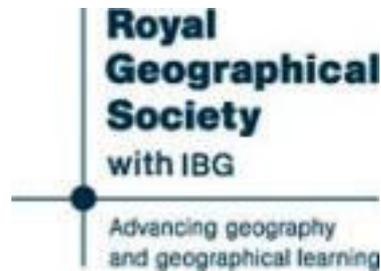


# WILEY



---

Report of the Arctic Committee of the Admiralty

Author(s): Geo. Henry Richards, F. L. McClintock, Sherard Osborn and Wm. Blakeney

Source: *Proceedings of the Royal Geographical Society of London*, Vol. 19, No. 5 (1874 - 1875), pp. 349-356

Published by: [Wiley](#) on behalf of [The Royal Geographical Society \(with the Institute of British Geographers\)](#)

Stable URL: <http://www.jstor.org/stable/1799983>

Accessed: 11/06/2014 05:13

---

Your use of the JSTOR archive indicates your acceptance of the Terms & Conditions of Use, available at <http://www.jstor.org/page/info/about/policies/terms.jsp>

JSTOR is a not-for-profit service that helps scholars, researchers, and students discover, use, and build upon a wide range of content in a trusted digital archive. We use information technology and tools to increase productivity and facilitate new forms of scholarship. For more information about JSTOR, please contact support@jstor.org.



Wiley and *The Royal Geographical Society (with the Institute of British Geographers)* are collaborating with JSTOR to digitize, preserve and extend access to *Proceedings of the Royal Geographical Society of London*.

<http://www.jstor.org>

## ADDITIONAL NOTICE.

(Printed by order of Council.)

THE following Report gives the results of the deliberations of the Arctic Committee which was appointed by the Admiralty to organize the Arctic Expedition of 1875. It is here published in continuation of the record of events leading up to the dispatch of the Expedition which has been given from time to time in our 'Proceedings.'\*

### REPORT OF THE ARCTIC COMMITTEE OF THE ADMIRALTY.

ADMIRALTY, Whitehall, 4th February, 1875.

IN pursuance of the instructions of the Lords Commissioners of the Admiralty, conveyed to us in their Secretary's letter dated 24th November, 1874,† the Committee have held nineteen meetings between the 1st December,

\* *Vide* 'Proceedings,' vol. xix. p. 39; vol. xviii. p. 553, &c.

† SIR,

ADMIRALTY, 24th November, 1874.

My Lords Commissioners of the Admiralty consider it necessary to appoint a committee of experienced officers who have served in the Polar Regions, to aid them in the consideration of the following points, in connection with the proposed expedition to the North Pole:—

- I. The scope of the proposed Expedition.
  - II. The orders which should be given for organizing and carrying it into effect.
  - III. The description of the ships to be employed.
  - IV. The most suitable place for winter quarters.
  - V. The various kinds of stores, provisions and clothing which will be required.
  - VI. The preparation of boats, sledges, fittings, &c.
  - VII. Whether dogs should be employed.
  - VIII. The selection of Ice Masters, Quartermasters, &c.
  - IX. The sanitary arrangements best calculated to preserve the health of officers and men of the Expedition.
  - X. A general consideration of all details in regard to the Expedition itself.
2. My Lords being desirous of availing themselves of your Arctic experience, have directed me to request that you will serve on the proposed Committee, in conjunction with the under-mentioned officers, viz. :—
- Rear-Admiral Sir L. McClintock.  
Rear-Admiral Sherard Osborn, C.B.
3. The Hydrographer of the Navy will be placed in communication with the Committee, and will be directed to afford all information in his power in regard to hydrographical questions, and the provision of the necessary scientific instruments.
4. The Controller of the Navy, the Director-General of the Medical Department, and other heads of Departments, will be also directed to afford the

1874, and the 4th of February, 1875, and have the honour to report as follows on the several points submitted for their consideration :—

I. The scope of the proposed Expedition.

II. The orders which should be given for organizing and carrying it into effect.

III. The description of the ships to be employed.

IV. The most suitable place for winter quarters.

The foregoing points I., II., III., IV., are so intimately connected that the Committee propose to deal with them collectively, and without adhering to the order in which they occur.

#### *Description of Ships.*

1. The ships to be employed for the main Expedition should be two screw steam vessels, strengthened and fitted for Arctic service, and capable of carrying coal for fuel, provisions, stores, &c., for at least three years, for a complement of about sixty to each ship, and as much coal for steaming purposes as circumstances will admit of, without being too deeply immersed. The two vessels selected by the Admiralty on the recommendation of the Committee, viz., H.M.S. *Alert*, and the sealing ship *Bloodhound*, appear to be in all respects suitable for the service.

2. It appears desirable, as a measure of precaution, that 50 or 60 tons of coal should be sent to Disco, for the use of the Expedition, either in one of the whaling vessels which start earlier than the Polar ships, or in a hired transport.

3. Should the Expedition not have returned to England by November, 1876, a third ship should be prepared and strengthened, to leave England in the spring of 1877, to be placed as a depôt and relief ship at some position to be decided upon near the entrance of Smith Sound, probably inside Lyttelton Island; her special duties, and the instructions to be given her Commander, will be referred to hereafter.

#### *Scope of the Expedition.*

4. The scope and primary object of the Expedition should be to attain the highest northern latitude, and, if possible, to reach the North Pole; and from winter quarters to explore the adjacent coasts within the reach of travelling parties. The limits of ship navigation should be confined within about the meridians of 20° and 90° of west longitude.

#### *The Route.*

5. The route by Smith Sound appears by far the preferable one to adopt, for the following reasons:—

a. Its southern entrance, in the latitude of 78°, has been found free from

---

Committee all the information and assistance in their power, with reference to the subjects relating to their respective departments.

5. My Lords are desirous that the Committee should commence their consultations at once, and propose that they should assemble at this office on Tuesday next, the 1st December, at 11 A.M.

I am, Sir, your obedient Servant,

(Signed) ROBERT HALL.

*Rear-Admiral G. H. Richards, C.B.*

Similar letters to the foregoing were also addressed to Rear-Admiral Sir I. McClintock, Kt., and Rear-Admiral Sherard Osborn, C.B.

ice by the several vessels which have visited it since 1852; of late years the sound has been penetrated for a considerable distance by American exploring expeditions, notably by Hall, who reached and wintered beyond the 81st parallel without much difficulty, and the vessels comprising these expeditions were far inferior in power and equipment to those which will compose the present.

*b.* Smith Sound is known to have a continuous coast-line on either side up to the parallel of about 82°, the highest point yet reached, with comparatively well determined points, where records of the progress of the expedition could be deposited and depôts of provisions placed, if necessary. There are likewise the Danish settlements on the west side of Greenland to fall back upon by boats should the Expedition be hard pushed, and the steam whalers frequent a high altitude in Baffin's Bay every summer.

*c.* This route, moreover, offers the best—indeed the only—promise of a continuous coast-line stretching far northwards, and upon this fact the prospect of reaching the Pole by travelling parties mainly depends. It is the only route, so far as our knowledge extends, where the operations of an expedition can be confined within such limits that succour would be reasonably certain of reaching it.

*d.* Finally, animal life has been found to exist to a considerable extent in the highest latitude yet reached up Smith Sound,—an advantage which cannot be over-estimated as regards the health and comfort of the crews; and, as a matter of fact, Esquimaux are found up to the entrance of Smith Sound, who appear to have a knowledge of regions to the northward; and it is possible that some of their race may be found to exist in a higher latitude than has yet been attained.

*Orders to be given.*

6. It appears, from experience hitherto gained, that the final departure of the Expedition from England may be deferred until the middle of June, though an earlier date, if the equipment of the ships can be hastened, may be desirable in the interests of scientific research.

The ships should proceed to Disco, in Greenland, where they would touch, as well as at the settlements of Proven and Upernivik for dogs, Esquimaux drivers, &c., and then pass up to Smith Sound in the prosecution of the enterprise.

7. Both shores in the vicinity of Capes Isabella and Alexander should be examined, in order to select a suitable position for the depôt or relief ship to be despatched in 1877; but as such a position cannot be absolutely determined on beforehand, and it is necessary to decide where information will be found by any ship which may be subsequently sent out from England, Lyttelton Island, in our opinion, meets all the requirements of a fixed point for rendezvous. Here a conspicuous cairn should be erected; one record placed in the cairn, another laid beside it, and a third buried 20 feet due north of it. These records should contain proceedings of the voyage and such information as may be necessary for the commander of the ship to be despatched in 1877.

8. The ships should then proceed up Smith Sound with all speed, so long as its navigation is not seriously obstructed by ice, carefully scrutinizing its shores for places of security for the ships, and stopping only to erect cairns on such conspicuous points as may be conveniently landed on. Similar information should be placed at these cairns, and after the same method as described for the cairn on Lyttelton Island. The commander will not fail to bear in mind, that these records of his progress and of any change of plans he may have found necessary to make, form an important feature in his instructions.

It is desirable that these cairns should not be more than 60 miles apart. By way of illustration, we would name Capes Frazer, Back, and Beechey on the western shore, and Capes Jackson and Bryan on the eastern shore; to these prominent headlands the attention of any searching party would naturally be directed. A small depôt of provisions and a boat might also be advantageously left at one or more of these points, to serve either for exploring parties or to aid in the event of an abandonment of the ships.

9. The general design of the voyage should be, that while both ships would share as far as possible in the objects of discovery and exploration, one must be so placed that she would not only serve for the crew of the other to fall back upon, but also, that the united crews could, without doubt, escape from her to the relief ship at the entrance of Smith Sound, by means of their sledges and boats over the ice.

Consequently, the second ship must not be carried northward of the 82nd parallel; such a position would secure this most important object, and also afford every prospect of exploration into very high latitudes.

10. The eastern or the western shore may be selected for her winter quarters according to circumstances; the advantages of the former are, that animal life has been found to exist there throughout the winter, and that the ship would be favourably placed for exploring the northern coast of Greenland or adjacent land in the spring of 1876; on the other hand, if continuous land on the western shore is found, it may, in the judgment of the officer in command, afford a counterbalancing advantage, in the greater facility and security of communication between the ships, and their co-operation in subsequent operations; this point must, therefore, be left to him to decide: if he should select the western shore, then he would be careful to leave a record on the eastern side of the probable position of the second ship; and in the absence of any conspicuous cairn, a ship or party visiting the bay wintered in by the *Polaris*, in about  $81^{\circ}35'$  north, would naturally seek the position of Hall's grave, where, and at 20 feet due north of it, records would be expected to be found.

11. The commander of the second ship, wherever placed, would follow such instructions as he received on parting company, or subsequently, from the officer commanding the Expedition.

12. It should be a matter for consideration, whether, before parting, the leader would leave a depôt of some six months' provisions with the second ship, in the event of his own crew having to retreat, but time and circumstances must govern his decision on this point.

13. Having assured himself of the safety of his second ship, and increased his own crew by such portion of hers as he may deem necessary to enable him to accomplish a sledging attempt to reach the Pole, this being the main feature of his voyage, and also the exploration of his share of the coast-lines extending northwards, the leader of the expedition should then push on northward, and explore by ship, as much of the unknown area as the season and the state of the ice would permit. But it is not contemplated that the two ships should winter at a greater distance apart than about 200 miles; and the officer in command, if he advance with his ship beyond that point in 1875, should use his best endeavours to return within the 200 miles distance, or the case may arise in which it may be even wise to rejoin his consort, and unite their forces for exploration in the spring and summer of 1876.

14. Should the advance ship, after leaving her consort, carry continuous, or nearly continuous land up to a high northern latitude, the officer in command should avail himself of opportunities to land small depôts of provisions at intervals, with cairns and records as already described; and also to deposit at the most northern station a depôt of provisions and a boat, for his spring travelling parties.

15. In the absence of continuous land, it must not be lost sight of that sledge travelling has never yet been found practicable over any considerable extent of unenclosed frozen sea, although conditions may be found to exist which would enable parties to travel for limited distances by sledge and boat operations combined, and for this purpose the best boats and sledges that can be devised have been supplied. The leader having increased his own crew by such portions of the crew of the second ship as he may deem necessary, it is expected that he will have at least six strong sledge parties and four dog sledges.

In early spring his sledge exploration will commence, and all these parties should be employed in the first instance to push out the North Pole party (which should be provided with at least one boat), and upon return from this work, some weeks later, the parties for the exploration of the coast-lines should be sent out.

16. It must be left to the officer in command to furnish ample instructions to his second, especially in regard to the explorations to be undertaken by him during the spring and summer of 1876, should the ships winter apart; and in this event, the first consideration should be, in the autumn of 1875 or early spring of 1876, to ascertain their respective positions; this, unless under very unfavourable conditions, would be probably accomplished by dog parties, without interfering much with the objects of exploration.

In connection with this subject the leader should bear in mind the necessity of giving such instructions as would govern his proceedings in the event of this proving to be a final separation.

17. It will be impossible to give any positive or detailed instructions for the guidance of the officer in command of the Expedition after quitting his consort, further than that he should use his best endeavours to rejoin her in the navigable season of 1876, and in company with her return to England, provided his spring exploration has been reasonably successful. But in the event of another season being absolutely required to complete a reasonable amount of exploration, still it will be a matter for his careful consideration, whether it would not be advisable that the advanced ship should fall back towards her consort from any advanced position she may have wintered at; and should it still remain doubtful whether a final retreat could be effected, the second ship might not be moved southward to such a position as would secure it.

18. In 1877 the leader should be at full liberty to abandon his ship as early as convenient, if, in his opinion, the explorations of the preceding year had been final, or, if from his experience of the navigable seasons of 1875-76 that her escape in 1877 would be doubtful; and he should so time this abandonment as to reach the relief ship at the entrance of Smith Sound not later than the first week in September, 1877.

In the event of his remaining out in the hope of extricating his own, or it may be both ships, during the summer of 1877, he should consider the propriety of reducing his own or both crews to a minimum, sending away all that can be spared to the relief ship at Lyttelton Island.

In this case one or both ships would remain out for the winter of 1877, if unable to extricate themselves in the summer of that year, a contingency which is hardly possible.

It is not desirable, under any circumstances, that a single ship should be left to winter in the Arctic regions. If one ship remains up Smith Sound, a second ship should remain at the rendezvous at its entrance.

19. It does not appear that any more definite instructions, than are embraced in the foregoing remarks, can be furnished to an officer already familiar with Arctic service, although there are many important points and details to which it might be desirable hereafter to direct his attention. With the ample means at his command, he may vary the detail according to circumstances,

but the main points laid down by the Admiralty for his guidance can always be kept in view, and all other objects should be subordinate to them.

20. He will be aware that in the summer of 1877, a relief or *de jôt* ship will be despatched to Smith Sound, and that she will take up, if possible, a position to be agreed upon with him before his departure from England, subordinate to any suggestions which may be deposited in the cairn at Lyttelton Island. The instructions to this ship, so far as they need be decided on at present, should be to be found at the rendezvous agreed upon not later than the last week in August 1877. She should be equipped and fitted for wintering in the Polar Seas, and, in the event of there being no tidings of the expedition nor instructions to the contrary, in the records to be found at the rendezvous, she should be ordered to winter at the position agreed upon.

21. If, under the circumstances alluded to in paragraph 18, the retreating parties should arrive at Lyttelton Island in 1878 and find no relief ship there, or no intelligence of her, it will be taken for granted that some unforeseen accident has prevented her reaching Lyttelton Island, and in that case the retreating parties must rely on their own resources for reaching Upernivik, looking out, of course, for the whalers on their fishing-grounds between the months of May and August. The Expedition will, in any case, on its return revisit the cairn on Lyttelton Island and leave records.

22. There is one other point which it may not be out of place briefly to refer to, notwithstanding that the officer in command is an experienced nautical surveyor, and it is this, that no minute surveys are necessary, nor, on an expedition of this character are they possible. As a rule, the requirements of hydrography and geography will be amply provided for, if the principal points discovered are determined with all the accuracy attainable, and the prominent features and general outline of the shores sketched in as faithfully as time and circumstances will admit, soundings being obtained when practicable.

23. The scientific memoranda furnished by the Societies at the request of the Admiralty should be supplied to the commanding officers, with instructions that the various suggestions therein contained should be carried out as far as circumstances will admit.

24. Should the season of 1875 be so unfavourable as to prevent the Expedition from penetrating beyond the 79th parallel, it is for their Lordships to decide whether the ships should winter there or return to England and renew the attempt the following year.

V. The various kinds of stores, provisions, and clothing which will be required.

With the assistance of the two officers placed at their disposal by their Lordships, viz., Dr. David Lyall, Deputy Inspector-General of Hospitals and Fleets, and Mr. James Lewis, Paymaster R.N., both of whom have had considerable experience in Arctic service, the Committee have carefully considered all points connected with the provisions and clothing, and have decided on the species and quantities of each to be supplied to the Expedition, together with scales of daily issue of the former, subject of course to any modification which the officer in command may from time to time feel it desirable or necessary to make. Lists also of the various kinds of stores requisite for the equipment of the *Alert* and *Bloodhound* for Arctic service have been drawn up.

VI. The preparation of boats, sledges, fittings, &c.

The construction of the boats has been considered with a view to their employment on ordinary service, to their adaptability for navigating among ice and to their portability for carrying on sledges, and their numbers have

been determined on the principle, that they should conveniently carry the whole of the crews, with ample provisions, under any contingencies which can be provided against. In regard to sledges, the numbers have been determined on, viz., about twenty-six for both ships, and their construction is left to Sir Leopold McClintock, under whose superintendence the Expedition is being fitted at Portsmouth.

VII. Whether dogs should be employed.

The Committee are of opinion that dogs could be employed with advantage for auxiliary travelling and other purposes, and that with this view arrangements should be made with the Danish Government for providing a certain number of those animals, together with Esquimaux drivers, interpreters, &c., at the settlements on the Western Coast of Greenland, where the ships would call for them.

VIII. The selection of ice-masters, quartermasters, &c.

The Committee recommend that the practice adopted in former expeditions be adhered to, viz., that three ice-quartermasters be attached to each ship, and that they be selected from the crews of the whaling vessels at the northern ports of the United Kingdom.

IX. The sanitary arrangements best calculated to preserve the health of officers and men of the Expedition.

The Committee are of opinion that the precautions most conducive to health and comfort on an expedition of this character are, first, that the officers and crew should be selected with a due regard to their age and physical fitness; and, secondly, that they should be liberally supplied with the best provisions which can be procured, antiscorbutics and medical comforts, as well as suitable clothing.

Upon these points, especially as regards the provisions, the Committee have been guided by their own experience with expeditions under the late Captain Austin and Sir Edward Belcher, in the years 1851-2-3-4, as well as the evidence of several of the seamen who served in these expeditions, and whom they have called before them.

The equipment of ships for Arctic service is now so well understood, that the Committee have not thought it necessary to offer any special sanitary suggestions on this point (the more especially as the ships of the present Expedition are being fitted and equipped under the personal superintendence of their experienced Arctic colleague, Rear-Admiral Sir Leopold McClintock), further than that all possible measures should be taken to secure warmth, ventilation, and the absence of condensed vapour from between decks.

X. A general consideration of all details in regard to the Expedition itself.

Many of the details connected with the Expedition have necessarily been mixed up and considered with the main points submitted to the Committee by their Lordships, and will be found recorded in the daily minutes of proceedings, but the most important of the detailed arrangements will be connected with the travelling and sledge equipments, which must be carried out at the port where the ships are being fitted out, under the superintendence of Sir Leopold McClintock, aided by the officers of the Expedition.

The Committee now believe that they have fully considered and reported on all the important points submitted to them, and as much of the detail as can be decided on at this early period of the outfit of the Expedition; but they would desire to point out, that their labours have been carried on, for the most part, during the absence of the leader of the Expedition on foreign

service; now that Captain Nares has returned to England, and during the progress of the equipment, some modifications of the Committee's views on minor, or even material points, may be found desirable as circumstances develop themselves; and in the event of any such modifications being found necessary, they would suggest that they should form a supplement to this Report, in order that a concise and comprehensive record should be preserved of all matters connected with the equipment of the Expedition, up to the date of its departure from England. Such a record, if further supplemented by a precis of the correspondence which may arise during the fitting out of the Expedition, would be of great service should it become necessary to equip a relief ship in the winter of 1876-77.

Though the Committee believe their own labours are ended, they would suggest that the services of the two officers who have been associated with them—Dr. Lyall and Mr. Lewis—should be retained for the present, and until the different articles of provisions, clothing, &c., which have been ordered to be prepared, are delivered over into the store, in order that they may examine and certify as to their fitness for the service.

Finally, the Committee would desire to acknowledge the ready assistance and courtesy they have received from the heads of Departments and the officers with whom their Lordships have placed them in communication. With the heads of the Contract and Victualling Departments, the Committee have been in daily communication, and nothing could exceed the readiness with which these gentlemen and their staff have met their views and wishes in every respect.

GEO. HENRY RICHARDS, *Rear-Admiral*.

F. L. McCLINTOCK, *Rear-Admiral*.

SHERARD OSBORN, *Rear-Admiral*.

WM. BLAKENEY, *Paymaster, R.N.*,  
*Secretary to Arctic Committee.*