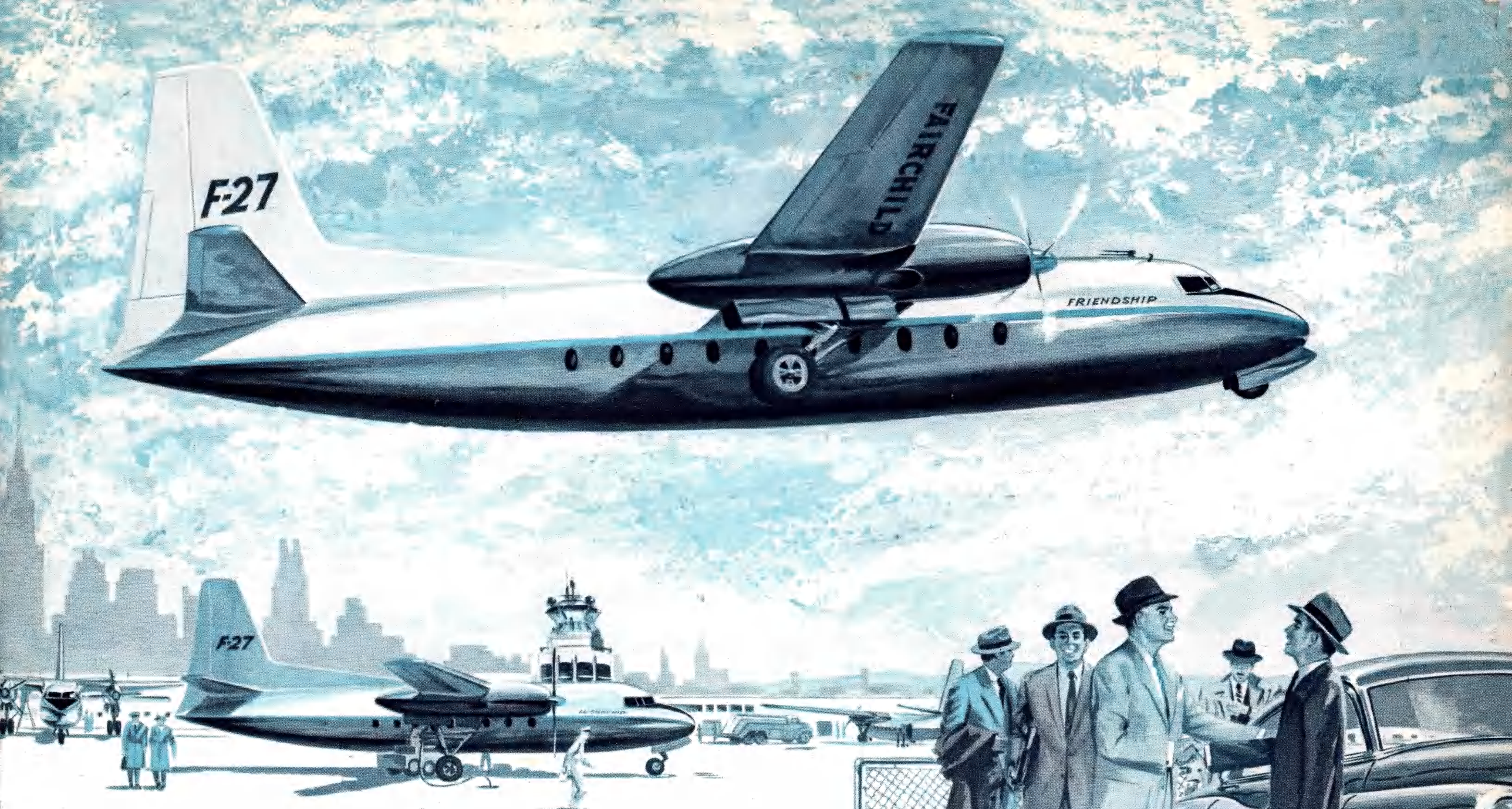


THE FAIRCHILD F-27 *Friendship*

THE NEW TURBO-PROP TRANSPORT DESIGNED TO MEET TODAY'S CORPORATE REQUIREMENTS

A NEW BUSINESS



A new business machine is being offered to American industry —the Fairchild F-27 Friendship, a high-performance, medium-size airliner designed to discriminating standards of comfort and dependability. An entirely new airplane, the Friendship is the first in its class tailored to meet today's corporate requirements. Only the airplane can tie the sprawling areas of industry and commerce together, and only the Friendship—fast and comfortable —assures the executive he will arrive *on time* and *relaxed*.



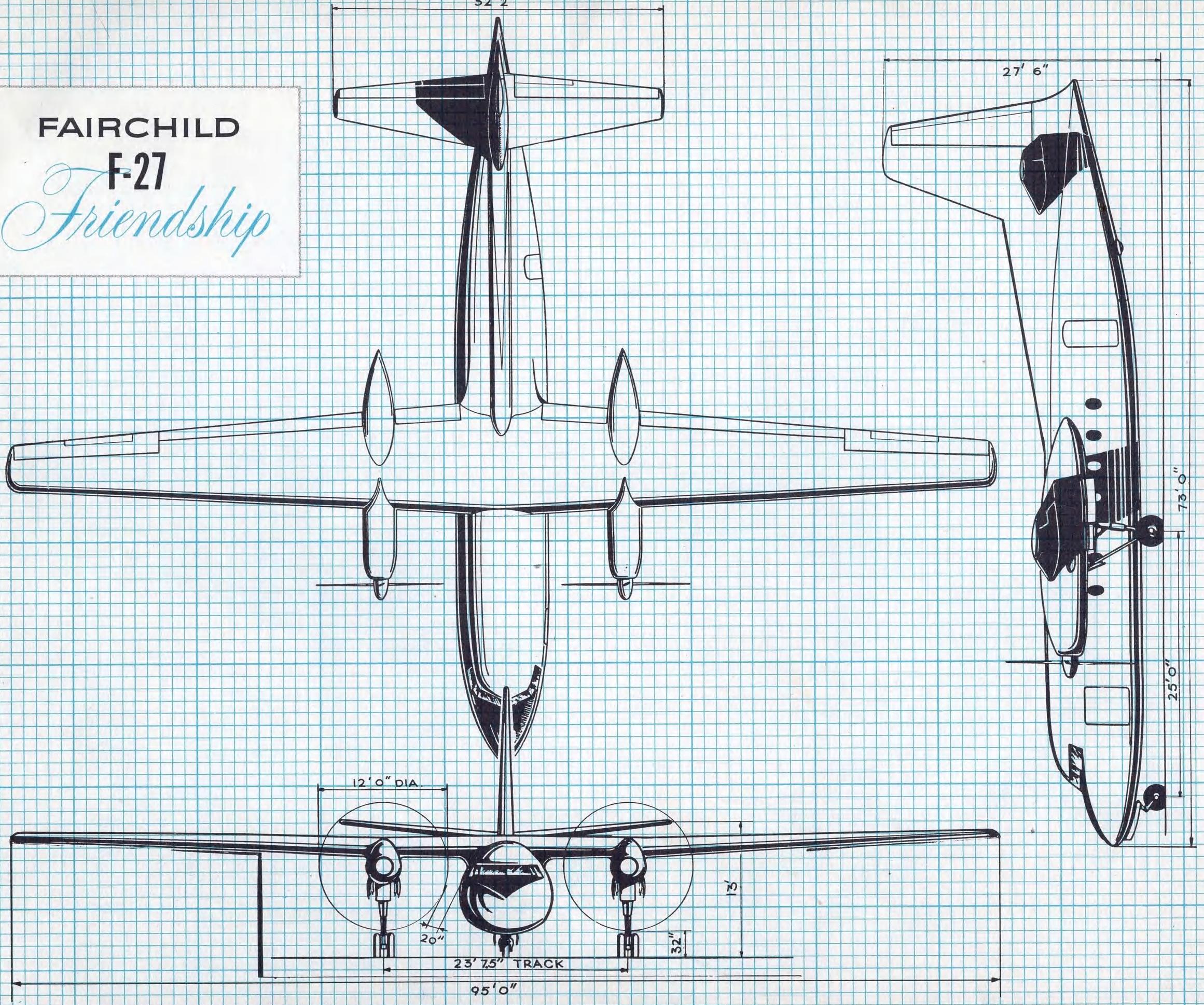
THIS IS THE *Friendship*

- turbo-prop power
- 280 mph cruising speed
- pressurization
- 2000 mile range
- smoother, quieter flight
- accommodations for up to 36
- ease of maintenance
- economy of operation
- single engine performance
- business office interiors
- high-wing visibility
- pneumatic system
- added safety features
- Civil Air Reg. 04b certification

MACHINE



FAIRCHILD F-27 *Friendship*



GENERAL DESCRIPTION



The Fairchild F-27 Friendship is a high-wing, tricycle landing gear, high-speed airliner, designed for short and medium range operation. It is powered by two Rolls-Royce Dart propeller-turbine engines, each developing 1600 shp plus 370 lbs static thrust in sea level take-off.

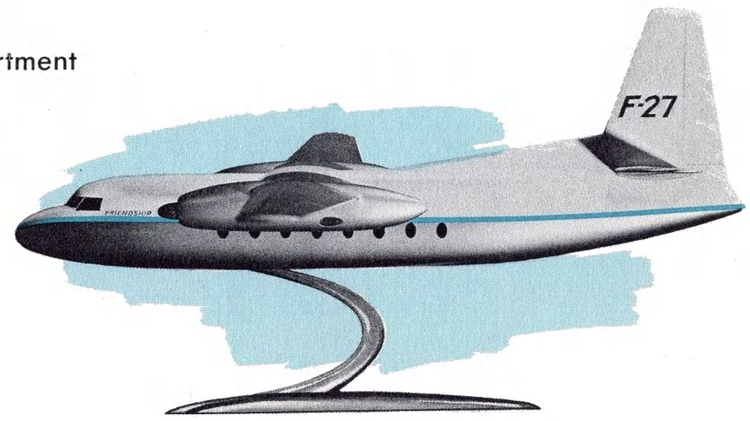
VITAL STATISTICS: The Friendship has a top cruising speed of 280 mph, a maximum range of 2000 miles. Sea level rate of climb is 1500 fpm. Span is 95 ft, length 73 ft, height 27½ ft.



CABIN: The interior of the Friendship is custom fitted to the requirements of the individual owner, with accommodations for a maximum 36 passengers. The cabin and flight deck feature automatically controlled air conditioning and pressurization to maintain a cabin altitude of 8000 ft at true altitudes to 20,000 ft.



SYSTEMS AND SAFETY: A pneumatic system, with its advantages of safety, light weight and cleanliness, has been adopted for the F-27. The electrical installation includes two separate systems, as well as provisions for an external power supply. A hot air de-icing system is provided for wings and an electrical one for the tail surfaces, windshield, cabin and engine air intakes, and propellers. An oxygen system is provided for the pilots, with individual regulation and tubes. Stowage area for passenger walk-around bottles is available. The engine fire prevention system consists of engine-mounted spray rings connected to a methyl bromide bottle in the nacelles, with flame detectors to provide warnings to the pilots. A fire warning system and spray ring is also located in the compartment containing the electrical devices. As an added fire safety measure, all F-27 fuel is carried in the outer wing sections. (~~1840~~ 1660 U.S. Gal. Cap.)

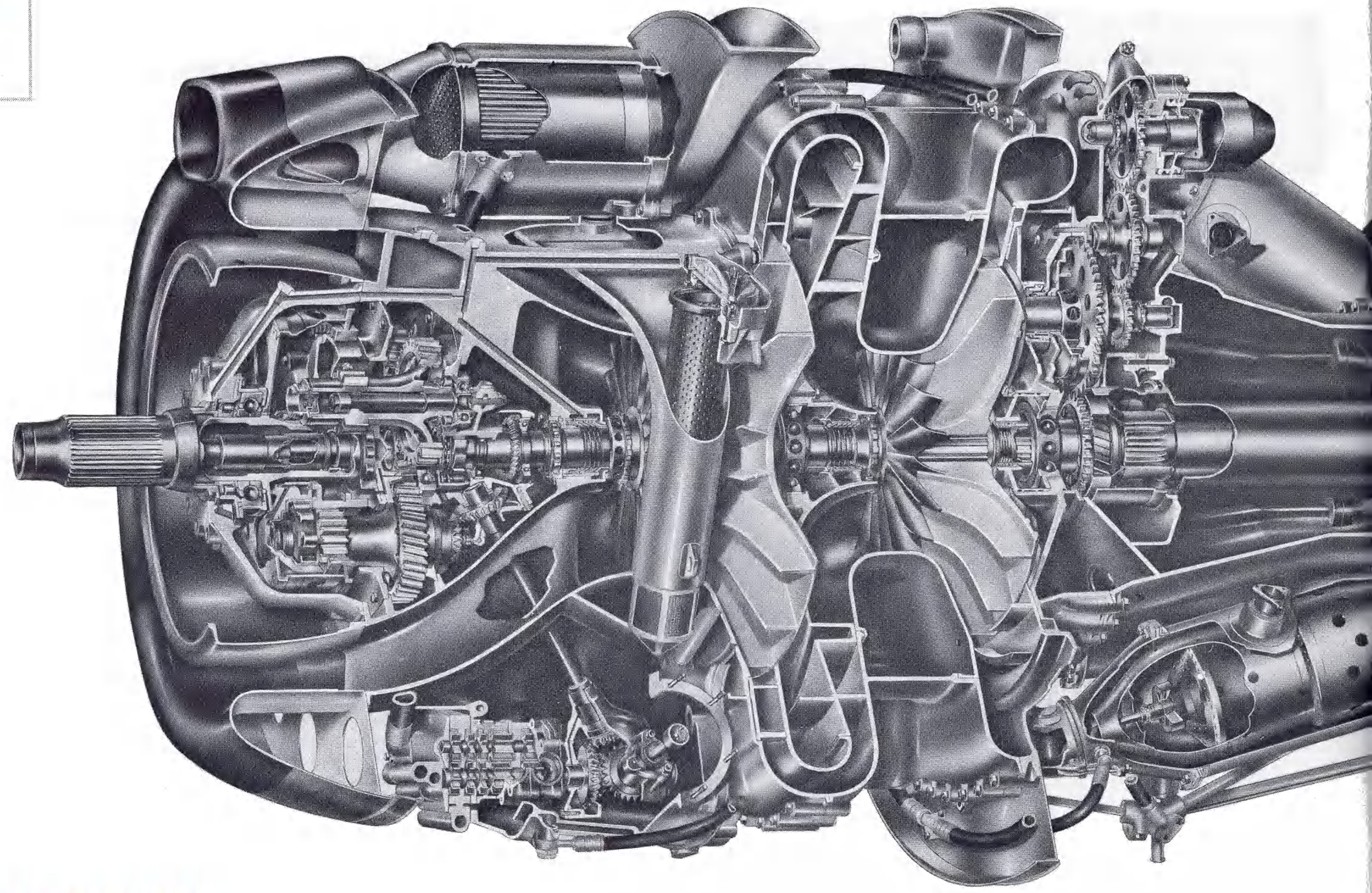


FAIRCHILD

F-27

Friendship

TURBO-PROP POWER

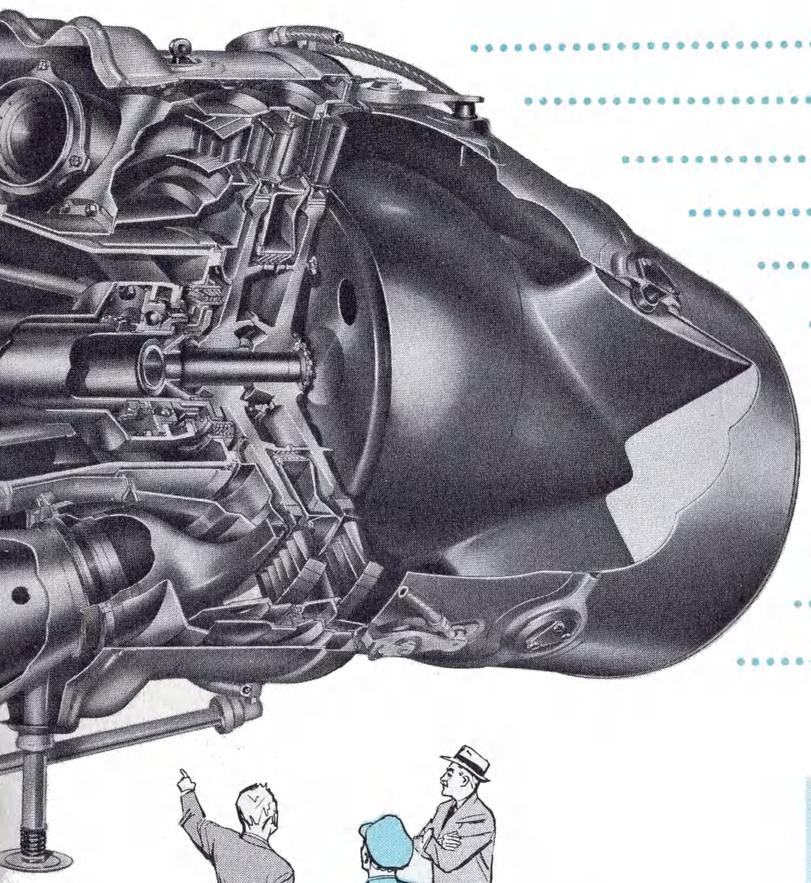


ROLLS-ROYCE DART

The Friendship is powered by two Rolls-Royce Dart propeller-turbine engines, one of the most recent achievements of a firm whose name symbolizes dependability. Flight-proven over more than 100-million passenger-hours, the Dart makes possible a new kind of business flying —quiet, smooth and *fast*.

. . . to set the pace of business flying





- *high-speed flight*
- *minimum vibration*
- *lowest noise level*
- *negligible daily servicing*
- *fewer moving parts*
- *no reciprocating parts*
- *economical operation and maintenance*
- *small frontal area*
- *light weight*
- *added jet boost*
- *greater fuel safety*
- *proven performance*



ENGINE PERFORMANCE

Static take-off power at sea level	1600 shp + 370 lbs thrust at 14,500 rpm
Static max. climb power at sea level	1460 shp + 340 lbs thrust at 14,200 rpm
Static max. continuous power at sea level	1460 shp + 340 lbs thrust at 14,200 rpm
Static recommended cruising power at sea level	1215 shp + 280 lbs thrust at 13,600 rpm

FAIRCHILD F-27 *Friendship*







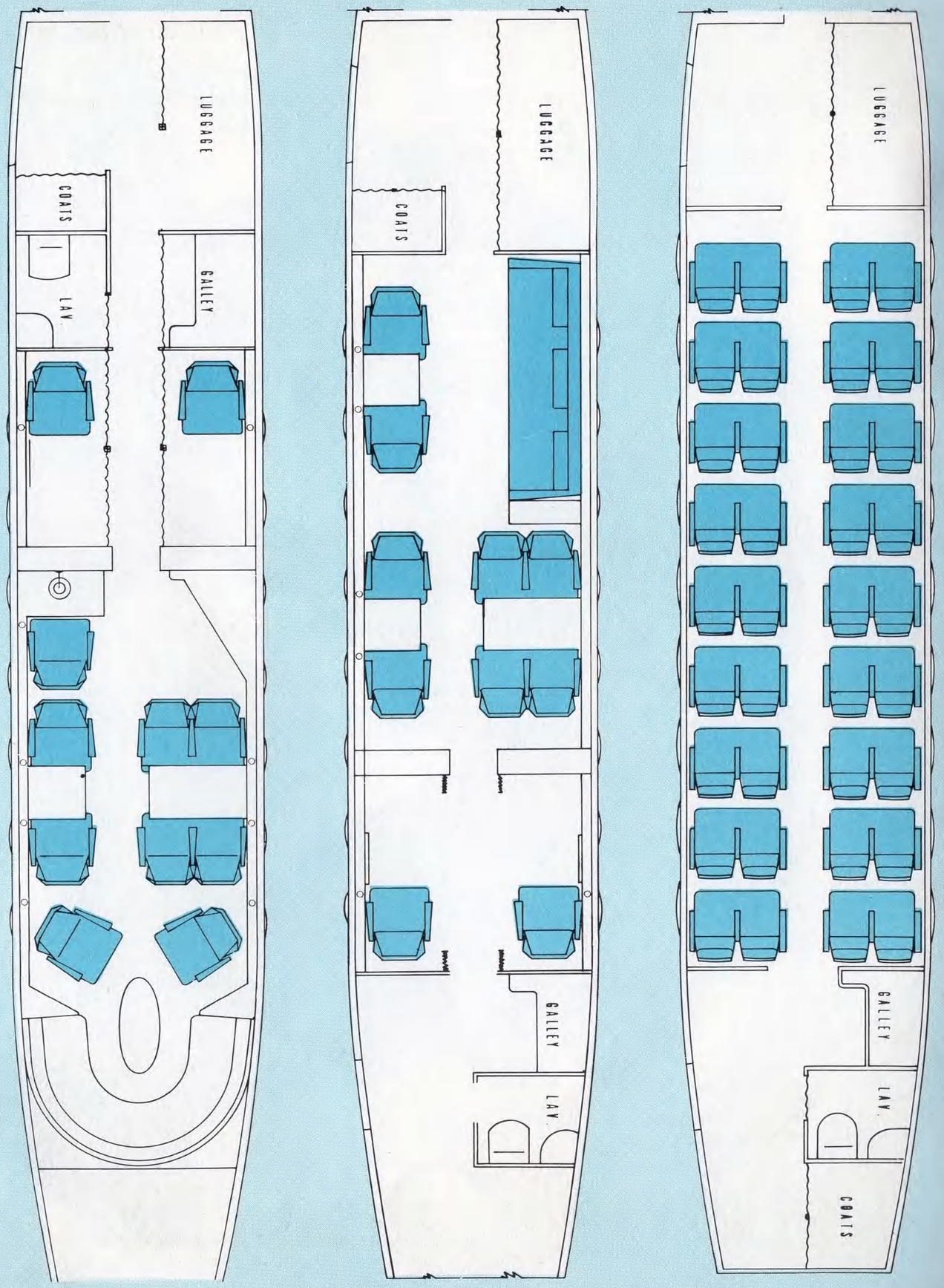


F-27

INTERIORS

. . . custom-fitted to meet any need

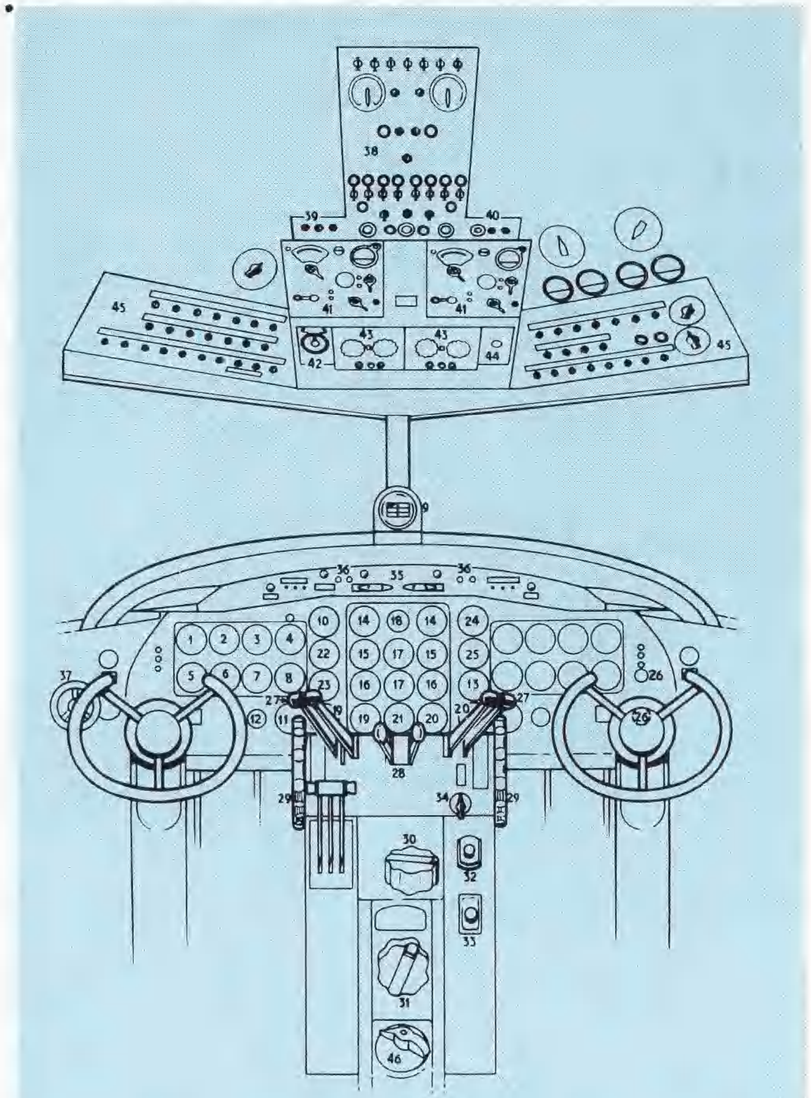
The passenger compartment is the heart of the corporation aircraft. It is the home office in the air, and as such it must be the conference room, the lounge, and the executive offices. The interior of the Friendship will be custom-fitted to meet any requirement or taste, with accommodations for up to 36 passengers. Pressurized to maintain a cabin altitude of 8000 ft. while the aircraft is at 20,000 ft. and sound-proofed to assure quiet flight, the Friendship is the only aircraft in its class that will permit passengers to work or relax comfortably en route and—no matter how long the trip—to arrive refreshed and ready for the day's work.



FLIGHT DECK *. . . spacious, comfortable and fully equipped*

Flight instruments in the prototype Friendship cockpit.

1 Airspeed indicator.
2 Horizon.
3 Zero reader.
4 I. L. S.
5 Altimeter.
6 Gyrosyn compass.
7 Turn-and-bank.
8 Rate of climb.
9 Magnetic compass.
10 Zero reader heading selector.
11 A. D. F. indicator.
12 Clock.
13 Outside air-temperature indicator.
14 Engine r.p.m.
15 Jet-pipe temperature.
16 Torquemeter.
17 Oil pressure.
18 Synchroscope.
19 Fuel contents.
20 Water/methanol contents.
21 Fuel flow.
22 Flap indicator.
23 Brake pressure.
24 Cabin differential pressure.
25 Undercarriage and flap position.
26 Pneumatic pressure.
27 Throttles.
28 H. P. fuel cock.
29 Elevator trim.
30 Rudder trim.
31 Aileron trim.
32 Flap control.
33 Undercarriage control.
34 Gust-lock safety switch.
35 Fire warning and extinguishing.
36 Feathering and unfeathering buttons.
37 Nosewheel steering.
38 Engine starter controls, L. P. fuel pumps, water/methanol pumps.
39 Main electrical switches.
40 Generator switches.
41 A. D. F. panel.
42 V. O. R. panel.
43 V. H. F. panel.
44 H. F. panel.
45 Miscellaneous electrical switches.
46 Fuel cross-feed cock.



The flight deck of the Friendship was designed to give the captain and pilot a work area in which their skill and proficiency can be fully realized. Ease of entry, adequate headroom, superior visibility and soundproofing, fully adjustable seats and other features built into the Friendship cockpit assure the fatigue-free flights that become doubly important on those long cross-continent business trips.

PERFORMANCE

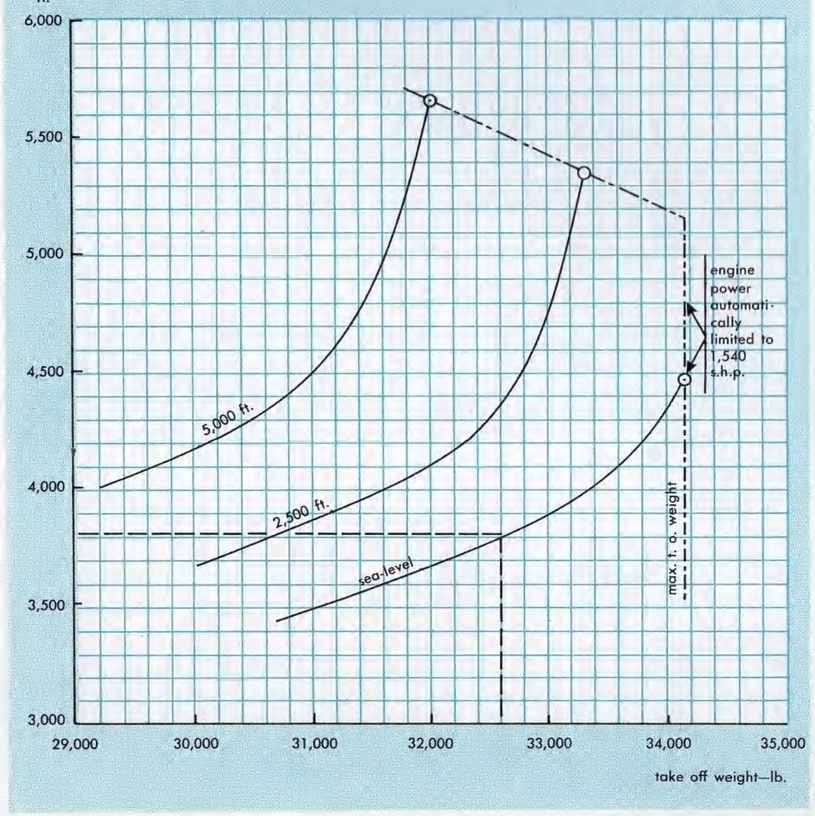
. . . to meet any schedule

The missed appointment, the waiting client, the hurriedly altered itinerary that so often disrupt the smooth flow of business operation need never again be traced to sub-standard air transportation. The high speed of the Friendship — over 280 miles an hour — and its long non-stop range of 2,000 miles, coupled with speedy ground handling and servicing, assure the executive that any schedule will be met — *on time*.

TAKE-OFF PERFORMANCE

take-off field length vs. take-off weight C. A. R. 04b requirements — level, smooth, dry, hard runway

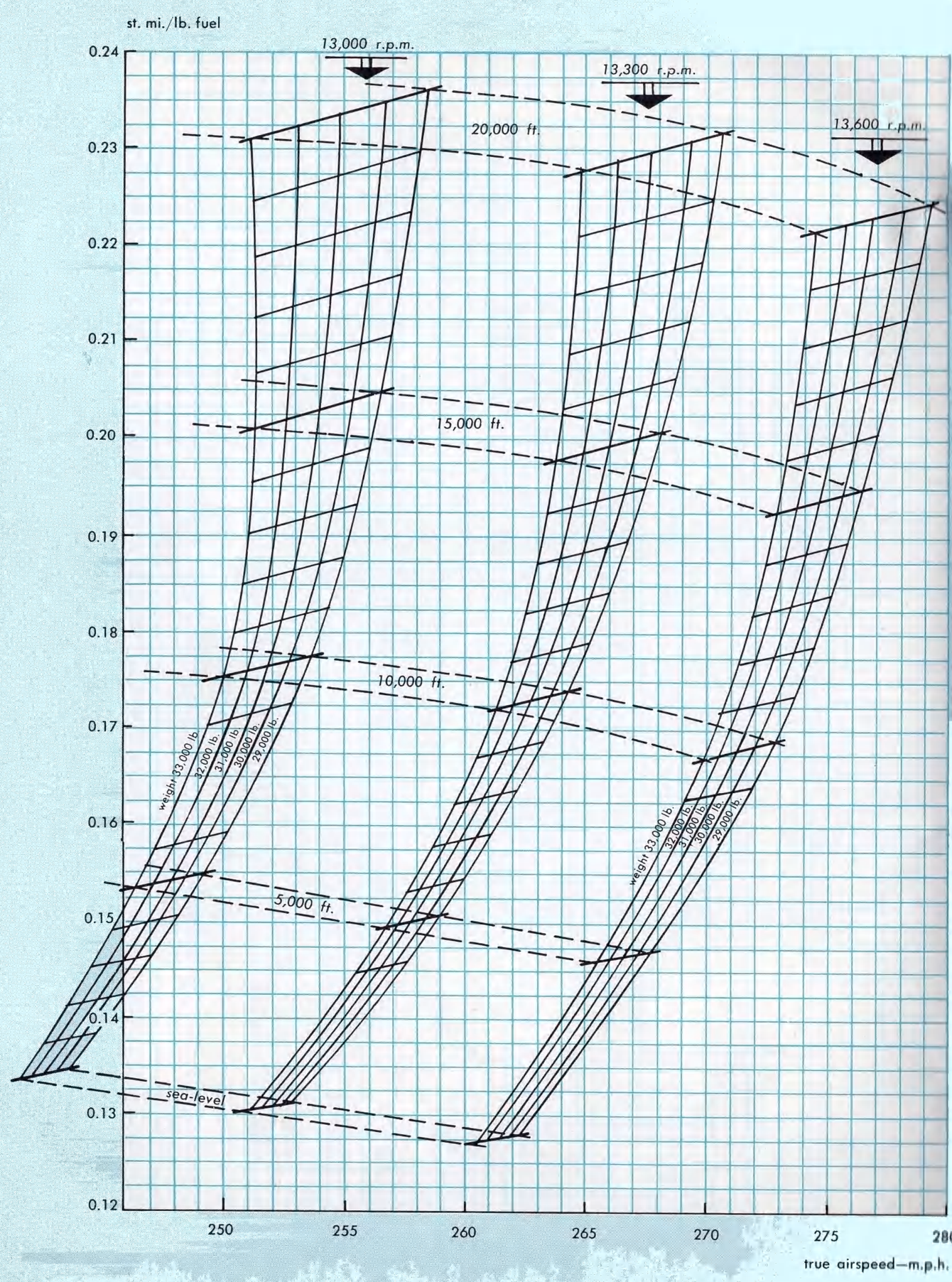
⊙ denotes weight limited by $R/c = 0.035\ V_{s_1}^2$ ft./min.



IN-FLIGHT PERFORMANCE

st. mi./lb. fuel vs. speed

C. A. R. 04b



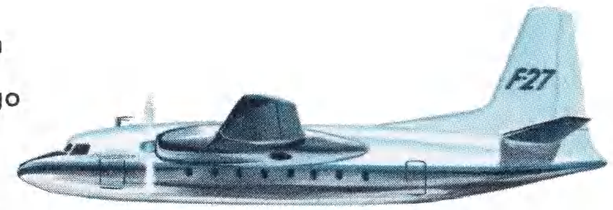


TAKE-OFF:

The Fairchild Friendship was designed to get off the ground swiftly and safely.

IN FLIGHT:

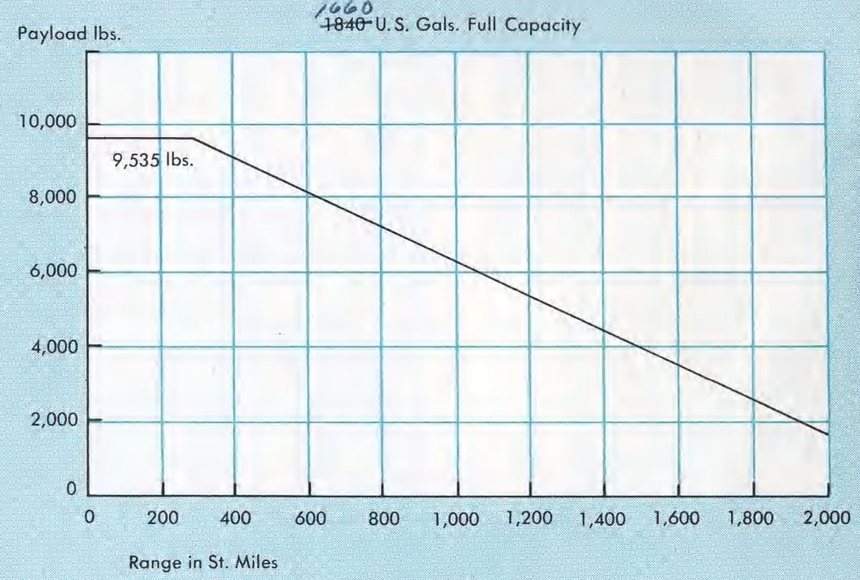
The Friendship can climb to 15,000 ft. in less than a quarter of an hour and cruise smoothly and quietly—New York to Chicago in about 2¾ hours, Dallas to Boston in about 5¾ hours. Single engine performance is outstanding. With one Dart inoperative and the propeller feathered, the Friendship can still climb 350 feet a minute at an altitude of 5,000 feet when fully loaded.



LANDING:

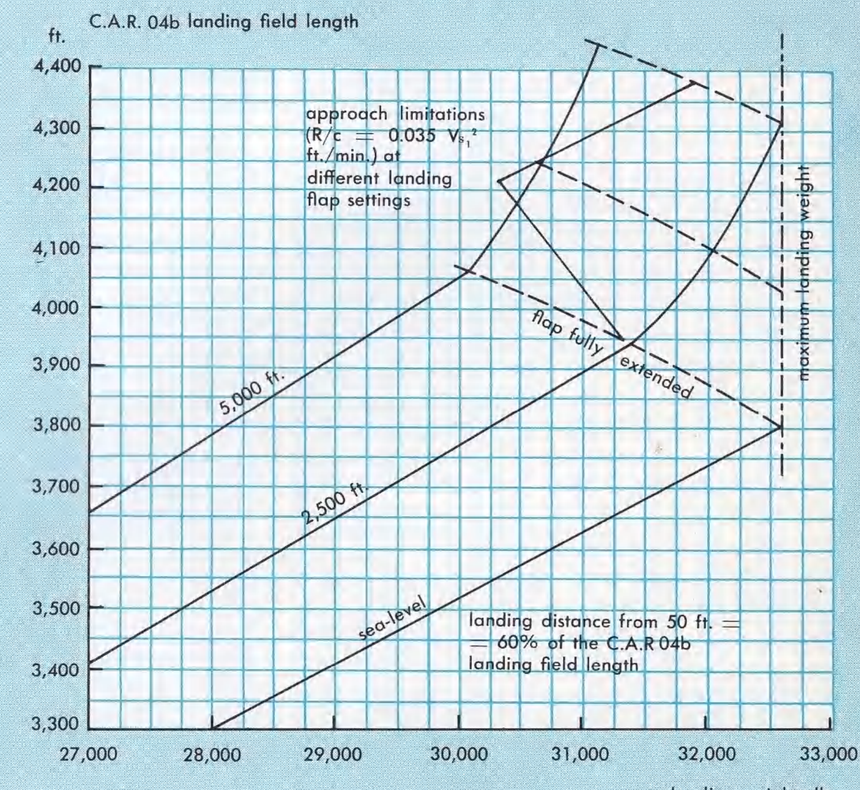
An F-27 with a 30,000-lb. landing weight needs but 3,300 feet for a sea level landing. At this weight, stalling speed is 73 mph, a remarkably low figure for this class of aircraft.

PAYLOAD vs RANGE



LANDING PERFORMANCE

landing field length vs. landing weight
C.A.R 04b requirements,
level, smooth, dry, hard runway



SERVICING AND MAINTENANCE *. . . with ease and economy*



Accessibility, interchangeability, availability . . . these are the reasons for the Friendship's ease and economy of maintenance and servicing.

All parts that must be checked regularly are easily *accessible* by means of large doors or panels, many of them removable.

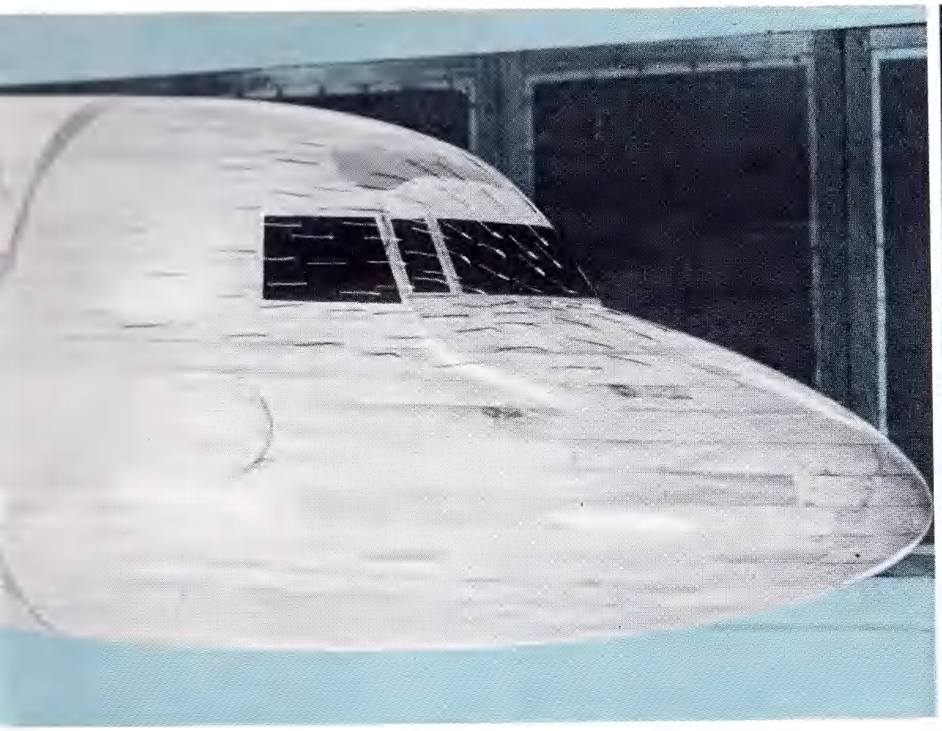
The long list of *interchangeable* parts includes wing tips, control units, stabilizer and fin, emergency exits, jet pipes, passenger seats, engines, windows, ad infinitum.

Spare and replacement parts will be readily *available,* manufactured and shipped from Fairchild's Maryland plant. Tie-down, jacking, slinging provisions and all necessary ground equipment are standard equipment with the aircraft.

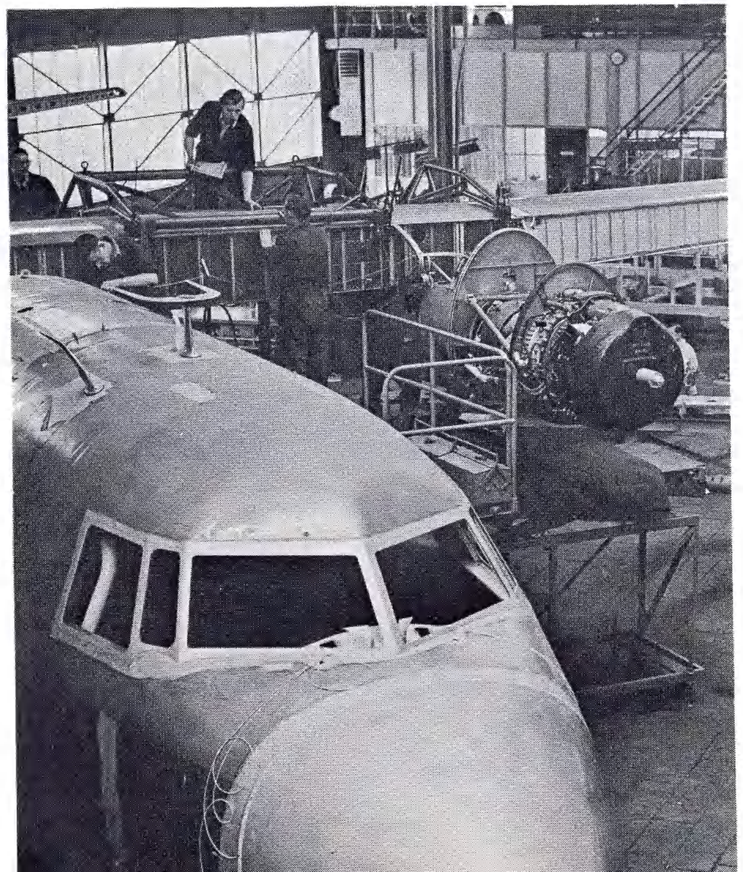
ENGINES . . . A dual consideration — high performance and operating economy — led to the choice of the Rolls Royce turboprops to power the F-27. The minimum of moving parts and the low vibration level extend the operating life not only of the engines but of the entire aircraft. The between-overhaul time of the Dart engine currently is 1,050 hours, and this figure will be increased with added mileage.

AIRFRAME . . . Elaborate cargo handling equipment and long ladders can be dispensed with in servicing the Friendship. The high wing and the low fuselage help keep ground time to a minimum. No need to bury into the floor to check control lines on the F-27. They're in the roof, easily reached through large panels.

CONSTRUCTION . . . *rugged, modern, proven*





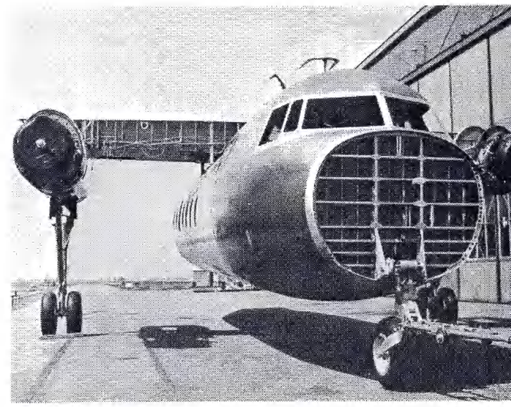


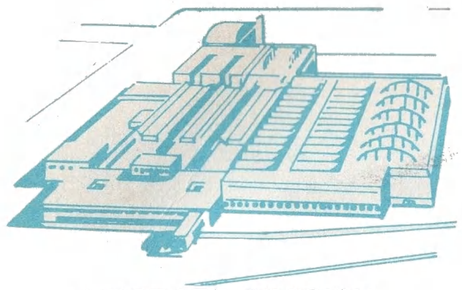
With the launching of the Friendship's wind tunnel tests in 1951 began one of the most extensive and complete pre-flight test programs ever conducted on an aircraft of this class.

The hull pressurization will be tested *under water* at twice normal working pressure.

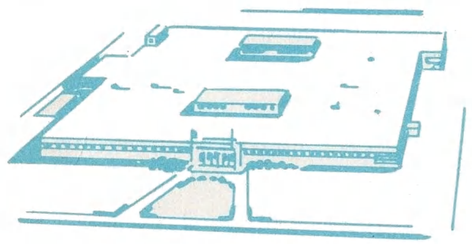
Fatigue and stress tests over every square inch of the F-27 subjected the aircraft to the most grueling scientific punishment.

On the basis of these tests, the Fairchild F-27 is being constructed to Civil Air Regulation 04b certification — a rugged, modern and proven corporate airliner.

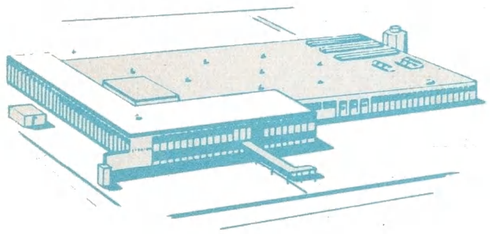




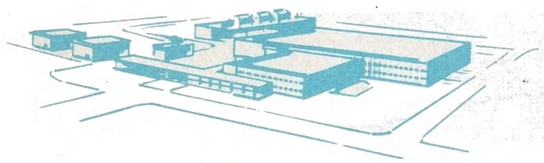
AIRCRAFT DIVISION
Hagerstown, Maryland



GUIDED MISSILES DIVISION
Wyandanch, Long Island, N. Y.



STRATOS DIVISION
Bay Shore, Long Island, N. Y.



ENGINE DIVISION
Deer Park, Long Island, N. Y.



EXECUTIVE OFFICE
Hagerstown, Maryland

FAIRCHILD

F-27

Friendship

FAIRCHILD

ENGINE AND AIRPLANE CORPORATION • HAGERSTOWN, MARYLAND

LITHO IN U.S.A.