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ES 1/1248

OPERATION ANTLER

INTERIM REPORT

SECTION A

(INTRODUCTION AND SUMMARY)

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1959 REVIEW
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TOP SECRET ATOMIC

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Trials Planning Branch,
A.W.R.E.,
Aldermaston, Berks.

November, 1957

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OPERATION ANTLER - INTERIM REPORTS

Amended 17.1.58.

Amendment No. 9

SECTION A - Introduction and Summary

In the Summary of results; Thermal Group, Time to minimum (total energy) and Time to minimum (infra-red) the 'US' figures should be transposed with the 'Buffalo' figures for Round 3.

Please amend your copy No 17

J.T.Tomblin.

Trials Planning Branch,
AWRE, Aldermaston.

17th January, 1958

Distribution:-

Amendment 9. Holders of complete report.

(Enquiries to A.D.Greenhalgh Ex 7959)

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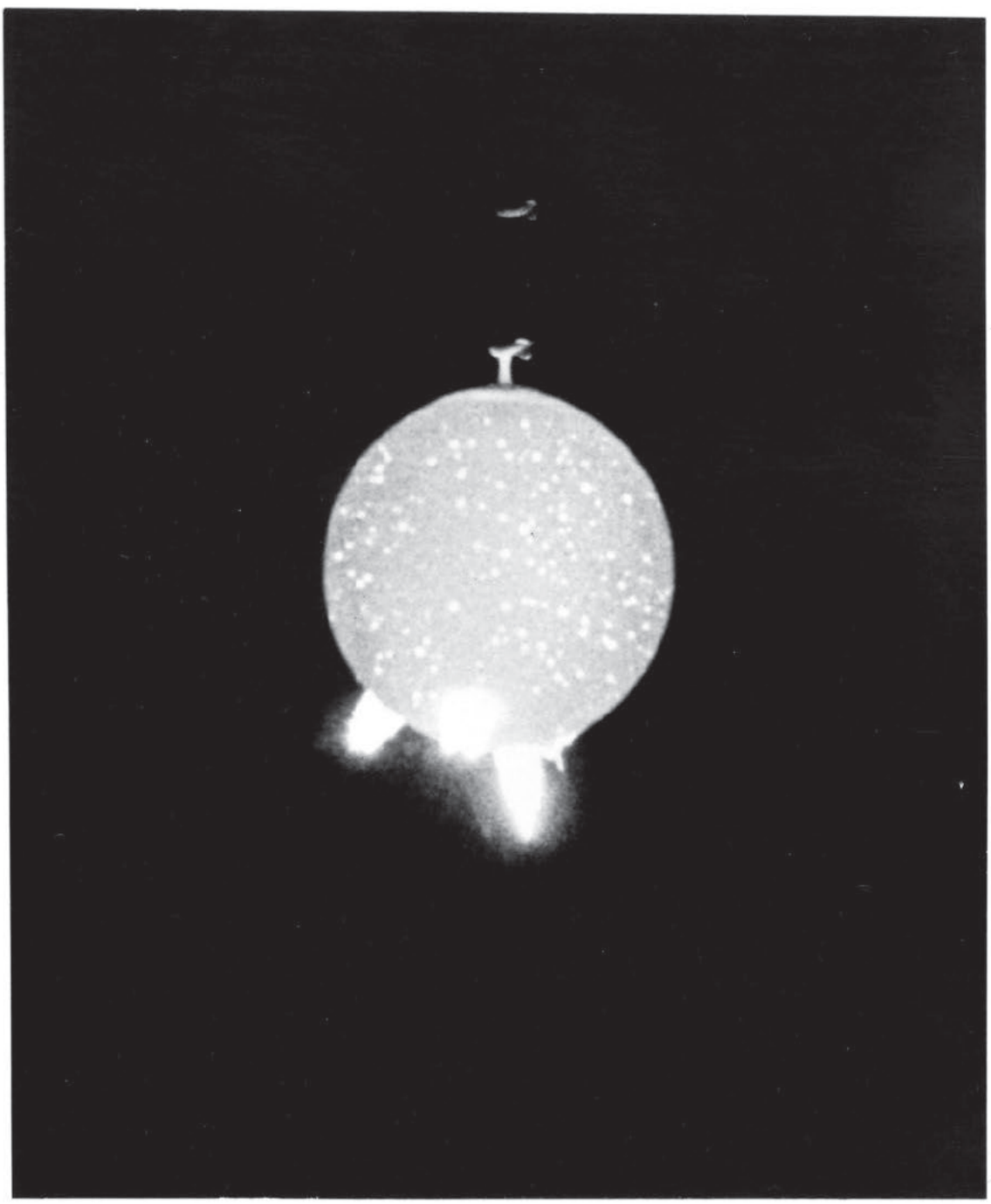
OPERATION ANTLER



ROUND 3
BALLOON BURST
TARANAKI

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OPERATION ANTLER - INTERIM REPORT

CONTENTS

SECTION A Introduction and Summary of Results

SECTION B Services Groups

SECTION C Weapons Groups

SECTION D Measurements Groups

SECTION E Target Response Group

Scripts Received: 19th October, 1957 at Maralinga.

Published: 8th November, 1957 at Aldermaston.

Trials Planning Branch,
A.W.R.E,
Aldermaston, Berks.

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Relevant parts of report to authors.

SPT Files: Register of total distribution and remaining scripts and diagrams with Mr. B.W. Wolfe, SPT, Bldg. F6.A.

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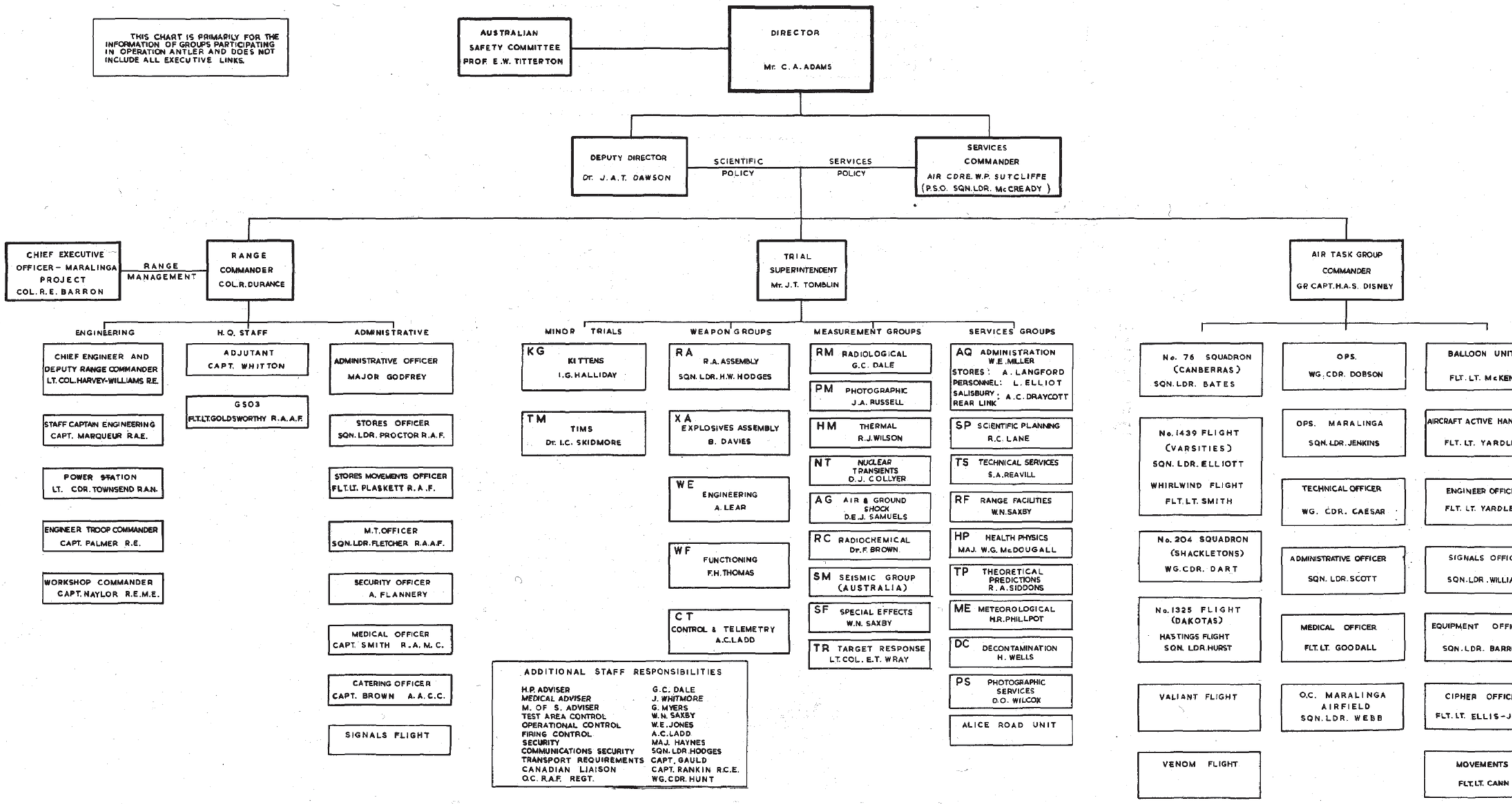
OPERATION ANTLER - SUMMARY PLAN

SECTION A - INTRODUCTION



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Introduction

This collection of interim reports on results obtained at Antler comprises individual reports drafted by each Group Leader at Maralinga and collated and issued by the Trials Planning Branch. They are not intended to replace final reports which will be issued in the normal way by Groups or Branches. Experience from previous trials has however shown that in the interval between firing and the publication of final reports it is difficult to obtain all the information relevant to the trial which exists and could be used. This Interim Report is intended to make such information available.

The purpose of the reports essentially requires quick issue. In the two weeks since the return to Aldermaston of the individuals concerned it has been necessary to check and reproduce some 120 drawings and graphs in addition to scrutinising and editing the drafts. It is therefore inevitable that some mistakes will have been made and that corrections will be required after issue. Notification of any errors should be made to Mr. Wolfe, S.P.T., Building F6A., who should also be informed of any alterations which Group Leaders or Branches wish to make after further consideration of their results. Correction sheets will then be issued to all recipients by S.P.T.

C. A. ADAMS

DIRECTOR, OPERATION ANTLER

AWRE.
Aldermaston.
5 November 1957.

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Firing Programme

A-Day	Arrival on site of the Scientific Force		15th August
SR1-Day	The Scientific Rehearsal		6th Sept.
OR1-Day	The full Operational Rehearsal	1000.	8th Sept.
S1-Day	The first day of Standby		12th Sept.
Z-Hour	1st declaration of Firing Phase	0100.	12th Sept.
	Firing Phase abandoned at	0645.	12th Sept.
Z-Hour	2nd declaration of Firing Phase	0900.	13th Sept.
	Firing Phase abandoned at	1500.	13th Sept.
Z-Hour	3rd declaration of Firing Phase	0800	14th Sept.
F	Pixie fired at Tadje**	1435*	14th Sept.
SR2-Day	Scientific Rehearsal		19th Sept.
S2-Day	First day of Standby		21st Sept.
Z-Hour	1st declaration of Firing Phase	0630.	21st Sept.
	Firing Phase abandoned at	1238.	21st Sept.
Z-Hour	2nd declaration of Firing Phase	1000.	24th Sept.
	Firing Phase abandoned at	1435.	24th Sept.
Z-Hour	3rd declaration of Firing Phase	0330.	25th Sept.
F	Indigo Hammer fired at Biak**	1000*	25th Sept.
SR/OR3	Scientific/Operational Rehearsal	0800.	5th Oct.
S3-Day	First day of Standby		7th Oct.
Z-Hour	Declaration of Firing Phase	0800.	9th Oct.
F	Tom fired at Taranaki**	1615*	9th Oct.

*To ± 0.1 sec.

**See Figures A.1, A.2, A.3.

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SUMMARY OF RESULTS

(Including amendments and comments discussed at Symposium on 4.12.57)

GROUP	METHOD	YIELDS IN KILOTONS			REMARKS
		Round 1 Pixie	Round 2 Indigo Hammer	Round 3 Tom	
RADIOLOGICAL (RM)	[redacted]				
PHOTOGRAPHIC (PM)					
THERMAL (HM)					
BLAST (AG)					
RADIOCHEMICAL (RC)					
NUCLEAR TRANSIENTS (NT)					

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SUMMARY OF RESULTS

SUMMARY OF RESULTS

GROUP	METHOD	Round 1 Pixie	Round 2 Indigo Hammer	Round 3 Tom	Comparison with Buffalo results
Radiological (hm)	[redacted]				
Photographic (Pm) Maralinga analysis	[redacted]				
Aldermaston analysis					
Thermal (HM)					
Nuclear Transients (NT)					
Blast (AG)					
Radiochemistry (RC) (Maralinga Analysis)					

Cancelled

*Incorporates results of Aldermaston analysis

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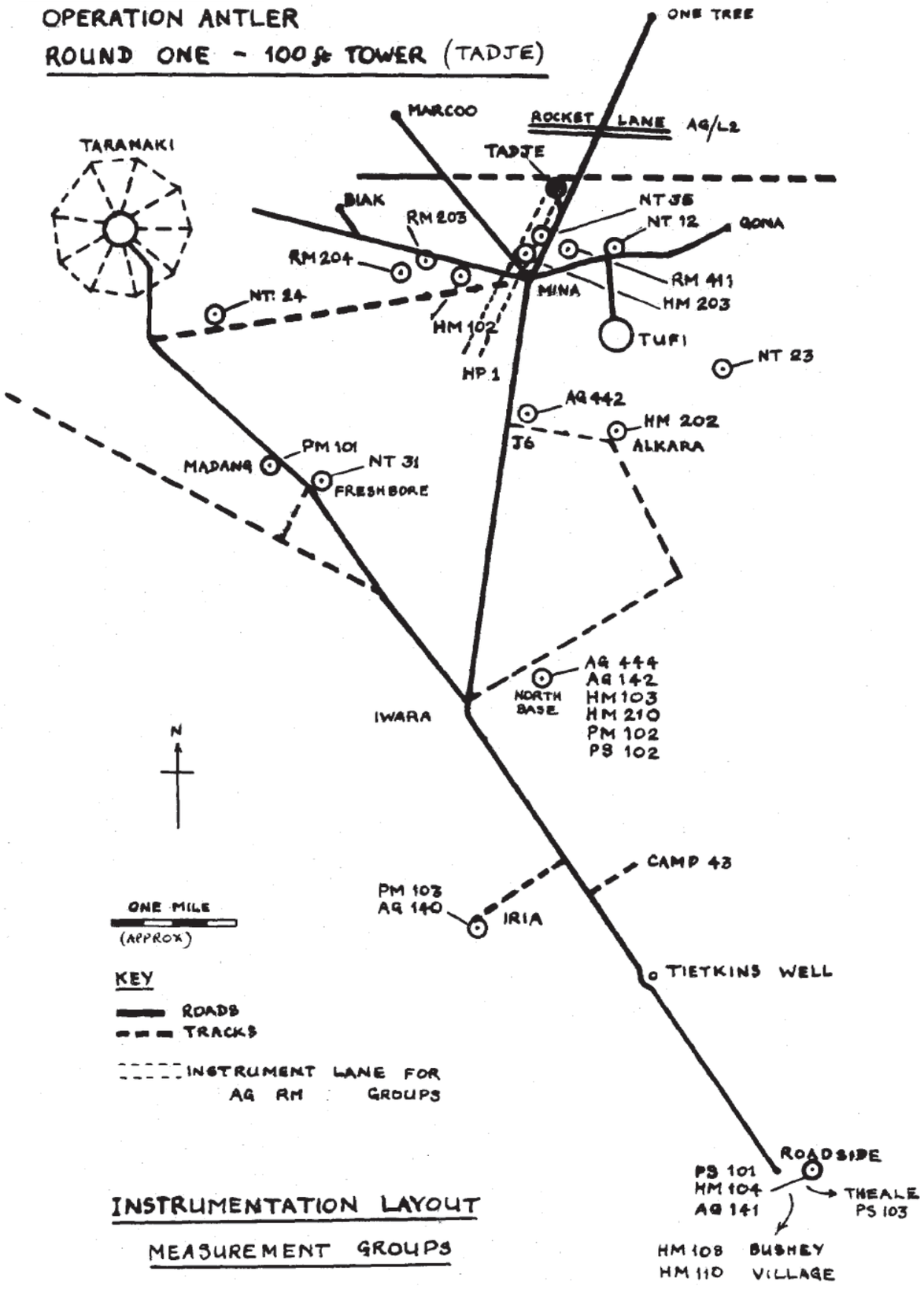

INSTRUMENTATION LAYOUT

MEASUREMENT GROUPS

FIGURE A.1.

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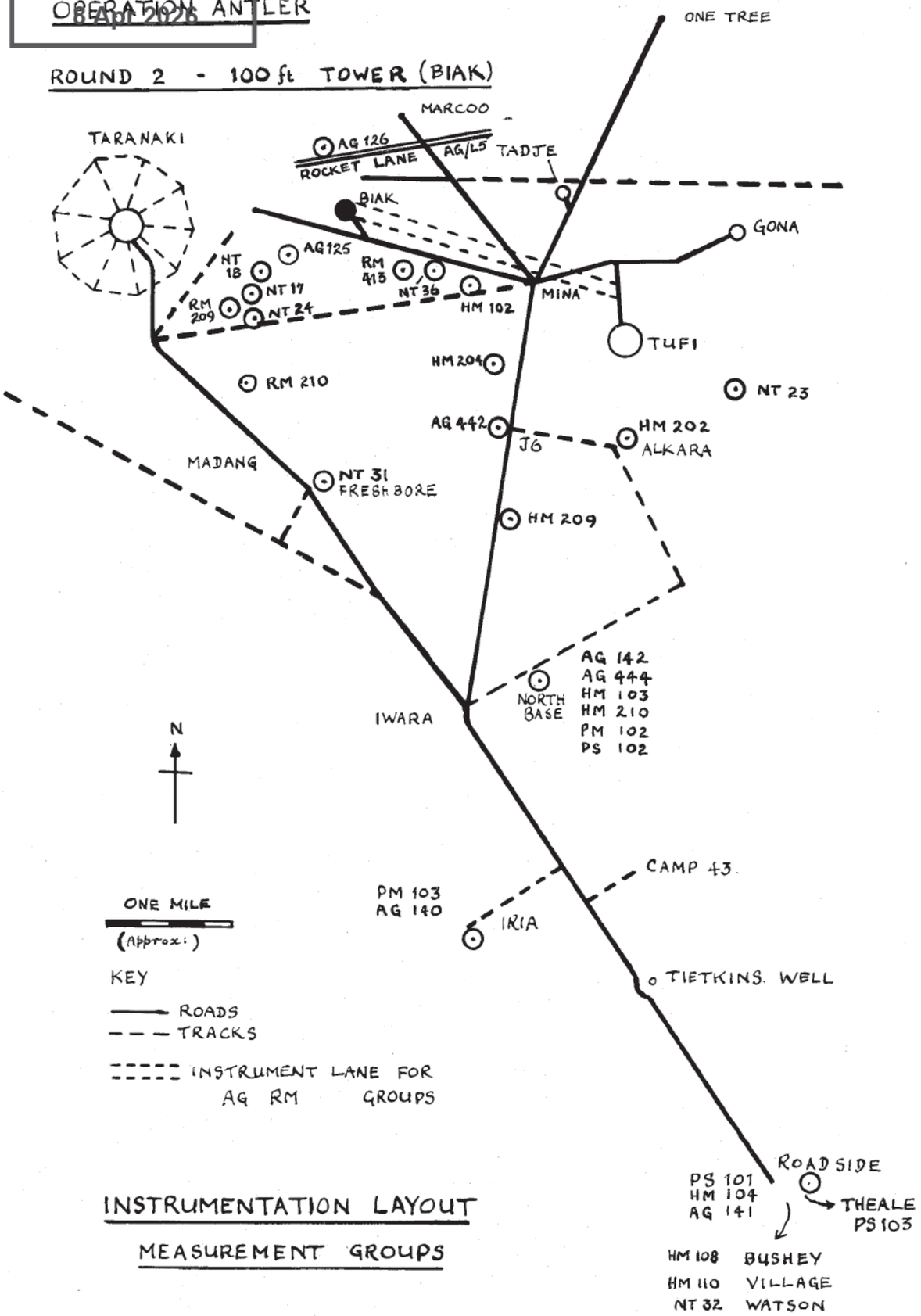
OPERATION ANTLER

ROUND 2 - 100 ft TOWER (BIAK)



INSTRUMENTATION LAYOUT

MEASUREMENT GROUPS

FIGURE A.2.

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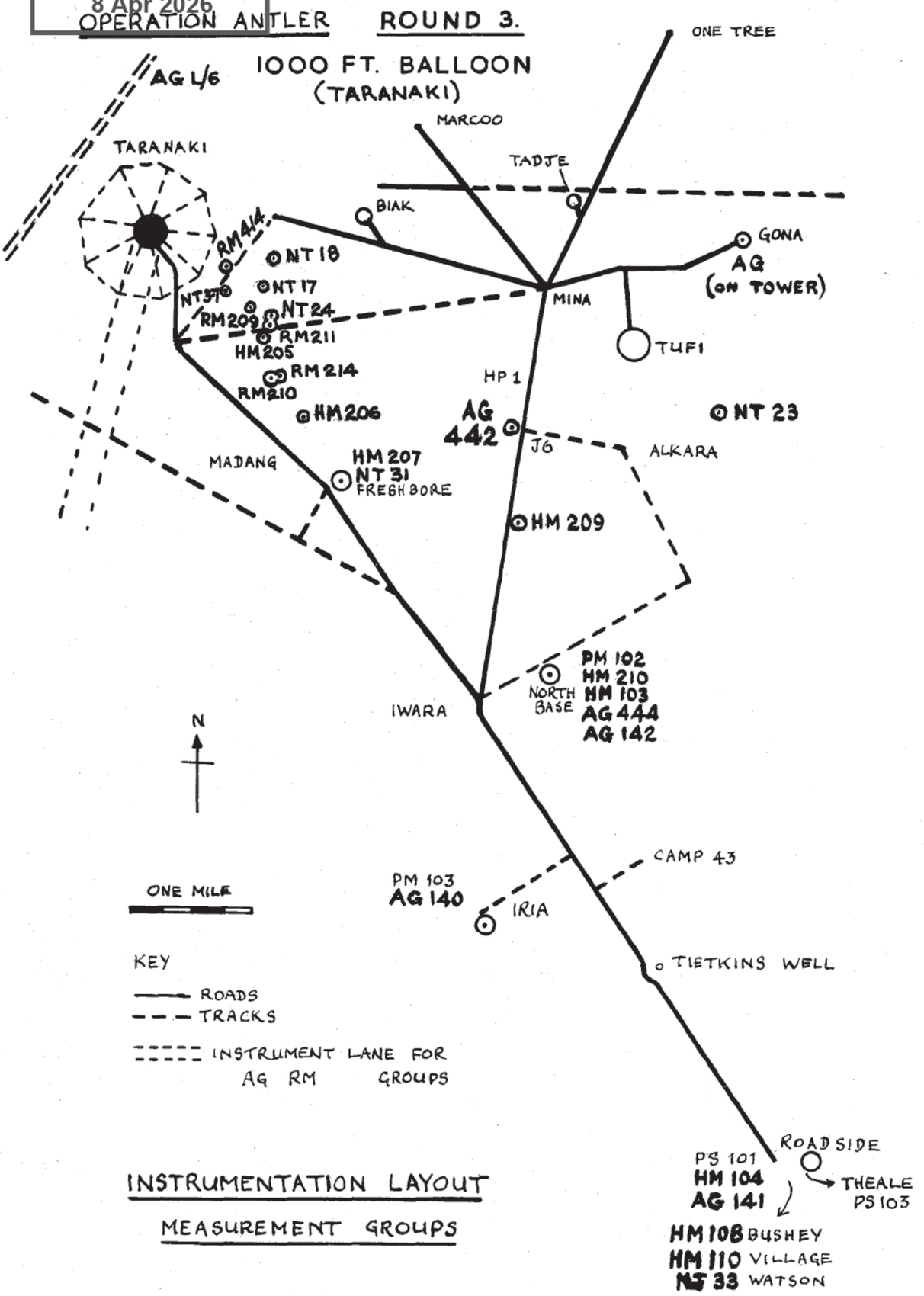

FIGURE A.3