

# THE BLUEBACK

by

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(Extract from "De Zee" N<sup>o</sup> 9, Amsterdam, September 1930, p. 553).

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A pamphlet entitled *Het uitgeven van kaarten gedurende drie eeuwen* (*The publication of charts during three centuries*), 1670-1930, drew my attention, though not for the first time, to the publications of the firm of IMRAY, LAURIE, NORIE & WILSON, Ltd., in London, which is, so far as I know, the last survivor of those justly celebrated publishing houses for private charts, of an epoch which is now nearly past (1). This pamphlet, published by the above mentioned firm, after having been translated from the English by J. VAN DE WAAL, collaborator of the firm of E. R. SECKEL & C<sup>o</sup> of Rotterdam, aroused in me a desire to study the blueback, to determine the reason why it is still so much in favour with a certain type of navigator and finally, to decide for myself whether or not this popularity is justified.

In the pamphlet in question the aim of the firm of IMRAY, LAURIE, NORIE & WILSON in these publications is not definitely stated. This cannot be: the general supply of navigational needs from the point of view of hydrography. For, on page 6 it is stated:— "*In one word: Blueback for general navigation; Admiralty charts for special purposes*" (2). Based on the study which I made of these charts and the catalogue in which they are listed, I believe I may state that the aim is as follows:— *To furnish, in the most simple and concise manner possible, the data concerning the realm of cartography, and this limited to those which are strictly necessary in normal cases for the routes most frequented by merchant vessels.*

Before discussing the manner in which this aim has been reached, it is necessary to consider the definition itself. If we set aside the restriction "to the most frequented routes" and the vague contents of the expression "strictly necessary", it is attractive, and I believe I may state without danger of contradiction that the greater part of the popularity of the bluebacks with certain navigators is due to the partial accomplishment of this purpose. Simplicity and conciseness are most certainly of importance and it is comprehensible that a tendency towards the realisation of these aims should be attrac-

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(1) Read among others:— *Bijdrage tot eene geschiedenis van het geslacht van Keulen als Boekhandelaars, uitgevers, kaart-en instrumentmakers in Nederland* (*Contribution to a history of the family of van Keulen as librarians, editors, cartographers and instrument-makers in Holland*), by G. D. BOM HGz, Amsterdam, 1885.

(2) As one may deduce from the text of the work, the words "Admiralty Charts" used by the author do not refer exclusively to charts published by the British Admiralty but, in a general sense, to the official charts of the Hydrographic Office of any State.

tive. Thus, a few years ago the technical service of a large shipping company wrote me that, for a voyage from Kiel to Lulea, they provided five bluebacks as against nineteen British Admiralty charts. Even if we disregard the fact that the nineteen Admiralty charts contain more details than the five bluebacks (which in special circumstances may be an advantage and even render them indispensable), this relation between the numbers does not give the exact proportion of the cartographic material represented, since a blueback very often reproduces more surface area than three Admiralty charts and often costs more than three times as much. Bluebacks which are 2 metres long in the E-W sense and more than 1 metre wide, are no exception. If there is sufficient space available in the chart-room so that charts of these excessive dimensions are not troublesome, there is no doubt that it is a convenience to have to handle only a limited number of charts. It should be remembered, however, that in exceptional cases there is an insufficiency of cartographic material! IMRAY, etc., themselves advise (page 6 of the pamphlet) as follows:- "The wise navigator will make use of a suitable combination of the two kinds" (Admiralty charts and bluebacks).

The stipulation "general navigation" is vague in the same manner as the limitation to what is "strictly necessary for merchant vessels in normal cases" which is found in *my* definition and in which the English firm would probably not concur. It is certain, however, that a supply of bluebacks alone should be considered insufficient and it would be difficult to assemble a supply composed of the two kinds which would give entire satisfaction, precisely on account of the vague notion of "general navigation" and the impossibility of foreseeing the abnormal situations in which the vessel might find herself.

How does the firm hope to attain the general aim it has in view? The reply to this question is found on page 5 of the pamphlet where it is stated:-

"The charts of the British Admiralty and of other Admiralties give the waters of a certain region subdivided in a series of charts. The blueback presents these on one, two or three sheets, which are also published separately but which are, mostly, so adjusted as to give an extended view of the coast and the navigable channels on one single sheet on a large or medium scale. By this method the use of a large number of small charts is avoided and the laying off of courses is rendered much easier."

To summarise:- by the publication of large charts on a medium scale, a large expanse is shown on each chart, which thus eliminates confusion in the charts and scales and also facilitates the direct laying off of courses.

In practice the execution of this principle makes it necessary to chart great lengths of coasts on the same scale, sufficient to permit navigation over the whole surface, even close to the shore and under all circumstances, except in unusually bad ones. In this case the charts, taken individually, must be given such limits that they may be joined together. Further, when the charts are provided with plans of complicated navigable waters and ports of which it is highly likely that the users may have need, as is done by the firm of IMRAY, etc., and when, finally, on the separate detailed charts the navigable but difficult waters and the ports and roadsteads which are little frequented are represented, we obtain an enticing ideal which every office should keep before it.

In the effort to realise this aim, however, we find it is difficult in every case rigidly to hold to this definition: *without reducing the scale*.

Because, in order to join them together the N-S and E-W limits must be the same and this, in general, cannot be accomplished except by neglecting the dimensions of the charts or else by choosing a relatively small scale.

While this may be feasible for coasts which lie in a N-S or an E-W direction, it is more difficult to accomplish for coasts which run in the principal intermediate directions. This shows clearly the defects in the quality of the bluebacks:— very large dimensions and, in spite of that, a scale too small for the purpose intended. From this fact we may qualify the blueback as: too large for a napkin and too small for a table-cloth, that is, larger than necessary for plotting positions and the course when clearly out of sight of land and dangers (a circumstance which is not inconvenient if the dimensions of the chart are not troublesome) but, mostly, too small for navigation in the vicinity of a dangerous coast (a fact which is certainly a great inconvenience).

There are also other obstacles which stand in the way of the attainment of the object laid down. In the first place, the divergent exigencies of the different branches of navigation, which make themselves particularly felt in the matter of the scale; further the variable importance of navigable waters and ports, and finally the cost of cartographic documents, so that one does not willingly replace old charts drawn up in accordance with out-of-date conceptions, especially if there are no new data to be recorded (1).

Further, the official services do not lose sight of this guiding principle, which is exemplified, among others, by the British Admiralty charts marked with the same number with the addition of consecutive letters, as, for instance, N<sup>o</sup> 1824*a* — East Coast of Ireland with Irish Sea; and 1824*b* — West Coast of Ireland; the same is true for three charts of the English Channel, 2675 *a*, *b* and *c*.

The Afdeeling Hydrographie (Netherlands Hydrographic Office) has found that, for its *own* charts, limits which make it possible to join up adjacent charts of the same scale are not practicable. By this method one is obliged to make the scale smaller than that which is desirable to satisfy other conditions, or else the charts (which are already quite large in themselves) become inconvenient to handle. As an example we may cite the case of the two coastal charts of Ceram on the scale of 1:200,000 now in process of preparation. Although the island of Ceram has not an unfavourable orientation, lying about WNW-ESE, one would have to make the charts wider than necessary — for the purpose of joining them together — and the combination of the two would have the dimensions of  $95 \times 230 \frac{c}{m}$  ( $37 \frac{1}{2} \times 90 \frac{1}{2}$  ins.).

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(1) The author invites attention in this connection to a consideration which he brought out in the July, 1930, issue of the periodical "De Zee" (page 413) relative to an article in the same periodical entitled "Oorspronkelijke, Admiralty, en niet-oorspronkelijke kaarten" (*Original charts, Admiralty charts and non-original charts*). In this discussion the question involved (the replacement of old charts drawn up according to out-of-date conceptions) is analysed in detail with reference to the British Admiralty charts of the West Coast of South America.

However, we have inserted on the charts as many of the important plans as possible, the two coastal charts in question comprising 10 and 13 plans respectively.

The firm of IMRAY, LAURIE, NORIE & WILSON is a commercial enterprise and therefore cannot, after all, afford to publish their charts at a loss. Even though the expenses of surveying vessels etc., do not have to be taken into account in fixing the selling price of their charts and though the printing and the correction are done in a very simple manner (one might almost say too simply), the firm expects to obtain a profit by not publishing more than a reasonable number of charts for the most frequented routes and by reducing the number in proportion as the traffic falls off. Thus it has published numerous charts of Great Britain, Ireland, the North Sea, the Baltic and the Mediterranean as well as the East coast of North America; for the other parts of the world the number is somewhat smaller and for certain parts it is very small indeed. For example, for the Dutch East Indies, the firm published:-

N<sup>o</sup> 301. *Straits of Malacca and Singapore*, scale of about 1:656,000, with 5 plans;

N<sup>o</sup> 296. *South China Sea, Singapore to Karimata Strait and Natuna Islands*, scale about 1:878,000;

N<sup>o</sup> 295. *Java Sea, Western pari*, scale about 1:510,000 (extending as far as Cape Mandalika),

and nothing else, except the general charts 267*b* and 270 on a scale of about 1:39,000,000.

It is for this reason that I have spoken of the "most frequented routes", because it is clearly evident from the above that, for the less frequented routes, the blueback is certainly insufficient for general navigation.

We may say then, speaking generally, that the fundamental principle of the bluebacks rests upon an enticing basis, but that the practical execution of this project is less satisfactory in so far as concerns the scale and the number of charts necessary for the various routes. I might add, however, that the catalogue is very clear and consequently easy to consult, a condition brought about by the small number of charts. This number is about 206, divided into approximately 388 partial charts which may be obtained separately.

In this case it is naturally easier to give a clear division than for some 4,000 charts of the British Admiralty.

Let us turn now to the preparation of the charts themselves. Under the circumstances it was not possible to study more than a few examples, and of these we made a careful examination of those parts which reproduced Dutch regions. Page 5 in the pamphlet leads us to the conclusion that the observations (surveys) of the different countries are the *direct* sources for the bluebacks. Based on my studies I am inclined to doubt this and to affirm that — with possibly some exceptions — the British Admiralty charts are the direct source for the bluebacks, even for the non-British coasts and navigable waters. As a consequence we have copies of copies, and it is hardly necessary to demonstrate the fact that these charts are inferior not only to the original charts but even to the intermediate form:- the charts of the British Admiralty.

The results of this examination, although incomplete, tend to show that the firm does not possess trained engravers and cartographers who are capable of preparing and keeping the charts up to date in accordance with well understood rules and that, owing to this fact, the drawing is crude and the corrections parsimonious and few. In this connection compare the blueback N<sup>o</sup> 296, *South China Sea, Singapore to Karimata Strait and Natuna Islands*, scale 1:878,000, above mentioned with the Dutch Chart N<sup>o</sup> 38, *South Part of the China Sea*, scale 1:1,000,000.

The latter, in spite of its smaller scale, is infinitely more clear and, where necessary, even gives directions for navigating in coastal waters — which, at least, permits one to select the navigable waters, even though thereafter one must follow them principally by sight. This cannot be done with the blueback because, in the first place, it too often violates the first rule to be observed by the cartographer, namely, not to give too many details on small scale charts, for this has but the effect of reducing their clearness (1). And on the blueback there are a large number of details which are erroneous or which are not in their proper place! A note states that Natoena Islands are imperfectly known although these islands were systematically surveyed in 1907. It should have been stated that the N. and S. Natoena's have been imperfectly charted because the firm has neglected to make use of the most recent information (the Dutch charts).

The rough and parsimonious manner of making corrections is especially evident on a chart on which there are many, such as the blueback N<sup>o</sup> 71, *Southern Part of the North Sea from Dungeness to Flamborough Head — Calais to Hamburg*, scale about 1:400,000, which in certain areas is unreadable and one might say that the effort to "scamp" each correction with a minimum of expense and trouble can be felt. For the rest, the general criticism which appears above can be applied in its entirety to this chart. The plans of the Texel, Hoek van Holland and Vlissingen which are on this chart also show several errors.

Therefore, although the principle and division of the bluebacks are based on acceptable conceptions, the manner in which they are carried out is absolutely inadequate. To this can be added two matters of secondary importance. The first is that the Sailing Directions and the other hydrographic publications should be in accord as far as possible with the charts which are used. The Dutch Sailing Directions, for example, are always carefully compared with the charts which are mentioned in them. The firm of IRMAY, etc., mention, however, in their catalogue only the Sailing Directions published by the British Admiralty. There is no doubt, also for this same reason, that along with the charts giving special plans (page 6 of the pamphlet), it is advantageous to take the British Admiralty charts in preference, even for

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(1) This rule makes the drawing of clear and concise small scale charts a veritable art. With respect to the reduction in the number of details with a reduction in the scale, see pages 6 and 7 of "*Algemeene Toelichting op de samenstelling en het gebruik van de Nederlandsche zee kaarten, zeemansgidsen, enz.*" (*General instructions for the preparation and use of the Dutch charts, Sailing Directions, etc.*) — published by the Netherlands Hydrographic Office.

general navigation. Something similar obtains in connection with the Notices to Mariners. In Dutch Notices to Mariners, national charts are quoted for areas where they exist, for the rest of the world the British Admiralty Charts and also, for some countries, the original official charts. The British Notices to Mariners mention only the British Admiralty charts concerned.

Of course it is evidently possible to correct the bluebacks from one of these Notices; but this method has its drawbacks. The latitudes and longitudes may differ, as well as the bearings, directions and distances. The firm of IMRAY, etc., is well aware of this and publishes its own Notices. According to a count about 80 % of these Notices are taken from British sources and about three-quarters from the Notices of the British Admiralty; there remain about 20 % taken from foreign sources, and these are practically all American. These IMRAY Notices are therefore mostly copies of copies, with the unavoidable consequence of considerable delay, the more so since the Notices to Mariners of the British Admiralty do not always follow the fundamental rule:—notify the navigator first, but in many cases are held up until all the corrections to be made on the chart are known. For example, in January 1927 the firm of IMRAY, etc., published a notice regarding a reef off the W. coast of Saleier — information which was taken from the British Notices to Mariners of 29th December 1926, which had been copied from the Notices to Mariners of the Hague of 27th November which, again, was taken from the Batavia Notices to Mariners of 22nd October 1926. On 19th January 1927 the lighting of the Stortemelk (passage from Zeegat to Terschelling) was modified and a new leading line was put into service. Notification of this change was given in the Notices to Mariners of the Hague 299/3474 on 23rd December 1926, and as early as November the intention to make the change had been published. The information was published in the British Notices to Mariners of 17th February and in that of IMRAY certainly not before March.

To summarise: the blueback is a relic of the past which (in view of the fact that official hydrographic offices exist everywhere and are working well) not only has no reason to exist but does not give the mariner anything which he could not procure better elsewhere. We admit that this “better” is still susceptible of improvement and that it would be advantageous — possibly by special publications — to serve the interests of commercial navigation more satisfactorily.

With respect to the defects of the bluebacks enumerated here, we can only state one advantage, which is, that *sometimes* they offer a more practical division by giving a better general idea of the existing navigational routes than certain of the official charts but, for the mariner, this advantage cannot be of sufficient importance to compensate for the inferior quality of the bluebacks.

