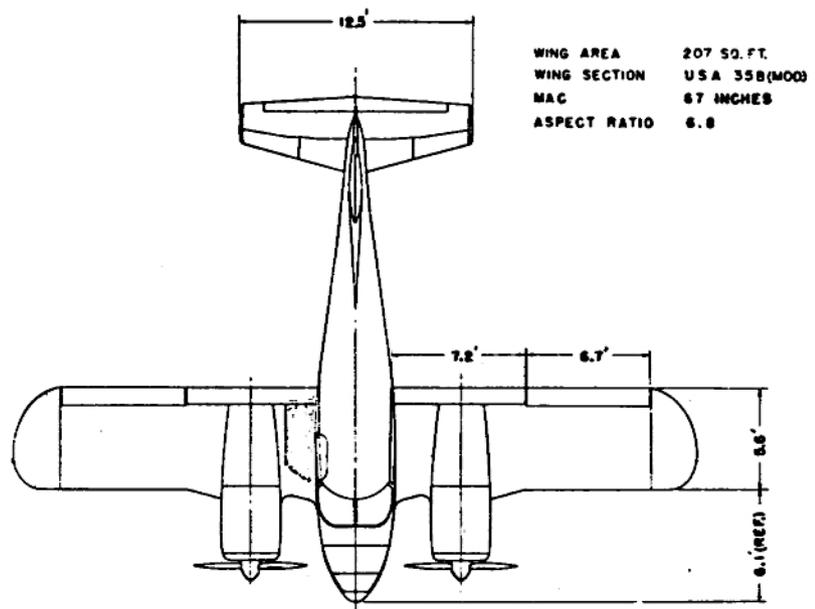


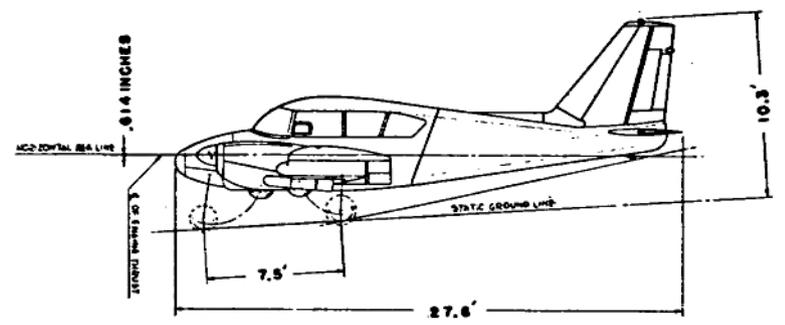
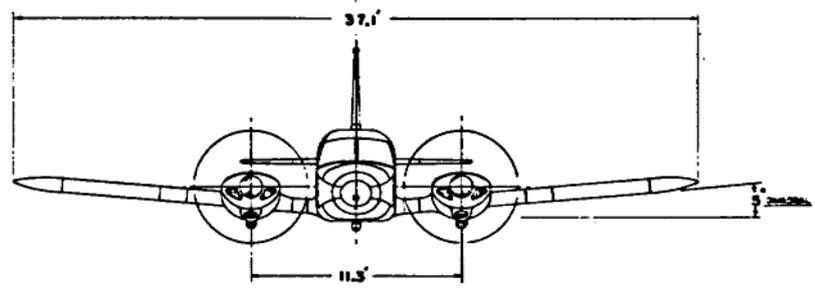
STANDARD AIRCRAFT CHARACTERISTICS

UO-1 AZTEC

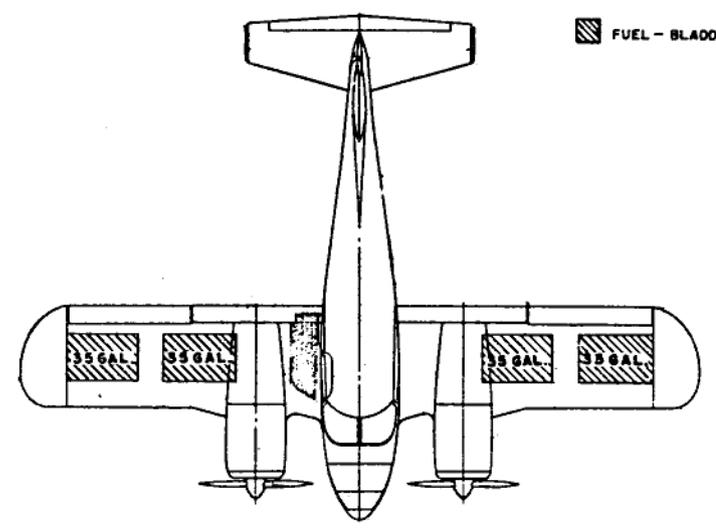
PIPER



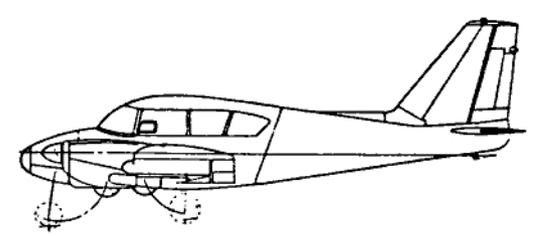
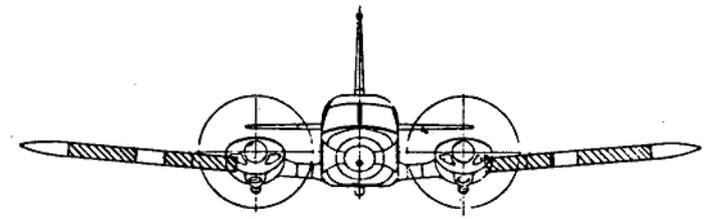
WING AREA 207 SQ. FT.
 WING SECTION USA 35B(MOD)
 MAC 67 INCHES
 ASPECT RATIO 6.8



DESCRIPTIVE ARRANGEMENT



FUEL - BLADDER CELL



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 VHP 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

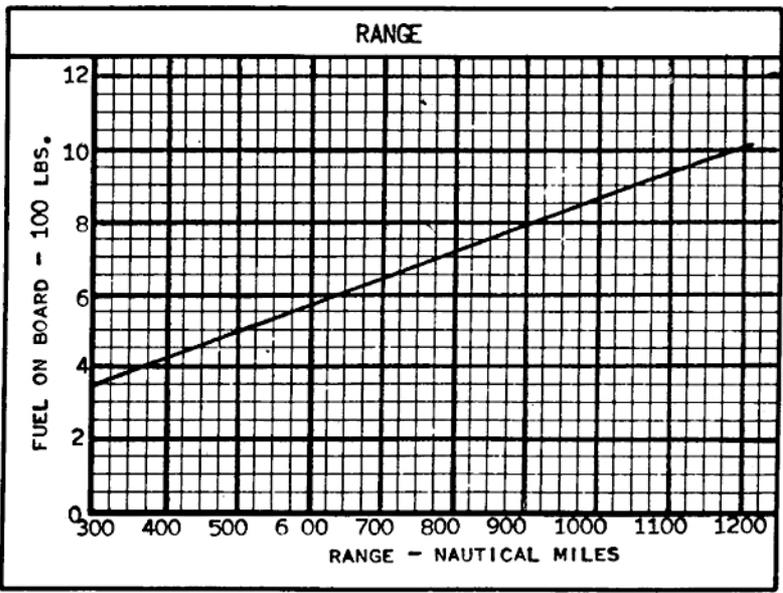
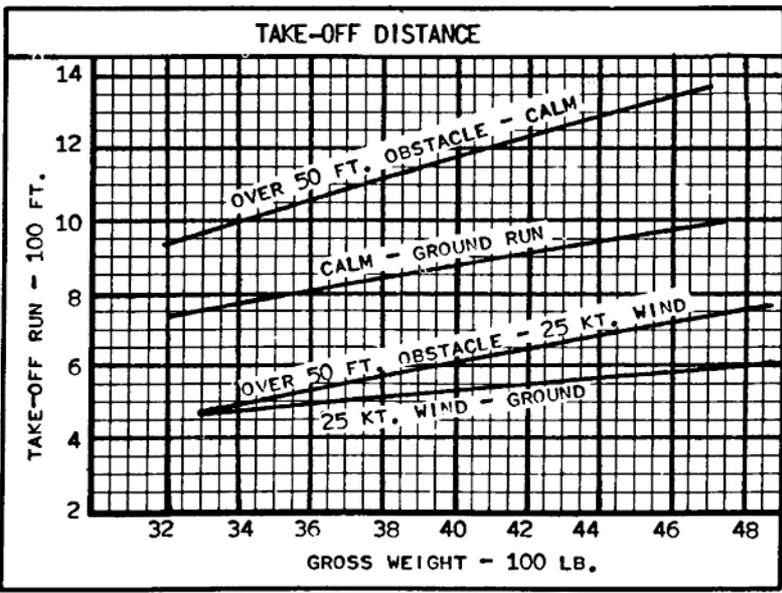
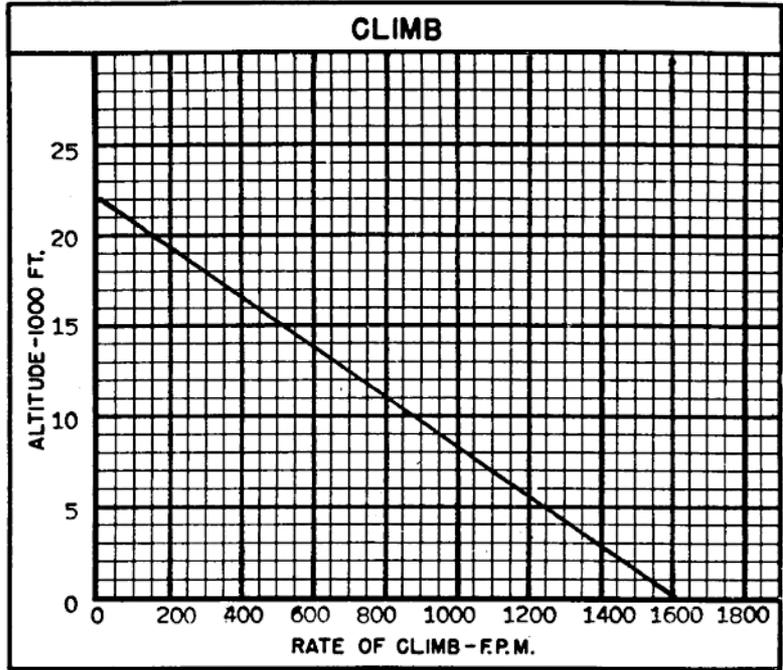
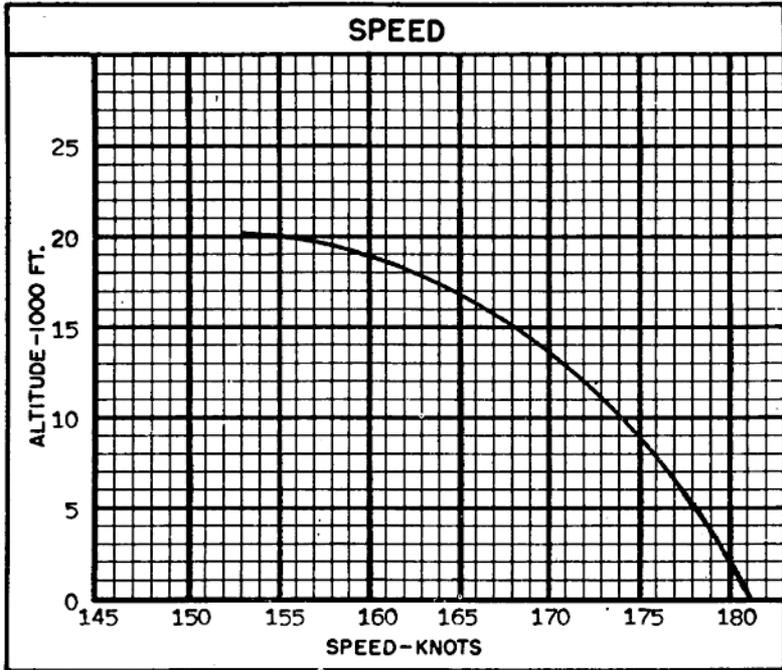
PERFORMANCE SUMMARY

| TAKE-OFF LOADING CONDITION | (1) TRANSPORT | | | | |
|--|------------------|----------|--|--|--|
| TAKE-OFF WEIGHT | lb. | 4800 | | | |
| Fuel internal/external (USEABLE) | lb./lb. | 840 | | | |
| Fayload (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%.

NAVARO-1339D (Rev. 1-55)



○ LOADING CONDITION COLUMN NUMBER

Standard Aircraft Characteristics NAVAER 1335E (Rev. 1-55)

NOTES

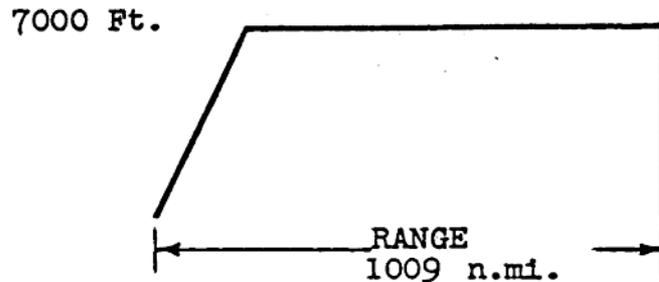
RANGE PROBLEM - TRAINER

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.



○ LOADING CONDITION COLUMN NUMBER