

D

(Formerly)

D/1/67

D/1/67

BIPOLAR BOTANICAL EXPEDITION
SOUTH GEORGIA.

CONNECTED FILES.

NUMBER

BRITISH ANTARCTIC SURVEY

FORMERLY FALKLAND ISLANDS DEPENDENCIES SURVEY

DIRECTOR: SIR VIVIAN FUCHS

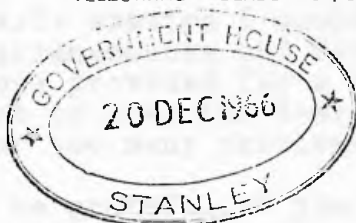
30, GILLINGHAM STREET, S.W. 1

TELEPHONE: VICTORIA 3687-8-9
TELEGRAMS: POLASURVEY, LONDON SW1

C.S. We can only welcome him to move. Please return for me to show o/c.

*Si
23/12
23/12*

AS/107/2
AS/164/8



18th November 1966

Dear Governor,

I am sending you a copy of some preliminary proposals for complementary botanical work in West Greenland and South Georgia. This work would fall within the scope of the International Biological Programme and has already received preliminary support from the Royal Society. Dr. Greene, who is one of the co-sponsors, looks after the B.A.S. botany although he is not in our employ. He proposes to take his wife (also a botanist who works on our material unpaid) as one of the Greenland party.

Clearly the permanent team working at Birmingham University will need to have knowledge of both areas. To this end it is proposed that four to six of them should go to South Georgia for the 1967/68 season and work from King Edward Point. Subsequently, only two botanists would be required to continue the work for two years.

Good

I imagine that you will have no objection to the general proposition? However, Greene wants to take his wife with him as a member of the reconnaissance team in 1967/68. I have told him that I am not sure what your attitude would be to a woman going to the present administrative station, but that I would ask you.

*There would be no objection provided
(1) a doctor is available and
(2) a house is available. The list of trees is a real problem; but
/becomes a B.A.S. station could be solved.*

I also said that if and when King Edward Point

/becomes a B.A.S. station

23/12

becomes a B.A.S. station I would not want a woman there because our arrangements and facilities would not be more than those provided for a base. In any case I would not want to open the door to women in B.A.S. as this poses far too many problems.

I would be grateful if you could let me know your attitude to his proposal.

Yours sincerely
Bunny Fuchs

V.E. FUCHS

H.E. The Governor,
Government House,
Port Stanley,
Falkland Islands,
SOUTH ATLANTIC

UNIVERSITY OF BIRMINGHAM.

Department of Botany.

BIPOLAR BOTANICAL PROJECT.

Drs. S.W. Greene and M.C. Lewis.

1. Introduction.

Since 1958, Birmingham University has played an increasingly important role in the botanical investigation of Polar Regions. Most of the work has been related to the Antarctic and the Department of Botany, through Dr. S.W. Greene, now acts as the co-ordinating centre for the Antarctic botanical programmes undertaken by the British Antarctic Survey. An Antarctic herbarium of some 10,000 specimens has been established as well as unique living conditions. The Department also possesses an extensive polar botanical library, including the records of most major expeditions (British and foreign). An Arctic herbarium is presently being built up, its basis being the collections made in Norway by Professor West in 1918-20 and in Arctic-Lapland by Birmingham University Biology Society Expedition in 1958.

Antarctic work undertaken in the Department has included taxonomic and distributional studies (Greene 1964 a, b) vegetational studies (Longton, in press), investigations into the reproductive physiology of Antarctic mosses (Longton and Greene, in press; Longton, in press), and genealogical studies on Antarctic Flowering Plants (Holton and Greene, in press). Current work includes an assessment of long-term microclimatological data in relation to Bryophyte growth patterns at various sites in Antarctica.

Some of the plants being investigated are unique to Antarctic regions, but others are more widespread in the Southern Hemisphere, while another group - the Bipolar group - is common to both North and South Polar Regions. However, so far the species of this Bipolar group have only been studied in one area independently of the other, by a variety of methods, few of which are directly comparable.

The appointment of Dr. M.C. Lewis to the staff of the Department of Botany, resulted in an expansion of departmental research interests into North Polar regions. Before joining the staff, he had spent 5 years working with Professor Böcher of Copenhagen University, one of the foremost authorities on the Arctic Flora. Dr. Lewis is a joint author of

the English edition of the Greenland Flora (in press), and is an active worker on physiological genecological problems. Thus a unique opportunity was provided for undertaking comparative studies of plants common to North and South Polar Regions.

2. Programme.

The primary objectives of this Bipolar study are to obtain strictly comparable data, using similar methods of investigation and presentation of results, to allow a critical comparison of northern and southern populations of selected species. These objectives can be achieved by measurements of plant performance under field conditions, by assessing:-

- a. Productivity, e.g. vegetative yield as expressed by dry weight accumulation, photosynthetic and respiratory rates.
- b. Reproductive performance, e.g. flower and fruit production, seed setting.
- c. Establishment rates, e.g. seed viability, germination rates, and seedling growth.

These assessments of plant performance will be most meaningful in combination with synchronous measurements of the microclimatic conditions under which the plants are growing throughout the growth cycle. Therefore, it is proposed to obtain continuous, long-term data concerning the following factors:-

- | | |
|---|--------------------------|
| (i) <u>Microclimate at plant level.</u> | (ii) <u>Soils.</u> |
| a. Air temperature | a. Temperature |
| b. Water vapour pressure | b. Soil moisture tension |
| c. Wind velocity | c. Physical properties |
| d. Solar radiation | d. Chemical properties. |

Data on other climatic factors such as precipitation, day length, hours of sunshine etc., can be obtained from synoptic meteorological records.

This series of observations can best be achieved by establishing two primary long-term study sites, an Arctic site on Disko Island, West Greenland, and an Antarctic site in Cumberland Bay, South Georgia. In addition, short-term comparative data will be obtained from secondary sites in the two areas and the results from these related to the continuous records from the primary site. In this way, a picture can be formed of how the plants are functioning in relation to the environmental complex and the diversity of the ecosystem within each area.

It is also proposed to transplant living material to a control site in the Department of Botany's Research Gardens at Winterbourne. Some of these plants will be used for controlled, environmental studies in the Departmental Phytotron, while others will be the subject of cytotaxonomic studies.

3. Timetable.

As planned at present, it is proposed to initiate this programme in the following stages:-

- a. A reconnaissance expedition to West Greenland in the summer of 1967, to select the Arctic study site and to collect preliminary data from field tests of equipment and methods.
- b. A comparable reconnaissance expedition to South Georgia during the austral summer of 1967/68.
- c. Establishment of the Arctic site in 1968 and its operation for at least two full seasons.
- d. Establishment of the Antarctic site during the austral summer of 1968/69 and its operation for a comparable period.

4. Logistics.

Since the programme outlined above incorporates many of the principal objectives of the International Biological Programme (IBP) preliminary negotiations are being initiated with the British National Committee of the IBP in the hope of getting the project officially accepted. Such recognition would it is believed, ensure financial support through the Royal Society.

An application to cover the costs of the Greenland Reconnaissance Expedition will be made to the University of Birmingham Expeditions Fund, and to the Royal Society. As a result of satisfactory discussions with Professor Böcher and Dr. Kjøie of Copenhagen University, it is the intention to establish the Arctic site in the vicinity of the Arctic Research Station on Disko Island, and to finance its operation jointly from Royal Society and Danish funds. The work will be carried out by research assistants under the supervision of Dr. Lewis.

The main expenses of the Reconnaissance Expedition and the operation of the Antarctic site would it is hoped, be provided through the British Antarctic Survey, with the possibility of support through the Southern Zones Committee of the Royal Society. The work at this site will be undertaken by Research Assistants under the supervision of Dr. Greene.

It is planned to apply to one of the Research Councils for the costs of operating the control site at Winterbourne Research Gardens, University of Birmingham. Although some specialized equipment already exists in the Department of Botany, the provision of a temperature-controlled Polar greenhouse is essential for the satisfactory cultivation of some Polar plants.

5. References.

- Greene, S.W., 1964a The Vascular Flora of South Georgia.
British Antarctic Survey Scientific Reports
No.45 58 pp.
- Greene, S.W. 1964b Problems and Progress in Antarctic Bryology.
Carrick, R., M. Holdgate and J. Prevost, (ed):
Biologic Antarctique, First International
Symposium on Antarctic Biology. Paris 2 - 8
Sept. 1962. pp. 173-79.
- Holtom, Anne & S.W. Greene The growth and reproduction of Antarctic
(in press) flowering plants. Proc. roy. Soc.
- Lewis, M.C. & T.T. Elkington English Edition of Blicher, T.W., K. Holmen
(in press) and K. Jacobsen, 1966 Grønlands Flora
Ed. 2, Copenhagen 307 pp.
- Longton, R.E. (a, in press) Vegetation in the Maritime Antarctic.
Proc. roy. Soc.
- Longton, R.E. (b, in press) Botanical studies in the Antarctic during
the 1963-64 and 1964-65 seasons. British
Antarctic Survey Bulletin No.10.
- Longton, R.E. & S.W. Greene The Growth and Reproduction of Polytrichum
(in press) alpestre Hoppe on South Georgia.
Proc. roy. Soc.

S.W. Greene

M.C. Lewis

Birmingham, Nov 1966.

West Greenland Reconnaissance Expedition.

Application for financial support to the University
of Birmingham Expeditions Fund.

Drs. S.W. Greene and M.C. Lewis.

Introduction.

As indicated in our prospectus outlining the Bipolar Botanical Project, this expedition forms the starting point of a projected extensive study of Bipolar Plants. Its purpose is to enable the selection of an area suitable for the Arctic Study site, as well as obtaining preliminary results from the testing of equipment and methods under field conditions. Thus it is envisaged primarily as a research expedition. The proposed methods of achieving these objectives are as follows:-

Location - Disko Island.

As a result of the interest and keenness of Professor E~~B~~cher and Dr. Kyie, of Copenhagen University, an assurance has been received that the necessary sleeping and messing facilities will be available to the Expedition at the new and excellently equipped Arctic Research Station at Godhavn, Disko Island. In addition the necessary field transport (boat, jeep) and specialized laboratory equipment (balances, ovens, microscopes) will be provided. Regular Danish air services operating between Copenhagen and Godhavn provide the best means of transport to and from Disko Island.

Duration.

Mid-July to mid-August 1967, the exact dates being dependent upon transport schedules. It is envisaged that one month should be spent in the field, an additional 6 days being required for travel.

Personnel.

- Dr. M.C. Lewis - Lecturer in Botany, University of Birmingham -
Leader. Field responsibilities to include
measurements of photosynthetic and respiration
rates and supervision of work on flowering plants.
- Dr. S.W. Greene - Lecturer in Cryptogamic Botany, University of
Birmingham - Deputy Leader. Field responsibilities
to include the microclimatological measurements and
supervision of work on bryophytes.
- G. Clarke B.A. - S.R.C. Research Student, working on Bipolar
bryophyte species under Dr. Greene's supervision.
Field responsibilities to include sampling of
bryophyte populations.

- Mrs. D.M. Greene M.Sc. - Demonstrator in Botany, University of Birmingham. Research Assistant associated with Antarctic Botanical Research Programme. Field duties to include processing of field samples in laboratory, i.e. dry weight accumulation etc.
- Arctic Research Assistant to be appointed to work under Dr. Lewis's supervision. Field responsibilities to include sampling of flowering plant populations.
- A general assistant to be available to assist any of the expedition members with their projects, and to be responsible for assembling the expedition's collections and photographic records.

Notes:-

- (i) It is anticipated that suitable research assistants to fill the two unassigned posts, financed from Royal Society and British Antarctic Survey funds, will be appointed in time to join the expedition.
- (ii) It is the intention that some members of this team, should be part of the South Georgia Reconnaissance Expedition, to ensure comparability of methods etc.
- (iii) It is hoped that 1 or 2 Danish workers will participate supported entirely from Danish funds.
- (iv) In view of the scope of the Bipolar Project, it is desirable that as many aspects as possible are fully investigated during the Reconnaissance Expedition. However, a modified programme could be undertaken with a minimum of four persons.

Results.

The specimens and field data, including that on microclimates, will be brought back to Birmingham for analysis and preparation for publication under the supervision of Drs. Greene and Lewis. Living material will be transplanted to Winterbourne, some of it being made available to Professor Böcher for cytotaxonomic studies. The analysis of soil samples will be undertaken by Dr. Kjøie.

Logistics.

The present application is for travel costs and subsistence as itemised below. An application is being made to the Royal Society for costs of additional equipment not at present available in the Botany Department. Clothing and personal gear will be the responsibility of individual members since specialised equipment will be available at the station.

Costs.

<u>Travel</u>	Birmingham - Copenhagen (boat and train)	
	6 return fares @ £25 each	£150.-.-.
	Copenhagen - Godhavn (air)	
	6 return fares @ £130 each	£780.-.-.
	Subsistence during transit	
	6 persons for 6 days @ £2 per person per day	£72.-.-.
<u>Greenland.</u>		
	Subsistence at Station	
	6 persons for 30 days @ £1 per person per day	£180.-.-.
<u>Total Cost of travel and subsistence</u>	<u>(i.e. £197.-.-. per person)</u>	<u>£1182.-.-.</u>

337

O/c to see and return please

on 23/12

Jic.

being welcome.

I am sure housing
would not be a problem.

DI

23/12

Seen check you.

If this comes off it would be possibly better
if communications direct to ^{ZHP} ~~ZHP~~ were
arranged to cater for any trouble regarding
results, interests etc.

J.P.P.
29-12-66

5

21/1/67

6A

581/67

Z

U



581/67

R. 1042Z

14/7/67

FROM LONDON HQ
 TO COLONIAL SECRETARY
 INFO STANLEY OFFICE

AS/107/2/1 BIPOLAR BOTANICAL EXPEDITION SOUTH GEORGIA
 1967/68. COLMAN AGREES THAT PARTY OF SIX SHOULD MESS
 IN SHACKLETON HOUSE. GRATEFUL YOU ASK PRESENT OIC S.GEORGIA
 TO INDICATE WHAT EXTRA FOOD REQUIRED TO MESS SIX PEOPLE FOR
 FIVE MONTHS. AN ORDER WILL THEN BE PLACED BY SURVEY TO COVER
 REQUIREMENT. COST TO BE CHARGED TO SURVEY. OIC S.GEORGIA SHOULD
 ALSO BE WARNED THAT DISCOVERY HOUSE WIL BE REQUIRED BY EXPEDITION AS
 A LABORATORY AND STORE AND THAT LIGHTING, HEATING AND WATER SUPPLY
 WOULD BE REQUIRED FROM NOVEMBER ONWARDS.

WOS/ACB

FFFF

93

GOVERNMENT TELEGRAPH SERVICE

FALKLAND ISLANDS

SENT

P1677 P416 8/64

Number	Office of Origin	Words	Handed in at	Date
	STANLEY			15.7.67

To

BEAT ADMINOFF ZBH

SEA/c

No 125 Following received from BAS Headquarters ^{in London.} and repeated to you for information and necessary action begins AS/107/2/1 BIPOLAR Botanical Expedition South Georgia 1967/68 stop Colman agrees that party of six should meet in Shackleton House stop Grateful you ask present OIC South Georgia to indicate what extra food required to meet six people for five months stop An order will then be placed by survey to cover requirement stop Cost to be charged to survey stop OIC South Georgia should also be warned that Discovery House will be required by expedition as a laboratory and store and that lighting heating and water supply would be required from November onwards ends Do you require any additional financial provision to carry out work on Discovery House

Secretary

Reply at 3.7

Time

BU 25.7.67

DECODE.

7 ~~8~~

TELEGRAM.

From Administrative Officer, South Georgia

To Colonial Secretary, Stanley

Despatched : 18th July, 19 67 Time : 1800

Received : 18th July, 19 67 Time : 1615

9

No 141 Your telegram No 125. Water supply and heating system have both been disconnected Discovery House. These will be reconnected between now and November. No additional funds should be necessary for Discovery House. Regarding food supplies do B.A.S. not have a standard food issue per man for the bases which they could supply with their party to be used in conjunction with Shackleton House stores. Failing this recommend that Indent 70/67 provisions for Shackleton House 1967/68 be increased by twenty percent and Indent 69/67 by ten percent. Will party also live in Shackleton House

X

Adminoff

0 1/2 B.A.S.
x/ above. Can you advise
21.7.67

P/L : MR

BRITISH ANTARCTIC SURVEY

48

MEMORANDUM.

Please quote in reply

No.....

24th July, 19 67.

The Hon. Colonial Secretary,

The Secretariat,

O.I/c., B.A.S. Office,

Stanley, Falkland Islands.

Stanley.

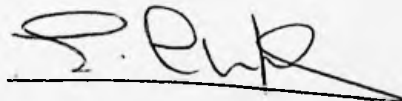
SUBJECT:-

Bipolar Botanical Expedition - South Georgia

With reference to underlined section of signal on page 3.

We do, but I would think that for general planning of meals, etc., it would be better to issue the visitors with food comparable to South Georgia stocks as opposed to a possibly different range of items issued by B.A.S.

I attach a B.A.S. food indent for your comparison.



E.C.J. Clapp, O.I/c.,
British Antarctic Survey, Stanley.

o/c BAS

But surely something slightly different wd. be welcome. I'm sure those at Shackleton House would welcome something just a little different now & again & an exchange of menus occasionally wd. still balance the budget. Unless you have any strong feeling I wd suggest the team to pop with BAS issue.

A.C.S. wd. make. Discussed with H.G.S. w/o Peels all should be 5.4 lights of stock

25.7.67

MEMORANDUM of a meeting held at 30 Gillingham, London S.W.1. on Wednesday 5th July, 1967 to discuss arrangements for the Bipolar Botanical Project expedition to visit South Georgia.

PRESENT: Sir Vivian Fuchs
Captain D. Coleman
Dr. S.W. Greene
Mr. W.O. Sloman

1. Sir Vivian Fuchs thanked Captain Coleman for coming and explained the scientific aims of the Bipolar Project, emphasizing the necessity for the same team of investigators to work at conjugate points in the Arctic and Antarctic. Dr. Greene is going to take a party of six (which will include his wife) to Greenland this summer, and he is seeking facilities to make comparative studies at South Georgia next season. The expedition will number either five or six and will again include Mrs. Greene. In addition Edwards, a Survey botanist, will spend part of the summer at South Georgia. The party will arrive in the JOHN BISCOE on about 20th November, intending to stay until the last ship out in about mid-April 1968.

MESSING, CANTEN SUPPLIES AND ACCOMMODATION.

2. Captain Coleman agreed to provide accommodation and messing facilities in Shackleton House, but suggested that Dr. and Mrs. Greene should occupy a bungalow, taking their main meals in Shackleton House.

3. It was agreed that the extra food required will be provided by the Survey in consultation with the OIC South Georgia, and that a message will be sent to him via the Colonial Secretary, Falkland Islands informing him that six people will require to be fed for five months, and asking him to indicate what extra food supplies will be required. An order will then be placed with the Crown Agents and charged to the Survey's account.

4. Captain Coleman undertook to provide bedding for the whole party.

5. Sir Vivian said that each member of the expedition would have to be responsible for their own personal "canteen stores" and Captain Coleman pointed out that there is no "Slop Chest" at South Georgia. Such items as washing powder, soap, toothpaste etc. would have to be included in personal baggage.

MOVEMENT

6. Captain Coleman asked whether the party would wish to move to other areas of the island, and if so, how much local assistance would be required? Dr. Greene indicated that they would like to visit West Bay, Gull Lake and Maiviken, but emphasized that the party would be equipped with field rations and camping gear and he did not anticipate that they would be a burden on the Administration. Captain Coleman said that in the absence of a whaling community it was now almost impossible to provide boating facilities, but he was happy for scientists to work on the island provided that adequate safety precautions were observed.

LABORATORY FACILITIES

7. Dr. Greene said that he would be grateful for laboratory facilities and estimated the party's needs as:

One good dry store approximately 15 ft. square.

One good wet laboratory with running water and electric power.

One or two smaller laboratories.

Captain Coleman said that the old Discovery House could be made available. Lighting and heating could be provided by November but he suggested that the OIC should be warned of this requirement. Dr. Greene welcomed these facilities and said that the power requirements for scientific purposes would be less than 5.kw. In cold periods some additional power for heating might be necessary.

8. Dr. Greene enquired about the small dark-room and laboratory used by Nigel Bonner and Captain Coleman confirmed that this is still available. He said that Shackleton House also has a dark-room but pointed out that this was provided for the permanent occupants and should not, therefore, be monopolized by the expedition.

COMMUNICATIONS

9. It was agreed that official or scientific messages should be passed through the Administration to the BAS Stanley Office and thence to London by telex. All private messages would be sent through the normal telegraph system.

MEDICAL FACILITIES

10. Captain Coleman agreed that medical attention would be provided free of charge when available.

11. Finally Captain Coleman said that he welcomed the proposed expedition and would be happy to support it in every way within the limits of his resources. Dr. Greene expressed his gratitude for this cooperation and undertook not to encourage members of the South Georgia Administration to join in any of his party's activities unless Captain Coleman had previously agreed to such participation.

6th July 1967.
ESH.

Distribution:

Captain Coleman
Dr. Greene
Stanley Office
Colonial Secretary (2)
File

GOVERNMENT TELEGRAPH SERVICE

10

FALKLAND ISLANDS

SENT

P2538 P4776/32/401381 500 11/66 R. Ward 843

Number	Office of Origin	Words	Handed in at	Date
	Stanley			2.8.67
To	LTF CROWN LONDON SWL			SGA/c

No 169 Please increase all items indent 70/67 by twenty percent and indent 69/67 by ten percent stop Both indents refer to South Georgia provisions

Secretary

Time

AA

Copies to I/69/67
I/70/67

GOVERNMENT TELEGRAPH SERVICE

FALKLAND ISLANDS

SENT

P2538 P4776/32/401381 500 11/66 R. Ward 843

Number	Office of Origin	Words	Handed in at	Date
	STANLEY			3.8.67
To	BAS London HQ			HOA/c

5
 Your signal 14th July Bipolar Botanical Expedition stop have
 increased South Georgia provisions indent so that party can be
 victualled from our stocks and cost recovered when known

Colonial Secretary

Time

GOVERNMENT TELEGRAPH SERVICE

FALKLAND ISLANDSSENT

12

P2538 P4776/32/401381 500 11/66 R. Ward 843

Number	Office of Origin	Words	Handed in at	Date
	STANLEY			3.8.67
To	HEAD ADMINOFF ZEN			SGA/c

7
 No 128 Yourtel 14.1 have requested Crown to increase Indents 69 and 70
 of 1967 as suggested stop Please ensure cost meals recovered from
 expedition stop Party will live at Shackleton House

Secretary



Time

DECODE.

13

TELEGRAM.

From Administrative Officer, South Georgia

To Colonial Secretary, Stanley

Despatched : 14th September, 19 67 Time : 1200

Received : 14th September, 19 67 Time : 1100

Botanica?

No 159 Handyman is now commencing work in Discovery House ready for Biological Expedition and finds he needs assistance. Have let Tony age 15 give him hand and will be grateful if you will agree to my paying him at boy labourer rates whilst so helping

Adminoff

P/L : ER
Intld. H.L.B.

Reply at 17

GOVERNMENT TELEGRAPH SERVICE

14

FALKLAND ISLANDS

SENT

P2538 P4776/32/401381 500 11/66 R. Ward 843

Number	Office of Origin	Words	Handed in at	Date
	STANLEY			15.9.67
To	HEAD ADMINISTRATIVE UNIT			SGA/c

141 13
 No ~~2~~ 159 payment of assistance to handyman approved
 at rate suggested stop Please telegraph estimated amount
 required so that claim may be made from SAS

Secretary

Reply at 15.

Time ER

EO 30.9.67

DECODE.

TELEGRAM.

From Administrative Officer, South Georgia

To Colonial Secretary, Stanley

Despatched : 19th September, 19 67 Time : 1830

Received : 19th September, 19 67 Time :

No 162 Your telegram ¹⁴141 estimated amount required fifteen pounds. Is rate payable two shillings sixpence halfpenny grateful you confirm

Adminoff

See 16

P/L : AA
Intld H.I.B.

GOVERNMENT TELEGRAPH SERVICE

FALKLAND ISLANDSSENT

16

P2538 P4776/32/401381 500 11/66 R. Ward S43

Number	Office of Origin	Words	Handed in at	Date
	Stanley			23.9.67
To	etat ADMINOFF SOUTHGEORGIA			SGa/c

15
 No. 143 Yourtel 162 Current rate is two shillings fivepence
 halfpenny

Secretary

Time FA

Pa

DECODE.

TELEGRAM.

17

From Administrative Officer, South Georgia

To Colonial Secretary, Stanley

Despatched : 3rd November, 1967 Time : 1230

Received : 3rd November, 1967 Time : 1130

13

No 181 My telegram 159 Discovery House is now ready. This proved to be a much larger job than first estimated. All domestic water piping had either to be replaced or cleaned. Assistance to handyman therefore greater than estimated 174 hours worked a total of £21 7s. 9d. grateful for authority to make payment of this amount. He is now assisting with the repairs to drains damaged by storm can he be paid for this also. Total cost of this should be in region eight to ten pounds definitely not more

Adminoff

S/c
R. reply - You - I agree
Reply as is

P/L : AA

3/1/67

GOVERNMENT TELEGRAPH SERVICE

FALKLAND ISLANDS

SENT

18

P2538 P4776/32/401381 500 11/66 R. Ward 843

Number	Office of Origin	Words	Handed in at	Date
	STANLEY			4.11.67
To	GRAT ADMINOFF ZBU			SGA/c

No 158 Yourtel 181 I agree

Secretary

Time

ER

Pa