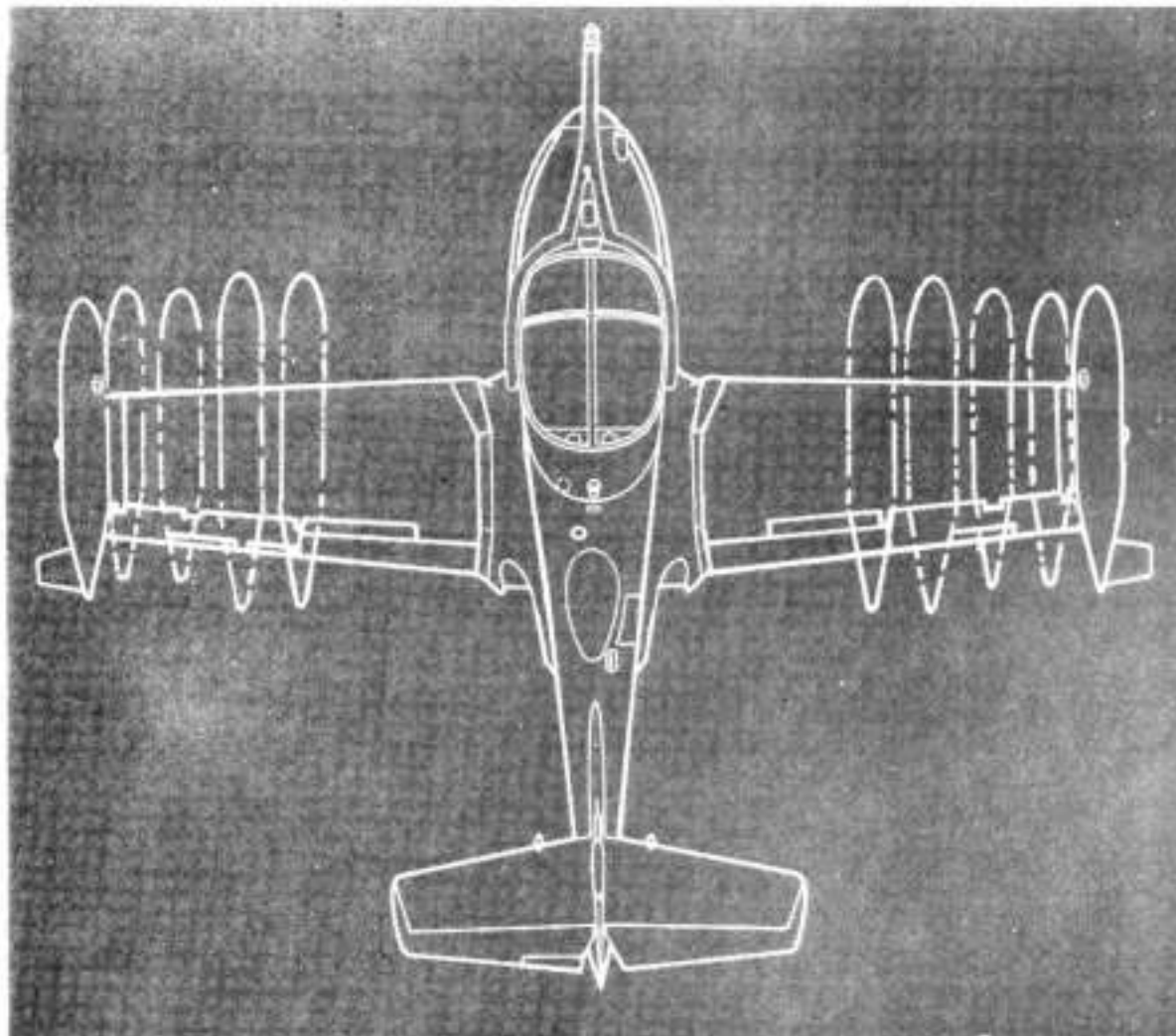
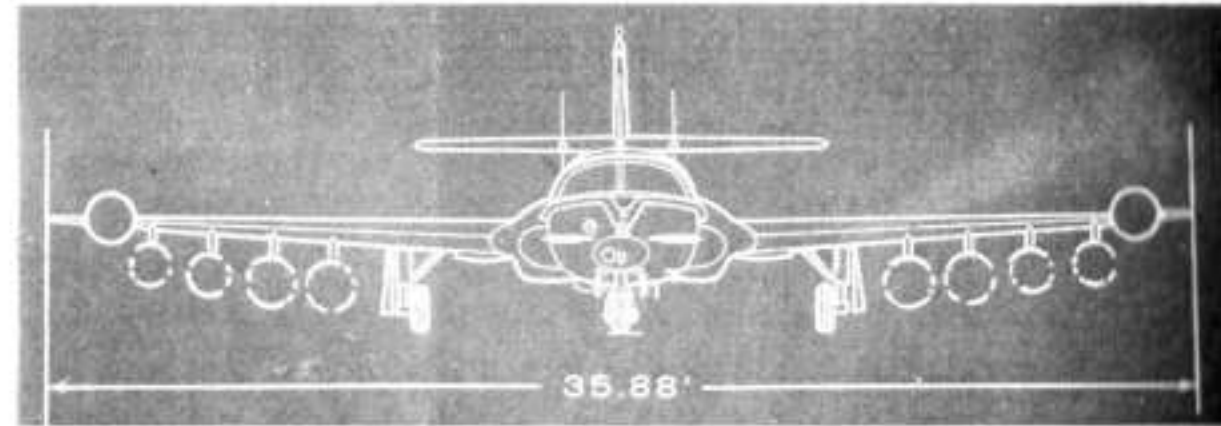
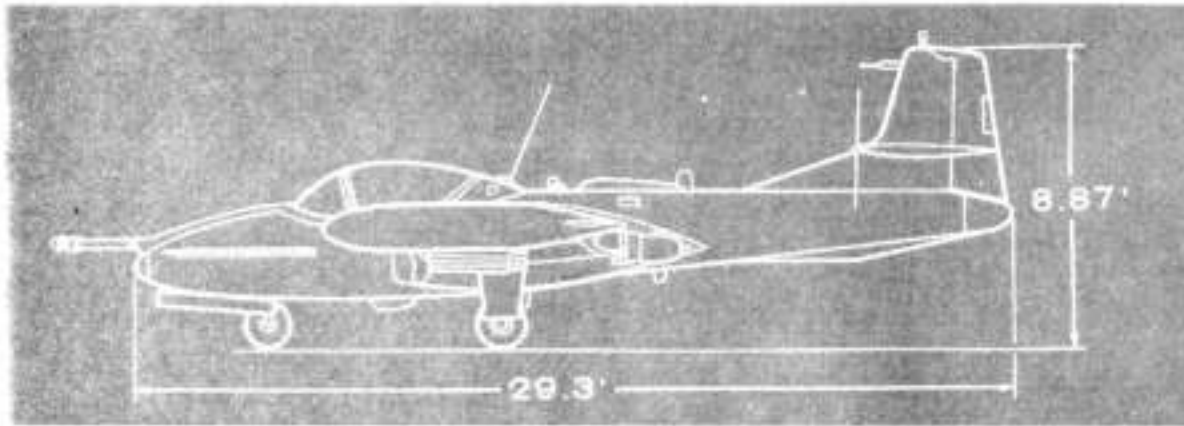


**THE EXPANDED
MISSION ENVELOPE
OF THE . . . A-37B**



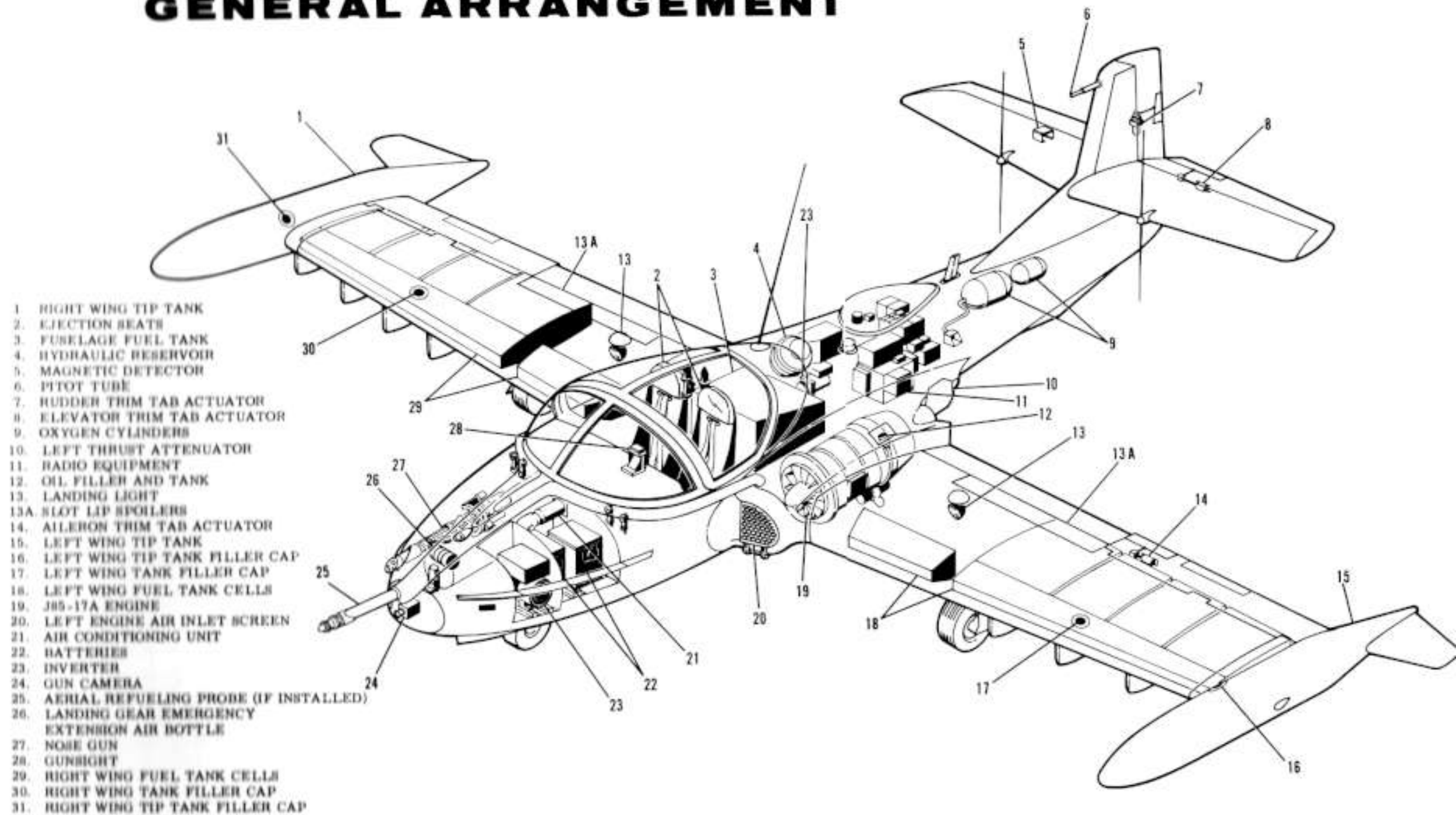
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14-00000



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 FT ²
WING LOADING	81.0 LB/FT ²
TOTAL FUEL CAPACITY (GALLONS)	
INTERNAL	277.5
TIPTANKS	180.
DROPTANKS (4)	480.
	<hr/>
TOTAL	937.5

GENERAL ARRANGEMENT

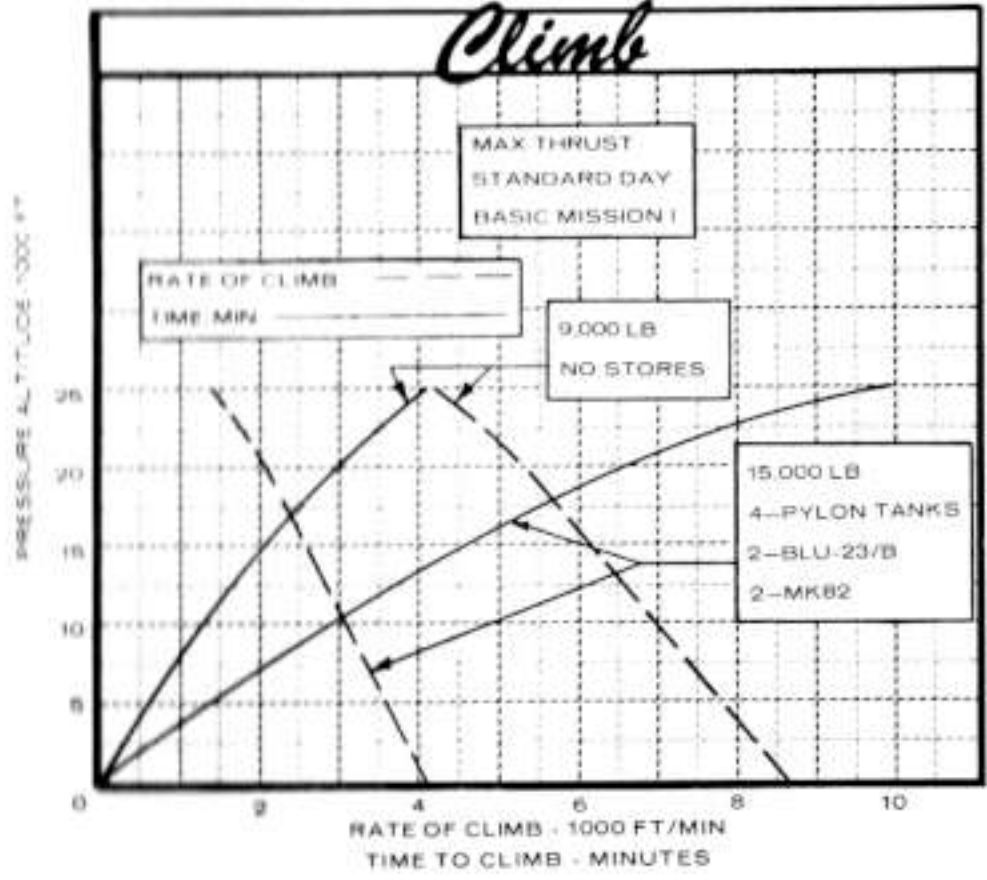


15,000 LB PERFORMANCE SUMMARY

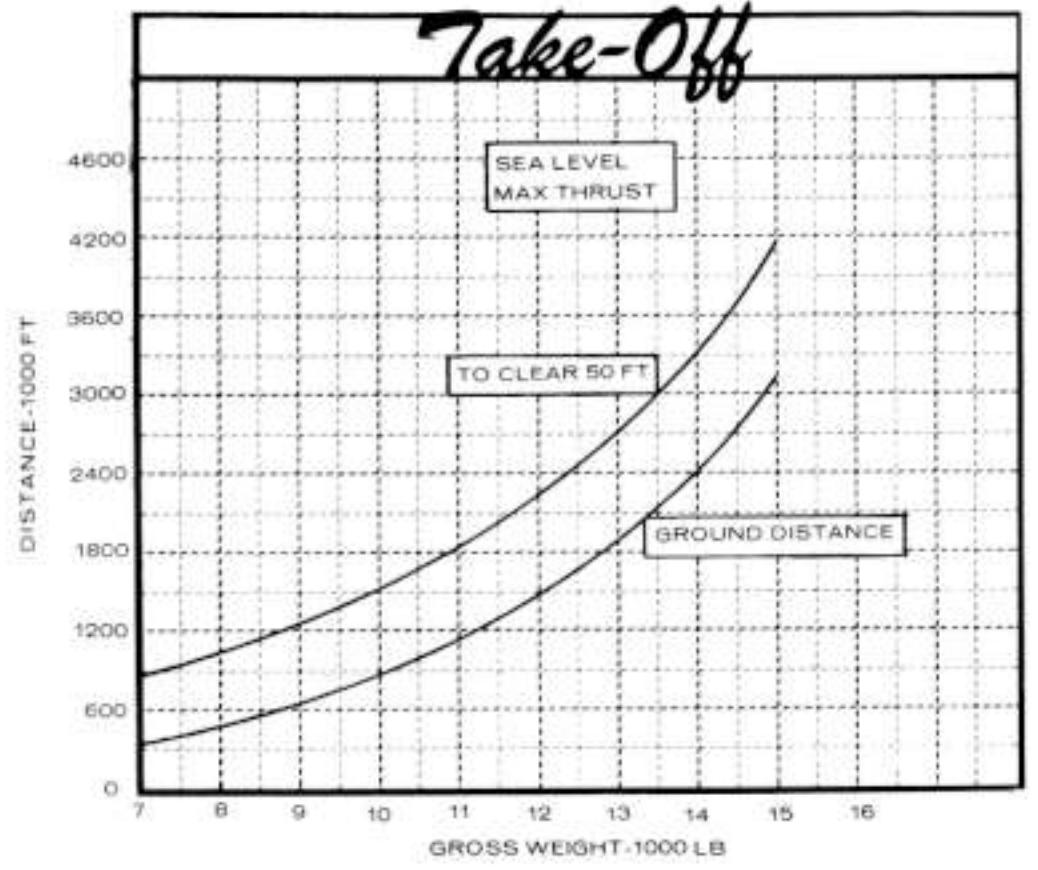
MAXIMUM LEVEL FLIGHT SPEED, (CLEAN) S.L.	403 KTAS
RATE OF CLIMB, S.L.,	4113 FPM
TIME TO CLIMB, S.L. TO 30,000 FT,	16.8 MIN
SERVICE CEILING,	
2 ENGINES	32,100 FT
1 ENGINE	19,200 FT
TAKEOFF DISTANCE, S.L.	
GROUND ROLL	3100 FT
OVER 50 FT. OBSTACLE	4200 FT
* LANDING DISTANCE, S.L.	
GROUND ROLL	1710 FT
* STALL SPEED, LANDING CONFIG.	75 KT

* LANDING WEIGHT 7000 LBS

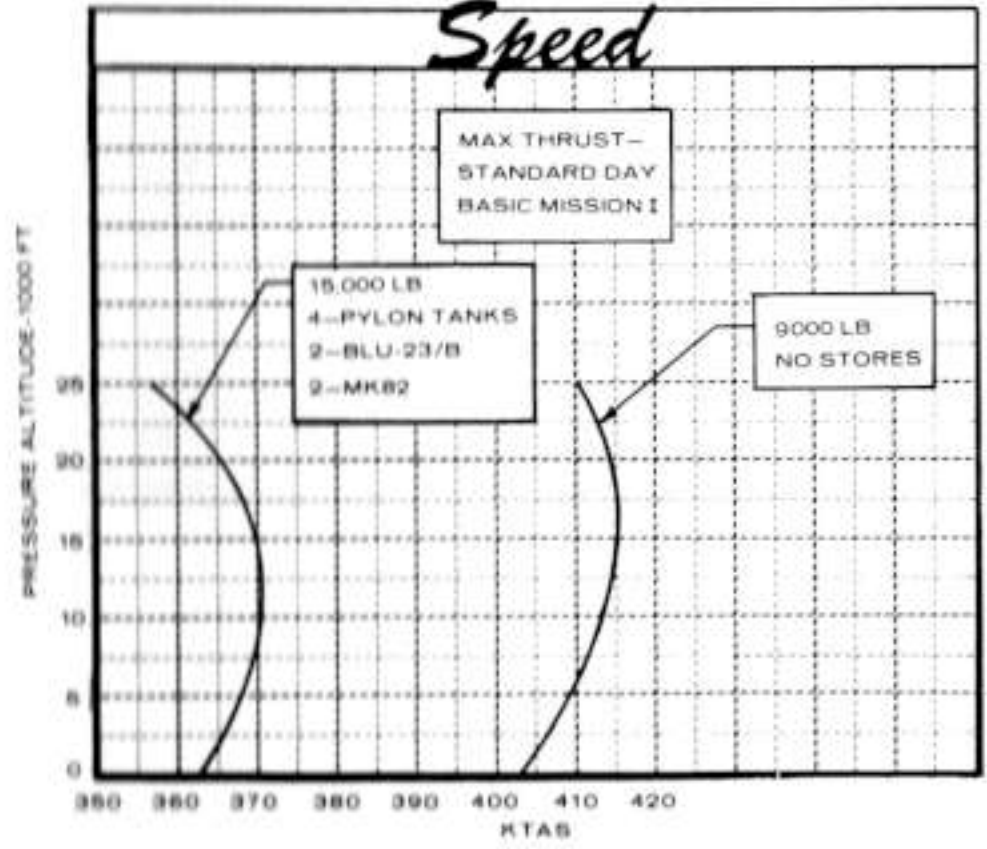
Climb



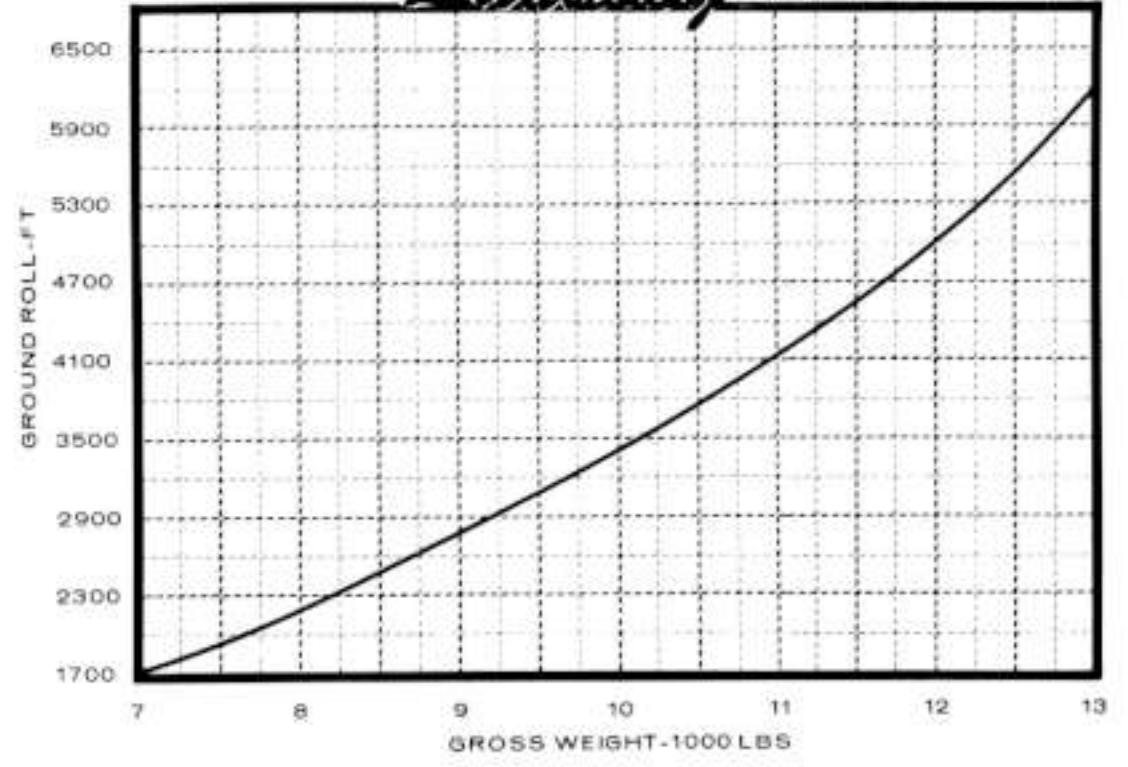
Take-Off



Speed

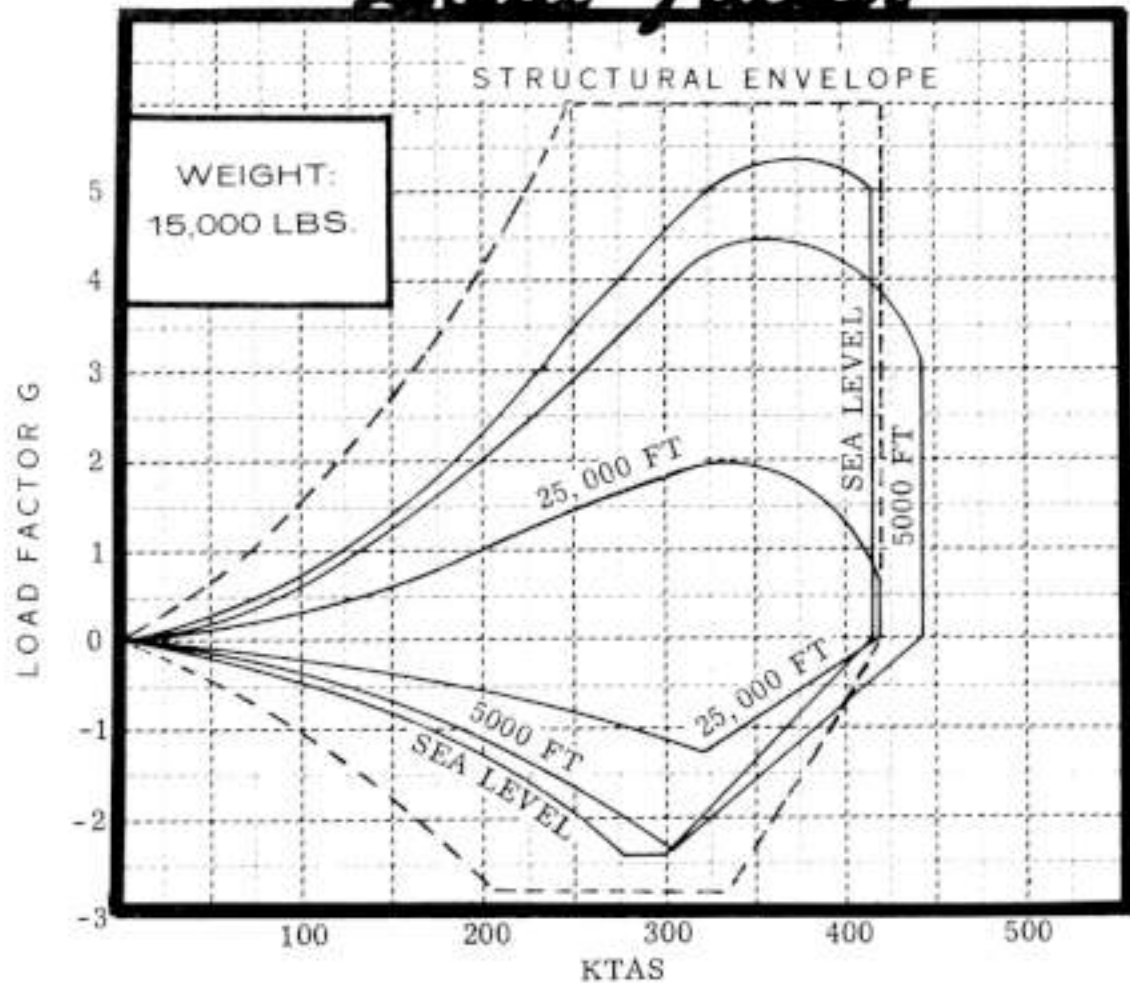


Landing

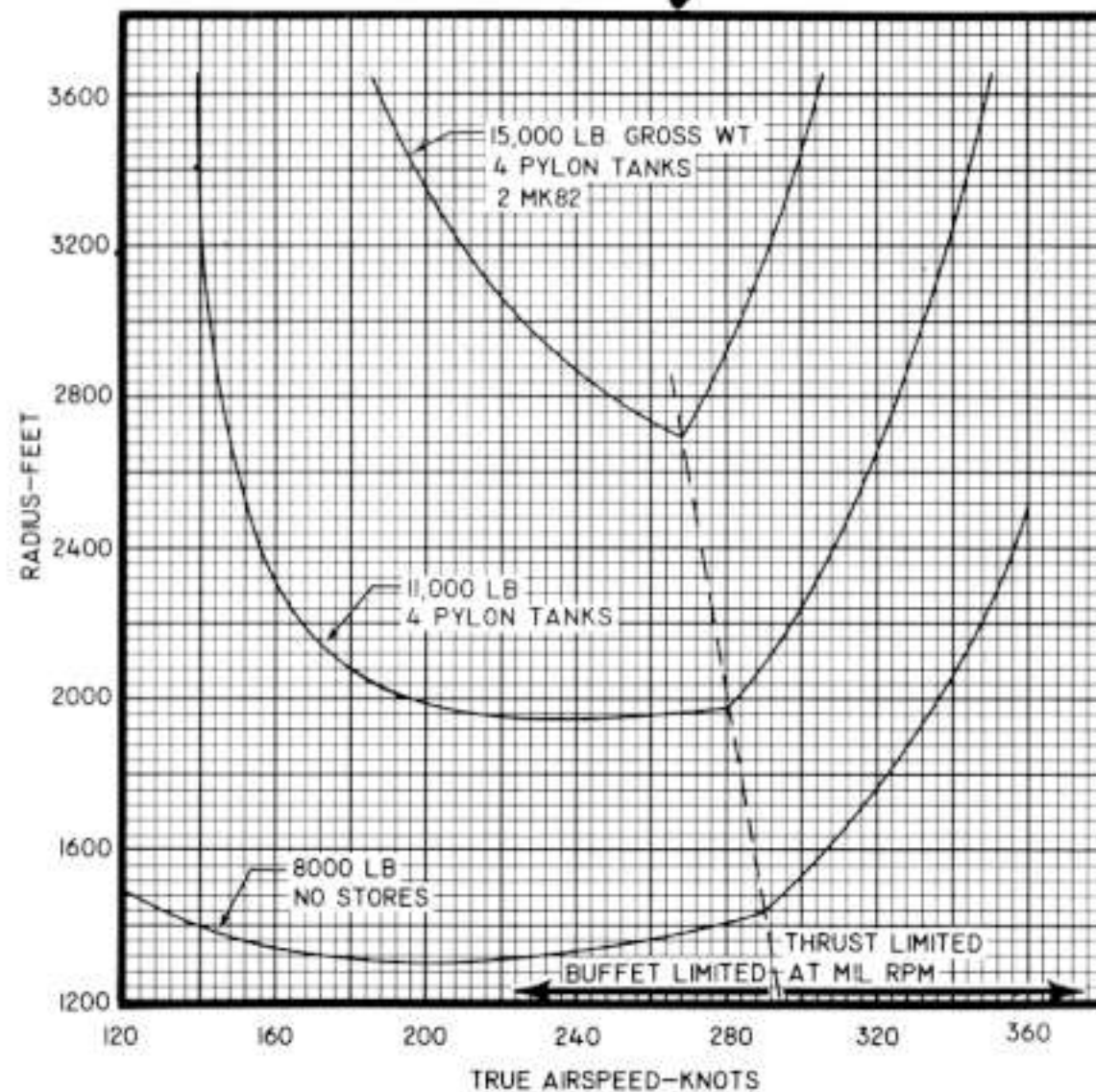


MANEUVERABILITY

Load Factor



Radius of Turn



ARMAMENT PROVISIONS



FUEL TANKS			X	X		X	X		
BOMBS & FIRE BOMBS	X	X	X	X		X	X	X	X
ROCKETS	X	X	X	X		X	X	X	X
FLARES	X	X	X	X		X	X	X	X
GUN PODS	X	X	X	X		X	X	X	X
DISPENSER & BOMBLETS	X	X	X	X		X	X	X	X

● NOTE

ADAPTABLE TO NON-U.S. MANUFACTURED
ORDNANCE IF COMPATIBLE WITH:

- * 14" LUG SPACING
- * PYLON WEIGHT LIMITATIONS
- * PYLON RECOIL LOAD LIMITATIONS
- * ARMAMENT CIRCUITRY

MISSION PROFILE HI-LO-HI

MAXIMUM FUEL

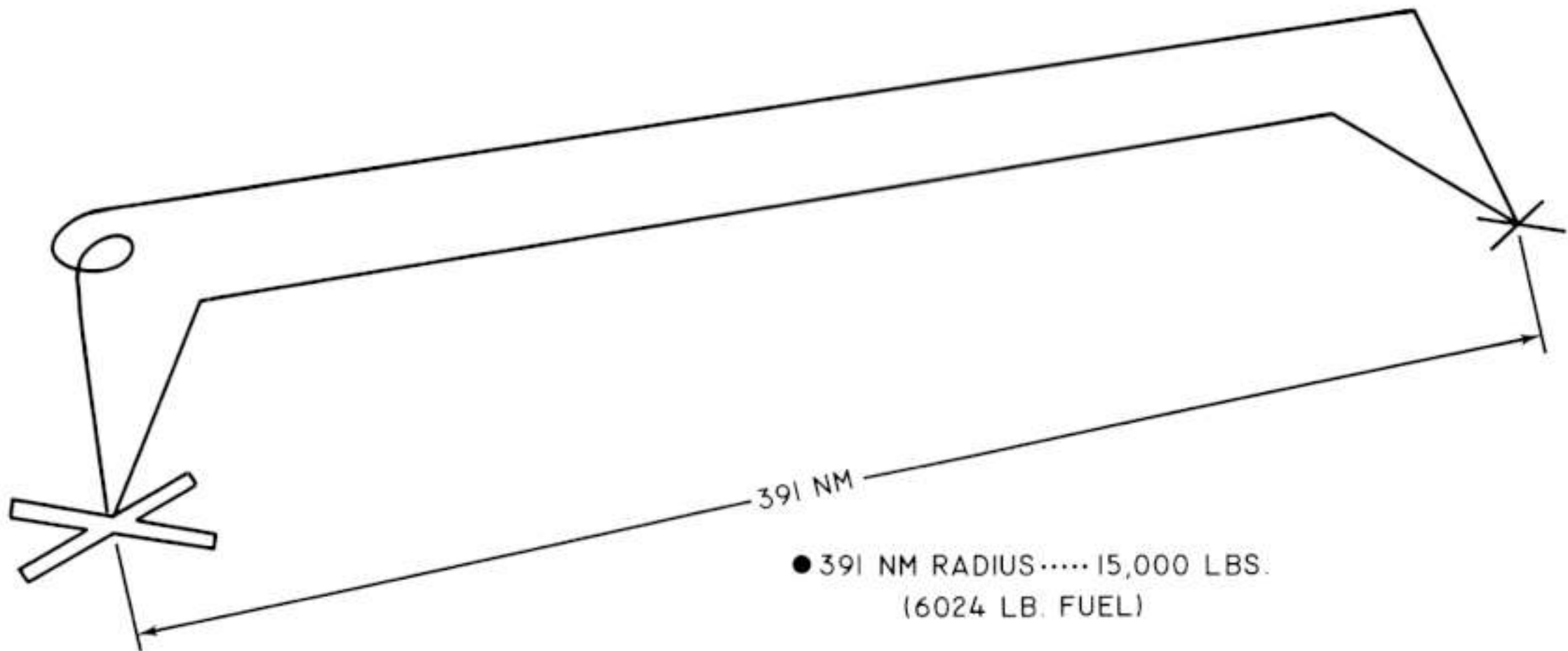
ORDNANCE

(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



COMPUTED PER MIL-7700B

MISSION PROFILE HI-LO-HI

MAXIMUM ORDNANCE

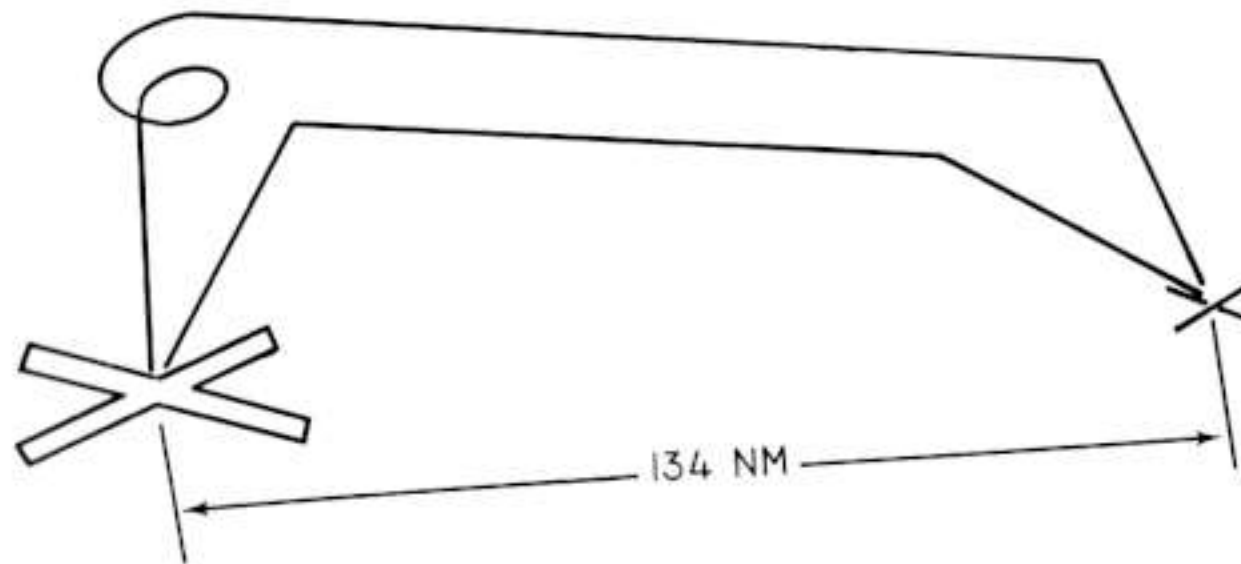
ORDNANCE

(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



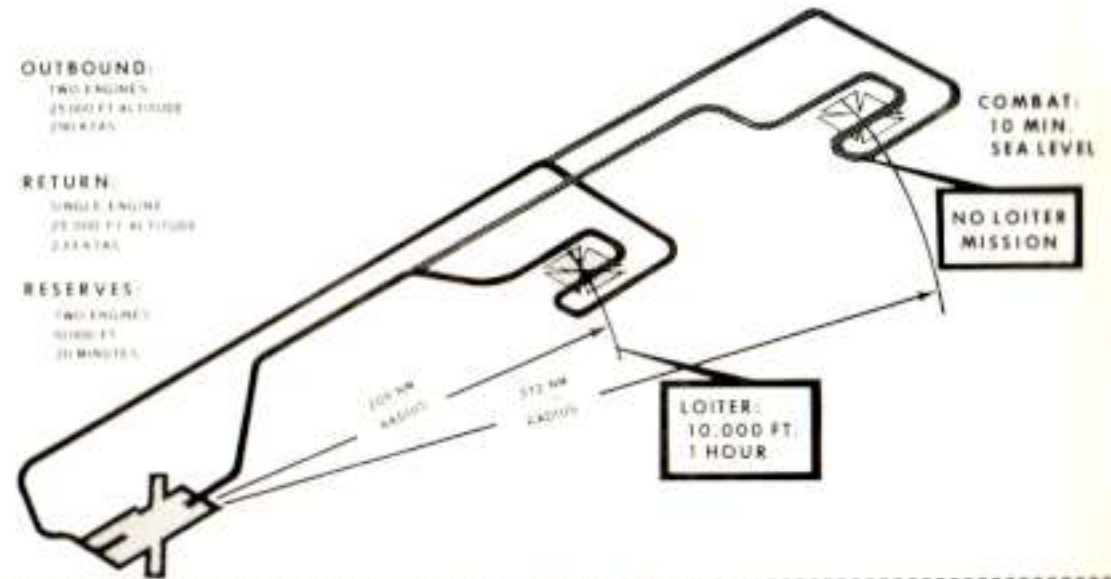
- 134 NM RADIUS.....15,000 LBS (2974 LB FUEL)

MISSION PROFILES



HI-LO-HI MISSION TAKEOFF GROSS WEIGHT15,000 LBS

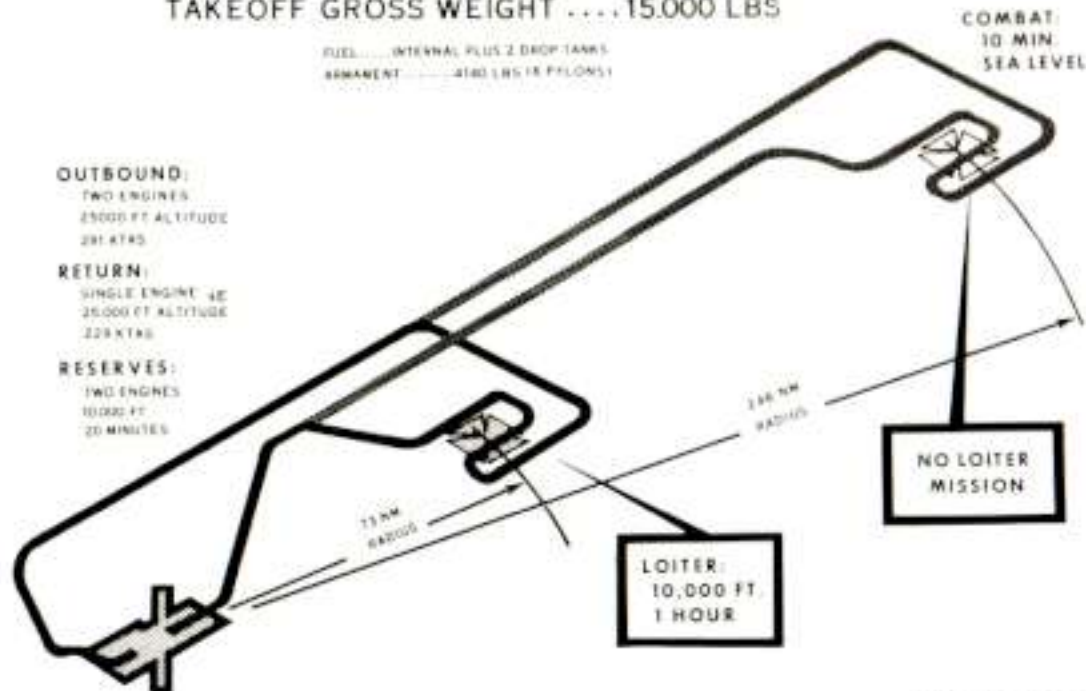
FUEL..... INTERNAL PLUS 4 DROP TANKS
ARMAMENT 2400 LBS (4 PYLONS)



HI-LO-HI MISSION

TAKEOFF GROSS WEIGHT 15,000 LBS

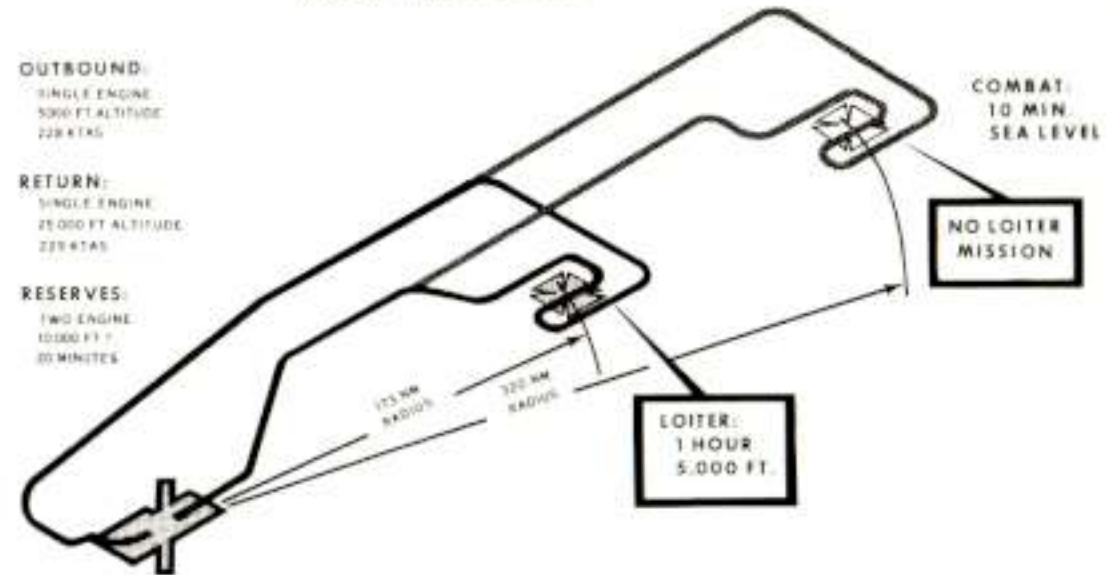
FUEL..... INTERNAL PLUS 2 DROP TANKS
ARMAMENT 4100 LBS (4 PYLONS)



LO-LO-HI MISSION

TAKEOFF GROSS WEIGHT 15,000 LBS

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



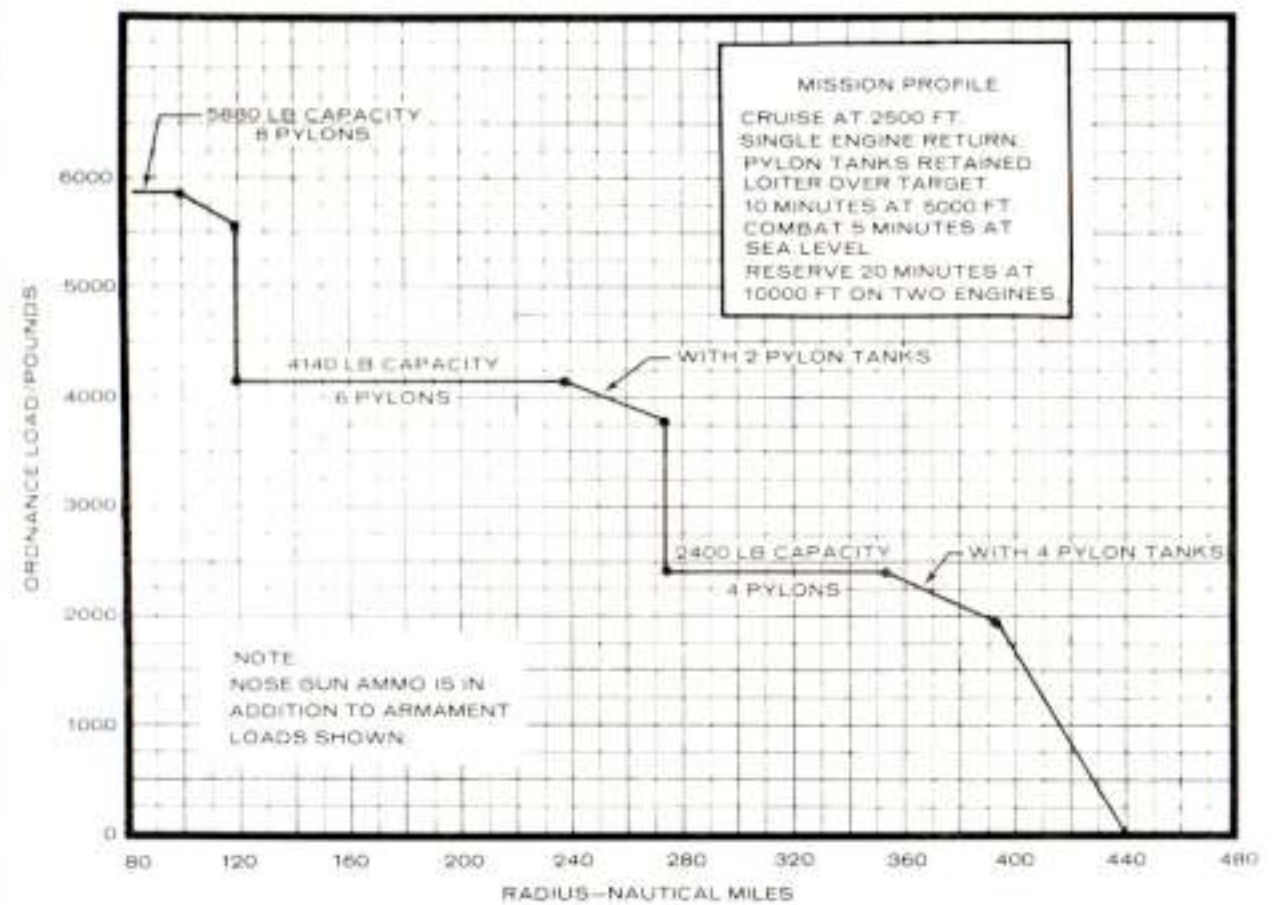
COMPUTED PER MIL-M-7700B

WEIGHT SUMMARY (15,000 LB)

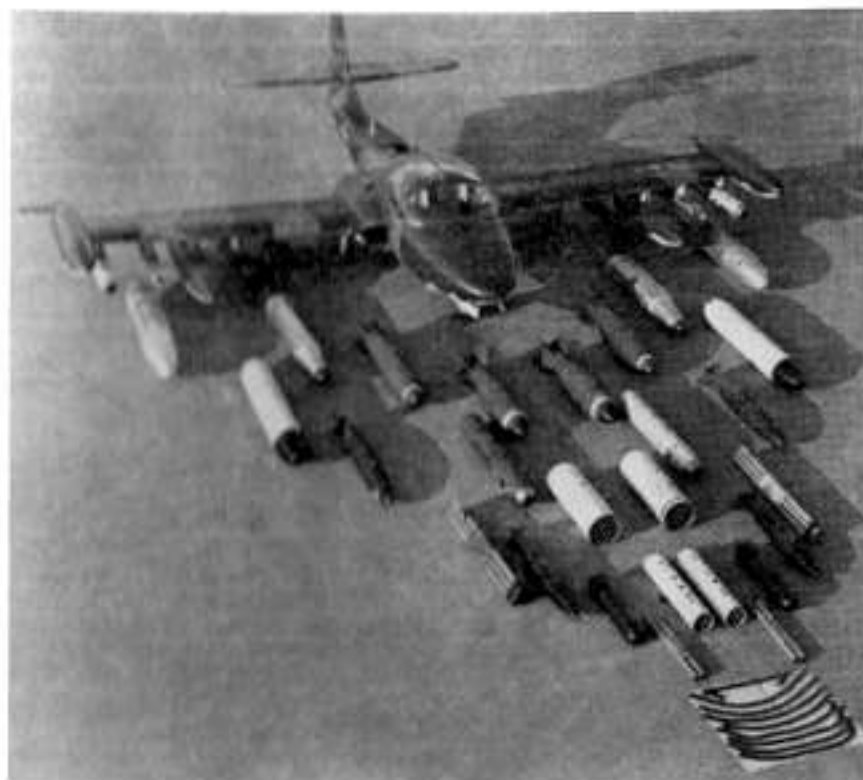
	MAX. FUEL	MAX. ORDNANCE
EMPTY WEIGHT (VNAF)	5873	5873
DROP TANKS (4)	560	0
UNUSABLE FUEL	191	191
PILOT	300	300
OIL	15	15
	<hr/>	<hr/>
BASIC WEIGHT	6939	6379
FUEL:		
INTERNAL	1804	1804
TIPS	1170	1170
DROP TANKS (4)	3050	0
	<hr/>	<hr/>
FUEL WEIGHT	6024	2974
ORDNANCE	2037	5647
	<hr/>	<hr/>
GROSS WEIGHT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

ORDNANCE/RADIUS TRADEOFF

15,000 LB. GROSS WEIGHT



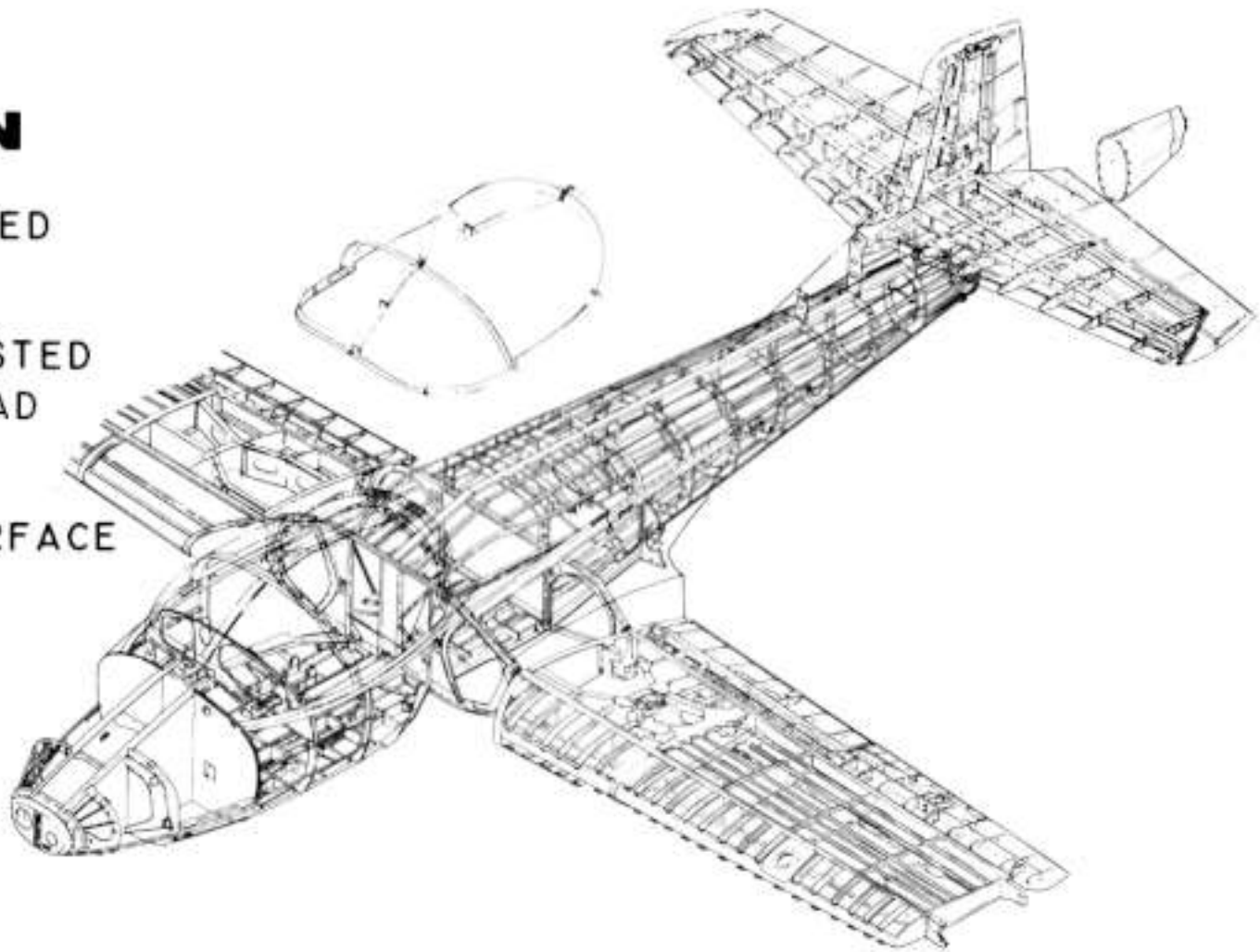
U.S.A.F. CERTIFIED WEAPONS



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.	DISPENSER & BOMBS	X	X		
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		
SOU-11A/A	323 Lbs.	GUN POD	X	X	X	X
SOU-25A/A	345 Lbs.	FLARE DISPENSER	X	X	X	X

STRUCTURAL SUBSTANTIATION

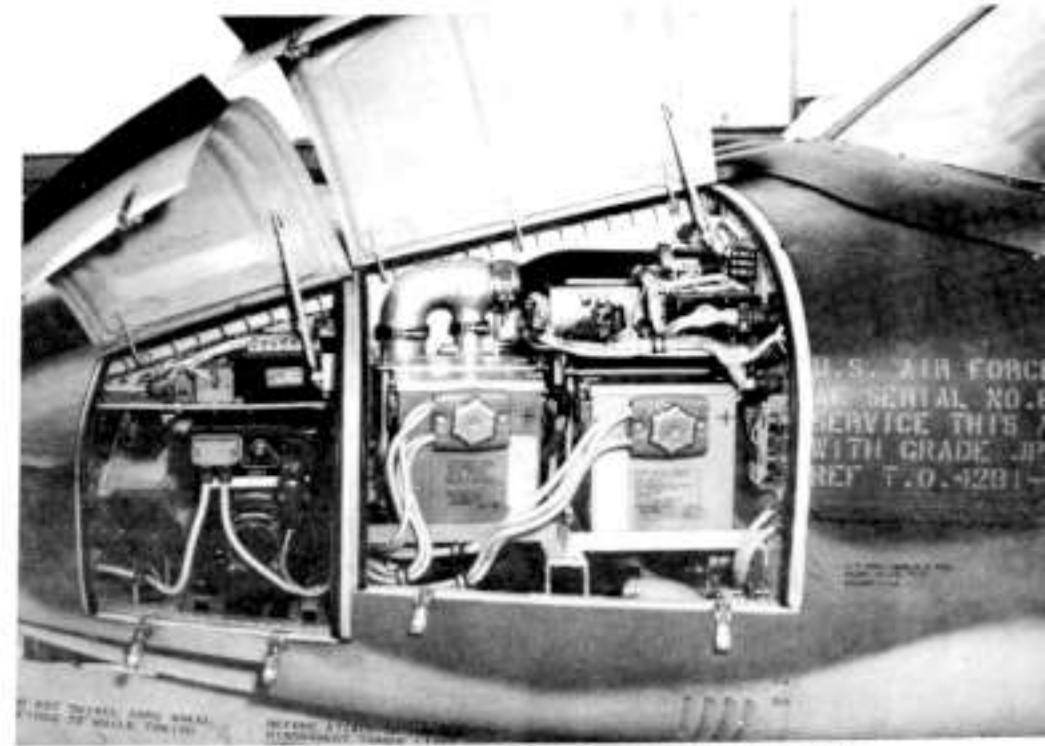
- ENTIRE STRUCTURE STATIC TESTED TO 1.5 TIMES LIMIT LOAD
- COMPLETE FLIGHT ENVELOPE TESTED DURING INSTRUMENTED AIR LOAD SURVEY PROGRAM
- TESTED FOR SEMI-PREPARED SURFACE OPERATION
- WING AND CARRY-THRU FATIGUE TEST NOW IN PROGRESS TO SUBSTANTIATE 7000 HOUR MINIMUM SAFE LIFE



RELIABILITY MAINTAINABILITY



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

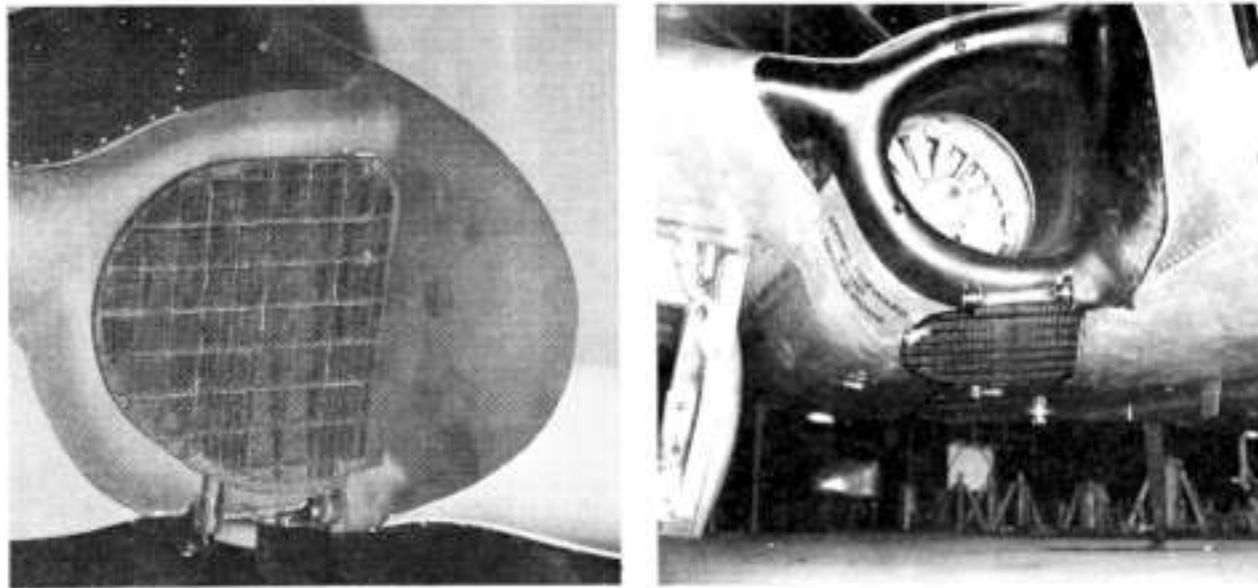


LEFT HAND NOSE COMPARTMENT



AVIONICS BAY ACCESS

SEMI-PREPARED RUNWAY CAPABILITY



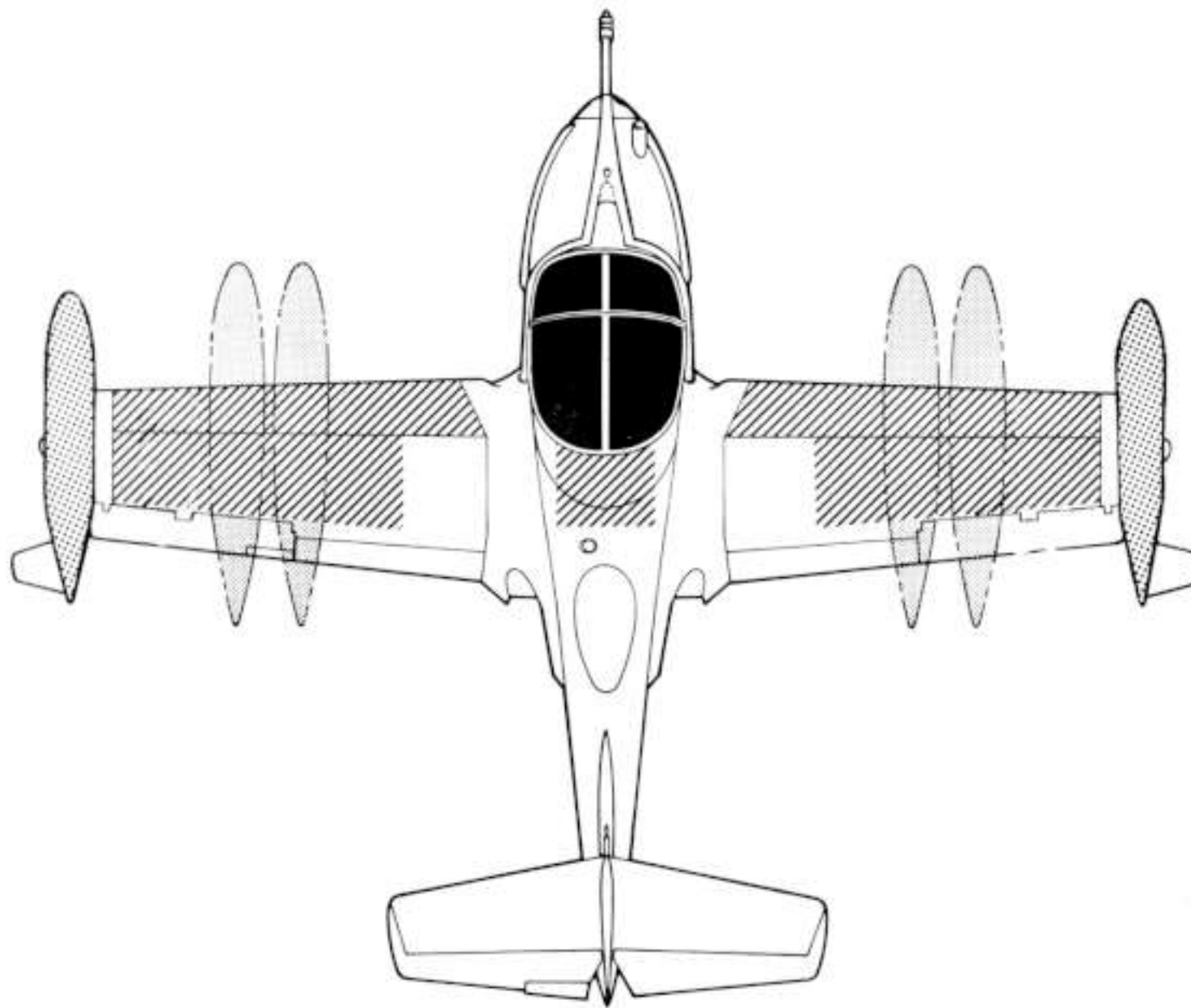
RETRACTABLE INLET SCREENS

- 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



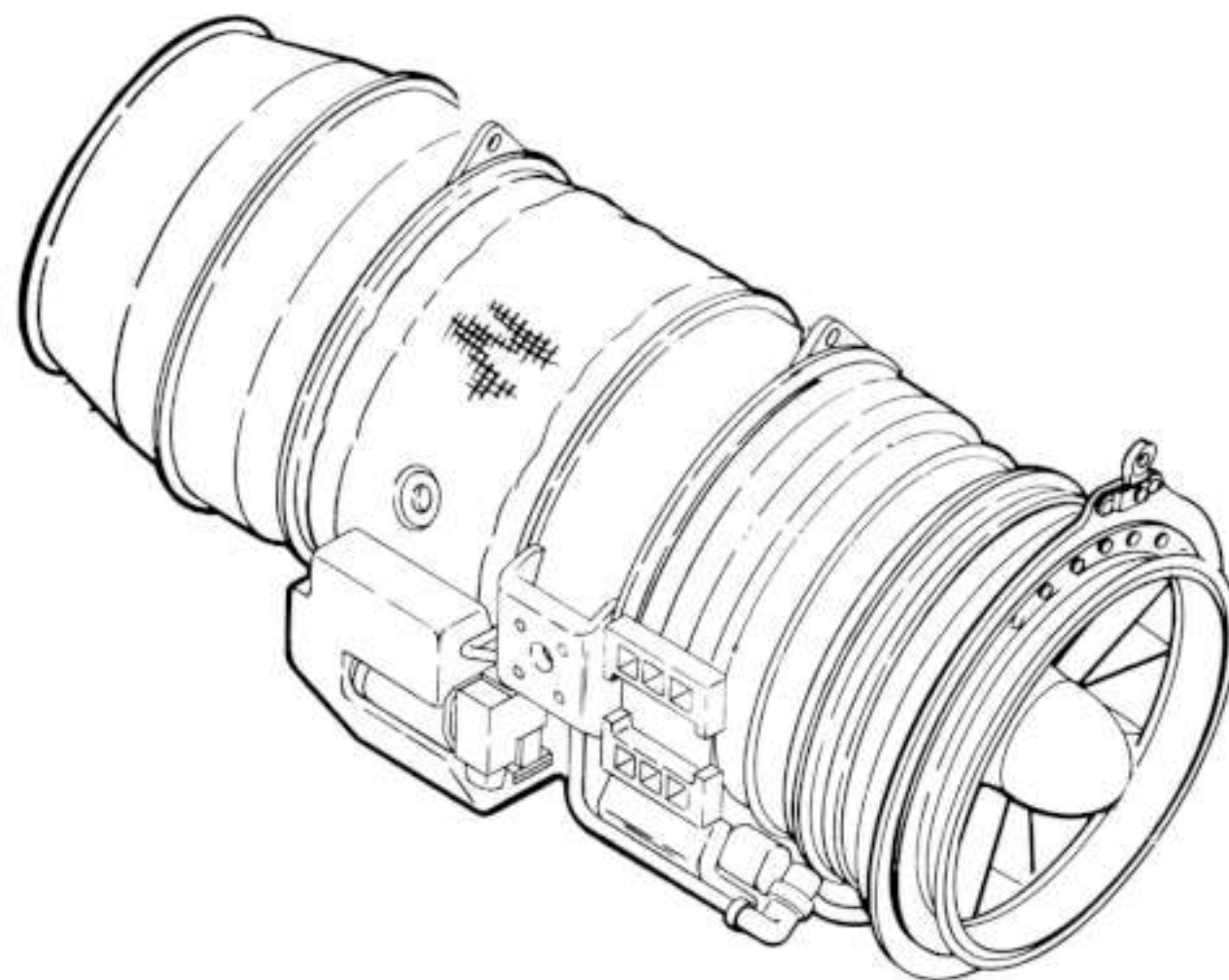
FUEL SYSTEM

- 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	180 GAL
	(With Foam Baffling)	
	INTERNAL FUEL	277.5 GAL
	(With Foam Baffling and Self Sealing Tanks)	
	AUX. PYLON FUEL	469.2 GAL
	(Four 120 Gal. Tanks With Foam Baffling)	
		<u>926.7 GAL</u>

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

A black and white photograph showing an aerial refueling operation. A large tanker aircraft is at the top right, with its tail number '0-53134' visible. A long, thin refueling boom extends from the tanker to a smaller fighter jet below. The fighter jet has 'USAF 14823' on its tail and a star insignia on its fuselage. Another smaller aircraft is visible in the lower left. The background is a clear sky over a body of water.

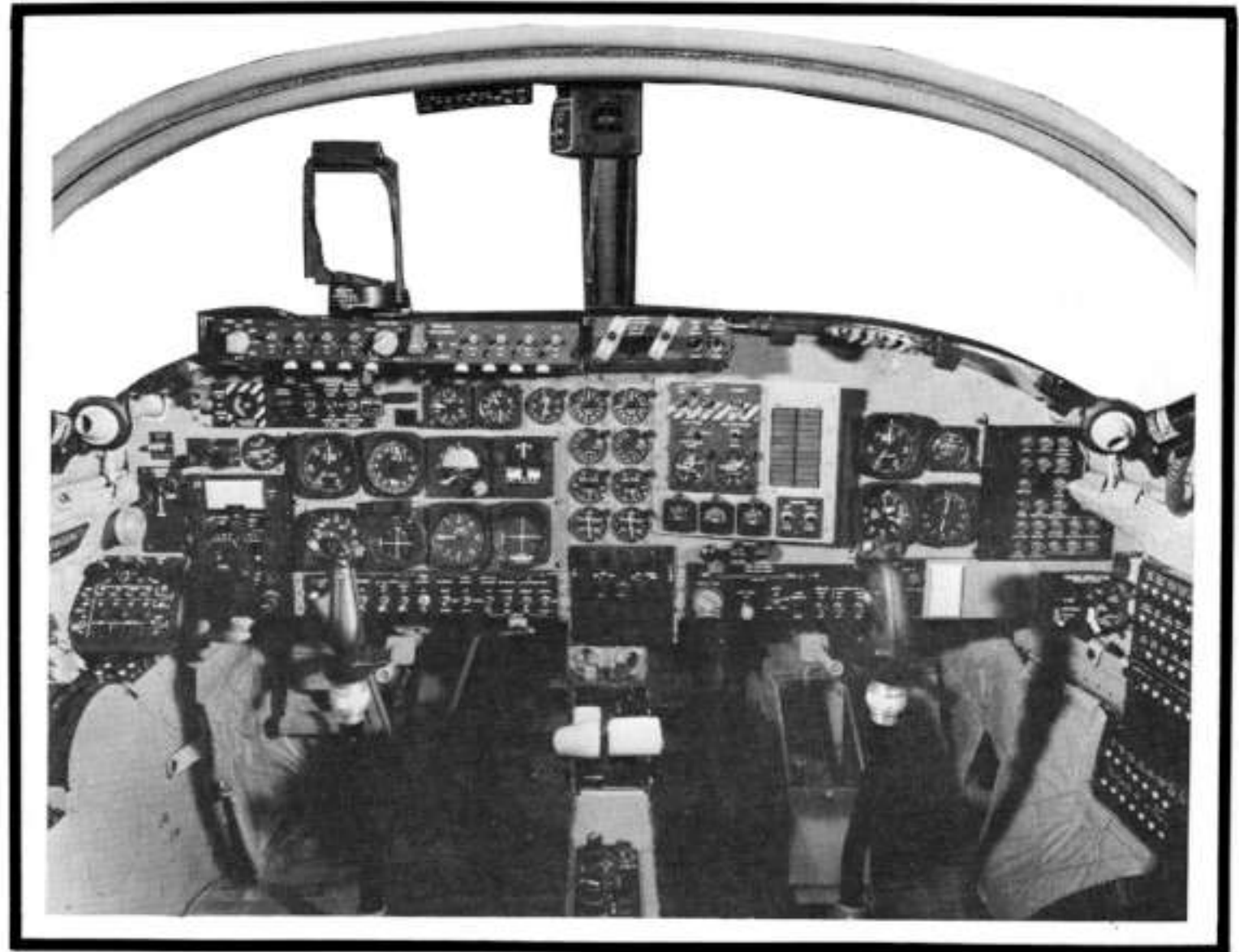
Aerial And Single Point Refueling

* 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

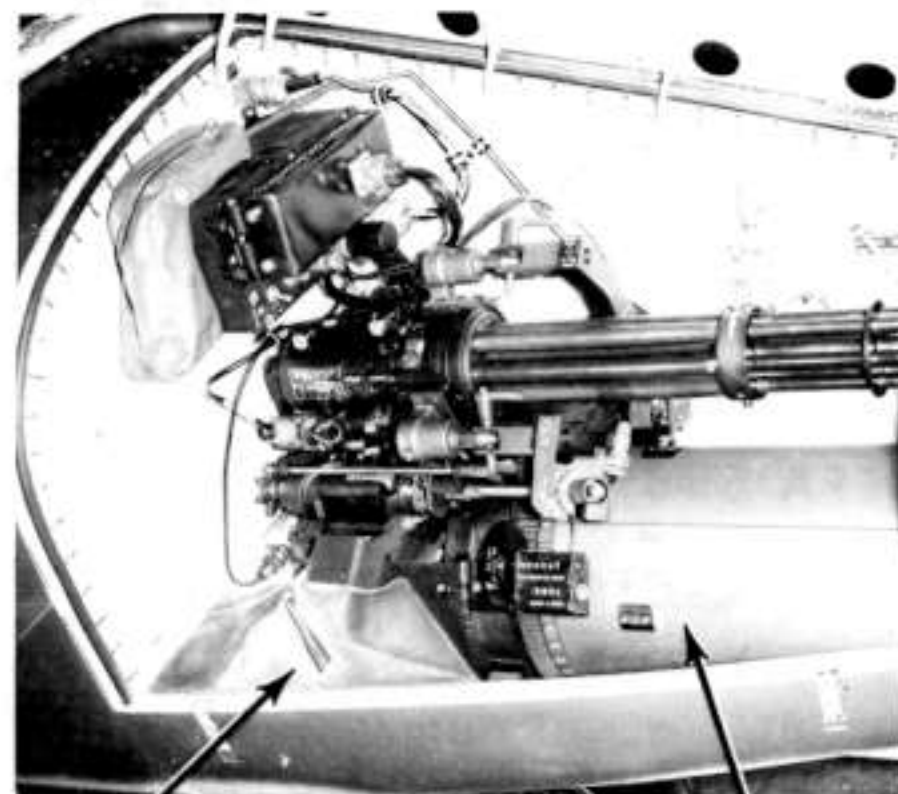


7.62 MM NOSE GUN INSTALLATION



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 30 mm CANNON

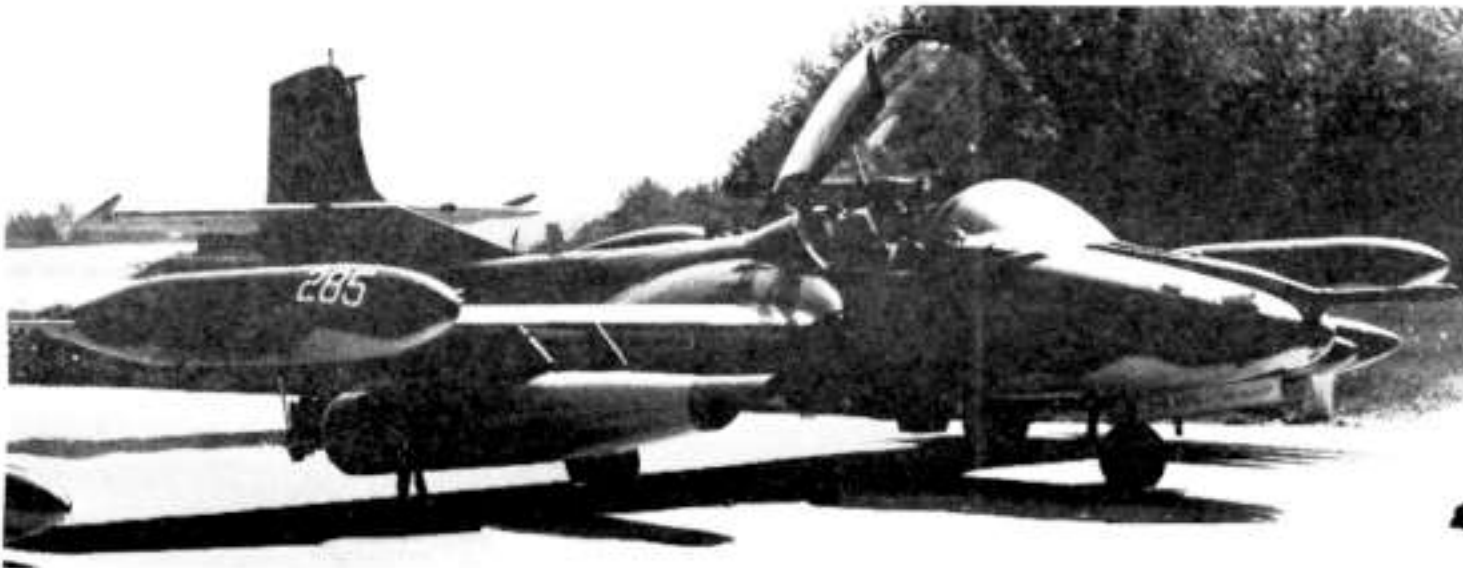
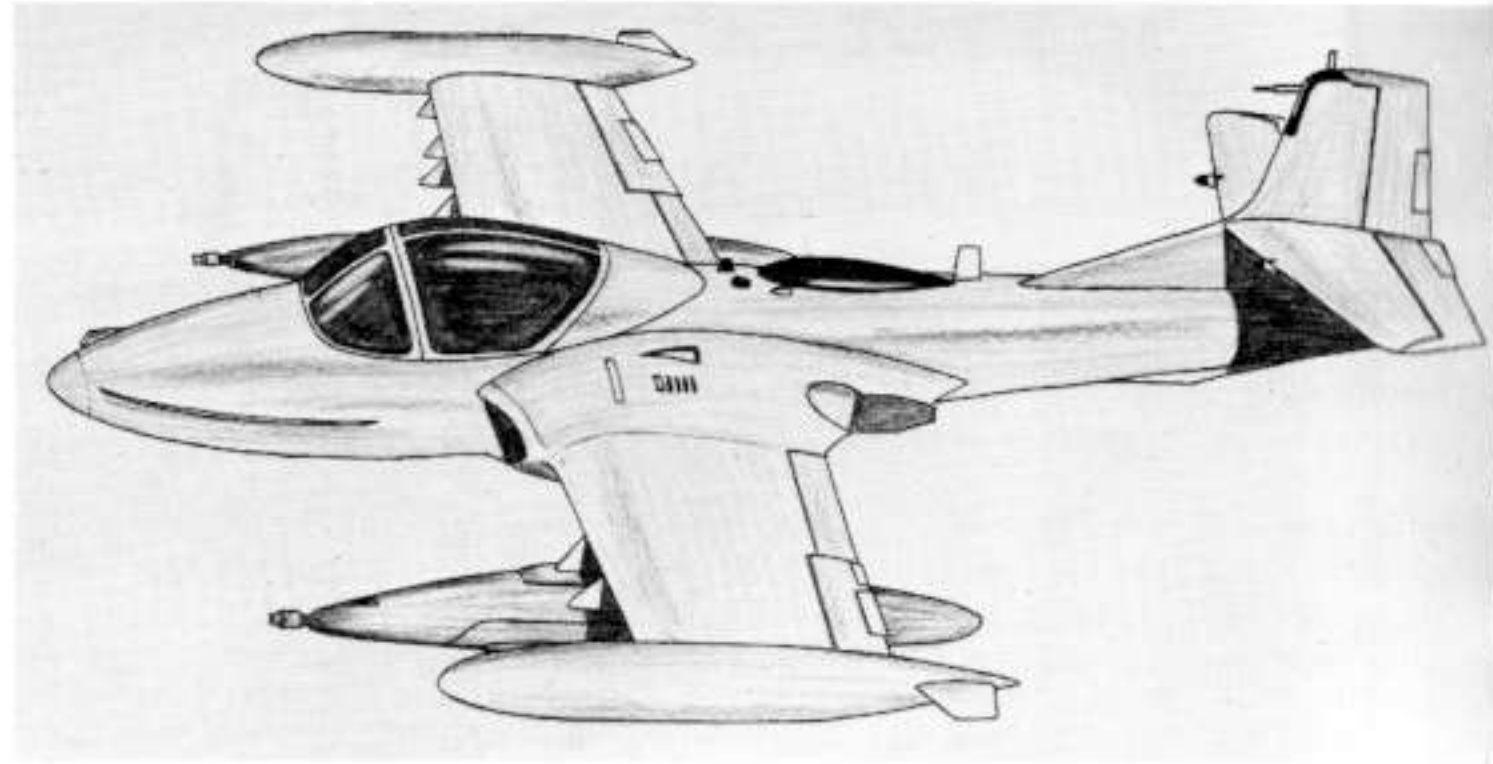
RATE OF FIRE 1350 SPM

PEAK RECOIL FORCES 2200 LBS

TOTAL WEIGHT WITH

180 ROUNDS662 LB

250 ROUNDS750 LB



GPU-2/A20 mm 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

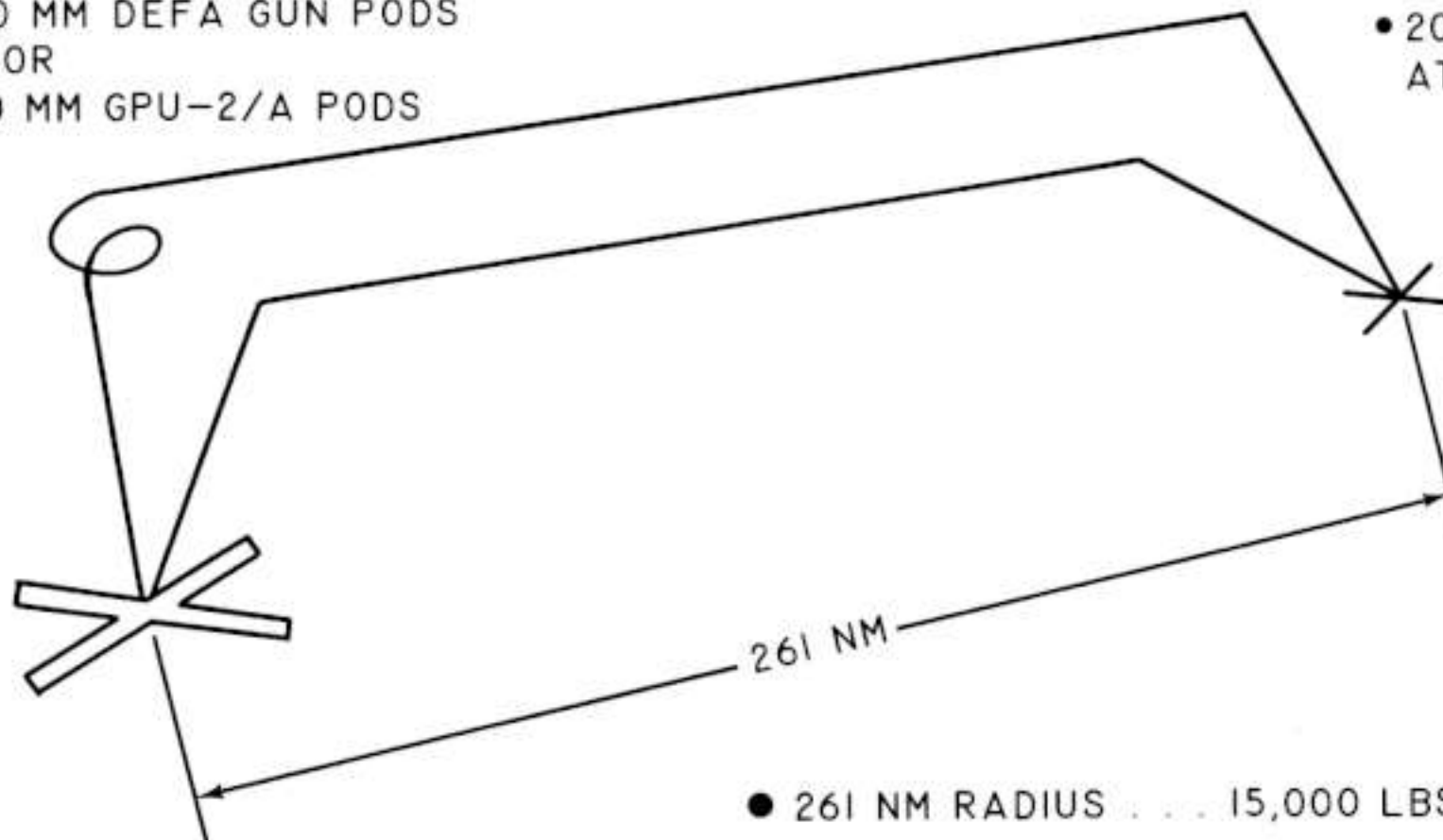
ORDNANCE

(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



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.

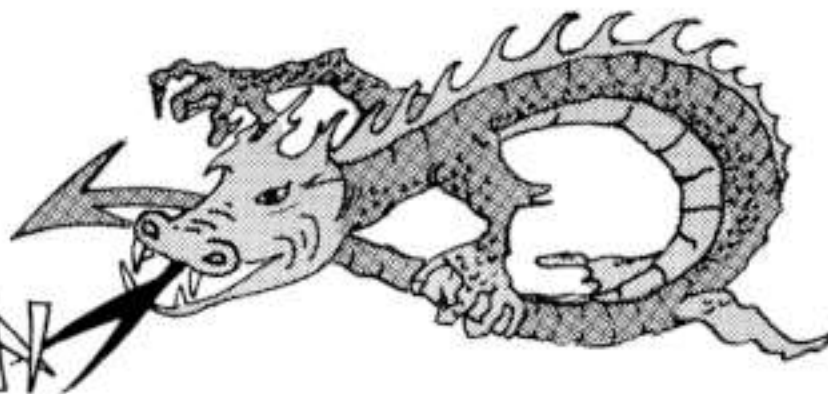
Throughout this period of accelerated operations the A-37 continued to achieve bombing accuracies of 15 meters C.E.P.

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 OPERA-
TIONAL 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

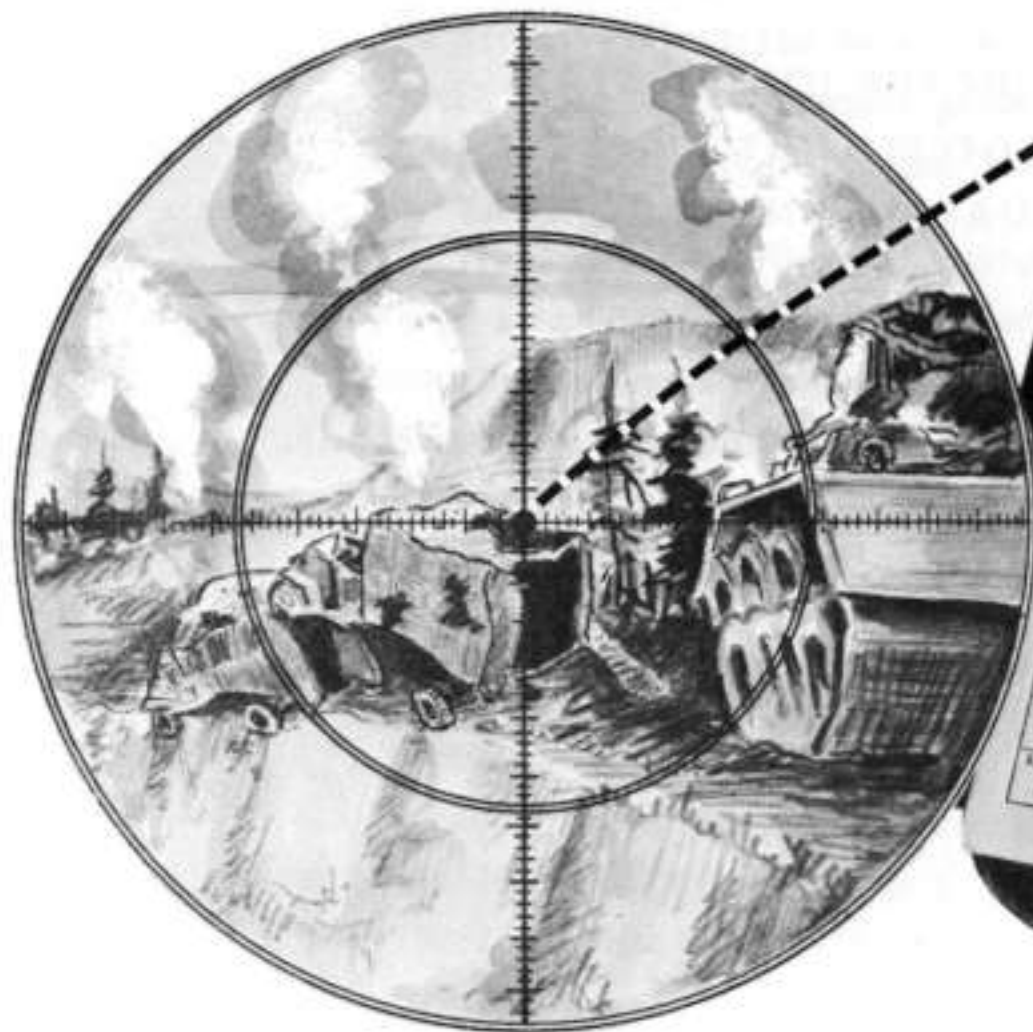
UTILIZATION 10 SORTIES/DAY/AIRCRAFT

TYPE OF MISSIONS FLOWN

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

PIN POINT ACCURACY

15 Meters C.E.P.



MISSION	RAP 91		NO	4682	TO	0950	TIME	1005
PLN	A278-671		LOAD	MC-82	FAO	LEONARD		
NO	31	LOUVEUR	MC-82	344-22	FAO	LEONARD		
NO	32	CHAPLIN	11		FAO	LEONARD		
COORDINATES	511 2443		COVERAGE	318	SLIT	53		
COORDINATES	511 3328		ON TGT	08	OFF TGT	15		
STRT	8	BLDG	3	OTHER				
Bunkers								
TGT DESTROYED								
2 Secondaries								
WEATHER	AGE	ENROUTE		TOT	ALT			
CLOUDS	8/10 3000	8/10 5000	8/10 5000	Phon	KIND			
WIND	3	—		2 1/2 H	VFR			
WIND	1815	1815	2015	1M 1700	6+			
ALT	89	2942	3400	15	3M 2500	9900		
TO WT	13700	FUEL	3749	ALT FUEL	500 M	PERM STOR	TO HOLD	
RAMP WT	14080	RUNG	1200	WIND SQUAD	FIELD EGN	2500		

**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