
nomad
THE AUSTRALIAN N22B AND N24A TURBOPROP

Nomad 22B.....Nomad 24A Airplanes accepted throughout the world. Working airplanes through to the next century

Fuel Economy

Anticipating the growing reliance on turbine fuel in the General Aviation scene in the years ahead, the Government Aircraft Factories NOMAD pioneered the use of the 400 shp Allison 250–B17B/C engines in fixed wing airplanes, and matched this with an aerodynamically efficient airframe that gives unsurpassed fuel economy.

Low Overall Operating Costs

Designed and engineered to airline standards, both Nomads, of which there were more than 100 airplanes in service at the end of the 70's, operationally testify to the low scheduled service and repair costs. This points to Government Aircraft Factories inherent design perception which incorporated all the attributes most required by line maintenance engineers.

. . . . . the right airplane at the right time

Government Aircraft Factories Nomads anticipated by many years the cost-related needs of the short haul industry by embodying the hardware needs for both passengers and freight in a unique and harmonious mix enthusiastically accepted the world over by General Aviation operators and their paying customers.

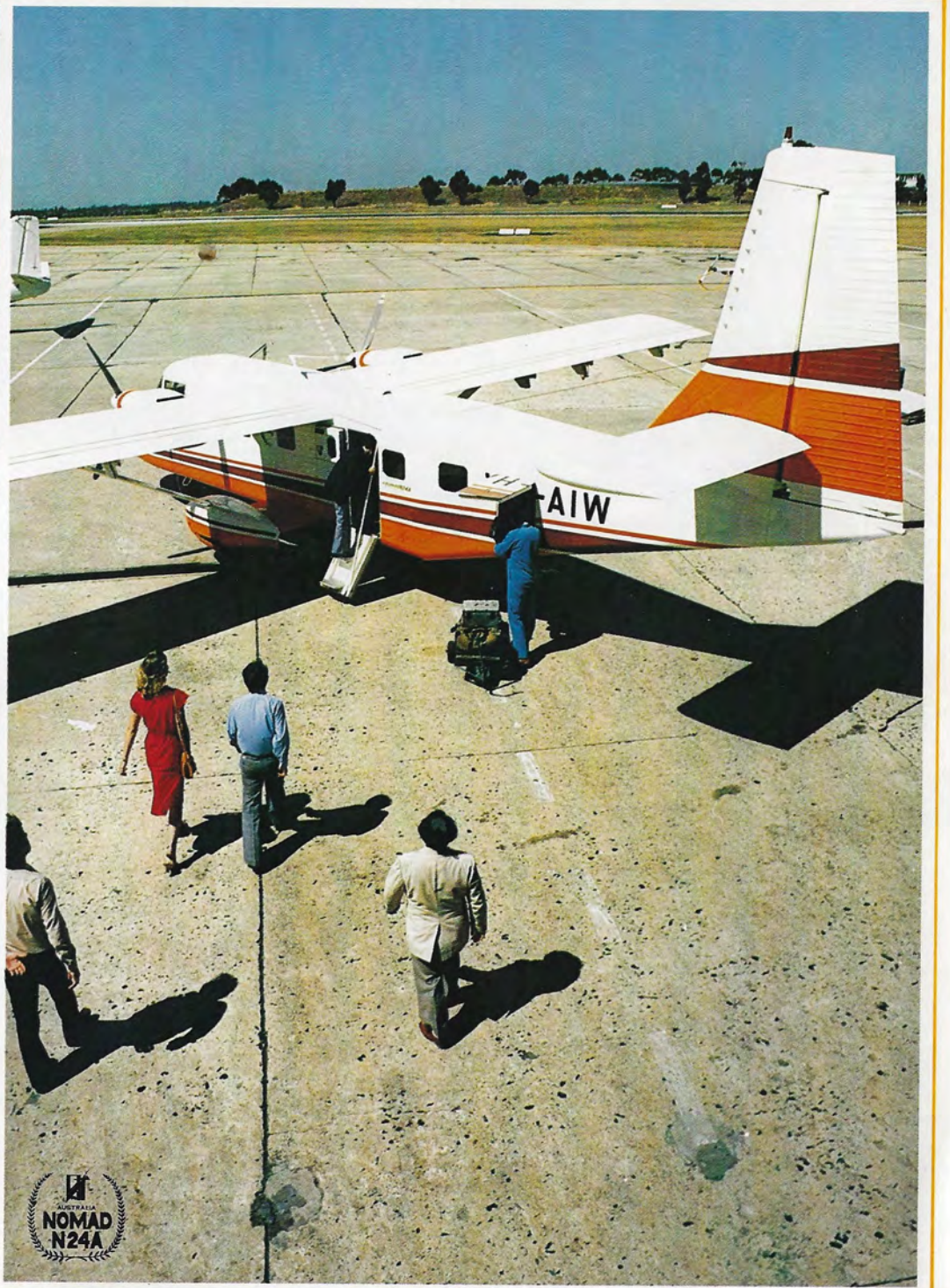
From the arctic wastes of Scandinavia, through temperate Europe down to daily operations at + 50°C flying survey in the Middle East, the Nomad has done the job – for years.

From the southernmost tip of South America up through the equatorial regions to Suriname and the Caribbean, the Mid-West of the United States and the frozen wastes of Alaska.

Or winding through the endless Indonesian archipelago up into the 10,000 ft. high, short, rough, angled strips of West Irian and Papua New Guinea and on patrol along the coastline of the world's biggest island, Australia.

The Nomad is at home – everywhere.


AUSTRALIA
NOMAD
N22B


AIW
AUSTRALIA
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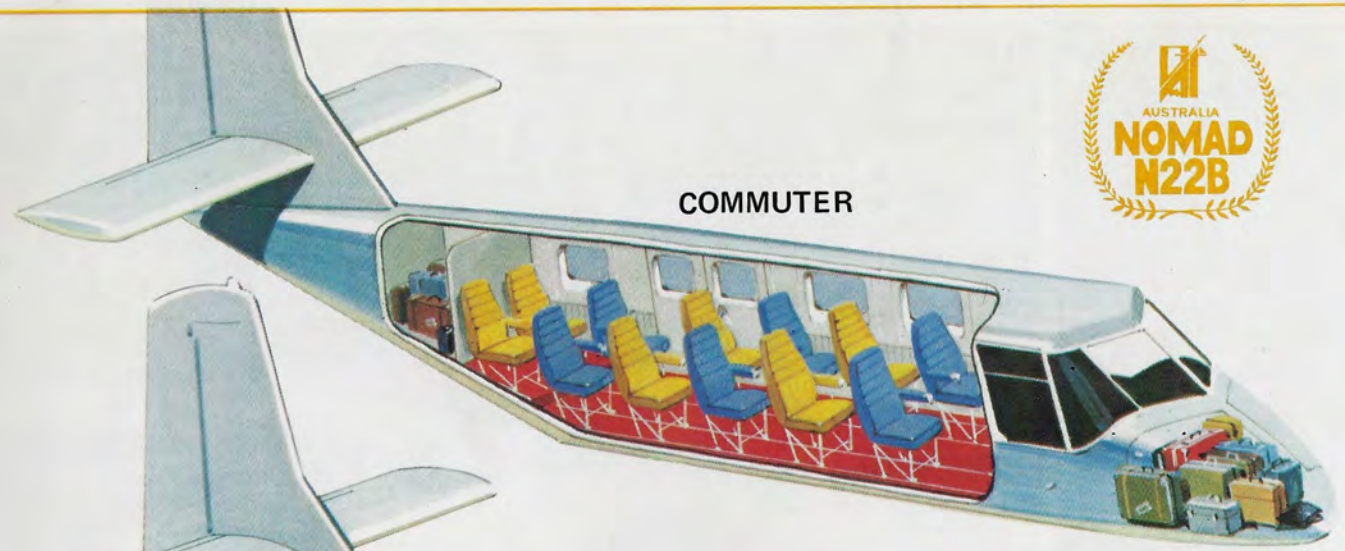
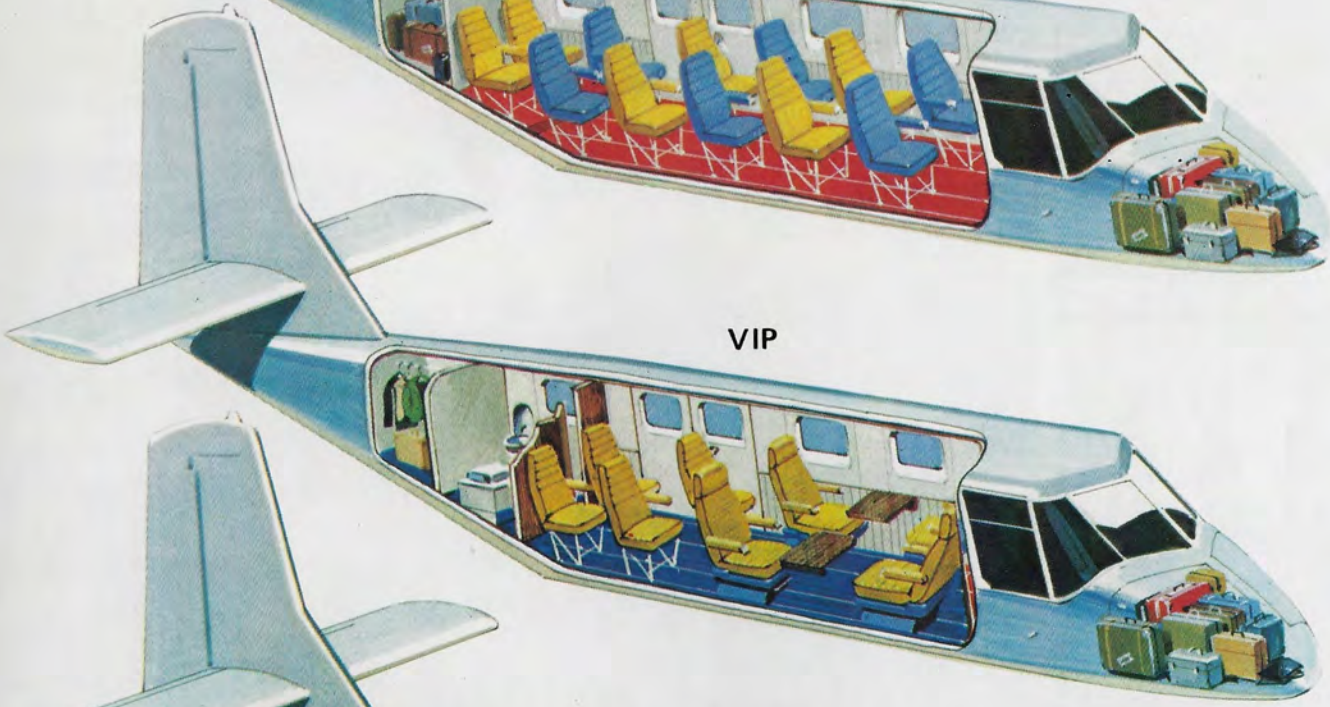
N24A

AUSTRALIA
NOMAD
N22B

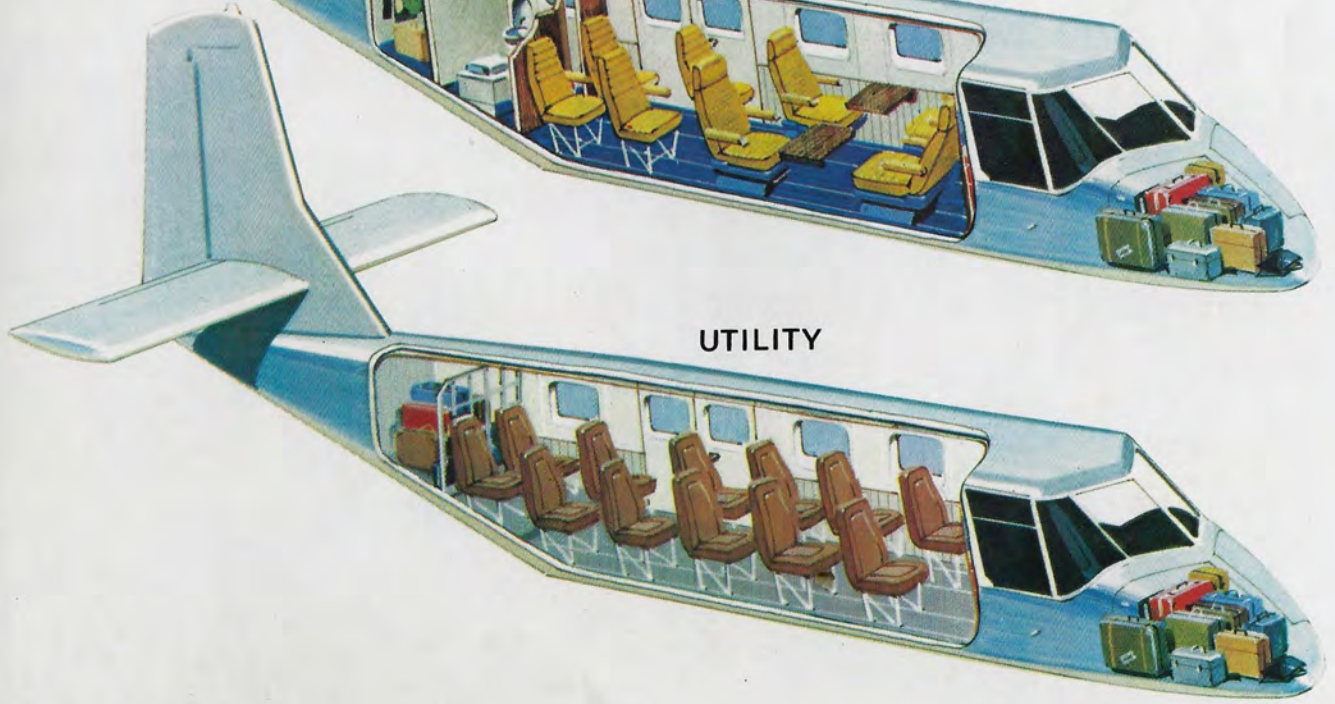
COMMUTER



VIP



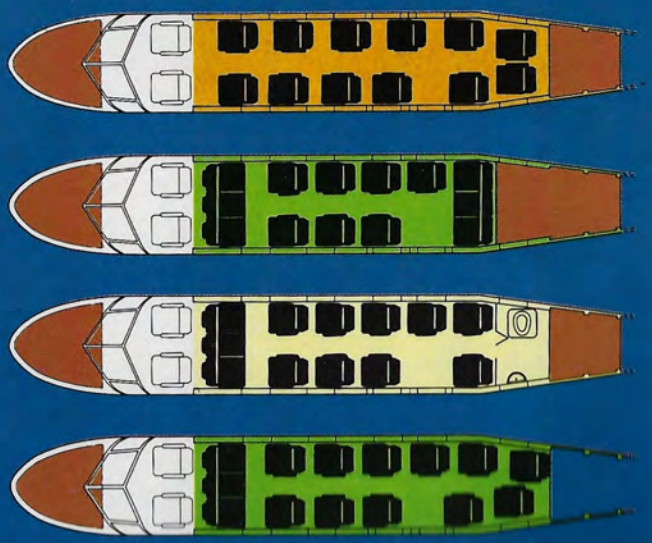
UTILITY



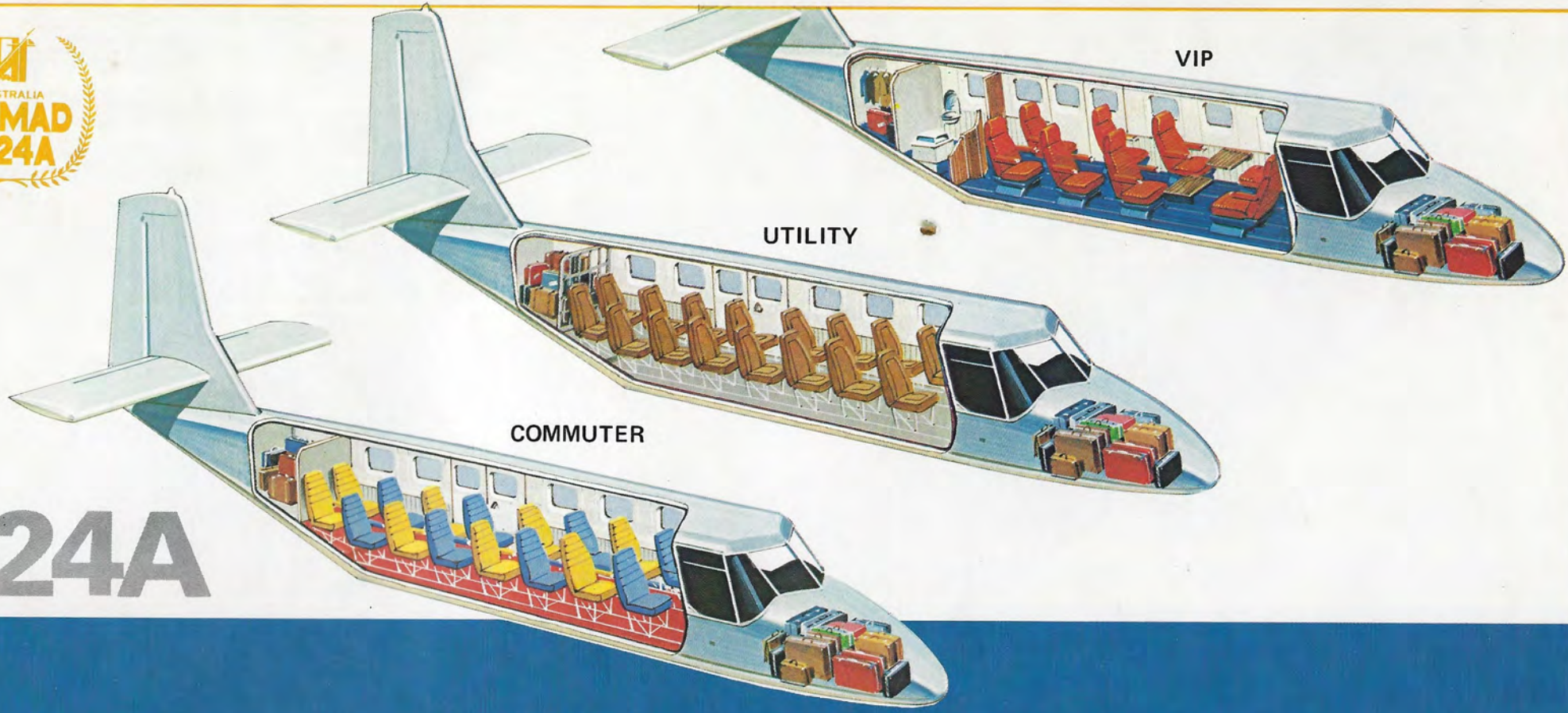
N22B

12 Pax layout flexibility

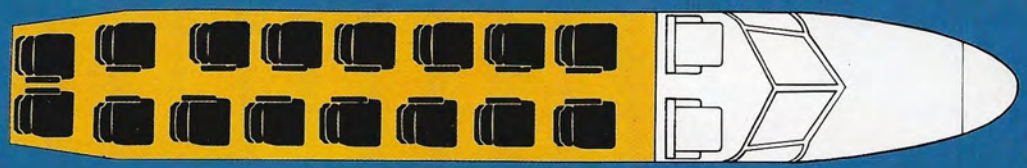
Although a pure STOL thoroughbred, the N22B has earned as many dollars on 5,000 ft. plus concrete runways as in spartan bush services. Operationally, one of the most capable aircraft in its class ever designed. But for its 12 passengers a different airplane, totally appealing, totally comfortable, commercially sound, a fact endorsed by operators around the world. The ideal size "step-up" from old generation 7 to 9 seat piston powered airplanes. Inside, unprecedented passenger comfort, "airline" standard for the passenger. Outside, uncompromisingly tough and purposeful. Capable of anything from inter-city commuter shuttles to unbelievable STOL movements from minimal airstrips.



AUSTRALIA
NOMAD
N24A



N24A



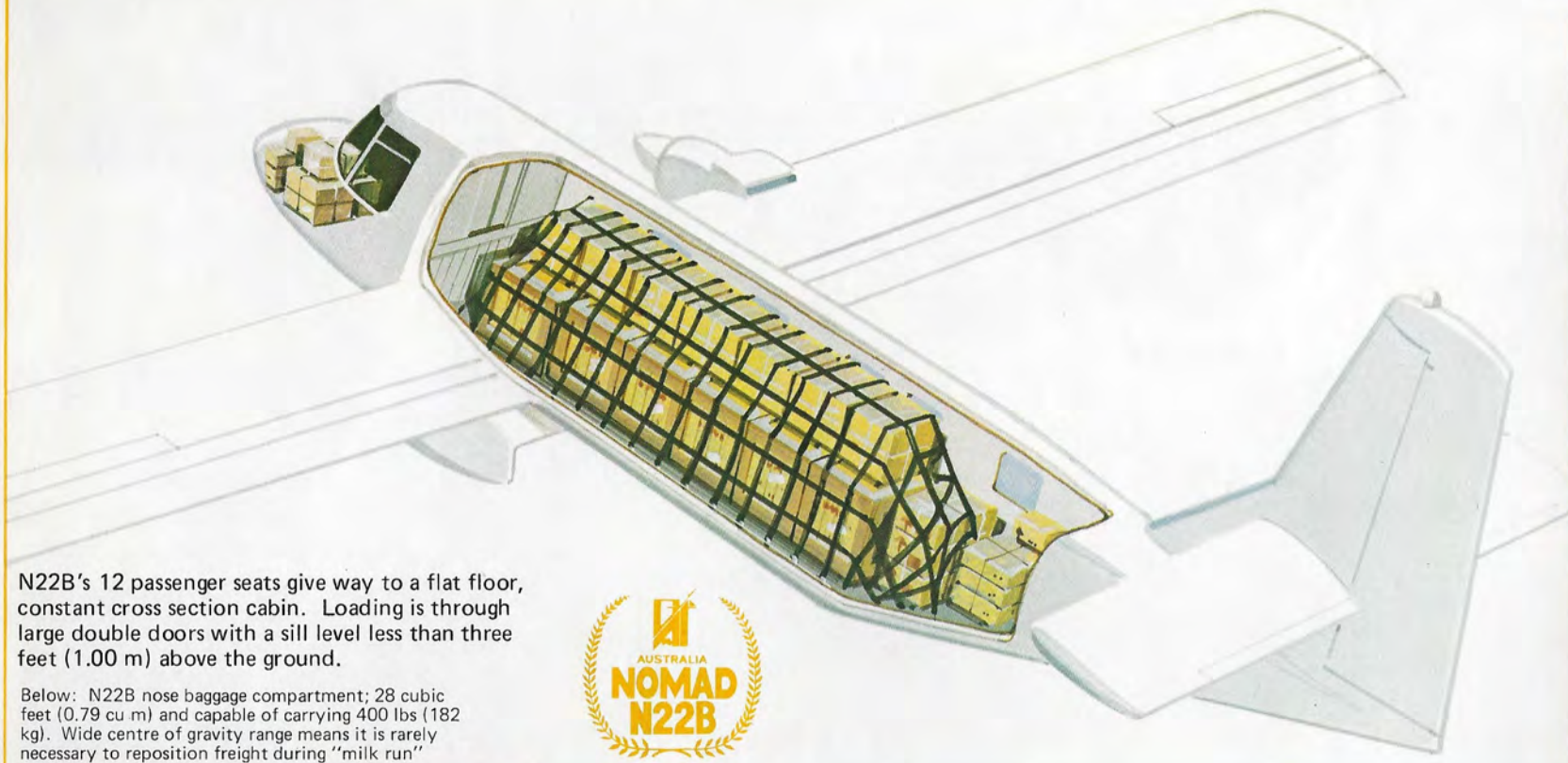
16 Pax Commuterliner

Stretched. Commuter dedicated. All the hard-learned design and maintenance features of the N22B plus the low seat/mile figures resulting from boosting capacity by a third with 98 per cent spares commonality with the N22B.

Gross weight UP – 9400 lbs (4265 kg). Now 16 passengers, baggage volume UP 50% all with substantially unchanged direct operating costs. More seat miles per lb. of fuel. Revenue UP by 33 percent.

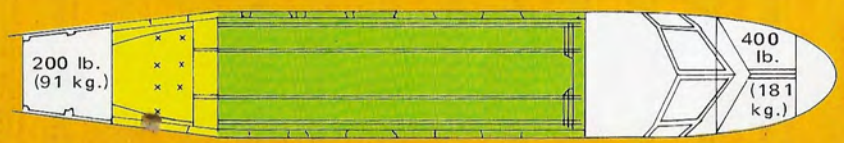
N22B

Two freighters, & combi capability



N22B's 12 passenger seats give way to a flat floor, constant cross section cabin. Loading is through large double doors with a sill level less than three feet (1.00 m) above the ground.

Below: N22B nose baggage compartment; 28 cubic feet (0.79 cu m) and capable of carrying 400 lbs (182 kg). Wide centre of gravity range means it is rarely necessary to reposition freight during "milk run" operations.



N22B freight cabin measures 17.6 ft. (5.36 m) long, 62 inches (1.57 m) high, 51 inches (1.30 m) wide. Fully usable 360 cubic feet (10.2 cu. m) is available over a full-width flat floor with continuous Douglas track tie down rails. A stressed floor (standard) allows loadings of:

Main Cabin — 150 lb. per sq. ft. (732 kg. per sq. m.)

Rear Fuse — 50 lb. per sq. ft. (244 kg. per sq. m.)

Nomad's square section cabin can easily accommodate large or bulky loads. Pilots have separate entry doors.

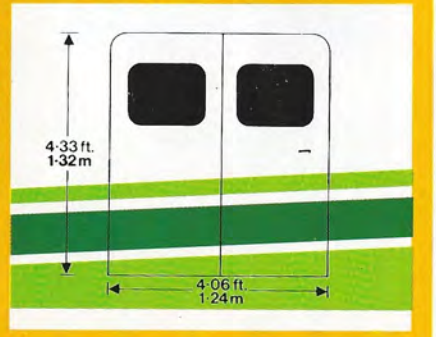
Both model Nomads accept standard IATA D containers.

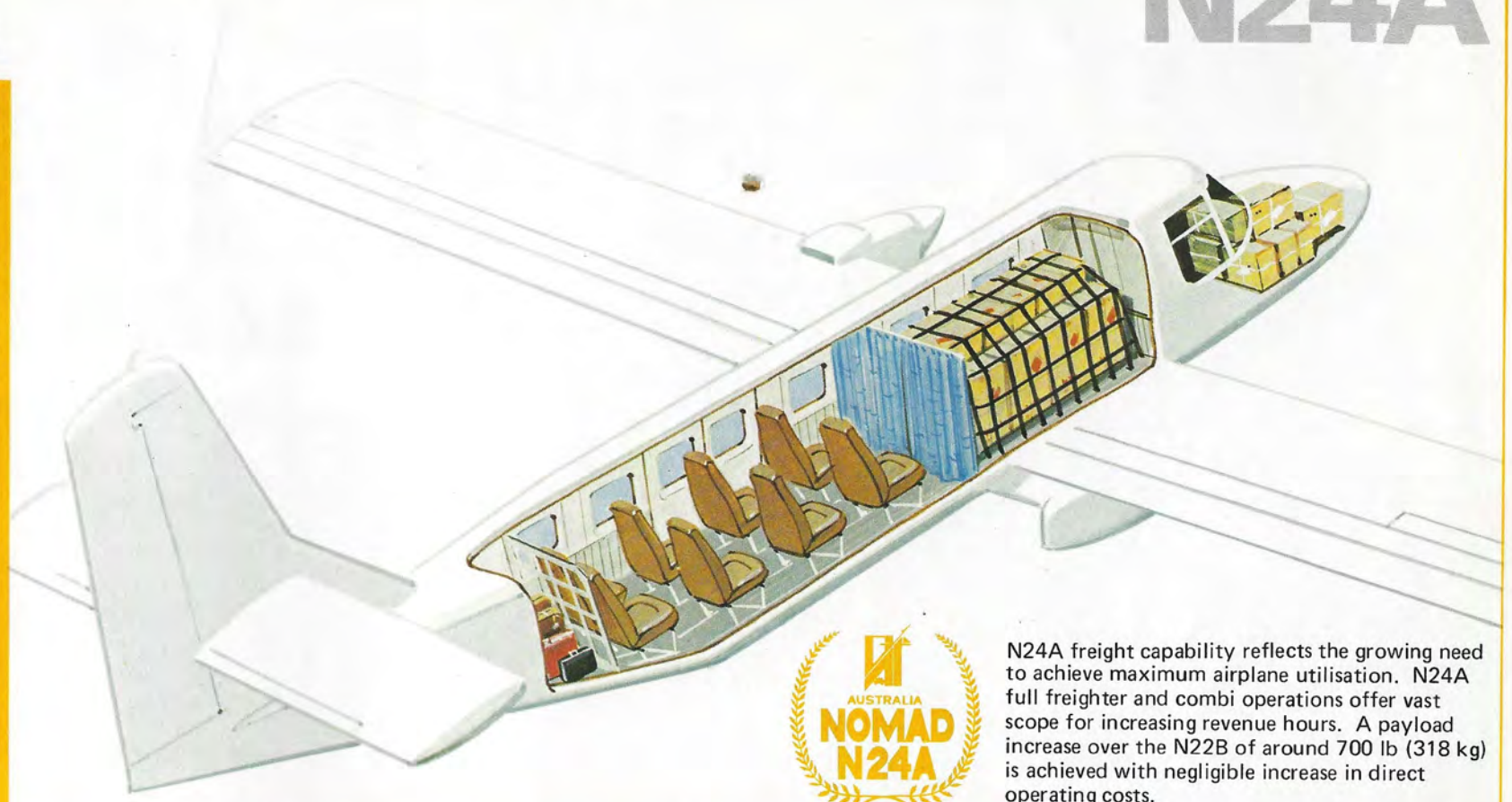
Quick-change — engineered in

N24A

30 cubic feet (0.85 cu. m) rear baggage locker. Standard on N24A – optional on N22B. Carries 200 lb (91 kg). Door size 21"x29" (0.50 m x 0.74 m).

Nomad Utility seats fold quickly to a minimal package of 19"x 19"x10" (48 cm x 48 cm x 25 cm) and stow in either baggage locker.





AUSTRALIA NOMAD N24A

N24A freight capability reflects the growing need to achieve maximum airplane utilisation. N24A full freighter and combi operations offer vast scope for increasing revenue hours. A payload increase over the N22B of around 700 lb (318 kg) is achieved with negligible increase in direct operating costs.

The fuselage cross-section and tie down arrangements in the N24A are unchanged. The simple fuselage stretch involves no additional system, no additional maintenance. Cabin length is extended from 17.6 ft (5.36 m) in the N22B to 21.3 ft (6.49 m) for N24A.

Allowable floor loadings are:

Main Cabin	100 lb. per sq. ft. max (488 kg. per sq. m.)	Rear Main Cabin	70 lb. per sq. ft. (342 kg. per sq. m.)	Rear Fuse	50 lb. per sq. ft. (244 kg. per sq. m.)

Nose baggage compartment capability is increased from 28 to 40 cubic feet (0.79 to 1.14 cu. m.)

Common to N22B and N24A
Airline standards of passenger comfort in short haul services

Nomad interiors offer true airline standard comfort. Nomad is at the forefront of cubic space per passenger – 26 cubic feet (0.72 cu. m) on the N24A – a figure unmatched by any other airplane in its class. Reliable and effective heating and ventilation. Partition separating the passenger cabin from the flight deck. Nineteen inch (48.0 cm) seat cushions, allowing generous aisle space and a comfortable 30 inch (76.20 cm) seat pitch. Wide view windows and an easy-boarding airstair, standard on the N24A. A compact "hook on" utility step, or the airstair, is optional for N22B. Add to these the legendary cabin quietness due to the low-vibration turboprops and you have the airplane that sets the standard for passenger appeal in commuter airlines. A variety of seats through Utility, Commuter, Cross Country and VIP are available.

1. VIP seat with back recline.
2. Commuter seat, fixed legs, cloth upholstered with single aisle armrest.
3. Cross Country seat – wider than Commuter seat with twin armrests.
4. Utility seat – folds to 19" x 19" x 10" (48 cm x 48 cm x 25 cm) – vinyl covered.


FRAGILE


VH-FHS


VH-FHS

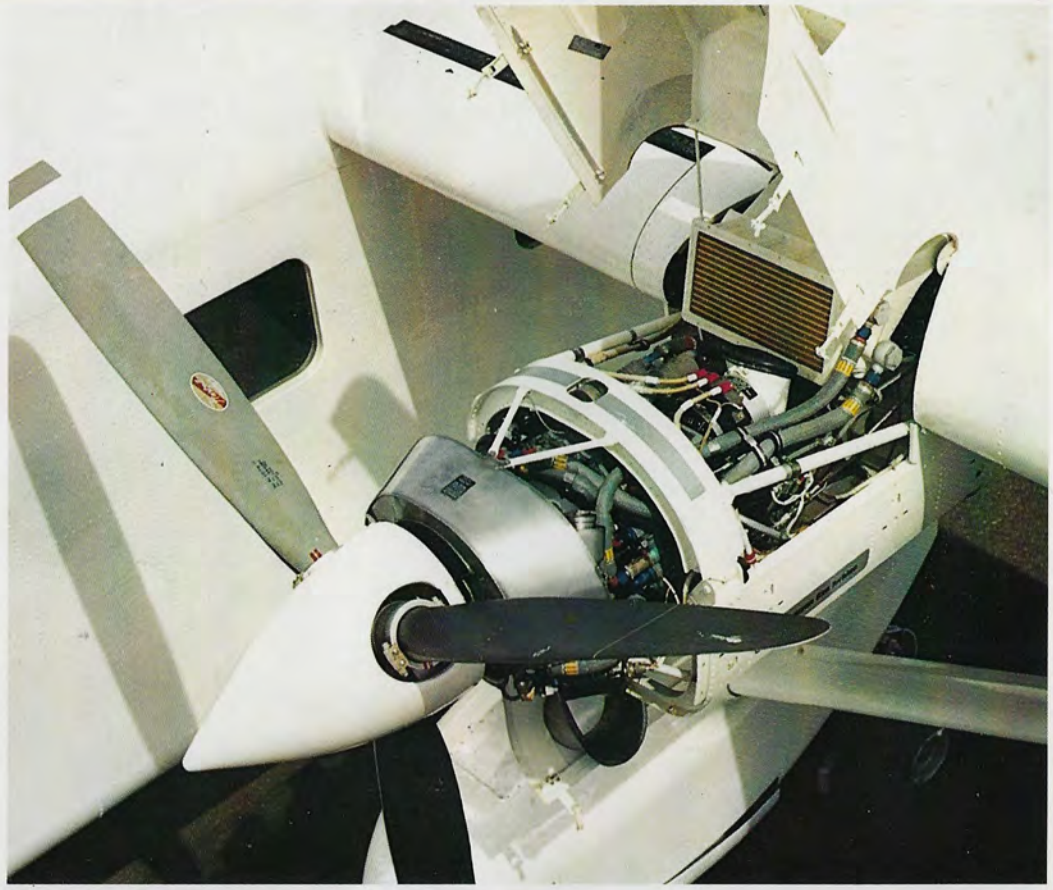
Typical N24A layout using Commuter seating...

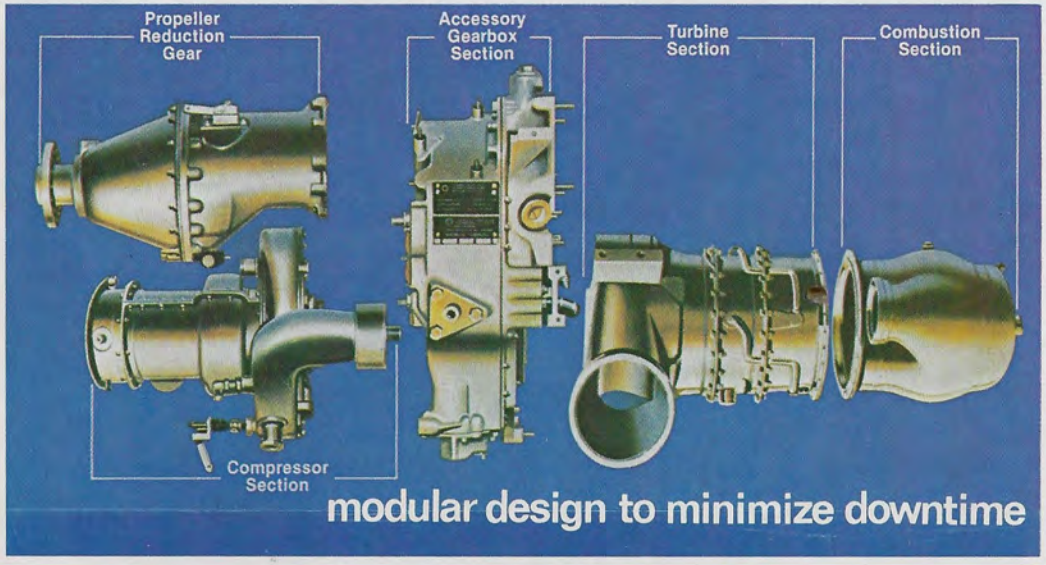
Nomad, first with Allison 250 B17B/C turboprop

In 1971 Nomad pioneered the use of the Allison 250 in fixed wing airplanes. The Allison was primarily a helicopter engine and the wealth of development experience logged by Nomads has meant the turboprop version is now renowned for its reliability, fuel economy and ease of maintenance. More than 18.3 million hours have been logged by 13000 Allison 250 engines throughout the world.

On Nomad, the Hartzell propeller/Allison engine combination allows use of BETA and reverse thrust. This means not only quick and responsive deceleration but the ability to taxi backwards on congested airport ramps. Modular construction allows each module to develop its optimum TBO and scheduled module changes are carried out "on the wing".

The huge population of Allison 250 powered helicopters has meant that heavy overhaul facilities are scattered prolifically across the world.





modular design to minimize downtime

N22B means STOL

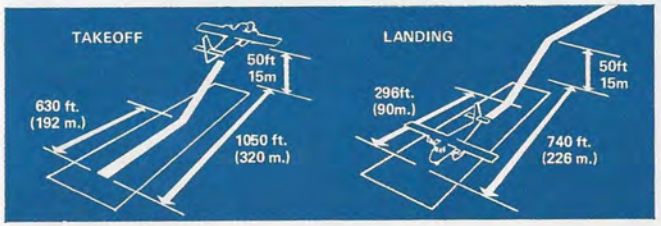
Nomad's unique high-lift profile, achieved through full span, double slotted flaps, along with its turbine power gives the airplane staggering takeoff and landing performance. To match this capability, the undercarriage and airframe structure are designed to cope with the roughest, the softest and the steepest airfields that can be used by this class of airplane.

The aircraft has carved itself a legendary reputation in rough, hot and high strips of South America, Indonesia and Papua New Guinea.

Pilot visibility from the flight deck matches the demands placed on aircrew operating into and out of tight strips.

It has extended the standard of airline passenger services and high volume freight capacity to areas served previously only by low payload, uncomfortable first-generation STOL airplanes.

AUSTRALIA NOMAD N22B



N24A means commuters

The stretch of the N24A was designed to deliberately sacrifice the full STOL capability of the N22B in favour of greater economic appeal to the commuter operator.

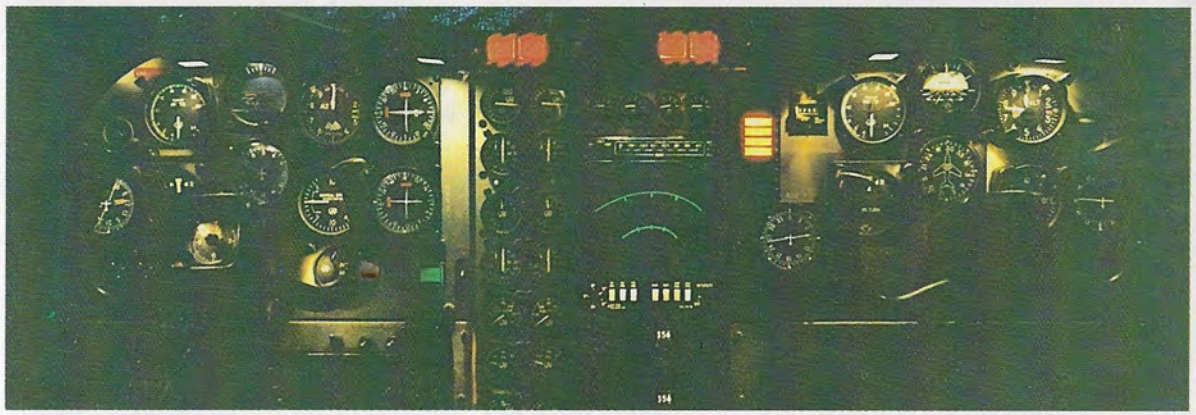
The N24A, while still retaining exceptionally short runway requirements, takes off using a docile 10 degree flap setting.

Its interior furnishings, seats and airstair are customised specifically for the commuter airline. It retains the design integrity proven on the N22B.

It is a new airplane, carrying the fuel economy and silence of operation of its smaller STOL brother into the environmentally sensitive area of urban commuter operations.

AUSTRALIA NOMAD N24A


FRICTION
FLAP
NOSE



Nomad...a pilot's airplane

The Nomad flight deck is the result of a major human engineering study. The layout of the instrument panel is simple and in many ways conventional.

The line pilot, settling into the vertically adjustable seat, strapping in with the standard inertia reel shoulder harness, has fingertip control over rudder pedal leg reach, and will have no difficulty in assimilating the logical panel layout.

A straight up and down pairing of engine instruments. Power, fuel and propeller controls, reduced to two levers instead of the conventional three.

The inter-relation of flap, power and trim functions is recognised and embodied with these three controls adjacent to each other.

There is plenty of room for a "full house" avionics fit with lots of panel space for controllers and two accessible avionics bays for remote units.

And visibility, designed to accommodate the demands of remote airstrip work, unparalleled in an aircraft of its class.

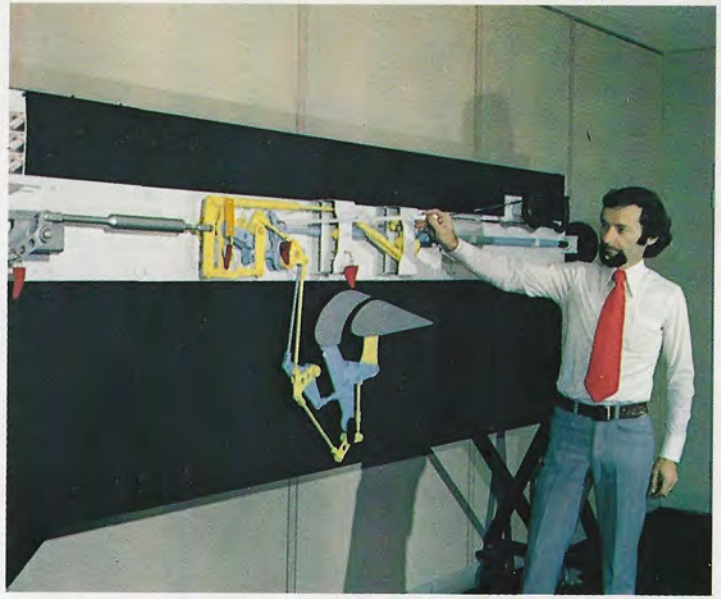
Major components supplied by dependable U.S. manufacturers.

Almost all proprietry components, standard parts and materials used in the construction of both Nomads are of American origin. The engines of course are Detroit Diesel Allison, a division of General Motors. The propellers are Hartzell. GAF designed both airplanes with a mind to employing as many standard US General Aviation items to provide commonality with other US manufacturers airplanes. From landing gear motors and actuators, instruments and avionics, right down to raw materials and even fasteners, the Nomads may be Australian designed and manufactured but they remain very much "world" General Aviation airplanes.

GAF identifies all suppliers of proprietry components and uses original manufacturers part numbers. This leaves the way clear for operators to purchase direct.

... low maintenance

A significant contributor to Nomad's demonstrated modest operating costs is the low maintenance manhours required per flight hour -- and this was no accident. Check Nomads easy access to all systems, in-built engine servicing platform on the wheel "pod", lack of up and down latches on the undercarriage, centralised grouping of all electrical services plus many other maintenance design features. You will quickly appreciate that these were "designed in" as original objectives.



GAF means total support ...

A Nomad operator, prior to taking delivery of his airplane, passes through one of the most thorough systems and operational training programs to be offered by any General Aviation manufacturer. At its Melbourne, Australia head-quarters, Government Aircraft Factories maintains full-time pilot and engineer training schools for the steady flow of Nomad customers.

Pilot training covers the whole spectrum of N22B and N24A operations. At Government Aircraft Factories airfield, pilots fly the airplanes from a fully sealed runway with full ILS facilities as well as from a specially prepared rough STOL strip.

In urgency cases, after sale product support is met with AOG demands monitored 24 hours/day, 365 days per year. With Government Aircraft Factories, the difference is that since 1971 GAF's subcontract manufacture program has supplied spares on behalf of Boeing and Fokker to front line airline carriers using 727 and F28.

For normal lead time spares, GAF Nomad distributors are required to maintain workable levels of consumable and rotable items. GAF back this with factory stocks in Melbourne together with consignment stocks of insurance spares warehoused in the USA.

GOVERNMENT AIRCRAFT FACTORIES

Landing Gear for all seasons

One of the first true STOL airplanes of its size to be fitted with fully retractable landing gear, Nomad design reflects awareness of the increasing demand that fuel usage places on the present day operator – as well as good overall operating economies.

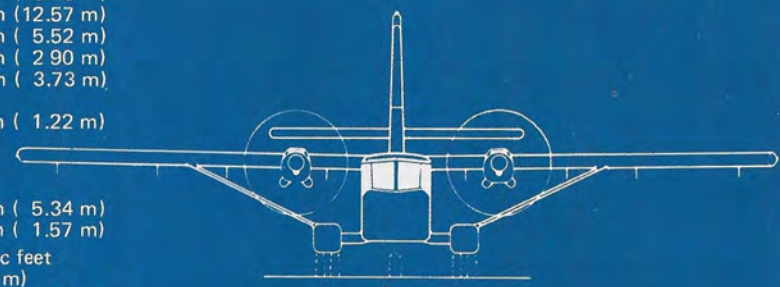
The gear itself is simple and reliable – an electromechanical system with all microswitches located in the stub wing, out of the slush and mud.

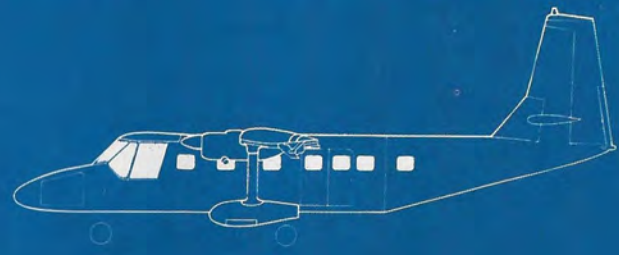
The long stroke oleo leg is highly damped to accommodate operations from the roughest and softest of surfaces.

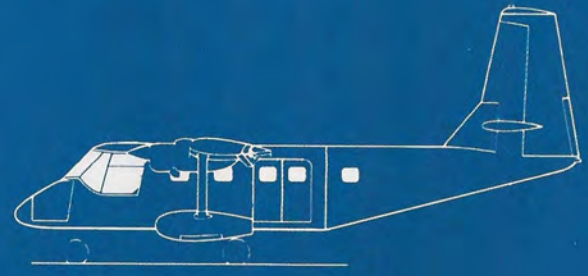
The gear retracts in less than six seconds.

General Characteristics N24A and N22B

Overall Dimensions	N24A	N22B
Wing Span	54 ft 2 in (16.46 m)	54 ft 2 in (16.46 m)
Length	47 ft 1 in (14.34 m)	41 ft 3 in (12.57 m)
Height (over tail)	18 ft 2 in (5.52 m)	18 ft 2 in (5.52 m)
Mainwheel Track	9 ft 6 in (2.90 m)	9 ft 6 in (2 90 m)
Wheel Base	14 ft 7 in (4.41 m)	12 ft 3 in (3.73 m)
Propeller Ground Clearance	4 ft 0 in (1.22 m)	4 ft 0 in (1.22 m)
Cabin Dimensions and Volume Excluding Flight Deck		
Cabin Length	21 ft 4 in (6.50 m)	17 ft 7 in (5.34 m)
Cabin Height	5 ft 2 in (1.57 m)	5 ft 2 in (1.57 m)
Cabin Volume	410 cubic feet (11.6 cu m)	360 cubic feet (10.2 cu m)
Cabin Width	4 ft 3 in (1.28 m)	4 ft 3 in (1.28 m)
Cabin Door Height	4 ft 4 in (1.32 m)	4 ft 4 in (1.32 m)
Cabin Door Width	4 ft 0 in (1.24 m)	4 ft 0 in (1.24 m)
Door Sill Height	2 ft 9 in (0.84 m)	2 ft 9 in (0.84 m)
Baggage Compartment		
Forward Nose Locker	40 cubic feet (1.14 cu m)	28 cubic feet (0.79 cu m)
Rear Compartment	30 cubic feet (0.85 cu m)	30 cubic feet (0.85 cu m)
Weights and Loadings		
Maximum Takeoff	9400 lb (4265 kg)	8500 lb (3856 kg)
Maximum Landing	9200 lb (4174 kg)	8500 lb (3856 kg)
Maximum Zero Fuel	9150 lb (4151 kg)	8250 lb (3742 kg)
Landing Gear		
Tyre Size Nose Wheel	8.00 x 6	8.00 x 6
Main Wheels	8.00 x 6	8.00 x 6
Inflation Pressure (nose)	44 psi (302 kPa)	46 psi (317 kPa)
Inflation Pressure (main)	39 psi (268 kPa)	34 psi (234 kPa)







NOMAD performance details, standard and optional equipment specifications and price etc., are provided in the appropriate NOMAD brochure listed below available from your NOMAD distributor or Government Aircraft Factories.

1.	N24A Performance Summary (FAR 23)	NSL007
2.	N24A Performance Summary (FAR 135)	NSL015
3.	N22B Performance Summary	NSL009
4.	N24A Standard Equipment	NSL014
5.	N22B Standard Equipment	NSL012
6.	N24A Optional Equipment Price List	
7.	N22B Optional Equipment Price List	
8.	N22B Technical Description	
9.	NOMAD's Allison Engine	

Government Aircraft Factories.

Government Aircraft Factories have been involved in aircraft design and production for over 40 years and have manufactured aircraft ranging from the World War II Beaufort and Beaufighter to the supersonic Dassault Mirage III. It is currently gearing up to manufacture major components of the F18 or F16 fighters.
With two plants in the vicinity of Melbourne, Australia, Government Aircraft Factories employs well over 2000 design and manufacturing personnel and is self-sufficient in production, from sheet metal pressings to upholstery panels, from autoclaved bonding to chemical milling and NC machining.
Government Aircraft Factories is a quality approved prime contractor to Boeing and Fokker for the supply of 727 and F28 major assemblies.

In the sophisticated arena of guided weapons and pilotless target aircraft, Government Aircraft Factories has completely developed the "Malkara" anti-tank missile, "Ikara" anti-submarine missile and the "Jindivik" drone, along with their guidance systems and launchers; and have sold and supported these products to the militaries of the world, including UK, Sweden, USA, Brazil and nationally in Australia. "Jindivik" with new versions still being developed, and in production after 30 years, testifies to the sound original design and production integrity exemplified in the NOMAD aircraft variants, N24A "Commuterliner", N22B "Floatmaster", "Searchmaster", "Surveymaster", "Mission Master" and "Medic Master".

AUSTRALIA

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Nomad variants

A family of airplanes has evolved around the basic structure.

Nomad Floatmaster, developed in conjunction with Wipline Inc., of the United States. Along with an amphibious version, this airplane is proving highly popular in the lake districts of North America and elsewhere where rivers and bays abound.

Medic Master. The choice of the legendary Australian Flying Doctors, flying over the remotest areas of the outback.

Nomad Searchmaster 'Lima'. Now a potent force in medium range maritime reconnaissance protecting the coastlines and EEZ territorial waters using sophisticated 360º radar and long range navigation systems.

Nomad Searchmaster 'Bravo'. The economical answer to maritime surveillance requirements. Ideally suited to developing countries, utilises forward looking target radar.

Nomad Mission Master. Proven forward area military airplane already in service with the defence forces of many Pacific nations.

Nomad Surveymaster. Proven in years of geophysical and photographic survey throughout the Middle East, S.E. Asia and Australia.

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AUSTRALIA
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NOMAD "Floatmaster"

NOMAD "Medic Master"

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