

CONFIDENTIAL.

SGA/FAU/1 # 15

D

(Formerly)

|        |
|--------|
| D/5/61 |
|        |

|        |
|--------|
| D/5/61 |
|--------|

SUBJECT:

BIOLOGICAL RESEARCH IN THE  
DEPENDENCIES

---

CONNECTED FILES.

NUMBER

D/6/61

Scientific investigations at South Georgia

I/3/5/62

South Georgia capsules

6th January 1961

(Dear Coleman)

I enclose copies of two projects which Tickell handed to me on arrival at Stanley. The first has been submitted already to the American National Science Foundation, and it is quite probable that funds will be forthcoming. The second one is for a similar project, but to be financed entirely from our resources. I think it is in the nature of an insurance, in case we were opposed to the Americans establishing themselves at Bird Island.

In the second project, Tickell mentions the possibility of our providing the 'base', and I think there may be something in this idea. I am not particularly keen to have an American hut at South Georgia, and it might be a good idea if we were to provide for the hut under Head 1. The idea, I think, would be that it should be used by Bonner, or any other seal biologist, and we would make the accommodation available to Tickell for his project.

I told Tickell that we regard Bird Island primarily as a fur seal reserve, and this must be our prime consideration. Since South Georgia is outside the area of the Antarctic Treaty, we are, of course, at any time free to say who may or may not go there. I suggested to Tickell, who is taking Dollman down with him, that they should discuss with you and Bonner the sort of hut that would serve best on Bird Island. I think we must bear in mind that Bonner may not be with us for very much longer, but I feel it is necessary for the seal work, both for fur seal and elephant, to be continued by a biologist, and whoever replaces Bonner will be spending some time at Bird Island. Even with his experience, I have never felt very happy about Bonner being at Bird Island entirely on his own, and I think we should reckon that the hut would always have to accommodate a helper for our biologist. If Tickell, another scientist, and a sort of general assistant were there at the same time, it looks as though we should reckon on a five man hut as a minimum, and preferably a six man hut, but I leave these details to be worked out at your meeting.

If the Americans finance the project, the results would, of course, be published in America, but I have no very strong feelings about this, for South Georgia is really outside the scope of normal F.I.D.S. activities.

These are the only copies of the projects which Tickell has, and I should be grateful if you would return them to me, together with your comments by the return of the 'Kista Dan'.

(Yours sincerely)

signed Edwin Arrowsmith

*Reply at 101*

CAPTAIN D. COLEMAN

King Edward Point,  
South Georgia.

4th February 1961.

Sir,

Referring to your letter of 6th January in connection with Tickell's two proposals for a hut on Bird Island, I discussed these with Tickell and I gathered the impression that:-

(1) He would personally much rather be sponsored by the American University because of freedom of publication and personal material advantages.

(2) Whilst the Americans may be willing to finance Tickell to the extent of 18000 dollars in salary, 5500 dollars travelling expenses and 17450 dollars for expedition equipment, (bearing in mind that of the equipment 16250 dollars-worth is of a returnable nature and only 1200 dollars-worth being consumable stores), it is, in my opinion, open to question whether the Americans will finance the erection of a hut with base equipment to the total value of 15500 dollars, and I strongly suspect that Tickell has gained support for his venture on the basis that the Falkland Island Government would provide and equip the base hut. (See page 3 paragraph (vi) of his American proposal). Referring to this paragraph and considering the date of writing, I was unaware that the Government had any such intention in mind at that time.

(3) That Tickell, is, in fact, playing off the Americans against the British to achieve his own ends.

(4) As instructed in your letter, paragraph 3, I had a meeting with Bonner, Tickell and Dolman. During this meeting Bonner expressed the opinion that he was against opening Bird Island to all and sundry in the way of FIDS and visiting expeditions, as it could have the effect of disturbing the Fur Seals, making them difficult to visit and handle by the Sealing Inspector. He also considered Tickell's Base Hut and equipment far too elaborate and expensive and stated that from the point of view as Sealing Inspector another hut similar to the one already on Bird Island would be adequate for his needs. However, considering Tickell's project, all three agreed that a hut 25' x 12' with a loft, accommodating four men would be suitable. This should be erected on concrete foundations, although Bonner favoured wood. Heavy equipment such as the Rayburn Cooker referred to in Tickell's proposal, would be far too difficult to get ashore, where all equipment and stores have to be landed by Norwegian Pram. Similar difficulty would arise with supplies of heavy fuel, and it was suggested that oil-fired cooking and heating facilities be provided.

A standard FIDS hut of about the same dimensions would be suitable although the expensive insulation provided in FIDS huts was not considered necessary. To sum up - a hut similar to FIDS standard type 25' x 12', not expensively insulated, fitted with loft, accommodation for 4 men, with oil-fired cooking and heating, and built on concrete pillars. No one could give any accurate idea of cost.

(5) The suggestion to build a hut on Bird Island has already had repercussions. Tickell imprudently discussed this with Green, who was most enthusiastic and already sees himself returning to South Georgia with a party of eight, including two of their wives. I do feel that with the provision of a large comfortable hut on Bird Island it will mean we are inundated with requests from various so-called scientific expeditions which we could not justifiably refuse on the grounds of lack of accommodation, and this would be contrary to Your Excellency's expressed desire to remove South Georgia from such influence.

The sealing investigations are of value to the island's economy but further knowledge of the 'behavioural conduct' of the Albatross cannot so be classed.

(6) Referring to paragraph (2) I would favour calling Tickell's bluff and agree to granting the Americans permission to establish a Base Hut as detailed in Tickell's Appendix 11 page 6, with the following restrictions:-

- (a) that the expedition be limited to two men, Tickell and one other,
- (b) that the purpose of the base be for the study of Albatross only,
- (c) that on completion of the programme in 1964 the Americans either remove the base hut or offer it for sale to the Falkland Island Government.

Thus the project would come under the heading of Anglo-American co-operation and in ~~one~~ case we would have the benefit of extra accommodation (Tickell's

hut designed to house 3) until 1964, and if at that time it is still necessary for biological work on Bird Island for seals we will have the option of buying the American hut, or if they decide to dismantle and remove it, then if it is considered necessary to provide additional accommodation for sealing, the erection of another hut similar to the one at present on Bird Island would be sufficient for the Sealing Inspector's needs and only cost about £100, which is £2,350 less than Tickell is asking us to spend on a hut for his personal expedition (see Tickell's proposals to FIDS page 8 paragraph 9, estimates Base Hut and equipment).

I am, Sir,

Your obedient servant,



Administrative Officer,  
South Georgia.

To  
His Excellency The Governor  
the Falkland Islands & Dependencies,  
Port Stanley,  
Falkland Islands.

FALKLAND ISLANDS DEPENDENCIES SURVEYAPPLICATION FOR BIOLOGICAL RESEARCH AT BIRD ISLAND, SOUTH GEORGIA1. Title of Research

The comparative behaviour, breeding biology and ecology of the albatrosses of the genus Diomedea.

2. Desired Starting Date

1st July 1961

3. Period of Time Involved

Three years; comprising eighteen months in the field and the remainder writing and working up results in the United Kingdom.

4. Description of ResearchA. Specific Aims

(i) To carry out studies of a varied nature bearing upon the behaviour, breeding biology and ecology of the Wandering Albatross Diomedea Exulans in comparison with the two Mollymauks Diomedea Melanophris and Diomedea Chrysostoma

(ii) By the study of museum material and the initiation of international inquiry to apply, for comparison, the study of birds at their breeding grounds in South Georgia with other island populations in the South Atlantic, Pacific and Indian Oceans.

B. Method

(i) The establishment of a small biological base on Bird Island, South Georgia, providing facilities for a party of two or three to overwinter. The hut, although small, needs to be well equipped and heated; there should be a 24 volt electric power system running from a high capacity battery bank charged from a 1 kilowatt diesel generator housed in a small subsidiary hut. Wireless communication equipment should be completely duplicated to lessen the chances of communication breakdown. At the termination of the proposed field work the base will be available for further biological projects whether on birds or Fur-Seals.

(ii) The ideal is for the party to be in the field early in October 1961 and to remain there until April 1963; this allows two complete summers observations to be linked with the single period of overwintering.

(iii) The work will be closely linked with the Bird Ringing Scheme of F.I.D.S. now administered by the British Trust for Ornithology. It is expected that 15,000 to 20,000 rings will be used.

## 5. Logistics

F.I.D.S. ships or charter vessels should be used to establish and relieve the base but in order that the research may begin early in October the party can travel to the island by air and whaling transport and sealer to prepare for the arrival of the hut and bulk of stores and equipment later in the year on a F.I.D.S. vessel.

## 6. Future of the Base

Although the project is limited to a period of less than two years in the field, the presence of the base and ecological programmes in progress make it unique situation for the continuance of long-term investigations of sea-bird populations especially since the island is, comparatively speaking, more accessible than other areas of F.I.D.S. and can be visited earlier and later in the summer season than any F.I.D.S. base.

## 7. Significance of the Programme

a) The southern oceans are the home of almost all the procellariiformes and the albatrosses the most highly developed group. The Wandering Albatross is the largest and the most frequently mentioned of all the sea-birds in the records of seafarers and explorers of the south yet little is known of the details of its life on the breeding grounds and its migrations away from them.

b) Until the recent activities of W.N. Bonner and the author's expedition in 1958/59 there has been no known area where a large population of Wandering Albatrosses was available close by an established base.

c) Such has been the controversy that has centred around this species that up till a few years ago one of the most eminent of marine ornithologists in the United States was still maintaining that the Wandering Albatross chick starved for a period of as long as six months. Even now the information available is scanty and little is known of the exact relationship of the chick to the parent during the extraordinarily long fledgling period. The proposed investigation has as one of its main objectives the study of starvation in overwintering chicks, using direct and/or respiration calorimetry together with other physiological tests such as the assay of blood sugar, in the study of metabolism.

d) Behavioural adaptation to bi-annual breeding is of considerable evolutionary significance and the presence of large colonies of the smaller albatrosses or Mollymauks D. melanophris and D. chrysostoma which complete their breeding cycles in a single season is most convenient for comparative studies both of behaviour and ecology, indeed as Garrick (Polar Record 10: 66, 299-306) to S.S.A.R. in problems of this nature the quantitative ecological approach has to be complimented by studies of other aspects especially behaviour.

e) D. melanophris and D. chrysostoma occur together at South Georgia and some other island although elsewhere they are found only singly. On Bird Island both segregated and intermixed rookeries are found and the chicks of the two species are apparently indistinguishable; clearly the segregating mechanisms and biogeography of these species deserve attention.

f) D. exulans and also the two species of Mollymauk are excellent subjects for feeding investigations since they readily regurgitate their stomach contents. Very large numbers of food samples can thus be obtained without wastage of birds. Plankton distribution charts of the 'Discovery' Investigations are available for the Antarctic/Sub-antarctic zones and provide a means of working out the feeding areas away from the breeding grounds. This type of work is particularly important to the appreciation of the ecology of the southern oceans. The total biomass of plankton removed by the marine mammals when considering the total energy exchange. It is interesting to speculate upon what the effect is of the reduction in whale stocks upon the populations of plankton grazing birds. The study of the food of marine birds has been listed by the S.C.A.R. Biological Group as one of the necessary tasks in Antarctic biology.

g) The recovery rate from ringed albatrosses away from their breeding grounds is low, but if large enough numbers can be marked the number of reports is sufficient for analysis of distribution. Bird Island is especially suitable for albatross ringing and already we have some indication that the oceanic dispersal of Mollymauks in their first year is not as extensive as that of the giant petrels.

h) It has been demonstrated that marine birds especially the petrels, have been responsible for the transport of seeds from one island to another in the southern hemisphere. These seeds become firmly attached to the last traces of fledgling down or by mud and oil to the feet of adults. That such young birds can rapidly move from one side of the globe to another has been clearly shown in the last few years by the landing of Giant Petrels, when an appreciable proportion became wrecked on foreign shores. It is to be expected that micro and macro-organisms are carried also and some of them may well be pathogenic. We know for instance that Mollymauks are infested with nematodes at certain times of the year and Giant Petrels are always attracted to rotting and putrifying carcasses. The ecology of parasites is intimately linked with that of their hosts and investigations of both at the same time is always convenient.

i) The need for conservation of the Antarctic and Sub-Antarctic Fauna has been unanimously agreed upon by the eleven member nations of S.C.A.R. In a recent paper Carrick (see above) summarized the state of the fauna indicating that study of the undisturbed flora and fauna should precede extension of human activities. He emphasised that scientific information even at survey level is still inadequate for the drafting of a final comprehensive plan of conservation. It was recommended that such a plan should include provision for adequate field study of populations and areas with long term guarantees against interference. Study of the albatrosses at Bird Island and elsewhere is closely aligned with these recommendations. This is especially important in the Falkland Islands and their Dependencies.

j) It is a fact that the government ordinances relating to the exploitation and preservation of birds in the Falklands and Dependencies are based upon little if any sound biological reasoning. They do not conform with current informed opinion on fauna conservation within the Antarctic and Sub-antarctic, but rather the reverse for they have allowed, for instance the introduction of Upland Geese Chloephaga picta leucoprera into South Georgia, a practice universally deprecated by conservationists and moreover in direct opposition to the advice of the Government biologist at the time. The recent creation of a Mink farm in the Falklands must be considered as a very serious potential danger to the indigenous species.

The size of the avifauna in these islands is large enough to allow complacency and fallacious ideas concerning the state of the populations. Species have been arbitrarily condemned as pests without any real understanding of their ecology and the measures taken against them are equally unreasoned.

The need to safeguard and improve the islands economy can well be understood but a thorough understanding of the natural resources and the exact degree of competition between domestic stock and natural populations is a prerequisite. The state of the Elephant Sealing industry at South Georgia in an illustration of how well this can be done.

The species with which this project is concerned are particularly vulnerable. During the South Georgia Biological Expedition 1958/59 it was noticed that the Wandering Albatrosses in one area at least had either disappeared altogether or had been subject to unusual predation for which man alone can be held responsible.

7. This project resembles closely one submitted to F.I.D.S. in November 1959 and which was approved in principle although later abandoned owing to shortage of funds. Application is also being made through the United States Antarctic Research Programme (U.S.A.R.P.) to the National Science Foundation (N.S.F.) for funds to support a similar programme under the sponsorship of Johns Hopkins University. Since South Georgia is outside the reference of the International Antarctic Treaty the authority of the Governor would be prerequisite to United States research activities on Bird Island.

Should F.I.D.S. still retain an interest in this research yet be unable to finance the whole operation it is suggested that an admirable degree of Anglo-American co-operation could be achieved whereby F.I.D.S. met the cost of the Base and its establishment (approximately \$5,000) together with the provision of one man as Base Leader, whilst the albatross research is financed from the United States, the workers being technically 'observers'.

#### 8. References:

1. Sir Raymond Priestley, M.C., c/o F.I.D.S., 22, Gayfere Street, London, S.W.1.
2. Professor F.T. Rogers Brambell, F.R.S., Dept. of Zoology, University College of North Wales, Bangor, Caernarvonshire.
3. Professor J.B. Cragg, Dept. of Zoology, Durham Colleges in the University of Durham, Durham.
4. Dr. R.C. Murphy, American Museum of Natural History, Central Park West at 79th St., New York, N.Y., United States.

#### 9. Estimates

The estimates cover the period July 1961 to July 1964. No figures are given for the establishment and relief of the Base since this would be most economically performed by F.I.D.S. vessels, however, because of the need to begin field work as early in October as possible other travel expenses would be incurred. In view of the shortage of time for preparation this includes one flight to Montevideo.

|                        | <u>1961</u> | <u>1962</u> | <u>1963</u> | <u>1964</u> |
|------------------------|-------------|-------------|-------------|-------------|
| Salary                 | £500        | £1,000      | £1,000      | £500        |
| U.K. Allowance         | 50          |             | 100         | 100         |
| Travel                 | 500         |             |             |             |
| Base Hut               | 1,000       |             |             |             |
| Generator Hut          | 50          |             |             |             |
| Hut fittings etc.      | 500±        |             |             |             |
| Wireless/Electrical    | 900         |             |             |             |
| Provisions & fuel      | 850±        |             |             |             |
| Photographic/recording | 500         |             |             |             |
| Biological             | 1,000       |             |             |             |
|                        | £5,850      | £1,000      | £1,100      | £600        |

‡ The estimates include provisions, clothing etc. for a second man but do not provide for salary and special equipment.

signed W.I.N. Tickell

8th December 1960

UNITED STATES ANTARCTIC RESEARCH PROGRAM

APPLICATION FOR A GRANT FROM NATIONAL SCIENCE FOUNDATION  
FOR U.S.A.R.P.

1. Name and address of institution

Department of Pathobiology School of Hygiene  
Johns Hopkins University.

2. Title of research

The comparative behaviour and ecology of the albatrosses of  
the genus Diomedea.

3. Desired starting date of research

1st July 1961

4. Time period for which support requested

3 years

5. Description of proposed research

A. Specific aims

(i) To carry out studies of a varied nature bearing upon the  
behaviour, and ecology of the Wandering Albatross Diomedea exulans  
in comparison with the two Mollymawks Diomedea melanophris and  
D. chrysostoma.

(ii) By the study of museum material and international inquiry  
to compare birds at their breeding grounds in South Georgia with  
the other island populations in the South Atlantic, Pacific and  
Indian Oceans.

(iii) Study of these species as vectors of pathogens.

B. Method

(i) The project allows for an initial period of one year to  
be spent at the Johns Hopkins University followed by two years  
in the field at a base established on Bird Island, South Georgia.

(ii) During 1958/59 Tickell mounted an independent reconnaissance  
expedition to locate areas in South Georgia suitable for research  
on the Albatrosses and Giant Petrels. At Bird Island large  
populations were available in a small area and it is believed that  
there is no other study area in the southern oceans which is so  
conveniently situated for field study of these species.

(iii) Much ground work was laid in the first visit. The following  
season breeding records were made by the resident Government Biologist  
and Tickell is visiting the island again this year, sponsored by  
U.S.A.R.P. Bird Banding Program.

(iv) The first twelve months will be spent at the School of Hygiene, Johns Hopkins University working and writing up the results of these first two seasons observations. The data are concerned with the aspects of albatross and giant petrel biology mentioned above and it is advisable that they should be written up prior to continuation of field activities. In this way full use of the preliminary investigations can be made in the planning of future research. The observations and material available are concerned with:-

- (a) Examination of food samples from D. chrysostoma and D. melanophris. In the ecology work great emphasis must be laid upon analysis of feeding habits. This is difficult in oceanic birds but with albatrosses quantitative analysis is possible. The identification of fragments of marine organisms is necessary and accommodation has been offered at the British National Institute of Oceanography (N.I.O.) by Dr. R.M. Laws. It is planned to spend July and August at the N.I.O. and the British Museum in London identifying material from Bird Island for comparison with the collections and distributions data of plankton of the Scotia sea and South Atlantic.
- (b) Examination of anatomical and embryological material of albatrosses.
- (c) Preliminary definition of behavioural postures in the four species of albatrosses breeding at South Georgia.
- (d) Account of incubation routine in the Wandering Albatross.
- (e) Breeding success and mortality in the Wandering Albatross. It is expected that this will produce further evidence to demonstrate bi-annual breeding in the species.
- (f) Preliminary examination of blood sera from Albatrosses, Giant Petrels and other species for evidence of pathogens whose distribution could be associated with the migrations of sea birds.
- (g) Preparation and testing of physiological apparatus for studies on metabolism of overwintering albatrosses' young.
- (v) The largest proportion of the second two years will be spent at the biological station where field studies will be continued in greater details.
- (vi) There is no station on Bird Island at the present time. It is possible that the Falkland Islands Dependencies Survey may establish one in the near future but this cannot be guaranteed. Provision must therefore be made for the setting up and operation of a station sufficient for a requirement of two biologists together with a third man as assistant and meteorological observer/radio operator.
- (vii) This station is minute in comparison with U.S.A.R.P. and 'Deepfreeze' operation. Because of the size of the party, the planning, logistics, establishment and maintenance of the station will of necessity be the responsibility of the three members themselves. An extra burden is placed upon the organization in addition to the preparation and pursuit of scientific programmes, but it has been shown by F.I.D.S. and in particular by Stonehouse and Bonner at South Georgia 1953/55, that small stations operated upon a comparatively limited budget can be productive of good scientific results.

(viii) The intention is to begin field work early in October 1962 and to continue until April 1964; this allows two complete summers' observations to be linked with a single overwintering.

(ix) An outline of requirements for the station is appended to this proposal.

6. The work will be closely linked with the Bird Banding Program of U.S.A.R.P. and in the three years will involve the use of 25,000 to 30,000 bands.
7. In view of the fact that South Georgia is British territory outside the reference of the Antarctic Treaty the authority of the Falkland Islands Government is necessary. Tickell's past record with F.I.D.S. and at South Georgia, leads him to believe that official permission will not be withheld. There is every opportunity here for profitable Anglo-American co-operation; the station will accommodate comfortably three men. An offer should be made to the Governor of the Falkland Islands to provide the third member of the station from amongst personnel of the Falkland Islands Dependencies Survey, preferably a meteorologist/radio operator.
8. An absolute minimum of two is required to occupy this base. There is thus a place for another American worker in an allied field.
9. Although the project is limited to a period of three years of which two years will have been spent on Bird Island, the presence of the station and the ecological programmes established, make it a unique situation for the continuance of long-term ecological studies of sea-bird populations, especially as the island is comparatively more accessible than the Antarctic Continent itself.
10. Significance of the Programme
  - a) The southern oceans are the home of almost all the procellariiformes, the albatrosses being the most highly adapted to soaring flight at sea. The Wandering Albatross is the largest and the most written about of all the sea-birds, yet little is known of the details of its life on the breeding grounds and its migrations away from them.
  - b) Until the recent activities of Tickell on Bird Island, South Georgia, there has been no known area where a large population of Wandering Albatrosses has been available for study.
  - c) Up to a few years ago one of the most eminent of marine ornithologists in the United States still considered that the Wandering Albatross chick starved for a period of as long as six months. Even now the information available is scanty and little is known of the exact relationship of the chick to the adult during the extraordinarily long fledgling period. The proposed investigation has as one of its main objectives the study of starvation in these overwintering chicks using respiration calorimetry and other physiological tests such as the assay of blood sugar, in the study of basal metabolism.
  - d) Behavioural adaptation to bi-annual breeding is of considerable evolutionary significance and the presence of large colonies of the smaller albatrosses or mollymauks (D. melanophris and D. chrysostoma) which complete their cycles in a single season, is very convenient for comparative behaviour as well as other

aspects. Indeed, as Carrick (Polar Record 10: 66, 299-306) has said, in problems of this nature the quantitative ecological approach has to be complimented by study of other aspects, especially behaviour.

- e) D. melanophris and D. chrysostoma occur together at South Georgia and some other islands although elsewhere they are found only singly. On Bird Island both segregated and inter-mixed rookeries are found and the chicks of the two species, apparently indistinguishable; clearly the segregating mechanisms and biogeography of these species deserve attention.
- f) D. exulans and also the two species of mollymawk are excellent subjects for feeding investigations since they readily regurgitate their stomach contents. Very large numbers of stomach samples can thus be obtained without wastage of birds. Good plankton distribution maps, made by the 'Discovery' Investigations are available for the West Antarctic quadrant of the Antarctic Sub-Antarctic zones and these provide an excellent basis for the study of ecology away from the breeding grounds. This type of study is particularly important to the appreciation of the whole ecology of the southern oceans. The total biomass of plankton removed by the marine avifauna is as significant as that utilized by the marine mammals in calculations of total energy exchange. Moreover, what changes are occurring in the populations of plankton grazing species when the whale stocks are being so depleted? The study of the food of marine birds has been listed by the S.C.A.R. Biological Group as one of the necessary tasks in Antarctic biology.
- g) The recovery rate from banded albatrosses away from the island is low, but if large enough numbers can be marked, the number of reports is sufficient for analysis of distribution. Already we have some indication that the oceanic dispersal of the mollymawks in their first year is not so extensive as that of the Giant Petrels.
- h) The need for conservation of the Antarctic and Sub-Antarctic has been unanimously agreed upon by the eleven member nations of S.C.A.R. In a recent paper, Carrick (see above) summarized the state of the fauna indicating that study of the undisturbed flora and fauna should precede extension of human activities. He emphasized that scientific information even at survey level is still inadequate for the drafting of a final comprehensive plan of conservation. It was recommended that such a plan should include provision for adequate field study of populations and areas with long-term guarantees from interference. Study of the albatrosses at Bird Island and elsewhere is closely aligned with these recommendations, especially since it allows within the framework of the project and a very limited number of workers, a fairly accurate census of the world population to be made.
- i) It is thought that marine birds, especially the petrels have been responsible for the transport of seeds of vascular plants from one island to another in the southern oceans. These seeds become firmly attached by barbules to the last traces of juvenile down or stuck by mud and oil to the bird's feet. Banding operations on several antarctic and sub-antarctic islands has shown that young birds can move rapidly from one side of the globe to another. Recoveries in Peru of birds banded in Antarctica show that individuals banded at the southern extreme of their range can be the same birds found at the opposite, tropical extreme of their flight distribution.

There is therefore an important connecting link between the isolated populations of the antarctic and the fauna of the other continents of the southern hemisphere. It is to be expected

that these birds are the carriers of macro and micro organisms some of which may prove to be pathogenic. We know for instance that some of the albatrosses are infested with nematodes at certain times of the year. Giant Petrels are scavengers upon carcasses of seals, penguins and other antarctic species and the same birds will later be swarming about fishing craft and in the harbours of Australia and South Africa, in close contact with human food supplies. The ecology of parasites is intimately linked with that of the hosts and investigation of both simultaneously is always convenient.

## 11. Biographical Sketch

William Lancelot Noyes Tickell. Born 21 October 1930

Degrees B.Sc. University of Wales 1954 major in zoology

M.Sc. " " " 1959 zoology

1954 - 1958 Member of the Falkland Islands Dependencies Survey. Served from November 1954 to March 1957 at the base in Signy Island in the South Orkneys carrying out the duties of Meteorologist, Biologist and Base Leader during the 1956 winter. Led the main survey journeys on Coronation Island during winter of 1956. On return to the United Kingdom worked at the Edward Grey Institute, Oxford under Dr. David Lack writing up field research carried out on Signy Island. 1958 - 1959 led an independent biological expedition of two men to Bird Island, South Georgia, supported by F.I.D.S., where pilot studies on albatrosses and Giant Petrels were set up. The expedition participated to a major degree in the U.S.A.F.P. Bird-Banding Program. 1960 lecturing for the Commonwealth Institute of London, on polar affairs. Visited the United States to work on the results of the U.S.A.F.P. Bird-Banding results under Dr. W.J.L. Sladen. This is being followed in the 1960/61 season by a two man bird-banding expedition to Bird Island, South Georgia. Appointed Assistant at Johns Hopkins University School of Hygiene for duration of work under Dr. Sladen.

Other interests and activities: mountaineering and skiing, sailing, photography, history and literature.

Membership of Societies relevant to this project:

Royal Geographical Society  
British Ornithologists Union  
British Ecological Society  
Zoological Society of London

- References: (i) Dr. W.J.L. Sladen, M.B.E., Dept. of Pathobiology, Johns Hopkins University, 615, North Wolfe Street, Baltimore 5, Md.
- (ii) Professor F.W. Rogers Brambell, F.R.S., Dept. of Zoology, University College of North Wales, Bangor, Caernarvonshire, United Kingdom.
- (iii) Professor J.B. Cragg, Dept. of Zoology, Durham Colleges in the University of Durham, Durham, England.
- (iv) Sir Raymond Priestley, M.C., c/o F.I.D.S., 22, Gayfere Street, London, S.W.1.

## 12. Previous Work

During service with F.I.D.S. completed a breeding biology and

systematic study of the Dove Prion Pachyptila desolata for which an M.Sc was awarded. Initiated large scale banding programme of the Giant Petrels within F.I.D.S. Assisted Dr. W.J.L. Sladen in the organization of the F.I.D.S. Bird-Ringing Scheme up to the time of its hand-over to the British Trust for Ornithology F.T.O. Began field studies of albatrosses on Bird Island 1958/59 and arranged follow-up observations during 1959/60. Continued studies at South Georgia 1960/61 under the auspices of U.S.A.R.P. Bird-Banding Program.

13. Publications

- 1958 'Antarctic Bird Banding by the Falkland Islands Dependencies Survey 1945 - 1957' Bird Banding, 29; 1-26 (joint author with W.J.L. Sladen)
- 1960 'New Methods of colour marking Petrels' The Ring, 22; May.
- 1960 'Chick-feeding in the Wandering Albatross Diomedea exulans' Nature Vol. 185, pp. 116-117
- 1960 'Notes from the South Orkneys and South Georgia' Ibis 102; 612-614
- 1961 'Recoveries of ringed Giant Petrels Macronectes giganteus' Ibis, ? (in press)

14. Publications of other workers

The most exhaustive work in the field of albatross biology has been that of L.E. Richdale on the Royal Albatross Diomedea epomophora which is a close relative of the Wandering Albatross. The following papers are all by Richdale:

- 1939 'A Royal Albatross Nesting on the Otago Peninsula, New Zealand' Emu, 38; 467-488
- 1942a 'Supplementary Notes on the Royal Albatross' Emu 41; 169-184, 253-264
- 1949c 'Buller's Mollymawk; Incubation data' Bird Banding, 20; 127-141
- 1950c 'Review on Royal Albatross at Campbell Island' Emu, 50; 142-143
- (1949a The Pre-egg Stage in Buller's Mollymawk. No.2; 1 - 52
- (1950b The Pre-egg Stage in the Albatross Family No.3; 1-92
- (1952 Post-egg Period in Albatrosses No.4; 1 - 66
- 1957 Jameson, W. 'Wandering Albatross' Hart-Davis, London
- 1959 Gibson, J.D. & Sefton, A.R. 'First Report of the N.S.W. Albatross Study Group' Emu, 59; 73-82
- 1960 Gibson, J.D. & Sefton, A.R. 'Second Report of the N.S.W. Albatross Study Group' Emu, 60; 125-130

Biological Monographs

The presence of large rookeries of the Black-Footed Albatross Diomedea nigripes and the Laysan Albatross Diomedea immutabilis on islands of strategic importance in the Hawaiian Archipelago have provided an economic, military and vital significance to studies of these species. Some publications are:

- Miller, Loye, H. 1940 'Observations on the Black-Footed Albatross' Condor, 42; 229-238

- Yogom, C. 1947 'Notes on the Behaviour and Abundance of the Black-Footed Albatrosses in the Pacific Waters off the Continental N. American Shores' Auk, 61; 507-525
- Thompson, D. Q. 1951 'Notes on the Distribution of the No. Pacific Albatrosses' Auk, 68; 227-235
- Bailey, A. M. 1952 'Laysan and Black-Footed Albatrosses' Bull. Denver Mus. Nat. Hist. Pic. 6; 1-79
- Kenyon, K. W. & Rice, D. W. 1958 'Homing of Laysan Albatrosses' Condor, 60; No. 1, 3-6
- Kenyon, K. W. et al 1958 'Birds & Aircraft on Midway Island' Special Sci. Report-Wildlife No. 38; 1 - 51

| 15. <u>Budget</u>                             | <u>1961</u> | <u>1962</u> | <u>1963</u> | <u>1964</u> |
|---|-------------|-------------|-------------|-------------|
| Salary \$6,000 p.a.                           | \$3,000     | \$6,000     | \$6,000     | \$3,000     |
| 25% Polar Allowance                           |             | 500         | 1,500       | 750         |
| Travel:                                       |             |             |             |             |
| Air flights between<br>Baltimore & Montevideo |             | 500         |             | 500         |
| Sea passages:<br>Montevideo-South Georgia     |             | 100         |             | 100         |
| Sealing vessels chartered<br>at South Georgia |             | 500         |             | 500         |
| Travel in U.S.:                               |             |             |             |             |
| Baltimore-Washington-New<br>York              | 100         | 100         |             |             |
| Per diem:                                     |             |             |             |             |
| 40 day in England @ \$5.00                    | 200         |             |             |             |
| c. 8 days in Argentina<br>@ \$12.00           |             | 100         |             | 100         |
|   | <hr/>       | <hr/>       | <hr/>       | <hr/>       |
|   | \$3,300     | \$7,800     | \$7,500     | \$4,950     |

Scientific Equipment:

|   |       |
|---|-------|
| Microscopes, binoculars<br>& compound with<br>accessories                         | 1,000 |
| Respiration chamber &<br>gas analysis apparatus                                   | 500   |
| Blood testing instruments<br>haemocytometer, photo-<br>electric haemoglobinometer | 300   |
| Multiple recording<br>electronic thermometers                                     | 300   |
| Biological calorimeter &<br>accessories   | 1,000 |
| Oxygen bomb calorimeter<br>& accessories  | 600   |

Budget continued:

|   | <u>1961</u> | <u>1962</u> | <u>1963</u> | <u>1964</u> |
|---|-------------|-------------|-------------|-------------|
| Multiple recording radiation counter    | 500         |             |             |             |
| Homogenizer                             | 100         |             |             |             |
| Portable electric pH meter              | 150         |             |             |             |
| Balances                                | 200         |             |             |             |
| Centrifuge                              | 150         |             |             |             |
| Serum collecting, syringes, tubes, etc. | 300         |             |             |             |
| Miscellaneous lab. equipment:           |             |             |             |             |
| Glassware, etc.                         | 500         |             |             |             |
| Typewriter & stationery                 | 100         |             |             |             |
| Calculator, manual                      | 100         |             |             |             |
| Refrigerator, portable                  | 300         |             |             |             |
| Incubator                               | 300         |             |             |             |
| Photographic equipment etc:             |             |             |             |             |
| Cine camera & accessories               | 500         |             |             |             |
| 16 mm Kodachrome film                   | 300         |             |             |             |
| Tape Recorder                           | 300         |             |             |             |
| Recording tapes                         | 100         |             |             |             |
|   | <hr/>       |             |             |             |
|   | \$10,900    | \$7,800     | \$7,500     | \$4,950     |
| Contingencies 10%                       | 1,090       | 780         | 750         | 495         |
| Johns Hopkins University 15%            | 1,635       | 1,170       | 1,125       | 742         |
|   | <hr/>       |             |             |             |
| Total                                   | \$13,625    | \$9,750     | \$9,375     | \$6,187     |
| Round Total                             | \$14,000    | \$10,000    | \$10,000    | \$7,000     |

Calculations have been made on the assumption that all passages will be charged. However, if United States ships are available for establishment and/or relief of the Bird Island station, the costs will

be appreciably less. It is not unlikely that free passages or passages at a reduced rate will be available on expedition vessels of other countries. These will significantly decrease calculated expenditure for travel.

As indicated earlier a second man is required for the period on Bird Island and in view of the fact that the station is financed from National Science Foundation, this should be an American, preferably a biologist. With the exception of salary, travel and specialist equipment, these estimates provide for a second man. They do not provide for a third member whom it was suggested earlier should be a British Observer.

APPENDIX I - METEOROLOGICAL

It is accepted that personnel at a station on Bird Island, South Georgia, will as a matter of course, undertake routine meteorological observations for climatological purposes.

It will be possible to undertake observations at the four main synoptic hours, but a routine involving observations at three hourly intervals would be impossible without increasing the personnel and altering the whole nature of the station.

Depending upon the state of communication equipment and the demands of the main biological programme it may be possible to offer transmission of weather data to the main South Georgia meteorological station and the Falkland Islands Meteorological Service for use in synoptic analysis.

The usual instrumental and observational records can be maintained but it is unlikely that Pilot Balloon ascents will be possible.

It is hoped to carry on micro-meteorological observations of weather conditions over the albatross rookeries as a part of the ecological programme.

Climatological data from Bird Island would be of considerable interest at South Georgia. There has been a weather station in East Cumberland Bay since the beginning of the century but the site of the station is far from ideal, records showing a marked bias due to local topographical features, chiefly the sheltering effects of high mountains on three sides, the sector NE to NW being the only one open to the sea. Immediately to the south of the station rise the Allardyce Range, the highest mountains in South Georgia reaching an altitude of almost 10,000'. Föhn winds and cloud banks are very characteristic and account for abnormally high temperatures in the Cumberland Bay area. For instance, between 1944 and 1950 maximum temperature recorded in South Georgia (75°) was equal to that for the Falkland Islands, non glaciated islands in the Sub-Antarctic on the other side of the Antarctic Convergence.

Bird Island, in contrast, is situated at the Northwest extremity of South Georgia and has no obstruction over the sector 140° to 090° and an absence of high mountains.

Equipment for a complete meteorological station is available at no charge from the Air Ministry Meteorological Office of the United Kingdom.

## APPENDIX II

### BIRD ISLAND BIOLOGICAL STATION, SOUTH GEORGIA

#### ACCOMMODATION AND FACILITIES FOR 2 - 3 MEN

OCTOBER 1962 - APRIL 1964

#### I Present facilities available:

There has never been any station or permanent habitation on Bird Island.

In November 1958 a small hut measuring 6' x 8' was erected in Jordan Cove to accommodate the Government Sealing Inspector and his assistant during their short summer visits to the island, these being not more than one month duration.

This hut although so small is admirable for the purposes it was intended. For a stay in excess of one month extra tents are required for storage etc. It belongs to the Falkland Islands Dependencies Survey but was made available to Tickell's expedition for 15 weeks in 1958/59 and is again being used by his Bird Banding party this season for a similar period.

#### II Proposed New Station:

1. It is clear that for any party which contemplates overwintering on Bird Island further accommodation is necessary. The proposal put forward for research on the albatrosses envisages a party of 2 - 3 men spending a continuous period of 18 months on the island. During this period no intermediate official visit by any vessel should be necessary although in fact calls by sealing vessels may be expected during September and October. It is necessary for the party to be completely self-reliant and self-contained as far as supplies and equipment are concerned. The presence of a medical officer however is not essential in small parties (see F.I.D.S. operations 1945 - 1960, periodic reports in 'Polar Record') moreover at South Georgia medical aid can be summoned by radio from the whaling stations where there are hospitals.

2. The station requirements outlined below are designed for a party of two although a third man can be accommodated without cramping. If required, two additional men could be housed during brief summer visits by utilising the emergency hut.

#### III Outline of Requirements of the Station:

Three buildings are desirable to ensure the minimum safety, working facilities and comfort of the party. Trivial luxuries are dispensed with but basic comfort is a justifiable demand not only for morale but for the satisfactory pursuit of research.

1. Main Hut - A sound semi-permanent wooden building measuring 25' x 10' with double flooring and adequate insulation of walls and roof. Ideally the foundation should be of concrete piers. The roof is pitched at 45° to allow maximum storage space in the loft and heating is provided by a stove burning solid fuel, to which is fitted a tank supplying constant hot water (Rayburn No.1 see attached leaflet). A design was drawn up according to Tickell's specification by a firm in England (Alexander Cowie & Co. Ltd., see attached drawing and specifications) which estimated the costs at about £3,000.00. Doubtless an American company can be found to produce the same construction if necessary.

2. Generator Hut - A simple, small uninsulated structure of metal or wood to house generators and batteries away from the main hut. Built on the concrete engine bed.

3. Emergency Hut - Small hut providing emergency accommodation equipment and provisions for use in the event of destruction of the main hut. Out of fire reach from the main hut.

N.B. the present biologist hut on the island could be used for this purpose.

4. Wireless - It is not necessary to emphasise the need for communication equipment, complete duplication is advisable for emergency. Transmitter output of at least 10 watts on R/T is needed in South Georgia and a higher output is desirable for more distant operation. Two types have proved themselves in South Georgia and one of these made by Ernest Turner Limited (see attached specifications) is produced at about \$900.00 each and others by B.W.F. Limited, England, at a similar price. Similar equipment is probably available in the United States.
5. Diesel Generator - A source of electric power is essential for wireless and instruments and can conveniently be adopted for lighting purposes also. Since a constantly running alternator is impracticable for such small stations the F.I.D.S. practice has been to use a bank of high capacity batteries delivering 2 1/2 volts at a maximum of 120 Ampere Hour. These batteries are charged from a 1 kilowatt generator driven by a small diesel engine ('Petter' type PAZ 1 see attached leaflet).

#### IV Establishment of the Station:

Various routes and combinations of vessels may be used to establish, supply and relieve the station: a) Ships of the United States Navy or research vessels of U.S.A.R.P. operating directly between a United States port and South Georgia.

b) F.I.D.S. ships and charter vessels between the United Kingdom, South America, Falkland Islands and South Georgia. In the past passages for personnel and shipping of freight for expeditions has readily been granted by the Governor. However, both research and charter vessels of F.I.D.S. are heavily committed in the logistic tasks of maintaining British Antarctic bases; whilst further co-operation is to be expected in the future the demands of other priorities have to be borne in mind.

c) Transport vessels of British, Argentinian and Norwegian whaling companies between the United Kingdom, Norway, Buenos Aires and South Georgia. Freight has been shipped at \$30.00 per ton.

d) In the event of routing by routes b) and c) above, coastwise passages between the whaling stations and Bird Island would be necessary. Sealing vessels may be chartered at \$300.00 to \$500.00 per day.

It may be that assistance of ship's personnel will be available in establishment of the station but preparations are made on the assumption that all building, installation of hut fittings and equipment and subsequent maintenance can be carried out by the members of the party.

V Budget:

|  |                 |
|--|-----------------|
| Fully insulated wooden hut 25' x 10'   | ₡3,000.00       |
| Fittings for hut, bunks, desks, workbench lockers, cupboards, sink unit, table, chairs, curtains and carpets | 600.00          |
| 'Rayburn No.1' Anthracite burning stove with hot water tank and insulated smokestack                         | 300.00          |
| Generator hut  | 300.00          |
| Special clothing, bedding, medical and fire fighting equipment   | 300.00          |
| Cooking and Kitchen equipment  | 200.00          |
| Workshop tools and materials   | 500.00          |
| Spares for Hut and stove etc.  | 200.00          |
| 12 x 6 volt 120 A.H. batteries   | 360.00          |
| Lighting and wiring etc.   | 200.00          |
| 1 Kilowatt generator and 'Petter' PAZ 1 diesel engine  | 1,000.00        |
| 2 Radio transmitter/Receivers complete with spares and accessories   | 2,000.00        |
| Provisions, 2 men for 18 months  | 2,500.00        |
| Fuel, Kerosene, Gasoline, Diesel Oil and Anthracite  | 500.00          |
| Freight charges on 25 tons   | 1,000.00        |
| Sealing vessel charters  | <u>1,000.00</u> |
|  | 13,960.00       |
| Contingencies 10%  | <u>1,396.00</u> |
|  | 15,356.00       |
| Round to   | ₡ 15,500.00     |

I had a talk to-day with Tickell about his Bird Island project. I told him that I thought this Government could not help with a hut, and he said that his scheme had now received the approval of the American authorities. On the question of the hut, I said permission would be given for it to be erected, and after the summer-winter-summer programme, it would be offered to the Government for purchase, and if Government did not wish to buy it, it would have to be dismantled and removed. I said I was prepared to give permission to a two man party specifically for the study of the albatross. Tickell said this would all be satisfactory.

Tickell said that the bird-banding programme had gone very well this year, and he would like it to continue next season because his own project would not start before 1962. He said he thought that Dollman would be interested, and he hoped to get one other FID. They would be able to assist Bonner with his seal tagging. He asked whether we would be able to help with transport etc., and I said that I would hope so, but it entirely depended on whether space would be available for men and materials. He undertook to keep me fully informed, and to give me as much notice as possible of any requirements he might have.

He said that Cawkell has recently published a Paper in the Ibis on birds of the Falklands, which he thought would be of interest to us here, and he would try to get me copies.

RA

25th April 1961

35

S/f

To see from Jolic 1 for information please.

JH for BS  
4/5/61

KCS.

Seen thank you.

JH 4/5/61

KCS

36A

34. Do you think we should advise South Georgia by memo about Tickell's future plans?

JH  
9.5.61

37.

g.s. 2.10

O.I.C

in draft.

8 23/5/61

~~JH~~

23.5.61

D/5/61

25th

To: The Administrative Office

From: The Colonial Secretary,

SOUTH GEORGIA.

Ornithological Investigations

1A  
I am directed to refer to the Bird Island project undertaken by Tickell and to inform you

- (i) Tickell has been advised that permission would be granted for the erection of a hut on Bird Island;
- (ii) Permission would be granted for a two man party for the study of albatross.

2. Tickell has undertaken to keep us fully informed and will give as much notice as possible of his intentions.

(Sgd) D.R.Morrison.

for Colonial Secretary.

DRM/FH

24 18.7.61 (mail)

No mail 19.7.61

B. 8. P. 61 (wait)

to wait

See 26.10.61

HT /

the document might like  
to see Dist

26.10.61

Seen.

See 12.12.61

tel for that  
from FDS office

EXTRACT FROM TELEGRAM TO SECFIDS. FROM FIDS. LONDON OF 8.12.61.  
(Original filed in: 1984/II)

Kista sailed 2nd with Dollman LeFeuvre Wylie South Georgia.

~~BW 12 2 62 (30)~~  
P.A.

LH

Extract from telegram No. 167 of 27th June, 1962 from Administrative Officer, South Georgia, to Colonial Secretary, Stanley. Original filed in D/5/62.



.....

(e) There will not be a service boat available next season to take the sealing inspector to Bird Island or for elephant seal tagging. Suggest Tickell should be informed no service boat.

39 b.

Copy of telegram No. 159 from Colonial Secretary to Administrative Officer South Georgia, dated 31st July, 1962. Original filed in D/5/62.

.....

No. 159. Yourtel No. 195 stop Transport for Tickell can probably be arranged.

Secretary.



DECODE.

No. 34.

TELEGRAM.

From Pola Survey, London.

To Colonial Secretary, Stanley.

Despatched : 12th July, 1962 Time : 1147

Received : 12th July, 1962 Time : 1030

119/62. If Vaughan wishes winter Bird Island Tickell will accommodate any period up to 18 months but food for Vaughan required ex Grytviken request you state intentions.

Reply at 46.

Polasurvey

39.41

O.I.C. S.A.S.,

f. <sup>40</sup> 38. Is this one of your series, pl.? If not we will have to deal with it here.

P/L : TB

A.C.S.

42

Not ours.

2.2  
1.7.62

§ p.c.s  
13.7.62.

42a

We should have had the <sup>40</sup>~~38~~ to B.A.S.

Vaugher is S.F. staff. Saw copy of his telegram  
to AO. Sir Polakovsky presumably did not know about  
absence of boat which was covered due to Tidwell -  
are we to undertake it will be impossible for us  
to get to B.A.S. Tidwell?

or  
18/1/62

## GOVERNMENT TELEGRAPH SERVICE

FALKLAND ISLANDS

SENT

~~43~~  
43

Wt P2809 5/61

| Number | Office of Origin            | Words | Handed in at | Date    |
|--------|-----------------------------|-------|--------------|---------|
|        | Psy                         |       |              | 23.7.62 |
| To     | etat ADMINOFF SOUTH GEORGIA |       |              | SGA/c   |

No. 150. Following received from Polasurvey London quote if Vaughan wishes winter Bird Island Tickell will accommodate any period up to 18 months but food for Vaughan required ex Grytviken request you state intentions unquote stop Polasurvey presumably do not know of absence of boat which information was conveyed direct to Tickell stop Understand it will be impossible for anybody to get to Bird Island query

Secretary

Time RB/TB

Reply at 424

DECODE.

44

TELEGRAM.

No. 107.

From Administrative Officer, South Georgia.

To Colonial Secretary, Stanley.

Despatched : 25th July, 1962 Time : 1240

Received : 26th July, 1962 Time : 1111

43 ~~42~~

No. 195. Your telegram No. 150. Vaughans programme for season 1962/63. Visit Bird Island early November until about 21st December for pup count. Again 1st January until 15th January for tagging. Whether there will be transport available for this programme is a matter that will depend on the co-operation of BAS ships and possibly HM ship. Grateful if you could ascertain whether or not this help would be available. Vaughan quite prepared to cover programme by going to Bird Island early November and staying there until late January. Confirm that there will not be a Grytviken service boat available for Bird Island during coming season as Albion Star only intend keeping ten men on station who will be fully occupied in catering for Simms men besides normal station services. It might be as well to warn Tickell that only very limited food supplies at Grytviken. Also confirm that Vaughan does not intend to winter Bird Island as he is due to go on leave March 1963.

Administrative Officer

#

45

~~F. T~~

1. Transfer for Tickell can probably be arranged

P/L : TB

So inform.

2. Inform Tickell as suggested. (Better I think for

all correspondence to be with Polansky.

5<sup>2</sup> 30/7/62.

GOVERNMENT TELEGRAPH SERVICE

46

FALKLAND ISLANDS

SENT

Wt P2809 5/61

| Number                 | Office of Origin | Words | Handed in at | Date    |
|------------------------|------------------|-------|--------------|---------|
|                        | Psy              |       |              | 31.7.62 |
| To                     |                  |       |              |         |
| etat POLASURVEY LONDON |                  |       |              | SGA/c   |

40 Yourtel 119/62 of 12th July stop Vaughan due leave March 1963 and does not intend to winter Bird Island stop Grateful warn Tickell that only very limited food supplies at Grytviken

Colonial Secretary

Time RB/TB

Bu 4.12.62 (KIV passage arrangements)

46A  
Dec. 30, 1963.

C.S.

Am never certain whether Tickell's Bird Island correspondence should go to Secretariat file or BAS. Am sending this old letter to Secretariat for filing and a copy to BAS for their records. If however the letter should go on a BAS file, will you please return.

ER.

Jue  
W!

United States Antarctic Research Program

South Georgia Expedition 1962-64

Bird Island

20th. August 1963

Dear Sir Edwin,

You will have been informed some time ago that the U.S.N.S. 'Eltanin' called at Bird Island in the latter part of August. This letter, I hope, will leave no ambiguity concerning my part in the visit.

Nothing that I have said or written either to my supervisor Dr. W. J. L. Sladen or the U.S.A.R.P. authorities at the National Science Foundation could have been misinterpreted to indicate that a U.S. vessel would be required to call here.

I am in fact considerably mystified about the circumstances leading to the proposed visit. No notification of 'Eltanin's movements has been sent to me by U.S.A.R.P.. The first information that reached me was in my wife's monthly airletter broadcast from B.A.S. Stanley. She mentioned that Dr. Sladen had told her that 'Eltanin' would be stopping at Bird Island. Since then I have had one brief note (by radio) from the ship confirming that she was bringing me two letters !

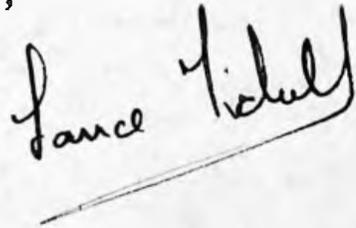
You will appreciate that as a junior worker I have little authority with N.S.F.; Dr. Sladen is my immediate superior and it is through him that any recommendations of mine reach N.S.F. In all my dealings with him I have emphasised your wish that U.S. ships should not call here; he is also aware that there is no logistic need for such a visit and his advice should have effectively arrested any move by N.S.F. to send the ship here.

Copy also at 28 on 2018/A.

Being aware of the shipping regulations for South Georgia, I have, of course, informed the Administrator of the proposed visit and notified the master of the 'Eltanin' that vessels are required to obtain government authority and customs clearance from Grytviken. Nevertheless I still find the situation most embarrassing. After the exceedingly generous support I have received from N.S.F. it is unthinkable that I should ever be other than appreciative. At the same time I must gratefully acknowledge that without Dr. Sladen's enthusiastic interest I would not have had this financial backing. You yourself have given me a full measure of your interest and assistance and at all times I have been resolved to abide by your wishes. I can only express my regret that this has not been possible.

With kind regards,

Yours sincerely,

A handwritten signature in cursive script, reading "W.L.N. Tickell". The signature is written in dark ink and is positioned above a horizontal line that extends to the right.

W.L.N. Tickell.

H.E. Sir Edwin Arrowsmith, K.C.M.G.,  
The Colonial Office,  
London, S.W.1.

c.c. Dr. W.J.L. Sladen.

DECODE.

No. 110.

TELEGRAM.

From Administrative Officer, South Georgia.

To Colonial Secretary, Stanley.

Despatched : 16th October, 19 62. Time : 1730

Received : 17th October, 19 62. Time : 1015

No. 266. Following Medical supplies required by Sealing Inspector for use Bird Island. Medical Officer Grytviken unable to supply. Grateful if S.M.O. could supply from stock otherwise please place telegraphic Indent to be despatched by air to connect with "Shackleton" at Montevideo. Charge head 1B subhead 37 seal research. 60 250 milligram capsules sigmamyacin or failing this achromycin. 4 15 gram containers cicatrin powder.

Administrative Officer

P/L : LH

BUF. early please (Intld.) HLB

H.C.S Cannot supply from stock *for adm. 17/10/62*

Telegraphic  
re AC, placed  
5/11  
19.10.62

48  
Please see  
I/315/62  
AS 70  
Can you 2  
17/10/62  
50  
Pl. order  
1/11/62

40  
4

DECODE.

No. 203.

TELEGRAM.

51

*From* Administrative Officer, South Georgia.

*To* Colonial Secretary, Stanley.

---

*Despatched* : 22nd November, 19 63. *Time* : 1930

*Received* : 23rd November, 19 63. *Time* : 0945

No. 265. Seal research programme. Vaughan wishes to go to Bird Island early December and return about first week January. Accompany Shackleton on her January sealing trip. February/March visit Husvik and Barff Peninsula both these visits in conjunction with Clagg and Longton. Grateful if BAS can help particularly with Bird Island trip.

Administrative Officer

*Repeat 56*

P/L : LH  
(Intld.) HLB

52

J.E.

Can I pass this on to you please.

L.G.

25.11.63

OIC BAS

53

Pl. make copy of 52 f.y. files  
& reply to A.O. direct with copy for  
this file

RA. 25.11.63

RA

# GOVERNMENT TELEGRAPH SERVICE

FALKLAND ISLANDS

## SENT

52.  
54

Wt. P2809 5/61

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

27.11.63.

To A.O. SOUTH GEORGIA.

BEAT O.I.C. ALL BASES (R) MASTER BRADSTON & MASTER BISCOE. ALSO TO

79/888 BISCOE SAILED PORT STANLEY 11.00 LOCAL MONDAY 25TH FOR DECEPTION DISSEMBARKING HOWIE WARR (MEET) WILSON (DEP) STOP HOPE BAY DISSEMBARKING GREEN (OPERATIONS OFFICER) CUNNINGHAM (BASE LEADER ADELAIDE) EMBARK LE PEUVRE (IF OPPORTUNITY ALLOWS SEALS WILL BE COLLECTED) STOP SIGNY DISSEMBARKING NOLOGNE LE PEUVRE EMBARKING GODSAL STOP GRYTVIKEN EMBARKING CLAGG VAUGHAN HANVIK DISSEMBARKING CLAGG LONGTON BIRD ISLAND DISSEMBARKING VAUGHAN STOP BY THIS TIME ALL AUTHORITIES SHOULD HAVE PRINTED ITINERARY AND VOYAGE CAN BE FOLLOWED FROM THIS STOP AS ICE CONDITIONS ARE STILL SUCH AS TO CAUSE DELAYS TIMES OF ARRIVAL SHOULD BE GUESSED FROM DIRECT CONTACTS WITH SHIP STOP A.O. SOUTH GEORGIA IS REQUESTED TO KEEP BIRD ISLAND PARTY INFORMED.

*Copy to Secretariat File D/5/61.*

Time

# GOVERNMENT TELEGRAPH SERVICE

55

FALKLAND ISLANDS

## SENT

Wt. P2809 5/61

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

27.11.63.

To

STAT. A.G. SOUTH GEORGIA

142/470 FOR VAUGHAN FROM HOLEGATE BERLINS SOUTH SANDWICH SURVEY PLANNED BY  
PROTECTOR FOR PERIOD 3 TO 28 MARCH STOP YOUR PARTICIPATION TO UNDERTAKE  
BURIAL CENSUS AND OTHER WORK ALSO REPRESENTING FALKLAND GOVERNMENT INTERESTS  
PROPOSED AND APPROVED STOP PLEASE SIGNAL AGREEMENT ENDS STOP PROTECTOR W/V  
WITH SHACKLETON EARLY MARCH AT GRYTVINCH TO TRANSFER PROJECT PERSONNEL.

ANTARCTIC

Time

# GOVERNMENT TELEGRAPH SERVICE

56

FALKLAND ISLANDS

## SENT

Wt. P2809 5/61

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

27.11.63.

To

STANT A.S. SOUTH GEORGIA

144/469 YOUR 265 AND RELEVANT PART OF MY 77/888 SEND HAVE BEEN FIRST CALL AROUND  
27th DECEMBER STOP VAUGHAN WILL BE BROUGHT OUT OF KING ISLAND DURING JANUARY  
JOURNEY OF SHACKLETON AND CAN COVERED TO VISIT PLACES MENTIONED IN YOUR TEL ON  
FEBRUARY CALL

ANTARCTIC

Pa  
Lg.

Time

DECODE.

No. 144.

TELEGRAM.

57

From Administrative Officer, South Georgia.

To Colonial Secretary, Stanley.

Despatched : 18th December, 1963. Time : 1920  
Received : 19th December, 1963. Time : 0930

No. 288. Herewith repeat of interchange of telegrams Holdgate Vaughan.

55

27/11/63 No. 144/470 for Vaughan from Holdgate begins

South Sandwich survey planned ex Protector for period 3 to 28 March. Your participation to undertake fur seal census and other work also representing Falkland Government interests proposed and approved. Please signal agreement ends. Protector R/V with Shackleton early March at Grytviken to transfer project personnel signed Antarctic.

Vaughan replied following for Holdgate from Vaughan "agree your proposal for South Sandwich" ends signed Administrative.

Both telegrams were passed through Administrative Officer South Georgia.

On reflection consider advisable to obtain confirmation that approval quoted in Holdgate's telegram was granted by your good self or His Excellency.

Administrative Officer

P/L : IH

Reply at 58.

DECODE.

58

TELEGRAM.

From..... H. E. the Governor.....

To..... Administrative Officer, South Georgia.....

Despatched :                      3rd January                      1964                      Time : 0845

Received :    19                      Time :

57

No. 2.    Yourtel 288 Vaughan South Sandwich

I discussed with Holdgate and gave approval.

EPA/ER

P/L

Pa -  
3164

DECODE.

TELEGRAM.

59

8

From H.E. the Governor.....

To Administrative Officer, South Georgia.

Despatched : 31st March 19 64 Time : 0915

Received : 19 Time :

No.109. T.O.Jones of National Science Foundation has proposed that upon removal of personnel their baggage and certain specialized items of scientific equipment the building and essential operating material be left at site for possible future scientific research projects. In the meantime facility available for our programme. This seems reasonable. Please inform Tickell.

EPA/ER : P/L

Reply at 60

DECODE.

No. 274.

TELEGRAM.

*From* Administrative Officer, South Georgia.

*To* Colonial Secretary, Stanley.

---

*Despatched* : 31st March, 1964. *Time* : 2145

*Received* : 1st April, 1964. *Time* : 0900

59

No. 138. Following for Governor.

Your telegram No. 109. Agree proposals reasonable.  
Your telegram passed to Tickell with request he list all  
equipment remaining with original to BAS and copy to be  
left here.

Administrative Officer

P/L : LH

(Intld.) HLB

*Pa*  
*1. 4. 64*

61

NATIONAL SCIENCE FOUNDATION

WASHINGTON, D.C. 20550

MAR 27 1964

AIR MAIL

Sir Edwin Arrowsmith  
Governor of the Falkland Islands  
Government House  
Falkland Islands

Dear Sir Edwin:

Thank you very much for your letter of February 28, 1964. We took the liberty of answering initially by cable so that you might have our thoughts before your resupply ship arrived at Bird Island.

It has been our understanding also that the resupply ship would remove the party and specialized scientific gear from Bird Island this year. We would like to consider with you the possibility of leaving the facility and equipment associated with its operation at its present site. There is a possibility that some of our research people may be interested in proposing future work in this location. In the meantime, however, if this arrangement is satisfactory to you, the facility is, of course, available to your scientists as they may wish to use it.

We are particularly interested in the information about your plans for a biological base at Grytviken or Husvik. Your new laboratory will certainly contribute to the further biological study of this region. As you may know, we have had a considerably increased interest in terrestrial and marine biological research in the Peninsula area, and we plan to carry out much more extensive research programs in Graham Land, Palmer Land and in the Drake Passage. We shall be glad to cooperate in such work with you in any manner which will be mutually beneficial.

Sincerely yours,



T. O. Jones  
Head, Office of  
Antarctic Programs

For Tickell file  
13.5.64

OTMS

United States Antarctic Research Program

South Georgia Expedition 1962-64

School of Hygiene,  
Johns Hopkins University,  
615, North Wolfe St.,  
Baltimore 5, Md., U.S.A.

15th. July 1964

Dear Norman,

You will recall our discussions last April concerning U.S.A.R.P. radio equipment and batteries. I am very grateful for your offer to store and maintain this equipment at South Georgia Radio Station during the periods that the Bird Island Base is not occupied.

The two transmitter/receivers should by now have been returned to you from the British Antarctic Survey H.Q. in Stanley. I have asked Bill Vaughan to bring out all the batteries when he next visits Bird Island and you should receive two more replacements from Lucas Ltd. in November, making the number up to sixteen. I have also asked Bill Vaughan to obtain for you all the spares for the TR/11/24 v. DC from Bird Island. Spares available for the D.W.S. C 119 are fewer and all packed in a compartment of the set itself.

You will see from the enclosed reports etc. that I have emphasised that parties authorised to visit Bird Island should consult you as early as possible about equipment and procedure. Naturally, in your capacity as Senior Wireless Operator it is for you to say what frequencies are permissible and what times convenient for communication schedules.

Parties staying at Bird Island for a few weeks or months during the summer will find eight batteries ample unless they wish to operate the deep freezer. One transmitter/receiver should also be sufficient and unless there is someone capable of sending on the key the TR/11 is the obvious choice.

You are sometimes called upon to provide radio equipment for field parties working in other parts of South Georgia; an instance being the radio and batteries loaned to Harry Clagg's Royal Bay party early this year. In view of the co-operation between National Science Foundation, British Antarctic Survey and the Falkland Islands Government in respect of the U.S.A.R.P. Base on Bird Island and the fact that the equipment is being maintained by you and B.A.S.. I think that provided the equipment is not required for Bird Island it should be available for use by official government and B.A.S. field parties in South Georgia.

Yours sincerely,

Mr. Norman Scott,  
Senior Wireless Operator,  
South Georgia Radio Station.

Copies to: Office of Antarctic Programs

W.L.N. Tickell

Dr. W. J. L. Sladen  
B. A. S. London  
B. A. S. Stanley  
B. A. S. Biological Unit

H. E. the Governor

A. O. South Georgia

VAUGHAN, SOUTH GEORGIA

THE JOHNS HOPKINS UNIVERSITY  
SCHOOL OF HYGIENE AND PUBLIC HEALTH  
615 NORTH WOLFE STREET  
BALTIMORE, MARYLAND 21205, U. S. A.

63

24th October '64

DEPARTMENT OF PATHOBIOLOGY

Your Excellency,

I regret that these reports have been so long in reaching you also that your copy is the one without photographs; if you wish to see pictures of the base the copy file sent to BAS. Office Stanley contains them.

Yours sincerely,

Januelat Tchell

Cs. for Secretariat file  
14 20/6/65

64

26 January, 1965.

Dear Mr. Tickell,

63 Thank you very much indeed for your kind letter of 24th October, which was awaiting me here on my return a few days ago from my first visit to some of the British Antarctic Territory bases.

It is extremely kind of you to send me the notes which you have prepared regarding the Bird Island base and I hope that one day I shall have an opportunity to visit it myself.

Unfortunately, when Mr. Vaughan tried to land there at the end of November he was unable to do so due to weather conditions and the R.R.S. "Shackleton" in which he was travelling was unable to wait for an improvement in the weather to allow him to try again. He was therefore brought on to Stanley and has since spent a very interesting two months visiting a number of the Antarctic bases. I look forward to seeing him before his final departure from this area as I am sure that he will have made good use of the opportunities so unexpectedly given to him.

May I take this opportunity of expressing my appreciation of the generous action of the National Science Foundation in suggesting that members of the Falkland Islands Government and the British Antarctic Survey should make as much use as they require of the U.S.A.R.P. base on Bird Island. You may rest assured that every endeavour will be made to see that facilities provided are used in a way of which the National Science Foundation would approve.

Yours sincerely,

WLN

W.L.N. Tickell, Esq.,  
The Johns Hopkins University  
School of Hygiene and Public Health  
615 North Wolfe Street,  
Baltimore, Maryland 21205, U.S.A.

United States Antarctic Research Program

South Georgia Expedition 1962-64

MEMORANDA

To: R.W. Vaughan, B.Sc., Falkland Islands Government  
Sealing Biologist for South Georgia.

You will doubtless have heard from the Administrative Officer at South Georgia that National Science Foundation have suggested that in the absence of United States parties the Falkland Islands Government and British Antarctic Survey should make such use of the U.S.A.R.P. base on Bird Island as they require. As far as I know of government plans at the moment this will concern mainly you and your assistants.

Amongst the various reports I am writing concerning the base, I have made some suggestions ('Base Manual') as a guide for those unfamiliar with the base and the manner in which it was intended to be used. There are, however, a number of more urgent matters with which you should be acquainted. I would be most grateful if you would attend to them when you return to South Georgia and next visit Bird Island.

1. One of the door hinges on No. 1 (Bonner's Bothy) was rusted through and I imagine the others on this hut will be in a similar condition. It would be a good idea to repair the whole door; but it will certainly last this winter as it was securely barred before we left (since this is your hut, it is not strictly our responsibility).
2. The door of No. 2 has a tendency to blow open. Before we left we lashed all doors closed; but some hasps and staples would be better.
3. Although there is ample spare glass and enough putty, there is no glass cutter and the panes of glass in the generator shed will need to be replaced pretty soon.
4. There is no black tar-varnish for the roofs; a coat of this annually would be effective treatment, it is standard practice on B.A.S. bases so you should be able to get some through Crown Agents.
5. We were short of 'Bulldog' clips (for  $1\frac{1}{2}$ " circumference wire rope) for the holding-down ropes. They are needed on the centre wire of the main hut and on one of those over No. 2; about six would suffice. The holding down ropes over No. 1 look rather rotten and should perhaps be replaced.
6. N.B. Some of the lighting circuits in Lönnerberg House were temporarily wired with aerial wire which has only imperfect insulation. These wires are easily recognisable (see wiring diagram in Base Manual) and have red tape attached in places. They should be re-wired as soon as possible with suitable cable as they constitute a fire risk. About 100' of 7/029 cable would be ample for this and other jobs.
7. Fluorescent tubes should not be operated from a battery bank that is being charged as the excess voltage may overload the tube transverters. After charging has ceased a couple of minutes should be allowed to allow the voltage output to drop from 30 v. to about 26 v. or less before switching on the tubes. If the tubes do not strike when first switched on, momentarily connect the earth wire to the earth lead on the radio bench; do not leave connected as it will cause interference on the radio receiver.
8. Radio. The TR 11, C.119 and Type 68 transmitter/receivers should all be at South Georgia Radio Station in the charge of the Senior Wireless Operator, Mr. Norman Scott (see Base Manual and letter to Mr. Scott). During the winter the TR 11 and C.119 were serviced in Stanley by B.A.S. and sent back to South Georgia in June; they should be in good condition. In keeping with the arrangements outlined in my letter to Mr. Scott it

follows that he should have the supply of radio spares now at Bird Island (almost exclusively for the TR 11). I'd be grateful therefore if you would take back to him those items that I have marked on the Radio Inventory.

9. Aerials. The masts are not difficult to erect but some care is necessary to avoid bending the aluminium sections. The nylon guy ropes will probably last several years providing the masts are dismantled and stored in the hut when the base is not occupied.
10. Batteries. On the Inventory the base is listed as having sixteen Type ALWD 30 6volt batteries. In actual fact there are only fourteen at the moment as two were returned to Lucas (Batteries) Ltd. as defective. Replacements for these two batteries should reach South Georgia on the first B.A.S. vessel in November.

To insure long and efficient service we have been advised that when not required at Bird Island all batteries should be returned to South Georgia Radio Station where they can be kept in a high state of charge. Mr. Scott has agreed to this (see my letter to Mr. Scott and Base Manual). Would you therefore at the first opportunity take all the batteries back to South Georgia Radio Station.

When you return to Bird Island the batteries will have been standing for about seven months. This should not have harmed them but they will be in a low state of charge and require a long charge at low amperage. The following procedure is suggested:-

- (a) On no account use the uncharged batteries for starting the generator automatically.
- (b) Top-up all cells with distilled water using the 'Deeminac' de-ionizing bottle and filter provided.
- (c) Take hydrometer readings of all cells. We would like these readings for comparison with those taken when we evacuated the base.
- (d) Connect up all four banks using the heavy-duty interconnecting cables and making sure all contact plugs are clean and greased with 'Vaseline'. Put the two new batteries in Bank 3 in the generator shed. Occasionally, charging or lighting failures and anomolous meter readings occur on the main switchboard due to faulty connections between batteries. They can be located usually by 'jiggling' the interconnecting cables and cleaning the connecting lugs. Failing that loose connections sometimes occur at the terminal block of the main switchboard where the input lines from Banks 1 and 2 are connected.
- (e) A long charge (between 20 and 30 hours) at about 5 - 7 amps. is recommended and at this rate the generator is capable of charging all four banks simultaneously (although we do not normally charge more than two banks at one time). To do this the switches should be as follows:-

Generator Shed Switch Gear

- Switch 1. NEUTRAL.  
" 2. NEUTRAL and SHORTED (with flexible blue shorting bars).  
" 3. UP and also shorted to DOWN or vice-versa.  
" 4. UP or DOWN.

Lönnberg House Main Switchboard

Both Charging Switches ON.

There is some current loss between the generator shed and Lönnberg House so when charging four banks simultaneously, Banks 1 and 2 will inevitably receive a lower charge than Banks 3 and 4. If you set the Charge Control (on the Control Box in the Generator Shed) at 30 amps. the balance should be satisfactory. As the charge continues you will find that the ammeter reading on the Control Box falls and it is necessary to increase the charge periodically to maintain the reading at 30 amps. After the Charge Control has been increased to maximum the ammeter reading will progressively decrease to about 10 amps. or less when all batteries are fully charged.

- (f) When fully charged the hydrometer readings of the batteries should be about 1.275; in point of fact there will be some

variation about that figure. Check levels in cells again when charging completed and top up with distilled water if necessary.

- (g) After the initial charge the batteries can be used and re-charged at 12-14 amps.
- (i) As soon as initial charge is complete REMOVE SHORTING WIRES FROM SWITCH 3 in the Generator Shed.
- (j) As long as you are not running the freezer or similar appliance a charge of about twelve hours at 12-14 amps. every two or three days is ample.

11. Diesel Generator. This is in good running condition. At the time it was laid up it had run almost 2,320 hours and at the 2,000 hour maintenance I fitted new Large-End bearing and Piston Rings as well as de-carbonising and normal maintenance.

Special preserving fluids were put in the lubricating and fuel systems (see 'Petter' Handbook); but no notice to this effect was left on the engine. In future it would be advisable to leave a label on the engine indicating that although the generator may be run for a short while on light load with these fluids for normal use they should be drained and refilled with standard fuel and lubricating oils.

To prepare and start the generator proceed as follows:-

- (a) Remove covers from Generator Unit, Air Filter (on bench), and Pepper Pot type Silencer (outside).
- (b) Remove seals from Inlet and Exhaust Ports of the engine and from the Air Inlets of the generator.
- (c) Fit Air Filter to inlet port and Exhaust Pipe to exhaust port. Remove cover from starting shaft and fit starting handle.
- (d) Lubricating System. Drain preserving fluid ('Shell ENSIS 20') by removing sump plug. Refill sump with Lubricating Oil (Essolube' HD 10W, 'Shell' X 100, etc.).  
N.B. There is NO lubricating oil left at Bird Island.
- (e) Fuel Injection System. Drain preserving fluid ('Shell' FUSUS A) from fuel tank and fuel filter bowl. Refill tank with gas-oil and bleed injection system (see 'Petter' Handbook).
- (f) Switch Main Isolator on Control Box OFF.
- (g) Start engine (see 'Petter' Handbook) by hand. Only after the batteries have received the long initial charge should the automatic starter be used and then only from Banks 3 and 4. NEVER start the unit from Banks 1 and 2 as this overloads the meters on the Main Switchboard in Lönberg House.
- (h) There are two outstanding jobs that can certainly be left until after the batteries have been charged up and could probably be postponed longer if you are staying on the island only a short while.

The front right-hand holding-down bolt (looking from generator shed door) broke off short some six weeks before we left. It was probably due to the rather twisted thread on the nut; but I was able to get the nut back on the stub and the unit has since run for about 400 hours without appreciable vibration. Apart from excavating about six inches of bolt from the concrete block and concreting in a new one the only alternative seems to be fitting vibrationless mountings in which case all the present four bolts would have to be sawn off flush with the concrete block and the new mountings fitted to expander bolts put in new holes made with a 'Rawplug' drill.

One of the lugs that holds the fan case to the cylinder block fractured (the lug is now in the top tray of the tool box). Because of this there is a fair amount of vibration of the fan case especially when the fuel-tank (which is mounted on the fan case) is full. If the fan-case and lug could be taken back to King Edward Point it would be a simple welding job to put it right. However, removing the fan case is not so simple as the flywheel has to be withdrawn from the main shaft to unbolt it from the crankcase. A box extractor is available in the tool kit for withdrawing the flywheel key so

- the job may prove easier than I imagine.
- (i) Make sure you take a  $\frac{3}{4}$ " spanner, or a good adjustable. In the very extensive spanner kit available there is nothing that fits the nut securing the fuel delivery pipe to the injector nor the mounting bolts of the engine or generator.

W.L.N. Tickell.

15th July, 1964.

Distribution:

Office of Antarctic Programs, National Science Foundation  
Dr. W.J.L. Sladen  
H.E. the Governor of the Falkland Islands  
British Antarctic Survey, London Office  
" " " Stanley Office  
" " " Biological Unit  
The Administrative Officer, South Georgia  
U.S.A.R.P. Base, Bird Island, South Georgia

la

THE JOHNS HOPKINS UNIVERSITY  
SCHOOL OF HYGIENE AND PUBLIC HEALTH  
615 NORTH WOLFE STREET  
BALTIMORE, MARYLAND 21205, U. S. A.

DEPARTMENT OF PATHOBIOLOGY

5th. October 1965

Mr. T. Dickinson,  
Sealing Biologist,  
King Edward Point,  
Grytviken,  
South Georgia.

Dear Tony,

Martin Holdgate tells me that there is a chance that you will visit Bird Island this season and in the event of this happening I would like to mention two matters of concern to me.

I appreciate that you have a commitment to the seal work but I would be grateful, should the opportunity arise, if you or your assistant could attempt some of the ornithological fieldwork outlined in the fieldwork request included with this letter. What you can accomplish will, of course, depend upon when you visit the island and how long you are able to stay.

Bill Vaughan wrote to me about the brief visit you made to Jordan Cove in March this year. The huts will, understandably deteriorate with the years, but their useful life will be prolonged in proportion to the amount of maintenance and repair they periodically receive. I had anticipated most of the need in this respect, as you have probably seen from my writings about the base on Bird Island. However, I certainly did not anticipate the elephant seal in the store hut ( an expected risk when one thinks of it). It would be useful to know whether the 'H' type chimney pot (that had blown off) is still in the vicinity of the hut and serviceable.

A number of copies of the following were sent to Bill Vaughan for distribution. One copy of each should be kept in the Laboratory at K.E.P. and the remainder deposited at Bird Island amongst the base documents in one of the lockers in Lönnberg House.

|  |                         |
|--|-------------------------|
| U.S.A.R.P. Base Manual to Bird I. Base | ( 5 copies for Bird I.) |
| " " " " " "                            | ( 2 " " " )             |
| Memo to R.W.Vaughan (15 July 1964)     | ( 2 " " " )             |

I remember Bill saying that he had obtained the materials ( 5 galls. tar varnish, hasps and staples, wire etc.) to do the jobs suggested in my memo; so maybe it will be possible for you to complete the most urgent of them.

Copy sent to A/O South Georgia.

*Cs. We should make sure that an original is  
sent to S. Georgia. Perhaps the safest thing to  
do is to have a copy  
taken of what was  
as A.C. SG should  
be sent a copy.*

*See S. + 111  
11/3/65*

I have written to the Senior Wireless Operator and Diesel Mechanic requesting their help should they have the opportunity and I would especially ask you to be sure that the 14 six-volt storage batteries are taken back to the Wireless Station at King Edward Point.

It just remains for me to wish you a pleasant season and hope that you have the unlikely luck to arrive off Bird Island in a flat sea and with no wind ! Needless to say I shall be most interested to hear what sort of time you have on the island.

Yours sincerely,

W.L.N.Tickell.

Copy to:- Office of Antarctic Programs  
B.A.S. Biological Unit  
H.E. The Governor.

Enclosures:- 'Request to B.A.S. for Field Observations during 1965-66'  
'Positions of rings on albatrosses, Giant Petrels  
and Skuas at Bird Island'  
Ornithological map of Bird Island

*Offc RAS Stanley: Plans deferred  
✓ 9/12/66*

67



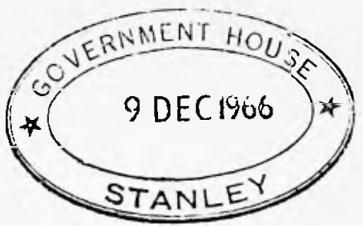
THE NATURE CONSERVANCY

12 Hope Terrace, EDINBURGH, 9

Telephone: MORNINGSIDE 4784/6

NATURAL ENVIRONMENT  
RESEARCH COUNCIL

Our reference:  
Your reference:



12th. November 1966

*BAS Snippet ?  
Tell Co  
Contract Firms*

Dear Sir Cosmo,

You may recall our brief correspondence two years ago when I completed the reports on the base and facilities at Bird Island, South Georgia.

Since leaving South Georgia I have completed writing up my studies on the Wandering Albatross. They will appear in a volume on ornithology of the Antarctic to be published in the new year by U.S.A.R.P. The work on the other species I hope to complete next year together with a film which is being produced by the B.B.C. Natural History Unit.

Because marine birds take so many years to reach maturity, the most valuable results to be obtained from my early expeditions are only just becoming available and I am therefore anxious to take up these studies again in the near future. To this end I would be grateful if you would permit me to take a party of from two to four men to Bird Island for the duration of the 1968-69 season.

As yet, I have made no plans. I would prefer to carry out the next phase in these studies from a British university; but it is difficult to obtain the necessary financial backing in the United Kingdom and I shall probably be obliged to seek National Science Foundation support from an American University.

In the event of N.S.F. support, United States expedition vessels will be available but should you prefer only British ships to visit Bird Island, I would be pleased to make my plans on the basis of B.A.S. logistical support.

Yours sincerely,

*Laurel Tickell*

W.L.N. Tickell

*Reddy 24/68  
Dec 69.*

2 January 1967

67

Many thanks for your letter of 12th November which reached me here on 9th December. As you know, opportunities for sending mail out from the Falklands are spasmodic and this letter cannot leave until 9th January.

I will remember our brief correspondence shortly after my arrival here when you kindly provided very full reports on the facilities at Bird Island.

I was most interested to learn that you have completed writing up your work on the Wandering Albatross and that this is soon to be published.

The news that you hope to take a party of two to four men to Bird Island in the summer season of 1968/69 is of considerable interest. By then I expect that a British biological base will have been established in South Georgia and I think that the sensible thing will be for me to discuss your plans with Sir Vivian Fuchs and write to you again before long.

I note from your address that you are at present living in Shetland. I have never been there but I believe that in many respects it has many features in common with the Falklands. If so, it must be an interesting place in which to work.

W

Dr W.L.N. Tickell,  
Valencia,  
New Road,  
Scalloway,  
Shetland

See 70

CONFIDENTIAL

CS. (I am uncertain whether you know about  
WTS. Please return, as I shall have to  
write to Tickell again soon. <sup>69</sup> 4/2/67  
P.S. I was present when  
for discussion with Fuchs. 9  
S. 1/2

January 1967

67  
I enclose a copy of a letter received from Dr Tickell  
dated 12th November, an Englishman who has done a certain amount  
of work for the Americans. I also enclose a copy of my reply to  
him.

Sir Vivian Fuchs is not particularly keen to  
encourage this person to operate from South Georgia, hence my  
stalling reply.

When Sir Vivian gets back to London in March, perhaps  
you would take the matter up with him further.

I am sending a copy of this letter to Mrs Honeywill<sup>u</sup> to  
hold pending Sir Vivian's return to England. I do not expect to  
be in touch with him again while he is visiting the bases other  
than by telegram.

CS

A. St.J. Sugg Esq., C.M.G.

CONFIDENTIAL

PS to Sugg suggesting he had a private  
word with Dr Brian Roberts in F.O.



NATURAL ENVIRONMENT  
RESEARCH COUNCIL

*Our reference:*

*Your reference:*

70

## THE NATURE CONSERVANCY

12 Hope Terrace, EDINBURGH 9

Telephone: MORNINGSIDE 4784/6

17, The Geophysical Observatory,  
Lerwick,  
Shetland.

30th. January 1967

68

Dear Sir Cosmo,

Thank you for your letter of 2nd. January which took only a week get here.

I was most interested to hear of the proposed biological station at South Georgia. If, as was originally suggested, a small coaster or M.F.V. were available the Bird Island base would make a most valuable sub-station.

As you remark, the Shetlands have many similarities with the Falklands; mainly in the coastline for these are much smaller islands and there are not the rolling expanses so characteristic of the Falkland 'camp'. Biologically they the northern counterpart and have one species, the Great Skua, in common.

Yours sincerely,

*Jameslot Tickell*

W.L.N. Tickell

Sir Cosmo Haskard, K.C.M.G  
Government House,  
Stanley,



CS

71

CONFIDENTIAL

18 February 1967

69

Would you please refer to my Confidential letter of 9th January with which I enclosed a copy of a letter from Dr Tickell.

I am now sending you a further letter from Dr Tickell dated 30th January, together with a copy of my reply to him.

I think that the next move is probably best left to Sir Vivian Fuchs who will no doubt have a word with you about Tickell's request to operate from South Georgia.

I am sending a copy of this letter to Sir Vivian to await his return to England.

CS

A. St.J. Sugg Esq., C.M.G.,  
Commonwealth Office

CS

72

18 February 1967

70

Thank you for your letter of 30th January which arrived here on 14th February.

Since I last wrote to you Sir Vivian Fuchs has revisited South Georgia but I have not been in touch with him by letter since then. He should however be back in London during March and I think that probably your best plan would be to write to him at 30 Gillingham Street, S.W.1.

I was most interested to learn that the Great Shag is found in the Shetlands. I have recently had plenty of evidence of their dive bombing tactics both at New Island and Carance Island.

CA

17 Dr W.L.M. Tickell,  
The Geophysical Observatory,  
Lerwick, Shetland

Copies: Sir Vivian Fuchs  
A. St.J. Sugg Esq., C.M.G., Commonwealth Office.

pa