

AUSTRALIAN MILITARY FORCES : CENTRAL COMMAND

31 May 1961

DAD Svy  
 HQ C Comd  
 Keswick Barracks  
KESWICK, SA.

22 May 61

DATE OF	
MILITARY SURVEY	
AHQ	
D Svy	1
AD Svy	2
DAD Svy	3
Tech (Major)	4
Staff Capt	5
Computer	
Sy. Equip	
Map Library	
Gen. Serv. Room	

OPERATION ORDER C/1/61

Reference HQ C Comd 307-1-10 dated 19 May 61  
 AHC A307-1-82 of 19 Dec 60

MAPS

- (a) ICAO Series 1/1,000,000  
 Sheets Darwin (3109) Melville Island (3099) Cape Wessel (3098)  
 Roper River (3110).
- (b) Mosaics - 4 mile to 1 inch Series  
 Arnhem Bay, Wessel Is, Junction Bay, Millingimbi, Mt Evelyn, Coburg  
 Peninsula, Alligator River, Darwin, Pine Creek.
- ... (c) Trace P (attached) - Location of control bases etc.

(1) SIT

(a) C Comd Fd Svy Section engaged on NT Ops will comprise following strength :-

- 3 Offrs 17 ORs (Survey)
- 1 Offr 11 ORs (att)
- DUKW Crews 6 ORs (att)
- 3 Civ Pilots/Engrs

Total 6 Offrs (or equivalent) 34 ORs (or equivalent). Remainder of C Comd Fd Svy Sec will op at Unit HQ under Senior Offr or WO present. Breakup of pers and tasks of members and att is shown at annex A.

(b) In sp of 1961 Svy op will be

- (i) Frigate HMAS Gascoyne--20 Jun - 5 Aug (Darwin)  
 (2 cutters; 4 Assault Craft Lk IV; FBL Lk V Raft 4 Zodiacs 3Z)
- (ii) LSM Vernon Sturdee 2 Aug - 15 Oct (Darwin)
- (iii) 3 Trucks Amphibion 6 x 6 GMC (DUKW) 2 Aug - 15 Oct ( " )
- (iv) Hel (Hiller 12E) (200 hrs flying) 20 Jun - 18 Aug ( " )  
 (This contract may be extended up to one month)
- (v) Cessna 195 Lt a/c (250 hrs flying) 15 Jun - 15 Sep ( " )

(2) HSN

(a) C Comd Fd Svy Det (NT) will establish Svy control for the fol 1/250,000 scale Map Sheets in Arnhem Land.

Alligator River, Mt Evelyn, Coburg Peninsula, (Incl offshore islands)  
 Melville Is and Bathurst Is.

(b) Astro control will be established along the E edges of Darwin and Pine Ck. 1/250,000 sheets to substitute for BMR traverses which were not identifiable.

(3) EXECUTION

Gen Outline

The Svy will be carried out in 4 phases. Tech instr are att at Annex B.

(a) Phase I

- (i) Survey of R Aust Sigs Transmitter sites vic Darwin. Unit HQ will be in Darwin.
- (ii) Control E Edge Darwin and Pine Ck 1/250,000 Map Sheets (See trace P).
- (iii) Timing for phase I - 8 Jun - 18 Jun 61. No ac sp will be available for phase I.

(b) Phase II

- (i) First order geodetic traverse Abbott Is to De Coursey Head.  
Dependent on avail of Heliport on LSI Vernon Sturdee, and additional Hel flying hours (b)(i) above may be subdivided into sections Abbott Is to Cape Stewart and Hawkesbury Pt to De Coursey Head, leaving the intermediate section until phase III.
- (ii) La Place observation at Abbott Is.
- (iii) Timings for Phase II - 22 Jun 61 - 4 Aug 61.
- (iv) HMAS Gascoyne, 2 Cutters, 4 Asslt Craft lik IV, FBE lik V Raft, 4 Zodiacs Z3, Hel and Lt a/c will be aval for recce and execution Phase II.
- (v) Field HQ will op at Blch Is and Maningrida.

(c) Phase III

- (i) Astro fixes Coburg Peninsula, Alligator River and Mt Evelyn 1/250,000 Sheets as shown on Trace P.
- (ii) Lt A/C heighting above sheets - for spot heights for model and for multiplex contours if time and flying hrs permit.
- (iii) Fix offshore Islands Coburg Peninsula by Tellurometer, Astro Azimuth.
- (iv) First order tellurometer traverse Cape Stewart - Hawkesbury Pt (dependent on note to (b)(i) above).
- (v) Timing for phase III - 23 Jul - 10 Sep approx (less changeover period HMAS Gascoyne to LSI Vernon Sturdee approx 4-8 Aug).
- (vi) HMAS Gascoyne and ancillary craft will be aval for phase III until 4 Aug. Thereafter LSI Vernon Sturdee plus 3 Trucks Amphibion 2<sup>3</sup> ton 6 x 6 (DUKW), Asslt Craft, FBE lik V Raft and Zodiac will sp op. Lt A/C will be aval continuously. Hel until 18 Aug, with such extensions as are later auth.
- (vii) Fd HQ will op at Croker Is.

(d) Phase IV

- (i) First order tellurometer traverse De Coursey Head via Melville Is to Darwin.
- (ii) Astro fixes Melville Is and Bathurst Is 1/250,000 map sheets.
- (iii) Lt A/C heighting for spot heights for model and for multiplex contouring if time and flying hrs permit.
- (iv) Timing for phase IV 10 Sep - 15 Oct approx.
- (v) Sp will be LSI Vernon Sturdee and ancillary small craft, Lt A/C until 15 Sep plus any auth extensions to Lt A/C and Hel charters.

(e) CO-ORD INSTR

- (i) Lt A/C arr Darwin 15 Jun and departs 15 Sep 61 unless extension is auth. Ac is aval Adm and Tech recce 15-22 Jun.
- (ii) HMAS Gascoyne dep Sydney 10 Jun 61, arr Darwin 19 Jun dep Darwin for svy grounds 21 Jun arr 22 Jun. Sp finishes 4 Aug 61.
- (iii) Hel arr Darwin 20 Jun and dep for svy grounds 21 Jun on HMAS Gascoyne. Hel completes contract 18 Aug 61 unless extension auth.
- (iv) LSH Vernon Sturdee with 3 DUKWS due Darwin 3 Aug departing for svy grounds 8 Aug. Sp finishes 15 Oct unless extension auth.
- (v) HMAS Gascoyne will visit Darwin for maint and re-supply 15-22 Jul approx. LSH Vernon Sturdee will return to Darwin for re-supply at approx 25-28 day intervals.
- (vi) LSH will transport FBE Mk V Raft, and assault boats (less bow covers) on return journey either to Brisbane or Sydney for on mov to 6 CSR.
- (vii) E Comd Fd Svy Sec will liaise with Hydrographer RAN and Captain HMAS Gascoyne to load Asslt boats and Zodiacs before 10 Jun.
- (viii) Sig co-ord is detailed in para 5c.
- (ix) GSO2 (Ops) HQ NT Comd will maintain liaison with branches, services and units of INT Comd on behalf of C Comd Svy Det.
- (x) A Svy OR will remain in Darwin during the season to assist the Adm Offr att in detail.

(4) ADH & LOG

(a) Nov - Mov details are shown at Annex C.

(b) Search and Rescue

- (i) Det Comd will maint loc stats and flight plans for all small craft, gd parties and ac under his comd.
- (ii) Initial S & R is the responsibility of the Det Comd of the Det to which the pers, craft, veh or a/c is att. Overdue a/c must be reported to Unit Comd on first aval wrls sched.
- (iii) RAAF/Civ S & R org may be called upon at any time warranted by circumstances by any Det Comd, but will normally be alerted by Unit Comd.
- (iv) A/c under unit Comd will be used for S & R in the first instance, or whilst awaiting RAAF/Civ S & R.
- (v) RAASC NCO att is responsible to maint flight plans, small craft, veh and ground party routes in such a manner as to minimise the search area. In the absence of the RAASC NCO a member of Field Base Party will be detailed for this task.
- (vi) When Ac are not in Radio contact with DCA Air Traffic Control, Field Base will arrange regular safety checks on Air/Ground frequencies.
- (vii) Aerodromes and airstrips in or near the area of operations their last known usage and capacity are shown at Annex D

(c) Safety Precautions

- (i) On hel ops p rs will carry one 24 hr rat pack each, and on lt ac two packs, for emergency use only.
- (ii) Lifejackets will be worn at all times by p rsonnel on board DUKWS or small craft.

- (iv) Water carried by hel and ac will be not less than 1 gal per man per day for estimated duration of task plus one gal per 4 men for emergency use.
  - (v) Personnel will not be carried in any small craft under tow.
  - (vi) Small craft will not move if unable to reach destination (land or mother ship) 30 mins before darkness, and will not travel during hours of darkness.
  - (vii) Operating instr for each type of craft will be issued fixing load limits which will not be exceeded.
  - (viii) Senior Naval, RAASC and Tn personnel in charge of cutters, DUKWS and small craft will be responsible for all decisions in relation to safety of their craft and personnel on board. Senior member on board may not order mov of craft against the advice of senior crew, but may order no mov if he considers mov dangerous for any good reason. He will be held completely responsible for such decision.
  - (ix) Each isolated detachment will carry one rifle and 20 rds ammo.
  - (x) Whilst it is essential that pers maint personal hygiene at highest possible standard in tropics, incl salt water bathing where fresh water is not aval, every precautiun must be taken to obviate risks from shark, stonefish etc. Pers will not bathe in coastal water more than 2 ft in depth unless a reliable member is posted as lookout with rifle. Bathers will not mov beyond 30 yds of lookout. Canvas shoes or boots will be worn when sea bottom is not clearly visible.
- (d) MED
- (i) Kits Med NCO will be carried by all dets except where suitable first aid kits are provided on Hel and lt ac.
  - (ii) Flying Doctor medical kit will be maint at Unit Field HQ
  - (iii) Hed Evac will be direct to NT Comd HQ where practicable or by NT Flying Doctor service in emergency.
  - (iv) Personnel will be particularly careful to cleanse and disinfect cuts and bruises immediately they occur and cover them with pourous dressings. Plastic Skin will not be used to cover any infected wound, tropical ulcer etc.
  - (v) Any case of skin infection will be reported to OC Det immediately it occurs.
  - (vi) Pers will ensure that sand fly bites are treated and not allowed to develop into tropical ulcers through infection.
- (e) SUPS
- (i) Maint RAASC expense items will be drawn from NT Comd and appropriate portion of Svy rat allce deducted.
  - (ii) Unit will rat itself when not R & C in Darwin.
  - (iii) Where meals or rats are provided by HMAS Gascoyne or LSM Vernon Sturdee, roll books will be annotated accordingly and svy rat allce adjusted.
- (f) POL
- (i) Approx 125 x 44 gal drums of avgas 80 Oct will be aval progressively in Darwin.
  - (ii) 80 gals om 270 oil to supplement currently held White Band Aero oil will be aval in Darwin in 4 gal drums.
  - (iii) ... will position approx 85 x 44 gal drums of avgas as

- (iv) Where ac refuel at other than Svy fuel dumps, signed AAF/F59 will be issued to pilots who will fill in the qty drawn and return 2 copies of F59 and Oil Coy Issue Voucher to Unit HQ.
- (v) ~~NT~~ <sup>in separate</sup> fuel will be purchased from authorised contractors shown ~~in~~ <sup>Annex</sup>, except where location makes this impracticable in which case all copies of AAF F59 will be endorsed with the reason for NIC purchase. ALL F59s will be endorsed with Veh No and G2 No when petrol is drawn.
- (vi) Oil and lubricants will be obtained from Army Sources and carried wherever possible.
- (vii) AAF F59s will be processed by DADST HQ C Comd for purchases south of Alice Springs. For Alice Springs and North they will be processed by Capt RAASC HQ NT Comd.
- (viii) The F59 will be made out to the actual oil Coy, the resellers name being shown in brackets thus -
  - BP Aust Ltd
  - (J Bloggs Katherine NT)
- (ix) Adm Offr will be responsible to demand and account for all POL and Avgas and maint drum register. Field issues will be recorded by Svy Veh Maint NCO and RAASC NCO and passed to Adm Offr periodically.

(g) RDC, REPAIR MAINT (VEHS)

- (i) Rd convoy to Darwin and isolated Veh dets will be auth to spend up to £25 on any one emergency repair. Order nos will be issued by DADIME HQ C Comd.
- (ii) Up to £10 may be spent on repair under IIBi 85/59.
- (iii) Veh cas beyond the scope of unit resources and (i) or (ii) above, will be referred to HQ Comd for instr for rec & repair.
- (iv) Where practicable RAEME or Dept of Works resources should be used. Local facilities may be used in emergency.

DUKW and Small Craft

- (v) Navy facilities will be utilised during att HMAS Gascoyne.
- (vi) LSM and reserve DUKWS will be used during att LSM Vernon Sturdee.
- (vii) Requirements beyond scope of (v) and (vi) will be notified to Comd HQ.

(h) PAY AND ALLCES

- (i) Pay will normally be aval monthly in adv or as offr mov Darwin - Field allows.
- (ii) Rat elm of svy allce (when applicable) will be aval as an adv to Comd 3 monthly. Other elms will be paid monthly in arrears on form TS4. Rat elm will be acquitted by signed Form TS 5a after each 3 monthly adv period.
- (iii) TA will be paid in accordance with UAP and on certification by OC that member was auth to mov.
- (iv) Fd Svy Allce rat elm will be paid at all times when members are not R & Q in Darwin or aboard HMAS Gascoyne or LSM Vernon Sturdee.
- (v) Acquittances for pay and allces will be made at the earliest time commensurate with remoteness of dets.
- (vi) A special advance of £100 per det for miscellaneous expenditure incl payment native labour will be aval under fol conditions -
  - (a) Claims to be checked for castings by responsible officer of

- (d) For wages, signed and witnessed TS5a.
- (e) Advance will be reimbursed by Finance Rep NT Comd on acquittance of payments.
- (f) Purchases limited to £25 per transaction.

(j) MDT

- (i) Clearing showers may be expected until late June.
- (ii) The seasonal wet in the area of ops has been light and access tracks should open earlier than usual and coastal flats dry out rapidly.
- (iii) SE winds generally to 25 knots will occur Jun to mid Oct when NW monsoonal winds may be expected.
- (iv) Temperatures down to near 40° may be expected in Jun and Jul in early morning. Day shade temperatures to 105° may be expected later in season with lower temperatures and high humidity from Sep.

(k) REPORTS

- (i) Det Comd at Keswick will originate monthly progress reports for AHQ and HQ C Comd.
- (ii) OC Sec will provide fd progress by signal for incorporation in (i) above.
- (iii) OC Sec will advise HQ NT Comd weekly on gen loc all dets and proposed mov for fol week.
- (iv) OC Keswick det will report activities and progress of compilation fortnightly on Fri to Unit Comd in the field by signal.

(l) POSTAL

- (i) Unit postal address in NT will be -

C Comd Fd Svy  
c/- HQ NT Comd  
LARRAKIYAH BARRACKS,  
DARWIN, NT.

- (ii) Adm Offr will arrange for mail to be on fwd by first avail means to field dets.

(m) STORES & STORE ACCOUNTANCY

- (i) Stores will be accounted in accordance with SOE Pam 4.
- (ii) Stores lists will be prepared combining stores left in NT Comd 1960 and those to be taken North this season.
- (iii) Det Comd will check and sign for stores issued and take responsibility for reporting loss or damage immediately on return to Fd HQ. Loss and damage report will be submitted by members concerned at earliest opportunity.
- (iv) Special stores, purchased for air transported tropical operations, are generally, because of their lightness, not as rugged as normal Army issues. Personnel will take special care of all such equipment and stores and Det Comds will take disciplinary action for breaches of this order.
- (v) Det Comds will prepare for approval, and maint, two stores lists, together with weights of stores, rats etc incl as under -
  - (a) For hel transported op.
  - (b) For small craft or veh op.

(n) AIR SP

- (i) NCO RAASC or in his absence a member appointed by OC will maintain a log for each ac in sp, showing detail of each sortie, pers, fuel, weight of stores carried, length and time of sortie.
- (ii) Both ac contractors are paid for time from take off to landing for each sortie, plus 5 minutes per day warming up time.
- (iii) Members in n (i) above will maintain daily "Aircraft Usage Return" and pilots log will be initialled daily by pilot and Det Comd showing agreement between aircraft Usage Return and log.
- (iv) At the end of each charter month Det Comd and Pilot will agree the flying hours and both sign the Aircraft Usage Returns. The original will be despatched to AHQ by fastest means to verify contractors claim.

(o) DRESS

- (i) In fd camps pers may wear green shorts and open sandals provided the area is free from hookworms. Shirts or safari jackets will be worn at all meals.
- (ii) When on air ops involving the possibility of walking out, boots ankle will be worn or carried. Lifejackets will be worn when flying over water.
- (iii) Dress in Darwin will conform to NT Comd Orders. Working dress may be worn when proceeding to or returning from the field or when engaged on tasks likely to soil or damage other uniforms.
- (iv) Aboard HMAS Gascoyne and LSM Vernon Sturdee, dress will be army equivalent to Navy rig and conform to Tn pers dress respectively.
- (v) Summer dress and greatcoat may be worn when leaving Keswick for NT.

(p) OTHER ORDERS

- (i) When not at variance with this OO, Unit Standing Orders and R Aust Svy Tech Instr will be complied with.
- (ii) Det Comds will issue op instr for ops under their comd as fol -
  - (a) Transmitter Sites - OC
  - (b) Tellurometer Traverse - Lt Etheredge
  - (c) Recce - WO Bounds
  - (d) Astro - Sgt Hogan
  - (e) Annotation & Heighting - Sgt Munro

(q) LEAVE

- (i) Approval has been given for members to accumulate days in lieu of rest days and public holidays worked during the field season. Approx 1/3rd of rest days will be taken in the field, incl a period of 4 clear days in Darwin.
- (ii) Remote Area ARL rate will apply during the period in NT.

(r) NATIVE RESERVES

- (i) Permission has been granted for members to enter Native Reserves for the purpose of this survey. All ranks are expected to conduct themselves in these areas in such a manner as to reflect no discredit on their Corps, or the Army generally. Croker Is is a part white Settlement and fraternisation with part white females is strictly forbidden.

(5) COLD AND SIG

(a) LOCS

<u>Loc</u>	<u>Open</u>	<u>Close</u>
HQ NT Comd	7 Jun	21 Jun
Elchs Is	22 Jun	20 Jul
Maringrida	22 Jul	2 Aug
Crocker Is	8 Aug	10 Sep
Helville Is	12 Sep	15 Oct
HQ NT Comd	6 Oct	20 Oct

(b) COMD

- (i) Unit Comd will be 2374 Maj F D Buckland.
- ((ii) Unit will come under Comd NT Comd for local adm from date of entry NT Comd.

(c) SIG

- (i) CSO HQ NT Comd will issue Sig instr, call signs and NIS for op.
- (ii) Unit Fd HQ will op shcedules to HQ NT Comd daily at the fol hrs -  
0800 - 1100 - 1400 - 1600 hrs. Scheds 1100 and 1400 hrs will be mainly reception checks and urgent traffic.
- (iii) All msgs on rear link will be formal.
- (iv) Hel and Lt ac will be fitted with HL sets. Gd/air frequencies will be 6238 and 7580 Kcs.
- (v) Domestic net will op with C/11 Wrls set at Fd Base and WS A510 with all dets. Fol Freq will be used 6355, 6238, 4930 and 2608 Kcs.
- (vi) HMAS Gascoyne will op with A510 sets or domestic net using freq in para (c)(v) above. Xtals will be sup on loan by C Comd Svy.
- (vii) Sig diagram is att at Annex F.
- (viii) Op instr for C11 and RT 210 are part of Annex F. Att R Aust Sig pers only are to operate these sets except in emergency.

*F D Buckland*  
Maj  
DAD Svy  
HQ C Comd

<u>DISTRIBUTION</u>	Copy No	Annex A	Annex B	Annex C	Annex D	Annex E	Annex F	Trace P
C Comd Fd Svy Sec	1-4	4	4	4	4	4	4	2
HQ NT Comd	5-6	2	2	2	2	2	2	1
D Svy AHQ	7-8	2	2	2	2	2	2	1
HQ C Comd	9-10	2	2	2	2	2	2	1
Hydrographer RAN	11	1	1	1	1	1	1	1
Capt HMAS Gascoyne	12	1	1	1	1	1	1	1
Capt LSM Vernon Sturdee	13	1	1	1	1	1	1	1
OC 101 Tpt Coy (42 Amphibious Pl)	14	1	1	1	1	1	1	1
File and Spares	15-20	5	5	5	5	5	5	1

ANNEXES

- A - Pers grouping and Tasks
- B - Tech Instr
- C - Mov Instr



TECHNICAL INSTRUCTIONS

1. Except where varied by these instrs all tech detail will be carried out in accordance with R Aust Svy Manuals and Specifications.

2. (a) Posn line astro fixations - will fol method in R Aust Svy Manual of Field Astronomy with particular emphasis on -

- (i) Obsn on six stars at approx  $45^{\circ}$   $90^{\circ}$   $135^{\circ}$   $225^{\circ}$   $270^{\circ}$   $315^{\circ}$  true bearings, altitudes  $20^{\circ}$  -  $35^{\circ}$  and approx equal.
- (ii) Three separate fixes will be obs at each sta, the same stars may be used in each if conditions in (a)(i) above are satisfied. Stars must be positively identified before leaving sta, and if possible fix computed.
- (iii) Stopwatch will be checked against WWVH immediately before and after full obsn and watch error recorded.
- (iv) Obsn to EAST and WEST stars will be weighted twice other stars for computation of long.
- (v) Range between 3 values lat and long will not exceed 3 secs arc.
- (vi) The fol eqpt, showing wts, will be standard for hel posn line astro parties of two pers :-

Wild Theodolite, legs, reostat	35 lb
Btys dry $1\frac{1}{2}$ V (3)	77 lb
Set Barometers (3)	7 lb
WS A 510 and spare btys (2)	21 lb
Watch stop (split hand), watch pocket	1 lb
Compass prismatic	1 lb
Torch, thermometer	1 lb
Axe felling	5 lb
Station marker	10 lb
Water ( $3\frac{1}{2}$ gal plastic container)	25 lb
Books and tables	3 lb
Cooking, eating utensils, rats	12 lb
Lt wt camp eqpt (2 sets)	20 lb
Rifle and ammo	10 lb
	<hr/>
TOTAL	153 lbs

(b) Geodetic Tellurometer Traverse

- (i) Obsn will be carried out as laid down in "Operation Handbook" and R Aust Svy precis. Remote sets will op at fwd and rear sta; Master set with the angle party on the centre sta. On completion of measurement each eqpt will adv one sta, each line being measured twice.
- (ii) Readings will commence on cavity 19 running down by half cavities.
- (iii) Specifications will be in accordance with "Provisional Specifications for Geodetic Application Tellurometer" dated 31 Mar 59.
- (iv) At least 4 course readings will be made; two forward and two reverse.
- (v) On fourth order connections or traverse for 1/ 250,000 scale mapping 4 course readings will be taken, 2 forward and 2 reverse. No fines are required.
- (vi) Photo control points will be fixed at every first or fourth order position where identification and/or transfer of stations is not clear and positive.



MOV INSTR - C COMD FD SVY SEC - 1961 FIELD SEASON NT

1. GENERAL

C Comd Fd Svy Sec will move to Darwin for svy ops in Arnhem Land commencing 31 May 61, returning to Adelaide approx 15 Nov 61.

2. MOV

(a) Adelaide to Darwin

- (i) 3 Offrs 10 ORs 6 Vehs will proceed to Darwin by road and rail as follows -

Adelaide - Pt Augusta - Rd  
Pt Augusta - Alice Springs - Rail  
Alice Springs - Darwin - Road

Two personnel will escort vehs whilst on rail, remainder travelling as rail passengers. All personnel above will join vehs ex rail at Alice Springs and proceed to Darwin in road convoy.

Lt Etheredge will be OC det for purpose of mov. TA will be paid for the mov.

- (ii) 2 ORs will emplane Adelaide 1 Jun 61 for Darwin  
1 Offr 8 ORs " " 6 Jun 61 " "  
6 ORs " " 15 Jun 61 " "

The senior member of each party will be OC Det for purpose of mov.

Personnel on tourist class air are advised that no meal is provided and a meal should be carried. Meal allowance is \$1.00 per day.

(b) Field Mov

- (i) On arrival Darwin pers will form dets as required for Phase I Ops. All dets will be veh transported.
- (ii) On 19 Jun unit will reform in Darwin and embark HIAS Gascoyne 20/21 Jun for Phase II Ops.
- (iii) Between 4 - 10 Aug Unit will disembark HIAS Gascoyne and transfer to LSH Vernon Sturdee for phase III and IV ops.
- (iv) A det will op base at Darwin continuously.

3. RETURN TO ADELAIDE

- (a) On completion of fd ops unit will proceed to Adelaide by Rd.
- (b) All unit vehs not for disposal in Darwin will be driven south.
- (c) All unit stores not for local disposal will be brought to Adelaide on vehs.
- (d) Sufficient pers to man 8 - 12 vehs will be required to return to Adelaide by road leaving Darwin approx 5 Nov. remainder of unit travelling by air.

4. Detailed Mov Instr is issued separately. Dress will be in accordance with these instr and/or Part I orders. RTO Adelaide will issue necessary tickets and book passages.

Annex D to OO Sv C/1/61  
dated 22 May 6

Strip	Latitude	Longitude	Largest Aircraft to Land . . . Date	Aircraft Required to Land 1961
GRAYS BAY	12 44	136 34	RAAF & Army Cessna's 180 unsuitable Cessna 172 Jun - Sep 60	Cessna 175
YIRKALA	12 17	136 49	IMA DC 3 Fortnightly	"
MILLINGHIBI	12 06	134 53	IMA DC 3 "	"
OENPELLI	12 19	133 02	IMA DC 3 "	"
KOOLATONG	13 14	135 49	RAAF & Army Cessna 59(180)	"
MANINGRIDA	12 07	134 12	RAAF Dakota Oct 59	"
ELCHO Is	12 01	135 34	IMA DC 3 Fortnightly (Main Strip)"	"
DRYSDALE Is	11 39	136 02	Missi Cessna 175	"
STEVENS Is	11 34	136 06	" " 175	"
MACHINBAR Is	11 10	136 42	" " 175	"
ARNHEM BAY	12 19	135 58	RAAF & Army Cessna Jul - Sep 59	"
BUCKINGHAM BAY	12 14	135 34	Army Cessna Sep 59 (180)	"
Nth CAPE NEWBALD	12 05	136 16	Being prepared Mission Cessna 175 (Sep 59)	"
Sth GOULBURN Is	11 04	133 43	IMA DC 3 Fortnightly	"
CROKER Is	11 10	132 34	" " "	"
NOARLANGI	12 49	132 39	Comanche 1959 Cessna 172 (1960)	"
FISHER	13 35	132 37	Cessna 180 (Prob DC 3)	"
NAHOONA	13 23	132 06	No info	"
MOLIN	13 41	132 08	Cessna 180	"
SLEISBECK	13 46	132 49	Cessna 180 (Prob DC 3)	"
PINE CREEK	13 46	131 50	Licensed Cessna 172 (1960)	"
DALY RIVER MISSION	13 45	130 39	Cessna 172 (1960)	"
BATHURST Is	11 45	130 38	DC "	"
SNAKE BAY (Helville Is)	11 46	130 40	DC 3	"
GARDEN POINT (Bathurst Is)	11 24	130 ;	Cessna 180	"
WOOLNER	12 20	131 32	Army Cessna Oct 59 (172)	"
Pt STUART	12 18	131 50	Cessna 180, 172 (1959)	"

POL & AVGAS DUMPS 1961 SEASON

(1) Fuel Dumps for 1961 season will be carried/positioned by Road, HIAS Gascoyne and LSM Vernon Sturdee as under :-

(a) Road

- (i) 6 x 44 gal drums of 80 Octane avgas are in position at Noarlangie from 1960 season. No more are reqd for 1961 season.
- (ii) 6 drums are reqd to be positioned by road at Oenpelli.
- (iii) 1 x 44 gal drum is in position at Fisher. A further 4 drums are to be placed by road.
- (iv) Road dumping convoy will rec all empty drums from 1960 season incl 3 x jerry cans at Oenpelli.

(b) HIAS Gascoyne

- (i) Avgas and aero oil will be distr as under. Phase I and Phase 2 Hel qtls will be held on board Gascoyne until dump positions are finalised.

Locality	Stock Placed 1960	1961 Replacement		Position by HIQS Gascoyne
		avgas	oil	
Elcho Is	14 drums	6	64 pts	Recover 8 drums
Haringrida	5	12	96 "	Dump 7 drums
S Goulburn Is	Nil	11	96 "	" 11 "
Phase I Hel	Nil	26	160 "	" 26 "
Phase II Hel	Nil	28	192 "	" 28 "
				Total 72 drums less 8 recovered - 64 drums

(c) LSM Vernon Sturdee

- (i) Unexpended fuel from HIAS Gascoyne to be held, and 39 x 44 gal drums avgas distr as under. Phase II and III Hel avgas will be held on board until dump positions finalised.

Locality	1961 Avgas	Requirement Oil
Croker Is	11 x 44 gal drums	96 pts
Bathurst Is	8 x 44 gal drums	64 pts
Phase II (Hel)	11 x 44 gal drums	64 pts
Phase III (Hel)	9 x 44 gal drums	64 pts
Total	39 drums	

(2) Lit fuel and oils for jeeps and outboard motors for phases II - IV incl will be carried on board vessel in sp. An initial qty 10 x 44 gal drums fuel and 12 gals OM 140 (outboard) will be distr by HIAS Gascoyne as reqd.

(3) Adm Offr will be responsible to account for all POL, avgas and drums.

WIRELESS DIAGRAM

Phase II Ops

DARWIN NT Comd Sigs



C 11

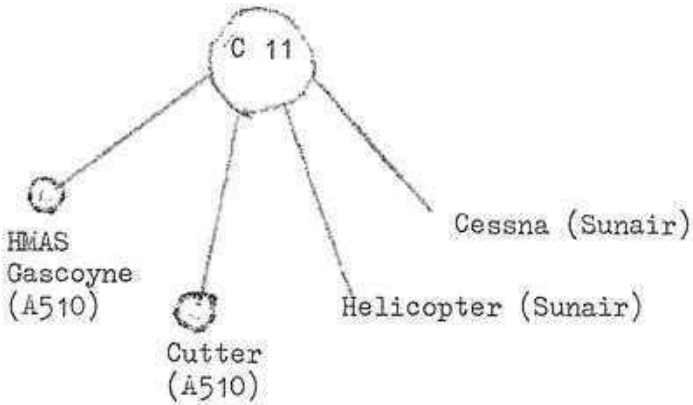
Elcho Is (Fd Base)

Scheds

0800 & 1600 hrs Routine  
1100 & 1400 hrs Emergency

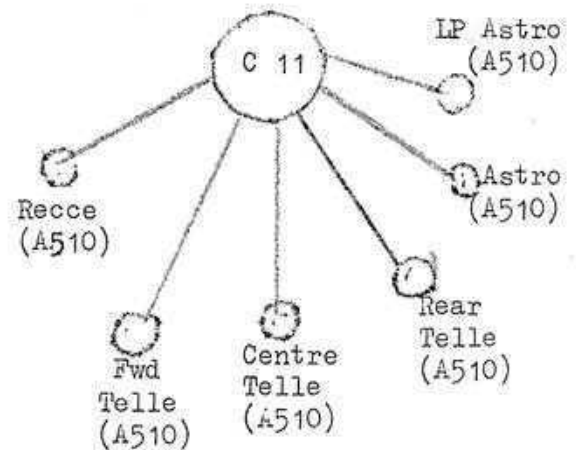
F1 6500 Kcs  
F2 5745 "  
F3 2724 "

ELCHO Is



F1 7580 KCs  
F2 6238 "

ELCHO Is



F1 6355 KCs  
F2 4930 "

- Notes
- (i) WSC 11 Op 7580 KCs domestic net will op Darwin Link
  - (ii) Domestic Net Sched times to be notified later
  - (iii) Wrls diagram phases III & IV to be issued later.

### OPERATING INSTRUCTIONS FOR WS C11 - RT210

- (1) Put sender range switch to range in which desired frequency lies.
- (2) Set POWER switch to LOW.
- (3) Turn the system switch to INT CAL. With the switch in this position the sender will not transmit.
- (4) Rotate the sender tune control until the black check point nearest to the required frequency appears against the cursor on the kc/s scale. A whistle should be heard in the headphones.
- (5) Adjust the CALIBRATE control to obtain zero beat.
- (6) Adjust the sender tune control to the exact frequency required.

#### NOTE

When WS C11 - RT210 are installed together, first tune the RT210 to the required frequency. Then, in place of paragraphs 3 and 4 above, turn the system switch to ADD TO REC, turn the tune control to the required frequency and adjust the CALIBRATE control for zero beat, to align sender and receiver correctly on the same frequency.

- (7) Turn the sender LOCK control clockwise to lock the position and extinguish dial lighting.
- (8) Switch to SENDER ON.
- (9) Adjust the aerial tuning unit TUNE and MATCH controls for maximum meter deflection, unless using dipole aerial. Then the aerial tuning unit will not be used, the dipole feeding straight from the sender.
- (10) Move the sender power switch to HIGH POWER, and again adjust TUNE and MATCH controls for a possible increase in aerial current.
- (11) When maximum deflection is obtained, turn the LOCK control on the aerial tuning unit to lock TUNE and MATCH controls and extinguish dial lighting.
- (12) Setting up procedure is now complete. Turn the sender system switch to VOICE/CPS to stop the rotary transformer running.
- (13) To commence transmission, turn the sender system switch to the desired method of operation.

### RECEPTION SET RT210

- (1) Operate ON - OFF switch to ON and allow set to warm up. If dial lighting is required, switch to ON & LIGHTS.
- (2) Set system switch to the AGC position.
- (3) Set Volume control fully clockwise.
- (4) Set NOISE LIM. switch to OFF.
- (5) Set cursor line to its central position by operation of the cursor control.
- (6) Set the range switch to range in which desired frequency lies.
- (7) Rotate the TUNING control handle until the required frequency reading appears in the scale window, approximately in line with the cursor.
- (8) Make final tuning adjustment by rotating TUNING control slowly in either direction to obtain strongest signal.
- (9) Lock the tuning control by operating locking device in the direction of the arrow.
- (10) Adjust the VOLUME control to a comfortable level.
- (11) The receiver is now ready for use.

