



C. S.

SCIENTIFIC  
(Meteorological)

NAT/MET/1#17

1946.

No. 255/46.

Met. Officer

SUBJECT.

1946

16th November

Previous Paper.

TAKING OVER OF THE FALKLAND ISLANDS METEOROLOGICAL

STATION BY AIR MINISTRY.

135/44

("Establishment of New Met. Stn.")

MINUTES.

Subsequent Paper.

0008

Letter from Met. Officer of 16. 11. 46.

Notes on Meeting held in London on 19. 7. 46

Telegram No 240 from S. of S. of 19. 11. 46  
(copy to Met O. f. d.)

Tel. No. 361 to S. of S. of 23. 11. 46.

Minute from Met. Office of 5. 12. 46

5

J.E. has not yet seen this file. (4A) is a copy of 'personnel' record etc. to Harbin kindly shows me it has already put a copy up to J.E. It is not an 'Official' document & the Sfs cannot therefore be blamed for not sending it to us. In fact, he <sup>will</sup> ~~may~~ not be aware of its exist. enc.

C.Bh

6. 9. 12. 46

Chaukyan. Nevertheless I feel that there  
(inevitable perhaps under present arrangements)  
is a tendency to issue disclosures over the head of  
this Govt. a point wh. I am taking up in  
d/o correspondence. NFA

MC 11/XV

Minute from Met. Office of 16. 12. 46 7.

" to " " " " 8.

" from " " " " 9.

Despatch No. 78 to S. of S. of 16. 12. 46 10.

11

A.L. 11/12/46 is a spec copy of (10) pl. sent

it to last. Officer. If not, pl. let him  
see the file.

A.B.E.  
19.12

(12)

Met. Officer

to see red ⑩ pl

A.B.E.  
19.12.46

(13)

A.C.S.

⑩ pl seen thank you.

G.H.

20.12.46

~~14~~ Letter from Met. Officer of 31.12.46 No 0008/A ②  
14. memo. from Met. Officer of 22.1.47.

15

E.E.

Re. note (14) - when known

S.E.T. &amp; A.T.

A.B.E.  
31.1.47

(16)

Honourable Colonial Secretary.

⑭ now Thank you. A.W. 3.2.47  
E.

(17)

S. E. & T.

To you accordingly.

A.W. H.  
3.2.47

(18)

Hon C.S.

⑭ seen Thank you

A.W. DET  
3.2.47

Savingram No. 28 of 8. 4. 47 from S. of S. 19.

20

Met. Officer

(19) for your remarks re.

C.B.L.  
2.5

21.

H.C.S.

(19)

1. There appears to be some confusion between paras. 3 and 4 of (9a). The scheme proposes that met office staff should deal with incoming synoptic messages and W/T operations, as such, are not required.

2. The scheme is proposed as a permanent measure and not a temporary one.

3. I presume that the periodic statements of the met. service account will come from the Treasury and not from the met. office.

G.H.  
6.5.47.

Memo. from Met. Officer of 2.5.47

22

23

H.E.

(22) which I have discussed with Mr. Harkins - with which I am in general agreement.

2. It is clear that the Air Ministry is contemplating a much more elaborate



organisation here is strictly required by the present needs of the F.I.s: but they may not have envisaged the implications of met. work here, in the Dependencies as an integral part <sup>either</sup> of a 'global' net-work: or of the F.I. Administration.

2. J.E. has already decided that the policy sh. be to integrate F.I.D.S. — Some main work apart from survey is at present met. — with the F.I. Administration: I have just sent a letter to the S/S suggesting how a substantial contribution can be made from Dependencies resources. It thus follows that if this met. work is to be carried out, it is conducted by met. Officer Stanley. They he must also be a member of the F.I. A.D., recorder for the A.M.

0161/11

3. Subject to J.E.'s remarks, may I ask met. Officer to proceed as a A of (22)?

4. (19) misapprehends (10) — see 21. What is intended is that met. Officers sh. be trained in W/T. No 'locally entered civilian W/T operators' can be engaged. In

Please

✓ Could explain this, if I.E. approves \$3, in  
the company D. to \$/s?

✓ 5. x on (19) nice to deal with  
by the Treasury. of. (1k) (2) (3) herein  
appd. by I.S. in 0008 which is in action.

6. I start 0037/OR [pt. see 38.  
50]: - 0/61: for every reference.  
A.B.L.  
9.5.47

24

22 pts in with my own intentions and I support  
in principle; efficient weather ~~reporting~~ is one of the  
few activities which will enable us immediately to  
justify an 'hold' on this section of Antarctica. As  
you are aware I have proposed that Met. Officers of  
FIOS shd. in future be seconded from Air Ministry  
and I hope they will co-operate to this extent.  
Mr. Storkens will have to put up a very strong  
case.

mc. 10/5

25

Met. Office

Re. process as per proposal. As  
I shd. be happy to see the date if  
it is convenient to you.

A.B.L.  
10.5

CLOSED - to be submitted to the Committee  
Documents in 0008/D for I.S. sent to report to the Committee  
106

255/46

Meteorological Office,  
Stanley,  
Falkland Islands.

(1)

November 16th. 1946.

His Excellency,  
The Governor,

I have the honour to submit the attached  
1 a-f report for transmission to;

The Director  
Meteorological Office, H.O.13  
Air Ministry  
Victory House  
London, W.O.2.

A copy of the report is enclosed for retention

I have the honour to be,  
Sir,  
Your Obedient Servant,

G. A. Hawkins

Meteorological Officer

*1 a-f. despatched direct to A.M. by  
Air Mail 16<sup>th</sup> Nov., 1946*

(12)

Meteorological Office,  
Stanley,  
Falkland Islands.

November 14th. 1946.

The Director,  
Meteorological Office, H.O.13,  
Air Ministry,  
Kingsway, London W.C.2.

PRELIMINARY REPORT ON THE FALKLAND ISLANDS METEOROLOGICAL SERVICE.

Introduction:

Because of its special nature this preliminary report was not couched in the precise form laid down in H.O.13 Standing Instruction No. 1. It divides naturally in to three sections:

1. A general report covering the contacts in South America, the situation on arrival in Stanley and the report of an interview with His Excellency the Acting-Governor.
2. A general report, based as nearly as possible on routine lines, dealing with Routine Procedure, Accommodation, Staff, Communications Instrumental Equipment, Filing and Correspondence.
3. An Upper Air Section report by the Radio/Sonde Officer.

Included under the same cover is a request for action regarding approval for the immediate recruitment of a third Meteorological Assistant.

*Ref 8 in 26/45*  
*"Erection of*  
*Ionospheric*  
*Station"*

A preliminary report has also been addressed to Dr. Smith-Rose on the proposed Ionospheric Station.

SECTION ONE:

1. South America: The Air Attache, Montevideo, arranged for the Radio/Sonde Officer and the Meteorological Officer to visit the Uruguayan Meteorological Office, where contact was made with the Assistant Director and the Senior Forecaster. Details of Meteorological broadcasts were obtained and arrangements were made for the interchange of synoptic charts and technical publications. Mr. McNaughton discussed the British Radio/Sonde with the Uruguayans and indicated that these instruments might eventually become available to countries outside the U.K. The Assistant Director volunteered the information that they had not been impressed by a demonstration of an American Radio/Sonde some years ago: of four ascents attempted by the American staff only one produced satisfactory results.

It proved impossible to visit B.Aires in the short space of time available but the Air Attache, Montevideo, undertook to send on copies of the B.S.A.A. reports on both the Uruguayan and Argentine Meteorological Services.

2. Stanley - situation on arrival: Both Officers landed in Stanley on November 5th. no contact being effected with the Naval Meteorological Officer who left the Colony on October 5th. The office was in the charge of the Senior Assistant (Mr. E. Harvey) who had maintained the routines, including the issue of forecasts, since Lieut. Niddrie's departure. In view of the very satisfactory state of affairs at the office it was decided that the existing arrangements should remain in force until the major issues involving the Upper Air and Ionospheric stations had been settled.
3. Interview with H.E. the Acting-Governor: The Governor was most anxious for information regarding the new Meteorological Office and Ionospheric station and the meeting took place on Wednesday 6th. November.

H.E. expressed regret that no accommodation had been reserved for Mr. McNaughton and explained that no news of our movements had been signalled to the Colonial Government.



3. (continued).

He was interested to learn about the projected Radar and Radio/Sonde Station but pointed out that no authority had been received from the Colonial Office to open an imprest account on behalf of the Met. Office. The only expenditure provided for in the Colony's estimates (approx. £400) was intended to cover the salaries of the Observers already employed by the Colonial Government and it would therefore be necessary to enquire from the S. of S. for the Colonies whether the additional expenditure involved would be borne on Colonial Office Votes or whether it was recoverable from some other State Department. The Governor decided to signal to the S. of S. for the Colonies for authority to start an imprest of £500 to cover any new building undertaken this year and to pay the salaries of the A.M. staff. H.B. added his assurance that everything possible would be done to ensure that no serious delay would occur in the building programme because of the lack of immediate authority for the imprest.

Ref 63 in 135/44  
"New Met.  
Station"

SECTION TWO:

1. Routine procedure:

- i) Hourly observations are taken from 0600 to 2200 Local Time and an isolated observation is taken at 0300 L.T. (0600Z). At least one balloon ascent is attempted daily.
- ii) Issue of Collective Messages: The South America Collective (SAMCOL) consists of approximately 200 groups and is compiled from Argentine, Brazil, Chile and Uruguay reports. The Falkland Islands collective (FICOL) consists of about 40 groups and includes reports from Hope Bay, Deception Island, Port Lockroy, South Georgia and Stanley. Both collectives are made for 1200 and 2300Z and in addition an 1800Z FICOL is issued. The 0600Z Stanley observation is incorporated in the 1200Z collective and pilot balloon ascents are included when available. A CLIMAT report containing average pressure, temperature and rainfall for each of the stations included in FICOL is issued at the end of each month.
- iii) Charting: The 1200, 1800 and 2300Z charts were drawn daily up to the departure of Lieut. Niddrie after which date the 1800 chart was discontinued. It is intended to recommence construction of this chart as soon as the Meteorological Officer is in a position to take over a watch.
- iv) Forecasting: Two routine forecasts are issued daily, one for the Stanley area (supplied to the Public Works Dept. for Notice Board display) and a second for the Falkland Islands area which is transmitted by the Stanley broadcasting station at the commencement of each day's programme. In addition Gale Warning messages are issued for the benefit of British Merchant Shipping and H.M. ships in the area, and forecasts are occasionally supplied to ships or to the Dependencies on request. During the whaling season daily forecasts for the South Georgia area are issued for the use of the whaling fleet.
- v) Statistical Returns: These are still being compiled quarterly according to a routine established by Lieut. Niddrie and will be submitted in this form for the current year. Copies of the statistics for 1946 will also be sent to Naval Met. Branch. From the 1st. of January 1947 all statistics will be tabulated and submitted in accordance with accepted Met. Office practice.

## 2. Accommodation

- i) Existing Building. This contains a forecasting office, Senior Met. Officer's office, instrument room, general office, watchkeepers bedroom and toilet. In addition there is a small room, originally designed for balloon filling, which is too small for any purpose other than conversion into a store cupboard. A sketch-plan of the building is appended which shows the existing arrangement.
- ii) Alterations and Extensions Envisaged. The most urgent requirement is storage space for the large volume of supplies which are expected to arrive on 24th. November per SS Lafonia. The Public Works Dept. were therefore consulted at once and two five-bay Nissen huts are already under construction on the North side of the office.

It is proposed that the forecasting, plotting and observation should all take place in the forecasting office, thereby releasing the general office for some other purpose. This office was examined with a view to conversion into a Radio/Sonde room but was found to be unsatisfactory for reasons which are set out in Section three of this report and it is now proposed to divide the room into two sections, one to form a R/Sonde Officer's office and the other to form a small store for instruments, instrument charts, logs and stationery.

The Upper Air Station will therefore require a small building to house the R/Sonde room and workshop, a balloon filling shed, a concrete site for the Radar equipment and a gravel covered launching site with mast. The details of this proposed plan are discussed in Section Three of this report but a sketch plan of the layout is given below. The proposed internal alterations to the existing building are also shown in a diagram.

The Executive Engineer (Lt.Col. J.A. Woodgate A.R.E.S.A.) will make every attempt to utilise surplus army stores in all new building undertaken.

## 3. Staff

### i) Present Staff.

Meteorological Officer-	Mr. C.A. Hawkins
Radio/Sonde Officer	- Mr. D. McNaughton
First Assistant	- Mr. E. Harvey
Second Assistant	- Mr. J. Newing
-----	
Naval Met. Staff	- AB(Met) J. Verne
	AB(Met) E. Massey

- ii) Changes in Staff. AB(Met) J. Verne will leave for the U.K. on November 17th but the Naval Officer in Charge, Falkland Is. generously offered to retain AB(Met) E. Massey for a few weeks until a decision could be reached regarding the future staff requirements.

It is submitted that at least one other assistant will be required to maintain the existing observational routine, after Massey's departure. In addition, the R/Sonde Officer will require the assistance of this third man during R/Sonde ascents. Action on this matter has been requested in the communication to M.O.13 contained under cover with this report.

4. Communications.

1) Wireless Telegraphy. All met. W/T messages, both incoming and outgoing, are at present handled by the Naval W/T Station. It was agreed at the Victory House meeting (19th July 1946) that the Admiralty should continue to accept responsibility for the transmission of met. messages but that alternative arrangements should be made for the reception of synoptic data. The Naval Officer in Charge has offered to assist by maintaining the reception schedules until such alternative arrangements can be made with the Electric and Telegraphic Dept., Stanley. A discussion with the Head of the dept. brought to light two main difficulties standing in the way of these alternative arrangements:

a) The Government W/T Service would need to be considerably expanded to deal with incoming met. messages and assurance would first of all be required from the S. of S. for the Colonies that the additional expenditure involved would be borne by the Colonial Office or by some other State Dept.

b) There may be some difficulty in recruiting the extra W/T operators required.

The above points were the subject of a recent dispatch from H.E. to the S. of S. for the Colonies and further action on this matter must await a reply to this dispatch.

ii) Radio Telephone. These instruments are the property of the F.I. Government and are at the disposal of the met. office for the collection of reports from Caracas I. and New I.. No charge is made for the use of this apparatus.

iii) Telephone. Daily reports from Darwin and the Cape Pembroke Lighthouse, are collected by telephone. A rental of \$5/5/0 per annum is charged, which covers all telephone calls to any part of the East Falklands whatever the duration of the call.

The met. office is also connected by a private Admiralty line through the cypher office, to the W/T control hut. The F.O.I.C. has agreed to the continued use of this line for the present.

iv) Collection and Delivery of Met. Messages. Under the existing system the messages are collected and delivered by met. office staff using a bicycle. This arrangement is considered to be entirely unsatisfactory but there is no immediate prospect of any alternative. An attempt will be made to arrange for the Colonial Govt. W/T operators to phone the messages direct to the met. office but if this should prove impossible then a request for some form of motor transport will be submitted at an early date.

5. Instrumental Equipment. The equipment held at the met. office was mastered and taken over from the Navy on November 16th. Arrangements were made with the Base Supply Officer for the temporary retention of certain items until the new equipment arrives in SS Laforia.

A list of the equipment which will be permanently retained and taken on charge from the Navy, has been forwarded to H.O.I.

Recd in 170/46  
"G. S. W/T. Str"

(12)

6. Filing and Correspondence. The Naval Met. filing system and contents were removed before the arrival of the A.M. staff and it is proposed to commence a new system based on the lines described in M.O.13 Standing Instruction No. 1. References will be added to this correspondence as soon as the system can be brought into operation. It is pointed out that a number of matters, including the precise relation between the parent and satellite stations of the Falklands and Dependencies, must remain obscure for the present, in the absence of the previous filing system.

It is proposed to adopt the reference symbol FLK for the met. office in Stanley. There is no reason to expect any great volume of correspondence dealing specifically with any one of the twelve out-stations and independent filing systems will not therefore be maintained for each station. All correspondence will be <sup>con</sup>tained in the Stanley files but reference will be made to the station concerned by the following device, thus;

FLK/4/47/3(Hope Bay), FLK/2/47/5(Pebble I.),  
FLK/2/47/8(S. Georgia), FLK/6/47/1, would be correspondence referring to Hope Bay, Pebble I., S. Georgia, Stanley, respectively. FLK/1/47/5(FLDS), would refer to all the stations under the control of the Falkland Islands Dependencies Survey, namely; P. Lockroy(Base A); Deception I.(Base B); Cape Geades, S. Orkneys (Base C); Hope Bay (Base D); Henry Rjard, Marguerite Bay(Base E). FLK/2/47/7(F.I.Outstations) would refer to the subsidiary stations on the West and East Falklands; namely; Darwin(East Falklands); Pebble I., Fox Bay, Carcass I., New I., all of which lie on the West Falklands. South Georgia and Cape Pembroke Lighthouse will always be referred to directly, thus: FLK/2/47/1(S. Georgia) and FLK/1/47/6(C. Pembroke).

G. A. Hawkins

Meteorological Officer

18

Meteorological Office,  
Stanley,  
Falkland Islands,  
South Atlantic.

Nov. 14th. 1946.

The Director,  
Meteorological Office, M.O.13,  
Air Ministry,  
Kingsway, London W.C.2.

Copy for information  
The Director, M.O.13.

PRELIMINARY REPORT ON THE FALKLAND ISLANDS METEOROLOGICAL SERVICE:

SECTION THREE - UPPER AIR:

- S. America.
1. General: The Radio/Sonde Officer (Mr. D. McNaughton) travelled from U.K. to the Falkland Islands in company with the Meteorological Officer (Mr. Hawkins) and accompanied him on a visit to the Headquarters of the Uruguayan Meteorological Service in Montevideo on Saturday October 26th. 1946. The prospect of obtaining upper air information from the Falkland Islands area was favourably received by the Deputy Director and the Senior Forecaster of this service. The R/S Officer enquired about the possibility of Uruguayan participation in this kind of work and was informed that financial considerations preclude this for the present at least. The Deputy Director further stated that American attempts to demonstrate Radio/Sondes in this part of the world a few years ago had been quite unimpressive - the operators, in most cases, being unable to contact the transmitters in flight. He was assured that British R/S apparatus has now attained a high standard of operational efficiency and was given a brief outline of the R/S network in the U.K. He was greatly impressed. The possibility that British equipment might become available for purchase was mentioned but further discussion of this matter was not considered appropriate at this stage.

Stanley.

The party arrived in Stanley, Falkland Islands on Tuesday November 5th. and some considerable time had to be devoted to a search for living accommodation for the R/S Officer, the local government not having been warned of his impending arrival. Since then a preliminary survey of the situation has been made and points arising from this are summarised below:

2. Accommodation and site: The present Met. Office building is quite inadequate to house the large quantities of R/S and other stores expected to arrive on the "Lafonia" on or about November 24th. Steps have therefore been taken to have two Nissen huts constructed for this purpose. At least one, and possibly both of these will be finished before the arrival of the ship and will provide storage for the bulk of the equipment expected.

The ground round the office is fairly level in directions between West and North and falls away elsewhere. It is therefore open and well-exposed. The top soil is peat but this has been cut away over much of the area to reveal a sub-stratum of heavy clay with occasional outbreaks of rock. The surface is therefore uneven, but the levelling of a launching ground should not prove too difficult. Owing to the non-porous quality of the clay however, a well-drained Radar site will almost certainly have to be constructed of concrete. At his request a report on the work of a Radio/Sonde cum Radar/Wind station has been submitted to the Executive Engineer (Lt.Col. J.A. Woodgate). This was designed to give Lt.Col. Woodgate an appreciation of the various operational problems involved, and included general specifications for a launching ground, Radar site, balloon-filling shed and a possible R/S section, together with a suitable plan for their distribution. Summarised briefly this called for:

a) The levelling and gravelling of a launching ground (complete with mast)



/mast) to the NNE of the present office at a distance of about 60 yards from it.

b). The provision of a concrete Radar site approx. 100 yards to the NW of the present office.

c). The erection of a balloon-filling shed and hydrogen-storage space on the edge of the launching ground North by West of the present office. It is hoped that this may be constructed with doors at either end.

d). The probable erection of a building for R/S purposes about 50 yards North of the present office.

*Red 1/2*

Further discussion will take place when Lt.Col. Woodgate has had an opportunity to study this report. A sketch-plan showing the proposed layout is included in this report.

Indications of the accommodation available in the present Met. Office building are contained in Section Two of the report. Consideration has been given to the possibility of using the "general office" as a R/S laboratory to house the receiving equipment etc. The room is probably almost large enough for this purpose but is considered unsuitable for a number of reasons. Foremost among these is the fact that no adequate provision could be made in this building for the accommodation of R/S consumable stores after unpacking, the preparation and repair of transmitters and ground apparatus and so on. It is undesirable to divorce these facilities from the receiving lab. and it has therefore been decided to try to arrange the building of a separate R/S section. This will be located at no great distance from the main building and as near the launching ground and balloon shed as practical and will consist chiefly of a receiving room and a workshop, together with some storage facilities. It is possible that a building surplus to local requirements may be found which can be modified for this purpose.

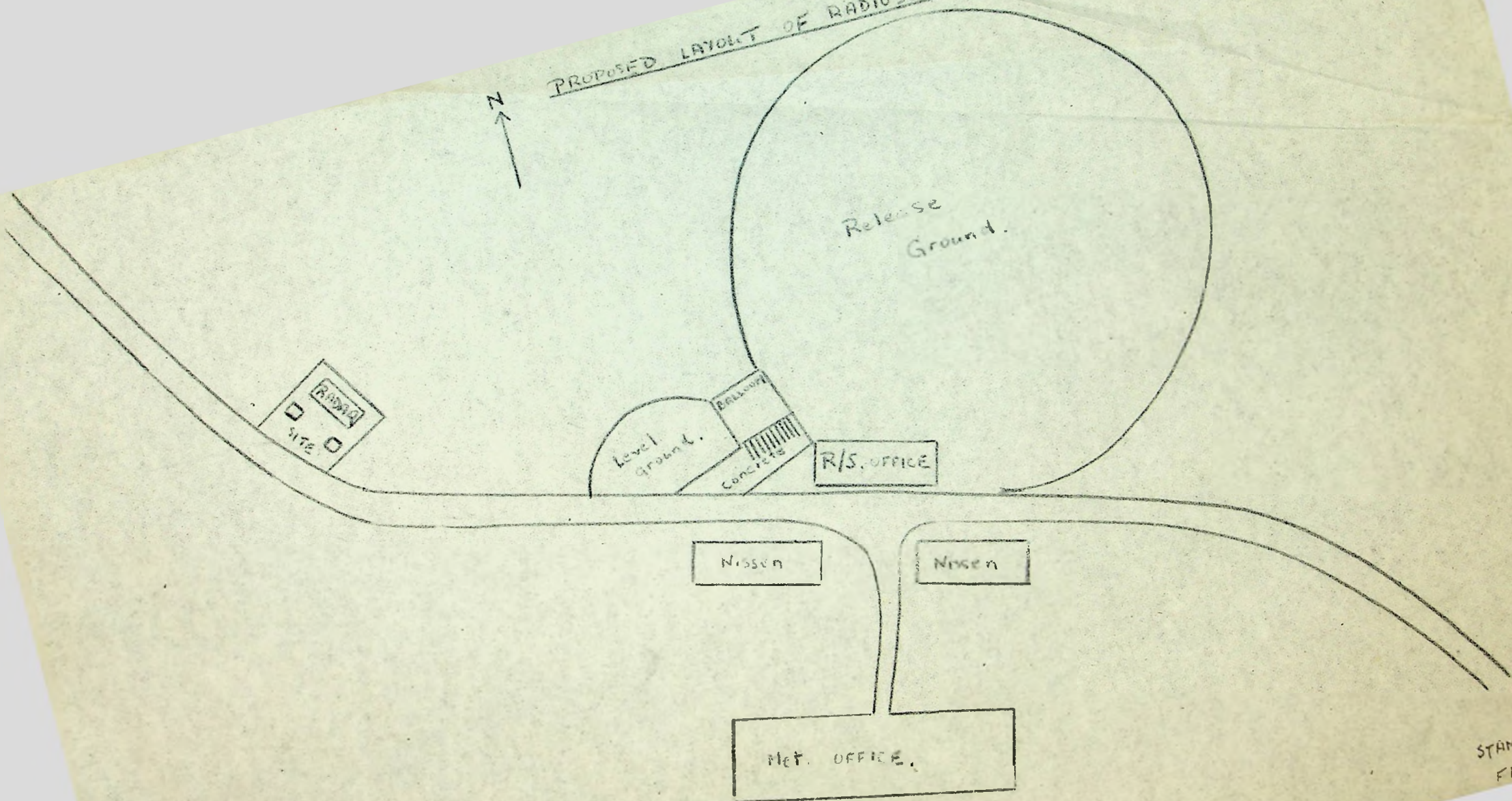
3. Power: Local electric power is supplied by Diesel-operated generators. The supply is AC single-phase rated at 220 volts but without automatic voltage control. The Chief of the Electrical and Telegraphic Dept. has given his assurance that the necessary 3 Kw power will be available for R/S purposes. However in view of the age of the Diesels, the absence of automatic voltage controls and the fluctuating power load, this official agrees with the R/S Officer that some form of voltage stabilisation will be essential to permit the efficient operation of R/S ground apparatus. Since H.O.4's list of equipment being shipped to this station does not include a voltage stabiliser a formal request for the provision of such an instrument is being made. This request is being submitted before the arrival of the equipment itself in order to avoid unnecessary delay, since it is already apparent that voltage stabilisation will be required.

The work of setting up the Radio/Sonde and Radar/Wind station will go forward as rapidly as circumstances permit and further reports of progress will be submitted when appropriate.

*D. McNaughtan.*  
Radio/Sonde Officer.



PROPOSED LAYOUT OF RADIOSONDE AND RADAR WIND STATION

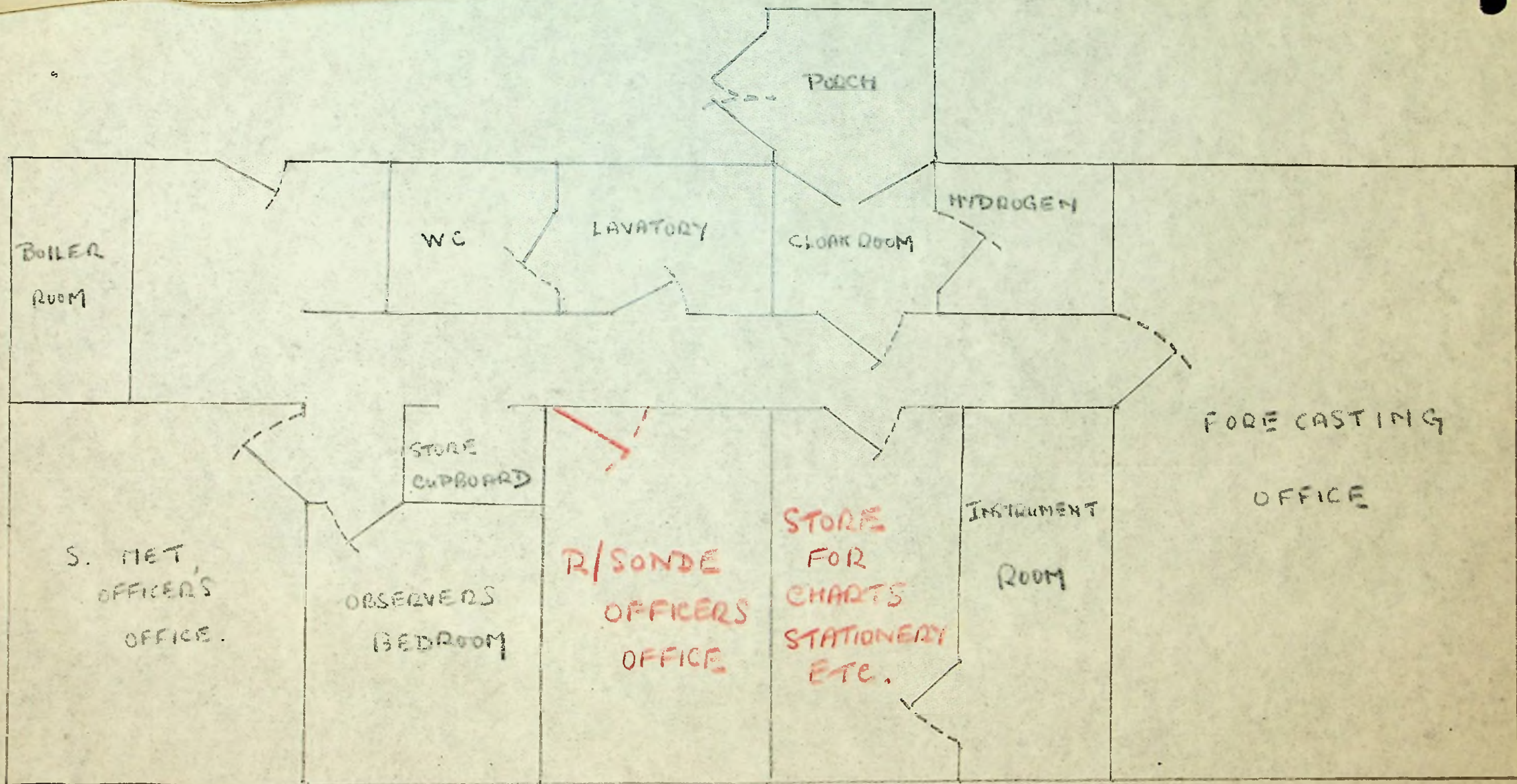


12

STANLEY  
FALKLAND ISLANDS



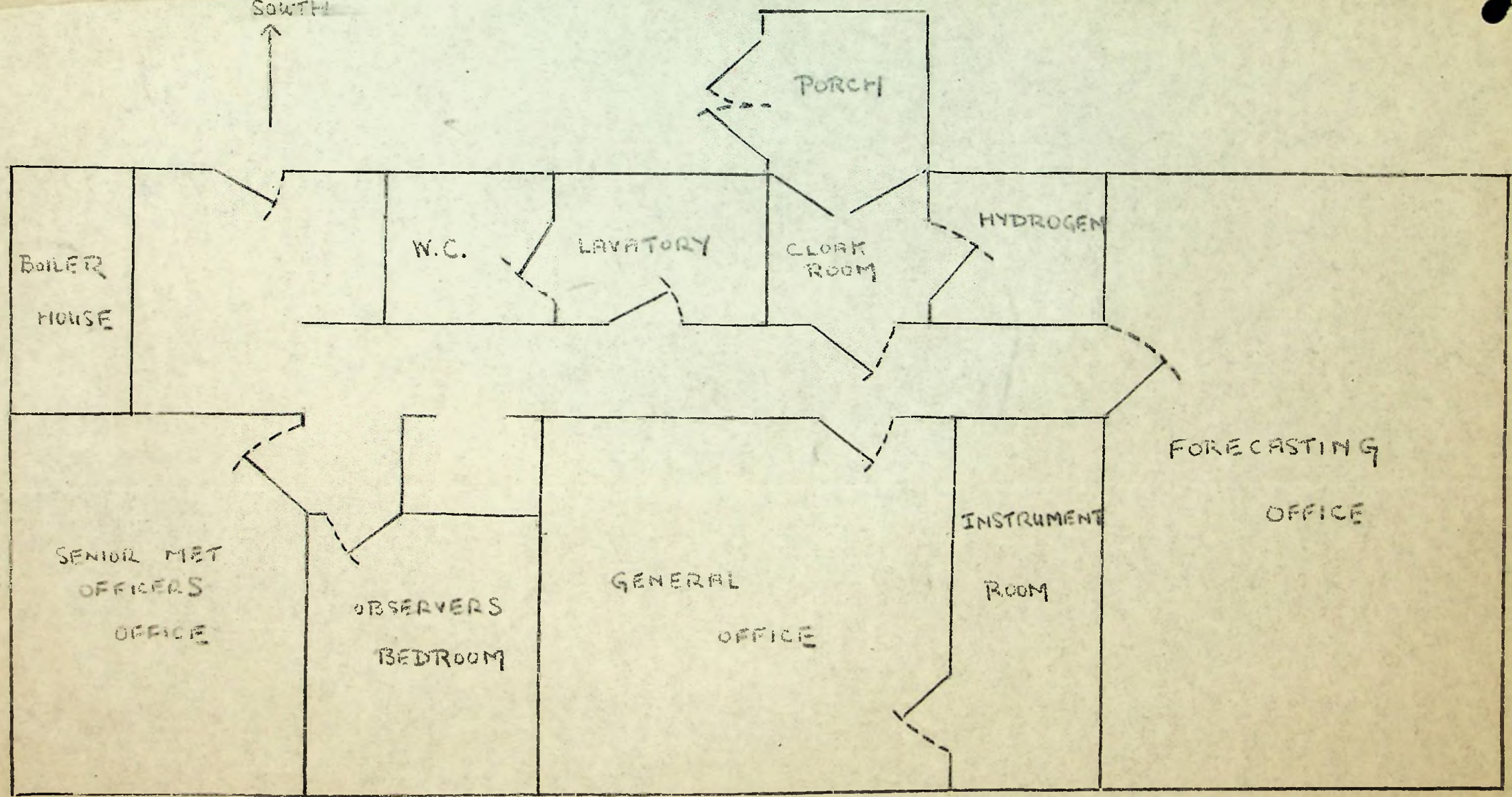
NET OFFICE SHOWING PROPOSED ALTERATIONS





ONE FLY PLAN OF MET. OFFICE - EXISTING LAYOUT

SOUTH  
↑



SCALE 4'0" to 1"

170000.

Copy to met office of 2.  
TELEGRAM.

COPY.

(1K)

Original filed in 135/44  
"Establishment of new  
Met. Station".

From His Excellency the Acting Governor.

To The Secretary of State for the Colonies.

Despatched : November 9th 19 46 Time : ....

Received : ..... 19 Time :

No. 353. Your telegram No. 179. Meterological Services. Request  
authority for Government to carry <sup>out</sup> on repayment by Air Ministry essential  
works required by Howkins.

2. Meanwhile am authorising advance account Air Ministry to pay  
salaries and minor charges.

GOVERNOR.

P/L.

Reply at Red 2.



135/44  
Handed to me by Lt. Howkins.  
Cable 6.11.46  
Notes of Meeting held in Room 717, Victory House, at  
2.30 p.m. on Friday, 19th July, 1946, to discuss  
arrangements for establishing a Meteorological Service  
in the Falkland Islands.

Present:-

Sir Nelson Johnson	D.M.O.
Mr. E. Gold	D.D.M.O.
Mr. R. Corless	A.D.M.O. (P)
Mr. G.W. Henlen	Colonial Office
Mr. H.L. Wilson	"
Mr. A.F. Wilkins	N.P.L.
Dr. C.E.P. Brooks	M.O.3.
Lt. G.A. Howkins	N.M.B.
Mr. R.A. Reed.	M.O.12.
Mr. H.T. Smith	M.O.4.
Mr. N.H. Smith	M.O.13.

D.M.O. opened the meeting stating it had been agreed with the Colonial Office that Air Ministry should take over the meteorological station operated in the Falkland Islands by the Admiralty during the war. Arrangements were in hand for Lt. G.A. Howkins to be transferred from the Naval Meteorological Branch to the Meteorological Office and for him to proceed shortly to the Falkland Islands as officer in charge of the station.

Mr. Henlen gave a brief description of Government policy concerning the Falkland Islands and its Dependencies mentioning that the latter included a large area of land consisting of about one-third of the South Pole land area. Survey parties, in which meteorologists were included and which were paid from Colonial Office funds, were based at Port Lockroy, Deception Island, Cape Geddes, Hope Bay and Marguerite Bay, W. Grahamland. The tour of duty of several of these meteorologists expired in December and arising out of the question of their replacement he asked (a) whether the proposed Meteorological Service was intended to cover the Dependencies as well as the Falkland Islands and if so, (b) whether the meteorologists in the Survey Parties would be replaced by the Meteorological Office. In answer to (a) D.M.O. replied in the affirmative but as regards (b) that he was proceeding on the assumption that the members of the Survey Parties would provide meteorological observations and transmit reports to the central office. He added that it would be quite impossible for the Meteorological Office at the present time to find five observers to take the place of the present meteorologists. After discussion it was agreed that the Colonial Office should endeavour to recruit suitable personnel in consultation with A.D.M.O. (P) who would arrange for a course at the Meteorological Office Training School. Lt. Howkins added that if these recruits travelled in the same ship as himself he would be able to continue that training. D.M.O. asked whether the Colonial Office could arrange for other personnel of the Survey Parties to perform meteorological duties in circumstances where trained observers were not available. Mr. Henlen replied that this was the only alternative.

Action  
C.O.

Action  
C.O.

With regard to the central office at Stanley at present maintained by the Admiralty, with a South African Naval Meteorologist in charge, it was agreed that the Admiralty should be asked to signal South Africa requesting that this officer (Lt. D.L. Niddrie) remain until Lt. Howkins arrival in the autumn.

Action  
D.M.O.

D.M.O. then proceeded to the items on the Agenda as circulated.

1. Functions of the Meteorological Service.

(a) Maintenance of synoptic observations throughout the Dependency.

Lt. Howkins described the existing organisation for the making of observations and collection of reports within the Islands and Dependencies. As regards the Falklands themselves, auxiliary stations are established at Cape Pembroke, New Island, Careass Island, Hope Bay, Pebble Island and Darwin. These stations report once daily and, except in the case of Cape Pembroke and Pebble Island, payments of some £5 to £10 per annum are paid to the observers for their services.

/It

It was agreed that, as the observers would probably be unwilling to continue to co-operate unless these payments were maintained, steps should be taken to secure authority for the allocation of a sum of up to £50 per annum for the purpose.

Action  
A.D.M.O(P)

Lt. Howkins was of the opinion that one of the auxiliary stations in the West Falklands should become a full reporting station making three reports daily.

It was agreed that he should, in due course, forward an estimate of the cost on the basis of securing voluntary co-operation as far as possible.

Action  
Lt. Howkins

Reports are also received three times daily by W/T from Grytviken (South Georgia) where the observations are made by a Norwegian employee of an Argentine whaling company.

In addition, reports are received by W/T three times daily from the Survey bases.

It was agreed that Lt. Howkins should be authorised to visit these bases as opportunities offered in order to give advice and assistance to the observers and to renew equipment when necessary.

As regards times at which observations should be made throughout the area, D.M.O. stated that these should conform to the international standard hours if at all possible.

(b) Preparation of a Falkland Islands Collective Message (FICOM) for issue by W/T.

Lt. Howkins stated that these collective messages are broadcast by the Naval W/T station twice daily and contain reports for the Falkland Islands and Dependencies and a selection of South American reports. These messages have a Naval interest and are of benefit to South Africa as well as South American states. They consist of about 300 groups.

It was agreed that these collective issues should be continued.

Arising from this, Lt. Howkins expressed uncertainty as to whether, owing to the departure of a large proportion of the Naval personnel and the fact that there were only four civilian W/T operators employed at the Government W/T station, it would be possible to ensure reception of the South American synoptic data. He added that reception schedules totalled about 3 hours in the 24, and he thought that the Navy would only undertake the transmission of Fleet messages. He also pointed out that <sup>normally</sup> the civilian operators were more experienced and more reliable than service ones, because service operators arriving from UK were fresh from W.T. courses and had little experience.

It was therefore agreed that D.M.O. should approach the Colonial Office with a view to ascertaining whether the local Government could arrange for the necessary meteorological W/T receptions.

Action  
D.M.O.

(c) Preparation of local forecasts for agricultural purposes.

Lt. Howkins stated the forecasts for farmers based on the 1200 G.M.T. chart are broadcast daily by the Stanley Broadcasting station and are widely received.

It was agreed that these arrangements should continue.

(d) Analysis of climatological data already available.

Lt. Howkins thought that a good deal of past data had been sent to South Africa, but that copies might have been sent to Naval Met. Branch. Dr. Brooks agreed to ascertain whether this was so. It was further agreed that Lt. Howkins should spend a day at Harrow to discuss and finalise all arrangements in connection with past and future data.

Action  
M.O.3.  
Action  
Lt. Howkins.

/((e)

1A<sup>9</sup>

- (e) Upper air observations including radio sonde, and if possible, radio wind.

D.M.O. stated that the aim with regard to radio sonde observations should normally be to carry out two to three ascents weekly, but that in interesting synoptic situations a sequence of observations should be carried out at six to twelve hour intervals.

As the result of discussion it transpired that the following action was required:-

Action  
M.O.4.

- (i) In view of the time taken for stores to get to the Falklands, initial supplies should be shipped in the vessel proceeding there direct in September and these supplies should include a reserve of 50 transmitters, and a three months' stock of stores in general.

Action  
M.O.4.

- (ii) Provision of a launching mast - the lattice type would appear to be the most suitable both as regards ease of erection and shipment.

Action  
M.O.4.

- (iii) Provision of an Admiralty canvas screen as a temporary shelter for balloon filling.

Action  
M.O.12.

- (iv) Provide Lt. Howkins prior to his departure with a specification of the special building required as a balloon shelter and as a store for all upper air equipment.

Action  
M.O.4.

With regard to radio wind observations, D.M.O. stated that these would be most useful but the maintenance problem as regards the G.L.3. appeared to be prohibitive. Mr. Wilkins, however, thought that the D.S.I.R. section, which was to consist of one E.O. (Radio expert) and two Laboratory Assistants, would be able to maintain the G.L.3. and also assist the meteorological staff with these observations. Lt. Howkins doubted whether facilities existed at Port Stanley for off-loading the G.L.3. trailer which weighed 11½ tons. It was therefore agreed that M.O.4. should initiate enquiries as to landing facilities.

D.M.O. stated that the target programme for radio wind observations should be daily ascents and that for radio sonde observations three times weekly, but modified by the "sequence" requirement mentioned earlier when appropriate.

- (f) Collaboration with D.S.I.R. in carrying out ionospheric observations.

Mr. Wilkins stated that this work was regarded as very important and that it was proposed to transfer the existing station to the vicinity of the Meteorological Office at Stanley. In reply to a query concerning power supply Lt. Howkins assured him that the required maximum of 3 kilowatts would be available. Mr. Wilkins said that the ionospheric station consisted of a hut 20' x 16' and three masts 75' to 250' high, the whole set-up covering an area 300' x 65' approximately. Lt. Howkins confirmed that it would be possible to choose a site within the vicinity of the Met. Office but displaced from the line of flow of the prevailing wind.

## 2. Staff.

D.M.O. stated that the proposed Met. Office staff consisted of one E.O., one A.E.O. (Radio Sonde) and two locally entered assistants. With regard to the radio sonde officer, Mr. Reed said that the first trainee would not be available until the end of October and asked what priority the Falkland Islands requirement should take on the list of new radio sonde stations. D.M.O. instructed that it should be second on the list, i.e. after Nairobi, but that the first warning notice issued should be that for the Falklands.

Action  
M.O.12.

Lt. Howkins considered that he would require a third locally entered assistant owing to the necessity for sending someone to the W/T office in order to telephone synoptic data to the forecaster. D.M.O. considered that two assistants should be tried in the first instance and that if Lt. Howkins found this number insufficient, he should ask for authority to recruit a third local observer.

/With

With regard to staff for the Dependencies, the position has been reported in the opening paragraphs.

Action  
C.O.

3. Equipment.

In addition to the existing equipment at Stanley it was agreed that the following should be supplied:-

Nephoscopes - Besson and Fileman.

Rain Recorder

Earth Thermometers

Radio Sondes

Balloons (pilot, R/S and R/W).

R/W Targets

Hydrogen - at rate of 150 cylinders per 6 months - automatic supply.

A small store of instruments - sufficient and of suitable ranges to cover requirements of the Dependencies also.

Action  
M.O.4.

It was agreed that M.O.4. should investigate the situation with regard to existing stores and arrange for transfer to Met. Office charge.

Action  
M.O.4.

With regard to the office building at Stanley it was agreed that the Governor should be asked to retain ownership and arrange for its maintenance.

Action  
C.O.

4. Target Date.

D.M.O. requested that A.D.M.O.(P) should arrange for Lt. Howkins' interview with the Civil Service Commissioners to take place during the first half of September.

Action  
A.D.M.O.(P).

As the ship proceeding direct to Port Stanley is understood to be leaving London during the third week in September. D.M.O. stated that all equipment should be ready by the 15th.

Action  
M.O.4.

D.M.O. instructed that Lt. Howkins should spend about 14 days in the Meteorological Office making contacts and finalising arrangements.

Action  
Lt. Howkins.

5. Other matters.

It was agreed that on technical matters Lt. Howkins as the officer in charge of the Falkland Islands Meteorological Service could communicate direct with the Meteorological Office, but that on administrative matters he should communicate through H.E. the Governor and his staff.

Meteorological Office,  
Air Ministry.

23/7/46.

DECODE.

No. S 25.

*Copy to met office of i.*  
TELEGRAM.

135/44

2

*From* The Secretary of State for the Colonies.

*To* His Excellency the Acting Governor.

*Despatched:* November 19th 19 46 *Time:* 23.35

*Received:* November 20th 19 46 *Time:* 09.30

*Red 63 in 135/44 - also Red 1th Series*

No. 240. Your telegram No. 353. Meteorological services. Grateful to learn what are essential works referred to.

P/L.

Reply at 3.

SECRETARY OF STATE.

*In 255/46  
with 10  
all  
27/4*

LJH.



DECODE.

Copy to Executive Engineer for inf.  
Copy to Meteorological Officer for inf.

TELEGRAM.

M.P. 255/46.

(3)

From His Excellency the Acting Governor.

To The Secretary of State for the Colonies.

Despatched: November 23rd 19 46 Time: 11.30.

Received: . . . . . 19 Time:

Red 2

No. 361. Your telegram No. 240. Meteorological Services.

Essential works.

Red 1a.  
3

Please see section 1 paragraph 3 section 2 paragraph 2 and section 3 paragraph 2 of Howkins' preliminary report dated 14th November sent to Director Meteorological Services Air Ministry by air should arrive end November.

2. In view of urgency of work have given provisional authority to proceed up to £1,000.

GOVERNOR.

G.T.C.

Reply at 12 in 0008/17 Falkland Is. met. station  
(by)

DRM.

METEOROLOGICAL OFFICE  
PORT STANLEY

4

5th. DECEMBER 1946.

Hon. C. S.

4a-b.

The attached notes are submitted for your information. This is the only copy held and it is requested that it be returned to this office after perusal.

G. A. Hawkins

(4a) is a copy of the original wh. has been returned to Mr. H.  
A. B.

Notes on a conversation betweenS E C R E T.Dr. B.B.Roberts (Foreign Office Research Department) and Mr. Howkins,13th September, 1946.

1. It is the wish of H.M.G. to emphasize that the occupation of the Falkland Islands Dependencies should be such as to afford evidence of the exercise of sovereignty and that the programme of research and exploration should keep this in view. An active programme of research, which can be justified on scientific grounds alone, is an essential part of the preparation of a case which can be used if necessary to demonstrate to Foreign Governments or to a Tribunal that H.M.G. is taking all reasonable steps to develop and exercise sovereignty over the area, and is not merely attempting to prevent foreign encroachments. There is no doubt that both the Chilean and Argentine Governments would like to set up meteorological stations in the Dependencies for political reasons. It is essential therefore that while we have to exclude them from doing so we must take every possible step to ensure that we do not lay ourselves open to the same charge. Whilst F.I.D.S. was political in origin, it is important to maintain it as far as possible as a normal administrative activity in which motives of research, exploration and development predominate.

2. As far as meteorology is concerned the programme of work can be based solely on meteorological requirements with the following exceptions:

(a) The positions of the observing stations are at present dictated by political considerations. However, a suggestion from Surgeon-Commander Bingham that Base A (Port Lockroy) should be moved this summer to the Argentine Islands may be considered solely from the point of view of advantage or disadvantage to the meteorological programme. Surgeon-Commander Bingham has been instructed to arrange this in consultation with the officer in charge of the Falkland Islands Meteorological Service.

(b) It is of particular importance to the Foreign Office that the standard of observation and research at Base C (Cape Geddes, South Orkneys) should compare favourably with the nearby Argentine station.

3. The Argentine meteorological station at Grytviken, South Georgia, is believed to issue unreliable reports, If it can be established that the South Georgia reports are unreliable, then it would be desirable to set up a British station at Grytviken. The guiding principle in such cases must be the importance of the station to the general scientific programme.

7



Meteorological Office  
Stanley  
Falkland Islands

December 16th 1946.

Ref. FLK/2/46/6

Employment of Locally Recruited Assistants  
to the Meteorological Office.

Hon. Col. Sec.,

It is unlikely that the Air Ministry Meteorological Office will employ locally recruited assistants on anything but a temporary basis. It is therefore submitted that they be recruited by The Falkland Islands' Government and seconded to the Meteorological Office; assistants would then be entitled to the privileges of established Government Servants, including periodical leave to the United Kingdom.

*G. A. Hoskins*

Meteorological Officer

The Honourable,  
The Colonial Secretary,  
Falkland Islands.

*Per (S)*



No. 255/46.

MINUTE.

8

(It is requested that, in any reference to this minute the above Number and the date may be quoted.)

16th December, 19 46.

To The Meteorological Officer,

From The Colonial Secretary,

STANLEY.

Stanley, Falkland Islands.

Employment of Locally Recruited Assistants to Met. Office.

7

I am directed by the Governor to refer to your letter, FLK/2/46/6, of today's date and to say that this Government accepts the proposal therein submitted. In addition to the two Meteorological Assistants already employed by this Government who will continue to be paid from Falkland Islands funds, two others will be engaged and seconded to the Air Ministry Meteorological Office at an annual charge of £250 each, to include Provident Fund contributions, Leave Passages and all other charges.

(Sgd.) A. B. MATHEWS  
Colonial Secretary.



9

Meteorological Office  
Stanley  
Falkland Islands

16th December 1946.

Ref. FLK/8/46/2.

Sir,

9a-6  
I have the honour to submit the attached letters for onward transmission to The Director, Meteorological Office.

Copies are attached for filing and transmission to the Secretary of State for The Colonies.

I have the honour to be,  
Sir,  
Your Obedient Servant,

C. F. Howkins

Meteorological Officer

His Excellency,  
The Governor,  
Falkland Islands.

16th December, 1946.

PROPOSED SCHEME FOR THE RECEPTION OF METEOROLOGICAL SYNOPTIC MESSAGES BY WIRELESS INTEGRALITY.

There are two types of incoming Synoptic Messages - the Collectives, broadcast by South American Countries at routine times, and the individual Synoptic Reports, transmitted from the subsidiary stations in the Falklands and Dependencies, which go to make up the Falkland Islands Collective Message (FICOL). The broadcast collective messages make up the greater part of the incoming traffic and are received without establishing wireless contact with the stations transmitting them: the individual reports from the Falklands and Dependencies can only be collected during intercommunication schedules between Stanley and the wireless stations concerned.

2. It is clear that the reception of incoming Synoptic messages ceased to be an Admiralty commitment when the Air Ministry Meteorological Office took over the station in Stanley. (Para. 8 of the Secretary of the Admiralty's letter H.O.12/46 refers). The Naval Officer in Charge, Falklands, has however indicated his willingness to continue receiving these messages, on the understanding that alternative arrangements will be made as soon as possible.

3. The Superintendent, Electrical and Telegraphs Dept. was approached on this matter and he estimates that three additional operators would have to be recruited if his Department were to handle all the incoming meteorological messages. The objections to such action are that :-

- (i) it may be difficult to find three suitable trainees:
- (ii) it would cost from £2450 - £3000 per annum, in salaries alone:
- (iii) the operators would be engaged in a monotonous, routine occupation with little hope of future advancement; (His Excellency's dispatch to The Secretary of State for the Colonies, dated 23rd October, 1946 refers).

4. By way of an alternative, it is suggested that the Meteorological Office staff should undertake the reception of the broadcast messages from South America and the Electrical and Telegraphs Dept. should handle only those signals which come from Stations in the Falklands and its dependencies.

5. Three assistants are already fully occupied with the existing Meteorological Office routines. These routines involve the attendance of one man at the Wireless Station Control Hut for two hours each morning, to phone incoming signals to the Meteorological Office and to compile the outgoing SANCOL and FICOL collectives. This wasteful routine could be avoided if the South American messages were received at the Meteorological Office, instead of at the Control Hut two miles away. With this saving in mind, it is estimated that a staff of four assistants, trained in both meteorology and wireless reception, would be sufficient to deal with all incoming messages from South American stations, in addition to the strictly meteorological work of the office.

6. To implement the scheme it would be necessary to :

- (i) recruit a fourth assistant: when under Naval jurisdiction the office had two civilian assistants and two Able Seamen (Ret.); a third civilian assistant has already been requested to replace the two Able seamen, both of whom will be withdrawn by Admiralty before 1st January, 1947. (Meteorological Officer's FM 3/46/1 and FM 2/46/1 refers).
- (ii) obtain at least two high-grade communications receivers: these may be obtainable from H.O. 4 (Instruments Section) who have already supplied two such receivers for Radio Sonde work;

96

- (iii) train all four assistants in W/T reception. The Superintendent, Electrical and Telegraphs Dept. is prepared to undertake this.
- (iv) arrange for Government operators, working in the Control Hut, to receive the individual synoptic messages sent from stations in the Falklands and Dependencies. The Superintendent, Electrical and Telegraphs Dept. states that this would involve little extra work since the reports are always embodied in routine schedules which have to be maintained for Government and civilian traffic.

7. The advantages of the scheme are as follows :-

- (i) It is economical in both money and manpower since it involves the recruitment of only one additional assistant as opposed to the three required by the Superintendent, Electrical and Telegraphs Dept. if he undertakes the work.
- (ii) All four assistants would be engaged in responsible technical posts with good prospects. There is the possibility that a youth with a Cambridge School Certificate, who had served several years in the Meteorological Office, could stand as a candidate in the Civil Service Examinations for the Assistant Experimental Officer grade.
- (iii) The Meteorological Office would benefit considerably by having plotters who could read morse. Signals from South American stations are often badly mutilated because the power is limited, operators are of low standard and atmospherics are frequent. It is reasonable to suppose that a W/T operator with a knowledge of meteorological codes would have a considerable advantage over an operator to whom the signals mean nothing. Likewise, a plotter who has a knowledge of morse would be able to put an intelligent interpretation on corrupt groups in the messages.

8. Authority to recruit the fourth assistant, required to implement the scheme, is requested in the accompanying letter MA/246/8.

9. The scheme has been approved in principle by His Excellency, who is addressing The Secretary of State for The Colonies regarding it.

*G. H. Hawkins*

Meteorological Officer  
Falkland Islands

The Director,  
Meteorological Office, H.O. 13,  
Air Ministry,  
Kingsway,  
London, W.C.2.

*Spence*  
Meteorological Office,  
Stanley,  
Falkland Islands. 96.

16th, December 1946

Ref. FIM/2/46/6

Request for a Fourth Assistant and a Submission  
regarding the Employment of Locally-Recruited  
Assistants.

If the scheme outlined in FIM/46/1  
is approved, then authority is requested to employ  
a fourth locally-recruited assistant.

2. The attached copies of minutes, referring  
to the status of locally recruited assistants, are  
forwarded for your consideration and approval.

Meteorological Officer

The Director,  
Meteorological Office, H.O.13,  
Air Ministry,  
Kingsway,  
London, W.C.2.

GOVERNMENT HOUSE

FALKLAND ISLANDS.

STANLEY.

No. 78

16th December, 1946.

Sir,

*Red 45 in 135/44  
Establishment of  
new met. stn.*

*Red 9a.*

I have the honour to refer to your telegram No. 146 of the 3rd of August, 1946, on the subject of the taking over by the Air Ministry of the Royal Naval Meteorological Station, and to enclose, for your information, a copy of a proposed scheme which is being submitted to the Air Ministry Meteorological Office by the Meteorological Officer (Mr. Howkins).

*Red 9a*

*Red 11 in 170/46  
"F.I. W/T Stn."*

2. The scheme has been discussed with Mr. Howkins, and I am in full agreement with it, more particularly because (as remarked in paragraph 3 (iii)) it meets one of the objections to the recruitment of local W/T operators to which Mr. Mathews referred to in his Confidential Despatch of the 23rd of October, 1946.

*Red 9a*

3. I have accepted Mr. Howkins's proposal that the two additional assistants required (see paragraph 6 (i)) to replace the Able Seamen at present employed at the Meteorological Office should be engaged and paid by this Government on an annual reimbursement by the Air Ministry of £250 each, to include Provident Fund contributions, leave passages, and other charges.

*FLK/2/46/8.  
FLK/4/46/12.*

4. I take this opportunity to enclose, for transmission to the Director, Meteorological Office, Air Ministry, correspondence noted in the margin relative to the proposals in the scheme from the Meteorological Officer.

I have the honour to be,  
Sir,  
Your most obedient,  
humble servant,

*Reply at 19*

(Sgd.) MILES CLIFFORD.

THE RIGHT HONOURABLE  
ARTHUR GRECH JONES, P.C., M.P.,  
SECRETARY OF STATE FOR THE COLONIES.



Meteorological Office,  
Stanley,  
Falkland Islands.

Ref FM 5/47/7

22nd. January 1947.

Contribution of Falkland Islands Government towards cost of Meteorological Office.

H.C.S.,

*Ad's*  
Further to H.E.'s telegram to S. of S. for the Colonies number 361/46 dated 27/11/46 and your minute No. 255/46, I propose to inform the Air Ministry that the Government of the Falkland Islands have very generously offered to maintain and heat the Meteorological Office buildings and to pay the salaries of the two assistants already employed there,

2. In this connection I propose that the Air Ministry should state their intention of undertaking responsibility for all other charges including, the salaries of staff other than those mentioned above, the payment of camp observers, the entire cost of new building, equipment and associated charges. In addition they will be liable to charges for all telephone, lighting and postal services which they may use.



G. A. Hawkins

Meteorological Officer

The Honourable,  
The Colonial Secretary,  
Stanley.

*ABC*  
*12/1*

Saving.

From the Secretary of State for the Colonies.

To the Officer Administering the Government of Falkland Islands.

Date 8 April, 1947.

N. 28 Saving.

253/46

10.

Your despatch No. 78 of 16th December, 1946.

Air Ministry are willing to pay the appropriate local rates for the four locally-entered civilian W/T operators at Port Stanley. This temporary arrangement will remain in force until the end of the current financial year by which time Howkins' proposals will have been studied and permanent arrangements approved.

The Air Ministry assume that you will open a separate Account in respect of the meteorological service and that you will submit periodic statements showing the expenditure under various headings. I should be glad if these statements could be transmitted to me in the first instance.

See 23 in 75/45

"Met. Service - Farm Stations"

SECEP.

See 19 in

0405

613

May 2nd. 1947

The Honourable,  
The Colonial Secretary,  
Stanley, Falkland Is.

FALKLAND ISLAND METEOROLOGICAL SERVICE.

A | I have the honour to submit the attached notes on a scheme for the Falkland Islands Meteorological Service. His Excellency has already indicated his intention of integrating the service and this, in my view, would be best achieved by having a self-contained, locally administered, organisation controlled from Stanley, but still maintaining close liaison with the Air Ministry. If you consider the matter worthy of further investigation, then I propose to submit a comprehensive report on the existing service with full details of the scheme which is outlined below:

The Meteorological Service consists essentially of three sections:-

1. (a). The Stanley Office (excluding the Upper Air Section) and the West and East Falkland outstations.

(b). Reception of wireless weather messages (shortly to be undertaken by us). — 255/46

2. The Upper Air Section.

3. The Dependencies stations including South Georgia.

The functions of the service are broadly:-

(i). To provide a forecast service for the Falklands and the adjoining sea areas.

(ii). To supply synoptic information (surface and upper air) to other countries.

(iii). Investigations (including climatology).

Of these the forecasting should be a Public Service and, as such, it would appear to be a Falkland Islands Government responsibility. The present demands on the forecast service are few and could be met by a small organisation involving sections 1.(a) and (b) only. If, however, aircraft are introduced and/or the kelp and sealing companies begin to operate on a large scale, then the demands on the forecast service will increase considerably and an Upper Air Section would become essential. Further, the upper air programme at present laid down (three Radio/sonde and four Radar/Wind ascents weekly) would require expansion and at least one technician for repair and maintenance would become necessary.

Regarding functions (ii) and (iii) above; in order to supply reliable synoptic information to other countries from the Falklands and Dependencies, it will be necessary to set up well-organised observing stations with trained staff and efficient W/T communications with Stanley. Further, if useful climatological results are to be obtained it will be necessary to equip the stations with efficient recording instruments. All this implies a large-scale organisation requiring considerable administration and the present staff at the Stanley office is inadequate for this purpose.

The expense of an organisation of this size would be out of all proportion to the income and present development of the Colony. It is therefore suggested that the financial <sup>responsibility</sup> for sections 2. and 3. of the service should be accepted by the Imperial Government.

Administration: It is submitted that such a service would function best, administered as a Government Department in Stanley. Close liaison could still be maintained with the Air Ministry so that staff could keep abreast of current developments. The advantage of a Government-administered service would be its greater sensitivity to the peculiar requirements of the area while still retaining its present essential relationship with the Air Ministry Meteorological Office. Also co-operation with other Government Departments would be much simpler - particularly with the Electrical and Telegraphs Dept. upon whom we will be largely dependent for the organisation of W/T reception and the maintenance of wireless equipment; and the Public Works Department who are already responsible for the upkeep of the buildings. Accounting for stores would be less complicated and interchanges of equipment between Stanley and other stations facilitated. Experience this season has shown that it would be desirable for McNaughton or myself to be in a position to devote at least two months annually to F.I.D.S. affairs and to be able to visit the Dependencies each summer.

I am of the opinion that the Air Ministry did not contemplate an organisation of the size of that outlined above and it must be emphasised that the staff would have to be increased.

G. A. Howkins  
Meteorological Officer.