C:S.O.

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O TEL/GEN/2#3

SUBJECT:

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WIRELESS COMMUNICATIONS - REPORTS AND ACTION TAKEN BY COMMITTEE ON.

CONNECTED FILES.

NUMBER AND YEAR.

OVERSEAS TELECOMMUNICATIONS DEPARTMENT,
Headquarters Building, General Post Office,
St. Martin's Le Grand, London, E.C.1.

28 October, 1949.

Dear Millar,

Whitley wrote to Shepherd on the 4th March about wire broadcast equipment for the Falkland Islands, I am sorry that our reply has been so long delayed: a rather comprehensive study has been necessary.

Our Engineers have designed wire broadcast and ancillary equipment which is described in the accompanying provisional specifications, and they consider that it would be best suited to the requirements. A schedule showing the estimated cost is also enclosed. We expect that fifteen to eighteen months would be required for delivery. The costs and delivery time would of course have to be worked out by the firm from which the equipment was ordered, but our figures should provide a useful guide which you may find helpful in considering the project.

The design is not complete in every detail but has been taken far enough to enable a fairly close estimate to be made of the work involved and its cost. Certain of the design details have been supplied by the B.B.C. who would have to be consulted before orders were placed with a Contractor to manufacture equipment of the B.B.C. design. Equipment designed by the B.B.C. is indicated in the attached schedules.

Yours sincerely,

(Sgd.) F.E. Jones

(F. E. JONES.)

J. B. Millar, Esq., Colonial Office.

Headquarters Building, General of ice, ot. atin's as irond, andon, a. J.

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S. E.T.

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May 6.5.

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Ine design is not complete in every detail but has been taken for enough to sabble a fairly close estimate to be mode of the most involved and its cost. Certain of the configuration of the consulted before orders were placed with a Centractor to a profession. Equipment can not be attached schedulion. Equipment can not be attached schedulion.

senote and light services

Hou. C. 5

Mequinent but the cert is much higher than estimates.

Juil kut up the costs for consideration

But 15/2/55 21.1.50

Set S would like to get something away by the next mail

Sk would appreciate your comments on the acheme referred to in 159 together with the costs which you are preparing

Mich 15 3 50

How C. 5

I regret it has not been possell, for me to reply in term for the mail which left a few days ago.

The report has been need and the equipment into meet one need but the cost is much higher than at first estimated.

The Broadcast equipment will cost £2300.

Masts if Rhombic antenne is used will cost, for two derials using 8 ments \$1600 aerial wine, Insulators stays, cable. \$250 Making the total cost including freight \$4250.

Then has been no information from the B.B.C. so for in commection with the Radio transmitters asked for some lime back but I doubt whether we will get this for less than £5000. It will haven be recalled that my estimate for transmitters was based on the assumption that we would get Radiforn sets of 500 watto output at a cost of £1600 each. A final decision now depends on the findings of the B.B.C.

AM, SPT 3. 3. 50 Extract from minute from Met Officer to Secretary FIDS.

Of the 24th February, 1950. Original filed in F.I.D.S. Zet 81 Page 3.

It was originally proposed by the W/T Committee that the Met Office should work regular routines with various points on the Dalklands equipped with 10 watt crystal controlled S/T seta working on 2 & 4-5 megs.

On the other hand, the suggestion was made in committee that these small sets might be used as telephone links with the mest, in addition to providing an emergancy service; it may therefore be better if S.P.&T. took over responsibility for this (particularly in view of our staff shortage)?

It might occasionally be desirable for the Met Office to contact a few of the stations to collect weather information for the aircraft (especially during an emergency flight) and, no dout, the 890 could be used on these occasions?

Se 143.

A.C.S.

159-162. This is all far too scrappy. Please put up a precis of the position so far, showing the position reached as regards site and buildings, equipment, etc., as well as references to correspondence on the question of our getting a grant for this from the C.D. & W. Fund.



Col. Butler.

wall a meeting of the Myr Ote. to enable a reply to be sent to 159. S.P.T. has the specifications mentioned at 160.

See y N/T Committee

Circulate papers beforehand.

100

Minutes covering meeting at G.H. on 11/4 isgeten with the report we asked for from Messes. Nicolan & Hallett, and remarks on this from Mr. Mercen. From the tree of Mr. Mercen's minute I think we may safely assume he has taken offence at something - cossibly some sections of the Temport enterplace prospheric staffs report?

- although I am confident no offence was intended.

Mr. Mercer appears to have been considering the viewebrosacical ing equipment from Dec. 15 th. to March 3rd.

(if we go bey minutes in this file, and should, long
ago, have known exactly what he thought of it. To
claim now that I have tried to humy him in to a
prap decision is ridiculaus. This remark that he does
not know "what was asked for is equally riduculaus
since the full correspondence on the sewjex should have
since the full correspondence on the sewjex should have
seen read by him. This last sendence makes no
contribution to the problem.

There is little point in not calling a spade a spade. Mr. Mercer takes little transle to co-operate with this Committee - (his alterede with regard to the new R/T sets is an excellent example of this) - and the sooner we clear the air the better. I am confident that Messer. Nicologn a stallet whilst deprecating any possibility of non-cooperation feel, (as I do) that there is no paint in au continuing to devote au valuable time to the working of this Immittee unless everyone on it realises that its deliberations are of considerable value + shauld be regarded as seech.

A meeting to discuss the matter is probably the only answer.

Sen. Secer V/T Committee. 22/4/50.

167

Minutes of meeting of W/T Committee held at Government House on Tuesday April 11th, 1950.

Present: Lt/Col. Pierce-Butler (Chairman):
Messrs. A. Mercer, D. Hallett, C. Nicolson.
Seccy. D. McNaughton.

The Chairman welcomed Mr. Nicolson who had been invited to take the place on the Committee of Mr. T. Kift, his predecessor as Officer-inCharge, Ionospheric Station. He explained that the meeting had been convened to enable a reply to be made to a letter from the Secretary of State which enclosed specifications of a new wire broadcasting system proposed for installation in the Falkland Islands (159 in 0438/III).

The Secretary, referring to a minute from the Colonial Secretary (at 163 in 0438/TII), pointed out that a very full summary of the recommendations of the Committee had been made in 0438/II at 146-154. He read portions of this relevant to the rediffusion equipment, and the Chairman directed that reference should be included in these minutes to the sections concerned. These are summarised below:

147 para 2 - Location of Studio.

147 para 3 - Specialist advice on broadcasting scheme.

152 - 153 - Summary of Broadcasting requirements.

152 para 1 - Allocation of money (original estimate).

110 para 4 - H.E.'s dispatch re money.

143 para I - Funds from C.D.W. grant - 25000 plus possibility of more.

File 0802 15 - Request for additional grant. Revised version.

The meeting then went on to the new wire broadcasting specifications. The Chairman suggested that it would be necessary to find a Commercial firm willing to contract for the whole equipment, but Mr. Mercer said he felt sure that the G.P.O. Engineering Department would act as our agents in this matter, arrange for the purchase of the equipment, and perhaps test it for us before it was shipped.

Mr. Mercer had already submitted some estimate of the total cost of the scheme if, as was suggested in the specifications,

a full Rhombic antenna is used. This was:-

8 masts at £200 each
Aerial wire, insulators, stays, cable etc.
Wire broadcast system (per specification)

£1600 £350 £2300 total £4250

The members of the committee, whilst acknowledging the undoubted advantages of the Rhombic system, felt that the provision of an aerial system costing almost £2000 to serve equipment costing only a few hundred pounds more, seemed quite disproportionate. They suggested that, even should the general specifications be accepted, consideration should be given to reducing the cost of the aerial system - either by using a much simpler system or by drastically reducing the size of the masts.

Some discussion of the specifications then followed and it soon became obvious that a number of points in them gave rise to comment. The Chairman accordingly suggested that Messrs. Nicolson and Hallett should take away the specifications and make a report on them. This should be passed to the other members of the Committee for their comments with a veiw to preparing a comprehensive report for consideration with the other aspects of the problem. This is provided as an Appendix to these minutes.

Chee wd. Seem to be Some point in this

The Secretary drew attention to an associated problem, the lack of staff to man the new equipment and to organise programmes. When the original recommendations were made, a full-time Information Officer was employed in Stanley. This Officer had now left the Colony and it was understood that it was not intended to replace him. The Committee members agreed that, should it be intended to increase the scope of broadcasting services by an amount as would warrant the purchase of the type of equipment covered by the specifications, then further consideration should be given to the forming of some body to control broadcasting, including at least one full-time officer. (Such an agency has, in fact, already been formed in the "Broadcast Committee" which has been constituted a permanent advisory Committee. This Committee, however, is hamoered seriously by two main factors - lack of equipment, and shortage of suitable personnel - only one of which will be settled by the provision of new equipment).

Finally Mr. Hallett asked the Chairman whether the Committee might consider the very serious problem of electrical interference with radio reception in Stanley. The G.P.O. had recently been given wide powers for the suppression of "man-made" interference in the U.K. and he thought it was high time some similar steps were taken here. The Chairman agreed and said he felt sure that the Administration would give favourable consideration to any suggestions the Committee might make. Ir. Mercer pledged the help of his department in tracing and eliminating interference, by far the most common of which was from the ignition systems of motor vehicles. The Chairman suggested that Messrs. Nicolson and Hallett might prepare a draft of suitable regulations to be submitted to His Excellency, and they agreed to do so.

The meeting closed at 12.10.

to Mer Jaus Man Hon. Secretary.

Chairman.

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Ionospheric Station, Port Stanley, 20th April 1950

PROPOSED WIRE BROADCASTING SYSTEM

As instructed by the Chairman of the W/T Committee we have considered the G.P.O. proposed specifications and the result of our subsequent discussions are summarised below.

On purely technical grounds the proposed wire broadcasting system submitted by the G.P.O. appears in most respects to be ideal, and considering the very high quality of the items specified, the cost seems reasonable.

There are, however, other factors to be taken into consideration before the adoption of the scheme in its entirety or even in part, could be recommended with confidence for use in Stanley.

Of these the most important would appear to be;}

- (a) The staff which will be available to operate and maintain the equipment.
- The nature of the broadcasting service Envisaged. (b) (In particular, the total extent of broadcasting time, whether the same or greater than at present, and the proportionate distribution of the available program material, e.g. live, recorded, relayed etc).

The above two points which are, to a considerable extent interdependent and on which recommendation or condemnation Total should, it is felt be given full consideration by the committee at the earliest opportunity.

> Regarding (a). Unless a qualified (preferably B.B.C. TRAINED) studio engineer is employed, much of the ancillary equipment specified would be wasted, through lack of knowledge as to its use entirely, or lack of knowledge as to its correct use. For this reason the quality of programs might be no better and possibly much worse than at present. If the complete scheme proposed were to be adopted, a full time

qualified and experienced engineer would also seem to be imperitive for maintenance and repair especially in dealing with the diversity equipment. (It is fully appreciated that the salaries alone of such a staff could not be met out of the revenue obtained from the service).

casting time could be fairly substantially increased, the expense of the complete equipment would not appear to be justified. Instead the present apparatus, early be replaced, item for item by more modern and powerful equipment, the comparative simplicity both technically and operationally of the present system being retained, would appear to be preferable.

We are of the opinion, that with diversity reception, even with well maintained equipment, handled by a competent operator, any noticeble improvement in reception would be slight and would be apparent on rare occasions only. As the G.P.O report stresses, diversity reception can only be successful if the performance of the two receivers (sensitivity, signal to noise ratio etc) can be maintained identical, or at least within extremely close limits. In view of this, unless maintenance was of a very high standard, reception might quite probably be inferior to that of a single receiver system. It is therefore felt that the additional expenditure of approximately £1,200 involved in the provision of diversity reception would not be justified.

B.B.C. RELAY FACILITIES.

Assuming even single receiver reception, using a rhombic aerial with the receiver and ancillary gear specified, it is not considered that the present ratio of B.B.C. to recorded programmes, justifies the high fraction of the total cost devoted entirely to relaying B.B.C. programs. In this connection the provision of facilities for recording B.B.C. programmes during the day for re-broadcasting in the evenings would be a very desirable addition to the present specification.

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We consider, and feel sure that we would have the support of the G.P.O. designers, that it appears to be rather ridiculous, when so much is being spent on the best of modern gear, to feed its output to, in many cases, ancient speakers, quite incapable of doing anything like justice to the studio gear. It is felt that whatever course may be adopted a first essential should be the replacement of all the very early type speakers, and the fitting to all speakers of proper matching transformers.

Part of my carrier proporate related to the un metaline and sale at get of standard denger spechens

In view of the above discussion, we recommend the following alternatives for consideration by the Committee:-

- 1. If it is accepted that a qualified engineer and operator will be employed, together with an expanded and more comprehensive service, then the G.P.O. specification should be adopted with the omission of diversity reception.
- 2. If a staff of only one be employed combining the duties of engineer and operator, and a moderately increased service. Then the present equipment be replaced by more modern and powerful apparatus e.g. Amplifier, dual turntable playing desk with 78 and 33 1/3 R.P.M. facilities, but less elaborate than the G.P.O. specification, and the recommended receiver, plus one rhombic aerial, and the specified outside broadcasting equipment.
- 2. If no full time staff is contemplated and the length and scope of the service remains as at present, then new equipment be installed as in 2. above, but with the exception of the rhombic aerial.

We also recommend the following extra equipment be included in all of the above alternatives.

One magnetic tape recorder.

New speakers throughout

One V.H.F. prtable transmitter and receiver to supplement the specified outside broacasting equipment.

The cost of these extras would be more than covered by the saving in omitting diversity reception and one rhombic aerial.

C. Micolson . Hallerd .

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It is requested that, in any reference to this memorandum the above number and the date may be quoted.

21 April 1950 Chavmin

Stanley, Falkland Islands.

21. 4.50

Broadcast Committee Stanley.

SUBJECT :-

These papers handed me this morning with the remark that HE is waiting for the reports and another reminde that the papers were wigently required at G.H. about his hours late, does not guis my much term to make a report of all. However the position is that new equipment is required and the Glo ingineer have produced, as a result of long and rumenes deliberations by the Broskert Committee, some Comprehensing equipment. I do not know what was asked for but the Information Office, as for as I recollect, was principally concerned with elaborate equipment renice he was to do the work. America

YE

With reference to the WIT Committee Nections held 11th algorit.

Minutes at 167 for approved please. I have flagged references
in other files attached. Mr Mc Saughton's minute at 165 is of interest and I will try to part this out at the next meeting on Monday 24 th. which is to draft regulations regarding the use of R/T sets in the Camp. The draft Regulations for Suppression of Radio Interference are not yet available but I will haster. Chaum WI WT Cummendon 22/4

Seen but this does not got us much further does it? I the some will the Cope be able to provent its finally agreed recumum takens? I.b. a. M.C. 22/1V

MINUTES OF MEETING OF W/T COMMITTEE AT GOVERNMENT HOUSE APRIL 24TH. 1950:

Chairman: Lieut/Col. K.Pierce-Butler.

Present: Messrs. C.Nicolson, D.Hallett, D.McNaughton (Secretary).

Absent: Mr A.Mercer, Supt. P. & T., was too busy to attend the meeting but had sent a letter to the Chairman expressing his view on several points. His letter is included as an appendix to these minutes.

The Chairman opened the meeting by saying that its principal purpose was to draw up regulations covering the operation of the Government Emergency R/T Service. The first eight R/T sets were almost ready for issue to stations on the West, and a similar issue to the East would follow shortly. He read Mr. Mercer's letter (which had considerable bearing on the subject), and the Committee proceeded to discuss the matter.

It was soon agreed by all present that it would not be possible to frame comprehensive regulations at this stage, for a number of reasons:

- 1. The framing of these regulations will take a considerable amount of time and will be possible only after prolonged consideration of the problem.
- 2. It is difficult to envisage the situation which will be produced by the existence of a large number of R/T stations all operating on the same obtain some frequencies. We should/experience first. The Committee appreciated that, since Government provided the sets it could, if necessary, limit their use strictly to emergency calls. However, since the farms will provide batteries and chargers and will be expected to co-operate in a number of other ways, they felt strongly that they should be permitted a limited amount of private use, provided that this did not jeopardise the efficiency of the emergency service or seriously reduce Government revenue.
- 3. It is obvious that it will eventually be necessary to provide almost continuous service at the Stanley Control Station not only to work regular schedules with the stations but also to cover emergency routines such as those which will be required for aircraft operations. The framing of final regulations should await the time when there was a prospect of the Stanley terminal being able to play its full role. (Mr Mercer's request for attention to the problem of staff has particular relevance here).
- 4. Although not impossible, the Committee thought it undesirable to impose a series of stringent regulations on the holders of Government R/T sets, when a number of sets are already operating in the Colony. The final regulations should cover all R/T traffic throughout the Islands, and incorporate where possible existing regulations, although there would be a numbers of

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requirements from the holders of Government sets which would not necessarily affect other users.

It was agreed therefore, that the Committee could best meet the present need by framing interim regulations which would:

- 1. Cover satisfactorily the operation of about 20 stations.
- 2. Be capable of being adhered to with the minimum possible control from the Stanley terminal until such time as Supt. P. and T. could obtain or train extra staff.
- 3. Form the basis for fuller regulations by being capable of expansion and ammendment as the number of sets was increased and as the Supt. P. and T. obtained more staff for the operation of the Starley terminal.

4. Cover the transmission and reception of messages of an emergency nature (e.g. medical), weather reports and other Neteorological information and messages concerned with the whereabouts and movements of Government transport - e.g. the aircraft, Philomel, Penelope and John Biscoe; and at the same time allow a certain amount of private use without prejudice to the emergency service.

It was therefore agreed that regulations should be drawn up on the following lines:

1. No transmitting station should operate without holding a current transmitting licence issued by the Government, and no transmissions should be made on any frequency other than those specified on the licence.

Mote: Holders of Government sets would be allocated 2.0 and 4.5 megs. only. Steps would have to be taken to licence all authorised R/T sets and the frequencies approved for use stated on the licences. In particular the above frequencies should be very strictly controlled and operation on them permitted only in connection with the Government Emergency R/T Service.

2. All transmitting stations should adopt a fixed transmitting and operating procedure and all transmissions should be as short as possible. Stations should be identified by <u>call signs</u> and <u>not</u> by code words, place names or the names of people.

Notes: An example of the recommended procedure should be supplied as an appendix to the regulations. It should include an instruction to "listen out" for at least a minute before transmitting to ensure that the frequency is not already in use. Steps would have to be taken to allot call signs to all stations

Chin in comportant

17

signs but the Committee were not sure whether Government held blocks of these.

3. The use of the frequency 4.5 megs. will be restricted to messages of an emergency nature, Met. messages and messages about the location or movements of Government transport. Limited private use may be allowed on the 2.0 megs. channel. The sets will not be used for private calls unless these could not be made by telephone. They may be used during periods when telephone communications are cut due to broken lines etc. but not merely when the lines are occupied by other subscribers.

Aqued.

Note: A certain amount of monitoring would probably be advisable to ensure that this regulation was not being broken. The idea behind the regulation is to give service and at the same time to restrict the number of calls to cover the time when some 40 stations will be operating.

4. All Covernment Emergency Radio Telephones should be assigned to a "Control Group" of about four stations. The composition of these groups should be ammended from time to time as the number of sets increases to preserve a reasonable geographical distribution. Mach morning one of the stations in the group will contact the others to see that the equipment is in working order and to accept any emergency etc. messages - medical calls, weather reports, messages about the whereabouts and movements of Government transport - and so on. He will then stand by to work Stanley Control Station at a specified time.

When possible other stations in the Group should <u>listen</u> to this routine. The task of being Control Station can be arranged between the members of the group and should nrmally change (say day or week about), unless other considerations make this undesirable. The times of the various schedules should be communicated from time to time by the Stanley station, and it should also make statements at specified hours about movements of the aircraft etc. and about any special schedules required with individual stations.

Notes: A list of stations split up into Control Groups will have to be prepared and also a time schedule showing the times at which various stations will be worked, the announcements made by the Stanley station, and so on. This will have to be modified from time to time as the number of stations increases.

4. All holders of Government Emergency R/T sets must be prepared from time to time, to work extra routines with the Stanley control to provide special information e.g. weather, state of airfield, state of sea etc. in connection

with the movement of Government transport - especially the aircraft in bad weather. Advice about these entra routines - what stations and when - will be provided by the Stanley Control Station, as provided for in 4. above.

Matter. The object should be to obtain the co-operation of the Marmer (and his wife too if possible). It might occasionally be unreasonable to work an entra routine at a specific time but holders of sets must be reminded that they hold them only so long as they are propered to co-operate in matters such as this, and that only this will enable the air service to be really safe and efficient.

The Committee then turned briefly to the matter of the wire broadcasting system for Stanley. Messrs. Micolson and Hallett had suggested that, if the necessary full-time staff could be made available, then the equipment recommended by the G.P.O. would be worth condidering - and only if so. The other members of the Committee present accepted this view and it was agreed that the staff required would be two people - probably 1) a radio engineer to maintain and operate the equipment and 3) an announcer and programme arranger. It was agreed that:

- a) Should the two men specified above be evailable the Committe would recommend the purchase of the G.P.O. Equipment, minus diversity reception but plus a tape or other similar recorder.
- b) Should they not be available then the Committee would recommend an improvement of the present system, item by item, by more modern and more powerful equipment.
- (It subsequently became obvious that this is an over-simplification of the views of the various members of the Committee and yet another meeting will have to be held preferably with all members present to clarify the situation).

In connection with todays meeting of the W/T Committee to discuss regulations and procedure to be adopted for working the Camp R/T Sets, I submit the following for the consideration of the Committee.

- 2. To have some eight stations on the West as a beginning and probably another eight on the East in the very near future, some time will be taken up each day attending to the various calls, and in addition to the preparation of regulations consideration might be given to the employment of someone to do the work. I propose that the work should be done from the Govt W/T Station for all communications excepting Met reports.
- 3. I propose that the first call be made to all Stations at 12.30 GMT to collect Medical messages first starting with Port Howard followed by Pebble Is Saunders Is Carcass Is Hillcove Westpoint Roycove Chartres Dunnosehead Weddell Is New Island Beaver Is Port Stephens Albemarle Fox Bay, when all these are fitted. After all medical medical messages have been passed then work each attains in the obeys and a sall unwented stations keeping suite station in the above order, all unwanted stations keeping quite until called.

The Stations may have to be limited to the duration of private comversation and should in any case leave the service free for official use for 30 minutes in the morning and afternoons.

- 4. I do not know what time will be occupied by the Met services but it was understood from the Met Officer that reports would be required at 12.00 GMT and 1800 GMT. I presume the Met Officer has made or will make arrangements accordingly.
- 5. To change the subject, since the π/T Committee decided the requirements for these R/T Sets and since some 18 sets have now been received, perhaps the Committee would prefer to decide whether two half wave aerials should be used or whether it can be agreed to use one halfwave aerial for the 2 Mc/s and use the same aerial for operation on 4.5 Mc/s, making the latter operating into an aerial slightly longer than a full wave aerial? .
- 6. 400 feet of coaxial feeder was ordered with the 40 sets and since the masts are 45 feet high only sufficient feeder will arrive to supply some eight sets each with one feeder. For the eight sets now going out I have used coaxial feeder belonging to our commercial station. I hope to be able to get this feeder replaced.
- You so for a There is also some misunderstanding regarding the supply of wind Chargers and batteries but I am unable to say whether the Committee had anything to do with this 7. There is also some misunderstanding regarding the supply of
 - 8. I would be grateful to requive very early remarks in regard to paragraph 5 above. For your information however, the signal strength at South Georgia was much better when operating 4.5 Mc/s into the 2 Ms/c aerial.

Sir, Your obedient servant amerca. S.P.T.

The Chairman, W/T Committee Stanley

INTERIM RUGULATIONS COVERED THE OPERATION OF PADTO TELEPHONES UNDER THE GOVERNMENT AND RESERVOID TELEPHONES.

- 1. No transmitting station shall operate without holding a limited commercial transmitting licence. This licence will permit operation only on 2000 Ke/s (150 metres) and 4500 Ke/s (66.6 metres).
- 2. Mach station shall be identified in all transmissions by its geographical place name. (My our row's that this is much simple).
- 5. Jamp stations will be divided into "Control Croups" (of about four stations each for the purpose of handling official Government messages (as set out in 5. below).) One of the stations in the Group shall act as "Control Station" for the group, and will be responsible for operating direct with the Government Station in Stanley. The grouping of stations (will be agreed upon mutually and will be on a geographical or farm basis.)
- 4. A standard how occdure shall be used at all times and all transmissions will be as brief as possible.
- 5. The 4500 Ne/s (66.6 metres) frequency shall be used only for the following types of traditic:
 - a. Emergency e.g. medical, people missing etc.
 - b. Meteorological messages.
- c. Hossages concerning the whereabouts, movements, safety etc. of Government transport such as the aircraft, including such reports as those on the state or airfields and water surfaces, operation of navigation lights etc.
- this frequency will be used between stations in the same "Control Group"; between Group Control Stations and Stanley; and between the aircraft and Stanley and individual Camp stations.

 6. The SOOO Mc/s (150 metres) frequency may be used by individual Camp stations at any time for private messages between each other, provided that:
- a. The call could not be made by telephone. (This does not include occasions when the telephone lines are busy).
- b. No transmission from an individual station shall last for more than three minutes.
- c. No exchange of messages between two or more stations shall last for more than 15 minutes.

• The following routine will be observed each day:

Before 1940 G.H.T. Control Stations will contact all stations in

their groups on (exither) 2000 Kc/s (or 4500 Kc/s) to check the

operation of the equipment and to accept an messages such as those set out in 5. above.

At 1940 G. T. the Stonley Control Station will make a general broadcast on 4500 Mc/s to all stations indicating the programme for the day, proposed movements of aircraft etc. and indicate which stations (including Control Stations and others) for which special messages are held and who will be worked for this purpose at 1500 G.H.T.

At 1345 G.H.T. the Stenley Control Station will proceed to work all Control Stations for the purpose of receiving emergency messages. The stations will be worked in a prescribed order and the exchanges will be as brief as possible. It should be possible to "work" a station with no traffic in less than one minute.

At 1500 G.M.T. the Stanley Control Station will talk to the stations already warned for this route by the 1540 broadcast. At this time any special routines required later in the day will be arranged.

Chaiman, W/T Committee:

Tous spote to Mr Hercer, Supt. P. and T. and to Mr Gilrath of Darvin. I received from you on Friday rough drafts of proposed regulations which you had prepared, based on the deliberations of the Committee and your talks with those gentlemen. I have produced a "tidied-up" version of these for your approval. I think you will wish it noted that they are not strictly in accordance with the original recommendations of the Committee. In particular the approved of the regulation concerning the use of call signs is not approved of by Hessrs. Hellett and Ticolson.

Honorary Sceretery,

YE.

1. The minutes of the last meeting of the WIT Committee held

1 on 24 th Agail, at 174 for information please.

2. Draft regulations for the use of RIT acts at 179. This
has been some discussion in the committee regarding the

use of call wigns instead of geographical place names to
identify stations. The main objection I have to calleges is
that the abboration of the is quit a major job, they will

pass to be published in the form of a disterory and no
one will remember them, the use of different placeties

by subscribes will lead to complete chaos on the

group. Europe knows the place names and they

will not course a misunderstanding.

WHB 1/5

content they have in our form at the when it is formed to the form of the form

I The juleun require at 179 may prove a little deficiel of application in produce but it is a case of hist and over 3 One Mining Mad much be clearly seems beard is the purpose

for which There sets are supplied - 1.0. energences which covers medical, mel. air service but not provale that.

A. I note - and regul - a slight note of

appentix cicepy into the Committee's minutes and

correspondence. The prepare of having a Committee is

to have all the available knowledge occapenence, whether

therewheat a pradical and to iron and difficulties
und to enate them. There Regular hay may be finished

approved slid be promigated as MC. 1/

early as possible.

There do his E.C. sels

fit in 4 hos three position even

been regularized?

The regar full forward by the Communications (the affect Despute to a layour Effective above can tell and I think that, as the important thing to be in to get smalling out as seem as fortible, we had been immed him vego: saying that they are howisined a will be modified in the light of experience. I would be will be stations him Denlifted by their place a) I am all for stations him Denlifted by their place

1) S.P.T. informs in that the failing the 7.1.C. sets is regulations. They fay a lieure every your feing mine so wetter they have in accordance with interestinal so wetter they have in accordance with interestinal symbolium is so discustion as to proposery. Ke I so not regulation in some difficulty.

4) The Othe shall advise as to the confeiling A control grafe" (vy:3) a once there have been worked out the southelity.

S.O.A. shall be inited to comment on their sintality.

(Direct discussion will To factor would suffer a world south time.)

A willen

Y.E. (on return)

The Regs suggested by the Communications
Committee appear adequate to a layman. Experience alone can
tell and I think that, as the important thing to do is to
get something out as soon as possible, we had best issue these regs, saying that they are provisional and will be modified in the light of experience if necessary.

- I am all for stations being identified by their place names and not by a call sign.
- 3. S.P.T.informs me that the position of the F.I.C.sets is regulated. They pay a licence every year. Being under 50 watts they have, in accordance with international regulations, a wide discretion as to frequency. He does not anticipate any difficulty.
- The remaining 22 sets, plus the spares, have now arrived, and are being tested prior to issue. The system of control groups" suggested by the Committee (reg:3) seems suitable, and they should be asked to advise on the comment on their suitability (direct discussion with Mr. Barton we uld suffice and save time). \ \ and save time
 - 5. The final distribution of the sets has still to be decided. The original list is at p.155 of 0031/II attached. Y.E.has minuted; particularly at p.233 of 0031/III The particular case is Fox Bay, with which is tied up the possibility of closing down the Government W/T station there. Y.E.may wish to take advantage of the presence in Stanley of Mr. Clement to discuss with him. Until the final distribution is decided the "control groups" cannot be fixed. Personally I favour the full distribution proposed at p.155 in the interests of uniformity.

m Ex.Co.

So du I - it is privates, but I do not apprive 2 selo the W.T. station at Fox Bay.

What is the authority for X as

Mic 11/vi

7. X on 155 was I fear, Dove as my authority During your absence. It see also X on 152. In the can A islands where a law telephone could not be laid some form of RIT communication would be required. Again in the interests of uniformity it afferment to me advantageous that forms should be encouraged to midall sets of the same fathern.

P.1,0.

184

2). Cialet & En G: with particular ref & Jan 5 overley?.

Acay hie 12/vi

Clexa treatify #
[12 JUN 1950

Ston Sino M. 14/10

Ston and J. P.D. 13/10/10

Ston her & St blement No. 16/1/20

Erroneated accordingly

prior to discussion in Council

Extract from the Minutes of a Meeting of the Executive Council held on the 17th of June, 1950.

8. Control of Radio Telephones.

Council advised that the interim Regulations covering the operation of Radio Telephones under the Government emergency Radio Telephone Service should be issued and circulated to all Camp Stations listed as page 155 of Secretariat file No. 0031/II as early as possible.

His Excellency concurred and ordered accordingly.

Clerk of the Executive Council.



Mr. MacNaughton.

Ref: the draft rules for R/T sets recommended by the Committee at pp.179-180, which have been approved by Ex:Co:. The approved distribution for the sets is as in the list at p.155 of file 0031/II attached. (Note that Ajax Bay, East Island and Albemarle have been added to the original list). Draft rule 3 proposes a number of "Control Groups". Bearing in mind the distribution, would you please advise as to suitable composition for these groups. As a possible suggestion 6 or 7 stations per group might be a good idea, so that if they so wished the individual members of the group could do one day a week as "Control Station".



1.7.50.



SUGGESTED GROUPING OF R/T STATIONS.

CONTROL:

| GOTTROH. | | |
|-------------------|--------------|--|
| Fox Bay West | - | Port Stephens * Weddell (Beaver and Passage Islands) New Island Albemarle |
| Fox Bay East | - | Dunnose Head Chartres Roy Cove Hill Cove |
| Pebble Island |) | West Point Carcass Island Port Howard Saunders Island |
| <u>real Inlet</u> | * | Douglas Station (Horseshoe Bay) Salvador Rincon Grande Port Louis N. Johnson's Harbour |
| <u>Ajax</u> | - | San Carlos Port San Carlos |
| <u>Darwin</u> | - | North Arm (Bleaker Island) Lively Island Speedwell Island (George and Barren Islands) |
| Fitzroy Station | - | Bluff Cove Sea Lions |
| | 2 | East Island |

H.C.S. Jaw 185 A. I discussed the destrebuter of stations with Mr. Barton and he suggested the groups shown in 185 B. Division is on a combined farm & geographical basis - 1. e. each former with reoponsibility for several smaller forms has had the latter included in his group e.g. Dancin group vicludes other F.I.C. settlements with which m. Gibruit is normally associated. For this reason the control statem in each group has been shown us the same station all the time - although, of cieuse, there is no reason why this responsibility should not be taken ever by one of the others when required. When this basis fell down (in the areas of smaller vidependent Jams) geographical grouping was adapted the Ajax borg group is small but use felt this was justified as traffic from the C.D.C project, even of an emergency light, might be more frequent than from a normal stateon.

mr. Bartan has agreed to inform the S.O.A. of his eneggeoded distribution and feels seeme they will be in general agreement. 9 think the best thing to do is to promulgate the graceping in 185 B. and weak each group as soon as it Comes into existence.

The meaning of the segrabols an 185 B are.

* Being purchased by Weddell from Gart.

De 153

De Being purchased by Darruin from Gart. in 0031/11.

Could a copy of the R/T regulations as issued see - your office 2 p.m. Also this file pse.

COLONIAL OFFICE, The Church House, Great Smith Street, S.W.1.

Your Ref: 0438/II

August, 1950

FALKLAND ISLANDS

Sir,

96834/9/50

Helpful (organish Mu last para)

but I would like the answer to my manqual grown ofthe views of B's proposals.

S/P+T othe Commeltee on M: B's proposals.

159 I have the honour to refer to my predecessor's despatch Mo.96 of the 8th November, 1949, about broadcasting development and to enclose a 190-1931 memorandum on this subject prepared by the B.B.C.

Thile the Corporation's proposals are no doubt sound on technical grounds, their financial estimate of the cost of this scheme is clearly beyond the compass of the funds likely to be available to your Government for this purpose. I considered, therefore, that it was pointless to forward the B.B.C.'s memorandum to you without first obtaining other expert advice X > on the subject. In view of his exceptional knowledge and considerable experience of broadcasting in the Falkland Islands, I decided to consult Mr. F.A.W.Byron, who has played a not inconsiderable part in the development of broadcasting in the Falkland Islands and is now on the staff of the Crown Agents for the Colonies. Mr. Byron has been good enough to draw up a more modest scheme which may, I believe, meet your requirements at a cost which is not quite so formidable.

In a letter dated the 11th August Ar. Byron states:-

"I have given this matter my careful consideration and come to the conclusion that a longwave service operating on say 1500 metres with a power of some 5 kilowatts would adequately serve the Colony as opposed to the Dependencies and I sought quotations from various manufacturers on this bas Unfortunately, while agreeing with me that the suggested service would be adequate the firms concerned could not supply me with a broadcast transmit of 5 K.W. operating on the wavelengths proposed. As a substitute I was offered a medium wave transmitter of 20 kilowatts by Marconi's and a 5 K.W. medium wave transmitter by Messrs. Redifon Ltd. It seems that owing to the desperate need to concentrate development on certain other projects at the present time the manufacturers were not prepared to produce a long wave transmitter nor to modify a standard medium wave transmitter.

I was therefore driven to consider the 5 K.W. set to operate on medium waves. Messrs. Redifon with whom I had been in contact advised me that they were confident that given good earth conductivity the set they proposed would cover the greater part if not all of the territory required. I considered however that their claim was rather too ambitious but having regard to the local conditions prevailing such as, earth conductivity which I estimate to be from fair to good and the absence of man main noise (electrical) I consider that the greater part of East Falkland could be served by the 5 K.W. set proposed and also the territory of West Falkland bordering on Falklan It may well be that distances in excess of those indicated would be covered at certain times since I know from personal experience that Radio

GOVERNOR,

SIR MILES CLIFFORD, K.B.E., C.M.G.,

man-made.

etc., etc., etc.

Interim reply at 200

W. Byrn .



Stations in South America e.g. Montevideo, Buenos Ayres etc. are received on most afternoons at good clarity and strength.

In all the circumstances, therefore, I am inclined to the view that for the Colony service a 5 K.W. medium wave transmitter should be installed operating on say 550 kilocycles and using a "T" type aerial on masts of approximately 160 feet high.

As regards the short wave service to the Dependencies I consider that a 5 K.W. set would be desirable with a directional aerial - the simplest and most economical arrangement being a $\frac{1}{2}$ wave folded dipole with a reflector utilising 4 - 66 ft. poles. It is suggested that a frequency of the order of 6 megacycles would be suitable.

One Studio Control Desk could be arranged to feed both the short and medium wave service simultaneously and also the local rediffusion service at Port Stanley if desirable. Good quality microphones and a gramophone reproducing unit could also be obtained for use with the above although consideration would no doubt be given to the possibility of using the existing instruments now in use on the rediffusion service.

With regard to the receiving station I have assumed that it is intended to receive, in the main, B.B.C. broadcasts from the U.K. and have included in my estimate of costs detailed below the cost of a simple scheme utilising 2 receivers and Rhombic aerials. I fear it may not be practicable to site the receiving station 5 miles distant from the transmitter as suggest by the B.B.C. Distances of 1 mile or so would however be satisfactory with careful layout although, of course, it is desirable to be as far away from the transmitter as possible.

I now detail below the approximate costs of the material proposed, together with my estimate for a simple diversity receiving system. I have assumed that auxiliary power plant will not be necessary and that the necessary power will be obtained from the local power station.

| 1 - | 5 K.W. medium wave transmitter = | | £6500.0° |
|-----|---|--------|---------------|
| 1 - | Aerial timing unit for above = | | £ 50° |
| | Medium wave aerial system including masts, radial earth system & coaxial cable, mast erecting gear e | tc. = | £1500. |
| 1 - | 5 K.W. short wave transmitter | = | £5000.0s.0d. |
| 1 - | Short wave directional aerial system with 66 ft. m | asts = | £ 600.0s.0d. |
| 1 - | Studio Control Desk | = | £ 500.0s.0d. |
| 1 - | Supply incidental such as microphones, gramophone | unit = | £ 500.0s.0d. |
| 1 – | Supply spare parts for above | say | £ 500.0s.0d. |
| 1 - | Simple Diversity receiving equipment to consist of 2 communication type receivers and 2 Rhombic aeria | | £1000.0s.0d. |
| | | Total | £16600.0s.0d. |
| | | - | |

As an addition to the above there would be shipping and local charges. I consider therefore that a grand total of £20,000 would be the minimum capital sum required exclusive of buildings."

4. Should you decide to proceed with a broadcasting development scheme on the lines suggested by Mr. Byron, you will no doubt wish to know whether any



See 66 in

BLUB.

financial assistance can be provided from United Kingdom funds. appreciate that priority in the granting of aid for broadcasting development appreciate that priority in the granting of all for broadcasting described has had to be given to the six territories named in my confidential circular despatch of the 29th March, 1949; and the allocations to these territories have in fact very largely exhausted the funds available. I appreciate, however, that a proper broadcasting service is a necessary amenity in the Falkland Islands where so many of the population live in conditions of extreme isolation, and I am anxious to afford you the maximum financial assistance compatible with the limited resources available to me. In the circumstances, therefore, on receipt of your formal application and detailed development scheme, I shall be prepared, as requested in your despatch No.93, to consider making a grant not exceeding £10,000 to your Government from the General Reserve under the Colonial Development and Welfare Act for the purpose of broadcasting development.

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

Interim reply at 200

BROADCASTING IN THE FALKLAND ISLANDS

Distribution in the remission relands. It is assumed that the service to be given will be a medium-wave service to sover the main islands, shus a short-wave service to cover the Falkland Islands dependencies and the outlying parts of the main island. It will also be assumed that it will be necessary to carry out most of the activities in the neighbourhood.

Of Port Stanley so as to according on communication eigening.

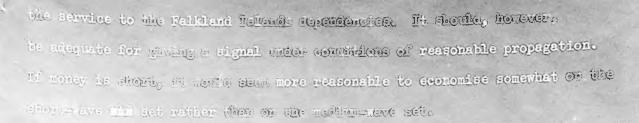
in Madisiejone Services

1.00

The values of the case that distances well over 100 miles are to 10 miles are the more than the part of the property fact a distance of the order of 60 miles are the more than the part of the order of 60 miles are the more than the part of the area are the content of 60 miles are the 100 miles are the sequence of the order of 60 miles are the sequence of the order of the content of the 100 miles are the sequence. The large the frequency, however, the large mile be the sequence. The first argument that a transmitter of all least 20 M arithms power should give an adequate signal of 1 millionly/metal. At area field of 0.5 millionly/metal and adequate signal of 1 millionly/metal. The property of the order of 120 miles from Port Stanley and should give a large field of 0.5 millionly/metal are all the read miles are the field of 0.5 millionly metals are the property of the order of 150 miles.

2. Short Neve Services

a percent of 5 MV should be employed, and thest this should be used on itrosposates between 6 Me/s and 175 Me/s dependent upon the time of day, the stepping office at this intersection has been adequate provision has been made to enable the required service to be carried. A 5 MV transmitter is not, of course, as powerful as would be desirable for carrying



The Mysessent divise William

This name approves could be accommonstate on the gase office. The site smaller is a state of the country of the

4. Starte grantification

The many resource likely the samples beginning to the samples of the many resource from a property of the strate, become successful to a possession of the samples of the s

To Repolitant Steeling

short-wave reception from the United Kingdom, although the aerials provided would also enable reception of programmes originating in other points to be carried out. Dual diversity reception was been covered, together with who provision of a small engine alternation, spaces, etc. The receiving station should preferably be like makes from the transmitting site. It should be of some 15 acres in caseous and should preferably be not exactly and should preferably be also as should preferably be as small engine and should preferably be as small and should preferably be as small as should preferably be as small as should preferably be as should preferably be as small as small as should preferably be as small as s

6. Costs:

The approximate cost of the proposales round be as given in torres I. It

the gradance only, and they include the cost of contement plus reasonable include the cost of contement plus reasonable include the cost of contement plus reasonable included the cost of telephone included the cost of participation and included the cost of power and included the cost of power and included the cost of power and the cost of cost of power and the cost of cost

75 (a)/84/ 95, F. 85

| | | CEC. |
|---------|--|---------|
| 1 | facilities for two studies, plus one set of crusical backs, plus one set of crusical backs, fundament, but not including engine contractors sets, fundament, etc | . 2,500 |
| <u></u> | Receiving Station equipped for dual diversity reception, whombde serials, secessory plant, but not including an earlier alternator conserve economic economic economic economic economic economics. | |
| | 29. By mostic memory distribution with discontinued General system, accessories, the dissel alternators, general subjunction, accessories, electric connections concentrations. | 91,000 |
| | 5 No. should never become when with acticle, maste, considering the considering general equip- | 32,000 |
| | Transplace and careful arthur with the transplace of the first transplace of the contract of t | 1,0,000 |
| | | |
| | (A) | 37,000 |
| | (Gautini) garay | 13,000 |
| | | 50,000 |
| | | |

How Col Sec,

187 onwards have been oted.

I feel that the rusults of the W/M Committee findings with a further discussion can provide the information necessary for a satisfactory and yet an economic service.

The proposals of the B.E.C and Mr Biron are both far beyond the finances being made available and the recurrent costs will our outway all Revenue likely to be collected from the licence paying community.

The processed long wave transmitter but forward by Mr Byron operating on 1500 metres at 5 K.M. would not be of any use to the Falkland Islands where all broadcasting receivers with one or two exceptions can only receive on frequencies higher than 550 kc/s

The Medium Frequency ransmitter if installed would I find have to work with very poor earth conductivity, the terrain is rock and clay and would not in my opinion be very successful at 5.K.V. A larger transmitter - 30 to 50 K.V. would require considerable a tention by technical attendants and with other commitments would be prohibitive in maintenance costs.

Our Committee has already roposed an E.F. Transmitter would serve the Dependencies in the 6 Mc/s band and a frequency of 6.125 mc/s has now been allocated to us for broadcasting.

The proposal to use 5 K.W. in place of 5½ K. projosed by the Conditive would not present any opposition since we must in any case approach the Prequency Board before we can use more power than 500 watts on E.F. for broadcasting, however, since Government already have several H.F. Prensiditers of 3½ K. output rade by the Marioni Co Ltd, the new set of or the same make have similar valve compliment thereby effecting an economy in spares to be stocked.

Since the power required for ledium wave broadcasting has to be very high for satisfactory results and the fact that it would absorb more than half the output of one of our Blackstones, I am proposing to the I/I Committee that Short Wave service is the only one financially possible for our requirements. A discussion on the supposition of frequencies will be necessary.

The views of Mr C Micolson and Mr D McKen htom are attached please.

Amurces

Sunt 2 A T Dent 2nd Hov 1 50. Mr. Nicolson has passed this file to me for comment. I am sure H.E. would wish to benaw the agreed views of the w/r lites. as a whole, and not the individual views of some of its members. A meeting should therefore be called.

In the meantime it is obvicues that we heave spent almost two years getting nawhere. The matter was threshed out fairly thoroughly here before to B.B.C. were asked for advice early last year. They were given fuel details of our needs and H.E. indecured the kind of ginancial provise in he had in mind—

15000 plus an additional sum from Dependencies See 0438/II. press 110 and 111). By June 1949 the matter had apparently been dealt with once by the B.B.C. S. of S. Stated that they head "offered where and information in a form which I do not consider appropriate to your purposes. New 16 months lader we seed to group purposes. New 16 months lader we seed to group purposes. New 16 months lader we

As fan as I can see mr. Byron's proposalo are Cikely & find little seepport here, the wants to spend £20,000 on an installation which may not do the job. The W/T Cthee. long ago agreed that real M.F. would not do for stanley to Camp broadcart As I see it we have two alternatives—

- Precisely haw we think the job should be done ic wewelength and pawer of transmetters etc. and give them a definede financial limit or
- Decide here when basic equipment is necessary and get Crawn Agents to get quotalius for specific items. I am confident use can get hald of a satisfacting installation without spending

a small fortune on it.

Seccy W/T. Ottee.

That The Laughton,

That Therest asked me this afternoon to note
my views on fages 187 to 194, and then pass on the file for your comments.

In view of the total cost, the BBC's proposal would hardly affect to mid very sirious consideration!

Regarding the Colonial Office letter, his Byron's proposals for The Defendencies broadcast service appears reasonable, but, the various reasons given below I am much more doubtful regarding his proposal for lamp broadcasting.

you will notice incidentally that the last five of the nine items specified in his list of equipment, amounting to \$3000, are common to the Sine Broadcasting proposals put forward by the GPO and

already considered by the W/T Consider.

Despite het Byrais alleged "exceptional knowledge and considerable inferience of broadcasting in the Falklands, I would dore to suggest that ground conductivity, on which medium wave propagation, unlike HF propagation, is very materially defendent, could much more afthy be described, at last in this locality, as food to very food. (See Radio Engineering, Terman, pages 610-615).
For this reason I would express even greater doubt

concerning the projects of adignate signal strength being received for much of the year, on the West, from the frograce 5KW, 1500 metres transmitter located in Stanley, Than he does.

So for as I can recollect her rift who gave the matter some thought from to a frevious meeting of the w/r Committee. calculated that for satisfactory all the year round reception Throughout the Falklands a medium wave transmitted located in Stonley would require an output fower of the order of 50 KW. This agrees -

198 This agrees fairly will with the BBC refort which especifies a minimum of 20KW on the assumption that the torain is not infavoretable: an assumption which in my ofinion is not sertanted in the fresent core. The reference by Wed B. to good reception here of MW transmissions from montevides and B.A. Las little bearing on the subject of transmission from Stanley to the lamp, as, quite afast from the difference in transmitted forws, in the formed case a sea fath is used, sea water being a first class surface over which to propagate MW. Regarding the Camp broadcasting therefore, as I are it, the is onlikely to provide entispectory reception throughout the (6) While transmission on MW would no doubt be the ideal fowed would be prohibitive. To a transmitter of sufficient (c) In view of (a) & (b) I feel that we are forced to consider the M.F. rather than the M.F. band for this service and would suggest that sither a meeting of the Committee

be called to divense the matter, of that the BBC be affroached again for their views on this alternative.

C. micolson. 31/10/50.

Y. E.

The despatch at p.187 with its enclosures has been considered by the members of the Committee individually, and their comments are at pp. 195-198. All the members of the committee are rather pressed with their own departmental mail, and, as this is obviously a matter meriting the most careful consideration, we should not reply in a hurry. But if we do not give them some acknowledgement by this mail we shall not get another chance until the mail which is due to leave Christmas Eve, and the news in the last sentence on p.189 certainly merits acknowledgement. I have therefore drafted an interim reply which I submit at cover for consideration.

Certainly red

3.11.50.

Fair pt. B.

Committee to be fur ally charged wills

this task. Col. Bulloic views may also be

of value one he could be co-opted.

office Fair & Mu/so.

GOVERNMENT HOUSE,

STANKY.

Brd November, 1950.

FALKLAND ISLANDS.

No. 125. COLONY.

Sir

187

- I have the honour to refer to your Despatch Ho. 54 or 1st September, 1950 concerning broadcasting development, and to express appreciation for the assistance which both the B.S.C. and Mr. Byron have given in this matter, and also for the promise given in the concluding sentence of your Despatch that a grant not exceeding 210,000 will be made available from the General Reserve of Colonial Development and melfare funds for this purpose.
- 2. As you note in paragraph 2 of your pespatch the suggestions put forward by the 3.3.6., though no doubt excellent in themselves, are ruled out by financial considerations. The Colony, even with the generous measure of assistance which is to be made available could obviously not, and indeed should obviously not, spend anything approaching \$150,000 on this service.
- 3. The suggestions put forward by Mr. Byron are more practicable from the financial point of view, and are being studied carefully. Since your Desputch was only received here ten days ago, it is not possible for me yet to give you a considered reply, but I am anxious to advise you of at any rate my first impressions by the mail which leaves in two days' time since the next outward mail will not be until eight weeks later.
- 4. Small though the Colony is, it is fortunate in being able to call upon a very reasonable body of expert advice in this matter recruited from the Ichospheric and Radio Jonde staff who, together with my supervisor Posts and Telegraphs Department and Colonel Butler constitute an advisory committee to me on these problems. The preliminary comments of these gentlemen on Mr. Byron's scheme (Colonel Butler has not yet seen it) are, I regret to say, unfavourable. For instance, it is observed that "ground conductivity, on which medium wave propagation, unlike M.F. propagation, is very materially dependent could much more aptly be described, at least in this locality, as "poor to very poor". Again, "good reception here of medium wave transmissions from Montevideo and Buenos Aires has little bearing on the subject of transmission from Stanley to the Camp as, quite apart from the difference in transmitted power, in the former case a sea puth is used and sea water is a first-class surface over which to propagate medium wave". Further it is noted that a long-wave transmitter operating on 1500 metres at 5 MW would be of little use in this Colony where the majority or broadcasting receivers can only receive on frequencies higher than 550 ke/s. Also it is believed

that....

THE RIGHT HONOURABLE JAMES GRIFFITHS, F.C., M.P., SECRETARY OF STATE FOR THE COLONIES. the power required for medium wave broadcasting, if satisfactory results are to be obtained, needs to be very high and would probably absorb a disprepartionately large amount of the output of even our new Fower Station.

5. I quote these criticisms, not to belittle the value of Ir. Byron's suggestions, but to show you that the problem is not one for which a simple solution is likely to be found. I have therefore instructed the committee to give this matter detailed consideration, and to submit to me their recommendations in the light of your Despatch and its enclosures, and I hope to be in a position to address you further and more conclusively on the subject by the next mail.

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

(Sgd.) MILES CAIFFORD

GOVERNOR.

Extract from a Minute by His Excellency the Governor, the original of which is filed at page 65 in 0001 "Local Broadcast"

"The Technical Advisory Committee's report should be self-contained in a form which can be submitted as an enclosure to our despatch: it should provide

- (a) A reasoned criticism of the Byron proposals;
- (b) Committee's own proposals
- Specification of equipment required for which, as in the case of our R/T. sets, tenders can be invited by C.A's.

The question of the Studio is outstanding.

(Itld.) M.C. 7/XI/50.

H.C.S. (Chairman W/T Ctee)

H.E s minudes above and on p. 199. 9 held a meeting of the Technical Sub-Cttee on Nov. 10th. (during your leave 9 think) and submit herewith minutes prepared in aceadance with H.E.s mobilections. At that time the Biscoe had not anived and Col. Butler was not available.

The tolerance Jigures for the new town mains quoded in para (v) of the specifications are from mr. Gutteredge. The states that these are what he escheck and will be most disappointed if he cannot achieve. He cannot guarantee them Lawever.

9 regret the delay between the meeting and my submission of this report. Apart from the time taken is have a draft approved, this is almost entirely due to the fact that I have mor had time to type it - I should be gradeful if you could X authorise me to have such material typed in the Secretarias to avoid such delays in future?

We should now like to go ahead and discuss the C.P.O. rediffusion proposals again to try to get something definite for the next mail - but we cannot get hold of the specifications

Sheet were last heard of at a Cite. meeting at G.H.

before Col. Butler left for U.K. the tello me that Mr. Mercer

look them from the meeting but the latter cannot recall

daing so and does not have them naw. We can do no

more till they are found and I am continuing enquiries.

H.E. might like to see this file before he attends

at broadcast Committee meeting on Friday p.m. 4.45 at C.H.

J. Men 23-11-50.

Read with und overl.

2 & Supprat X.

3. As to Y, I am such to death of Make repealed disappearance of official papers; such must continue until they are formed.

7 . Miss.

4. I would like Col. Butler to see the paper at cover and when he is in disagreemed with it - when he should bring such disagreemed to the wolfies of his fellers-member - it stid. go forward.

Mc 24/2:

File to Col: Butter for action as indivalis in M.E's minute.

Monneed to 2) Attacked to this file (in brown envelope) and Monneed to the paper of which IT Ne Naughton is looking the paper of which IT Ne Naughton is looking the paper of the little.

25/1/50

bol Butter for you accordingly, pol Sile to you accordingly, pol 25/10/50

Reference HE's minute above.

I disagree with suggistion by committee that the frequency 3½ mets should be used in writer. From superiores we have found it impossible to on occasions at sligny. It is far too low for average working therewas I agree with findings of Committee

Whenvis I agree with findings of Committee

29/11/50.

Secretary, Communication Ctte.

Secretary, Communication Ctte.

Above with by Col: Putter for consideration

At the Ctte please. M.E's minute official refers.

1 29/11/50.

H.C.S.

Your minute above. I have discussed the matter again with Mr Nicolson who assures me that, on the basis of Ionospheric measurements made at his station this year, a frequency even lower that $3\frac{1}{2}$ megs. will be required to ensure reception at the bases in mid-winter evenings during the next few years at least. I have discussed the matter also with Col. Butler who now agrees that the lower working limit of the Dependencies transmitter will have to be $2\frac{1}{2}$ megs. or less. The following amendments made to my original draft at back cover will make it complete and agreed to by all concerned.

1. (a) The Byron Proposals:

In para. 1 line 7 alter to read:

" would have to be reduced at that season in the course of the next two years to the order of $2\frac{1}{2}$ megs/sec. This conclusion is based on recent Ionospheric measurements made in Stanley and takes into consideration the fact that there are still several

several/ years to go before we reach the minimum of the sunspot cycle.

(c) Specification of equipment required:

In Sub-para vii. the frequency range of the Dependencies transmitter should be altered from 3 to 15 to 2 to 15 megs.

In sur

The recommendations about the rediffusion equipment also at back cover should enable action to be taken in this mail. I regret the delay - it has not been a simple job.

Secretary, Communications Cttee.
19 - 12 - 50

Y. E.

Two reports from the Communications Committee are at back cover, the first dealing with the despatch at p.187 and its enclosures; the second dealing with the enclosures to p.159. The minute by the Secretary of the Committee above also refers. It is important that the two matters of broadcasting equipment and re-diffusion equipment should be dealt with in conjunction with each other, and not kept in water-tight compartments.

I submit draft covering despatch at cover.

20.12.50. I have discussed with Minn hickoughter & Buth

recording switch gen. The depath tropped

and go as this and.

Me. 20/31

21-12-50.

H.C.S.

H.E. s minute above. Please find at back cever:

Amended versions of the Committees reports - copies of these go to S. J. S. and (through him) to C.P.O.

2) Amended draft of your despartch (as amended by H.E.) which I have taken the liberity of preparing - it may save your some valuable time.

offii. Fai. 1 21/2.

STANDSY, PAUKLAND ISLANDS.

Zand December, 1950.

FALLAND ISLANDS.

No. 134. COLONY.

Sir.

200

209-213

I have the honour to refer to my despatch To.125 or the Jrd of movember, 1900, concerning broadcast development, and to inform you that the Committee mentioned in paragraph of that descatch has now submitted to me its report a copy of which I enclose for your information. It will be observed that this report is in two orts; one relating to proadcasting equipment, and the other to reclification equipment. It respect to the former you will observe that my technical committee is unable to recommend the preposals put forwark by Mr. yron, and has therefore suggested alternative equipment which in its opinion would be more suitable. I should be grateful if your divisors may be asked to consider the report which I now enclose, and if estimates of cost can be obtained, in consultation with the General lost Office, for the equipment specified in part (c) of the first part of the report.

- 2. The re-diffusion equipment with which the second wars of the consistes's report deals is that recommended by the Jonaral lost office and forwarded 159 under cover of your pessates in. 36 of the Sth of lovember, 1949. It will be observed that my Committee is in general agreement with the proposals put forward by the General post office. I enclose additional copies of the committee's reports and should be grateful if the comments or the General Fost Office sight be sought on the questions raised therein, and if they mint be invited to obtain tempors for the equipment, including tenders for the producust transmitters which ther could recommend having resure to part (c) of the flest part of the report. These should include tanders Trom leases. Redizon and Marconi some of whose equipment is already installed in the Colony.
 - considered in the competence of my Consisted to considered in the competence of my Consisted to consider and advise upon this problem; r. Mercar, inscrinted ont of losts and relegrated has had thirty years' experience of vireless telegraphy and radio telephony in this colony, r. Teleughton is the head of the ir inistry adio conde Unit, and r. Micolson is the Officer-in-charge of the Tonospheric Station, C. J. R., Lt.-Col. utler who has now soon and who concurs fally with the Committee's report has had experience as a Communications Officer with Imperial Airways, in the lawy as an officer in the Royal Cors of a nals (Radio Officer and Staff Officer W/T)

/ wrki

and has had much practical experience of /T and R/T installation and operation in the Dependencies. I might say also that the Committee was responsible for the design of the present R/T sets which are working most successfully.

4. On the other hand I cannot agree that Ir. Byron (whose subsequent experience has been, I am aware, considerable) who left here over seventeen years ago, and served here at a time when there was only a primitive re-diffusion service in Stanley, can claim Yexceptional knowledge and experience of broadcasting in the Falkland Islands" since there was none during his service here as Superintent, Electrical and Telegraphs Department.

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

(Sgd) MEL ES CLIFFORD
GOVERNOR.

FALKLAND ISLANDS COMMUNICATIONS COMMITTEE.

FART I.

Technical Sub-Committee Meeting on 10th November 1950.

Present: Messrs. A. Mercer (Supt. Posts and Telegraphs Dept.),
C. Nicolson (O-i-C Ionospheric Station), D. McNaughton
(Radio-Sonde Officer, Air Ministry) (Secretary).

140-193

1

The meeting had been called to discuss again the problem of broadcasting in the Colony, with particular reference to proposals put forward by Mr. Ayron of the Grown Agents and received in the Secretary of State's Despatch Falkland Islands No. 54 dated 1st September, 1950. The same despatch also covered proposals from the B.B.C., but these were of little more than academic interest since the estimated cost was far in excess of the Colony's financial capacity.

His excellency had asked the Committee to provide:

- (a) A reasoned criticism of the Byron proposals.
- (b) The Committee's own proposals.
- (c) Specifications of equipment required for which tenders might be invited by the Crown Agents.

The Sub-Committee agreed on the rollowing:

(a) The Byron Proposals:

The committee discussed in some detail the proposals put forward by Fr. Byron in his letter dated 11th August 1950 which was quoted in the Secretary of State's Despatch referred to above. So far as the proposals for the Dependencies transmitter were concerned the Committee were in general agreement with Fr. Byron, but suggested that the approximate frequency quoted by him was almost certainly too high for mid-winter operation and that this would have to be reduced at that season, in the course of the next two years, to the order of 2½ megs/sec. This conclusion is based on recent Ionospheric measurements made in Stanley and takes into consideration the fact that there are still several years to go before we reach the minimum of the sunspot cycle. (Mr. Byron had quoted 6 megs/sec). This indicates that a transmitter having available a range of frequencies will be most suitable for this service, and the Committee propose to make a recommendation to this effect.

With regard to the service for the Colony as opposed to the Dependencies, the Committee were less in agreement with Mr. Byron's views. His first suggestion that a 1500-metres service would be suitable is of little value when one considers that only a very small number of receivers in the Colony are capable of reception on wavelengths greater than 500-550 metres. This is inevitable in an area where the bulk of listening has always been carried out on high and medium frequencies. So far as the medium-wave transmitter was concerned, the Committee noted (from the second paragraph of Mr. Byron's letter) that the manufacturers of the proposed equipment ("essrs. Redifon) "were confident that, given good earth conductivity, the set they proposed would cover the greater part if not all of the territory required". This, in itself, is not good enough for our pruposes. The whole area should be covered for as much of the time as is possible with our limited finances, and a service covering "the greater part" - and almost always neglecting the places most distant from Stanley - would have little value. Mr. Byron's modification of this to suggest that "their

claim was rather too ambitious but having regard to the local conditions prevailing such as earth conductivity, which I estimate to be from fair to good and the absence of man-made noise (electrical), I consider that the greater part of the Mast Falaland could be served by the 5 Mw. set proposed and also the territory of West Malkland bordering on the Malkland Bound" indicates clearly how inadequate such a service would In practice arth conductivity is considered here to be poor or very poor rather than "fair to good" as ir. Byron suggests. His hope that "distances in excess of those indicated would be covered at certain times since Radio Stations in South America c.g. Montevidec, Suenos Aires Stc. are received on most afternooms at good clarity and strength" is likely to prove fulse since these stations are of considerable power and their path to the Falklands is almost entirely over sea water which is an excellent surface over which to propagate medium It is of interest to note that the B. B. C. proposed (paragraph 1 of their proposals) a medium-wave transmitter with a power of at least 20 km but, even with this very appreciable power admitted that "an adequate signal of 1 millivolt/ metre" would be received up to only about 70 miles from Stanley "if the ground is rocky" - as indeed it is. This is the approximate service area suggested by Fr. Eyron for a transmitter of only a quarter of this power. The committee themselves decided a considerable time ago that in order to reach the whole of the area equiarly with medium-wave transmissions from Stanley at all times of the year, afternoon and evening, it would be necessary to have a transmitter whose output was of the order of 50 lw. The initial cost and maintenance expenses of such a transmitter world be quite beyond the Colony's means. If a medium-wave/it employed, which does not have the power necessary for reception in the more distant parts of the area we shall produce the most unfortunate situation that the districts deprived of the benefits of radio entertainment will be those most distant from Stanley, where the populace may already tend to feel that they are sometimes neglected by the authorities in the This is something which His excellency would wish to Capital. avoid at all costs. For these reasons Medium Mave broadcasting from stanley need not be considered as a practical proposition. (It is appreciated that High Prequency transmissions will have their discovantages also but these will be far outweighed by the much greater area normally covered with comparatively low transmitter power).

/transmitter

There is no possibility of continuing to use the present studio equipment. The present amplifier is hopelessly overloaded, carrying almost three times the number of loudspeakers that it was originally designed to feed. The microphones have seen better days, and a similar remark is true of the gramophone reproducing unit, with the additional disadvantages that it produces very heavy wear on records and is incapable of reproducing anything but ordinary 78 r.p.m. records (R.B.C. recordings, for example, are usually on 35% r.p.m. discs).

Thus, to sum up, while some of the apparatus suggested by Mr. Eyron is considered suitable for use here, other parts of his proposals appear impractical and, in accordance with His Excellency's instructions the Committee will recommend a complete installation.

(b) The Committee's proposals for broadcasting.

The Committee feel that, having regard to the various factors

involved the most satisfactory solution would be the installation of two High Frequency (Short Wave) transmitters, one designed primarily for use within the Colony itself, and the other to provide reception in the more distant areas of the Dependencies. The Committee appreciate that there are certain disadvantages in the use of short waves. It is important to note, however, that should poor reception be experienced at any time, it is likely to be spread more or less at random over the area, or even tend to effect most the places nearest Stanley. A medium-wave transmitter of insufficient power would almost always neglect the places furthest from Stanley. The two transmitters should, if possible, be of the same type or very similar in order to reduce to a minimum the number of spares which are required to be held for them and to facilitate maintenance generally. In this connection it should be borne in mind that the Stanley W/T Station (VFC) is already fitted with two Marconi Shib 8 34 kw. transmitters and the same Company may be able to provide 5 kw. transmitters for our broadcasting needs of a very similar pattern. This consideration need not be given undue weight, however, should any other commercial firm offer broadcasting equipment otherwise more salted to our needs. The two new transmitters should be complete with audio-amplifiers so that they may be operated separately or together, with or without the local rediffusion equipment. They should be located at the Stanley M/T station and fed by land-line from the studio in town.

Because of the close association which the new transmitters will have with the local rediffusion service it will be most convenient in they are considered with it as a complete installation. This was the original intention when the whole requirements or the Colony were submitted to the Secretary of State in order that he could obtain expert advice on our behalf, Proposals have now been received from the General Fost Office for rediffusion equipment and from the 5.5.C. for broadcasting equipment. The B.B.C. proposals, (as has already been stated) are impractical because of excessive costs, and the General ost office proposals are unlikely to be accepted in full for similar reasons. The latter, however, have been provided in some detail and are likely to form a useful basis for the exentual installation. The General Post Office Engineering Department assured Mr. Mercer (Supt. Posts and Telegraphs) when he was on leave in the United Kingdom last year, that they would be prepared to purchase the various items of equipment required and assemble and test the installation before sending it to the Falklands. The Committee very strongly recommend that they be asked to do the same in respect of the two new broadcast transmitters, in order that they are in every way suited for use with the rediffusion equipment.

(c) Apecifications of equipment required.

Two High Frequency (Short Wave) transmitters will be required.

The following general remarks apply:

(i) The transmitters should be of a broadcast type having the audio band width necessary for the satisfactory transmission of musical programmes.

- (ii) The transmitters should be equipped with audioamplifiers in order that they may be used separately or together, with or without the local rediffusion amplifier. Other studio equipment will be common to both systems.
- (iii) Paragraphs (vi) and (vii) below show the approximate range of frequencies in which it will be necessary to work each transmitter at various times. It would be most convenient, however, if both transmitters could cover the whole range (a range of 2 20 mags. for example, would suit perfectly) to provide the maximum possible flexibility and safeguard, as far as possible, the continuity of the service in each case. The intention is to obtain allocated frequencies and controlling crystals for several "spots" in the pands indicated.
 - (iv) Because of the intention to alter frequencies with varying Ionospheric conditions it will be necessary to work the transmitters into varying loads unless the aerial system is altered with each frequency change. The transmitters should therefore be capable of operation into a balanced or unbalanced load. It is appreciated that this may involve provision of a separate serial matching unit in each case.
 - (v) The power supply will be derived from local mains. The nominal voltage will be 400 A.C. and the frequency 50 cycles/second. These may be subject to variation of + or 5% in voltage and + or 4% in frequency.
 - (vi) The transmitter intended primarily for the Palkland Islands domestic service should have a power output of approximately 5 Rv. and a frequency range of at least 2 to 8 mags with provision for crystal control.
- (vii) The transmitter intended primarily for the Dependencies service should have a similar power output and a frequency range of at least 2 to 15 megs. with provision for crystal control.
- (viii) The transmitters will be installed, complete with amplifiers, at the stanley U/T Station, East of the town, and fed by a land line from the studio a total distance of approximately 12 miles. Tenders should therefore include indications of the cost of suitable cable together with any matching equipment or other incidentals which may be required.

(Sad) D. McNaughton

Secretary.

COMMUNICATIONS COMMITTEE.

PART 2.

Technical Sub-Committee.

It was agreed that the equipment specified by the General Post Office was in every way suited to the job to be done and that the diversity reception system incorporated was, in principle, a very good thing to have. The only doubt which arose was whether the advantages of the diversity system would not be outweighed by the extra cost of its installation. It was agreed that two receivers would be desirable in any case and a good rhombic receiving aerial, The difference in cost therefore resolves itself into the cost of the diversity switching equipment and the second rhombic aerial required for use with it. The former will cost under \$100 but the latter, on the basis of the only figures available here, may cost about \$1000.

After Further discussion, and after a consultation with His excellency, it was agreed to recomment that equipment of the type specified by the General lost Office should be purchased, but that they should be asked to comment on the derial problem. The finally agreed recommendations are this:

- (a) That his excellency should arrange to purchase equipment of the type outlined in the General Fost Office specifications.
- (b) That the General Fost Office should be invited to comment on the apparently high price which may have to be paid for the rhombic receiving aerials. Each of these is expected to cost about 21000 this is based on the cost of four 80-foot masts plus the necessary wire, feeders etc. The only guide to the cost of the masts available here is that 90 feet-high masts recently supplied to the T/T station cost about 2200 each. A good open location for these aerials will be available south of the town.
- (c)That His Excellency should arrange for copies of the Committee's reports on Broadcasting and Rediffusion to be transmitted to the General Post Office with a request that they should recommend, as soon as possible, transmitters to provide the broadcasting side of the installation in conjunction with their rediffusion equipment.

(Sgd) D. McNaughton

Secretary, Communications Committee.

21 - 12 - 50.

Brif letter & Scerday of the Che thanking them for their refort, Shick and have entailed a lot of work, and which has been of material assistance & M.E.

28/2/80.

Mr. Bound In a gl Dayle

TELEGRAM SENT.

From SECRETARY OF STATE to GOVERNOR.

Despatched: 7.4.51. Time: 2130. Received: 8.4.51. Time: 0900.

CONFIDENTIAL. Your despatch No 134 of December 22nd 1950 No 66.

Broadcasting.

Estimated cost wired broadcasting scheme forwarded with my despatch No 96 of 1949 has increased by about 25% to approximately £2.400. Cost RHOMBIC receiving aerials will be considerably less than estimated in part II of your technical committees report since General Post Office state lattice mast not (repeat not) necessary; they themselves use oversize telegraph poles for this purpose.

- Cost of 5 kilowatt short wave Marconi transmitters with spares would be about £12000. REDIFON transmitter of the same power costs about £2000 less but Marconi is considered more reliable.
- Maximum assistance that can be given from general reserve of Colonial Development and Welfare Funds is £10,000. Unless therefore you are prepared to make a substantial increase in contribution from local funds it would appear that all that can be afforded is one transmitter and wired broadcast equipped for Stanley. Total cost of scheme on this basis would be about £15000.
- If 2 transmitters can be afforded (in which event total cost would be approximately £27000) B.B.C. and G.P.O. both consider broadcasti: to the Colony should be on medium waves even if low power has to be used. Their views on frequencies question follows by bag. Matter is complicated because under Atlantic City agreement forwarded with my telegram 26th August 1949 circular saving, broadcasting on the following bands is not permitted in Falkland Islands: 2300-2590 kilocycles 3200-3400 kilocycles 4700-5060 kilocycles 11975-12330 kilocycles. agreement is not yet in force but G.P.O. consider you should avoid use of frequencies in these. I recognise this restriction must conflict with technical advice of your communications committee but I would suggest you defer replying until you have had an apportunity to consider the views of G.P.O. and B.B.C.

Lee 221

SECRETARY OF STATE.

G. T. G. information & view. I will from to the Ctte for their

Cs

Scon

2. As ho X on neverse I was not aware Mad we had continpeded lattice masts and can find no reference to these. I assume that the Ctu. had in mind the type of most ("ADASTEA") rountly exected at the W/T Station; there are maid in various signs and weights and could be cheapen, I imagine, than the orthinal at 188.

3. Tokke is no reason, prosumably, why the Depondencies second will pay he transmith which is designed for their particular service.

mc 10/1

Res KIV. fr w. J. 19

Mo reply from

Mo mail from I for last Setgrey In the within wo at 316 pl? Mark for the Market 1 14/15.

Chairman With for your information & views, pol Macs, pol Spices, pol soft,

H.C.S.

We spoke on 216. It is very interesting but I feel there is little we can pay until feeller details of the frequencies problem come à hand — in the next mail we hape. In the meantime I suggest that you send this file to Messis. Medder a Nicholson for them to see 216. I'll amonge it if you re-issue to me.

H.Es minute at 217 opposite - I can find no reference to lattice towers. Our colimades were made as H.E. suzgests - see 213 pava (b) It is to be happed that the near mail brings further details of this - all we really need to know is how high the masts meest be. The original operifications said so feet but we believe we could get by on much less than this. J. Mon

Secretary, Communications Offee 30/4/31.

1. N. Nowalle Thick you At at end A your face 1, flease.

2/1/50

Messis. Mercer & Nicholson.

216 et seg for you to see pl.

21 Socretary Communications Committee,
216 Seen

thank you. Lagree AM. 8.5.51

m Nicolan To you please My 8.5.5. Sec J. Communications Committee.

agree that little can be done pending arrival of letter concerning frequency question.

C. histori.

8/5/51.

This frequency problem looks like being a very difficult one. En teory we should use medium vouves for the domestic peniece so that we produce no interference autside au aun area but we don't think we can afford to buy a big craugh wanometter to do this properly. It looks as if the B.B.C. (who adoscated a 20 KW. medium wave transmitted) are likely & my o persuade us dar use can get by on 5 km. merely so that we don't violade an international agreement. I doubt that we can get a reply out by the Punta Avenas mail, beef I suggest that your inform me as soon as the information coming by this mail is available for ferusal. D. Mcn

ACS K.I.V. for the meid. II 14/8/81.

Godrasly Advisory (rechand) Cle early H.

96834/9/51

PRIORITY

SAVING

From the Secretary of State for the Colonies

To the Officer Administering the Government of FALKLAND ISLANDS

Date 25 April, 1951

NO. 32 Saving

CONFIDENTIAL

216

My confidential telegram No. 66.

Broadcasting

I have consulted the General Post Office and the B.B.C. with regard to the proposals put forward by your Technical Committee in Part 1 of their report forwarded under cover of your despatch No. 134 of 22nd December, 1950.

2. On the general question of the frequencies that should be used the General Post Office has commented as follows:-

"(1) Coverage of the Falkland Islands.

The maximum distance to be covered from Port Stanley is approximately 140 miles although the range to be covered in the eastern island, which presumably contains the majority of both urban and rural inhabitants is only 60 miles.

If the Falklands were to use high frequencies to cover this area, then a typical frequency for day-time use would be 6 Mc/s and for night-time 3 Mc/s, although due to maximum usable frequency limitations these frequencies may need, at sunspot minimum periods to drop down to 4-5 Mc/s by day and 1.5 Mc/s at night.

But it is not clear that high frequencies are, in fact, superior to medium frequencies for broadcasting in the Falklands. Calculations have been made in order to compathe expected field strengths likely to obtain during the when using 600 kc/s, 5 Mc/s and 6 Mc/s and at night when using 600 kc/s, and $2\frac{1}{2}$ - 3 Mc/s. It has been assumed th 5 kw transmitter would be used in all cases, with a short vertical aerial for the 600 kc/s transmissions and a horizontal aerial for the 1.5 - 6 Mc/s transmissions and has further been assumed that the 600 kc/s transmissions would be over rocky ground, i.e. the worst conditions for ground wave propagation.

These calculations indicate that during the day the field strengths obtained by using 600 Kc/s are superior to those obtained on 5 to 6 Mc/s for distances up to 140 miles from Port Stanley while for distances up to 60 miles an improvement of signal of at least 20 db is obtained. Noise data available shows that in the Falkland Islands the atmospheric noise on 5 - 6 Mc/s and 600 Kc/s is substantially the same during the day.



At night the field strength on 600 Kc/s is also superior to that obtained on 2.5 - 3 Mc/s. However, the atmospheric noise on 600 Kc/s at night appears to be some 10 db worse than on 2.5 - 3 Mc/s so although 600 Kc/s would give a much improved service for the first 60 miles (eastern island) it would be slightly inferior beyond this range due to the increased atmospheric noise. Nevertheless improved receiver sensitivity on 600 Kc/s compared with 3 Mc/s may well offset this small disadvantage. Some fading would be experienced at ranges of about 80 to 110 miles when using 600 Kc/s and at 15 to 25 miles when using $2\frac{1}{2}$ - 3 Mc/s.

(2) Coverage of Dependencies.

The nearest Dependency appears to be approximately 800 miles from Port Stanley and it is stated that the maximum range required is 1500 miles. In general, frequencies of between 6 and 15 Mc/s could be used during the day. After dark, at sunspot minimum, it would be necessary to drop down to a frequency of the order of 3 Mc/s to ensure that the nearest Dependency was not in the skip zone of the transmissions from Port Stanley.

From considerations of both field strength and atmospheric noise there appears to be no significant difference between the night-time propagation on 3 Mc/s and, say, 1.5 Mc/s, over the ranges concerned. Below 1.5 Mc/s the atmospheric noise increases fairly rapidly with decrease in frequency.

It would appear, therefore, that little, if any, improvement could be obtained for the service to the Dependencies beyond using a frequency around 1500 Kc/s by night and suitable frequencies in the range 6 - 15 Mc/s by day. In some cases 6 Mc/s could be used for night periods. Also it is thought that the optimum frequency by day is rarely high enough to warrant the use of a frequency above 15 Mc/s.

(3) Recommendations.

It is recommended that frequencies should be chosen by local listening tests as follows:-

600 Kc/s (approx.) or 1500 Kc/s (approx.)

One frequency in the band 6000 - 6200 Kc/s
" " " " 9500 - 9700 Kc/s
" " 11700 -11900 Kc/s
" " 15100 -15350 Kc/s

The frequencies chosen should clear the edges of the above bands by at least 10 Kc/s.

The British Broadcasting Corporation uses 15260 Kc/s for broadcasting to the Falkland Islands and, no doubt, that frequency will be left clear.

It is confirmed that the bands $2300-2500~\rm Kc/s$, $3200-3400~\rm Kc/s$, $4750-5060~\rm Kc/s$ and $11975-12330~\rm Kc/s$ are not available for broadcasting in the Falkland Islands.



- 3. Mr. F.C. McLean, Head of Engineering Projects Group, B.B.C. has commented as follows on your Committee's proposals:-
 - "(1) General experience, as for example in Singapore, confirms the difficulty of establishing a satisfactory short-wave service over a wide range of distances. This difficulty is particularly noticeable when at the outer range an appreciable distance is concerned and a service is also required at a very short distance. This has been proved by experience in Singapore where the Department of Broadcasting uses medium waves for short distance services and short waves for the greater distances. It was of course an important feature of the proposal for the service in Migeria, I think therefore that it would be rather a pity to abandon the proposal for the medium-wave transmitter in the Falkland Islands. Although, as I stated in my memorandum of 22nd May last, a power of at least 20 kw is desirable, it would, I think, be better to accept a reduction in power to 5 kw if this were imposed by financial reasons, rather than to abandon the medium-wave project altogether. In the event of such a scaling down of transmitter power it would however be important not to scale down the size of the aerial system which as previously recommended should be directional.
 - (2) Economy in construction would emphasise the importance of obtaining efficient propagation by the use of a low frequency for this medium-wave service as suggested in paragraph 1 of my memo cited above. In addition, however, to the very important reason put forward by the Falkland Islands Communications Committee against the use of 200 Kc/s, I think it would not be economical to use such a low frequency for a low power station in view of the inordinate demands that this would make on the size of an efficient transmitter aerial system.
 - (3) As correctly pointed out by the Communications Committee, a short-wave system to cover short distances must use a very low frequency, particularly at sunspot minimum conditions. To use such a frequency however normally entails great difficulty in the supply of suitable receivers. A very large part of the receivers normally obtainable are not suitable for frequencies lower than 6 Mc/s and there is therefore an advantage in covering short distance reception by medium waves so that the nearest distance at which a reflected wave service is required is thereby increased with a consequent increase of the optimum frequency.
 - that a 5 kw transmitter should be used for the short-wave service, but at the same time I would like to suggest that consideration might be given to starting some sort of a service with low-power transmitters. Delivery of both medium and short wave transmitters is now extremely difficult and likely to be subject to delays. There are however now available in the second-hand market in this country some RCA 250 W transmitters which will give a very acceptable broadcast quality. They are being sold quite cheaply and are immediately available. They will work on any frequency from 2 Mc/s upwards and can be adapted for use on lower frequencies. It may be possible for the Falkland Islands authorities to procure some of these equipments and with them to start trial transmissions from which they can obtain data of conductivity, local noise, etc. and use this for their broadcasting coverage system which would have a more substantia basis than one predicted on the basis of the scanty information so far available".

? Can (FID) >



- As you will observe, both the General Post Office and the B.B.C., consider that you would be well advised to broadcast on medium rather than short waves to the Colony. In view of the fact that you are not debarred by International Agreement from broadcasting on frequencies in the tropical bands, your Committee may well feel that there is no alternative but to accept their advice on this point.
- 4. With regard to the point raised by Mr. McLean in paragraph 2(4) above, I confirm that the delay in the delivery of new transmitters is of the order of eighteen months. A few of the 250 Watt second-hand RCA transmitters to which he refers are available at a cost of about £250 per unit and can be converted for operation on medium waves, should you so desire.
- 5. I think I should make clear that the estimates of the general cost of the scheme quoted in my telegram under reference embraced the approximate cost of the equipment only; they did not include the cost of building and installation.

Replyat 221

SECER.

Secretary N/T Committee

To see 221-224, por

Spren

Messes Merced & Nicolson,

To see 221 - 224 please We

To see 221 - 224 please We seem to be seem to be getting down to brown techs naw. We should have a meeting soon but there is no prospect, as ? see it, of getting a reply off in this mail.

INEN_ 18-5-51.

Sec W/T Committee,

221-224 Seen, I thened a
meeting is receivery to sort the information out
and for reaction on faces the of 223 and para 4

g 224:

All. 18.5.51

M. Nieolson, 10 you please.

10.5:8

Scorelary w/I Committee.

Regret I can't agree with you about the brass (acks! It seems to me that on the infortant frequency question (MF versus HF), 221 to 224 singly places the ball rather awkvardly back in out court.

Agree that another meeting is necessary to attempt to thrash the matter out.

C. nicolson: 21/5/51.

H. C.S.

Please find herewith final version of aun ladest report on broadcasting. Cauld your have it typed?

-I'm afraid I have not time to do so. You may find it convenient & have a number of copies made - the maximum distribution I can envisage would be I local.

2 for S. of S.

I for G.P.O.

I for B.B.C.

I for H.E. to take with him?

Total 6 best that may be more than

io necessary.

It has not been an easy report to write and H.E. may wish Jurker explanation - I should be very pleased to discuss it with him should be wish me to do so. I think personal representations by him are the best hope we have.

D.MM -

Thinks on vevere. I submit in bade in order that IE way have a chance & veal and if vegend, discuss with No Mr Nanglin, before you leave, and also so that we can get the Way refort type if vegend.

W 20/6/51.

Read - it is quite clear to me

and he roped may be typed for submission ender brief county desperd. There is little that we can add to 1; the considerations are puly technical.

When sepenment engreposeed (and their may be willed in the Dospolets) should be med for loting founds. Soft might like to term that before the BBC's beamed service starting late in the officient, much the boot stronged and deaned homomorphism MC.

They are from theorem!

Note for dossier - I studd like if printle to well out discuss with BBC vapo. Spicials. (Include in dispatch).

Very bris dost defetch at come s. f.c. I have sent the lefat out for typing already.

21/6/51.

Edunya.
Fa: MC 22/VI

22nd June, 1951.

FALFLAND ISLANDS.

No. 42. CUILLEY.

Sir.

221

207

229

I have the headur to refer to your friently Confidential Soving Tologram No. 52 dated the 25th April on the subject of arondonating in this colony, which has been considered by the same local Consistee as was referred to in my despatch No. 1 A of the 22nd Secretar, 1950. The Consistee has prepared a further report, three copies of which I enclose for your information. I am in general agreement with their views and recommendations and do not feel that I can usefully edd much thereto, since the matter is essentially technical.

- 2. I would propose that the cost of the experimental equipment which they recommend should be not from Colony funds, and I agree with their suggestion in the completing paragraph of the report as to the final allocation of costs.
- 3. You may be interested to learn that before the A.A.c's beamed cervice, which starts late in the afternoon (local that), by far the strongest and clearest transmissions in English case from baseow!
- 4. I should welcome the opportunity, if it can be arranged, of meeting officials from the G.F.G. and the B.B.G. during by forth-coming visit to implant for the purpose of discussing this question.

I have the honour to be, Ulr. Your most obedient, husble servant.

Reply at 246

(sgd.) MILES CLIFFORD

COV. A.

THE EIGHT HENOURABLE JAMES GRIFFITHS, F.O., M.P., SECRETARY OF STATE FOR THE COLONIES.

PALELAND ISLANDS CONFUNICATIONS COMMITTEE.

jech icol an- o i la.

legart on a meeting held in the affice of the tweetintenses. Total a clographs operated on richy, lay sets, 1931, and superquent consultations covering a period of several weeks.

he purpose if the meeting was to consider the views expressed by the constant of the other information contained in the occupanty of tate's gving folgress (0.)2, doted full agent, 1, and to recommend to is recollency a polyage course of retion.

The general conclusions reached may be demarked as follows:

1. Medium-wave transmitter;

edim-nevo transmitter with a power of at locate 5 %. Will have to an aravided ast the related plants to ditte service. The committee aged that itempoish considerations proved the clony area obtaining a transmitter of one coor power. I the present time (i.e. during the winter mounts to opposite conditions are normally each that, during the evenings, the maintain upable frequency for as attempolating is at the order of 2 - 3 Ce/s. Taking into consideration the frequency coverage of normal opposition the frequency coverage of normal opposition the frequency coverage of normal opposition and selectation the frequency coverage of normal opposition are relief wave-cont.

2. pange of the editor wave transmitter.

hile accepting the necessity of providing a recima-wave transmitter the consister regret that they cannot enquese the communat optimistic opinions of the G. on the coverage likely to be achieved by The cotter has already been discussed at length in Part I of the committee's report of the decting held on Tovember, 10th, 1950. (see (s) The Evron Population paragraph 2) and they see no reason now to alter their views. The calculations made by the day, and the comparative riels strongths of medium and high frequency train 10 120 must (for this area) be based on rather searty and empirical data. In addition they almost cortainly do not take into compleration and fact that the medical upve-band to very crowded in this part of the world and that many of the stations using it, operating with considerable power over a good propagating surface, put signals of great atrength into the Politimue from Joach marica. Count listering casts to find countatest "blane" spots in the medium sav -bard ladicate that these are very diridult (if not impossible) to find. (There is some reason to believe that some stations in both merics do not stick rigidly to their normal frequencies). Thus a "Galum-wave transmitter operating from Stanley may have to compete with posecrul stations on wavelengths close to its own, with a consequent reduction in effective range.

that we should accept a Medium-mave transmitter with a power or only 5 km. when the original recommendation was for one or least 20 km is, in the committee's view



disconcerting, particularly since the original estimate of range was not entirely satisfactory. Thus the committee feel that the possibility of the 5 w. edium-wave transmitter providing adequate coverage of the falklands themselves is remote and this is a course of serious concern.

3. The estects of limited range.

induction we are faced with the very disspreable possibility that we may provide an interior service to those listeners living furthest from Stanley (1.0. the very people whose needs we are most concerned to meet). In our view those listeners residing in the seat island (where they already nove closer links with tabley by more frequent air and see transport services and, in most cases, by telephone) must assemption about the distribution of listeners made in the Tiret paragrain of the 's comments is correct only because the out lolum includes the town of tabley in which reside almost half the total population of the islands. since tamley listeners can be served adequately by land-line from the redification service they may, in fact, se disregarded when considering procdessting regalresents. Thus the majority of proceeded listeners and the most important section of the Metening community, replace at distunces Tron 70 to 140 miles from utanley. The rading which the wiles on one of the median frequencies would be very much more serious than that at 15 - 25 miles which would result ir higher frequencies wore amployed.

There remine, of course, the possibility that some suplementary service might of provided to cover those areas neglected by the oclustwave transcission - and here lies the core of the problem. The only frequencies suitable to provide such a supplementary service here are in those provides to some which lie between 5 and 1; %c/s. i.e. they are not noted from the provided in which prosecuting is not consisted in temperate intitudes - he so could tropical occase. It sevices that the statement in provided in error and that the phrase "you are not debarred" should read "you are debarred"). This statement is eased on local impospheric records and is continued by the . . . in the second paregraph of their examents.

should the Committee's rears prove well-founded then we run the risk of providing listoners in the sect sultions with a service little, if anything, better than that which they now enjoy - even after we have spent 110 - 12,000 on a new transmitter. It is as alarming thought.

4. International agreements and the "tropical Dands".

His Excellency may welcome a brief technical explanation of the use of these bands. Speaking very generally, it is customary to use medium frequencies for broadcasting to what might be called "near" and "middle-distance" areas, and high frequencies for "long" distances -

as the 3.5.6. augment in their comments on lingarore and ligaria. (It is impossible to give an explanation of the terms "mear", "middle distance" etc. or to express them in miles; they are to some extent self-explanatory, but very with transmitter power, exact frequency, propagating surface, Tomospheric conditions, and no on). the trolies, havever, attompheric noise or medius wavelengths is so nigh as to make it impractical to use them for the "middle distance". That is, it would be necessary to build transmitters of huge power (at very great expense) in order to ensure that the signals from the transmitter received in the "middle distance" were not on pletely arowned in stmospheric noise. In order to avoid this the present Interactional agreements allocate to broadcasting stations in the trapics certain frequency banks which lie interesoniately between medium and high frequencies and which are most suitable for covering the "mindle distance". The committee consider that, here in the relations, the ost falami am adjacent inlamis may be looked won as our "mindle distance" and that we chall be unable to smintain a service to that area, not because of high atmospheric noise but because, as a very small colony we cannot afford to purchase and operate a medium-wave transmitter powerful enough to do so. In the tropies the big trouble is noise and they have exclusive use of the "tropical bonds". Here in the Fallands the big trouble is money - and we have no "trojical bands". Thus the B. B. C's comparison of the Salaloma with Singapore and Sigeria is not really valid since they mave the use of the tropical banks".

In short, the cosmittee recommend that every possible effort should be made to obtain authority to use frequencies in the "tropical bends" by explaining the problems peculiar to the Falaland especially

- (a) that on liminals ground alone the size of the Colony and its population connot justify anything more than a <u>jaw</u>. madium-wave translitter;
- (b) that the area is sountainous with frequent rocky peaks and extensive stone outerops so that ground commectivity is poor.
- (c) that the most important section of the listening audience resides at distances of from 70 to 140 miles from 1 tanley.
- (d) that Ionospheric conditions, coupled with the extent of the area to be served, are such that transmissions on frequencies of 6 %c/s or more would not provide satisfactory evening reception throughout the Comp for more than about four months in the year.

It might be maded that the present Stanley transmitter operating on This Mc/s. provides a service in the salabase day and night during the summer and by day in the winter, and in the perendencies at times in the winter evenings, although it has an output of only be watts. The B.R.C's. remark that "a large part of receivers normally obtainable are not cuitable for frequencies lower than 6 c/s." is not really appliesble to the substand Islands, where most receivers are of good quality with adequate short-wave coverage, usually down to 2, - 5 c/s.

- 1/2 ***

There are strong arguments for adopting the suggestion of the A.A.C. that low-power and type 17:356 transmitters should be used to start an improved service as soon as they can be obtained and installed. The delivery time for the new high power transmitter is now likely to exceed 10 months and we may therefore assume that it will be at least two years before we have it installed and operating in the colony. The type 17436 transmitters are insemintely available, however, at a price only a fraction of their true worth, and are known to be of ragged construction and good mality, being installed as standard equipment on all rile. In bases and in the eteorological affice Beach arters in tanley. The astablishment of a new service as soon as possible with these equipments would not only provide a greatly improved service reasonably soon, but sould also provide useful information about consectivity, noise, frequencies and so on. It should be borne in which however, that the operation of a 50-sate medium-wave transmitter would do or very little assistance in estimating the coverage of a 5 w set; and that (as far as R/7 is concerned) the committee are shready convinced that only operation in the tropical bands is likely to be receivable for almost all of the year.

Ther are consideration of these and previous arguments, the consistes make the following memoral recommentations to its meellener:

- (1) Dotinite ormers should now be placed (before prices rise even further) for the studio and redictusion equipment specified by the G.F.C. and for one 5km. edium-rave transmitter. The G.F.C. should be consulted as to the minimum efficient height for smalls required for the resolute receiving serials for diversity reception, according that a good open location for these can be found louth of Stanley. The G.F.C. and/or B.F.C. should be computed about a suitable nerial system for the transmitter. I decision as to how these serials about be created can then be taken locally. The committee feel that the total cost of the equipment specified is likely to be so large as to justify a request for the full measure of financial assistance of fire occupied by the secretary of State.
 - press for a special dispensation to enable the coldland islands to one frequencies in the tropical banks. The request should mention our considerable distance from any tropical station, the great importance of efficient radio communications to a scattered population, and the other points out in section 4 (a) to (d) above. The frequencies will be used at that on a power of 500 watts or less, but may be required for one with greater power later. Fermination to operate on two medium frequencies with a power of 500 watts at first and 5 km later, and on frequencies in all other high frequency banks up to 1) had in a similar manner to those in the tropical banks, should also be accept. The frequencies will be required for at least the period 2100 0200 c. T. daily but permination to operate at all times of the day between any 1000 G. T. and 0200 G. M.T. is desirable.

(3) The Crown agents should be instructed to obtain two k.C... type _Th356 250/560 - watts transmitters complete with erystal and master oscillators and audio amplifiers. The Counittes are consident that these can be readily obtained for much less than the #250 quoted in the Secretary of State's communication. The Clywoodsle apply ompony of Gioegow has recently advertised the complete equipments as required for #120 each, for example, and several other firms at figures considerably less than this. One of the transmitters should be modified for operation on the top section of the median wave-band. It is desirable that this modification permit operation down to 1000 Kc/c. but it is appreciated that the problem becomes greater, the lower the frequency, and it is not considered wise to spend a large sum. The modification should therefore take the frequency coverage as low a factory with not cover at least low, to 1000 C/s the Grown gents for the colonies should be instructed to advise by telegram. In order for the components necessary to do no can then be sent, and the modification made here a receipt of the equipment.

The equipment should be satipped as soon as evailable - direct shipment by the return voyage of the John Rispoe" may be convenient. Installation should be used as soon as possible to provide an improved service and to obtain valuable data on reception. A decision as to whether a local high power transmitter should be obtained can as delayed until a period of testing has been completed.

- (h) Copies of this report should be provided to the Coerctory of State for the Colonies in order that he may case them on (if he approves) to the G.F.C. and R.E.C. for their further views and communis. Their essistance in the attempt to obtain freedency allocations in the tropical bands would be invaluable.
- (j) The total cost of the equipment recommended above will be about 115,000. Assuming the full measure of financial assistance from the central sum there will remain about 15,000 to be found locally. No doubt his excellency has in mind how this sum is to be made evailable. If the committee may make a suggestion it is that the necessary amount should be found, in the first instance, from Colony Tunds. Thould it be considered wise at a later stage to instal a powerful high-iroquency transmitter it sould be appropriate to provide this from popendoncies funds since they will derive the reason benefit from it. Apply the part of the original outlay might reasonably be recovered from expendencies funds later.

(sqa) D. Mc Manghton

Secretary, Committee.

11 Ne Naughton

Page 228 fi. Space copy and original of report at back cover which you way come to detach.

2) As H.E. is discussing in U.K. I think it wight be win not to place any when for equipment until his setum, as he is not going the away luy.

W. 22/1/si.

H.C.S.

228 seen thank you. Spare capies extracted.

JMCN-5-6-51. BM 6/5/51



TELEGRAM RECEIVED.

From SECRETARY OF STATE to GOVERNOR.

Despatched: 30.7.512 Time: 1425. Received: 31.7.51. Time: 0900.

REPLY URGENTLY REQUIRED.

No 137. Your despatch No 42 of June 22nd 1950. Broadcast. It is proposed apply for a frequency around 1500 kilocycles for use in Falkland Islands at the forthcoming radio conference in Geneva.

Your views on this would be welcomed.

Reply at 237.

SECRETARY OF STATE.

To Broadcasting (Technical) Committee for early views, please.

(Intild) M.R.R. 31/7/51.

G. T. C.

H.C.S

9 house descussed 234 with Messus. Mercer a Nécolson. Ut feel:

1) We should ask for a medien frequency around 600 Kc/s. also.

Dive hould try to ensure that any regentements in other frequency bands are not forgotten, and that any needs should be borne in mind of the Genera conference is concerned with all broadcast frequency bands.

We therefore purposes something on these lines:

Your blevorum No. 137 . Grabeful if
application can be made for frequencies avaiend

1500 Kc/s. and 600 Kc/s. Pawer is expected

90 be less than 500 walts at first and 5 Kw.

laker of Presume action in regard to Righ

frequencies including tropical bands is under

consideration and that your will have matter trained

at Jeneva if your consider it appropriate.

DECODE.

TELEGRAM SENT.

From GOVERNOR to SECRETARY OF STATE

No. 178. Your telegram No. 137. Broadcasting. Allocation of a frequency around 1500 kc/s would be welcome. One around 600 kc/s would also be useful if it can be obtained. Power is expected to be less than 500 watts at first and 5 Kw later.

2. Presume question of high frequencies including tropical bands is under consideration and that matter will be raised at Geneva if appropriate.

OFFICER ADMINISTERING THE GOVERNMENT.

G.T.C.

H.C.S.

With reference to the Cite's recommendation about type ET 4336 R.C.A. Transmitters, I understand.

Othat FIDS. are abtaining two of these equipments complede with amplifiers, etc. for abase \$270

(2) that H.E. has reserved form more and has said that two of them may be used for broadcasting when they arrive.

I gutter too, that H.E. Janvaurs a period of experiment with these transmetters in vorinces frequencies to strengthen au requests for frequency allocations. Perhaps your would care to ensure that these transmitters are actually on the way - the sooner we get them the better? As to the modefication for M. W. operation, we feel this can best be done here and we suggest that the following components required should be obtained as soon as possible from Crown Agents. The pattern numbers given are Admirallig references - if C.A. are told this they should have no defficielly in obtaining suitable parts. The items required are:

237.
Admirally
Ratten No. Mo. Description. required. W. 2815 Condenser, 180 p.F. 2. Conclense, 750 pF. 50854 2. 51127 Condenser, 200 pF. 3. W. 2575. Condenser, 300 pF. 2. W. 4429 Switch, sengle pole, 4-way. 2. D. McMaughtin Communications Ctree. 27 - 8 - 51. JE Pl. su for 1.238. Can J.E. indicte how ? Pa Bricon to hope. A MILLAR & church som the transmitter will be coming at. ? Pa Bricon to MILLAR & church change. 2) Affron adamy of the space recommended above? MQ. 28/11 28/8/8 Thuck or Si. Afferre ison of telegram on in Heft I cover? We advalled has them in technical prosession I Much: May were 28/8/51. ordered one mally from of the FD territories,

mo 28/vi

ANIVALE MANAGED NEWSHEVED



Extract from the minutes of a meeting of the Executive

Council held on the 23rd of August, 1951.

odmuki

10. His Excellency informed Council that during his visit to the United Kingdom the following matters had been discussed amongst others:-

(a) Broadcasting Equipment. Discussions were at present proceeding between the Colonial Office, the G.P.O., and the B.B.C. as to whether or not the Colony could make use of the tropical band. In the meantime an allocation in the medium band was being sought and experiments would be carried out locally on transmitters the Governor had obtained at small cost and which would probably come out in the "John Biscoe". It was no use embarking on expenditure of the order of £15,000 or so until we had discovered the most favourable operating conditions.

Clerk of the Executive Council.



Number

GOVERNMENT TELEGRAPH SERVICE

241

modelly the to the to the

FALKLAND ISLANDS AND DEPENDENCIES

SENT

Office of Origin Words Handed in at Date

on division the anthur and the time there are the track of 29.8.61. to come to the second of the animalian and animalian To are relatively strongly and objects CHAPELICIES I.OIDON: Singo tries say bred reflered to a contract for more POLLO JING FOR MILLAR BRACKET INFORMATION DEPARTMENT BRACKS PROM RIVER STOP BEGING STOP REPER MOR TWO TYPE BY 4336 ROA TRANSLITTERS WITCH YOU PROMISED GOVERNOR YOU WOULD EARHARK FOR THIS COLONY COMMA GRATERIE IN 12 YOU CAN INDICATE HOW MOON DELIVERY MAY BE POULTBLE STOP CAN THEY COME BY JOHN BISCOST STOP I CONFIRM

GOVERNOR.

ALLO THAT WE WOULD LIKE TO HAVE OTHER TWO AS ASLL FOR FIDS IF STILL

SM.

AVAILABLE. STOP ENDS.

Time

GOVERNMENT TELEGRAPH SERVICE.

FALKLAND ISLANDS AND DEPENDENCIES.

SENT.

Number Office of Origin Words Handed in at Date

To

CHOWN LONDON.

HO. JC.

CRATEFUL IF FOLLOWING TRANSPORT A BRUCKET ADMIRATELY PATTERN NUMBER
REACKET B BRACKET DESCRIPTION BRACKET OF BRACKET HUBBER REQUIRED STOP

#2845 OFF CONTENT RESOLUTION FLOOP THOSE SOSPE STOP OF BRICKET PROBLEM AND CONTENT RESOLUTION FOR STOP THOSE SOSPE STOP THESE ORIGINAL PROPERTY OF THE SECURIOR OF STOP OF STOP THESE OFF STOP THESE OFF STOP THESE OFF STOP THESE OFF STOP OF STOP O

COLONIAL SECRETARY.



pps.

TELEGRAM SENT.

From SECRETARY OF STATE to GOVERNOR.

Despatched: 7.9.51. Time: 1240. Received: 8.9.51. Time: 0845.

REPLY URGENTLY REQUIRED.

No 161. Your telegram No 196. Broadcasting. Following for RAYMER from MILLAR begins.

The two RCA transmitters earmarked for the Colony will be sent with "John Biscoe! Can supply other two as requested but please confirm by telegram that these are needed in addition to the two transmitters recently purchased by Crown Agents for FIDS. Ends.

SECRETARY OF STATE.

Above. Two for the Broadcasting Studio and two for FIDS. Do we (FIDS) require a further two?

(Intld) M.R.R.

8/9/51.

C.M.O.

I think, yes?

(Intld) M.C.

8/9/51.

COPY.

DECODE.

TELEGRAM SENT.

From GOVERNOR to SECRETARY OF STATE

Despatched: 8.9.51. Time: 14.00 Received: Time:

Confirm other two transmitters required for FIDS and should be shipped "Biscoe" consigned Port Stanley. Secfids informed.

Pl. H.C.S.
Pse see reply to 243, above, which we somed for FIDS HI/61.

G. Ed.
11.9.51

ACS 1. R. Naylli fra 242-243 w.v.l. his 238. 11/9/51.



290ET 10E1

COLONIAL OFFICE,
The Church House,
Great Smith Street,
5.4. 1.

96834/9/51 Your Reference 0438/II MALALAN IBLANS

Ma. 63

Early ash to Sale Committee 1

A. 1951.

Sin,

228 Thave the honour to acknowledge your despatch 10.42 of the 22nd June on the subject of broadcasting development in the Palkland Islands with which you forwarded a further report from your Johnsonications Johnstitee.

- dering your recent visit to London, it was agreed that, before taking action on your Committee's recommendation about the ordering of a 5 k/ medium-wave transmitter, the Eritish Broadcasting Corporation should be forther consulted and asked to clarify their views, since they had recently expressed doubts on whether a transmitter of this power would provide adequate coverage of the Colony. Mr. P.C. McLean, Mead of the Corporation's Engineering Projects Group, who has been advising on the question, has been absent on leave and this has delayed the British Broadcastin Corporation's reply. He has now returned and has made clear that, while he shares your Committee's apprehensions about the cervice a 5 kM transmitter would give, particularly to those listeners in the Colony living furthest from Stanley, he feels that a medium-wave service on this power would be very much better than no service at all, and he therefore supports the recommendation of the Committee that the transmitter should be ordered. Mr. McLean has emphasised that, if the best results are to be obtained, it would be important not to scale down the size of the aerial system, which should be directional.
- J. In the circumstances, I should be grateful to learn if you wish a Colonial Development and Welfare scheme to be prepared ful the provision of a 5 kM medium wave transmitter to your Governess. In order to avoid delay, I would be prepared, subject to your agreement, to draw up the scheme here and, as soon as the necessary formalities have been completed and a grant approved, to authorise the Grown agents to place the orders.
- your discussions in London, I confirm that the Crown agents have been asked to send you two second-hand R.C.A. 250 watt transmitters with the "John Biscoe" when she sails in October. These were purchased about two months ago for another Johnial Government which does not now require them. The total cost of these transmitters, which will not exceed \$400, will be charged, as agreed to your Government. It has been made clear to the Orown agents that these are required for use in the Colony and are additional to the transmitters of the same type which you have ordered for the Dependencies.
- 5. I confirm also that I have asked the General Post Office to place orders for the studio and wired broadcasting equipment

/specified

2

ACTION TOP

SIR MILIS CLIFFURD, K.B.B., C. ...G. etc. etc.



specified in the enclosures with my despatch No.90 of the 3th Tovember, 1949, and they have agreed to procure, assemble and test this equipment against payment by the Grown Agents. In view of the considerable time that has elapsed since this scheme was prepared, I should be obliged if the specifications could be checked and if you would inform me by telegram of any items of equipment specified in the scheme which will not now be needed. The deneral rost office estimate that delivery of this equipment may take about eighteen months because of the present supply situation and the fact that some of the equipment has to be made specially for this scheme. The original estimates are now, of course, out of date. Fending the preparation of detailed estimates, it should be assumed that the cost may have increased by about 30% to approximately \$2,500. To this there should be added the cost of the rhombic receiving agricle, estimated by the Ceneral Post Office at about 8500. I should be glad if you will agree to most the cost of this equipment from local funds, since this would simplify the question of assistance from the central allocation of Colonial Development and Welfare funds; the latter would then by confined to helping to meet the cost of the transmitter, referred to in paragraph j above.

Turning now to the question of frequencies; the Engineering Department of the General Post office have examined your committee's report, but see no reason to modify their comments contained in my confidential savingram to 52 of the 25th april, and support the Committee's recommendation that a 5 km medium wave transmitter should be installed. It regard to the use of 221 frequencies in the tropical bands for broadcasting in the ralllands, the Eneral Post Office do not consider that there is any chance of negotiating agree ents with the countries likely to be affected in this matter. The point out that these are shared bands and that the stations most likely to be affected are fixed and mobile service stations in Argentina; (it is not clear from your Committee's report that they appreciated that these bands are shared; on page 3 they seem to imply, for example, that the tropical broadcasting stations have the exclusive use of these bands; this is not the case; similarly, on page 4, paragraph 2, reference is made to the considerable distance of your station from any tropical broadcasting station). For reasons which you will appreciate, the General Post office consider it most unlikely that the Argentine Government would agree to leave the way clear for a broadcasting station in these bands in the Falkland Islands. They state, indeed that such an agreement would be regarded as a great concession even between countries on the falkland. la. concession even between countries on the friendliest terms. I regret, therefore, that the position remains as described to you in London by my Telecommunications Liaison Officer; that is to say you could use frequencies in say the J c/s band for broadcasting, but you would have no status there and would require to change frequency if you caused interference.

as you know, application will be made at the Extraordinary Administrative Radio Conference for the allocation to your Povernment of a medium-wave frequency around 1,500 Res. Cur delegation at Geneva will also bear in mind your desire for a frequency around 600 Res. if it can be obtained. It would be helpful if you will inform me of your reasons for wanting this second medium-wave frequency.

I have the honour to be,

Sir,
Your most obedient, humble servant,

Reply 254.

(for the Secretary of State)

231

240

From the Secretary of State for the Colomes.

To the Officer Administering the Government of FALKLAND ISLANDS

Date 12th September, 1951.

84 Saving. 0438/1

PRIORITY

246 My despatch No. 63.

Broadcasting. As you are aware from my despatch under reference, the General Post Office have agreed to procure, assemble and test on your behalf the wired broadcasting and studio equipment specified in the enclosures with my despatch No. 96 of the 8th November. 1949. In this connection, I attach three questions from the Post Office Engineering Department to which I should be grateful if you could arrange to let me have an early reply.

SECER.

Copies sent to:-

Crown Agents - Mr. F.A.W. Byron. Crown Agents for the Colonies.

Falkland Islands

1. Number of Subscribers

The equipment upon which the 1949 estimate was based was designed to provide a rediffusion service to a maximum of 400 subscribers. In so far as the number of subscribers influences the power output capacity and cost of the main amplifier can it be confirmed that 400 subscribers is the maximum number to be anticipated during the first 10 years of service?

2. Control Desk. (Drawing WB 22025)

In this drawing, copies of which were supplied with the 1949 estimate, a 'detachable cover to give access to miscellaneous apparatus' is shown fitted in the front of the back plinth immediately beneath the control panel. Greater accessability would be obtained if the cover were fitted at the rear of the back plinth, but this would mean that the control desk could not be stood against a wall. Can it be confirmed that desk will be assembled and used sufficiently far away from a wall to give access to a rear fitted cover?

3. Outside Broadcast Equipment.

The two O.B. equipments to be provided were originally designed on the basis of a single microphone input for each equipment. For O.B.'s from sources like the Cathedral etc. it may be found convenient to use at least two microphones, i.e. one near the pulpit and another for a more general pick-up from choir and congregation. In this case a method of mixing the outputs from two microphones is required. Only one piece of mixing equipment would probably be necessary and could be associated with either of the O.B. equipments. Can it be confirmed that this facility is required or whether a single microphone input is satisfactory. Additional cost of mixer would probably be around twenty pounds.

LLB 2/1. Wembley. A.G.B.

the Secretary of State for the Colonies.

e th October, 1951.

94 Saving.

0438/111

PRIORITY

246 My despatch No. 63.

Broadcasting.

I attach a memorandum and drawings prepared by Engineering Department of the General Post Office, showing constructional details and estimated cost of the rhombic receiving arrays to be constructed at Stanley. Freight charges and the cost of erection have not been included in the estimate.

2. The General Post Office would be grateful to know to what extent you will have to obtain the materials specified in these schedules from the United Kingdom. It may be that certain of them are already available locally.

SECER.

Copies sent to:-

Crown Agents - Mr. F.A.W. Byron. Crown Agents for the Colonies.

Mail from ach



ALL COMMUNICATIONS TO BE ADDRESSED TO THE AGENTS FOR THE COLONIES. LLOWING REFERENCE AND THE THIS LETTER BEING QUOTED



/Falkland Islands 5849

NLAND: "GROWN, SOWEST, LONDON." OVERSEAS: "CROWN, LONDON." ABBEY 7730.



4. MILLBANK, LONDON, S.W.1

5 007 1951

ir.

Broadcast Relay Exchange

We have the honour to inform you that we have been informed by the Secretary of State for the Colonies that the Overseas Telecommunications Department of the General Post Office has been requested by him to procure, assemble and test all equipment necessary for the installation of a broadcast relay exchange system for use in your territory and that any costs incurred in connection with this scheme should be charged to the Government of the Falkland Islands. We have written to the Post Office for full details of the equipment they propose to supply so that we can place the necessary order with them. In this connection we understand that when the scheme was first prepared by the General Post Office the total cost amounted to £1,900, but we have been advised that this figure may be exceeded by some 25% in view of the increases in raw materials which have occurred since the date of the This estimate, we understand, does not include original estimate. the cost of the aerial array Which it would appear would amount to approximately £500. We assume that the cost of the Post Office proposals may be met in full, and we should be glad if you would confirm to us that the cost of the equipment for the scheme proposed should be met in full in spite of any increase in cost over the original estimates.

We also understand that you had in mind the possibility of the purchase of broadcast transmission equipment to work in conjunction with the broadcast relay scheme, but we have not yet received any details of this additional equipment from you and should be glad to receive any information you can give regarding this matter.

> We have the honour to be, Sir, Your obedient servants,

for the Crown Agents.

The Colonial Secretary, Port Stanley, FALKLAND ISLANDS.

Secretary Bronneast Committee 246-252 outmitted for your information and necessary action, pl Mores.

B.

H.C.S.,

Tyram should Jack But

we are watery

We have had a meeting of the Communications Committee to consider 246 on but we shall have to have at least one more before

we can provide complete recommendations on all the problems involved.

In the meantime H.E. may care to take up one point which

S.of S. asks should be handled by telegram. This is at X on 247

where he asks for confirmation that all of the equipment specified in the original G.P.O. scheme is still required. Our recommendation is that it should all be bought - indeed we intend to seek H.E.'s approval for the purchase of one or two additional items.

If H.E. approves, I suggest a telegram to S. of S. assuring him that all the original items are still required - and then the re-issue of this to me so that we can make fuller recommendations for the next mail.

May P.W.D. please be asked to supply two copies of a plan of the present building? — we should send it to the G.P.O. for Situate guidance in the assembly and layout of equipment.

X.Mc Maughter

Communications Committee.

10-11-51,

Will affect action as vecommended in the above minute?

yes. Me. 13/xi Aces Acending H.



GOVERNMENT TELEGRAPH SERVICE

FALKLAND ISLANDS AND DEPENDENCIES

SENT

| Number | Office of Origin | Words | Handed in at | Date |
|---------|------------------|-------|--------------|-----------|
| | | | | 13.11.51. |
| Го | | | | |
| CHAPEL, | RIES FOLDON | | | HOA/O |

WO 262. YOUR DESPATCH 63 OCLORY OF 6TH EMPTEMBER STOP ERCADOASTING DEVELOPMENT BURDARA 2 REFERENCE PARAGRAPH 5 STOP I CONFIRM THAT ALL OF THE EQUIPMENT SERVICED IN THE CRICINAL OF GREEK IS STILL REQUIRED.

GOV WICE.

| - | | |
|-----|---|------|
| - 1 | ı | me |
| | ŧ | 1111 |

-

Secretary, b/b.
Action taken on your 253 of the
returned

Mills

DECODE.

TELEGRAM RECEIVED.

From SECRETARY OF STATE to GOVERNOR.

Despatched: 8.12.51. Time: 1400 Received: 9.12.51. Time: 0845

REPLY URGENTLY REQUIRED.

246 No 235. My despatch No 63. Broadcasting.

Marconi unexpectedly have 5 kilowatt medium wave transmitter for delivery next May. It will not remain available for long as delay in delivery of new transmitters is normally eighteen months. Grateful learn immediately if you wish me to reserve it for you.

SECRETARY OF STATE.

A.C.S.
Pl. ask Mr.McNaughton to call on me to-day.
(Intld) M.R.R.
10/12/51

H.C.S.,

We had a meeting the other day to agree on a recommendation to H.E. about 255.

Everyone is now agreed (G.P.O., B.B.C. and ourselves) that the best answer to our problem from a technical point of view which lies anywhere near the Colony's financial capacity is:

- 1) A medium wave 5 Kw transmitter operating on approx. 600 Kc/s of 1500 Kc/s.
- 2) A supplementary H.F. service on frequencies higher than 6 mc/s.

There is still some doubt as to whether even this will provide a 100% answer but it should come reasonably close to doing so, and if (as suggested in para. 6 on 247) we are completely debarred from using broadcasting equipment in bands between 2 and 6 mc/s., it is the only solution which can provide anything approaching a satisfactory service, i.e. without it the service provided would be appreciably worse than that provided now.

Also, if we are, in fact, quite unable to use bands between 2 and 6 mc/s then the service with 89M transmitters (which should commence in a matter of weeks now) will prove of very little value as a "pilot" service for two main reasons (already set out in X on 232).

- 1) The operation of a 250 w. transmitter on medium waves would be of very little assistance in estimating the coverage of a 5 Kw. set; and
- 2) As far as H.F. is concerned the Committee are already convinced that only operation in bands between 2 and 6 mc/s is likely to be receivable in the evenings for almost all of the year. The 89M's will, we are convinced, merely prove the usefulness of the 2 6 mc/s channels which proof is of little value if we just can't use them.

The provision of a 5 Kw medium frequency transmitter introduces a number of additional problems mostly connected S. of S.'s telegram (255) makes no mention with finance. of price and we have no firm quotation to work on. However a short-wave transmitter of similar power from the same firm is quoted (in para. 2 on 216) at £12,000. Let us take the The B.B.C. Engineer insists (at Y on 246) same figure. that the medium-wave transmitter should have a large The simplest type would be an inverted directional aerial. L using only two masts say 300 feet high. With wire, concrete, stays, insulators, feeders this might cost around £1,500.

An aerial tuning unit might be around £500. It is possible that the installation of a medium-wave transmitter of this power would not be practical at the W/T station for technical reasons and this would involve further appreciable expense extraordinary and recurrent - on a building, power supply and installation, as well as more staff to look after it. It is to be emphasised that this risk while in operation. is slight but it will be as well to bear it in mind.

A roughtestimate of the cost of purchase and installation of the 5Kw. set would therefore be:

Tramsmitter, spares, packing, freight etc.
Aerial tuning unit.
Aerial system.
Installation and contingencies.

£12,500.
500
1,500
250

£14, 750

with the slight possibility of:

New building Power supply.

£2,000 1,000

£3,000

Which means that the whole job would cost around £15,000 with a possibility that there would be little change from With rediffusion equipment already on order likely to cost around £2500 and aerials for receiving £500 at least, the cost of the whole scheme looks very likely to exceed £18,000 of which only £10,000 can come from a C.D. & W grant.

The question therefore seems to boil down to this. Is it worth spending £15,000 on a medium-wave transmitter to serve the needs of about 1500 people bearing in mind these facts:

- 1) That if we cannot use frequencies in the 2 - 6 mc/s bands (i.e. we are actually forced to stop broadcasting in them) then without it we cannot provide a service even as good as the very inferior one now operating (The present transmitter on 3440 Kc/s would, of course, have to sease operating).
- 2) That if we can continue to use frequencies in these bands on a power of 250 watts then, with the 89M's, we can materially improve the present service, but we cannot provide evening entertainment in the Camp for several winter months.
- 3) That if we do not purchase the equipment offered in 255 now its price may well rise again in 2-3 years time.
- That even with the 5 Kw set nobody can guarantee that everybody in the Falklands will be able to 4) hear every evening in the year.

We feel that only H.E. himself can make such a decision and we provide the above information to help him as far as is in our power. If you (or he) feel that the matter has not been made sufficiently clear the other Members of the Committee would be glad to discuss the matter more fully with him.

DMMare sh lon.
Secretary,
Communications Office

12-12-51. 256-7 submitted w.r. C. 255. Pryself J God' like being sold wite this. For millane it would belf if we know the answer of the afflication expensed to at pain 7 on p. 247. We must be allowed to specie between 2-6 west. And if we are I think we ought to expensed with the RCA sels first. Please no veges beeten have a meeting with the Cha county

GOVERNMENT TELEGRAPH SI

FALKLAND ISLANDS AND DEPENDENCIES.

SENT.

Number Office of Origin Words Handed in at Date

18.12.51.

To

CHAP MAIN LOW ON

HOA/C

NO 286. OR TREBURAN 235.

NO 286. OR TREBURAN 235.

INTENTION 10 TO INSTITUTE AT COVERNMENT STRUCTURE STRUCTURE ABOUT HALF
A HILE SOUTHEAST OF STRUCTURE STOP ALLOCATION OF FREQUENCIES AROUND
600 MMD 1500 MO/S HAS BEEN SOUGHT AND OPTIMUM OPERATING PREQUENCY
WILL BE USED STOP MOST OF TRUMBENTIATION HERE AT 1500 TO 2000 BOUND
STOP PLEASE CONFIRM FROM HARCOMI'S THAT OPERATION POSSIBLE OF THESE X
PREQUENCIES AND THAT INSTALLATION SLOSE TO RECEIVING EQUIPMENT IS
PRACTICAL STOP IF SATISFIED AND IF YOUR ADVISTS COMES BEARING IN
HIMD DOUBTS AS TO CONFIRM EXPECTIVENASS OF 5 KILOMATT READSHITTER
REFERRED TO IN PARAGRAPH 2 OF YOUR DESCRIPTION FOR THIS CONDUCT.

EXCERSES IS JUSTIFIED GRATISTED TO RESERVE EQUIPMENT FOR THIS CONDUCT.

MARKA

Reply N263

Time



TELEGRAM SENT.

From SECRETARY OF STATE to GOVERNOR

Despatched: 10.1.52 Time: 1245 Received: 11.1.52 Time: 1000

262

Your telegram No. 288. Broadcasting. I support views of G.P.O. and B.B.C. that transmitter should be purchased. Cost including test load test equipment aerial coupling unit spare components working and spare valves £11,440.

- 2. An allocation of 600 kilocycles was obtained for your Government at recent radio conference at Geneva. B.B.C. adviee this should be better for your purposes than 500 kilocycles.
- 3. Please forward plans of proposed station and aerial Generally inadvisable to place receivers near transmitters and B.B.C. consider estimate of cost of aerial system may be too low but they will advise on these points when they have seen plans.
- 4. Please confirm that you wish me to prepare Colonial Development and Welfare Scheme as proposed and instruct Crown Agents to purchase the transmitter.

SECRETARY OF STATE.

A.C. S.

Mr. McNaughton to see early, pl.

(INTLD) M.R.R. 11.1.52

Mr. NCM. accy. pl.

H. C. S.

I had hoped to have a comprehensive report on all aspects of Broadcasting equipment ready in time for this mail but pressure of other work makes this impossible. H.E. will wish to take up with S. of S., however, certain outstanding points - especially the reply to 263 in this file. We have had several meetings of the sub-Committee and have reached agreement on almost everything. I have therefore taken the liberty of short-circuiting a formal report of our meetings and offer, instead, a draft communication to S. of S. which you may care to consider for onward transmission to H.E. The points mentioned have been agreed upon by the Committee, who have heard and agreed this draft, which is at back cover.

De Monarchim.
—Secretary.
Communications Cttee.

Here, with traff at come, submitted.

Draft wany fair, as a sample.?

May 25/1/12 Som. Mc 25/1/12

SAVING TOLEGRA

From: The Covernor of the Falkland Islands.

To: The Secretary of State for the Colonics.

Date: 25th January, 1932.

10. 42. WINIT.

- 263

 Kour telegrom to. 3 dated 1 th January. 1952. I have noted that you support the views of the G. . . . and f. . . . that the 5 Mm. medium wave transmitter should be purchased for this colony. I should be grateful if you would now have prepared a closed a velocial evelocial and alterested in paragraph 4 of pour telegram, and would instruct the trawn agents to purchase the transmitter.
 - Reseite the considerable measure of assistance which will be afforded to the colony by the scheec, the toral cost of franconting continent (including new recenflusion and exacto equipment) will we blos, and I so anylous to keep expenditure, buth initial on recurrent, to the distan consistent with ceriving full benefit from the new equipment. You are also every that I am faced with an neare authorier shortage. It was for these important reasons that my Committee advised the implaliation of the new transmitter at the Covernment trainess smaller about help a mile to the southers of Studies, fed by means of a lost line for the ro detating Studie in the town. In this wa in this way the not inconsiderable cost of a completely new building and the power supply thereto would be avoided (though some entension or modification of the present building might be required. The transmitter could be switched on and off and monitored during operation by wareless staff already in the building on normal radio watches, and maintenance would stallorly be facilitated. the other hand, this plan prived imperciacal a smould have to erect a new building and provide a power supply, and should be faced with the task of finding people to men use station and managen the equipment. circumstances this would not be easy.
- ireless Station and the area in which my Committee proposed that the transmitting acrial should be erected. The intention was to use an inverted-Lacrial with the masts, as the cheapest and simplest form of scaledirectional aerial, but considerations such as the distance from the transmitter say well affect this ecision. You will recall that in partyraph 2 of your lespatch ho. O dated 6th eptember 1/51, you quoted in a case of the serial system, which should be important not to scale down the size of the aerial system, which should be directional. I should be grateful in you would now consult the B. O. as to the type of aerial which they recommend, and on the question of locating the transmitter itself at the directes Station. It may be that the conditions set out in paragraph 2 above, make it reasonable to creet the aerial some little may from the transmitter itself, it this is possible from a technical point of view and if this would reduce interference.
- to understand that a frequency of 1500 bilocycles per second has not been obtained for this colony at the Geneva Conference (your telegram No. 137 dated Oth July and my reply telegram No. 170 dated 4th August refor)? The view of my committee continues to be that, while agreeing with the B.B.C. view that 600 Kes. should, in theory, yield better results, it is very desirable to have alternative frequencies near the bottom and top of the waveband on which to carry out tests before a final decision is made. It was for this reason that I asked in my telegram No. 288 dated 18th December whether the transmitter would operate on both 600 and 1500 Kes. and I should still be grateful for advice on this point, though I do not consider its importance sufficient to affect the question of purchase.
 - 5. with reference to your Saving Telegram No. 84 dated 12th September,

1951, with which you enclosed three questions from the General lost Office regarding the wire-broadcasting equipment, I should be grateful if the General wet ffice might be advised as follows:-

(a) immber of subscribors;

It is confirmed that 400 subscribers is the maximum number to be anticipated curing the first ten years of service.

(b) Control Losk (Lrawing B 2205):

It is confirmed that this cosk can be assembled and used sufficiently for from a wall to give access to a rear fitted cover.

(o) Outside Proedcast Family ment:

One miner for the combination of two micropione inputs will be required, and I should be grateful if the Concret lost office will arrange to purchase it as suggested.

i an most grateful to the Coneral lost office fortheir assistance in this matter, sarticularly for their agreement to assemble and test the equipment before despatch to the Colony. I hope to write to you further on the nather of the wire broadcasting equipment with particular reference to the race is receiving acrials and their feeder system, when my Consisted has reported to be more fully. In the meantime I shall be grateful if you will your on the naswers contained in caragraph 5 chove and will ask the General Cost Office to recurrent to me a tage recurring mechine for une in conjunction with the contin equipment. I am convinced of the need for such a machine, not only for recording programmes produces by the rition madensting derporation of times which may not be subtable for local listening at also for recording programes produced locally, especially those of an imprompto nature, a procedure which I am informed is common in many wronders ing organications.

GOVERNOR.

Sicretary, Aft Committee

Silve returned, pl.

Stylist.

And mely and delle file returns to his pl. 3dilsz

DECODE.

TELEGRAM SENT.

From SECRETARY OF STATE to GOVERNOR

Despatched: 8.3.52. Time: 0750. Received: 9.3.52. Time: 0850

No 41. Your despatch No 42. Broadcasting.

I approve grant £10,000 from Central Colonial Development and Welfare Scheme D 1748. Transmitter being ordered for delivery May. fund. Memorandum Colonial Development and Welfare (D 2265) follows.

SECRETARY OF STATE.

L 9MAY 1952

96834/9/52

C.D.W.(D) No.2265

FALKLAND ISLANDS

DEVELOPMENT OF THE BROADCASTING SERVICE

GRANT OF £10,000.

1 cm 0802

In his confidential ircular despatch of 29th March, 1949, the Secretary of State informed Colonial Governments that he had allocated £1 million for the development of broadcasting in the Colonies from the General Reserve of Colonial Development and Welfare funds. Certain areas whose needs were considered particularly pressing were specially named for benefit from this aid. Some other territories, including the Falkland Islands, were invited to put forward proposals for the development of broadcasting.

- 2. In 1929 the Falkland Islands Government installed at Stanley the first wired broadcasting system in the Colonies. Later a low-power short-wave broadcasting station was added to this and transmitted to the Colony and Dependencies. The service provided is inadequate and it has long been evident that steps must be taken to improve it. This is no easy matter technically, since distances of about 1,500 miles have to be covered in broadcasting to the Dependencies, while the maximum distance to be covered in the Colony is about 140 miles.
- 3. The problem has been considered by a local Communications Committee, which included the Superintendent, Posts and Telegraphs, the Officer in Charge of the Ionospheric Station, and the local representative of the Air Ministry (the Radio Sonde Officer). A development plan in the following three parts has been agreed upon.
- 4. In the first place, the Falkland Islands have bought eight second-hand R.C.A. 250 watt transmitters at a cost of about £1,200 and will use these mainly to improve reception in the Dependencies.
- 5. Secondly, the General Post Office in this country has drawn up for the Falkland Islands Government a scheme for the installation of a modern wired broadcasting system at Stanley (the existing equipment is inefficient and out of date). The cost of this scheme will be about £3,100.
- 6. Finally, the B.B.C. and General Post Office have been consulted on the best means of providing an adequate local service for the Colony as a whole, and it has been agreed that a 5 kw medium-wave transmitter should be provided for this. The cost of the transmitter and aerial system is estimated to be about £17,500.
- 7. The Falkland Islands Government will meet the cost of the wired broadcasting system and of the small transmitters for the Dependencies and will pay the full recurrent costs of the service from local funds; but they cannot meet the full capital cost of the 5 kw medium-wave station, and they have applied for a grant of £10,000 to assist them with this.

- 8. In a territory so distant as the Falkland Islands, where half the population live in conditions of extreme isolation, an efficient local broadcasting service is a necessary amenity.
- 9. It is therefore proposed to make a grant of £10,000 to the Government of the Falkland Islands for the construction of a 5 kw medium-wave broadcasting station at Stanley. Details are given in the attached Financial Summary and Appendix Details are given in the attached Financial Summary and Appendix.

Colonial Office, Colonial Office,
Sanctuary Buildings,
Great Smith Street,
London, s.W.1.

29th February, 1952.

Financial Summary

| | rinancial bullmary | |
|----|--|--|
| 1. | Administering Authority | Government of the Falkland Islands. |
| 2. | Allocation | Contral-broadcasting |
| 3. | Classification | Broadcasting |
| 4. | Description of Scheme | Construction of a medium-wave station at Stanley. |
| 5• | Total cost | Approximately £17,500. |
| 6. | Colonial Development and Welfare Assistance required. | £10,000. |
| 7. | Estimate of assistance required by United Kingdom financial years. | 1952/53 Capital £10,000 |
| 8. | Estimate of capital expenditure to be made outside colony. | Approximately £17,000 (the equip-ment will be bought in the United Kingdom). |

| | | Ł | | |
|-------|--------------------------|---------|--|--|
| Cohin | Balana 5/ kw. toulen | 7.500 | | |
| (| Ward B'conty (Stanly). | 3 100 | | |
| | 2 RCA Seb. | 1 200 | | |
| | Say | 210:800 | | |
| | add acud syden | 7500 | | |
| ** | Wal deud Ho | [12.800 | | |
| | | 4 | | |

APPENDIX

| | Details of capital Expenditure. | £ |
|----|--|----------|
| 1. | 5 kW MF broadcast transmitter, type Marconi TBM. 672. | 9,443. |
| 2. | Working valves and one set spare valves | 646. |
| 3. | Test load | 106. |
| 4. | Test equipment | 175. |
| 5. | Aerial coupling unit | 800. |
| 6. | Spare components | 270. |
| 7. | Acrial system, matching unit, feeder and installation | 2,500. |
| 8. | Transport and contingencies | 3,500. |
| | | £17,440. |
| : | say | £17,500. |

ving.

From the Secretary of State for the Colonies.

FALKLAND ISLANDS . To the Officer Administering the Government of

Date . J April, 1952

No. 76 Saving.



265

1. Your savingram No.42 dated 25th January, 1952.

Broadcasting Development.

Your 5 kW medium wave transmitter and all equipment, other than the aerial system, matching unit and feeder, itemised in the Appendix to Colonial Development and Welfare Scheme No. 2265 a copy of which was despatched to you on 13th March, 1952, has now been ordered from Messrs. Marconi. Limited.

- 2. I attach a copy of the reply from the Britis
 Broadcasting Corporation to the points which you I attach a copy of the reply from the British raised in paragraphs 2 and 3 of your savingram under reference.
 - 3. As you will see the British Broadcasting Corporation continue to express doubts on the question of the coverage which would be provided by the 5kW M/W transmitter. These misgivings were of course referred to in previous correspondence and were shared by your Broadcasting Committee. They were also the subject of my Despatch No.63 dated 6th September, 1951. What was said by Mr. F.C. Maclean of the British Broadcasting Corporation then still applies.

246



From the Secretary of State for the Colonies.

To the Officer Administering the Government of

| Date | | | | |
|-------|------|------|---|------|
| N. II | | | _ | |

4. The coverage difficulties largely arise from the siting of the transmitter at Port Stanley. I presume that your Committee has already given consideration to an alternative siting, which might provide better coverage - for example at Fox Bay.

- 5. Although one would probably not obtain one hundred per cent population coverage, it is felt that the service obtained would justify expenditure.
- 6. It is unfortunate that central funds would not be available to meet the considerable cost of mast radiators. The Colonial Development and Welfare allocation for Broadcasting has been fully committed and it is most unlikely that further funds can be made available for the Falkland Islands.
- 7. I hope that you will find it possible to produce an aerial system, within the limit of £2,500, which will permit the most efficient use of the transmitter in the existing circumstances.
- 8. Your paragraph l_{\downarrow} . The only frequency obtained at Geneva was 600 KCs. If this frequency is found to be unsuitable you may choose, after listening tests, an alternative frequency which will be registered in your name.



HE BRITISH BROADCASTING CORPORATION

White rate of the William's latter of flat formary and my recent becomes convergation with Fourtable, concerningly place for broad-unthing in the Folkland Island. I am sorry I have been unable to give ourilar abbotion to this ratter. I have, Lam afraid, but to deal when a good want of other work first and I hope you will accept apply for this delayed reply.

when delier was considering the question of the falleland Governments for models a chick delivery was offered, and bhareby avoiding considerable delay in particle a breakersting service under way, I emphasized that such a bringuistic contention, by itself, provide anything like Itali coverage of the falses and their a chick a chick anything like Itali coverage of the falses are their action to growide a service in the outer areas of the Falkland Islands and in the Dependencine. This point was made in Mr. McLean's earlier

A point not made during "illar's conversation with me earlier this west, but which I now understand to be the case, is that the most important and tence is not that sithin a few wiles on Apart Stanley, but is that at a distance of 70 - 140 miles away. Mr. Epidin, however, draw attention to this should his sarlier correspondence and it has, no doubt, been taken into consideration. It is important to nemember, however, that the day. operating on a frequency in the region of 450 - 500 kc/s, may be little more than 50 miles and is likely to be less than this distance if the proposed higher power frequency around 1500 kc/s were used. With an efficient aerial system such as a mast radiator having a height of the order of a wavelength and working from a good site, the maximum daylight range using the lower frequency can be expected to be of the order of 90 100 miles, provided the noise level is low and the terrain favourable. Over rocky ground, however, the range might not exceed 50 - 75 miles.
Under similar conditions, but using the higher frequency these ranges can be expected to be of the order of 40 - 50 miles over good terrain and 30 -40 miles over rocky ground.

DALLES BY THE BEST OF THE STATE OF

There is not to the specific proposeds contained in paragraphs 2 and 3 of the following of the polytoperature of the following, and there is not possible to state without varying out field strength the state of th

that we have previously stressed the importance of not scaling this down of a ben't be have previously stressed the importance of not scaling this down of a ben't be have it used. The power we originally recommended was 20kW, but in view of the financial stringency we were of the epinion time to power of 5kW might be used. It being better than no service at all, as the limited coverage to week in the use of a referred share is acceptable. The meaning rappes circum are based on the use of a representation having a higher if one quitter of a wavenument (we would not recommend a must beight less than 700 ft. for one with a recommend in the best than 700 ft. for one with a recommend in the best was a reincover in order to recommend the message to the use of a country and similar must be used as a reincover in order to recommend the message to the use shared be very much greater than the figure of \$2,500 which I become beside resident to the south and the second the cost of such an aerial system, together with him tuning crimits are figure and to the second process of the feeder and serial tuning unit. Marconi's would be able to quote for such a system, and it is possible they may have a stock item at a lower figure than this. I believe that must radiators can be purchased in the U.S.A. considerably cheaper, but presumably the must for dollars would preste a difficulty.

Considering all the aspects of this problem, it seems to me that the wisest course for the Falklands before any final decisions are made in regard to the medium-wave acrial system and choice of site, would be either to carry out a field strength

and the second of the second o

Time Calminderally,

Ration.

(de fir the all services droup

H.C.S

We head a meeting on Wednesday evening of the Communications Committee to prepare advice on 271-279 - we were Mr. Mercer, mr Mortimer and my self. Mr. Mortimer is the new Officer-in-Change of the donaspheric Station and H.E. has already agreed that he should take the place of Mr. Nicolson on the Committee. Mr. Mercer readily agreed that we should invite him to assest us you will wish to issue the relevant gazette Motice and ? suggest the effective dade of his appaintment should be the day after Mr. Nicolan left the Colony (1. e May 12th). Jace many wind to review the whole question of this Committee and perhaps confirm its name. It strended are a long time ago as a general committee to advise on the whole greention of wireless Communications and had many more members than it has now At ascall the time when the R/T sets were being discussed a Technical Sub-Committee was set up and this gradually took over the whole work (see f. 209 et seg). Since it became Raboniaus to talk of the Technical Seeb- Committee of the Falkland Islands Wireless Communications Committee When, in any case, the parent body had ceased to exist, the smaller body came to be referred to merely as the "Communications Committee. H.E. has recently stated that Mr. Mercer should be regarded as chairman, although this has not been formally notefied.

'fue did not specifically ask for comment on 271 but we should like to draw attention to para. 4 — we have baught only two of the trunsmitters mentioned to use for broadcasting, although FIDS. have baught a neumber for general communications in the Dependencies. With reference to para 6 and the Appendix the estimate of £2500 for the aexical system appears to have been decided upon in the Colonial Office — we very tentatively preggested £1500 and the B.B.C's ideas would cost £15,000 - £20,000'

From 275-279 we are concerned mainly with thee things

the effectiveness of the medicen wave transmitter; and the nature and east of the aerical; and the site. I'll deal with them in that order:

1) Range of Medium Wave transmitted:

We have already discussed this locally and communicated with B.B.C. and G.P.O. about it on a number of occasions. Our final request that the set should be ordered, made the provieso that this should be done only if S. of S. advisers felt expense was justified. (See X on 262). Since the order has been placed we may assume that they did so? Up till now the B.B.C.'s comments on anticipated tange have been in tatles general terms - (for example X on 223 and X on 246) - and their figures this time (in pava 3 on 277) are not encauvaging. We derive comfort from two things, however. Tistly the figures quosed are for day-time operation. We are not really very interested in that and believe that performance often dark will be considerably better. Secondly, the G.P.O. are very much move of timestat about the whole thing - (see their remarks on 221 and 222). Stewerer, as an additional check, and in line with the suggestion at the end of pava 1 on 278, S.P.a.T. will showly make tooks from VPC using a wansmitted of 3/2 KW. on a Juquency of 600 Kc/s (i.e. the one we shall be using for broadcasting). The aexical will not be entirely satisfactory and the programme will consist only of two audio tones, but it should enable some estimades of signal strength to be made. The government W/T operated at fox Bay will be included in the people asked & report reception. We may also learn a little from the operation of a modefield RCA transmitted in the studio which will showtly go into service on 1500 Kc/s.

2) Fransmitting aerical for medium waves:

there again B.B.C. addice up till naw has been in general terms (for example X on 223) and it is now a little alarming

the transmetter to be served — especially when we can only just manage to buy the transmitter with the aid of C.D. & W! do pay fis,000 - \$20,000 for a transmitting acide of two masts is all of the question at present, we believe, and S.P. & T. will make enquinies direct with several firms (including the Craun Agents Consulting Engineers) for a cheapen way to do the job. In the meantime the tests he is gaing to make well help to decide how claborabe the acrial system need be

3) the site.

The auguments in Javaur of installation at the Wineless Station (VPC) set out in pana. 2 on 265, are so strong that it is the obvious morse unless it would interfere with reception. This is the real problem and it looks as if experiment will provide the only real answer? This is another matter on which S.P. & T. will check up during his tests. Again he may not be usle to previole a final and complete answer but he should go along way towards doing so.

We discussed another matter which is autstanding and which is mentioned at. KIV in para 6 on 266. This is the question of masts for the receiving thombics for the recliffusion equipment. The G.P.O. say these should be 80 feet high and the libely east of steel mast has long worried us (e.g. (b) on 213). At aux request they sent us opecufications of wooden masts which they estimated would cost only I soo (250 refers) but we are not happy asout these. Their construction would call for much work by skilled a semi-okilled lasaem (which is not available locally). Absolutely everything would have to

imported. Skilled losace would be required for maintenance. there is some question about how wooden mast would stand up to been sunk in peat soil. And so on. All things considered, we still feel that prefabricated metal mast which can be recised and lawered for maintenance purposes by a few men (these are some at VPC and these will shortly be some at the met. Office) are the best eventual answer. To avaid the high cast of these until we are certain they are needed S.P. a T. proposes that we should exect the shombics on some and metal masts which he already holds. The cost of this would be very small - little more than the cost of the concrete besses which need not be large. The disadvantage is that they are only 40-50 feet high but this may now be serious and they can be replaced lader if tests show it to be necessary. Since the height does not maderially affect them, S. P. & T. proposes to go ahead and order the aexists themselves, the Leeders, insulators and so on which will link them to the Studio idself - provision is available in the estimates. The occurring if these masts do the job may amount to \$ 1000 or \$ 1500 so I think H.E. will agree it is worth experimenting.

perhaps he could be asked to produce them as soon as convenient.

Since uniting this report I have been adressed by Mr. Mercer that the modification of his 31/2 KN. transmitter for medium wave aperation may take some time. At a more immediate answer he intends to try relaying present studies programmes through a G. 40 transmitter with a power of 500 walts. In some ways this will be a better test since normal speech, music etc. will be broadcast, the will make the other modification as soon as possible.

Secretary Communications Citée.

As regards the liveless Cities - all the work

now seems to be done by the Cechnical sub. Cities a

Description they be reconstituted to form the

Cities. They should be asked to some advise if

additional members are required in the beauty)

They will want a stand in the simplified in showing this shower; there has a time two were to

a colony of the colony the complete only two were to

trace of our havry wer been billed for them.

3) as regards the main problem, we now have
the 5 km set and it is up to no to find
the best a most economical method of using
it. The Citte appear to trace be exploring
the various possibilities and it remains to
await the out come of the experiments.

12/6

Paul 2 is as I Minght - M' Multer fulling over him

own feet: see 233 + 243/244. I arranged bein with him

on the spot and bet him we would take her other two

of FIDS. I don't Much his later have been belted alter

but doubten the birds with come home to roost in him of.

2. Go to you prus 3, I cannot help feeling that

the C.O. have ruther borneed themselves and us into this

through a confusion of sepecto (pt. note this admirable

education were!). Clearly we cannot offeel anything thes

114/16,000 for mosts and I do not be how we come

Three difficulties associe. As we of the mombers of the Cotantee (Necholom J Much) suggest, we can always exel it and the price orang appreciate! I shall await the words of the words of the words appreciate when whent and with we and have held on homes which these were them.

Mi. Mr. M. had better be fully bridged for descursion of house when BBC, GPO and Breeze-Cardene but

Me 1/vi

There is it knows a good gifted rades tigge at the Mail Station who would so as a stand in for Machington on the Communication Clie; Mr. Strothers is to allevate for him on the Brossolcarby Clae of Spic cases as Disache? Wi him has the be graphed as Chammer if the Communication.

Otto, if their has not shoot placedy been store.

Mr Rac hangleton Ref: (281).

Hease see this minute of take the recessary holes. For are presumedly arranging for the Mercer to beep you informed of any developments when you are or leave.

2) as regards the Cites I would like to reconstitute it as a simple book under the Chamium ship & follow. Could your sub. Cites therefore suffest names for permanent and (where necessary) temporary membership.

3) les regards the les men plans of the struction. There is endence that stew gave them to Perper Aldridge but nothing to show them to they were sent on or where they are.

Plans that they were sent on or where they are.

Plans the Her is making some more — comes 2m to He me.

13/6

H. C. S.

Thank you sit. Mr. Mercer and I intend to keep in touch with each other during my absence. I have a plan of the studio building and of the lay-aut recommended by the G. P.O.

visit & the B.B.C. a I will discuss the questions involved with them

- especially transmitting masts. Would you please advise Crown

Agents that I am authorised also & visit the G.P.O. + Preece-Candlew

- I believe the awangement is that FIDS. will continue my salary

during these visits, but the Calony should pay subsistence in London?

that we add to aw member Mr. T. Hooley, Senier w/T Operation at VPC. The is often closely interested in au decisions and recommendations, and S.P+T. supports may view that he would be a very useful member. Although several members of the met. Staff have wide knowledge of practical radio I am max inclined to recommend their inclusion. The Committee would therefore consist of Mr. Mercer (Chauman).

m. martimer.

mr. Hooley.

mr. mcMaughten (Son. Secretary).

I don't think there is any real need to replace me during my absence and mr. mortimer will, I am sure, act as Secretary doubt the need arise.

For the record, my lone address is

33 Smith Quadvant, Coadbridge, Scotland.

AMC 19-6-52.

ACS. (1 Bours). I approve the reconstitution of the Cities as at It above. Oh restrice fayette notice should be cancelled to a new one issued.

The trake necessary action of return the trace for action of return the file to me for action at XI above.

GAZETTE NOTICE

Colonial Secretary's Office, Stanley, Falkland Islands.

9th July, 1952.

With reference to Gazette Notice No. 67 of the 3rd of December, 1948, the Wireless Communications Committee has been reconstituted as follows, with effect from the 8th of July, 1952:-

A. MERCER, ESQ. (Chairman)

D. MCNAUGHTON, ESQ. (Hon. Secretary)

D. MORTIMER, ESQ.

T.V. HOOLEY. ESQ.

By Command,

ACTING COLONIAL SECRETARY.

1.20 289 ane pe? Say 44

Ref: 0438/III

HTL





FALKLAND ISLANDS TO GET HIGHER POWER TRANSMITTER

The Falkland Islands, one of Britain's southernmost possessions, is to have a higher power transmitter for broadcast entertainment. A contract to supply a 5 kW medium frequency installation has been won by Marconi's Wireless Telegraph Co. Ltd.

Delivery of the transmitter with associated equipment and spares is scheduled for May-June of this year.

The Falkland Islands, a group of some $100\,\mathrm{small}$ islands near the south east tip of the South American continent, has a population of over $2,000\,\mathrm{small}$

In 1929 a wired broadcasting system was installed, but it was not until 1942 that it got its first transmitter, working on a low power of only 45 watts. The new installation, at Port Stanley, will bring the local programme to the entire population.

2nd May, 1952.

0

With the Compliments of

Marconi's Wireless Telegraph Company Limited.

Chelmsford, Essex.

Further information and photographs (if available) can be obtained from:

P. Raikes [Publicity Manager]

phone: DAY - Chelmsford 3221

NIGHT - Good Easter 265

V. E. Hughes [PRESS OFFICER]

Telephone: DAY - Chelmsford 3221 NIGHT - TATe Gallery 8292. WORLD RADIO HANDBOOK for Listeners. Lindorffsallé 1, Hellerup, Denmark.

24th July, 1952.

WORLD RADIO HANDBOOK BULLETIN no.94.

(By publication acknowledge to World Radio Handbook) All times GMT.

Belgium. As from August 1st the Belgian National Broadcasting Service will broadcast its programmes directly from Brussels. Until August 15th the programmes at 17.00-23.15 and 23.30-05.00 will be radiated as follows: Over a 100 kW transmitter operating in the 31 m.b. directed to Congo, over a 20 kW transmitter directed to North-and South America(until 23.15 this transmitter will operate in the 25 m.b., after 23.30 in the 31 m.b.). From 01.00 the programmes will also be relayed by OTC(50 kW) operating in the 31 m.b. beamed to North America. Allocated frequencies for the Brussels transmitters are 9665, 9745, 9770, 11720, 11850 and 11893 kc/s.

El Salvador. Here some of the latest information about short-

wave stations in this country:

YSC - "Ondas Populares y Deportivas", San Salvador, on 6095 kc/s is on the air uninterrupted at 11.00-06.00. All programmes are in Spanish. YSDR - "Radio Tropical", Santa Ana, 4800 kc/s. Schedule 12.30-14.30 and 18.00-04.00 in Spanish. YSF - "Radio Vanguardia", San Salvador, operates on 9250 kc/s at 18.00-20.00 and 00.00-04.00. All programmes are in Spanish. Announces as: "YSF -Radio Vanguardia, emisora de la juventud desde San Salvador ciudad Capital de la República de El Salvador, Centro America". YSO -"La Voz de la Democracia", San Salvador, 7270 kc/s 1,5 kW 12.00-15.00, 17.00-21.00, 23.00-04.00 in Spanish. YSR - "La Voz de El Salvador", San Salvador, 6050 kc/s 1 kW 12.00-06.00 in Spanish. YSS - "Radio Nacional YSS Alma Cuscatleca", San Salvador, 6050 kc/s 1 kW 12.00-06.00 in Spanish. 6010 and 9555 kc/s(both 5 kW). Schedule 18.00-19.00,00.00-04.00. Falkland Islands. The existence of a broadcasting station in the Falkland Islands is now confirmed through the following information received direct from Mr. Flavio Serrano, Rio de Janeiro: Broadcast Studios, Port Stanley, is operating on 1500 and 3400 kc/s. Each channel 0.25 kW to be increased in 1953 to 5 kW. Schedule: Mo. 00.30-01.30, 23.15-01.00(Tues.), Wedn. 23.15-01.00 (Thurs.), Fri. 23.15-01.00(Sat.), Sat. 21.00-22.00. Sun. 21.00-22.00, 23.00-23.59.

Station TGTA -"Radio Bolivar", Guatemala City(0.3 kW) Guatemala. Station TGTA -"Radio Bolivar", Guatemala City(0.3 kW) is on the air daily at 00.00-04.00. All programmes are in Spanish. Taiwan. The present schedule of the "Voice of Free China", Taipeh, is as follows: 22.30-04.00 to Japan, Korea, Malaya, China over 7130 and 11735 kc/s.(22.35 Japanese, 23.00 Korean, 00.45 Malayan, "The Fatherland is Calling" at 01.50 and 03.50.)04.00-05.00 English to U.S.A. on 11735 and 15235 kc/s. News 04.05. 16.00-17.00 Dictation News in Chinese over 11735 kc/s for China. 19.00-21.00 to Europe and Near East over 11920 kc/s. English at 19.20. French 19.50. (Fritz Bittner Germany) Guatemala. at 19.20, French 19.50. (Fritz Büttner, Germany).

Turkey. "Radio Ankara" will soon begin transmissions over the

20 kW transmitters TAN 6000, TAM 7240, TAK 11760 and TAD 17720 (Fritz Büttner, Germany). kc/s.

If you receive information about new stations, new programmes, new frequencies or changes in schedules, please, send us a report.

I like "the existence is now emfermed"

the 145.52 Happy listening.

MARCONI'S WIRELESS TELEGRAPH COMPANY LIMITED



Marconi House, Chelmsford.

TELEPHONE: CHELMSFORD 3221 (Private Branch Exchange) · TELEGRAMS: EXPANSE CHELMSFORD



R. Raymer Esq., Colonial Secretary, The Secretariate, Port Stanley, FALKLAND ISLANDS.

Please address the PropariFAL.115/2527

TELEPHONE CALLS

Please ask for extension...

24th June. 1952.

Dear Sir.

5kW M.F. Broadcast Transmitter - Falkland Islands.

Contract No. W/EMI Falkland Islands 5849/1

Our Order No. BC/G.65275.

- 1) We have been requested by Mr. Watrous of the Colonial office to send you Accommodation and Foundation details for the above transmitter, and we have pleasure, therefore, in enclosing herewith duplicate copies of Drawing LT.3136 Sh.1 and LSK.13021 Shts. 1 and 2.
- 2) The drawings illustrate a typical layout for a 5kW equipment, and sufficient cabling and earthing materials are included in the contract for such a layout. In watrous thought that this information would be of assistance to you in arranging for your local radio staff to investigate the question of accommodation, either in an existing or a new building.
- We have, of course, been in close touch with Mr. Watrous on this contract and we have had discussions with Mr. A.G. Burgess of the Post Office Engineering Department, regarding audio input equipment requirements from your studio line. It would seem that a line amplifier will be required, and we understand that Mr. Watrous is looking into this point.
- 4) We also understand that the matter of a suitable Aerial, R.F.Feeder and earth system is being dealt with by the Colonial Office and yourself.

Jie s pars to Sl.T. p. 1518

cont/

Ot corel

R. Raymer Esq.,

- The Transmitter Equipment was inspected in these works by the Crown Agents Inspector on the 12th June. When we receive their certificate of approval, the equipment will be dismantled for packing. The packing will take two or three weeks to complete, therefore, providing we obtain early approval, the equipment should be ready for despatch by mid July.
- 6) We trust this information will prove helpful to you and should you require any further details or assistance in any way, please do not hesitate to let us know.

Yours faithfully, MARCONI'S WIRELESS TELEGRAPH CO.LTD.

(H.A.Lewis)
Manager, Broadcasting Division.

Encl: 2 copies LT.3136 Sh.1. 2 copies LSK.13021 Sh.1-2.

INVOICE

(FIRST ADVICE COPY)

THE CROWN AGENTS FOR THE COLONIES

Dr. to Messrs. of (full address) Črown Agents' Reference Indent No. Special Account (if any)

Department

Date of Invoice Contractor's Reference No.

Date of Posting (if goods have been despatched by post)

| | | To be filled | шыу | | | - | | | | | | | |
|----------|----------|---|-----|----|------------|-----|------|---|----|----|-----------|----|----|
| tom Nos. | Quantity | Description of Article in wording of Tender | T. | c. | ight q. | lb. | Rate | £ | 6. | d. | £ | s. | d. |
| | | s not of United Kingdom manufacture the | | | | | | | | | should be | | |

In the case of goods not of United Kingdom manufacture the items concorned should be indicated on the invoice and the country of origin stated.

It is important that full packing particulars should be given, either (1) on the back of copies two to seven of this set of invoice forms (i.e. six copies), or (2) on the contractor's own forms (four copies), as convenient.

ADVICE NOTE.

NO.96400.

Date.....

From

Mancomy's Wheless telegraph co. Ltd.

MARCONI WORKS, CHELMSFORD.

TELEgrams: "Expanse, Chelmsford"
No. 3221 Chelmsford

To

BOTH . JUL

| CONSIGNED TO | PER | ORDER NO. | MARKS | 4 |
|--|-----------------------------------|--|---|---|
| 6.6. THICHLAND MONARCH S. SHED KING TO DECK. LUMBON. U/O-THE CHESSE ASSENTS FOR THE COLUMNIES, LONDON. | OUR LORKY WY 5960. Carriage | the state of the s | ige Stanger stones Via generation | N. S. |

ONL. SKW. M. W. SHUABOAST TRAUSHITTER TYPE TRAUSTE/A. TO AND CHELLE WILLIAM SECTION

GASE NO. 33889. SIZALKHAFT LINED.

NETT . O. Jobbie

13 1 to 18 8 0 S12E. Salava

-Sar ard. Tour loal.

TEN SECT.

Prole JA.

CONTRINING --

TOFFED BACK AMPLITHER ON FT. 17540.D. NO.457838.

TPACKED IN SELECASE MEKTERINE. 4 ERGLASES IN ACOULD.

1.LINE AMPLIFIER & CATHODE FOLLOWER 11356.6. NO.663959. LPAGHEG IN SPL.GASE SEXBOX17.6 THELOSEN IN ABOVE).

GADE NO.02230. D.E.R.. B.1.B. BIZAL RAFT LINED. Lok 30X3G. THOPICAL Chara Man -

T. PROLETANAE.

PT.2.

Chik Malijasta talodo katello 30x3 x22. THOPICAL . SIZALHRAET LINED. CONTAINING "

TAULTER CONDENSER.

CASE NO.83839. 0.3.10. 1.3.86. B信托马斯哈拉。 TROPICAL. SIZALKHAFT LINED.

CONTAINING

1.A.F.FILTER UNIT. 11891A.

463914

0.

We cannot accept responsibility for damage occurring in transit or for non-delivery unless reported to the Carriers and we cannot accept responsibility for accept responsibility for a second accept responsibility for a second upon to us in writing within 14 days from date of despatch. Goods should be signed for as "not examined" unless opened upon receipt and contents found to be in order. All returns must be advised.

0438/III 314

CS Has SPF got any for the on the subjects of a) 5 kes let.

b) Radio in Ver ference.

acs: 0438/m with s.P.T.

Shr. Dile is sail to be will you - women you be all. Tile when report of \$22.9. Die now in.

S.P.T. aone pe?

How cal Sec.

The reports on reasoning ones 500 watt 600 Kds experimental Broadcast transmitter indicate that the frequency is covering the area except new Island and Carces So. no reports from these statum may be caused by four localities, four receives or ferous being content to letter on other frequencies.

From reports to hand it is evident that the 5 Km transmitter will Surpess the tresent service which is claimed to be being good.

I am not frepared to Say the 500 walt set now in use will well the needs for the tolony although first reforts your exceptionally good coverage. However I consider the 5 Km transmitter with must up to 300 feet

high will give a good Service throughout the colony. but on a frequency slightly lower than 600 Kc/s.



From lesto we have made sines June last on 600 Kds.

Reception was very good in daytime, very good in the evening over the area Sancarlos, Forbay and Sea Lion J. Beyond these places reports have been good during daytime but only fair to good at right. Then Island, Carcios Island gave very foor reports. Weddell Island westpoint Island and Saunders Island gave fair to good reception reports.

Other places listened mostly on 3440 Ke/s and reports they sent were on that frequency and not on 600 Ke/s, as was at first believed. The 55 Fitzgray gave very good reception reports up to 400 miles North of Stanley.

In view of the above, and from information callected by His Honor the Offices Administering the government, it is obvious that now Aresent 500 walt transmitter will not Satisfy the broadcast requirements of the Colony. This transmitter operated with a "T" deried only 85 feet high.

The men 5 KW transmitter has arrived, but a decision still has to be made about the aeriel System. Which is controlled in the sum of £2500, while the BBC recommend a most radiator costing £6000 - £8000. with the fossibility of a second most radiator being readed to give derectivity, I feel the total cost of the aeriel System might well neach £9000 for 1 most or £18000 for two.

espensive here, since it will be recessary to emport skilled babour, but I have already approached newsors Prescu Carden r Ride on an alternative to the mass radiator.

The Calonial Office, on page 188 put up estimated costs of masts 160 feet high complete with call rearth System but we have freed that most other figures are very low and I change the best bet will be the assist of the consulting Engineers to E.A.



It is intended to exect the transmitter at the Good off Statem after switched accommend the transmitter showed he exected to the West of Stanley, free from other mests and buildings which night upset the reliation pattern of the transmitter. Also the BBC will not recommend masts lower than 300 feet.

although new Smell set; Soo watto operating into an aerial only 95 feet high, can hardly provide concert information on the ferformance of the new transmitter, it is obvious that there will be very severe into facine with new recessary to establish a receiving station remate from the present site, coupling the two stations with suitable control cables. In any case it is going to cost something to fit the new transmites up and I consider one of the following two proposels will have to be sunderlied in

- (1) To reorganise the fresent transmitter layout at the Gout will Station to make the for all the Broadcast transmitters, and establish a receiving Station on a new site some distance from the transmitters, coupling the two stations with a suitable control cable.
- (2) To exect a sets at Broadcest station on a lite to the West or South of Stanley.

The Staff broblem will be acute but in either case were will have to need it. apprentices can be sought and present technical staff split between the sorvices.

St. 517 17.12.52 All communications to be addressed to the Crown Agents for the Colonies, the above reference and the date of this letter being quoted.

> No. Savingram 42 of 25-1-52

C.D. & W. scheme (D2265)

No.

Department :-

Letter

Indent

Date

The Colonial Secretary.

Port Stanley,

Falkland Islands.

Sir,

We append a report in connection with the indent or other communication referred to hereon.

CROWN AGENTS FOR THE COLONIES

We are, Sir,

CFP 1050

Your obedient servants,

for the CROWN AGENTS.

MILLBANK, 3/5

LONDON, S.W.1.

| ITEM No. | SUBJECT | REMARKS |
|----------|---|---|
| 1 | 5. KW. MF Broadcast Transmitter valve cooling equipment | We attach for your information and retention a copy of drawing LSK 13015 Sheet 1 showing the exhaust Air Ducting being supplied by Marconis. Will you please confirm that this suits your requirements since we have no knowledge here of the accommodation arranged for the Transmitter in question. |

N. a. n. Goods received

FAWB W/G11. 60,000/11/51. W. & Co. Ltd.

X/Falland Is. 5849/1.

Communications to be addressed to the Crown Agents for the Colonies, 4, Millbank, London, S.W.I and the above reference quoted.



4, MILLBANK, LONDON, S.W.1.

7 NOV 1852

S GFP 1957

Telegrams | Inland: "Crown, Sowest, London" | Overseas: "Crown, London" | Telephone: Abbey 7780.

The Crown Agents for the Colonies present their compliments and have the honour to enclose the papers mentioned below in connection with the indent quoted.

Indent No. Savingram 42 of 25.1.52 to Col Office Co. ltr. 96834/9/51 of Dated 9.8.51 and 10.3.52.

Dept. C.D. & W. Scheme.

Enclosures.

T.2222/1. Medium Wave Broadcast Transmitter
Type TBM.672A (Edition B).

T.1890/1. General Description and Operating Instructions for Aerial Coupling Transformer Unit (WQ.4979)
Instruction for Receipt Testing of Marconi Valve Type BR.140
(2 duplicated books of each)

NOTE: One copy of each of the above was packed with the material to which it applies.

HEREWITH

The Colonial Secretary, FALKLAND ISLANDS.

Joh MS

and Islands 5849

to be addressed to

its for the Colonies,
ence and the date of

ng quoted.
o. Savingram 42 of 25-1-52

(Date C.D. & W. Scheme (D2265)

No.

Date

Jepartment :-

The Colonial Secretary,
Port Stanley,
Falkland Islands.

CROWN AGENTS FOR THE COLONIES.

4, MILLBANK,

LONDON, S.W.1.

21st October, 1052

Sir,

We append a report in connection with the indent or other communication referred to hereon.

We are, Sir,

7 NOV 1952

Your obedient servants,

71/1

for the Crown Agents.

| ITEM No. | SUBJECT | REMARKS |
|----------|----------------------|--|
| | Radio Relay Exchange | We have the honour to report that the Post Office Engineering Department, Palace of Engineering, Wembley, inform us that they are unable to obtain delivery of certain essential components until January, 1953, and that in the circumstances they estimate that the equipment cannot be ready for shipment before the end of April next. We thought it proper to advise you of the estimated delivery period given to us in this connection. |

FAWB/PT

ALL COMMUNICATIONS

TO BE ADDRESSED TO THE

CROWN AGENTS FOR THE COLONIES.

THE FOLLOWING REFERENCE AND THE

DATE OF THIS LETTER BEING QUOTED



W10D/EM1/Falkland Islands 5849/1

TELEGRAMS (INLAND: "CROWN, SOWEST, LONDON."
OVERSEAS: "CROWN, LONDON."
TELEPHONE: ABBEY 7730.



4, MILLBANK,

LONDON, S.W.1

13 96T 1952

Sir,

With reference to the broadcasting equipment ordered in pursuance of Savingram No. 42 to the Colonial Office we have the honour to state that Messrs. Marconi's have informed us that the position regarding the items outstanding for this contract is as follows:-

| Section | Item | Description | Remarks |
|---------|-------|-----------------------|---|
| JA | 2 | 2 Crystals | At present being re-tested. |
| N | 5 | 1 Switchfuse | Available - await inspection |
| N | 6 | Air Ducting | 11 11 11 |
| N | 8(pt) | Copper tubing | 11 11 11 |
| N | 9) | Camoura | 11 11 |
| N | 10) | Screws | (with item N.6) |
| R | 7 | Ammeter > | Should be available for inspec- |
| R | 8 | Voltmeter > | tion during the next few days |
| R | 12 | Test Load frames | Completion early next month |
| R | 16 | Load-in Insulator | Completion early next year |
| R | 17 | Absorption Wave Meter | Completion December. |
| R | 20 | Avometer | Available - await inspection |
| R | 21 | Loud Speaker | Should be available early next month |
| R | 22 | Tool Box | Available - await inspection with Item N.6. |

The items not yet available are receiving special attention to obtain a curtailment of the period quoted for completion.

We have the honour to be, Sir, Your obedient servants,

for the Crown Agents.

The Colonial Secretary, Falkland Islands.

X/Falkland Is. 5849/1.



Communications to be addressed to the Crown Agents for the Colonies, 4, Millbank, London, S.W.r and the above reference quoted.



TELEGRAMS { INLAND: "CROWN, SOWEST, LONDON." OVERSEAS: "CROWN, LONDON" TELEPHONE: ADBEY 7730.

4, MILLBANK, LONDON, S.W.1.

2 0CT 1952

The Crown Agents for the Colonies present their compliments and have the honour to enclose the papers mentioned below in connection with the indent quoted.

Indent No Savingram 42 of 25/1/52 from Falkland Is. to Col. Office. Co ltr. 96834/9/51 of 9/8/51

Dept. CD&W Scheme (D2265).

Enclosures.

Operating Instructions for Sullivan-Griffiths Universal AC-DC. Bridges List Nos. AC.900 and AC.901. (2 copies of Operating Instructions).

HEREWITH



The Colonial Secretary,

FALKLAND ISLANDS.

RH/SR

W.26. 25,000/1/52. C.F.H; 181

PRELIMINARY SHIPPING ADVICE

The Crown Agents for the Colonies have to report that the following shipment is expected:-

Reference:

Falkland Islands 5849/1

SUPPLIER: Mosars. Marconi's Wireless Telegraph Co.Ltd. Marconi House,

6DEC 1952 15th Novr.

2

CHEL SFORD. Essex.

No. Savingra.42 of 25.1.52 from Falk. Is. to Colonial Office

ecial A/6.0. Ltr. 96834/9/51 of

Dept. 9.8.51 and 10.3.52.

Dept. C.D. & V. Scheme (D.22Marked)

Consignee The Officer administering the Government

REQN. 5849. 0.A.G.

C † A PT. STANLEY

O.H.M.S.

* Nos.

Gross Weight

M.V./S.S. MERAK H. A.Shed, West India Estween the 20th and 24th November, 1952

Dock, London,

The particulars given in the schedule below were those furnished by the above mentioned contractor, when forwarding instructions were issued, and are not necessarily accurate.

| ** * * * * * T. | *Nos. | Description of | 202-202-202 | MI | EASUREME | NTS | Ī | WE | GHT | | |
|---|-------|----------------|------------------------|---------|----------|-------|------|------|------|-----|--|
| VALUE £ | | Packages | CONTENTS | I,ength | Breadth | Depth | Tons | Cwt. | Qrs. | Lb. | |
| 49. | 89250 | 1 Case | Broadcasting equipment | 2/1 | 1/8 | 1/3 | - | - | 1 | 26 | |
| | | | | | | | | | | | |
| HP/17 | , | | | | | | | | | | |
| | | | | | | | | | | | |

75

Note to Contractor:—
Please ensure that this material has passed inspection.

The Bill of Lading and Invoice will be despatched as soon as possible. It should be understood, however, that the shipment is not yet confirmed.

Office of the Crown Agents for the Colonies, 4, Millbank, London, S.W.1.

PRELIMINARY SHIPPING ADVICE

The Crown Agents for the Colonies have to report that the following shipment is expected:— Reference:

Falkland Is. 5849/1

SUPPLIER:

15th Novr.

Hessrs. Marconi Wireless Telegraph Co. Ltd. Marconi House, CHELMSFORD, Essex.

Acct.

Authy./Savin. 42 of

25.1.52 from Falk. Is. to

Colonial Office CO ltr. Special A /C

96834/9/51 of 7.8.51 Marked

10.3.52. Dept.

00 & W.Scheme (D.2265)

The Officer administering Consignee

the Government

O.H.M.S. SPECIAL STOWAGE

REON. O.A.G.

CONTENTS. PT.STANLEY.

*Nos.

Gross Weight

M.V./S.S.

Indent No.

MEGAR H.

from A. Shed Test India

Dock, London

Between the 20th and 24th Rovember, 1952

The particulars given in the schedule below were those furnished by the above mentioned contractor, when forwarding instructions were issued, and are not necessarily accurate.

| VALUE | *Nos. | Description of | CONTENTS | M | EA SUREME | NTS | | WE | CHT | i | 1 |
|---------|-------|----------------|--------------------------------------|--------|-----------|-------|------|-------|------|-----|---|
| £ | | Packages | CONTENTS | Length | Breadth | Depth | Tons | C wt. | Qrs. | Lb. | |
| | 89124 | 1 Case | Valve conditioning unit and lamps | 2/9 | 2/- | 2/- | - | 1 | 0 | 25 | |
| | | | | | | | | | | | |
| AW P/17 | | | N | | | | | | | | |

N.

75

Pro Contractor:-

Valu advise us and our agents of the of this consignment by return.

> The Bill of Lading and Invoice will be despatched as soon as possible. It should be understood, however, that shipment is not yet confirmed.

> > Office of the Crown Agents for the Colonies, 4, Millbank, London, S.W.1.

PRELIMINARY SHIPPING ADVICE

Crown Agents for the Colonies have to report that the following shipment is expected:— Reference:

Falk. Ia. 5849/4

SYPPUR's liveless Telegraph Oa libes

6 DEC 1952

Marconi House, Cholmsford, ESSEK.

19th Hove ber

. 2

Sevin-42 of 25.1.52. from

Indeht No. Palk. Is. to Col. Cff. & C.G. Special A/C 25r.96.34/9/51 of 9.8.51 4

Dept.

Marked

Consignee The Officer Administering the devergment.

5849 REQN.

 $C \uparrow A$

* Nos.

Gross Weight.

O.H.M.S.

O.A.O.

Pt. Stanley.

M.V./S.S.

MERAE N.

by 24th Movember, 1952, from

A Shed, Got India

Dock, London,

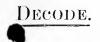
The particulars given in the schedule below were those furnished by the above mentioned contractor, when forwarding instructions were issued, and are not necessarily accurate.

| VALUE | *Nos. | Description of | CONTENTS. | ME | ASUREMEN | TS. | | WEI | GHT. | 1 | |
|-------------|-------------|----------------|----------------------|-------------|-------------|--------|------|--------------|-------|---------|-------------------|
| | | Packages. | CONTENTS. | Length. | Breadth. | Depth. | Tons | Cwt. | Qrs. | Lb. | |
| £8 6 | 7249/ 50 | 1 case | Breadcasting equipt. | 5•11 3•2 | 2•4 1•10 | 1.4 | | 1 | 0 | 18 8 | |
| | | | | | 1 | oen ei | 11 | 10 H -31 | -7/1- | 1143 | J. A D. SEG 14 |
| AW. | - 1- | | | | | | | | | | |

75

Confirming telephone Note to Contractor :instructions.

> The Bill of Lading and Invoice will be despatched as soon as possible. It should be understood, however, that shipment is not yet confirmed. Office of the Crown Agents for the Colonies, 4, Millbank, London, S.W.1.



TELEGRAM SENT.

325

From SECRETARY OF STATE to GOVERNOR.

Despatched: 15.1,53 Time: 1700 Received: 16.1.53 Time: 0845

No 15. Broadcasting New Studio. Foblowing from Sir Miles Clifford begins. What action has been taken by McNaughton regarding equipment. Ends.

SECRETARY OF STATE.

Reply 326

325

DECODE.

TELEGRAM SENT.

From GOVERNOR to SECRETARY OF STATE

Despatched: 17.1.53 Time: 1130 Received: Time:



No 17. Your telegram No 15. Following for Sir Miles Clifford begins. New Studio equipment expected to be shipped May/June but McNaughton suggested to G.P.O. advantageous to ship direct by FITZROY towards end March any items ready. He is preparing report for you on Studio building layout as a result of interviews with G.P.O. and B.B.C.

2. New Broadcast transmitter requires accommodation to instal and possible interference may mean further removed from Stanley than Government W/T Station. Ends.

O.A.G.'S DEPUTY



TELEGRAM SENT.

From SECRETARY OF STATE to GOVERNOR.

Despatched: 16.1.53 Time: 1845 Received: 17.1.53 Time: 0845

265

No 16. Reference your savingram No 42 of 25th January 1952. Please confirm that rhombic receiving aerials being constructed with local labour and materials. Are you awaiting further information? Your para 6 refers.

SECRETARY OF STATE

H.C.S. has seen ~ file pl. (Intld)J.B. 17/1

P/L. SS KIV324

329

GOVERNMENT TELEGRAPH SERVICE.

FALKLAND ISLANDS AND DEPENDENCIES.

SENT.

| Nur | mber | Office of Origin | Words | Handed in at | Date |
|-----|---------|------------------|-------|--------------|---------|
| | | | | | 26.1.53 |
| То | Secreta | ry of State, | | | HOA/C |

327

NO. 22. YOUR TELEGRAM NO. 16 of 1953. RHOMBIC RECEIVING AERIALS REQUIRED DEFAILS REQUIRED DEFAILS FROM U.K. AND INDEMY AWAITS FURTHER EXPATILY FROM G.P.O. STOP LOCAL LABOUR WILL BE USED.

OFFICER ADMINISTERING THE GOVERNMENT.

Time

Reply at 344

INVOICE.

333

(FIRST ADVICE COPY)

THE CROWN AGENTS FOR THE COLONIES

Dr. to Messrs.
of (full address)
Crown Agents' Reference
Indent No.
Special Account (if any)
Department

Date of Inv
Contractor's
Date of Post
Department

Date of Post

Date of Invoice Contractor's Reference No.

Date of Posting (if goods have been despatched by post)

| tem Nos. | Quantity | Description of Article in wording of Tender T. c. q. lb. Rate £ s. d. £ s. d. |
|----------|----------|--|
| | | Air lucting and cooleas for 5 to 2 5 |
| | | |
| | | |
| | | PACKING THE REPORT OF THE PROPERTY OF THE PROP |

INVOICE (FIRST ADVICE COPY)

THE CROWN AGENTS FOR THE COLONIES Dr. to Messrs.

Dr. to Messrs. of (full address) Crown Agents' Reference Indent No. W. 5849/1 Special Account (if any)

1

Department

Date of Invoice 25th 100.1952. Contractor's Reference No. 0.05275/00 Date of Posting (if goods have been despatched by post)

| | | Ta be fille | d in by | Contracto | ır | | | | | | | |
|-----------|----------|--|---------|-----------------|-----|------|----|-----------|-----|---------------|-------------|------|
| Item Nos. | Quantity | Description of Article in wording of Tender | T. | Weight c. q. | lb. | Rato | £ | 5. | d. | £ | s. | d. |
| | | Valve open communit, apocity test set ste for just set set set set set set set set set s | | £ \$5 | | | 80 | 10 | . 5 | Ly | 9• 3 | 1. 7 |
| | | | | /2 | -el | Le | | Pa. | ٠, | 0 | | |
| | | | | | C | - 2 | | | 50 | lif | 2 | N |
| | | | | | | | | | | | | |
| | | | | | | | | 0.00 | | Table service | | |

In the case of goods not of United Kingdom manufacture the items concerned should be indicated on the invoice and the country of origin stated.

It is important that full packing particulars should be given, either (1) on the back of copies two to seven of this set of invoice forms (i.e. six copies), or (2) on the contractor's own forms (four copies), as convenient.

supplied

State here general nature or class of goods. *INVOICE of by Arconi's Wireless Telegraph Co. Ltd. Chelmsford.

to The Crown Agents for the

London.

2 JAN

to be shipped per a g atta

S.S. "HIGHLAND CHIEFTAIN" 11/12/52.

Order No. 5019/1.

Country from which consigned United Kingdon.

| Country Marks and numbers on | QUANTITY AND DESCRIPTION OF GOODS | | Selling pr purchas | | |
|--------------------------------------|--|------|-----------------------|-------|--------------|
| Origin packages | | @ | A | mount | |
| Reqn 5049 PAINT C N Hos. | IAL STOWAGE. O.A.G. PI. STANLEY. VIA MONTEVIDEO. WEIGHT. 1 Pint Brushing Cellulose Paint. 1 "Glossy Black Paint. 1 "Sheliac Varnish. 1 Polishing Outfit Ho. 7. | all. | £3• | ₽• | 9. |
| | r. 0, B. | | £ 3. | 0. | <u>.0</u> 6. |
| | | | | | |
| | | | | | |
| | Net value of goods £ Value of outside packages £ Carriage to port of shipment £ | | | | |
| | Total Value £ | 1 | | | |

⁽¹⁾ If all the goods shown on the Invoice have the same country of origin such country need not be shown in a separate column provided it is clearly indicated in a conspicuous place on the invoice, e.g. "Country of Origin, England" (2) Goods admissible under the British Preferential Tariff should not be shown on the same invoice foreign origin.

In the case of goods not of United Kingdom manufacture the items concerned should be indicated on the investment the country of origin stated.

INVOICE. (SECOND ADVICE COPY)

Sx2 %

THE CROWN AGENTS FOR THE COLONIES

Dr. to Messrs. Marconi's direless Telegraph Co.Ltd., of (full address) Marconi Rouse, Chelmsford. Essex.

Crown Agents' Reference 1/5849/1 Ltd. Date of Indent No. 1212/15/162

Special Account (if any) Department by bost)

Date of Invoice 8th Dec. 1952. Contractor's Reference No. RO. 65275/BB Date of Posting (if goods have been despatched by post) 2 -12 52

| Department | | To be filled in by Contractor | | | |
|------------|----------|--|---------------------|--|-----------------|
| tem Nos. | Quantity | Description of Article in wording of Tender | Weight T. c. q. lb. | Rate £ s. d. | £ s. d. |
| | | Crystals for 5 Km H.F Broadcast Transwitter | | 13.0.0 | i i |
| | | Decreased in cost of mat as per details attached. Postage. | erials | 17.15.0 - 1.10 | 217,16,10 |
| | | | | 10 mm | 6.6 |
| - 1 | | | | | |
| | , | | | THOUSE IN THE STATE OF THE STAT | 0 |
| - 1 | | | | | 2/VZ.L.C.T.V.C. |
| | | | | | |
| | | | | | PACKING |
| | | | | 1 / 81 | -0 |



TELEGRAM SENT.

344

From SECRETARY OF STATE to GOVERNOR.

Despatched: 2.2.53 Time: 2235 Received: 3.2.53 Time: 0845

329

No 26. Your No 22. of 26th January. Please refer to my Priority Saving No 94 of 9th October 1951 which gave fullest information on rhombic receiving arrays with diagrams and costs. Please state what further details required from G.P.O.

SHORETARY OF STATE

File & p.u.pl. (Intld) J.B. 3/2

Reply at 347

What is the latest about broadcasting? I fear 5. we are still stuck with the 5 k.w. set about which, as you know, I have always been sceptical. be most interested to know how Mercer's experiments have gone with the smaller set during the winter. As I see it the aerials are going to be a problem with the big set which in any event seems to me to be using a Nasmith hammer to crack a nut. Harrison seems to have the erroneous impression that it was we who were clamouring for it. I think this should be pursued, if, as I suspect, we don't need it.

Son Cal Sec. Information sought from Go was approved of new location of knowline devil and the pale routs. Eccular of which have been sent to M. Burges at been received election of Mc Naughton was given

KIV 344

FALKLAND ISLANDS AND DEPENDENCIES.

SENT.

| Number | Office of Origin | Words | Handed in at | Date |
|--------|------------------|-------|--------------|---------|
| | | | | 10.2.53 |

CHAPELRIES LONDON

HOA/C

344

NO 25 YOUR TELEGRAM 26 STOP IMPURISATION SCHOOL MAS MARTHUR POSITION OF RHOUBLE ASREAD SCHOOL MAST OF STANKY SITE THE CHESSIES DISTANCE PROFIT STUDIO IS SUITABLE AND ALSO WHETHIR COLORIA. CASA: CAN BE SUSPINIOUS FROM OVERALAD CARACITA WIRM FOR PART OF DISTANCE STOP NO DIRECT REPLY HAS SEEN RECTIVED PROFIT THE GRADUE MONORMAN WHO RECENTLY RETURNED PROFIT THE GRADUE WITH BROKED AS BEEN CIVED THE INFORMATION REQUIRED AND THE GRADUE WITH BROKED STING CAS BEEN CIVED THE INFORMATION REQUIRED AND THE SECONDARY PROPERTY.

OFFICER ADVICE TRAPE THE COVERNMENT

Mono - he rear.

GOVERNUENT HOUSE,

STANLEY, FALMAND ISLANDS.

27th February, 1953.

Dear Sir Wiles,

Broadcasting equipment

I have talked to Mercer and icHaughton and the position is as follows:-

(a) 5 L.w. Transmitter.

We definitely need the 5 k.m. transmitter. Mercer's experiments on the 600 k.c. frequency with the ½ k.w. transmitter though good, were not quite good enough. However it is thought that this smaller one could be suitably adapted to serve the Dependencies.

(b) Installation of the Transmitter.

I enclose (Appendix A) a minute from Mercer on the subject. If you approve his plan then we can make a start on the installation and approach the Admiralty for use of the Control Station. There seems little point in retaining the Dorman alternator.

(c) Aerials.

The 300 ft. ones costing over £12,000 are out of the question and we must just get the best masts for the money available. The Grown Agents have been asked to get quotations for steel masts and we hope that we can afford something in the nature of 160 ft.

(d) Prequencies.

Mercer is happy with the 600 k/c. frequency.

(e) Rhombic Aerials.

These have been ord red.

(f) Broadcast Studio.

I enclose (appendix 3) a note on the subject prepared by McNaughton. If you approve his plan we commake a start. Progress will depend on the availability of P. ... D. labour.

(g) Tage Recorders.

The order for these seems to have been lost sight of and I am following it up.

2. I must applogise for a very hasty note and lack of considered comments but pressure of other work has only just enabled me to go into this question on the day of an out-mail.

(Yours sincerely)

(Sgā) Colin Campbell.

uic Typolloner

·工(11.

I beg to submit a rough floor plan of the Govt W/T Station buildings which shows approximate positions of existing equipment and the proposed space to accommodate the new 5 K.W. Broadcast transmitter.

The new set can be fitted into the present engineroom and with the construction of a 'blower room' on the south side, the arrangements as per Marconi's plans can be met.

The Dorman alternator set and its associated switchboard could be fitted into an annex to the peat shed or offered for dale. The question of a standby power plant has not been necessary since the Stanley Power System was made available and in any case the machine we have is not now adequate to meet commercial and broadcast needs. With the new transmitter fitted at the W/T Station, I find the interference to our commercial receivers in considerable and it has been necessary to repeatedly shift the broadcast frequency to clear traffic. It will not be possible to shift the frequency on the new transmitter to give such clearances and in any case such practice is to be deplored

To meet the services of Broadcasting and commercial traffic I must recommend that our Services at some place remote from the transmitters and to meet this requirement, propose that all our receivers and control equipment be fitted at the Admiralty Control Station immediately to the west of Sulivan House and coupling this building by suitable underground cable with our transmitters. Receiving aerials can be exceeded to the south of the building and if necessary on the high ground immediately between the race course. The building is at present being occupied by Secfids as a store to I understand the stores are being removed to a more convenient position in Stanland.

The question of staff will arise but with the engagement of more apprentices, position can be handled satisfactorily.

The question of a suitable aerial system for the Broadcast transmitter have not been settled, Messrs Preece Cardew & Rider being unable to assist have recomme advice of the Crown Agents be sought.

From the results obtained with our small transmitter during the past eigenstant am confident that we will give a very good service throughout the Falkland masts supporting an inverted 'L' aerial. but for the most efficient result obvious that the B.B.C. and other experts are satisfied that the mast rangest is the answer, however, I suggest we get the best equipment we can are with this in mind the Crown Agents have been approached.

Thro'
The Hon

The Hon Col Seo, Stanley accompanying plan Sup sent to fe miles

Superintendent P & 26.2.53

1.89 9. As at para 2 of 352, pl. Wifer 6.5. 28/2/53. Am Cal Sec. I have 4 animed the fel and can for after HE water for GPo to submit a recom I propose the attacked draft telegram in sent. to the come agents. The original correspondence with Colonies office but C. A are also in on quipment and it involves the selection

FALKLAND ISLANDS

SENT

| Number | Office of Origin | Words | Handed in at | Date |
|--------|------------------|-------|--------------|----------|
| | | | | 7:- 3-53 |
| То | | | | |
| CROUM | I LOMBON, | | | HOW/C |

D REFERENCE SECRETARY OF STATE'S COLONY SAVINGRAM NO.76 of 16th APRIL 1952 STOP BROADS ST MEDIUM FREQUENCY FIVE KW TRANSMITTER FOR OPER TION ON 600 KILOSYRLES STOP WOULD APPRECIATE YOUR RECOMMEND TION BY TELEGRAPH FOR BUST POSSIBLE APRIAL SYSTEM WITH MATCHING UNIT AND PELD R OBTAINABLE WITHIN THE LIMIT OF 21500 STOP INFORMATION IS URGENTLY REQUIRED.

SECR TARY

Reply at 357

Time

2 56



FALKLAND ISLANDS

SENT

| Number | Office of Origin | Words | Handed in at | Date |
|----------|------------------|-------|--------------|-----------|
| | | | | 24. 3. 53 |
| То | | | | |
| CROWN LO | NDON | | | Ro / G |

YOUR REFERENCE U/5849/1 STOP GRATIFUL IF YOU WILL ENQUIRE FROM G.P.O. ONE ABSTRACT HEY HAVE BEEN ABLE TO RECOMMEND BUILDED TO PROCEEDED BY THEM STOP THE BEING SUPPLIED BY THEM STOP THE HATCHING UNIT GOD CHEEN FOR COUPLING STUDIO ROUPERENT TO MARCONI MY TRANSMITTLE METO THE STOP WINDERSTAND LATTER THE STOP PLEASE TILEGRAPH REPLIES.

SECRETARY.

Time



TELEGRAM.

From Crown Agents, London.

To Colonial Secretary.

18th March, Despatched:

O 4.33 111

*19*53 Time: 1730

Received:

19th March,

19 53 Time: 0845

Your telegram 7th March. Aerial system broadcast transmitter following is recommended. A three wire span T aerial 250 feet long erected between two 100 feet tubular steel masts with radial earth system consisting 30 wires 60 metres long a Aerial would be connected to aerial coupling unit already supplied. Cost including 100 metres feeder line if required £1,400 to £1,500.

CROWN.

Reply 364. File and pass to S.P.T. for his obs.pl.

(Intld.) J.B.

19.3.

as at B pt You have file 0438 fix?

355a

. Am Cal See

when the estimate of \$1500. Porviding the Technical Committee agree I recommend the attached telegram be despatched, ordering the aerial equipment as specified

AM. Str

S/P.T. Pl anage of 6 thee to consider.

Mr. Mercer & provide some other information before the considers. meantine file returned to secretariat for insertion of further papers. Iman.

TELEGRAM.

From The Crown Agents for the Colonies.

The Colonial Secretary.

Despatched:

23rd April, 1953. 19 Time: 1205

Received:

23rd April, 19 53 Time: 1400

356

Your telegram 24th March. G.P.D. recommend

- (1) Ferrograph recorder type YD price £100 ten shillings delivery 4 weeks.
- (2)They state no line amplifier or matching unit necessary as open wire route satisfactory if no interference problems expected. Marconis equipment is designed to work into 600 OHMS and levels are adequate. Shall we order the recorder?

CROWN.

File & pass to S.P.T. for obs.pl. (Intld)J.B. 23/4

361

FALKLAND ISLANDS

SENT

| Number | | Office of Origin | Words | Handed in at | Date |
|--------|----------|------------------|-----------------|-------------------|-----------------|
| | | | | | 29.4.53 |
| То | | | | | |
| CROUN | LONDON | | | | HOA/C |
| 357 | | 0-mm 10-mm 1 000 | | | VACIFICATION OF |
| YOUR T | EL TERAM | 23RD APRIL 800 | og sakaan Opula | R RECORD IR AC RE | GUME THE TE |
| BY GPC | STOP | CORPIRMATORY II | EDENT FOLLOWS | STOP GROUP NUMBE | R 15. |
| | | SMCRITARY | | | |

all correspondence on this subject should quote C.A. Regn. No. F. Islands 6216.

Time

Malkland Is. 5849 CROWN AGENTS FOR THE COLONIES, Il communications to be addressed to 4. MILLBANK, on Agents for the Colonies, ve reference and the date of LONDON, S.W.1. this letter being quoted. No. CO 1t. 96834/9/51 7th April. Letter Date 9.8.51. No. Sir. Indent We append a report in connection with the indent or other Date communication referred to hereon. Department:-We are, Sir, Colonial Secretary. Your obedient servants, Port Stanley. Falkland Islands. for the CROWN AGENT ITEM No. SUBJECT REMARKS C.D. & W. Scheme We have to refer to your telegram D.2265 dated 24th March in which you requested Equipment being us to enquire from the G.P.O. whether supplied by G.P.O. they had been able to recommend a suitable tape recorder for use in conjunction with the equipment being supplied by them and what their recommendations were for suitable line amplifier, matching unit and cable for coupling studio equipment to Marconi MF transmitter. We immediately telephoned your message to the Post Office Authorities concerned and followed up with a confirming letter. We now await their recommendations and will telegraph you as soon as received. Copy 128 15. 1/8 FAWB/MGW /G11, 50,000/7/52. W. & Co. Ltd.

J/ 11/12/1 All communications to be addressed to 4. MILLE ents for the Colonies, erence and the date of VIA AIR MAIL. the Cros the abov this letter weing quoted. LONDON. No. Savingram 42 of 25/1/52from 10th February Letter Falk. Is. to Col. Office Date No. Sir. Indent We append a report in connection with the indent or other Date communication referred to hereon. Department :--We are, Sir, The Colonial Secretary. Your obedient servants. Port Stanley, FALKLAND ISLANDS. for the Crown Agents. M No. SUBJECT REMARKS We are advised by Messrs. Marconi's Broadcasting Trans-Wireless Telegraph Company Limited that the metter etc. items still outstanding on the order consist of a Test Ammeter and Wavemeter which are to be re-inspected, one lead-in Insulator, Monitoring Loud Speaker and Test Load frame. The last three items are nearingtems pletion and it is hoped to have a ready for shipment within the nex three weeks. We shall do everything possid insure that this promise is maintail my sent to SPT 5/5/5

The Sacretary Tech Board Otto,

366 How C5 requires views of

Committee on telegram at back cover.

although I have attached a

doeft reply for Comm agents, the committee may will theme my will theme me amed by bette off if the medis men higher than 100 feet.

RH 150 (150 feet high) complete with Stays helyans, horstong gea, but no Specifiers, insulation or across for 1,810.

When com not med Please?

SPT 25/3

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YOUR TULLOR IN 18TH MARCH STOP PLIASE ORDER A INTEGRATION OF MATTERS

LTTH ON MATTER IN PERCENT SPORT IN OLL TORS AND OMSHURDER IN MATTERS

FIRST LINE STOP FULL CONSTRUCTION & DETAILS WILL BY REWURD STOP

SECRETARY

How C.S. thank you All SP: 7-5-53