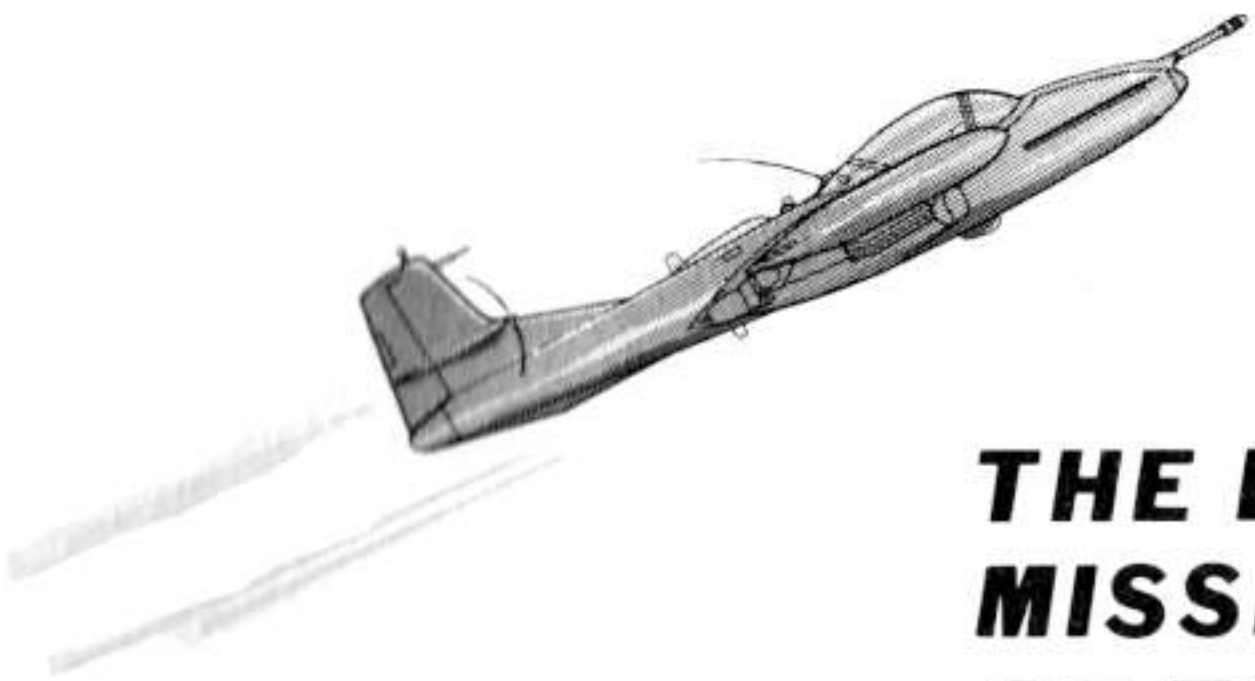
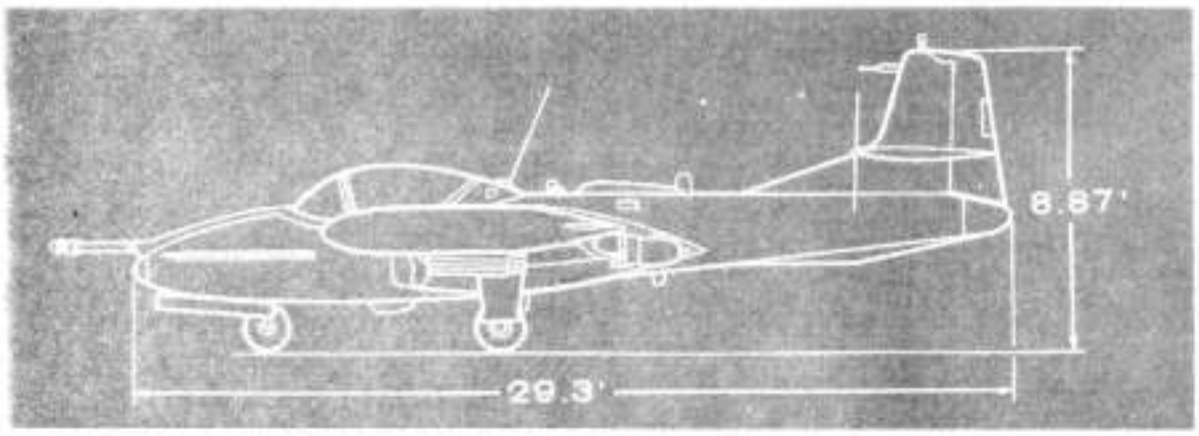
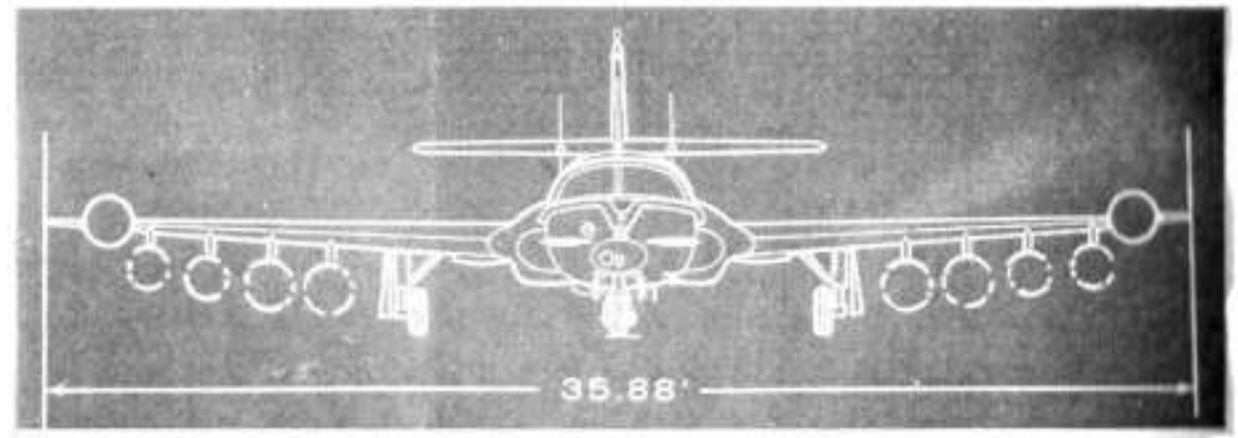
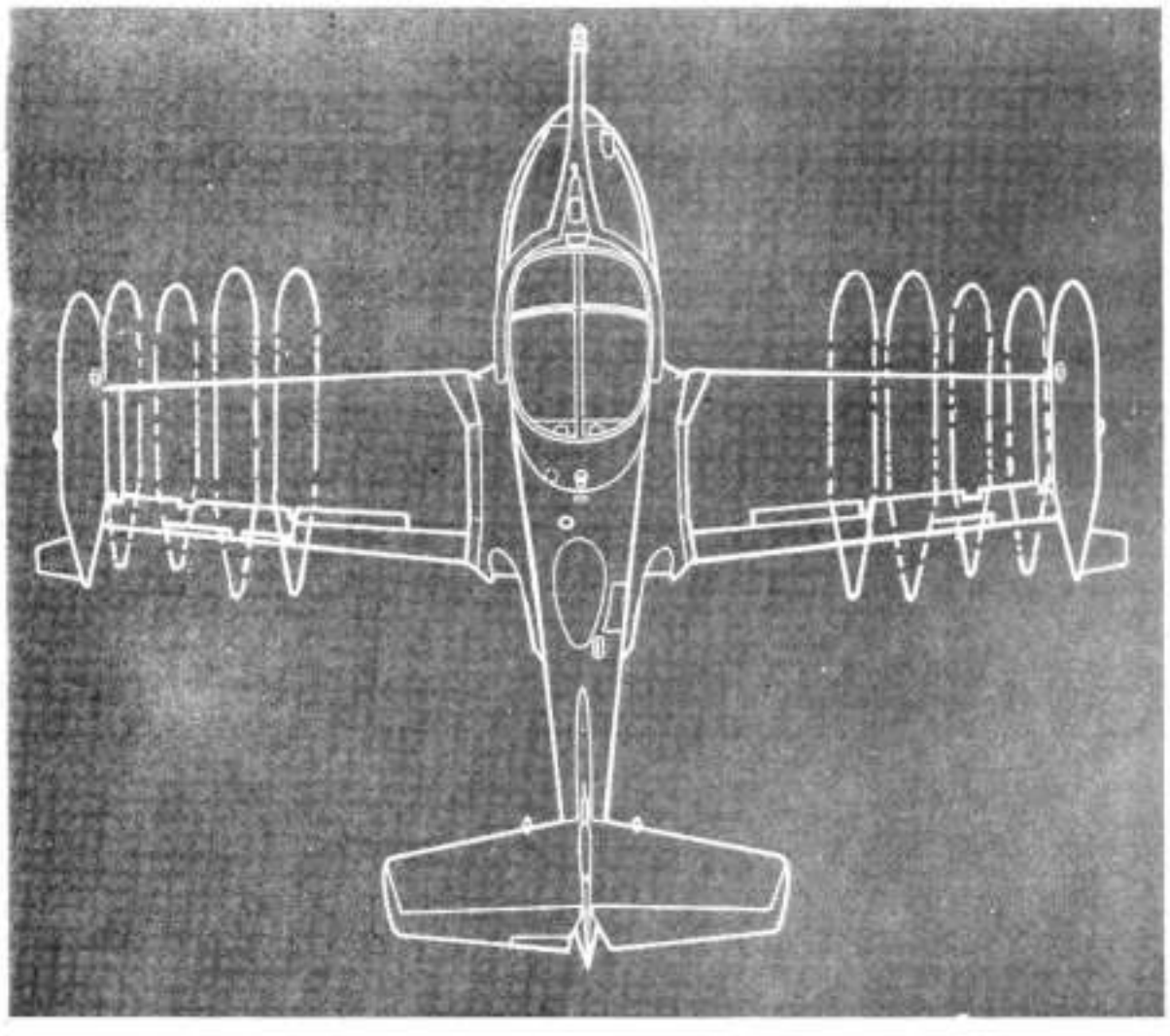


THE EXPANDED MISSION ENVELOPE OF THE . . . A-37B





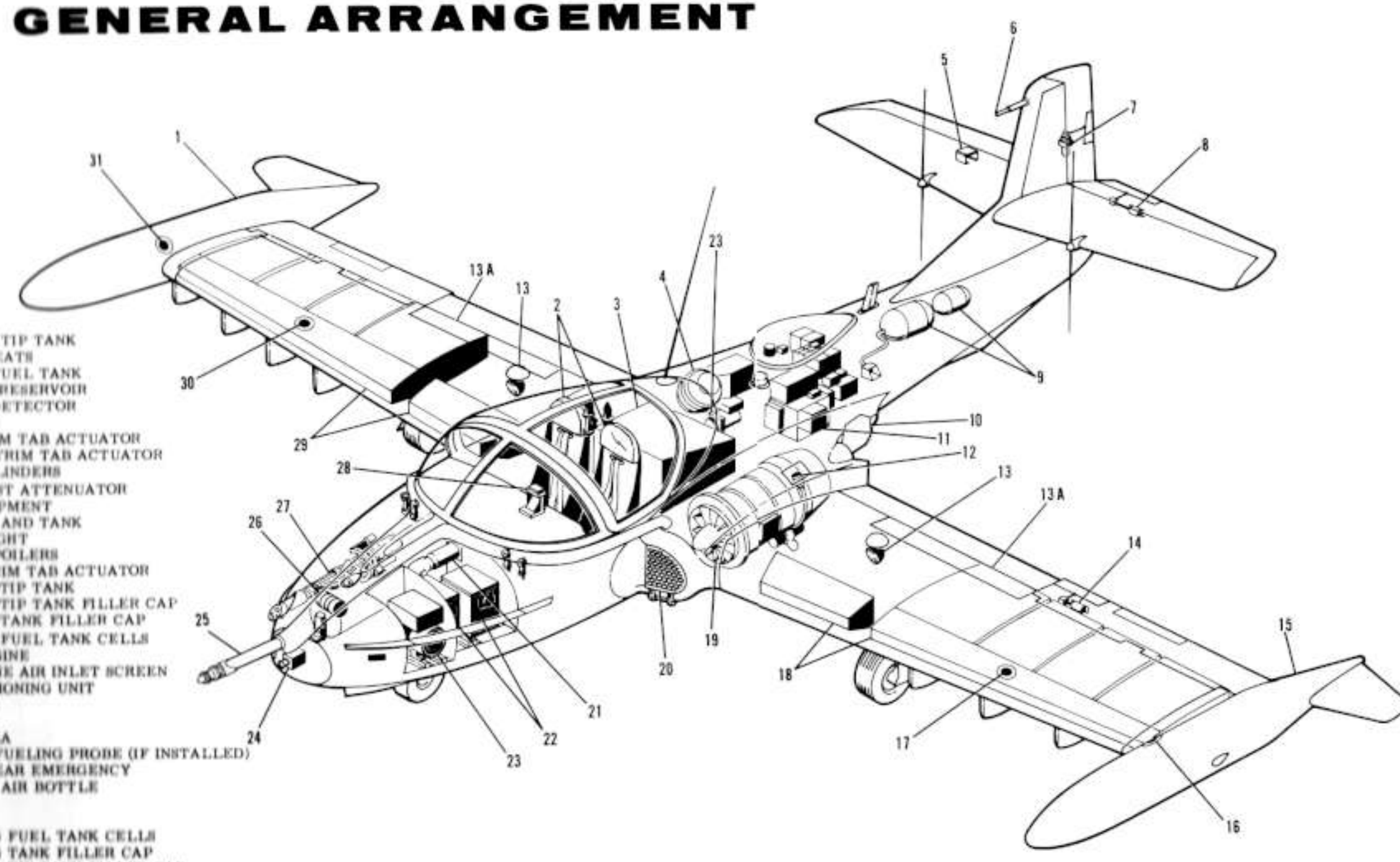




BASIC DATA

GROSS WEIGHT	15,000 LB
EMPTY WEIGHT	5873 LB
ENGINES (2)	J85-17A (GENERAL ELECTRIC)
POWER RATING (TAKEOFF), THRUST	2850 LB (EACH)
POWER LOADING	2.6 LB /LB THRUST
WING AREA	183.9 FT²
WING LOADING	81.0 LB/FT²
TOTAL FUEL CAPACITY (GALLONS)	
INTERNAL	277.5
TIPTANKS	180.
DROPTANKS (4)	480.
TOTAL	937.5

GENERAL ARRANGEMENT



1. RIGHT WING TIP TANK
2. EJECTION SEATS
3. FUSELAGE FUEL TANK
4. HYDRAULIC RESERVOIR
5. MAGNETIC DETECTOR
6. PITOT TUBE
7. RUDDER TRIM TAB ACTUATOR
8. ELEVATOR TRIM TAB ACTUATOR
9. OXYGEN CYLINDERS
10. LEFT THRUST ATTENUATOR
11. RADIO EQUIPMENT
12. OIL FILLER AND TANK
13. LANDING LIGHT
13A. SLOT LIP SPOILERS
14. AILERON TRIM TAB ACTUATOR
15. LEFT WING TIP TANK
16. LEFT WING TIP TANK FILLER CAP
17. LEFT WING TANK FILLER CAP
18. LEFT WING FUEL TANK CELLS
19. J85-17A ENGINE
20. LEFT ENGINE AIR INLET SCREEN
21. AIR CONDITIONING UNIT
22. BATTERIES
23. INVERTER
24. GUN CAMERA
25. AERIAL REFUELING PROBE (IF INSTALLED)
26. LANDING GEAR EMERGENCY EXTENSION AIR BOTTLE
27. NOSE GUN
28. GUNSIGHT
29. RIGHT WING FUEL TANK CELLS
30. RIGHT WING TANK FILLER CAP
31. RIGHT WING TIP TANK FILLER CAP

15,000 LB PERFORMANCE SUMMARY

MAXIMUM LEVEL FLIGHT SPEED, (CLEAN) S.L. ..... 403 KTAS

RATE OF CLIMB, S.L., ... 4113 FPM

TIME TO CLIMB, S.L. TO 30,000 FT, ... 16.8 MIN

SERVICE CEILING,

2 ENGINES ..... 32,100 FT

1 ENGINE ..... 19,200 FT

TAKEOFF DISTANCE, S.L.

GROUND ROLL ..... 3100 FT

OVER 50 FT. OBSTACLE ..... 4200 FT

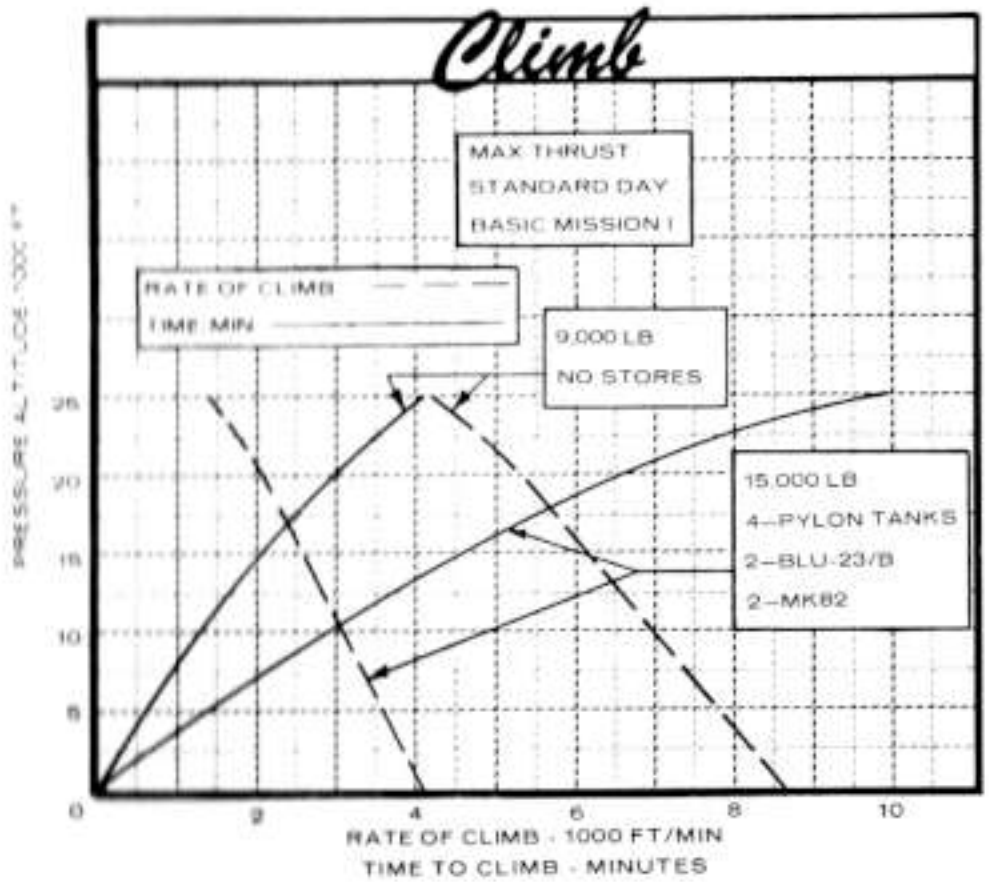
✶ LANDING DISTANCE, S.L.

GROUND ROLL ..... 1710 FT

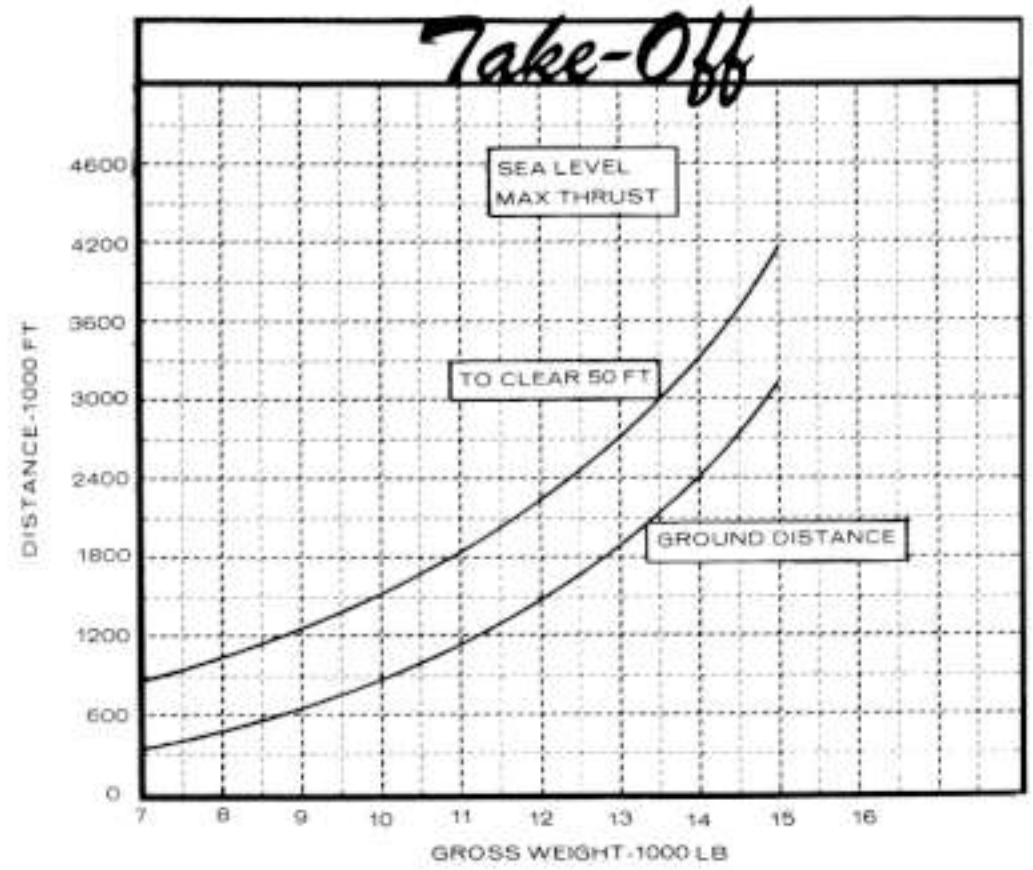
✶ STALL SPEED, LANDING CONFIG. .... 75 KT

* LANDING WEIGHT 7000 LBS

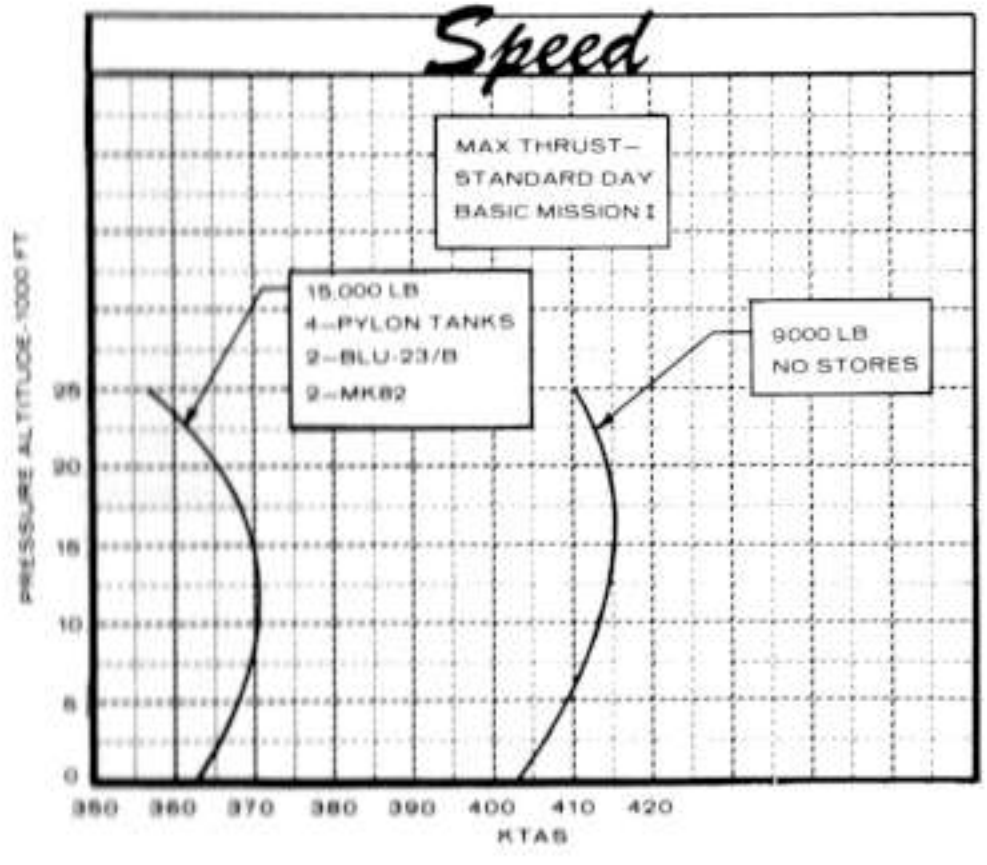
Climb



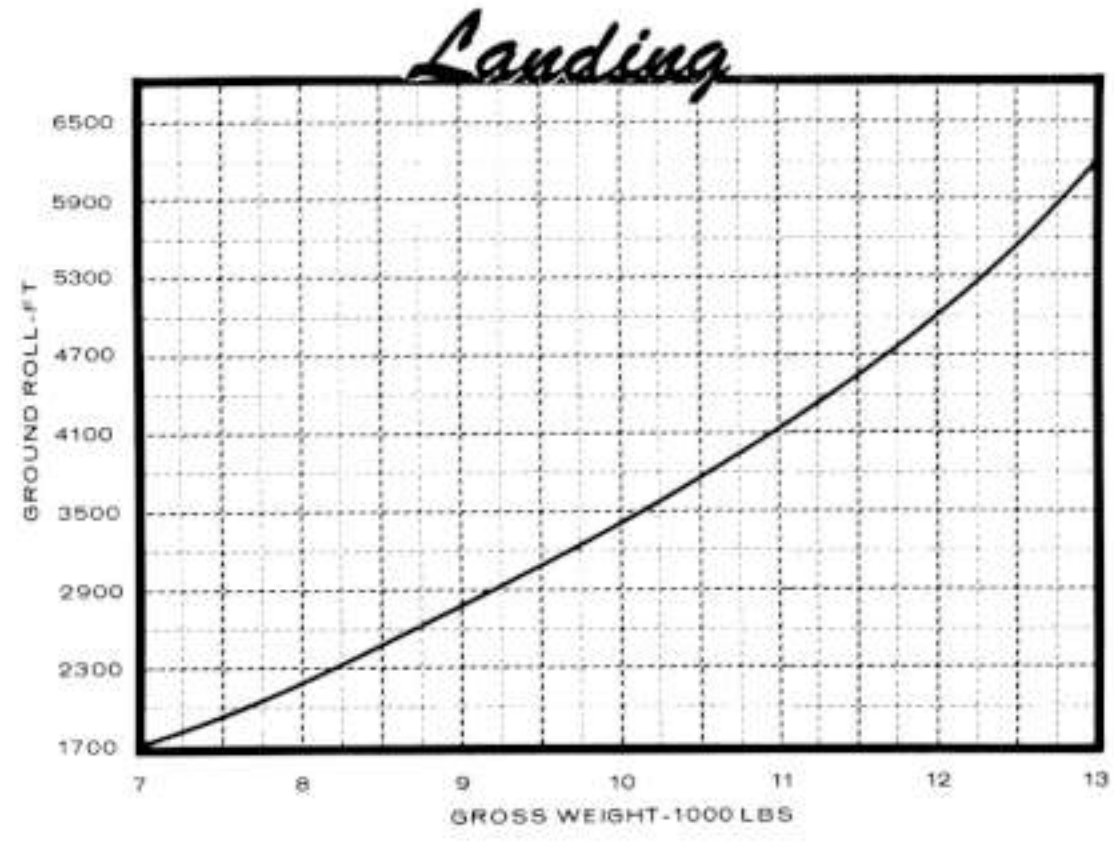
Take-Off



Speed

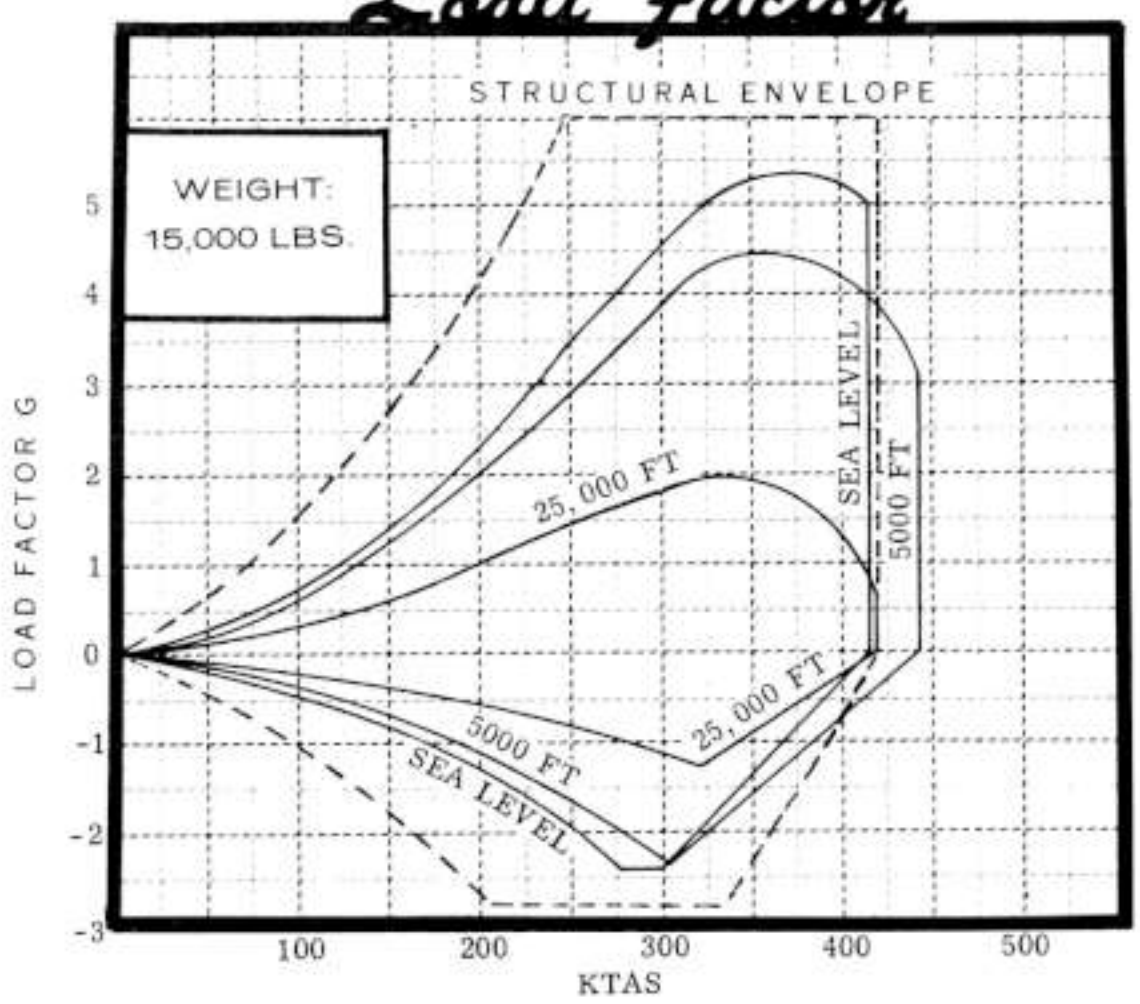


Landing

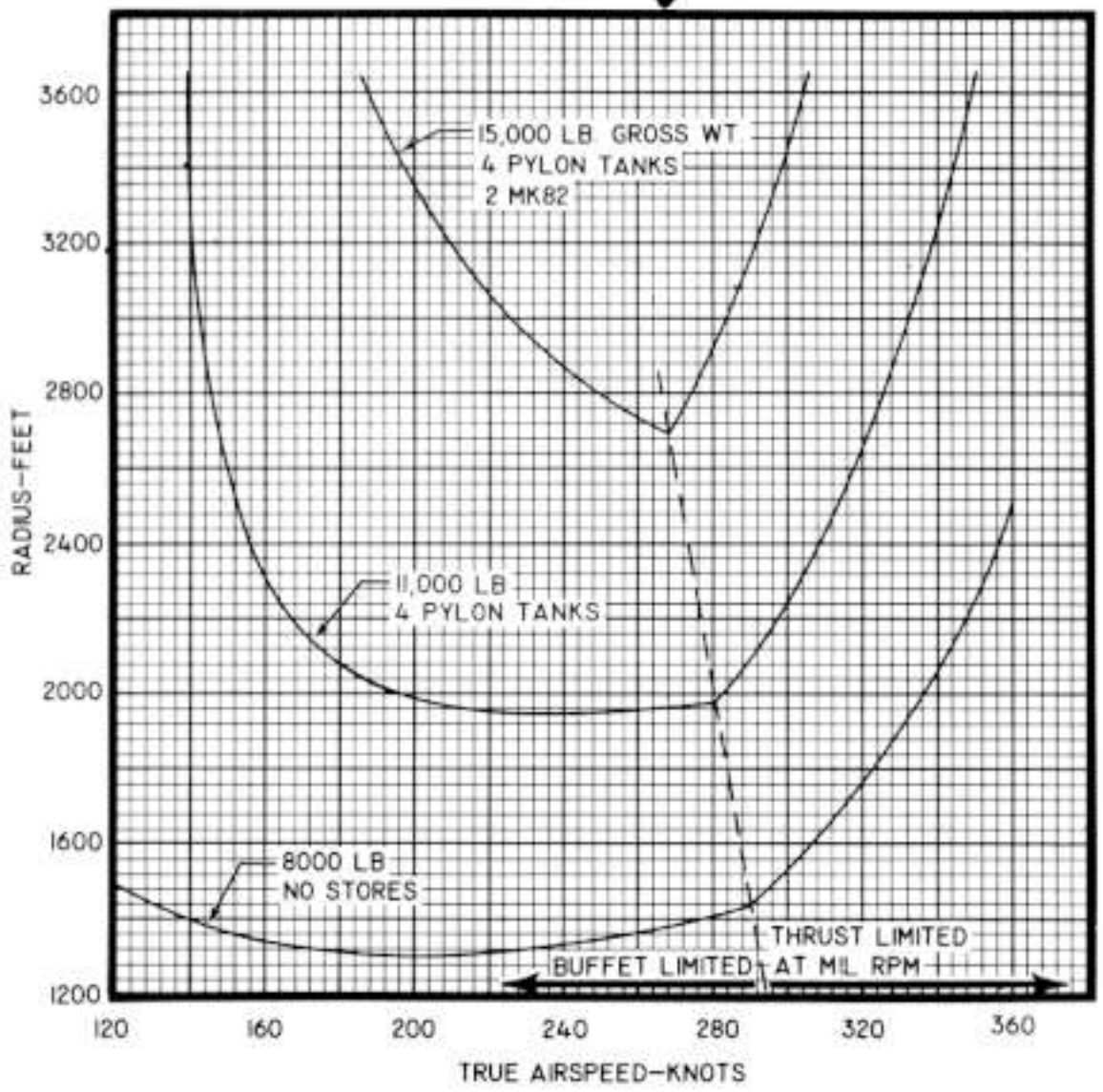


MANEUVERABILITY

Load Factor



Radius of Turn



MISSION PROFILE HI-LO-HI

MAXIMUM FUEL

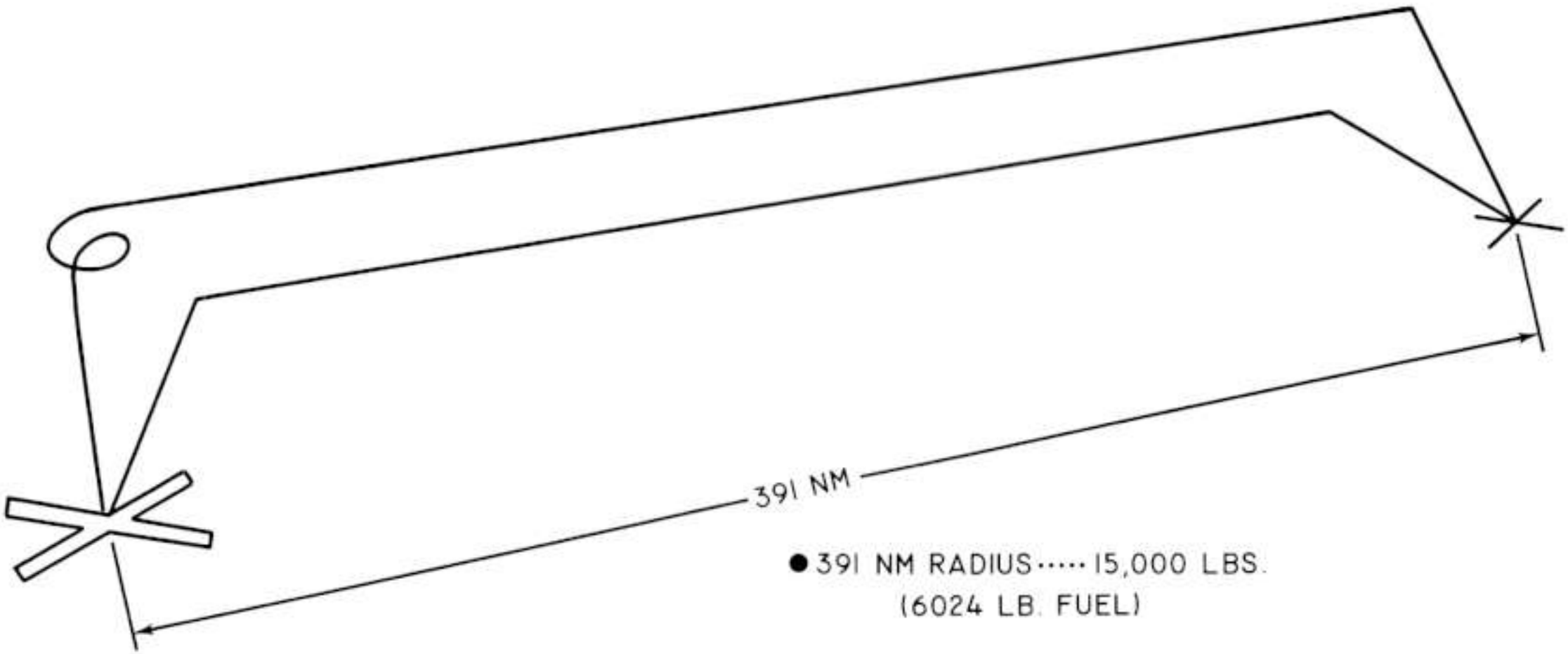
ORDNANCE

(2042 LBS)

- (2) MK 82
- (2) BLU 23

PROFILE

- CRUISE AT 25,000 FT.
- 10 MIN COMBAT AT S.L.
- 20 MIN RESERVE AT 10,000 FT



- 391 NM RADIUS ····· 15,000 LBS.
  (6024 LB. FUEL)

COMPUTED PER MIL-7700B

MISSION PROFILE HI-LO-HI

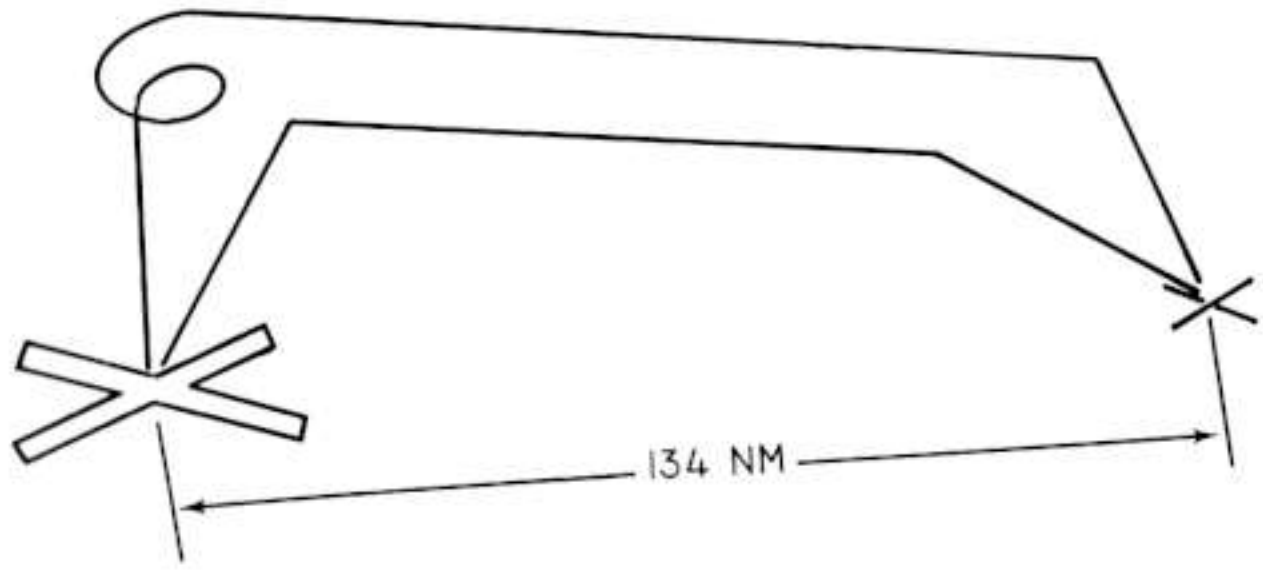
MAXIMUM ORDNANCE

ORDNANCE
(5628 LBS)

- (4) BLU-27/B
- (4) MK-82SE

PROFILE

- CRUISE AT 25,000 FT
- 10 MIN. COMBAT AT S.L.
- 20 MIN. RESERVE AT 10,000 FT



- 134 NM RADIUS·····15,000 LBS (2974 LB FUEL)

COMPUTED PER MIL-7700B

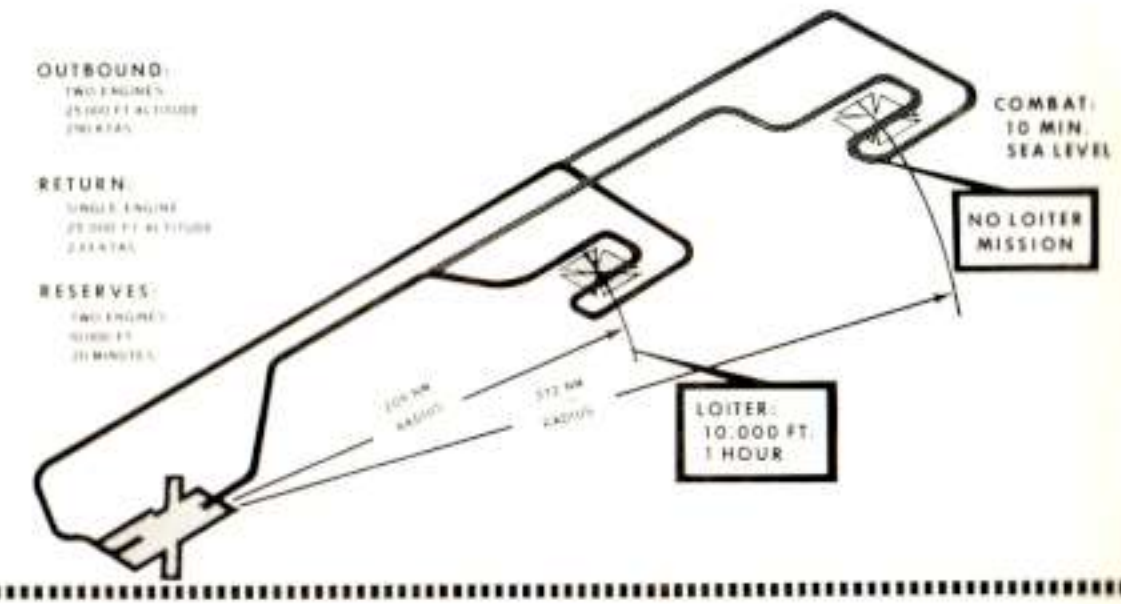
MISSION PROFILES



HI–LO–HI MISSION

TAKEOFF GROSS WEIGHT.....15,000 LBS

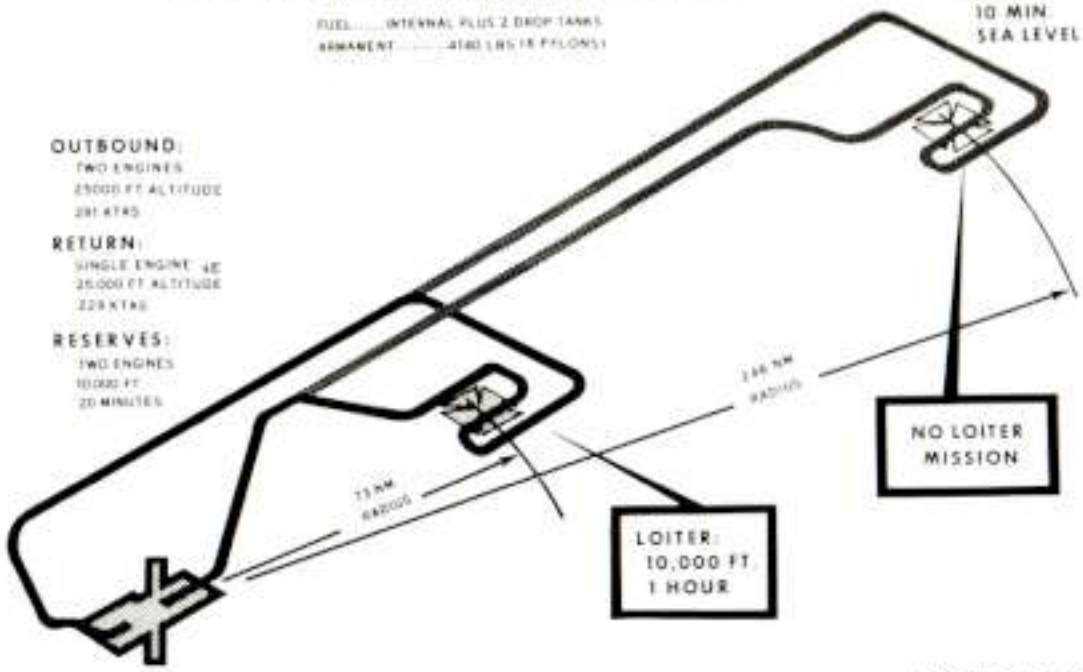
FUEL.....INTERNAL PLUS 4 DROP TANKS
ARMAMENT.....2400 LBS (4 PYLONS)



HI–LO–HI MISSION

TAKEOFF GROSS WEIGHT ....15,000 LBS

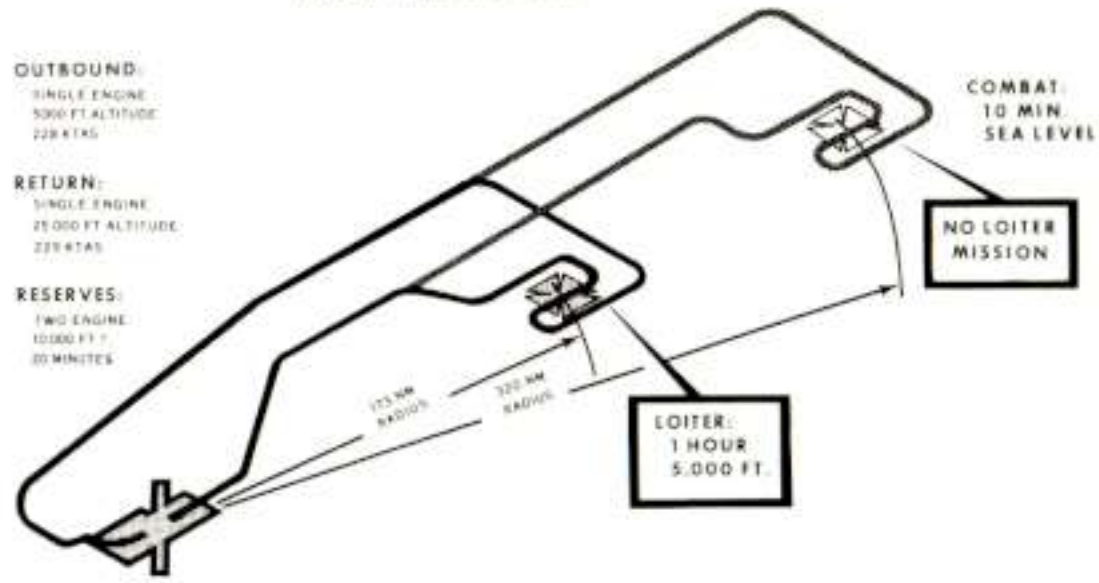
FUEL.....INTERNAL PLUS 2 DROP TANKS
ARMAMENT.....4160 LBS (8 PYLONS)



LO–LO–HI MISSION

TAKEOFF GROSS WEIGHT....15,000 LBS

FUEL.....INTERNAL PLUS 4 DROP TANKS
ARMAMENT.....2400 LBS (4 PYLONS)



COMPUTED PER MIL-M-7700B

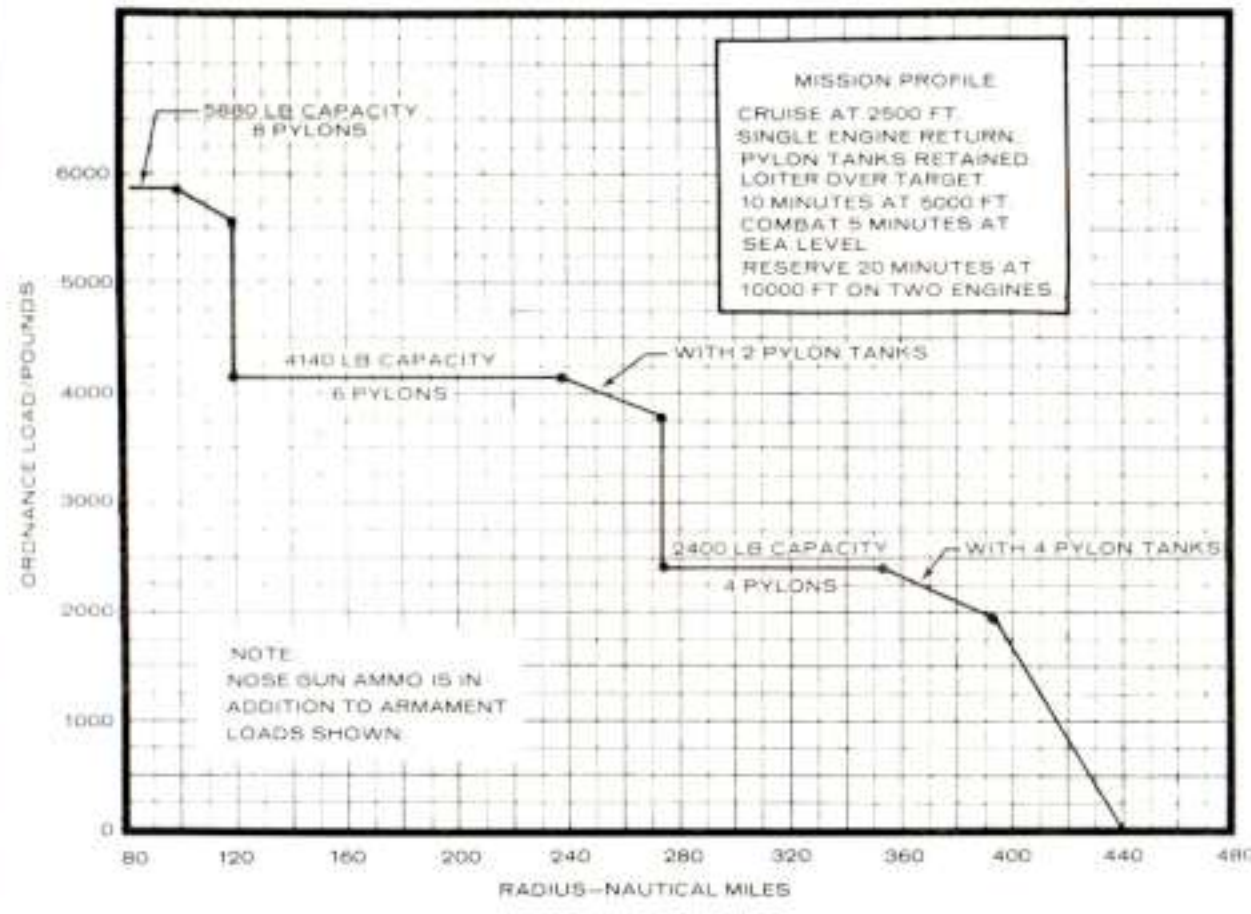
WEIGHT SUMMARY (15,000 LB)

	MAX. FUEL	MAX. ORDNANCE
EMPTY WEIGHT (VNAF)	5873	5873
DROP TANKS (4)	560	0
UNUSABLE FUEL	191	191
PILOT	300	300
OIL	15	15
BASIC WEIGHT	6939	6379
FUEL:		
INTERNAL	1804	1804
TIPS	1170	1170
DROP TANKS (4)	3050	0
FUEL WEIGHT	6024	2974
ORDNANCE	2037	5647
GROSS WEIGHT	15,000	15,000

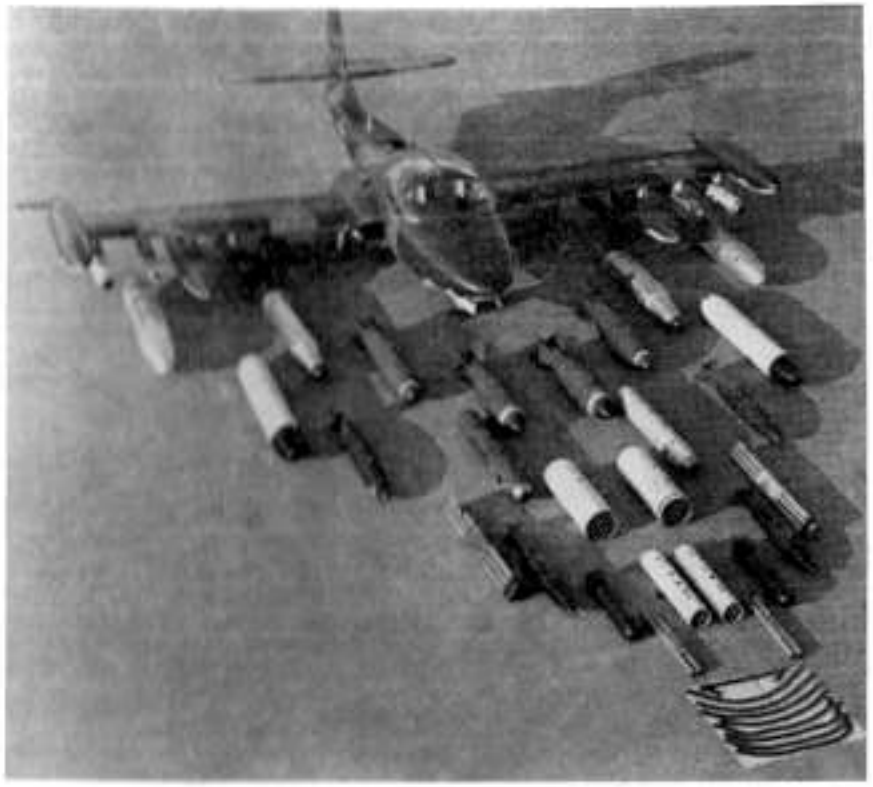
ORDNANCE/RADIUS TRADEOFF

15,000 LB. GROSS WEIGHT





U.S.A.F. CERTIFIED WEAPONS

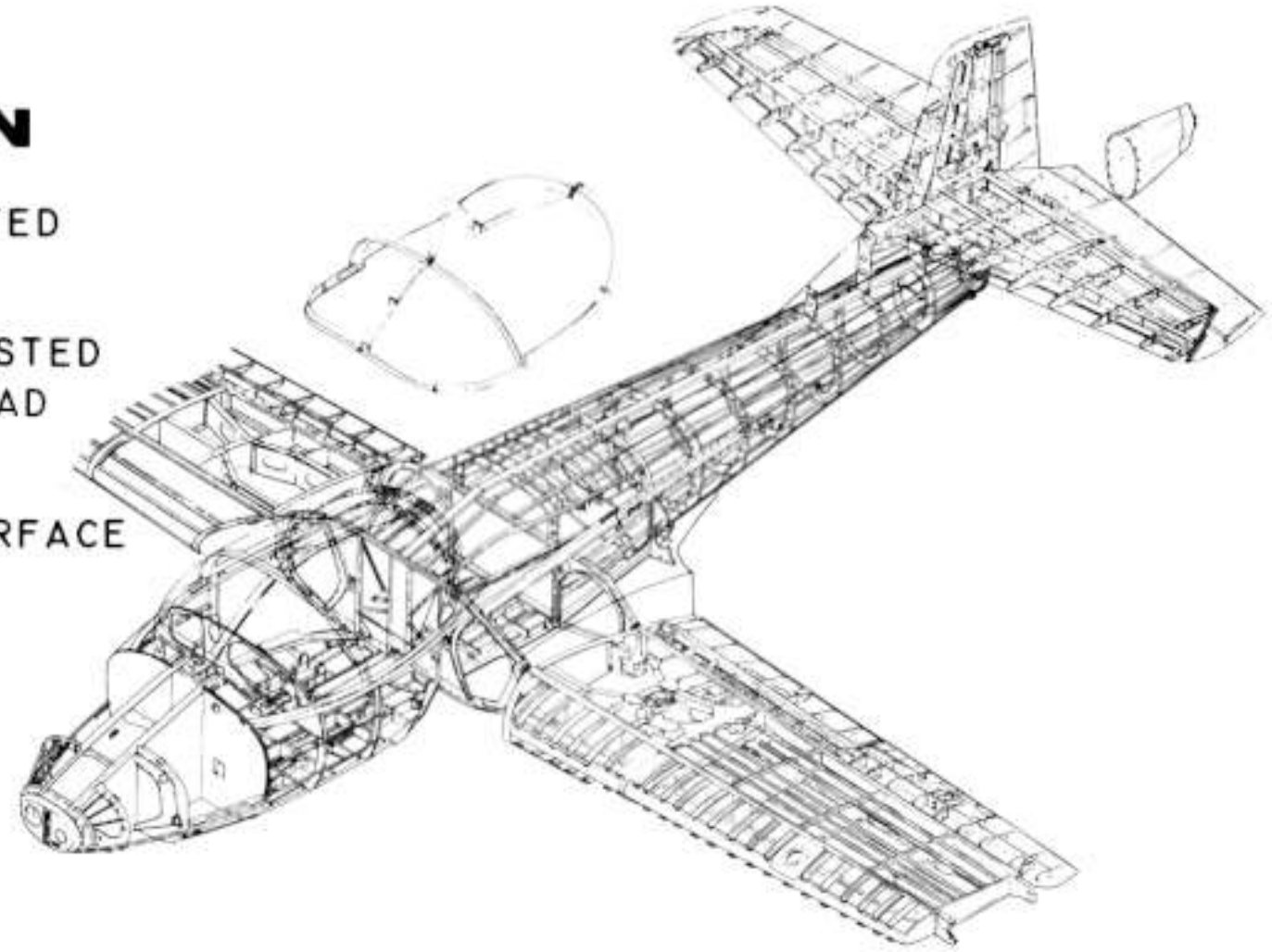




STORE	WEIGHT	TYPE	STORES LOCATION			
			L1, R1	L2, R2	L3, R3	L4, R4
AN-M47A4	130 Lbs.	PWP WP BOMB	X	X	X	X
AF/B-37K-1	175 Lbs.	PRACTICE BOMB CONTAINER RACK (WITH BDU-33/B, BDU-33A/B AND BDU-33B/B)	X	X	X	X
BLU-1C/B	700 Lbs.	FIRE BOMB	X	X		
BLU-23/B	497 Lbs.	FIRE BOMB	X	X	X	
BLU-27/B BLU-27A/B	847 Lbs.	FIRE BOMB	X	X		
BLU-32/B BLU-32A/B	589 Lbs.	FIRE BOMB	X	X	X	X
BLU-52/B	350 Lbs.	CHEMICAL BOMB	X	X	X	X
CBU-14/A CBU-14A/A	250 Lbs.	DISPENSER & BOMBS	X	X	X	X
CBU-22/A CBU-22A/A	226 Lbs.	DISPENSER & BOMBS	X	X	X	X
CBU-24A/B CBU-24B/B	818 Lbs.	DISPENSER & BOMBS	X	X		
CBU-25/A CBU-25A/A	264 Lbs.	DISPENSER & BOMBS	X	X	X	X
CBU-29A/B CBU-29B/B CBU-49A/B CBU-49B/B CBU-53/B CBU-54/B	818 Lbs.	DISPENSER & BOMBS	X	X		
CBU-52/B	739 Lbs.	DISPENSER & BOMBS	X	X		
CBU-52A/B	788 Lbs.					
CBU-55/B	519 Lbs.	FAE BOMB CLUSTER			X	
LAU-3/A	415 Lbs.	ROCKET LAUNCHER	X	X	X	
LAU-32A/A LAU-32B/A LAU-54/A LAU-59/A	174 Lbs. 177 Lbs. 181 Lbs. 181 Lbs.	ROCKET LAUNCHER	X	X	X	X
LAU-68A/A	217 Lbs.	ROCKET LAUNCHER	X	X		X
M117 M117A1 M117A1E2 M117A1E3	823 Lbs.	GP BOMB	X	X		
M129E1	200 Lbs.	LEAFLET BOMBS	X		X	
MK-36	560 Lbs.	DESTRUCTOR	X	X	X	X
MK-81	260 Lbs.	GP BOMB	X	X	X	X
MK-82	531 Lbs.	GP BOMB	X	X	X	X
MK-82/M1A1	531 Lbs.	GP BOMB & FUZE EXTENDER	X	X	X	X
MK-82 (SNAKEYE I)	560 Lbs.	GP BOMB	X	X	X	X
PYLON TANK	531 Lbs.	FUEL-100 GAL	X	X		
SUU-11A/A	323 Lbs.	GUN POD	X	X	X	X
SUU-25A/A	345 Lbs.	FLARE DISPENSER	X	X	X	X

STRUCTURAL SUBSTANTIATION

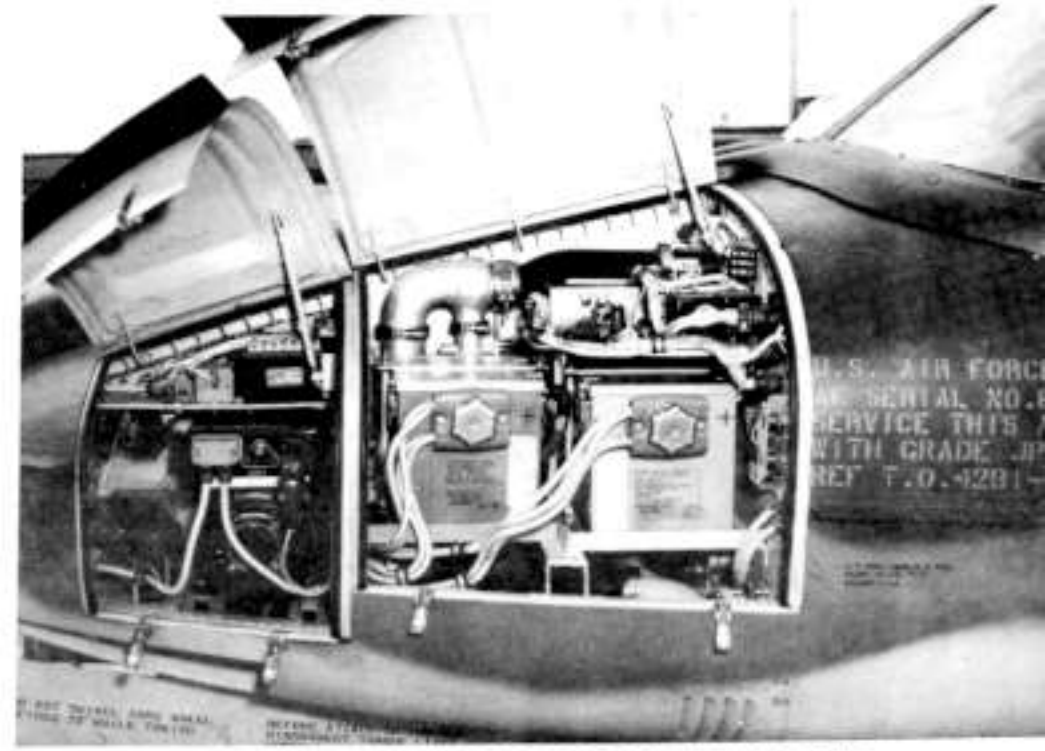
- ENTIRE STRUCTURE STATIC TESTED TO 1.5 TIMES LIMIT LOAD
- COMPLETE FLIGHT ENVELOPE TESTED DURING INSTRUMENTED AIR LOAD SURVEY PROGRAM
- TESTED FOR SEMI-PREPARED SURFACE OPERATION
- WING AND CARRY-THRU FATIGUE TEST NOW IN PROGRESS TO SUBSTANTIATE 7000 HOUR MINIMUM SAFE LIFE



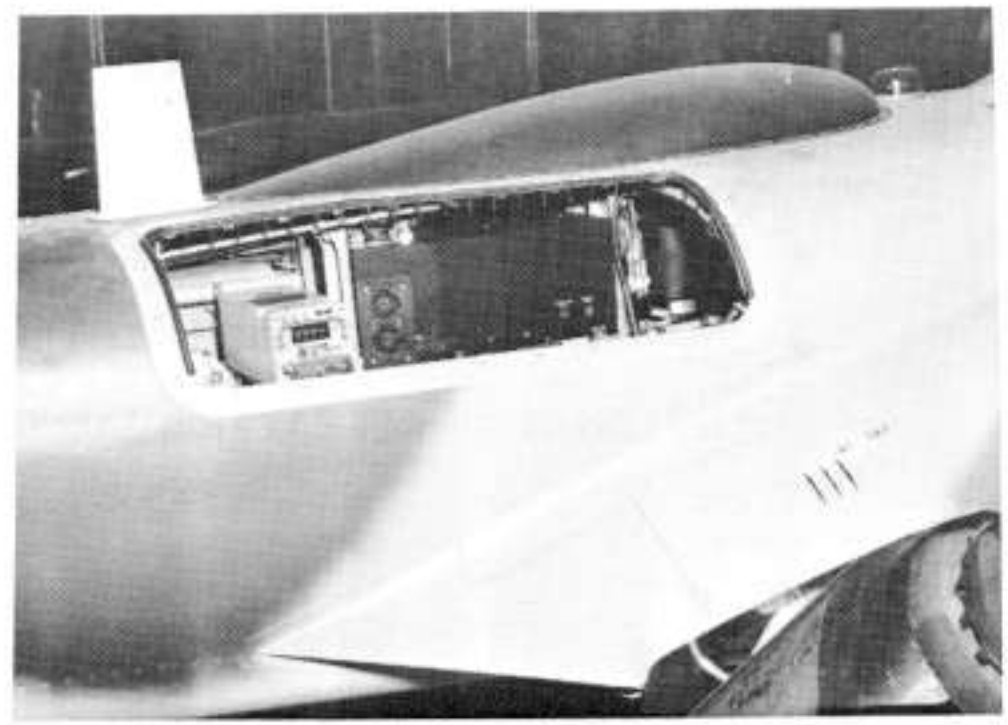
RELIABILITY
MAINTAINABILITY



- 7 MAN HOURS PER FLYING HOUR
- READY ACCESS TO EQUIPMENT
- 87% AVERAGE OPERATIONAL READINESS RATE
- ENGINE CHANGE IN 90 MINUTES

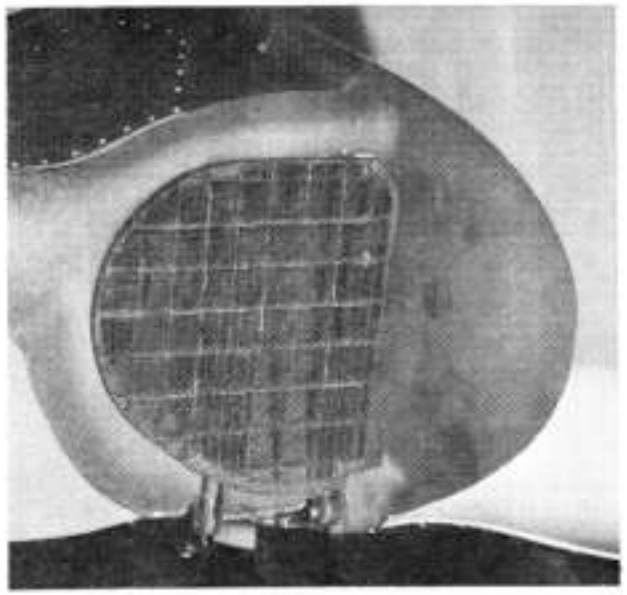


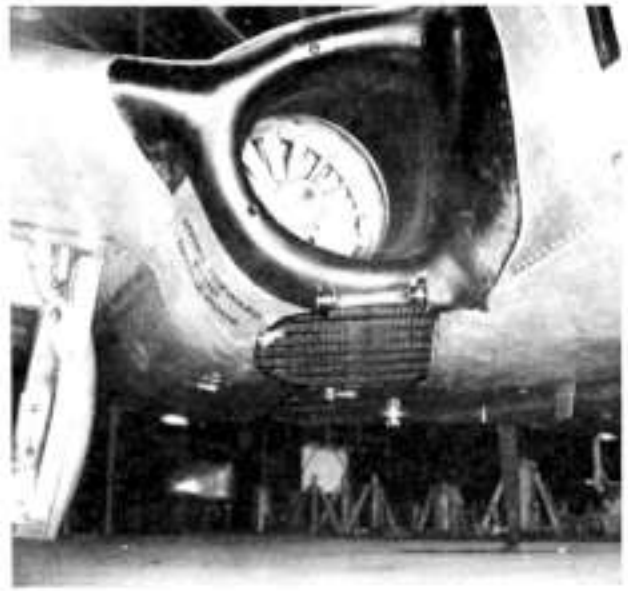
LEFT HAND NOSE COMPARTMENT



AVIONICS BAY ACCESS

SEMI-PREPARED RUNWAY CAPABILITY





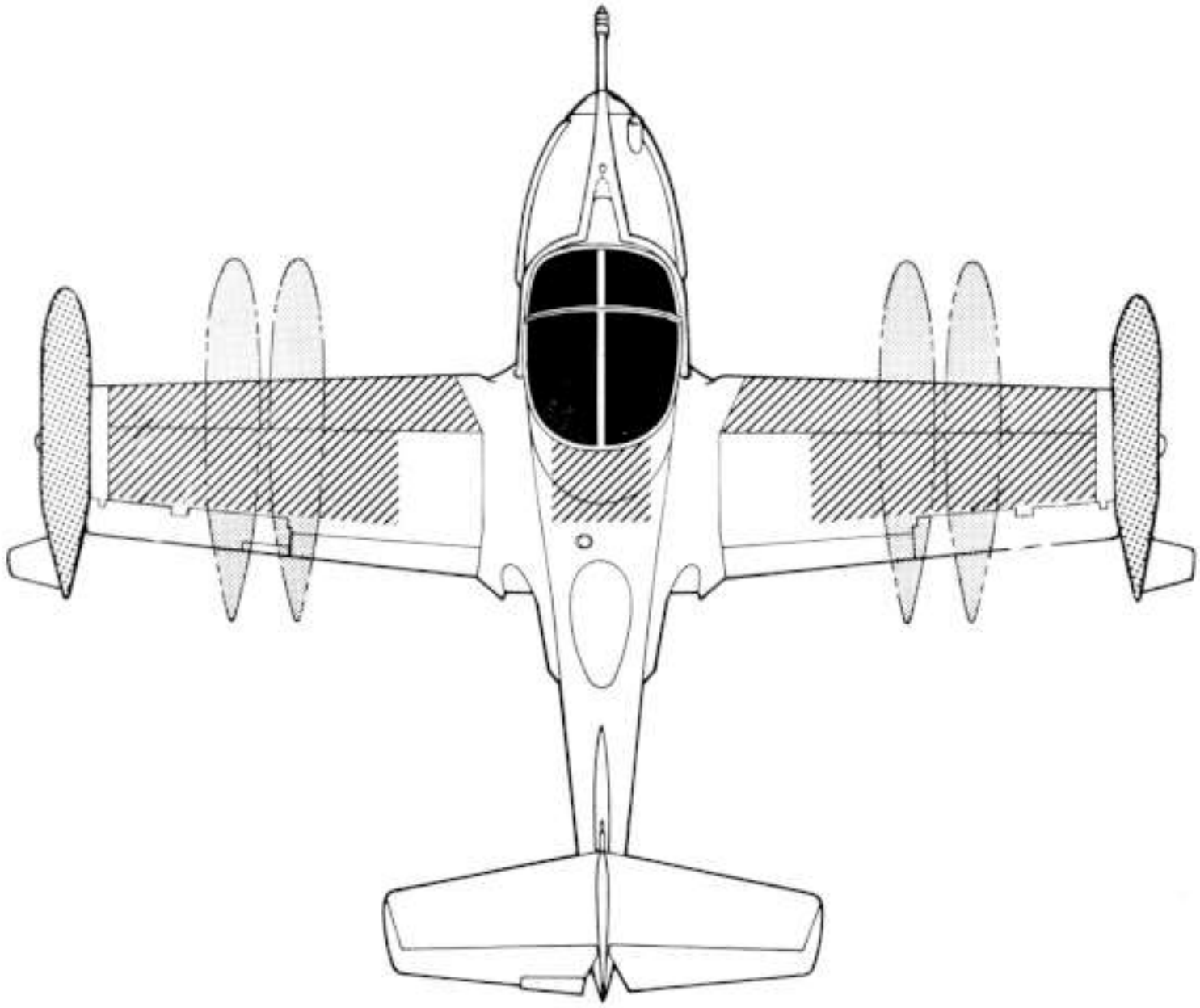
RETRACTABLE INLET SCREENS

- FOD PROTECTION AS SMALL AS $\frac{1}{8}$" DIAMETER
- GROUND TO AIR FLAK PROTECTION
- IN FLIGHT USE TO 415 KTS.
- "AUTOMATIC" EXTENSION AFTER TOUCHDOWN
- "AUTOMATIC" RETRACTION DURING TAKEOFF ROLL



LANDING GEAR

- LARGE WHEELS
- HI–FLOTATION TIRES
- PROVEN LOW MAINTENANCE GEAR SYSTEM
- EMERGENCY–"BLOWDOWN" FEATURE



FUEL SYSTEM

- SELF–SEALING INTERNAL TANKS
- FOAM BAFFLING IN ALL TANKS
- SIMPLIFIED FUEL MANAGEMENT SYSTEM
- EMERGENCY GRAVITY FEED IN EVENT OF ELECTRICAL FAILURE
- FIREWALL SHUT–OFF VALVES
- INVERTED FLIGHT CAPABILITY

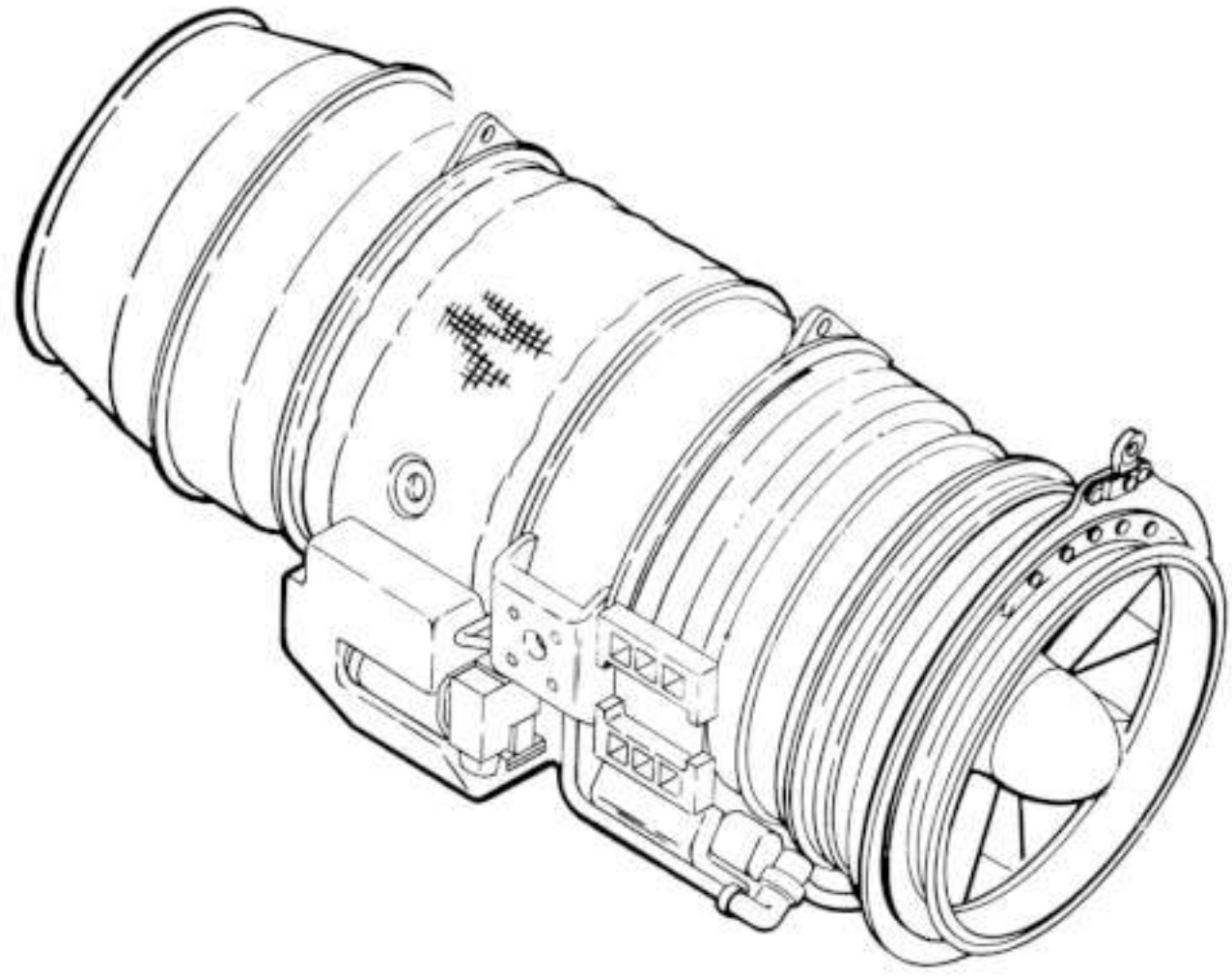
USABLE FUEL

TIP FUEL (With Foam Baffling)	180 GAL
INTERNAL FUEL (With Foam Baffling and Self Sealing Tanks)	277.5 GAL
AUX. PYLON FUEL (Four 120 Gal. Tanks With Foam Baffling)	469.2 GAL
	926.7 GAL

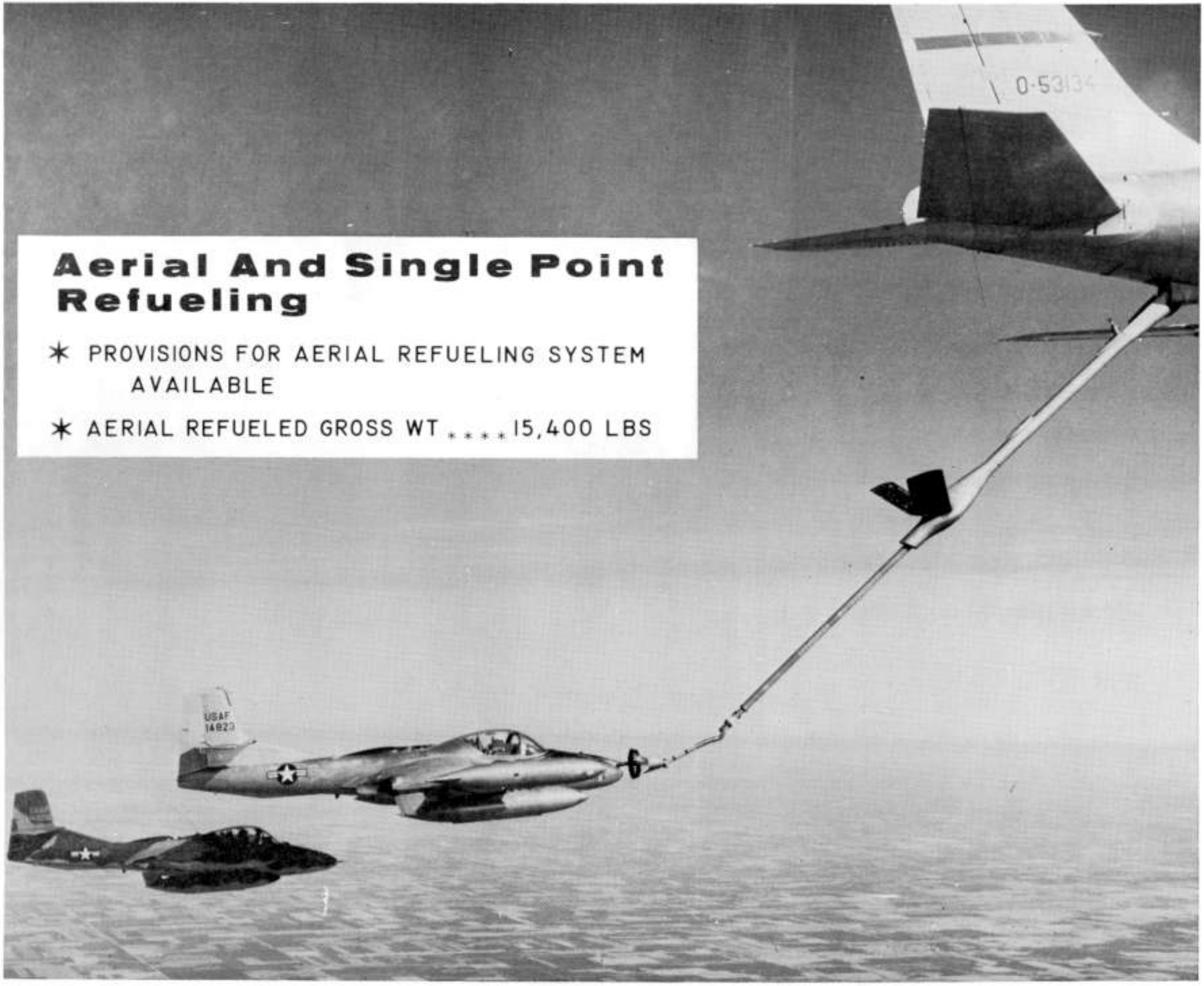
J85 (CJ-610) POWER PLANT

THRUST	SFC*
MILITARY (2850 LBS)	0.99
NORMAL (2700 LBS)	0.97
90% NORMAL (2430 LBS)	0.95

*Specific fuel consumption LB/HR/LB-Thrust



- OVER 9000 J85's (CJ610) IN SERVICE
- BASIC ENGINE IN USE IN 18 COUNTRIES
- 2400 HOUR TBO
- AUTOMATIC VARIABLE INLET GUIDE VANES
- NOSE BULLET/GUIDE VANE DEICING

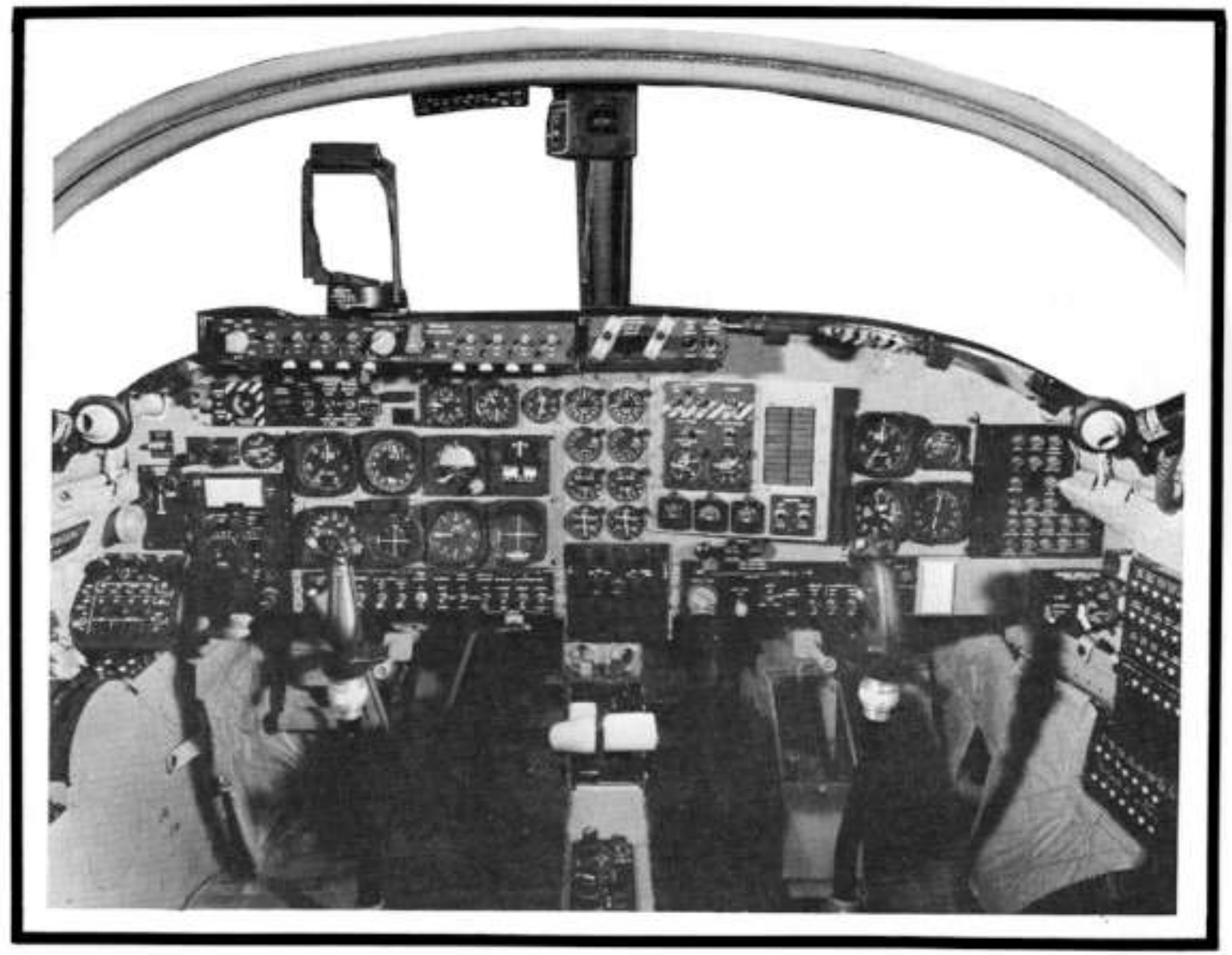


Aerial And Single Point Refueling

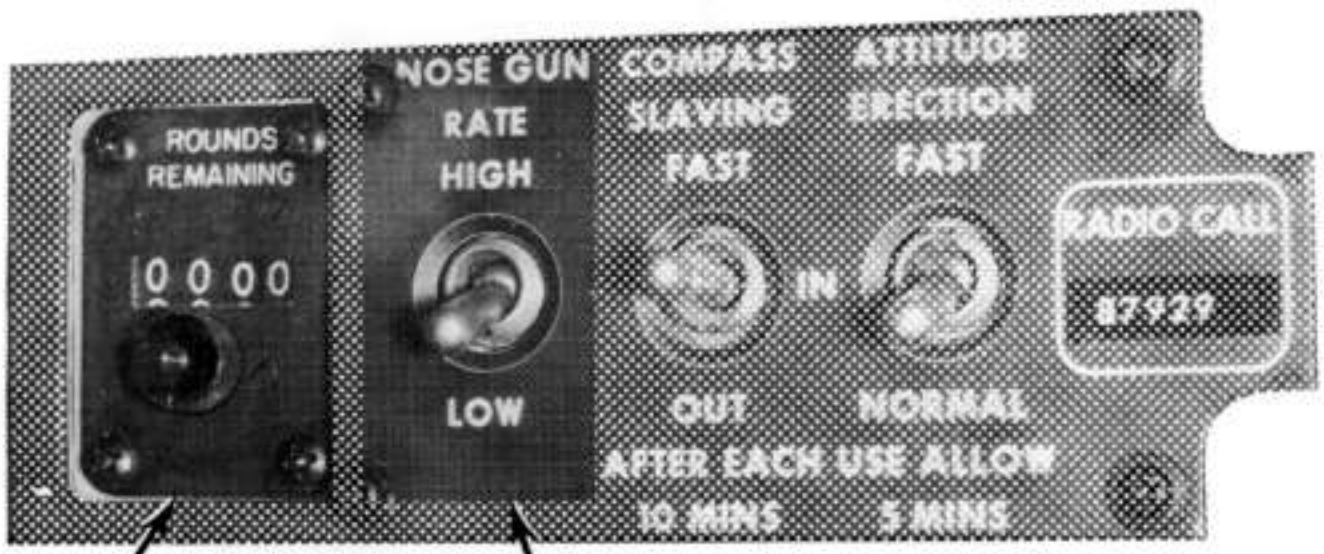
* PROVISIONS FOR AERIAL REFUELING SYSTEM AVAILABLE
* AERIAL REFUELED GROSS WT .... 15,400 LBS

INSTRUMENT PANEL

- SINGLE PILOT . . . NORMAL COMBAT MISSION
- SIDE–BY–SIDE SEATING OPTIMUM TRAINING ARRANGEMENT
- OBSERVER/PASSENGER SECOND PILOT
- FUNCTIONAL INSTRUMENT GROUPING

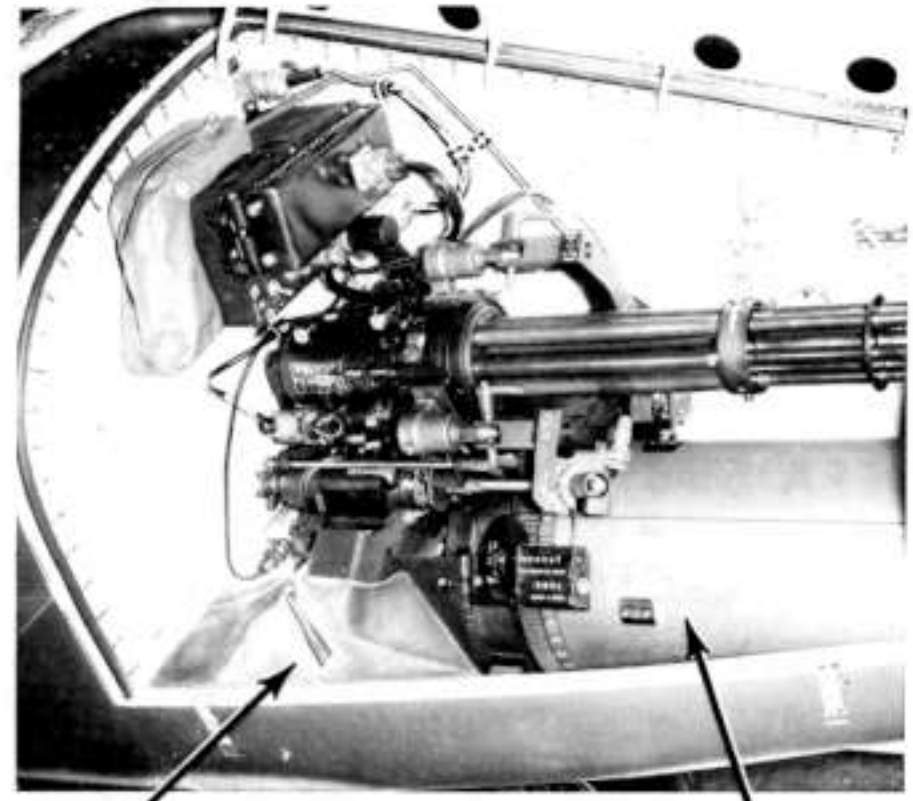


7.62 MM NOSE GUN INSTALLATION



COCKPIT ROUNDS COUNTER

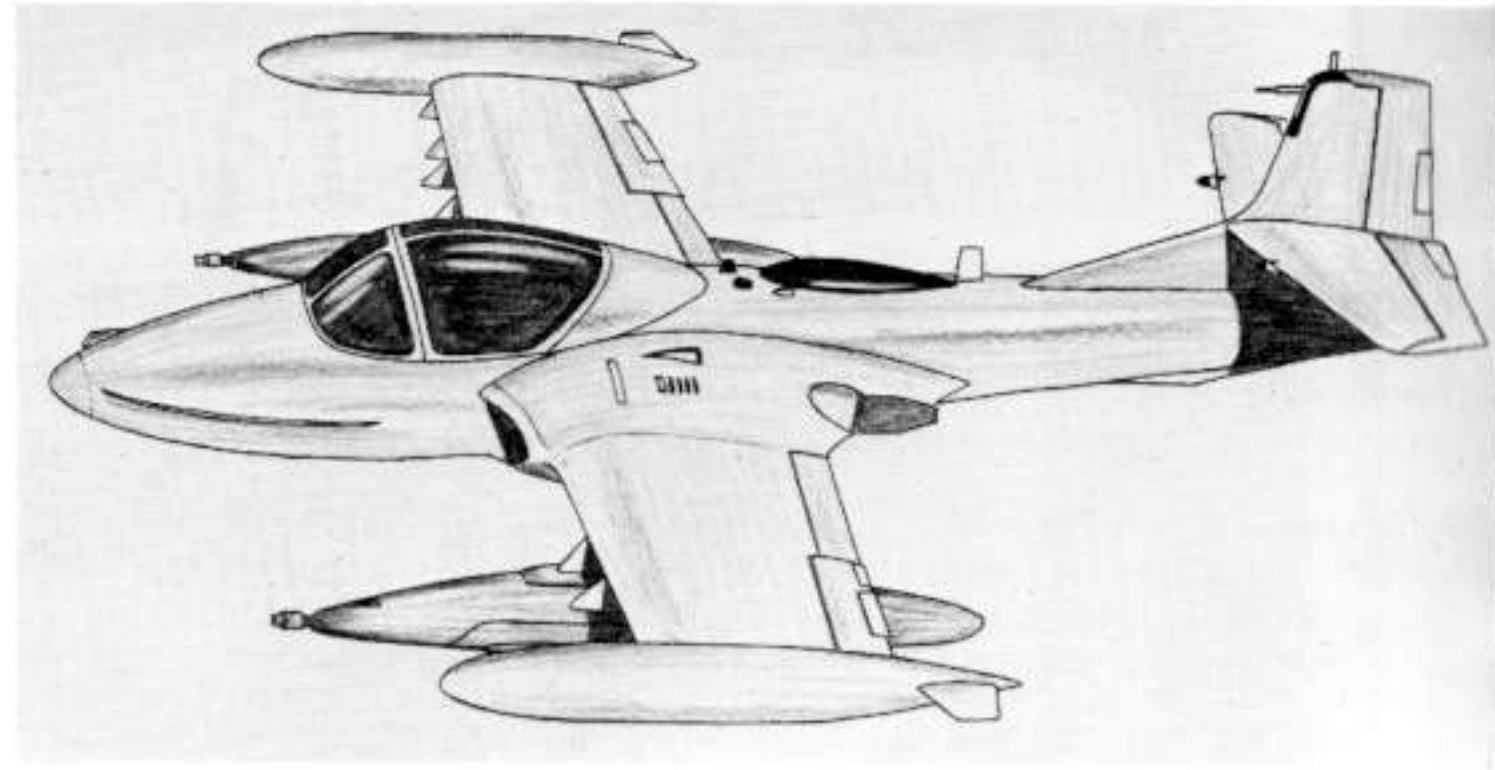
VARIABLE FIRING RATE 3000 OR 6000 S.P.M.



- SHELL CASING CONTAINER
- AMMO DRUM (1500 ROUNDS)
- LOADING TIME:
  - AUTOMATIC..... 3 MIN
  - HANDCRANK..... 5 – 6 MIN
- INSTALLATION/REMOVAL OF GUN IN LESS THAN 3 MINUTES

NEW WEAPON POTENTIAL

PODS FOR WING PYLON MOUNTINGS OF THE 20mm AND 30mm CANNON DETAILED BELOW ARE NOW BEING DEVELOPED. THESE WEAPONS WILL PROVIDE THE A-37B WITH A NEW SPECTRUM OF OFFENSIVE AND DEFENSIVE FIRE POWER.



DEFA 553 30mm CANNON

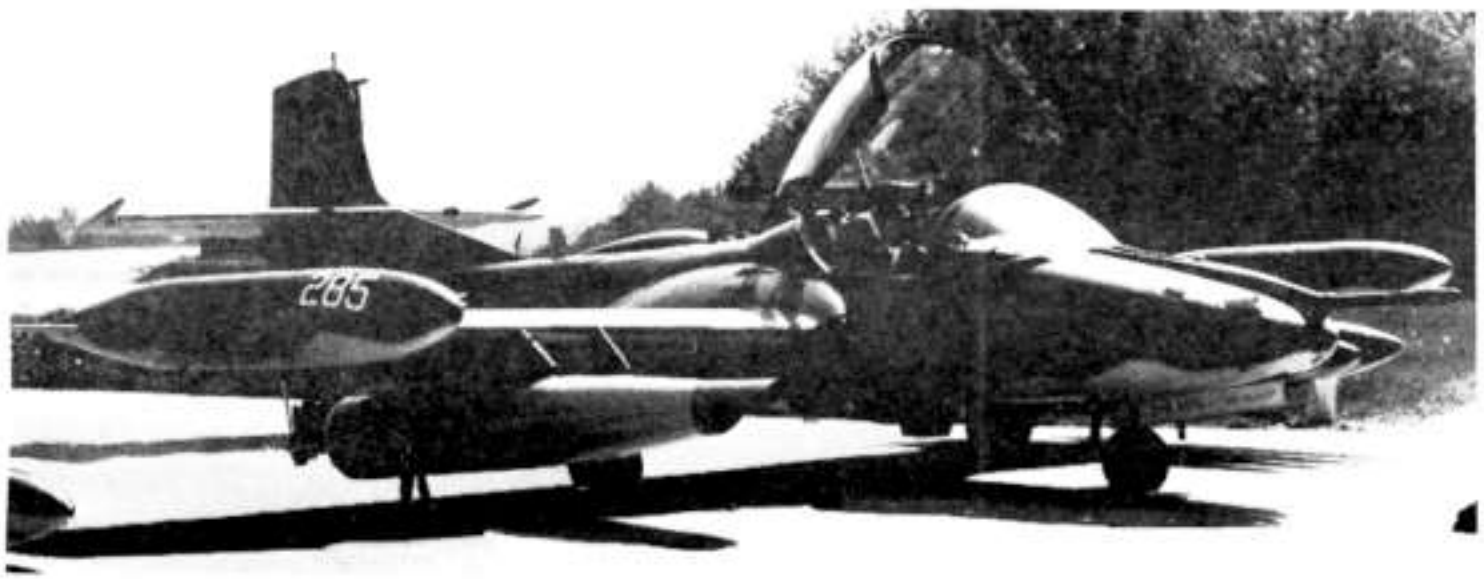
RATE OF FIRE 1350 SPM

PEAK RECOIL FORCES 2200 LBS

TOTAL WEIGHT WITH

180 ROUNDS.....662 LB

250 ROUNDS.....750 LB



GPU-2/A20mm CANNON

RATE OF FIRE 750/1500 SPM

PEAK RECOIL FORCES 2600 LB

TOTAL WEIGHT WITH 300 ROUNDS—550 LB

MISSION PROFILE

20/30 mm GUN PODS AND 500 LB BOMBS

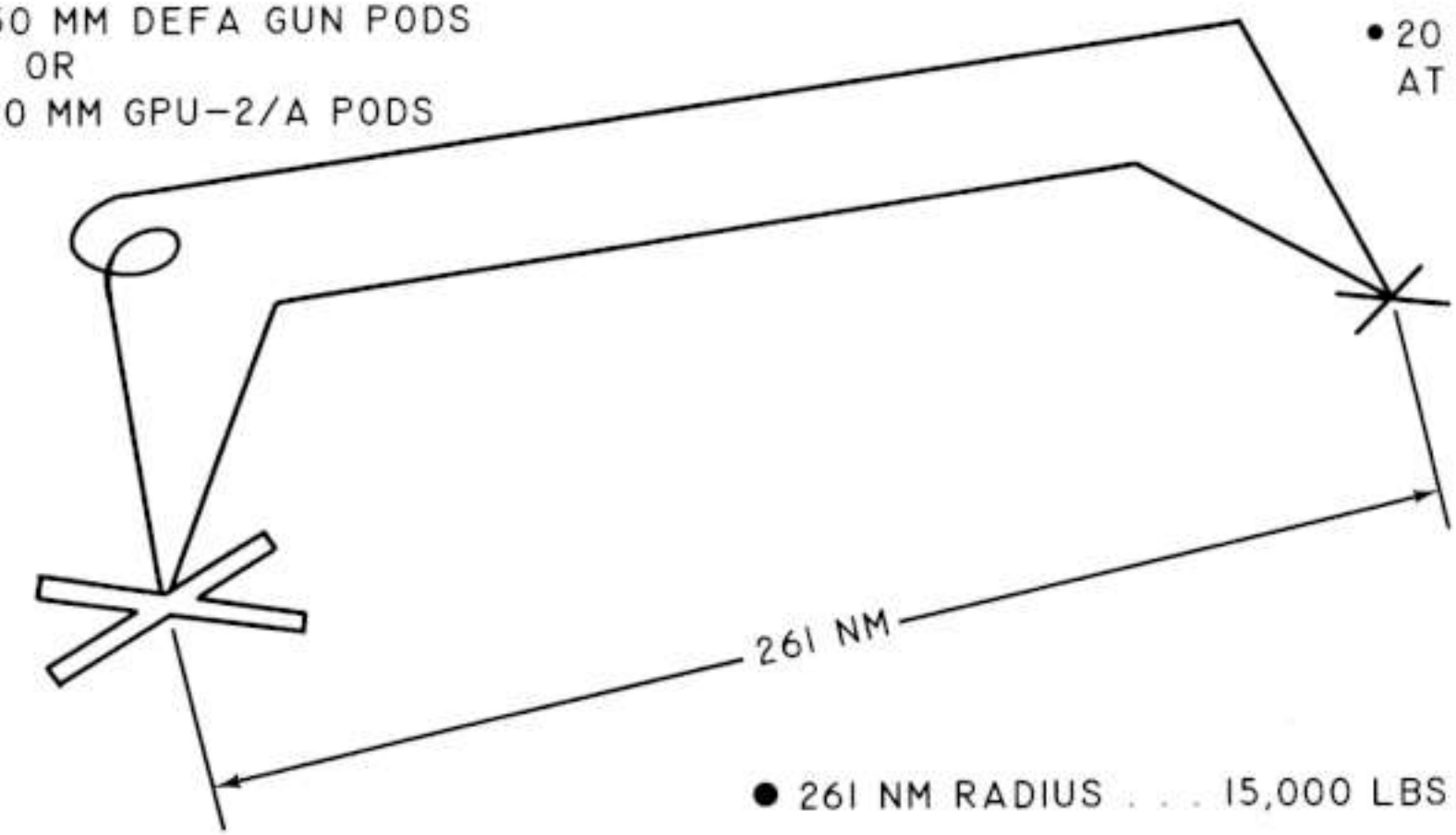
ORDNANCE

(3744 LBS)

- (4) MK 82 S.E.
- (2) 30 MM DEFA GUN PODS
  OR
- (2) 20 MM GPU-2/A PODS

PROFILE

- CRUISE AT 25,000 FT
- 10 MIN COMBAT AT S.L.
- 20 MIN. RESERVE AT 10,000 FT



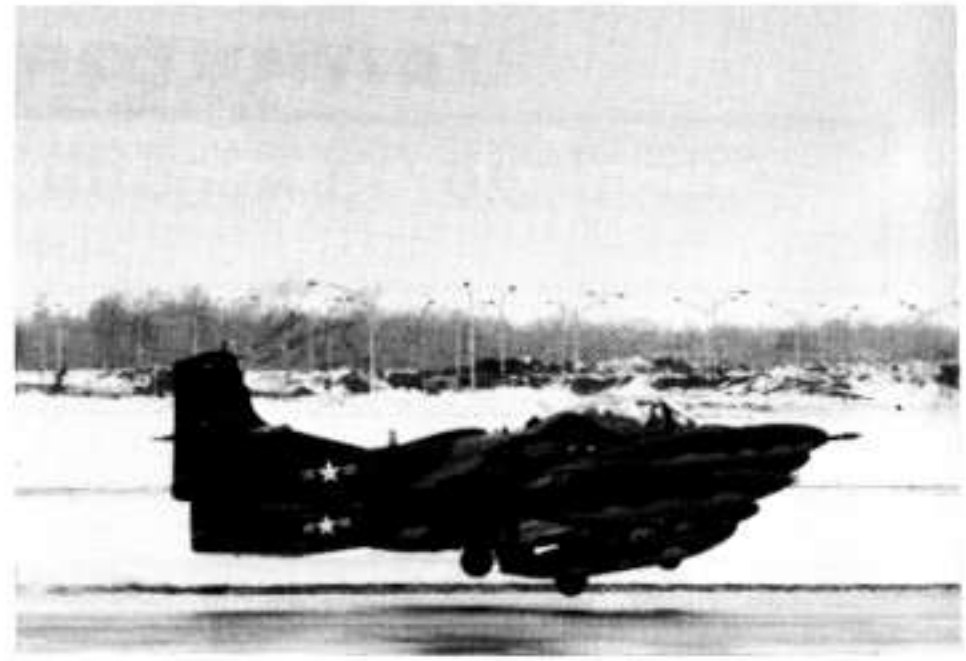
- 261 NM RADIUS . . . 15,000 LBS (4499 LB FUEL)

COMPUTED PER MIL-7700B

ARCTIC OPERATION

EXTENSIVE OPERATIONAL EXPERIENCE IN COLD AND ADVERSE WEATHER

- PROVEN ENGINE AND ENGINE INLET ANTI-ICE SYSTEMS
- ADAPTABLE TO WING BOOTS & WINDSHIELD DEICING IF NEEDED TO MEET MISSION REQUIREMENTS



FORMATION TAKEOFF



"BROOM & SHOVEL PREFLIGHT"

SELF-DEFENSE CAPABILITY

- SMALL SILHOUETTE
- EXCELLENT MANEUVERABILITY
- SELF-SEALING FUEL CELLS
- EXPLOSION SUPPRESSION FOAM
- ARMOR UNDER SEATS
- SHATTERPROOF WINDSHIELD/CANOPY
- REDUNDANT ELEVATOR
- 2 ENGINES
- EJECTION SEAT
- FLAK CURTAINS
- SIDEWINDER MISSILES
- 20/30 MM CANNON



Force Effectiveness

In defense planning, the number of sorties flown during the initial days of conflict are critical. The keys to achieving effective close support during the decisive first few days are (1) high in-commission rate, (2) rapid "turn-around" time, (3) extremely accurate ordnance delivery capability and (4) sufficient aircraft to do the job.

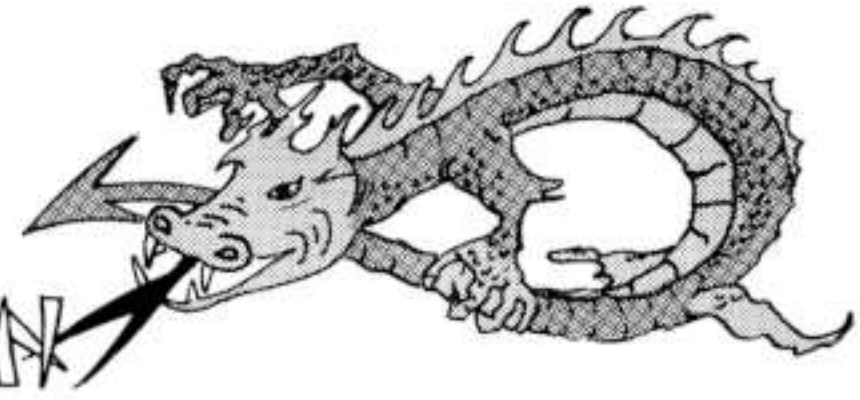
The Vietnam "Combat Dragon" evaluation conducted by the United States Air Force demonstrated the ability of the A-37 to perform under the accelerated conditions demanded by an "all-out" effort. During 60 hours of accelerated operations a total of 246 sorties were flown with just 13 aircraft. These 13 aircraft averaged 5 sorties per hour, 24 hours per day. The average turn-around time between sorties was 1.43 hours.

Throughout this period of accelerated operations the A-37 continued to achieve bombing accuracies of 15 meters C.E.P.

The A-37 is the lowest cost combat proven jet weapon system in the world. This low unit price permits a force of sufficient size to provide an effective close support capability.

In planning an aircraft force structure, you can count on a close support aircraft with a proven capability to stay in-commission, ready to deliver ordnance - ACCURATELY.

THE A-37 COMBAT DRAGON



. . . IS THE ONLY AIRCRAFT IN THE UNITED STATES INVENTORY TO UNDERGO ITS INITIAL OPERATIONAL TEST AND EVALUATION UNDER COMBAT CONDITIONS.

THE RESULTS (5791 SORTIES)

BOMB ACCURACY ..... 15 METERS C.E.P.

BATTLE DAMAGE ..... 13 SINGLE HITS, NO LOSSES

COMBAT WEATHER MINIMUM ..... 1000 FT AND 1 MILE VISIBILITY

MAINTENANCE

MAN-HOUR/SORTIE..... 5.9

MAN-HOUR/FLYING HOUR 4.7

MAXIMUM AIRCRAFT

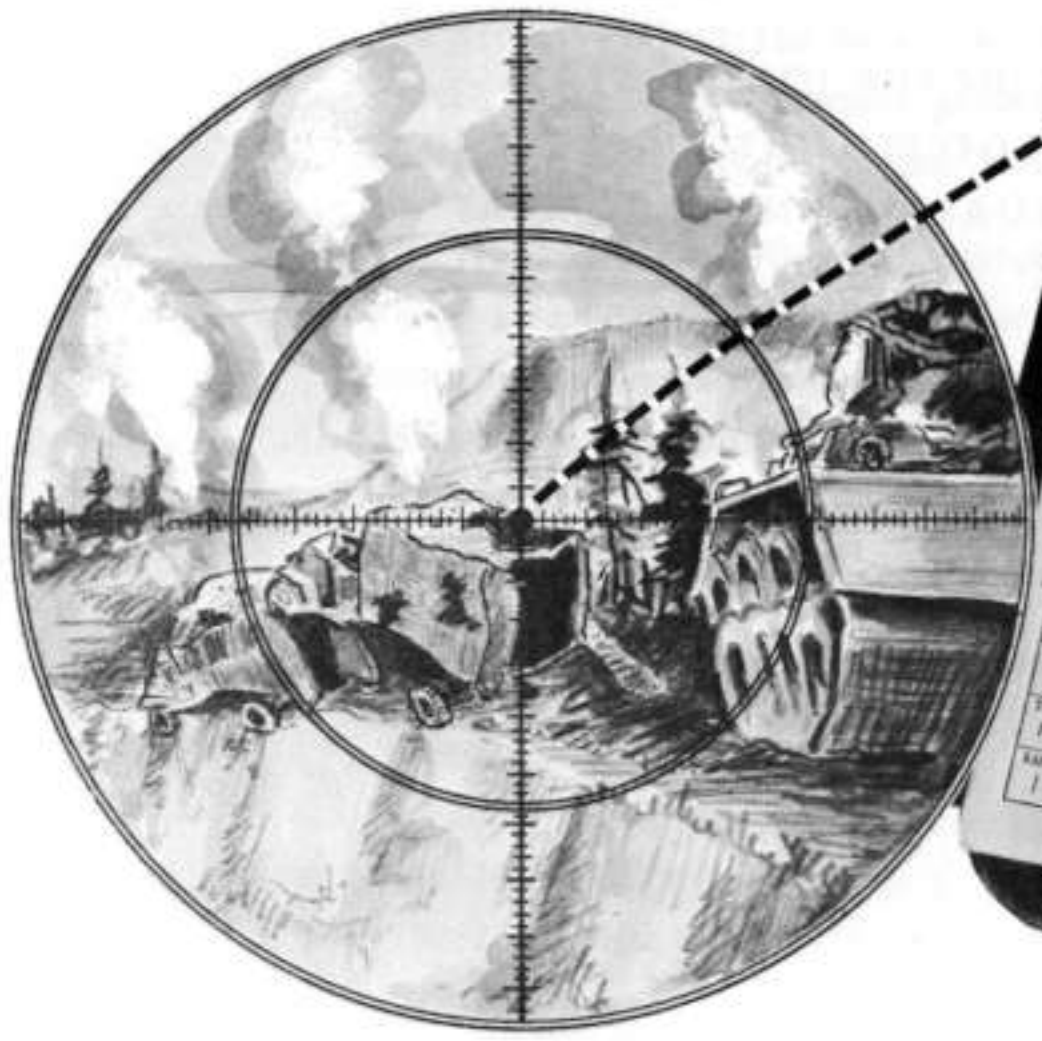
UTILIZATION ..... 10 SORTIES/DAY/AIRCRAFT

TYPE OF MISSIONS FLOWN

- CLOSE SUPPORT
- COMBAT AIR PATROL
- ARMED ESCORT
- FAC PLATFORM
- NIGHT INTERDICTION

PIN POINT ACCURACY

15 Meters C.E.P.





CIRCULAR ERROR PROBABLY-50% OF ORDNANCE FALL WITHIN 15 METERS OF TARGET

5,000,000 T-37B HOURS BASIS FOR A-37B MISSION VERSATILITY

Primary

- CLOSE AIR SUPPORT
- ARMED RECONNAISSANCE
- POLICE ACTION
- ARMED ESCORT
- INTERDICTION (DAY AND NIGHT)

Secondary

- ADVANCED TRAINER
- FORWARD AIR CONTROL
- WEAPON SYSTEMS TRAINER
- NAVIGATION AND PROFICIENCY
- AIR-TO-AIR CAPABILITY

COMBAT PROVEN

1. 5 YEARS IN SOUTHEAST ASIA
2. OVER 200,000 COMBAT SORTIES
3. UNPRECEDENTED BOMBING PRECISION

COST EFFECTIVE

1. LOW INITIAL COST
2. MINIMUM TRANSITION TIME
3. UNCOMPLICATED, RUGGED AND OPERATIONALLY READY
4. A37/T37 SYSTEMS COMMONALITY

IN PRODUCTION

Cessna® AIRCRAFT COMPANY

MILITARY AND TWIN DIVISION

WICHITA, KANSAS