PIPER Comanche

Comanche...“a going piece of machinery”

No term could more aptly describe the beautiful, wonderful Piper Comanche, the sensation of the business aircraft world. Here's the only single-engine business airplane with both **high performance** and **truly spacious comfort.** Here's a plane that wants to fly so much and flies so well that you, too, will get a new exhilaration at being in command of such an outstanding airplane. From the moment you open the throttle until you land effortlessly at your destination you'll agree that never has an airplane been designed with so much aerodynamic “personality.”

■ ■ ■ And Piper gives you your choice of two fine Comanche models. For maximum economy and good solid 160 mph cruise, Piper offers the 180 horsepower Comanche.

For over-three-mile-a-minute cruise and sensational “get up and go,” select the 250 horsepower Comanche. In either you get the same wonderful aerodynamic characteristics which distinguish the Comanche from others in its class. And you get a far roomier cabin, much larger baggage capacity than in any others. ■ ■ ■ The day when you, too, walk up to your own Comanche will be the day you gain an entirely new understanding of the value and utility of a company or privately owned airplane... whether you've owned an airplane previously or not. Here is economical air transportation at its very best. Nothing in its price class will give you the all-around satisfaction that is yours with the Comanche. That is why the Comanche has rapidly become the favorite.

an Aerodynamic Masterpiece...

This exclusive combination of features gives the **Comanche** its exceptional performance, its perfect flight characteristics:

SINGLE PIECE STABILATOR. Like all modern jet aircraft, the Comanche is equipped with a single-piece stabilator which results in 25% less drag, better control in all speed ranges and, above all, a degree of longitudinal stability not found in any airplane in the Comanche's class. Equipped with an anti-servo tab, the Comanche remains "glued" in any desired attitude--level flight, climb or descent. Jet-type swept rudder gives the Comanche modern-as-tomorrow beauty but, more important, provides better rudder control with less area.

LAMINAR FLOW WING. For good take-off and climb performance combined with minimum drag for high speed cruise and long range, the Comanche, exclusively among all-metal single-engine business aircraft, uses the modern laminar flow wing. Its weight-lifting and long-range capabilities have been amply proven by many non-stop ferry flights from the United States to Europe and by the world-record-breaking flight of Max Conrad, 7,668 miles from Casablanca to Los Angeles. Best of all, the laminar flow wing gives the Comanche gentle, "docile" stall characteristics.

Roomiest single-engine business plane ... *Roomiest*, by far!

Comfort is just as important as performance in the airplane of your choice. A cramped cabin, with shoulders bumping shoulders...knees nudging seats...can make a trip seem twice as long. Only in the Comanche can you be sure of the comfort you want for the many hours you'll "live" in your airplane. Because the Comanche has far more room than any other single-engine business airplane, it gives you extra inches all the way around, added space where it counts.

Travel comfort is dependent, too, on the amount of baggage you can carry. And here, too, the Comanche far exceeds any other airplane in its class in space available, giving you a big 20-cubic-foot baggage compartment with 200-pound allowance, 50 pounds of baggage per passenger! And when you compare usable payload with full tanks, instruments and other equipment you'll find the Comanche far excels other aircraft in its class.

The comfort, the spaciousness that are yours in the Comanche are just as important a reason for selecting this fine airplane as its excellent performance and wonderful flight characteristics.

NEW BEAUTIFUL STYLING. Light, bright colors and rich fabrics distinguish the tasteful new Comanche decor. Deeply upholstered seats and thick carpeting in colors to harmonize with the exterior trim are complemented by neutral gray moldings and oyster white headlining. The effect is airy, elegant, comfortable beyond compare.

NEW SEATING COMFORT. Now, new tilting backs for the front seats give you your choice of three positions with optional head rests for added comfort. Rear seat back has four adjustable positions. Main wing spar is located under rear seat to provide unobstructed leg room for rear seat passengers. Front seats are 5.5 inches apart and individually adjustable fore and aft. Rudder pedals, suspended from above, leave floor clear for front seat passengers.

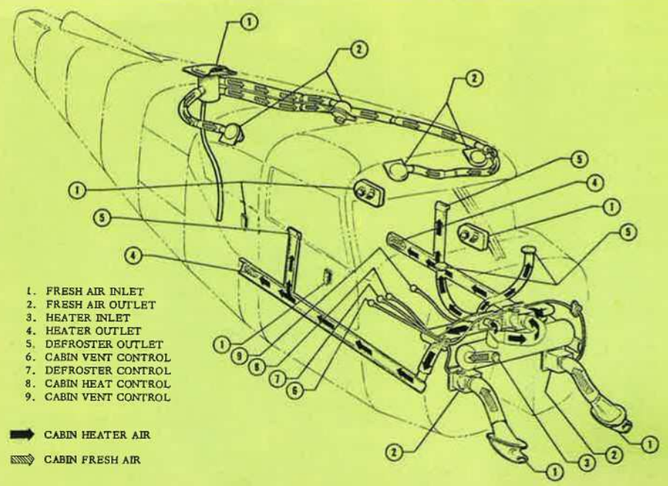
and for FLYING at its Very Best.....AUTOMATIC FLIGHT

with exclusive PIPER *AutoControl*

Automatic flight is standard equipment in the AutoFlite model of the Comanche. With the exclusive Piper AutoControl you enjoy "magic carpet" travel which cannot be matched by any other form of personal transportation. The Piper AutoControl makes turns automatically or, with the Heading Lock engaged, lets you fly hours on end without touching the wheel or rudder pedals—on the exact course you wish to fly.

With AutoControl doing all the work you're free to navigate, communicate, or relax, look around...arriving at your destination surprisingly free from fatigue. So popular has automatic flight become that 90% of Comanche purchasers have specified the AutoFlite model. AutoControl, thoroughly proved and improved, adds surprisingly little cost and weight, just four pounds.

Just a simple twist of the AutoControl puts the Comanche into automatic turns. For cross-country flight, gyro-controlled Heading Lock holds course unerringly.



NEW CABIN AIR SYSTEM includes eight warm air outlets for abundant, evenly distributed warm air throughout the Comanche's cabin. New heater system includes two outlets forward by the rudder pedals, two on each side aft of the front seats, two windshield defrosters and two side window sill outlets which provide a "blanket" of warm air over the forward windows and prevent them from fogging or frosting. New, quieter cold air ducting system provides two new vents at the rudder pedals, a new overhead system with airline-type ventilators over each seat plus waist-height air inlets by each seat—a total of ten cool air sources.

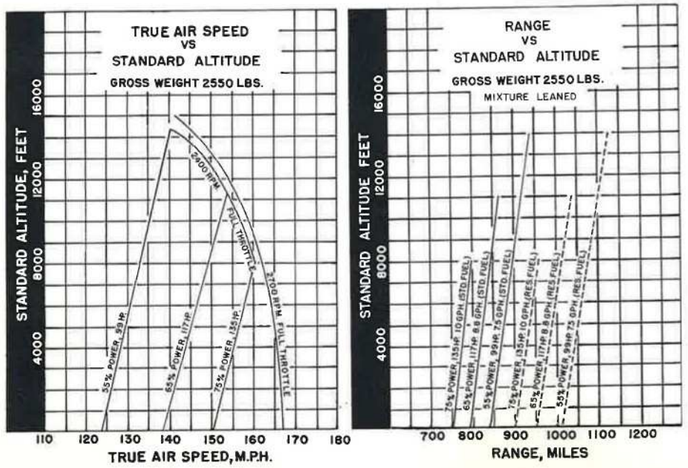
PIPER OFFERS YOU YOUR CHOICE OF TWO FINE *Comanche* MODELS

180 HORSEPOWER COMANCHE. For amazing economy of operation with high performance, nothing will match the 180 horsepower Comanche. In the $15,000 to $17,000 middle priced range, only the Comanche 180 gives you all-metal construction, modern low wing design, retractable landing gear and unmatched cabin comfort. The Comanche's clean aerodynamic design makes possible a good, solid 160 mph cruising speed with fuel consumption and other related operating costs far less than those of other all-metal aircraft in the same approximate performance range. Cruising range with 60 gallons of fuel exceeds 1,100 miles at economy cruise and only the Comanche gives you the luxurious roominess and comfort you want and expect from an airplane in this price and performance class.

250 HORSEPOWER COMANCHE. Here is the gem of the high performance single-engine business fleet. With the superbly smooth Lycoming 250 horsepower engine, you cruise at 181 miles an hour, climb at 1,400 feet per minute, operate with ease at 15,000 feet or higher (absolute ceiling at gross load, 22,000 feet). Here's an airplane whose efficiency was thoroughly proven by Max Conrad when he took off in a stock Comanche 250 from Casablanca with a 5,000 pound gross load—nearly 3½ times the empty weight—and set a new World's Non-stop Distance Record of 7,668 miles to Los Angeles. Normal cruising range with standard fuel is 1,100 miles.

Piper can offer you the Comanche with all its superior aerodynamic features and cabin roominess at far less cost than comparable aircraft because of volume production and manufacturing efficiency.

180 HP COMANCHE

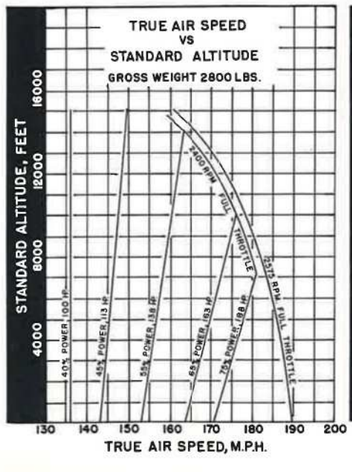


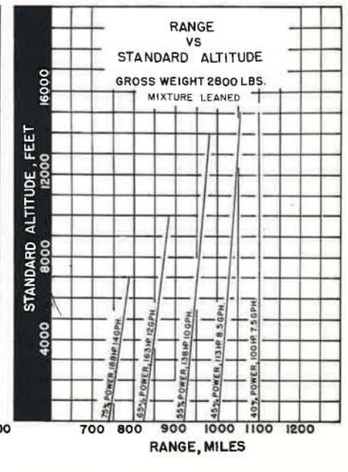
PERFORMANCE DATA

PERFORMANCE DATA	180 hp	250 hp
Top Speed (mph)	167	190
Optimum Cruising Speed (75% power, opt. alt., mph)	160	181
Stalling Speed (flaps down, mph)	58	64
Take-Off Run (ft.)	750	750
Landing Roll (flaps down, ft.)	600	650
Best Rate of Climb Speed (mph)	96	95
Rate of Climb (fpm)	910	1400
Service Ceiling (ft.)	18,500	20,000
Absolute Ceiling (ft.)	21,000	22,000
Fuel Consumption (75% power, gph)	10	14
Cruising Range (50 gal. standard fuel, 75% power, opt. alt.)	5 hrs., 800 miles	
Cruising Range (50 gal. standard fuel, optimum)	6.2 hrs., 920 miles	
Cruising Range (60 gal. fuel, 75% power, opt. alt.)	6 hrs., 960 miles	4.3 hrs., 780 miles
Cruising Range (60 gal. fuel, optimum)	7.5 hrs., 1100 miles	7.5 hrs., 1100 miles

HONEST FIGURES. The aircraft industry has always been plagued with over-enthusiastic performance figures, or figures based on "clean" airplanes without normal equipment, such as radio antennas. However, it is firm Piper policy to rate Piper performance conservatively and publish only figures for performance which can be expected from production-line aircraft at gross load and completely equipped with radio antennas. Comparing aircraft "on paper" can be misleading—and disappointing. Only side-by-side comparative flight tests will prove the relative performance of two aircraft. The Comanche will compare favorably under any such practical evaluation.

250 HP COMANCHE





WIDE-TREAD, LOW-SLUNG TRICYCLE LANDING GEAR WITH LOWEST CENTER OF GRAVITY

The Comanche can be landed and taxied with ease under severe wind conditions thanks to its wide-tread landing gear and lowest center of gravity of any all-metal high performance business airplane.

WIDE, DEEP INSTRUMENT PANEL

accommodates full instrumentation for IFR operations and has space provisions for additional equipment. Illustrated here is standard panel and equipment for Super Custom and AutoFlite models of Comanche. Mounted directly in front of pilot is a complete navigation and communications package consisting of a Lear Automatic Direction Finder, Narco Omnigator MK II for VHF communications, VOR/ILS navigation. If additional radios are desired for individual requirements, they can be accommodated on right side in place of glove compartment.

PIPER COMANCHE SENSIBLY DESIGNED FOR SAFETY... EASE AND CONVENIENCE OF OPERATION... DEPENDABILITY AND ECONOMY

BIGGEST NOSE WHEEL! 600 x 6 nose wheel is same size as main wheels, has a 25% greater circumference than smaller nose wheels used in other aircraft. This means you can operate the Comanche with greater safety from rough, soft or sandy fields, land many places you wouldn't dare to try with other high performance aircraft.

SHORT, HUSKY MAIN LANDING GEAR. The shorter the strut, the greater the strength with much less weight. Comanche's low-slung design gives you this important two-way feature. You won't find a retractable landing gear that will take more punishment.

EASIEST GROUND HANDLING. Single hand brake operates both main wheel hydraulic brakes with double-pressure plates, with equal, simultaneous braking for smooth, short stops. System gives either pilot brake control, greatly reduces weight and maintenance.

ELECTRICAL SYSTEM. All electrical switches and associated circuit breakers are conveniently grouped together under the left instrument panel. New, larger 50 ampere generator provides ample current for the 12 volt system.

WIDE SPAN FLAPS extend two-thirds the length of the Comanche's wing, reduce stalling speed to 59 mph. Flaps are actuated by flap handle next to manual landing gear handle (see photo above). Only light forces are needed to apply flaps. Three flap positions are provided.

SHORT TURNING RADIUS. You taxi with ease and excellent maneuverability with the Comanche's "wide-angle" nose wheel steered by the rudder pedals.

WING TIPS are made of resilient, high-strength plastic, resist hangar damage.

DOUBLE CABIN LIGHTS give bright interior illumination. Angled rear light is bright enough to enable passengers to read in the rear seat without causing cockpit glare. Rheostatically-controlled red spot-lights provide instrument illumination to suit individual requirements and conditions. Cabin speaker and stabilizer adjusting crank are incorporated in same ceiling unit.

FAST RETRACTING LANDING GEAR goes up in six seconds or less, "cleans" Comanche fast for maximum climb immediately after take-off.

NEW SAFETY GEAR SWITCH is simple to operate. Cannot be put in up position until switch is pulled out. Microswitch on left landing strut prevents gear from retracting until wheels are off the ground.

SIMPLE MANUAL GEAR EXTENSION. Landing gear can be extended manually by single upward and forward motion of telescoping gear lever. Simple operating instructions are provided on underside of access plate to electric motor drive disengage.

WING TIP LANDING LIGHTS are standard on all models. 250 watt beams provide brilliant light for landing and taxiing, well clear of the propeller arc.

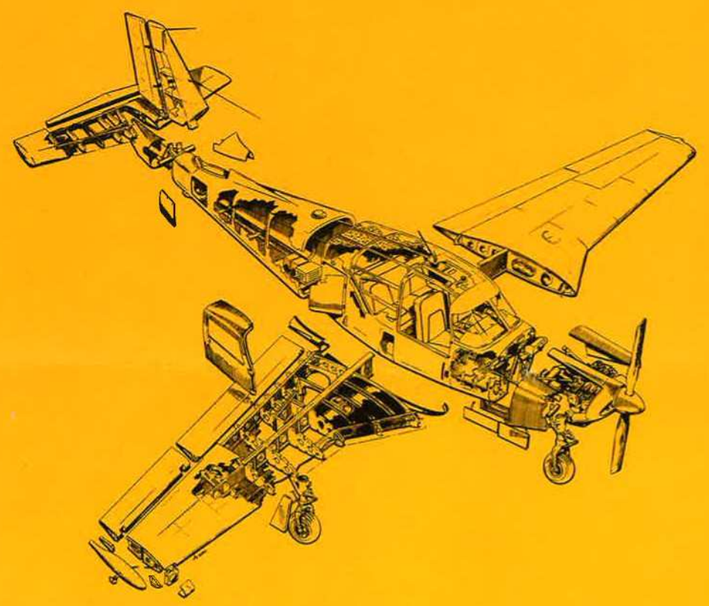
DOUBLE TAIL LIGHT provides maximum visibility from astern, gives dual reliability.

ROTATING BEACON, offered as optional equipment, provides a bright red flashing light visible for many miles.

SIMPLIFIED WEIGHT SAVING, COST SAVING, MAINTENANCE SAVING SYSTEMS

With no compromise in quality, the systems in the Comanche have been ingeniously engineered and meticulously simplified to save weight, reduce complexity, minimize possible malfunction, and greatly cut down the cost of inspection and servicing. For instance, the braking system provides both front seat occupants with brake control yet uses only one stationary brake cylinder instead of four required in conventional dual brake installations. The direct mechanical linkage to operate flaps eliminates usual problems and continual servicing required with electric or hydraulic systems. The Comanche door uses a simple, direct, hand-operated locking pin instead of a complicated indirect locking pin arrangement. These are just a few examples of the many steps taken to eliminate the possibility of malfunction, cut down the cost of maintenance repair and servicing, yet, at the same time, give you an airplane at far lower initial cost. These are real reasons why the Comanche is definitely less expensive to operate than similar type airplanes. Lower initial cost means lower fixed depreciation and insurance rates. Simplified systems mean lower maintenance, inspection and servicing costs. The lighter weight of these systems means more useful payload.

MASSIVE ALL-METAL CONSTRUCTION • UNQUESTIONABLE STRENGTH



Well over one thousand Comanches have established a perfect in-flight record of structural integrity due to two specific design goals of Piper's engineering department. One, knowing that high performance aircraft can quickly build up excessive speed and dangerous flight loads, particular attention was paid to longitudinal stability. This has been achieved with the Comanche's stabilator which automatically tends to bring the nose back toward level flight as speed builds up.

Two, the Comanche's laminar flow wing, while being exceedingly clean, permits a very deep, massive spar which has been static-tested to loads exceeding six times the gross weight of the airplane. Reserve strength, far exceeding FAA requirements, has been built in the Comanche throughout.

LASTING PROTECTION

An exclusive feature of the Comanche is the special corrosion treatment for all interior metal surfaces. Aluminum parts are treated with zinc chromate primer before assembly, assuring protection of surfaces as well as metal between skin laps. This is a more expensive procedure, but is typical of the extra quality evident throughout the Comanche's construction.

Lycoming Power—Your Assurance of Dependability and Economy

You're assured peace of mind when you fly behind the Lycoming engines—180 or 250 horsepower—offered in the Comanche. Lycoming—a name recognized as the finest in business airplane powerplants—gives you both unmatched dependability and exceptional economy due to Lycoming's traditionally long operating periods between overhauls. Between 125,000 and 150,000 miles of travel can normally be expected in the Comanche before an overhaul is needed!

180 HP LYCOMING 0-360

For 160 mph performance with maximum economy, the 180 hp Lycoming engine is your choice. Its simple, four-cylinder design is the result of over 20 years of steady improvement and design refinement by Lycoming. Installed in the Comanche with Dyna-focal motor mounts, it provides smooth, quiet power. As with all Lycoming engines, it is equipped with dual ignition.

250 HP LYCOMING 0-540

The Lycoming 250 horsepower six-cylinder engine has the lowest ratio of weight per horsepower of any aircraft engine in its class, another reason for the Comanche's outstanding climb and payload capacity. This direct-drive power plant purrs away effortlessly as you cruise at an honest 181 mph at 75% power. As with the 180 hp Lycoming, there is no limitation on continuous operation at maximum power output.

	180	250
Rated Horsepower	180	250
Rated Speed, RPM	2700	2575
Bore, inches	5.125	5.125
Stroke, inches	4.375	4.375
Displacement, cubic inches	361	541.5
Compression Ratio	8.5:1	8.5:1
Dry Weight (without installation parts, pounds)	285	396
Fuel Consumption (75% power, gph)	10.5	14
Oil Sump Capacity, quarts	8	12
Fuel, Aviation Grade, octane	91/96—100	91/96—100

PIPER FACTORY CERTIFIED SERVICE

FACTORY CERTIFIED SERVICE

You are assured of efficient, economical maintenance of both your Comanche and your Lycoming engine at any of the Piper Factory-Certified Service Centers located world-wide and staffed by factory-trained personnel.

EQUIPMENT

STANDARD Comanche

INSTRUMENTS
- Airspeed
- **Sensitive Altimeter
- Ammeter
- Compass
- 2 Fuel Gauges
- Fuel Pressure Gauge
- Oil Pressure Gauge
- Oil Temperature Gauge
- Recording Tachometer
- Manifold Pressure Gauge
- *Stall Warning Indicator

POWER PLANT
- Engine—Lycoming 180 or 250 hp. Constant Speed Controllable Propeller with Spinner
- Engine Machined for Vacuum Pump (No Drive Installed), Governor Drive, Packard Shielding, Fuel Pump, 35 Amp Generator, Geared Starter

ELECTRICAL PROVISIONS
- 33 Amp Hour Battery
- Navigation Lights
- Instrument Panel Lights with Rheostat
- 2 Landing Lights
- Cabin Speaker and Front and Rear Dome Lights
- Headphone and Mike Jacks
- Circuit Breakers

FUEL SYSTEM
- Engine Driven Fuel Pump
- Electric Auxiliary Fuel Pump
- Engine Primer
- Quick Drain Gascolator
- Quick Oil Drain
- Two 30-gallon Rubber Cell Fuel Tanks

AIRCRAFT FEATURES
- Cleveland 600 x 6 Wheels and Disk Brakes with Double Pressure Plates; Scott Parking Brake Valve with Control
- Tow Bar, Stowed in Baggage Compartment
- Tiedown Rings

CONTROLS, CABIN FEATURES and ACCESSORIES
- Cabin Heater and Defroster with Controls
- Cabin Ventilators
- Dual Flight Controls
- Mixture Control
- Carburetor Air Control
- Vernier Prop Control
- Door, Ignition and Baggage Locks—All with Same Key
- Front Seat Arm Rests
- Arm Rests for All 4 Seats
- Assist Straps
- Cigarette Lighter and 4 Ash Trays
- Coat Hooks
- Glove Compartment in Right Panel
- Mike Holder
- Landing Gear Warning Horn and Light
- Shock Mounted Instrument Panel
- Adjustable Front and Rear Seats

*Comanche 250 only.
**Gyro and sensitive instruments are reconditioned surplus—CAA Certified.

Piper Aircraft Corporation reserves the right to make changes in specifications, materials, equipment or prices at any time without prior notice or to discontinue models as required.

CUSTOM Comanche

All Equipment of Standard, PLUS:
- Narco Superhomer with 9 Crystals (121.5, 121.7, 121.9, 122.1, 122.5, 122.6, 122.7, 122.8, 123.0)
- Low Frequency Receiver with Separate Power Supply
- Headset Mike and 2 Antennas
- Advanced Instrument Panel** With
  - Artificial Horizon
  - Directional Gyro
  - Electric Turn and Bank
  - Rate of Climb
  - Clock
  - Outside Air Temperature Gauge
- Vacuum Pump Drive and Vacuum Pump

SUPER CUSTOM Comanche

All Equipment of Custom, PLUS:
- Narco Omnigator Mk. II with 9 Crystals, In Place Of Superhomer and LF Receiver
- Lear ADF-12E

AUTOFLITE Comanche

All Equipment of Super Custom, PLUS:
- **Piper AutoControl**

SPECIFICATIONS

	PA-24 "180"	PA-24 "250"
Engine	Lycoming 0-360	Lycoming 0-540
HP and RPM	180 @ 2700	250 @ 2575
Gross Weight (lbs.)	2550	2800
Empty Weight (lbs.)	1455	1600
Useful Load (lbs.)	1095	1200
Wing Span (ft.)	36	36
Wing Area (sq. ft.)	178	178
Length (ft.)	24.7	24.9
Height (ft.)	7.3	7.3
Power Loading (lbs./hp)	14.2	11.2
Wing Loading (lbs./sq. ft.)	14.3	15.7
Baggage Capacity (lbs.)	100	200
Fuel Capacity (standard, gals.)	50	60
Fuel Capacity (with reserve fuel, gals.)	60	

WIDE CHOICE OF ATTRACTIVE COLOR COMBINATIONS OFFERED

Santa Fe Red with Daytona White

Daytona White or Yukon Yellow wing, tail and cabin top are accented by Bahama Blue, Santa Fe Red, Montego Green or Hershey Brown trim

Bahama Blue with Daytona White

Montego Green with Daytona White

Also available:

Montego Green with Yukon Yellow

Hershey Brown with Daytona White

Hershey Brown with Yukon Yellow

Bahama Blue with Yukon Yellow

Printed in U.S.A.

PIPER

AIRCRAFT CORPORATION

LOCK HAVEN, PENNSYLVANIA