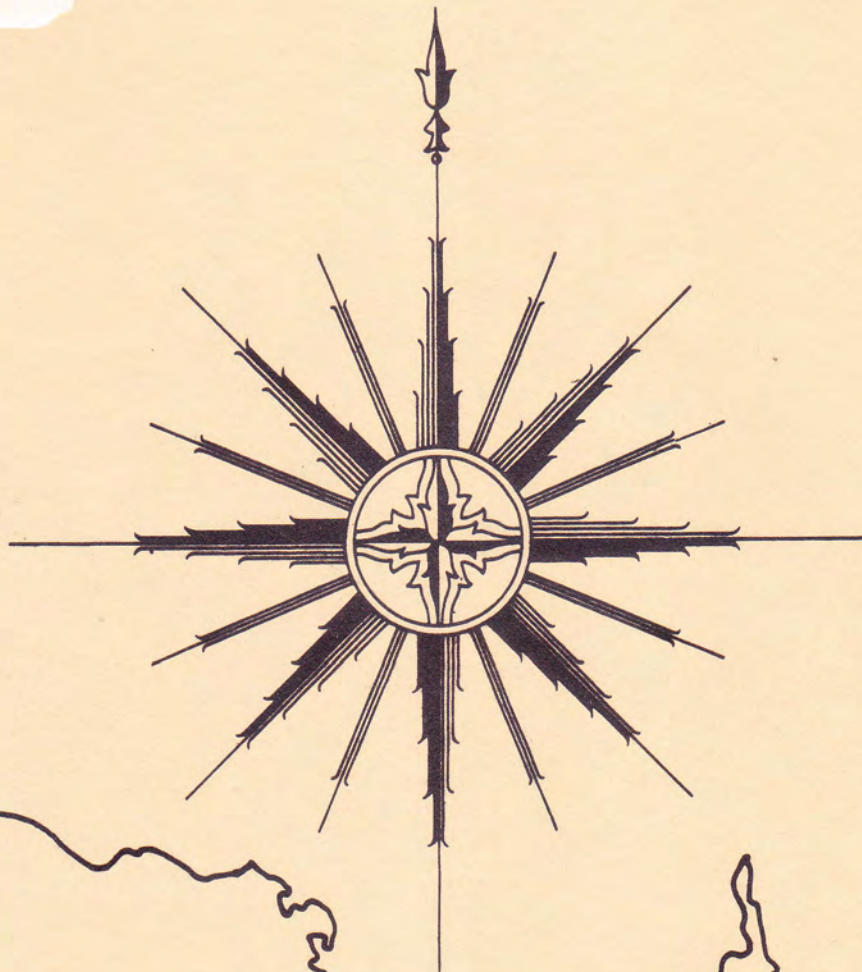
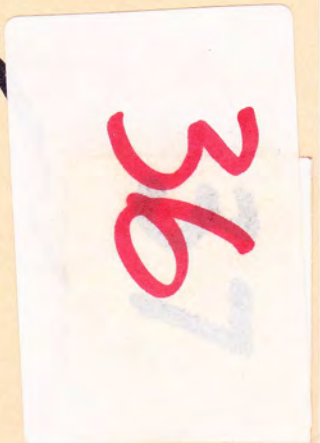


Australian Survey Corps Field Survey Squadron



OPERATION DESERT WALK 80



PROJECT REPORT
OPERATION DESERT WALK 80

- References:
- A. Dept of Defence (Army Office) A478/1/48 dated 12 Aug 79
 - B. DEFARM CAMPBELL SIG EXD SVY 01103 of 170030Z Jan 80
 - C. 4 FF Gp/4 MD Mounting Instruction 788/2S/37 dated 4 Feb 80

General

1. Operation DESERT WALK 80 was mounted by 4 Fd Svy Sqn and the Division of National Mapping (Natmap), during the period 27 Feb 80 to 31 Mar 80. The aim of the operation was to obtain, by Airborne Profile Recorder (APR) methods, vertical control in the following 1:250 000 map areas:

- a. SH 52-8 MAURICE
- b. SH 52-12 OOLDEA
- c. SH 53-5 TALLARINGA
- d. SH 53-9 BARTON.

Operational Programme

2. The operation was divided into two separate phases both of which were successfully completed. The phases were:

- a. Panelling (4 Fd Svy Sqn). To revisit and panel the existing ground control stations necessary for the adjustment of the profiles. A total of 28 control stations were visited and panels were checked or relaid. Full details are contained in Annex A.
- b. Airborne Profile Recording (Natmap). To obtain the vertical control required by the acquisition of North-South terrain profiles at intervals of $22\frac{1}{2}$ minutes of longitude, and East-West profiles at intervals of 30 minutes of latitude. A total of 2250 km of profiles were flown. Full details are contained in Annex B.

Air Support

3. Fixed wing and rotary wing aircraft were in support of the operation:

- a. LOH - 161 Recce Sqn. One LOH was employed on the operation. A total of 30 task hours were allotted; the total hours flown being 30.8. The aircraft was employed on the station visiting and panelling task.
- b. NOMAD - Natmap. One aircraft fitted with Natmap APR was employed on the operation. This aircraft flew a total of 84.75 task hours.

Administration

4. Manning. The composition of the force was as follows:

- a. RA Svy - 4 x ORs
- b. A Avn - 1 x Offr, 1 x OR
- c. Natmap - 5 personnel.

A nominal roll of all personnel involved in the operation is contained in Annex C.

5. Rations. Army personnel received the meal element of TA. Civilian personnel received their appropriate allowance.

6. Accommodation. Army personnel were quartered with the Commonwealth Police at MARALINGA. Natmap personnel were accommodated at the East-West Motel CEDUNA.

7. Pay and Allowances

- a. Pay. Army members were paid in advance for the duration of the operation.
- b. Allowances. Army members received the incidental element of TA. The other allowances to which the members are entitled is at present under investigation.

8. Health. The health of members employed on the operation was good.

9. Morale. The standard of morale was high throughout the operation.

10. Discipline. No situation arose that required disciplinary action.

11. Co-operation. Excellent co-operation between RA Svy, A Avn, Natmap and the Commonwealth Police at Maralinga existed throughout the operation. The Commonwealth Police deserve special thanks, although not directly involved in the operation, as their interest and co-operation contributed considerably towards the success of the operation.

Logistics

12. Supply. All aspects of initial supply and resupply functioned satisfactorily.

13. Serviceability. In general, equipment serviceability was satisfactory. The major problem being the APR; non-serviceability of this item delayed the completion of the operation by seventeen days. Full details are included in Annex B.

14. Fuel. Fuel used during the operation was:

- a. MT Super - 600 litres
- b. MT Standard - 1 397 litres
- c. Avtur - 16 135 litres.

Communications

15. Rear Link. Rear link communications were provided by telephone using

Telecom Credit Card.

23 Apr 80



J. GRUSZKA
MAJ
OC

- Annexes: A. Stations Panelled
 B. APR Report
 C. Nominal Roll

Distribution List:

Reg No:

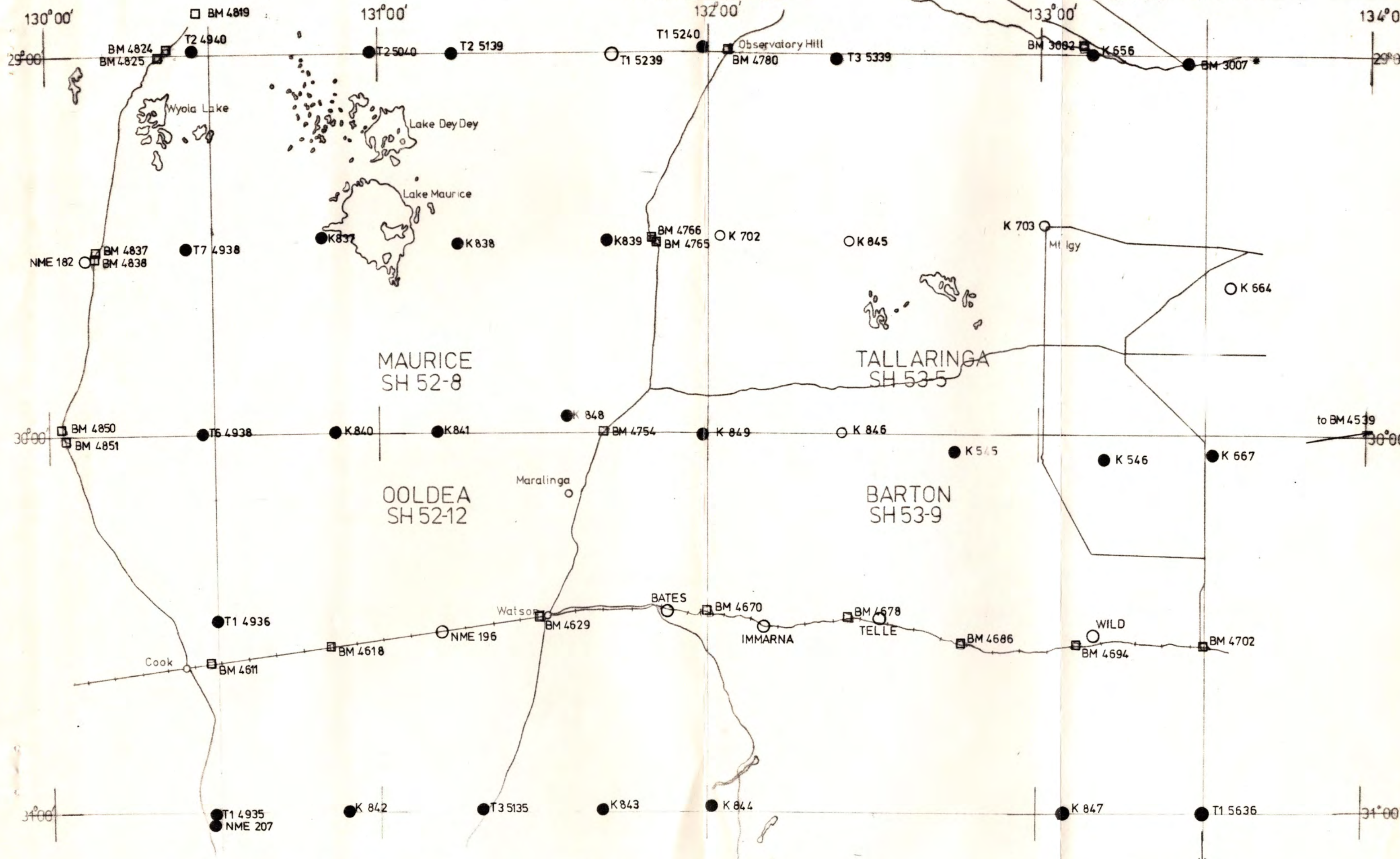
Dept of Defence (Army Office)	(5)	
- Incl 3 for DSvy		1 - 5
Field Force Command	(3)	6 - 8
4 Field Force Group	(2)	9 - 10
Army Svy Regt	(2)	11 - 12
1 Fd Svy Sqn	(1)	13
2 Fd Svy Sqn	(1)	14
5 Fd Svy Sqn	(1)	15
8 Fd Svy Sqn	(1)	16
161 Recce Sqn	(1)	17
Division of National Mapping	(3)	18 - 20

Internal:

OC 4 Fd Svy Sqn	(1)	21
4 Fd Svy Sqn Library	(6)	22 - 27

OPERATION DESERT WALK 80 PANELLING

SCALE: 1:1,000,000



- Stations Repanned This Operation.
- Not Panelled This Op, But Identified By Detail.
- * Panel Incorrectly Positioned.

- BM's Not Visited, Or Identified By This Squadron.
National Mapping Use Only.
- Reflys

Compiled: *[Signature]* (J.M. PHILLIPS Cpl)
Checked: *[Signature]*
Date: 29 Apr 80

to BM 3260

AIRBORNE PROFILE RECORDER REPORT

Task

1. To obtain by Airborne Profile Recorder (APR) methods, vertical control in the following 1:250 000 map areas:
 - a. SH 52-8 MAURICE
 - b. SH 52-12 OOLDEA
 - c. SH 53-5 TALLARINGA
 - d. SH 53-9 BARTON.

Execution

2. Organization. The force was divided into APR acquisition personnel from Division of National Mapping (Natmap), and RA Svy personnel carrying out liaison and film verification duties. The APR acquisition team comprised 1 x pilot, 1 x navigator, 1 x operator/recorder, 1 x technician and 1 x ground based assessor.

3. Deployment

- a. APR team was based at Ceduna.
- b. RA Svy personnel based at Maralinga.

4. Method

- a. A total of 14 profiles (see Appendix 1) were obtained. Nine being North-South profiles at intervals of 22.5 minutes of longitude, and five East-West profiles at intervals of 30 minutes of latitude. This gave a total of 2250 km of profiles.
- b. Existing control stations had previously been panelled so that they could be identified on the APR strip photography to enable the profiles to be related to absolute ground height.
- c. On completion of each days flying, the APR charts were assessed to ensure the equipment had functioned correctly. The APR 70mm strip film was developed and the location of the flight path with regard to the control stations determined. Chart assessment was carried out by Natmap; film development by RA Svy.

Logistics

5. Logistical aspects were satisfactory with the exception of the unserviceability of the APR equipment. When the equipment arrived, the laser would not function properly. This eventually required the laser to be completely rebuilt by DRC Salisbury. This equipment malfunction delayed the completion of the operation by 17 days.

Inter-Departmental Co-operation

6. Co-operation between Natmap and RA Svy personnel was good, with members of both agencies striving to satisfactorily complete the task. The only problem being that the Natmap methods of APR acquisition and computation differ considerably from those employed by RA Svy. This resulted initially in a misunderstanding of each others requirements.

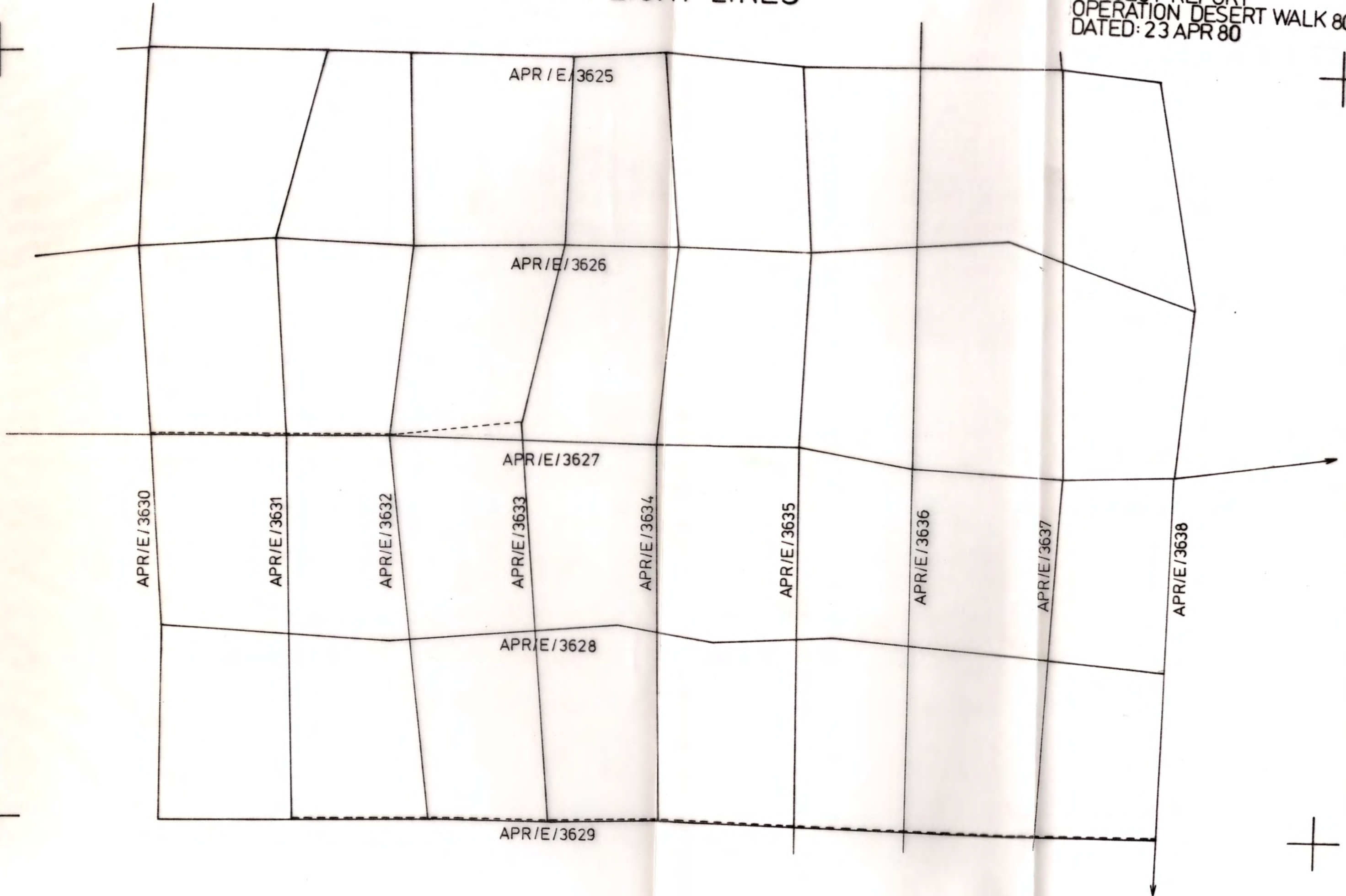
7. Achievement. An APR network of sufficient strength to control the 4 x 1:250 000 areas was obtained.

8. Observations. When two separate organizations are involved on a task, there is a possibility of each organization employing slightly different techniques; this can lead to misunderstanding. To avoid this occurring, it is necessary for close, detailed liaison before the task commences.

Appendix: 1. APR Flight Lines

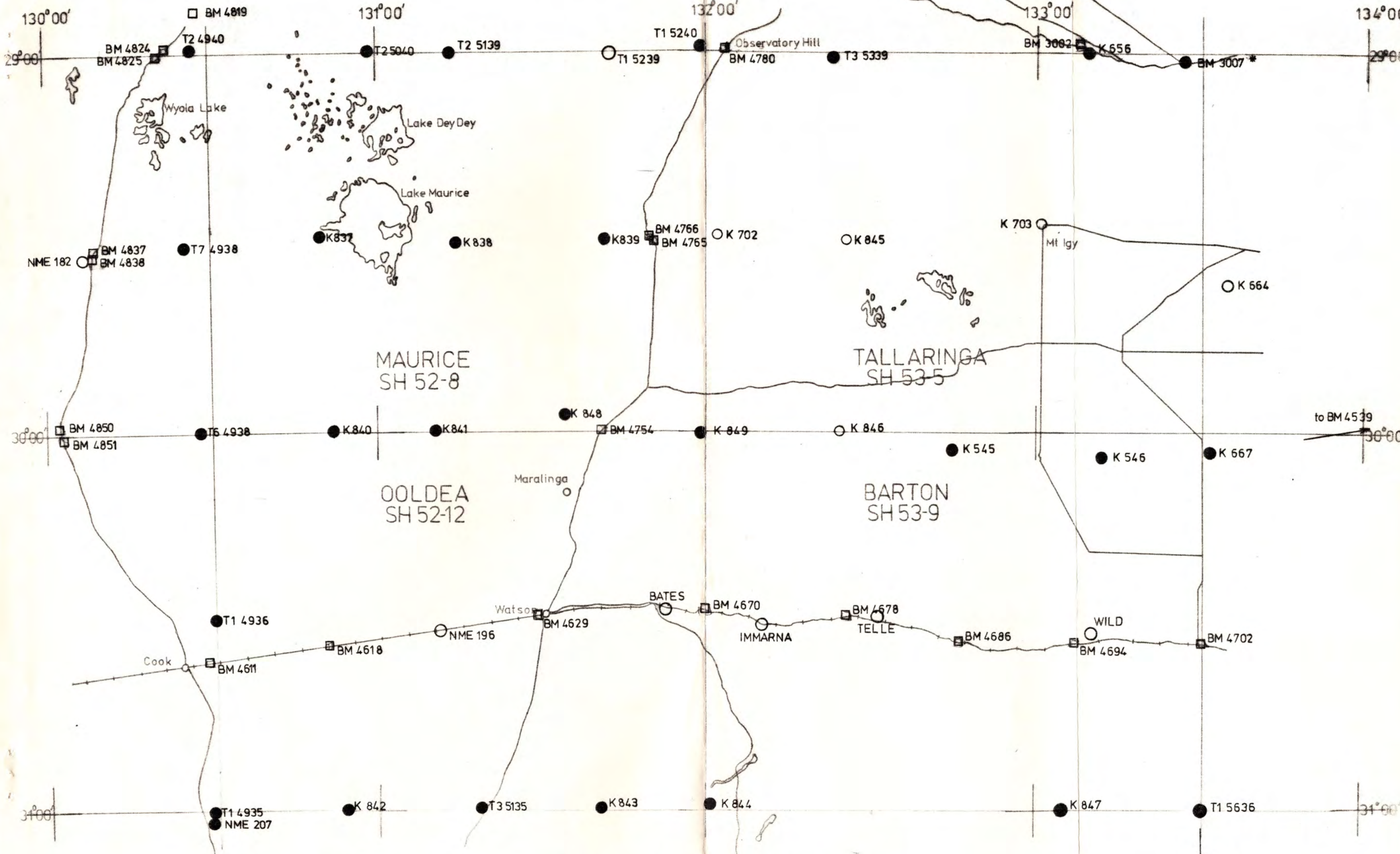
APR FLIGHT LINES

APPENDIX 1 TO
ANNEX B TO
PROJECT REPORT
OPERATION DESERT WALK 80
DATED: 23 APR 80



OPERATION DESERT WALK 80

SCALE : 1:1,000,000



● Stations Repanelled This Operation.
 ○ Not Panelled This Op, But Identified By Detail.
 * Panel Incorrectly Positioned.

□ BM's Not Visited, Or Identified By This Squadron.
 National Mapping Use Only.
 --- Reflays

Compiled: *J.M. Phillips* (J.M. PHILLIPS Cpl)
 Checked: *[Signature]*
 Date: 29 Apr 80

to BM 3260

to BM 4539

ANNEX C TO
OF REPORT
OF DESERT WALK 80
DATED 23 APR 80

NOMINAL ROLL
OF DESERT WALK 80

<u>Army No.</u>	<u>Rank</u>	<u>Name</u>	<u>Unit</u>
1733682	Sgt	D.J.Winterflood	4 Fd Svy Sqn
317246	Cpl	J.M.Phillips	"
63273	Spr	A.D.Lucas	"
49555	Pte	C.M.Lawrence	"
221603	Capt	G.F.Rutter	161 Recce Sqn AAVN
224307	Cpl	R.J.Madden	"
	Mr.	R.Menzies	NATMAP
	Mr.	R.Goldsworthy	"
	Mr.	F.Prior	"
	Mr.	R.Turner	"
	Mr.	O.Ertok	Defrescen