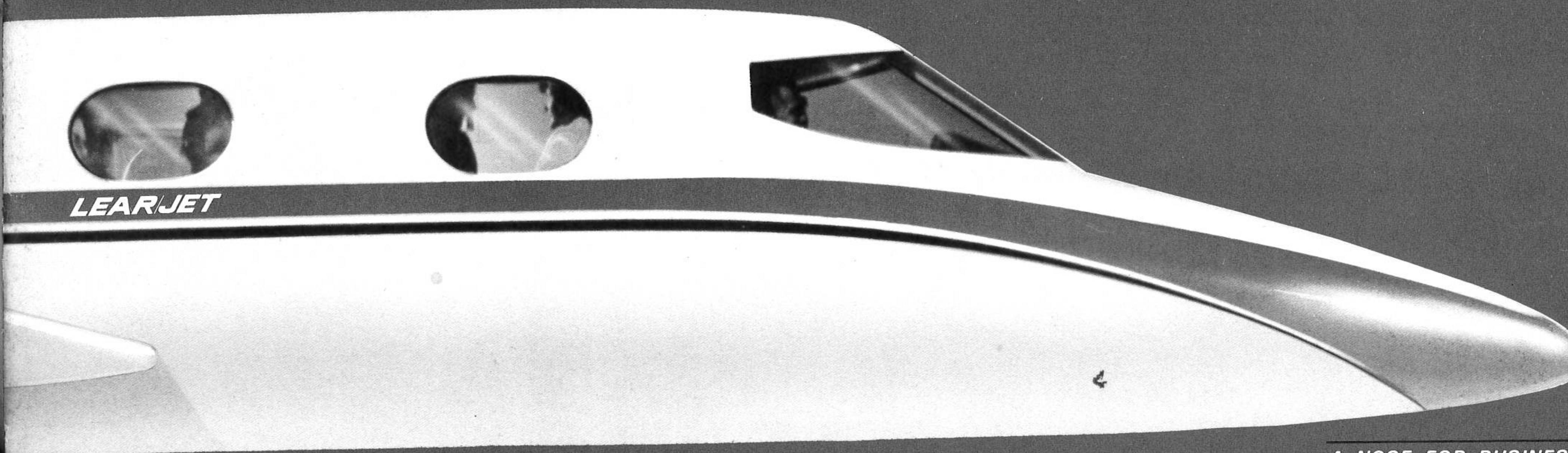
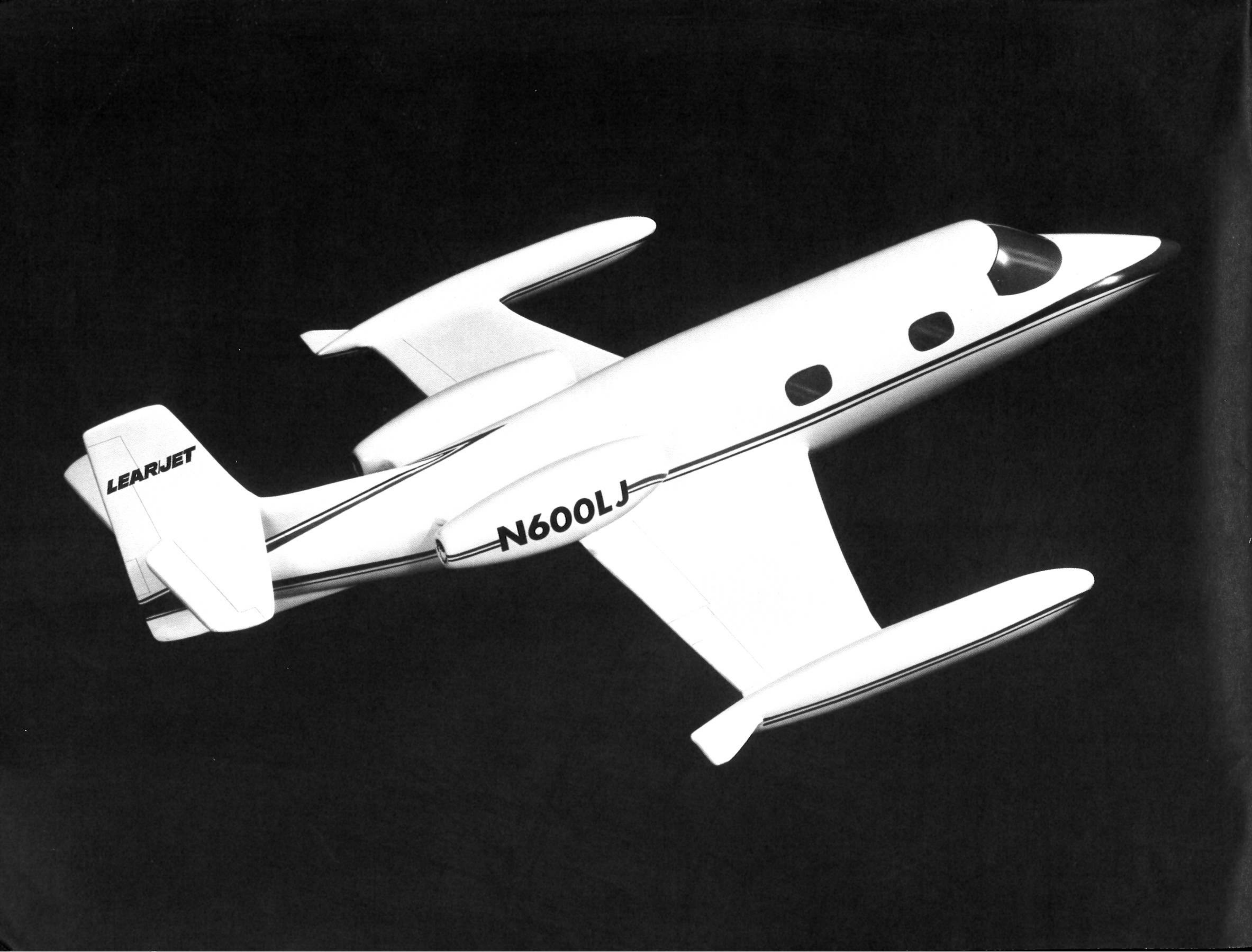
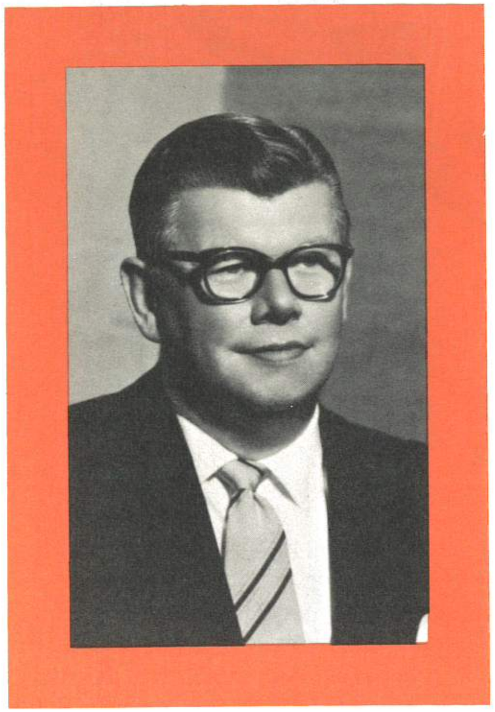
LEAR/JET



A NOSE FOR BUSINESS


LEARJET
N600LJ

PRESIDENT'S REPORT



WILLIAM P. LEAR, SR.
President

This brochure cannot properly describe nor accurately define the LEAR-JET and its performance, but it will disclose features of interest to everyone who reads it.

After three years of intensive study, thorough engineering, wind tunnel testing and theoretical analysis, we are soon to see the results in flight.

Completed production tooling, engineers, engineering and materials from Europe are now located in our new factory and facilities at Wichita, Kansas, with a full force of experienced business aircraft production experts to produce the first flight test article off production tools. Fabrication and production of aircraft will continue uninterrupted during the period of flight testing, permitting Lear-Jet deliveries immediately after certification, (expected in late summer 1963).

Jet airliner, FAA experienced personnel are in charge of the test and certification program. FAA has appointed structural integrity designees in our plant and has assured us of their full interest and support of our certification efforts.

Our flight test facilities are already activated. Our new 96,000 square feet factory can ultimately produce up to ten (10) Lear-Jets per month.

Our total effort is now directed towards the perfecting and production of this pace-setting business Lear-Jet, the answer to the executive who needs sure, swift transportation for himself and his staff at low-cost per seat-mile.

Performance data is based on experienced engineering calculations. We believe it is accurate. Our guarantee is based on these calculations. We expect to meet our guarantee; we hope to exceed it. Finally, the proof of performance is established by flight test. Any comparison of estimated performance presumes equal accuracy and equivalent conservatism — a variable at best; however, after the Lear-Jet is flight tested and certified, other jets similarly tested can be compared. Before that, comparisons are meaningless.

Valid, however, are comparisons of weight-to-thrust ratio, frontal area, wing area, wing-loading, and details of engineering and design. In these, the Lear-Jet excels.

This brochure cannot possibly disclose the ingenuity, artistry or thoroughness of engineering design, nor can it adequately portray the texture, finish, roominess, comfort and luxury of the cabin, the convenience and adequacy of the cockpit, the ease of handling, the judicious selection of instrumentation and radio, or the excellence of the auto-pilot operation.

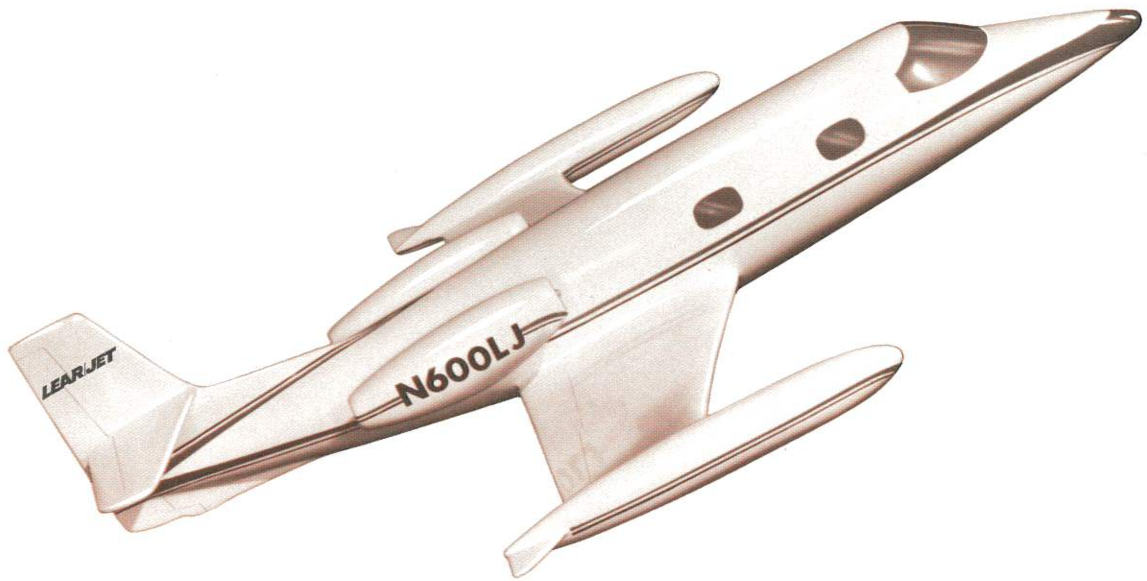
However, we hope this brochure is sufficiently informative to whet your appetite for a test of the real thing, i.e., a Lear-Jet demonstration.

Your order now will assure early delivery in 1964 (previous sales absorb all production for 1963). A small deposit will hold a position for you. Your order is solicited.

Sincerely,

Wm. P. Lear

William P. Lear, Sr.



It looks like a jet — flies like a jet and climbs like a jet. Fast — sure — reliable — easy to fly and economical to own and operate.

Designed to operate out of small airports — needs no special jet ground equipment, power carts, etc. More than 4,000 U. S. airports are adequate for Lear-Jet operation.

This 500 m.p.h. nine-place twin turbine jet weighing less than 12,500 lbs. is powered by General Electric CJ610-1 engines, developing 2,850 lbs. thrust for take-off at sea level. The engines provide almost one pound of thrust for each two pounds of weight. The climb performance is spectacular (8,000 f.p.m.) resulting in excellent small field take-off performance.

High thrust-to-weight ratio gives phenomenal single engine performance (400 m.p.h. cruise at 25,000 feet altitude). Single engine initial rate-of-climb is over 2,000 f.p.m. — greater than most propeller aircraft can climb with two engines.

Air cooling on the ground without main engines running is provided by an APU turbine powerplant, which also furnishes heat and electrical power and the current for starting the main engines. The APU consumes less than 45 pounds of jet fuel per hour.

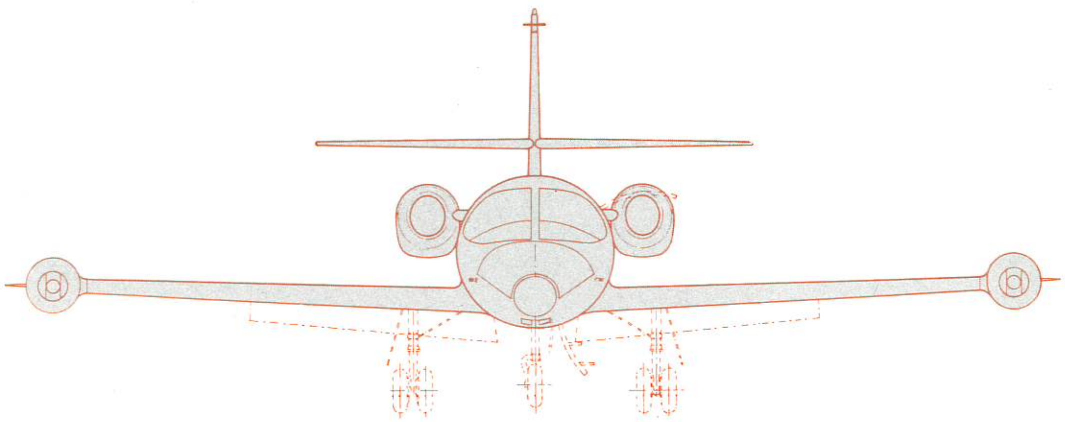
Designed to operate at a 42,000 foot altitude the cabin altitude stays under 8,000 feet. Complete comfortization is provided through air-conditioning, side-wall radiant heating and soundproofing.

The Lear-Jet's clean aerodynamic design with laminar airfoil wings, small diameter round "Area Rule" (coke bottle) fuselage, extremely tight nacelles and well-designed tail configuration results in close to super-sonic performance.

The Lear-Jet is neither a scaled down airliner nor a hybrid conversion. It doesn't look like any other plane, since it was designed specifically as the answer to the business flyer's need.

The engines are mounted far enough towards the rear to reduce engine noise in the cabin. You fly ahead of the noise. They are high enough above the wings to eliminate runway debris injestion, and to be unaffected by wing air flow disturbance due to stalls. They are close enough to the centerline of the aircraft to minimize asymmetrical control problems during single engine operation, and low enough to avoid sonic damage to the empennage.

The tail assembly is specifically designed for structural simplicity and strength. Thousands



of flight hours and a million dollar test and development program are behind its design. It incorporates aerodynamic boost and is statically and dynamically balanced for operation at maximum speeds.

The hydraulically operated two-piece door is structural and instead of weakening the aircraft due to the large opening (1 yard wide by 1½ yards high) it actually provides additional strength to the aircraft.

The cabin emergency exit (19 x 28 inch) is through one of the very large windows on the right side of the cabin.

Windows and windshield are stressed for six to seven times normal loads, although certification pressure test requirements are only 1½ times normal. Side windows are provided with anti-noise acoustapanes.

Dual panes are used throughout to provide a second window for additional safety. Engine compressor hot air keeps them hot and dry. Due to low streamlined windshield angle, no windshield wipers are required (similar to the Lear Star).

De-Icing of windshield and nacelles is by engine compressor hot air.

Cabin pressurization supplied from the turbine compressors is automatically controlled at all times. Either engine alone can maintain cabin pressure.

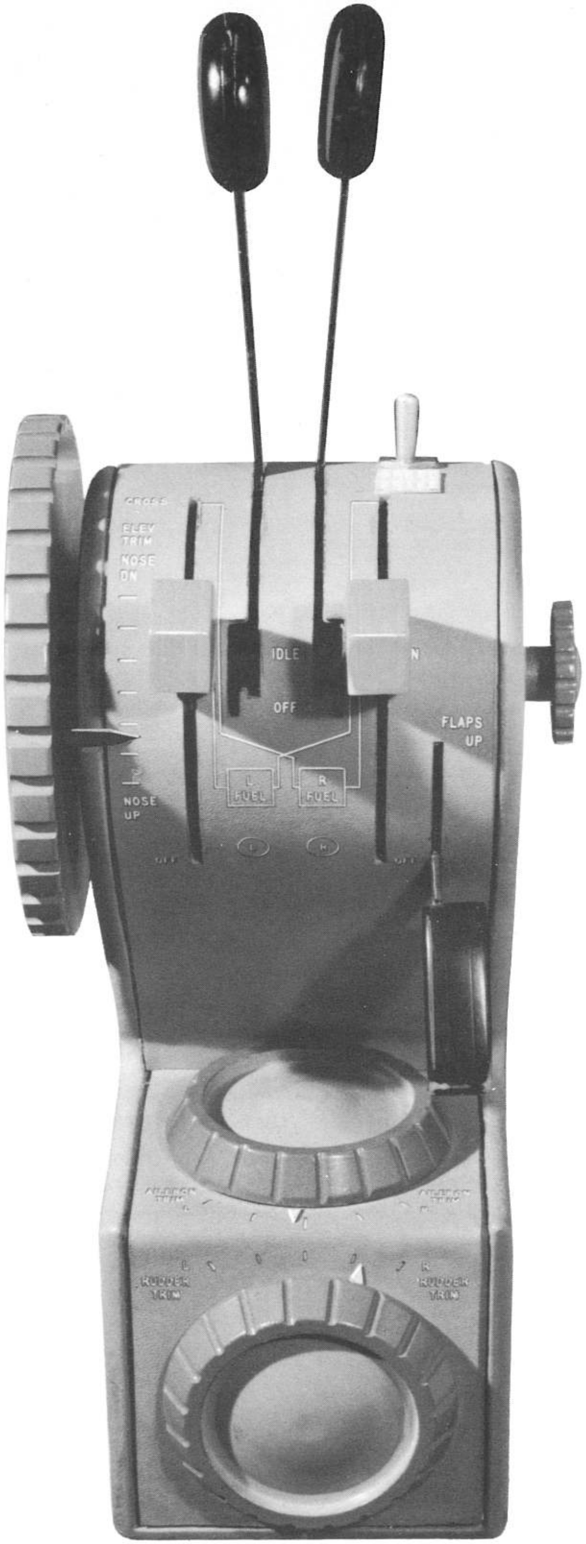
Hydraulic landing gear actuators are fed from either of two engine-driven pumps, with a separate emergency electric pump system plus a manual, free-fall release.

The five-wheeled tricycle gear uses the same size wheels and tires all around. Dual main gear wheels permit operation off sod or grass strips. Soft landing and smooth taxiing is provided by special landing gear strut design. Main undercarriage doors are closed when gear is retracted, also closed when gear is down. The gear may be used as an emergency speed brake as it is designed to be let down at altitude cruise speeds.

A speed or dive brake provides normal drag for slowing the aircraft.

Baggage is carried in the pressurized cabin behind the divan seat.

Conveniences and comforts of the cabin include refreshment cabinet, ice chest, liquor storage, toilet, single and double width work table, reclining chairs, reclining divan, ash trays, window sunshades and emergency oxygen system.



The Lear-Jet cockpit represents the experience of thousands of hours of IFR and VFR flight in hundreds of cockpits. It is the culmination of designing hundreds of panel layouts and instrument arrangements in dozens of cockpits. More than a control station, it is the pilot's private operating room designed by a pilot, for a pilot. It is designed to make the pilot proficient, efficient and comfortable with special concern for his protection against cockpit gremlins that scratch skin, scar knuckles, bump heads and irritate knees. (Example: no overhead controls — no between-seat pedestals.)

Seats adjust to the mighty midget and the tall Texans equally well. The cockpit has elbow room, a place to rest your arms, room for your feet, and easy accessibility. It doesn't require the supple litheness of a double jointed acrobat to get in and out. A pilot can have complete privacy when desired, and he has a place within reach for everything — flight data, maps, computers, cigarettes, ash trays and all controls. All instruments are easy to see, controls respond properly and logically, there is radio in abundance, radar where it can be watched and an auto-pilot to relieve him for the job of directing the whole flight.

The Lear-Jet cockpit keeps the pilot warm or cool, protects him from the sun and yet provides him with panorama-vision (170°) with a minimum of center post visibility interference (2½" wide).

The Lear-Jet Instrument Panel is rich in duality, visibility and convenience. Six separate panels — each easily removable for inspection, insure easy maintenance.

Dual engine instruments are thrust indicators, E.P.R., R.P.M., exhaust gas temps, fuel flow, oil pressure, oil temp, and fuel quantity gauges.

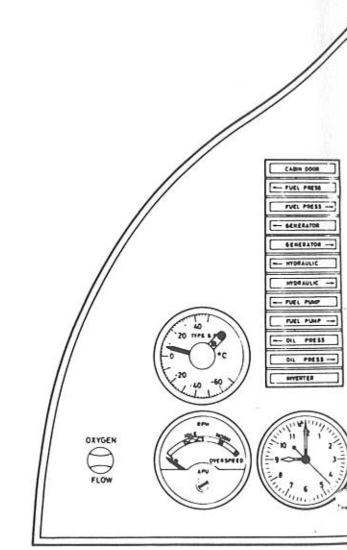
The fuel gauges always read tip tanks (which empty last) except when the wing switch is depressed.

On the pilot's panel is a Lear VGI vertical gyro repeater, unlimited in roll indication (360°) with 85° freedom in pitch, the standard altitude instrument for all U. S. A. fighter jets.

Below is the course director, providing a graphic display of heading, direction and position with respect to the localizer or VOR course. It is also used as a VOR course selector, glide slope indicator and has ILS warning flags.

The air speed data unit indicates both air speed and Mach, plus warning limits for both.

An altimeter with partial digital read-out reduces the chance of mis-reading. Secondary instruments are bank and turn and rate-of-climb indicators. See "Equipment" for detail list of instruments and radio.



PILOT'S SUB-PANEL

ADF, RMI and VOR RMI provide relative direction to station information.

DME indicator provides distance and ground speed information. The extra cross-pointer connected to the other NAV Receiver provides a cross-check for the pilot.

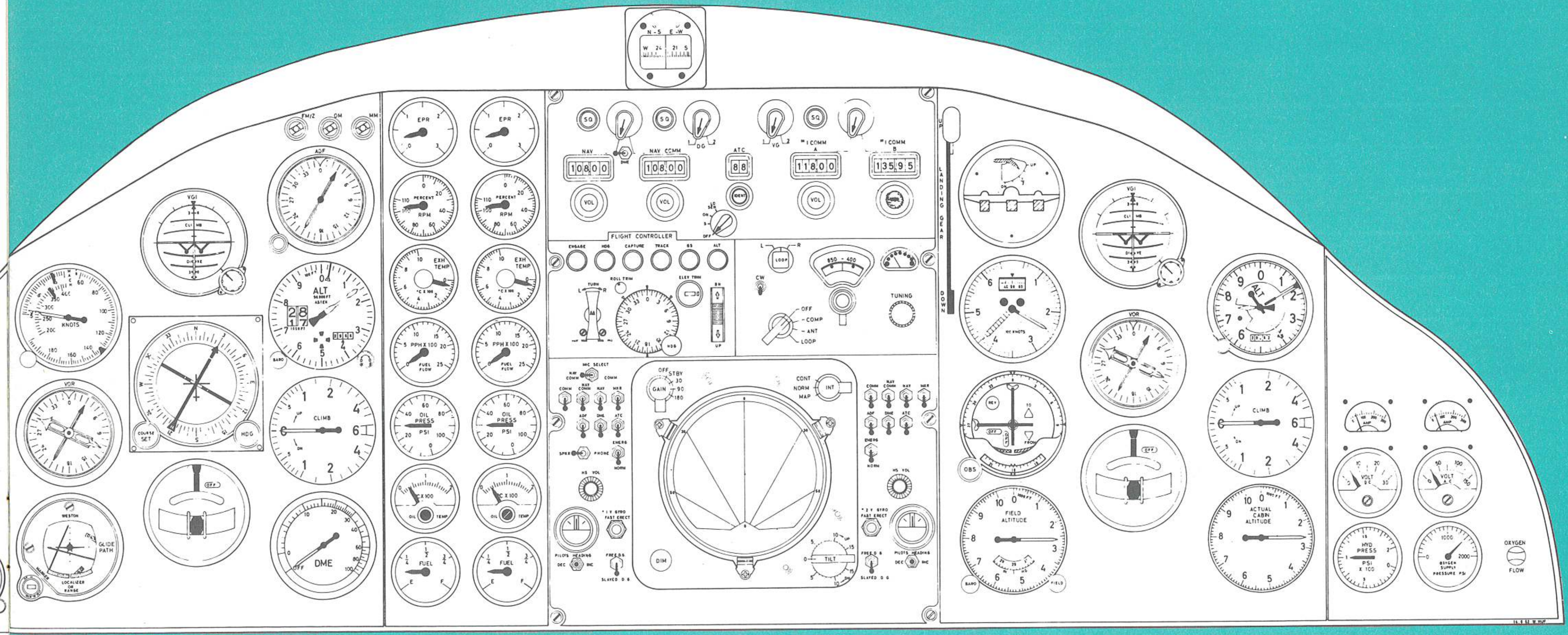
Next to the undercarriage lever at the top left-hand corner of the co-pilot's panel, is the flap and gear position indicator. The co-pilot's instruments on the co-pilot's panel are Air Speed Indicator, VGI, Sensitive Altimeter, Omni-bearing Selector, VOR RMI, Bank and Turn, Rate-of-Climb, and cabin pressurization controls.

On the radio panel are the controls for the Radar, Transponder, DME, ADF, Radios, Auto-Pilot, Beam Coupler, Remote Gyros, Audio System and Gyro-Slaving, as well as selection of either navigation receiver into the auto-pilot, of either remote DG or VG in the Auto-pilot and either VOR selector for the DME, and either of the two Comm transceivers.

On the pilot's sub-panel are warning indicators, outside air temperature gauge, APU-RPM, clock and oxygen flow indicator.

On the co-pilot's sub-panel are the generator ammeter and voltmeters, oxygen supply gauge and hydraulic system pressure gauge.

The magnetic compass is at the top center of the glare shield. In the side consoles are mounted circuit breakers, lighting switches, dimmers, starter, ignition and all other switches.



PILOT'S FLIGHT PANEL

ENGINE GAUGE PANEL

RADIO PANEL

CO-PILOT'S FLIGHT PANEL

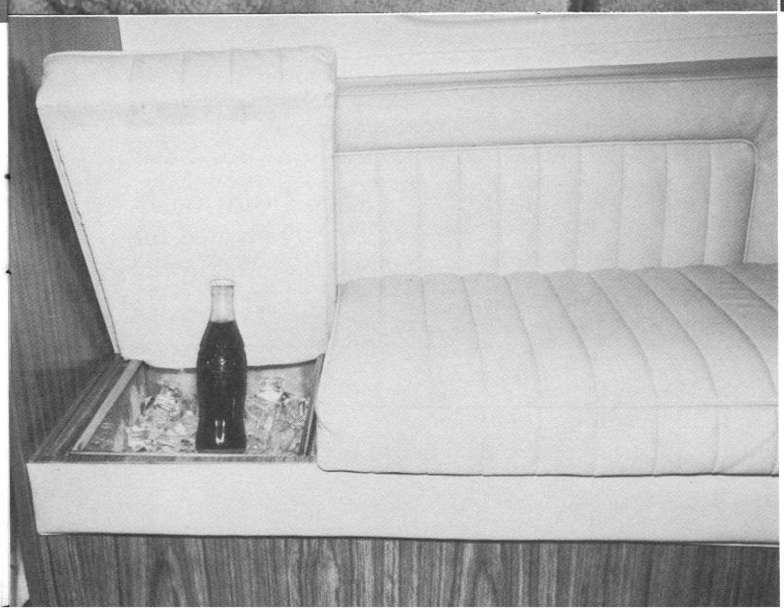
CO-PILOT'S SUB-PANEL

The cabin and interior furnishing of the Lear-Jet represent the greatest ingenuity and artistic skill ever applied to an aviation problem. Here the problem involved tasteful selection of textures and color to achieve luxury, convenience, comfort, roominess, flexibility, despite the limitations of space and requirements for lightness and consideration for cost. A careful study of the result discloses total accomplishment.

A deeply upholstered divan seat for two or three has a center arm rest when desired, and two position reclining backs with fold down arrangement for easy access to the baggage compartment, located immediately behind it.

Two rearward facing seats fully adjustable for sitting or dozing, have fold down backs to facilitate easy entrance or exit from the cabin. These seats move fore and aft on floor slides and can quickly be removed or easily be reversed to face forward.

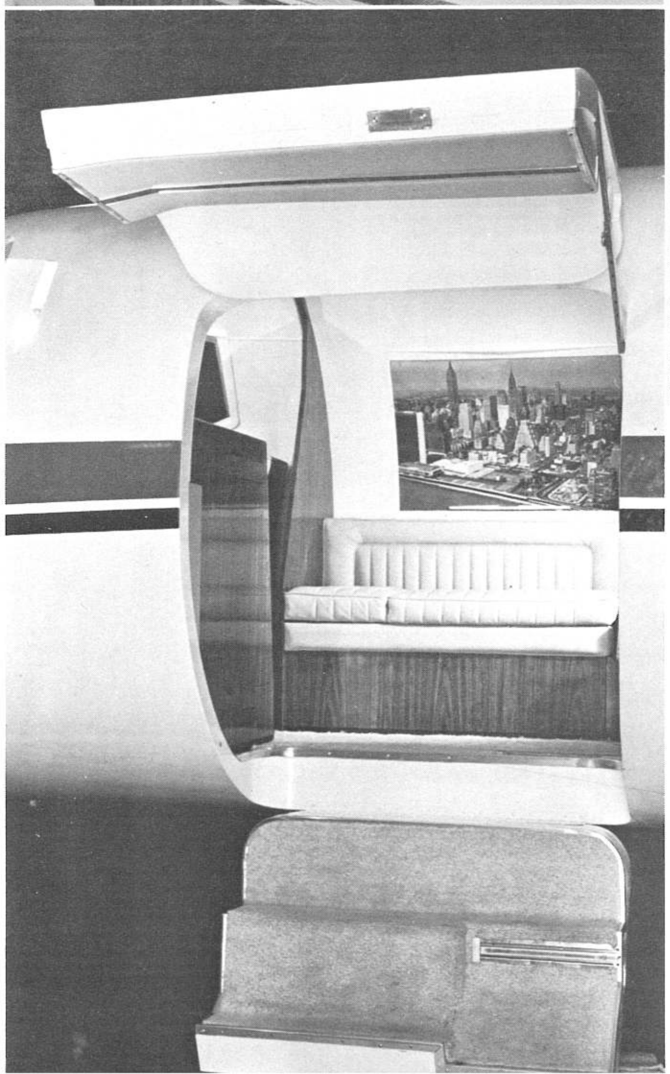
A bench seat for two, cleverly conceals a toilet and storage compartment with a magazine rack at the side. Opaque curtains provide

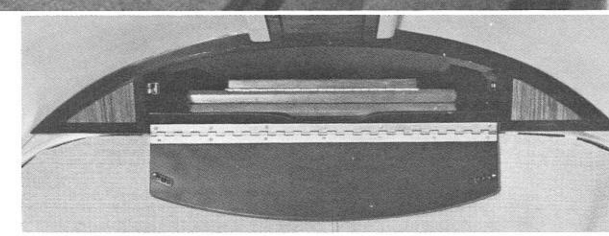


toilet or cockpit privacy when needed, disappear when unused.

Opposite the bench seat is a refreshment cabinet to which is attached a convenient table. The cabinet contains three one-quart vacuum jugs, a plastic cup dispenser, a liquor cabinet and two storage compartments — one below for refuse, tools and dust cloths, the upper one for candy, gum, cards, medicine, sugar, spoons, etc.

On each side of the cabin in front of the divan seat and available even when the work table is in place are convenient ash trays, as well as receptacles for cards, cigarettes, etc.

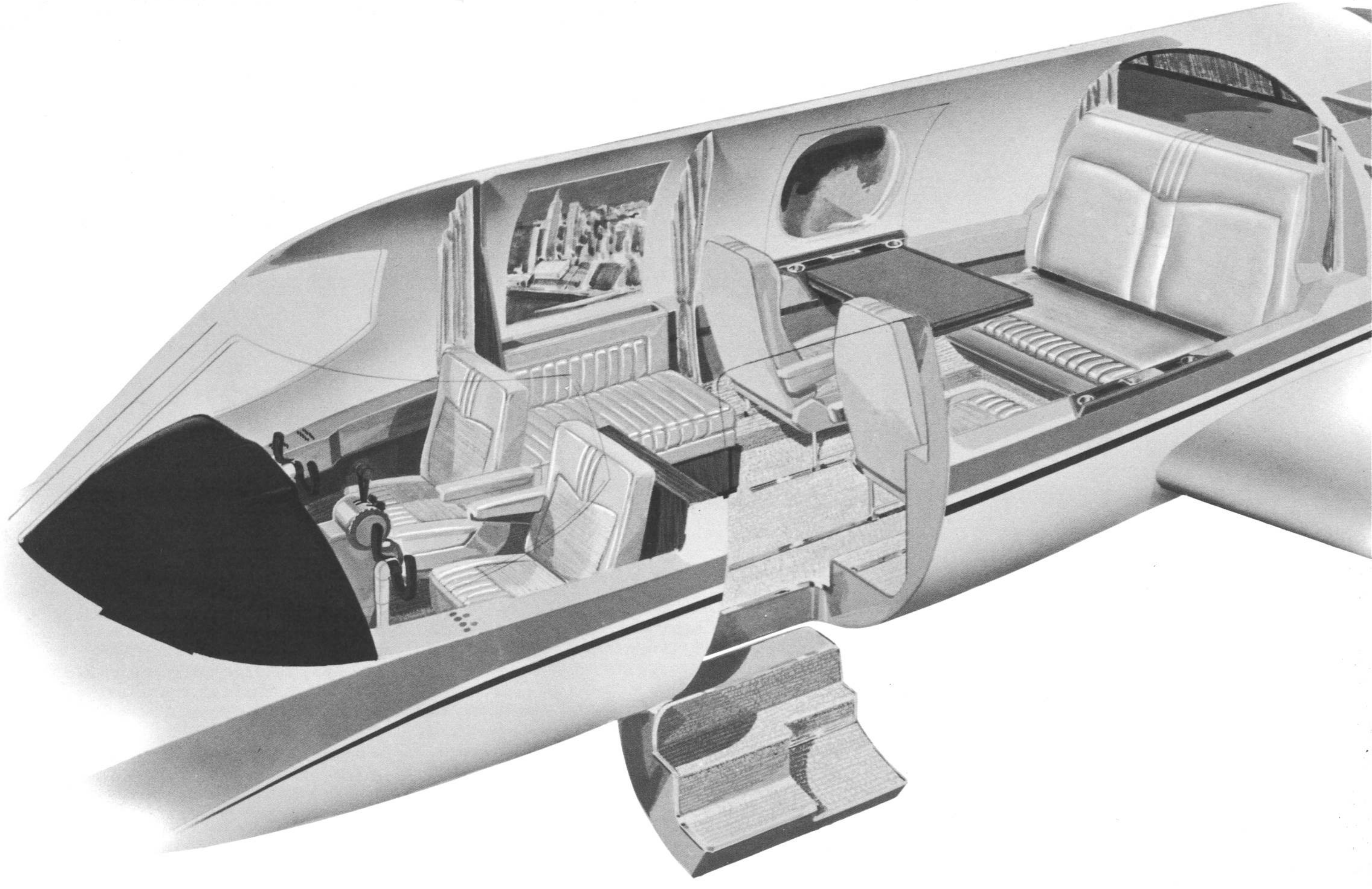




Plastic window shades are provided to protect the occupants from glare and direct sunlight and provide protection against the greenhouse effect on the ground. Externally window shades are sun-reflecting white, and beige colored inside. Pictures, portraits or scenery can be added optionally.

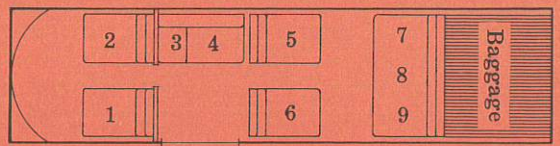
The interior tastefully combines beige and walnut, with all metal surfaces, matte silver.

The double work table, surfaced with washable nylon felt, is easily and quickly erected for use and as quickly folded and stored away above the baggage compartment.

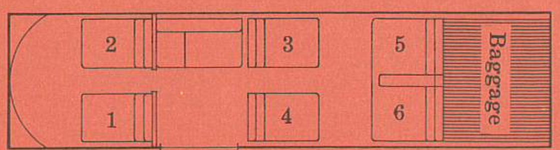


five creative cabin configurations

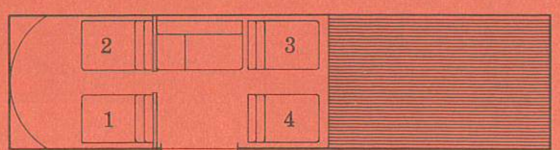
(All Standard Equipment)



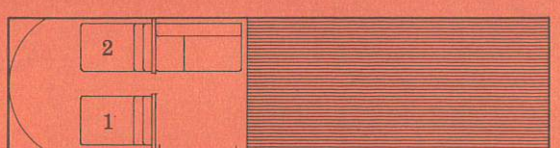
1. Nine place maximum seating.



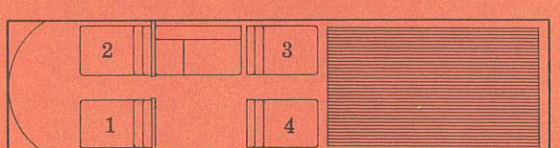
2. Six place.



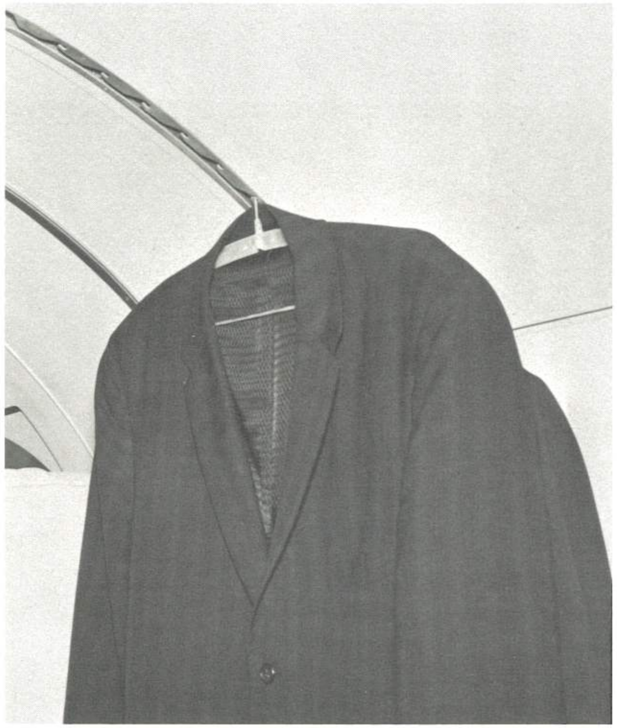
3. Divan backs folded down for full cargo load.



4. A full cargo carrier.



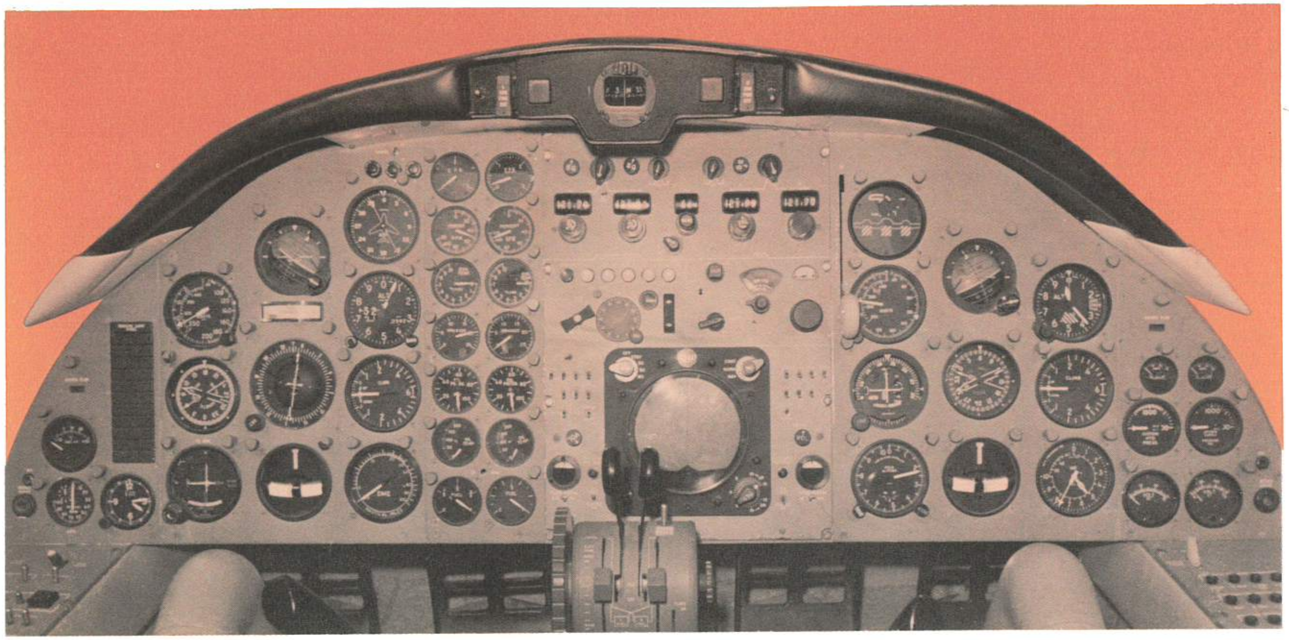
5. A litter carrier for military-hospital application accommodating patients plus two medical attendants, pilot and passenger.



A flush-mounted clothes rack is located just inside the door. The baggage compartment located aft of the divan seat, holds a station wagon load of baggage (41.5 cubic feet). The folded down divan seat backs give easy access and provides an often needed convenience of being able to reach any luggage in flight. Having these items stored in the heated, pressurized section affords added protection and convenience.

The baggage compartment, together with most of the cabin, can be used for cargo carrying when desired.

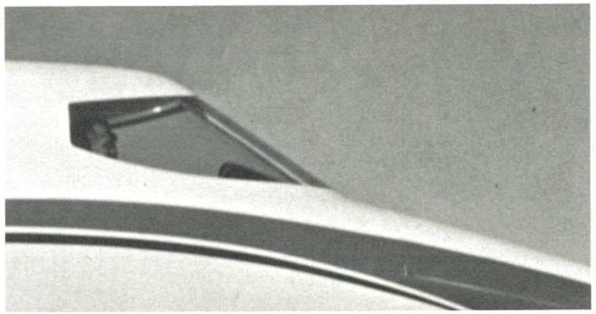
The unusually large door opening is designed to permit easy loading and unloading of passengers, cargo or litters. The yard wide door enables a standard marine litter to be loaded into the cabin without the necessity of tipping or canting while loading the patient. Two or possibly three patients may be carried plus doc-



tor, nurse and crew.

The Lear-Jet automatic flight stabilization and path control system represents the ultimate in performance and reliability. The important part of any Auto-Pilot system is the *gyros*. The Lear-Jet has two complete sets of gyro references (2 D.G.s - 2 V.G.s), any combination of these four gyros is selectable at will for use with the auto-pilot and pilot's instruments, thus providing dual auto-pilot reliability. This Lear-Jet feature is designed to permit operation under ceilings of 100 feet and visibility of one-quarter mile as a routine matter, increasing the jet's maximum useful range. Beam Path Coupler assures accurate beam guidance, including automatic cross-wind correction and automatic altitude hold.

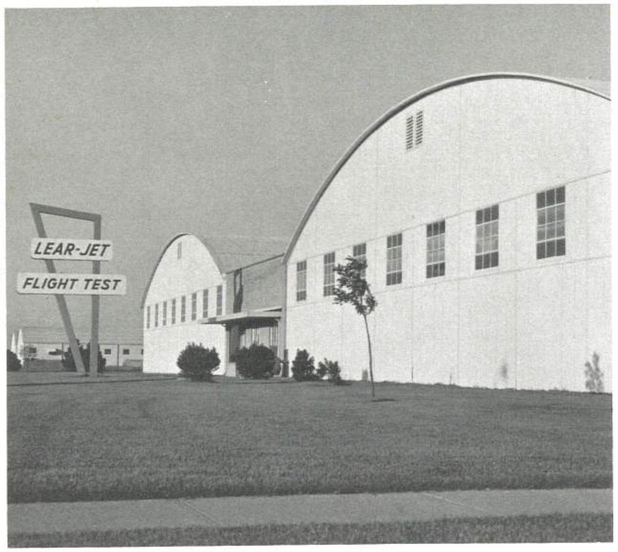
Piloting the Lear-Jet will be like driving with power steering as both boost and artificial damping in the yaw and roll axis are provided.



HOME OF THE LEAR-JET

The building shown is phase one of the expansion program
located on 64 acres of the Development Site
known as

LEAR AERO ''SPACEWAY''



The following pages present estimated performance data showing range, speed, time, distance and fuel required for climb and descent. Charts are used in the following manner:

Range Curves (Page 14)

All are used with uniform procedure.

Maximum range shown is fuel exhaustion range (FAA minimum) for the altitude flown. To determine amount of holding fuel available with full fuel at take-off, proceed as follows:

At the destination distance drop down to the slanting line for the altitude at which cruise flight was conducted — proceed left to the vertical scale showing hours of fuel remaining for holding at 20,000′.

The effect of wind on range is shown on the lowest scale. This part of presentation can be used two ways:

To determine the increase or decrease in range for varying wind speeds or to determine the wind speed knowing the loss or gain in the predicted range.

Enter from wind value on the lowest vertical scale and move right horizontally across the curve to intersect the intended cruising altitude — proceed vertically from this point to intersect with the zero altitude range line. Read difference from predicted maximum range. To determine wind speed proceed conversely.

The times shown on the various altitude cruise lines are cumulative.

Speed Curves (Pages 15 and 16)

a. Speed capabilities at maximum continuous power shows capabilities at various altitudes in ICAO standard atmosphere and relation of speed capability to VMO-MMO curve.

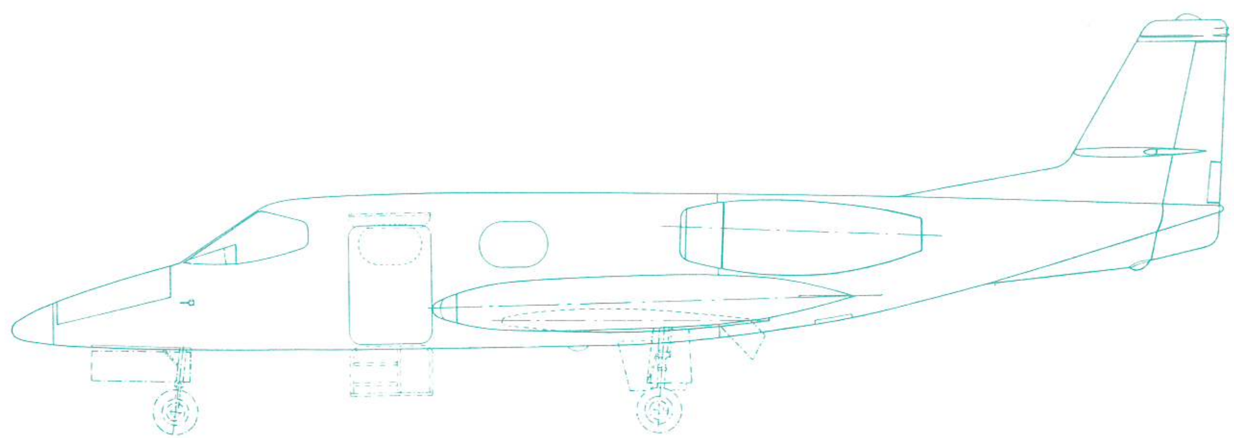
b. Single-engine speed and climb performance shows capabilities on single engine using maximum continuous thrust. This curve also shows single engine ceiling.

c. Block Speeds—For all ranges from 250 to 1720 nautical miles at altitude from 25,000 to 45,000′ at optimum range and .8 Mach no. cruise. Enter curve at range. Proceed to cruise altitude for cruise program to be flown and read block speed on left vertical scale.

Time, Distance and Fuel Curves (Page 17)

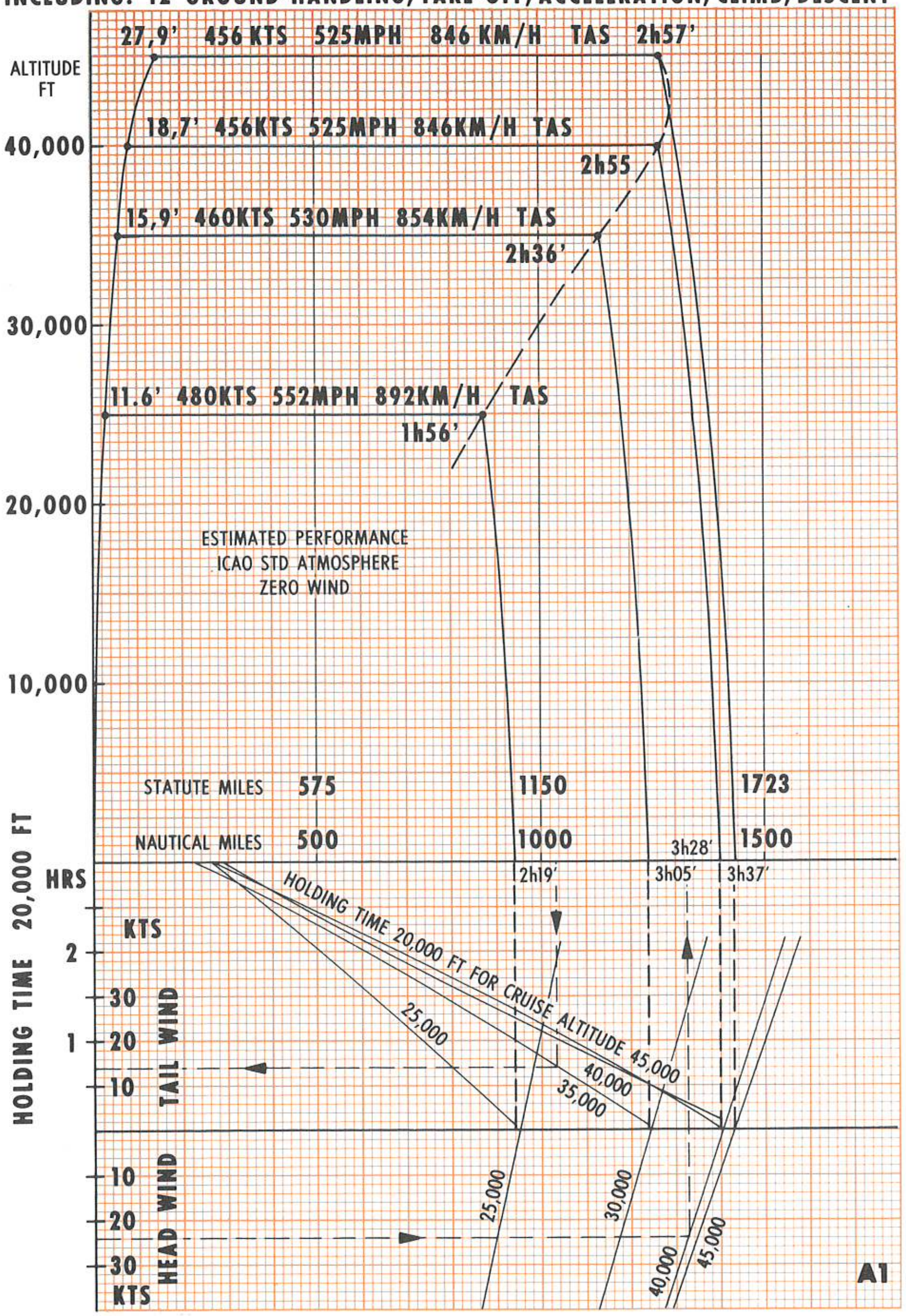
a. Climb — Shows time required, distance covered and fuel used to climb to a given cruise altitude. Enter curve from the left at desired cruise altitude. Proceed horizontally right to intersection with proper weight line in time, distance and fuel used curves. From this intersection drop vertically to the scales for each category and read directly.

b. Descent — Shows time distance and fuel required for descent, at idle thrust intermediate thrust and thrust required to maintain 250 KTAS. Use same as Range Curves.



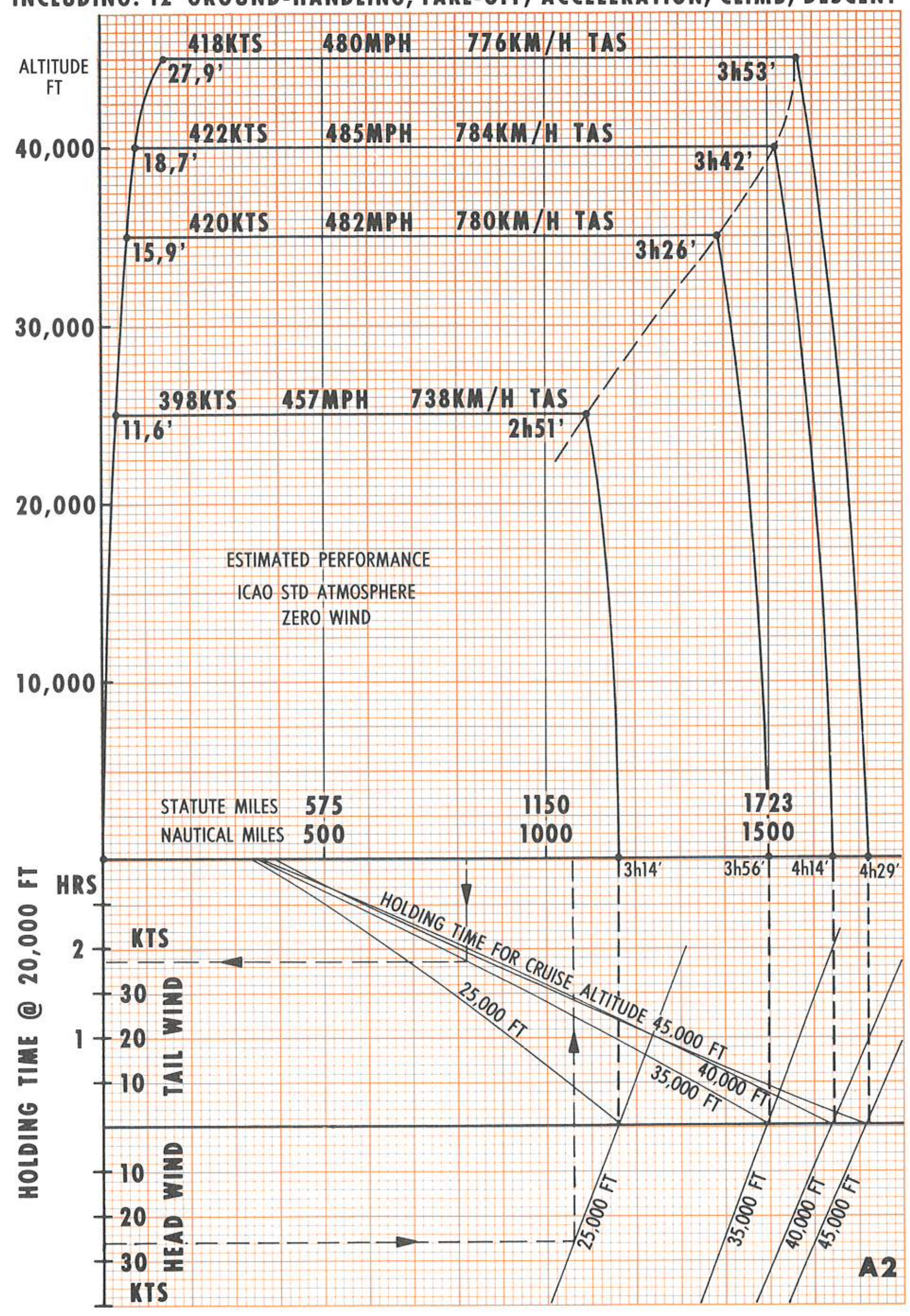
HIGH SPEED RANGE @ M_{CR} =.80

INCLUDING: 12' GROUND-HANDLING, TAKE-OFF, ACCELERATION, CLIMB, DESCENT



OPTIMUM RANGE

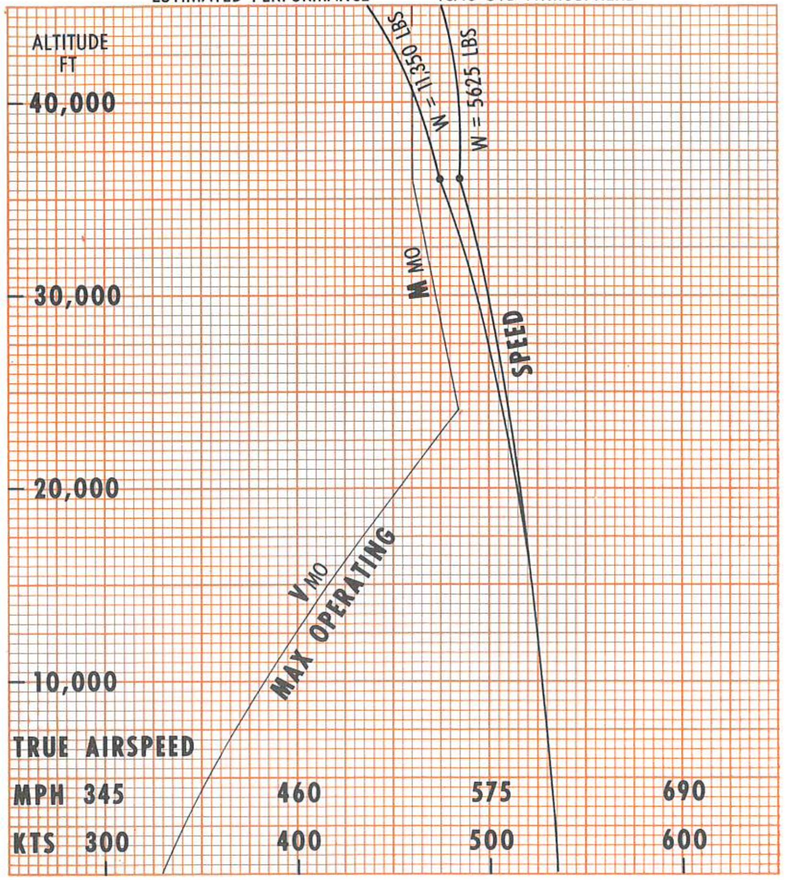
INCLUDING: 12' GROUND-HANDLING, TAKE-OFF, ACCELERATION, CLIMB, DESCENT



MAX. LEVEL SPEED

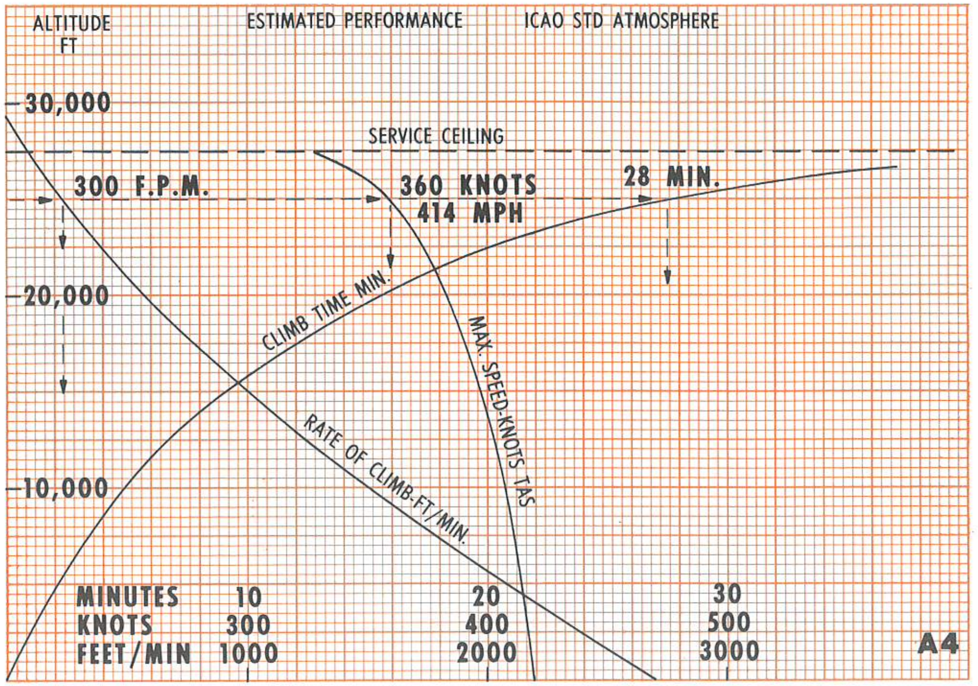
WITH MAX. CONT. POWER

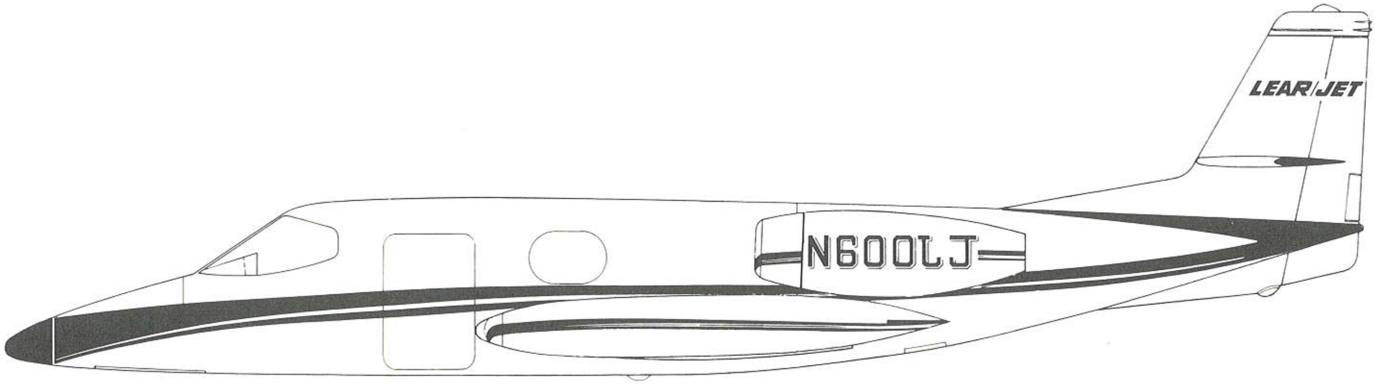
A3

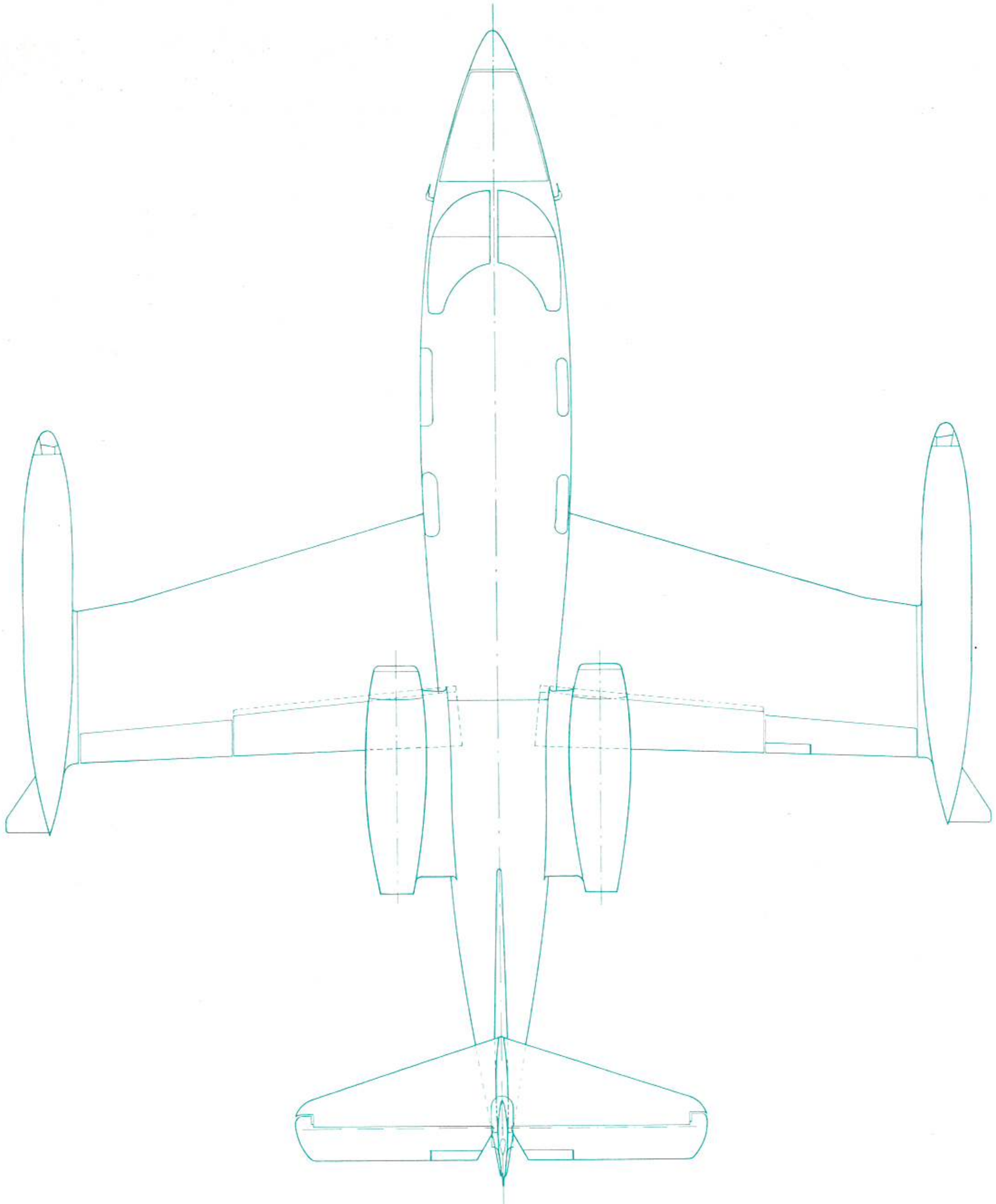


SINGLE ENGINE PERFORMANCE

@ MAX.CONT.POWER

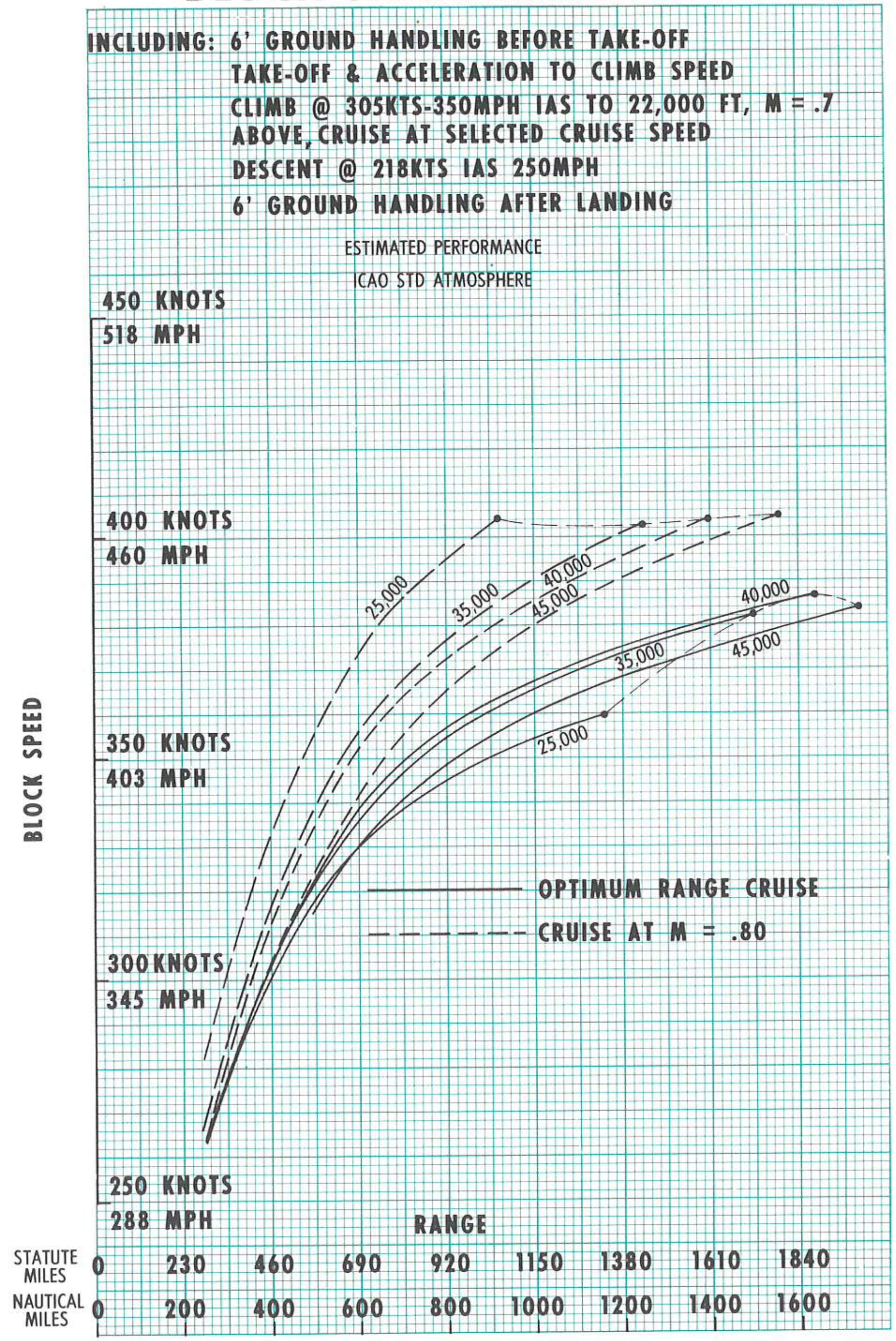






BLOCK SPEED vs RANGE

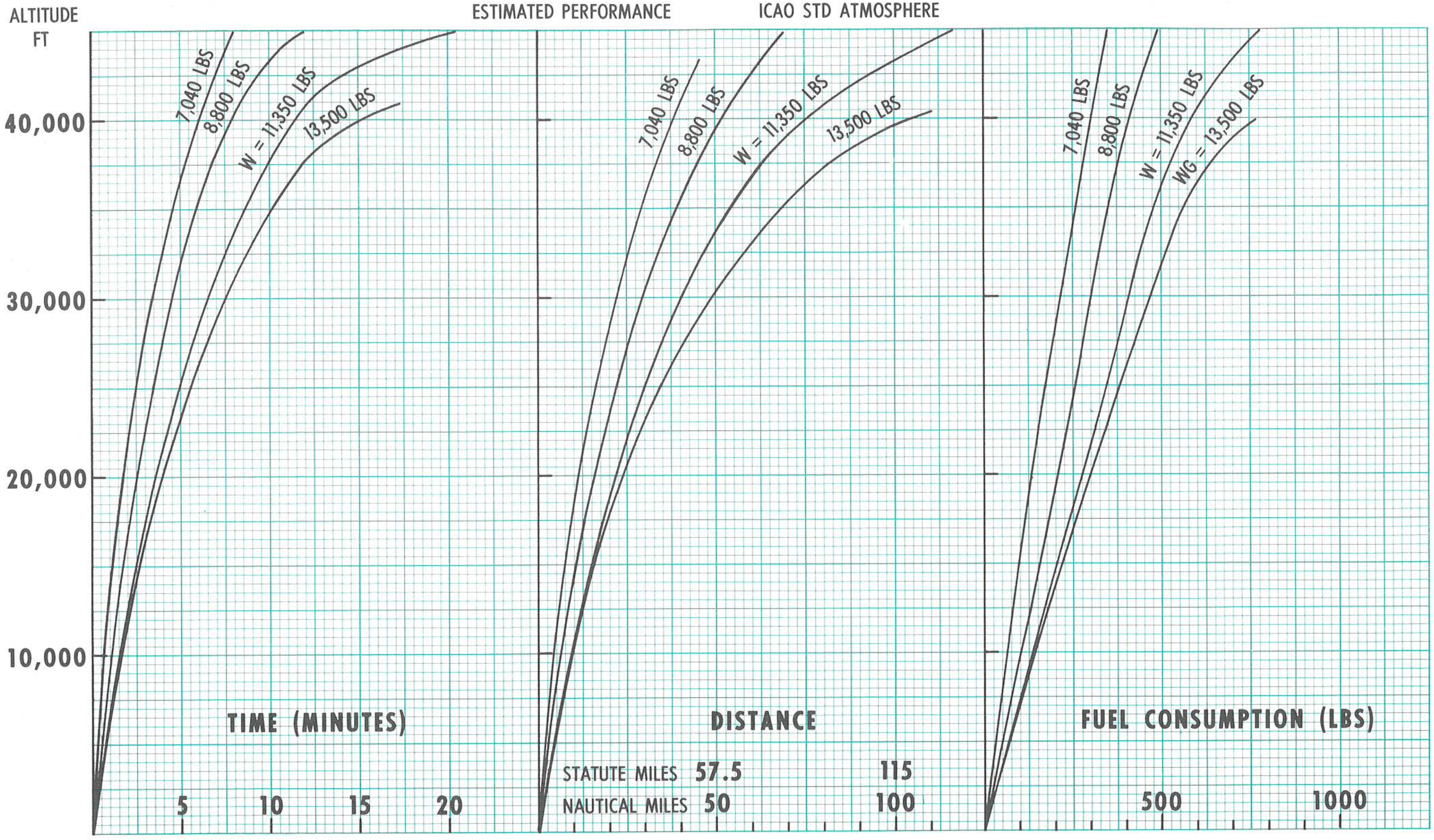
A5

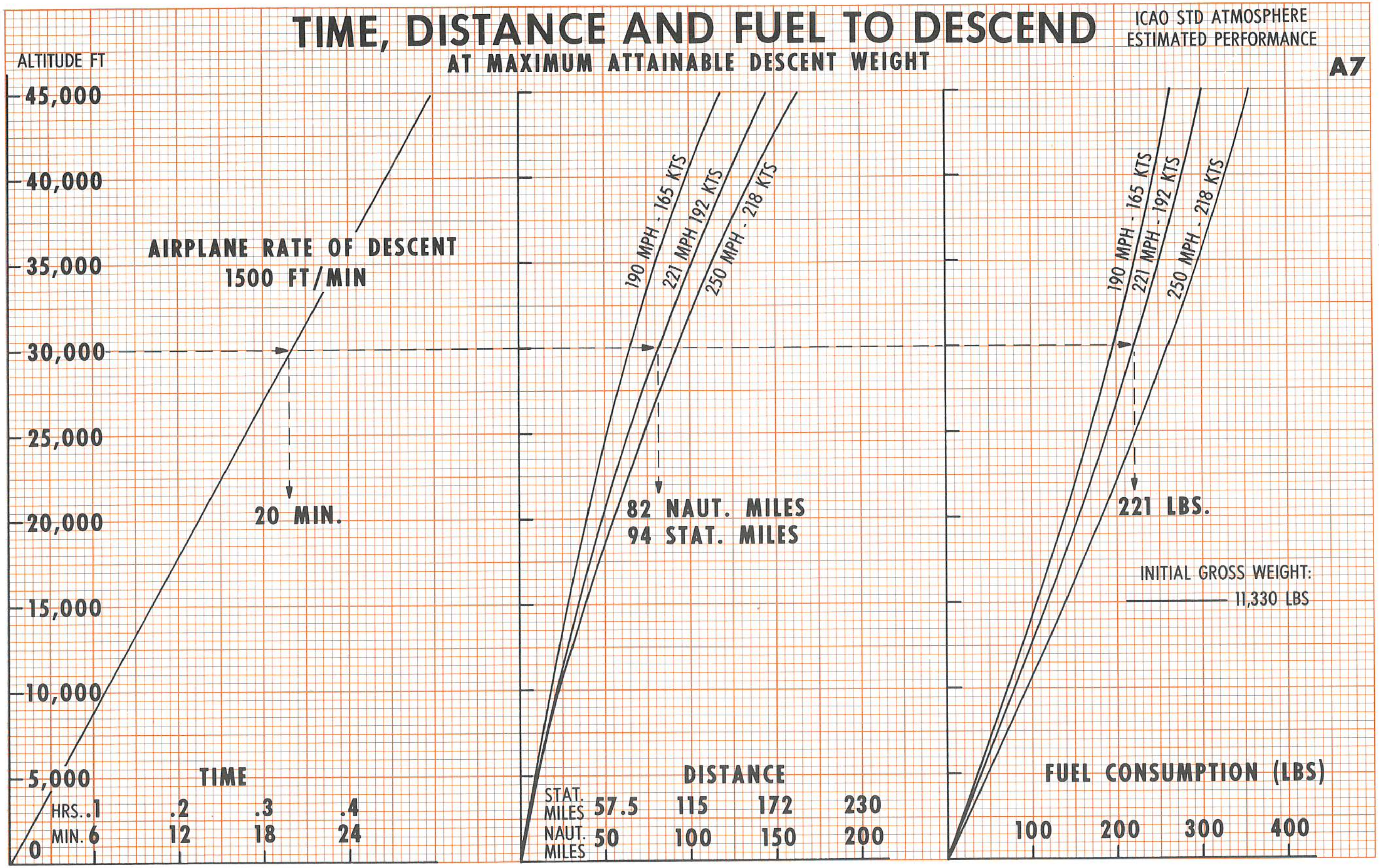


TIME, DISTANCE & FUEL CONSUMPTION FOR CLIMB

A6

ESTIMATED PERFORMANCE ICAO STD ATMOSPHERE





TIME, DISTANCE AND FUEL TO DESCEND
AT MAXIMUM ATTAINABLE DESCENT WEIGHT
ICAO STD ATMOSPHERE
ESTIMATED PERFORMANCE
A7
ALTITUDE FT
45,000
40,000
35,000
30,000
25,000
20,000
15,000
10,000
5,000
0
AIRPLANE RATE OF DESCENT
1500 FT/MIN
20 MIN.
TIME
HRS. .1 .2 .3 .4
MIN. 6 12 18 24
190 MPH - 165 KTS
221 MPH 192 KTS
250 MPH - 218 KTS
82 NAUT. MILES
94 STAT. MILES
DISTANCE
STAT. MILES 57.5 115 172 230
NAUT. MILES 50 100 150 200
190 MPH - 165 KTS
221 MPH - 192 KTS
250 MPH - 218 KTS
221 LBS.
INITIAL GROSS WEIGHT:
11,330 LBS
FUEL CONSUMPTION (LBS)
100 200 300 400

FACTORS INVOLVED IN CALCULATION OF ESTIMATED OPERATING ECONOMICS—

Economical to operate, the Lear-Jet is a business tool for increasing your profit. Because of its high speed you will be able to double the distance or trips each day.

Small and light, it's easy to hangar and handle, will require a minimum of maintenance.

Crew cost will be lower per mile. The Lear-Jet will make money by saving time, expenses and fatigue of your top personnel. It will enable your salesmen, engineers and executives to greatly increase their radius of operation and still arrive on and from the job fresh and relaxed because of their swift, quiet pressurized-cabin ride above the weather. Your Lear-Jet will bring customers to your plant the same way — refreshed, impressed, and ready to do business.

Price is complete, there are no extras to buy. You'll benefit thru standardization, lower maintenance, universal serviceability, pilot interchangeability and cost.

The cost of operating an airplane can be figured at so much per hour, per mile, or per seat mile. In any event, the cost per mile is always in relation to speed.

For example: If a DC3 costs $148.00 an hour to operate (figured on 50 hour per month utilization, at a block speed of 165 mph) it costs 90 cents per mile. This formula applied to an airplane that goes three times as fast (500 mph) and costs twice as much per hour ($296.00) indicates that the faster airplane will cut travel time by two-thirds and will decrease mile costs by one-third. Divide this figure by the number of passengers to compute seat mile costs.

I. FIXED COSTS

Defined as those costs which remain to be paid regardless of whether or not the aircraft is in use.

1. Depreciation:

   Many methods and basis for calculation—We have chosen a straight line method covering 7-year period to a 40% residual value.

   Costs: Airplane Purchase Price Complete $489,000

   Yearly Depreciation $41,914.30

2. Insurance:

   This covers a no deductible hull premium liability insurance including — — Single limit, legal and implied liability and medical coverage.

   Costs:

   a. Hull Insurance Premium — 3% $14,670.00

      1. Lear-Jet insurance rates have been quoted at 3% if pilot qualifications are verified by Lear-Jet check-out team.

   b. All Liability Insurance $1,476/year

   c. Medical & Hospital Insurance:

      $20.00 each for
      $5,000 coverage per seat . . . . . . Total $140/year

3. Hangar Rental (National average) $3,000/year

4. Miscellaneous Costs:

   These include such items as apply to administratively support flying operations and cover technical and training flying. Chart and map costs, landing and parking fees, airport-to-town taxi costs, paper, cups, towels, stationery, postage, telephones, telegrams, etc. $5,000/year

Note: Normally crew cost are included in the fixed yearly cost—For the reasons that in many cases no professional pilots will be used and reflecting the fact that pilot's salaries and indirect costs and benefits vary, the crew costs have been omitted.

Estimated total annual Fixed Costs $66,060.80

II. ESTIMATED VARIABLE COSTS PER HOUR

(Defined as those costs which totally vary in proportion to yearly number of flying hours)

1. Fuel & Oil:

   Fuel costs reflect operations variables such as stage length, cruising altitudes, cruising methods, etc. (See performance charts)

   a. Fuel . . . . $.27 per gal.

   Oil costs are calculated from data supplied by the engine manufacturer on the basis of .1 gallon of oil per hour.

   b. Oil . . . . $1.30 per hr.

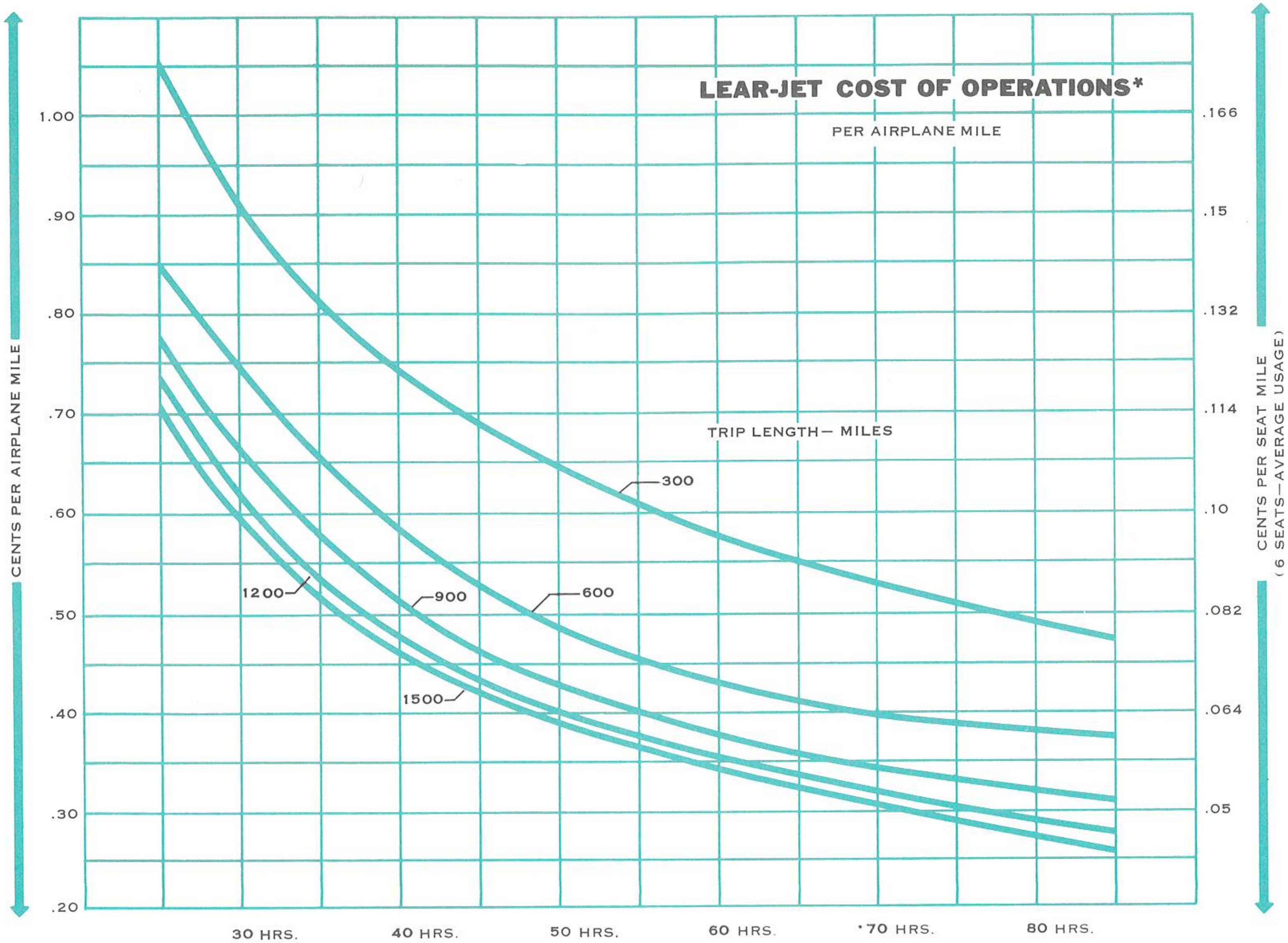
2. Maintenance and Overhaul Costs:

   These costs are calculated to include allowances for all periodic and routine maintenance, inspections and overhaul applying to airframe, engines, radio, instruments, accessories, etc.

   a. Routine maintenance and inspection.
      1. Airframe and Engines
         a. Periodic inspections . . . . $500 each
            100 hours at $5.00/hour
         b. Routine maintenance . . . . $.85/hour
      2. Other Equipment
         a. Routine maintenance . . . . $.38/hour

   b. Overhaul
      1. Airframe and Engines
         a. Airframe . . . . $.35/hour
         b. Engines at $12.50 each—800 TBO (Costs supplied by G.E.) . . $25.00/hour
         c. Other Equip. 1200 hrs. TBO $4.25/hour

Total Maintenance and Overhaul $35.83/hour



*BASED ON ESTIMATED PERFORMANCE.
SEE PERFORMANCE CHARTS FOR DETAILS.

Nose Compartment

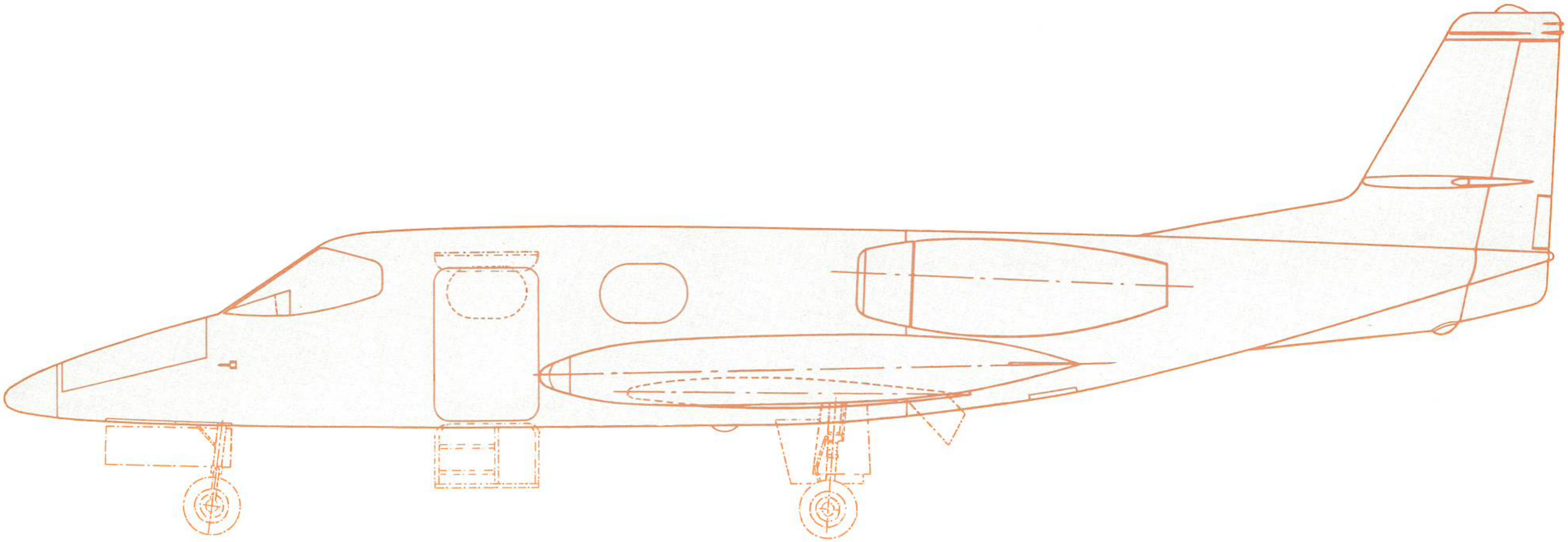
The nose compartment ahead of the forward cabin bulkhead contains the oxygen tanks, inverters, radar auto-pilot amplifier, and dual gyro reference systems.

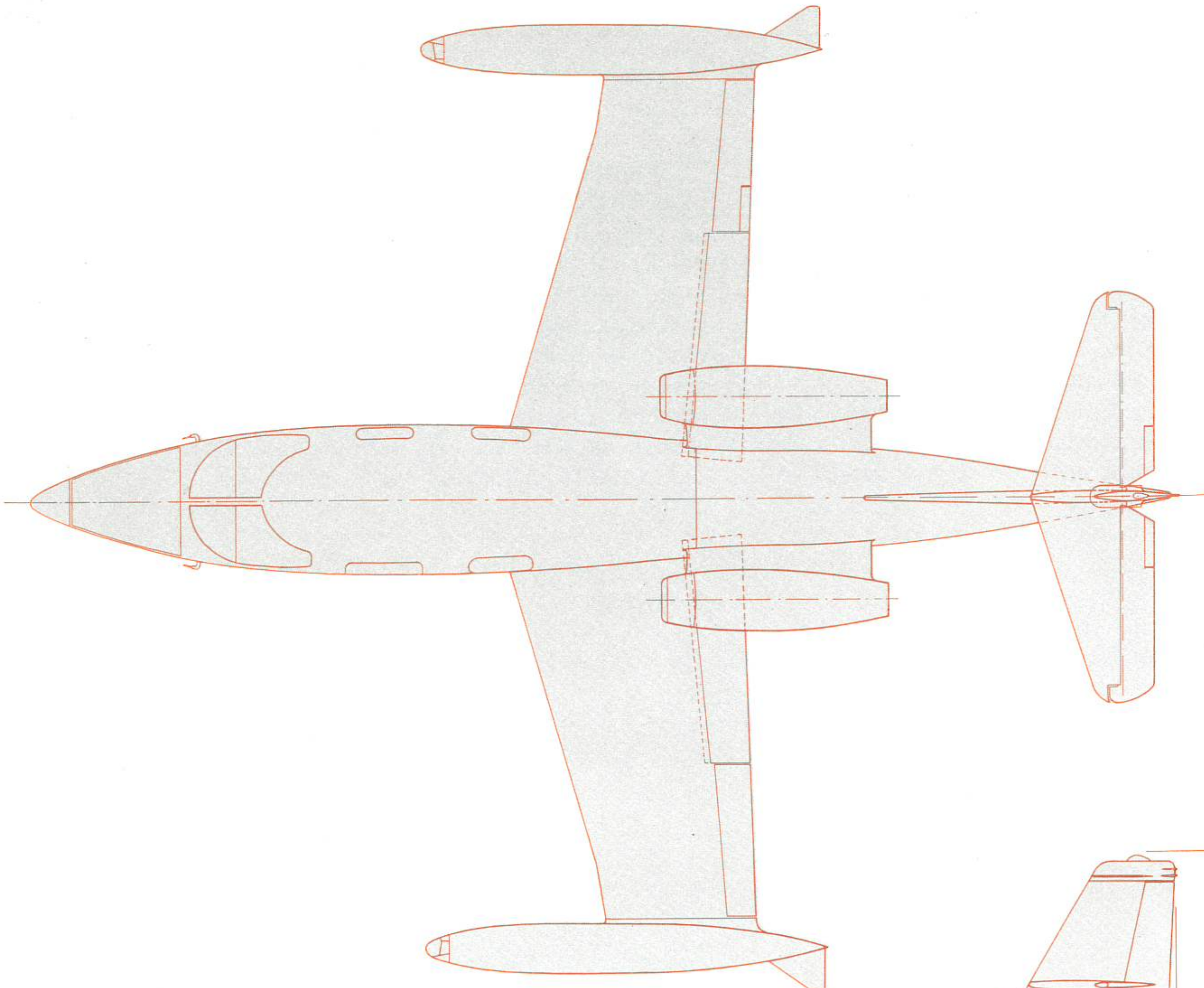
Door

To operate the hydraulic Cabin Door from the outside, unlock flush handle at the center of the cabin door. It will spring out approximately one inch. Turn this handle 90° to unlock the structural attachments. Then press the external flush switch alongside the door, which operates an electric hydraulic raising and holding actuator, which will lift the top half of the door to become a canopy, and the lower half which becomes the steps for the cabin. To close door from inside, push internal door close switch. After actuator closes doors, reestablish structural clamping by rotating internal lever 90°. When door is properly closed and locked, both the internal and external levers return to their flush position. Fool-proof interlocks prevent accidental opening of the door in flight. To open the door from inside, first rotate lock-lever 90°, then press the door open-switch. The hydraulic actuators hold the canopy raised regardless of wind or weather. To close and lock the ship, press the external (close door) switch, turn lock-lever then push it in flush, lock it with the key.

Auxiliary Power Unit

In order to operate off fields unequipped with power units, an APU has been installed. A 30 horsepower, high-speed turbine unit drives a generator for starting the main engines. There is no need for a large heavy battery, as the battery is only used for starting the APU. An external power cart connection is provided. Ingenious cooling and heating system provides ground air-conditioning for the cabin with electric power for all ground operation of lights, fans, radios, inverters, gyros, etc. Airborne, this same system provides pressurization and complete comfortization. The cabin temperature control is fully automatic, but adjustable.





DIMENSIONS AND VOLUMES

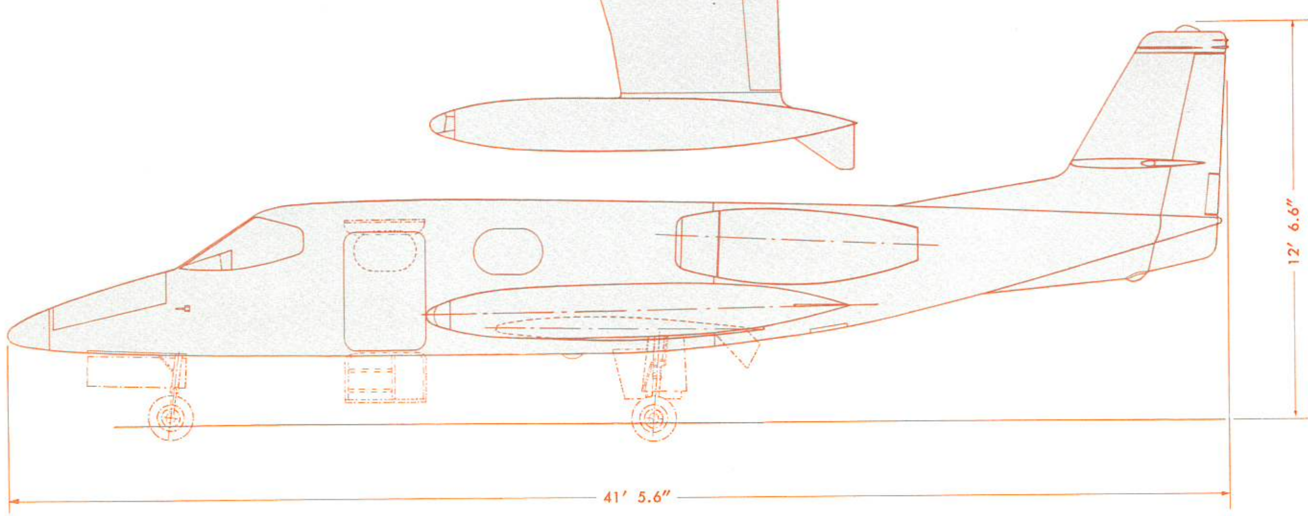
Fuselage Dimensions

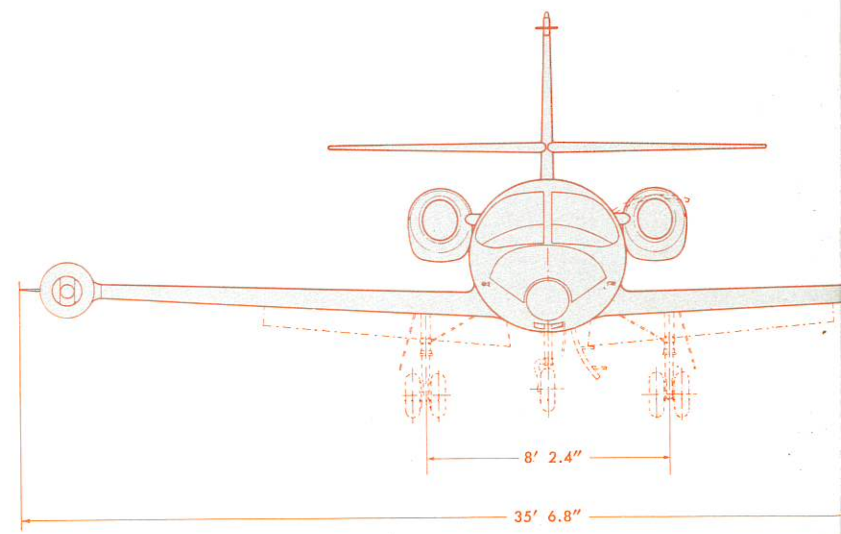
Length	41 ft. 5.6 in.
Height	12 ft. 6.6 in.
Wing Span	35 ft. 6.8 in.

Fuselage Volumes

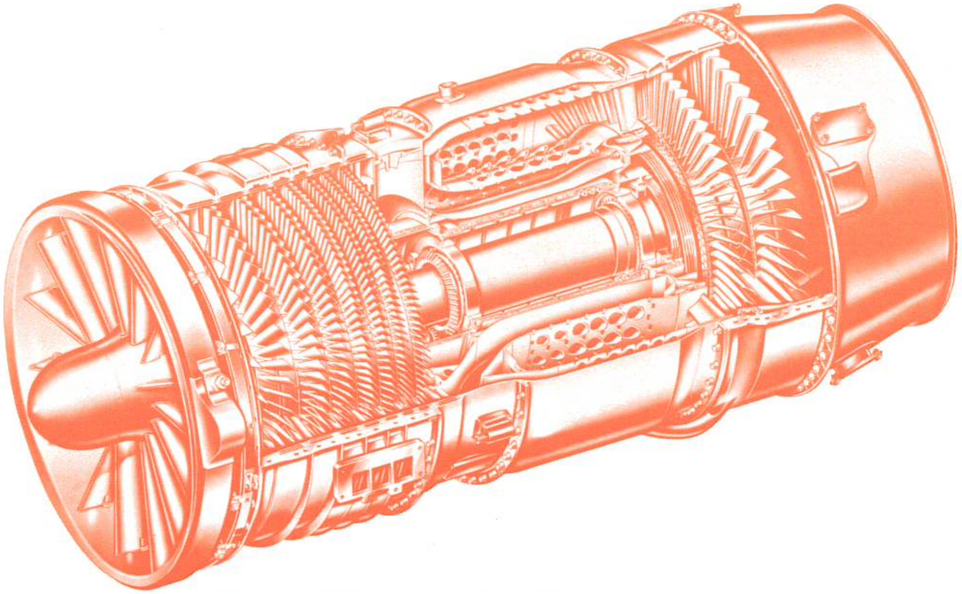
Cabin	Approximately 164 cu. ft.
Crew Compartment	Approximately 54 cu. ft.
Baggage Compartment	Approximately 40 cu. ft.

All performance and specifications subject to change without notice.

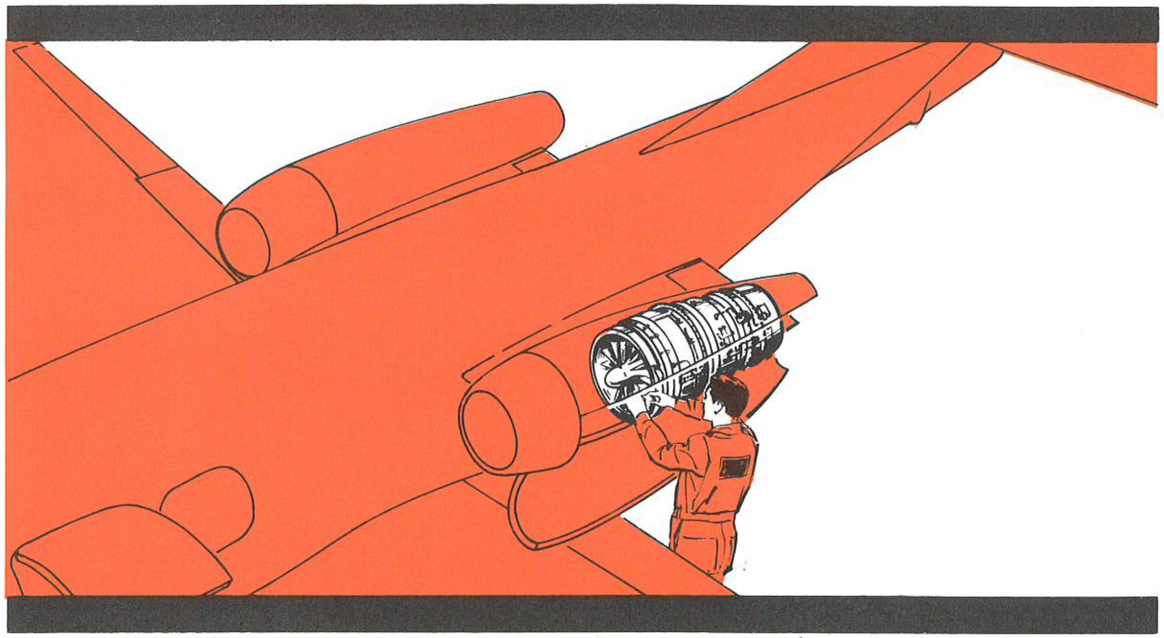




Each of the Lear-Jet's two General Electric CJ610-1 Turbojet engines produces 2,850 pounds of thrust. This means greater speed and range, shorter take-offs and landings, low fuel consumption and virtually vibration-free comfort. This engine is a commercial version of the military J-85 now in large scale production for the Air Force T-38 Trainer. Abusive tests and extreme overload conditions have conclusively proved its reliability.



Engine nacelles hinge down for easy maintenance — Dependable service and support is available anywhere you are by the more than 300 General Electric Aircraft Engine Field Service Representatives around the world.

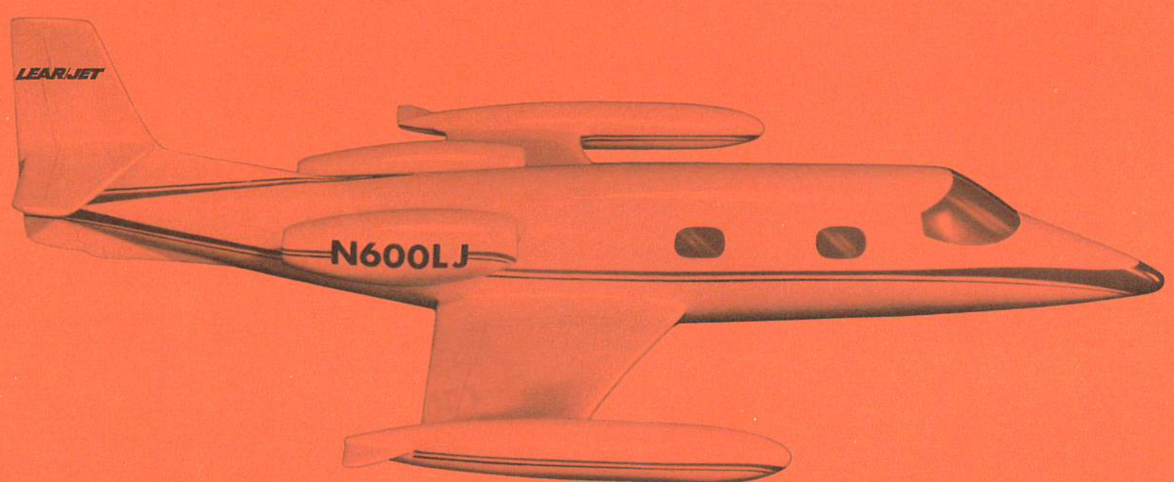


CERTIFICATION AND GUARANTEES

Useful load

Seven places	@ 170 lbs. ea.	1,190 lbs.	
Baggage, seven	@ 30 lbs. ea.	210 lbs.	
723 gals. fuel	@ 6.7 lbs. ea.	4,844 lbs.	
Two gals. oil	@ 8.0 lbs. ea.	16 lbs.	
Total		6,260 lbs.	± 0.0
Cruising True Airspeed		500 mph	+ 0.0 – 5.0%
Maximum Range		1,900 stat. mi	+ 0.0 – 5.0%
Take-Off Dist. over 35 ft. obstacle		2,500 ft.	– 0.0 + 5.0%
Landing Dist. over 35 ft. obstacle		3,000 ft.	– 0.0 + 5.0%
Single-engine Ceiling		24,000 ft.	+ 0.0 – 5.0%

Note: All performance based on standard atmospheric conditions using General Electric CJ610-1 engine, specification No. E1050c.



NEW STANDARD FUEL CAPACITY OF 823 GALLONS INCREASES MAXIMUM RANGE TO 2,150 MILES WITH FIVE PLACES.

CHARTS ON PAGE 14 ARE BASED ON 100 GALLON RESERVE AFTER TOUCHDOWN.

INSTRUMENTATION STANDARD EQUIPMENT

Radio Equipment

The Lear-Jet is complete and as far as possible has ARINC interchangeability. There are two complete navigation receivers for VOR, ILS and Glide Slope, two communication transceivers, a marker receiver, ADF, a transponder, a radar, DME with distance and ground speed indicator. The entire system is now undergoing thorough flight, operational, and environmental testing to insure perfection.

Radar

RCA AVQ20, 12" Scanner, 5" Screen, Gyro Stabilized (1)

Transponder

Wilcox, GAT or equivalent (1)

Distance Measuring Equipment (DME)

NARCO, remote control (1)

Radio

VHF Transceivers, (Airinc) Interchangeability, FAA-TSO (2)
VOR or ILS Receivers, (Airinc), Interchangeability, FAA-TSO (2)
Glide Path Receivers, (Airinc), Interchangeability FAA-TSO (2)
Manual and Automatic VOR Bearing Instrumentation, (Airinc), Interchangeability, FAA-TSO (2)
Marker Beacon Receiver (3-light) (Airinc) Interchangeability, FAA-TSO (1)
ADF, Complete with Gonio Loop and Panel Goniometer, FAA-TSO (1)

Autopilot

Selectable Variable Rate Turns
Controllable Climbs and Descents
Automatic Altitude Hold
Automatic Pitch Trim
Roll Trim Adjustment
Automatic Yaw Damper
Automatic Heading Hold
Automatic VOR Navigation
Automatic ILS Approach
Course Director Function
Flight Controller
Flight Patch Indicator
Turn and Bank Indicator

Aircraft Gyro Systems

Dual AC Vertical Gyro Systems
Dual Directional Gyro Systems
The gyro amplifiers are all transistorized.
The vertical and directional gyros will operate any manufacturer's (Airinc) equipment signal levels.

Flight Instruments

Horizontal Situation Display (ILS Indicator Left Side) (1)
Autopilot Direction Indicator (1)
VOR, ILS Indicator, Right Side (1)
DME Indicator (1)
RMI Indicators with VOR Bearing Indicators (2)
Turn and Bank Indicators (2)
Airspeed Indicators with Mach Scales and Barber Pole Limit Markers (2)
Altimeter – Digital (1)
Altimeter – (3 Hand) (1)
Rate of Climb Indicators (2)
Cabin Altitude Controller with Field Pressure Setting (1)
Cabin Altitude and Differential Pressure Indicator (1)
Horizons, Lear 3" Sphere Vertical Gyro Indicator with Non Tumbling Gyro System (2)
Clock (1)
Magnetic Compass (1)
Outside Air Temperature (1)

MERRILL C. MEIGS
TRIBUNE TOWER — SUITE 1529
435 NORTH MICHIGAN AVENUE
CHICAGO 11, ILLINOIS

BUSINESS COUNSELOR PHONE 644-5152

September 21, 1962

General Edwin W. Rawlings, President
General Mills, Incorporated
Minneapolis 26, Minnesota

Dear Ed:

Bill Lear was in town last week with the new nine passenger mock-up of his Lear-Jet. It met with enthusiastic approval.

I had a good chance to visit with Bill, whom I have known almost all of his business life. I thought it would be interesting to jot down some observations of this remarkable man and his career. Since you are interested in the progress of the new Lear-Jet, here they are:

Seldom is found a combination of experience, ingenuity, capability and resources such as possessed by the spearhead of this Lear-Jet project. William P. Lear, Sr., an extraordinary American, without wealth, with a limited education, became a radio amateur in 1913, a Navy radio instructor in 1917, a pilot in 1922, developed and manufactured automobile radio in 1928, developed and made aircraft radio in 1931, aircraft direction finders in 1934, winner of the Frank M. Hawks Award "for outstanding contribution to aviation" in 1938. In 1949, awarded the Collier Trophy for development of Jet Auto-Pilot, elected to membership in the Tau Beta Engineering Society and, between the years of 1931 and 1962, built Lear, Incorporated from a $500 capital into an annual business of nearly $100,000,000. Sold it in 1962 in order to devote his efforts and resources to the Lear-Jet program.

He is credited with developing radio transmitters, receivers, VOR equipment, auto-pilots and automatic landing systems, and the Lear-Star Executive Aircraft which established a new pace for executive speed and range. He became a jet pilot with an enviable record of proven ability to operate under adverse ceiling and visibility conditions.

Here, in one man, is found a consuming drive for accomplishment in aviation, unrelenting perseverance of accomplishment, a thorough experience and ingenuity in aviation, electronics, avionics, and aircraft

actuator design, a knowledge of the economic aircraft requirements of industry, a complete familiarity with the desires and facilities needed by the pilot, an unusual understanding of aerodynamic principles, a great love for flying. He is dedicated to the development of the Lear-Jet. He believes it to be the answer to the businessman's requirements -- with its flexibility, speed and economy, and that it will most certainly be the pilot's dream ship!

Possibly the most unusual part of the combination is to find all of the foregoing in one man with the additional but extremely, important asset of being able to afford to indulge in his beliefs and aspirations! He lives, thinks, dreams, sleeps, eats and breathes for the Lear-Jet and its perfection. Being a perfectionist, he considers every detail worthy of his personal interest and consideration.

Sixty-one of the Lear-Stars with its 287 m.p.h. performance, 3300 mile range, and 24,000 pound gross take-off weight were bought, flown and appreciated by the Blue Bloods of private and corporate America. At the outset, that project seemed to his best friends and business associates, foolhardy and the venture doomed to failure.

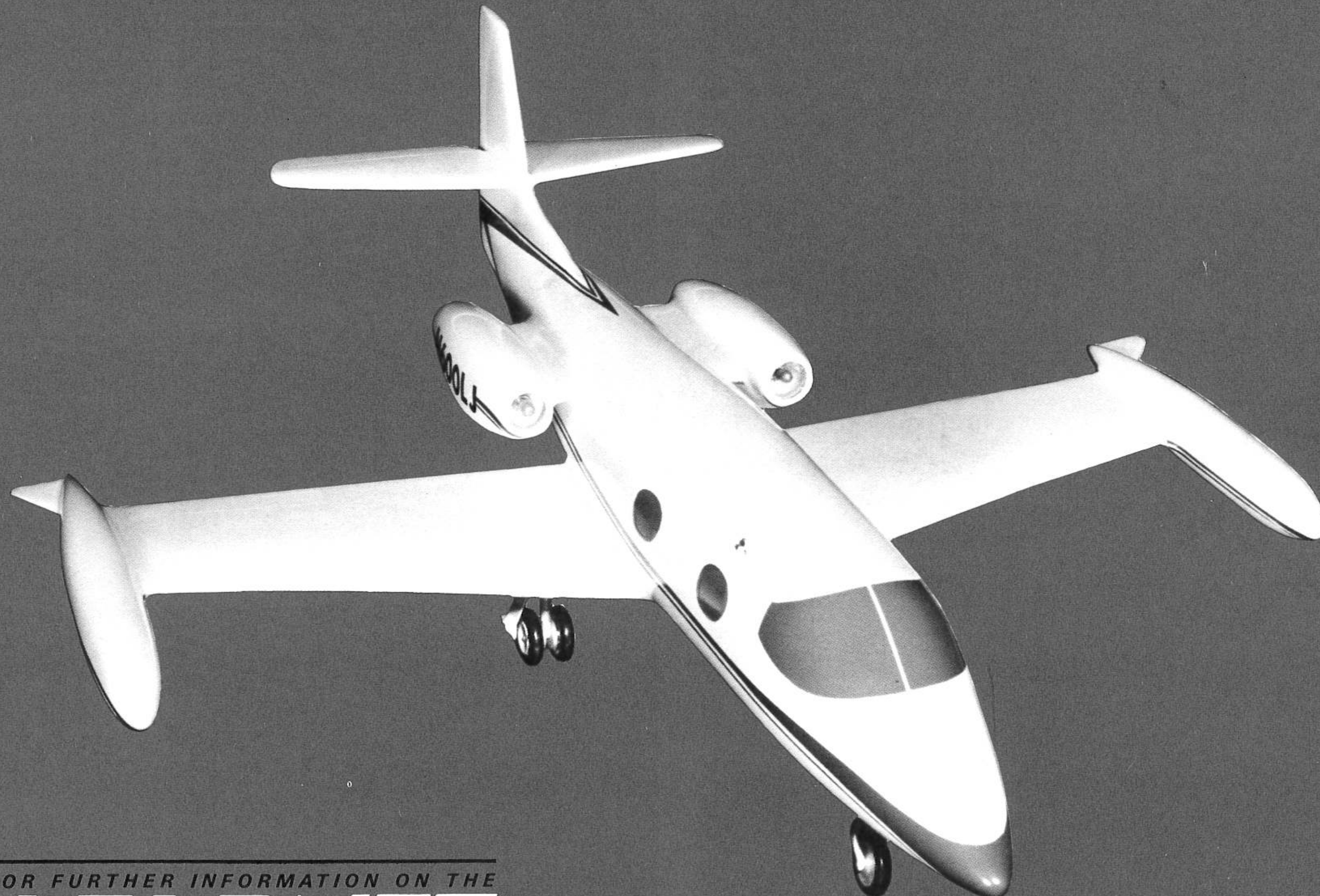
However, then as now, he had faith in his convictions, so one must add to this unusual combination of experience and ability, two more important factors to insure the success of any project -- faith and courage.

Cordial regards,

Merrill C. Meigs

Merrill C. Meigs

MCM:rg



FOR FURTHER INFORMATION ON THE

LEAR/JET

Write today to...
"LEAR-JET", BOX 1280, WICHITA, KANSAS, U.S.A.
or: Air-Rep, 30 rue Malatrex, Geneva, Switzerland

LITHO IN U.S.A.