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PUBLICATIONS OF THE NAVY RECORDS SOCIETY VOL. XXIX.

FIGHTING INSTRUCTIONS
1530-1816

EDITED WITH ELUCIDATIONS FROM CONTEMPORARY AUTHORITIES BY JULIAN S. CORBETT, LL.M.

PRINTED FOR THE NAVY RECORDS SOCIETY MDCCCCV

PREFACE

The inaccessibility of the official Fighting Instructions from time to time issued to the fleet has long been a recognised stumbling-block to students of naval history. Only a few copies of them were generally known to exist; fewer still could readily be consulted by the public, and of these the best known had been wrongly dated. The discovery therefore of a number of seventeenth century Instructions amongst the Earl of Dartmouth's papers, which he had generously placed at the disposal of the Society, seemed to encourage an attempt to make something like a complete collection. The result, such as it is, is now offered to the Society. It is by no means exhaustive. Some sets of Instructions seem to be lost beyond recall; but, on the other hand, a good deal of hitherto barren ground has been filled, and it is hoped that the collection may be of some assistance for a fresh study of the principles which underlie the development of naval tactics.

It is of course as documents in the history of tactics that the Fighting Instructions have the greatest practical value, and with this aspect of them in view I have done my best to illustrate their genesis, intention, and significance by extracts from contemporary authorities. Without such illustration the Instructions would be but barren food, neither nutritive nor easily digested. The embodiment of this illustrative matter has to some extent involved a departure from the ordinary form of the Society's publications. Instead of a general introduction, a series of introductory notes to each group of Instructions has been adopted, which it is feared will appear to bear an excessive proportion to the Instructions themselves. There seemed, however, no other means of dealing with the illustrative matter in a consecutive way. The extracts from admirals' despatches and contemporary treatises, and the remarks of officers and officials concerned with the preparation or the execution of the Instructions, were for the most part too fragmentary to be treated as separate documents, or too long or otherwise unsuitable for foot-notes. The only adequate way therefore was to embody them in Introductory Notes, and this it is hoped will be found to justify their bulk.

A special apology is, however, due for the Introductory Note on Nelson's memoranda. For this I can only plead their great importance, and the amount of illustrative matter that exists from the pens of Nelson's officers and opponents. For no other naval battle have we so much invaluable comment from men of the highest capacity who were present. The living interest of it all is unsurpassed, and I have therefore been tempted to include all that came to hand, encouraged by the belief that the fullest material for the study of Nelson's tactics at the battle of Trafalgar could not be out of place in a volume issued by the Society in the centenary year.

As to the general results, perhaps the most striking feature which the collection brings out is that sailing tactics was a purely English art. The idea that we borrowed originally from the Dutch is no longer tenable. The Dutch themselves do not even claim the invention of the line. Indeed in no foreign authority, either Dutch, French or Spanish, have I been able to discover a claim to the invention of any device in sailing tactics that had permanent value. Even the famous tactical school which was established in France at the close of the Seven Years' War, and by which the French service so brilliantly profited in the War of American Independence, was worked on the old lines of Hoste's treatise. Morogues' *Tactique Navale* was its text-book, and his own teaching was but a scientific and intelligent elaboration of a system from which the British service under the impulse of Anson, Hawke, and Boscawen was already shaking itself free.

Much of the old learning which the volume contains is of course of little more than antiquarian interest, but the bulk of it in the opinion of those best able to judge should be found of living value. All systems of tactics must rest ultimately on the dominant weapon in use, and throughout the sailing period the dominant weapon was, as now, the gun. In face of so fundamental a resemblance no tactician can afford to ignore the sailing system merely because the method of propulsion and the nature of the material have changed. It is not the principles of tactics that such changes affect, but merely the method of applying them.

Of even higher present value is the process of thought, the line of argument by which the old tacticians arrived at their conclusions good and bad. In studying the long series of Instructions we are able to detach certain attitudes of mind which led to the atrophy of principles essentially good, and others which pushed the system forward on healthy lines and flung off obsolete restraints. In an art so shifting and amorphous as naval tactics, the difference between health and disease must always lie in a certain vitality of mind with which it must be approached and practised. It is only in the history of tactics, under all conditions of weapons, movement and material, that the conditions of that vitality can be studied.

For a civilian to approach the elucidation of such points without professional assistance would be the height of temerity, and my thanks therefore are particularly due for advice and encouragement to Admiral Sir Cyprian Bridge, Vice-Admiral Sir Reginald Custance, Rear-Admiral H.S.H. Prince Louis of Battenberg, and to Captain Slade, Captain of the Royal Naval College. To Sir Reginald Custance and Professor Laughton I am under a special obligation, for not only have they been kind enough to read the proofs of the work, but they have been indefatigable in offering suggestions, the one from his high professional knowledge and the other from his unrivalled learning in naval history. Any value indeed the work may be found to possess must in a large measure be attributed to them. Nor can I omit to mention the valuable assistance which I have received from Mr. Ferdinand Brand and Captain Garbett, R.N., in unearthing forgotten material in the Libraries of the Admiralty and the United Service Institution.

I have also the pleasure of expressing my obligations to the Earl of Dartmouth, the Earl of St. Germans, and Vice-Admiral Sir Charles Knowles, Bart., for the use of the documents in their possession, as well as to many others whose benefits to the Society will be found duly noted in the body of the work.

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PART 1

EARLY TUDOR PERIOD

ALONSO DE CHAVES ON SAILING TACTICS

INTRODUCTORY

The following extract from the *Espejo de Navegantes*, or *Seamen's Glass*, of Alonso de Chaves serves to show the development which naval tactics had reached at the dawn of the sailing epoch. The treatise was apparently never published. It was discovered by Captain Fernandez Duro, the well-known historian of the Spanish navy, amongst the manuscripts in the library of the Academy of History at Madrid. The exact date of its production is not known; but Alonso de Chaves was one of a group of naval writers and experts who flourished at the court of the Emperor Charles V in the first half of the sixteenth century.[1] He was known to Hakluyt, who mentions him in connection with his own cherished idea of getting a lectureship in navigation established in London. 'And that it may appear,' he writes in dedicating the second edition of his *Voyages* to the lord admiral, 'that this is no vain fancy nor device of mine it may please your lordship to understand that the late Emperor Charles the Fifth ... established not only a Pilot-Major for the examination of such as sought to take charge of ships in that voyage' (*i.e.* to the Indies), 'but also founded a notable lecture of the Art of Navigation which is read to this day in the Contractation House at Seville. The Readers of the Lecture have not only carefully taught and instructed the Spanish mariners by word of mouth, but also have published sundry exact and worthy treatises concerning marine causes for the direction and encouragement of posterity. The learned works of three of which Readers, namely of Alonso de Chaves, of Hieronymus de Chaves, and of Roderigo Zamorano, came long ago very happily to my hands, together with the straight and severe examining of all such Masters as desire to take charge for the West Indies.' Since therefore De Chaves was an official lecturer to the Contractation House, the Admiralty of the Indies, we may take it that he speaks with full authority of the current naval thought of the time. That he represented a somewhat advanced school seems clear from the pains he takes in his treatise to defend his opinions against the old idea which still prevailed, that only galleys and oared craft could be marshalled in regular order. 'Some may say,' he writes, 'that at sea it is not possible to order ships and tactics in this way, nor to arrange beforehand so nicely for coming to the attack or bringing succour just when wanted, and that therefore there is no need to labour an order of battle since order cannot be kept. To such I answer that the same objection binds the enemy, and that with equal arms he who has taken up the best formation and order will be victor, because it is not possible so to break up an order with wind and sea as that he who is more without order shall not be worse broken up and the sooner defeated. For ships at sea are as war-horses on land, since admitting they are not very nimble at turning at any pace, nevertheless a regular formation increases their power. Moreover, at sea, so long as there be no storm, there will be nothing to hinder the using of any of the orders with which we have dealt, and if there be a storm the same terror will strike the one side as the other; for the storm is enough for all to war with, and in fighting it they will have peace with one another.'

At first sight it would seem that De Chaves in this argument takes no account of superiority of

seamanship—the factor which was destined to turn the scale against Spain upon the sea. But the following passage with which he concludes shows that he regarded seamanship as the controlling factor in every case. 'And if,' he argues, 'they say that the enemy will take the same thought and care as I, I answer that when both be equal in numbers and arms, then in such case he who shall be more dexterous and have more spirit and fortitude he will conquer, the which he will not do, although he have more and better arms and as much spirit as he will, if he be wanting in good order and counsel. Just as happens in fencing, that the weaker man if he be more dexterous gives more and better hits than the other who does not understand the beats nor knows them, although he be the stronger. And the same holds good with any army whatsoever on land, and it has been seen that the smaller by their good order have defeated the stronger.'

From the work in question Captain Fernandez Duro gives four sections or chapters in Appendix 12 to the first volume of his history,[2] namely, 1. 'Of war or battle at sea,' relating to single ship actions. 2. 'The form of a battle and the method of fighting,' relating to armament, fire discipline, boarding and the like. 3. 'Of a battle of one fleet against another.' 4. 'Battle.' In the last two sections is contained the earliest known attempt to formulate a definite fighting formation and tactical system for sailing fleets, and it is from these that the following extracts have been translated.

It will be noted that in the root-idea of coming as quickly as possible to close quarters, and in relying mainly on end-on fire, the proposed system is still quite mediæval and founded mainly upon galley tactics. But a new and advanced note is struck in the author's insistence on the captain-general's keeping out of action as long as possible, instead of leading the attack in the time-honoured way. We should also remark the differentiation of types, for all of which a duty was provided in action. This was also a survival of galley warfare, and rapidly disappeared with the advance of the sailing man-of-war, never to be revived, unless perhaps it be returning in the immediate future, and we are to see torpedo craft of the latest devising taking the place and function of the *barcas*, with their axes and augers, and armoured cruisers those of the *naos de succurro*.

ESPEJO DE NAVEGANTES, circa 1530.

[+Fernandez Duro, Armada Española i. App. 12+.]

Chapter III.—Of a Battle between One Fleet and Another.

[*Extract*.]

... When the time for battle is at hand the captain-general should order the whole fleet to come together that he may set them in order, since a regular order is no less necessary in a fleet of ships for giving battle to another fleet than it is in an army of soldiers for giving battle to another army.

Thus, as in an army, the men-at-arms form by themselves in one quarter to make and meet charges, and the light horse in another quarter to support, pursue, and harass[3] so in a fleet, the captain-general ought to order the strongest and largest ships to form in one quarter to attack, grapple, board and break-up the enemy, and the lesser and weaker ships in another quarter apart, with their artillery and munitions to harass, pursue, and give chase to the enemy if he flies, and to come to the rescue wherever there is most need.

The captain-general should form a detachment of his smaller and lighter vessels, to the extent of one-fourth part of his whole fleet, and order them to take station on either side of the main body. I mean that they should always keep as a separate body on the flanks of the main body, so that they can see what happens on one side and on the other.

He should admonish and direct every one of the ships that she shall endeavour to grapple with the enemy in such a way that she shall not get between two of them so as to be boarded and engaged on both sides at once.[4]

* * * * *

Having directed and set in order all the aforesaid matters, the captain-general should then marshal the other three-quarters of the fleet that remain in the following manner.

He should consider his position and the direction of the wind, and how to get the advantage of it with his fleet.

Then he should consider the order in which the enemy is formed, whether they come in a close body or in line ahead,[5] and whether they are disposed in square bodies or in a single line,[6] and whether

the great ships are in the centre or on the flanks, and in what station is the flagship; and all the other considerations which are essential to the case he should take in hand.

By all means he should do his best that his fleet shall have the weather-gage; for if there was no other advantage he will always keep free from being blinded by the smoke of the guns, so as to be able to see one to another; and for the enemy it will be the contrary, because the smoke and fire of our fleet and of their own will keep driving upon them, and blinding them in such a manner that they will not be able to see one another, and they will fight among themselves from not being able to recognise each other.

Everything being now ready, if the enemy have made squadrons of their fleet we should act in the same manner in ours, placing always the greater ships in one body as a vanguard to grapple first and receive the first shock; and the captain-general should be stationed in the centre squadron, so that he may see those which go before and those which follow.

Each of the squadrons ought to sail in line abreast,[7] so that all can see the enemy and use their guns without getting in each other's way, and they must not sail in file one behind the other, because thence would come great trouble, as only the leading ships could fight. In any case a ship is not so nimble as a man to be able to face about and do what is best.[8]

The rearguard should be the ships that I have called the supports, which are to be the fourth part of the fleet, and the lightest and best sailers; but they must not move in rear of the fleet, because they would not see well what is passing so as to give timely succour, and therefore they ought always to keep an offing on that side or flank of the fleet where the flagship is, or on both sides if they are many; and if they are in one body they should work to station themselves to windward for the reasons aforesaid.

And if the fleet of the enemy shall come on in one body in line abreast,[9] ours should do the same, placing the largest and strongest ships in the centre and the lightest on the flanks of the battle, seeing that those which are in the centre always receive greater injury because necessarily they have to fight on both sides.

And if the enemy bring their fleet into the form of a lance-head or triangle, then ours ought to form in two lines [*alas*], keeping the advanced extremities furthest apart and closing in the rear, so as to take the enemy between them and engage them on both fronts, placing the largest ships in the rear and the lightest at the advanced points, seeing that they can most quickly tack in upon the enemy opposed to them.

And if the enemy approach formed in two lines [*alas*], ours ought to do the same, placing always the greatest ships over against the greatest of the enemy, and being always on the look-out to take the enemy between them; and on no account must ours penetrate into the midst of the enemy's formation [*batalla*], because arms and smoke will envelope them on every side and there will be no way of relieving them.

The captain-general having now arrayed his whole fleet in one of the aforesaid orders according as it seems best to him for giving battle, and everything being ready for battle, all shall bear in mind the signals he shall have appointed with flag or shot or topsail, that all may know at what time to attack or board or come to rescue or retreat, or give chase. The which signals all must understand and remember what they are to do when such signals are made, and likewise the armed boats shall take the same care and remember what they ought to do, and perform their duty.[10]

Chapter IV.—Battle

Then the flagship shall bid a trumpet sound, and at that signal all shall move in their aforesaid order; and as they come into range they shall commence to play their most powerful artillery, taking care that the first shots do not miss, for, as I have said, when the first shots hit, inasmuch as they are the largest, they strike great dread and terror into the enemy; for seeing how great hurt they suffer, they think how much greater it will be at close range and so mayhap they will not want to fight, but strike and surrender or fly, so as not to come to close quarters.

Having so begun firing, they shall always first play the largest guns, which are on the side or board towards the enemy, and likewise they shall move over from the other side those guns which have wheeled carriages to run on the upper part of the deck and poop.[11] And then when nearer they should use the smaller ones, and by no means should they fire them at first, for afar off they will do no hurt, and besides the enemy will know there is dearth of good artillery and will take better heart to make or abide an attack. And after having come to closer quarters then they ought to play the lighter artillery. And so soon as they come to board or grapple all the other kinds of arms shall be used, of which I have spoken more particularly: first, missiles, such as harpoons [*dardos*] and stones, hand-guns

[*escopetas*] and cross-bows, and then the fire-balls aforesaid, as well from the tops as from the castles, and at the same time the calthrops, linstocks, stink-balls [*pildoras*], grenades, and the scorpions for the sails and rigging. At this moment they should sound all the trumpets, and with a lusty cheer from every ship at once they should grapple and fight with every kind of weapon, those with staffed scythes or shear-hooks cutting the enemy's rigging, and the others with the fire instruments [*trompas y bocas de fuego*] raining fire down on the enemy's rigging and crew.

The captain-general should encourage all in the battle, and because he cannot be heard with his voice he should bid the signal for action to be made with his trumpet or flag or with his topsail.

And he should keep a look-out in every direction in readiness, when he sees any of his ships in danger, to order the ships of reserve to give succour, if by chance they have not seen it, or else himself to bear in with his own ship.

The flagship should take great care not to grapple another, for then he could not see what is passing in the battle nor control it. And besides his own side in coming to help and support him might find themselves out of action; or peradventure if any accident befell him, the rest of the fleet would be left without guidance and would not have care to succour one another, but so far as they were able would fly or take their own course. Accordingly the captain-general should never be of the first who are to grapple nor should he enter into the press, so that he may watch the fighting and bring succour where it is most needed.

The ships of support in like manner should have care to keep somewhat apart and not to grapple till they see where they should first bring succour. The more they keep clear the more will they have opportunity of either standing off and using their guns, or of coming to close range with their other firearms. Moreover, if any ship of the enemy takes to flight, they will be able to give chase or get athwart her hawse, and will be able to watch and give succour wherever the captain-general signals.

The boats in like manner should not close in till they see the ships grappled, and then they should come up on the opposite side in the manner stated above, and carry out their special duties as occasion arises either with their bases,[12] of which each shall carry its own, and with their harquebuses, or else by getting close in and wedging up the rudders, or cutting them and their gear away, or by leaping in upon the enemy, if they can climb in without being seen, or from outside by setting fire to them, or scuttling them with augers.[13]

FOOTNOTES:

[1] Fernandez Duro, *De algunas obras desconocidas de Cosmografia y de Namgaaon, &c.* Reprinted from the *Revista de Navegacion y Comercio*. Madrid, 1894-5.

[2] *Armada Española desde la union de los Reines de Castilla y de Aragon*.

[3] *Entrar y salir*—lit. 'to go in and come out,' a technical military expression used of light cavalry. It seems generally to signify short sudden attacks on weak points.

[4] Here follow directions for telling off a fourth of the largest boats in the fleet for certain duties which are sufficiently explained in the section on 'Battle' below.

[5] *Unos en pos de otros á la hila*—lit. one behind the other in file.

[6] *En escuadrones ó en ala*. In military diction these words meant 'deep formation' and 'single line.' Here probably *ala* means line abreast. See next note.

[7] *Cado uno de los escuadrones debe ir en ala*. Here *escuadrone* must mean 'squadron' in the modern sense of a division, and from the context *ala* can mean nothing but 'line abreast,' 'line ahead' being strictly forbidden.

[8] This, of course, refers to fire tactics ashore. The meaning is that a ship, when she has delivered her fire, cannot retire by countermarch and leave her next in file to deliver its fire in turn. The whole system, it will be seen, is based on end-on fire, as a preparation for boarding and small-arm fighting.

[9] *Viniere toda junta puesta in ala*.

[10] This sentence in the original is incomplete, running on into the next chapter. For clearness the construction has been altered in the translation.

[11] This remarkable evolution is a little obscure. The Spanish has '*y moviendo asimismo los otros del otro bordo, aquellos que tienen sus carretones que andan per cima de cubierta y toldo*.'

[12] *Versos*, breech-loading pieces of the secondary armament of ships, and for aiming boats. Bases were of the high penetration or 'culverin' type.

[13] *Dando barrenos*. This curious duty of the armed boats he has more fully explained in the section on single ship actions, as follows: 'The ships being grappled, the boat ready equipped should put off to the enemy's ship under her poop, and get fast hold of her, and first cut away her rudder, or at least jam it with half a dozen wedges in such wise that it cannot steer or move, and if there is a chance for more, without being seen, bore half a dozen auger holes below the water-line, so that the ship founders.'

The rest of the chapter is concerned with the treatment of the dead and wounded, pursuit of the enemy when victory is won, and the refitting of the fleet.

AUDLEY'S FLEET ORDERS, *circa* 1530

INTRODUCTORY

The instructions drawn up by Thomas Audley by order of Henry VIII may be taken as the last word in England of the purely mediæval time, before the development of gunnery, and particularly of broadside fire, had sown the seeds of more modern tactics. They were almost certainly drafted from long-established precedents, for Audley was a lawyer. The document is undated, but since Audley is mentioned without any rank or title, it was probably before November 1531, when he became serjeant-at-law and king's serjeant, and certainly before May 1632 when he was knighted. It was at this time that Henry VIII was plunging into his Reformation policy, and had every reason to be prepared for complications abroad, and particularly with Spain, which was then the leading naval Power.

The last two articles, increasing the authority of the council of war, were probably insisted on, as Mr. Oppenheim has pointed out in view of Sir Edward Howard's attempts on French ports in 1512 and 1513, the last of which ended in disaster.[1]

FOOTNOTE:

[1] *Administration of the Royal Navy*, p. 63.

ORDERS TO BE USED BY THE KING'S MAJESTY'S NAVY BY THE SEA.

[+Brit. Mus. Harleian MSS. 309, fol. 42, et seq.+[1]]

[*Extract.*]

If they meet with the enemy the admiral must apply to get the wind of the enemy by all the means he can, for that is the advantage. No private captain should board the admiral enemy but the admiral of the English, except he cannot come to the enemy's, as the matter may so fall out without they both the one seek the other. And if they chase the enemy let them that chase shoot no ordnance till he be ready to board him, for that will let[2] his ship's way.

Let every ship match equally as near as they can, and leave some pinnaces at liberty to help the overmatched. And one small ship when they shall join battle [is] to be attending on the admiral to relieve him, for the overcoming of the admiral is a great discouragement of the rest of the other side.

In case you board your enemy enter not till you see the smoke gone and then shoot off[3] all your pieces, your port-pieces, the pieces of hail-shot, [and] cross-bow shot to beat his cage deck, and if you see his deck well ridden[4] then enter with your best men, but first win his tops in any wise if it be possible. In case you see there come rescue bulge[5] the enemy ship [but] first take heed your own men be retired, [and] take the captain with certain of the best with him, the rest [to be] committed to the sea, for else they will turn upon you to your confusion.

The admiral ought to have this order before he joins battle with the enemy, that all his ships shall bear a flag in their mizen-tops, and himself one in the foremast beside the mainmast, that everyone may know his own fleet by that token. If he see a hard match with the enemy and be to leeward, then to gather his fleet together and seem to flee, and flee indeed for this purpose till the enemy draw within gunshot. And when the enemy doth shoot then [he shall] shoot again, and make all the smoke he can to the intent the enemy shall not see the ships, and [then] suddenly hale up his tackle aboard,[6] and have the wind of the enemy. And by this policy it is possible to win the weather-gage of the enemy, and then

he hath a great advantage, and this may well be done if it be well foreseen beforehand, and every captain and master made privy to it beforehand at whatsoever time such disadvantage shall happen.

The admiral shall not take in hand any exploit to land or enter into any harbour enemy with the king's ships, but[7] he call a council and make the captains privy to his device and the best masters in the fleet or pilots, known to be skilful men on that coast or place where he intendeth to do his exploit, and by good advice. Otherwise the fault ought to be laid on the admiral if anything should happen but well. [8]

And if he did an exploit without assent of the captains and [it] proved well, the king ought to put him out of his room for purposing a matter of such charge of his own brain, whereby the whole fleet might fall into the hands of the enemy to the destruction of the king's people.[29]

FOOTNOTES:

[1] _A Book of Orders for the War both by Land and Sea, written by Thomas Audley at the command of King Henry VIII.

[2] *I.e.* hinder.

[3] MS. 'the shot of.' The whole MS. has evidently been very carelessly copied and is full of small blunders, which have been corrected in the text above. 'Board' till comparatively recent times meant to close with a ship. 'Enter' was our modern 'board.'

[4] 'Ridden' = 'cleared.'

[5] 'Bulge' = 'scuttle.' A ship was said to bulge herself when she ran aground and filled.

[6] The passage should probably read 'hale or haul his tacks aboard.'

[7] *I.e.* 'without,' 'unless.'

[8] It was under this old rule that Boroughs lodged his protest against Drake's entering Cadiz in 1587.

[9] The rest of the articles relate to discipline, internal order of ships, and securing prize cargoes.

THE ADOPTION OF SPANISH TACTICS BY HENRY VIII

INTRODUCTORY

These two sets of orders were drawn up by the lord high admiral in rapid succession in August 1545, during the second stage of Henry VIII's last war with France. In the previous month D'Annibault, the French admiral, had been compelled to abandon his attempt on Portsmouth and the Isle of Wight, and retire to recruit upon his own coast; and Lord Lisle was about to go out and endeavour to bring him to action.

The orders, it will be seen, are a distinct advance on those of 1530, and betray strongly the influence of Spanish ideas as formulated, by De Chaves. So striking indeed is the resemblance in many points; that we perhaps may trace it to Henry's recent alliance with Charles V. The main difference was that Henry's 'wings' were composed of oared craft, and to form them of sufficient strength he had had some of the newest and smartest 'galliasses,' or 'galleys'—that is, his vessels specially built for men-of-war—fitted with oars. The reason for this was that the French fleet was a mixed one, the sailing division having been reinforced by a squadron of galleys from the Mediterranean. The elaborate attempts to combine the two types tactically—a problem which the Italian admirals had hitherto found insoluble—points to an advanced study of the naval art that is entirely characteristic of Henry VIII.

The main idea of the first order is of a vanguard in three ranks, formed of the most powerful hired merchant ships and the king's own galleons and great ships, and supported by a strong rearguard of smaller armed merchantmen, and by two oared wings on either flank composed of royal and private vessels combined. The vanguard was to be marshalled with its three ranks so adjusted that its general form was that of a blunt wedge. In the first rank come eight of the large merchantmen, mainly Hanseatic vessels; in the second, ten of the royal navy and one private vessel; in the third, nineteen second-rate merchantmen. The tactical aim is clearly that the heavy Hanseatic ships should, as De Chaves says, receive the first shock and break up the enemy's formation for the royal ships, while the third rank are in position to support. The wings, which were specially told off to keep the galleys in

check, correspond to the reserve of De Chaves, and the importance attached to them is seen in the fact that they contained all the king's galleons of the latest type.

In the second set of instructions, issued on August 10, this order was considerably modified. The fleet had been increased by the arrival of some of the west-country ships, and a new order of battle was drawn up which is printed in the *State Papers, Henry VIII* (Old Series), i. 810. The formation, though still retaining the blunt wedge design, was simplified. We have now a vanguard of 24 ships, a 'battaill' or main body of 40 ships, and one 'wing' of 40 oared 'galliasses, shallops and boats of war.' The 'wing' however, was still capable of acting in two divisions, for, unlike the vanguard and 'battaill,' it had a vice-admiral as well as an admiral.

LORD LISLE, No. 1, 1545.

[+Le Fleming MSS. No. 2+.][1]

The Order of Battle.[2]

THE VANGUARD.

These be the ships appointed for the first rank of the vanguard:

In primis:

The Great Argosy.
The Samson Lubeck.
The Johannes Lubeck.
The Trinity of Dantzig.
The Mary of Hamburg.
The Pellican.
The Morion [of Dantzig].
The 'Sepiar' of Dantzig.
= 8.

The second rank of the vanguard:

The Harry Grace à Dieu.
The Venetian.
The Peter Pomegranate.
The Mathew Gonson.
The Pansy.
The Great Galley.
The Sweepstake.
The Minion.
The Swallow.
The New Bark.
The Saul 'Argaly.'
= 12 (*sic*).

The third rank of the vanguard:

The 'Berste Denar.'
The Falcon Lively.
The Harry Bristol.
The Trinity Smith.
The Margaret of Bristol.
The Trinity Reniger.
The Mary James.
The Pilgrim of Dartmouth.
The Mary Gorge of Rye.
The Thomas Tipkins.
The Gorges Brigges.
The Anne Lively.
= 12.

The John Evangelist.
The Thomas Modell.

The Lartycke [or 'Lartigoe'].
The Christopher Bennet.
The Mary Fortune.
The Mary Marten.
The Trinity Bristol.
= 7.

THE OARED WINGS.

Galleys and ships of the right wing:

The Great Mistress of England.
The Salamander.
The Jennet.
The Lion.
The Greyhound.
The Thomas Greenwich.
The Lesser Pinnace.
The Hind.
The Harry.
The Galley Subtle.
Two boats of Rye.
= 12.

Galleys and ships of the left wing:

The Anne Gallant.
The Unicorn.
The Falcon.
The Dragon.
The Sacre.
The Merlin.
The Rae.
The Reniger pinnace.
The Foyst.
Two boats of Rye.
= 11.

The Fighting Instructions.

Item. It is to be considered that the ranks must keep such order in sailing that none impeach another. Wherefore it is requisite that every of the said ranks keep right way with another, and take such regard to the observing of the same that no ship pass his fellows forward nor backward nor slack anything, but [keep] as they were in one line, and that there may be half a cable length between every of the ships.

Item. The first rank shall make sail straight to the front of the battle and shall pass through them, and so shall make a short return to the midwards as they may, and they [are] to have a special regard to the course of the second rank; which two ranks is appointed to lay aboard the principal ships of the enemy, every man choosing[3] his mate as they may, reserving the admiral for my lord admiral.

Item. That every ship of the first rank shall bear a flag of St. George's cross upon the fore topmast for the space of the fight, which upon the king's determination shall be on Monday, the 10th of August, *anno* 1545.[4]

And every ship appointed to the middle rank shall for the space of the fight bear a flag of St. George's cross upon her mainmast.

And every ship of the third rank shall bear a like flag upon his mizen[5] mast top, and every of the said wings shall have in their tops a flag of St. George.

Item. The victuallers shall follow the third rank and shall bear in their tops their flags. Also that neither of the said wings shall further enter into fight; but, having advantage as near anigh[6] as they can of the wind, shall give succour as they shall see occasion, and shall not give care to any of the small vessels to weaken our force. There be, besides the said ships mentioned, to be joined to the foresaid battle fifty sail of western ships, and whereof be seven great hulks of 888 ton apiece, and there is also the number of 1,200 of soldiers beside mariners in all the said ships.

FOOTNOTES:

[1] A similar list of ships is in a MS. in the Cambridge University Library.

[2] This paper gives the order of the wings and vanguard only. The fifty west-country ships that were presumably to form the rearguard had not yet joined.

[3] MS. 'closing.'

[4] The fleets did not get contact till August 15.

[5] MS. 'messel.'

[6] MS. 'a snare a nye.' The passage is clearly corrupt. Perhaps it should read 'neither of the said wings shall further enter into the fight but as nigh as they can keeping advantage of the wind [*i.e.* without losing the weather-gage of any part of the enemy's fleet] but shall give succour,' &c.

LORD LISLE, No. 2.

[+Record Office, State Papers, Henry VIII.+]

The Order for the said Fleet taken by the Lord Admiral the 10th day of August, 1545.[1]

1. First, it is to be considered that every of the captains with the said ships appointed by this order to the vanward, battle and wing shall ride at anchor according as they be appointed to sail by the said order; and no ship of any of the said wards or wing shall presume to come to an anchor before the admiral of the said ward.

2. *Item*, that every captain of the said wards or wing shall be in everything ordered by the admiral of the same.

3. *Item*, when we shall see a convenient time to fight with the enemies our vanward shall make with their vanward if they have any; and if they be in one company, our vanward, taking the advantage of the wind, shall set upon their foremost rank, bringing them out of order; and our vice-admiral shall seek to board their vice-admiral, and every captain shall choose his equal as near as he may.

4. *Item*, the admiral of the wing shall be always in the wind with his whole company; and when we shall join with the enemies he shall keep still the advantage of the wind, to the intent he with his company may the better beat off the galleys from the great ships.[2]

FOOTNOTES:

[1] The articles are preceded, like the first ones, by a list of ships or 'battle order,' showing an organisation into a vanward, main body (battle), and one wing of oared craft. See Introductory Note, p. 19.

[2] Of the remaining seven articles, five relate to distinguishing squadronal flags and lights as in the earlier instructions, and the last one to the Watchword of the night. It is to be 'God save King Henry,' and the answer, 'And long to reign over us.'

PART II

ELIZABETHAN AND JACOBEAN

SIR WALTER RALEGH, 1617

THE ELIZABETHAN ORIGIN OF RALEGH'S INSTRUCTIONS

INTRODUCTORY

No fighting instructions known to have been issued in the reign of Elizabeth have been found, nor is there any indication that a regular order of battle was ever laid down by the seamen-admirals of her time.[1] Even Howard's great fleet of 1588 had twice been in action with the Armada before it was so much as organised into squadrons. If anything of the kind was introduced later in her reign Captain Nathaniel Boteler, who had served in the Jacobean navy and wrote on the subject early in the reign of Charles I, was ignorant of it. In his *Dialogues about Sea Services*, he devotes the sixth to 'Ordering of Fleets in Sailing, Chases, Boardings and Battles,' but although he suggests a battle order which we know was never put in practice, he is unable to give one that had been used by an English fleet.[2] It is not surprising. In the despatches of the Elizabethan admirals, though they have much to say on strategy, there is not a word of fleet-tactics, as we understand the thing. The domination of the seamen's idea of naval warfare, the increasing handiness of ships, the improved design of their batteries, the special progress made by Englishmen in guns and gunnery led rapidly to the preference of broadside gunfire over boarding, and to an exaggeration of the value of individual mobility; and the old semi-military formations based on small-arm fighting were abandoned.

At the same time, although the seamen-admirals did not trouble or were not sufficiently advanced to devise a battle order to suit their new weapon, there are many indications that, consciously or unconsciously, they developed a tendency inherent in the broadside idea to fall in action into a rough line ahead; that is to say, the practice was usually to break up into groups as occasion dictated, and for each group to deliver its broadsides in succession on an exposed point of the enemy's formation. That the armed merchantmen conformed regularly to this idea is very improbable. The faint pictures we have of their well-meant efforts present them to us attacking in a loose throng and masking each other's fire. But that the queen's ships did not attempt to observe any order is not so clear. When the combined fleet of Howard and Drake was first sighted by the Armada, it is said by two Spanish eye-witnesses to have been *in ala*, and 'in very fine order.' And the second of Adams's charts, upon which the famous House of Lords' tapestries were designed, actually represents the queen's ships standing out of Plymouth in line ahead, and coming to the attack in a similar but already disordered formation. Still there can be no doubt that, however far a rudimentary form of line ahead was carried by the Elizabethans, it was a matter of minor tactics and not of a battle order, and was rather instinctive than the perfected result of a serious attempt to work out a tactical system. The only actual account of a fleet formation which we have is still on the old lines, and it was for review purposes only. Ubaldino, in his second narrative, which he says was inspired by Drake,[3] relates that when Drake put out of Plymouth to receive Howard 'he sallied from port to meet him with his thirty ships in equal ranks, three ships deep, making honourable display of his masterly and diligent handling, with the pinnaces and small craft thrown forward as though to reconnoitre the ships that were approaching, which is their office.' Nothing, however, is more certain in the unhappily vague accounts of the 1588 campaign than that no such battle order as this was used in action against the Armada.

It is not till the close of the West Indian Expedition of 1596, when, after Hawkins and Drake were both dead, Colonel-General Sir Thomas Baskerville, the commander of the landing force, was left in charge of the retreating fleet, that we get any trace of a definite battle formation. In his action off the Isla de Pinos he seems, so far as we can read the obscure description, to have formed his fleet into two divisions abreast, each in line ahead. The queen's ships are described at least as engaging in succession according to previous directions till all had had 'their course.' Henry Savile, whose intemperate and enthusiastic defence of his commander was printed by Hakluyt, further says: 'Our general was the foremost and so held his place until, by order of fight, other ships were to have their turns according to his former direction, who wisely and politicly had so ordered his vanguard and rearward; and as the manner of it was altogether strange to the Spaniard, so might they have been without hope of victory, if their general had been a man of judgment in sea-fights.'

Here, then, if we may trust Savile, a definite battle order must have been laid down beforehand on the new lines, and it is possible that in the years which had elapsed since the Armada campaign the seamen had been giving serious attention to a tactical system, which the absence of naval actions prevented reaching any degree of development. Had the idea been Baskerville's own it is very unlikely that the veteran sea-captains on his council of war would have assented to its adoption. At any rate we may assert that the idea of ships attacking in succession so as to support one another without masking each other's broadside fire (which is the essential germ of the true line ahead) was in the air, and it is clearly on the principle that underlay Baskerville's tactics that Ralegh's fighting instructions were based twenty years later.[4]

These which are the first instructions known to have been issued to an English fleet since Henry VIII's time were signed by Sir Walter Ralegh on May 3, 1617, at Plymouth, on the eve of his sailing for his ill-fated expedition to Guiana. Most of the articles are in the nature of 'Articles of War' and 'Sailing Instructions' rather than 'Fighting Instructions,' but the whole are printed below for their general interest. A contemporary writer, quoted by Edwards in his *Life of Ralegh*, says of them: 'There is no

precedent of so godly, severe, and martial government, fit to be written and engraven in every man's soul that covets to do honour to his king and country in this or like attempts.' But this cannot be taken quite literally. So far at least as they relate to discipline, some of Ralegh's articles may be traced back in the *Black Book of the Admiralty* to the fourteenth century, while the illogical arrangement of the whole points, as in the case of the Additional Fighting Instructions of the eighteenth century, to a gradual growth from precedent to precedent by the accretion of expeditional orders added from time to time by individual admirals. The process of formation may be well studied in Lord Wimbledon's first orders, where Ralegh's special expeditional additions will be found absorbed and adapted to the conditions of a larger fleet. Moreover, there is evidence that, with the exception of those articles which were designed in view of the special destination of Ralegh's voyage, the whole of them were based on an early Elizabethan precedent. For the history of English tactics the point is of considerable importance, especially in view of his twenty-ninth article, which lays down the method of attack when the weather-gage has been secured. This has hitherto been believed to be new and presumably Ralegh's own, in spite of the difficulty of believing that a man entirely without experience of fleet actions at sea could have hit upon so original and effective a tactical design. The evidence, however, that Ralegh borrowed it from an earlier set of orders is fairly clear.

Amongst the *Stowe MSS.* in the British Museum there is a small quarto treatise (No. 426) entitled 'Observations and overtures for a sea fight upon our own coasts, and what kind of order and discipline is fitted to be used in martialling and directing our navies against the preparations of such Spanish Armadas or others as shall at any time come to assail us.' From internal evidence and directly from another copy of it in the *Lansdown MSS.* (No. 213), we know it to be the work of 'William Gorges, gentleman.' He is to be identified as a son of Sir William Gorges, for he tells us he was afloat with his father in the Dreadnought as early as 1578, when Sir William was admiral on the Irish station with a squadron ordered to intercept the filibustering expedition which Sir Thomas Stucley was about to attempt under the auspices of Pope Gregory XIII. Sir William was a cousin of Ralegh's and brother to Sir Arthur Gorges, who was Ralegh's captain in the Azores expedition of 1597, and who in Ralegh's interest wrote the account of the campaign which Purchas printed. Though William, the son, freely quotes the experiences of the Armada campaign of 1588, he is not known to have ever held a naval command, and he calls himself 'unexperienced.' We may take it therefore that his treatise was mainly inspired by Ralegh, to whom indeed a large part of it is sometimes attributed. This question, however, is of small importance. The gist of the matter is a set of fleet orders which he has appended as a precedent at the end of his treatise, and it is on these orders that Ralegh's are clearly based. They commence with fourteen articles, consisting mainly of sailing instructions, similar to those which occur later in Ralegh's set. The fifteenth deals with fighting and bloodshed among the crews, and the sixteenth enjoins morning and evening prayer, with a psalm at setting the watch, and further provides that any man absenting himself from divine service without good cause shall suffer the 'bilboes,' with bread and water for twelve hours. The whole of this drastic provision for improving the seamen's morals has been struck out by a hurried and less clerkly hand, and in the margin is substituted another article practically word for word the same as that which Ralegh adopted as his first article. The same hand has also erased the whole numbering of the articles up to No. 16, and has noted that the new article on prayers is to come first.[5] The articles which follow correspond closely both in order and expression to Ralegh's, ending with No. 36, where Ralegh's special articles relating to landing in Guiana begin. Ralegh's important twenty-ninth article dealing with the method of attack is practically identical with that of Gorges. Ralegh, however, has several articles which are not in Gorges's set, and wherever the two sets are not word for word the same, Ralegh's is the fuller, having been to all appearances expanded from Gorges's precedent. This, coupled with the fact that other corrections beside those of the prayer article are embodied in Ralegh's articles, leaves practically no doubt that Gorges's set was the earlier and the precedent upon which Ralegh's was based.

An apparent difficulty in the date of Gorges's treatise need not detain us. It was dedicated on March 16, 1618-9, to Buckingham, the new lord high admiral, but it bears indication of having been written earlier, and in any case the date of the dedication is no guide to the date of the orders in the Appendix.

The important question is, how much earlier than Ralegh's are these orders of Gorges's treatise? Can we approximately fix their date? Certainly not with any degree of precision, but nevertheless we are not quite without light. To begin with there is the harsh punishment for not attending prayers, which is thoroughly characteristic of Tudor times. Then there is an article, which Ralegh omits, relating to the use of 'musket-arrows.' Gorges's article runs: 'If musket-arrows be used, to have great regard that they use not but half the ordinary charge of powder, otherwise more powder will make the arrow fly double.' Now these arrows we know to have been in high favour for their power of penetrating musket-proof defences about the time of the Armada. They were a purely English device, and were taken by Richard Hawkins upon his voyage to the South Sea in 1593. He highly commends them, but nevertheless they appear to have fallen out of fashion, and no trace of their use in Jacobean times has been found.[6]

A still more suggestive indication exists in the heading which is prefixed to Gorges's Appendix. It runs as follows:—'A form of orders and directions to be given by an admiral in conducting a fleet through the Narrow Seas for the better keeping together or relieving one another upon any occasion of distress or separation by weather or by giving chase. For the understanding whereof suppose that a fleet of his majesty's consisting of twenty or thirty sail were bound for serving on the west part of Ireland, as Kinsale haven for example.' The words 'his majesty' show the Appendix was penned under James I; but why did Gorges select this curious example for explaining his orders? We can only remember that it was exactly upon such an occasion that he had served with his father in 1578. There is therefore at least a possibility that the orders in question may be a copy or an adaptation of some which Sir William Gorges had issued ten years before the Armada. Certainly no situation had arisen since Elizabeth's death to put such an idea into the writer's head, and the points of rendezvous mentioned in Gorges's first article are exactly those which Sir William would naturally have given.

On evidence so inconclusive no certainty can be attained. All we can say is that Gorges's Appendix points to a possibility that Ralegh's remarkable twenty-ninth article may have been as old as the middle of Elizabeth's reign, and that the reason why it has not survived in the writings of any of the great Elizabethan admirals is either that the tactics it enjoins were regarded as a secret of the seamen's 'mystery' or were too trite or commonplace to need enunciation. At any rate in the face of the Gorges precedent it cannot be said, without reservation, that this rudimentary form of line ahead or attack in succession was invented by Ralegh, or that it was not known to the men who fought the Armada.

Amongst other articles of special interest, as showing how firmly the English naval tradition was already fixed, should be noticed the twenty-fifth, relating to seamen gunners, the twenty-sixth, forbidding action at more than point-blank range, and above all the fifth and sixth, aimed at obliterating all distinction between soldiers and sailors aboard ship, and at securing that unity of service between the land and sea forces which has been the peculiar distinction of the national instinct for war.

As to the tactical principle upon which the Elizabethan form of attack was based, it must be noted that was to demoralise the enemy—to drive him into 'utter confusion.' The point is important, for this conception of tactics held its place till it was ultimately supplanted by the idea of concentrating on part of his fleet.

FOOTNOTES:

[1] Hakluyt printed several sets of instructions issued to armed fleets intended for discovery, viz.: 1. Those drawn by Sebastian Cabota for Sir Hugh Willoughby's voyage in 1553. 2. Those for the first voyage of Anthony Jenkinson, 1557, which refers to other standing orders. 3. Those issued by the lords of the Council for Edward Fenton in 1582, the 20th article of which directs him to draw up orders 'for their better government both at sea and land.' But none of these contain any fighting instructions.

[2] Boteler's MS. was not published till 1685, when the publisher dedicated it to Samuel Pepys. The date at which it was written can only be inferred from internal evidence. At p. 47 he refers to 'his Majesty's late augmentation of seamen's pay in general.' Such an augmentation took place in 1625 and 1626. He also refers to the 'late king' and to the colony of St. Christopher's, which was settled in 1623, but not to that of New Providence, settled in 1629. He served in the Cadiz Expedition of 1625, but does not mention it or any event of the rest of the war. The battle order, however, which he recommends closely resembles that proposed by Sir E. Cecil (*post*, p. 65). The probability is, then, that his work was begun at the end of James I's reign, and was part of the large output of military literature to which the imminent prospect of war with Spain gave rise at that time.

[3] See *Drake and the Tudor Navy*, ii. Appendix B.

[4] See Article 1 of the Instructions of 1816, *post*, p. 342.

[5] In all previous English instructions the prayer article had come towards the end. In the Spanish service it came first, and it was thence probably that Ralegh got his idea.

[6] Laughton, *Defeat of the Armada*, i. 126; *Account, &c.* (*Exchequer, Queen's Remembrancer*), lxiv. 9, April 9, 1588; Hawkins's *Observations* (Hakl. Soc), § lxvi.

SIR WALTER RALEGH, 1617.[1]

[+State Papers Domestic xcii. f. 9+.]

Orders to be observed by the commanders of the fleet and land companies under the charge and conduct of Sir Walter Ralegh, Knight, bound for the south parts of America or elsewhere.

Given at Plymouth in Devon, the 3rd of May, 1617.

First. Because no action nor enterprise can prosper, be it by sea or by land, without the favour and assistance of Almighty God, the Lord and strength of hosts and armies, you shall not fail to cause divine service to be read in your ship morning and evening, in the morning before dinner, and in the evening before supper, or at least (if there be interruption by foul weather) once in the day, praising God every night with the singing of a psalm at the setting of the watch.

2. You shall take especial care that God be not blasphemed in your ship, but that after admonition given, if the offenders do not reform themselves, you shall cause them of the meaner sort to be ducked at yard-arm; and the better sort to be fined out of their adventure. By which course if no amendment be found, you shall acquaint me withal, delivering me the names of the offenders. For if it be threatened in the Scriptures that the curse shall not depart from the house of the swearer, much less shall it depart from the ship of the swearer.

3. Thirdly, no man shall refuse to obey his officer in all that he is commanded for the benefit of the journey. No man being in health shall refuse to watch his turn as he shall be directed, the sailors by the master and boatswain, the landsmen by their captain, lieutenant, or other officers.

4. You shall make in every ship two captains of the watch, who shall make choice of two soldiers every night to search between the decks that no fire or candlelight be carried about the ship after the watch be set, nor that any candle be burning in any cabin without a lantern; and that neither, but whilst they are to make themselves unready. For there is no danger so inevitable as the ship firing, which may also as well happen by taking of tobacco between the decks, and therefore [it is] forbidden to all men but aloft the upper deck.

5. You shall cause all your landsmen to learn the names and places of the ropes, that they may assist the sailors in their labour upon the decks, though they cannot go up to the tops and yards.

*6. You shall train and instruct your sailors, so many as shall be found fit, as you do your landsmen, and register their names in the list of your companies, making no difference of professions, but that all be esteemed sailors and all soldiers, for your troops will be very weak when you come to land without the assistance of your seafaring men.

7. You shall not give chase nor send abroad any ship but by order from the general, and if you come near any ship in your course, if she be belonging to any prince or state in league or amity with his majesty, you shall not take anything from them by force, upon pain to be punished as pirates; although in manifest extremity you may (agreeing for the price) relieve yourselves with things necessary, giving bonds for the same. Provided that it be not to the disfurnishing of any such ship, whereby the owner or merchant be endangered for the ship or goods.

*8. You shall every night fall astern the general's ship, and follow his light, receiving instructions in the morning what course to hold. And if you shall at any time be separated by foul weather, you shall receive billets sealed up, the first to be opened on this side the North Cape,[2] if there be cause, the second to be opened beyond the South Cape,[3] the third after you shall pass 23 degrees, and the fourth from the height of Cape Verd.[4]

9. If you discover any sail at sea, either to windward or to leeward of the admiral, or if any two or three of our fleet shall discover any such like sail which the admiral cannot discern, if she be a great ship and but one, you shall strike your main topsail and hoist it again so often as you judge the ship to be hundred tons of burthen; or if you judge her to be 200 tons to strike and hoist twice; if 300 tons thrice, and answerable to your opinion of her greatness.

*10. If you discover a small ship, you shall do the like with your fore topsail; but if you discover many great ships you shall not only strike your main topsail often, but put out your ensign in the maintop. And if such fleet or ship go large before the wind, you shall also after your sign given go large and stand as any of the fleet doth: I mean no longer than that you may judge that the admiral and the rest have seen your sign and you so standing. And if you went large at the time of the discovery you shall hale of your sheets for a little time, and then go large again that the rest may know that you go large to show us that the ship or fleet discovered keeps that course.

*11. So shall you do if the ship or fleet discovered have her tacks aboard, namely, if you had also your tacks aboard at the time of the discovery, you shall bear up for a little time, and after hale your sheets again to show us what course the ship or fleet holds.

*12. If you discover any ship or fleet by night, if the ship or fleet be to windward of you, and you to windward of the admiral, you shall presently bear up to give us knowledge. But if you think that (did

you not bear up) you might speak with her, then you shall keep your luff,[5] and shoot off a piece of ordnance to give us knowledge thereby.

13. For a general rule: Let none presume to shoot off a piece of ordnance but in discovery of a ship or fleet by night, or by being in danger of an enemy, or in danger of fire, or in danger of sinking, that it may be unto us all a most certain intelligence of some matter of importance.

*14. And you shall make us know the difference by this: if you give chase and being near a ship you shall shoot to make her strike, we shall all see and know that you shoot to that end if it be by day; if by night, we shall then know that you have seen a ship or fleet none of our company; and if you suspect we do not hear the first piece then you may shoot a second, but not otherwise, and you must take almost a quarter of an hour between your two pieces.

*15. If you be in danger of a leak—I mean in present danger—you shall shoot off two pieces presently one after another, and if in danger of fire, three pieces presently one after another; but if there be time between we will know by your second piece that you doubt that we do not hear your first piece, and therefore you shoot a second, to wit by night, and give time between.

16. There is no man that shall strike any officer be he captain, lieutenant, ensign, sergeant, corporal of the field,[6] quartermaster, &c.

17. Nor the master of any ship, master's mate, or boatswain, or quartermaster. I say no man shall strike or offer violence to any of these but the supreme officer to the inferior, in time of service, upon pain of death.

18. No private man shall strike another, upon pain of receiving such punishment as a martial court[7] shall think him worthy of.

19. If any man steal any victuals, either by breaking into the hold or otherwise, he shall receive the punishment as of a thief or murderer of his fellows.

20. No man shall keep any feasting or drinking between meals, nor drink any healths upon your ship's provisions.

21. Every captain by his purser, stewards, or other officers shall take a weekly account how his victuals waste.

22. The steward shall not deliver any candle to any private man nor for any private use.

23. Whosoever shall steal from his fellows either apparel or anything else shall be punished as a thief.

24. In foul weather every man shall fit his sails to keep company with the fleet, and not run so far ahead by day but that he may fall astern the admiral by night.

25. In case we shall be set upon by sea, the captain shall appoint sufficient company to assist the gunners; after which, if the fight require it, in the cabins between the decks shall be taken down [and] all beds and sacks employed for bulwarks.[8]

*The musketeers of every ship shall be divided under captains or other officers, some for the forecastle, others for the waist, and others for the poop, where they shall abide if they be not otherwise directed.[9]

26. The gunners shall not shoot any great ordnance at other distance than point blank.

27. An officer or two shall be appointed to take care that no loose powder be carried between the decks, or near any linstock or match in hand. You shall saw divers hogsheads in two parts, and filling them with water set them aloft the decks. You shall divide your carpenters, some in hold if any shot come between wind and water, and the rest between the decks, with plates of leads, plugs, and all things necessary laid by them. You shall also lay by your tubs of water certain wet blankets to cast upon and choke any fire.[10]

28. The master and boatswain shall appoint a certain number of sailors to every sail, and to every such company a master's mate, a boatswain's mate or quartermaster; so as when every man knows his charge and his place things may be done without noise or confusion, and no man [is] to speak but the officers. As, for example, if the master or his mate bid heave out the main topsail, the master's mate, boatswain's mate or quartermaster which hath charge of that sail shall with his company perform it, without calling out to others and without rumour[11], and so for the foresail, fore topsail, spritsail and the rest; the boatswain himself taking no particular charge of any sail, but overlooking all and seeing every man to do his duty.

29. No man shall board his enemy's ship without order, because the loss of a ship to us is of more importance than the loss of ten ships to the enemy, as also by one man's boarding all our fleet may be engaged; it being too great a dishonour to lose the least of our fleet. But every ship, if we be under the lee of an enemy, shall labour to recover the wind if the admiral endeavours it. But if we find an enemy to be leewards of us, the whole fleet shall follow the admiral, vice-admiral, or other leading ship within musket shot of the enemy; giving so much liberty to the leading ship as after her broadside delivered she may stay and trim her sails. Then is the second ship to tack as the first ship and give the other side, keeping the enemy under a perpetual shot. This you must do upon the windermost ship or ships of an enemy, which you shall either batter in pieces, or force him or them to bear up and so entangle them, and drive them foul one of another to their utter confusion[12].

30. The musketeers, divided into quarters of the ship, shall not deliver their shot but at such distance as their commanders shall direct them.

31. If the admiral give chase and be headmost man, the next ship shall take up his boat, if other order be not given. Or if any other ship be appointed to give chase, the next ship (if the chasing ship have a boat at her stern) shall take it.

32. If any make a ship to strike, he shall not enter her until the admiral come up.

33. You shall take especial care for the keeping of your ships clean between the decks, [and] to have your ordnance ready in order, and not cloyed with chests and trunks.

34. Let those that have provision of victual deliver it to the steward, and every man put his apparel in canvas cloak bags, except some few chests which do not pester the ship.

35. Everyone that useth any weapon of fire, be it musket or other piece, shall keep it clean, and if he be not able to amend it being out of order, he shall presently acquaint his officer therewith, who shall command the armourer to mend it.

36. No man shall play at cards or dice either for his apparel or arms upon pain of being disarmed and made a swabber of the ship.

*37. Whosoever shall show himself a coward upon any landing or otherwise, he shall be disarmed and made a labourer or carrier of victuals for the rest.

*38. No man shall land any man in any foreign ports without order from the general, by the sergeant-major[13] or other officer, upon pain of death.

*39. You shall take especial care when God shall send us to land in the Indies, not to eat of any fruit unknown, which fruit you do not find eaten with worms or beasts under the tree.

*40. You shall avoid sleeping on the ground, and eating of new fish until it be salted two or three hours, which will otherwise breed a most dangerous flux; so will the eating of over-fat hogs or fat turtles.

*41. You shall take care that you swim not in any rivers but where you see the Indians swim, because most rivers are full of alligators.

*42. You shall not take anything from any Indian by force, for if you do it we shall never from thenceforth be relieved by them, but you must use them with all courtesy. But for trading and exchanging with them, it must be done by one or two of every ship for all the rest, and those to be directed by the cape merchant[14] of the ship, otherwise all our commodities will become of vile price, greatly to our hindrance.

*43. For other orders on the land we will establish them (when God shall send us thither) by general consent. In the meantime I shall value every man, honour the better sort, and reward the meaner according to their sobriety and taking care for the service of God and prosperity of our enterprise.

*44. When the admiral shall hang out a flag in the main shrouds, you shall know it to be a flag of council. Then come aboard him.

*45. And wheresoever we shall find cause to land, no man shall force any woman be she Christian or heathen, upon pain of death.

FOOTNOTES:

[1] The articles marked with an asterisk do not appear in the Gorges set, and were presumably those which Ralegh added to suit the conditions of his expedition or which he borrowed from other

precedents.

[2] Cape Finisterre.

[3] Cape St. Vincent.

[4] MS. Cape Devert.

[5] MS. 'loofe.'

[6] Corporal of the field meant the equivalent of an A.D.C. or orderly.

[7] This appears to be the first known mention of a court-martial being provided for officially at sea.

[8] This passage is corrupt in the MS. and is restored from Wimbledon's Article 32, *post*, p. 58.

[9] This was the Spanish practice. There is no known mention of it earlier in the English service.

[10] Gorges's article about 'Musket-arrows' is here omitted by Ralegh.

[11] *I.e.* 'noisy confusion.' Shakspeare has 'I heard a bustling rumour like a fray.'

[12] The corresponding article in Gorges's set (*Stowe MSS.* 426) is as follows:—

'No man shall board any enemy's ship but by order from a principal commander, as the admiral, vice-admiral or rear-admiral, for that by one ship's boarding all the fleet may be engaged to their dishonour or loss. But every ship that is under the lee of an enemy shall labour to recover the wind if the admiral endeavour it. But if we find an enemy to leeward of us the whole fleet shall follow the admiral, vice-admiral or other leading ship within musket-shot of the enemy, giving so much liberty to the leading ship, as after her broadside is delivered she may stay and trim her sails. Then is the second ship to give her side and the third, fourth, and rest, which done they shall all tack as the first ship and give the other side, keeping the enemy under a perpetual volley. This you must do upon the windermost ship or ships of the enemy, which you shall either batter in pieces, or force him or them to bear up and so entangle them, and drive them foul one of another to their utter confusion.' For the evidence that this may have been drawn up and used as early as 1578, and consequently in the Armada campaign, see Introductory Note, *supra*, pp. 34-5.

[13] 'Sergeant-major' at this time was the equivalent to our 'chief of the staff' or 'adjutant-general.' In the fleet orders issued by the Earl of Essex for the Azores expedition in 1597 there was a similar article, which Ralegh was accused of violating by landing at Fayal without authority; it ran as follows:—'No captain of any ship nor captain of any company if he be severed from the fleet shall land without direction from the general or some other principal commander upon pain of death,' &c. Ralegh met the charge by pleading he was himself a 'principal commander.'—Purchas, iv. 1941.

[14] This expression has not been found elsewhere. It may stand for 'chap merchant,' *i.e.* 'barter-merchant.'

PART III

CAROLINGIAN

I. VISCOUNT WIMBLEDON, 1625

II. THE EARL OF LINDSEY, 1635

THE ATTEMPT TO APPLY LAND FORMATIONS TO THE FLEET, 1625

INTRODUCTORY

From the point of view of command perhaps the most extraordinary naval expedition that ever left our shores was that of Sir Edward Cecil, Viscount Wimbledon, against Cadiz in 1625. Every flag officer both of the fleet and of the squadrons was a soldier. Cecil himself and the Earl of Essex, his vice-

admiral, were Low Country colonels of no great experience in command even ashore, and Lord Denbigh, the rear-admiral, was a nobleman of next to none at all. Even Cecil's captain, who was in effect 'captain of the fleet,' was Sir Thomas Love, a sailor of whose service nothing is recorded, and the only seaman of tried capacity who held a staff appointment was Essex's captain, Sir Samuel Argall. It was probably due to this recrudescence of military influence in the navy that we owe the first attempt to establish a regular order of battle since the days of Henry VIII.

These remarkable orders appear to have been an after-thought, for they were not proposed until a day or two after the fleet had sailed. The first orders issued were a set of general instructions, 'for the better government of the fleet' dated October 3, when the fleet was still at Plymouth.

They were, it will be seen, on the traditional lines. Those used by Ralegh are clearly the precedent upon which they were drawn, and in particular the article relating to engaging an enemy's fleet follows closely that recommended by Gorges, with such modifications as the squadronal organisation of a large fleet demanded. On October 9, the day the fleet got to sea, a second and more condensed set of 'Fighting Instructions' was issued, which is remarkable for the modification it contains of the method of attack from windward.[1] For instead of an attack by squadrons it seems to contemplate the whole fleet going into action in succession after the leading ship, an order which has the appearance of another advance towards the perfected line.

Two days later however the fleet was becalmed, and Cecil took the opportunity of calling a council to consider a wholly new set of 'Fighting Instructions' which had been drafted by Sir Thomas Love. This step we are told was taken because Cecil considered the original articles provided no adequate order of battle such as he had been accustomed to ashore. The fleet had already been divided into three squadrons, the Dutch contingent forming a fourth, but beyond this, we are told, nothing had been done 'about the form of a sea fight.' Under the new system it will be seen each of the English squadrons was to be further divided into three sub-squadrons of nine ships, and these apparently were to sail three deep, as in Drake's parade formation of 1588, and were to 'discharge and fall off three and three as they were filed in the list,' or order of battle. That is, instead of the ships of each squadron attacking in succession as the previous orders had enjoined, they were to act in groups of three, with a reserve in support. The Dutch, it was expressly provided, were not to be bound by these orders, but were to be free 'to observe their own order and method of fighting.' What this was is not stated, but there can be no doubt that the reference is to the boarding tactics which the Dutch, in common with all continental navies, continued to prefer to the English method of first overpowering the enemy with the guns. This proviso, in view of the question as to what country it was that first perfected a single line ahead, should be borne in mind.

As appears from the minutes of the council of war, printed below, Love's revolutionary orders met with strong opposition. Still, so earnest was Cecil in pressing them, and so well conceived were many of the articles that they were not entirely rejected, but were recognised as a counsel of perfection, which, though not binding, was to be followed as near as might be. Their effect upon the officers, or some of them, was that they understood the 'order of fight' to be as follows:—'The several admirals to be in square bodies' (that is, each flag officer would command a division or sub-squadron formed in three ranks of three files), 'and to give their broadsides by threes and so fall off. The rear-admiral to stand for a general reserve, and not to engage himself without great cause.'[2] The confusion, however, must have been considerable and the difference of opinion great as to how far the new orders were binding; for the 'Journal of the Vanguard' merely notes that a council was called on the 11th 'wherein some things were debated touching the well ordering of the fleet,' and with this somewhat contemptuous entry the subject is dismissed.

Still it must be said that on the whole these orders are a great advance over anything we know of in Elizabethan times, and particularly in the careful provisions for mutual support they point to a happy reversion to the ideas which De Chaves had formulated, and which the Elizabethans had too drastically abandoned.

FOOTNOTES:

[1] 'Journal of the Vanguard' (Essex's flagship), and Cecil to Essex, *S.P. Dom. Car. I*, xi.

[2] 'Journal of the Expedition,' *S. P. Dom. Car., I*, x. 67.

LORD WIMBLEDON, 1625, *No.* 1, *Oct.* 3.

[+State Papers Domestic, Car. I, ix.+]

A copy of those instructions which were sent unto the Earl of Essex and given by Sir Edward Cecil, Knight, admiral of the fleet, lieutenant-general and marshal of his majesty's land force now at sea, to be duly performed by all commanders, and their captains and masters, and other inferior officers, both by sea and land, for the better government of his majesty's fleet. Dated in the Sound of Plymouth, aboard his majesty's good ship the Anne Royal, the third of October, 1625.

1. First above all things you shall provide that God be duly served twice every day by all the land and sea companies in your ship, according to the usual prayers and liturgy of the Church of England, and shall set and discharge every watch with the singing of a psalm and prayer usual at sea.

2. You shall keep the company from swearing, blaspheming, drunkenness, dicing, carding, cheating, picking and stealing, and the like disorders.

3. You shall take care to have all your company live orderly and peaceable, and shall charge your officers faithfully to perform their office and duty of his and their places. And if any seaman or soldier shall raise tumult, mutiny or conspiracy, or commit murder, quarrel, fight or draw weapon to that end, or be a sleeper at his watch, or make noise, or not betake himself to his place of rest after his watch is out, or shall not keep his cabin cleanly, or be discontented with the proportion of victuals assigned unto him, or shall spoil or waste them or any other necessary provisions in the ships, or shall not keep clean his arms, or shall go ashore without leave, or shall be found guilty of any other crime or offence, you shall use due severity in the punishment or reformation thereof according to the known orders of the sea.

4. For any capital or heinous offence that shall be committed in your ship by the land or sea men, the land and sea commanders shall join together to take a due examination thereof in writing, and shall acquaint me therewith, to the end that I may proceed in judgment according to the quality of the offence.

5. No sea captain shall meddle with the punishing of any land soldiers, but shall leave them to their commanders; neither shall the land commanders meddle with the punishing of the seamen.

6. You shall with the master take a particular account of the stores of the boatswain and carpenters of the ship, examining their receipts, expenses and remains, not suffering any unnecessary waste to be made of their provisions, or any work to be done which shall not be needful for the service.

7. You shall every week take the like account of the purser and steward of the quantity and quality of victuals that are spent, and provide for the preservation thereof without any superfluous expense. And if any person be in that office suspected[1] for the wasting and consuming of victuals, you shall remove him and acquaint me thereof, and shall give me a particular account from time to time of the expense, goodness, quantity and quality of your victuals.

8. You shall likewise take a particular account of the master gunner for the shot, powder, munition and all other manner of stores contained in his indenture, and shall not suffer any part thereof to be sold, embezzled or wasted, nor any piece of ordnance to be shot off without directions, keeping also an account of every several piece shot off in your ship, to the end I may know how the powder is spent.

9. You shall suffer no boat to go from your ship without special leave and upon necessary causes, to fetch water or some other needful thing, and then you shall send some of your officers or men of trust, for whose good carriage and speedy return you will answer.

10. You shall have a special care to prevent the dreadful accident of fire, and let no candles be used without lanterns, nor any at all in or about the powder room. Let no tobacco be taken between the decks, or in the cabins or in any part of the ship, but upon the forecastle or upper deck, where shall stand tubs of water for them to throw their ashes into and empty their pipes.

11. Let no man give offence to his officer, or strike his equal or inferior on board, and let mutinous persons be punished in most severe manner.

12. Let no man depart out of his ship in which he is first entered without leave of his commander, and let no captain give him entertainment after he is listed, upon pain of severity of the law in that case.

13. If any fire should happen in your ship, notwithstanding your care (which God forbid!), then you shall shoot off two pieces of ordnance, one presently after the other, and if it be in the night you shall hang out four lanterns with lights upon the yards, that the next ships to you may speed to succour you.

14. If the ship should happen to spend a mast, or spring a leak, which by increasing upon you may grow to present danger, then you shall shoot off two pieces of ordnance, the one a good while after the other, and hang out two lights on the main shrouds, the one a man's height over the other, so as they

may be discernible.

15. If the ship should happen to ran on ground upon any danger (which God forbid!) then you shall shoot off four pieces of ordnance distinctly, one after the other; if in the night, hang out as many lights as you can, to the end the fleet may take notice thereof.

16. You shall favour your topmasts and the head of your mainmast by bearing indifferent sail, especially in foul weather and in a head sea and when your ship goeth by the wind; lest, by the loss of a mast upon a needless adventure, the service is deprived of your help when there is greatest cause to use it.

17. The whole fleet is to be divided into three squadrons: the admiral's squadron to wear red flags and red pennants on the main topmast-head; the vice-admiral's squadron to wear blue flags and blue pennants on the fore topmast-heads; the rear-admiral's squadron to wear white flags and white pennants on the mizen topmast-heads.[2]

18. The admirals and officers are to speak with me twice a day, morning and evening, to receive my directions and commands, which the rest of the ships are duly to perform. If I be ahead I will stay for them, if to leeward I will bear up to them. If foul weather should happen, you are not to come too near me or any other ship to hazard any danger at all. And when I have hailed you, you are to fall astern, that the rest of the ships in like manner may come up to receive my commands.

19. You shall make in every ship two captains of the watch, or more (if need be), who shall make choice of soldiers or seamen to them to search every watch in the night between the decks, that no fire or candle be carried about the ship after the watch is set, nor that no candle be burning in any cabin without a lantern, nor that neither but whilst they are making themselves ready, and to see the fire put out in the cook's room, for there is no danger so inevitable as the ship's firing.

20. You shall cause the landmen to learn the names and places of the ropes that they may assist the sailors in their labours upon the decks, though they cannot go up to the tops and yards.

21. You shall train and instruct such sailors and mariners as shall be found fit to the use of the musket, as you do your landmen, and register their names in a list by themselves, making no difference for matter of discipline between the sailors and soldiers aboard you.

22. You shall not give chase nor send aboard any ship but by order from me, or my vice-admiral or rear-admiral; and if you come near any ship in your course belonging to any prince or state you shall only make stay of her, and bring her to me or the next officer, without taking anything from them or their companies by force, but shall charge all your company from pillaging between decks or breaking up any hold, or embezzling any goods so seized and taken, upon pain of severity of the law in that case.

23. You shall fall astern of me and the admirals of your several squadrons unto the places assigned unto you, and follow their lights as aforesaid, receiving such instructions from me or them in the morning what course to hold. And if you shall at any time be separated from the fleet by foul weather, chase or otherwise, you shall shape your course for the southward cape upon the coast of Spain in the latitude of 37, one of the places of rendezvous; if you miss me there, then sail directly for the Bay of Cales or St. Lucar, which is the other place assigned for rendezvous.

24. You must have a special care in times of calms and foggy weather to give such a berth one unto the other as to keep your ships clear, and not come foul one of another. Especially in fogs and mists you shall sound with drum or trumpet, or make a noise with your men, or shoot off muskets, to give warning to other ships to avoid the danger of boarding or coming foul one of another.

25. If you or any other two or three of the fleet discover any sail at sea to the windward or leeward of the admiral, which the admiral cannot discern, if she be a great ship you shall signify the same by striking or hoisting of your main topsail so often as you conceive the ship to be hundred tons of burthen; and if you discover a small ship you shall give the like signs by striking your fore topsail; but if you discover many ships you shall strike your main topsail often and put out your ensign in the maintop; and if such ship or fleet go large before the wind, you shall after your sign given do the like, till you perceive that the admiral and the rest of the squadrons have seen your sign and your so standing; and if you went large at the time of discovery of such ship or fleet, you shall for a little time hale aft your sheets and then go large again, that the rest of the fleet and squadrons may know that you go large to show that the ship or fleet discovered keeps that course.

26. If the ship or fleet discovered have their tacks aboard and stand upon a wind, then if you had your tack aboard at the time of the discovery you shall bear up for a little time, and after hale aft your sheets again to show us what course the ship or fleet holdeth.

27. If you discover any ship or fleet by night, and they be [to] windward of you, the general or admirals, you shall presently bear up to give us knowledge if you can speak with her; if not, you may keep your luff and shoot off a piece of ordnance by which we shall know you give chase, to the end that the rest may follow accordingly.

28. For a general rule let no man presume to shoot off any pieces of ordnance but in discovery of ships or fleet by night, or being in danger of the enemy, or of fire, or of sinking, that it may be unto us a most certain intelligence of some matter of importance.

29. If any man shall steal any victuals by breaking into the hold or otherwise, he shall receive the punishment of a thief and murderer of his fellows.

30. No man shall keep any feasting or drinking between meals, or drink any health upon the ship's provisions; neither shall the steward deliver any candle to any private man or for any private use.

31. In foul weather every man shall set his sail to keep company with the rest of the fleet, and not run too far ahead by day but that he may fall astern the admiral before night.

32. In case the fleet or any part of us should be set upon, the sea-captain shall appoint sufficient company to assist the gunners, after which (if the fight require it) the cabins between the decks shall be taken down, [and] all beds and sacks employed for bulwarks. The musketeers of every ship shall be divided under captains or other officers, some for the forecastle, some for the waist, and others for the poop, where they shall abide if they be not otherwise directed.

33. An officer or two shall be appointed to take care that no loose powder be carried between [the decks] nor near any linstock or match in hand. You shall saw divers hogsheads in two parts, and, filling them with water, set them aloft the decks. You shall divide your carpenters, some in hold, if any shot come between wind and water, and the rest between the decks, with plates of lead, plugs and all things necessary laid by them. You shall also lay by your tubs of water certain wet blankets, to cast upon and cloak any fire.

34. The master and boatswain shall appoint a convenient number of sailors to every sail, and to every such company a master's mate or a quartermaster, so as when every man knows his charge and his place, things may be done without noise or confusion; and no man [is] to speak but the officers.

35. No man shall board any enemy's ship, especially such as command the king's ships, without special order from me. The loss of one of our ships will be an encouragement to the enemy, and by that means our fleet may be engaged, it being a great dishonour to lose the least of our fleet. If we be under the lee of an enemy, every squadron and ship shall labour to recover the wind (if the admiral endeavour it). But if we find an enemy to leeward of us the whole fleet shall follow in their several places, the admirals with the head of the enemy, the vice-admirals with the body, and the rear-admirals with the sternmost ships of the chase, (or other leading ships which shall be appointed) within musket-shot of the enemy, giving so much liberty to the leading ship as after her broadside[3] delivered she may stay and trim her sails; then is the second ship to give her side, and the third and fourth, with the rest of that division; which done they shall all tack as the first ship and give their other sides, keeping the enemy under perpetual volley. This you must do upon the windermost ship or ships of an enemy, which you shall either batter in pieces, or force him or them to bear up, and so entangle them or drive them foul one of another to their utter confusion.

36. Your musketeers, divided into quarters of the ship, shall not discharge their shot but at such a distance as their commanders shall direct them.

37. If the admiral or admirals give chase, and be the headmost man, the next ship shall take up his boat if other order be not given, or if any other ship be appointed to give chase, the next ship (if the [4] chasing ship have[5] a boat at her stern) shall take it.

38. Whosoever shall show himself a coward upon any landing or otherwise, he shall be disarmed and made a labourer or carrier of victuals for the army.

39. No man shall land anywhere in any foreign parts without order from me, or by the sergeant-major or other officer upon pain of death.

40. Wheresoever we shall land no man shall force any woman upon pain of death.

41. You shall avoid sleeping upon the ground and the drinking of new wines, and eating new fruits, and fresh fish until it has been salted three hours, and also forbear sleeping upon the deck in the night time, for fear of the serene[6] that falls, all which will breed dangerous fluxes and diseases.

42. When the admiral shall hang out the arms of England in the mizen shrouds, then shall the council of war come aboard; and when that shall be taken in and the St. George hung in the main shrouds, that is for a general council.[7]

For any orders upon the land (if God send us thither) we shall establish them. For matter of sailing or discipline at sea if there be cause you shall receive other directions, to which I refer you.

Likewise it is ordered between the seamen and the landmen that after the captain of the ship is cabined, he shall if possible lodge the captain of the foot in the same cabin, after the master of the ship is cabined the lieutenant, and after the master's mates the ensign.

FOOTNOTES:

[1] MS. 'if any suspected persons be in that office,' &c.

[2] This is the first known occasion of red, blue and white flags being used to distinguish squadrons, though the idea was apparently suggested in Elizabeth's time. See *Navy Records Society, Miscellany*, i. p. 30.

[3] MS. has 'to the leading ships as after their broadside,' &c.

[4] MS. 'a'

[5] MS. 'with.'

[6] Spanish *'sereno,'* the cold evening air.

[7] The 'council of war' was composed of the flag officers and the colonels of regiments. Sir Thos. Love was also a member of it, but probably as treasurer of the expedition and not as flag captain. The 'general council' included besides all captains of ships and the masters.

LORD WIMBLEDON, 1625, *No.* 2, *October* 11.

[+State Papers Domestic, Charles I, xi.+]

Instructions when we come to fight with an enemy, sent by the Lieutenant-General unto the Earl of Essex.

1. That you shall see the admiral make way to the admiral enemy, so likewise the vice-admiral and the rear-admiral, and then every ship [is] to set upon the next according to his order, yet to have such a care that those that come after may be ready to second one another after the manner here following.

2. If we happen to be encountered by an enemy at sea, you shall then appoint a sufficient company to assist the gunners. You shall pull down all the cabins betwixt the decks and use the beds and sacks for bulwarks, and shall appoint your muskets to several officers, some to make good the forecastle, some the waist, and others abaft the mast, from whence they shall not stir till they be otherwise directed, neither shall they or the gunners shoot a shot till they be commanded by the captain.

3. You shall appoint a certain number of mariners to stand by sails and maintops, that every of them knowing his place and duty there be no confusion or disorder in the command; and shall divide carpenters some in hold, some betwixt the decks, with plates of lead, plugs and other things necessary for stopping up breaches made with great shot; and saw divers hogsheads in halves and set them upon the deck full of water, with wet blankets by them to cloak and quench any fire that shall happen in the fight.

4. No man shall board any enemy's ships without special order, but every ship if we be to leeward shall labour to recover the wind. If we be to windward of them, then shall the whole fleet, or so many of them as shall be appointed, follow the leading ship within musket-shot of the enemy, and give them first the chase pieces, then the broadside, afterwards a volley of small shot; and when the headmost ship hath done, the next ship shall observe the same course, and so every ship in order, that the headmost may be ready to renew the fight against such time as the sternmost hath made an end; by that means keeping the weather of the enemy and in continual fight till they be sunk in the sea, or forced by bearing up to entangle themselves, and to come [foul] one of another to their utter confusion.

LORD WIMBLEDON, 1625, *No.* 3.

[+The Earl of St. Germans's MS. Extract+.[1]]

At a Council of War holden aboard the Anne Royal, Tuesday, the 11th of October, 1625.

The council, being assembled, entered into consultation touching the form of a sea-fight performed against any fleet or ships of the King of Spain or other enemy, and touching some directions to be observed for better preparation to be made for such a fight and the better managing thereof when we should come to action.

The particulars for this purpose considerable were many; insomuch that no pertinent consultation could well be had concerning the same without some principles in writing, whereby to direct and bound the discourse. And therefore, by the special command of my lord lieutenant-general, a form of articles for this service (drawn originally by Sir Thomas Love, Kt., treasurer for this action, captain of the Anne Royal and one of the council of war) was presented to the assembly, and several times read over to them.

After the reading, all the parts thereof were well weighed and examined, whereby it was observed that it intended to enjoin our fleet to advance and fight at sea, much after the manner of an army at land, assigning every ship to a particular division, rank, file, and station; which order and regularity was not only improbable but almost impossible to be observed by so great a fleet in so uncertain a place as the sea. Hereupon some little doubt arose whether or no this form of articles should be confirmed; but then it was alleged that the same articles had in them many other points of direction, preparation, and caution for a sea-fight, which were agreed by all men to be most reasonable and necessary. And if so strict a form of proceeding to fight were not or could not be punctually observed, yet might these articles beget in our commanders and officers a right understanding of the conception and intent thereof; which with an endeavour to come as near as could be to perform, the particulars might be of great use to keep us from confusion in the general. Neither could the limiting of every several ship to such a rank or file [and] to such certain place in the same, bring upon the fleet intricacy and difficulty of proceeding, so [long] as (if the proper ships were absent or not ready) those in the next place were left at liberty, or rather commanded, to supply their rooms and maintain the instructions, if not absolutely, yet as near as they could. In conclusion therefore the form of articles which was so presented, read, and considered of, was with some few alterations and additions ratified by my lord lieutenant-general and by the whole council as act of theirs passed and confirmed, and to be duly observed and put in execution by all captains, mariners, gunners, and officers in every ship, and all others, to whom it might appertain, at their perils, leaving only to my lord lieutenant the naming and ranking of the ships of every division in order as they should proceed for the execution of the same articles; which in conclusion were these, touching the whole fleet in general and the admiral's squadron in particular, namely:—

1. That when the fleet or ships of the enemy should be discovered the admiral of our fleet with the ships of his squadron should put themselves into the form undermentioned and described, namely, that the same squadron should be separated into three divisions of nine ships in a division, and so should advance, set forward, and charge upon the enemy as hereafter more particularly is directed.

That these nine ships should discharge and fall off three and three, as they are filed in this list.

Anne Royal Admiral
Prudence Captain Vaughan
Royal Defence Captain Ellis.

Barbara Constance Captain Hatch
Talbot Captain Burdon
Abraham Captain Downes.

Golden Cock Captain Beaumont
Amity Captain Malyn
Anthony Captain Blague.

That these nine ships should second the admiral of this squadron three and three, as they are filed in this list.

St. George Vice-admiral
Lesser Sapphire Captain Bond
Sea Venture Captain Knevet.

Assurance Captain Osborne
Camelion Captain Seymour

Return Captain Bonithon.

Jonathan Captain Butler[2]
William Captain White
Hopewell Captain ——

That these nine ships should second the vice-admiral of this squadron three and three, as they are filed in this list.

Convertine Rear-admiral
Globe Captain Stokes
Assurance of Dover Captain Bargey.

Great Sapphire Captain Raymond
Anne Captain Wollaston
Jacob Captain Gosse.

George Captain Stevens
Hermit Captain Turner
Mary Magdalen Captain Cooper.

These three ships should fall into the rear of the three former divisions, to charge where and when there should be occasion, or to help the engaged, or supply the place of any that should be unserviceable.

Hellen Captain Mason
Amity of Hull Captain Frisby
Anne Speedwell Captain Polkenhorne.

2. That the admiral of the Dutch and his squadron should take place on the starboard side of our admiral, and observe their own order and method in fighting.

3. That the vice-admiral of our fleet and his squadron should make the like division, and observe the same order and form as the admiral's squadron was to observe, and so should keep themselves in their several divisions on the larboard side of the admiral, and there advance and charge if occasion were when the admiral did.

4. That the rear-admiral of the fleet and his squadron should also put themselves into the like order of the admiral's squadron as near as it might be, and in that form should attend for a reserve or supply. And if any squadron, ship or ships of ours should happen to be engaged by over-charge of the enemies, loss of masts or yards, or other main distress needing special succour, that then the rear-admiral with all his force, or one of his divisions proportionable to the occasion, should come to their rescue; which being accomplished they should return to their first order and place assigned.

5. That the distance between ship and ship in every squadron should be such as none might hinder one another in advancing or falling off.

6. That the distance between squadron and squadron should be more or less as the order of the enemy's fleet or ships should require, whereof the captains and commanders of our fleet were to be very considerate.

7. That if the enemy's approach happened to be in such sort as the admiral of the Dutch and his squadron, or the vice-admiral of our fleet [and] his squadron, might have opportunity to begin the fight, it should be lawful for them to do so until the admiral could come up, using the form, method, and care prescribed.

8. That if the enemy should be forced to bear up, or to be entangled among themselves, whereby an advantage might be had, then our rear-admiral and his squadron with all his divisions should lay hold thereof and prosecute it to effect.

9. That the rear-admiral's squadron should keep most strict and special watch to see what squadrons or ships distressed of our fleet should need extraordinary relief, and what advantage might be had upon the enemy, that a speedy and present course might be taken to perform the service enjoined.

10. That if any ship or ships of the enemy should break out or fly, the admiral of any squadron which should happen to be in the next and most convenient place for that purpose should send out a competent number of the fittest ships of his squadron to chase, assault, or take such ship or ships so breaking out; but no ship should undertake such a chase without the command of the admiral, or at leastwise the admiral of his squadron.

11. That no man should shoot any small or great shot at the enemy till he came at the distance of caliver or pistol shot, whereby no shot might be made fruitless or in vain; whereof the captains and officers in every ship should have an especial care.

12. That no man should presume or attempt to board any ship of the enemy without special order and direction from the admiral, or at leastwise the admiral of his squadron.

13. That if any of our fleet happened to be [to] leeward of the enemy, every of our ships should labour and endeavour what they might to take all opportunity to get to windward of them, and to hold that advantage having once obtained it.

14. That the captains and officers of every ship should have an especial care as much as in them lay to keep the enemies in continual fight without any respite or intermission to be offered them; which, with the advantage of the wind if it might be had, was thought the likeliest way to enforce them to bear up and entangle themselves, or fall foul one of another in disorder and confusion.

15. That an especial care should be had in every ship that the gunners should load some of their pieces with case shot, handspikes, nails, bars of iron, or with what else might do most mischief to the enemy's men, upon every fit opportunity, and to come near and lay the ordnance well to pass for that purpose, which would be apt to do great spoil to the enemy.

16. That the cabins in every ship should be broken down so far as was requisite to clear the way of the ordnance.

17. That all beds and sacks in every ship should be disposed and used as bulwarks for defence against the shot of the enemy.

18. That there should be ten, eight, six, or four men to attend every piece of ordnance as the master gunner should choose out and assign them to their several places of service, that every one of them might know what belonged properly to him to do. And that this choice and assignation should be made with speed so as we might not be taken unprovided.

19. That there should be one, two, or three men of good understanding and diligence, according to the burden of every ship, forthwith appointed to fill cartouches[3] of powder, and to carry them in cases or barrels covered to their places assigned.

20. That the hold in every ship should be rummaged and made predy,[4] especially by the ship's sides, and a carpenter with some man of trust appointed to go fore and after in hold to seek for shot that may come in under water; and that there should be provided in readiness plugs, pieces of sheet lead, and pieces of elm board to stop all leaks that might be found within board or without.

21. That in every ship where any soldiers were aboard the men should be divided into two or three parts, whereof only one part should fight at once and the rest should be in hold, to be drawn up upon occasion to relieve and rescue the former.

22. That the men in every ship should be kept as close as reasonably might be till the enemy's first volley of small shot should be past.

23. That the mariners in every ship should be divided and separated into three or four parts or divisions, so as every one might know the place where he was to perform his duty for the avoiding of confusion.

24. That the master or boatswain of every ship, by command of the captain, should appoint a sufficient and select number of seamen to stand by and attend the sails.

25. That more especially they should by like command appoint sufficient helmsmen to steer the ship.

26. That the sailors and helmsmen should in no sort presume to depart or stir from their charge.

27. That the mainyard, foreyard, and topsail sheets in every ship should be slung, and the topsail yards if the wind were not too high; hereby to avoid the shooting down of sails.

28. That there should be butts or hogsheads sawn into two parts filled with salt water, set upon the upper and lower decks in several places convenient in every ship, with buckets, gowns, and blankets to quench and put out wild-fire or other fire if need be.

29. That if a fight began by day and continued till night, every ship should be careful to observe the admiral of her squadron; that if the admiral fell off and forbore the fight for the present every other ship might do the like, repairing under her own squadron to amend anything amiss, and be ready to

charge again when the admiral should begin.

30. That if any of the ships belonging to any squadron or division happened to be absent or not ready in convenient time and place to keep and make good the order herein prescribed, then every squadron and division should maintain these directions as near as they could, although the number of ships in every division were the less, without attending the coming in of all the ships of every division.

31. And that these ten ships, in regard of the munition and materials for the army and the horses which were carried in them, should attend the rear-admiral and not engage themselves without order, but should remain and expect such directions as might come from our admiral or rear-admiral.

Peter Bonaventure Captain Johnson
Sarah Bonaventure Captain Carew
Christian Captain Wharey
Susan and Ellen Captain Levett
William of London Captain Amadas
Hope Sir Thomas Pigott, Knt.
Chestnut
Fortune
Fox
Truelove

There was no difference between the articles for the admiral's squadron and those for the vice-admiral's and rear-admiral's, save in the names of the ships of every division, and that their squadrons had not any particular reserve, nor above five or six ships apiece in the third division, for want of ships to make up the number of nine; the munition and horse ships which belonged to their squadrons being unapt to fight, and therefore disposed into a special division of ten ships by themselves to attend the general reserve.

* * * * *

At the rising of the council a motion was made to have some of the best sailers of our fleet chosen out and assigned to lie off from the main body of the fleet, some to sea and some to shoreward, the better to discover, chase, and take some ships or boats of the enemy's; which might give us intelligence touching the Plate Fleet, whether it were come home or no, or when it would be expected and in what place, and touching such other matters whereof we might make our best advantage. But nothing herein was now resolved, it being conceived, as it seemed, that we might soon enough and more opportunely consider of this proposition and settle an order therein when we came nearer to the enemy's coasts; so the council was dissolved.

FOOTNOTES:

[1] *A Relation Touching the Fleet and Army of the King's most excellent majesty King Charles, set forth in the first year of his highness's reign, and touching the order, proceedings, and actions of the same fleet and army*, by Sir John Glanville, the younger, serjeant-at-law, and secretary to the council of war. [Printed for the Camden Society, 1883, N.S. vol. xxxii.]

[2] Elsewhere in the MS. spelt 'Boteler.' Probably Nathaniel Boteler, author of the *Dialogues about Sea Services*.

[3] MS. 'carthouses.'

[4] MS. 'pridie'=Boteler's 'predy.' 'To make the ship predy,' he says, is to clear for action. 'And likewise to make the hold predy is to bestow everything handsomely there and to remove anything that may be troublesome.'—*Dialogues*, 283.

THE SHIP-MONEY FLEETS, *circa* 1635

INTRODUCTORY

That Cecil's unconfirmed orders produced some impression beyond the circle of the military flag-officers is clear. Captain Nathaniel Boteler, in the work already cited,[1] quotes the system they enjoined as the one he would himself adopt if he were to command a large fleet in action. In his sixth dialogue on the 'Ordering of Fleets,' after recommending the division of all fleets of eighty sail and upwards into five squadrons, an organisation that was subsequently adopted by the Dutch, he proceeds to explain his system of signals, and the advantages of scout vessels being attached to every squadron,

especially, he says, the 'van and wings,' which looks as though the ideas of De Chaves were still alive. Boteler's work is cast in the form of a conversation between a landsman admiral and an experienced sea captain, who is supposed to be instructing him. In reply to the admiral's query about battle formations, the captain says that 'neither the whole present age [*i.e.* century] with the half of the last have afforded any one thorough example of this kind.' In the few actions between sailing fleets that had taken place in the previous seventy-five years he says 'we find little or nothing as touching the form of these fights.' Being pressed for his own ideas on the subject, he consents to give them as follows: 'I say, then, that wheresoever a fleet is either to give or take a battle with another every way equal with it, every squadron of such fleet, whether they be three in number as generally they are, or five (as we prescribed in the beginning of the dialogue) shall do well to order and subdivide itself into three equal divisions, with a reserve of certain ships out of every squadron to bring up their rears, the which may amount in number to the third part of every one of those divisions. And every one of these (observing a due berth and distance) are in the fight to second one another, and (the better to avoid confusion, and the falling foul one upon another) to charge, discharge and fall off by threes or fives, more or less, as the fleet in gross is greater or smaller; the ships of reserve being to be instructed either to succour and relieve any that shall be anyway engaged and in danger, or to supply and put themselves in the place of those that shall be made unserviceable; and this order and course to be constantly kept and observed during the whole time of the battle.

Asked if there are no other forms he says: 'Some forms besides, and different from this (I know well), have been found prescribed and practised; as for a fleet which consisteth but of a few ships and being in fight in an open sea, that it should be brought up to the battle in one only front, with the chief admiral in the midst of them, and on each side of him the strongest and best provided ships of the fleet, who, keeping themselves in as convenient a distance as they shall be able, are to have a eye and regard in the fight to all the weaker and worser ships of the party, and to relieve and succour them upon all occasions, and withal being near the admiral may both guard him and aptly receive his instructions. And for a numerous fleet they propound that it should be ordered also (when there is sea-room sufficient) into one only front, but that the ablest and most warlike ships should be so stationed as that the agility of the smaller ships and the strength of the other may be communicated[2] to a mutual relief, and for the better serving in all occasions either of chase or charge; to which end they order that all the files of the front that are to the windwards should be made up of the strongest and best ships, that so they may the surer and speedier relieve all such of the weaker ships, being to leewards of them, as shall be endangered or anyway oppressed by any of the enemy.' All this is a clear echo of De Chaves and the system which still obtained in all continental navies. For a large fleet at least Boteler evidently disapproved all tactics based on the line abreast, and preferred a system of small groups attacking in line ahead, on Cecil's proposed system. Asked about the campaign of 1588, he has nothing to tell of any English formation. Of the crescent order of the Armada he says—and modern research has fully confirmed his statement—that it was not a battle order at all, but only a defensive sailing formation 'to keep themselves together and in company until they might get up to be athwart Gravelines, which was the rendezvous for their meeting with the Prince of Parma; and in this regard this their order was commendable.'

How far these ideas really represented current naval opinion we cannot precisely tell, but we know that Boteler was an officer held in high enough esteem to receive the command of the landing flotilla at Cadiz, and to be described as 'an able and experienced sea captain.' But whatever tendency there may have been to tactical progress under Buckingham's inspiring personality, it must have been smothered by the lamentable conduct of his war. Later on in the reign, in the period of the 'Ship-money' fleets, when Charles was endeavouring to establish a real standing navy on modern lines, we find in the Earl of Lindsey's orders of 1635, which Monson selected for publication in his *Tracts*, no sign of anything but tactical stagnation. The early Tudor tradition seems to have completely re-established itself, and Monson, who represents that tradition better than anyone, though he approved the threefold subdivision of squadrons, thought all battle formations for sailing ships a mistake. Writing not long after Boteler, he says: 'Ships which must be carried by wind and sails, and the sea affording no firm or steadfast footing, cannot be commanded to take their ranks like soldiers in a battle by land. The weather at sea is never certain, the winds variable, ships unequal in sailing; and when they strictly keep their order, commonly they fall foul one of another, and in such cases they are more careful to observe their directions than to offend the enemy, whereby they will be brought into disorder amongst themselves.'

Of Lindsey's orders only Article 18 is given here out of the thirty-four which Monson prints in full. It is the only one relating to tactics. The rest, which follow the old pattern, are the usual medley of articles of war, sailing instructions, and general directions for the conduct of the fleet at sea. We cannot therefore safely assume that Article 18 fairly represents the tactical thought of the time. It may be that Lindsey's orders were merely in the nature of 'General Instructions,' to be supplemented by more particular 'Fighting Instructions,' as was the practice later.

FOOTNOTES:

[1] *Ante*, p. 27.

[2] The obsolete meaning of 'communicate' is to 'share' or 'participate,' to 'enjoy in common.'

THE EARL OF LINDSEY, 1635.

Such instructions as were given in the Voyage in 1635 by the Right Honourable Robert, Earl of Lindsey. [1]

[+Monson's Naval Tracts, Book III. Extract+.]

Art. 18. If we happen to descry any fleet at sea which we may probably know or conjecture designs to oppose, encounter or affront us, I will first strive to get the wind (if I be to leeward), and so shall the whole fleet in due order do the like. And when we shall join battle no ship shall presume to assault the admiral, vice-admiral or rear-admiral, but only myself, my vice-admiral or rear-admiral, if we be able to reach them; and the other ships are to match themselves accordingly as they can, and to secure one another as cause shall require, not wasting their powder at small vessels or victuallers, nor firing till they come side to side.

FOOTNOTE:

[1] This was a fleet of forty sail, designed, under colour of securing the sovereignty of the Seas and protecting commerce against pirates, to assist Spain as far as possible against the French and Dutch. It never fought.

PART IV

THE FIRST DUTCH WAR

I. ENGLISH AND DUTCH ORDERS ON THE EVE OF THE WAR, 1648-52

II. ORDERS ISSUED DURING THE WAR, 1653-54

I

ENGLISH AND DUTCH ORDERS ON THE EVE OF THE WAR, 1648-53

INTRODUCTORY

From the foregoing examples it will be seen that at the advent of the Commonwealth, which was to set on foot so sweeping a revolution in the naval art, all attempts to formulate a tactical system had been abandoned. This is confirmed by the following extract from the orders issued by the Long Parliament in 1648. It was the time when the revolt of a part of the fleet and a rising in the South Eastern counties led the government to apprehend a naval coalition of certain foreign powers in favour of Charles. It is printed by Granville Penn in his *Memorials of Sir William Penn* as having been issued in 1647, but the original copy of the orders amongst the Penn Tracts (*Sloane MSS.* 1709, f. 55) is marked as having been delivered on May 2, 1648, to 'Captain William Penn, captain of the Assurance frigate and rear-admiral of the Irish Squadron.' They are clearly based on the later precedents of Charles I, but it must be noted that Penn is told 'to expect more particular instructions' in regard to the fighting article. We may assume therefore that the admiralty authorities already recognised the inadequacy of the established fighting instructions, and so soon as the pressure of that critical time permitted intended to amplify them.

Amongst those responsible for the orders however there is no name that can be credited with advanced views. They were signed by five members of the Navy Committee, and at their head is Colonel Edward Mountagu, afterwards Earl of Sandwich, but then only twenty-two years old.[1]

Whether anything further was done is uncertain. No supplementary orders have been found bearing date previous to the outbreak of the Dutch war. But there exists an undated set which it seems impossible not to attribute to this period. It exists in the *Harleian MSS.* (1247, ff. 43b), amongst a number of others which appear to have been used by the Duke of York as precedents in drawing up his famous instructions of 1665. To begin with it is clearly later than the orders of 1648, upon which it is an obvious advance. Then the use of the word 'general' for admiral, and of the word 'sign' for 'signal' fixes it to the Commonwealth or very early Restoration. Finally, internal evidence shows it is previous to the orders of 1653, for those orders will be seen to be an expansion of the undated set so far as they go, and further, while these undated orders have no mention of the line, those of 1653 enjoin it. They must therefore lie between 1648 and 1653, and it seems worth while to give them here conjecturally as being possibly the supplementary, or 'more particular instructions,' which the government contemplated; particularly as this hypothesis gains colour from the unusual form of the heading 'Instructions for the better ordering.' Though this form became fixed from this time forward, there is, so far as is known, no previous example of it except in the orders which Lord Wimbledon propounded to his council of war in 1625, and those were also supplementary articles.[2]

Be this as it may, the orders in question do not affect the position that up to the outbreak of the First Dutch War we have no orders enjoining the line ahead as a battle formation. Still we cannot entirely ignore the fact that, in spite of the lack of orders on the subject, traces of a line ahead are to be detected in the earliest action of the war. Gibson, for instance, in his *Reminiscences* has the following passage relating to Blake's brush with Tromp over the honour of the flag on May 9, 1652, before the outbreak of the war:[3] 'When the general had got half Channel over he could see the Dutch fleet with their starboard tacks aboard standing towards him, having the weather-gage. Upon which the general made a sign for the fleet to tack. After which, having their starboard tacks aboard (the general's ship, the Old James, being the southernmost and sternmost ship in the fleet), the rest of his fleet tacking, first placed themselves in a line ahead of the general, who after tacking hauled up his mainsail in the brails, fitted his ship to fight, slung his yards, and run out his lower tier of guns and clapt his fore topsail upon the mast.' If Gibson could be implicitly trusted this passage would be conclusive on the existence of the line formation earlier than any of the known Fighting Instructions which enjoined it; but unfortunately, as Dr. Gardiner pointed out, Gibson did not write his account till 1702, when he was 67. He is however to some extent corroborated by Blake himself, who in his official despatch of May 20, relating the incident, says that on seeing Tromp bearing down on him 'we lay by and put ourselves into a fighting posture'—*i.e.* battle order—but what the 'posture' was he does not say. If however this posture was actually the one Gibson describes, we have the important fact that in the first recorded instance of the complete line, it was taken as a defensive formation to await an attack from windward.

The only other description we have of English tactics at this time occurs in a despatch of the Dutch commander-in-chief in the Mediterranean, Van Galen, in which he describes how Captain Richard Badiley, then commanding a squadron on the station, engaged him with an inferior force and covered his convoy off Monte Christo in August 1652. When the fleets were in contact, he says, as though he were speaking of something that was quite unfamiliar to him, 'then every captain bore up from leeward close to us to get into range, and so all gave their broadsides first of the one side and then again of the other, and then bore away with their ships before the wind till they were ready again; and then as before with the guns of the whole broadside they fired into my flagship, one after the other, meaning to shoot my masts overboard.'[4] From this it would seem that Badiley attacked in succession in the time-honoured way, and that the old rudimentary form of the line ahead was still the ordinary practice. The evidence however is far from strong, but really little is needed. Experience teaches us that the line ahead formation would never have been adopted as a standing order unless there had been some previous practice in the service to justify it or unless the idea was borrowed from abroad. But, as we shall see, the oft-repeated assertion that it was imitated from the Dutch is contrary to all the evidence and quite untenable. The only experience the framers of the order of 1653 can have had of a line ahead formation must have been in our own service.

The clearest proof of this lies in the annexed orders which Tromp issued on June 20, 1652, immediately before the declaration of war, and after he had had his brush with Blake, in which, if Gibson is to be trusted, Tromp had seen Blake's line. From these orders it is clear that the Dutch conception of a naval action was still practically identical with that of Lindsey's instructions of 1635, that is, mutual support of squadrons or groups, with no trace of a regular battle formation. In the detailed 'organisation' of the fleet each of the three squadrons has its own three flag officers—that is to say, it was organised, like that of Lord Wimbledon in 1625, in three squadrons and nine sub-squadrons, and was therefore clearly designed for group tactics. It is on this point alone, if at all, that it can be said to show any advance on the tactics which had obtained throughout the century, or on those which Tromp himself had adopted against Oquendo in 1639.

Yet further proof is to be found in the orders issued by Witte Corneliszoon de With to his captains in

October 1652, as commander-in-chief of the Dutch fleet. In these he very strictly enjoins, as a matter of real importance, 'that they shall all keep close up by the others and as near together as possible, to the end that thereby they may act with united force ... and prevent any isolation or cutting off of ships occurring in time of fight;' adding 'that it behoved them to stand by and relieve one another loyally, and rescue such as might be hotly attacked.' This is clearly no more than an amplification of Tromp's order of the previous June. It introduces no new principle, and is obviously based on the time-honoured idea of group tactics and mutual support. It is true that De Jonghe, the learned historian of the Dutch navy, regards it as conclusive that the line was then in use by the Dutch, because, as he says, several Dutch captains, after the next action, were found guilty and condemned for not having observed their instructions. But really there is nothing in it from which a line can be inferred. It is all explained on the theory of groups. And in spite of De Jonghe's deep research and his anxiety to show that the line was practised by his countrymen as well as by the English in the first Dutch War, he is quite unable to produce any orders like the English instructions of 1653, in which a line formation is clearly laid down.

But whether or not we can accept De Jonghe's conclusions as to the time the line was introduced into the Dutch service, one thing is clear enough—that he never ventured to suggest that the English copied the idea from his own countrymen. It is evident that he found nothing either in the Dutch archives or elsewhere even to raise such an idea in his mind. But, on the other hand, his conspicuous impartiality leads him to give abundant testimony that throughout these wars thoughtful Dutch officers were continually praising the order and precision of the English tactics, and lamenting the blundering and confusion of their own. It may be added that Dr. Gardiner's recent researches in the same field equally failed to produce any document upon which we can credit the Dutch admirals with serious tactical reforms. Even De Ruyter's improvements in squadronal organisation consisted mainly in superseding a multiplicity of small squadrons by a system of two or three large squadrons, divided into sub-Squadrons, a system which was already in use with the English, and was presumably imitated by De Ruyter, if it was indeed he who introduced it and not Tromp, from the well-established Commonwealth practice.[5]

FOOTNOTES:

[1] The others were John Rolle, member for Truro, a merchant and politician, who died in November 1648, and who as early as 1645 had been proposed, though unsuccessfully, for the Navy Committee; and three less conspicuous members of Parliament: Sir Walter Earle (of the Presbyterian party), Giles Greene, and Alexander Bence. They were all superseded the following year by the new Admiralty Committee of the Council of State.

[2] *Supra*, p. 63. It may also be noted that these articles are intended for a fleet not large enough to be divided into squadrons—just such a fleet in fact as that in which Penn was flying his flag. The units contemplated, *e.g.* in Articles 2-4, are 'ships,' whereas in the corresponding articles of 1653 the units are 'squadrons.'

[3] Gardiner, *Dutch War*, i. 9.

[4] This at least is what Van Galen's crabbed old Dutch seems to mean. 'Alsoo naer bij quam dat se couden toe schieter dragen, de elcken heer onder den windt, gaven so elck hare laghe dan vinjt d'eene sijde, dan veer van d'anden sijde, hielden alsdan met haer schepen voor den vindt tal dat se weer claer waren, dan wast alsvooren met cannoneren van de heele lagh en in sonderheijt op mijn onderhebbende schip vier gaven van meeninge masten aft stengen overboort to schieten.' A copy of Van Galen's despatch is amongst Dr. Gardiner's *Dutch War* transcripts.

[5] See De Jonghe's introduction to his Third Book on 'The Condition of the British and Dutch Navies at the outbreak of and during the Second English War,' *Geschiedenis van het Nederlandsche Zeewesen*, vol. ii. part ii. pp. 132-141, and his digression on Tactics, pp. 290 *et seq.*, and p. 182 note. De Witte's order is p. 311.

PARLIAMENTARY ORDERS, 1648.

[+Sloane MSS. 1709, f. 55. Extract+]

Instructions given by the Right Honourable the Committee of the Lords and Commons for the Admiralty and Cinque Ports, to be duly observed by all captains and officers whatsoever and common men respectively in their fleet, provided to the glory of God, the honour and service of Parliament, and the safety of the Kingdom of England. [*Fol.* 59.]

If any fleet shall be discovered at sea which may probably be conjectured to have a purpose to encounter, oppose, or affront the fleet in the Parliament's service, you may in that case expect more particular directions. But for the present you are to take notice, that in case of joining battle you are to leave it to the vice-admiral to assail the enemy's admiral, and to match yourself as equally as you can, to succour the rest of the fleet as cause shall require, not wasting your powder nor shooting afar off, nor till you come side to side.

SUPPLEMENTARY INSTRUCTIONS, circa 1650.

[+Harleian MSS. 1247, 43b. Draft unsigned+.]

Instructions for the better ordering and managing the fleet in fighting.

1. Upon discovery of a fleet, receiving a sign from the general's ship, which is putting abroad the sign made for each ship or frigate, they are to make sail and stand with them so nigh as to gain knowledge what they are and of what quality, how many fireships and others, and what order the fleet is in; which being done the frigates or vessels are to speak together and conclude on the report they are to give, and accordingly report to the general or commander-in-chief of the squadron, and not to engage if the enemy's ships exceed them in number except it shall appear to them on the place that they have the advantage.

2. At sight of the said fleet the vice-admiral or he that commands in the second place, and the rear-admiral or he that commands in the third place, are to make what sail they can to come up with the admiral on each wing, as also each ship according to her quality, giving a competent distance from each other if there be sea-room enough.

3. As soon as they shall [see] the general engage, or [he] shall make a sign by shooting off two guns and putting a red flag on the fore topmast-head, that each ship shall take the best advantage they can to engage with the enemy next unto him.

4. If any ship shall happen to be over-charged and distressed the next ship or ships are immediately to make towards their relief and assistance upon signal given; which signal shall be, if the admiral, then a pennant in the fore topmast-head; the vice-admiral or commander in the second place, a pennant in the main topmast-head; and the rear-admiral the like.

5. In case any ship shall be distressed or disabled by loss of masts, shot under water, or otherwise so as she is in danger of sinking or taking, he or they are to give a signal thereof so as, the fleet having knowledge, they may be ready to be relieved. Therefore the flagships are to have a special care to them, that such provisions may be made that they may not be left in distress to the mercy of the enemy; and the signal is to be a weft[1] of the ensign of the ship so distressed.

6. That it is the duty of the commanders and masters of all the small frigates, ketches and smacks belonging to the fleet to know the fireships that belong to the enemy, and accordingly by observing their motion to do their utmost to cut off their boats (if possible), or if opportunity serve that they lay them on board, fire and destroy them; and to this purpose they are to keep to windward of the fleet in time of service. But in case they cannot prevent the fireships from coming on board us by coming between us and them, which by all means possible they are to endeavour, that then, in such a case, they show themselves men in such an exigent,[2] and shear aboard them, and with their boats, grapnels, and other means clear them from us and destroy them; which service, if honourably done, according to its merit shall be rewarded, and the neglect thereof strictly and severely called to account.

7. That the fireships belonging to the fleet endeavour to keep the wind, and they with the small frigate's to be as near the great ships as they can, and to attend the signal from the commander-in-chief and to act accordingly.

8. If any engagement shall happen to continue until night and the general please to anchor, that upon signal given they all anchor in as good order as may be, the signal being as in the instructions for sailing; and if the general please to retreat without anchoring, then the signal to be firing two guns so nigh one the other as the report may be distinguished, and within three minutes after to do the like with two guns more. And the commander of this ship is to sign copies of these instructions to all ships and other vessels of this fleet. Given on board the ——

FOOTNOTES:

[1] See note, p. 99. [Transcriber's note: The text for this note reads: '*Waft* (more correctly written

wheft). It is any flag or ensign stopped together at the head and middle portion, slightly rolled up lengthwise, and hoisted at different positions at the after-part of a ship.'—Admiral Smyth (*Sailors' Word-Book*).]

[2] 'Exigent' = exigence, emergency. Shakespeare has 'Why do you cross me in this exigent?'—*Jul. Cæs.* v. i.

MARTEN TROMP, June 20, 1652.

[+Dr. Gardiner's First Dutch War, vol. i. p. 321. Extract+.]

June 20/30, 1652. *The resolution of Admiral Tromp on the distribution of the fleet in case of its being attacked*.

Each captain is expressly ordered, on penalty of 300 guilders, *to keep near*[1] the flag officer under whom he serves. Also he is to have his guns in a serviceable condition. The squadron under Vice-Admiral Jan Evertsen is to lie or sail immediately ahead of the admiral. Further Captain Pieter Floriszoon (who provisionally carries the flag at the mizen as rear-admiral) is always to remain with his squadron close astern of the admiral; and the Admiral Tromp is to take his station between both with his squadron. The said superior officers and captains are to stand by one another with all fidelity; and each squadron when another is vigorously attacked shall second and free the other, using therein all the qualities of a soldier and seaman.

FOOTNOTE:

[1] The Dutch has 'troppen' = to gather round (*cf.* our 'trooping the colour'). De With's corresponding order has 'dat zij allen bij den anderen ... gesloten zou den blijven.' *Supra*, p. 86.

II

ORDERS ISSUED DURING THE WAR 1653 AND 1654

INTRODUCTORY

The earliest known 'Fighting Instructions' in any language which aimed at a single line ahead as a battle formation, were issued by the Commonwealth's 'generals-at-sea' on March 29, 1653, in the midst of the Dutch War. This is placed beyond doubt by an office copy amongst the Duke of Portland's MSS. at Welbeck Abbey.[1] It is of high importance for the history of naval tactics that we are at last able to fix the date of these memorable orders. Endless misapprehension on the subject of our battle formations during the First Dutch War has been caused by a chronological error into which Mr. Granville Penn was led in his *Memorials of Penn* (Appendix L). Sir William Penn's copy of these Instructions is merely dated 'March 1653,'[2] and his biographer hazarded the very natural conjecture that, as this is an 'old style' date, it meant 'March 1654.' This would have been true of any day in March before the 25th, but as we now can fix the date as the 29th, we know the year is really 1653 and not 1654.[3] There was perhaps some anxiety on Mr. Penn's part to get his hero some share in the orders, and as William Penn was not appointed one of the 'generals-at-sea' till December 2, 1653, he could not officially have had the credit of orders issued in the previous March. This point however is also set at rest by the Welbeck copy, which besides the date has the signatures of the generals, and they are those of Blake, Deane and Monck. Penn did not sign them at all, but this really in no way affects his claim as a tactical reformer. For as he was vice-admiral of the fleet and an officer of high reputation, his share in the orders was probably as great as that of anyone else.

The winter of 1652-3 was the turning point of the war. The summer campaign had shown how serious the struggle was to be, and no terms for ending it could be arranged. Large reinforcements consequently had been ordered, and Monck and Deane nominated to assist Blake as joint generals-at-sea for the next campaign. Four days later, on November 30, 1652, Blake had been defeated by Tromp off Dungeness, and several of his captains were reported to have behaved badly. An inquiry was ordered, and the famous 'Laws of War and Ordinances of the Sea,' prepared by Sir Harry Vane by order of Parliament for the better enforcement of discipline, were put in force. Notwithstanding these vigorous efforts to increase the strength and efficiency of the sea service, it was not till after the first action of the new campaign that an attempt was made to improve the fleet tactics. The action off Portland on February 18, 1653, and the ensuing chase of Tromp, marked the first real success of the

war; but though the generals succeeded in delivering a severe blow to the Dutch admiral and his convoy, it must have been clear to everyone that they narrowly escaped defeat through a want of cohesion between their squadrons. On the 19th and 20th Tromp executed a masterly retreat, with his fleet in a crescent or obtuse-angle formation and his convoy in its arms, but nowhere is there any hint that either side fought in line ahead.[4] On the 25th the fleet had put into Stokes Bay to refit, and between this time and March 29 the new orders were produced.[5]

The first two articles it will be seen are practically the same as the 'Supplementary Instructions' on p. 99, but in the third, relating to 'general action,' instead of the ships engaging 'according to the order presented,' as was enjoined in the previous set, 'they are to endeavour to keep in a line with the chief,' as the order which will enable them 'to take the best advantage they can to engage with the enemy.' Article 6 directs that where a flagship is distressed captains are to endeavour to form line between it and the enemy. Article 7 however goes still further, and enjoins that where the windward station has been gained the line ahead is to be formed 'upon severest punishment,' and a special signal is given for the manoeuvre. Article 9 provides a similar signal for flagships.

Compared with preceding orders, these new ones appear nothing less than revolutionary. But it is by no means certain that they were so. Here again it must be remarked that it is beyond all experience for such sweeping reforms to be so rigorously adopted, and particularly in the middle of a war, without their having been in the air for some time previously, and without their supporters having some evidence to cite of their having been tried and tried successfully, at least on a small scale. The natural presumption therefore is that the new orders only crystallised into a definite system, and perhaps somewhat extended, a practice which had long been familiar though not universal in the service. A consideration of the men who were responsible for the change points to the same conclusion. Blake, the only one of the three generals who had had experience of naval actions, was ashore disabled by a severe wound, but still able to take part, at least formally, in the business of the fleet. Deane, another soldier like Blake, though he had commanded fleets, had never before seen an action, but had done much to improve the organisation of the service, and at this time, as his letters show, was more active and ardent in the work than ever. Monck before the late cruise had never been to sea at all, since as a boy he sailed in the disastrous Cadiz expedition of 1625; but he was the typical and leading scientific soldier of his time, with an unmatched power of organisation and an infallible eye for both tactics and strategy, at least so far as it had then been tried. Penn, the vice-admiral of the fleet, was a professional naval officer of considerable experience, and it was he who by a bold and skilful movement had saved the action off Portland from being a severe defeat for Blake and Deane. Monck's therefore was the only new mind that was brought to bear on the subject. Yet it is impossible to credit him with introducing a revolution in naval tactics. All that can be said is that possibly his genius for war and his scientific and well-drilled spirit revealed to him in the traditional minor tactics of the seamen the germ of a true tactical system, and caused him to urge its reduction into a definite set of fighting instructions which would be binding on all, and would co-ordinate the fleet into the same kind of homogeneous and handy fighting machine that he and the rest of the Low Country officers had made of the New Model Army. In any case he could not have carried the thing through unless it had commended itself to the experience of such men as Penn and the majority of the naval officers of the council of war. And they would hardly have been induced to agree had they not felt that the new instructions were calculated to bring out the best of the methods which they had empirically practised.

How far the new orders were carried out during the rest of the war is difficult to say. In both official and unofficial reports of the actions of this time an almost superstitious reverence is shown in avoiding tactical details. Nevertheless that a substantial improvement was the result seems clear, and further the new tactics appear to have made a marked impression upon the Dutch. Of the very next action, that off the Gabbard on June 2, when Monck was left in sole command, we have a report from the Hague that the English 'having the wind, they stayed on a tack for half an hour until they put themselves into the order in which they meant to fight, which was in file at half cannon-shot,' and the suggestion is that this was something new to the Dutch. 'Our fleet,' says an English report by an eye-witness, 'did work together in better order than before and seconded one another.' Then there is the important testimony of a Royalist intelligencer who got his information at the Hague on June 9, from the man who had brought ashore the despatches from the defeated Dutch fleet. After relating the consternation which the English caused in the Dutch ranks as well by their gunnery as their refusal to board, he goes on to say, 'It is certain that the Dutch in this fight (by the relation and acknowledgment of Tromp's own express sent hither, with whom I spoke) showed very great fear and were in very great confusion, and the English he says fought in excellent order.'[6]

Again, for the next battle—that of the Texel—fought on July 31 in the same year, we have the statement of Hoste's informant, who was present as a spectator, that at the opening of the action the English, but not the Dutch, were formed in a single line close-hauled. 'Le 7 Aoust' [*i.e.* N.S.], the French gentleman says, 'je découvris l'armée de l'amiral composée de plus de cent vaisseaux de guerre. Elle

était rangée en trois escadrons et elle faisoit vent-arrière pour aller tomber sur les Anglois, qu'elle rencontra le même jour à peu près en pareil nombre rangez *[sic]* sur une ligne qui tenoit plus de quatre lieues Nord-Nord-Est et Sud-Sud-Ouest, le vent étant Nord-Ouest. Le 8 et le 9 se passèrent en des escarmouches, mais le 10 on en *[sic]* vint à une bataille decisive. Les Anglois avoient essaié de gagner le vent: mais l'amiral Tromp en aiant toujours conservé l'avantage, et l'étant rangé sur une ligne parallèle à celle des Anglois arriva sur eux,' &c. This is the first known instance of a Dutch fleet forming in single line, and, so far as it goes, would tend to show they adopted it in imitation of the English formation.[7] At any rate, so far as we have gone, the evidence tends to show that the English finally adopted the regular line-ahead formation in consequence of the orders of March 29, 1653, and there is no indication of the current belief that they borrowed it from the Dutch.

By the English admirals the new system must have been regarded as a success. For the Fighting Instructions of 1653 were reissued with nothing but a few alterations of signals and verbal changes by Blake, Monck, Disbrowe, and Penn, the new 'admirals and generals of the fleet of the Commonwealth of England,' appointed in December 1653, when the war was practically over. They are printed by Granville Penn (*Memorials of Penn*, ii. 76), under date March 31, 1655, but that cannot be the actual date of their issue, for Blake was then in the Mediterranean, Penn in the West Indies, and Monck busy with his pacification of the Highlands. We must suspect here then another confusion between old and new styles, and conjecture the true date to be March 31, 1654, that is just before Monck left for Scotland, and a few days before the peace was signed. So that these would be the orders under which Blake conducted his famous campaign in the Mediterranean, Penn and Venables captured Jamaica, and the whole of Cromwell's Spanish war was fought.

FOOTNOTES:

[1] *Hist. MSS. Com.* XIII. ii. 85. It is from a transcript of this copy made for Dr. Gardiner that I have been permitted to take the text below. A set of 'Instructions for the better ordering of the fleet in Sailing' accompanies them.

[2] *British Museum, Shane MSS.* 3232, f. 81.

[3] The Sloane copy is not quite identical with that in the Portland MSS. The variations, however, are merely verbal and in a few signals, and are of such a nature as to be accounted for by careless transcription.

[4] Hoste, the author of the first great treatise on Naval Tactics, quotes Tromp's formation as a typical method of retreat; but his account is vitiated by what seems a curious mistake. He says: 'Il rangea son armée en demi-lune et il mit son convoi au milieu: c'est à dire que son vaisseau faisait au vent l'angle obtus de la demi-lune, et les autres s'étendoient de part (*sic*) et d'autre *sur les deux lignes du plus- près* pour former les faces de la demi-lune qui couvroient le convoi. Ce fut en cet ordre qu'il fit vent arrière, foudroiant à droite et à gauche tous les anglois qui s'approchent' But if with the wind aft his two quarter lines bore from the flagship seven points from the wind, the formation would have been concave to the enemy and the convoy could not have been *au milieu*. (*Evolutions Navales*, pp. 90, 95, and plate 29, p. 91.) The passage is in any case interesting, as showing that what was then called the crescent or half-moon formation was nothing but our own 'order of retreat,' or 'order of retreat reverted,' of Rodney's time. As defined by Sir Charles Knowles in 1780, the order of retreat reverted was formed on two lines of bearing, *i.e.* by the seconds of the centre ship keeping two points abaft her starboard and larboard beams respectively. In the simple order of retreat they kept two points before the beam.

[5] No reference to these orders appears in the correspondence of the generals at this time, unless it be in a letter of John Poortmans, deputy-treasurer of the fleet, to Robert Blackbourne, in which he writes on March 9: 'The generals want 500 copies of the instructions for commanders of the state's ships printed and sent down.' (*S.P. Dom.* 48, f. 65.)

[6] *Clarendon MSS.* 45, f. 470.

[7] Hoste, *Evolutions Navales*, p. 78. Dr. Gardiner declared himself sceptical as to the genuineness of the French gentleman's narrative, mainly on the ground of certain inaccuracies of date and detail; but, as Hoste certainly believed in it, it cannot well be rejected as evidence of the main features of the action for which he used it.

COMMONWEALTH ORDERS, 1653.[1]

[+Duke of Portland's MSS.+]

By the Right Honourable the Generals and Admirals of the Fleet. Instructions for the better ordering of the fleet in fighting.

First. Upon the discovery of a fleet, receiving a sign from the general, which is to be striking the general's ensign, and making a weft,[2] two frigates [3] appointed out of each squadron are to make sail, and stand with them so nigh as they may conveniently, the better to gain a knowledge of them what they are, and of what quality, and how many fireships and others, and in what posture[4] the fleet is; which being done the frigates are to speak together and conclude in that report they are to give, and accordingly repair to their respective squadrons and commanders-in-chief, and not to engage if the enemy[5] exceed them in number, except it shall appear to them on the place they have the advantage:

Ins. 2nd. At sight of the said fleet the vice-admiral, or he that commands in chief in the 2nd place, and his squadron, as also the rear-admiral, or he that commandeth in chief in the 3rd place, and his squadron, are to make what sail they can to come up with the admiral on each wing, the vice-admiral on the right wing, and the rear-admiral on the left wing, leaving a competent distance for the admiral's squadron if the wind will permit and there be sea-room enough.

Ins. 3rd. As soon as they shall see the general engage, or make a signal by shooting off two guns and putting a red flag over the fore topmast-head, that then each squadron shall take the best advantage they can to engage with the enemy next unto them; and in order thereunto all the ships of every squadron shall endeavour to keep in a line with the chief unless the chief be maimed or otherwise disabled (which God forbid!), whereby the said ship that wears the flag should not come in to do the service which is requisite. Then every ship of the said squadron shall endeavour to keep[6] in a line with the admiral, or *he that commands in chief*[7] next unto him, and nearest the enemy.

Inst. 4th. If any squadron shall happen to be overcharged or distressed, the next squadron or ships are *speedily*[8] to make towards their relief and assistance upon a signal given them; which signal shall be, in the admiral's squadron a pennant on the fore topmast-head, the vice-admiral or he that commands in chief in the second place a pennant on the main topmast-head, [and] the rear-admiral's squadron the like.

Inst. 5th. If in case any ship shall be distressed or disabled for lack of masts, shot under water, or otherwise *in danger of sinking or taking, he or they*,[9] thus distressed shall make a sign by the weft of his jack or ensign, and those next him are strictly required to relieve him.

Inst. 6th. That if any ship shall be necessitated to bear away from the enemy to stop a leak or mend what else is amiss, which cannot be otherwise repaired, he is to put out a pennant on the mizen yard-arm or ensign staff, whereby the rest of the ships may have notice what it is for; and if it should be that the admiral or any flagship should do so, the ships of the fleet or the respective squadrons are to endeavour to *keep up in a line as close*[10] as they can betwixt him and the enemy, having always one eye to defend him in case the enemy should come to annoy him in that condition.

Inst. 7th. In case the admiral should have the wind of the enemy, and that other ships of the fleet are to windward of the admiral, then upon hoisting up a blue flag at the mizen yard, or the mizen topmast, [11] every such ship then is to bear up into his wake, *and grain upon severest punishment*[12] In case the admiral be to leeward of the enemy, and his fleet or any part thereof to leeward of him, to the end such ships to leeward may come up into the line with their admiral, if he shall put abroad a flag as before and bear up, none that are to leeward are to bear up, but to keep his or their luff to gain the wake or grain.

Inst. 8th. If the admiral will have any of the ships *to endeavour*[13] by tacking or otherwise to gain the wind of the enemy, he will put abroad a red flag at his spritsail, topmast shrouds, forestay or main topmast[14] stay. He that first discovers the signal shall make sail and hoist and lower his sail[15] or ensign, that the rest of the ships may take notice of it and follow.

Inst. 9th. If we put out a red flag on the mizen shrouds, or mizen yard-arm, we will have all the flagships to come up in the grain and wake[16] of us.

Inst. 10th. If in time of fight God shall deliver any of the enemy's ships into our hands, special care is to be taken to save their men as the present state of our condition will permit in such a case, but that the ships be immediately destroyed, by sinking or burning the same, so that our own ships be not disabled or any work interrupted by the departing of men or boats from the ships; and this we require all commanders to be more than mindful of.[17]

Inst. 11th. None shall fire upon any ship of the enemy that is laid aboard by any of our own ships, but so that he may be sure he endamage not his friend.

Inst. 12th. That it is the duty of commanders and masters of all small frigates,[18] ketches, and smacks belonging to the several squadrons to know the fireships belonging to the enemy, and accordingly by observing their motions to do their utmost to cut off their boats if possible, or, if opportunity be, that they lay them aboard, seize or destroy them. And to this purpose they are to keep to windward of their squadrons in time of service. But in case they cannot prevent the fireships [coming][19] on board by clapping between us and them (which by all means possible they are to endeavour), that then in such cases they show themselves men in such an exigent and steer on board them, and with their boats, grapnels, and other means clear them from us and destroy them; which service (if honourably done) according to its merit shall be rewarded, but the neglect severely to be called to accompt.

Inst. 13th. That the fireships in the several squadrons endeavour to keep the wind; and they with the small frigates to be as near the great ships as they can, to attend the signal from the general or commander-in-chief, and to act accordingly. If the general hoist up a white flag on the mizen yard-arm or topmast-head, all small frigates in his squadron are to come under his stern for orders.

Inst. 14th. That if any engagement by day shall continue till night and the general shall please to anchor, then upon signal given they all anchor in as good order as may be, the signal being as in the 'Instructions for Sailing'; and if the general please to retreat without anchoring, the signal to be firing two guns, the one so nigh the other as the report may be distinguished, and within three minutes after to do the like with two guns more.

Given under our hands at Portsmouth, this March 29th, 1653.

ROBERT BLAKE. RICHARD DEANE. GEORGE MONCK.

FOOTNOTES:

[1] Re-issued in March 1654, by Blake, Monck, Disbrowe, and Penn, with some amendments and verbal alterations. As reissued they are in *Sloane MSS.* 3232, f. 81, and printed in Granville Penn's *Memorials of Sir William Penn*, ii. 76. All the important amendments in the new edition, apart from mere verbal alterations, are given below in notes to the articles in which they occur.

[2] '*Waft* (more correctly written *wheft*). It is any flag or ensign stopped together at the head and middle portion, slightly rolled up lengthwise, and hoisted at different positions at the after-part of a ship.'—Admiral Smyth (*Sailors' Word-Book*).

[3] The orders of 1654 have 'one frigate.'

[4] *I.e.* 'formation.'

[5] 1654, 'enemy's ships.'

[6] 1654, 'get.'

[7] 1654, 'or the commander-in-chief.'

[8] 1654, 'immediately.'

[9] 1654, 'so as she is in danger of being sunk or taken, then they.'

[10] 1654, 'to keep on close in a line.'

[11] 1654, 'mizen topmast-head.'

[12] 1654, 'or grain upon pain of severe punishment.' Nothing is more curious in naval phraseology than the loss of this excellent word 'grain,' or 'grayne,' to express the opposite of 'wake.' To come into a ship's grain meant to take station ahead of her. There is nothing now which exactly supplies its place, and yet it has long fallen into oblivion, so long, indeed, that its existence was unknown to the learned editors of the new *Oxford Dictionary*. This is to be the more regretted as its etymology is very obscure. It may, however, be traced with little doubt to the old Norse 'grein,' a branch or prong, surviving in the word 'grains,' a pronged harpoon or fish spear. From its meaning, 'branch,' it might seem to be akin to 'stem' and to 'bow,' which is only another spelling of'bough.' But this is not likely. The older meaning of 'bows' was 'shoulders,' and this, it is agreed, is how it became applied to the head of a ship. There is, however, a secondary and more widely used sense of 'grain,' which means the space between forking boughs, and so almost any angular space, like a meadow where two rivers converge. Thus 'grain,' in the naval sense, might easily mean the space enclosed by the planks of a ship where they spring from the stem, or if it is not actually the equivalent of 'bows,' it may mean the diverging waves thrown up by a ship advancing through the water, and thus be the exact analogue of 'wake.'

[13] 1654, 'to make sail and endeavour.'

[14] 1654, 'Fore topmast.'

[15] 1654, 'jack.'

[16] 1654, 'wake or grain.'

[17] 1654, 'more than ordinarily careful of.'

[18] It should be remembered that 'frigate' at this time meant a 'frigate-built ship.' The larger ones were 'capital ships' and lay in the line, while the smaller ones were used as cruisers.

[19] Inserted from 1654 copy.

PART V

THE SECOND DUTCH WAR

I. THE EARL OF SANDWICH, 1665

II. THE DUKE OF YORK AND PRINCE RUPERT, 1665-6

I

ORDERS OF THE RESTORATION

INTRODUCTORY

Though several fleets were fitted out in the first years of the Restoration, the earliest orders of Charles II's reign that have come down to us are those which the Earl of Sandwich issued on the eve of the Second Dutch War. Early in the year 1665, when hostilities were known to be inevitable, he had sailed from Portsmouth with a squadron of fifteen sail for the North Sea. On January 27th he arrived in the Downs, and on February 9th sailed for the coast of Holland.[1] War was declared on March 4th following. The orders in question are only known by a copy given to one of his frigate captains, which has survived amongst the manuscripts of the Duke of Somerset. So far as is known no fresh complete set of Fighting Instructions was issued before the outbreak of the war, and as Monck and Sandwich were still among the leading figures at the admiralty it is probable that those used in the last Dutch and Spanish Wars were continued. The four orders here given are supplementary to them, providing for the formation of line abreast, and for forming from that order a line ahead to port or starboard. It is possible however that no other orders had yet been officially issued, and that these simple directions were regarded by Sandwich as all that were necessary for so small a squadron.

FOOTNOTE:

[1] *Domestic Calendar*, 1664-5, pp. 181, 183.

THE EARL OF SANDWICH, Feb. 1, 1665.

[+Duke of Somerset's MSS., printed by the Historical MSS. Commission.
Rep. XV. part vii. p. 100+.]

Orders given by direction of the Earl of Sandwich to Captain Hugh Seymour,[1] of the Pearl frigate.

1665, February 1. On board the London in the Downs.

If we shall bear up, putting abroad the standard on the ancient[2] staff, every ship of this squadron is to draw up abreast with the flag, on either side, in such berth as opportunity shall present most convenient, but if there be time they are to sail in the foresaid posture.[3]

If the admiral put up a jack[4]-flag on the flagstaff on the mizen topmast-head and fire a gun, then the outwardmost ship on the starboard side is to clap upon a wind with his starboard tacks aboard, and all the squadron as they lie above or as they have ranked themselves are presently to clap upon a wind and stand after him in a line.

And if the admiral make a weft with his jack-flag upon the flagstaff on the mizen topmast-head and fire a gun, then the outwardmost ship on the larboard side is to clap upon a wind with his larboard tacks aboard, and all the squadrons as they have ranked themselves are presently to clap upon a wind and stand after him in a line.

All the fifth and sixth rates[5] are to lie on that broadside of the admiral which is away from the enemy, looking out well when any sign is made for them. Then they are to endeavour to come up under the admiral's stern for to receive orders.

If we shall give the signal of hanging a pennant under the flag at the main topmast-head, then all the ships of this squadron are, with what speed they can, to fall into this posture, every ship in the place and order here assigned, and sail and anchor so that they may with the most readiness fall into the above said posture.[6]

FOOTNOTES:

[1] Son of Colonel Sir Edward Seymour, 3rd baronet, Governor of Dartmouth.

[2] *I.e.* ensign.

[3] *I.e.* in the 'order of battle' already given.

[4] The earliest known use of the word 'jack' for a flag in an official document occurs in an order issued by Sir John Pennington to his pinnace captains in 1633. He was in command of the Channel guard in search of pirates, particularly 'The Seahorse lately commanded by Captain Quaile' and 'Christopher Megges, who had lately committed some outrage upon the Isle of Lundy, and other places.' The pinnaces were to work inshore of the admiral and to endeavour to entrap the piratical ships, and to this end he said, 'You are also for this present service to keep in your Jack at your boultsprit end and your pendant and your ordnance.' (*Sloane MSS.* 2682, f. 51.) The object of the order evidently was that they should conceal their character from the pirates, and at this time therefore the 'jack' carried at the end of the bowsprit and the pennant must have been the sign of a navy ship. Boteler however, who wrote his *Sea Dialogues* about 1625, does not mention the jack in his remarks about flags (pp. 327-334). The etymology is uncertain. The new *Oxford Dictionary* inclines to the simple explanation that 'jack' was used in this case in its common diminutive sense, and that 'jack-flag' was merely a small flag.

[5] *I.e.* his cruisers.

[6] In the Report of the Historical MSS. Commission it is stated that the position of the ships is shown in a diagram, but I have been unable to obtain access to the document.

II

MONCK, PRINCE RUPERT AND THE DUKE OF YORK

INTRODUCTORY

It has hitherto been universally supposed that the Dutch Wars of the Restoration were fought under the set of orders printed as an appendix to Granville Penn's *Memorials of Penn*. Mr. Penn believed them to belong to the year 1665, but recent research shows conclusively that these often-quoted orders, which have been the source of so much misapprehension, are really much later and represent not the ideas under which those wars were fought, but the experience that was gained from them.

This new light is mainly derived from a hitherto unknown collection of naval manuscripts belonging to the Earl of Dartmouth, which he has generously placed at the disposal of the Society. The invaluable material they contain enables us to say with certainty that the orders which the Duke of York issued as lord high admiral and commander-in-chief at the outbreak of the war were nothing but a slight modification of those of 1654, with a few but not unimportant additions. Amongst the manuscripts, most of which relate to the first Lord Dartmouth's cousin and first commander, Sir Edward Spragge, is a 'Sea Book' that must have once belonged to that admiral. It is a kind of commonplace book, the

greater part unused, in which Spragge appears to have begun to enter various important orders and other matter of naval interest with which he had been officially concerned, by way of forming a collection of precedents.[1] Amongst these is a copy of the orders set out below, dated from the Royal Charles, the Duke of York's flagship, 'the 10th of April, 1665,' by command of his royal highness, and signed 'Wm. Coventry.' This was the well-known politician Sir William Coventry, the model, if not the author, of the *Character of a Trimmer*, who had been made private secretary to the duke on the eve of the Restoration, and was now a commissioner of the navy and acting as secretary on the duke's staff. So closely it will be seen do they follow the Commonwealth orders of 1653, as modified in the following year, that it would be scarcely worth while setting them out in full, but for the importance of finally establishing their true origin. The scarcely concealed doubts which many writers have felt as to whether the new system of tactics can have been due to the Duke of York may now be laid at rest, and henceforth the great reform must be credited not to him, but to Cromwell's 'generals-at-sea.'

Nevertheless the credit of certain developments which were introduced at this time must still remain with the duke and his advisers: Rupert, Sandwich, Lawson, and probably above all Penn, his flag captain. For instance, differences will be found in Articles 2 and 3, where, instead of merely enjoining the line, the duke refers to a regular 'order of battle,' which has not come down to us, but which no doubt gave every ship her station in the line, like those which Sandwich had prepared for his squadron a few months earlier, and which Monck and Rupert certainly drew up in the following year.[2] Then again the truculent Article 10 of 1653 and 1654 ordering the immediate destruction of disabled ships of the enemy after saving the crews if possible, which contemporary authorities put down to Monck, is reversed. At the end, moreover, two articles are added; one, numbered 15, embodying numbers 2 and 3 of Sandwich's orders of the previous year, with such modifications as were necessary to adapt them to a large fleet, and another numbered 16 enjoining 'close action.' Nor is this all. Spragge's 'Sea Book' contains also a set of ten 'additional instructions' all of which are new. They are undated, but from another copy in Capt. Robert Moulton's 'Sea Book' we can fix them to April 18th, 1665.[3] Their whole tenour suggests that they were the outcome of prolonged discussions in the council of war; and in the variously dated copies which exist of sections of the orders we have evidence that between the last week in March, when the duke hoisted his flag, and April 21st, when he put to sea, much time must have been spent upon the consideration of the tactical problem.[4]

The result was a marked advance. In these ten 'additional instructions,' for instance, we have for the first time a clear distinction drawn between attacks from windward and attacks from leeward. We have also the first appearance of the close-hauled line ahead, and it is enjoined as a defensive formation when the enemy attacks from windward. A method of attack from windward is also provided for the case where the enemy stays to receive it. Amongst less important developments we have an article making the half-cable's length, originally enjoined under the Commonwealth, the regular interval between ships, and others to prevent the line being broken for the sake of chasing or taking possession of beaten ships. Finally there are signals for tacking in succession either from the van or the rear, which must have given the fleet a quite unprecedented increase of tactical mobility. Nor are we without evidence that increased mobility was actually exhibited when the new instructions were put to a practical test.

It was under the old Commonwealth orders as supplemented and modified by these noteworthy articles of April 1665, that was fought the memorable action of June 3rd, variously known as the battle of Lowestoft or the Second Battle of the Texel. It is this action that Hoste cites as the first in which two fleets engaged in close hauled line ahead, and kept their formation throughout the day. After two days' manoeuvring the English gained the wind, and kept it in spite of all their enemy could do, and the various accounts of the action certainly give the impression that the evolutions of the English were smarter and more complex than those of the Dutch. It is true that about the middle of the action one of the new signals, that for the rear to tack first, threw the fleet into some confusion, and that later the van and centre changed places; still, till almost the end, the duke, or rather Penn, his flag captain, kept at least some control of the fleet. Granville Penn indeed claims that the duke finally routed the Dutch by breaking their line, and that he did it intentionally. But this movement is only mentioned in a hasty letter to the press written immediately after the battle. If the enemy's line was actually cut, it must have been an accident or a mere instance of the time-honoured practice of trying to concentrate on or 'overcharge' a part of the enemy's fleet. Coventry in his official despatch to Monck, who was ashore in charge of the admiralty, says nothing of it, nor does Hoste, while the duke himself tells us the object of his movement was merely to have 'a bout with Opdam.' Granville Penn was naturally inclined to credit the statement in the Newsletter because he believed the action was fought under Fighting Instructions which contained an article about dividing the enemy's fleet. But even if this article had been in force at the time—and we now know that it was not—it would still have been inapplicable, for it was only designed in view of an attack from leeward, a most important point which modern writers appear unaccountably to have overlooked.[5]

But although we can no longer receive this questionable movement of the Duke of York as an instance of 'breaking the line' in the modern sense, it is certain that the English manoeuvres in this action were more scientific and elaborate than ever before—so much so indeed that a reaction set in, and it is this reaction which gave rise to the idea in later times that the order in line ahead had not been used in Commonwealth or Restoration times. We gather that in spite of the victory there was a widespread conviction that it ought to have been more decisive. It was felt that there had been perhaps too much manoeuvring and not enough hard fighting. In the end the Duke of York and Sandwich were both tenderly relieved of their command, and superseded by Monck. He and Rupert then became joint admirals for the ensuing campaign. They had the reputation of being two of the hardest fighters alive, and both were convinced of their power of sweeping the Dutch from the sea by sheer hard hitting, a belief which so far at least as Monck was concerned the country enthusiastically shared. The spirit in which the two soldier-admirals put to sea in May 1666 we see reflected in the hitherto unknown 'Additional Instructions for Fighting' given below. For the knowledge of these remarkable orders, which go far to solve the mystery that has clouded the subject, we are again indebted to Lord Dartmouth. They are entered like the others in Sir Edward Spragge's 'Sea Book.' They bear no date, but as they are signed 'Rupert' and addressed to 'Sir Edward Spragge, Knt., Vice-Admiral of the Blue,' we can with certainty fix them to this time. For we know that Spragge sailed in Rupert's squadron, and on the fourth day of the famous June battle was raised to the rank here given him in place of Sir William Berkley, who had been killed in the first day's action.[6] What share Monck had in the orders we cannot tell, but Rupert, being only joint admiral with him, could hardly have taken the step without his concurrence, and the probability is that Rupert, who had been detached on special service, was issuing a general fleet order to his own squadron which may have been communicated to the rest of the fleet before he rejoined. It must at any rate have been after he rejoined, for it was not till then that Spragge received his promotion. Both Monck and Rupert must therefore receive the credit of foreseeing the danger that lay in the new system, the danger of tactical pedantry that was destined to hamper the action of our fleets for the next half century, and of being the first to declare, long before Anson or Hawke, and longer still before Nelson, that line or no line, signals or no signals, 'the destruction of the enemy is always to be made the chiefest care.'

In the light of this discovery we can at last explain the curious conversation recorded by Pepys, which, wrongly interpreted, has done so much to distort the early history of tactics. The circumstances of Monck's great action must first be recalled. At the end of May, he and Rupert, with a fleet of about eighty sail, had put to sea to seek the Dutch, when a sudden order reached them from the court that the French Mediterranean fleet was coming up channel to join hands with the enemy, and that Rupert with his squadron of twenty sail was to go westward to stop it. The result of this foolish order was that on June 1 Monck found himself in presence of the whole Dutch fleet of nearly a hundred sail, with no more than fifty-nine of his own.[7] Seeing an advantage, however, he attacked them furiously, throwing his whole weight upon their van. Though at first successful shoals forced him to tack, and his rear fell foul of the Dutch centre and rear, so that he came off severely handled. The next day he renewed the fight with forty-four sail against about eighty, and with so much skill that he was able that night to make an orderly retreat, covering his disabled ships with those least injured 'in a line abreadth.'[8] On the 3rd the retreat was continued. So well was it managed that the Dutch could not touch him, and towards evening he was able near the Galloper Sand to form a junction with Rupert, who had been recalled. Together on the 4th day they returned to the fight with as fierce a determination as ever. Though to leeward, they succeeded in breaking through the enemy's line, such as it was. Being in too great an inferiority of numbers, however, they could not reap the advantage of their manoeuvre.[9] It only resulted in their being doubled on, and the two fleets were soon mingled in a raging mass without order or control; and when in the end they parted after a four days' fight, without example for endurance and carnage in naval history, the English had suffered a reverse at least as great as that they had inflicted on the Dutch in the last year's action.

Such a terrific object lesson could not be without its effects on the great tactical question. But let us see how it looked in the eyes of a French eye-witness, who was naturally inclined to a favourable view of his Dutch allies. Of the second day's fight he says: 'Sur les six heures du matin nous apperçumes la flotte des Anglais qui revenoit dans une ordre admirable. Car ils marchent par le front comme seroit une armée de terre, et quand ils approchent ils s'etendent et tournent leurs bords pour combattre: parce que le front à la mer se fait par le bord des vaisseaux': that is, of course, the English bore down on the Dutch all together in line abreast, and then hauled their wind into line ahead to engage. Again, in describing the danger Tromp was in by having weathered the English fleet with his own squadron, while the rest of the Dutch were to leeward, he says: 'J'ai déjà dit que rien n'égale le bel ordre et la discipline des Anglais, que jamais ligne n'a été tirée plus droite que celle que leurs vaisseaux forment, qu'on peut être certain que lorsqu'on en approche il les faux [*sic*] tous essuïer.' The very precision of the English formation however, as he points out, was what saved Tromp from destruction, because having weathered their van-ship, he had the wind of them all and could not be enveloped. On the other hand, he says, whenever an English ship penetrated the Dutch formation it fared badly because the

Dutch kept themselves 'redoublez'—that is, not in a single line. As a general principle, then, he declares that it is safer to 'entrer dans une flotte d'Angleterre que de passer auprès' (*i.e.* stand along it), 'et bien mieux de passer auprès d'une flotte Hollandaise que se mêler au travers, si elle combat toujours comme elle fit pour lors.' But on the whole he condemns the loose formation of the Dutch, and says it is really due not to a tactical idea, but to individual captains shirking their duty. It is clear, then, that whatever was De Ruyter's intention, the Dutch did not fight in a true line. Later on in the same action he says: 'Ruyter de son côté appliqua toute son industrie pour donner une meilleure forme à sa ligne ... enfin par ce moyen nous nous remismes sur une ligne parallèle à celle des Anglais.' Finally, in summing up the tactical lesson of the stupendous battle, he concludes: 'A la vérité l'ordre admirable de leur [the English] armée doit toujours être imité, et pour moi je sais bien que si j'étais dans le service de mer, et que je commandasse des vaisseaux du Roi je songerois à battre les Anglois *par leur propre manière et non par celle des Hollandoises, et de nous autres, qui est de vouloir aborder*.' In defence of his view he cites a military analogy, instancing a line of cavalry, which being controlled 'avec règle' devotes itself solely to making the opposing force give way, and keeps as close an eye on itself as on the enemy. Supposing such a line engaged against another body of horse in which the squadrons break their ranks and advance unevenly to the charge, such a condition, he says, would not promise success to the latter, and the parallel he contends is exact.[10]

From this account by an accomplished student of tactics we may deduce three indisputable conclusions, 1. That the formation in line ahead was aimed at the development of gun power as opposed to boarding. 2. That it was purely English, and that, however far Dutch tacticians had sought to imitate it, they had not yet succeeded in forcing it on their seamen. 3. That the English certainly fought in line, and had reached a perfection in handling the formation which could only have been the result of constant practice in fleet tactics.

It remains to consider the precisely opposite impression we get from English authority. To begin with, we find on close examination that the whole of it, or nearly so, is to be traced to Pepys or Penn. The *locus classicus* is as follows from Pepys's *Diary* of July 4th. 'In the evening Sir W. Penn came to me, and we walked together and talked of the late fight. I find him very plain, that the whole conduct of the late fight was ill.... He says three things must be remedied, or else we shall be undone by their fleet. 1. That we must fight in line, whereas we fight promiscuously, to our utter demonstrable ruin: the Dutch fighting otherwise, and we whenever we beat them. 2. We must not desert ships of our own in distress, as we did, for that makes a captain desperate, and he will fling away his ship when there are no hopes left him of succour. 3. That ships when they are a little shattered must not take the liberty to come in of themselves, but refit themselves the best they can and stay out, many of our ships coming in with very little disableness. He told me that our very commanders, nay, our very flag officers, do stand in need of exercising amongst themselves and discoursing the business of commanding a fleet, he telling me that even one of our flag men in the fleet did not know which tack lost the wind or kept it in the last engagement.... He did talk very rationally to me, insomuch that I took more pleasure this night in hearing him discourse than I ever did in my life in anything that he said.'

Pepys's enjoyment is easily understood. He disliked Penn—thought him a 'mean rogue,' a 'coxcomb,' and a 'false rascal,' but he was very sore over the supersession of his patron, Sandwich, and so long as Penn abused Monck, Pepys was glad enough to listen to him, and ready to believe anything he said in disparagement of the late battle. Penn was no less bitter against Monck, and when his chief, the Duke of York, was retired he had sulkily refused to serve under the new commander-in-chief. For this reason Penn had not been present at the action, but he was as ready as Pepys to believe anything he was told against Monck, and we may be sure the stories of grumbling officers lost nothing when he repeated them into willing ears. That Penn really told Pepys the English had not fought in line is quite incredible, even if he was, as Sir George Carteret, treasurer of the navy, called him, 'the falsest rascal that ever was in the world.' The fleet orders and the French testimony make this practically impossible. But he may well have expressed himself very hotly about the new instruction issued by Monck and Rupert which modified his own, and placed the destruction of the enemy above a pedantic adherence to the line. Pepys must clearly have forgotten or misunderstood what Penn said on this point, and in any case both men were far too much prejudiced for the passage to have any historical value. Abuse of Monck by Penn can have little weight enough, but the same abuse filtered through Pepys's acrid and irresponsible pen can have no weight at all.[11]

FOOTNOTES:

[1] It is a folio parchment-bound volume, labelled 'Royal Charles Sea Book,' but this is clearly an error, due to the fact that the first order copied into it is dated from the Royal Charles, April 24, 1666. The first entry, however, is the list of a ship's company which Spragge commanded in 1661-2, as appears from his noting the deaths and desertions which took place amongst the crew in those years. At this time he is known to have commanded the Portland. For some years the book was evidently laid

aside, and apparently resumed when in 1665 he commissioned the Triumph for the Dutch War.

[2] See notes *supra*, pp. 108-9, and in the *Dartmouth MSS., Hist. MSS. Com. Rep.* XI. v. 15.

[3] *Harleian MSS.* 1247. It contains orders addressed to Moulton and returns for the Centurion, Vanguard and Anne, the ships he commanded in 1664-6. At p. 52 it has a copy of the above 'Additional Instructions,' but numbered 1 to 6, articles 1 to 5 of the Dartmouth copy being in one long article. At p. 50 it has the original articles as far as No. 6. Then come two articles numbered as 7 and 8, giving signals for a squadron 'to draw up in line' and to come near the admiral. They are subscribed 'Royal James, Admiral.' The Royal James was Rupert's flagship in 1665, and the two articles may be squadronal orders of his. Then, numbered 9 to 12, come four 'additional instructions for sailing' by the Duke of York, relating to chasing, and dated April 24, 1665.

[4] Some of these articles are dated even as late as April 27, See in the *Penn Tracts, Sloane MSS.* 3232, f. 33, *infra*, p. 128.

[5] See *post*, p. 177. For the despatches, &c., see G. Penn, *Memorials of Penn*, II. 322-333, 344-350. He also quotes a work published at Amsterdam in 1668 which says: 'Le Comte de Sandwich sépara la flotte Hollandaise en deux vers l'une heure du midi.' He explains that by the order for the rear to tack first, Sandwich was leading, forgetting Coventry's despatch (*ibid.* p. 328), which tells how by that time the duke had taken Sandwich's place and was leading the line himself, and that it was he, not Sandwich, who led the movement upon Opdam's ship in the centre of the Dutch line.

[6] Charnock, *Biographia Navalis*, i. 65.

[7] Pepys, it must be said, persuaded himself that this order was suggested and approved by the admirals. He traced it to Spragge's desire to get away with his chief on a separate command. Pepys however was clearly not sure about it, and he almost certainly would have been if the Duke of York was really innocent of the blunder. The truth probably can never be known.

[8] Vice-Admiral Jordan to Penn, June 5, *Memorials of Penn*, II. 389. This is the first known instance of the use of the term 'line abreast.' In the published account a different term is used. 'By 3 or 4 in the morning,' it says, 'a small breeze sprang up at N.E. and at a council of flag officers, his grace the lord general resolved to draw the fleet into a "rear line of battle" and make a fair retreat of it.' (*Brit. Museum*, 816, m. 23(13), p. 5, and *S.P. Dom. Car. II*, vol. 158.) The French and Dutch called it the 'crescent' formation. See note, p. 94.

[9] See *post*, pp. 136-7.

[10] *Mémoires d'Armand de Gramont, Comte de Guiche, concernant les Provinces Unis des Pays-Bas servant de supplément et de confirmation à ceux d'Aubrey du Maurier et du Comte d'Estrades*. Londres, chez Philippe Changuion, 1744. (The italics are not in the original.) *Cf.* the similar French account quoted by Mahan, *Sea Power*, 117 *et seq.*

[11] *Cf.* a similar conversation that Pepys had on October 28 with a certain Captain Guy, who had been in command of a small fourth-rate of thirty-eight guns in Holmes's attack on the shipping at Vlie and Shelling after the 'St. James's Fight' and of a company of the force that landed to destroy Bandaris. The prejudice of both Pepys and Penn comes out still more strongly in their remarks on Monck's and Rupert's great victory of July 25, and their efforts to make out it was no victory at all. The somewhat meagre accounts we have of this action all point as before to the superiority of the English manoeuvring, and to the inability or unwillingness of the Dutch, and especially of Tromp, to preserve the line.

THE DUKE OF YORK, April 10, 1665.

[+Sir Edward Spragge's Sea Book. The Earl of Dartmouth MSS.+]

_James, Duke of York and Albany, Earl of Ulster, Lord High Admiral of England and Ireland, &c, Constable of Dover Castle, Lord Warden of the Cinque Ports, and Governor of Portsmouth.

Instructions for the better ordering his majesty's fleet in time of fighting_.

Upon discovery of a fleet receiving a sign from the admiral, which is to be striking of the admiral's ensign, and making a weft, one frigate appointed out of each squadron are to make sail and stand in with them so nigh as conveniently they may, the better to gain a knowledge of what they are and what quality, how many fireships and others, and in what posture the fleet is; which being done the frigates

are to meet together and conclude on the report they are to give, and accordingly to repair to their respective squadrons and commanders-in-chief, and not engage if the enemy's ships exceed them in number, except it shall appear to them on the place that they have an advantage.

2. At the sight of the said fleet the vice-admiral, or he that commands in chief in the second place, and his squadron, and the rear-admiral, or he that commands in chief in the third place, and his squadron are to make what sail they can to come up and put themselves into the place and order which shall have been directed them before in the order of battle.

3. As soon as they shall see the admiral engage or shall make a signal by shooting off two guns and putting out a red flag on the fore topmast-head, that then each squadron shall take the best advantage they can to engage with the enemy according to the order prescribed.

4. If any squadron shall happen to be overcharged and distressed, the next squadron or ships are immediately to make towards their relief and assistance upon a signal given them: which signal shall be in the admiral's squadron a pennant on the fore topmast-head; if any ship in the vice-admiral's squadron, or he that commands in chief in the second place, a pennant on the main topmast-head; and the rear-admiral's squadron the like.[1]

5. If any ship shall be disabled or distressed by loss of masts, shot under water or the like, so as she is in danger of sinking or taking, he or the [ship] thus distressed shall make a sign by the weft of his jack and ensign, and those next to them are strictly required to relieve them.[1]

6. That if any ship shall be necessitated to bear away from the enemy to stop a leak or mend what else is amiss, which cannot otherwise be repaired, he is to put out a pennant on the mizen yard-arm or on the ensign staff, whereby the rest of the ship's squadron may have notice what it is for—and if it should be that the admiral or any flagships should do so, the ships of the fleet or of the respective squadrons are to endeavour to get up as close in a line between him and the enemy as they can, having always an eye to defend him in case the enemy should come to annoy him in that condition.

7. If the admiral should have the wind of the enemy and that other ships of the fleet are in the wind of the admiral, then upon hoisting up a blue flag at the mizen yard or mizen topmast, every such ship is then to bear up into his wake or grain upon pain of severe punishment. If the admiral be to leeward of the enemy, and his fleet or any part thereof to leeward of him, to the end such ships may come up into a line with the admiral, if he shall put abroad a flag as before and bear up, none that are to leeward are to bear up, but to keep his or their ship or ships luff, thereby to gain his wake or grain.

8. If the admiral would have any of the ships to make sail or endeavour by tacking or otherwise to gain the wind of the enemy, he will put up a red flag upon the spritsail, topmast shrouds, forestay, or fore topmast-stay. He that first discovers this signal shall make sail, and hoist and lower his jack and ensign, that the rest of the ships may take notice thereof and follow.

9. If we put a red flag on the mizen shrouds or the mizen yard-arm, we would have all the flagships to come up in the wake or grain of us.

10. If in time of fight God shall deliver any of the enemy's ships into our power by their being disabled, the commanders of his majesty's ships in condition of pursuing the enemy are not during fight to stay, take, possess, or burn any of them, lest by so doing the opportunity of more important service be lost, but shall expect command from the flag officers for doing thereof when they shall see fit to command it.

11. None shall fire upon ships of the enemy that is laid on board by any of our own ships but so as he may be sure he doth not endamage his friends.

12. That it is the duty of all commanders and masters of the small frigates, ketches and smacks belonging to the several squadrons to know the fireships belonging to the enemy, and accordingly by observing their motion do their utmost to cut off their boats if possible, or if opportunity be that they lay them on board, seize and destroy them, and for this purpose they are to keep to wind[ward] of the squadron in time of service. But in case they cannot prevent the fireships from coming aboard of us by clapping between them and us, which by all means possible they are to endeavour, that then in such case they show themselves men in such an exigent and steer on board them, and with their boats, grapnels, and other means clear them from us, and destroy them; which service if honourably done to its merit shall be rewarded, and the neglect thereof strictly and severely called to an account.

13. That the fireships in every squadron endeavour to keep the wind, and they, with the small frigates, to be as near the great ships as they can, to attend the signal from the admiral and to act accordingly. If the admiral hoist up a white flag at the mizen yard-arm or topmast-head all the small frigates of his squadron are to come under his stern for orders.

14. If an engagement by day shall continue till night, and the admiral shall please to anchor, that upon signal given they all anchor in as good order as may be, the signal being as in the Instructions for Sailing; and if the admiral please to retreat without anchoring, then the sign to be by firing of two guns, so near one to the other as the report may be distinguished, and within three minutes after to do the like with two guns more.

15. If, the fleet going before the wind, the admiral would have the vice-admiral and the ships of the starboard quarter to clap by the wind and come to their starboard tack, then he will hoist upon the mizen topmast-head a red flag, and in case he would have the rear-admiral and the ships on the larboard quarter to come to their larboard tack then he will hoist up a blue flag in the same place.

16. That the commander of any of his majesty's ships suffer not his guns to be fired until the ship be within distance to [do] good execution; the contrary to be examined and severely punished by the court-martial.

FOOTNOTE: [1] Modified by Article 8 of the 'Additional Instructions,' *post*, p. 127.

THE DUKE OF YORK, April 10 *or* 18, 1665.

[+Sir Edward Spragge's Sea Book+.[1]]

Additional Instructions for Fighting.

1. In all cases of fight with the enemy the commanders of his majesty's ships are to endeavour to keep the fleet in one line, and as much as may be to preserve the order of battle which shall have been directed before the time of fight.[2]

2. If the enemy stay to fight us, we having the wind, the headmost squadron of his majesty's fleets shall steer for the headmost of the enemy's ships.

3. If the enemy have the wind of us and come to fight us, the commanders of his majesty's fleet shall endeavour to put themselves in one line close upon a wind.

4. In the time of fight in reasonable weather, the commanders of his majesty's fleet shall endeavour to keep about the distance of half a cable's length one from the other,[3] but so as that according to the discretion of the commanders they vary that distance according as the weather shall be, and the occasion of succouring our own or assaulting the enemy's ships shall require.

5. The flag officers shall place themselves according to such order of battle as shall be given.

6. None of the ships of his majesty's fleet shall pursue any small number of ships of the enemy before the main [body] of the enemy's fleet shall be disabled or shall run.

7. In case of chase none of his majesty's fleet or ships shall chase beyond sight of the flag, and at night all chasing ships are to return to the flag.

8. In case it shall please God that any of his majesty's ships be lamed in fight, not being in probability of sinking nor encompassed by the enemy, the following ships shall not stay under pretence of securing them, but shall follow their leaders and endeavour to do what service they can upon the enemy, leaving the securing of the lame ships to the sternmost of our ships, being [assured] that nothing but beating the body of the enemy's fleet can effectually secure the lame ships. This article is to be observed notwithstanding any seeming contradiction in the fourth or fifth articles of the [fighting] instructions formerly given.

9. When the admiral would have the van of his fleet to tack first, the admiral will put abroad the union flag at the staff of the fore topmast-head if the red flag be not abroad; but if the red flag be abroad then the fore topsail shall be lowered a little, and the union flag shall be spread from the cap of the fore topmast downwards.

10. When the admiral would have the rear of the fleet to tack first, the union flag shall be put abroad on the flagstaff of the mizen topmast-head; and for the better notice of these signals through the fleet, each flagship is upon sight of either of the said signals to make the said signals, that so every ship may know what they are to do, and they are to continue out the said signals until they be answered. Given under my hand the 10th of April, 1665, from on board the Royal Charles.

By command of his royal highness.
WM. COVENTRY.

FOOTNOTES:

[1] Also in Moulton's Sea Book, *Harl. MSS.* 1247, f. 52 but are there dated April 18, differently numbered, and signed 'James.'

[2] This is Article 17 of the complete set, which was modified by Rupert's subsequent order of 1666. See p. 130.

[3] It is interesting to note that the distance adopted by D'Estrées and Tourville for the French service was a full cable. See Hoste, p. 65.

THE DUKE OF YORK'S SUPPLEMENTARY ORDER, April 27, 1665.

[+Penn's Tracts, Sloane MSS. 3232, f. 83+.]

Additional Instructions for Fighting.[1]

[1.] When the admiral would have all the ships to fall into the order of 'Battailia' prescribed, the union flag shall be put into the mizen peak of the admiral ship; at sight whereof the admirals of [the] other squadrons are to answer it by doing the like.

[2.] When the admiral would have the other squadrons to make more sail, though he himself shorten sail, a white ensign shall be put on the ensign staff of the admiral ship.

For Chasing.[2]

[1.] When the admiral shall put a flag striped with white and red upon the fore topmast-head, the admiral of the white squadron shall send out ships to chase; when on the mizen topmast-head the admiral of the blue squadron shall send out ships to chase.

[2.] If the admiral shall put out a flag striped with white and red upon any other place, that ship of the admiral's own division whose signal for call is a pennant in that place shall chase, excepting the vice-admiral and rear-admiral of the admiral's squadron.

[3.] If a flag striped red and white upon the main topmast shrouds under the standard, the vice-admiral of the red is to send ships to chase.

If the flag striped red and white be hoisted on the ensign staff the rear-admiral of the red is to send ships to chase.

On board the Royal Charles, 27 April, 1665.

FOOTNOTES:

[1] This is preceded by an additional 'Sailing Instruction,' with signals for cutting and slipping by day or night.

[2] Also in Capt. Moulton's Sea Book (*Harl. MSS.* 1247, p. 51_b_), headed 'James Duke of York &c. Additional Instructions for Sailing.' At foot it has 'given under my hand on board the Royal Charles this 24 of April, 1665. James,' and the articles are numbered 9 to 12, No. 3 above forming 11 and 12.

PRINCE RUPERT, 1666.

[+Sir Edward Spragge's Sea Book+.]

Additional Instructions for Fighting.

1st. In case of an engagement the commander of every ship is to have a special regard to the common good, and if any flagship shall, by any accident whatsoever, stay behind or [be] likely to lose company, or be out of his place, then all and every ship or ships belonging to such flag is to make all the way possible to keep up with the admiral of the fleet and to endeavour the utmost that may be the destruction of the enemy, which is always to be made the chiefest care.

This instruction is strictly to be observed, not-withstanding the seventeenth article in the Fighting Instructions formerly given out.[1]

2ndly. When the admiral of the fleet makes a weft with his flag, the rest of the flag officers are to do the like, and then all the best sailing ships are to make what way they can to engage the enemy, that so the rear of our fleet may the better come up; and so soon as the enemy makes a stand then they are to endeavour to fall into the best order they can.[2]

3rdly. If any flagship shall be so disabled as not to be fit for service, the flag officer or commander of such ship shall remove himself into any other ship of his division at his discretion, and shall there command and wear the flag as he did in his own.

RUPERT.

For Sir Edward Spragge, Knt., vice-admiral of the blue squadron.

FOOTNOTES:

[1] Meaning, of course, Article 1 of the 'Additional Instructions' of April 18, 1665, which would be No. 17 when the orders were collected and reissued as a complete set. No copy of the complete set to which Rupert refers is known to be extant.

[2] It should be noted that this instruction anticipates by a century the favourite English signals of the Nelson period for bringing an unwilling enemy to action, *i.e.* for general chase, and for ships to take suitable station for neutral support and engage as they get up.

PART VI

THE THIRD DUTCH WAR TO THE REVOLUTION

I. THE DUKE OF YORK, 1672-3

II. SIR JOHN NARBROUGH, 1678

III. THE EARL OF DARTMOUTH, 1688

PROGRESS OF TACTICS DURING THE THIRD DUTCH WAR

INTRODUCTORY

For the articles issued by the Duke of York at the outbreak of the Third Dutch War in March 1672 we are again indebted to Lord Dartmouth's naval manuscripts. They exist there, copied into the beginning of an 'Order Book' which by internal evidence is shown to have belonged to Sir Edward Spragge. It is similar to the so-called 'Royal Charles Sea Book,' and is nearly all blank, but contains two orders addressed by Rupert to Spragge, April 29 and May 22, 1673, and a resolution of the council of war held on board the Royal Charles on May 27, deciding to attack the Dutch fleet in the Schoonveldt and to take their anchorage if they retired into Flushing.

The orders are not dated, but, as they are signed 'James' and countersigned 'M. Wren,' their date can be fixed to a time not later than the spring of 1672, for Dr. Matthew Wren, F.R.S., died on June 14 in that year, having served as the lord admiral's secretary since 1667, when Coventry resigned his commissionership of the navy. They consist of twenty-six articles, which follow those of the late war so closely that it has not been thought worth while to print them except in the few cases where they vary from the older ones.

They are accompanied however in the 'Sea Book' by three 'Further Instructions,' which do not appear in any previous set. They are of the highest importance and mark a great stride in naval tactics, a stride which owing to Granville Penn's error is usually supposed to have been taken in the previous war. For the first time they introduced rules for engaging when the two fleets get contact on opposite tacks, and establish the much-abused system of stretching the length of the enemy's line and then bearing down together. But it must be noted that this rule only applies to the case where the fleets are approaching on opposite tacks and the enemy is to leeward. There is also a peremptory re-enunciation of the duty of keeping the line and the order enforced by the penalty of death for firing 'over any of our own ships.'

Here then we have apparently a return to the Duke of York's belief in formal tactics, and it is highly significant that, although the twenty-six original articles incorporate and codify all the other scattered additional orders of the last war, they entirely ignore those issued by Monck and Rupert during the Four Days' Battle.

We have pretty clear evidence of the existence at this period of two schools of tactical opinion, which after all is no more than experience would lead us to suspect, and which Pepys's remarks have already indicated. As usual there was the school, represented by the Duke of York and Penn, which inclined to formality, and by pedantic insistence on well-meant principles tended inevitably to confuse the means with the end. On the other hand we have the school of Monck and Rupert, which was inclined anarchically to submit all rules to the solvent of hard fighting, and to take tactical risks and unfetter individual initiative to almost any extent rather than miss a chance of overpowering the enemy by a sudden well-timed blow. Knowing as we do the extent to which the principles of the Duke of York's school hampered the development of fleet tactics till men like Hawke and Nelson broke them down, we cannot but sympathise with their opponents. Nor can we help noting as curiously significant that whereas it was the soldier-admirals who first introduced formal tactics, it was a seaman's school that forced them to pedantry in the face of the last of the soldier-school, who tried to preserve their flexibility, and keep the end clear in view above the means they had invented.

Still it would be wrong to claim that either school was right. In almost every department of life two such schools must always exist, and nowhere is such conflict less inevitable than in the art of war, whether by sea or land. Yet just as our comparatively high degree of success in politics is the outcome of the perpetual conflict of the two great parties in the state, so it is probably only by the conflict of the two normal schools of naval thought that we can hope to work out the best adjusted compromise between free initiative and concentrated order.

It was the school of Penn and the Duke of York that triumphed at the close of these great naval wars. The attempt of Monck and Rupert to preserve individual initiative and freedom to seize opportunities was discarded, and for nearly a century formality had the upper hand. Yet the Duke of York must not be regarded as wholly hostile to initiative or unwilling to learn from his rivals. The second and most remarkable of the new instructions acquits him. This is the famous article in which was first laid down the principle of cutting off a part of the enemy's fleet and 'containing' the rest.

Though always attributed to the Duke of York it seems almost certainly to have been suggested by the tactics of Monck and Rupert on the last day of the Four Days' Battle, June 4, 1666. According to the official account, they sighted the Dutch early in the morning about five leagues on their weather-bow, with the wind at SSW. 'At eight o'clock,' it continues, 'we came up with them, and they having the weather-gage put themselves in a line to windward of us. Our ships then which were ahead of Sir Christopher Myngs [who was to lead the fleet] made an easy sail, and when they came within a convenient distance lay by; and the Dutch fleet having put themselves in order we did the like. Sir Christopher Myngs, vice-admiral of the prince's fleet, with his division led the van. Next his highness with his own division followed, and then Sir Edward Spragge, his rear-admiral; and so stayed for the rest of the fleet, which came up in very good order. By such time as our whole fleet was come up we held close upon a wind, our starboard tacks aboard, the wind SW and the enemy bearing up to fall into the middle of our line with part of their fleet. At which, as soon as Sir Christopher Myngs had their wake, he tacked and stood in, and then the whole line tacked in the wake of him and stood in. But Sir C. Myngs in fighting being put to the leeward, the prince thought fit to keep the wind, and so led the whole line through the middle of the enemy, the general [Monck] with the rest of the fleet following in good order.'

The account then relates how brilliantly Rupert fought his way through, and proceeds, 'After this pass, the prince being come to the other side and standing out, so that he could weather the end of their fleet, part of the enemy bearing up and the rest tacking, he tacked also, and his grace [Monck] tacking at the same time bore up to the ships to the leeward, the prince following him; and so we stood along backward and forward, the enemy being some to windward and some to leeward of us; which course we four times repeated, the enemy always keeping the greatest part of their fleet to windward, but still at so much distance as to be able to reach our sails and rigging with their shot and to keep themselves out of reach of our guns, the only advantage they thought fit to take upon us at this time. But the fourth time we plying them very sharply with our leeward guns in passing, their windward ships bore up to relieve their leeward party; upon which his highness tacked a fifth time and with eight or ten frigates got to the windward of the enemy's whole fleet, and thinking to bear in upon them, his mainstay and main topmast being terribly shaken, came all by the board.' Monck not being able to tack for wounded masts 'made up to the prince,' and then the Dutch, after a threat to get between the two admirals, suddenly bore away before the wind for Flushing.[1]

The manoeuvre by which Myngs attempted from to windward to divide the enemy's fleet and so gain

the wind of part of it seems to be exactly what the new instruction contemplated, while its remarkable provision for a containing movement seems designed to prevent the disastrous confusion that ensued after the Dutch line had been broken. This undoubtedly is the great merit of the new instruction, and it is the first time, so far as is known, that the principle of containing was ever enunciated. In this it compares favourably with everything we know of until Nelson's famous memorandum. Its relations to Rodney's and Howe's manoeuvres for breaking the line must be considered later. For the present it will suffice to note that it seems designed rather as a method of gaining the wind than as a method of concentration, and that the initiation of the manoeuvre is left to the discretion of the leading flag officer, and cannot be signalled by the commander-in-chief.

As to the date at which these three 'Further Instructions' were first drawn up there is some difficulty. It is possible that they were not entirely new in 1672, but that their origin, at least in design, went back to the close of the Second War. In Spragge's first 'Sea Book' there is another copy of them identical except for a few verbal differences with those in the second 'Sea Book.' In the first 'Sea Book' they appear on the back of a leaf containing some 'Sailing Instructions by the Duke of York,' which are dated November 16, 1666, and this is the latest date in the book. Moreover in this copy they are headed 'Additional Instructions to be observed in the next engagement,' as though they were the outcome of a previous action. Now, as Wren died on June 10 (o.s.), and the battle of Solebay, the first action of the Third War, was fought on May 28 (o.s.), it is pretty clear that it must have been the Second War and not the Third that was in Spragge's mind at the time. Still if we have to put them as early as November 1666 it leaves the question much where it was. Besides the idea of containing the main body of the enemy after cutting off part of his fleet, the death penalty for firing over the line is obviously designed to meet certain regrettable incidents known to have occurred in the Four Days' Battle. Nor is there any evidence that they were used in the St. James's fight of July 25, and as this was the last action in the war fought, the 'next engagement' did not take place till the Third War. It is fairly clear therefore that we must regard these remarkable orders as resulting from the experience of the Second War, and as having been first put in force during the Third one.

After the battle of Solebay these supplementary articles were incorporated into the regular instructions as Articles 27 to 29. This appears from a MS. book belonging to Lord Dartmouth entitled 'Copies of instructions and other papers relating to the fleets. Anno 1672' It contains a complete copy of both Sailing and Fighting Instructions, with a detailed 'order of sailing' for the combined Anglo-French fleet, dated July 2, 1672, and a corresponding 'order of battle' dated August 1672. It also contains the flag officers' reports made to the Duke of York after the battle.

Instructions for the 'Encouragement for the captains and companies of fireships, small frigates, and ketches,' now appear for the first time, and were repeated in some form or other in all subsequent orders.

Finally, it has been thought well to reprint from Granville Penn's *Memorials of Penn* the complete set of articles which he gives in Appendix L. No date is attached to them; Granville Penn merely says they were subsequent to 1665, and has thereby left an unfortunate impression, adopted by himself and almost every naval historian, both British and foreign, that followed him, that they were used in the campaign of 1666, that is, in the Second Dutch War. From the fact however that they incorporate the 'Further Instructions for Fighting' countersigned by Wren, we know that they cannot have been earlier than 1667, while the newly discovered MS. of Lord Dartmouth makes it practically certain they must have been later than August 1672. We may even go further.

For curiously enough there is no evidence that these orders, on which so much doubtful reasoning has been based, were ever in force at all as they stand. No signed copy of them is known to exist. The copy amongst the Penn papers in the British Museum which Granville Penn followed is a draft with no signature whatever. It is possible therefore that they were never signed. In all probability they were completed by James early in 1673 for the coming campaign, but had not actually been issued when, in March of that year, the Test Act deprived him of his office of lord high admiral, and brought his career as a seaman to an end. What orders were used by his successor and rival Rupert is unknown.

Of even higher interest than this last known set of the Duke of York's orders are certain additions and observations which were subsequently appended to them by an unknown hand. As it has been found impossible to fix with certainty either their date or author, I have given them by way of notes to the text. They are to be found in a beautifully written and richly bound manuscript in the Admiralty Library. At the end of the volume, following the Instructions, are diagrammatic representations of certain actions in the Third Dutch War, finely executed in water-colour to illustrate the formation for attack, and to every plan are appended tactical notes relating to the actions represented, and to others which were fought in the same way. The first one dealt with is the 'St. James's Fight,' fought on July 25, 1666, and the dates in the tactical notes, as well as in the 'Observations' appended to the articles, range as far as the last action fought in 1673. The whole manuscript is clearly intended as a commentary on the

latest form of the duke's orders, and it may safely be taken as an expression of some tactician's view of the lessons that were to be drawn from his experience of the Dutch Wars.

As to the authorship, the princely form in which the manuscript has been preserved might suggest they were James's own meditations after the war; but the tone of the 'Observations,' and the curious revival of the word 'general' for 'commander-in-chief,' are enough to negative such an attribution. Other indications that exist would point to George Legge, Lord Dartmouth. His first experience of naval warfare was as a volunteer and lieutenant under his cousin, Sir Edward Spragge, in 1665. Spragge was in fact his 'sea-daddy,' and with one exception all the examples in the 'Observations' are taken from incidents and movements in which Spragge was the chief actor. One long observation is directed to precautions to be taken by flag officers in shifting their flags in action, so as to prevent a recurrence of the catastrophe which cost Spragge his life. Indeed, with the exception of Jordan, Spragge is the only English admiral mentioned. Dartmouth was present at all the actions quoted, and succeeded in constituting himself a sufficient authority on naval affairs to be appointed in 1683 to command the first important fleet that was sent out after the termination of the war. These indications however are far too slight to fix him with the authorship, and his own orders issued in 1688 go far to rebut the presumption.[2]

Another possible author is Arthur Herbert, afterwards Lord Torrington. He too had served a good deal under Spragge, and had been present at all the battles named. This conjecture would explain the curious expression used in the observation to the seventh instruction, 'The battle fought in 1666.' There was of course more than one battle fought in 1666, but Herbert was only present in that of July 25th, the 'St. James's Fight,' represented in the manuscript—and it was his first action. But here again all is too vague for more than a mere guess.

But whoever was the author, the manuscript is certainly inspired by someone of position who had served in the last two Dutch Wars, and its undeniable importance is that it gives us clearly the development of tactical thought which led to the final form of Fighting Instructions adopted under William III, and continued till the end of the eighteenth century. The developments which it foreshadows will therefore be best dealt with when we come to consider those instructions. For the present it will be sufficient to note the changes suggested. In the first place we have a desire to simplify signals and to establish repeating ships. Secondly, for the sake of clearness the numbering of the articles is changed, every paragraph to which a separate signal is attached being made a separate instruction, so that with new instructions we have thirty-three articles instead of James's twenty-four. Thirdly, we have three new instructions proposed: viz., No. 5, removing from flag officers the right to divide the enemy's fleet at their discretion without signal from the admiral; No. 8, giving a signal for any squadron that has weathered part of the enemy by dividing or otherwise to bear down and come to close action; and No. 17, for such a squadron to bear down through the enemy's line and rejoin the admiral. All of these rules are obviously the outcome of known incidents in the late war. There are also suggested additions or alterations to the old articles to the following effect: (1) When commanders are in doubt or out of sight of the admiral, they are to press the headmost ships of the enemy all they can; (2) When the enemy 'stays to fight' they are to concentrate on his weathermost ships, instead of his headmost, as under the old rule; (3) Finally, while preserving the line, they are to remember that their first duty is 'to press the weathermost ships and relieve such as are in distress.'

It is this last addition to the Duke of York's sixteenth article that contains the pith of the author's ideas. All his examples are chosen to show that the system of bearing down together from windward in a line parallel to that of the enemy is radically defective, even if all the advantages of position and superior force are with you, and for this reason—that if you succeed in defeating part of the enemy's line you cannot follow up your success with the victorious part of your own without sacrificing your advantage of position, and giving the enemy a chance of turning the tables on you. Thus, if your rear defeats the enemy's rear and follows it up, your own line will be broken, and as your rear in pressing its beaten opponents falls to leeward of the enemy's centre and van it will expose itself to a fatal concentration. His own view of the proper form of attack from windward is to bear down upon the van or weathermost ships of the enemy in line ahead on a course oblique to the enemy's line. In this way, he points out, you can concentrate on the ships attacked, and as they are beaten you can deal with the next in order. For so long as you keep your own line intact and in good order, regardless of your rear being at first too distant to engage, you will always have fresh ships coming into action at the vital point, and will thus be able gradually to roll up the enemy's line without ever disturbing your own order. Fortifying himself with the reflection that 'there can be no greater justification than matter of fact,' he proceeds to instance various battles in the late wars to show that this oblique form of attack always led to a real victory, whereas whenever the parallel form was adopted, though in some cases we had everything in our favour and had fairly beaten the Dutch, yet no decisive result was obtained.

From several points of view these observations are of high interest. Not only do they contain the earliest known attempt to get away from the unsatisfactory method of engaging in parallel lines ship to

ship, but in seeking a substitute for it they seem to foreshadow the transition from the Elizabethan idea of throwing the enemy into confusion to the eighteenth century idea of concentration on his most vulnerable part. In so far as the author recommends a concentration on the weathermost ships his idea is sound, as they were the most difficult for the enemy to support; but since the close-hauled line had come in, they were also the van, and a concentration on the van is theoretically unsound, owing to the fact that the centre and rear came up naturally to its relief. To this objection he appears to attach no weight, partly because no doubt he was still influenced by the old intention of throwing the enemy into confusion.[3] For since the line ahead had taken the place of the old close formations it seemed that to disable the leading ships came to the same thing as disabling the weathermost. The solution eventually arrived at was of course a concentration on the rear, but to this at the time there were insuperable objections. The rear was normally the most leewardly end of the line, and an oblique attack on it could be parried by wearing together. The rear then became the van, and the attack if persisted in would fall on the leading squadron with the rest of the fleet to windward—the worst of all forms of attack. The only possible way therefore of concentrating on the rear was to isolate it and contain the van by cutting the line. But in the eyes of our author and his school cutting the line stood condemned by the experience of war.[4]

In his 'Observations' he clearly indicates the reasons. He would indeed forbid the manoeuvre altogether except when your own line outstretches that of the enemy, or when you are forced to pass through the enemy's fleet to save yourself from being pressed on a lee shore. The reasons given are the disorder it generally causes, the ease with which it is parried, and the danger of your own ships firing on each other when as the natural consequence of the manoeuvre they proceed to double on the enemy. The fact is that fleet evolutions were still in too immature a condition for so difficult a manoeuvre to be admissible. Presumably therefore our author chose the attack on the weathermost ships, although they were also the van, as the lesser evil in spite of its serious drawbacks.

The whole question of the principles involved in his suggestion is worthy of the closest consideration. For the difficulty it reveals of effecting a sound form of concentration without breaking the line as well as of adopting any form that involved breaking the line gives us the key of that alleged reaction of tactics in the eighteenth century which has been so widely ridiculed.

FOOTNOTES:

[1] The original draft corrected by Lord Addington, principal secretary of state, is in *S.P. Domestic*, Car. II, 158.

[2] See *post*, p. 170.

[3] *Cf.* Hoste's second Remark, *post*, p. 180.

[4] In the Instructions which Sir Chas. H. Knowles drew up about 1780, for submission to the Admiralty he has at p. 16 a remark upon rear concentration which helps us to see what was in the author's mind. It is as follows: 'N.B.—In open sea the enemy (if of equal force) will never suffer you to attack their rear, but will pass you on opposite tacks to prevent your doing it: therefor the attempt is useless and only losing time.'

THE DUKE OF YORK, 1672.[1]

[+Spragge's Second Sea Book. Dartmouth MSS.+]

Instructions for the better ordering of his majesty's fleet in fighting.

1. Discovery of a fleet, striking the admiral's flag and making a weft.[2]

2. To come into the order of battle.[2]

3. A red flag on the fore topmast-head, to engage.[2]

4. If overcharged or distressed, a pennant.[2]

5. Ditto, a weft with his jack and ensign.[2]

6. A pennant on the mizen peak or ensign staff if any ship bear away from the enemy to stop a leak.

If any ship shall be necessitated to bear away from the enemy to stop a leak or mend what is amiss which cannot otherwise be repaired, he is to put out a pennant on the mizen peak or ensign staff,

whereby the rest of that ship's squadron may have notice what it is for; and if the admiral or any flagship should be so, the ships of the fleet or of the respective squadrons are to endeavour to get up as close in line between him and the enemy as they can, having always an eye to defend him in case the enemy should come to annoy him in that condition; and in case any flagship or any other ship in the fleet shall be forced to go out of the line for stopping of leaks or repairing any other defects in the ships, then the next immediate ships are forthwith to endeavour to close the line either by making or shortening sail, or by such other ways and means as they shall find most convenient for doing of it; and if any ship, be it flagship or other that shall happen to be disabled and go out of the line, then all the small craft shall come in to that ship's assistance, upon signal made of her being disabled. If any of the chief flagships or other flagships shall happen to be so much disabled as that thereby they shall be rendered unable for present service, in such case any chief flag officer may get on board any other ship which he may judge most convenient in his own squadron, and any other flag officer in that case may go on board any ship in his division.

7. A blue flag on the mizen yard or topmast.[3]

8. To make sail, a red flag on the spritsail, topmast shrouds, &c.[3]

9. A red flag on the mizen shrouds, to come into the wake or grain of us.[3]

10. Not to endanger one another.[4]

11. The small craft to attend the motion of the enemy's fireships.[4]

12. A white flag on the mizen yard-arm or topmast-head, all the small frigates of the admiral's squadron.[4]

13. To retreat, four guns.[4]

14. None to fire guns till within distance.[5]

15. For the larboard and starboard tacks.[6]

16. To keep the line.[7]

17. If we have the wind of the enemy.[7]

18. If the enemy have the wind of us.[7]

19. The distance of each ship in time of fight.[8]

20. Not to pursue any small number of enemy's ships.[9]

21. For leaving chase.[9]

22. If any ship be disabled in fight.[9]

23. The van of the fleet to tack first.[9]

24. The rear of the fleet to tack first.[9]

25. To fall into the order of battle.[10]

26. To make sail.[10]

JAMES.

By command of his royal highness.

M. WREN.

FOOTNOTES:

[1] This set of orders has marginal rubrics indicating the contents of each article, and where the article does not differ from the orders of 1665 I have given the rubric only in the text.

[2] Identical with corresponding article of April 10, 1665.

[3] Same as corresponding article of April 10, 1665. Article 10 of those instructions relating to 'not staying to take possession of disabled ships' is here omitted.

[4] These four articles are identical with 11, 12, 13 and 14 of April 10, 1665.

[5] Same as Article 16 of April 10, 1665.

[6] Same as Article 15 of April 10, 1665.

[7] These three articles are the same as 1, 2, and 3, of 'Additional Instructions' of April 18, 1665. The complete set used by Monck and Rupert in 1666 must have been numbered as above.

[8] Same as 4 and 5 of 'Additional Instructions,' April 18,1665.

[9] These five articles are the same as 6 to 10 of the 'Additional Instructions,' April 18, 1665.

[10] These two articles are the same as the two 'Additional Instructions' of April 27, 1665.

THE DUKE OF YORK'S SUPPLEMENTARY ORDERS, 1672.

[+Spragge's Second Sea Book. Dartmouth MSS.+]

Further Instructions for Fighting.

1. To keep the enemy to leeward.

In case we have the wind of the enemy, and that the enemy stands towards us and we towards them, then the van of our fleet shall keep the wind, and when *the rear comes*[1] to a convenient distance of the enemy's rear shall stay until our whole line is come up within the same distance of the enemy's van, and then our whole line is to stand along with them the same tacks on board, still keeping the enemy to leeward, and not suffering them to tack in the van, and in case the enemy tack in the rear first, then he that leads the van of our fleet is to tack first, and the whole line is to follow, standing all along with the same tacks on board as the enemy does.

2. To divide the enemy's fleet.

In case the enemy have the wind of us and we have sea-room enough, then we are to keep the wind as close as we can lie until such time as we see an opportunity by gaining their wakes to divide their fleet; and if the van of our fleet find that they have the wake of any part of them, they are to tack and to stand in, and strive to divide the enemy's body, and that squadron which shall pass first being come to the other side is to tack again, and the middle squadron is to bear up upon that part of the enemy so divided, which the last is to second, either by bearing down to the enemy or by endeavouring to keep off those that are to windward, as shall be best for service.

3. To keep the line.

The several commanders of the fleet are to take special care that they keep their line, and upon pain of death that they fire not over any of our own ships.

(Signed) JAMES.
By command of his royal highness.

(Signed) M. WREN.

FOOTNOTE:

[1] This must be a copyist's error. In Lord Dartmouth's MS. book (see *ante*, p. 139) it reads 'when they are come.'

__THE DUKE OF YORK_, 1672-3_.

[+Spragge's Second Sea Book. Dartmouth MSS.+]

Encouragement for the captains and companies of fireships, small frigates and ketches.

Although it is the duty of all persons employed in his majesty's fleet even to the utmost hazard of their lives to endeavour as well the destroying of his majesty's enemies, as the succouring of his majesty's subjects, and in most especial manner to preserve and defend his majesty's ships of war (the

neglect whereof shall be at all times strictly and severely punished), nevertheless, that no inducement may be wanting which may oblige all persons serving in his majesty's service valiantly and honourably to acquit themselves in their several stations, we have thought fit to publish and declare, and do hereby promise on his majesty's behalf:

That if any of his majesty's fireships perform the service expected of them in such manner that any of the enemy's ships of war of forty guns or more shall be burnt by them, every person remaining in the fireship till the service be performed shall receive on board the admiral, immediately after the service done, ten pounds as a reward for that service over and above his pay due to him; and in case any of them shall be killed in that service it shall be paid to his executors or next relation over and above the ordinary provision made for the relations of such as are slain in his majesty's service; and the captains of such fireships shall receive a medal of gold to remain as a token of honour to him and his posterity, and shall receive such other encouragement by preferment and command as shall be fit to reward him, and induce others to perform the like service. The inferior officers shall receive each ten pounds in money and be taken care of, and placed in other ships before any persons whatsoever.

In case any of the enemy's flagships shall be so fired, the recompense shall be double to each man performing it, and the medal to the commander shall be such as shall particularly express the eminence of the service, and his and the other officers' preferments shall be suitable to the merit of it.

If any of his majesty's fifth or sixth rate frigates, or any ketches, smacks or hoys in his majesty's service, shall board or destroy any fireships of the enemy, and so prevent any of them from going on board any of his majesty's ships, above the fifth rate, besides the preferment which shall be given to the commanders and officers of such ships performing such service answerable to the merit, the companies of such ships or vessels, or in case they shall be killed in that service, their executors or nearest relations, shall receive to every man forty shillings as a reward, and such persons who shall by the testimony of the commanders appear to have been eminently instrumental in such service shall receive a further reward according to their merit.

If the masters of any ketches, hoys, smacks, and other vessels hired for his majesty's service shall endeavour to perform any of the services aforesaid, and shall by such his attempt lose his vessel or ship, the full reward thereof shall be paid by the treasurer of his majesty's navy, upon certificate of the service done by the council of war, and the said commanders and men serving in her shall receive the same recompense with those serving in his majesty's ships or vessels.

JAMES.[1]

By command of his royal highness.

FOOTNOTE:

[1] In Capt. Moulton's Sea Book *(Harleian MSS.* 1247, f. 53) is another copy of these articles which concludes, 'given on board the Royal Charles the 20th of April 1665. James.' And at foot is written 'a copy of His Royal Highness's command received from his Excellency the Earl of Sandwich.' They probably therefore originated in the Second War and were reissued in the Third.

FINAL FORM OF THE DUKE OF YORK'S ORDERS, 1673.

With the additions and observations subsequently made.[1]

[+G. Penn, Memorials of Penn+.]

James, Duke of York and Albany, Earl of Ulster, Lord High Admiral of England, Scotland, and Ireland, Constable of Dover Castle, Lord Warden of the Cinque Ports, and Governor of Portsmouth, &c.

Instructions for the better ordering his majesty's fleet in fighting.

Instruction I. Upon discovery of a fleet, and receiving of a signal from the admiral (which is to be the striking of the admiral's ensign, and making a weft), such frigates as are appointed (that is to say, one out of each squadron) are to make sail, and to stand with them, so nigh as they can conveniently, the better to gain knowledge what they are, and of what quality; how many fireships, and others; and what posture their fleet is in; which being done, the frigates are to speak together, and conclude on the report they are to give; and, accordingly, to repair to their respective squadrons and commanders-in-chief; and not to engage (if the enemy's ships exceed them in number), unless it shall appear to them on the place that they have an advantage.

Instruction II. At sight of the said fleet, the vice-admiral (or he who commands in chief in the second place), with his squadron; and the rear-admiral (or he who commands in chief in the third squadron), with his squadron; are to make what sail they can to come up, and to put themselves into that order of battle which shall be given them; for which the signal shall be the union flag put on the mizen peak of the admiral's ship; at sight whereof, as well the vice- and rear-admirals of the red squadron, as the admirals, vice-admirals, and rear-admirals of the other squadrons, are to answer it by doing the like.

Instruction III. In case the enemy have the wind of the admiral and fleet, and they have sea-room enough, then they are to keep the wind as close as they can lie, until such time as they see an opportunity by gaining their wakes to divide the enemy's fleet; and if the van of his majesty's fleet find that they have the wake of any considerable part of them, they are to tack and stand in, and strive to divide the enemy's body; and that squadron that shall pass first, being got to windward, is to bear down on those ships to leeward of them; and the middle squadron is to keep her wind, and to observe the motion of the enemy's van, which the last squadron is to second; and both of these squadrons are to do their utmost to assist or relieve the first squadron that divided the enemy's fleet.[2]

Instruction IV. If the enemy have the wind of his majesty's fleet, and come to fight them, the commanders of his majesty's ships shall endeavour to put themselves in one line, close upon a wind, according to the order of battle.[3]

Instruction V. If the admiral would have any of the fleet to make sail, or endeavour, by tacking or otherwise, to gain the wind of the enemy, he will put a red flag upon the spritsail [*sic*], topmast shrouds, fore-stay, fore topmast-stay; and he who first discovers this signal shall make sail, and hoist and lower his jack and ensign, that the rest of the fleet may take notice thereof, and follow.[4]

Instruction VI.[5] If the admiral should have the wind of the enemy when other ships of the fleet are in the wind of the admiral, then, upon hoisting up a blue flag at the mizen yard, or mizen topmast, every ship is to bear up into his wake or grain, upon pain of severe punishment.

If the admiral be to leeward of the enemy, and his fleet or any part thereof be to leeward of him, to the end such ships that are to leeward may come up in a line with the admiral (if he shall put a flag as before and bear up); none that are to leeward are to bear up, but to keep his or their ship's luff, thereby to give his ship wake or grain.

If it shall please God that the enemy shall be put to run, all the frigates are to make all the sail that possibly they can after them, and to run directly up their broadsides, and to take the best opportunity they can of laying them on board; and some ships which are the heavy sailers (with some persons appointed to command them) are to keep in a body in the rear of the fleet, that so they may take care of the enemy's ships which have yielded, and look after the manning of the prizes.[6]

Instruction VII.[7] In case his majesty's fleet have the wind of the enemy, and that the enemy stand towards them, and they towards the enemy, then the van of his majesty's fleet shall keep the wind; and when they are come within a convenient distance from the enemy's rear, they shall stay until their whole line is come up within the same distance from the enemy's van; and then their whole line is to tack (every ship in his own place), and to bear down upon them so nigh as they can (without endangering their loss of wind); and to stand along with them, the same tacks aboard, still keeping the enemy to leeward, and not suffering them to tack in their van; and in case the enemy tack in the rear first, he who is in the rear of his majesty's is to tack first, with as many ships, divisions, or squadrons as are those of the enemy's; and if all the enemy's ships tack, their whole line is to follow, standing along with the same tacks aboard as the enemy doth.

Instruction VIII.[8] If the enemy stay to fight (his majesty's fleet having the wind), the headmost squadron of his majesty's fleet shall steer for the headmost of the enemy's ships.[9]

Instruction IX.[10] If, when his majesty's fleet is going before the wind, the admiral would have the vice-admiral and the ships of the starboard quarter to clap by the wind and come to their starboard tack, then he will hoist upon the mizen topmast-head a red flag.

And in case he would have the rear-admiral and the ships of the larboard quarter to come to their larboard tack, then he will hoist up a blue flag in the same place.

Instruction X.[11] If the admiral would have the van of the fleet to tack first, he will put abroad the union flag at the staff on the fore topmast-head, if the red flag be not abroad; but if the red flag be abroad, then the fore topsail shall be lowered a little, and the union flag shall be spread from the cap of the fore topmast downwards.

When the admiral would have the rear of the fleet to tack first, the union flag shall be put abroad on the flagstaff of the mizen topmast-head; and for the better notice of these two signals through the fleet,

each flagship is, upon sight of either of the said signals, to make the same signals, that so every ship may know what they are to do; and they are to continue out the same signals until they be answered. [12]

Instruction XI.[13] If the admiral put a red flag on the mizen shrouds, or the mizen peak, all the flagships are to come up into his wake or grain.

Instruction XII.[13] When the admiral would have the other squadrons to make more sail, though himself shorten sail, a white ensign shall be put on the ensign staff of the admiral's ships.

Instruction XIII.[13] As soon as the fleet shall see the admiral engage, or make a signal, by putting out a red flag on the fore topmast-head, each squadron shall take the best advantage to engage the enemy, according to such order of battle as shall be given them.

Instruction XIV.[13] In time of fight, if the weather be reasonable, the commanders of his majesty's fleet shall endeavour to keep about the distance of half a cable one from another; but so as they may also (according to the direction of their commanders) vary that distance, as the weather shall prove, and as the occasion of succouring any of his majesty's ships or of assaulting those of the enemy shall require.

And as for the flag officers, they shall place themselves according to such order of battle as shall be given.

Instruction XV.[14] No commander of any of his majesty's ships shall suffer his guns to be fired until the ship be within distance to do good execution; and whoever shall do the contrary shall be strictly examined, and severely punished, by a court-martial.

Instruction XVI.[14] In all cases of fight with the enemy, the commanders of his majesty's ships are to keep the fleet in one line, and (as much as may be) to preserve the order of battle which they have been directed to keep before the time of fight.[15]

Instruction XVII.[16] None of the ships of his majesty's fleet shall pursue any small number of the enemy's ships before the main body of their fleet shall be disabled, or run.

Instruction XVIII.[16] None shall fire upon the ships of the enemy's that are laid on board by any of his majesty's ships, but so as he may be sure he do not endamage his friend.

Instruction XIX.[16] The several commanders in the fleet are to take special care, upon pain of death, that they fire not over any of their own ships.

Instruction XX.[17] It is the duty of all commanders of the small frigates, ketches, and smacks, belonging to the several squadrons (who are not otherwise appointed by the admiral), to know the fireships belonging to the enemies, and accordingly observing their motion, to do their utmost to cut off their boats (if possible); or, if they have an opportunity, to lay them on board, seize, and destroy them; and, to this purpose, they are to keep to windward of their squadron, in time of service. But in case they cannot prevent the fireships from coming on board of his majesty's ships, by clapping between them (which by all possible means they are to endeavour), they are in such an exigent to show themselves men, by steering on board them with their boats, and, with grapnels and other means, to clear his majesty's ships from them, and to destroy them. Which service, if honourably performed, shall be rewarded according to its merit; but if neglected, shall be strictly examined, and severely punished. [18]

Instruction XXI.[19] The fireships in the several squadrons are to endeavour to keep the wind; and they (with their small frigates) to be as near the great ships as they can, attending the signal from the admiral, and acting accordingly.

If the admiral hoist up a white flag at the mizen yard-arm or topmast-head, all the small frigates in his squadron are to come under his stern for orders.

Instruction XXII.[20] In case it should please God that any ships of his majesty's fleet be lamed in fight, and yet be in no danger of sinking, nor encompassed by the enemy, the following ships shall not stay, under pretence of succouring them, but shall follow their leaders, and endeavour to do what service they can against the enemy; leaving the succouring of the lame ships to the sternmost of the fleet; being assured that nothing but beating the body of the enemy's fleet can effectually secure the lame ships,

Nevertheless, if any ship or ships shall be distressed or disabled, by loss of mast, shot under water, or the like, so that it is really in danger of sinking or taking; that or those ship or ships thus distressed

shall make a sign by the weft of his or their jack or ensign, and those next to them are strictly required to relieve them.

And if any ships or squadron shall happen to be overcharged or distressed, the next squadron, or ships, are immediately to make towards their relief and assistance.

And if any ship shall be necessitated to bear away from the enemy, to stop a leak, or mend what is amiss (which cannot otherwise be repaired), he is to put a pennant on the mizen peak, or ensign staff, whereby the rest of that ship's squadron may have notice what it is for.

If the admiral or any flagship should be so, then the ships of the fleet, or of the respective squadrons, are to endeavour to get up as close into a line between him and the enemy as they can; having always an eye to defend him in case the enemy should come to annoy him in that condition.

And in case any flagship, or any other ship in the fleet, shall be forced to go out of the line, for stopping of leaks, or repairing of any other defect, then the next immediate ships are forthwith to endeavour to close the line again, either by making or shortening sail, or by such other ways and means as they shall find most convenient for doing of it; and all the small craft shall come in to that ship's assistance, upon a signal made of her being disabled.

And if any of the chief flagships, or other flagships shall happen to be so much disabled as that they shall be unfit for present service, in such a case any chief flag officer may go on board any other ship of his own squadron, as he shall judge most convenient; and any other flag officer, in that case, may go on board any ship in his division.[21]

Instruction XXIII.[22] In case of fight, none of his majesty's ships shall chase beyond sight of the admiral; and at night all chasing ships are to return to the fleet.

Instruction XXIV.[23] If any engagement by day shall continue till night, and the admiral shall please to anchor, all the fleet are, upon a signal, to anchor, in as good, order as may be, which signal will be the same as in the 'Instructions for Sailing' *(vid.* Instr. XVIII.); that is to say, the admiral fires two guns, a small distance one from another, &c.

And if the admiral please to retreat without anchoring, then he will fire four guns, one after another, so as the report may only be distinguished; and about three minutes after he will do the like with four guns more.[24]

FOOTNOTES:

[1] The later *Admiralty MS.* is prefaced by the following *Observation*: 'There have happened several misfortunes and disputes for want of a sufficient number of signals to explain the general's pleasure, without which it is not to be avoided; and whereas it hath often happened for want of a ready putting forth and apprehending to what intent the signals are made, they are contracted into a shorter method so that no time might be lost. It is most certain that in all sea battles the flags or admiral-generals are equally concerned in any conflict, and no manner of knowledge can be gained how the rest of the battle goes till such time as it is past recovery. To prevent this let a person fitly qualified command the reserve, who shall by signals make known to the general in what condition or posture the other parts of the fleet are in, he having his station where the whole can best be discovered, and his signals, answering the general's, may also be discerned by the rest of the fleet.'

[2] The *Admiralty MS.* has this *Observation*: 'Unless you can outstretch their headmost ships there is hazard in breaking through the enemy's line, and [it] commonly brings such disorders in the line of battle that it may be rather omitted unless an enemy press you near a lee shore. For if, according to this instruction, when you have got the wind you are to press the enemy, then those ships which are on each side of them shall receive more than equal damages from each other's shot if near, and in case the enemy but observed the seventh instruction—that is, to tack with equal numbers with you—then is your fleet divided and not the enemy's.

[3] The *Admiralty MS.* here inserts an additional instruction, numbered 5, as follows: 'If in time of fight any flagship or squadron ahead of the fleet hath an opportunity of weathering any of the enemy's ships, they shall put abroad the same signal the general makes them for tacking, which, if the general would have them go about, he will answer by giving the same again, otherwise they are to continue on the same line or station.'

Observation.—'For it may prove not convenient in some cases to break the line.'

[4] The *Admiralty MS.* adds, 'And as soon as they have the wind to observe what other signals the general makes; and in case they lose sight of the general, they are to endeavour to press the headmost

ships of the enemy all they can, or assist any of ours that are annoyed by them.' The whole makes Instruction VI. of the *Admiralty MS.* An *Observation* is attached to the old instruction as follows:—'This signal was wanting in the battle fought 11th August, 1673. The fourth squadron followed this instruction and got the wind of the enemy about four in the afternoon, and kept the wind for want of another signal to bear down upon the enemy, as Monsieur d'Estrées alleged at the council of war the next day. For want of this the enemy left only five or six ships to attend their motion, and pressed the other squadrons of ours to such a degree they were forced to give way.' *Cf.* note, p. 181.

[5] The *Admiralty MS.* makes of the three paragraphs of this instruction three separate instructions, numbered 7, 9, and 10, and inserts after the first paragraph a new instruction numbered 8, with an *Observation* appended. It is as follows: *Additional Instruction, No. VIII.:* 'When any of his majesty's ships that have gained the wind of the enemy, and that the general or admiral would have them bear down and come to a close fight, he will put abroad the same signal as for their tacking, and hoist and lower the same till it be discerned; at which, they that are to windward shall answer by bearing down upon the enemy. *Observation.*—The same in the battle of Solebay, Sir Joseph Jordan got the wind and kept it for want of a signal or fireships.' This *Observation* appears to be intended as a continuation of the previous one, the new instruction supplies the missing signal there referred to.

[6] The *Admiralty MS.* has this *Observation*: 'The 28th May, '73, the battle fought in the Schooneveld, the rear-admiral of their fleet commanded by Bankart (? Adriaen Banckers) upon a signal from De Ruyter gave way for some time, and being immediately followed by Spragge and his division, it proved only a design to draw us to leeward, and that De Ruyter might have the advantage of weathering us. So that for any small number giving way it is not safe for the like number to go after them, but to press the others which still maintain the fight according to the article following.

[7] No.11 in the *Admiralty MS*. with the following *Observation*: 'In bearing down upon an enemy when you have the wind, or standing towards them and they towards you, if it is in your power to fall upon any part of their ships, those to windward will be the most exposed; therefore you must use your utmost endeavour to ruin that part. The battle fought in *1666*, the headmost or winderly ships were beaten in three hours and put to run before half the rest of the fleet were engaged. We suffered the like on the 4th of June, for Tromp and De Ruyter never bore down to engage the body of our fleet, but pressed the leading ships where Spragge and his squadron had like to have been ruined.'

[8] *Admiralty MS.* No. 12.

[9] For 'headmost of the enemy's ships' the *Admiralty MS*. has 'windmost ships of the enemy's fleet, and endeavour all that can be to force them to leeward.' Also this *Observation*: 'It may happen that the headmost of their fleet may be the most leewardly, then in such case you are to follow this instruction, whereas before it was said to stand with the headmost ships of the enemy.'

[10] *Admiralty MS*. Nos. 13 and 14. It has the *Observation*: 'This ought to be for each squadron apart.'

[11] *Admiralty MS*. Nos. 15 and l6. To the first paragraph, or No. 15, it has the *Observation*: 'It may happen that by the winds shifting there may be neither van nor rear; then in that case a signal for each squadron would be better understood, so that you are to follow the 14th and 15th of the "Sailing Instructions." For in the battle of August '73 the wind shifted and put the whole line out of order.'

[12] The *Admiralty MS*. here inserts a new article, No. 17: 'If the general would have those ships to windward of the enemy to bear down through their line to join the body of the fleet, he will put abroad a white flag with a cross from corner to corner where it can best be discovered.'

[13] *Admiralty MS*. Nos. 18 to 23.

[14] *Admiralty MS*. Nos, 18 to 23.

[15] *Admiralty MS*. adds: 'having regard to press the weathermost ships and relieve such as are in distress.' It is worth noting that this important relaxation of strict line tactics practically embodies the idea of Rupert's Additional Instruction of 1666. *Supra*, p. 129.

[16] *Admiralty MS*. Nos. 24 to 26.

[17] *Admiralty MS*. No. 27. It adds this *Observation*: 'When the fleet is to leeward of the enemy you to take care to put yourself in such a station as that you may (when any signal is given) without loss of time tack and stand in to the line. And when any part of the fleet or ships wherein you are concerned are ordered to tack and gain the wind of the enemy, you are to make all the sail you can and keep up with the headmost ships that first tack.'

[18] *Admiralty MS. 'Observation*: The reward of saving a friend to be equal to that of destroying an enemy.'

[19] *Admiralty MS.* Nos. 28 and 29.

[20] *Admiralty MS.* No. 30.

[21] The *Admiralty MS.* has the *Observation:* 'in changing ships be as careful as you can not to give the enemy any advantage or knowledge thereof by striking the flag. In case of the death of any flag officer, the flag to be continued aloft till the fight be over, notice to be given to the next commander-in-chief, and not to bear out of the line unless in very great danger. It hath been observed what very great encouragement the bare shooting of an admiral's flag gives the enemy, but this may be prevented by taking in all the flags before going to engage. It was the ruin of Spragge in the battle of August '73 by taking his flag in his boat, which gave the enemy an opportunity to discover his motion, when at the same [time] we saw three flags flying on board the main topmast-head of three ships which Tromp had quitted.'

[22] *Admiralty MS.* No. 31.

[23] *Admiralty MS.* Nos. 32 and 33.

[24] The *Admiralty MS.* has the *Observation*: 'By reason that guns are not so well to be distinguished at the latter end of a battle from chose of the enemy, sky-rockets would be proper signals.' This appears to be the earliest recorded suggestion for the use of rockets for naval signalling.

II

MEDITERRANEAN ORDERS, 1678

INTRODUCTORY

In 1677 Narbrough had been sent for the second time as commander-in-chief to the Mediterranean, to deal with the Barbary corsairs. To enable him to operate more effectively against Tripoli, arrangements were on foot to establish a base for him at Malta, and meanwhile he had been using the Venetian port of Zante. It was at this time that Charles II, in a last effort to throw off the yoke of Louis XIV, had married his eldest niece, the Princess Mary, to the French king's arch-enemy William of Orange, and relations between France and England were at the highest tension. Preparations were set on foot in the British dockyards for equipping a 'grand fleet' of eighty sail; on February 15 was issued a new and enlarged commission to Narbrough making him 'admiral of his majesty's fleet in the Straits'; Sicily, which the French had occupied, was hurriedly evacuated; Duquesne, who commanded the Toulon squadron, was expecting to be attacked at any moment, and Colbert gave him strict orders to keep out of the British admiral's way.[1]

It will be seen that it was in virtue of his new commission, and in expectation of encountering a superior French force, that Narbrough issued his orders, and they may be profitably compared with those of Lord Sandwich on the eve of the Second Dutch War as the typical Fighting Instructions for a small British fleet. No collision however occurred; for Louis could not face the threatened coalition between Spain, Holland, and England, and was forced to assent to a general peace, which was signed at Nymwegen in the following September.

FOOTNOTE:

[1] Corbett, *England in the Mediterranean*, ii. 97-104. The official correspondence will be found in Mr. Tanner's *Calendar of the Pepys MSS.*, vol. i., and in the *Lettres de Colbert*, vol. iii.

SIR JOHN NARBROUGH, 1678.

[+Egerton MSS. 2543, f. 839+.]

_Sir John Narbrough, Knight, admiral of his majesty's fleet in the Mediterranean seas for this expedition.

Instructions for all commanders to place their ships for their better fighting and securing the whole fleet if a powerful enemy sets upon us_.

When I hoist my union flag at the mizen peak, I would have every commander in this fleet place himself in order of sailing and battle as prescribed, observing his starboard and larboard ship and leader, either sailing before or by the wind, and so continue sailing in order so long as the signal is abroad.

In case a powerful squadron of ships falls with our fleet, and will fight us, and we see it most convenient to fight before the wind, and the enemy follow us, I would have every commander place his ships in this order of sailing prescribed as followeth, and so continue sailing and fighting, doing his utmost to annoy the enemy, so long as shall be required for defence of himself and whole fleet.

Larboard side. Portsmouth frigate.
Newcastle frigate.
Samuel and Henry 30
Advice 20
Diamond.
Friendship 12
Lion 20
Bonaventure. 11
John and Joseph 10
Pearl frigate.
Return 10
Benjamin and Elizabeth 14
Concord 26
Fountain 8
Leopard 20
Boneto sloop, Baltam^r.[1]
Plymouth, Admiral.
Spragge frigate, Batchelor.[1]
St. Lucar Merchant 20
Prosperous 30
Sapphire frigate
Mary and Martha 30
Delight 9
Olive Branch 10
Italian Merchant 30
Tiger 30
James galley
Dragon 18
Samuel and Mary 24
Mediterranean 16
James Merchant 20
King-fisher frigate.
Starboard side. Portland frigate.

In case the enemy be to leeward of us, and force us to fight by the wind, then I would have each ship in this fleet to follow each other in a line as afore prescribed, either wing leading the van as the occasion shall require.

In case I would have the van to tack first (in time of service) I will spread the union flag at the flagstaff at the fore topmast-head, and if I would have the rear of the fleet to tack first I will spread the union flag at the flagstaff at the mizen topmast-head, each commander being [ready] to take notice of the said signals, and to act accordingly, following each other as prescribed, and be careful to assist and relieve any that is in necessity.

In case of separation by foul weather, or by any inevitable accident, and the wind blows hard westerly, then Zante Road is the place appointed for rendezvous.

Given under my hand and on board his majesty's ship Plymouth, at an anchor in Zante Road.

This 4th of May, 1678.

JOHN NARBROUGH.

FOOTNOTE:

[1] Neither Baltimore nor Batchelor nor any similar names of commissioned officers occur in Pepys's Navy List, 1660-88. Tanner, *op. cit.*

III

THE LAST STUART ORDERS

INTRODUCTORY

The next set of orders we have are those drawn up by George Legge, first Lord Dartmouth, for the fleet with which he was entrusted by James II, to prevent the landing of William of Orange in 1688. The only known copy of them is in the *Sloane MSS.* 3650. It is unfortunately not complete, the last few articles with the date and signature being missing, so that there is no direct evidence that it related to this fleet. There can however be no doubt about the matter. For it is followed by the battle order of a fleet in which both ships and captains correspond exactly with that which Dartmouth commanded in 1688. The only other fleet which he commanded was that which in 1683 proceeded to the Straits to carry out the evacuation of Tangier, and it was not large enough to require such a set of instructions.

We know moreover that in this year he did actually draw up some Fighting Instructions, shortly after September 24, the day his commission was signed, and that he submitted them to King James for approval. On October 14 Pepys, in the course of a long official letter to him from the admiralty, writes: 'His majesty, upon a very deliberate perusal of your two papers, one of the divisions of your fleet and the other touching your line of battle, does extremely approve the same, commanding me to tell you so. [1]

Lord Dartmouth's articles follow those which James had last drawn up in 1673 almost word for word, and the only alterations of any importance all refer to the handling of the line in action. There can be practically no doubt therefore that we here have the instructions which Pepys refers to, and that the new matter relating to the line of battle originated with Dartmouth, as the result of a considerable experience of naval warfare. After leaving Cambridge he joined, at the age of 17, the ship of his cousin, Sir Edward Spragge, and served with him as a volunteer and lieutenant throughout the Second Dutch War. In 1667, before he was 20, he commanded the Pembroke, and in 1671 the Fairfax, in Sir Robert Holmes's action with the Dutch Smyrna fleet, and in the battle of Solebay. In 1673 he commanded the Royal Catherine (84), and served throughout Rupert's campaign with distinction. Since then, as has been said, he had successfully conducted the evacuation of Tangier. If on this occasion he needed advice he had at hand some of the best, in the person of his flag officers, Sir Roger Strickland and Sir John Berry, two of the most seasoned old 'tarpaulins' in the service, and both in high estimation as naval experts with James.

The amendments introduced into these instructions, although not extensive, point to a continued development. We note first that James's Articles 3 and 4 are combined in Dartmouth's Article 3, so as to ensure the close-hauled line being formed before any attempt is made to divide the enemy's fleet. No such provision existed in the previous instructions. Another noteworthy change under the new article is that, whether by intention or not, any commander of a ship is given the initiative in weathering a part of the enemy's fleet if he sees an opportunity. If this was seriously intended it seems to point to a reaction to the school of Monck and Rupert, perhaps under Spragge's influence. Dartmouth's next new article, No. 5, for reforming line of battle as convenient, regardless of the prescribed order of battle, points in the same direction.

The only other change of importance is the note inserted in the sixth article, in which Dartmouth lays his finger on one of the weak points in James's method of attack from windward by bearing down all together, and suggests a means by which the danger of being raked as the ships come down may be minimised.

FOOTNOTE:

[1] *Dartmouth MSS. (Historical MSS. Commission*, XI. v. 160.)

LORD DARTMOUTH, Oct. 1688.

[+Sloane MSS. 3650, ff. 7-11+.]

George, Lord Dartmouth, admiral of his majesty's fleet for the present expedition.

Instructions for the better ordering his majesty's fleet in fighting.

1 and 2. *[Same as in Duke of York's*, 1673.]

3. If the enemy have the wind of his majesty's fleet, and come to fight them, the commanders of his majesty's ships shall endeavour to put themselves into one line as close upon a wind as they can lie, according to the order of battle given, until such time as they shall see an opportunity by gaining their wakes to divide the enemy's fleet, &c. *[rest as in Article 3 of* 1673].

4. [*Same as* 5 *of* 1673.] [1]

5. If the admiral should have the wind of the enemy, when other ships of the fleet are in the wind of the admiral, then upon hoisting up a blue flag at the mizen yard or mizen topmast, every such ship is to bear up into his wake or grain upon pain of severe punishment. In this case, whether the line hath been broke or disordered by the shifting of the wind, or otherwise, each ship or division are not unreasonably to strive for their proper places in the first line of battle given, but they are to form a line, the best that may be with the admiral, and with all the expedition that can be, not regarding what place or division they fall into or between.

If the admiral be to leeward of the enemy, &c. [*rest as in 6 of 1673*].

6. In case his majesty's fleet have the wind of the enemy, and that the enemy stands towards them and they towards the enemy, then the van of his majesty's fleet shall keep the wind, and when they are come at a convenient distance from the enemy's rear they shall stay until their own whole line is come up within the same distance from the enemy's van; and then the whole line is to tack, every ship in his own place, and to bear down upon them so nigh as they can without endangering the loss of the wind—[Note that they are not to bear down all at once, but to observe the working of the admiral and to bring to as often as he thinks fit, the better to bring his fleet to fight in good order; and at last only to lask away[2] when they come near within shot towards the enemy as much as may be, and not bringing their heads to bear against the enemy's broadsides]—and to stand along with them the same tacks on board, still keeping the enemy to leeward, and not suffering them to tack in their van. And in case the enemy tack in the rear first, he who is in the rear of his majesty's fleet is to tack first with as many ships or divisions as are those of the enemy's, and if all the enemy's ships tack, their whole line is to follow, standing along with the same tacks aboard as the enemy doth.

7 to 9. [*Same as 8 to 10 of 1673*.]

10. [*Same as 11 of 1673, but with yellow flag instead of red*.]

11. When the admiral would have the other divisions to make more sail, though himself shorten sail, a white ensign shall be put on the ensign staff for the vice-admiral, a blue for the rear, and for both a striped.

12. As soon as the fleet shall see the admiral engage or make a signal by putting out a red flag on the fore topmast-head, each division shall take the best advantage they can to engage the enemy, according to such order of battle as shall be given them, and no ship or division whatsoever is upon any pretence to lie by to fight or engage the enemy whereby to endanger parting the main body of the fleet till such time as the whole line be brought to fight by this signal.

13 to 18. [*Same as 14 to 19 of 1673*.]

18. The several commanders in the fleet are to take special care, upon pain of severe punishment, that they fire not over any of their own ships.

19. [*Same as 20 of 1673*.]

20. The fireships in their several divisions are to endeavour to keep the wind, and they with the small frigates to be as near the great ships as they can, attending the signal and acting accordingly.

21. [*Same as 22 of 1673*.][3]

FOOTNOTES:

[1] Article 4 of 1673 is omitted, being included in Article 3 above.

[2] To sail with a quartering wind. Morogues urged this precaution a century later (*Tactique Navale*, p. 209).

[3] The MS. ends abruptly in the middle of this article.

PART VII

WILLIAM III AND ANNE

I. RUSSELL, 1691

II. ROOKE, 1703

LORD TORRINGTON, TOURVILLE AND HOSTE

INTRODUCTORY

No one document probably possesses so much importance for the history of naval tactics as the instructions issued by Admiral Russell in 1691. Yet it is a remarkable thing that their tenour was unknown—indeed their existence was wholly unsuspected—until a copy of them was happily discovered in Holland by Sir William Laird Clowes. By him it was presented to the United Service Institution, and the thanks of the Society are due to him and the Institution that these instructions are now at last available for publication.

They form part of a complete printed set of Fleet Instructions, entitled 'Instructions made by the Right Honourable Edward Russell, admiral, in the year 1691, for the better ordering of the fleet in sailing by day and night, and in fighting.' Besides the Fighting Instructions we have a full set of signals both for day and night properly indexed, instructions for sailing in a fog, instructions to be observed by younger captains to the elder, instructions for masters, pilots, ketches, hoys, and smacks attending the fleet, and the usual instructions for the encouragement of captains and companies of fireships, small frigates and ketches. Now this is the precise form in which all fleet instructions were issued, with scarcely any alteration, up to the conclusion of the War of American Independence,[1] and the peculiar importance of this set of articles therefore is, that in them we have the first known example of those stereotyped Fighting Instructions to which, as all modern writers seem agreed, was due the alleged decadence of naval tactics in the eighteenth century.

This being so, they clearly demand the most careful consideration. 'The English,' says Captain Mahan in his latest discussion of the subject, 'in the period of reaction which succeeded the Dutch Wars produced their own caricature of systematised tactics,[2] and this may be taken as well representing the current judgment. But when we come to study minutely these orders of Russell, and to study them in the light of the last of the Duke of York's and the observations thereon in the *Admiralty Manuscript*, as well as of the views of the great French admirals of the time, we may well doubt whether the judgment does not require modification. We may doubt, that is, whether Russell's orders, so far from being a caricature of what had gone before, were not rather a sagacious attempt to secure that increase of manoeuvring power and squadronal control which had been found essential to any real advance in tactics.

In the first place, after noting that these instructions begin logically with two articles for the formation of line ahead and abreast, we are struck by this disappearance of the Duke of York's article relating to 'dividing the enemy's fleet.' It is certainly to this disappearance that is mainly due the belief that the new instructions were retrograde. The somewhat hasty conclusion is generally drawn that the manoeuvre of 'breaking the line' had been introduced during the Dutch Wars, and forgotten immediately afterwards. But, as we have already seen, the Duke of York's article can hardly be construed as embodying the principle of concentration by 'breaking the line,' and 'containing.' As we know, it only applied to an attack from the leeward which the English, and indeed every power up to that time, did all they knew to avoid, and it cannot safely be assumed to mean anything more than a device for gaining the wind of part of the enemy when you cannot weather his whole fleet; while the 'containing' was intended to prevent the enemy's concentrating on the squadron that performed the manoeuvre. Now, although Russell's instructions lay down no rule for isolating and containing, they do provide three new and distinct articles by which the admiral can do so if he sees fit. Under the Duke of York's instructions, it will be remembered, it was left to the van commander to execute the manoeuvre of dividing the enemy's fleet as he saw his opportunity, and under those of Lord Dartmouth it was left apparently to 'any commander.' With all that can be said for leaving the greatest possible amount of initiative to individual officers, such a system can hardly be called satisfactory, and in any case so important a movement ought certainly to be as far as possible under the control of the commander-in-chief. But under the previous instructions he could not even initiate it by signal. The defect had already been seen, and it will be remembered that the additions and observations to this and the following

articles which the *Admiralty Manuscript* contains are all directed to remedying the omission. It is to exactly the same end that Russell's orders seem designed, and if, as we shall see to be most probable, they were really drawn up by Lord Torrington, we know that they were used in this way at Beachy Head. Whether the idea of concentration and containing was in the mind of their author we cannot tell for certain, but at any rate the new instructions provide signals by which the admiral can order such movements not only by any squadron, but even by any subdivision he pleases. The freedom of individual initiative it is true is gone, but this, as the *Admiralty MS*. indicates, was done deliberately, not as a piece of reactionary pedantry, but as the result of experience in battle. In all other respects the tactical flexibility that was gained is obvious, and was fully displayed in the first engagements in which the instructions were used.

So far as we can judge, the current view at this time was that where fleets were equal, every known form of concentration was unadvisable upon an unshaken enemy. The methods of the Duke of York's school were regarded as having failed, and the result appears to have been to convince tacticians that with the means at their disposal a strict preservation of the line gave a sure advantage against an enemy who attempted an attack by concentration. Tactics, in fact, in accordance with a sound and inevitable law, having tended to become too recklessly offensive, were exhibiting a reaction to the defensive. If the enemy had succeeded in forming his line, it had come to be regarded as too hazardous to attempt to divide his fleet unless you had first forced a gap by driving ships out of the line. This idea we see reflected in the 6th paragraph of the Duke of York's twenty-second article (1673) and in Russell's new twenty-third article, enjoining ships to close up any gap that may have been caused by the next ahead or astern having been forced out of the line. Briefly stated, it may be said that the preoccupation of naval tactics was now not so much to break the enemy's line, as to prevent your own being broken.

But the matter did not end here. It was seen that when your own fleet was superior, concentration was still practicable in various ways, and particularly by doubling. Tacticians were now mainly absorbed in working out this form of attack and the methods of meeting it, and Russell's elaborate articles for handling squadrons and subdivisions independently may well have had this intention.

The new phase of tactical opinion is that which we find expounded in Père Hoste's famous work, *L' Art des armées navales, ou Traité des évolutions navales*, published in 1697 at the instigation of the Comte de Tourville. The author was a Jesuit, but claims that he is merely giving the result of his experience while serving with the great French admirals of that time, who had learned all they knew either as allies or enemies of the English. 'For twelve years,' he says in his apology for touching naval subjects, 'I have had the honour of serving with Monsieur le Maréchal d'Estrées, Monsieur le Duc de Mortemart, and Monsieur le Maréchal de Tourville in all the expeditions they made in command of naval fleets; and Monsieur le Maréchal de Tourville has been kind enough to communicate to me his lights, bidding me write on a matter which I think has never before been the subject of a treatise.'

The whole system of tactics that he develops is based, like Russell's, on the single line ahead and the independent action of squadrons. The passages in which he elaborates the central battle idea of concentration by doubling are as follows: 'The fleet which is the more numerous will try to extend on the enemy in such a manner as to leave its rearmost ships astern, which will immediately turn [*se repliera*] upon the enemy to double him, and put him between two fires. *Remark I.*—If the more numerous fleet has the wind it will be able more easily to turn its rear upon that of the enemy, and put him between two fires. But if the more numerous fleet is to leeward it ought none the less to leave its rear astern, because the wind may shift in the fight. Besides, the fleet that is to leeward can edge away insensibly in fighting to give its rearmost ships a chance of doubling on the enemy by hugging the wind. *Remark II.*—I know that many skilful people are persuaded that you ought to double the enemy ahead; because, if the van of the enemy is once in disorder it falls on the rest of the fleet and throws it infallibly into confusion.' And by the aid of diagrams he proceeds to show that this view is unsound, because the van can easily avoid the danger while the rear cannot. To support his view he instances the entire success with which at the battle of La Hogue, Russell, having the superior fleet, doubled on Tourville's rear.

'To prevent being doubled,' he proceeds, 'you must absolutely prevent the enemy from leaving ships astern of you, and to that end you may adopt several devices when you are much inferior in number.

'I. If we have the wind we may leave some of the enemy's leading ships alone, and cause our van to fall on their second division. In this manner their first division will be practically useless, and if it forces sail to tack upon us it will lose much time, and will put itself in danger of being isolated by the calm which generally befalls in this sort of action by reason of the great noise of the guns. We may also leave a great gap in the centre of our fleet, provided the necessary precautions be taken to prevent our van being cut off. By these means, however inferior we be in numbers, we may prevent the enemy leaving ships astern of us. *Example.*—Everyone did not disapprove the manner in which Admiral Herbert

disposed his fleet when he engaged the French in the action of Bevesier [*i.e.* Beachy Head] in the year 1690. He had some ships fewer than ours, and he had determined to make his chief effort against our rear. That is why he ordered the Dutch leading division to fall on our second division. Then he opened his fleet in the centre, leaving a great gap opposite our centre. After which, having closed up the English to very short intervals, he opposed them to our rear, and held off somewhat with his own division so as to prevent the French profiting by the gap which he had left in his fleet to double the Dutch. This order rendered our first division nearly useless, because it had to make a very long board to tack on the enemy's van, and the wind having fallen, it was put to it to be in time to share the glory of the action.[3]

'II. If the less numerous fleet is to leeward, the gap may be left more in the centre and less in the van, but it is necessary to have a small detachment of men-of-war and fireships so as to prevent the enemy profiting by the gaps in the fleet to divide it.

'III. Others prefer to give as a general rule, that the flag officers of the less numerous fleet attack the flag officers of the enemy's fleet;[4] for by this means several of the enemy's ships remain useless in the intervals, and the enemy cannot double you.

'IV. Others prefer that the three squadrons of the less numerous fleet each attack a squadron of the more numerous fleet, taking care that each squadron ranges up to the enemy in such a manner as not to leave any of his ships astern, but rather leaving several vessels ahead.

'V. Finally, there are those who would have the less numerous fleet put so great an interval between the ships as to equalise their line with that of the enemy. But this last method is, without doubt, the least good, because it permits the enemy to employ the whole of its strength against the less numerous fleet. I agree, however, that this method might be preferred to others in certain circumstances; as when the enemy's ships are considerably less powerful than those of the less numerous fleet.'

Having thus explained the system of doubling, he proceeds to give the latest ideas of his chief on breaking the enemy's line, or, as it was then called, passing through his fleet. 'We find,' he says, 'that in the relations of the fights in the Channel between the English and the Dutch that their fleets passed through one another.... In this manner the two fleets passed through one another several times, which exposed them to be cut off, taken, and mutually to lose several ships. *Remark*.—This manoeuvre is as bold as it is delicate, and consummate technical skill is necessary for it to succeed as happily as it did with the Comte d'Estrées ... in the battle of the Texel, in the year 1673, for he passed through the Zealand squadron, weathered it, broke it up, and put the enemy into so great a disorder that it settled the victory which was still in the balance.'[5]

After pointing out by diagrams various methods of parrying the manoeuvre, he proceeds: 'I do not see, then, that we need greatly fear the enemy's passing through us; and I do not even think that this manoeuvre ought ever to be performed except under one of the three following conditions: (1) If you are compelled to do it in order to avoid a greater evil; (2) If the enemy by leaving a great gap in the midst of his squadrons renders a part of his fleet useless; (3) If several of his ships are disabled....

'Sometimes you are compelled to pass through the enemy's fleet to rescue ships that the enemy has cut off, and in this case you must risk something, but you should observe several precautions: (1) You should close up to the utmost; (2) You should carry a press of sail without troubling to fight in passing through the enemy; (3) The ships that have passed ought to tack the moment they can to prevent the enemy standing off on the same tack as the fleet that passes through them.'

It is clear, then, that in the eyes of perhaps the finest fleet leader of his time, and one of the finest France ever had, a man who thoroughly understood the value of concentration, the method of securing it by breaking the line was dangerous and unsound. In this he thoroughly endorses the views contained in the 'Observations' of the *Admiralty MS.* and the modifications of the standing order which they suggest. Indeed, Hoste's remarks on breaking the line are, in effect, little more than a logical elaboration of those ideas and suggestions. In the 'Observations' we have the monition not to attempt the manoeuvre 'unless an enemy press you on a lee shore.' We have the signal for a squadron breaking the enemy's line, but only in order to rejoin the main body, and we have the simple method of parrying the move by tacking with an equal number of ships. The fundamental principles of the problem in both the English and the French author are the same, and a comparison of the two enables us to assert, with no hesitation, that the manoeuvre of breaking the line was abandoned by the tacticians of that era, not from ignorance nor from lack of enterprise, but from a deliberate tactical conviction gained by experience in war. In judging the apparent want of enterprise which our own admirals began to display in action at this time, we should probably be careful to refrain from joining in the unmitigated contempt with which modern historians have so freely covered them. In the typical battle of Malaga, for instance, Rooke did nothing but carry out the principles which were the last word of Tourville's brilliant career. Nor must it be forgotten that, although Rodney executed the manoeuvre in 1782, and Hood provided a

signal for its revival which Howe at first adopted, it was never in much favour in the British service, seeing that it was only adapted for an attack from to leeward. The manoeuvre of breaking the line which Howe eventually introduced was something wholly different both in form and intention from what Rodney executed and from what was understood by 'dividing the fleet' in the seventeenth century. [6] How far the system of doubling was approved by English admirals is doubtful. We have seen that an 'Observation' in the *Admiralty Manuscript* distrusts it,[7] but I have been able to find no other expression of opinion on the point earlier than 1780, and that entirely condemns it. It occurs in a set of fleet instructions drawn up for submission to the admiralty by Admiral Sir Charles H. Knowles, Bart. As Knowles was a pupil and *protégé* of Rodney's, we may assume he was in possession of the great tactician's ideas on the point; and in these *Fighting and Sailing Instructions* the following, article occurs: 'To double the enemy's line—that is, to send a few unengaged ships on one side to engage, while the rest are fighting on the other—is rendering those ships useless. Every ship which is between two, has not only her two broadsides opposed to theirs, but has likewise their shot which cross in her favour.'[8] No signal was provided for 'doubling' in Lord Howe's or the later signal books, though Nelson certainly executed the manoeuvre at the Nile. It survived however in the French service, and the English books provided a signal for preventing its execution by a numerically superior enemy. Sir Alexander Cochrane also revived it after Trafalgar.

Knowles's objection to the manoeuvre makes it easy to understand that, however well it suited the French tactics of long bowls or boarding, it was not well adapted to the English method of close action with the guns. With the French service it certainly continued in favour, and the whole of Hoste's rules were reproduced by the famous naval expert Sébastien-Francois Bigot, Vicomte de Morogues—in his elaborate *Tactique navale, ou traits des évolutions et des signaux*, which appeared in 1763, and was republished at Amsterdam in 1779. Not only was he the highest French authority on naval science of his time, but a fine seaman as well, as he proved when in command of the *Magnifique* on the disastrous day at Quiberon.[9]

The remainder of the new instructions, though less important than the expansion of the Duke of York's third article, all tend in the same direction. So far from insisting on a rigid observance of the single line ahead in all circumstances, the new system seems to aim at securing flexibility, and the power of concentration by independent action of squadrons. This is to be specially noted in the new article, No. 30, in which signals are provided for particular squadrons and particular divisions forming line of battle abreast. It is true that the old rigid form of an attack from windward is retained, but, ineffective as the system proved, it was certainly not inspired, as is so often said, by a mediæval conception of naval battle as a series of single ship actions. From what has been already said, the well-considered tactical idea that underlay it is obvious. The injunction to range the length of the enemy's line van to van, and rear to rear, or *vice versa*, was aimed at avoiding being doubled at either end of the line; while the injunction to bear down together was obviously the quickest mode of bringing the whole fleet into action without giving the enemy a chance of weathering any part of it by 'gaining its wake.' That it was inadequate for this purpose is well known. It would only work when the two fleets were exactly parallel at the moment of bearing down—as was made apparent at the battle of Malaga, where the French from leeward almost succeeded in dividing Rooke's fleet as it bore down. Still the idea was sound enough. The trouble was that it did not make sufficient allowance for the unhandiness of ships of the line in those days, and their difficulty in taking up or preserving exact formations.

As to the authorship of the articles, it must be remembered that the mere fact that they were issued by Russell is not enough to attribute them to him. He had had practically no previous experience as a flag officer, and in all probability they followed more or less closely those used by Lord Torrington in the previous year. Torrington was first lord of the admiralty in 1689, and commander-in-chief of the main fleet in 1690. It was not till after his acquittal in December of that year that he was superseded by Russell. The instructions moreover seem generally to be designed in close accordance with all we know of Torrington's tactical practice, and it is scarcely doubtful that they are due to his ripe experience and not to Russell.

That the point cannot be settled with absolute certainty is to be the more lamented because henceforth this set of Fighting Instructions, and not those of Rooke in 1703, must be taken as the dominating factor of eighteenth-century tactics. Rooke's instructions, except for the modification of a few articles, are the same as Russell's, and consequently it has not been thought necessary to print them in full. For a similar reason it has been found convenient to print such slight changes as are known to have been made in the standing form after 1703 as notes to the corresponding articles of Russell's instructions.

FOOTNOTES:

[1] See Introductory Note to Rooke's Instructions of 1703, p. 197.

[2] *Types of Naval Officers*, p. 15.

[3] This plan of attack bears a strong resemblance to that which Nelson intended to adopt at Trafalgar. 'Nelson,' says Captain Mahan, 'doubtless had in mind the dispositions of Tourville and De Ruyter.'—*Life of Nelson*, ii. 351. Hoste, however, it would seem, though a devout admirer of both Tourville and De Ruyter, gives the credit to Lord Torrington. It was not introduced officially into the British tactical system until Lord Howe adopted it in 1792. It was retained in the subsequent Signal Books and Instructions.

[4] This proviso was added to the signal in the edition of 1799, and a corresponding explanatory instruction (No. 24) was provided. See *post*, p. 262.

[5] It should be remembered that neither the Dutch nor the English accounts of the action at all endorse this view of D'Estrées's behaviour. See also the *Admiralty MS.*, p. 153, note 1.

[6] See *post*, pp. 245-9.

[7] *Ante*, p.152, note 1.

[8] Printed in 1798. A MS. note says 'These instructions were written in 1780 and afterwards very much curtailed, though the general plan is the same.'

[9] Lacour Gayet, *La marine militaire de la France sous Louis* XV, 1902, pp. 214-5.

ADMIRAL EDWARD RUSSELL, 1691.

[+From a printed copy in the Library of the United Service Institution+.]

Fighting Instructions.

I. When the admiral would have the fleet draw into a line of battle, one ship ahead of another (according to the method given to each captain), he will hoist a union flag at the mizen peak, and fire a gun; and every flagship in the fleet is to make the same signal.[1]

II. When the admiral would have the fleet draw into a line of battle, one ship abreast of another (according to the method given to each captain), he will hoist a union flag and a pennant at the mizen-peak, and fire a gun; and every flagship in the fleet is to do the same.

III. When the admiral would have the admiral of the white and his whole squadron to tack, and endeavour to gain the wind of the enemy, he will spread a white flag under the flag at the main top-mast-head, and fire a gun, which is to be answered by the flagships in the fleet; and when he would have the admiral of the blue do the same, he will spread a blue flag on that place.

IV. When the admiral would have the vice-admiral of the red, and his division, tack and endeavour to gain the wind of the enemy, he will spread a red flag from the cap at the fore topmast-head downward on the backstay. If he would have the vice-admiral of the white do the same, a white flag; if the vice-admiral of the blue, a blue flag at the same place.

V. When the admiral would have the rear-admiral of the red and his division tack and endeavour to gain the wind of the enemy, he will hoist a red flag at the flagstaff at the mizen topmast-head; if the rear-admiral of the white, a white flag; if the rear-admiral of the blue, a blue flag at the same place, and under the flag a pennant of the same colour.

VI. If the admiral be to leeward of the fleet, or any part of the fleet, and he would have them bear down into his wake or grain, he will hoist a blue flag at the mizen peak.

VII. If the admiral be to leeward of the enemy, and his fleet, or any part of them, to leeward of him, that he may bring those ships into a line, he will bear up with a blue flag at the mizen peak under the union flag, which is the signal for the line of battle; and then those ships to leeward are to use their utmost endeavour to get into his wake or grain, according to their stations in the line of battle.

VIII. If the fleet be sailing before the wind, and the admiral would have the vice-admiral and the ships of the starboard quarter to clap by the wind, and come to the starboard tack, then he will hoist upon the mizen topmast-head a red flag. And in case he would have the rear-admiral and the ships of the larboard quarter to come to their larboard tack, then he will hoist up a blue flag at the same place.

IX. When the admiral would have the van of the fleet to tack first, he will put abroad the union flag at the flagstaff on the fore topmast-head, and fire a gun, if the red flag be not abroad; but if the red flag be abroad, then the fore topsails shall be lowered a little, and the union flag shall be spread from the cap of the fore topmast downwards, and every flagship in the fleet is to do the same.

X. When the admiral would have the rear-admiral of the fleet tack first, he will hoist the union flag on the flagstaff at the mizen topmast-head, and fire a gun, which is to be answered by every flagship in the fleet.

XI. When the admiral would have all the flagships in the fleet come into his wake or grain, he will hoist a red flag at the mizen peak, and fire a gun; and the flagships in the fleet are to make the same signal.

XII. When the admiral would have the admiral of the white and his squadron make more sail, though himself shorten sail, he will hoist a white flag on the ensign staff; if the admiral of the blue, or he that commands in the third post, a blue flag at the same place; and every flagship in the fleet is to make the same signal.

XIII. As soon as the admiral shall hoist a red flag on the flagstaff at the fore topmast-head, every ship in the fleet is to use their utmost endeavour to engage the enemy, in the order the admiral has prescribed unto them.[2]

XIV. When the admiral hoisteth a white flag at the mizen peak, then all the small frigates of his squadron that are not in the line of battle are to come under his stern.

XV. If the fleet is sailing by a wind in a line of battle, and the admiral would have them brace their headsails to the mast, he will hoist a yellow flag on the flagstaff at the mizen topmast-head, and fire a gun; which the flagships in the fleet are to answer. Then the ships in the rear are to brace to first.

XVI. The fleet lying in a line of battle, with their headsails to the mast, and if the admiral would have them fill and stand on, he will hoist a yellow flag on the flagstaff at the fore topmast-head, and fire a gun; which the flagships in the fleet are to answer. Then the ships in the van are to fill first, and to stand on. If it happen, when this signal is to be made, that the red flag is abroad on the flagstaff at the fore topmast-head, the admiral will spread the yellow flag under the red.

XVII. If the admiral see the enemy's fleet standing towards him, and he has the wind of them, the van of the fleet is make sail till they come the length of the enemy's rear, and our rear abreast of the enemy's van; then he that is in the rear of our fleet is to tack first, and every ship one after another, as fast as they can, throughout the line, that they may engage on the same tack with the enemy. But in case the enemy's fleet should tack in their rear, our fleet is to do the same with an equal number of ships; and whilst they are in fight with the enemy, to keep within half a cable's length one of another, or if the weather be bad, according to the direction of the commanders.

When the admiral would have the ship that leads the van of the fleet (or the headmost ship in the fleet) when they are in a line of battle, hoist, lower, set or haul up any of his sails, the admiral will spread a yellow flag under that at the main topmast-head, and fire a gun; which the flagships that have flags at the main topmast-head are to answer; and those flagships that have not, are to hoist the yellow flag on the flagstaff at the main topmast-head, and fire a gun. Then the admiral will hoist, lower, set or haul up the sail he would have the ship that leads the van do.

XVIII. If the admiral and his fleet have the wind of the enemy, and they have stretched themselves in a line of battle, the van of the admiral's fleet is to steer with the van of the enemy's and there to engage them.

XIX. Every commander is to take care that his guns are not fired till he is sure he can reach the enemy upon a point-blank; and by no means to suffer his guns to be fired over by any of our own ships.

XX. None of the ships in the fleet shall pursue any small number of the enemy's ships till the main body be disabled or run.

XXI. If any of the ships in the fleet are in distress, and make the signal, which is a weft with the jack or ensign, the next ship to them is strictly required to relieve them.

XXII. If the admiral, or any flagship, should be in distress, and make the usual signal, the ships in the fleet are to endeavour to get up as close into a line, between him and the enemy, as they can; having always an eye to defend him, if the enemy should come to annoy him in that condition.

XXIII. In case any ship in the fleet should be forced to go out of the line to repair damages she has

received in battle the next ships are to close up the line.

XXIV. If any flagship be disabled, the flag may go on board any ship of his own squadron or division.

XXV. If the enemy be put to the run, and the admiral thinks it convenient the whole fleet shall follow them, he will make all the sail he can himself after the enemy, and fire two guns out of his fore-chase; then every ship in the fleet is to use his best endeavour to come up with the enemy, and lay them on board.

XXVI. If the admiral would have any particular flagship, and his squadron, or division, give chase to the enemy, he will make the same signal that is appointed for that flagship's tacking with his squadron or division, and weathering the enemy.

XXVII. When the admiral would have them give over chase, he will hoist a white flag at the fore topmast-head and fire a gun.

XXVIII. In case any ship in the line of battle should be disabled in her masts, rigging or hull, the ship that leads ahead of her shall take her a-tow and the division she is in shall make good the line with her. But the commander of the ship so disabled is not on any pretence whatever to leave his station till he has acquainted his flag or the next flag officer with the condition of his ship, and received his directions therein. And in case any commander shall be wanting in his duty, his flag or the next flag officer to him is immediately to send for the said commander from his ship and appoint another in his room.

XXIX. If the admiral would have any flag in his division or squadron cut or slip in the daytime, he will make the same signals that are appointed for those flagships, and their division or squadron, to tack and weather the enemy, as is expressed in the third, fourth, fifth, and sixth articles before going.

XXX. When the admiral would have the red squadron draw into a line of battle, abreast of one another, he will put abroad a flag striped red and white on the flagstaff at the main topmast-head, with a pennant under it, and fire a gun. If he would have the white squadron, or those that have the second post in the fleet, to do the like, the signal shall be a flag striped red, white, and blue, with a pennant under it, at the aforesaid place. And if he would have the blue squadron to do the like he will put on the said place a Genoese ensign, together with a pennant. But when he would have either of the said squadrons to draw into a line of battle, ahead of one another, he will make the aforesaid signals, without a pennant; which signals are to be answered by the flagships only of the said squadrons, and to be kept out till I take in mine. And if the admiral would have any vice-admiral of the fleet and his division draw into a line of battle as aforesaid, he will make the same signals at the fore topmast-head that he makes for that squadron at the main topmast-head. And for any rear-admiral in the fleet and his division, the same signals at the mizen topmast-head; which signals are to be answered by the vice- or rear-admiral.

FOOTNOTES:

[1] The instructions under which Mathews fought his action off Toulon in 1744 add here the words 'and every ship is to observe and keep the same distance those ships do which are next the admiral, always taking it from the centre.' They were a MS. addition made by Mathews himself. See 'V. A——l L——k's Rejoinder to A——l M——ws's Replies' in a pamphlet entitled *Original Letters and Papers between Adm——l M——ws and V. Adm——l L——k*. London, 1744, p. 31. From an undated copy of Fighting Instructions in the Admiralty Library we know that this addition was subsequently incorporated into the standing form.

[2] The instructions of 1744, as quoted in the Mathews-Lestock controversy, add here the words 'and strictly to take care not to fire before the signal be given by the admiral.' This appears also to have been an addition made by Mathews in 1744. It was clumsily incorporated in the subsequent standing form thus: 'to engage the enemy and on no account to fire before the admiral shall make the signal, in the order the admiral has prescribed unto them.' See note to Article I., *supra.*

THE PERMANENT INSTRUCTIONS, 1703-1783

INTRODUCTORY

These like Russell's are extracted from a complete printed set, also presented to the United Service Institution by Sir W. Laird Clowes, and entitled, 'Instructions for the directing and governing her majesty's fleet in sailing and fighting, by the Right Honourable Sir George Rooke, Knight, Vice-Admiral of England, and admiral and commander-in-chief of her majesty's fleet. In the year 1703.' They also

contain all the other matter as in Russell's, while another copy has bound with it all the fleet articles of war under the hand of Prince George of Denmark, then lord high admiral.

As they were not issued till 1703, the second year of the war, in which Rooke did nothing but carry out a barren cruise in the Bay of Biscay, we may assume that the Cadiz expedition of 1702 proceeded under Russell's old instructions of the previous war. It was under Rooke's new instructions, however, that the battle of Malaga was fought in 1704. They were certainly in force in 1705, for a copy of them exists in the log book of the Britannia for that year (*British Museum, Add. MSS*. 28126, ff. 21-27). They were also used by Sir Clowdisley Shovell during his last command; as we know by a printed copy with certain manuscript additions of his own, relating to chasing and armed boats, which he issued to his junior flag officer, Sir John Norris, in the Mediterranean, on April 25, 1707 (*British Museum, Add. MSS.* 28140). Nor is there any trace of their having been changed during the remainder of the war. At the battle of Malaga they were very strictly observed, and in the opinion of the time with an entirely satisfactory result; that is to say that, although Rooke's ships were foul and very short of ammunition, he was able to prevent Toulouse breaking his line and so to fight a defensive action, which saved Gibraltar from recapture, and discredited the French navy to such an extent that thenceforth it was entirely neglected by Louis XIV's government, and gave little more trouble to our fleets.

Though no copy of these Fighting Instructions has been found with a later date than 1707, we know that with very slight modifications they continued in use down to the peace of 1783. The evidence is to be found scattered in proceedings of courts-martial, in chance references in admirals despatches, and in signal books. For instance, in the 'Mathews and Lestock Tracts' *(British Museum*, 518, g), which deal with the courts-martial that followed the ill-fought action off Toulon in 1744, eight of the articles then in force are printed. All of them have the same numbering as the corresponding articles of 1703, six are identical in wording, and two, Numbers I. and XIII., have only the slight modifications which Admiral Mathews made, and which have been given above in notes to the similar articles in Russell's set. These modifications, as we have seen, were subsequently incorporated into the standing form, and appear in the undated copy of the complete Fighting Instructions in the Admiralty Library. Again, Article XIV. of 1703 is referred to in the Additional Fighting Instructions issued by Boscawen in 1759.[1] According to a MS. note by Sir C.H. Knowles they were re-issued in 1772 and 1778, and Keppel in 1778 was charged under Article XXXI. of 1703. Finally, there is in the Admiralty Library a manuscript signal book prepared by an officer, who was present at Rodney's great action of April 12, 1782. In this book, in which 1783 is the last date mentioned, there is inserted beside each signal the number of the article in the printed Fighting Instructions to which it related. In this way we are able to fix the purport of some twenty articles, and all of these correspond exactly both in intention and number with those of 1703.

FOOTNOTE:

[1] See below, p. 224.

SIR GEORGE ROOKE, 1703.

[+From a printed copy in the Library of the United Service Institution+.]

Articles I. to XVI.—[*The same as Russell's of* 1691, *except for slight modifications of wording and signals*.][1]

Art. XVII.—If the admiral see the enemy's fleet standing towards him and he has the wind of them, the van of the fleet is to make sail till they come the length of the enemy's rear and our rear abreast of the enemy's van; then he that is in the rear of our fleet is to tack first, every ship one after another as fast as they can, throughout the line. And if the admiral would have the whole fleet tack together, the sooner to put them in a posture of engaging the enemy, then he will hoist the union flag on the flagstaff's[2] at the fore and mizen mast-heads and fire a gun; and all the flagships in the fleet are to do the same. But in case the enemy's fleet should tack in their rear, our fleet is to do the same with an equal number of ships, and whilst they are in fight with the enemy to keep within half a cable's length one of another, or if the weather be bad, according to the direction of the commander.

Art. XVIII.—[*Same as the remainder of Russell's XVII.*] When the admiral would have the ship that leads the van … by the flagships of the fleet.

Arts. XIX. to XXIII.—[*Same as Russell's XVIII. to XXII.*]

Art. XXIV.—[*Replacing Russell's XXIII. and XXVIII.*] No ship in the fleet shall leave his station upon

any pretence whatsoever till he has acquainted his flag or the next flag officer to him with the condition of his ship and received his direction herein. But in case any ship shall do so, the next ships are to close up the line.[3] And if any commander shall be wanting in doing his duty, his flag or the next flag officer to him is immediately to send for the said, commander from his ship and appoint another in his room. [4]

Arts. XXV. to XXVII., XXIX. and XXX.—[*Same as Russell's.*]

Art. XXXI.—When the admiral would have the fleet draw into a line of battle one astern of the other with a large wind, and if he would have those lead who are to lead with their starboard tacks aboard by a wind, he will hoist a red and white flag at the mizen peak and fire a gun; and if he would have those lead who are to lead with their larboard tacks aboard by a wind, he will hoist a Genoese flag at the same place and fire a gun; which is to be answered by the flagships of the fleet.

Art. XXXII.—When the fleet is in the line of battle, the signals that are made by the admiral for any squadron or particular division are to be repeated by all the flags that are between the admiral and that squadron or division to whom the signal is made.

FOOTNOTES:

[1] The modifications consist mainly in adding a gun to several of the flag signals, and enjoining the flagships to repeat them.

[2] The undated admiralty copy (*post* 1744) has 'flagstaves.'

[3] This manoeuvre was finely executed by Sir Clowdisley Shovell with the van squadron at the battle of Malaga.

[4] Burchett, the secretary of the navy, in his *Naval History* censures Benbow for not having acted on this instruction in 1702 or rather on No. 28 of 1691.

PART VIII

ADDITIONAL FIGHTING INSTRUCTIONS OF THE EIGHTEENTH CENTURY

I. ADMIRAL VERNON, *circa* 1740

II. LORD ANSON, *circa* 1747

III. SIR EDWARD HAWKE, 1756

IV. ADMIRAL BOSCAWEN, 1759

V. SIR GEORGE RODNEY, 1782

VI. LORD HOOD, 1783

ORIGIN AND GROWTH OF THE ADDITIONAL INSTRUCTIONS

INTRODUCTORY

Although, as we have seen, the 'Fighting Instructions' of 1691 continued in force with no material alteration till the end of the next century, it must not be assumed that no advance in tactics was made. From time to time important changes were introduced, but instead of a fresh set of 'Fighting Instructions' being drawn up according to the earlier practice, the new ideas were embodied in what were called 'Additional Fighting Instructions.' They did not supersede the old standing form, but were intended to be read with and be subsidiary to it. It is to these 'Additional Instructions,' therefore, that we have to look for the progress of tactics during the eighteenth century. By one of those strange chances, however, which are the despair of historians in almost every branch and period of their subject, these Additional Instructions have almost entirely disappeared. Although it is known in the usual way—that is, from chance references in despatches and at courts-martial—that many such sets of

Additional Instructions were issued, only one complete set actually in force is known to exist. They are those signed by Admiral Boscawen on April 27, 1759, in Gibraltar Bay, and are printed below.

After his capture of Louisbourg in the previous year, Boscawen had been chosen for the command of the Mediterranean fleet, charged with the important duty of preventing the Toulon squadron getting round to Brest, and so effecting the concentration which the French had planned as the essential feature of their desperate plan of invasion. He sailed with the reinforcement he was taking out on April 14, and must therefore have issued these orders so soon as he reached his station. There is every reason to believe, however, that he was not their author; that they were, in fact, a common form which had been settled by Lord Anson at the admiralty. In the shape in which they have come down to us they are a set of eighteen printed articles, to which have been added in manuscript two comparatively unimportant articles relating to captured chases and the call for lieutenants. These may have been either mere 'expeditional' orders, as they were called, issued by Boscawen in virtue of his general authority as commander-in-chief on the station, or possibly recent official additions. More probably they were Boscawen's own, for, strictly speaking, they should not appear as 'Additional Fighting Instructions' at all. From the series of signal books and other sources we know there already existed a special set of 'Chasing Instructions,' and yet another set in which officers' calls and the like were dealt with, and both of Boscawen's articles were subsequently incorporated into these sets. The printed articles to which Boscawen attached them were certainly not new. Either wholly or in part they had been used by Byng in 1756, for at his court-martial he referred to the 'First article of the Additional Fighting Instructions as given to the fleet by me at the beginning of the expedition,' and this article is identical with No. 1 of Boscawen's set.

How much older the articles were, or, indeed, whether any were issued before the Seven Years' War, has never yet been determined. From the illogical order in which they succeed one another it would appear that they were the result of a gradual development, during which one or more orders were added from time to time by the incorporation of 'expeditional' orders of various admirals, as experience suggested their desirability. Thus Article I. provides, in the case of the enemy being inferior in number, for our superfluous ships to fall out of the line and form a reserve, but it is not till Article VIII. that we have a scientific rule laid down for the method in which the reserve is to employ itself. Still, whatever may have been the exact process by which these Additional Instructions grew up, evidence is in existence which enables us to trace the system to its source with exactitude, and there is no room for doubt that it originated in certain expeditional orders issued by Admiral Vernon when he was in command of the expedition against the Spanish Main in 1739-40. Amongst the 'Mathews and Lestock' pamphlets is one sometimes attributed to Lestock himself, but perhaps more probably inspired by him. It is dedicated to the first lord of the admiralty, and entitled *A Narrative of the Proceedings of his majesty's fleet in the Mediterranean*, 1741-4, including, amongst other matter relating to Mathews's action, 'some signals greatly wanted on the late occasion.' At p. 108 are some 'Additional signals made use of by our fleet in the West Indies,' meaning that of Admiral Vernon, which Lestock had recently left. These signals relate to sailing directions by day and by night, to 'seeing ships in the night' and to 'engaging an enemy in the night,' and immediately following them are two 'Additional Instructions to be added to the Fighting Instructions.' The inference is that these two 'Additional Instructions' were something quite new and local, since they were used by Vernon and not by Mathews. They are given below, and will be found to correspond closely to Articles I. and III. of the set used by Boscawen in the next war. Since, therefore, in all the literature and proceedings relating to Mathews and Lestock there is no reference to any 'Additional Instructions,' we may conclude with fair safety that these two articles used by Vernon in the West Indies were the origin and germ of the new system.

Nor is it a mere matter of inference only, for it is confirmed by a direct statement by the author of the pamphlet. At p. 74 he has this interesting passage which practically clears up the history of the whole matter. 'Men in the highest stations at sea will not deny but what our sailing and fighting instructions might be amended, and many added to them, which by every day's experience are found to be absolutely necessary. Though this truth is universally acknowledged and the necessity of the royal navy very urgent, yet since the institution of these signals nothing has been added to them excepting the chasing signals, excellent in their kind, by the Right Honourable Sir J—— N——.[1] Not but that every admiral has authority to make any additions or give such signals to the captains under his command as he shall judge proper, which are only expeditional. Upon many emergencies our signals at this juncture [*i.e.* in the action before Toulon] proved to be very barren. There was no such signal in the book, expressing an order when the admiral would have the ships to come to a closer engagement than when they begun. After what has been observed, it is unnecessary now to repeat the great necessity and occasion there was for it; and boats in many cases, besides their delay and hindrance, could not always perform that duty.

'Mr. V[ernon], that provident, great admiral, who never suffered any useful precaution to escape him, concerted some signals for so good a purpose, wisely foreseeing their use and necessity, giving them to

the captains of the squadron under his command. And lest his vigilance should be some time or other surprised by an enemy, or the exigencies of his master's service should require him to attack or repulse by night, he appointed signals for the line of battle, engaging, chasing, leaving off chase, with many others altogether new, excellent and serviceable, which show his judgment, abilities, and zeal. The author takes the liberty to print them for the improvement of his brethren, who, if they take the pains to peruse them, will receive benefit and instruction.'

Here, then, we have indisputable evidence that the system which gave elasticity to the old rigid Fighting Instructions began with Admiral Vernon, who as a naval reformer is now only remembered as the inventor of grog. The high reputation he justly held as a seaman and commander amongst his contemporaries has long been buried under his undeserved failure at Cartagena; but trained in the flagships of Rooke and Shovell, and afterwards as a captain under Sir John Norris in the Baltic, there was no one till the day of his death in 1757, at the age of 73, who held so high a place as a naval authority, and from no one was a pregnant tactical reform more likely to come. The Lestock pamphlet, moreover, makes it clear that through all the time of his service—the dead time of tactics as we regard it now—tacticians so far from slumbering had been striving to release themselves from the bonds in which the old instructions tied them.

This is confirmed by two manuscript authorities which have fortunately survived, and which give us a clear insight into the new system as it was actually set on foot. The first is a MS. copy of some Additional Instructions in the Admiralty Library. They are less full and clearly earlier than those used by Boscawen in 1759, and are bound up with a printed copy of the regular Fighting Instructions already referred to, which contain in manuscript the additions made by Mathews during his Mediterranean command.[2] In so far as they differ from Boscawen's they will be found below as notes to his set.

The second is a highly interesting MS. copy of a signal book dated 1756, in which the above instructions are referred to. It is in the United Service Institution (*Register No.* 234). At the end it contains a memorandum of a new article by which Hawke modified the established method of attack, and for the first time introduced the principle of each ship steering for her opposite in the enemy's line. It is printed below, and as will be seen was to be substituted for 'Articles V. and VI. of the Additional Fighting Instructions by Day' then in force, which correspond to Articles XV. and XVI. of Boscawen's set. It does not appear in the Boscawen set, and how soon it was regularly incorporated we do not know. No reference has been found to it till that by Rodney, in his despatch of April 1780 referred to below.

Of even higher interest for our purpose is another entry in the same place of an article also issued by Hawke for forming 'line of bearing.' Here again the older form of the Additional Fighting Instructions is referred to, and the new article is to be inserted after Article IV., which was for forming the line ahead or abreast. The important point however is that the new article is expressly attributed to Lord Anson. Now it is known that when Anson in April 1747 was cruising off Finisterre for De la Jonquière he kept his fleet continually exercising 'in forming line and in manoeuvres of battle till then absolutely unknown.'[3]

The 'line of bearing' or 'quarter line' must have been one of these, and we therefore reach two important conclusions: (1) that this great tactical advance was introduced by Anson during the War of the Austrian Succession, and (2) that the older set of Additional Fighting Instructions was then in existence. Another improvement probably assignable to this time was Article IV. (of Boscawen's set) for battle order in two separate lines. Articles V., VI., VII., for extended cruising formations certainly were then issued, for in his despatch after his defeat of De la Jonquière Anson says: 'At daybreak I made the signal for the fleet to spread in a line abreast, each ship keeping at the distance of a mile from the other [Article V.] that there might not remain the least probability for the enemy to pass by us undiscovered.'[4]

Then we have the notable Article XVIII., not in the earlier sets, enjoining captains to pursue any ship they force out of the line, regardless of the contrary order contained in Article XXI. of the regular Fighting Instructions. We have seen the point discussed already in the anonymous commentary on the Duke of York's final instructions, and it remained a bone of contention till the end. Men like Sir Charles H. Knowles were as strongly in favour of immediately following a beaten adversary as the anonymous commentator was in favour of maintaining the line. Knowles's idea was that it was folly to check the ardour of a ship's company at the moment of victory, and he tells us he tried to persuade Howe to discard the old instruction when he was drawing up his new ones.[5]

As to the further tactical progress which the Boscawen instructions disclose, and which nearly all appear closely related to the events of the War of the Austrian Succession, when Anson was supreme, we may particularly note Article I., for equalising the lines and using superfluous ships to form a reserve; Article III. for closer action; Article VIII. for the reserve to endeavour to 'Cross the T,' instead

of doubling; and Articles IX. and X. for bringing a flying enemy to action.

With these internal inferences to corroborate the direct evidence of our documents the conclusion is clear—that during the War of the Austrian Succession the new system initiated by Vernon was developed by Anson as a consequence of Mathews's miserable action off Toulon in 1744, and that its first fruits were gathered in the brilliant successes of Hawke and Anson himself in 1747.

Though no complete set later than those used by Boscawen is known to exist, we may be certain from various indications that they continued to be issued as affording a means of giving elasticity to tactics, and that they were constantly issued in changing form. Thus Rodney, in his report after the action off Martinique in April 1780, says, 'I made the signal for every ship to bear down and steer for her opposite in the enemy's line, agreeable to the twenty-first article of the Additional Instructions.' Again in a MS. signal book in the Admiralty Library, which was used in Rodney's great action of April 12, 1782, and drawn up by an officer who was present, a similar article is referred to. But there it appears as No. XVII. of the Additional Instructions, and its effect is given in a form which closely resembles the original article of Hawke:—'When in a line of battle ahead and to windward of the enemy, to alter the course to lead down to them; whereupon every ship is to steer for the ship of the enemy, which from the disposition of the two squadrons it may be her lot to engage, notwithstanding the signal for the line ahead will be kept flying.' It is clear, therefore, that between 1780 and 1782 Rodney or the admiralty had issued a new set of 'Additional Instructions.' The amended article was obviously designed to prevent a recurrence of the mistake that spoiled the action of 1780. In the same volume is a signal which carries the idea further. It has been entered subsequently to the rest, having been issued by Lord Hood for the detached squadron he commanded in March 1783. There is no reference to a corresponding instruction, but it is 'for ships to steer for (independent of each other) and engage respectively the ships opposed to them.' In Lord Howe's second signal book, issued in 1790,[6] the signal reappears in MS. as 'each ship of the fleet to steer for, independently of each other, and engage respectively the ship opposed in situation to them in the enemy's line.' And in this case there is a reference to an 'Additional Instruction, No. 8,' indicating that Hood, who had meanwhile become first sea lord, had incorporated his idea into the regular 'Additional Fighting Instructions.'

Take, again, the case of the manoeuvre of 'breaking the line' in line ahead. This was first practised after its long abandonment by a sudden inspiration in Rodney's action of April 12, 1782. In the MS. signal book as used by Rodney in that year there is no corresponding signal or instruction. But it does contain one by Hood which he must have added soon after the battle. It is as follows:—

'When fetching up with the enemy to leeward and on the contrary tack to break through their line and endeavour to cut off part of their van or rear.' It also contains another attributed to Admiral Pigot which he probably added at Hood's suggestion when he succeeded to the command in July 1782. It is for a particular ship 'to cut through the enemy's line of battle, and for all the other ships to follow her in close order to support each other.' But in both cases there is no corresponding instruction, so that the new signals must have been based on 'expeditional' orders issued by Pigot and Hood. The same book has yet another additional signal 'for the leading ship to cut through the enemy's line of battle,' apparently the latest of the three, but not specifically attributed either to Pigot or Hood.

With the Additional Instructions used by Rodney the system culminated. For officers with any real feeling for tactics its work was adequate. The criticisms of Hood and Rodney on Graves's heart-breaking action off the Chesapeake in 1781 show this clearly enough. 'When the enemy's van was out,' wrote Hood, 'it was greatly extended beyond the centre and rear, and might have been attacked with the whole force of the British fleet.' And again, 'Had the centre gone to the support of the van and the signal for the line been hauled down … the van of the enemy must have been cut to pieces and the rear division of the British fleet would have been opposed to … the centre division.' Here, besides the vital principle of concentration, we have a germ even of the idea of containing, and Rodney is equally emphatic. 'His mode of fighting I will never follow. He tells me that his line did not extend so far as the enemy's rear. I should have been sorry if it had, and a general battle ensued. It would have given the advantage they wished and brought their whole twenty-four ships of the line against the English nineteen, whereas by watching his opportunity … by contracting his own line he might have brought his nineteen against the enemy's fourteen or fifteen, and by a close action have disabled them before they could have received succour from the remainder.'[7]

Read with such remarks as these the latest Additional Fighting Instructions will reveal to us how ripe and sound a system of tactics had been reached. The idea of crushing part of the enemy by concentration had replaced the primitive intention of crowding him into a confusion; a swift and vigorous attack had replaced the watchful defensive, and above all the true method of concentration had been established; for although a concentration on the van was still permissible in exceptional circumstances, the chief of the new articles are devoted to concentrating on the rear. Thus our tacticians had worked out the fundamental principles on which Nelson's system rested, even to

breaking up the line into two divisions. 'Containing' alone was not yet clearly enunciated, but by Hood's signals for breaking the line, the best method of effecting it was made possible. Everything indeed lay ready for the hands of Howe and Nelson to strike into life.

FOOTNOTES:

[1] Admiral Sir John Norris had been commander-in-chief in the Mediterranean 1710-1, in the Baltic 1715-21 and 1727, in the Downs in 1734, and the Channel 1739 and following years. Professor Laughton tells me that Norris's papers and orders for 1720-1 contain no such signals. He must therefore have issued them later.

[2] Catalogue, 252/24. The reason this interesting set has been overlooked is that the volume in which they are bound bears by error the label 'Sailing and Fighting Instructions for H.M. Fleet, 1670. Record Office Copy.' The Instructions of 1670 were of course quite different.

[3] *Dict. Nat. Biog.* vol. ii. p. 33.

[4] Barrow, *Life of Anson*, p. 162

[5] *Observations on Naval Tactics, &c.*, p. 27.

[6] In the Admiralty Library. It is undated, but assigned to 1792-3. For the reasons for identifying it as Howe's second code see *post*, pp. 234-7. In his first code Howe adopted Hood's wording almost exactly; see *post*, p. 236.

[7] *Letters of Sir Samuel Hood*, p. 46; and cf. *post*, p. 228 *n.*

ADMIRAL VERNON, circa 1740.

[+Mathews-Lestock Pamphlets+.[1]]

An Additional Instruction to be added to the Fighting Instructions.

In case of meeting any squadron of the enemy's ships, whose number may be less than those of the squadron of his majesty's ships under my command, and that I would have any of the smaller ships quit the line, I will in such case make the signal for speaking with the captain of that ship I would have quit the line; and at the same time I will put a flag, striped yellow and white, at the flagstaff at the main topmast-head, upon which the said ship or ships are to quit the line and the next ships are to close the line, for having our ships of greatest force to form a line just equal to the enemy's. And as, upon the squadrons engaging, it is not to be expected that the ships withdrawn out of the line can see or distinguish signals at such a juncture, it is therefore strictly enjoined and required of such captain or captains, who shall have their signal or signals made to withdraw out of the line, to demean themselves as a *corps de réserve* to the main squadron, and to place themselves in the best situation for giving relief to any ship of the squadron that may be disabled or hardest pressed by the enemy, having in the first place regard to the ship I shall have my flag on board, as where the honour of his majesty's flag is principally concerned. And as it is morally impossible to fix any general rule to occurrences that must be regulated from the weather and the enemy's disposition, this is left to the respective captain's judgment that shall be ordered out of the line to govern himself by as becomes an officer of prudence, and as he will answer the contrary at his peril.

Memorandum.—That whereas all signals for the respective captains of the squadron are at some one of the mast-heads, and as when we are in line of battle or in other situations it may be difficult for the ships to distinguish their signal, in such case you are to take notice that your signal will be made by fixing the pennant higher upon the topgallant shrouds, so as it may be most conspicuous to be seen by the respective ship it is made for.

A second Additional Instruction to the Fighting Instructions.

If, at any time after our ships being engaged with any squadron of the enemy's ships, the admiral shall judge it proper to come to a closer engagement with the enemy than at the distance we first began to engage, the admiral will hoist a union flag at the main topmast-head and fire a gun on the opposite side to which he is engaged with the enemy, when every ship is to obey the signal, taking the distance from the centre; and if the admiral would have any particular ship do so he will make the same signal with the signal for the captain of that ship.

And in case of being to leeward of the enemy, the admiral will at the same time he makes this signal

hoist the yellow flag at the fore topmast-head for filling and making sail to windward.

And during the time of engagement, every ship is to appoint a proper person to keep an eye upon the admiral and to observe signals.

FOOTNOTE:

[1] 'A Narrative of the Proceedings of his Majesty's Fleet in the Mediterranean, &c. By a Sea Officer' London, 1744, pp. 111-2

LORD ANSON, circa 1747_.

[+MS. Signal Book, 1756, United Service Institution+.]

Lord Anson's Additional Fighting Instruction, to be inserted after Article the 4th in the Additional Fighting Instructions by Day.

Whereas it may often be necessary for ships in line of battle, to regulate themselves by bearing on some particular point of the compass from each other without having any regard to their bearing abreast or ahead of one another;

You are therefore hereby required and directed to strictly observe the following instructions:

When the signal is made for the squadron to draw into a line of battle at any particular distance, and I would have them keep north and south of each other, I will hoist a red flag with a white cross in the mizen topmast shrouds to show the quarter of the compass, and for the intermediate points I will hoist on the flagstaff at the mizen top-mast-head, when they are to bear

N by E and S by W, one common pennant
NNE " SSW, two common pennants
NE by N " SW by S, three " "
NE " SW, a Dutch jack.

And I will hoist under the Dutch jack when I would have them bear

NE by E and SW by W, one common pennant
ENE " WSW, two common pennants
E by N " W by S, three " "
and fire a gun with each signal.

When I would have them bear from each other on any of the points on the NW and SE quarters I will hoist a blue and white flag on the mizen topmast shrouds, to show the quarter of the compass and distinguish the intermediate points they are to form on from the N and S in the same manner as in the NE and SW quarter.[1]

ED. HAWKE. FOOTNOTE:

[1] From this article it would appear that the correct expression for 'line of bearing' is 'quarter line'—*i.e.* a line formed in a quarter of the compass, and that 'bow and quarter line' is due to false etymology. Though Hawke approved the formation, it does not appear in the Additional Instructions used by Boscawen in 1759. It was however regularly incorporated in those used in the War of American Independence. See *post*, p. 225, Art. III.

SIR EDWARD HAWKE, 1756.

[+MS. Signal Book, United Service Institution+.]

Memorandum,

In room of Articles V. and VI. of the 'Additional Fighting Instructions by Day'[1] it is in my discretion that this be observed, viz.:

When sailing in a line of battle, one ship ahead of another, and I would have the ship that leads with either the starboard or larboard tacks aboard to alter her course in order to lead down to the enemy, I will hoist a Dutch jack under my flag at the mizen topmast-head and fire two guns. Then every ship of the squadron is to steer for the ship of the enemy that from the disposition of the two squadrons must be her lot to engage, notwithstanding I shall keep the signal for the line ahead flying, making or shortening sail in such proportion as to preserve the distance assigned by the signal for the line, in order that the whole squadron as soon as possible may come to action at the same time.[2]

ED. HAWKE.

Additional Signals.

If upon seeing an enemy I should think it necessary to alter the disposition of the ships in the line of battle, and would have any ships change station with each other, I will make the signal to speak with the captains of such ships, and hoist the flag chequered red and blue on the flagstaff at the mizen topmast-head.[3]

FOOTNOTES:

[1] *I.e.* the older set. They were Articles XV. and XVI. of the remodelled set used by Boscawen in 1759.

[2] This article was presumably issued by Hawke when in July 1756 he superseded Byng in the Mediterranean. It seems designed to prevent a recurrence of the errors which lost the battle of Minorca, where the British van was crushed by coming into action long before the centre and rear. It is not in the Additional Instructions of 1759, but reappears in a modified form in those of 1780.

[3] This article is entered in the same signal book, but has no signature. It may therefore have been one of Anson's innovations.

ADMIRAL BOSCAWEN, 1759.[1]

[+From the original in the Admiralty Library, 252/29+.]

I. In case of meeting with a squadron of the enemy's ships that may be less in number than the squadron under my command, if I would have any of the smaller ships quit the line, that those of the greatest force may be opposed to the enemy, I will put abroad the signal for speaking with the captains of such ships as I would have leave the line, and hoist a flag, striped yellow and white, at the flagstaff at the main topmast-head; then the next ships are to close the line, and those that have quitted it are to hold themselves in readiness to assist any ship that may be disabled, or hard pressed, or to take her station, if she is obliged to go out of the line: in which case, the strongest ship that is withdrawn from the line is strictly enjoined to supply her place, and fill up the vacancy.

II. And in case of meeting with any squadron, or ships of war of the enemy that have merchant-men under their convoy, though the signal for the line of battle should be out, if I would have any of the frigates that are out of the line, or any ship of the line fall upon the convoy, whilst the others are engaged, I will put abroad the pennant for speaking with the captain of such ship or ships, and hoist the flag above mentioned for quitting the line, with a pennant under it; upon which signal, such ship or ships are to use their utmost endeavours to take or destroy the enemy.

III. If at any time while we are engaged with the enemy, the admiral shall judge it proper to come to a closer engagement than at the distance we then are, he will hoist a red and white flag on the flagstaff at the main topmast-head, and fire a gun. Then every ship is to engage the enemy at the same distance the admiral does; and if the admiral would have any particular ship do so, he will make the same signal, and the signal for speaking with the captain.

IV.[2] When I would have the two divisions of the fleet form themselves into a separate line of battle, one ship ahead of another at the distance of a cable's length asunder, and each division to be abreast of the other, when formed at the distance of one cable's length and a half, I will hoist a flag chequered blue and yellow at the mizen peak, and fire a gun, and then every ship is to get into her station accordingly,

*V.[3] When I would have the fleet spread in a line abreast, each ship keeping at the distance of one mile from the other, I will hoist a flag chequered blue and yellow, on the flagstaff at the mizen top-mast-head, and fire a gun.

*VI. When I would have the ships spread in a line directly ahead of each other, and keep at the distance of a mile asunder, I will hoist a flag chequered red and white at the mizen peak, and fire a gun.

*VII. And when the signal is made for the ships to spread either abreast or ahead of one another, and I would have them keep at the distance of two miles asunder, I will hoist a pennant under the fore-mentioned flags: then every ship is to make sail, and get into her station accordingly.

VIII. If I should meet with a squadron of the enemy's ships of war inferior in number to the ships under my command, those ships of my squadron (above the number of the enemy) that happen to fall in either ahead of the enemy's van or astern of his rear, while the rest of the ships are engaged, are hereby required, and directed to quit the line without waiting for the signal, and to distress the enemy by raking the ships in the van and rear, notwithstanding the first part of the twenty-fourth article of the Fighting Instructions to the contrary.

IX. And if I should chase with the whole squadron, and would have a certain number of the ships that are nearest the enemy draw into a line of battle ahead of me, in order to engage till the rest of the ships of the squadron can come up with them, I will hoist a white flag with a red cross on the flagstaff at the main topmast-head, and fire the number of guns as follows:—

When I would have five ships draw into a line of battle, ahead of each other, I will fire one gun.

When I would have seven ships draw into a line of battle, ahead of each other, I will fire three guns.

X. Then those ships are immediately to form the line without any regard to seniority or the general form delivered, but according to their distances from the enemy, viz., The headmost and nearest ship to the enemy is to lead, and the sternmost to bring up the rear, that no time may be lost in the pursuit; and all the rest of the ships are to form and strengthen that line, as soon as they can come up with them, without any regard to my general form of the order of battle.

XI. Whereas every ship is directed (when sailing in a line of battle) to keep the same distances those ships do who are nearest the admiral, always taking it from the centre: if at any time I think the ship ahead of me is [at] too great a distance, I will make it known to him by putting abroad a pennant at the jib-boom end, and keep it flying till he is in his proper station: and if he finds the ship ahead of him is at a greater distance from him than he is from the [4]——-(or such ship as my flag shall be flying on board of), he shall make the same signal at his jib-boom end, and keep it flying till he thinks that ship is at a proper distance, and so on to the van of the line.

XII. And when I think the ship astern of me is at too great a distance, I will make it known to him by putting abroad a pennant at the cross-jack yard-arm, and keep it flying till he is in his station: and if he finds the ship astern of him is at a greater distance than he is from the —— (or such ship as my flag shall be flying aboard of) he shall make the same signal at the cross-jack yard-arm, and keep it flying till he thinks that the ship is at a proper distance, and so on to the rear of the line.

XIII. And if at any time the captain of any particular ship in the line thinks the ship without him is at a greater distance than those ships who are next the centre, he shall make the above signal: and then that ship is immediately to close, and get into his proper station.

XIV.[5] When the signal is made for the squadron to draw into a line of battle, one ship ahead of another, by hoisting a union flag at the mizen peak and firing a gun, every ship is to make all the sail he can into his station, and keep at the distance of half a cable's length from each other: If I would have them to be a cable's length asunder, I will hoist a blue flag, with a red cross under the union flag at the mizen peak and fire a gun: and if two cables' length asunder, a white and blue flag under the union flag at the mizen peak, and fire a gun: but when I would have the squadron draw into a line of battle, one ship abreast of another, and keep at those distances as above directed, I will hoist a pennant under the said flags at the mizen peak.

XV.[6] When sailing in a line of battle, one ship ahead of another, and I would have the ship who leads to alter her course and lead more to starboard, I will hoist a flag striped white and blue at the fore topmast-head, and fire a gun for every point of the compass I would have the course altered.

XVI.[6] And if I would have the ship that leads to alter her course and lead more to port, I will hoist a flag striped blue and white on the flagstaff at the mizen topmast-head, and fire a gun for every point of the compass I would have the course altered, and every ship in the squadron is to get into her wake as fast as possible.

XVII.[7] When I would have all the fireships to prime, I will hoist a chequered blue and yellow pennant at the mizen topmast-head.

*XVIII.[8] Notwithstanding the general printed Fighting Instructions, if at any time, when engaged with an equal number of the enemy's ships, and the ship opposed to any of his majesty's ships is forced out of the line, you are hereby required and directed to pursue her, and endeavour to take and destroy her.

Memorandum.—When the squadron is in a line of battle ahead, and the signal is made for the headmost and weathermost to tack, the ship that leads on the former tack is to continue to lead after tacking.[9]

*XIX.[10] When I would have the ship or ships that chase bring down their chase to me, I will hoist a blue flag pierced with white on the fore topgallant mast, not on the flagstaff.

*XX.[10] When I find it necessary to have the state and condition of the ships in the squadron sent on board me, I will make the signal for all lieutenants, and hoist a blue and white flag at the mizen peak and fire a gun. If for the state and condition of a particular ship, I make the signal for the lieutenant of that ship, with the flag at the mizen peak.

Given under my hand on board his majesty's ship Namur, in Gibraltar Bay, this 27 April, 1759.

E. BOSCAWEN
(autograph).

To Capt. Medows,
of his majesty's ship Shannon.
By command of the admiral
ALEX. MACPHERSON
(autograph).

FOOTNOTES:

[1] The articles marked with an asterisk are additions subsequent to and not appearing in the earlier *Admiralty MS.* 252/24, 'Additional Fighting Instructions by Day' (see p. 108).

[2] In the earlier *Admiralty MS.* this article is numbered VII. and begins 'If the fleet should happen to be in two divisions and I would have them form,' &c.

[3] Used by Lord Anson in 1747. See *supra*, p. 209.

[4] The earlier *Admiralty MS.* has simply 'the ship my flag shall be aboard of.'

[5] Article IV, in the earlier *Admiralty MS*. It is practically identical except that it has 'she' and 'her' throughout where ships are spoken of, and a few other verbal differences.

[6] Articles V. and VI. in the earlier *Admiralty MS*.

[7] The equivalent of Article XIV. in the earlier *Admiralty MS*. which reads thus, 'When I would have the fireships to prime I will hoist a pennant striped red and white on the flagstaff at the fore topmast-head and fire a gun, but in case we are at any time in chase of the enemy's fleet, the fireships are to prime as fast as possible whether the signal be made or not.' The *Admiralty MS*. ends here with another article relating to fireships (No. XV.): 'You are to hold his majesty's ship under your command in a constant readiness for action, and in case of coming to an engagement with the enemy, if they have the wind of us, to keep your barge manned and armed with hand and fire-chain grapnels on the offside from them, to be ready to assist as well any ship that may be attempted by the fireships of the enemy, as our own fireships when they shall be ordered upon service.' This article disappears from subsequent sets, and was perhaps incorporated into the 'General Instructions to Captains' to which it more properly belongs. The MS. also contains 'Night Signals' and private signals for knowing detached ships rejoining at night.

[8] Whoever was the author of this article, it was generally regarded as too risky and subsequently disappeared. The article of the 'printed Fighting Instructions' referred to is No. XXI.

[9] This memorandum, which concludes the printed portion, must have been added in view of the misconception which occurred in Knowles's action of 1748.

[10] MS. additions by Boscawen.

SIR GEORGE RODNEY, 1782.[1]

[+MS. Signal Book in the Admiralty Library+.]

1. Line ahead at one cable. 2. Line abreast at one cable. 3. Quarter lines on various compass bearings. 4. When in line ahead to alter course to starboard or port together—one gun for every point. [2] 5. The same when in line abreast.[2] 6. To form order of sailing.[3] 7. When in line of battle for the whole fleet to tack together. 8. When in line of battle for the next ship ahead or on the starboard beam, which is at too great a distance, to close. 9. The same for the next astern or on the larboard beam. 10. (*Undetermined.*) 11. The fleet to form in two separate lines ahead at one cable's distance, each division abreast of the other at two cables' distance.[4] 12. (?) Particular ships to come under the admiral's stern without hail.[5] 13. Ships to change stations in the line of battle. 14. When in chase for the headmost ship to engage the sternmost of the enemy, and the next ship to pass, under cover of her fire, and take the ship next ahead, and so on in succession, without respect to seniority or the prescribed order of battle. To engage to windward or leeward as directed by signal.[6] 15. The whole fleet being in chase, for some of the headmost ships to draw into line of battle and engage the enemy's rear, at the same time endeavouring to get up with their van. *Note.*—These ships to form without any regard to seniority or the order of battle. The ship nearest the enemy is to lead and the sternmost to bring up the rear. *Signal.*—Red flag with white cross at main topmast-head with one gun for five ships, and three for seven.[7] 16. When turning to windward in line of battle for the leading ship to make known when she can weather the enemy. To be repeated from ship to ship to the commander-in-chief. If he should stand on till the sternmost ship can weather them, she is to make it known by hoisting a common pennant at the fore topgallant mast-head; to be repeated as before. The sternmost ship is likewise to do so whenever the squadron shall be to windward of the enemy, and her commander shall judge himself far enough astern of their rear to lead down out of their line of fire. 17. When in line of battle ahead and to windward of the enemy, to alter course to lead down to them: whereupon every ship is to steer for the ship of the enemy which from the disposition of the two squadrons it may be her lot to engage, notwithstanding the signal for the line ahead will be kept flying.[8] 18. When to windward of the enemy or in any other position that will admit, for the headmost ship to lead down out of their line of fire and attack their rear, the second from the leader to pass under her fire, and take the second ship of the enemy, and so on in succession. To engage to starboard or larboard according to signal. 19. To come to a closer engagement.[9] 20. For particular ships to quit the line. 21. For particular ships to attack the enemy's convoy.[10] 22. For all fireships to prime.[11] 23. On discovering a superior force. 24. For three-decked and heavy ships to draw out of their places in the line of battle, and form in the van or rear of the fleet. 25. To attack the enemy's centre.[12] 26. To attack the enemy's rear.[12] 27. To attack the enemy's van.[12] 28. To make sail ahead on a bearing from the admiral.[13] 29. In cruising to form line ahead or abreast at one or two miles' distance.[14]

FOOTNOTES:

[1] The actual Additional Fighting Instructions used by Rodney for his famous campaign of 1782 are lost; what follows are merely the drift of those instructions so far as they can be determined from the references to them in his signal book. It should be noted that by this time those used in the Seven Years' War had been entirely recast in a more logical form.

[2] *Cf.* Boscawen's Nos. 15 and 16.

[3] According to Sir Chas. H. Knowles the regular sailing formation at this time for a large fleet was in three squadrons abreast, each formed in bow and quarter line to starboard and port of its flag. He says it was his father's treatise on Tactics which induced Howe to revert to Hoste's method, and adopt the formation of squadrons abreast in line ahead. This, he adds, Howe used for the first time when sailing to relieve Gibraltar in 1782. Thenceforth it became the rule of the service, and the subsequent signal books contain signals for forming line of battle from two, three, and six columns of sailing respectively. This Knowles regards as the great reform on which modern tactics were founded. See his *Observations on Tactics*, 1830.

[4] *Cf.* Boscawen's No. 4.

[5] This may be an Additional Sailing Instruction, the various sets of Additional Instructions not being distinguished in the signal book.

[6] This article may well have been the outcome of Hawke's defeat of L'Etenduère in 1747, when he chased and engaged practically as the instruction directs, and with complete success.

[7] *Cf.* Boscawen's Nos. 9 and 10.

[8] This appears to correspond to Article XXI. of the Additional Fighting Instructions in use in 1780, to which Rodney referred in his report on the action of April 17 in that year.

[9] *Cf.* Boscawen's No. 3.

[10] *Cf.* Boscawen's No. 2.

[11] *Cf.* Boscawen's No. 17.

[12] In connection with these three articles the following dictum attributed to Rodney should be recalled: 'During all the commands Lord Rodney has been entrusted with he made it a rule to bring his whole force against a part of the enemy's, and never was so absurd as to bring ship to ship when the enemy gave him an opportunity of acting otherwise.' And *cf. supra*, p. 213.

[13] This may be an Additional Sailing Instruction.

[14] *Cf.* Boscawen's Nos. 5, 6 and 7. A number of other Additional Instructions are referred to, but they seem to relate to Sailing, Chasing or General Instructions. No more Fighting Instructions can be identified.

LORD HOODS ADDITIONS, 1783.[1]

[+MS. Signal Book in the Admiralty Library+.]

1. For the ships to steer for (independent of each other) and engage respectively the ships opposed to them.

2. When in line of battle, for the leading ship to carry as much sail as her commander judges the worst sailing ship can preserve her station with all her plain sail set.

3. To prepare to reef topsails together.

4. When in line of battle or otherwise for the men to go to dinner.

5. After an action for the ships to signify whether they are in a condition to renew it.[2]

6. For ships in chase or looking out to alter course to port or starboard.

7. To stay by or repair to the protection of prizes or ships under convoy.

8. When fetching up with the enemy and to leeward, or on a contrary tack, to break through their line, and to endeavour to cut off part of their van or rear.

9. For the leading ship to cut through the enemy's line of battle.

10. To signify that the admiral will carry neither top nor stern lights. *Note*.—The fleet immediately to close.

11. For particular ships to reconnoitre the enemy in view, and to return to make known their number and force.

12. For a particular ship to keep between the fleet and that of the enemy during the night, to communicate intelligence.[3]

13. To signify to a ship that she mistakes the signal that was made to her.

14. To prepare to hoist French or Spanish colours.

15. For a particular ship to open her fire on the ship opposed to her.

16. When a ship is in distress in battle.

17. Signal to call attention of larboard or starboard line of the division only.[4]

FOOTNOTES:

[1] See pp. 211-2. These additional signals are all added in paler ink, with those made by Admiral Pigot. In the original they occur on various pages without numbers. In the text above they have merely been numbered consecutively for convenience of reference. Hood was made a viscount September 12, 1782, and began to issue these orders on March 11, 1783, when he had a squadron placed under his command.

[2] Ascribed also to Pigot.

[3] Also ascribed to Pigot.

[4] The MS. has also an additional signal ascribed to Pigot for a particular ship to cut through the enemy's line of battle, and for the other ships to follow her in close order to support each other.

PART IX

THE NEW SIGNAL BOOK INSTRUCTIONS

INTRODUCTORY

The time-worn Fighting Instructions of Russell and Rooke with their accretion of Additional Instructions did not survive the American War. Some time in that fruitful decade of naval reform which elapsed between the peace of 1783 and the outbreak of the Great War they were superseded. It was the indefatigable hand of Lord Howe that dealt them the long-needed blow, and when the change came it was sweeping. It was no mere substitution of a new set of Instructions, but a complete revolution of method. The basis of the new tactical code was no longer the Fighting Instructions, but the Signal Book. Signals were no longer included in the Instructions, and the Instructions sank to the secondary place of being 'explanatory' to the Signal Book.[1]

The earliest form in which these new 'Explanatory Instructions' are known is a printed volume in the Admiralty Library containing a complete set of Fleet Instructions, and entitled 'Instructions for the conduct of ships of war explanatory of and relative to the Signals contained in the Signal Book herewith delivered.' The Signal Book is with it.[2] Neither volume bears any date, but both are in the old folio form which had been traditional since the seventeenth century. They are therefore presumably earlier than 1790 when the well-known quarto form first came into use, and as we shall see from internal evidence they cannot have been earlier than 1782. Nor is there any direct evidence that they are the work of Lord Howe, but the 'significations' of the signals bear unmistakable marks of his involved and cumbrous style, and the code itself closely resembles that he used during the Great War. With these indications to guide us there is little difficulty in fixing with practical certainty both date and authorship from external sources.[3]

In a pamphlet published by Admiral Sir Charles Henry Knowles in 1830, when he was a very old man, he claims to have invented the new code of numerical signals which Howe adopted. The pamphlet is entitled 'Observations on Naval Tactics and on the Claims of Clerk of Eldin,' and in the course of it he says that about 1777 he devised this new system of signals, and gave it to Howe on his arrival in the summer of that year at Newport, in Rhode Island, 'and his lordship,' he says, 'afterwards introduced them into the Channel Fleet.' Further, he says, he soon after invented the tabular system of flags suggested by the chess-board, and published them in the summer of 1778. To this work he prefixed as a preface the observations of his father, Sir Charles Knowles, condemning the existing form of sailing order, and recommending Père Hoste's old form in three columns, and this order, he says, Howe adopted for the relief of Gibraltar in September 1782. He also infers that the alleged adoption of his

signals in the Channel Fleet was when Lord Howe commanded it before he became first lord of the admiralty for the second time—that is, before he succeeded Keppel in December 1783. For during the peace Knowles tells us he made a second communication to Howe on tactics, of which more must be said later on. The inference therefore is that when Knowles says that Howe adopted his code in the Channel Fleet it must have been the first time he took command of it—that is, on April 2, 1782.[4]

Now if, as Knowles relates—and there is no reason to doubt this part of his story—Howe did issue a new code of signals some time before sailing for Gibraltar in 1782, and if at the time, as Knowles also says, he had been studying Hoste, internal evidence shows almost conclusively that these folios must be the Signal Book in question. From end to end the influence of Hoste's Treatise and of Rodney's tactics in 1782 is unmistakable.[5]

From Hoste it takes not only the sailing formation in three columns, but re-introduces into the British service the long-discarded manoeuvre of 'doubling.' For this there are three signals, Nos. 222-4, for doubling the van, doubling the rear, and for the rear to double the rear. From Hoste also it borrows the method of giving battle to a superior force, which the French writer apparently borrowed from Torrington. The signification of the signal is as follows: 'No. 232. When inferior in number to the enemy, and to prevent being doubled upon in the van or rear, for the van squadron to engage the headmost ships of the enemy's line, the rear their sternmost, and the centre that of the enemy, whose surplus ships will then be left out of action in the vacant spaces between our squadrons.'

The author's obligations to the recent campaigns of Rodney and Hood are equally clear. Signal 236 is, 'For ships to steer for independent of each other and engage respectively the ships opposed to them in the enemy's line,' and this was a new form of the signal, which, according to the MS. Signal Book of 1782, was introduced by Hood.[6] Still more significant is Signal 235, 'when fetching up with the enemy to leeward, and on the contrary tack, to break through their line and endeavour to cut off part of their van or rear.' This is clearly the outcome of Rodney's famous manoeuvre, and is adopted word for word from the signification of the signal that Hood added. Pigot, it will be remembered, on succeeding Rodney, added two more on the same subject, viz. (1) 'For the leading ship to cut through the enemy's line of battle,' and (2) 'For a particular ship specified to cut through the enemy's line of battle, and for all the other ships to follow her in close order to support each other.' Neither of these later signals is in the code we are considering, and the presumption is that it was drawn up very soon after Rodney's victory and before Pigot's signals were known at home.

Finally there is a MS. note added by Sir Charles H. Knowles to his 'Fighting and Sailing Instructions,' to the effect that in the instructions issued by Howe in 1782 he modified Article XXI. of the old Fighting Instructions (*i.e.* Article XX. of Russell's). 'His lordship in 1782,' it says, 'directed by his instructions that the line [*i.e.* his own line] should not be broken until all the enemy's ships gave way and were beaten.' And this is practically the effect of Article XIV. of the set we are considering. In the absence of contrary evidence, therefore, there seems good ground for calling these folio volumes 'Howe's First Signal Book, 1782,' and with this tentative attribution the Explanatory Instructions are printed below.

As has been already said, these instructions, divorced as they now were from the signals, give but a very inadequate idea of the tactics in vogue. For this we must go to the tactical signals themselves. In the present case the more important ones (besides those given above) are as follows:

'No. 218. To attack the enemy's rear in succession by ranging up with and opening upon the sternmost of their ships; then to tack or veer, as being to windward or to leeward of the enemy, and form again in the rear.' This signal, which at first sight looks like a curious reversion to the primitive Elizabethan method of attack, immediately follows the signals for engaging at anchor, and may have been the outcome of Hood's experience with De Grasse in 1782.

'No. 232. In working to gain the wind of the enemy, for the headmost and sternmost ships to signify when they can weather them by Signal 17, p. 66; or if to windward of the enemy and on the contrary tack, for the sternmost ship to signify when she is far enough astern of their rear to be able to lead down out of their line of fire.'

'No. 234. When coming up astern and to windward of the enemy to engage by inverting the line'—that is, for the ship leading the van to engage the sternmost of the enemy, the next ship to pass on under cover of her fire and engage the second from the enemy's rear, and so on.

FOOTNOTES:

[1] The first attempt to provide a convenient Signal Book separate from the Instructions was made privately by one Jonathan Greenwood about 1715. He produced a small 12mo. volume dedicated to Admiral Edward Russell, Earl of Orford, and the other lords of the admiralty who were then serving with him. It consists of a whole series of well-engraved plates of ships flying the various signals

contained in the Sailing and Fighting Instructions, each properly coloured with its signification added beneath. The author says he designed the work as a pocket companion to the Printed Instructions and for the use of inferior officers who had not access to them. Copies are in the British Museum and the R.U.S.I. Library.

[2] *Catalogue*, Nos. 252/27 and 252/26.

[3] A still earlier Signal Book attributed to Lord Howe is in the United Service Institution, but it is no more than a condensed and amended form of the established one. Its nature and intention are explained by No. 10 of the 'explanatory observations' which he attached to it. It is as follows; 'All the signals contained in the general printed Signal Book which are likely to be needful on the present occasion being provided for in this Signal Book, the signals as appointed in the general Signal Book will only be made either in conformity to the practice of some senior officer present, or when in company for the time being with other ships not of the fleet under the admiral's command, and unprovided with these particular signals.' It was therefore probably issued experimentally, but what the 'present occasion' was is not indicated. It contains none of the additional signals of 1782-3.

[4] Knowles was of course too old in 1830 for his memory to be trusted as to details. A note in his handwriting upon a copy of his code in possession of the present baronet gives its story simply as follows: 'These signals were written in 1778, as an idea—altered and published—then altered again in 1780—afterwards arranged differently in 1787, and finally in 1794; but not printed at Sir C.H. Knowles's expense until 1798, when they were sent to the admiralty, but they were not published, although copies have been given to sea officers.'

[5] A partial translation of Hoste had been published by Lieutenant Christopher O'Bryen, R.N., in 1762. Captain Boswall's complete translation was not issued till 1834.

[6] Note that the signal differs from that which Rodney made under Article 17 of the Additional Fighting Instructions in his action of April 17, 1780, and which being misunderstood spoilt his whole attack.

LORD HOWE, 1782.

[+Admiralty Library 252/27+.]

Instructions respecting the Order of Battle and conduct of the fleet, preparative to and in action with the enemy.

Article I. When the signal is made for the fleet to form in order of battle, each captain or commander is to get most speedily into his station, and keep the prescribed distance from his seconds ahead and astern upon the course steered, and under a proportion of sail suited to that carried by the admiral.

But when the signal is made for tacking, or on any similar occasion, care is to be taken to open, in succession, to a sufficient distance for performing the intended evolution. And the ships are to close back to their former distance respectively as soon as it has been executed.

II. In line of battle, the flag of the admiral commanding in chief is always to be considered as the point of direction to the whole fleet, for forming and preserving the line.

III. The squadron of the second in command is to lead when forming the line ahead, and to take the starboard side of the centre when forming the line abreast, unless signal is made to the contrary; these positions however are only restrained to the first forming of the lines from the order of sailing.

For when the fleet is formed upon a line, then in all subsequent evolutions the squadrons are not to change their places, but preserve the same situation in the line whatever position it may bring them into with the centre, with respect to being in the van or the rear, on the starboard or larboard side, unless directed so to do by signal.

Suppose the fleet sailing in line ahead on the larboard tack, the second in command leading, and signal is made to form a line abreast to sail large or before the wind, the second squadron in that case is to form on the larboard side of the centre.

Again, suppose in this last situation signal is made to haul to the wind, and form a line ahead on the starboard tack, in this case the squadron of the third in command is to lead, that of the second in command forming the rear.

And when from a line ahead, the squadron of the second in command leading, the admiral would immediately form the line on the contrary tack by tacking or veering together, the squadron of the third in command will then become the van.

These evolutions could not otherwise be performed with regularity and expedition.

When forming the line from the order of sailing, the ships of each squadron are to be ranged with respect to each other in the line in the same manner as when in order of sailing each squadron in one line; and, as when the second in command is in the van, the headmost ship of his squadron (in sailing order) becomes the leading ship of the line, so likewise the headmost ship of the third squadron (in sailing order) becomes the leading ship of the line, when the third in command takes the van, except when the signal is made to form the line reversed.

Ships happening to have been previously detached on any service, separate from the body of the fleet, when the signal for forming in order of battle is made, are not meant to be comprehended in the intention of it, until they shall first have been called back to the fleet by the proper signal.

IV. When the fleet is sailing in line of battle ahead, the course is to be taken from the ship leading the van upon that occasion; the others in succession being to steer with their seconds ahead respectively, whilst they continue to be regulated by the example of the leading ship.[1]

V. The ships, which from the inequality of their rates of sailing cannot readily keep their stations in the line, are not to obstruct the compliance with the intent of the signal in others; nor to hazard throwing the fleet into disorder by persisting too long in their endeavours to preserve their stations under such circumstances; but they are to fall astern and form in succession in the rear of the line.

The captains of such ships will not be thereby left in a situation less at liberty to distinguish themselves; as they will have an opportunity to render essential service, by placing their ships to advantage when arrived up with the enemy already engaged with the other part of the fleet.

The ships next in succession in order of battle are to occupy in turn, on this and every other similar occasion, the vacant spaces that would be otherwise left in the line; so that it may be always kept perfect at the appointed intervals of distance.

And when the fleet is sailing large, or before the wind, in order of battle, and the admiral makes the signal for coming to the wind on either tack, the ship stationed to lead the line on that tack, first, and the others in succession, as they arrive in the wake of that ship and of their seconds ahead respectively, are to haul to the wind without loss of time accordingly.

And all the signals for regulating the course and motions of the fleet by day or night, after the signal for forming in order of battle has been made, are to be understood with reference to the continuance of the fleet in such order, until the general signal to chase, or to form again in order of sailing, is put abroad.

VI. When the fleet is formed on any line pointed out by the compass signal, the relative bearing of the ships from each other is to be preserved through every change of course made, as often as any alteration thereof together shall be by signal directed.[2]

When, on the contrary, the signal to alter the course in succession has been put abroad, the relative bearing of the ships from each other will be then consequently changed; and any alteration of the course subsequently directed to be made by the ships together will thereafter have reference to the relative bearing last established. The same distinction will take place so often as the alteration of course in succession, as aforesaid, shall in future recur.

VII. If the admiral should observe that the enemy has altered his course, and the disposition of his order of battle, one, two, three, or any greater number of points (in which case it will be necessary to make a suitable change in the bearing of the ships from each other in the British fleet, supposed to be formed in such respects correspondently to the first position of the enemy), he will make the signal for altering course in succession, according to the nature of the occasion. The leading ship of the line is thereupon immediately to alter to the course pointed out; and (the others taking their places astern of her in succession, as they arrive in the wake of that ship and of their seconds ahead respectively) she is to lead the fleet in line of battle ahead on the course so denoted, until farther order.

VIII. When it is necessary to shorten or make more sail whilst the fleet is in order of battle, and the proper signal in either case has been made, the fleet is to be regulated by the example of the frigate appointed to repeat signals; which frigate is to set or take in the sail the admiral is observed to do.

The ship referred to is thereupon to suit her sail to the known comparative rate of sailing between

her and the admiral's ship.

Hence it will be necessary that the captains of the fleet be very attentive to acquire a perfect knowledge of the comparative rate of sailing between their own and the admiral's ship, so as under whatever sail the admiral may be, they may know what proportion to carry, to go at an equal rate with him.

IX. When, the ships of the fleet being more in number than the enemy, the admiral sees proper to order any particular ships to withdraw from the line, they are to be placed in a proper situation, in readiness to be employed occasionally as circumstances may thereafter require—to windward of the fleet, if then having the weather-gage of the enemy, or towards the van and ahead, if the contrary—to relieve, or go to the assistance of any disabled ship, or otherwise act, as by signal directed.

The captains of ships, stationed next astern of those so withdrawn, are directly to close to the van, and fill up the vacant spaces thereby made in the line.

When, in presence of an enemy, the admiral or commander of any division of the fleet finds it necessary to change his station in the line, in order to oppose himself against the admiral or commander in a similar part of the enemy's line, he will make the signal for that purpose; and the ships referred to on this occasion are to place themselves forthwith against the ships of the enemy, that would otherwise by such alteration remain unopposed.

X. When the fleet is sailing in a line of battle ahead, or upon any other bearing, and the signal is made for the ships to keep in more open order, it will be generally meant that they should keep from one to two cables' length asunder, according as the milder or rougher state of the weather may require; also that they should close to the distance of half a cable, or at least a cable's length, in similar circumstances, when the signal for that purpose is put abroad.

But in both cases, the distance pointed out to the admiral's second ahead and astern, by the continuance of the flag abroad, as intimated in the Signal Book, is to be signified from them respectively to the ships succeeding them on either part, by signals.

These signals are to be continued either way, onward, throughout the line if necessary.

Notice is to be taken, in the same manner, of any continued deviation from the limited distance; and to commence between the several commanders of private ships respectively, independent of the admiral's previous example, when they observe their seconds ahead or astern to be at any time separated from them, further than the regulated distance kept by the ships next to the admiral, or that which was last appointed.

When the admiral, being before withdrawn from the line, means to resume his station therein, he will make the signal for the particular ships, between which he means to place himself, to open to a greater distance, whether it be in his former station, or in any other part of the line, better suited for his future purpose.

XI. When any number of ships is occasionally detached from the fleet for the same purpose, they are, during their separation from the body of the fleet, to comply with all such signals as shall be made at any time, whilst the signal flag appropriated for that occasion remains abroad.

But the signals made to all ships so appointed, having the commander of a squadron or division with them, will be under the flag descriptive of such commander's squadron or division, whose signals and instructions they are to obey.

XII. Great care is to be taken at all times when coming to action not to fire upon the enemy either over or near any ships of the fleet, liable to be injured thereby; nor, when in order of battle, until the proper signal is made, and that the ships are properly placed in respect to situation and distance, although the signal may have been before put abroad.

And if, when the signal for battle is made, the ships are then steering down for the enemy in an oblique direction from each other, they are to haul to the wind, or to any order parallel with the enemy, to engage them as they arrive in a proper situation and distance, without waiting for any more particular signal or order for that purpose: regard being only had by the several commanders in these circumstances to the motions of the ships preceding them on the tack whereunto the course more inclines, and upon and towards which the enemy is formed for action, that they may have convenient space for hauling up clear of each other.

When our fleet is upon the contrary tack to that of the enemy, and standing towards them, and the admiral makes the signal to engage, the van ship is then to lead close along their line, with a moderate

sail, and engage; the rest of the fleet doing the same, passing to windward or to leeward of the enemy, as the admiral may direct.

XIII. When weathering the enemy upon the contrary tack, and signal is made to engage their van, the leading ship is then to bear down to the van ship of the enemy, and engage, passing along their line to windward to the sternmost ship of their van squadron, then to haul off close to the wind, the rest of the fleet doing the same in succession.[3]

XIV. No ship is to separate in time of action from the body of the fleet, in pursuit of any small number of the enemy's ships beaten out of the line; nor until their main body be also disabled or broken: but the captains, who have disabled or forced their opponents out of the line, are to use their best endeavours to assist any ship of the fleet appearing to be much pressed, or the ships nearest to them, to hasten the defeat of the enemy, unless otherwise by signal, or particular instruction, directed.[4]

XV. When any ship in the fleet is so much disabled as to be in the utmost danger and hazard of being taken by the enemy, or destroyed, and makes the signal expressive of such extremity; the Captains of the nearest ships, most at liberty with respect to the state of their opponents in the enemy's line, are strictly enjoined to give all possible aid and protection to such disabled ship, as they are best able. And the captain of any frigate (or fireship) happening to be at that time in a situation convenient for the purpose, is equally required to use his utmost endeavours for the relief of such disabled ship, by joining in the attack of the ship of the enemy opposed to the disabled ship, if he sees opportunity to place his ship to advantage, by favouring the attempt of the fireship to lay the enemy on board, or by taking out any of the crew of the disabled ship, if practicable and necessary, as may be most expedient.

XVI. No captain, though much pressed by the enemy, is to quit his station in time of battle, if possible to be avoided, without permission first obtained from the commanding officer of his division, or other nearest flag officer, for that purpose; but, when compelled thereto by extreme necessity before any adequate assistance is furnished, or that he is ordered out of the line on that account, the nearest ships and those on each part of the disabled ship's station are timely to occupy the vacant space occasioned by her absence, before the enemy can take advantage thereof.

And if any captain shall be wanting in the due performance of his duty in time of battle, the commander of the division, or other flag officer nearest to him, is immediately to remove such deficient captain from his post, and appoint another commander to take the charge and conduct of the ship on that occasion.

XVII. When, from the advantage obtained by the enemy over the fleet, or from bad weather, or otherwise, the admiral hath by signal signified his intention to leave the captains and other commanders at liberty to proceed at their discretion; they are then permitted to act as they see best under such circumstances, for the good of the king's service and the preservation of their ships, without regard to his example. But they are, nevertheless, to endeavour at all times to gain the appointed rendezvous in preference, if it can be done with safety.

XVIII. The ships are to be kept at all times prepared in readiness for action. And in case of coming to an engagement with the enemy, their boats are to be kept manned and armed, and prepared with hand and fire-chain grapnels, and other requisites, on the off-side from the enemy, for the purpose of assisting any ship of the fleet attempted by the fireships of the enemy; or for supporting the fireships of the fleet when they are to proceed on service.

The ships appointed to protect and cover these last, or which may be otherwise in a situation to countenance their operations, are to take on board their crews occasionally, and proceed before them down, as near as possible, to the ships of the enemy they are destined to attempt.

The captains of such ships are likewise to be particularly attentive to employ the boats they are provided with, as well to cover the retreat of the fireships boat, as to prevent the endeavours to be expected from the boats of the enemy to intercept the fireship, or in any other manner to frustrate the execution of the proposed undertaking.[5]

XIX. If the ship of any flag officer be disabled in battle, the flag officer may embark on board any private ship that he sees fit, for carrying on the service: but it is to be of his own squadron or division in preference when equally suitable for his purpose.

XX. The flag officers, or commanders of divisions, are on all occasions to repeat generally, as well as with reference to their respective divisions, the signals from the admiral, that they may be thereby more speedily communicated correspondent to his intentions.

And the purpose of all signals for the conduct of particular divisions is then only meant to be carried into execution when the signal has been repeated, or made by the commanders of such particular

divisions respectively. In which circumstances they are to be always regarded and complied with by the ships or divisions referred to, in the same manner as if such signals had been made by the admiral commanding in chief.

XXI. When ships have been detached to attack the enemy's rear, the headmost ship of such detachment, and the rest in succession, after having ranged up their line as far is judged proper, is then to fall astern; and (the ship that next follows passing between her and the enemy) is to tack or wear as engaged to windward or leeward, and form in the rear of the detachment.

XXII. When the fleet is to tack in succession, the ship immediately following the one going in stays should observe to bear up a little, to give her room; and the moment for putting in stays is that when a ship discovers the weather quarter of her second ahead, and which has just tacked before her.

On this and every other occasion, when the fleet is in order of battle, it should be the attention of each ship strictly to regulate her motions by those of the one preceding her; a due regard to such a conduct being the only means of maintaining the prescribed distance between the ships, and of preserving a regular order throughout the line.

XXIII. As soon as the signal is made to prepare for battle, the fireships are to get their boarding grapnels fixed; and when in presence of an enemy, and that they perceive the fleet is likely to come to action, they are to prime although the signal for that purpose should not have been made; being likewise to signify when they are ready to proceed on service, by putting abroad the appointed signal.

They are to place themselves abreast of the ships of the line, and not in the openings between them, the better to be sheltered from the enemy's fire, keeping a watchful eye upon the admiral, so as to be prepared to put themselves in motion the moment their signal is made, which they are to answer as soon as observed.

A fireship ordered to proceed on service is to keep a little ahead and to windward of the ship that is to escort her, to be the more ready to bear down on the vessel she is to board, and to board if possible in the fore shrouds. By proceeding in this manner she will not be in the way of preventing the ship appointed to escort her from firing upon the enemy, and will run less risk of being disabled herself; and the ship so appointed and the two other nearest ships are to assist her with their boats manned and armed.

She is to keep her yards braced up, that when she goes down to board, and has approached the ship she is to attempt, she may have nothing to do but to spring her luff.

Captains of fireships are not to quit them till they have grappled the enemy, and have set fire to the train.

XXIV. Frigates have it in particular charge to frustrate the attempts of the enemy's fireships, and to favour those of our own. When a fireship of the enemy therefore attempts to board a ship of the line, they are to endeavour to cut off the boats that attend her, and even to board her, if necessary.

XXV. The boats of a ship attempted by an enemy's fireship, with those of her seconds ahead and astern, are to use their utmost efforts to tow her off, the ships at the same time firing to sink her.

XXVI. In action, all the ships in the fleet are to wear red ensigns.

FOOTNOTES:

[1] This and Article II. appear to be the first mention of working the fleet by 'guides.'

[2] The original has here the following erasure: 'The same is to be understood of the bearing indicated, though the admiral should shape his course from the wind originally when the signal for forming upon a line of bearing is made.'

[3] It was Nelson's improvement on this unscientific method of attack that is the conspicuous feature of his Memorandum, 1803, but it must be remembered that Howe had not yet devised the manoeuvre of breaking the line in all parts on which Nelson's improvement was founded.

[4] *Cf.* note 1, p. 224.

[5] Howe's insistence on these points both here and in Articles XXII.-XXV. is curious in view of the fact that the use of fireships in action had gone out of fashion. From 1714 to 1763 only one English fireship is known to have been 'expended,' and that was by Commander Callis when he destroyed the Spanish galleys at St. Tropez in 1742. At the peace of 1783 the Navy List contained only 17 fireships out of a total of 468 sail. Howe had two fireships on the First of June, 1794, but did not use them.

INTRODUCTORY

The second form in which the new Fighting Instructions, originated by Lord Howe, have come down to us, is that which became fixed in the service after 1790; that is, instead of two folio volumes with the Signals in one and the Explanatory Instructions in the other, we have, at least after 1799, one small quarto containing both, and entitled 'Signal Book for Ships of War.' The earliest known example, however, of the new quarto form is a Signal Book only, which refers to a set of Instructions apparently similar to those of 1799. These have not been found, but presumably they were in a separate volume. The Signal Book is in the Admiralty Library labelled in manuscript '1792-3(?),' but, as before, no date or signature appears in the body of it. From internal evidence, however, as well as from collateral testimony, there is little difficulty in identifying it as Lord Howe's second code issued in 1790.

The feature of the book that first strikes us is that, though the bulk of it is printed, all the most important battle signals, as well as many others, have been added in MS., while at the end are the words, 'Given on board the Queen Charlotte, to Capt. ——, commander of his majesty's ship the ——, by command of the admiral.' It is thus obvious that the original printed form, which contains many further unfilled blanks for additional signals, was used as a draft for a later edition. No such edition is known to exist in print, but both the original signals and the additions correspond exactly with the MS. code which was used by Lord Howe in his campaign of 1794. In editing this code for the Society in his *Logs of the Great Sea Fights*, Admiral Sturges Jackson hazarded the conjecture that it had not then been printed, but was supplied to each ship in the fleet in MS. The admiralty volume goes far to support his conjecture, and it is quite possible that we have here the final draft from which the MS. copies were made.

As to the actual date at which the code was completed there is not much difficulty. The Queen Charlotte was Howe's flagship in the Channel fleet from 1792-4, but it was also his flagship in 1790 at the time of the 'Spanish Armament,' when he put to sea in immediate expectation of war with Spain. While the tension lasted he is known to have used the critical period in exercising his fleet in tactical evolutions, in order to perfect it in a new code of signals which he had been elaborating for several years.[1] It is probable therefore that this Signal Book belongs to that year, and that it is one of several copies which Howe had printed with the battle signals blank for his own use while he was elaborating his system by practical experiment. This conjecture is brought to practical certainty by a rough and much-worn copy of it in the United Service Institution. It was made by Lieut. John Walsh, of H.M.S. Marlborough, one of Howe's fleet, and inside the cover he has written 'Earl Howe's signals by which the Grand Fleet was governed 1790, 1791, and 1794.'

It was upon the tactical system contained in this book that all the great actions of the Nelson period were fought. The alterations which took place during the war were slight. The codes used by Howe himself in 1794, and by Duncan at Camperdown in 1797, follow it exactly. A slightly modified form was issued by Jervis to the Mediterranean fleet, and was used by him at St. Vincent in 1797. No copy of this is known to exist, but from the logs of the ships there engaged it would appear that, though the numbering of the code had been changed, the principal battle signals remained the same. In 1799 a new edition was printed in the small quarto form. In this the Signal Book and the Instructions were bound together, and were issued to the whole navy, but here again, though the numbers were changed, the alterations were of no great importance.[2] Reprints appeared in 1806 and 1808, but the code itself continued in use till 1816. In that year an entirely new Signal Book based on Sir Home Popham's code was issued with a fresh set of Explanatory Instructions, or, as they had come to be called, 'Instructions relating to the line of battle and the conduct of the fleet preparatory to their engaging and when engaged with an enemy.'[3] Both these sets of 'Explanatory Instructions' are printed below, but, as we have seen, they throw but little light by themselves on the progress of tactical thought during the great period they covered. They were no longer 'Fighting Instructions' in the old sense, unless read with the principal battle signals, and to these we have to go to get at the ideas that underlay the tactics of Nelson and his contemporaries.

Now the most remarkable feature of Howe's Second Signal Book, 1790, is the apparent disappearance from it of the signal for breaking the line which in his first code, 1782, he had borrowed from Hood in consequence of Rodney's manoeuvre. The other two signals introduced by Hood and Pigot for breaking the line on Rodney's plan are equally absent. In their stead appears a signal for an entirely new manoeuvre, never before practised or even suggested, so far as is known, by anyone. The 'signification' runs as follows: 'If, when having the weather-gage of the enemy, the admiral means to pass between the ships of their line for engaging them to leeward or, being to leeward, to pass between them for obtaining the weather-gage. N.B.—The different captains and commanders not being able to effect the specified intention in either case are at liberty to act as circumstances require.' In the Signal

Book of 1799 the wording is changed. It there runs 'To break through the enemy's line in all parts where practicable, and engage on the other side,' and in the admiralty copy delivered to Rear-Admiral Frederick there is added this MS. note, 'If a blue pennant is hoisted at the fore topmast-head, to break through the van; if at the main topmast-head, to break through the centre; if at the mizen topmast-head, to break through the rear.'[4]

This form of the signification shows that the intention of the signal was something different from what is usually understood in naval literature by 'breaking the line.' By that we generally understand the manoeuvre practised by Lord Rodney in 1782, a manoeuvre which was founded on the conception of 'leading through' the enemy's line in line ahead, and all the ships indicated passing through in succession at the same point. Whereas in Lord Howe's signal the tactical idea is wholly different. In his manoeuvre the conception is of an attack by bearing down all together in line abreast or line of bearing, and each ship passing through the enemy's line at any interval it found practicable; and this was actually the method of attack which he adopted on June 1, 1794. In intention the two signals are as wide as the poles asunder. In Rodney's case the idea was to sever the enemy's line and cut off part of it from the rest. In Howe's case the idea of severing the line is subordinate to the intention of securing an advantage by engaging on the opposite side from which the attack is made. The whole of the attacking fleet might in principle pass through the intervals in the enemy's line without cutting off any part of it. In principle, moreover, the new attack was a parallel attack in line abreast or in line of bearing, whereas the old attack was a perpendicular or oblique attack in line ahead.

Nothing perhaps in naval literature is more remarkable than the fact that this fundamental difference is never insisted on, or even, it may be said, so much as recognised. Whenever we read of a movement for breaking the line in this period it is almost always accompanied with remarks which assume that Rodney's manoeuvre is intended and not Howe's. Probably it is Nelson who is to blame. At Trafalgar, after carefully elaborating an attack based on Howe's method of line abreast, he delivered it in line ahead, as though he had intended to use Rodney's method. His reasons were sound enough, as will be seen later. But as a piece of scientific tactics it was as though an engineer besieging a fortress, instead of drawing his lines of approach diagonally, were to make them at right angles to the ditch. When the greatest of the admirals apparently (but only apparently) confused the two antagonistic conceptions of breaking the line, there is much excuse for civilian writers being confused in fact.

The real interest of the matter, however, is to inquire, firstly, by what process of thought Howe in his second code discarded Rodney's manoeuvre as the primary meaning of his signal after having adopted it in his first, and, secondly, how and to what end did he arrive at his own method.

On the first point there can be little doubt. Sir Charles H. Knowles gives us to understand that Howe still had Hoste's Treatise at his elbow, and with Hoste for his mentor we may be sure that, in common with other tactical students of his time, he soon convinced himself that Rodney's manoeuvre was usually dangerous and always imperfect. Knowles himself in his old age, though a devout admirer of Rodney, denounced it in language of characteristic violence, and maintained to the last that Rodney never intended it, as every one now agrees was the truth. Nelson presumably also approved Howe's cardinal improvement, or even in his most impulsive mood he would hardly have called him 'the first and greatest sea officer the world has ever produced.'[5]

As to the second point—the fundamental intention of the new manoeuvre—we get again a valuable hint from Knowles. Upon his second visit to the admiralty, after Howe had succeeded Keppel at the end of 1783, Knowles brought with him by request a tactical treatise written by his father, as well as certain of his own tactical studies, and discussed with Howe a certain manoeuvre which he believed the French employed for avoiding decisive actions. He showed that when engaged to leeward they fell off by alternate ships as soon as they were hard pressed, and kept reforming their line to leeward, so that the British had continually to bear up, and expose themselves to be raked aloft in order to close again. In this way, as he pointed out, the French were always able to clip the British wings without receiving any decisive injury themselves. In a MS. note to his 'Fighting and Sailing Instructions,' he puts the matter quite clearly. 'In the battle off Granada,' he says, 'in the year 1779 the French ships partially executed this manoeuvre, and Sir Charles [H.] Knowles (then 5th lieutenant of the Prince of Wales of 74 guns, the flagship of the Hon. Admiral Barrington) drew this manoeuvre, and which he showed Admiral Lord Howe, when first lord of the admiralty, during the peace. His lordship established a signal to break through the enemy's line and engage on the other side to leeward, and which he executed himself in the battle of the 1st of June, 1794.' The note adds that before Knowles drew Howe's attention to the supposed French manoeuvre he had been content with his original Article XIV., modifying Article XXI. of the old Fighting Instructions as already explained. Whether therefore Knowles's account is precisely accurate or not, we may take it as certain that it was to baffle the French practice of avoiding close action by falling away to leeward that Howe hit on his brilliant conception of breaking through their line in all parts.

No finer manoeuvre was ever designed. In the first place it developed the utmost fire-face by bringing both broadsides into play. Secondly, by breaking up the enemy's line into fragments it deprived their admiral of any shadow of control over the part attacked. Thirdly, by seizing the leeward position (the essential postulate of the French method of fighting) it prevented individual captains making good their escape independently to leeward and ensured a decisive *mêlée*, such as Nelson aimed at. And, fourthly, it permitted a concentration on any part of the enemy's line, since it actually severed it at any desired point quite as effectually as did Rodney's method. Whether Howe ever appreciated the importance of concentration to the extent it was felt by Nelson, Hood and Rodney is doubtful. Yet his invention did provide the best possible form of concentrated attack. It had over Rodney's imperfect manoeuvre this inestimable advantage, that by the very act of breaking the line you threw upon the severed portion an overwhelming attack of the most violent kind, and with the utmost development of fire-surface. Finally it could not be parried as Rodney's usually could in Hoste's orthodox way by the enemy's standing away together upon the same tack. By superior gunnery Howe's attack might be *stopped*, but by no possibility could it be *avoided* except by flight. It was no wonder then that Howe's invention was received with enthusiasm by such men as Nelson.

Still it is clear that in certain cases, and especially in making an attack from the leeward, as Clerk of Eldin had pointed out, and where it was desirable to preserve your own line intact, Rodney's manoeuvre might still be the best. Howe's manoeuvre moreover supplied its chief imperfection, for it provided a method of dealing drastically with the portion of the enemy's line that had been cut off. Thus, although it is not traceable in the Signal Book, it was really reintroduced in Howe's third code. This is clear from the last article of the Explanatory Instructions of 1799 which distinguishes between the two manoeuvres; but whether or not this article was in the Instructions of 1790 we cannot tell. The probability is that it was not, for in the Signal Book of 1790 there is no reference to a modifying instruction. Further, we know that in the code proposed by Sir Charles H. Knowles the only signal for breaking the line was word for word the same as Howe's. This code he drew up in its final form in 1794, but it was not printed till 1798. The presumption is therefore that until the code of 1799 was issued Howe's method of breaking the line was the only one recognised. In that code the primary intention of Signal 27 'for breaking through the enemy's line in all parts' is still for Howe's manoeuvre, but the instruction provides that it could be modified by a red pennant over, and in that case it meant 'that the fleet is to preserve the line of battle as it passes through the enemy's line, and to preserve it in very close order, that such of the enemy's ships as are cut off may not find an opportunity of passing through it to rejoin their fleet.' This was precisely Rodney's manoeuvre with the proviso for close order introduced by Pigot. The instruction also provided for the combining of a numeral to indicate at which number in the enemy's line the attempt was to be made. No doubt the distinction between manoeuvres so essentially different might have been more logically made by entirely different signals.[6] But in practice it was all that was wanted. It is only posterity that suffers, for in studying the actions of that time it is generally impossible to tell from the signal logs or the tactical memoranda which movement the admiral had in mind. Not only do we never find it specified whether the signal was made simply or with the pennant over, but admirals seem to have used the expressions 'breaking' and 'cutting' the line, and 'breaking through,' 'cutting through,' 'passing through,' and 'leading through,' as well as others, quite indiscriminately of both forms of the manoeuvre. Thus in Nelson's first, or Toulon, memorandum he speaks of 'passing through the line' from to-windward, meaning presumably Howe's manoeuvre, and of 'cutting through' their fleet from to-leeward when presumably he means Rodney's. In the Trafalgar memorandum he speaks of 'leading through' and 'cutting' the line from to-leeward, and of 'cutting through' from to-windward, when he certainly meant to perform Howe's manoeuvre. Whereas Howe, in his Instruction XXXI. of 1799, uses 'breaking the line' and 'passing through it' indifferently of both forms.

All we can do is generally to assume that when the attack was to be made from to-windward Howe's manoeuvre was intended, and Rodney's when it was made from to-leeward. Yet this is far from being safe ground. For the signification of the plain signal without the red pennant over—*i.e.* 'to break through … and engage on the other side'—seems to contemplate Howe's manoeuvre being made both from to-leeward and from to-windward.

The only notable disappearances in Howe's second code (1790) are the signals for 'doubling,' probably as a corollary of the new manoeuvre. For, until this device was hit upon, Rodney's method of breaking the line apparently could only be made effective as a means of concentration by doubling on the part cut off in accordance with Hoste's method. This at least is what Clerk of Eldin seems to imply in some of his diagrams, in so far as he suggests any method of dealing with the part cut off. Yet in spite of this disappearance Nelson certainly doubled at the Nile, and according to Captain Edward Berry, who was captain of his flagship, he did it deliberately. 'It is almost unnecessary,' he wrote in his narrative, 'to explain his projected mode of attack at anchor, as that was minutely and precisely executed in the action.… These plans however were formed two months before, … and the advantage now was that they were familiar to the understanding of every captain in the fleet.' Nelson probably felt

that the dangers attending doubling in an action under sail are scarcely appreciable in an action at anchor with captains whose steadiness he could trust. Still Saumarez, his second in command, regarded it as a mistake, and there was a good deal of complaint of our ships having suffered from each other's fire.[7]

Amongst the more important retentions of tactical signals we find that for Hoste's method of giving battle to a numerically superior force by leaving gaps in your own line between van, centre and rear. The wording however is changed. It is no longer enjoined as a means of avoiding being doubled. As Howe inserted it in MS. the signification now ran 'for the van or particular divisions to engage the headmost of the enemy's van, the rear the sternmost of the enemy's rear, and the centre the centre of the enemy. But with exception of the flag officers of the fleet who should engage those of the enemy respectively in preference.'[8] This signification again is considerably modified by the Explanatory Instructions. Article XXIV., it will be seen, says nothing of engaging the centre or of leaving regular gaps. The leading ship is to engage the enemy's leading ship, and the rearmost the rearmost, while the rest are to select the largest ships they can get at, and leave the weaker ones alone till the stronger are disabled. It was in effect the adoption of Hoste's fifth rule for engaging a numerically superior fleet instead of his first, and it is a plan which he condemns except in the case of your being individually superior to your enemy, as indeed the English gunnery usually made them.

The curious signal No. 218 of 1782 for attacking the enemy's rear in succession by 'defiling' on the Elizabethan plan was also retained. In the Signal Book of 1799 it ran, 'to fire in succession upon the sternmost ships of the enemy, then tack or wear and take station in rear of the squadron or division specified (if a part of the fleet is so appointed) until otherwise directed.'

It has been already said that the alterations in the edition of 1799 were not of great importance, but one or two additions must be noticed. The most noteworthy is a new signal for carrying out the important rule of Article IX. of the Instructions of 1782 (Article X. of 1799), providing for the formation of a *corps de réserve* when you are numerically superior to the enemy, as was done by Villeneuve on Gravina's advice in 1805, although fortunately for Nelson it was not put in practice at Trafalgar.

The other addition appears in MS. at the end of the printed signals. It runs as follows: 'When at anchor in line of battle to let go a bower anchor under foot, and pass a stout hawser from one ship to another, beginning at the weathermost ship,' an addition which would seem to have been suggested by what had recently occurred at the Nile. Nelson's own order was as follows: '*General Memorandum*.—As the wind will probably blow along shore, when it is deemed necessary to anchor and engage the enemy at their anchorage it is recommended to each line-of-battle ship of the squadron to prepare to anchor with the sheet cable in abaft and springs, &c.'[9] Another copy of the signal book has a similar MS. addition to the signal 'Prepare for battle and for anchoring with springs, &c.'[10] It runs thus: 'A bower is to be unbent, and passed through the stern port and bent to the anchor, leaving that anchor hanging by the stopper only.—Lord Nelson, St. George, 26 March, 1801. If with a red pennant over with a spring only.—Commander-in-chiefs Order Book, 27 March, 1801.' These therefore were additions made immediately before the attack on the Danish fleet at Copenhagen.

No other change was made, and it may be said that Howe's new method of breaking the line was the last word on the form of attack for a sailing fleet. How far its full intention and possibilities were understood at first is doubtful. The accounts of the naval actions that followed show no lively appreciation on the part of the bulk of British captains. On the First of June the new signal for breaking through the line at all points was the first Howe made, and it was followed as soon as the moment for action arrived by that 'for each ship to steer for, independently of each other, and engage respectively the ship opposed in situation to them in the enemy's line.' The result was an action along the whole line, during which Howe himself at the earliest opportunity passed through the enemy's line and engaged on the other side, though as a whole the fleet neglected to follow either his signal or his example.

In the next great action, that of St. Vincent, the circumstances were not suitable for the new manoeuvre, seeing that the Spaniards had not formed line. Jervis had surprised the enemy in disorder on a hazy morning after a change of wind, and this was precisely the 'not very probable case' which Clerk of Eldin had instanced as justifying a perpendicular attack. Whether or not Jervis had Clerk's instance in his mind, he certainly did deliver a perpendicular attack. The signal with which he opened, according to the signification as given in the flagship's log, was 'The admiral intends to pass through the enemy's line.'[11] There is nothing to show whether this meant Howe's manoeuvre or Rodney's, for we do not know whether at this time the instruction existed which enabled the two movements to be distinguished by a pennant over.

What followed however was that the fleet passed between the two separated Spanish squadrons in line ahead as Clerk advised. The next thing to do, according to Clerk, was for the British fleet to wear

or tack together, but instead of doing so Jervis signalled to tack in succession, and then repeated the signal to pass through the enemy's line although it was still unformed. It was at this moment that Nelson made his famous independent movement that saved the situation, and what he did was in effect as though Jervis had made the signal to tack together as Clerk enjoined. Thereupon Jervis, with the intention apparently of annulling his last order to pass through the line, made the signal, which seems to have been the only one which the captains of those days believed in—viz. to take suitable stations for mutual support and engage the enemy on arriving up with them in succession. In practice it was little more than a frank relapse to the methods of the early Commonwealth, and it was this signal and not that for breaking the line which made the action general.

Again, at the battle of Camperdown, Duncan, while trying to form single line from two columns of sailing, began with the signal for each ship to steer independently for her opponent. This was followed —the fleet having failed to form line parallel to the enemy, and being still in two disordered columns— by signals for the lee or van division to engage the enemy's rear, and as some thought the weather division his centre; and ten minutes later came the new signal for passing through the line. The result was an action almost exactly like that of Nelson at Trafalgar—that is, though the leading ships duly acted on the combination of the two signals for engaging their opposites and for breaking the line, each at its opposite interval, the rest was a *mêlée*; for, since what was fundamentally a parallel attack was attempted as a perpendicular one, it could be nothing but a scramble for the rear ships.

In none of these actions therefore is there any evidence that Howe's attempt to impress the service with a serious scientific view of tactics had been successful, and the impression which they made upon our enemies suggests that the real spirit that inspired British officers at this time was something very different from that which Howe had tried to instil. Writing of the battle of St. Vincent, Don Domingo Perez de Grandallana, whose masterly studies of the French and English naval systems and tactics raised him to the highest offices of state, has the following passage: 'An Englishman enters a naval action with the firm conviction that his duty is to hurt his enemies and help his friends and allies without looking out for directions in the midst of the fight; and while he thus clears his mind of all subsidiary distractions, he rests in confidence on the certainty that his comrades, actuated by the same principles as himself, will be bound by the sacred and priceless law of mutual support. Accordingly, both he and all his fellows fix their minds on acting with zeal and judgment upon the spur of the moment, and with the certainty that they will not be deserted. Experience shows, on the contrary, that a Frenchman or a Spaniard, working under a system which leans to formality and strict order being maintained in battle, has no feeling for mutual support, and goes into action with hesitation, preoccupied with the anxiety of seeing or hearing the commander-in-chief's signals for such and such manoeuvres.... Thus they can never make up their minds to seize any favourable opportunity that may present itself. They are fettered by the strict rule to keep station, which is enforced upon them in both navies, and the usual result is that in one place ten of their ships may be firing on four, while in another four of their comrades may be receiving the fire of ten of the enemy. Worst, of all, they are denied the confidence inspired by mutual support, which is as surely maintained by the English as it is neglected by us, who will not learn from them.'[12]

This was probably the broad truth of the matter; it is summed up in the golden signal which was the panacea of British admirals when in doubt: 'Ships to take station for mutual support and engage as they come up;' and it fully explains why, with all the scientific appreciation of tactics that existed in the leading admirals of this time, their battles were usually so confused and haphazard. The truth is that in the British service formal tactics had come to be regarded as a means of getting at your enemy, and not as a substitute for initiative in fighting him.

FOOTNOTES:

[1] *Dictionary of National Biography, sub voce* 'Howe,' p. 97.

[2] A copy of this is in the Admiralty Library issued to 'Thomas Lenox Frederick esq., Rear-Admiral of the Blue,' and attested by the autographs of Vice-Admiral James Gambier, Vice-Admiral James Young, and another lord of the admiralty, and countersigned by William Marsden, the famous numismatist and Oriental scholar, who was 'second secretary' from 1795 to 1804. Another copy, also in the Admiralty Library, is attested by Gambier, Sir John Colpoys and Admiral Philip Patton, and countersigned by the new second secretary, John Barrow, all of whom came to the admiralty under Lord Melville on Pitt's return to office in 1804. Two other copies are in the United Service Institution.

[3] Sir Home Popham's code had been in use for many years for 'telegraphing.' It was by this code Nelson's famous signal was made at Trafalgar.

[4] In one of the United Service Institution copies the signal has been added in MS. and the note is on a slip pasted in. In the other both signal and note are printed with blanks in which the distinguishing

pennants have been written in.

[5] Nelson to Howe, January 8, 1799. *Nicolas*, iii. 230.

[6] Sir Charles H. Knowles did modify his code in this way some time after 1798. For his original signal he substituted two in MS. with the following neatly worded significations: 'No. 32. To break through the enemy's line together and engage on the opposite side. No. 33. To break through the enemy's line in succession and engage on the other side.' Had these two lucid significations been adopted by Howe there would have been no possible ambiguity as to what was meant.

[7] Laughton, *Nelson's Letters and Despatches*, p. 151. Ross, *Memoir of Lord de Saumarez*, vol. i.

[8] This last mediæval proviso was omitted in the later editions. It is not found in Hoste.

[9] Ross, *Memoir of Saumarez*, i. 212. Nelson refers to 'Signal 54, Art. XXXVII. of the Instructions,' which must have been a special and amplified set issued by Jervis. There is no Art. XXXVII. in Howe's set.

[10] In the United Service Institution.

[11] *Logs of the Great Sea Fights*, i. 210. The log probably only gives an abbreviation of the signification. Unless Jervis had changed it, its exact wording was 'The admiral means to pass between the ships of their line for engaging them to leeward,' &c. See *supra*, p. 255.

[12] Fernandez Duro, *Armada Española*, viii. 111.

LORD HOWE'S EXPLANATORY INSTRUCTIONS.

[+Signal Book, 1799+.[1]]

Instructions for the conduct of the fleet preparatory to their engaging, and when engaged, with an enemy.

I. When the signal is made for the fleet to form the line of battle, each flag officer and captain is to get into his station as expeditiously as possible, and to keep in close order, if not otherwise directed, and under a proportion of sail suited to that carried by the admiral, or by the senior flag officer remaining in the line when the admiral has signified his intention to quit it.

II. The chief purposes for which a fleet is formed in line of battle are: that the ships may be able to assist and support each other in action; that they may not be exposed to the fire of the enemy's ships greater in number than themselves; and that every ship may be able to fire on the enemy without risk of firing into the ships of her own fleet.

III. If, after having made a signal to prepare to form the line of battle on either line of bearing, the admiral, keeping the preparative flag flying, should make several signals in succession, to point out the manner in which the line is to be formed, those signals are to be carefully written down, that they may be carried into execution, when the signal for the line is hoisted again; they are to be executed in the order in which they were made, excepting such as the admiral may annul previously to his hoisting again the signal for the line.

IV. If any part of the fleet should be so far to leeward, when the signal is made for the line of battle, that the admiral should think it necessary to bear up and stand towards them, he will do it with the signal No. 105 hoisted.[2] The ships to leeward are thereupon to exert themselves to get as expeditiously as possible into their stations in the line.

V. Ships which have been detached from the body of the fleet, on any separate service, are not to obey the signal for forming the line of battle, unless they have been previously called back to the fleet by signal.

VI. Ships which cannot keep their stations are to quit the line, as directed in Article 9 of the General Instructions, though in the presence of an enemy.[3] The captains of such ships will not thereby be prevented from distinguishing themselves, as they will have opportunities of rendering essential service, by placing their ships advantageously when they get up with the enemy already engaged with the other part of the fleet.

VII. When the signal to form a line of bearing for either tack is made, the ships (whatever course they may be directed to steer) are to place themselves in such a manner that if they were to haul to the wind

together on the tack for which the line of bearing is formed, they would immediately form a line of battle on that tack. To do this, every ship must bring the ship which would be her second ahead, if the line of battle were formed, to bear on that point of the compass on which the line of battle would sail, viz., on that point of the compass which is seven points from the direction of the wind, or six points if the signal is made to keep *close* to the wind.

As the intention of a line of bearing is to keep the fleet ready to form suddenly a line of battle, the position of the division or squadron flags, shown with the signal for such a line, will refer to the forming of the line of battle; that division or squadron whose flag is uppermost (without considering whether it do or do not form the van of the line of bearing) is to place itself in that station which would become the van if the fleet should haul to the wind and form the line of battle; and the division whose flag is undermost is to place itself in that station in which it would become the rear if by hauling to the wind the line of battle should be formed.[4]

VIII. When a line of bearing has been formed, the ships are to preserve that relative bearing from each other, whenever they are directed to alter the course together; but if they are directed to alter the course in succession, as the line of bearing will by that be destroyed, it is no longer to be attended to.

IX. If the signal to make more or less sail is made when the fleet is in line of battle, the frigate appointed to repeat signals will set the same sails as are carried by the admiral's ship; the ships are then in succession (from the rear if to shorten, or the van, if to make more, sail) to put themselves under a proportion of sail correspondent to their comparative rate of sailing with the admiral's ship.

To enable captains to do this it will be necessary that they acquire a perfect knowledge of the proportion of sail required for suiting their rate of sailing to that of the admiral, under the various changes in the quantity of sail, and state of the weather; which will enable them, not only to keep their stations in the line of battle, but also to keep company with the fleet on all other occasions.

When the signal to make more sail is made, if the admiral is under his topsails he will probably set the Foresail.

If the signal is repeated, or if the foresail is set he will probably set Jib and staysails.

If the foresail, jib, and staysails are set, he will set the
Topgallant-sails.

Or in equally weather Mainsail.

When the signal to shorten sail is made, he will probably take in sail in a gradation the reverse of the preceding.

X. Ships which are ordered by signal to withdraw from the line are to place themselves to windward of the fleet if it has the weather-gage of the enemy, or to leeward and ahead if the contrary; and are to be ready to assist any ship which may want their assistance, or to act in any other manner as directed by signal.

If the ships so withdrawn, or any others which may have been detached, should be unable to resume their stations in the line when ordered by signal to do so, they are to attack the enemy's ships in any part of the line on which they may hope to make the greatest impression.[5]

XI. If the fleet should engage an enemy inferior to it in number, or which, by the flight of some of their ships, becomes inferior, the ships which, at either extremity of the line, are thereby left without opponents may, after the action is begun, quit the line without waiting for a signal to do so; and they are to distress the enemy, or assist the ships of the fleet, in the best manner that circumstances will allow.

XII. When any number of ships, not having a flag officer with them, are detached from the fleet to act together, they are to obey all signals which are accompanied by the flag appropriated to detachments, and are not to attend to any made without that flag. But if a flag officer, commanding a squadron, or division, be with such detachment, all the ships of it are to consider themselves, for the time, as forming part of the division, or squadron, of such flag officer; and they are to obey those signals, and only those, which are accompanied by his distinguishing flag.

XIII. Great care is at all times to be taken not to fire at the enemy, either over, or very near to, any ships of the fleet; nor, though the signal for battle should be flying, is any ship to fire till she is placed in a proper situation, and at a proper distance from the enemy.

XIV. If, when the signal for battle is made, the ships are steering down for the enemy, they are to haul

to the wind, or to any course parallel to the enemy, and are to engage them when properly placed, without waiting for any particular signal; but every ship must be attentive to the motions of that ship which will be her second ahead, when formed parallel to the enemy, that she may have room to haul up without running on board of her. The distance of the ships from each other during the action must be governed by that of their respective opponents on the enemy's line.

XV. No ship is to Separate from the body of the fleet, in time of action, to pursue any small number of the enemy's ships which have been beaten out of the line, unless the commander-in-chief, or some other flag officer, be among them; but the ships which have disabled their opponents, or forced them to quit the line, are to assist any ship of the fleet appearing to be much pressed, and to continue their attack till the main body of the enemy be broken or disabled; unless by signal, or particular instruction, they should be directed to act otherwise.

XVI. If any ship should be so disabled as to be in great danger of being destroyed, or taken by the enemy, and should make a signal, expressive of such extremity, the ships nearest to her, and which are the least engaged with the enemy, are strictly enjoined to give her immediately all possible aid and protection; and any fireship, in a situation which admits of its being done, is to endeavour to burn the enemy's ship opposed to her; and any frigate, that may be near, is to use every possible exertion for her relief, either by towing her off, or by joining in the attack of the enemy, or by covering the fireship; or, if necessity require it, by taking out the crew of the disabled ship; or by any other means which circumstances at the time will admit.[6]

XVII. Though a ship be disabled, and hard pressed by the enemy in battle, she is not to quit her station in the line, if it can possibly be avoided, till the captain shall have obtained permission so to do from the commander of the squadron, or division, to which he belongs, or from some other flag officer. But if he should be ordered out of the line, or should be obliged to quit it, before assistance can be sent to him, the nearest ships are immediately to occupy the space become vacant, to prevent the enemy from taking advantage of it.

XVIII. If there should be found a captain so lost to all sense of honour and the great duty he owes his country, as not to exert himself to the utmost to get into action with the enemy, or to take or destroy them when engaged; the commander of the squadron, or division, to which he belongs, or the nearest flag officer, is to suspend him from his command, and is to appoint some other officer to command the ship, till the admiral's pleasure shall be known.

XIX. When, from the advantage obtained by the enemy over the fleet, or from bad weather, or from any other cause, the admiral makes the signal for the fleet to disperse, every captain will be left to act as he shall judge most proper for the preservation of the ship he commands, and the good of the king's service; but he is to endeavour to go to the appointed rendezvous, if it may be done with safety.

XX. The ships are to be kept at all times as much prepared for battle as circumstances will admit; and if the fleet come to action with an enemy which has the weather-gage, boats, well armed, are to be held in readiness, with hand and fire-chain grapnels in them; and if the weather will admit, they are to be hoisted out, and kept on the offside from the enemy, for the purpose of assisting any ships against which fireships shall be sent; or for supporting the fireships of the fleet, if they should be sent against the enemy.[7]

XXI. The ships appointed to protect and cover fireships, when ordered on service, or which, without being appointed, are in a situation to cover and protect them, are to receive on board their crews, and, keeping between them and the enemy, to go with them as near as possible to the ships they are directed to destroy. All the boats of those ships are to be well armed, and to be employed in covering the retreat of the fireship's boats, and in defending the ship from any attempts that may be made on her by the boats of the enemy.

XXII. If the ship of any flag officer be disabled in battle, the flag officer may repair on board, and hoist his flag in any other ship (not already carrying a flag) that he shall think proper; but he is to hoist it in one of his own squadron or division if there be one near, and fit for the purpose.

XXIII. If a squadron or any detachment be directed by signal to gain or keep the wind of the enemy, the officer commanding it is to act in such manner as shall in his judgment be the most effectual for the total defeat of the enemy; either by reinforcing those parts of the fleet which are opposed to superior force, or by attacking such parts of the enemy's line as, by their weakness, may afford reasonable hopes of their being easily broken,

XXIV. When the signal (30) is made to extend the line from one extremity of the enemy's line to the other, though the enemy have a greater number of ships, the leading ship is to engage the leading ship, and the sternmost ship the sternmost of the enemy; and the other ships are, as far as their situation will

admit, to engage the ships of greatest force, leaving the weaker ships unattacked till the stronger shall have been disabled.[8]

XXV. If the admiral, or any commander of a squadron or division, shall think fit to change his station in the line, in order to place himself opposite to the admiral or the commander of a similar squadron or division in the enemy's line, he will make the Signal 47 for quitting the line in his own ship, without showing to what other part of the line he means to go; the ships ahead or astern (as circumstances may require) of the station opposed to the commander in the enemy's line are then to close and make room for him to get into it. But if the admiral, being withdrawn from the line, should think fit to return to any particular place in it, he will make the signal No. 269 with the distinguishing signal of his own ship, and soon after he will hoist the distinguishing signal of the ship astern of which he means to take, his station. And if he should direct by signal any other ship to take a station in the line, he will also hoist the distinguishing signal of the ship astern of which he would have her placed, if she is not to take the station assigned her in the line of battle given out.

XXVI. When the Signal 29 is made for each ship to steer for her opponent in the enemy's line, the ships are to endeavour, by making or shortening sail, to close with their opponents and bring them to action at the same time; but they must be extremely careful not to pass too near each other, nor to do anything which may risk their running on board each other: they may engage as soon as they are well closed with their opponents, and properly placed for that purpose.

XXVII. When the Signal 28 is made, for ships to form as most convenient, and attack the enemy as they get up with them; the ships are to engage to windward or to leeward, as from the situation of the enemy they shall find most advantageous; but the leading ships must be very cautious not to suffer themselves to be drawn away so far from the body of the fleet as to risk the being surrounded and cut off.

XXVIII. When Signal 14 is made to prepare for battle and for anchoring, the ships are to have springs on their bower anchors, and the end of the sheet cable taken in at the stern port, with springs on the anchor to be prepared for anchoring without winding if they should go to the attack with the wind aft. The boats should be hoisted out and hawsers coiled in the launches, with the stream anchor ready to warp them into their stations, or to assist other ships which may be in want of assistance. Their spare yards and topmasts, if they cannot be left in charge of some vessel, should in moderate weather be lashed alongside, near the water, on the off-side from the battery or ship to be attacked. The men should be directed to lie down on the off side of the deck from the enemy, whenever they are not wanted, if the ship should be fired at as they advance to the attack.

XXIX. When the line of battle has been formed as most convenient, without regard to the prescribed form, the ships which happen to be ahead of the centre are to be considered, for the time, as the starboard division, and those astern of the centre as the larboard division of the fleet; and if the triangular flag, white with a red fly, be hoisted, the line is to be considered as being divided into the same number of squadrons and divisions as in the established line of battle. The ship which happens at the time to lead the fleet is to be considered as the leader of the van squadron, and every other ship which happens to be in the station of the leader of the squadron or division is to be considered as being the leader of that squadron or division, and the intermediate ships are to form the squadrons or divisions of such leaders, and to follow them as long as the triangular flag is flying, and every flag officer is to be considered as the commander of the squadron or division in which he may be accidentally placed.

XXX. If the wind should come forward when the fleet is formed in line of battle, or is sailing by the wind in a line of bearing, the leading ship is to continue steering seven points from the wind, and every other ship is to haul as close to the wind as possible, till she has got into the wake of the leading ship, or till she shall have brought it on the proper point of bearing; but if the wind should come aft, the sternmost ship is to continue steering seven points from the wind, and the other ships are to haul close to the wind till they have brought the sternmost ship into their wake, or on the proper point of bearing.

XXXI. If Signal 27, to break through the enemy's line, be made without a 'red pennant' being hoisted, it is evident that to obey it the line of battle must be entirely broken; but if a 'red pennant' be hoisted at either mast-head, that fleet is to preserve the line of battle as it passes through the enemy's line, and to preserve it in very close order, that such of the enemy's ships as are cut off may not find an opportunity of passing through it to rejoin their fleet.

If a signal of number be made immediately after this signal, it will show the number of ships of the enemy's van or rear which the fleet is to endeavour to cut off. If the closing of the enemy's line should prevent the ships passing through the part pointed out, they are to pass through as near to it as they can.

If any of the ships should find it impracticable, in either of the above cases, to pass through the enemy's line, they are to act in the best manner that circumstances will admit of for the destruction of the enemy.

FOOTNOTES:

[1] Similar but not identical instructions are referred to in the Signal Book of 1790. The above were reproduced in all subsequent editions till the end of the war.

[2] 'Ships to leeward to get in the admiral's wake.'

[3] The instructions referred to are the 'General Instructions for the conduct of the fleet.' They are the first of the various sets which the Signal Book contained, and relate to books to be kept, boats, keeping station, evolutions and the like. Article IX. is 'If from any cause whatever a ship should find it impossible to keep her station in any line or order of sailing, she is not to break the line or order by persisting too long in endeavouring to preserve it; but she is to quit the line and form in the rear, doing everything she can to keep up with the fleet.'

[4] See at p. 235, as to the new sailing formation in three columns.

[5] It should be noted that this is an important advance on the corresponding Article IX. of the previous instructions, and that it contains a germ of the organisation of Nelson's Trafalgar memorandum.

[6] The continued insistence on fireship tactics in this and Articles XX. and XXI. should again be noted, although from 1793 to 1802 the number of fireships on the Navy List averaged under four out of a total that increased from 304 to 517.

[7] It should be remembered that at this time there were no davits and no boats hoisted up. They were all carried in-board.

[8] This is a considerable modification of the signification of the signal; see *supra*, p. 263.

NELSON'S TACTICAL MEMORANDA

INTRODUCTORY

The first of these often quoted memoranda is the 'Plan of Attack,' usually assigned to May 1805, when Nelson was in pursuit of Villeneuve, and it is generally accompanied by two erroneous diagrams based on the number of ships which he then had under his command. But, as Professor Laughton has ingeniously conjectured, it must really belong to a time two years earlier, when Nelson was off Toulon in constant hope of the French coming out to engage him.[1] The strength and organisation of Nelson's fleet at that time, as well as the numbers of the French fleet, exactly correspond to the data of the memorandum. To Professor Laughton's argument may be added another, which goes far actually to fix the date. The principal signal which Nelson's second method of attack required was 'to engage to leeward.' Now this signal as it stood in the Signal Book of 1799 was to some extent ambiguous. It was No. 37, and the signification was 'to engage the enemy on their larboard side, or to leeward if by the wind,' while No. 36 was 'to engage the enemy on their starboard side if going before the wind, or to windward if by the wind.' Accordingly we find Nelson issuing a general order, with the object apparently of removing the ambiguity, and of rendering any confusion between starboard and larboard and leeward and windward impossible. It is in Nelson's order book, under date November 22, 1803, and runs as follows:

'If a pennant is shown over signal No. 36, it signifies that ships are to engage on the enemy's starboard side, whether going large or upon a wind.

'If a pennant is shown in like manner over No. 37, it signifies that ships are to engage on the enemy's larboard side, whether going large or upon a wind.

'These additions to be noted in the Signal Book in pencil only.'[2]

The effect of this memorandum was, of course, that Nelson had it in his power to let every captain know, without a shadow of doubt, under all conditions of wind, on which side he meant to engage the enemy.

To the evidence of the Signal Book may be added a passage in Nelson's letter to Admiral Sir A. Ball

from the Magdalena Islands, November 7, 1803. He there writes: 'Our last two reconnoiterings: Toulon has eight sail of the line apparently ready for sea … a seventy-four repairing. Whether they intend waiting for her I can't tell, but I expect them every hour to put to sea.'[3] He was thus expecting to have to deal with eight or nine of the line, which is the precise contingency for which the memorandum provides. There can be little doubt therefore that it was issued while Nelson lay at Magdalena, the first week in November 1803.[4]

The second memorandum, which Nelson communicated to his fleet, soon after he joined it off Cadiz, is regarded by universal agreement as the high-water mark of sailing tactics. Its interpretation however, and the dominant ideas that inspired it, no less than the degree to which it influenced the battle and was in the mind of Nelson and his officers at the time, are questions of considerable uncertainty. Some of the most capable of his captains, as we shall see presently, even disagreed as to whether Trafalgar was fought under the memorandum at all. From the method in which the attack was actually made, so different apparently from the method of the memorandum, some thought Nelson had cast it aside, while others saw that it still applied. A careful consideration of all that was said and done at the time gives a fairly clear explanation of the divergence of opinion, and it will probably be agreed that those officers who had a real feeling for tactics saw that Nelson was making his attack on what were the essential principles of the memorandum, while some on the other hand who were possessed of less tactical insight did not distinguish between what was essential and what was accidental in Nelson's great conception, and, mistaking the shadow for the substance, believed that he had abandoned his carefully prepared project.

For those who did not entirely grasp Nelson's meaning there is much excuse. We who are able to follow step by step the progress of tactical thought from the dawn of the sailing period can appreciate without much difficulty the radical revolution which he was setting on foot. It was a revolution, as we can plainly see, that was tending to bring the long-drawn curve of tactical development round to the point at which the Elizabethans had started. Surprise is sometimes expressed that, having once established the art of warfare under sail in broadside ships, our seamen were so long in finding the tactical system it demanded. Should not the wonder be the converse: that the Elizabethan seamen so quickly came so near the perfected method of the greatest master of the art? The attack at Gravelines in 1588 with four mutually supporting squadrons in échelon bears strong elementary resemblance to that at Trafalgar in 1805. It was in dexterity and precision of detail far more than in principle that the difference lay. The first and the last great victory of the British navy had certainly more in common with each other than either had with Malaga or the First of June. In the zenith of their careers Nelson and Drake came very near to joining hands. Little wonder then if many of Nelson's captains failed to fathom the full depth of his profound idea. Naval officers in those days were left entirely without theoretical instruction on the higher lines of their profession, and Nelson, if we may judge by the style of his memoranda, can hardly have been a very lucid expositor. He thought they all understood what with pardonable pride he called the 'Nelson touch.' The most sagacious and best educated of them probably did, but there were clearly some—and Collingwood, as we shall see, was amongst them—who only grasped some of the complex principles which were combined in his brilliant conception.

An analysis of the memorandum will show how complex it was. In the first and foremost place there is a clear note of denunciation against the long established fallacy of the old order of battle in single line. Secondly, there is in its stead the reestablishment of the primitive system of mutually supporting squadrons in line ahead. Thirdly, there is the principle of throwing one squadron in superior force upon one end of the enemy's formation, and using the other squadrons to cover the attack or support it if need arose. Fourthly, there is the principle of concealment—that is, disposing the squadrons in such a manner that even after the real attack has been delivered the enemy cannot tell what the containing squadrons mean to do, and in consequence are forced to hold their parrying move in suspense. The memorandum also included the idea of concentration, and this is often spoken of as its conspicuous merit. But in the idea of concentration there was nothing new, even if we go back no further than Rodney. It was only the method of concentration, woven out of his four fundamental innovations, that was new. Moreover, as Nelson delivered the attack, he threw away the simple idea of concentration. For a suddenly conceived strategical object he deliberately exposed the heads of his columns to what with almost any other enemy would have been an overwhelming superiority. On the other hand, by making, as he did, a perpendicular instead of a parallel attack, as he had intended, he accentuated—it is true at enormous risk—the cardinal points of his design; that is, he departed still further from the old order of battle, and he still further concealed from the enemy what the real attack was to be, and after it was developed what the containing squadron was going to do. Concentration in fact was only the crude and ordinary raw material of a design of unmatched subtlety and invention.

The keynote of his conception, then, was his revolutionary substitution of the primitive Elizabethan and early seventeenth century method for the fetish of the single line. For some time it is true the established battle order had been blown upon from various quarters, but no one as yet had been able to

devise any system convincing enough to dethrone it. It will be remembered that at least as early as 1759 an Additional Instruction had provided for a battle order in two lines, but it does not appear ever to have been used.[5] Rodney's manoeuvre again had foreshadowed the use of parts of the line independently for the purpose of concentration and containing. In 1782 Clerk of Eldin had privately printed his *Essay*, which contained suggestions for an attack from to-windward, with the line broken up into écheloned divisions in close resemblance to the disposition laid down in Nelson's memorandum. In 1790 this part of his work was published. Meanwhile an even more elaborate and well-reasoned assault on the whole principle of the single line had appeared in France. In 1787 the Vicomte de Grenier, a French flag officer, had produced his *L'Art de la Guerre sur Mer*, in which he boldly attacked the law laid down by De Grasse, that so long as men-of-war carried their main armament in broadside batteries there could never be any battle order but the single line ahead. In Grenier's view the English had already begun to discard it, and he insists that, in all the actions he had seen in the last two wars, the English, knowing the weakness of the single line, had almost always concentrated on part of it without regular order. The radical defects of the line he points out are: that it is easily thrown into disorder and easily broken, that it is inflexible, and too extended a formation to be readily controlled by signals. He then proceeds to lay down the principle on which a sound battle order should be framed, and the fundamental objects at which it should aim[6]. His postulates are thus stated:

'1. De rendre nulle une partie des forces de l'ennemi afin de réunir toutes les siennes contre celles qui l'on attaque, ou qui attaquent; et de vaincre ensuite le reste avec plus de facilité et de certitude.

'2. De ne présenter à l'ennemi aucune partie de son armée qui ne soit flanquée et où il ne pût combattre et vaincre s'il vouloit se porter sur les parties de cette armée reconnues faibles jusqu'à présent.'

Never had the fundamental intention of naval tactics been stated with so much penetration, simplicity, and completeness. The order, however, which Grenier worked out—that of three lines of bearing disposed on three sides of a lozenge—was somewhat fantastic and cumbrous, and it seems to have been enough to secure for his clever treatise complete neglect. It had even less effect on French tactics than had Nelson's memorandum on our own. This is all the more curious, for so thoroughly was the change that was coming over English tactics understood in France that Villeneuve knew quite well the kind of attack Nelson would be likely to make. In his General Instructions, issued in anticipation of the battle, he says: 'The enemy will not confine themselves to forming a line parallel to ours.... They will try to envelope our rear, to break our line, and to throw upon those of our ships that they cut off, groups of their own to surround and crush them.' Yet he could not get away from the dictum of De Grasse, and was able to think of no better way of meeting such an attack than awaiting it 'in a single line of battle well closed up.'

In England things were little better. In spite of the fact that at Camperdown Duncan had actually found a sudden advantage by attacking in two divisions, no one had been found equal to the task of working out a tactical system to meet the inarticulate demands of the tendency which Grenier had noticed. The possibilities even of Rodney's manoeuvre had not been followed up, and Howe had contented himself with his brilliant invention for increasing the impact and decision of the single line. It was reserved for Nelson's genius to bring a sufficiently powerful solvent to bear on the crystallised opinion of the service, and to find a formula which would shed all that was bad and combine all that was good in previous systems.[7]

The dominating ideas that were in his mind become clearer, if we follow step by step all the evidence that has survived as to the genesis and history of his memorandum. As early as 1798, when he was hoping to intercept Bonaparte's expedition to Egypt, he had adopted a system which was not based on the single line, and so far as is known this was the first tactical order he ever framed as a fleet commander. It is contained in a general order issued from the Vanguard on June 8 of that year, and runs as follows, as though hot from the lesson of St. Vincent: 'As it is very probable the enemy will not be formed in regular order on the approach of the squadron under my command, I may in that case deem it most expedient to attack them by separate divisions. In which case the commanders of divisions are strictly enjoined to keep their ships in the closest possible order, and on no account whatever to risk the separation of one of their ships.'[8] The divisional organisation follows, being his own division of six sail and two others of four each. 'Had he fallen in with the French fleet at sea,' wrote Captain Berry, who was sent home with despatches after the Nile, 'that he might make the best impression upon any part of it that should appear the most vulnerable or the most eligible for attack, he divided his force into three sub-squadrons [one of six sail and two of four each]. Two of these sub-squadrons were to attack the ships of war, while the third was to pursue the transports and to sink and destroy as many as it could.'[9] The exact manner in which he intended to use this organisation he had explained constantly by word of mouth to his captains, but no further record of his design has been found. Still there is an alteration which he made in his signal book at the same time that gives us the needed light. We cannot fail to notice the striking resemblance between his method of attack by

separate divisions on a disordered enemy, and that made by the Elizabethan admirals at Gravelines upon the Armada after its formation had been broken up by the fireships. That attack was made intuitively by divisions independently handled as occasion should dictate, and Nelson's new signal leaves little doubt that this was the plan which he too intended. The alteration he ordered was to change the signification of Signal 16, so that it meant that each of his flag officers, from the moment it was made, should have control of his own division and make any signals he thought proper.

But this was not all. By the same general order he made two other alterations in the signal book in view of encountering the French in order of battle. They too are of the highest interest and run as follows: 'To be inserted in pencil in the signal book. At No. 182. Being to windward of the enemy, to denote I mean to attack the enemy's line from the rear towards the van as far as thirteen ships, or whatsoever number of the British ships of the line may be present, that each ship may know his opponent in the enemy's line.' No. 183. 'I mean to press hard with the whole force on the enemy's rear.'[10]

Thus we see that at the very first opportunity Nelson had of enforcing his own tactical ideas he enunciated three of the principles upon which his great memorandum was based, viz. breaking up his line of battle into three divisional lines, independent control by divisional leaders, and concentration on the enemy's rear. All that is wanting are the elements of surprise and containing.

These, however, we see germinating in the memorandum he issued five years later off Toulon. In that case he expected to meet the French fleet on an opposite course, and being mainly concerned in stopping it and having a slightly superior force he is content to concentrate on the van. But, in view of the strategical necessity of making the attack in this way, he takes extra precautions which are not found in the general order of 1798. He provides for preventing the enemy's knowing on which side his attack is to fall; instead of engaging an equal number of their ships he provides for breaking their line, and engaging the bulk of their fleet with a superior number of his own; and finally he looks to being ready to contain the enemy's rear before it can do him any damage.

Thus, taking together the general order of 1798 and the Toulon memorandum of 1803, we can see all the tactical ideas that were involved at Trafalgar already in his mind, and we are in a position to appreciate the process of thought by which he gradually evolved the sublimely simple attack that welded them together, and brought them all into play without complication or risk of mistake. This process, which crowns Nelson's reputation as the greatest naval tactician of all time, we must now follow in detail.

Shortly before he left England for the last time, he communicated to Keats, of the Superb, a full explanation of his views as they then existed in his mind, and Keats has preserved it in the following paper which Nicolas printed.

'Memorandum of a conversation between Lord Nelson and Admiral Sir Richard Keats, the last time he was in England before the battle of Trafalgar.[11]

'One morning, walking with Lord Nelson in the grounds of Merton, talking on naval matters, he said to me, "No day can be long enough to arrange a couple of fleets and fight a decisive battle according to the old system. When *we* meet them" (I was to have been with him), "for meet them we shall, I'll tell you how I shall fight them. I shall form the fleet into three divisions in three lines; one division shall be composed of twelve or fourteen of the fastest two-decked ships, which I shall keep always to windward or in a situation of advantage, and I shall put them under an officer who, I am sure, will employ them in the manner I wish, if possible. I consider it will always be in my power to throw them into battle in any part I choose; but if circumstances prevent their being carried against the enemy where I desire, I shall feel certain he will employ them effectually and perhaps in a more advantageous manner than if he could have followed my orders" (he never mentioned or gave any hint by which I could understand who it was he intended for this distinguished service).[12] He continued, "With the remaining part of the fleet, formed in two lines, I shall go at them at once if I can, about one third of their line from their leading ship." He then said, "What do you think of it?" Such a question I felt required consideration. I paused. Seeing it he said, "But I will tell you what *I* think of it. I think it will surprise and confound the enemy. They won't know what I am about. It will bring forward a pell-mell battle, and that is what I want."[13]

Here we have something roughly on all-fours with the methods of the First Dutch War. There are the three squadrons, the headlong 'charge' and the *mêlée*. The reserve squadron to windward goes even further back, to the treatise of De Chaves and the Instructions of Lord Lisle in 1545. It was no wonder it took away Keats's breath. The return to primitive methods was probably unconscious, but what was obviously uppermost in Nelson's mind was the breaking up of the established order in single line, leading by surprise and concealment to a decisive *mêlée*. He seems to insist not so much upon

defeating the enemy by concentration as by throwing him into confusion, upsetting his mental equilibrium in accordance with the primitive idea. The notion of concentration is at any rate secondary, while the subtle scheme for 'containing' as perfected in the memorandum is not yet developed. As he explained his plan to Keats, he meant to attack at once with both his main divisions, using the reserve squadron as a general support. There is no clear statement that he meant it as a 'containing' force, though possibly it was in his mind.[14]

There is one more piece of evidence relating to this time when he was still in England. According to this story Lord Hill, about 1840, when still Commander-in-Chief, was paying a visit to Lord Sidmouth. His host, who, better known as Addington, had been prime minister till 1804, and was in Pitt's new cabinet till July 1805, showed him a table bearing a Nelson inscription. He told him that shortly before leaving England to join the fleet Nelson had drawn upon it after dinner a plan of his intended attack, and had explained it as follows: 'I shall attack in two lines, led by myself and Collingwood, and I am confident I shall capture their van and centre or their centre and rear.' 'Those,' concluded Sidmouth, 'were his very words,' and remarked how wonderfully they had been fulfilled.[15] Hill and Sidmouth at the time were both old men and the authority is not high, but so far as it goes it would tend to show that an attack in two lines instead of one was still Nelson's dominant idea. It cannot however safely be taken as evidence that he ever intended a concentration on the van, though in view of the memorandum of 1803 this is quite possible.

Finally, there is the statement of Clarke and McArthur that Nelson before leaving England deposited a copy of his plan with Lord Barham, the new first lord of the admiralty. This however is very doubtful. The Barham papers have recently been placed at the disposal of the Society, in the hands of Professor Laughton, and the only copy of the memorandum he has been able to find is an incomplete one containing several errors of transcription, and dated the Victory, October 11, 1805. In the absence of further evidence therefore no weight can be attached to the oft-repeated assertion that Nelson had actually drawn up his memorandum before he left England.

Coming now to the time when he had joined the fleet off Cadiz, the first light we have is the well-known letter of October 1 to Lady Hamilton. In this letter, after telling her that he had joined on September 28, but had not been able to communicate with the fleet till the 29th, he says, 'When I came to explain to them the *Nelson touch* it was like an electric shock. Some shed tears and all approved. It was new—it was singular—it was simple.' What he meant exactly by the 'Nelson touch' has never been clearly explained, but he could not possibly have meant either concentration or the attack on the enemy's rear, for neither of these ideas was either new or singular.

On October 3 he writes to her again: 'The reception I met with on joining the fleet caused the sweetest sensation of my life.... As soon as these emotions were past I laid before them the plan I had previously arranged for attacking the enemy, and it was not only my pleasure to find it generally approved, but clearly perceived and understood.'[16]

The next point to notice is the 'Order of Battle and Sailing' given by Nicolas. It is without date, but almost certainly must have been drawn up before Nelson joined. It does not contain the Belleisle, which Nelson knew on October 4 was to join him.[17] It also does include the name of Sir Robert Calder and his flagship, and on September 30 Nelson had decided to send both him and his ship home.[18]

The order is for a fleet of forty sail, but the names of only thirty-three are given, which were all Nelson really expected to get in time. The remarkable feature of this order is that it contains no trace of the triple organisation of the memorandum. The 'advanced squadron' is absent, and the order is based on two equal divisions only.

Then on October 9, after Calder had gone, there is this entry in Nelson's private diary: 'Sent Admiral Collingwood the Nelson touch.' It was enclosed in a letter in which Nelson says: 'I send you my Plan of Attack, as far as a man dare venture to guess at the very uncertain position the enemy may be found in. But, my dear friend, it is to place you perfectly at your ease respecting my intentions and to give full scope to your judgment for carrying them into effect.' The same day Collingwood replies, 'I have a just sense of your lordship's kindness to me, and the full confidence you have reposed in me inspires me with the most lively gratitude. I hope it will not be long before there is an opportunity of showing your lordship that it has not been misplaced.' On these two letters there can be little doubt that the 'Plan of Attack' which Nelson enclosed was that of the memorandum. The draft from which Nicolas printed appears to have been dated October 9, and originally had in one passage 'you' and 'your' for the 'second in command,' showing that Nelson in his mind was addressing his remarks to Collingwood, though subsequently he altered the sentence into the third person. Only one other copy was known to Nicolas, and that was issued in the altered form to Captain Hope, of the Defence, a ship which in the order of battle was in Collingwood s squadron, but Codrington tells us it was certainly issued to all the captains.[19]

So far, then, we have the case thus—that whatever Nelson may have really told Lord Sidmouth, and whatever may have been in his mind when he drew up the dual order of battle and sailing, he had by October 9 reverted to the triple idea which he had explained to Keats. Meanwhile, however, his conception had ripened. There are marked changes in organisation, method and intention. In organisation the reserve squadron is reduced from the original twelve or fourteen to eight, or one fifth of his hypothetical fleet instead of about one third—reduced, that is, to a strength at which it was much less capable of important independent action. In method we have, instead of an attack with the two main divisions, an attack with one only, with the other covering it. In intention we have as the primary function of the reserve squadron, its attachment to one or other of the other two main divisions as circumstances may dictate.

The natural inference from these important changes is that Nelson's conception was now an attack in two divisions of different strength, the stronger of which, as the memorandum subsequently explains, was to be used as a containing force to cover the attack of the other, and except that the balance of the two divisions was reversed, this is practically just what Clerk of Eldin had recommended and what actually happened in the battle. It is a clear advance upon the original idea as explained to Keats, in which the third squadron was to be used on the primitive and indefinite plan of De Chaves and Lord Lisle as a general reserve. It also explains Nelson's covering letter to Collingwood, in which he seems to convey to his colleague that the pith of his plan was an attack in two divisions, and, within the general lines of the design, complete freedom of action for the second in command. How largely this idea of independent control entered into the 'Nelson touch' we may judge from the fact that it is emphasised in no less than three distinct paragraphs of the memorandum.

Such, then, is the fundamental principle of the memorandum as enunciated in its opening paragraphs. He then proceeds to elaborate it in two detailed plans of attack—one from to-leeward and the other from to-windward. It was the latter he meant to make if possible. He calls it 'the intended attack,' and it accords with the opening enunciation. The organisation is triple, but no special function is assigned to the reserve squadron. The actual attack on the enemy's rear is to be made by Collingwood, while Nelson with his own division and the reserve is to cover him. In the event of an attack having to be made from to-leeward, the idea is different. Here the containing movement practically disappears. The fleet is still to attack the rear and part of the centre of the enemy, but now in three independent divisions simultaneously, in such a way as to cut his line at three points, and to concentrate a superior force on each section of the severed line. To none of the divisions is assigned the duty of containing the rest of the enemy's fleet from the outset. It is to be dealt with at a second stage of the action by all ships that are still capable of renewing the engagement after the first stage. 'The whole impression,' as Nelson put it, in case he was forced to attack from to-leeward, was to overpower the enemy's line from a little ahead of the centre to the rearmost ship. He does not say, however, that this was to be 'the whole impression' of the intended attack from to-windward. 'The whole impression' there appears to be for Collingwood to overpower the rear while Nelson with the other two divisions made play with the enemy's van and centre; but the particular manner in which he would carry out this part of the design is left undetermined.

The important point, then, in considering the relation between the actual battle and the memorandum, is to remember that it provided for two different methods of attacking the rear according to whether the enemy were encountered to windward or to leeward. The somewhat illogical arrangement of the memorandum tends to conceal this highly important distinction. For Nelson interpolates between his explanation of the windward attack and his opening enunciation of principle his explanation of the leeward attack, to which the enunciation did not apply. That some confusion was caused in the minds of some even of his best officers is certain, but let them speak for themselves.

After the battle Captain Harvey, of the Téméraire, whom Nelson had intended to lead his line, wrote to his wife, 'It was noon before the action commenced, which was done according to the instructions given us by Lord Nelson.... Lord Nelson had given me leave to lead and break through the line about the fourteenth ship,' *i.e.* two or three ships ahead of the centre, as explained in the memorandum for the leeward attack but not for the windward.

On the other hand we have Captain Moorsom, of the Revenge, who was in Collingwood's division, saying exactly the opposite. Writing to his father on December 4, he says, 'I have seen several plans of the action, but none to answer my ideas of it. A regular plan was laid down by Lord Nelson some time before the action but not acted on. His great anxiety seemed to be to get to leeward of them lest they should make off to Cadiz before he could get near them.' And on November 1, to the same correspondent he had written, 'I am not certain that our mode of attack was the best: however, it succeeded.' Here then we have two of Nelson's most able captains entirely disagreeing as to whether or not the attack was carried out in accordance with any plan which Nelson laid down.

Captain Moorsom's view may be further followed in a tactical study written by his son, Vice-Admiral

Constantine Moorsom.[20] His remarks on Trafalgar were presumably largely inspired by his father, who lived till 1835. In his view there was 'an entire alteration both of the scientific principle and of the tactical movements,' both of which he thinks were due to what he calls the *morale* of the enemy's attitude—that is, that Nelson was afraid they were going to slip through his fingers into Cadiz. The change of plan—meaning presumably the change from the triple to the dual organisation—he thinks was not due to the reduced numbers which Nelson actually had under his flag, for the ratio between the two fleets remained much about the same as that of his hypothesis.

The interesting testimony of Lieutenant G.L. Browne, who, as Admiral Jackson informs us, was assistant flag-lieutenant in the Victory and had every means of knowing, endorses the view of the Moorsoms.[21] After explaining to his parents the delay caused by the established method of forming the fleets in two parallel lines so that each had an opposite number, as set forth in the opening words of the memorandum, he says, 'but by his lordship's mode of attack you will clearly perceive not an instant of time could be lost. The frequent communications he had with his admirals and captains put them in possession of all his plans, so that his mode of attack was well known to every officer of the fleet. Some will not fail to attribute rashness to the conduct of Lord Nelson. But he well considered the importance of a decisive naval victory at this time, and has frequently said since we left England that, should he be so fortunate as to fall in with the enemy, a total defeat should be the result on the one side or the other.'

Next we have what is probably the most acute and illuminating criticism of the battle that exists, from the pen of 'an officer who was present.' Sir Charles Ekin quotes it anonymously; but from internal evidence there is little difficulty in assigning it to an officer of the Conqueror, though clearly not her captain, Israel Pellew, in whose justification the concluding part was written. Whoever he was the writer thoroughly appreciated and understood the tactical basis of Nelson's plan, as laid down in the memorandum, and he frankly condemns his chief for having exposed his fleet unnecessarily by permitting himself to be hurried out of delivering his attack in line abreast as he intended. It might well have been done, so far as he could see, without any more loss of time than actually occurred in getting the bulk of the fleet into action. Loss of time was the only excuse for attacking in line ahead, and the only reason he could suppose for the change of plan. If they had all gone down together in line abreast, he is sure the victory would have been more quickly decided and the brunt of the fight more equally borne. Nothing, he thinks, could have been better than the plan of the memorandum if it had only been properly executed. An attack in two great divisions with a squadron of observation—so he summarises the 'Nelson touch'—seemed to him to combine every precaution under all circumstances. It allows of concentration and containing. Each ship can use her full speed without fear of being isolated. The fastest ships will break through the line first, and they are just those which from their speed in passing are liable to the least damage, while having passed through, they cause a diversion for the attack of their slower comrades. Finally, if the enemy tries to make off and avoid action, the fleet is well collected for a general chase. But as Nelson actually made the attack in his hurry to close, he threw away most of these advantages, and against an enemy of equal spirit each ship must have been crushed as she came into action. Instead of doubling ourselves, he says, we were doubled and even trebled on. Nelson in fact presented the enemy's fleet with precisely the position which the memorandum aimed at securing for ourselves—that is to say, he suffered a portion of his fleet, comprising the Victory, Téméraire, Royal Sovereign, Belleisle, Mars, Colossus, and Bellerophon, to be cut off and doubled on.[22]

The last important witness is Captain Codrington, of the Orion. No one seems to have kept his head so well in the action, and this fact, coupled with the high reputation he subsequently acquired, gives peculiar weight to his testimony. It is on the question of the advanced or reserve squadron that he is specially interesting. On October 19 at 8 P.M., just after they had been surprised and rejoiced by Nelson's signal for a general chase, and were steering for the enemy, as he says, 'under every stitch of sail we can set,' he sat down to write to his wife. In the course of the letter he tells her, 'Defence and Agamemnon are upon the look out nearest to Cadiz; ... Colossus and Mars are stationed next. The above four and as many more of us are now to form an advanced squadron; and I trust by the morning we shall all be united and in sight of the enemy.' Clearly then Nelson must have issued some modification of the dual 'order of battle and sailing.' Many years later in a note upon the battle which Codrington dictated to his daughter, Lady Bourchier, he says that on the 20th, in spite of Collingwood's advice to attack at once, Nelson 'continued waiting upon them in two columns according to the order of sailing and the memorable written instruction which was given out to all the captains.'[23] Later still, when a veteran of seventy-six years, he gave to Sir Harris Nicolas another note which shows how in his own mind he reconciled the apparent discrepancy between the dual and the triple organisation. It runs as follows: 'In Lord Nelson's memorandum of October 9, 1805, he refers to "an advanced squadron of eight of the fastest sailing two-decked ships" to be added to either of the two lines of the order of sailing as may be required; and says that this advanced squadron would probably have to cut through "two, three or four ships of the enemy's centre so as to ensure getting at their commander-in-chief, on

whom every effort must be made to capture";[24] and he afterwards twice speaks of the enemy's van coming to succour their rear. Now I am under the impression that I was expressly instructed by Lord Nelson (referring to the probability of the enemy's van coming down upon us), being in the Orion, one of the eight ships named, that he himself would probably make a feint of attacking their van in order to prevent or retard it.' Here then would seem to be still further confusion, due to a failure to distinguish between the leeward and windward form of attack. According to this statement Codrington believed the advanced squadron was in either case to attack the centre, while Nelson with his division contained the van. But curiously enough in a similar note, printed by Lady Bourchier on Nicolas's authority, there is a difference in the wording which, though difficult to account for, seems to give the truer version of what Codrington really said. It is there stated that Codrington told Nicolas he was strongly impressed with the belief 'that Lord Nelson directed eight of the smaller and handier ships, of which the Orion was one, to be ready to haul out of the line in case the enemy's van should appear to go down to the assistance of the ships engaged to meet and resist them: that to prevent this manoeuvre on the part of the enemy Lord Nelson intimated his intention of making a feint of hauling out towards their van,' &c. There is little doubt that we have here the true distribution of duties which Nelson intended for the windward attack—that is, the advanced squadron was to be the real containing force, but he intended to assist it by himself making a feint on the enemy's van before delivering his true attack on the centre.[25]

From Codrington's evidence it is at any rate clear that some time before the 19th Nelson had told off an 'advanced squadron' as provided for in his memorandum, and that the ships that were forming the connection between the fleet and the frigates before Cadiz formed part of it. Now Nelson had begun to tell off these ships as early as the 4th. On that day he wrote to Captain Duff, of the Mars, 'I have to desire you will keep with the Mars, Defence and Colossus from three to four leagues between the fleet and Cadiz in order that I may get information from the frigates stationed off that port as expeditiously as possible.' On the 11th, writing to Sir Alexander Ball at Malta, he speaks of having 'an advanced squadron of fast sailing ships between me and the frigates.' The Agamemnon (64) was added on the 14th, the day after she joined. On that day Nelson entered in his private diary, 'Placed Defence and Agamemnon from seven to ten leagues west of Cadiz, and Mars and Colossus four leagues east of the fleet,' &c,[26] On the 15th he wrote to Captain Hope, of the Defence: 'You will with the Agamemnon take station west from Cadiz from seven to ten leagues, by which means if the enemy should move I hope to have constant information, as two or three ships will be kept as at present between the fleet and your two ships.'[27]

On the 12th he writes to Collingwood, of the Belleisle, the fastest two-decker in the fleet, as though she too were an advanced ship, and on the morning of the 19th he tells him the Leviathan was to relieve the Defence, whose water had got low. Later in the day, when Mars and Colossus had passed on the signal that the enemy was out, he ordered 'Mars, Orion, Belleisle, Leviathan, Bellerophon and Polyphemus to go ahead during the night.'[28] On the eve of the battle therefore these six ships, with Colossus and Agamemnon, made up the squadron of eight specified on the memorandum.

The conclusion then is that, though some of the ships destined to form the advanced squadron had not arrived by the 9th when the memorandum was issued, Nelson had already taken steps to organise it, and that on the evening of the 19th, the first moment he had active contact with the enemy, it was detached from the fleet as a separate unit. Up to this moment it would look as though he had intended to use it as his memorandum directed. Since with the exception of the Agamemnon and the Leviathan, which had only temporarily replaced the Defence while she watered, the whole of the ships named belonged to Collingwood's division, the resulting organisation would have been, lee-line nine ships, weather-line eight ships, and eight for the advanced squadron—an organisation which in relative proportion was almost exactly that which he had explained to Keats. It would therefore still have rendered Nelson's original plan of attack possible, although it did not preserve the balance of the divisions prescribed in the memorandum.

There can be little doubt, however, that Nelson on the morning of the battle did abandon the idea of the advanced squadron altogether. Early on the 20th it was broken up again. At 8 o'clock in the morning of that day the captains of the Mars, Colossus and Defence (which apparently was by this time ready again for service) were called on board the Victory and ordered out to form a chain as before between the admiral and his frigates.[29] The rest presumably resumed their stations in the fleet. Even if he had not actually abandoned this part of his plan, it is clear that in his hurry to attack Nelson would not spend time in reforming the squadron as a separate unit, but chose rather to carry out his design, so far as was possible, with two divisions only. So soon as he sighted the enemy's fleet at daylight on the 21st, he made the signal to form the line of battle in two columns, and with one exception the whole of the advanced ships took station in their respective divisions according to the original order of battle and sailing.'[30] The exception was Codrington's ship, the Orion. No importance however need be attached to this, for although he was originally in Collingwood's division he may well have been

transferred to Nelson's some time before. It is only worthy of remark because Codrington, of all the advanced squadron captains, was the only one, so far as we know, who still considered the squadron a potential factor in the fleet and acted accordingly. While Belleisle, Mars, Bellerophon and Colossus rushed into the fight in the van of Collingwood's line, Orion in the rear of Nelson's held her fire even when she got into action, and cruised about the *mêlée*, carefully seeking points where she could do most damage to an enemy, or best help an overmatched friend—well-judged piece of service, on which he dwells in his correspondence over and over again with pardonable complacency. He was thus able undoubtedly to do admirable service in the crisis of the action.

That the bulk of his colleagues thought all idea of a reserve squadron had been abandoned by Nelson is clear, and the resulting change was certainly great enough to explain why some of the captains thought the plan of the memorandum had been abandoned altogether. For not only was the attack made in two divisions instead of one, and in line ahead instead of line abreast, but its prescribed balance was entirely upset. Instead of Nelson having the larger portion of the fleet for containing the van and centre, Collingwood had the larger portion for the attack on the rear. In other words, instead of the advanced squadron being under Nelson's direction, the bulk of it was attached to Collingwood. If some heads—even as clear as Codrington's—were puzzled, it is little wonder.

As to the way in which this impulsive change of plan was brought about, Codrington says, 'They [the enemy] suddenly wore round so as to have Cadiz under their lee, with every appearance of a determination to go into that port. Lord Nelson therefore took advantage of their confusion in wearing, and bore down to attack them with the fleet in two columns.' This was in the note dictated to Lady Bourchier, and in a letter of October 28, 1805, to Lord Garlies he says, 'We all scrambled into battle as soon as we could.'[31]

Codrington's allusion to Nelson's alleged feint on the enemy's van brings us to the last point; the question, that is, as to whether, apart from the substitution of the perpendicular for the parallel attack, and in spite of the change of balance, the two lines were actually handled in the action according to the principles of the memorandum for the intended attack from to-windward.

Lady Bourchier's note continues, after referring to Nelson's intention to make a feint on the van, 'The Victory did accordingly haul to port: and though she took in her larboard and weather studding sails, she kept her starboard studding sails set (notwithstanding they had become the lee ones and were shaking), thus proving that he proposed to resume his course, as those sails would be immediately wanted to get the Victory into her former station.' The note in Nicolas is to the same effect, but adds that Codrington had no doubt that having taken in his weather studding sails he kept the lee ones 'set and shaking in order to make it clear to the fleet that his movement was merely a feint, and that the Victory would speedily resume her course and fulfil his intention of cutting through the centre.' And in admiration of the movement Codrington called his first lieutenant and said, 'How beautifully the admiral is carrying his design into effect!' Though all this was written long after, when his memory perhaps was fading, it is confirmed by a contemporary entry in his log: 'The Victory, after making a feint as of attacking the enemy's van, hauled to starboard so as to reach their centre.'[32] This is all clear enough so far, but now we have to face a signal mentioned in the log of the Euryalus which, as she was Nelson's repeating frigate, cannot be ignored. According to this high authority Nelson, about a quarter of an hour before making his immortal signal, telegraphed 'I intend to push or go through the end of the enemy's line to prevent them from getting into Cadiz.' It is doubtful how far this signal was taken in, but those who saw it must have thought that Nelson meant to execute Howe's manoeuvre upon the enemy's leading ships. At this time, according to the master of the Victory, he was standing for the enemy's van. Nelson also signalled to certain ships to keep away a point to port. The Victory's log has this entry: 'At 4 minutes past 12 opened our fire on the enemy's van, in passing down their line.' At 30 minutes past 12 the Victory got up with Villeneuve's flagship and then broke through the line. Now at first sight it might appear that Nelson really intended to attack the van and not the centre, on the principle of Hoste's old manoeuvre which Howe had reintroduced into the Signal Book for attacking a numerically superior fleet—that is, van to van and rear to rear, leaving the enemy's centre unoccupied.[33] For the old signal provided that when this was done 'the flag officers are, if circumstances permit, to engage the flag officers of the enemy,' which was exactly what Nelson was doing. On this supposition his idea would be that his ships should attack the enemy ahead of Villeneuve as they came up. And this his second, the Téméraire, actually did. But, as we have seen by Instruction XXIV. of 1799, the old rule of 1790 had been altered, and if Nelson intended to execute Hoste's plan of attack he, as 'leading ship,' would or should have engaged the enemy's 'leading ship,' leaving the rest as they could to engage the enemy of 'greatest force.' The only explanation is that, if he really intended to attack the van, he again changed his mind when he fetched up with Villeneuve, and could not resist engaging him. More probably, however, the signal was wrongly repeated by the Euryalus, and as made by Nelson it was really an intimation to Collingwood that he meant to cover the attack on the rear and centre by a feint on the van.[34]

However this may be, the French appear to have regarded Nelson's movement to port as a real attack. Their best account (which is also perhaps the best account that exists) says that just before coming into gun-shot the two British columns began to separate. The leading vessels of Nelson's column, it says, passed through the same interval astern of the Bucentaure, and then it tells how 'les vaisseaux de queue de cette colonne, au contraire, serrèrent un peu le vent, comme pour s'approcher des vaisseaux de l'avant-garde de la flotte combinée: mais après avoir reçu quelques bordées de ces vaisseaux ils abandonnérent ce dessein et se portèrent vers les vaisseaux placés entre le Redoutable et la Santa Anna ou vinrent unir leurs efforts à ceux des vaisseaux anglais qui combattaient déjà le Bucentaure et la Santísima Trinidad.'[35] This is to some extent confirmed by Dumanoir himself, who commanded the allied van, in his official memorandum addressed to Decrès, December 30, 1809. In defending his failure to tack sooner to Villeneuve's relief, he says, 'Au commencement du combat, la colonne du Nord [*i.e.* Nelson's] se dirigea sur l'avant-garde qui engagea avec elle pendant quarante minutes.'[36] In partial corroboration of this there is the statement in the log of the Téméraire, the ship that was immediately behind Nelson, that she opened her fire on the Santísima Trinidad and the two ships ahead of her; that is, she engaged the ships ahead of where Nelson broke the line, so that Captain Harvey as well as Dumanoir may have believed that Nelson intended his real attack to be on 'the end of the line.'

In the face of these facts it is impossible to say categorically that Nelson intended nothing but a feint on the van. It is equally impossible to say he intended a real attack. The point perhaps can never be decided with absolute certainty, but it is this very uncertainty that brings out the true merit and the real lesson of Nelson's attack. As we now may gather from his captains' opinions, its true merit was not that he threw his whole fleet on part of a superior enemy—that was a commonplace in tactics. It was not concentration on the rear, for that also was old; and what is more, as the attack was delivered, so far from Nelson concentrating, he boldly, almost recklessly, exposed himself for a strategical object to what should have been an overwhelming concentration on the leading ships of his two columns. The true merit of it above all previous methods of concentration and containing was that, whether, as planned or as delivered, it prevented the enemy from knowing on which part of their line Nelson intended to throw his squadron, just as we are prevented from knowing to this day. 'They won't know what I am about' were his words to Keats.

The point is clearer still when we compare the different ways in which Nelson and Collingwood brought their respective columns into action. Collingwood in his Journal says that shortly before 11 o'clock, that is, an hour before getting into action, he signalled 'for the lee division to form the larboard line of bearing.' The effect and intention of this would be that each ship in his division would head on the shortest course to break the enemy's line in all parts. It was the necessary signal for enabling him to carry out regularly Howe's manoeuvre upon the enemy's rear, and his object was declared for all to see.[37] Nelson, on the other hand, made no such signal, but held on in line ahead, giving no indication of whether he intended to perform the manoeuvre on the van or the centre, or whether he meant to cut the line in line ahead. Until they knew which it was to be, it was impossible for the enemy to take any step to concentrate with either division, and thus Nelson held them both immobile while Collingwood flung himself on his declared objective.

Nothing could be finer as a piece of subtle tactics. Nothing could be more daring as a well-judged risk. The risk was indeed enormous, perhaps the greatest ever taken at sea. Hawke risked much at Quiberon, and much was risked at the Nile. But both were sea-risks of the class to which our seamen were enured. At Trafalgar it was a pure battle-risk—a mad, perpendicular attack in which every recognised tactical card was in the enemy's hand. But Nelson's judgment was right. He knew his opponent's lack of decision, he knew the individual shortcomings of the allied ships, and he knew he had only to throw dust, as he did, in their eyes for the wild scheme to succeed. As Jurien de la Gravière has most wisely said 'Le génie de Nelson c'est d'avoir compris notre faiblesse.'

Yet when all is said, when even full weight is given to the strategical pressure of the hour and the uncertainty of the weather, there still remains the unanswerable criticism of the officer of the Conqueror: that by an error of judgment Nelson spoilt his attack by unnecessary haste. The moral advantage of pushing home a bold attack before an enemy is formed is of course very great; but in this case the enemy had no intention of avoiding him, as they showed, and he acknowledged, when they boldly lay-to to accept action. The confusion of their line was tactically no weakness: it only resulted in a duplication which was so nicely adapted for meeting Howe's manoeuvre that there was a widespread belief in the British fleet, which Collingwood himself shared, that Villeneuve had adopted it deliberately.[38] Seeing what the enemy's accidental formation was, every ship that pierced it must be almost inevitably doubled or trebled on. It was, we know, the old Dutch manner of meeting the English method of attack in the earliest days of the line.[39] Had he given Villeneuve time for forming his line properly the enemy's battle order would have been only the weaker. Had he taken time to form his own order the mass of the attack would have been delivered little later than it was, its impact would have

been intensified, and the victory might well have been even more decisive than it was, while the sacrifice it cost would certainly have been less, incalculably less, if we think that the sacrifice included Nelson himself.

FOOTNOTES:

[1] *Nelson's Letters and Despatches*, p. 382.

[2] Nicolas, *Nelson's Despatches*, v. 287, note. It is also given in vol. vii. p. ccxvi, apparently from a captain's copy which is undated.

[3] *Ibid.* v. 283.

[4] Professor Laughton pointed out (*op. cit.*) that the conditions will fit June to August 1804, but that it might have been 'earlier, certainly not later.'

[5] It is very doubtful whether this formation was ever intended for anything but tactical exercises. Morogues has a similar signal and instruction (*Tactique Navale*, p. 294, ed. 1779), 'Partager l'armée en deux corps, ou mettre l'armée sur deux colonnes; et représentation d'un combat.' Anson certainly used it for manoeuvring one half of his fleet against the other during his tactical exercises in 1747. Warren to Anson, *Add. MSS.* 15957, p. 172.

[6] Mathieu-Dumas, *Précis des Evénements Militaires*, xiii. 193.

[7] Captain Boswall, in the preface to his translation of Hoste, says Grenier's work was translated in 1790. If this was so Nelson may well have read it, but I have not been able to find a copy of the translation either in the British Museum or elsewhere.

[8] Ross, *Memoir of Saumarez*, i. 212.

[9] Laughton, *Nelson's Letters and Despatches*, 150.

[10] No. 182 as it stood in the signal book meant, Ships before in tow to proceed to port. No. 183. When at anchor to veer to twice the length of cable. No. 16. Secret instructions to be opened.

[11] It was in the handwriting, Nicolas says, of Edward Hawke Locker, Esq., the naval biographer and originator of the naval picture gallery at Greenwich. He endorsed it, 'Copy of a paper communicated to me by Sir Richard Keats, and allowed by him to be transcribed by me, 1st October, 1829.'

[12] It was certainly not Keats himself, though afterwards Nelson meant to offer him command of the squadron he intended to detach into the Mediterranean. In the expected battle Keats, had he arrived in time, was to have been Nelson's 'second' in the line. *Nelson to Sir Alexander Ball*, October 15, 1805.

[13] *Nelson's Despatches*, vii. 241, note.

[14] Nelson's 'advance squadron' must not be confused with the idea of a reserve squadron which Gravina pressed on Villeneuve at the famous Cadiz council of war before Trafalgar. Gravina's idea was nothing but the old one of a reserve of superfluous ships after equalising the line, as provided by the old English Fighting Instructions and recommended by Morogues.

[15] Sidney, *Life of Lord Hill*, p. 368.

[16] Clarke and McArthur say the letter was to Lady Hamilton. Nicolas, reprinting from the *Naval Chronicle*, has the addressee's name blank.

[17] Nelson to Captain Duff, October 4. The order to take her under his command was despatched on September 20. Same to Marsden, October 10.

[18] Same to Lord Barham, September 30.

[19] See the note on Trafalgar dictated by him in *Memoirs of Sir Edward Codrington*, edited by Lady Bourchier, 1873.

[20] *On the Principles of Naval Tactics*, 1846.

[21] *Great Sea Fights*, ii. 196, note.

[22] See *post*, p. 357 Appendix, where this interesting paper is set out in full.

[23] *Life of Codrington*, ii. 57-8.

[24] It should be noted that the memorandum only enjoins this for an attack from to-leeward, and not for the 'intended attack' from to-windward.

[25] See *Nelson's Despatches*, vii. 154; *Life of Codrington*, ii. 77.

[26] Nicolas, vii. 122. Before this Mars and Colossus had had the inside station. See Nelson to Collingwood, October 12.

[27] *Ibid.*, vii. 122.

[28] Nicolas, vii. 115, 129, 133.

[29] Memorandum and Private Diary, Nicolas, pp. 136-7.

[30] Some doubt has been expressed as to the signals with which Nelson opened at daybreak on the 21st. But their actual numbers are recorded in the logs of the Mars, Defiance, Conqueror and Bellerophon, and all but the first in the log of the Euryalus repeating frigate. They were No. 72: 'To form order of sailing in two columns or divisions of the fleet,' which, by the memorandum was also to be the order of battle; No. 76, with compass signal ENE, 'when lying by or sailing by the wind to bear up and sail large on the course pointed out'; No. 13, Prepare for battle. Collingwood has in his journal: 'At 6.30 the commander-in-chief made the signal to form order of sailing in two columns, and at 7.0 to prepare for battle. At 7.40 to bear up east.'

[31] *Life of Codrington*, ii. 59, 60.

[32] *Great Sea Fights*, ii. 278.

[33] A veteran French officer of the old wars took this view of Nelson's threat in a study of the battle which he wrote. 'Nelson,' he says, 'a d'abord feint de vouloir attaquer la tête et la queue de l'armée. Ensuite il a rassemblé ses forces sur son centre, et a abandonné le sort de la bataille à l'intelligence de ses capitaines.' Mathieu-Dumas, *Précis des Evénements Militaires*, xiv. 408.

[34] The only trace of notice having been taken by anyone of a signal from Nelson at the time stated was Collingwood's impatient remark when Nelson began to telegraph 'England expects,' &c. 'I wish Nelson would stop signalling,' he is reported to have said. 'We all know well enough what we have to do,' as though Nelson had been signalling something just before.

[35] *Monuments des Victoires et Conguêtes des Français* from Nicolas, vii. 271. It was also adopted by Mathieu-Dumas (*op. cit.* xiii. p. 178) as the best and most impartial account. He says it was written by a French naval officer called Parisot.

[36] Jurien de la Gravière, *Guerres Maritimes*, ii. 220, note.

[37] This highly important signal appears to have been generally overlooked in accounts of the action. Yet Collingwood's journal is so precise about signals that there can be no doubt he made it. Agamemnon in Nelson's column answered it under the impression it was general. Her log says, 'Answered signal No. 50'—that is, 'To keep on the larboard line of bearing though then on the starboard tack. Ditto starboard bearing if on larboard tack.' Captain Moorsom also says, 'My station was sixth ship in the rear of the lee column; but as the Revenge sailed well Admiral Collingwood made my signal to keep a line of bearing from him which made me one of the leading ships through the enemy's line.' No other ship records the signal. Probably few saw it, for in the memorandum which Collingwood issued two years later he lays stress on the importance of captains being particularly watchful for the signals of their divisional commander. See *post*, pp. 324 and 329.

[38] Collingwood to Marsden, October 22. same to Parker, November 1. Same to Pasley, December 16, 1805.

[39] See *supra*, p. 119. Villeneuve saw this. In his official despatch from the Euryalus, November 5, he says 'Notre formation s'effectuait avec beaucoup de peine; mais dans le genre d'attaque que je prévoyais que l'ennemi allait nous faire, cette irrégularité même dans notre ligne ne me paraissait pas un inconvénient.'—Jurien de la Gravière, *Guerres Maritimes*, ii. 384.

LORD NELSON, 1803.

[+Clarke and McArthur, Life of Nelson, ii. 427+.[1]]

Plan of Attack.

The business of a commander-in-chief being first to bring an enemy's fleet to battle on the most advantageous terms to himself (I mean that of laying his ships close on board the enemy, as expeditiously as possible, and secondly, to continue them there without separating until the business is decided), I am sensible beyond this object it is not necessary that I should say a word, being fully assured that the admirals and captains of the fleet I have the honour to command will, knowing my precise object, that of a close and decisive battle, supply any deficiency in my not making signals, which may, if extended beyond those objects, either be misunderstood, or if waited for very probably from various causes be impossible for the commander-in-chief to make. Therefore it will only be requisite for me to state in as few words as possible the various modes in which it may be necessary for me to obtain my object; on which depends not only the honour and glory of our country, but possibly its safety, and with it that of all Europe, from French tyranny and oppression.

If the two fleets are both willing to fight, but little manoeuvring is necessary, the less the better. A day is soon lost in that business. Therefore I will only suppose that the enemy's fleet being to leeward standing close upon a wind, and that I am nearly ahead of them standing on the larboard tack. Of course I should, weather them. The weather must be supposed to be moderate; for if it be a gale of wind the manoeuvring of both fleets is but of little avail, and probably no decisive action would take place with the whole fleet.[2]

Two modes present themselves: one to stand on just out of gun-shot, until the van ship of my line would be about the centre ship of the enemy; then make the signal to wear together; then bear up [and] engage with all our force the six or five van ships of the enemy, passing, certainly if opportunity offered, through their line. This would prevent their bearing up, and the action, from the known bravery and conduct of the admirals and captains, would certainly be decisive. The second or third rear ships of the enemy would act as they please, and our ships would give a good account of them, should they persist in mixing with our ships.

The other mode would be to stand under an easy but commanding sail directly for their headmost ship, so as to prevent the enemy from knowing whether I should pass to leeward or to windward of him. In that situation I would make the signal to engage the enemy to leeward, and cut through their fleet about the sixth ship from the van, passing very close. They being on a wind and you going large could cut their line when you please. The van ships of the enemy would, by the time our rear came abreast of the van ship, be severely cut up, and our van could not expect to escape damage. I would then have our *rear* ship and every ship in succession wear [and] continue the action with either the van ship or the second as it might appear most eligible from her crippled state; and this mode pursued I see nothing to prevent the capture of the five or six ships of the enemy's van. The two or three ships of the enemy's rear must either bear up or wear; and in either case, although they would be in a better plight probably than our two van ships (now the rear), yet they would be separated and at a distance to leeward, so as to give our ships time to refit. And by that time I believe the battle would, from the judgment of the admiral and captains, be over with the rest of them. Signals from these moments are useless when every man is disposed to do his duty. The great object is for us to support each other, and to keep close to the enemy and to leeward of him.

If the enemy are running away, then the only signals necessary will be to engage the enemy on arriving up with them; and the other ships to pass on for the second, third, &c., giving if possible a close fire into the enemy on passing, taking care to give our ships engaged notice of your intention.

FOOTNOTES:

[1] From the original in the St. Vincent Papers. Also in Nicolas, *Despatches and Letters*, vi. 443. Obvious mistakes in punctuation have been corrected in the text.

[2] *Cf.* the similar remark of De Chaves, *supra*, p. 5.

LORD NELSON, 1805.

[+Nicolas, Despatches and Letters, vii.+[1]]

Memorandum.

Secret. Victory, off Cadiz, 9th October, 1805.

Thinking it almost impossible to bring a fleet of forty sail of the line into line of battle in variable winds, thick weather, and other circumstances which must occur, without such a loss of time that the opportunity would probably be lost of bringing the enemy to battle in such a manner as to make the

business decisive; I have therefore made up my mind to keep the fleet in that position of sailing (with the exception of the first and second in command), that the order of sailing is to be the order of battle; placing the fleet in two lines of sixteen ships each, with an advance squadron of eight of the fastest sailing two-decked ships, *which* will always make, if wanted, a line of twenty-four sail on whichever line the commander-in-chief may direct.

The second in command will,[2] after *my* intentions are made known to him, have the entire direction of his line; to make the attack upon the enemy, and to follow up the blow until they are captured or destroyed.

If the enemy's fleet should be seen to windward in line of battle, and that the two lines and the advanced squadron can fetch them,[3] they will probably be so extended that their van could not succour their rear.

I should therefore probably make the second in command's[4] signal, to lead through about the twelfth ship from the rear (or wherever he[5] could fetch, if not able to get as far advanced). My line would lead through about their centre; and the advanced squadron to cut two, three, or four ships ahead of their centre, so far as to ensure getting at their commander-in-chief on whom every effort must be made to capture.

The whole impression of the British fleet must be to overpower from two to three ships ahead of their commander-in-chief, supposed to be in the centre, to the rear of their fleet. I will suppose twenty sail of the enemy's line to be untouched; it must be some time before they could perform a manoeuvre to bring their force compact to attack any part of the British fleet engaged, or to succour their own ships; which indeed would be impossible, without mixing with the ships engaged.[6]

Something must be left to chance; nothing is sure in a sea fight beyond all others. Shots will carry away the masts[7] and yards of friends as well as foes; but I look with confidence to a victory before the van of the enemy could succour their rear;[8] and then the British fleet would most of them be ready to receive their twenty sail of the line, or to pursue them, should they endeavour to make off.

If the van of the enemy tacks, the captured ships must run to leeward of the British fleet; if the enemy wears, the British must place themselves between the enemy and the captured and disabled British ships; and should the enemy close, I have no fears as to the result.

The second in command will, in all possible things, direct the movements of his line, by keeping them as compact as the nature of the circumstances will admit. Captains are to look to their particular line as their rallying point. But in case signals can neither be seen nor perfectly understood, no captain can do very wrong if he places his ship alongside that of an enemy.

Of the intended attack from to-windward, the enemy in the line of battle ready to attack.

[Illustration][9]

The divisions of the British fleet[10] will be brought nearly within gunshot of the enemy's centre. The signal will most probably be made for the lee line to bear up together, to set all their sails, even steering sails[11] in order to get as quickly as possible to the enemy's line and to cut through, beginning from the twelfth ship from the enemy's rear.[12] Some ships may not get through their exact place; but they will always be at hand to assist their friends; and if any are thrown round the rear of the enemy, they will effectually complete the business of twelve sail of the enemy.[13]

Should the enemy wear together, or bear up and sail large, still the twelve ships, composing in the first position the enemy's rear, are to be *the* object of attack of the lee line, unless otherwise directed by the commander-in-chief; which is scarcely to be expected, as the entire management of the lee line, after the intention of the commander-in-chief is signified, is intended to be left to the judgment of the admiral commanding that line.

The remainder of the enemy's fleet, thirty-four sail, are to be left to the management of the commander-in-chief, who will endeavour to take care that the movements of the second in command are as little interrupted as possible.

FOOTNOTES:

[1] Sir Harris Nicolas states that he took his text from an 'Autograph [he means holograph] draught in the possession of Vice-Admiral Sir George Mundy, K.C.B., except the words in italics which were added by Mr. Scott, Lord Nelson's secretary: and from the original issued to Captain Hope of the Defence, now in possession of his son, Captain Hope, R.N.'

[2] Lord Nelson originally wrote here but deleted 'in fact command his line and.'—Nicolas.

[3] Lord Nelson originally wrote here but deleted 'I shall suppose them forty-six sail in the line of battle.'—Nicolas.

[4] Originally 'your' but deleted.—*Ibid*.

[5] Originally 'you' but deleted.—*Ibid*.

[6] In the upper margin of the paper Lord Nelson wrote and Mr. Scott added to it a reference, as marked in the text—'the enemy's fleet is supposed to consist of 46 sail of the line, British fleet 40. If either be less, only a proportionate number of enemy's ships are to be cut off: B. to be 1/4 superior to the E. cut off.—*Ibid*.

[7] The Barham copy reads 'a mast.'

[8] Originally 'friends.'—Nicolas.

[9] This is the only diagram found in either of Nelson's memoranda. It is not in the Barham copy.

[10] Nelson presumably means the two main divisions as distinguished from the 'advanced squadron.' This distinction is general in the correspondence of his officers and accords with the arrangement as shown in the diagram. The Barham copy has 'division' in the singular, as though Nelson intended to specify one division only. It is probably a copyist's error.

[11] In the upper margin of the paper, and referred to by Lord Nelson as in the text 'Vide instructions for signal yellow with blue fly. Page 17, Eighth Flag, Signal Book, with reference to Appendix.'—Nicolas. Steering-sail, according to Admiral Smyth (*Sailors' Word-Book*, p. 654), was 'an incorrect name for a studding sail,' but it seems to have been in common use in Nelson's time.

[12] The Barham copy reads 'their rear.'

[13] The Barham copy ends here. The second sheet has not been found.

NELSON AND BRONTÉ.[1]

INSTRUCTIONS AFTER TRAFALGAR

INTRODUCTORY

The various tactical memoranda issued after Trafalgar by flag officers in command of fleets are amongst the most interesting of the whole series. The unsettled state of opinion which they display as the result of Nelson's memorandum is very remarkable; for with one exception they seem to show that the great tactical principles it contained had been generally misunderstood to a surprising extent. The failure to fathom its meaning is to be accounted for largely by the lack of theoretical training, which made the science of tactics, as distinguished from its practice, a sealed book to the majority of British officers. But the trouble was certainly intensified by the fact—as contemporary naval literature shows—that by Nelson's success and death the memorandum became consecrated into a kind of sacred document, which it was almost sacrilege to discuss. The violent polemics of such men as James, the naval chronicler, made it appear profanity so much as to consider whether Nelson's attack differed in the least from his intended plan, and anyone who ventured to examine the question in the light of general principles was likely to be shouted down as a presumptuous heretic. Venial as was this attitude of adulation under all the circumstances, it had a most evil influence on the service. The last word seemed to have been said on tactics; and oblivious of the fact that it is a subject on which the last word can never be spoken, and that the enemy was certain to learn from Nelson's practice as well as ourselves, admirals were content to produce a colourable imitation of his memorandum, and everyone was satisfied not to look ahead any further. To no one did it occur to consider how the new method of attack was to be applied if the enemy adopted Nelson's formation. They simply assumed an endless succession of Trafalgars.

The first outcome of this attitude of mind is an 'Order of Battle and Sailing,' accompanied by certain instructions, issued by Admiral Gambier from the Prince of Wales in Yarmouth Roads, on July 23, 1807, when he was about to sail to seize the Danish fleet.[2] His force consisted of thirty of the line, and its organisation and stations of flag officers were as follows:

VAN SQUADRON

Division 1. Commodore Hood (No. 1 in line).
Division 2. Vice-Admiral Stanhope (No. 6).

CENTRE DIVISION

Division 1.} Admiral Gambier (No. 15).
Division 2.}

REAR SQUADRON

Division 1. Rear-Admiral Essington (No. 25).
Division 2. Commodore Keats (No. 30).

Gambier's fleet was thus organised in three equal squadrons (the centre one called 'the centre division') and six equal subdivisions. The commander-in-chief was in the centre and had no other flag in his division, Similarly each junior flag officer was in the centre of his squadron and led his subdivision, but he had a commodore to lead his other subdivision. These two commodores also led the fleet on either tack. So far all is plain, but when we endeavour to understand by the appended instruction what battle formation Gambier intended by his elaborate organisation it is very baffling. Possibly we have not got the instruction exactly as Gambier wrote it; but as it stands it is confused past all understanding, and no conceivable battle formation can be constructed from it. All we can say for certain is that he evidently believed he was adopting the principles of Trafalgar, and perhaps going beyond them. The sailing order is to be also the battle order, but whether in two columns or three is not clear. Independent control of divisions and squadrons is also there, and even the commodores are to control their own subdivisions 'subject to the general direction' of their squadronal commanders, but whether the formation was intended to follow that of Nelson the instruction entirely fails to disclose.

The next is a tactical memorandum or general order, issued by Lord Collingwood for the Mediterranean fleet in 1808, printed in Mr. Newnham Collingwood's *Correspondence of Lord Collingwood*. No order of battle is given; but two years later, in issuing an additional instruction, he refers to his general order as still in force. In this case we have the battle order, and it consists of twenty of the line in two equal columns, with the commander-in-chief and his second in command, second in their respective divisions. There were no other flag officers in the fleet.[3] The memorandum which is printed below will be seen to be an obvious imitation of Nelson's, and nothing can impress us more deeply with the merit of Nelson's work than to compare it with Collingwood's. Like Nelson, Collingwood begins with introductory remarks emphasising the importance of 'a prompt and immediate attack' and independent divisional control; and in order to remedy certain errors of Trafalgar, he insists in addition on close order being kept throughout the night and the strictest attention being paid to divisional signals, thinking no doubt how slowly the rear ships at Trafalgar had struggled into action, and how his signal for line of bearing had been practically ignored. Then, after stating broadly that he means with the van or weather division to attack the van of the enemy, while the lee or larboard division simultaneously attacks the rear, he differentiates like Nelson between a weather and a lee attack. For the attack from to-windward he directs the two divisions to run down in line abreast in such a way that they will come into action together in a line parallel to the enemy; but, whatever he intended, nothing is said about concentrating on any part of the enemy, or about breaking the line in all parts or otherwise.

The attack from to-leeward is to be made perpendicularly in line ahead. In this formation his own (the weather column) is to break the line, so as to cut off the van quarter of the enemy's line from the other three quarters, and the lee column is to sever this part of the enemy's line a few ships in rear of their centre. So soon as the leading ships have passed through and so weathered the enemy, they are to keep away and lead down his line so as to engage the rear three fourths to windward. This is of course practically identical with the lee attack of Nelson's memorandum. The only addition is the course that is to be taken after breaking the line. One cannot help wondering how far the leading ships after passing the line would have been able to lead down it before they were disabled, but the addition is interesting as the first known direction as to what was to be done after breaking the line in line ahead after Rodney's method. Seeing the grave and obvious dangers of the movement it is natural that, like Nelson, Collingwood hoped not to be forced to make it; what he desired was a simple engagement on similar tacks. His 'intended attack' as in Nelson's case is clearly that from to-windward.

Turning then again to the windward attack, we see at once its superficial resemblance to Nelson's, but so entirely superficial is it that it is impossible to believe Collingwood ever penetrated the subtleties of his great chiefs design. The dual organisation is there and the independent divisional control, but nothing else. The advance squadron has gone, and with it all trace of a containing movement. There is not even the feint—the mystification of the van. Concentration too has gone, and instead of the sound main attack on the rear, he is most concerned with attacking the van. True, he

may have meant what Nelson meant, but if he had really grasped his fine intention he surely must have let some hint of it escape him in his memorandum. But for the windward attack at least there is no trace of these things, and Nelson's masterly conception sinks in Collingwood's hands into a mere device for expediting the old parallel attack in single line—that is to say, the line is to be formed in bearing down instead of waiting to bear down till the line was complete. We can only conclude, then, that both Collingwood and Gambier could see nothing in the 'Nelson touch' but the swift attack, the dual organisation, and independent divisional control.

There is a third document, however, which confirms us in the impression already formed that there were officers who saw more deeply. It is a tactical memorandum issued by Admiral the Hon. Sir Alexander Forrester Inglis Cochrane, Bart., G.C.B., uncle of the more famous Earl of Dundonald. It is printed by Sir Charles Ekin, in his *Naval Battles*, from a paper which he found at the end of a book in his possession containing 'Additional Signals, Instructions, &c.,' issued by Sir A.I. Cochrane to the squadron under his command upon the Leeward Islands station.' He commanded in chief on this station from 1805 to 1814, but appears never to have been directly under Nelson's influence except for a few weeks, when Nelson came out in pursuit of Villeneuve and attached him to his squadron. He was rather one of Rodney's men, under whom he had served in his last campaigns, and this may explain the special note of his tactical system. His partiality for Rodney's manoeuvre is obvious, and the interesting feature of his plan of attack is the manner in which he grafts it on Nelson's system of mutually supporting squadrons. He does not even shrink from a very free use of doubling which his old chiefs system entailed, and he provides a special signal of his own for directing the execution of the discarded manoeuvre. The 'explanation' of another of his new signals for running aboard an enemy 'so as to disable her from getting away' is also worthy of remark, as a recognition of Nelson's favourite practice disapproved by Collingwood.

Yet, although we see throughout the marks of the true 'Nelson touch,' Cochrane's memorandum bears signs of having been largely founded on an independent study of tactical theory. His obligations to Clerk of Eldin are obvious. There are passages in the document which seem as though they must have been written with the *Essay on Naval Tactics* at his elbow, while his expression 'an attack by forcing the fleet from to-leeward' is directly borrowed from Morogues' 'Forcer l'ennemi au combat elant sous le vent.' On the other hand certain movements are entirely his own, such as his excellent device of inverting the line after passing through the enemy's fleet, a great improvement on Collingwood's method of leading down it in normal order.

The point is of some interest, for although Cochrane's memorandum is over-elaborate and smells of the lamp, yet it seems clear that his theoretical knowledge made him understand Nelson's principles far better than most of the men who had actually fought at Trafalgar and had had the advantage of Nelson's own explanations. All indeed that Cochrane's memorandum seems to lack is that rare simplicity and abstraction which only the highest genius can achieve.

FOOTNOTES:

[1] The signature does not occur to the draught but was affixed to the originals issued to the admirals and captains of the fleet. To the copy signed by Lord Nelson, and delivered to Captain George Hope, of the Defence, was added: 'N.B.—When the Defence quits the fleet for England you are to return this secret memorandum to the Victory' Captain Hope wrote on that paper: 'It was agreeable to these instructions that Lord Nelson attacked the combined fleets of France and Spain off Cape Trafalgar on the 21st of October, 1805, they having thirty-three of the line and we twenty-seven,'—Nicolas.

The injunction to return the memorandum may well have been added to all copies issued, and this may account for their general disappearance.

[2] For this document the Society is indebted to Commander G.P.W. Hope, R.N., who has kindly placed it at my disposal.

[3] For this document the Society is again indebted to Commander Hope, R.N.

ADMIRAL GAMBIER, 1807.

[+MS. of Commander Hope, R.N. Copy+.]

Order of Battle and Sailing.[1]

The respective flag officers will have the immediate direction of the division in which their ships are placed, subject to the general direction of the admiral commanding the squadron to which they belong.

The ships in order of battle and sailing are to keep at the distance of two cables' length from and in the wake of each other, increasing that distance according to the state of the weather.[2]

The leading ship of the starboard division is to keep the admiral two points on her weather bow. The leading ship of the lee division is when sailing on a wind to keep the leader of the weather column two points before her beam; when sailing large, abreast of her.

(Signed) J. GAMBIER. Prince of Wales, Yarmouth Roads: 23 July, 1807.

FOOTNOTES:

[1] For the actual order to which the instructions are appended see Introductory Note, *supra*, p. 322.

[2] The normal distance was then a cable and a half. See *post*, p. 330 note.

LORD COLLINGWOOD, 1808-10.

[+Correspondence of Collingwood, p. 359+.]

From every account received of the enemy it is expected they may very soon be met with on their way from Corfu and Tarentum, and success depends on a prompt and immediate attack upon them. In order to which it will be necessary that the greatest care be taken to keep the closest order in the respective columns during the night which the state of the weather will allow, and that the columns be kept at such a sufficient distance apart as will leave room for tacking or other movements, so that in the event of calm or shift of wind no embarrassment may be caused.

Should the enemy be found formed in order of battle with his whole force, I shall notwithstanding probably not make the signal to form the line of battle; but, keeping in the closest order, with the van squadron attack the van of the enemy, while the commander of the lee division takes the proper measures, and makes to the ships of his division the necessary signals for commencing the action with the enemy's rear, as nearly as possible at the same time that the van begins. Of his signals therefore the captains of that division will be particularly watchful.

If the squadron has to run to leeward to close with the enemy, the signal will be made to alter the course together, the van division keeping a point or two more away than the lee, the latter carrying less sail; and when the fleet draws near the enemy both columns are to preserve a line as nearly parallel to the hostile fleet as they can.

In standing up to the enemy from the leeward upon a contrary tack the lee line is to press sail, so that the leading ship of that line may be two or three points before the beam of the leading ship of the weather line, which will bring them to action nearly at the same period.

The leading ship of the weather column will endeavour to pass through the enemy's line, should the weather be such as to make that practicable, at one fourth from the van, whatever number of ships their line may be composed of. The lee division will pass through at a ship or two astern of their centre, and whenever a ship has weathered the enemy it will be found necessary to shorten sail as much as possible for her second astern to close with her, and to keep away, steering in a line parallel to the enemy's and engaging them on their weather side.

A movement of this kind may be necessary, but, considering the difficulty of altering the position of the fleet during the time of combat, every endeavour will be made to commence battle with the enemy on the same tack they are; and I have only to recommend and direct that they be fought with at the nearest distance possible, in which getting on board of them may be avoided, which is alway disadvantageous to us, except when they are flying.[1]

Additional Instruction.[2]

When the signal No. 43 or 44[3] is made to form the order, the fleet is to form in one line, the rear shortening sail to allow the van to take their station ahead. If such signal should not be made the captains are referred to the general order of 23 March, 1808.

COLLINGWOOD.
Ville de Paris, 4th January, 1810.

FOOTNOTES:

[1] The remaining clauses of the memorandum do not relate to tactics.

[2] From the original in the possession of Commander Hope, R.N. It is attached to an order of battle in two columns. See *supra*, p. 323.

[3] Sig. 43: 'Form line of battle in open order.' Sig. 44: 'Form line of battle in close order at about a cable and a half distant'; with a white pennant, 'form on weather column'; with a blue pennant, 'form on lee column.'

SIR ALEXANDER COCHRANE, 1805-1814.

[+Printed in Skin's Naval Battles, pp. 394 seq. (First edit.)+]

Modes of Attack from the Windward, &c.

When an attack is intended to be made upon the enemy's rear, so as to endeavour to cut off a certain number of ships from that part of their fleet, the same will be made known by signal No. 27, and the numeral signal which accompanies it will point out the headmost of the enemy's ships that is to be attacked, counting always from the van, as stated in page 160, Article 31 (Instructions).[1] The signal will afterwards be made for the division intended to make the attack, or the same will be signified by the ship's pennants, and the pennants of the ship in that division which is to begin the attack, with the number of the ship to be first attacked in the enemy's line. Should it be intended that the leading ship in the division is to attack the rear ship of the enemy, she must bear up, so as to get upon the weather quarter of that ship; the ships following her in the line will pass in succession on her weather quarter, giving their fire to the ship she is engaged with; and so on in succession until they have closed with the headmost ship intended to be attacked.

The ships in reserve, who have no opponents, will break through the enemy's line ahead of this ship, so as to cut off the ships engaged from the rest of the enemy's fleet.

When it is intended that the rear ship of the division shall attack the rear ship of the enemy's line, that ship's pennants will be shown; the rest of the ships in the division will invert their order, shortening sail until they can in succession follow the rear ship, giving their fire to the enemy's ships in like manner as above stated; and the reserve ships will cut through the enemy's line as already mentioned.

When this mode of attack is intended to be put in force, the other divisions of the fleet, whether in order of sailing or battle, will keep to windward just out of gun-shot, so as to be ready to support the rear, and prevent the van and centre of the enemy from doubling upon them. This manoeuvre, if properly executed, may force the enemy to abandon the ships on his rear, or submit to be brought to action on equal terms, which is difficult to be obtained when the attack is made from to-windward.

When the fleet is to leeward, and the commanding officer intends to cut through the enemy's line, the number of the ship in their line where the attempt is to be made will be shown as already stated.

If the ships after passing the enemy's line are to tack, and double upon the enemy's ships ahead, the same will be made known by a blue pennant over the Signal 27; if not they are to bear up and run to the enemy's line to windward, engaging the ship they first meet with; each succeeding ship giving her fire, and passing on to the next in the rear. The ships destined to attack the enemy's rear will be pointed out by the number of the last ship in the line that is to make this movement, or the pennants of that ship will be shown; but, should no signal be made, it is to be understood that the number of ships to bear up is equal in number to the enemy's ships that have been cut off; the succeeding ships will attack and pursue the van of the enemy, or form, should it be necessary to prevent the enemy's van from passing round the rear of the fleet to relieve or join their cut-off ships.

If it is intended that the ships following those destined to engage the enemy's rear to windward shall bear up, and prevent the part of their rear which has been cut off from escaping to leeward, the same will be made known by a red pennant being hoisted over the Signal 21,[2] and the number of ships so ordered will be shown by numeral signals or pennants. If from the centre division, a white pennant will be hoisted over the signal.

If the rear ships are to perform this service by bearing up, the same will be made known by a red pennant under. The numeral signal or pennants, counting always from the van, will show the headmost ship to proceed on this service.[3] The ships not directed by those signals are to form in close order, to cover the ships engaged from the rest of the enemy's fleet.

When the enemy's ships are to be engaged by both van and centre, the rear will keep their wind, to

cover the ships engaged from the enemy to windward, as circumstances may require.

When the signal shall be made to cut through the enemy's van from to-leeward, the same will be made known by Signal 27, &c. In this case, if the headmost ships are to tack and double upon the enemy's van, engaging their ships in succession as they get up, the blue pennant will be shown as already stated, and the numeral signal pointing out the last ship from the van which is to tack, which in general will be equal in number to the enemy's ships cut through. The rest of the ships will be prepared to act as the occasion may require, either by bearing up and attacking the enemy's centre and rear, or tacking or wearing to cut off the van of the enemy from passing round the rear of the fleet to rejoin their centre. And on this service, it is probable, should the enemy's ships bear up, that some of the rear ships will be employed—the signal No. 21 will be made accompanied with the number or pennants of the headmost ship—upon which she, with the ships in her rear, will proceed to the attack of the enemy.

When an attack is likely to be made by an enemy's squadron, by forcing the fleet from to-leeward, Signal 109 will be made with a blue pennant where best seen;[4] upon which each ship will luff up upon the weather quarter of her second ahead, so as to leave no opening for the leading ship of the enemy to pass through: this movement will expose them to the collected fire of all that part of the fleet they intended to force.[5]

It has been often remarked that Nelson founded no school of tactics, and the instructions which were issued with the new Signal Book immediately after the war entirely endorse the remark. They can be called nothing else but reactionary. Nelson's drastic attempt to break up the old rigid formation into active divisions independently commanded seems to have come to nothing, and the new instructions are based with almost all the old pedantry on the single line of battle. Of anything like mutually supporting movements there is only a single trace. It is in Article XIV., and that is only a resurrection of the time-honoured *corps de réserve*, formed of superfluous ships after your line has been equalised with that of a numerically inferior enemy. The whole document, in fact, is a consecration of the fetters which had been forged in the worst days of the seventeenth century, and which Nelson had so resolutely set himself to break.

The new Signal Book in which the instructions appear was founded on the code elaborated by Sir Home Riggs Popham, but there is nothing to show whether or not he was the author of the instructions. He was an officer of high scientific attainments, but although he had won considerable distinction during the war, his service had been entirely of an amphibious character in connection with military operations ashore, and he had never seen a fleet action at sea. He reached flag rank in 1814, and was one of the men who received a K.C.B. on the reconstitution of the order in 1815. Of the naval lords serving with Lord Melville at the time none can show a career or a reputation which would lead us to expect from them anything but the colourless instructions they produced. The controlling influence was undoubtedly Lord Keith. The doyen of the active list, and in command of the Channel Fleet till he retired after the peace of 1815, he was all-powerful as a naval authority, and his flag captain, Sir Graham Moore, had just been given a seat on the board. A devout pupil of St. Vincent and Howe, correct rather than brilliant, Keith represented the old tradition, and notwithstanding the patience with which he had borne Nelson's vagaries and insubordination, the antipathy between the two men was never disguised. However generously Keith appreciated Nelson's genius, he can only have regarded his methods as an evil influence in the service for ordinary men, nor can there be much doubt that his apprehensions had a good deal to justify them.

The general failure to grasp the whole of Nelson's tactical principles was not the only trouble. There are signs that during the later years of the war a very dangerous misunderstanding of his teaching had been growing up in the service. In days when there was practically no higher instruction in the theory of tactics, it was easy for officers to forget how much prolonged and patient study had enabled Nelson to handle his fleets with the freedom he did; and the tendency was to believe that his successes could be indefinitely repeated by mere daring and vehemence of attack. The seed was sown immediately after the battle and by Collingwood himself. 'It was a severe action,' he wrote to Admiral Parker on November 1, 'no dodging or manoeuvring.' And again on December 16, to Admiral Pasley, 'Lord Nelson determined to substitute for exact order an impetuous attack in two distinct bodies.' Collingwood of course with all his limitations knew well enough it was not a mere absence of manoeuvring that had won the victory. In the same letter he had said that although Nelson succeeded, as it were, by enchantment, it was all the effect of system and nice combination.' Yet such phrases as he and others employed to describe the headlong attack, taken from their context and repeated from mouth to mouth, would soon have raised a false impression that many men were only too ready to receive. So the seed must have grown, till we find the fruit in Lord Dundonald's oft-quoted phrase, 'Never mind manoeuvres: always go at them.' So it was that Nelson's teaching had crystallised in his mind and in the mind perhaps of half the service. The phrase is obviously a degradation of the opening enunciations in Nelson's memoranda, a degradation due to time, to superficial study, and the contemptuous confidence of years of undisputed mastery at sea.

The conditions which brought about this attitude to tactics are clearly seen in the way others saw us. Shortly after Trafalgar a veteran French officer of the war of American Independence wrote some *Reflections* on the battle, which contain much to the point. 'It is a noteworthy thing,' he says in dealing with the defects of the single-line formation, 'that the English, who formerly used to employ all the resources of tactics against our fleets, now hardly use them at all, since our scientific tacticians have disappeared. It may almost be said that they no longer have any regular order of sailing or battle: they attack our ships of the line just as they used to attack a convoy.'[6] But here the old tactician was not holding up English methods as an example. He was citing them to show to what easy victories a navy exposed itself in which, by neglect of scientific study and alert observation, tactics had sunk into a mere senile formula. 'They know,' he continues, 'that we are in no state to oppose them with well-combined movements so as to profit by the kind of disorder which is the natural result of this kind of attack. They know if they throw their attack on one part of a much extended line, that part is soon destroyed.' Thus he arrives at two fundamental laws: '1. That our system of a long line of battle is worthless in face of an enemy who attacks with his ships formed in groups (*réunis en pelotons*), and told off to engage a small number of ships at different points in our line. 2. That the only tactical system to oppose to theirs is to have at least a double line, with reserve squadrons on the wings stationed in such a manner as to bear down most easily upon the points too vigorously attacked.' The whole of his far-sighted paper is in fact an admirable study of the conditions under which impetuous attacks and elaborate combinations are respectively called for. But from both points of view the single line for a large fleet is emphatically condemned, while in our instructions of 1816 not a hint of its weakness appears. They resume practically the same standpoint which the Duke of York had reached a century and a half before.

Spanish tacticians seem also to have shared the opinion that Trafalgar had really done nothing to dethrone the line. One of the highest reputation, on December 17, 1805, had sent to his government a thoughtful criticism of the action, and his view of Nelson's attack was this: 'Nothing,' he says, 'is more seamanlike or better tactics than for a fleet which is well to windward of another to bear down upon it in separate columns, and deploy at gun-shot from the enemy into a line which, as it comes into action, will inflict at least as much damage upon them as it is likely to suffer. But Admiral Nelson did not deploy his columns at gun-shot from our line, but ran up within pistol-shot and broke through it, so as to reduce the battle to a series of single-ship actions. It was a manoeuvre in which I do not think he will find many imitators. Where two fleets are equally well trained, that which attacks in this manner must be defeated.'[7]

So it was our enemies rightly read the lesson of Trafalgar. The false deductions therefore which grew up in our own service are all the more extraordinary, even as we find them in the new instructions and the current talk of the quarter-deck. But this is not the worst. It is not till we turn to the Signal Book itself that we get a full impression of the extent to which tactical thought had degenerated and Nelson's seed had been choked. The movements and formations for which signals are provided are stubbornly on the old lines of 1799. The influence of Nelson, however, is seen in two places. The first is a group of signals for 'attacking the enemy at anchor by passing either outside them or between them and the land,' and for 'anchoring and engaging either within or outside the enemy.' Here we have a rational embodiment of the experience of the Nile. The second is a similar attempt to embody the teaching of Trafalgar, and the way it is done finally confirms the failure to understand what Nelson meant. So extraordinary is the signification of the signal and its explanatory note that it must be given in full.

'*Signal.*—Cut the enemy's line in the order of sailing in two columns.

'Explanatory Note.—The admiral will make known what number of ships from the van ship of the enemy the weather division is to break through the enemy's line, and the same from the rear at which the lee division is to break through their line.

'To execute this signal the fleet is to form in the order of sailing in two columns, should it not be so formed already; the leader of each column steering down for the position pointed out where he is to cut through the enemy's line.

'If the admiral wishes any particular conduct to be pursued by the leader of the division, in which he happens not to be, after the line is broken, he will of course point it out. If he does not it is to be considered that the lee division after breaking through the line is left to its commander.

'In performing this evolution the second astern of the leader in each column is to pass through the line astern of the ship next ahead [*sic*] of where her leader broke through, and so on in succession, breaking through all parts of the enemy's line ahead [*sic*] of their leaders as described in the plate.'

The plate represents the two columns bearing down to attack in a strictly formed line ahead, and the ships, after the leaders have cut through, altering course each for its proper interval in the enemy's line, and the whole then engaging from to-leeward. The note proceeds:

'By this arrangement no ship will have to pass the whole of the enemy's line. If however, in consequence of any circumstance, the rear ships should not be able to cut through in their assigned places, the captains of those ships, as well as of the ships that are deprived of opponents in the enemy's line by this mode of attack, are to act to the best of their judgment for the destruction of the enemy, unless a disposition to the contrary has been previously made.

'It will be seen that by breaking the line in this order the enemy's van ships will not be able to assist either their centre or rear without tacking or wearing for that purpose.'

This from cover to cover of the Signal Book is the sole trace to be found of the great principles for which Nelson had lived and died. That Lord Keith or anyone else could have believed that it adequately represented the teaching of Trafalgar is almost incredible.

To begin with, the wording of the note contains an inexplicable blunder. The last paragraph shows clearly that the idea of the signal is an attack on the rear and centre, as at Trafalgar; yet the ships of each column as they come successively into action are told to engage the enemy's ship *ahead* of the point where their leaders broke through, a movement which would resolve itself into an attack on their centre and van, and leave the rear free to come into immediate action with an overwhelming concentration on the lee division.

That so grave an error should have been permitted to pass into the Signal Book is bad enough, but that such a signal even if it had been correctly worded should stand for Nelson's last word to the service is almost beyond belief. The final outcome of Nelson's genius for tactics lay of course in his memorandum, and not in the form of attack he actually adopted. Yet this remarkable signal ignores the whole principle of the memorandum. The fundamental ideas of concentration and containing by independent squadrons are wholly missed; and not only this. It distorts Nelson's lee attack into a weather attack, and holds up for imitation every vice of the reckless movement in spite of which Nelson had triumphed. Not a word is said of its dangers, not a word of the exceptional circumstances that alone could justify it, not a word of how easily the tables could be turned upon a man who a second time dared to fling to the winds every principle of his art. It is the last word of British sailing tactics, and surely nothing in their whole history, not even in the worst days of the old Fighting Instructions, so staggers us with its lack of tactical sense.[8]

FOOTNOTES:

[1] *I.e.* the Instructions of 1799, *supra*, p. 278. For Signal 27 see p. 255.

[2] 'To attack on bearing indicated.'

[3] In Ekin's text the punctuation of this sentence is obviously wrong and destroys the sense. It should accord, as I have ventured to amend it, with that of the previous paragraph.

[4] Signal 109, 'To close nearer the ship or ships indicated.'

[5] Sir Charles Elkin adds, 'In the same work he has also a signal (No. 785) under the head "Enemy" to "Lay on board," with the following observation:—

'"N.B.—This signal is not meant that your people should board the enemy unless you should find advantage by so doing; but it is that you should run your ship on board the enemy, so as to disable her from getting away."'

[6] Mathieu-Dumas, *Précis des Evénements Militaires: Pièces Justificatives*, vol. xiv. p. 408.

[7] Fernandez Duro, *Armada Española*, viii. 353.

[8] The anonymous veteran of the old French navy, cited by Mathieu-Dumas, explains exactly how Villeneuve might have turned the tables on Nelson by forming two lines himself. 'There is,' he concludes, 'no known precedent of a defensive formation in two lines; but I will venture to assert that if Admiral Villeneuve had doubled his line at the moment he saw Nelson meant to attack him in two lines, that admiral would never have had the imprudence of making such an attack.'—*Evénements Militaires*, xiv. 411.

THE INSTRUCTIONS OF 1816.

[+Signal Book, United Service Institution+.]

Instructions relating to the Line of Battle and the Conduct of the Fleet preparatory to their engaging and when engaged with an enemy.

I. The chief purposes for which a fleet is formed in line of battle are, that the ships may be able, to assist and support each other in action; that they may not be exposed to the fire of the enemy's ships greater in number than themselves, and that every ship may be able to fire on the enemy without risk of firing into the ships of her own fleet.

II. On whichever tack the fleet may be sailing, when the line of battle is formed, the van squadron is to form the van, the centre squadron the centre, and the rear squadron the rear of the line, unless some other arrangement be pointed out by signal. But if a change of wind, or tacking, or wearing, or any other circumstance, should alter the order in which the line of battle was formed, the squadrons are to remain in the stations in which they may so happen to be placed, till the admiral shall direct them to take others.

III. When the signal is made for the fleet to form the line of battle, each flag officer and captain is to get into his station as expeditiously as possible; and to keep in close order, if not otherwise directed, and under a proportion of sail suited to that carried by the admiral, or by the senior flag officer remaining in the line, when the admiral has signified his intention to quit it.

IV. In forming the line of battle, each ship should haul up a little to windward rather than to leeward of her second ahead, as a ship a little to leeward will find great difficulty in getting into her station, if it should be necessary to keep the line quite close to the wind; and it may also be better to form at a distance a little greater, rather than smaller, than the prescribed distance, as it is easier to close the line than to extend it.

V. If the admiral should haul out of the line, the ships astern of him are to close up to fill the vacancy he has made, and the line is to continue on its course, and to act in the same manner as if the admiral had not left it All signals made to the centre will be addressed to the senior officer remaining in it, who, during the absence of the admiral, is to be considered as the commander of the centre squadron.

VI. The repeating frigates are to be abreast of the commanders of the squadrons to which they belong, and the fireships and frigates to windward of their squadrons, if no particular station be assigned to them.

VII. When the signal to form a line of bearing for either tack is made, the ships (whatever course they may be directed to steer) are to place themselves in such a manner that, if they were to haul to the wind together on the tack for which the line of bearing is formed, they would immediately form a line of battle on that tack. To do this, every ship must bring the ship which would be her second ahead, if the line of battle were formed, to bear on that point of the compass on which the line of battle would sail, viz. on that point of the compass which is six points from the direction of the wind.

As the intention of a line of bearing is to keep the fleet ready to form suddenly a line of battle, the position of the division or squadron flags, shown with the signals for such a line, will refer to the forming the line of battle; that division or squadron whose flag is *uppermost* (without considering whether it do or do not form the van of the line of bearing) is to place itself in that station which would become the van if the fleet should haul to the wind, and form the line of battle; and the division whose flag is *undermost* is to place itself in that station in which it would become the rear if by hauling to the wind the line of battle should be formed.

VIII. When a line of bearing has been formed the ships are to preserve their relative bearing from each other, whenever they are directed to alter their course together; but if they are directed to alter their course in succession, as the line of bearing would by that circumstance be destroyed, it is to be no longer attended to.

IX. If after having made the signal to prepare to form the line of battle, or either line of bearing, the admiral, keeping the preparative flag flying, should make several signals in succession to point out the manner in which the line is to be formed, those signals are to be carefully written down, that they may be carried into execution, when the signal for the line is hoisted again. They are to be executed in the order in which they are made, excepting such as the admiral may annul previously to his again hoisting the signal for the line.

X. If the wind should come *forward* when the fleet is formed in line of battle, or is sailing by the wind on a line of bearing, the leading ship is to steer seven points from the wind, and every ship is to haul as close to the wind as possible till she has got into the wake of the leading ship, or till she shall have brought it on the proper point of bearing; but if the wind should come *aft*, the ships are to bear up until they get into the wake, or on the proper point of bearing from the leading ship.

XI. Ships which have been detached from the body of the fleet on any separate service are not to obey the signal for forming the line of battle unless they have been previously called back to the fleet by signal.

XII. Ships which cannot keep their stations are to quit the line, as directed in Article XIX. in the General Instructions, though in the presence of an enemy. The captains of such ships will not thereby be prevented from distinguishing themselves, as they will have the opportunities of rendering essential service by placing their ships advantageously when they get up with the enemy already engaged with the other part of the fleet.

XIII. If the ship of any flag officer be disabled in battle, the flag officer may repair on board, and hoist his flag in any other ship (not already carrying a flag) that he shall think proper, but he is to hoist it in one of his own squadron or division, if there be one near and fit for the purpose.

XIV. If the fleet should engage an enemy inferior to it in number, or which, by the flight of some of their ships, becomes inferior, the ships, which at either extremity of the line are thereby left without opponents, may, after the action is begun, quit the line, without waiting for a signal to do so; and they are to distress the enemy, or assist the ships of the fleet in the best manner that circumstances will allow.

XV. Great care is at all times to be taken not to fire at the enemy either over or very near to any ships of the fleet, nor, though the signal for battle should be flying, is any ship to fire till she is placed in a proper situation, and at a proper distance from the enemy.

XVI. No ship is to separate from the body of the fleet in time of action to pursue any small number of the enemy's ships which have been beaten out of the line, unless the commander-in-chief, or some other flag officer, be among them; but the ships which have disabled their opponents, or forced them to quit the line, are to assist any ship of the fleet appearing to be much pressed, and to continue their attack till the main body of the enemy be broken or disabled, unless by signal, or particular instruction, they should be directed to act otherwise.

XVII. If any ship should be so disabled as to be in great danger of being destroyed or taken by the enemy, and should make a signal expressive of such extremity, the ships nearest to her, and which are the least engaged with the enemy, are strictly enjoined to give her immediately all possible aid and protection; and any fireship, in a situation which admits of its being done, is to endeavour to burn the enemy's ship opposed to her; and any frigate that may be near is to use every possible exertion for her relief, either by towing her off, or by joining in the attack on the enemy, or by covering the fireship, or, if necessity requires it, by taking out the crew of the disabled ship, or by any other means which circumstances at the time will admit.

XVIII. Though a ship be disabled and hard pressed by the enemy in battle, she is not to quit her station in the line if it can possibly be avoided, till the captain shall have obtained permission so to do from the commander of the division or squadron to which he belongs, or from some other flag officer. But if he should be ordered out of the line, or should be obliged to quit it before assistance can be sent to him, the nearest ships are immediately to occupy the space become vacant to prevent the enemy from taking advantage of it.

XIX. If there should be a captain so lost to all sense of honour and the great duty he owes his country as not to exert himself to the utmost to get into action with the enemy, or to take or destroy them when engaged, the commander of the squadron or division to which he belongs, or the nearest flag officer, is to suspend him from the command, and is to appoint some other officer to command the ship till the admiral's pleasure shall be known.

APPENDIX

FURTHER PARTICULARS OF THE TRAFALGAR FIGHT

[+Sir Charles Ekin's Naval Battles, pp. 271 et seq. Extract+.]

The intelligent officer to whom the writer is indebted for this important manuscript was an eye-witness of what he has so ably related, and upon which he has reasoned with so much judgment.[1]

'The combined fleet, after veering from the starboard to the larboard tack, gradually fell into the form of an irregular crescent; in which they remained to the moment of attack. Many have considered that the French admiral intended this formation of the line of battle; but from the information I obtained

after the action, connected with some documents found on board the Bucentaur, I believe it was the intention to have formed a line ahead, consisting of twenty-one sail—the supposed force of the British fleet—and a squadron of observation composed of twelve sail of the line, under Admiral Gravina, intended to act according to circumstances after the British fleet were engaged. By wearing together, the enemy's line became inverted, and the light squadron which had been advanced in the van on the starboard tack, was left in the rear after wearing; and the ships were subsequently mingled with the rear of the main body. The wind being light, with a heavy swell, and the fleet lying with their main topsails to the mast, it was impossible for the ships to preserve their exact station in the line; consequently scarce any ship was immediately ahead or astern of her second. The fleet had then the appearance, generally, of having formed in two lines, thus: so that the ship to leeward seemed to be opposite the space left between two in the weather-line.

[Illustration]

'In the rear, the line was in some places trebled; and this particularly happened where the Colossus was, who, after passing the stern of the French Swiftsure, and luffing up under the lee of the Bahama, supposing herself to leeward of the enemy's line, unexpectedly ran alongside of the French Achille under cover of the smoke. The Colossus was then placed between the Achille and the Bahama, being on board of the latter; and was also exposed to the fire of the Swiftsure's after-guns. All these positions I believe to have been merely accidental; and to accident alone I attribute the concave circle of the fleet, or crescent line of battle. The wind shifted to the westward as the morning advanced; and of course the enemy's ships came up with the wind, forming a bow and quarter line. The ships were therefore obliged to edge away, to keep in the wake of their leaders; and this manoeuvre, from the lightness of the wind, the unmanageable state of the ships in a heavy swell, and, we may add, the inexperience of the enemy, not being performed with facility and celerity, undesignedly threw the combined fleets into a position, perhaps the best that could have been planned, had it been supported by the skilful manoeuvring of individual ships, and with efficient practice in gunnery.

'Of the advantages and disadvantages of the mode of attack adopted by the British fleet, it may be considered presumptuous to speak, as the event was so completely successful; but as the necessity of any particular experiment frequently depends upon contingent circumstances, not originally calculated upon, there can be no impropriety in questioning whether the same plan be likely to succeed under all circumstances, and on all occasions.

'The original plan of attack, directed by the comprehensive mind of our great commander, was suggested on a supposition that the enemy's fleet consisted of forty-six sail of the line and the British forty; and the attack, as designed from to-windward, was to be made under the following circumstances:

'Under a supposition that the hostile fleet would be in a line ahead of forty-six sail, the British fleet was to be brought within gun-shot of the enemy's centre, in two divisions of sixteen sail each, and a division of observation consisting of the remaining eight.

'The lee division was by signal to make a rapid attack under all possible sail on the twelve rear ships of the enemy. The ships were to break through the enemy's line; and such ships as were thrown out of their stations were to assist their friends that were hard pressed. The remainder of the enemy's fleet, of thirty-four sail, were to be left to the management of the commander-in-chief.'

This able officer then proceeds to describe, by a figure, the plan of attack as originally intended; bearing a very close resemblance to that already given in Plate XXVIII. fig. 1; but making the enemy's fleet, as arranged in a regular line ahead, to extend the distance of five miles; and the van, consisting of sixteen ships, left unoccupied; the whole comprising a fleet of forty-six sail of the line. He then observes:

'If the regulated plan of attack had been adhered to, the English fleet should have borne up together, and have sailed in a line abreast in their respective divisions until they arrived up with the enemy. Thus the plan which consideration had matured would have been executed, than which perhaps nothing could be better; the victory would have been more speedily decided, and the brunt of the action would have been more equally felt, &c.

'With the exception of the Britannia, Dreadnought, and Prince, the body of the fleet sailed very equally; and I have no doubt could have been brought into action simultaneously with their leaders. This being granted, there was no time gained by attacking in a line ahead, the only reason, I could suppose, that occasioned the change.

'The advantages of an attack made in two great divisions, with a squadron of observation, seem to combine every necessary precaution under all circumstances.

'The power of bringing an overwhelming force against a particular point of an enemy's fleet, so as to ensure the certain capture of the ships attacked, and the power of condensing such a force afterwards [so] as not only to protect the attacking ships from any offensive attempt that may be made by the unoccupied vessels of the hostile fleet, but also to secure the prizes already made, will most probably lead to a victory; and if followed up according to circumstances, may ultimately tend to the annihilation of the whole, or the greater part of the mutilated fleet.

'Each ship may use her superiority of sailing, without being so far removed from the inferior sailing ships as to lose their support.

'The swifter ships, passing rapidly through the enemy's fire, are less liable to be disabled; and, after closing with their opponents, divert their attention from the inferior sailers, who are advancing to complete what their leaders had begun. The weather division, from being more distant, remain spectators of the first attack for some little time, according to the rate of the sailing; and may direct their attack as they observe the failure or success of the first onset, either to support the lee division, if required, or to extend the success they may appear to have gained, &c.

'If the enemy bear up to elude the attack, the attacking fleet is well collected for the commencement of a chase, and for mutual support in pursuit.

'The mode of attack, adopted with such success in the Trafalgar action, appears to me to have succeeded from the enthusiasm inspired throughout the British fleet from their being commanded by their beloved Nelson; from the gallant conduct of the leaders of the two divisions; from the individual exertions of each ship after the attack commenced, and the superior practice of the guns in the English fleet.

'It was successful also from the consternation spread through the combined fleet on finding the British so much stronger than was expected; from the astonishing and rapid destruction which followed the attack of the leaders, witnessed by the whole of the hostile fleets, inspiring the one and dispiriting the other and from the loss of the admiral's ship early in the action.

'The disadvantages of this mode of attack appear to consist in bringing forward the attacking force in a manner so leisurely and alternately, that an enemy of equal spirit and equal ability in seamanship and gunnery would have annihilated the ships one after another in detail, carried slowly on as they were by a heavy swell and light airs.

'At the distance of one mile five ships, at half a cable's length apart, might direct their broadsides effectively against the head of the division for seven minutes, supposing the rate of sailing to have been four miles an hour; and within the distance of half a mile three ships would do the same for seven minutes more, before the attacking ship could fire a gun in her defence.

'It is to be observed that, although the hull of the headmost ship does certainly in a great measure cover the hulls of those astern, yet great injury is done to the masts and yards of the whole by the fire directed against the leader; and that, if these ships are foiled in their attempt to cut through the enemy's line, or to run on board of them, they are placed, for the most part, *hors de combat* for the rest of the action.

'Or should it fall calm, or the wind materially decrease about the moment of attack, the van ships must be sacrificed before the rear could possibly come to their assistance.

'In proceeding to the attack of October 21, the weather was exactly such as might have caused this dilemma, as the sternmost ships of the British were six or seven miles distant. By the mode of attacking in detail, and the manner in which the combined fleet was drawn up to receive it, instead of doubling on the enemy, the British were, on that day, themselves doubled and trebled on; and the advantage of applying an overwhelming force collectively, it would seem, was totally lost.

'The Victory, Téméraire, Sovereign, Belleisle, Mars, Colossus and Bellerophon were placed in such situations in the onset, that nothing but the most heroic gallantry and practical skill at their guns could have extricated them. If the enemy's vessels had closed up as they ought to have done, *from van to rear*, and had possessed a nearer equality in active courage, it is my opinion that even British skill and British gallantry could not have availed. The position of the combined fleet at one time was precisely that in which the British were desirous of being placed; namely, to have part of an opposing fleet doubled on, and separated from the main body.

'The French admiral, with his fleet, showed the greatest passive gallantry; and certainly the French Intrépide, with some others, evinced active courage equal to the British; but there was no nautical management, no skilful manoeuvring.

'It may appear presumptuous thus to have questioned the propriety of the Trafalgar attack; but it is only just, to point out the advantages and disadvantages of every means that may be used for the attainment of great results, that the probabilities and existing circumstances may be well weighed before such means are applied. A plan, to be entirely correct, must be suited to all cases. If its infallibility is not thus established, there can be no impropriety in pointing out the errors and dangers to which it is exposed, for the benefit of others.

'Our heroic and lamented chief knew his means, and the power he had to deal with; he also knew the means he adopted were sufficient for the occasion; and that sufficed.

'The Trafalgar attack might be followed under different circumstances, and have a different result: it is right, therefore, to discuss its merits and demerits. It cannot take one atom from the fame of the departed hero, whose life was one continued scene of original ability, and of superior action.'

FOOTNOTE:

[1] The concluding part of the MS. is devoted to a detailed account of the part played in the action by the Conqueror and her two seconds, Neptune and Leviathan, with the special purpose of showing that Villeneuve really struck to the Conqueror. In a note the author says, 'I have been thus particular, as the capture of the French admiral has been unblushingly attributed to others without any mention being made of the ship that actually was the principal in engaging her, wishing to do justice to a gallant officer who on that day considered his task not complete until every ship was either captured or beyond distance of pursuit.' The inference is that the author was an officer of the Conqueror, defending his captain, Israel Pellew, younger brother of the more famous Edward, Lord Exmouth. It is possible therefore, and even probable, that this criticism of Trafalgar represents the ideas of the Pellews.

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Vol. XXVIII. *The Correspondence of Admiral John Markkam*, 1801-7. Edited by Sir Clements R. Markham. (12_s._ 6_d._)

In 1905: Vol. XXIX. *Fighting Instructions*, 1530-1816. Edited by Mr. Julian Corbett.

To follow:

Vol. XXX. *Papers relating to the First Dutch War*, 1652-54 (Vol. III.). Edited by Mr. C.T. Atkinson.

Other works in preparation, in addition to further volumes of Mr. Tanner's *Descriptive Catalogue*, of *Sir William Monson's Tracts*, of *The First Dutch War*, which will be edited by Mr. C.T. Atkinson, and of *The Naval Miscellany*, are *The Journal of Captain* (afterwards Sir John) *Narbrough*, 1672-73, to be edited by Professor J.K. Laughton; *Official Documents illustrating the Social Life and Internal Discipline of the Navy in the XVIIIth Century*, to be edited by Professor J.K. Laughton; *Select Correspondence of the great Earl of Chatham and his Sons*, to be edited by Professor J.K. Laughton; *Select Correspondence of Sir Charles Middleton, afterwards Lord Barham*, 1778-1806, to be edited by

Professor J.K. Laughton; *Reminiscences of Commander James Anthony Gardner*, 1775-1806, to be edited by Sir R. Vesey Hamilton; and a *Collection of Naval Songs and Ballads*, to be edited by Professor C.H. Firth and Mr. Henry Newbolt.

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May 1905.

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NAVY RECORDS SOCIETY

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REPORT OF THE COUNCIL

* * * * *

Read at the Thirteenth Annual General Meeting, Thursday, June 28, 1906.

* * * * *

THE COUNCIL have to report that the number of members and subscribers on the Society's list is 536; a net increase of 28 over last year. This is largely due to the additional support received from the Admiralty, which has increased the number of its subscriptions to fourteen, as well as to the accession of other departments of the public service and of public institutions, including

The War Course College, Devonport;

The War Course College, Portsmouth;

The Staff College, Camberley;

The University of Liverpool;

The Public Libraries, Cardiff;

The Public Libraries, Croydon;

and, in his private capacity, the Secretary of State for War. The Society of Swedish Naval Officers, Stockholm, has also been admitted as a subscriber.

On the other hand, death has removed nine of our members, and among them two who have, from the beginning, been most active in furthering the ends and promoting the interests of the Society. These are:—

Captain MONTAGU BURROWS, R.N., Chichele Professor of History in the University of Oxford, and known to all of us as the author of the *Life of Hawke*; and

Rear-Admiral Sir WILLIAM WHARTON, K.C.B., Hydrographer to the Admiralty.

The names of the others are:—

Sir W. LAIRD CLOWES;
Earl COWPER;
Lord CURRIE, G.C.B.;
Commander W.M. LATHAM, R.N.;
Mr. C.A. NANKIVELL;
Mr. G.R. STEVENS;
Commander W.H. WATSON, R.N.R.

While congratulating the Society on the improving appearance of the list, the Council would again urge on every member the necessity of his individual co-operation in the endeavour to make the work of the Society more generally and widely known. To this end they also invite the assistance of the Press. It is only by such increased publicity that the numbers, the funds, and therefore the work and usefulness, of the Society can be maintained.

Since the date of the last General Meeting the Society has issued:

For 1905. Vol. XXX. *The First Dutch War* (Vol. III.). Edited by the late Dr. S.R. GARDINER and Mr.

C.T. ATKINSON.

For this year it is proposed to issue *The Reminiscences of Commander James Anthony Gardner*, 1775-1806, edited by Sir R. VESEY HAMILTON; and *Select Correspondence of Sir Charles Middleton, afterwards Lord Barham*, edited by Professor J.K. LAUGHTON.

These are now well advanced, and will, it is hoped, be issued in the course of the autumn.

Of the several works in preparation—a list of which will be found in the Advertisement at the end of Vol. XXX—it is unnecessary to speak here.

The Society will, however, be interested to learn that copies have been found of the Fighting Instructions of Hawke and Rodney. These were described at some length by Mr. Julian S. Corbett in the *Times* of December 19, and, by the kind permission of the owner, Mr. Pritchard, will be edited for the Society by Mr. Corbett, and issued—probably next year—either as a separate volume or included in a volume of the Miscellany.

The Balance Sheet is appended.

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