ANGEL
AIRCRAFT CORPORATION

Municipal Airport
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Orange City, IA 51041-7453

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Performance Specifications

Powerplant	Lycoming IO-540 300 HP @2700 RPM
Propeller	2 Hartzell HC-E3YR-2ALTF/FLC-7458, 76" dia (75 inmin) constant-speed, 3-blade, feathering
TBO	2,000 hours
Weights	
Takeoff	5,800 lbs maximum
Standard Empty	3,880 lbs
Standard Useful Load	1,920 lbs
Seats	8 persons
Fuel Capacity	222 U.S. Gal. usable fuel (1,332 lbs)
Fuel Grade	100 LL (min. grade)
Dimensions:	
Length	33 ft 3 in
Height	11 ft 6 in
Wing Span	39 ft 11.5 in
Wing Area	225.4 sq ft
Aspect Ratio	7.08
Baggage	
Cabin Cargo (w/o seats)	84 cu ft, 1,400 lbs
Baggage Compartment	10 cu ft, 200 lbs
STOL Take-off Distance	
Minimum Take-off Roll	658 Ft
Over 50 ft. Obstacle	1,404 Ft
Maximum Effort	1,270 Ft
STOL Landing Distance	
No Obstacle	568 Ft
Over 50 ft. Obstacle	1,046 Ft

Best Rate of Climb	
Both Engines Operating	1,330 FPM
Single Engine Rate of Climb	196 FPM
Service Ceiling	
Both Engines Operating (100 FPM)	19,015 Ft
Single Engine Ceiling (50 FPM)	3,868 Ft
Speeds (KIAS)	
Maximum Level Speed	180 kts

Cruising Speeds (with 30 minute reserve)

Cruise @ 75% pwr:	175 kts; Range: 1,137 nm Endurance: 6.5 hours
Cruise @ 65% pwr:	169 kts; Range: 1,266 nm Endurance: 7.5 hours
Cruise @ 55% pwr:	158 kts; Range: 1,406 nm Endurance: 8.9 hours
Cruise @ 45% pwr:	145 kts; Range: 1,493 nm Endurance: 10.3 hours
Cruise @ 35% pwr:	131 kts; Range: 1,720 nm Endurance: 13.1 hours

V Speeds

V_{ne}	never exceed speed	209 KIAS
V_{no}	max structural cruising speed	174 KIAS
V_a	maneuvering speed at 5,800 lbs	139 KIAS
V_a	maneuvering speed at 4,200 lbs	121 KIAS
V_{le}	max landing gear extension speed	130 KIAS
V_{lo}	max landing gear operating speed	130 KIAS
V_{fe}	max flaps extended speed	104 KIAS
V_{mc}	minimum control speed	65 KIAS
V_y	best rate of climb	101 KIAS
V_{s1}	power off stall, flaps up	71 KIAS
V_{so}	power off stall, flaps down	57 KIAS

The ANGEL—Not Just a Pretty Face

With a graceful, sleek pusher configuration, fully retractable landing gear and seating for eight, the ANGEL can take you wherever you want to go — on a pipeline patrol, search and rescue operation, personnel transportation, humanitarian relief efforts — or maybe just to go island-hopping with some friends. The ANGEL offers you comfort and ease of handing with room for eight plus a high load capacity while providing the peace of mind of a twin-engine, STOL-capable airplane. All at a price that won't break your bank account.

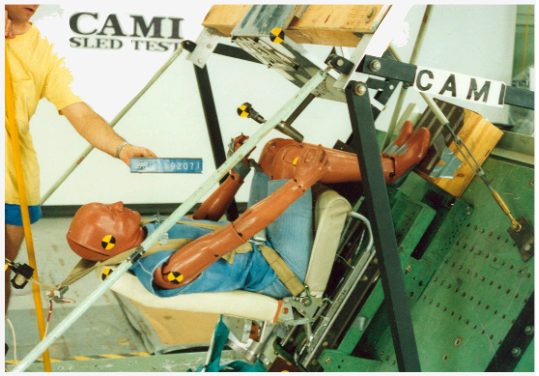
- Fully IFR Equipped
- Certified to FAR 23
- Dependable IO-540-M1C5 engines
- Hartzell propellers
- 1,920 lb useful load
- 175 knot cruise at 75% power
- 222 usable gallons with no zero-fuel weight limitation

Performance at Gross Weight

You no longer have to sacrifice performance when carrying a heavy load. The ANGEL provides 175 knot cruise at 75% power while at maximum weight burning 31.5 GPH. And with 222 gallons of usable fuel, the ANGEL can take you wherever you want to go whether to a local airport or a distant unimproved strip.

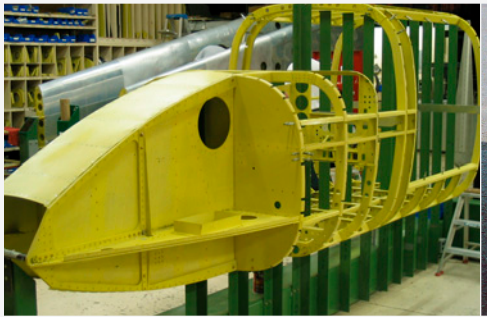
- 1,720 nautical miles at 131 knots (35% power)
- 13.1 hours of endurance (35% power)
- 658 ft minimum ground roll
- 1,404 ft takeoff over 50-foot obstacle
- 568 ft minimum braked roll
- 1,046 ft landing distance over a 50-foot obstacle

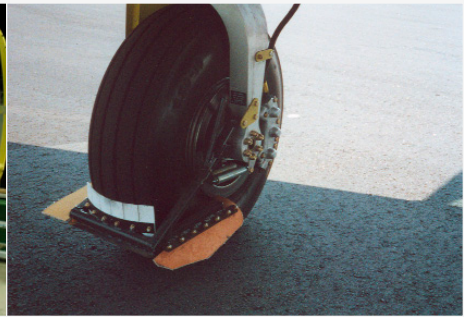
Practical, Rugged and Stylish



The ANGEL's metal construction is simple, reliable and readily repairable. Made to take the punishment associated with STOL operations, the ANGEL comes equipped with large, low-pressure main tires for soft ground and rugged main gear that can take a beating. The cabin has been designed and tested for overturn loads, the engine mounts designed to contain the engines for loads up to 20g's, and the seats were crash-tested to absorb energy and restrain the occupants to 26g's.

- 8.50 x 10 main tires (35 psi) for rough and soft fields
- 8.50 x 6 nose tire (15 psi) long wheelbase, lightly loaded, large rolling radius, rugged strut and structure
- Near full-span semi-fowler flaps for efficient wing utilization
- Spoilers for safe, dependable roll control near stall
- 18% thick airfoil at wing root for high lift
- Main cabin door is 42" wide by 36.5" tall
- Seats easily removed to add 75 lbs to useful load
- Rugged, heavy-duty landing gear
- Tail surfaces sized for soft-field rotation and low V_{mc}



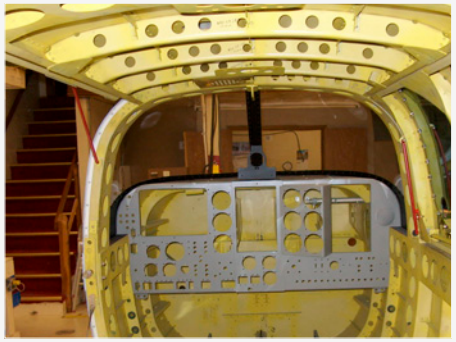


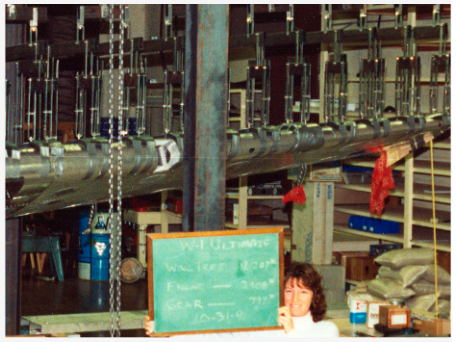
Built to Endure by Pilots for Pilots

Led by Carl Mortenson, principal designer and test pilot of the ANGEL (Comm, SMEL, SES, Inst., and A&P since 1955), and Ed Mortenson, chief engineer and flight test engineer (Pvt., SMEL, Inst.), the ANGEL team includes many renowned aeronautic specialists who have lent their

expertise and time to bring general aviation and commercial pilots the ANGEL — a sleek, comfortable workhorse that offers easy handling, a sizeable payload and endurance. The ANGEL is as much at home on the ramp at an international airport as it is patrolling a ranch in Texas or providing relief efforts in the back country of Peru.

The ANGEL was *Type Certified* by the *FAA* in 1992 and ANGEL AIRCRAFT CORPORATION was awarded their *FAA Production Certificate* in 2003.





CABIN SPECIFICATIONS

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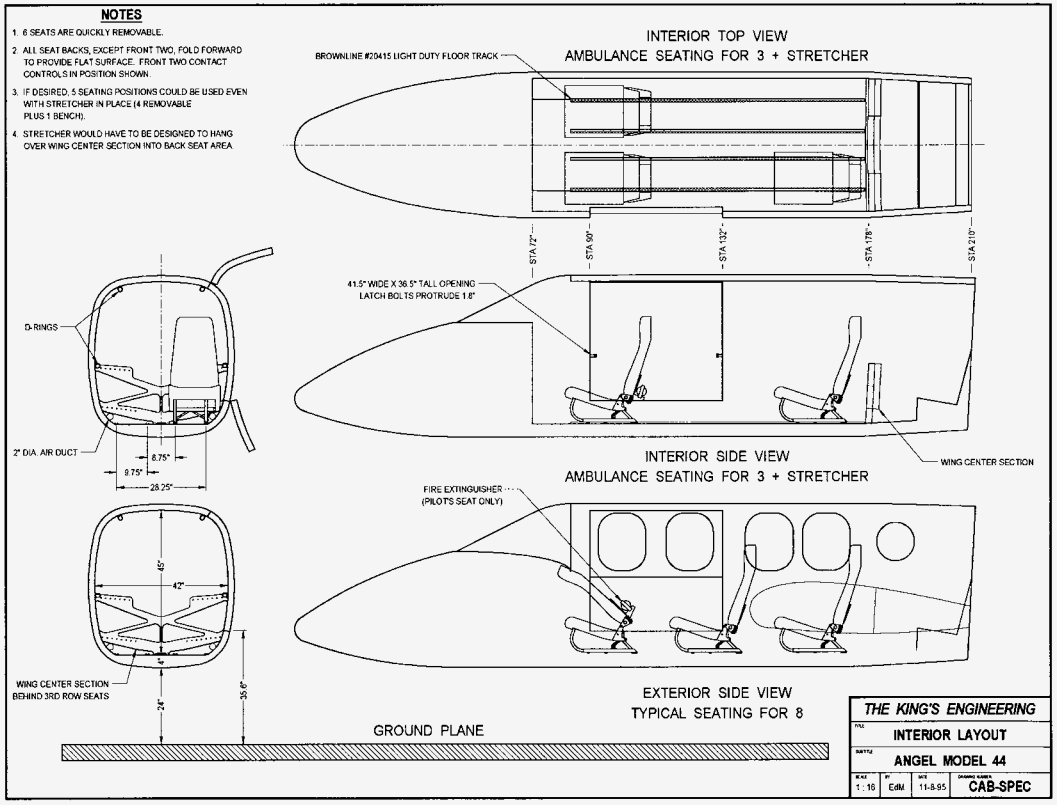
Looking back at rows 2, 3 and 4 from the pilot's seat.

The ANGEL offers many different cabin configurations. The ANGEL can be configured to seat only the pilot if desired, plus any number of additional seats up to a total of eight.

The ANGEL, with a 42-inch wide cabin, can also be easily reconfigured for air ambulance transport and can be equipped with various levels of medical equipment and seating for attendants and family members.

One person can easily remove unneeded seats allowing four 55-gallon barrels to fit nicely into the cabin of the ANGEL while passenger luggage may be stowed in the separate aft baggage compartment.

The STOL capability of the ANGEL allows, if necessary, for taking off and landing on roads.



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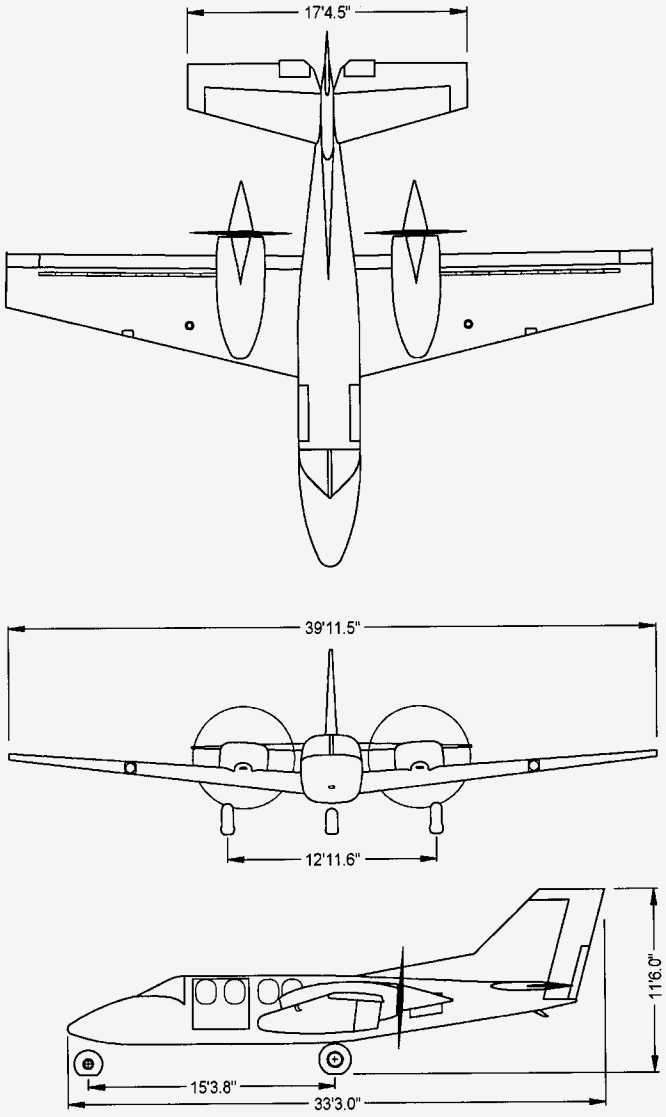

Standard Equipment

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Avionics

Two Garmin GNS 430's
Garmin GTX 327 Transponder
Garmin GMA 340 Audio Panel with Marker Beacon Receiver
King/Honeywell KI-525 HSI
S-Tec 55X autopilot will be available shortly

Cockpit, Flight and Ground Controls

Dual Primary Flight Controls
90º Swivelling Nose Wheel
Pilot and Co-Pilot Toe Brakes
Parking Brake
Electric-Hydraulic Retractable Landing Gear
Fuel Control On-Off Valves - Left Engine, Right Engine, Crossfeed

Lighting Systems

Instrument Panel, Cockpit, Cabin

Cabin Comfort System

Heater - 2 Exhaust Muff Cabin Heaters
Cabin Fresh Air System and Vents

Optional Equipment

Overhead Oxygen Supply System
Customers may substitute other FAA approved aircraft radios such as the Goodrich WX-500 Stormscope.

Pilot and Mechanic Checkout

Interactive Pilot and Mechanic Checkout

Angle Aircraft Corporation offers new owners a full pilot checkout course with the purchase of each airplane. In addition to the pilot's course, Angel Aircraft recommends that owners and their mechanics avail themselves of the Angel maintenance course.

Pilot Checkout includes:

Review of the Pilot's Flight Manual
Physical review of each section and sytem of the airplane
Instruction on the aircraft's weight and balance
Introduction to the aircraft's performance data
Ground school and corresponding flight instruction of operating limitations, normal procedures and emergency procedures

Hands-on maintenance Checkout includes:

Systems review and explanation
Maintenance hints
Inspection checklists

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