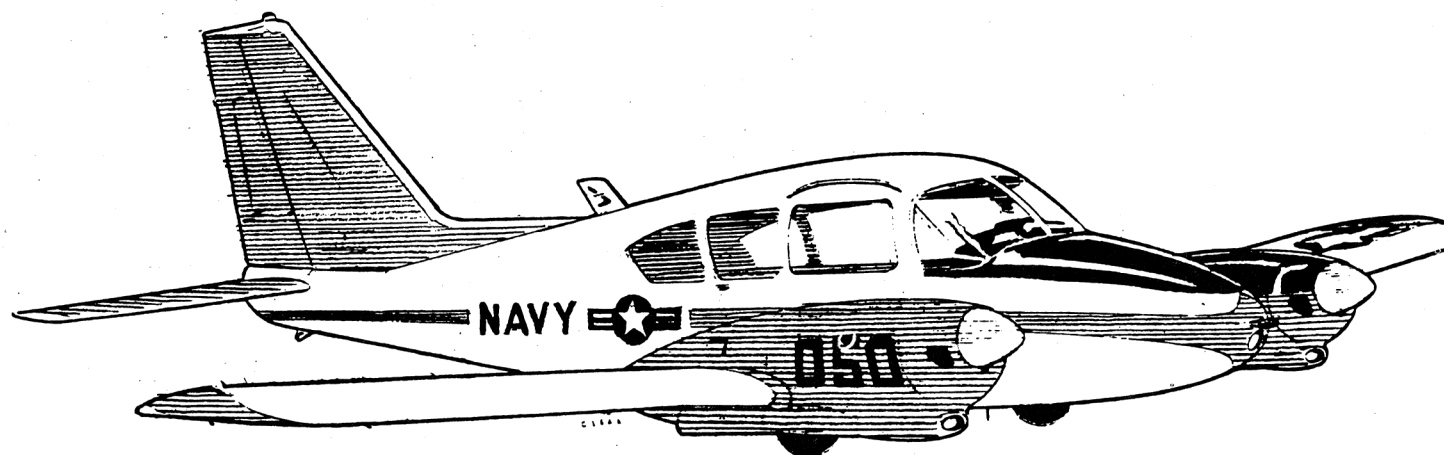
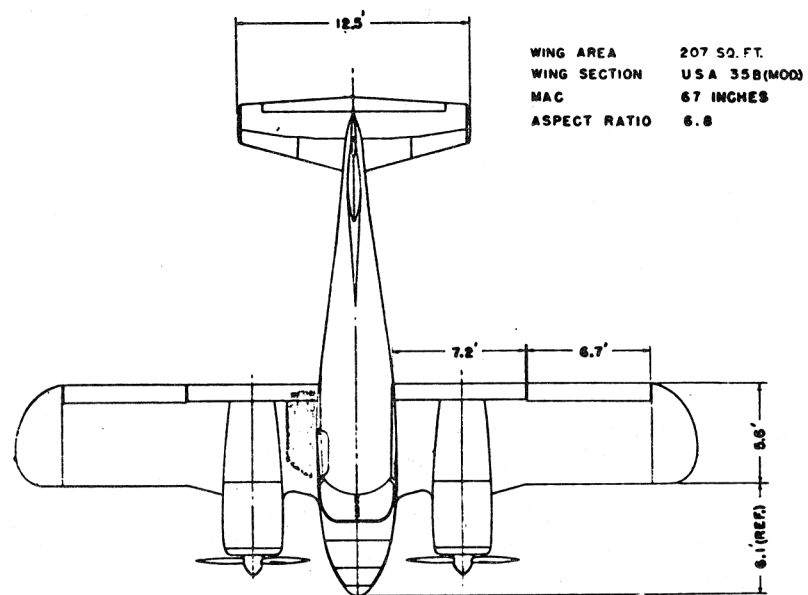
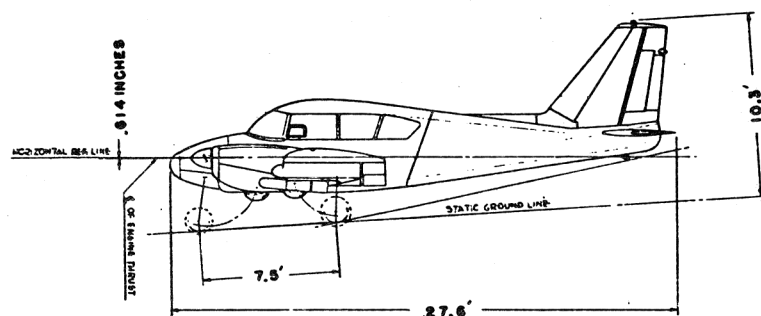
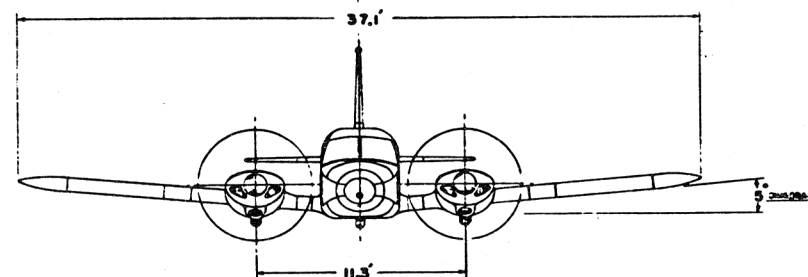




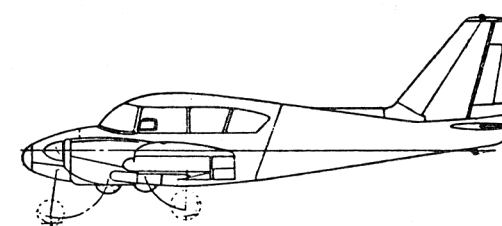
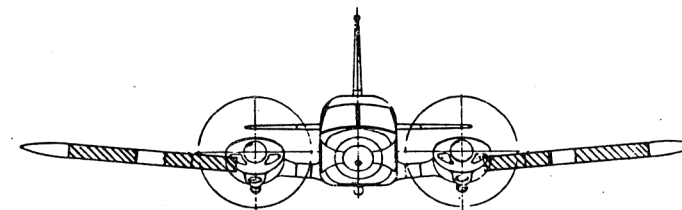
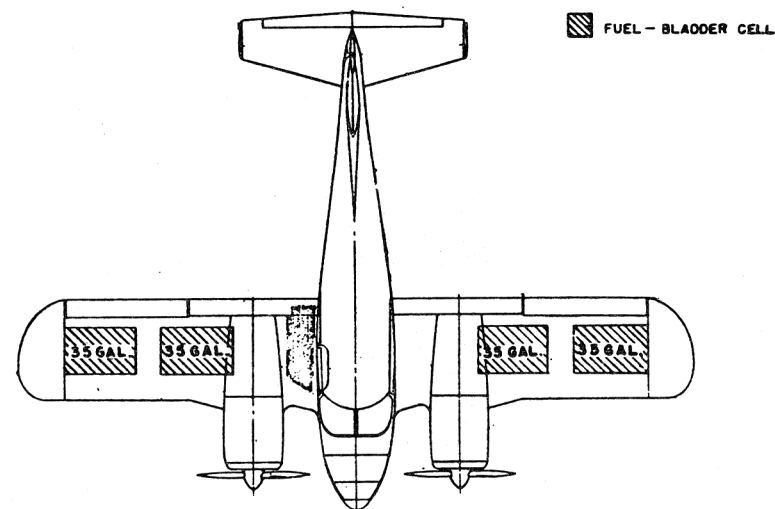
STANDARD AIRCRAFT CHARACTERISTICS
UO-1 AZTEC
PIPER



WING AREA 207 SQ. FT.
WING SECTION USA 35B(MOD)
MAC 67 INCHES
ASPECT RATIO 6.8



DESCRIPTIVE ARRANGEMENT



TANKAGE

POWER PLANT

NO. AND MODEL . (2) O-540-A1D5
 MANUFACTURER LYCOMING
 LENGTH 37.2 IN.
 DIAMETER 33.4 IN.
 PROP. MFR . HARTZELL HC-A2XK-2
 NO. BLADES/DIA. 2/74"
 BLADE DESIGN NO. 8433B10

RATINGS

	H.P.	RPM	ALT.
RATED	250	2575	SL
MAX CONT.	250	2575	SL
75%	188	2400	SL TO 6000
65%	163	2400	SL TO 10000
55%	138	2400	SL TO 15,000

ELECTRONICS

- VHF COMMUNICATIONS -
 COLLINS 101
 17L-7A TRANSMITTER
 51X-2B RECEIVER
- AUXILIARY VHF TRANSMITTER-
 ARC
 T-20 TRANSMITTER
- DUAL VHF OMNI - COLLINS
 51X3 RECEIVERS
 344A-1 INST. CONVERTER
 344D-1 OMNI CONVERTER
 331H-L COURSE SEL. INDIC.
- ADF - 21A - ARC
- MARKER BEACON-51Z-2 COLLINS
- GLIDE SLOPE-51V-3 COLLINS
- AUDIO AMPLIFIER-CA-2A
 FLITE-TRONICS

MISSION AND DESCRIPTION**UTILITY AND LOGISTICS AIRPLANE**

THE UO-1 IS A TWIN-ENGINE AIRPLANE OF CONVENTIONAL CONSTRUCTION. IT FEATURES SLOTTED FLAPS, RETRACTABLE TRICYCLE GEAR, AND AN ALL-MOVABLE HORIZONTAL TAIL SURFACE. IT WILL CARRY A CREW OF ONE PILOT PLUS THREE PASSENGERS AND 200 POUNDS OF BAGGAGE. IT INCORPORATES ELECTRICAL PROPELLER DE-ICING EQUIPMENT, OXYGEN EQUIPMENT, HEATED PILOT, AN AUTO-PILOT AND A COMPLETE INSTRUMENT PANEL WITH DUAL COMMUNICATION AND NAVIGATION RADIOS.

DEVELOPMENT

FIRST FLIGHT 16 OCTOBER 1958
 ACCEPTED FOR SERVICE USE... 19 AUGUST 1961

DIMENSIONS

WING	
AREA	207 SQ. FT.
SPAN	37' 1 3/4"
MAC	5' 7"
SWEEPBACK (1/4 CHORD)	0°
LENGTH	27' 7 5/8"
HEIGHT	10' 3 3/8"
TREAD	11' 4"

WEIGHTS

LOADING	LBS.	ULT. L.P.
EMPTY	3020	5.7
BASIC	-	-
DESIGN	4800	5.7
COMBAT	-	-
MAX. T.O.	4800	4.5
MAX. LAND	4800	4.5

ALL WEIGHTS ARE A COMBINATION OF ACTUAL AND CALCULATED.

FUEL AND OIL

NO. TANKS	GALS.	LOCATION
4	140	- WING

FUEL GRADE 91/96 OCTANE
 FUEL SPEC.

OIL

CAPACITY (GALS) 6
 GRADE 1100
 SPEC MIL-O-6082

ORDNANCE

NONE

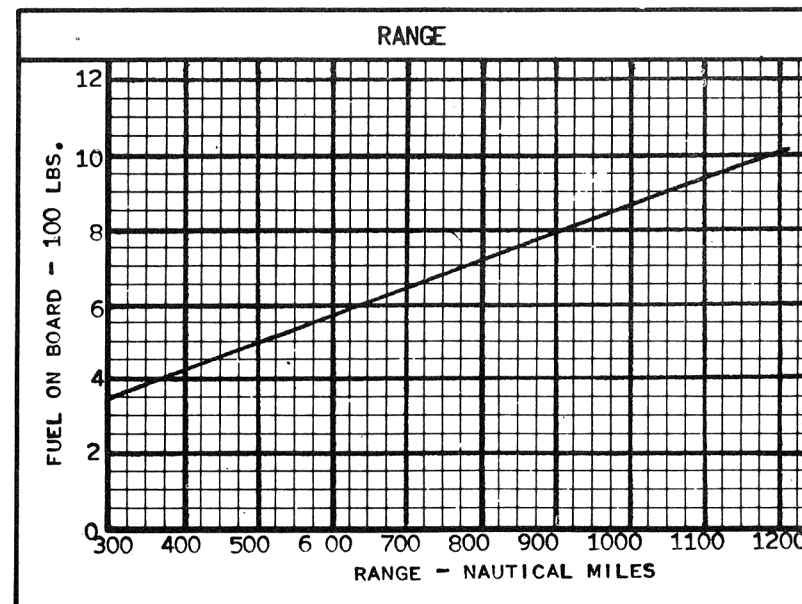
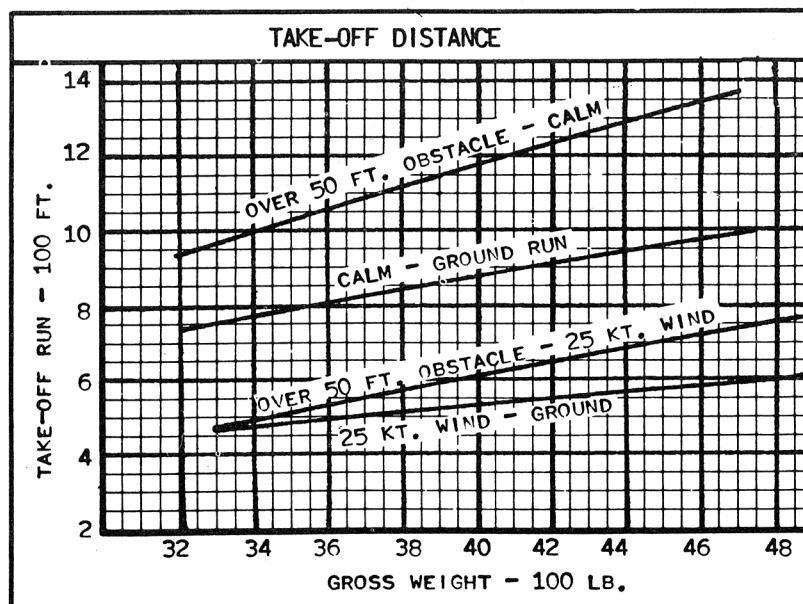
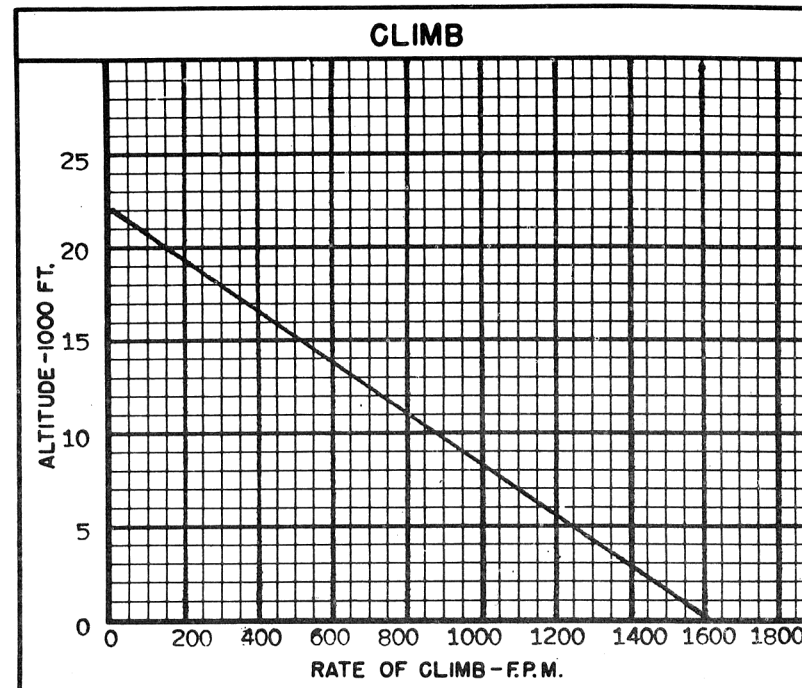
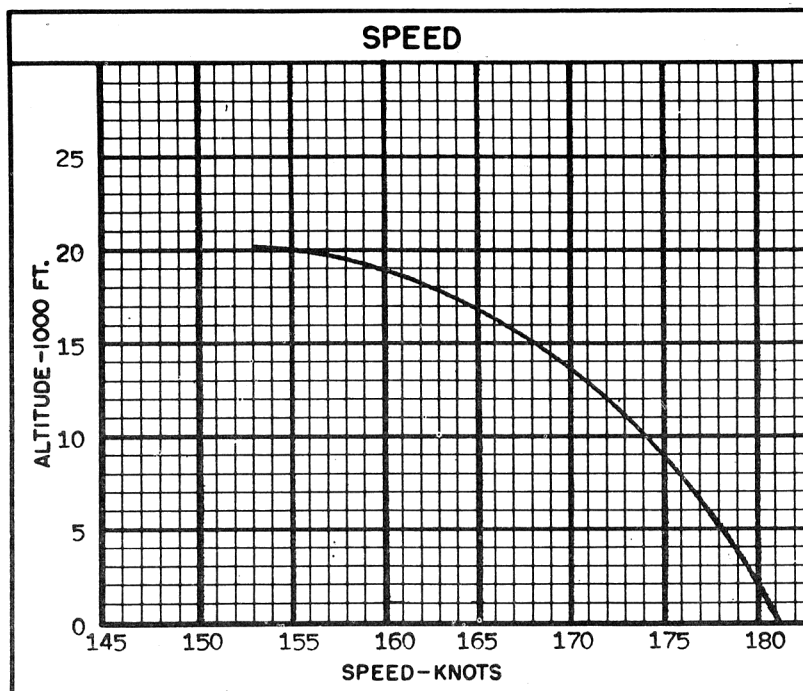
PERFORMANCE SUMMARY

TAKE-OFF LOADING CONDITION		(1) TRANSPORT				
TAKE-OFF WEIGHT	lb.	4800				
Fuel internal/external (USEABLE)	lb./lb.	840				
Payload (INCLUDING PILOT)	lb.	941				
Wing loading	lb./sq.ft.	23.5				
Stall speed - power-off	kn.	54				
Take-off run at S.L. - calm	ft.	1000				
Take-off run at S.L. 25 kn. wind	ft.	610				
Take-off to clear 50 ft. - calm	ft.	1410				
Max. speed/altitude	kn./ft.	181/S.L.				
Rate of climb at S.L.	fpm.	1620				
Time: S.L. to 7,000ft.	min.	5				
Time: S.L. to 20,000ft.	min.	34.5				
Service ceiling (100 fpm)	ft.	20900				
Combat range	n.mi.	1009				
Average cruising speed	kn.	117.5				
Cruising altitude(s) 31% POWER	ft.	7000				
Combat radius/Mission time	n.mi.	-				
Average cruising speed	kn.	-				
COMBAT LOADING CONDITION						
COMBAT WEIGHT	lb.					
Engine power						
Fuel	lb.					
Combat speed/combat altitude	kn./ft.					
Rate of climb/combat altitude	fpm/ft.					
Combat ceiling (500 fpm)	ft.					
Rate of climb at S.L.	fpm.					
Max. speed at S.L.	kn.					
Max. speed/altitude	kn./ft.					
LANDING WEIGHT	lb.	3960				
Fuel	lb.	840				
Stall speed - power-off/appr. power	kn./kn.	54/47				
Distance - ground roll/over 50 ft. obst.	ft./ft.	806/1115				

NOTES

- (A) MILITARY RATED THRUST.
 PERFORMANCE BASIS: CALCULATIONS
 RANGE AND RADIUS ARE BASED ON ENGINE SPECIFICATION FUEL CONSUMPTION DATA INCREASED BY 5%.

NAVAR-1335D (Rev. 1-55)



○ LOADING CONDITION COLUMN NUMBER

NOTES

RANGE PROBLEM - TRAINER

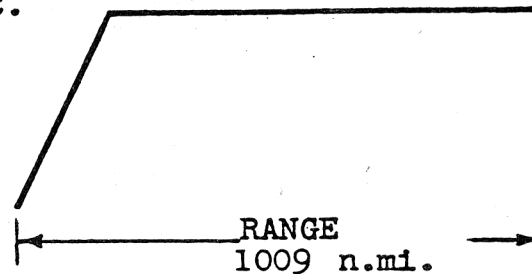
WARM-UP, TAXI, TAKE-OFF, ACCELERATION: 5 minutes at normal rated thrust at sea level.

CLIMB: On course to cruise altitude with military rated thrust.

CRUISE: At long range speed at cruising altitude.

RESERVE: 5% of initial fuel plus fuel required for 20 minutes at speed for maximum endurance at sea level.

7000 Ft.



○ LOADING CONDITION COLUMN NUMBER