

DA42-VI THE DEFINITION OF PERFECTION

 **Diamond**
AIRCRAFT



THE DEFINITION OF PERFECTION



DA42-VI: OUR HIGH-PERFORMANCE SINGLE IS A TWIN

The DA42-VI is easy to fly and burns fuel like a single, but with the added safety of a second engine. Impressive cross-country performance pleases private pilots and business owners alike, while the low operating costs make it an ideal advanced trainer. No wonder it's the best selling piston twin, by far.



AT A GLANCE:

- 4 seats, convenient access
- Panoramic canopy
- Luxurious leather interior
- G1000 NXi with 3-axis GFC700 and Yaw Damper
- Twin 168 hp Jet fuel AE300 Engines
- Superb Single Engine Performance
- High Fuel Efficiency
- TKS Ice Protection (FIKI)



Consumption at 60%
39.4 lt/h or 10.4 gal/h



Max. Speed
365 km/h or 197 kts



Max. Altitude
5,488 m or 18,000 ft



Useful Load
579 kg or 1,276 lbs



„The DA42-VI is wonderful. She does everything you promised. Climbs like a rocket through the ice layer, 1350 fpm and still 1100-1200 at altitude. Radar is great. Use it a lot. Data link is great. Weather and sending emails and SMS at altitude. I don't think there is any other piston twin that comes close price/performance-wise. For those of us who don't want to spend what it takes to fly a turboprop, the DA42-VI is the perfect airplane. What a dream machine!“

Brian Meese, DA42-VI owner,
Sweden

ADVANCED TWIN TECHNOLOGY



GO WHERE SINGLES FEAR TO TREAD.

Imagine this: It's getting dark. You're in the mountains, crossing big water or densely populated terrain. You're picking up ice and your intended destination just closed. At times like this, the security of the second engine, incredible endurance and single engine performance, a FIKI certified ice protection system, superior situational awareness courtesy of the supreme Garmin G1000 NXi glass flightdeck, and an autopilot with razor sharp precision and standard Electronic Stability & Protection (Garmin ESP™), are – quite simply – life insurance.



The performance, stability, handling characteristics and ease of operation of the DA42 make it an easy transition from single to twin. Superb performance with a single engine service ceiling of 18,000' offers a margin of safety that single engine aircraft simply do not have. Especially when flying in inclement weather, over inhospitable terrain, over water and at night, nothing beats the safety of continued flight in case of engine failure. That is why Diamond's high performance piston is a twin.



"[...] general aviation has another gem in the form of the DA42-VI."

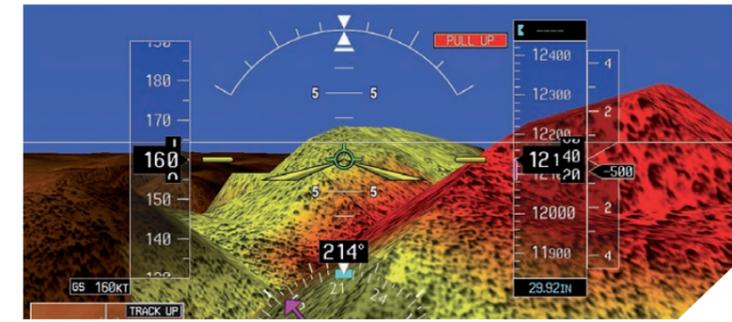
Australian Flying Magazine

ADVANCED AVIONICS



ADVANCED AVIONICS AND ALL WEATHER CAPABILITY (FIKI).

The fully integrated Garmin G1000 NXi flight deck with standard 3-axis GFC700 Automated Flight Control System, yaw damper and Electronic Stability and Protection (ESP™), is complemented by a long list of avionics options to perfectly suit your needs. Integrated weather radar, normally available only on much more expensive aircraft, is available as are Traffic Alerting, Synthetic Vision, and much more. Your DA42-VI is also certified for IFR (Instrumental Flight Rules), VFR (Visual Flight Rules) and Night VFR.



A proven TKS ice protection system helps the DA42-VI to withstand flight into known icing conditions. Wings, tail, propellers and windshield are protected with TKS fluid, systems are redundant and rigorous flight tests have demonstrated the ability of the DA42-VI to withstand icing long enough to get you back to safety.



When it comes to safety, positive results are what really matter most. Diamond has earned a safety record, backed by real world data, that is second to none.

AIRFRAME AND ENGINE



AIRFRAME

The DA42 offers exceptional visibility thanks to its panoramic wrap around canopy and generous rear windows. Comfortable access for all on board is assured through the forward swinging canopy and large rear door that provides access to the folding rear seats and fuselage baggage area. Additional baggage is stowed in two generous nose compartments that are sized for golfbags and offer maximum flexibility in loading for any mission. Comfort is assured by adjustable front seatbacks and lumbar support. Luxury features abound throughout, including premium leather interiors in several styles and colors, all LED interior lighting, optional electric air conditioning and more.

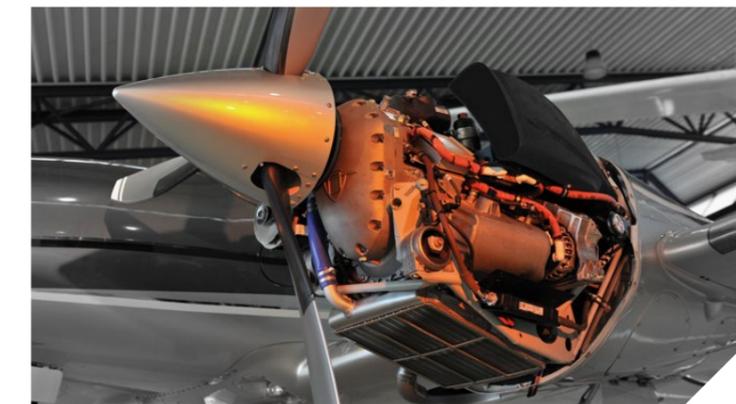


The sleek all carbon composite airframe incorporates advanced aerodynamics with the latest in passive safety technology for high performance, great efficiency and superior occupant protection. The composite airframe is durable, easily maintained and will keep looking great for many years to come.



ENGINE

The turbocharged Austro AE300 jet fuel piston engines perfectly match the DA42's aerodynamically efficient airframe, burning less than 17 gph (64.3 lt/hr), combined, at a high speed cruise of 197 kts (365 km/h), and less than 10.4 gph (39.4 lt/hr) overall in a typical flight training environment.



For further information about the AE300 engine visit:

www.austroengine.at

DESIGNED FOR PILOT'S SATISFACTION



DA42-VI IMPROVEMENTS



1. PROPELLER

The propeller for the DA42-VI has been developed and designed in close cooperation with the company mt-propeller. Slightly bigger, increased diameter and a more curvy shape led to a performance improvement of 3 knots.

2. COWLING/NACELLE

The embodiment of modern design and technical excellence: sleek style and noble workmanship in every detail. We have achieved a systematic appraisal and further developments of the existing modular systems, which makes our aircraft faster, more aerodynamic and more advanced. Redesign of the air intakes for charge air, engine cooling, fuel cooling, gear box cooling and cabin heat. The streamlined shape of the new cowlings as well as the repositioning of the fuel cooler resulted in more thrust and less aerodynamic drag which made the DA42-VI about 8 knots faster.

3. TKS PANELS

Sophisticated installation process for the TKS-panel has considerably increased the performance and aerodynamic qualities which resulted in less drag and improved lift.

FLUSH HEAD SCREWS

In spite of their flat and elegant impression the flush head screws provide high durability and a higher speed for our customers. Your benefits: high efficiency and a sovereign elegance.



4. LUGGAGE COMPARTMENT

The improvements incorporate aesthetic, functional and aerodynamic advantages. With an advanced new hinge concept gaps could be reduced to a minimum clearance and increased the opening angle. Additionally the doors are sealed with a better seal design and provide better protection for your luggage.



INTERIOR

Product enhancement does not stop with interior design. By using lightweight materials, such as ultra light floor coverings, a significant additional weight reduction, increased speed and enhanced performance of the aircraft, could be achieved.

5. WING FAIRINGS

Right from the development stage, the engineers at Diamond Aircraft laid the foundations for a new generation of wing fairings. Attached under the wing they are covering exposed flap hinges and control rods contributing to the efficiency of the DA42-VI.

6. NEW RUDDER

With the redesign of the rudder we succeeded not only in aerodynamic benefits by reducing drag but also in decreasing the minimum control speed which has been reduced by over 5 kts. This means better directional controllability with the critical engine inoperative at a lower speed, and an appreciable reduced take-off distance.



DA42-VI improvements compared to its predecessor DA42 NG.

SALES UNITS



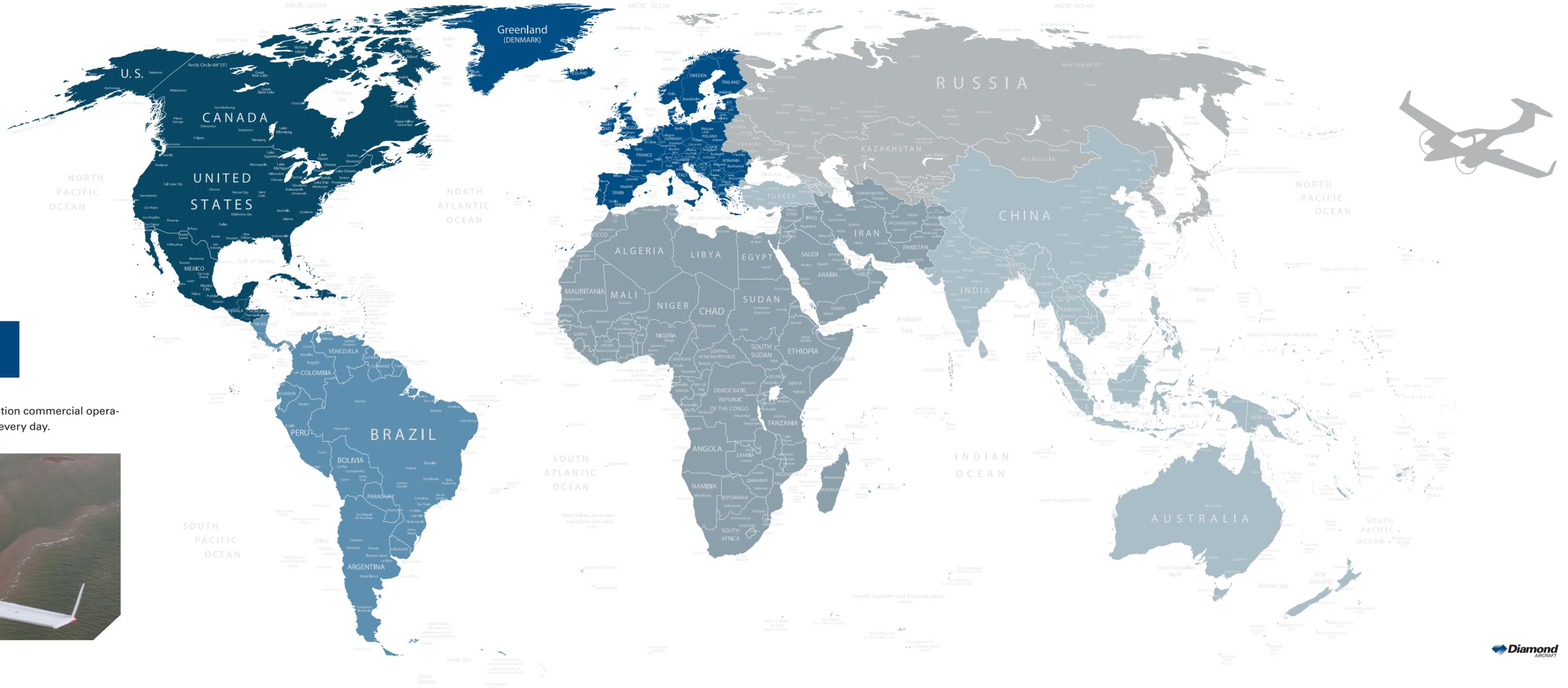
DA42 variants in global operation

(Year 2005 - 2021)

North America	150 Units
Latin America	20+ Units
Europe	460+ Units
Middle East / Africa	85+ Units
CIS States	120 Units
Asia and Pacific	250+ Units

**WORLDWIDE
1,095 UNITS**

With 1,095 Diamond DA42's in worldwide service today, many in high utilization commercial operations, the DA42 fleet is proving its durability and safety, day in and day out, every day.



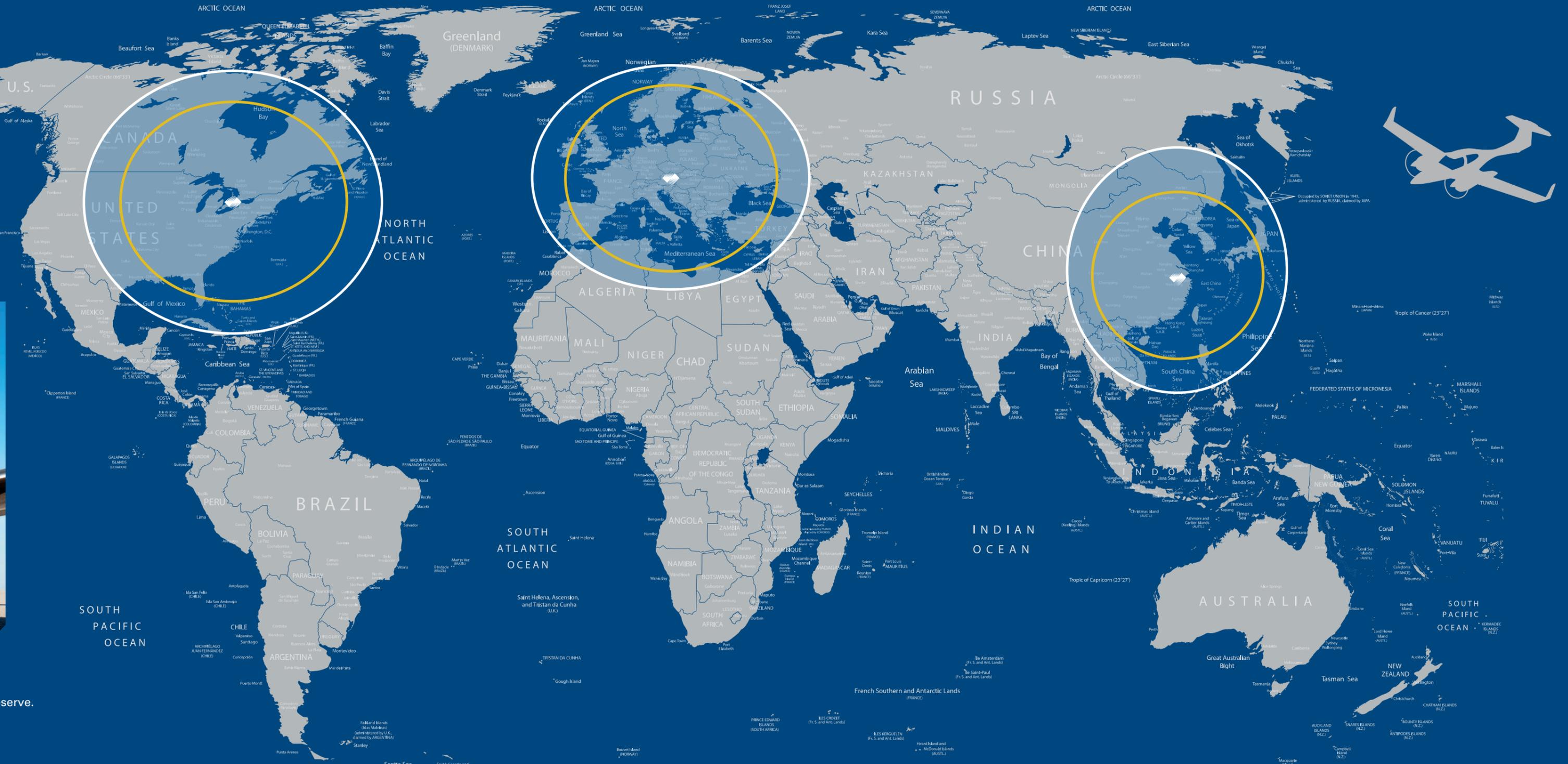
DA42-VI RANGE



DA42-VI RANGE (incl. auxiliary tank)

POWER: 50% (white circle on map)
Range: 1,225 nm (2,269 km)
Time: 8.8 h
Speed: 141 kts (261 km/h)
Consumption: 8.8 gal/h (33.3 l/h)

POWER: 75% (yellow circle on map)
Range: 1,028 nm (1,904 km)
Time: 5.9 h
Speed: 175 kts (324 km/h)
Consumption: 13 gal/h (49.2 l/h)



The above data are approximately specifications and may change without notice.
Range calculation does not consider additional fuel consumption for taxi, take-off, climb, descend or reserve.

DA42-VI FACTS AND SPECIFICATIONS



POWER PLANT

Engine	2x Austro Engine AE 300 turbocharged common-rail injected 2.0 liter diesel engine with 168 HP and EECU single lever control system	
Propeller	2x MT propeller MTV-6-R-C-F/CF 190-69 3-blade constant speed propeller	
Fuel grades	Jet A-1, Jet A, TS-1 (Russia, Ukraine), RT (Russia, Ukraine), No. 3 Jet Fuel (China), JP-8	

DIMENSIONS / MASS / LOADING

Length	8.56 m	28 ft 1 in
Height	2.49 m	8 ft 2 in
Wingspan	13.55 m	44 ft 6 in
Seats	4	4
Empty weight without options	1,420 kg	3,131 lbs
Max. useful load	579 kg	1,276 lbs
Max. take-off mass	1,999 kg	4,407 lbs
Fuel capacity total (usable fuel)	289 lt / 231 kg	76.4 US gal / 509 lbs
main tank	189 lt / 151 kg	50.0 US gal / 333 lbs
auxiliary tank	100 lt / 80 kg	26.4 US gal / 176 lbs

PERFORMANCE (MTOM, ISA)

Max. speed (16,000 ft, MCP) 1,760 kg TOW	365 km/h TAS	197 kts TAS
Max. cruising speed (16,000 ft, MCP)	352 km/h TAS	190 kts TAS
Cruise speed at 75% (16,000 ft)	324 km/h TAS	175 kts TAS
Stall speed, landing configuration	115 km/h CAS	62 kts CAS
Rate of climb (MSL)	5.7 m/s	1,114 ft/min
Single engine service ceiling (climb rate 50 ft/min)	4,878 m	16,000 ft
Single engine absolute ceiling (climb rate 0 ft/min)	5,335 m	17,500 ft
Range at 60% (12,000 ft, incl. auxiliary tank) incl. climb, no reserves	2,038 km	1,100 nm
Max. range (FL 180, 50% PWR) incl. climb, no reserves	2,269 km	1,225 nm
Consumption at 60% in total	39.4 lt/hr	10.4 US gal/hr
Take-off performance (MSL, ground roll / take-off obstacle) Short field t/o procedure	375 m / 649 m	1,230 ft / 2,129 ft
Landing performance (MSL, ground roll / landing distance)	387 m / 647 m	1,269 ft / 2,122 ft
Max. operating altitude	5,488 m	18,000 ft
Max. demonstrated crosswind	46 km/h	25 kts

Specifications apply to standard equipped aircraft, if not otherwise stated. The above data are approximately specifications and may change without notice.

AVIATION AS UNIQUE AS YOU ARE



NORTH & SOUTH AMERICA, AUSTRALIA, NEW ZEALAND:

1560 Crumlin Sideroad, London, ON, Canada, N5V1S2
Phone: +1 800 268 4001, sales-canada@diamondaircraft.com

EUROPE, MIDDLE EAST, AFRICA, RUSSIA/CIS, ASIA (HQ):

N. A. Otto-Strasse 5, 2700 Wiener Neustadt, Austria
Phone: +43 2622 26700, sales-austria@diamondaircraft.com

CHINA:

Wanfeng Airpark, Dashiju Town
Xinchang County, Zhejiang Province, P. R. China

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