

1553.

**C.S.O.**  
**SECRET**

NAT/MET/2#2

SUBJECT:

Meteorological Service in War.

1553

28 APR 1952

NO. OF COPIES SENT

S A V I N G

DEF/103/142/01

FROM THE SECRETARY OF STATE FOR THE COLONIES.

TO THE OFFICERS ADMINISTERING THE GOVERNMENTS OF:-

- (1) NIGERIA NO. SAVING
- (2) TRINIDAD NO. SAVING
- (3) BERMUDA NO. SAVING
- (4) MAURITIUS NO. SAVING
- (5) COMMISSIONER GENERAL, SINGAPORE NO. SAVING

THE OFFICER ADMINISTERING THE GOVERNMENT OF:-

- (6) HONG KONG NO. SAVING
- (7) ADMINISTRATOR, EAST AFRICA HIGH COMMISSION NO. SAVING

THE OFFICERS ADMINISTERING THE GOVERNMENTS OF:-

- (8) NORTHERN RHODESIA NO. SAVING
- (9) NYASALAND NO. SAVING
- (10) FALKLAND ISLANDS NO. SAVING

Date: April, 1952 SECRET

(To (1) only) Your Savingram No. 167 Secret of 27th October, 1951.

(To all) Meteorological Services in War.

2. Following recent agreement with the North Atlantic Treaty Organisation on the policy for the security of Meteorological information in time of war, the Meteorological office, Air Ministry, has prepared a paper on the policy and its implementation. A copy of this memorandum is enclosed. The information contained therein is for official use only and should be appropriately safeguarded.

3. It is suggested that Colonial Meteorological Services should draw up parallel instructions for implementation, if required, in an emergency, bearing in mind that it would be unsound to encypher meteorological data which could be fairly easily guessed by an enemy; e.g. because of small daily variations within the tropics where the weather is normally of a fixed seasonal type.

4. The general policy for the collection of individual meteorological reports and for the exchange of territorial broadcasts is to use one-time pads. To enable quantity and consumption figures of cryptographic material to be assessed, it is necessary to know the volume of traffic and the number of recipients. I should be grateful if this information could be supplied.

5. For security reasons, it might not be possible to reveal the details of the cryptosystems which might have to be supplied from the United Kingdom unless they will be operated by personnel of European stock and of British parentage who have been cleared for security. An assurance that such personnel will be available is required.

c.o./2400/52

SECEP.

Reply at 13

M.G.

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Annex to M.O. War Book

COPY NO. 70 <sup>2.</sup>

Appendix 1.

Policy for the Security of Meteorological Information in War

1. Meteorological Security Areas.

In war, security, as described in para. 4 below, will be provided for meteorological information in those areas for which it is in the military interests of the U.K. and its Allies to deny such information to the enemy. In general, meteorological security areas will embrace Allied or Allied-Occupied territory and adjacent sea areas, and will be determined by the appropriate authorities in the light of:-

- (a) The capabilities of actual or potential enemies in utilizing the information were it to be readily available to them.
- (b) The cost to the enemy to obtain such meteorological information as he requires from the same area through his own devices.
- (c) The cost to the Allies to prevent or delay enemy access to the meteorological information, including the impairment of Allied productivity.
- (d) The inferences which the enemy might draw from certain types of meteorological information.

2. Local relaxation of security.

Certain meteorological information by its nature or use will be excepted from security control. Such information will refer to the area of enemy contact in which the enemy can himself obtain local weather data. This information will be limited to local gun data and ballistic forecasts for a period of less than 3 hours duration, and may be transmitted or dispatched in clear by any available means.

It may also be expedient to make certain weather information available to the public and essential services on a limited scale, where such procedure would not jeopardize military interest.

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3. Temporary relaxation of security.

It may be necessary to provide ballistic data in clear to anti-aircraft in areas remote from the land battlefield after emergency deployment or a heavy raid.

In addition, for reasons of aircraft safety, it may sometimes be necessary to transmit in clear essential landing weather information on short range voice circuits to aircraft in the vicinity of an airfield.

4. Classification and identification of weather information.

(a) Meteorological information relating to TOP SECRET, SECRET or CONFIDENTIAL subjects will be classified and handled accordingly.

(b) To provide the necessary security of meteorological information not covered in (a) above, a special identification, "Weather Controlled", is established. This identification will be applied to meteorological information on which security is required in accordance with paragraph 1 above. The following procedures will apply to "Weather Controlled" information:-

(i) When transmitted by radio, "Weather Controlled" information will be encyphered in an appropriately secure and rapid meteorological cryptosystem except as provided in paragraph 3.

(ii) When transmitted over land-line circuits "Weather Controlled" information will normally be in clear.

(iii) "Weather Controlled" information will otherwise be handled in the manner prescribed in A.P. 3086 for RESTRICTED information, except when relaxation is authorised because of operational necessity (see paragraph 3) by the appropriate authority.

5. Implementation of the Policy.

See Appendix 2.

June, 1951

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G. 300887/EB/6/51/50

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Annex to M.O. War Book

Appendix 2. (Provisional)

Implementation of the policy for the security of  
meteorological information in war

1. Determining authority.

- (a) Co-ordination of the implementation of meteorological security will be the responsibility of a high-level Allied authority (at present the Standing Group of NATO).
- (b) In the case of information provided by stations under the control of the Air Ministry Meteorological Service, the designation of the areas in which meteorological security will be imposed will be decided after consultation between D.M.O., D.D.I. (Org. & S.), A.C.A.S. (Sigs.) and Admiralty; promulgation will be effected through a Confidential M.O. Order and A.M.O. or initially, if there is a need for urgency, by signal.
- (c) The determination of local relaxation within a theatre of operations will be the responsibility of the Theatre Commander in consultation with his meteorological and security advisers.
- (d) The determination of temporary relaxation of meteorological security because of operational necessity will be the responsibility of the military commander concerned in consultation with his meteorological and security advisers; if time permits, the approval of higher authority will be obtained.

2. Cryptosystems.

- (a) The types of cryptographic systems to be employed for the encypherment of meteorological information will be subject of consultation between A.C.A.S. (Sigs.), Admiralty and D.M.O. The supply and distribution of crypto-material will be arranged by A.C.A.S. (Sigs.).
- (b) The crypto-~~systems~~<sup>systems</sup> to be used for the transmission of "Weather Controlled" information will not be used for other purposes.

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- (c) In certain circumstances, e.g. for the transmission of meteorological information relating to a TOP SECRET source, it will be necessary to use an appropriately secure general cryptosystem instead of a special meteorological system.
- (d) In the Air Ministry Meteorological Service the operation of meteorological cryptosystems will normally be the responsibility of personnel under the control of the Meteorological Office.

3. Classified meteorological information.

The classification of meteorological information relating to TOP SECRET, SECRET or CONFIDENTIAL subjects, and the recipients authorised to receive such information, will be determined by Meteorological Office Headquarters, or, in the case of theatres overseas, by the Chief Meteorological Officer after consultation with local security authorities. As an example, meteorological analysis which refers in whole or in part to enemy occupied territory would be classified as SECRET, and would be issued to only a selection of meteorological offices.

Appropriate instructions will be issued by Meteorological Office Headquarters (or by the Chief Meteorological Officer acting on general guidance from Meteorological Office Headquarters). The handling procedures laid down in A.P. 3086 (Second Edition) and A.P. 3184 will be followed.

Note. Although the line teleprinter system in the U.K. is graded "Restricted" and normally all signals classified Confidential and above transmitted by teleprinter should be encyphered, it is not yet possible to provide cyphering facilities for all traffic of the higher security classifications and for the time being messages graded Confidential and Secret will be transmitted over the system in clear.

4. "Weather Controlled" Information.

Apart from the specially classified information referred to above, all meteorological information for which it is necessary in military interests to provide security will be identified "Weather Controlled".

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The determination of precisely what meteorological information will not require protection will depend upon the military situation but, for immediate action in an emergency, either in the U.K. or at overseas stations, the information which need not be given protection is detailed in para. 5.

As stated in Appendix 1, in a meteorological security area "Weather Controlled" information, when transmitted by radio, will be encyphered (except where or when local or temporary relaxation is authorised) and when transmitted by land-line (to authorised recipients) will normally be in clear. The significance of the word "normally" is that it is expected that the land-lines to be used for sending "Weather Controlled" information will normally be approved as secure for such information. As indicated above, the meteorological teleprinter system in the U.K. is approved for the transmission of Restricted information only.

At overseas stations where teleprinters are used, C.Met.Os. should consult the local security authorities regarding the degree of security pertaining to the circuits; if it is deemed that, in the event of meteorological security being imposed, such circuits cannot be approved for the transmission in clear of "Weather Controlled" information, the question of the provision of a suitable cryptosystem should be taken up with the Signals authorities.

The public telephone system affords no security and should not be used, therefore, for the transmission of "Weather Controlled" information except in an emergency.

As the R.A.F. private wire system affords only limited security, the Basic Meteorological Code will be used for the routine transmission of "Weather Controlled" information on R.A.F. telephone circuits.

As stated in Appendix 1, the handling (apart from transmission procedure) of "Weather Controlled" information will be the same as that for information classified as Restricted. This means that "Weather Controlled" information must not be published or communicated to anyone except for official purposes.

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5. Weather information not requiring classification or identification.

In a meteorological security area in which action by the Meteorological Office (and Naval Weather Service) is required to protect weather information in the military interest, e.g. in the U.K., it may be assumed, in anticipation of final instructions, that, apart from specifically authorised relaxation, meteorological information may be sent in clear as follows:-

- (a) An individual coded weather report transmitted by telephone to a collecting centre.
- (b) A local forecast in code, e.g. TAFOT (covering a radius of not more than 10 miles and for a period not exceeding six hours and excluding an inference, analysis or further outlook) transmitted by telephone to an authorised recipient.
- (c) During telephone consultation between one meteorological office and another or between a meteorological office and an authorised recipient, e.g. a pilot, at a station where there is no meteorological office. The greatest discretion should be used in passing any information the interception of which would endanger security; no reference should be made to the general weather situation or to the further outlook.

See also para. 8. ||

6. Supply of meteorological information to the Fighting Services.

The Fighting Services must be given the fullest possible meteorological information, but the method or channel of supply must be in accordance with the security procedures given in this paper or in A.P. 3086 and A.P. 3184.

7. Supply of meteorological information to Allied countries.

"Weather Controlled" information may be passed to Allied meteorological and fighting services in accordance with para. 4 above.



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8. Supply of meteorological information to neutral countries.

No meteorological information will be passed to neutral countries except when specifically authorised by Meteorological Office Headquarters after agreement by a high-level Allied authority (at present the Standing Group of NATO).

9. Supply of meteorological information to civil aviation.

The supply, in war-time, of meteorological information to civil aviation (British) will be strictly in accordance with the policy laid down in Appendix I, and will be the subject of special instructions. The general principle will be to give as much information as possible to crews on the ground, but to restrict to a minimum the transmission of meteorological information to aircraft in flight. Special arrangements will be made, if required, in respect of flights to/from neutral countries.

10. Supply of meteorological information to Government Departments and to Essential Services.

Government Departments and Essential Services must be given the minimum meteorological information necessary for the proper performance of their work. The term "essential service" is here intended to include public and other services of national importance for the operation of which meteorological information is necessary, and for which proper precautions as to security are practicable.

Information relating to a TOP SECRET, SECRET or CONFIDENTIAL subject will not be supplied without the approval of the Director in consultation with D.D.I. (Org. & S.); written information will be marked "Weather Controlled - not to be published and for use of recipient only"; routine information sent by telephone will be transmitted in an ad hoc code, to be agreed between D.M.O. and the appropriate Air Ministry authorities.

In every case the information will be passed only to officers vouched for by the Department or Corporation concerned (after such officers have read and signed a suitable cautionary document) who will arrange for the meteorological information to be replaced by executive instructions at the earliest possible stage.

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11. Supply of meteorological information to the Press, B.B.C. and public.

- (a) Derived information. No derived information, e.g. forecasts and analyses, will be issued to the public or published by the Press or B.B.C.
- (b) Current weather. No information regarding current weather (defined broadly as the weather of today and yesterday) will be issued to the public or published by the Press or B.B.C.
- (c) Past weather.
  - (i) Except as provided in (ii) below, no observations contained in synoptic reports in current use will be issued to the public or published by the Press or B.B.C.
  - (ii) Observations of surface wind, duration of sunshine, amount of rainfall, maximum and minimum temperatures and general weather (other than snow) may not be issued until 36 hours after occurrence.
  - (iii) Observations of snow may not be issued until 5 days after the date of occurrence.
  - (iv) Mean values for a week or longer and totals for a week or longer of any meteorological element may be published immediately.
  - (v) Photographs which reveal meteorological conditions, directly or incidentally, may not be published until five days after the occurrence when they show floods or snow, or until 36 hours after the occurrence when they reveal frost, fog and gales.

12. Issue and distribution of publications.

The D.W.R. and D.A.R. and the BB report will be classified as Confidential and will be issued only to those official recipients

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to whom such reports are necessary for the proper performance of their duties; no analysis will be shown over enemy occupied territory.

Local D.W.R. will not be issued.

The Monthly Weather Report, Monthly Frequency Tables and Monthly Supplement will be classified as Restricted.

All other meteorological publications will be classified as appropriate in accordance with the guidance given in A.P. 3086.

With the cessation of observations from the Voluntary Observing Fleet, the issue of the Marine Observer will be suspended.

13. Observations at Rainfall, Climatological and Auxiliary Reporting Stations.

Observers, voluntary or otherwise, at stations, including Health Resorts, not manned by personnel of the Meteorological Office (or Naval Weather Service) will be urged to continue to make and forward their observations as in peace-time, but will be advised that, owing to the need for security, there will be restrictions on the publication of the data.

Observers at auxiliary reporting stations will be asked to safeguard their observations and to confine themselves strictly to the coded message when transmitting reports by telephone to a collecting centre.

Broadcasting of climatological data will cease.

June, 1951.

H.C.S.


Attached Sanips were discussed with H.H and draft  
reply is attached. I suggest that this correspondence  
should be filed at your Office, since I have no proper  
place to keep secret matter.

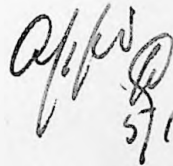
C.H.

30.12.52

Y.H.

Attached draft S.V.C.

  
21/12

  
5/1

F. I. ref:

C. O. ref: ~~REF~~, 103, 142/01.

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SAVING TELEGRAM.

*From:* The Officer Administering the Government of the Falkland Islands.

*To:* The Secretary of State for the Colonies.

*Date:* 12th January, 1956.

No. 7      SAVING.      SECRET.      COINT.

Your Secret Saving Telegram No. 69 of 8th April, 1952. Meteorological Services in G.A.R.

2. The enclosure to your above quoted savinggram would appear to apply equally well to this territory in the event of an emergency. Daily and seasonal variations in weather are considerable and there would be no risk that codes would be compromised by an enemy guessing at interstation, but there are Chilean or Argentine stations adjacent to almost all our bases in the Dependencies, which would presumably continue to broadcast messages on clear if these countries were neutrals. This fact would be taken into account before starting to encipher synoptic reports from bases.

3. The quantity and consumption figures of cryptographic material are shown in the attached schedule and it is confirmed that personnel of European stock and British parentage who can be cleared for security, would be available.

You.....

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14-  
You will no doubt appreciate that there is no opportunity of distributing one-time passes to Antarctic bases during the winter (May - November).

OFFICER ADMINISTERING THE GOVERNMENT'S RESERVE.

Cryptographic Material Required.

Stanley

Issue of Synoptic Reports in FICOLS = 450 groups per day.  
Forecasts for whaling areas = 900 groups per day  
Possible extension of Forecasts  
Northwards to River Plate  
(Admiralty Requirement?). = 400 groups per day  
Total per day = 1750

South Georgia

Forecasts for whaling areas = 900 groups per day.

Seven Dependencies Bases.

Synoptic reports to Stanley = 40 groups per day

Falkland Islands Outstations.

These are manned by part-time voluntary observers who should not have access to official codes.

Stanley would require copies of Bases and South Georgia one-time pads for decyphering purposes and South Georgia should hold Stanley pads for the same purpose. Likely recipients of Stanley and South Georgia broadcasts are:-

South African Weather Bureau, Pretoria.  
West African Meteorological Service, Accra.  
Naval Weather Service, Simonstown (if reopened).  
Any H.M. Ships protecting River Plate shipping  
and whaling fleets or others operating in  
South Western South Atlantic.  
British and allied Whaling vessels?

Summary

1. Stanley. One-time pads consumption rate 1750 groups per day, with copies at South Georgia, Pretoria, Accra, Simonstown, H.M. Ships, Whaling vessels?.
2. South Georgia. One-time pads consumption rate 900 groups per day, with copies as above but read Stanley for South Georgia.
3. Seven Bases, each with a one-time pad and a copy of each in Stanley, consumption rate 40 groups per day.

PA

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MEMORANDUM.

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No. \_\_\_\_\_  
It is requested that in any reference to this memorandum the above number and the date may be quoted.

24th March, 19 53

From: The Chief Met. Officer.

To: The Honourable,  
The Colonial Secretary,  
Stanley.

Stanley, Falkland Islands.

SUBJECT:- Meteorological Services in War.  
(Circular Saving No. 69 of 8th April, 1952 refers).

The following is a record of a discussion with Instr. Lt. S. Terry, R.N. of H.M.S. "Superb".

I pointed out that our present services for Stanley, S. Georgia and the sea areas covered by the whaling bulletins, could be maintained (if required), provided that South American reports and reports from Antarctic Bases were available. The area from the Plate to 50°S between 40°W and the Argentine coast could also be covered and it would be possible to maintain all sea area forecasts during the winter. It would suffice if Chilean or Argentine national collectives were available, though Chilean collectives were rarely audible in the winter through lack of a suitable transmitting frequency. Difficulty could arise so far as Bases were concerned if it were necessary to encypher reports, and hostilities happened to commence during the winter (May - November) before one-time pads could be issued. For this reason, it might be desirable to issue one-time pads to Bases before an emergency, and thereby avoid any possibility of a break in reports.

It was agreed that this was the only point which required decision before an emergency arose and which could be profitably discussed.

Lt. Terry thought that, although a break in reports and forecasts might not be serious so far as this area was concerned, it might inconvenience Simonstown, where Bases reports and certain S. American observations (repeated from Stanley Met.) were used a good deal for forecasting purposes. It might therefore be best if Admiralty's opinion was sought before deciding whether cyphers should be held by Bases.

*G.A. Howland*

Copy to Instr. Lt. S. Terry, R.N.  
(No other copies made)  
*C.W.*  
24.3.53

*a.c.l.*  
It was found loose in back of file pt.  
Wed 2/5/53  
... the file was found loose  
In R.A.S. no entry had been made in letter to memo. is not date stamp

*Pa. 8 9/3*