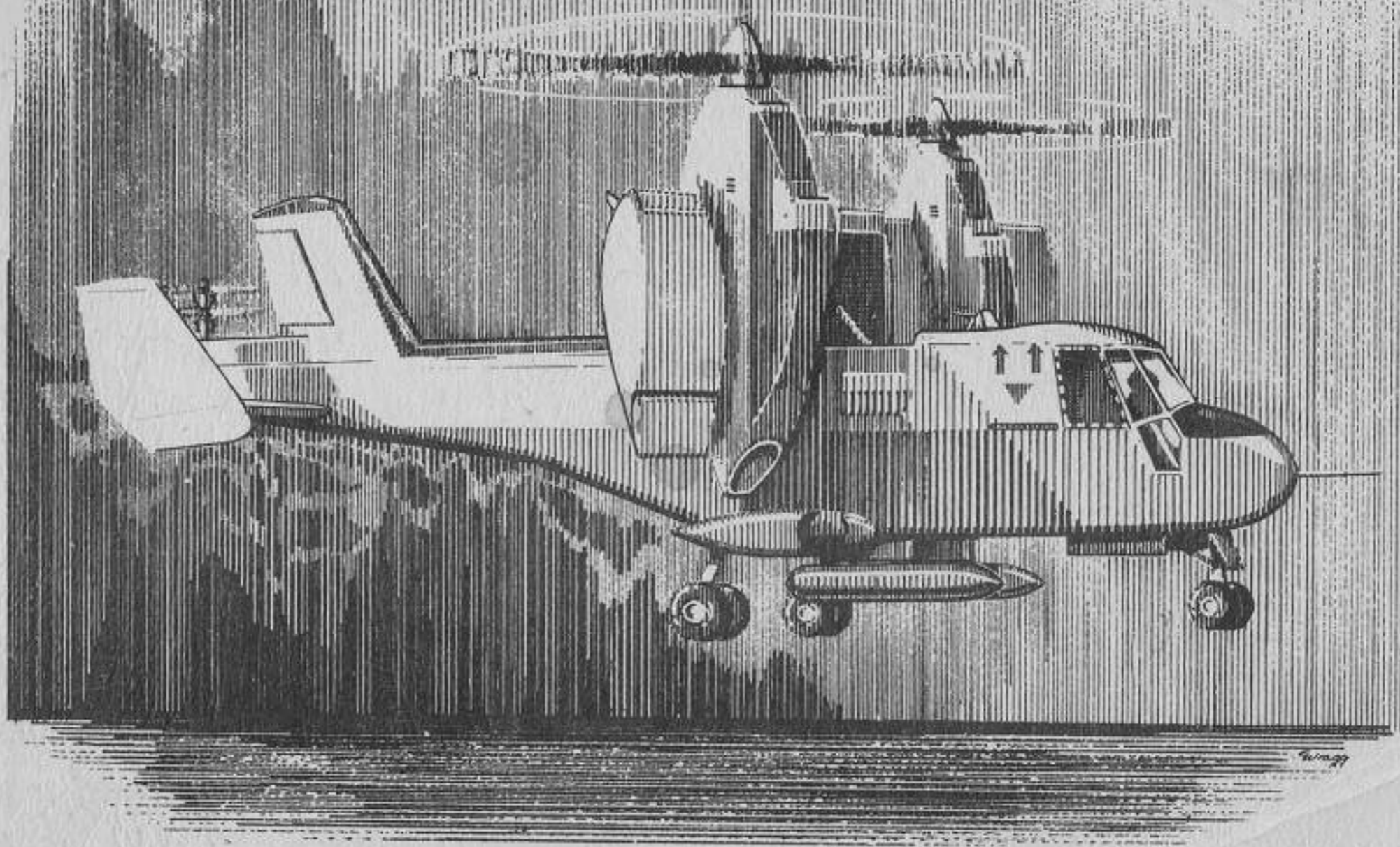


21B
Since you're
going to be project
Pilot you may as well
have the
best



CANADAIR **CL-84-1** V/STOL AIRCRAFT



CL-84-1 INTRODUCTION

VERTICAL/SHORT TAKE-OFF AND LANDING (V/STOL) AIRCRAFT DESIGNS HAVE ADVANCED FROM BASIC TEST VEHICLES TO AIRCRAFT WHICH CAN BE USED BY MILITARY FORCES IN NUMEROUS OPERATIONAL ROLES.

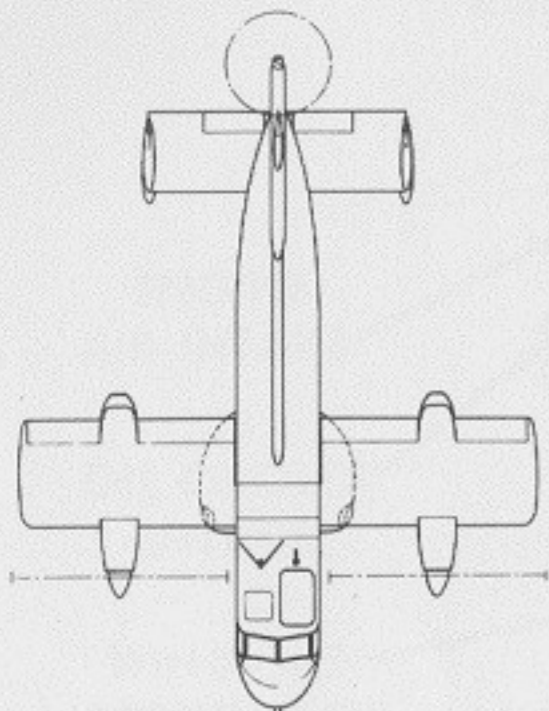
FOLLOWING A SEVEN YEAR PERIOD OF V/STOL RESEARCH AND DEVELOPMENT BY CANADAIR, THE CANADIAN DEPARTMENT OF DEFENCE PRODUCTION JOINED WITH THE COMPANY IN 1963 TO FUND A PROGRAM FOR THE MANUFACTURE AND FLIGHT TEST OF A PROTOTYPE TILT-WING AIRCRAFT DESIGNATED THE CL-84.

CURRENT PROTOTYPE TESTS AND CONTINUED ENGINEERING STUDIES HAVE RESULTED IN THE DESIGN OF A MULTI-MISSION AIRCRAFT FOR EVALUATION IN A VARIETY OF ROLES. THIS MODEL, THE CL-84-1, IS BASICALLY THE SAME AS THE PROTOTYPE BUT INCORPORATES DUAL CONTROLS, ADDITIONAL AVIONICS, EXTERNAL HARD POINTS, AND A MODIFIED FUEL SYSTEM WHICH PERMITS LONG RANGE OPERATION. THE FOLLOWING PAGES PROVIDE A DESCRIPTION OF THE CL-84-1, PERFORMANCE ESTIMATES, AND ILLUSTRATIONS OF V/STOL APPLICATIONS.

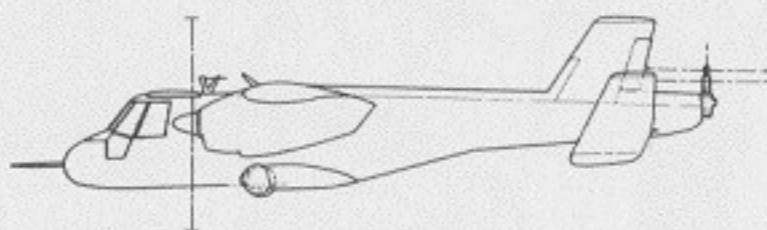
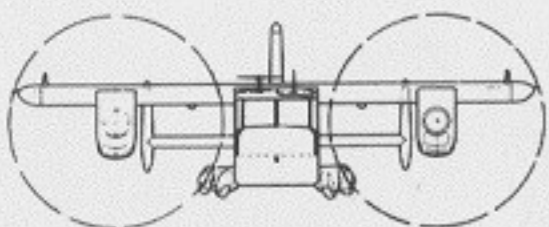


CL-84-1 GENERAL ARRANGEMENT

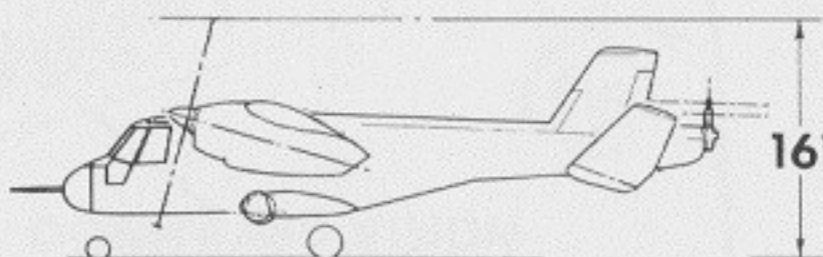
POWER PLANT - TWO 1400 SHP
LYCOMING T53K-4A
PROPELLER - 14' DIAMETER GLASS-FIBRE
28" GROUND CLEARANCE - STOL
TAIL ROTOR - 7' DIAMETER CONTRA-ROTATING
EMPTY WEIGHT - 7700 LB



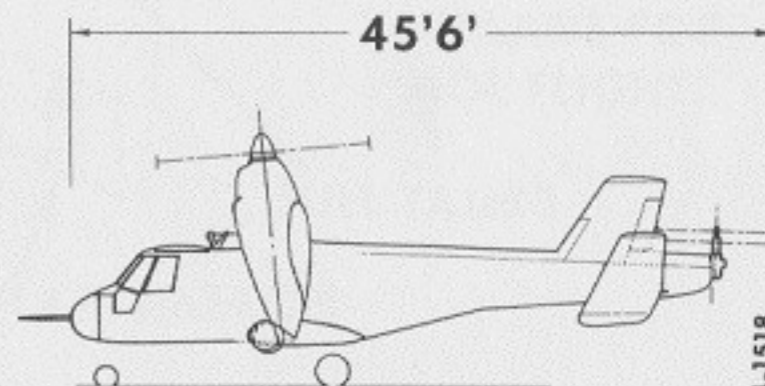
33'4"



CONVENTIONAL



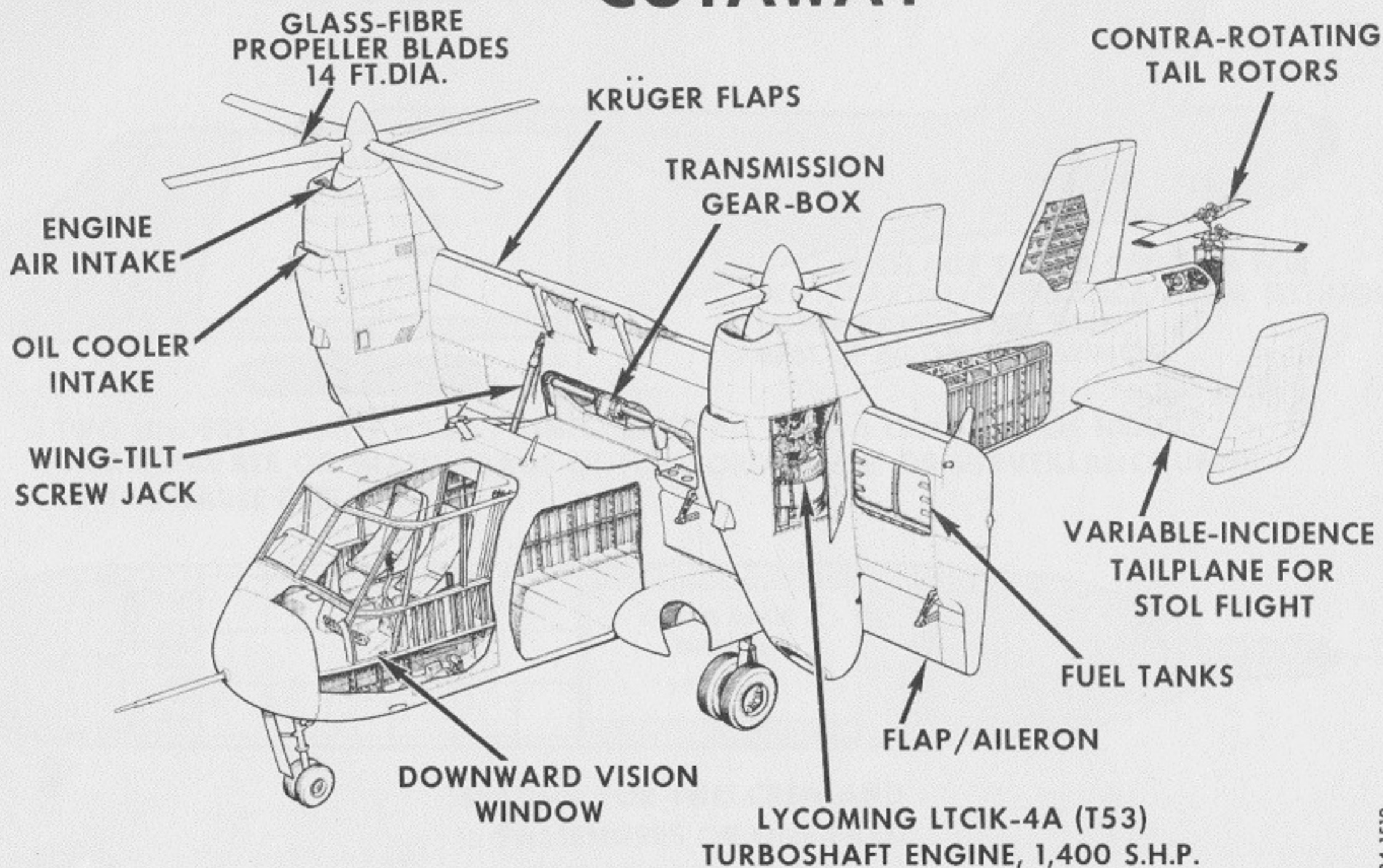
STOL



VTOL



CL-84-1 CUTAWAY





CL-84-1

VTOL PERFORMANCE

SEA LEVEL

STANDARD DAY

85°F TEMP

● GROSS WEIGHT	12,200 LB	11,045 LB
● FUEL-NORMAL (WING)	1,600 LB	1,600 LB
● PAYLOAD WITH ONE PILOT	2,540 LB	1,385 LB
● CRUISE - 10,000 FT		
AVERAGE SPEED - TAS	250 KT	250 KT
RANGE WITH 10% RESERVE	380 NM	390 NM



CL-84-1

STOL PERFORMANCE

SEA LEVEL

STANDARD DAY

85° F DAY

● GROSS WEIGHT	14,700 LB	13,250 LB	14,700 LB
● TAKE-OFF ROLL	140 FT	140 FT	170 FT
● FUEL - NORMAL PLUS TWO EXTERNAL TANKS	3,230 LB	3,230 LB	3,230 LB
● PAYLOAD WITH ONE PILOT	3,200 LB	1,760 LB	3,200 LB
● CRUISE SPEED - 10,000 FT (TAS)	250 KT	250 KT	250 KT
● RANGE WITH 10% RESERVE	720 NM	745 NM	720 NM

STOL 500 FT OVER 50 FT

● BY REDUCING SPEED AND OPERATING BOTH PROPELLERS WITH ONE ENGINE THE RANGE EXCEEDS 900 NM



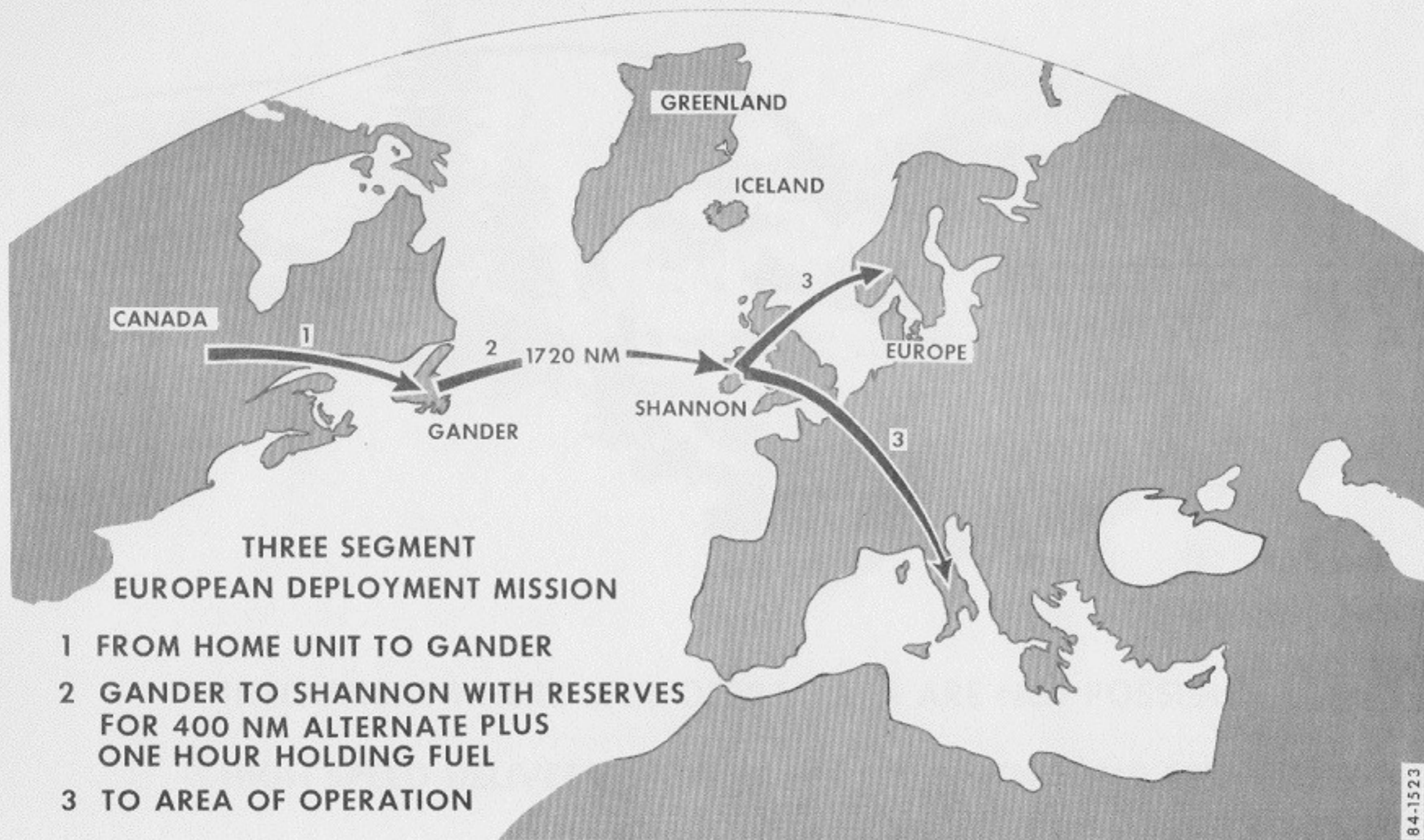
CL-84-1 FERRY MISSION STANDARD DAY

SEA LEVEL

● GROSS WEIGHT	16,250 LB
● TAKE-OFF ROLL- AIRPORT	250 FT
● FUEL - MAX CAPACITY	7,230 LB
● TWO ENGINE CRUISE - 20,000 FT	
AVERAGE CRUISE SPEED	235 KT TAS
RANGE WITH 10% RESERVE	2,100 NM

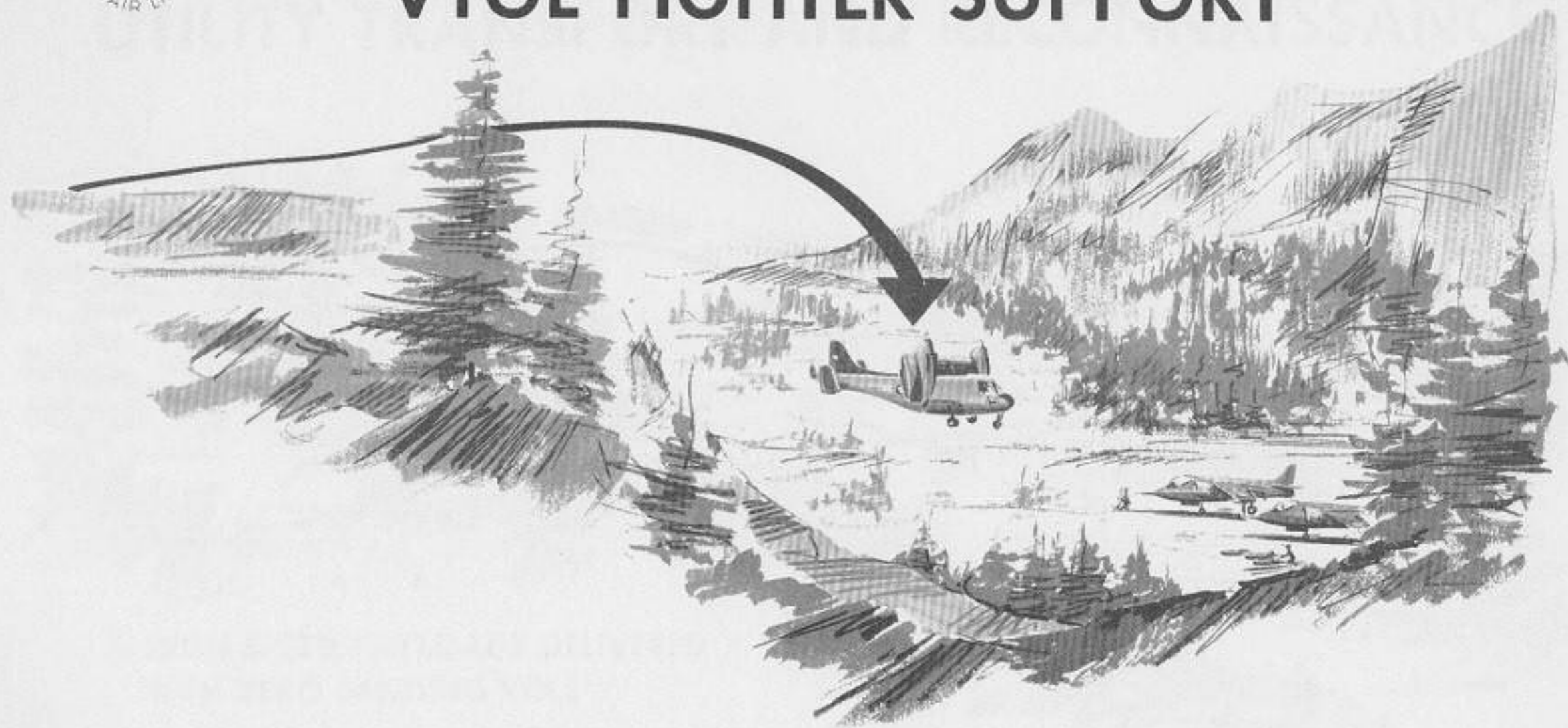


CL-84-1 DEPLOYMENT





CL-84-1 VTOL FIGHTER SUPPORT

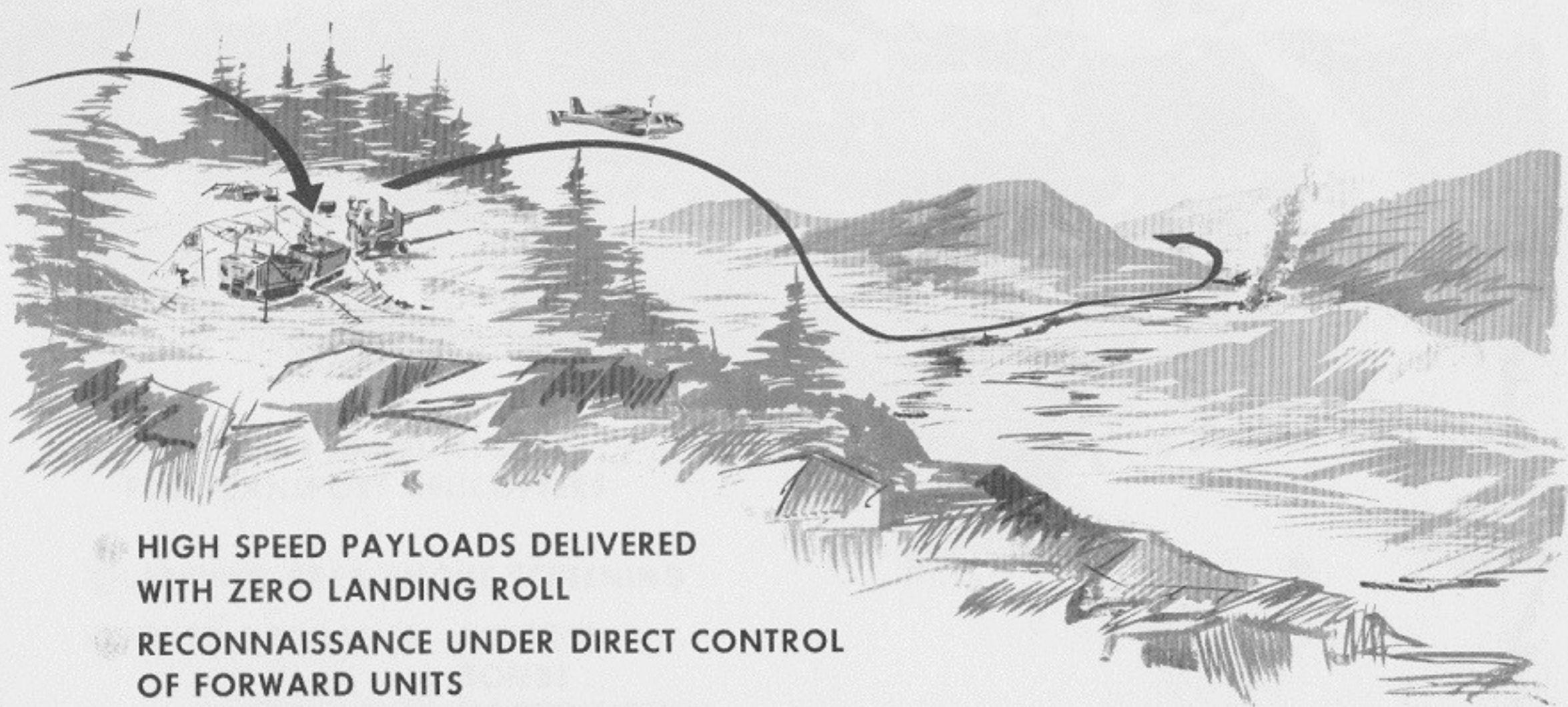


- INTO AREAS WHERE STOL OPERATIONS ARE NOT POSSIBLE
- HIGH SPEED DELIVERY OF PRIORITY EQUIPMENT AND PERSONNEL



CL-84-1

UTILITY TRANSPORT AND RECONNAISSANCE



HIGH SPEED PAYLOADS DELIVERED
WITH ZERO LANDING ROLL

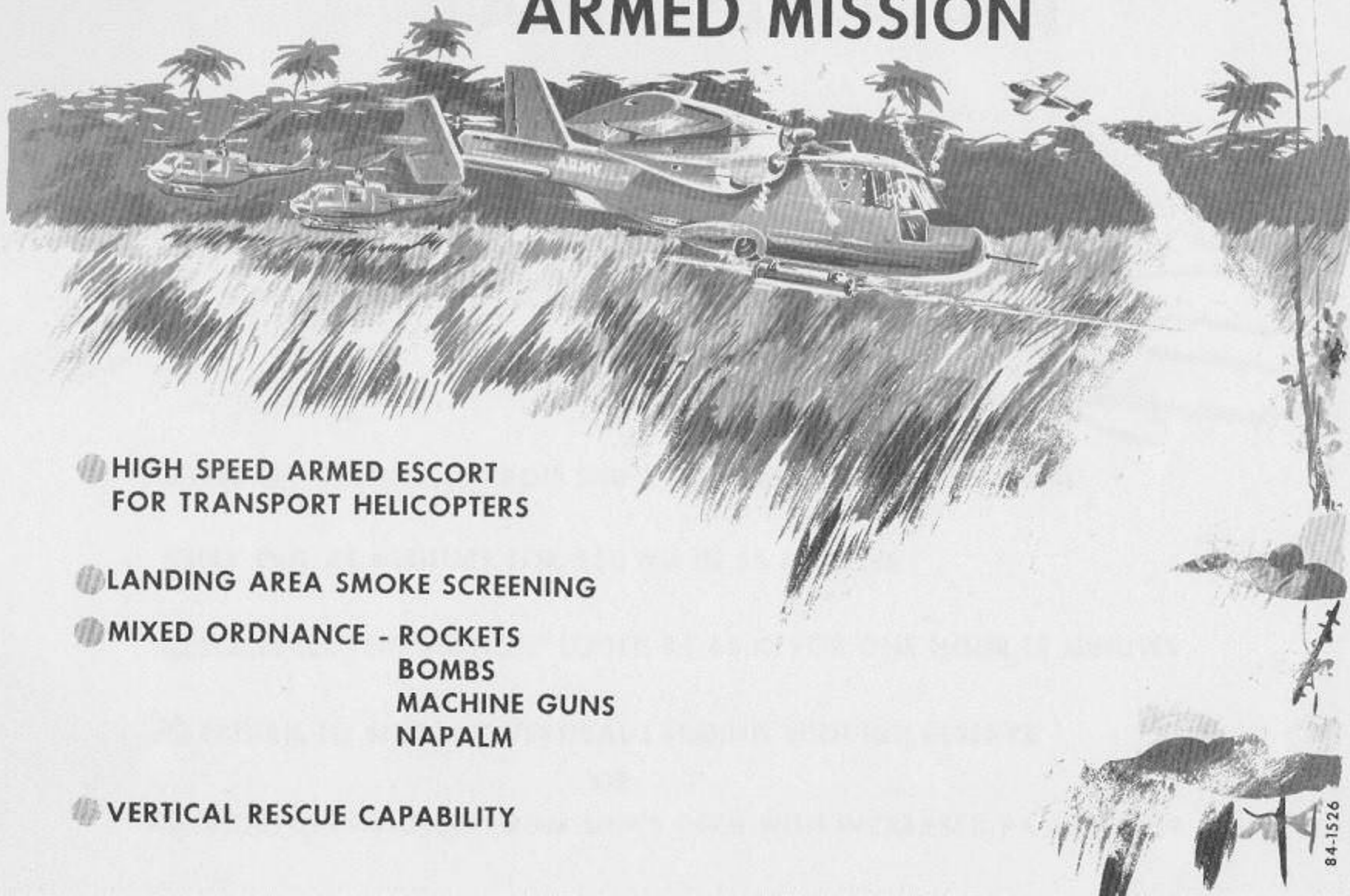
RECONNAISSANCE UNDER DIRECT CONTROL
OF FORWARD UNITS

- SPEEDS FROM 0 TO 270 KT
- SEA LEVEL RADIUS OF ACTION OF 300 NM



CL-84-1

ARMED MISSION

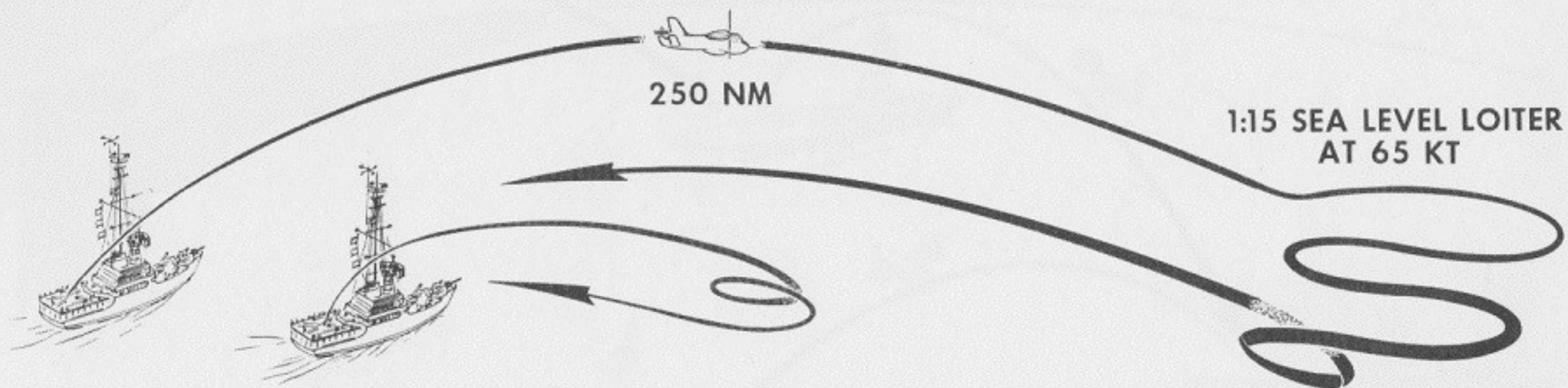


- HIGH SPEED ARMED ESCORT
FOR TRANSPORT HELICOPTERS
- LANDING AREA SMOKE SCREENING
- MIXED ORDNANCE - ROCKETS
BOMBS
MACHINE GUNS
NAPALM
- VERTICAL RESCUE CAPABILITY



CL-84-1

ASW EVALUATION

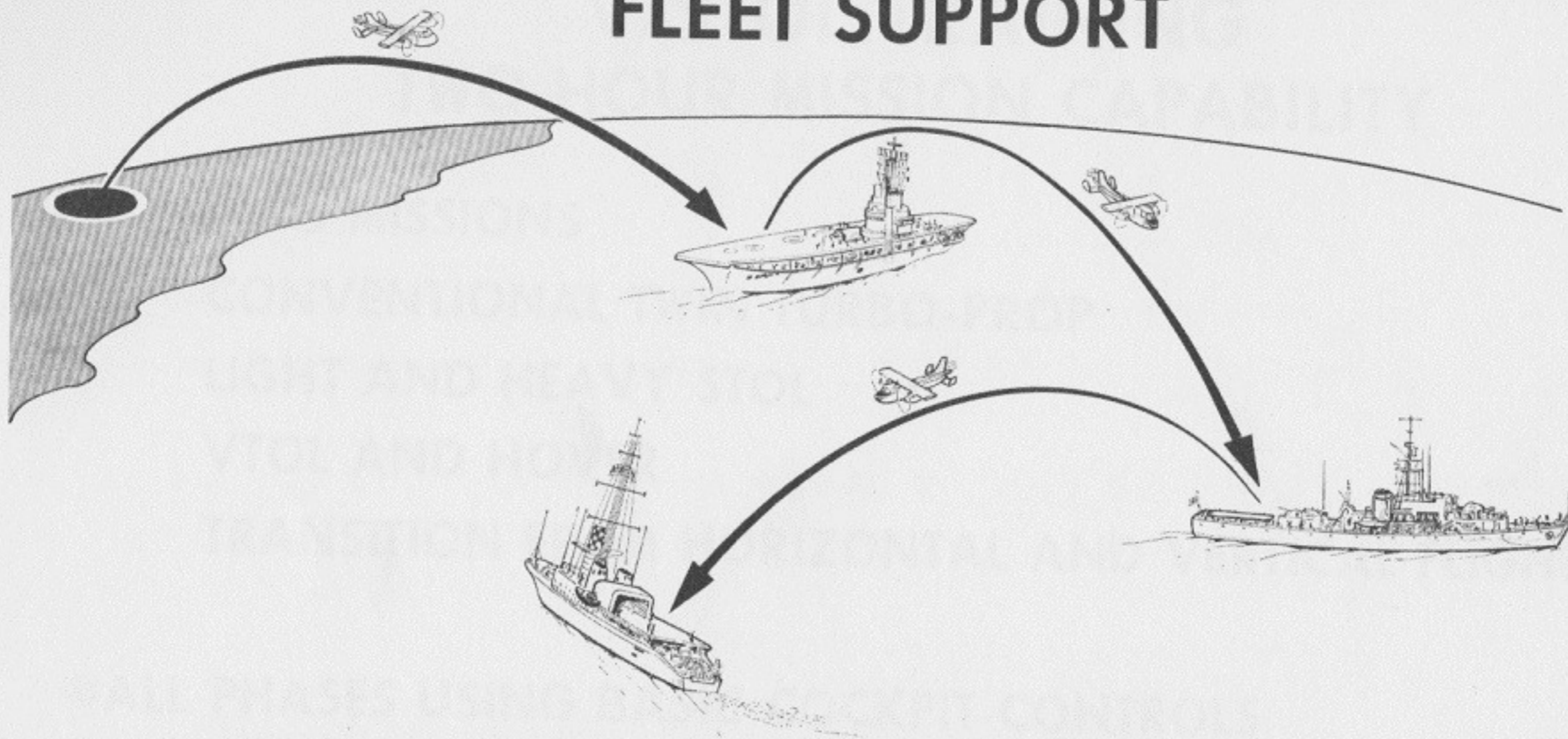


- DEPART VERTICALLY FROM SHIP'S DECK WITH 1000 LB PAYLOAD
 - FLY OUT AT ALTITUDE FOR 250 NM IN 55 MINUTES
 - SEA LEVEL "ON STATION" LOITER AT 65 KT FOR ONE HOUR 15 MINUTES
 - RETURN TO SHIP FOR VERTICAL LANDING WITH 10% RESERVE
- OR
- SHORTER DISTANCES FROM SHIP'S DECK WITH INCREASED PAYLOAD OR LOITER TIME



CL-84-1

FLEET SUPPORT



- SHORE TO SHIP - STOL PAYLOAD 3200 LB FOR 720 NM AT 250 KT CRUISE WITH STOL (CARRIER) OR VERTICAL (SHIP) LANDING
- SHIP TO SHIP - VERTICAL OPERATION FROM DECK PADS 2500 LB PAYLOAD FOR 380 NM AT 250 KT CRUISE



CL-84-1

V/STOL TRAINING TWO HOUR MISSION CAPABILITY

● TRAINING MISSIONS

CONVENTIONAL TWIN TURBO-PROP

LIGHT AND HEAVY STOL

VTOL AND HOVER

TRANSITION FROM HORIZONTAL AND VERTICAL FLIGHT

● ALL PHASES USING BASIC COCKPIT CONTROLS

STICK

POWER LEVER

RUDDER PEDALS



CL-84-1

TILT-WING V/STOL

A NEW CONCEPT IN

AIRBORNE VERSATILITY

CANADAIR LIMITED P.O. BOX 6087, MONTREAL, CANADA
A SUBSIDIARY OF GENERAL DYNAMICS CORPORATION









CL-64 DYNAVERT

CANADAIR-GENERAL DYNAMICS

CF-VTD-X