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OVERSEAS DEVELOPMENT ADMINISTRATION

FALKLAND ISLANDS AIRPORT

PROPOSAL FOR FEASIBILITY STUDY

RENDEL, PALMER & TRITTON, Consulting Engineers, Southwark Bridge House, 61, Southwark Street, London S.E.1



Foreign and Commonwealth Office

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OVERSEAS DEVELOPMENT ADMINISTRATION

Eland House Stag Place London SW1E 5DH

Telephone 01-834 2377 ext

Rendel Palmer & Tritton Southwark Bridge House 61 Southwark Street LOHDON SE1 Your reference KLA/DEJ

Our reference SPD 235/56/01

Date 27 January 1972

Gentlemen

FALKLAND ISLANDS AIRPORT

- 1. I am directed by the Minister for Overseas Development to refer to your letter of 17 January 1972 and to confirm that this Administration wishes to amend my letter of 19 November 1971 by deleting paragraphs 5 and 6 and substituting therefor:-
 - "5. In consideration of the performance by your firm of this engagement the British Government will, in accordance with paragraph 6 below make the following payments to your firm:
 - a. an inclusive fee of \$15,000 in respect of all fees and all expenses of whatsoever nature incurred by your firm other than those provided for in sub paragraph b below:
 - b. reimbursement at cost of expenditure necessarily incurred by your firm on materials testing; provided that the british Government shall not be liable to your firm under this engagement for a sum in excess of 221,500 unless such excess has first been agreed and accepted by this Administration in writing before any action has been taken by your firm which would result in the figure of £21,500 being exceeded.
 - 6. The fees and expenses reformed to in paragraph 5 above will be paid to your firm in sterling in London as follows:
 - a. £5,000 within 14 days of the date on which your firm's written acceptance of this offer of engagement is received by this Administration;
 - b. the balance within 14 days of the receipt by this Administration of your firm's report subject to the receipt and approval by this Administration of your firm's detailed statement of account."
- 2. I should be glad if you would confirm that your firm agrees to the above amendments.

I am Gentlemen Tour obediest servant

AIRFIELD PROJECT IN THE FALKLAND ISLANDS

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AIRFIELD PROJECT IN THE FALKLAND ISLANDS

1.0 INTRODUCTION

The Overseas Development Administration of the Foreign and Commonwealth Office has invited proposals from Rendel, Palmer and Tritton, by letter dated 25th October, 1971, for carrying out a study and making a report on a proposed airfield project in the Falkland Islands. The letter of invitation was accompanied by Terms of Reference (see Appendix) and by a copy of an Initial Reconnaissance Report, No. 62/342, made by 62 CRE (Construction) and dated 15 September, 1971.

2.0 PROGRAMME FOR STUDY AND REPORT

It is required that the appointed Consultants' field team should leave UK by air on 13 November, 1971, in order to travel to the Falkland Islands by amphibious aircraft from the Argentine on 16 November, 1971. The team will be returned to the Argentine approximately one month later. The Consultants' report is required by 30 March, 1972. No further visit will be possible prior to the start of construction.

3.0 STAFFING PROPOSALS

In view of the requirement that the Consultants should obtain, in one visit to the Falkland Islands, all necessary information to enable final detail designs and tender documents for construction to be prepared, it is considered important that their team should contain a number of engineers who would eventually work on the final design, after submission of the Report. The size of the team is limited to six by the capacity of the amphibious aircraft. The proposed team for the visit is as follows:

J.E. Warren Senior Engineer in charge

J. Trnka * Civil Engineer

G. Lovegrove Soils Engineer
D. Hattrell Civil Engineer

I.G. Cross Assistant Engineer

J. Boustead Surveyor

*If J. Trnka were unable to join the team due to difficulties with his identity papers, visas, etc., his place would be taken by Mr. R. Smith.

In addition to the above, Mr. S.W. Pratt, Associate, would visit the Argentine during the period of the team's visit, in connection with telecommunications and navigational aids.

The overall administration of the project would be the responsibility of Mr. K.E. Ainscow as Partner in charge and Mr. E.B.Kelbie, senior airport engineer.

Datails of the qualifications and experience of the above are attached to these proposals.

4.0 METHOD OF CARRYING OUT THE WORK

Site selection and survey:

It would appear that the site of the proposed airfield, on Cape Pembroke, has been determined. The RE report gives comments on a number of alternative sites which were considered. The Consultants would familiarise themselves with the topography and conditions in the area as a whole and, assuming that they had no comment to make on possible further alternatives and on the selection of the site, would make a contoured plan by ground survey methods of a sufficiently large area to enable adjustments of runway siting, clearway, drainage design, etc., to be considered in detail. The survey would include access routes to the airfield area from the town of Stanley, together with suitable routes for water supply, power line, sewage disposal outfall and sites for navigational beacons and aerial installations. Existing contour maps would be up-dated as necessary as the basis for consideration of approach and take-off surfaces, let-down procedure and noise effects.

Soil survey:

The Consultants would study the RE report, the Wainwright and Botham report and the RRL (1963) report on sampling and testing of soils on the Islands. The Consultants' boring, sampling and testing programme would be designed to complement the earlier work and would have five main objectives:

- (i) to establish the engineering properties of the sub-soil on the site of the airfield and the access route(s) in order to determine suitable foundation and pavement designs incorporating materials readily available from local sources;
- (ii) to identify areas where material suitable for filling on the airfield could be obtained;
- (iii) to identify sources of aggregates for concrete, flexible paving and surfacing;
- (iv) to investigate foundation conditions for buildings and permanent structures;
- (v) to identify any conditions which may require special constructional measures e.g. sulphates, cement-reactive aggregates.

Restrictions on weight of equipment and the limited period of time available make it impossible for soil testing to be carried out locally on any but the simplest scale. The Consultants would therefore propose to leave survey and other equipment in the care of the PWD and to use all available capacity on their return trip to carry soil samples to the U.K. for testing. In the event that construction did not proceed, the Consultants' survey equipment could be shipped to the UK or taken over by the local authorities, as appropriate. Soil testing in the U.K. would be carried out by an approved firm of specialists.

Meteoreological records:

(4)

It is understood from the RE that there are excellent met. records available in the Falkland Islands, adequate for the purposes of the study.

Airside facilities:

The B.O.T. (Wainwright and Botham) Report, 1969, proposed a two-runway arrangement for the airport, in view of wind variability and the absence of an alternative airport for use in emergency. The RE report envisaged a single runway airport but did not consider useability (the report is on a preliminary reconnaissance only).

This aspect of the remote position of the Falkland Islands, in terms of relatively small aircraft, will be an important factor in the study, coupled with the careful assessment of meteoreological conditions. The proposal for length of runway will take into account, in addition to the normal criteria of forecast aircraft types, payload/range, wind conditions, temperature, altitude, etc., the necessity for the provision of a facility with maximum useability and the ability to cope with emergency conditions. The RE report emphasises the abrupt changes that occur in local weather conditions and this feature, in addition to its effect on considerations of runway length, will have an important bearing on the proposals for navigational and landing aids.

The provision of telecommunications with adequate range in relation to mainland route lengths will also be a necessary feature.

The Terms of Reference, in respect of emergency conditions, envisage two possible runway lengths and the provision of navigational equipment additional to the essential items. Although it is understood that no economic justification for the project is required as part of the study, it is considered that some justification will be necessary in these terms in relation to any additional facilities to be provided against emergency conditions.

(5)

Terminal and operational facilities:

Discussions would be held with local Customs, health and immigration officials as to the requirements at the airport. It is envisaged that terminal facilities for passengers would be essentially simple. Operational facilities would be proposed which took account of the frequency of poor weather conditions. All aspects of the airport would be planned with a view to possible future growth of traffic, including facilities for local flying.

With reference to telecommunications and navigational aids, the senior engineer in charge would be fully briefed as to enquiries to be made in Stanley. The Consultants would also make a separate visit to the Argentine, during or at the end of the team's work in the Islands, to discuss with the authorities there the technical details of the telecommunications proposals and air traffic control aspects.

Traffic levels:

Discussion with civil aviation authorities in the Argentine would include requirements for aircraft parking, maintenance and the forecast for any cargo traffic and special handling facilities.

Constructional aspects and data for estimates:

In addition to enquiries in Stanley, the senior engineer in charge and a civil engineer would make enquiries in the Argentine, following their return there, as to the c.i.f. prices of materials and equipment necessary for construction. They would also enquire into the status and capability of contractors experienced in this class of work, having established the position regarding labour in the Falkland Islands. It is envisaged that the relevant Government departments and local contractors' associations would be approached in these enquiries, in addition to the U.K. Government officials.

Services:

The team's investigations in the Stanley area would include the study of possible means of providing essential services to the airport, such as power, telephones, water, fuel supply, and the necessary storage and stand-by facilities.

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5.0 REFERENCE TO OTHER CONSULTANTS

Rendel, Palmer and Tritton would follow their normal practice of discussion of operational aspects of the proposals with officials of the British Airports Authority and the appropriate department of the Department of Trade and Industry.

6.0 REPORT

(11)

The report, to be submitted by 30 March, 1972, would cover all the items 1 to 7 inclusive in the Terms of Reference.

Plans would be included as follows:

- 1. Airfield location, related to local datum.
- 2. 1:1250 or 1:1000 site plan and layout.
- 3. Cross sections and longitudinal sections through runway, taxiway, apron etc., to show final levels of all construction and earthwork, scale 1:100.
- 4. Large scale (outline) plans of airport buildings.
- Plans and sections of access route(s) to suitable scale. 5.
- 6. Proposals for services.
- Drainage and flood protection. 7.
- Approach and take-off surfaces. 8.

The Report would include a full schedule of all facilities and equipment proposed. The estimate of cost would be based on main sectional items, prior to completion of the detailed design and preparation of bills of quantities.

7.0 FACILITIES TO BE PROVIDED FOR THE STUDY

It is understood from the RE that tentative arrangements were made for heavy winter clothing and waterproof boots to be supplied to Army personnel by the British Antarctic Survey and Royal Marines stationed in the Falklands, if the Army had been required to carry out further work It is hoped that the Consultants' staff could avail themselves of these facilities, in order to minimise the weight of baggage to be transported.

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It is assumed that PWD will provide transport i.e. Land Rovers, for use by the Consultants, together with office space, clerical and general assistance, casual labour and consumable stores such as pegs, paint etc., free of charge.

8.0 FEES

The Consultants would require a lump sum fee of £17,500 (seventeen thousand five hundred pounds) for the work up to and including the submission of their Report (20 copies). This fee would include the cost of all time, travelling and subsistence expenses, provision of all necessary equipment and facilities except as stated above, printing costs and other expenses. It excludes the cost of equipment left in the Falkland Islands and not eventually used by the Consultants or returned to U.K.. It also excludes the cost of soil testing in the U.K., which would be reimburseable net in addition to the above fee.

It is assumed that all the Consultants equipment would be free of duty in transit in the Argentine and in the Falkland Islands.

The fee would be payable in two parts:

£5,000 within 28 days of the date of receipt of instructions to proceed

£12,500 within 28 days of the submission of an account following delivery of 20 copies of the Consultants' report.

In the event that the Consultants' team were delayed in departing from the Falkland Islands, other than by their own actions, so that the period spent in the Islands exceeded five weeks, the Consultants would be at liberty to request payment of additional fees on this account.

The present proposals are of course conditional upon the grant of the necessary visas by the Argentine authorities in due time.

9.0 PREVIOUS EXPERIENCE IN SIMILAR WORK

Airport Development and Engineering

Rendel, Palmer and Tritton have been engaged on the expansion and development of the following airports in recent years:

Nausori Airport, Suva, Fiji (1970)

The Firm is at present engaged on the preparation of a Master Plan for the phased development of Nausori Airport.

Aqaba Airport, Jordan (1968 to date)
(Architectural Consultants: Alex Gordon and Partners)
(Operational Advisors: British Airports Authority)

Rendel, Palmer and Tritton prepared a Master Plan for the phased development of a new airport at Aqaba, followed by detailed design and supervision of work by contract for the first phase of development. This work is still in progress under the Firm's supervision. The total estimated cost for the first phase development is approximately JD 1,000,000.

> Nicosia Airport, Cyprus (1968 to date) (with British Airports Authority and consultant economists)

The Firm was responsible for engineering aspects of a feasibility study for the extension of the main runway and other airside facilities; it is now advising the Government of Cyprus on detailed design and specifications for carrying out the work. The total estimated cost was £1,722,000.

Lungi Airport, Freetown, Sierra Leone (1964-67)

The work included the preparation of a Master Plan, with detailed design and supervision of work by contract for the extension of the runway, lighting and navigational aids, to bring the airport to I.C.A.O. Class A standard. This work was completed in 1967, under the Firm's supervision. Cost of the works was of the order of £2,000,000 which included £126,000 for ancillary buildings (fire station, cargo shed etc.).

Jerusalem Airport, Jordan (1963-64)

The potential for development to cater for short, medium and long-haul international traffic was studied from operational and engineering aspects. Detailed proposals and cost estimates were then made on the basis of the Firm's recommendations to develop the Airport for use by short and medium-haul jet traffic. The recommendations included the extension and modification of the terminal building to three times its existing floor area and extension and improvement of all airside facilities, access roads and car parks. The total estimated cost was JD 1,365,000 which included JD 250,000 for the terminal building.

Amman Airport, Jordan (1962-63)

The Firm prepared a comprehensive report on engineering operational and economic aspects of improving the Airport from I.C.A.O. Class B to Class A standard, and subsequently produced tender documents and drawings for all work to the runways, taxiways, aircraft stands, lighting and navigational aids and for the extension and modification of terminal buildings.

Buildings and structural work

R.P.T. have been responsible for the structural detailed design of the following:

Aqaba	Airport,	Jordan		Terminal buildings, control
				tower, fire station
Lungi	Airport,	Sierra	2.	Fire station, cargo shed and
Leone			•	ancilliary buildings
Amman	Airport,	Jordan		Extensions to terminal
			*	buildings

Limassol, Cyprus Passenger terminal

Airport operations

Rendel, Palmer and Tritton normally obtains the advice and assistance of the Operations Department of the British Airports Authority when engaged to study and report on the location of new airports or on modifications and extension of an existing airport.

This procedure was adopted for the study of Nicosia Airport, Cyprus, and Aqaba Airport, Jordan.

Telecommunications, Lighting and Radio Navigational Aids

The Firm has telecommunication engineers on the staff of its Electrical Engineering Department under the control of an Associate, Mr. S.W. Pratt. Other engineers of the same Department are experienced in the design and supervision of installation of airfield lighting systems and navigational aids.

For advice on telecommunications systems planning, the Firm has previously arranged for the participation of an expert from the British Department of Trade and Industry, which is the responsible body for telecommunications at all airports in the United Kingdom. This arrangement was used for the Nicosia Airport Study.

Architecture

For architectural treatment of Terminal Buildings, Rendel, Palmer and Tritton normally work in association with Messrs. Alex Gordon and Partners, consultant architects, of London and Cardiff.

10.0 DETAILS OF STAFF

See Pages 10 to 19.

RENDEL, PALMER & TRITTON

E.J. WARREN

Position:

Senior Engineer in charge

Date of Birth:

1921

Qualifications:

Member of the Institution of Civil Engineers

Experience:

1941-1946

Royal Engineers (commissioned 1942)

1947-48

Assistant Engineer for Balfour Beattie Ltd.

on transmission line.

1949-50

Assistant Engineer with Gammon (Malaya) Ltd. WHITFORD

on construction of Changi Airfield, Sumatra,

and access road location.

1951

Assistant Engineer with Sutcliffe and Partners

on design of concrete roads.

1952-54

Joined Rendel, Palmer & Tritton as Assistant

Engineer on design of marine works.

1955-56

Assistant Engineer supervising construction of

nine major road bridges in Sierra Leone.

1957-61

In charge of field parties in Sierra Leone on location survey during dry season returning to

London Office in wet seasons for design of

various roadworks.

1962-63

In charge of field parties in India for surveys

for port and bridge work.

1964-65

In charge of location and survey of 500 km.

of feeder roads in Iran.

1966-68

Engineer's Representative for the reconstruction

of the Lungi International Airport, Sierra Leone.

1969-70

Engineer in charge of location and survey of 125 miles of road in Fiji, and survey and data collection for development and reconstruction of

Nausori Regional Airport.

1971

Senior engineer in economic assessment team for

major road projects in Wales.

J. TRNKA

Position:

Civil Engineer

Date of Birth:

1929

Qualifications:

M.Sc. (Eng.).

Postgraduate study "Motorway and Airfield Pavements"

(Laboratory technique and design) 1965/66.

Experience:

1953/55

Engineer in Roads and Airports Department of the Army Design Institute, Prague, Czechoslovakia. Member of survey and design team, later leading design team on various road projects and one airport.

1955/56

In the Institute for Development of Roads and Highways of the Ministry of Transport, Prague.

Engineer-in-charge offcasibility and economic studies for construction and reconstruction of several major roads. Responsible for preparation of contract

documents for design and construction.

1960/62

In the Survey and Design Department of the Directorate General of Roads and Bridges, Baghdad, Iraq. Project Engineer for location and part design of 220 Kms. of road in all parts of the country.

1962

Resident Engineer on construction of a major urban highway in the city of Prague.

1963/66

Senior Engineer in the Directorate of Motorways, Prague. Responsible for design and preparation of contract documents for the first section of Prague-Brno-Bratislava motorway, 31 Kms. (Kcs. 530 mil. = £26m.)

1966/68

In the construction department of the Directorate General of Roads and Bridges, Baghdad, Iraq.

Resident Engineer on various road projects:

1) Qurna-Chibbayish Road, 42 Km.

2) Diwaniyah-Nassiriyah Road, 110 Km. (Section II & III)

3) Hilla-Kufa-Najaf Road, 52 Km.

1968

Joined Rendel, Palmer and Tritton as Engineer in Roads and Airports Department, member of design team on Taff Vale Trunk Road, Wales.

1969

Engineer on field staff of Suva-Nandi road project, Fiji. (July-October).

1970

Engineer member of R.P.T. team appointed by IBRD/IDA to aid the Central Roads Wing in India to prepare group of major highway projects throughout the country.

1971

In Firm's London office. Employed on Nausori Airport Master Plan and Singapore Port Master Plan.

G.W. LOVEGROVE

Position:

Soils Engineer

Date of Birth:

1942

Qualifications:

B.A. (Hons.) Civil Engineering, Dublin University. M.Sc. Soil Mechanics, Imperial College.

Member of the Institution of Civil Engineers.

Experience:

1964-67

Surveyor with the British Antarctic Survey.

1968

Joined Rendel, Palmer and Tritton

Assistant engineer on off-shore survey and site investigation for extensions to Beirut

Airport.

1969-70

Soils engineer responsible for preliminary site investigation and soils testing programme on the Suva-Nandi 120-mile major road project, Fiji.

1970

Soils engineer responsible for preliminary soils investigation for Nausori Regional Airport, Fiji.

1970-71

Soils engineer responsible for a number of investigations for major civil engineering projects in the United Kingdom.

Author of a paper on site investigation for highway projects in developing countries.

D.V. HATTRELL

Position:

Civil Engineer

Date of Birth:

1943

Qualifications:

B.Sc. in Civil Engineering.
M.Sc. in Structural Engineering

(Southampton University)

Experience:

1961-65

Southampton University.

1965-66

Assistant Engineer in Rendel, Palmer and Tritton's head office concerned with Power Station steelwork and reinforced concrete design; steelwork design for docks; office supervision of Freetown Airport reconstruction.

1966-68

Assistant to Resident Engineer on site at Freetown Airport; concerned with setting out and survey work; detailing of road, drainage and general airfield works; final measurement;

airfield strength testing.

1968-69

Assistant Engineer in R.P.T. head office, concerned with airport design. Worked on design for new Aqaba Airport, Jordan.

1969-70

Assistant Engineer in R.P.T. Melbourne office concerned with feasibility studies for road and railway work and design of jetties.

1970 to date

Assistant Engineer in R.P.T.'s head office concerned with Aqaba Airport Contract administration, Nausori Airport, Fiji, Master Plan and design of bridges in South Wales.

I.G. CROSS

Position:

Civil Engineer (Airports)

Date of Birth:

1944

Qualifications:

B.Sc. (Hons.) in Civil Engineering M.Sc. in Transportation Engineering

Experience:

1967-68

Joined Rendel, Palmer and Tritton. Employed on traffic and engineering studies for the extension of Nicosia Airport Cyprus, followed by similar studies for the preparation of a Master Plan for a new airport at Aqaba, Jordan and detailed design of airfield and highway pavements.

1969

Member of Consultants General Road Study Team in Ethiopia engaged on traffic surveys, road inventory field work, soils and route geology, as well as cost analysis of future road development projects.

1970-71

Suva-Nandi Highway, Fiji; employed on road drainage design and determination of culvert sizes; design of protection to road embankments subject to wave action; design of horizontal and vertical alignment of 35 mile section.

Employed on Land Use and Traffic Surveys for the South Shoreditch Redevelopment Plan, London.

Port of Misurata, Libya; design of access roads to the port area.

Merthyr Trunk Road, South Wales; design of reinforced concrete bridges.

Co-author of a series of papers on hovercraft and hoverports. To be published in book form.

J.R. BOUSTEAD

Position:

Location engineer/surveyor

Date of Birth:

1920

Experience:

1952-57

Rendel, Palmer and Tritton. Extensive field survey experience in Ghana, Iran and in South Wales on road location and final design.

1958-60

With G.S.I. (America) in Angola and Turkey on surveys for pipe lines and oil installations.

1960-64

Rendel, Palmer and Tritton. Road and Bridge realignment survey in Sierra Leone.

Survey work in connection with Cardiff-Merthyr Trunk Road.

Surveyor on Main Road Improvement Project in

Sierra Leone.

Survey work connected with Eggborough Power

Station.

1965-66

With Tarmac Libya.

1966-1968

Rendel, Palmer and Tritton. Surveyor on

Pembroke Power Station project.

1968-1970

Rendel, Palmer and Tritton. In charge of field survey team obtaining topographical and engineering survey necessary for the location and design of 125 miles of road

in Fiji.

1970-71

Field survey team leader on projects in

United Kingdom.

R.T. SMITH

Position:

Civil Engineer

Date of Birth:

1945

Qualifications:

B.Sc. (Hons. Civil Engineering,

Birmingham University.

Experience:

1966 to date

Joined Rendel, Palmer and Tritton and has been engaged on the following work:-

Design work for power station and dock gates.

Assistant engineer on site supervision of reconstruction of Lungi Airport, Sierra Leone.

Design work for Aqaba Airport, Jordan.

Design work of roadworks, bridges and drainage on Suva to Nandi Highway, Fiji (over 100 miles).

Master Plan work for Nausori Airport, Fiji, particularly Terminal.

E.B. KELBIE

Position:

Senior airport engineer

Date of Birth:

1932

Qualifications:

B.Sc. (Eng.) M.I.C.E., M.I.H.E.

Experience:

1955-59

Design and construction of road and bridgeworks with County Highways Department.

1959-63

FPWD Nigeria as Executive Engineer. Resident Engineer on Ikeja (Lagos) Airport extension and strengthening project, supervising construction and surfacing work on runway, apron and aircraft movement areas.

Resident Engineer in charge of supervision of construction of new apron and resurfacing of

runway at Kano Airport.

1963-71

With Rendel, Palmer and Tritton, engaged on

Report on Jerusalem Airport.

Report, Design and Tender Documents for Amman Airport.

Feasibility report on extension of runways at Nicosia Airport.

Master Plan, Designs, Tender Documents and Contract Administration for new Airport at Aqaba, Jordan.

Master Plan for the phased development of Nausori Regional Airport, Fiji.

Has also been responsible for site investigations, earthworks, stability problems for dams and irrigation projects (South America) and for design of highways.

Foreign languages spoken - SPANISH

S.W. PRATT

Position:

Associate

Date of Birth:

1924

Qualifications:

Chartered Engineer,

Member of the Institution of Electrical

Engineers.

Experience:

1941-44

Student Apprenticeship.

1944-47

Service with Royal Navy in electrical and

telecommunication branches.

1947-53

Site engineer and contract engineer with

electrical contractors.

1953-61

Joined Rendel, Palmer and Tritton. Design and supervision of electrical installations

for Air Ministry and Dock and Harbour authorities in U.K. and overseas.

1961-present

Engineer in charge (Associate 1971) of the

Electrical, Heating, Ventilating and Air

Conditioning Department of R.P.T.

organisation.

Reports, design and preparation of Contract

Documents for stand-by power supply,

airfield lighting, visual aids, telecommunication

and navigational aids for airports.

Reports, design and supervision of miscellaneous electrical, control, heating, ventilating and air conditioning services associated with civil engineering, mechanical handling and marine

projects.

Diesel engine powered generation, electrical transmission and distribution for Dock and Harbour

authorities in U.K. and overseas.

Power, lighting and control systems for Power Stations.

Heating, ventilating and air conditioning for

Power Stations.

K.E. AINSCOW

Position:

Partner

Date of Birth:

1926

Qualifications:

B.Sc. (Tech);

Fellow of the Institution of Civil Engineers; Member of the Institution of Structural Engineers.

Experience:

1944-48

Four years Royal Engineers, (Survey)

1948-54

Engineer in County Surveyor's Department, Dorset, including 2 years as Resident Engineer on road and bridge construction by contract.

1954

Joined Rendel, Palmer & Tritton.

Senior Engineer on control from London office of construction contracts for Neath By-Pass (Lonlas - Earlswood), S. Wales (£2m.) and trunk road works in London area, including a number of road bridges in reinforced concrete and steelwork.

Project Engineer for the preliminary studies and Report on the extension of Nicosia Airport, Cyprus.

Engineer-in-charge of location and design of 570 Kms. of feeder roads in southern Chile, (Estimated £9m.) and preparation of standard bridge designs for Public Works Ministry.

Engineer-in-charge of preliminary location survey for Masingbe-Tonkolili road, Sierra Leone, 23 miles (flm.), including two major river crossings.

Project Engineer for studies and design of 500 Kms. of major roads and bridgeworks in Iran, including 170 Kms. of the Pan-Asian highway. (Estimated £5m.).

Responsible for the organisation, direction and data analysis of traffic surveys for road development in S. Wales, in London and Liverpool; economic and traffic study of Hooghly Toll Crossing, Calcutta.

1969

Partner-in-charge of the preparation of Master Plan and design for Aqaba Airport, Jordan.

Partner-in-charge of technical and economic study and detail design for the Suva-Nandi Highway, Fiji (120 miles with 65 bridges).

Project Director, Ethiopia Transport Study.

Partner of Urban Development Advice Group, U.K.

Partner of Rendel and Partners, Australia.

Director of MRT Consulting Engineers Ltd.

Foreign languages spoken - SPANISH

APPENDIX

TERMS OF REFERENCE

FALKLAND ISLANDS AIRFIELD PROJECT

TERMS OF REFERENCE

The Argentine National Airlines (LADE) propose to run a service between Commedore Rivodavia in Argentina and the Falkland Islands using F.27 (Fokker Friendship) aircraft with a service frequency of at least four flights per month.

Consequently it is proposed than an airfield be built at or near Port Stanley in the Falkland Islands and a site at Cape Pembroke as set out in the Royal Engineers Preliminary Reconnaissance Report has been selected as being the most suitable. This report suggests that a minimum airfield length of 3,600 ft. is required with a clearway but that in the case of a possible emergency arising a 4,000 ft. airfield would be more desirable. The pavement being to LCN 15.

The consultant is required to investigate this site to:-

- 1) Establish its suitability for operation by F.27, HS748 or other suitable aircraft to enable flights to be carried out between Port Stanley and Commedore Rivodavia or other airfields in Argentina as a regular service, and between
 - (a) Port Stanley and Punto Arenas in Chile and
 - (b) Port Stanley and Montevideo un Uruguay in emergency conditions.
- Prepare preliminary plans over the proposed airfield together with its ancilliary buildings.
- Recommend a list of suitable essential navigational equipment to be installed at Port Stanley and provide an estimate of its cost.
- 4) Recommend a list of additional desirable navigational equipment to be installed at Port Stanley bearing in mind the possible emergency requirements and provide an estimate of cost.
- Prepare an estimate of cost of construction of the airfield for the lengths of 3,600 ft. and 4,000 ft. as suggested in the preamble and also for such length as the consultant considers it desirable.

- 6) Prepare a list of suggested contractors of a calibre suitable to undertake the construction work of the airfield bearing in mind that labour is scarce in the Falkland Islands.
- Collect and collate into directly useable form, data in sufficient detail and quantity on soils, materials and other factors of relevance, to enable a final detailed design to be completed in London at a later date without further major visits to the Falkland Islands.
- 8) Submit a report by the 30th March, 1972.

Note: the Minute Man (Craelius) earth auger has been shipped by SS John Biscoe to the Falkland Islands and is available for use by the consultant on the 17 November.

22 October 1971