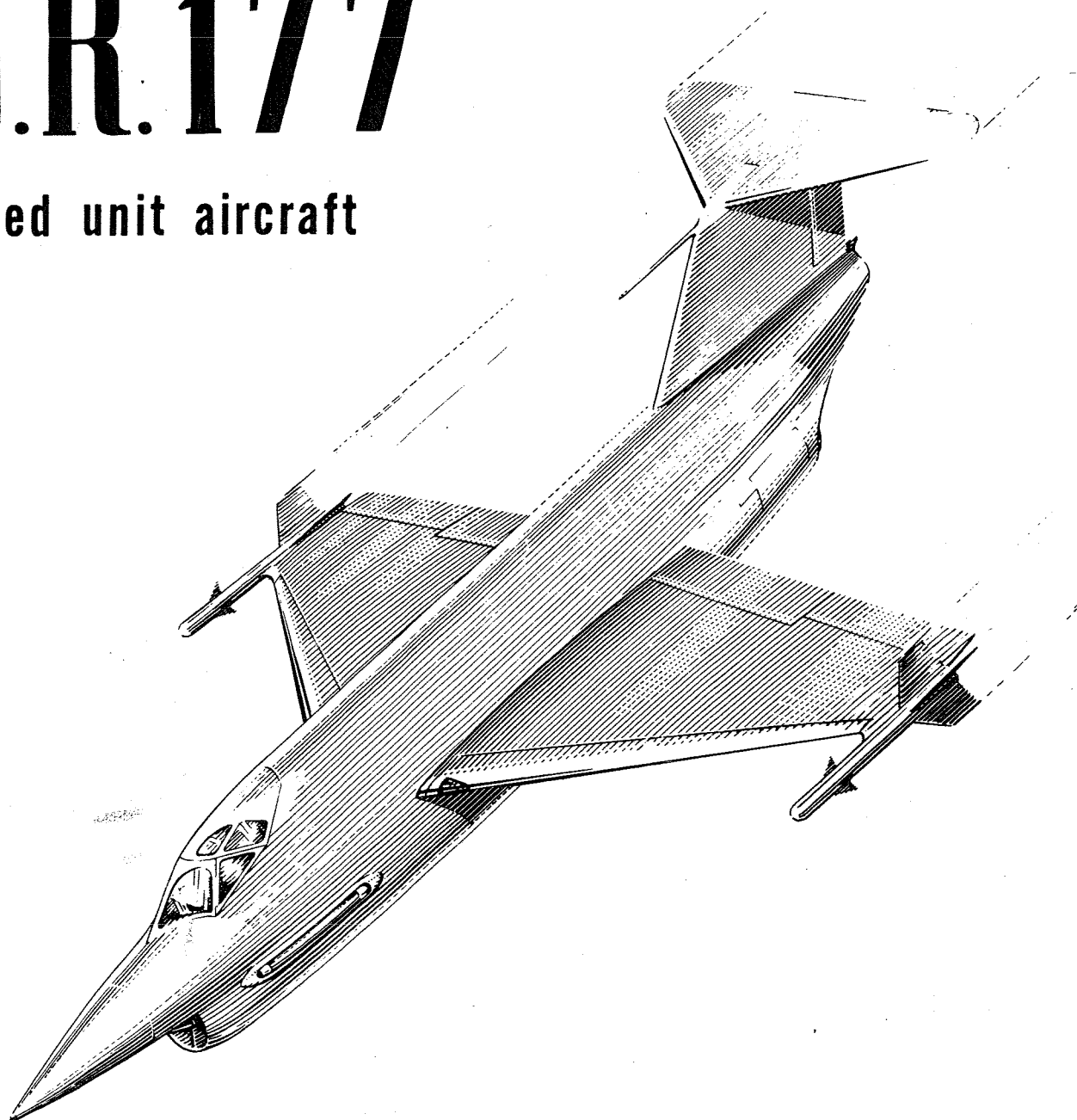


S.R.177

mixed unit aircraft



SAUNDERS-ROE LIMITED, OSBORNE, EAST COWES, ISLE OF WIGHT, ENGLAND.

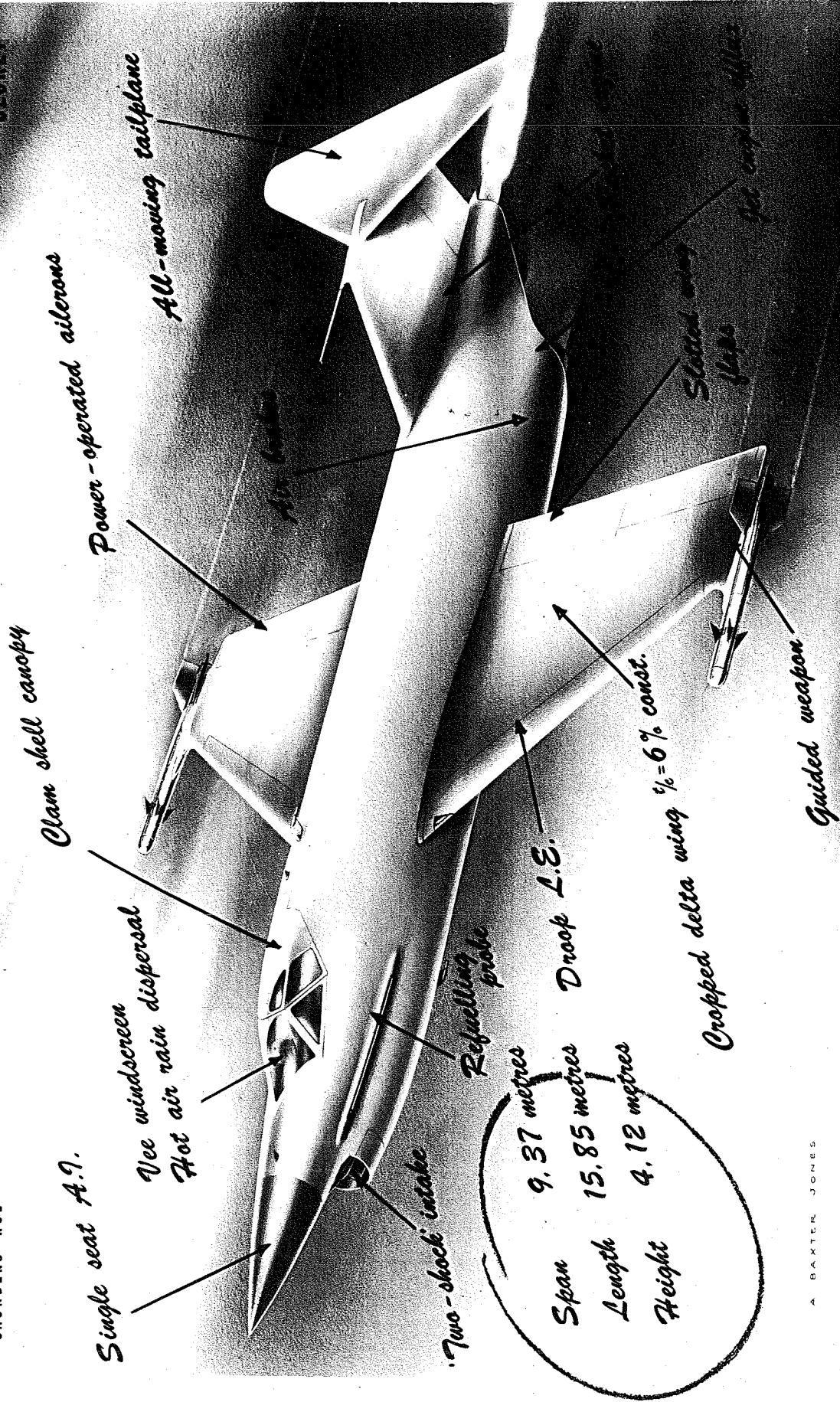
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SECRET



SR.177

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INTRODUCTION

This brochure is intended to replace Saunders-Roe publication T. P. 199. It presents the military performance of the S. R. 177 aircraft and includes the latest information on weapons and alternative roles.

The brochure is divided into three parts; Part One covers the basic interceptor, Part Two a short range ground attack version, and Part Three a long range ground attack and reconnaissance aircraft.

As an interceptor, the S. R. 177 has been designed specifically to combat Mach 0,9 to Mach 1,3 bombers at altitudes between 12 000 and 24 000 metres. With ground radar early warning of 370 Km. a normal interceptor distance of 180 Km. can be achieved.

In the short range ground attack role the rocket engine is not used and the aircraft is flown with H. T. P. tanks empty apart from a small quantity for operation of the A. P. U. As no physical conversion is involved the aircraft can complete high altitude interception or short range ground attack sorties as necessary.

For long range ground attack and reconnaissance at low altitude the aircraft is modified by removal of the rocket engine, adaptation of the fuel system to accept all kerosene and the addition of drop and ventral tanks. The aircraft can then achieve a radius of action of 1 600 Km. on reconnaissance duties.

The only information on the high altitude interception performance of the S. R. 177 in the possession of the German Air Force is contained in the Saunders-Roe publication T. P. 199. This shows interceptions using pursuit course attacks. This present brochure (T. P. 271) shows interception employing jumped-up collision course weapons.

An appendix is added in this document showing a comparison between the jumped-up weapon and the pursuit course weapon.

MAIN CONTENTS

PART ONE	-	INTERCEPTOR ROLE
PART TWO	-	SHORT RANGE GROUND ATTACK ROLE
PART THREE	-	LONG RANGE GROUND ATTACK AND RECONNAISSANCE ROLES

APPENDIX

SUPPLEMENTARY BRIEFING NOTES

PART 1
INTERCEPTOR ROLE

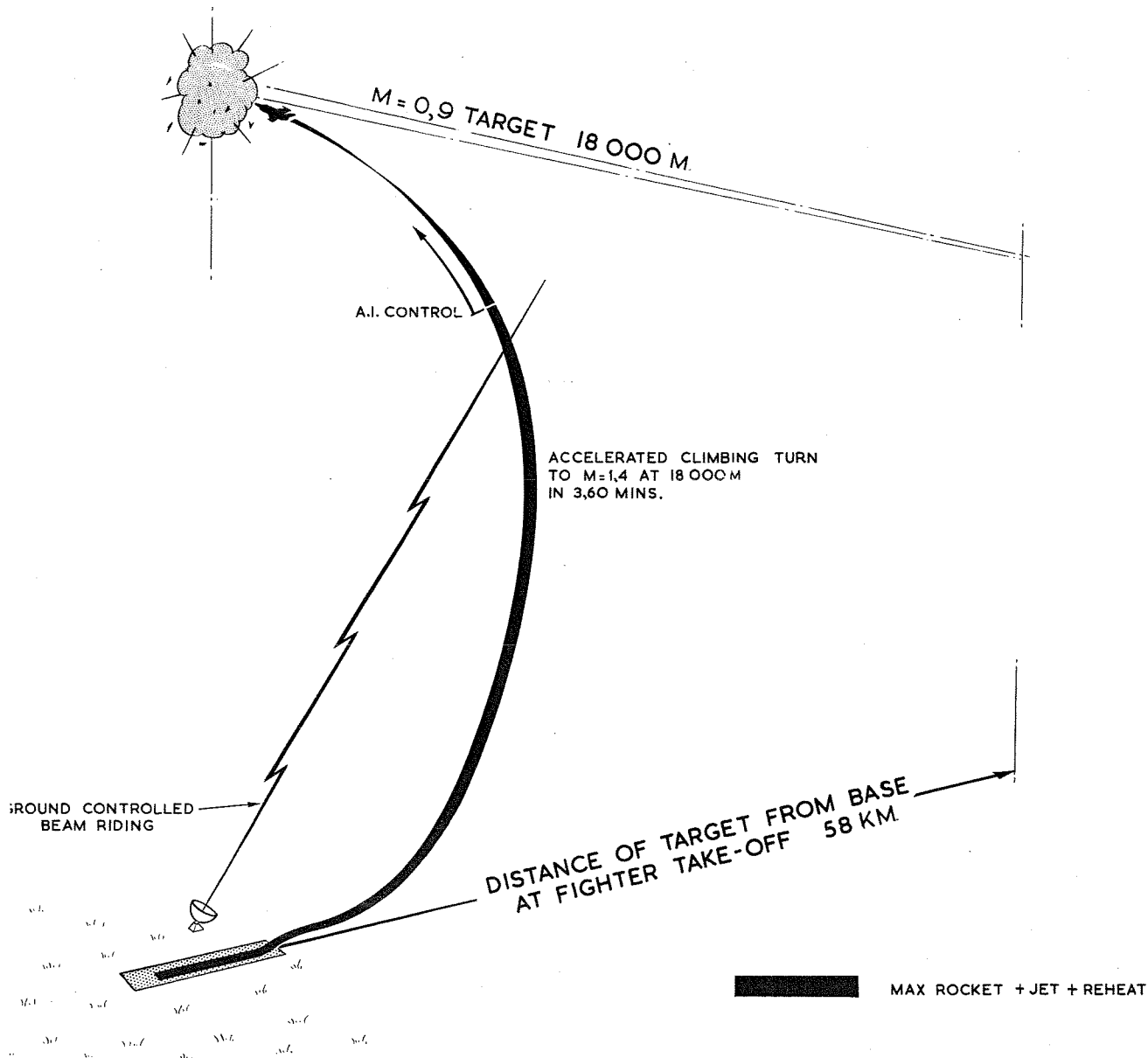
PART 1 - INTERCEPTOR ROLE

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INTERCEPTION PERFORMANCE WITH AN H. T. P. TO KEROSENE RATIO OF 1, 7:1	1. 1
INTERCEPTION PERFORMANCE WITH AN H. T. P. TO KEROSENE RATIO OF 1, 7:1 PLUS 2 x 680 LITRE DROP TANKS	1. 5
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SHORT WARNING INTERCEPTION AGAINST M=0,9 TARGET AT 18 000 M

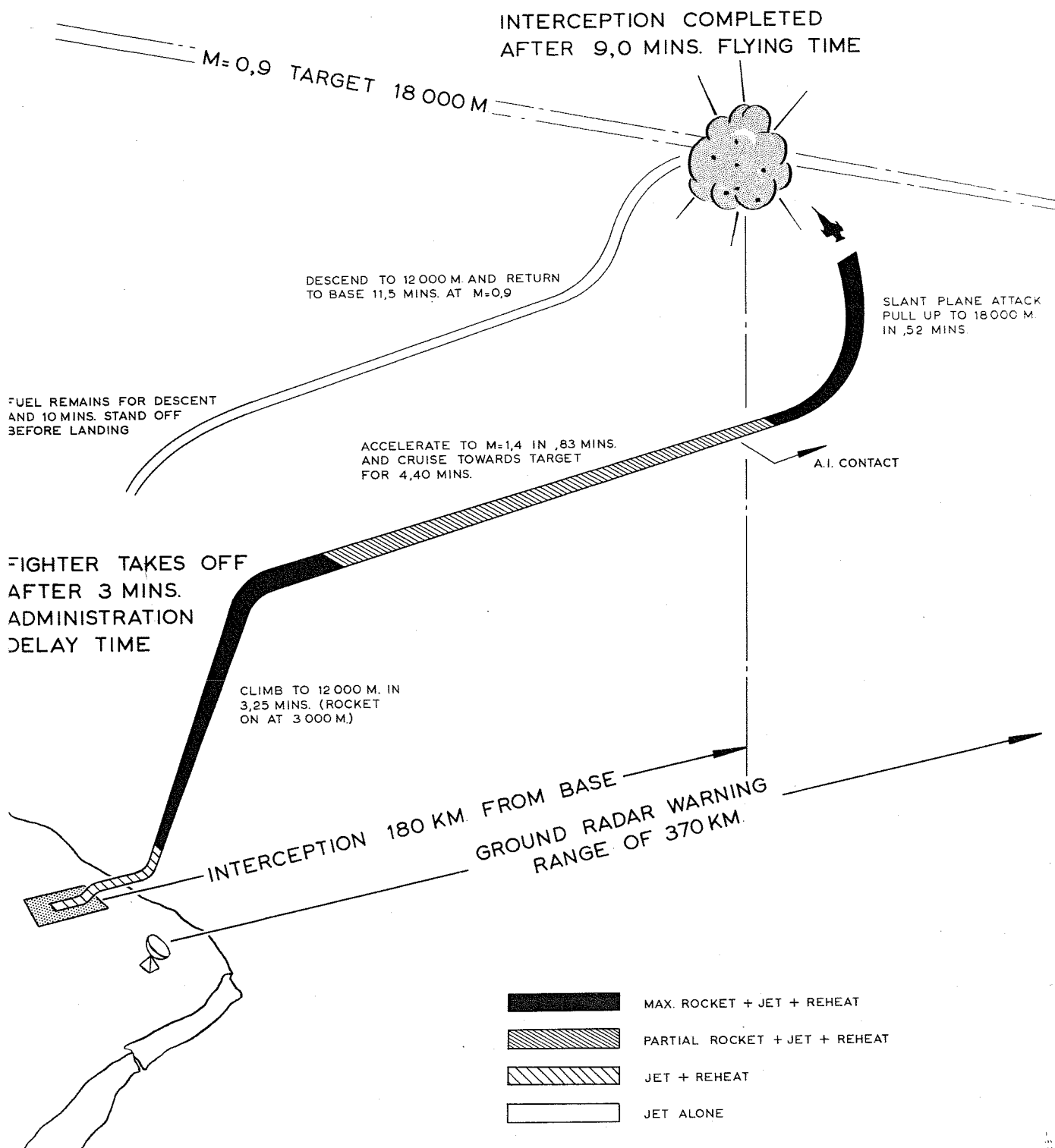
INTERCEPTION COMPLETED
OVER BASE AFTER 3,60 MINS.
FLYING TIME



INTERCEPTION PERFORMANCE WITH AN H.T.P.
TO KEROSENE RATIO OF 1,7:1

**NORMAL WARNING INTERCEPTION AGAINST
M=0,9 TARGET AT 18 000 M.**

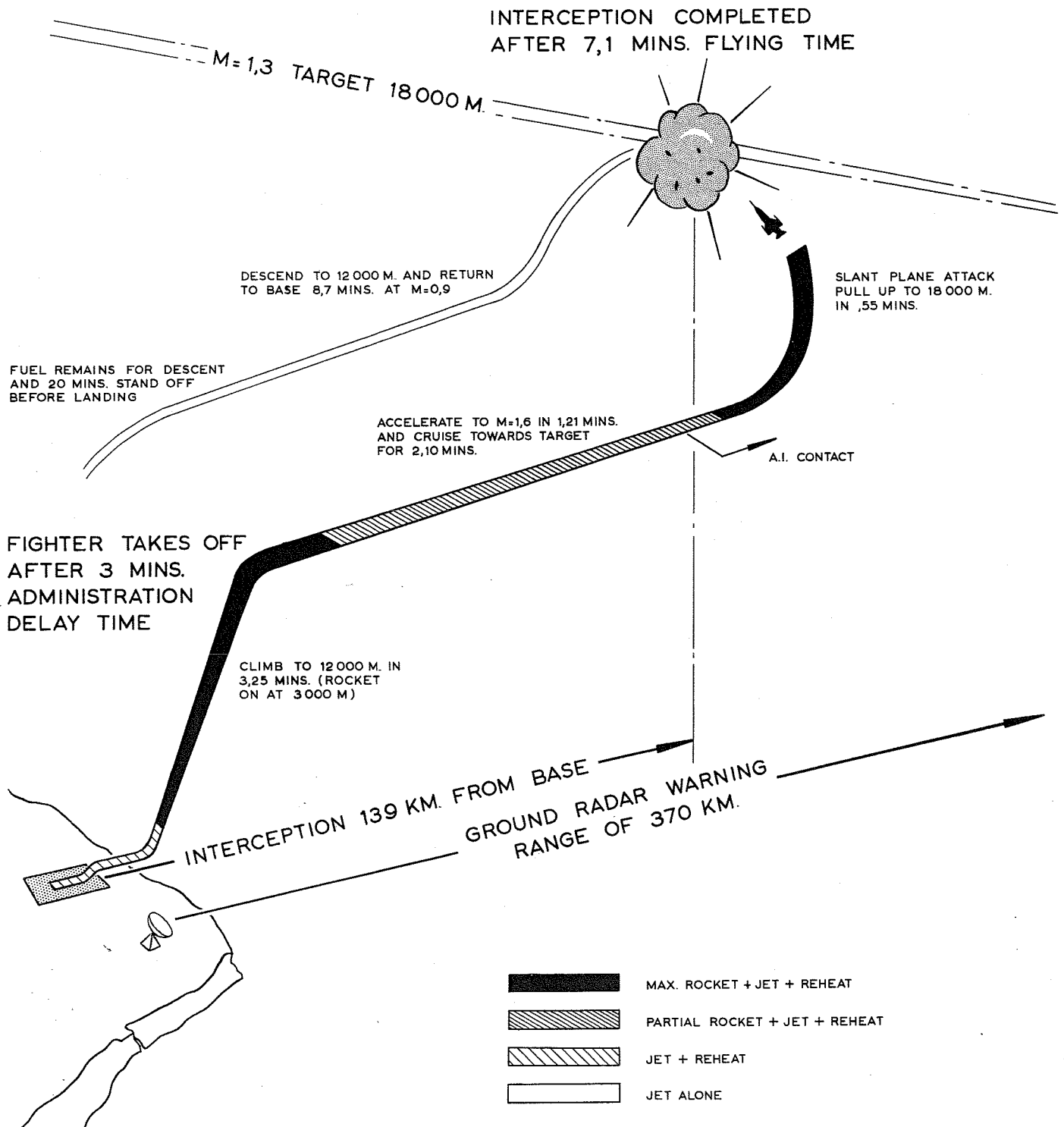
TOTAL FLYING TIME = 36 MINS.



**INTERCEPTION PERFORMANCE WITH AN H.T.P.
TO KEROSENE RATIO OF 1,7:1**

NORMAL WARNING INTERCEPTION AGAINST M=1,3 TARGET AT 18 000 M.

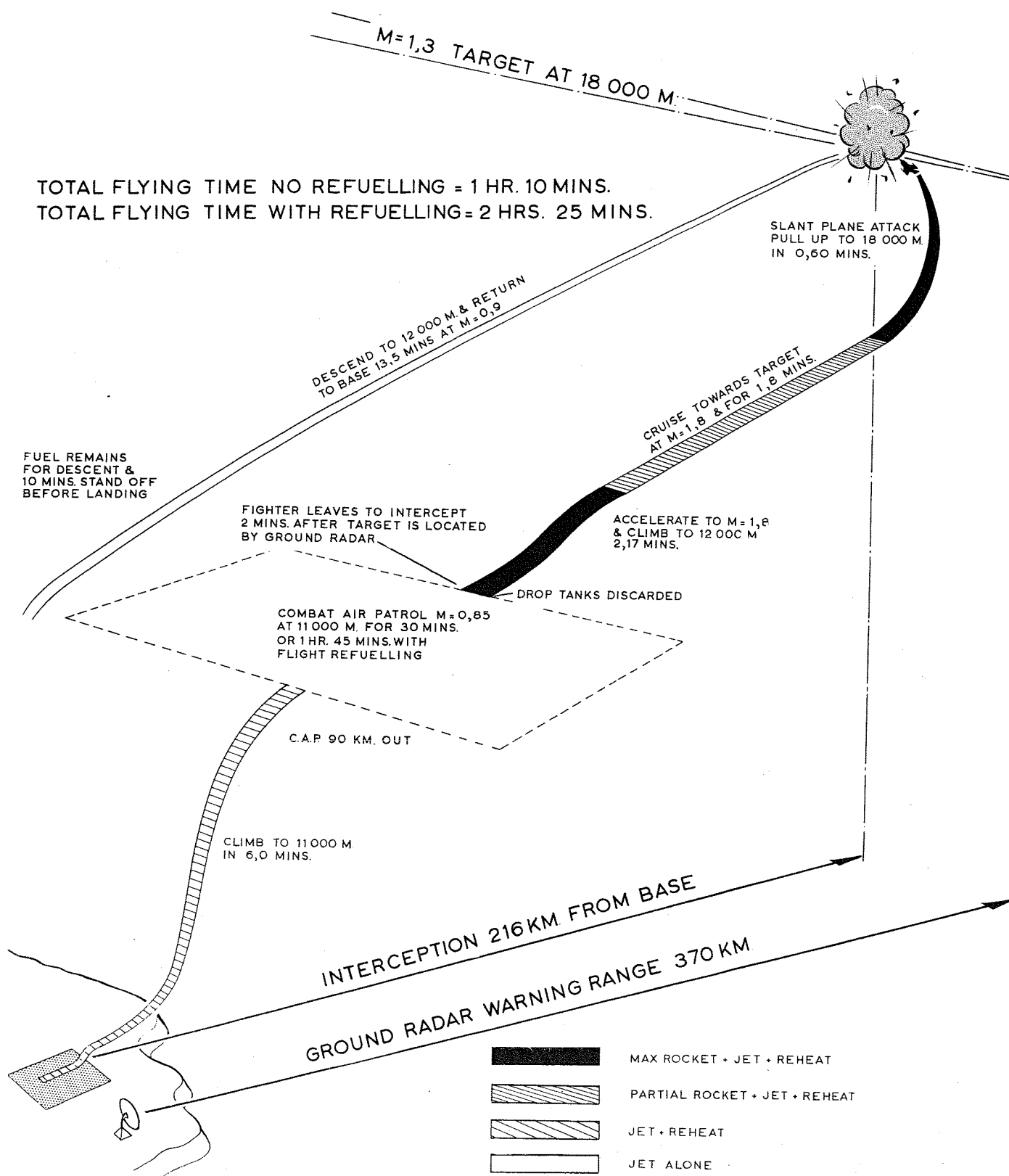
TOTAL FLYING TIME = 41 MINS.



INTERCEPTION PERFORMANCE WITH AN H.T.P.
TO KEROSENE RATIO OF 1,7:1

NORMAL WARNING INTERCEPTION AGAINST M=1.3 TARGET AT 18 000 M FROM COMBAT PATROL AT 11 000 M

TOTAL FLYING TIME NO REFUELLING = 1 HR. 10 MINS.
TOTAL FLYING TIME WITH REFUELLING = 2 HRS. 25 MINS.



INTERCEPTION PERFORMANCE WITH AN H.T.P. TO KEROSENE RATIO
OF 1.7:1 PLUS 2 X 680 LITRE DROP TANKS

SECRET