

# DA42

Advanced twin technology,  
safety and performance





# 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.

# PROPULSION

The turbocharged Austro AE300 jet fuel piston engines perfectly match the DA42's aerodynamically efficient airframe, burning less than 17 gph, combined, at a high speed cruise of 190 kts, and less than 11 gph overall in a typical flight training environment.

Control is jet-engine simple, with each engine / propeller combination controlled by a single power lever and power settings displayed in % power. Simplified power control means that you can focus on more important things and that is not just more convenient, but safer too.

The 3 blade MT hydraulic constant speed propellers feature advanced blade geometry for efficient performance,

smoothness and low noise. They are automatically controlled by each engine's digital engine control through conventional hydraulic governors. Feathering is as simple as flipping a single switch.

The DA42's AE300 170 hp jet fuel piston engines have been in service in Diamond's DA40 NG and DA42 since 2009. With over 1500+ engines in service and a total fleet time of well over 1,050,000+ hrs, the AE300 has proven itself to be smooth, reliable and efficient.

Austro Engines and MT Propellers are supported by North American based factory support and parts centers and a network of Authorized Service Centers.



# AVIONICS

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.

# STANDARD FEATURES & OPTIONS

## Airframe & Powerplant

- 2x Austro Engine AE 300 turbocharged common-rail injected 2.0 liter diesel engine with 168 HP and EECU single lever control system
- 2x MT Propeller MTV-6-R-C-F/CF 190-69 3-blade constant speed propeller
- Composite cabin and safety seats (up to 26g)
- "FAILSAFE" airframe and wing design
- Lightning protection system
- 3-point safety belts automatic (all seats)
- Garmin ESP (electronic stability protection)
- Gear warning horn muting system
- Stick limiter
- Ergonomic seats and backrests, fabric inlays, carbon on transmission tunnel
- Adjustable backrest for pilot- and copilot (with adjustable lumbar support)
- Sun glare shields and canopy lining
- 28 V aux power outlet
- Instrument lighting
- Overhead cabin light
- 1x USB port each for pilot & co-pilot
- Hydraulic retractable landing gear
- Heated pitot tube
- High-gloss multi layer paint
- Variety of exterior striping
- White spinner, black air intake rings, white entry steps and entry grips
- Registration markings
- Electrically operated flap system
- Landing and taxi lights (Xenon)
- Position and strobe lights with LED technology
- 76.4 US gal (289 lt) long range fuel tank
- Baggage extension with separate compartment
- Nose baggage compartment accessible from both sides
- Pitot cover
- Control gust lock
- Tow bar
- Tool kit
- First aid kit, fire extinguisher, emergency axe
- Standard cockpit color: black

## Additional Options

- Diamond Airframe and Engine Program by Piston Power
- Air conditioning/RACC II system (powered by an additional alternator)
- TKS deicing system
- Oxygen system
- Electrically operated adjustable rudder pedals for pilot and copilot
- Built-in tablet mount provisions (pilot/ copilot armrests)
- Removable right hand control stick
- Am safe belts (4 seats)
- Am safe belts (2 seats)
- Premium leather interior selection (different colors available)
- Double Bubble Canopy
- Removable sheepskin seat cushions (front seats only)
- Diamond Deluxe Paint
- Diamond customized paint or striping
- Canopy and Nose Cover (grey)
- Engine cover set (1 pair, grey)
- Diamond Airframe and Engine Program by Piston Power TM
- Custom registration number (USA only – 4 month lead time)

## Avionics

- Integrated Garmin G1000 NXi glass panel cockpit including:
- 2x Garmin GDU 105x 10-inch flight display (primary FD and multi-function FD)
  - Garmin GEA 71B airframe/engine interface unit
  - 2x Garmin GIA 64W COM/NAV/SBAS-GPS/GS/LOC
  - Garmin GMA 1360 digital audio system
  - Garmin GRS 79 attitude heading reference system
  - Garmin GDC 72 digital air data computer
  - Garmin GMU 44 magnetometer
  - Garmin GFC 700 automatic flight control system including yaw damper
  - Garmin GTX 335 R remote ADS-B transponder
  - Garmin FliteCharts Approach plates (subscription required)
  - ELT 406 MHz
  - Standby instruments (compass, attitude indicator, air speed indicator (kts), altitude indicator (ft))

## Avionics – Optional

- Honeywell KN 63 remote DME
- Becker 3500 remote ADF
- WX 500 Stormscope
- Avidyne TAS 605 traffic advisory system
- Garmin GWX 70 weather radar
- Garmin GSR 56 Iridium satellite datalink (subscription required)
- Garmin synthetic vision technology
- Garmin GTX 345R ADS-B in/out transponder
- Garmin GDL 69A SXM satellite datalink receiver (3-month free subscription)
- 2nd digital stand-by altitude module CMD-302 SAM
- Flightstream 510
- Jeppesen ChartView Approach Plates and Jeppesen PilotPak (IFR budle, various region available.) (1-year free subscription)

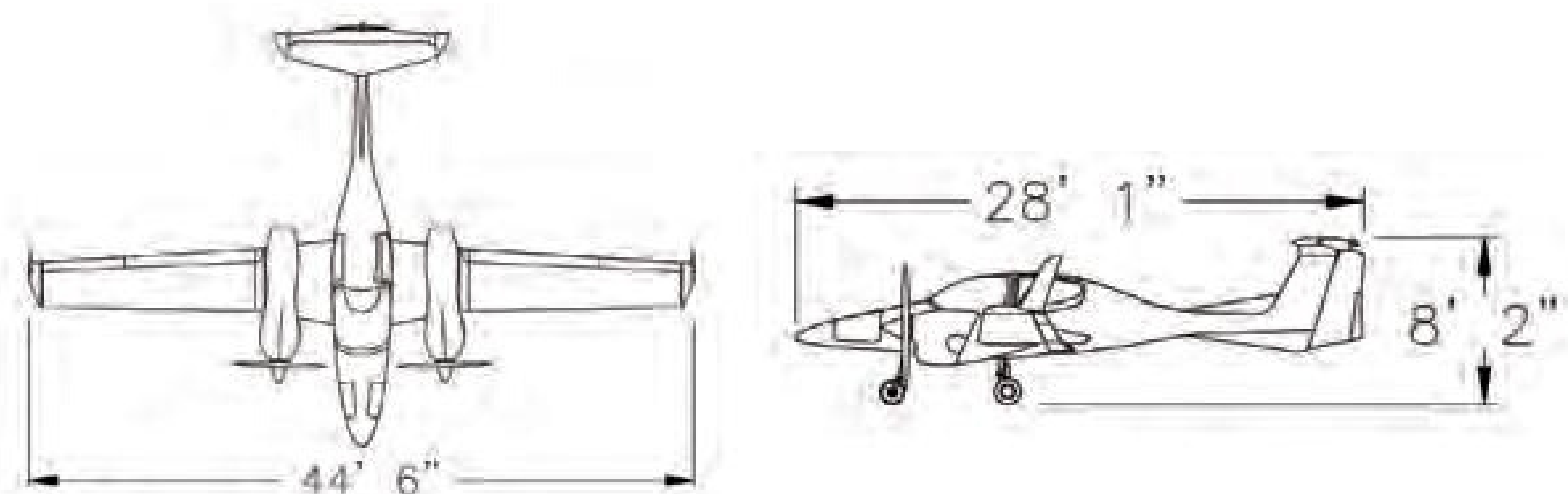
## Weights

Max Take-off Weight: 4,407 lbs      Useful Load<sup>1</sup>: 1,298 lbs  
Max Zero Fuel Weight: 4,045 lbs      Max Fuel Weight<sup>1, 2</sup>: 536 lbs  
Max Landing Weight: 4,407 lbs      Full Fuel Payload<sup>1, 2</sup>: 762 lbs  
Standard Empty Weight<sup>1</sup>: 3,109 lbs

<sup>1,2</sup> Weights and Loads shown are for standard configuration. Selection of optional features may affect these weights. S/N specific Production variances can occur.  
<sup>2</sup> Fuel density assumed at 7.01 lbs / USG

## Fuel & Capacity

Approved Fuels: JET A-1, JET A, JP-8, others per AFM  
Fuel Capacity: 79.4USG, Unusable: 3.0 USG



Contact us today at (406) 359-1669  
Or find us online at [www.lifestyleaviation.com](http://www.lifestyleaviation.com)



# PERFORMANCE

## Speeds

V <sub>ne</sub>	188 KIAS
V <sub>mc</sub>	68 KIAS (Flaps T/O)
V <sub>r</sub>	76 KIAS (Flaps T/O)

### Landing Gear Speed Limits

Extension V <sub>loe</sub>	188 KIAS
Retraction V <sub>lor</sub>	152 KIAS

### Flap Speed Limits

V <sub>f1</sub> (T/O)	133 KIAS
V <sub>f2</sub> (LDG)	113 KIAS

Max Demonstrated Cross Wind	25 kts
-----------------------------	--------

## Runway Performance

### T/O Dist @ 3,748 lbs (grnd roll / over 50 ft obst)

1148 ft / 2011 ft

### T/O Dist @ MTOW (grnd roll / over 50 ft obst)

1391 ft / 2546 ft

### LDG Dist @ 3,748 lbs (grnd roll / over 50 ft obst)

1099 ft / 1893 ft

### LDG Dist @ MTOW (grnd roll / over 50 ft obst)

1220 ft / 2034 ft

## Cruise Performance

High Speed Cruise:	190 ktas @ 92% Power / 16.8 gph (16,000 ft, ISA)
Economy Cruise:	152 ktas @ 60% Power / 10.3 gph (12,000 ft, ISA)
Max Endurance <sup>1</sup> :	11.75 hrs @ 35% Power / 6.5 gph (18,000 ft, ISA)
Max Range <sup>1</sup> :	1273nm @ 50% Power / 9.7gph (18,000 ft, ISA)

Notes:  
<sup>1</sup> No reserve

## Ceiling

Certified Ceiling, Normal Ops:	18,000 ft
Certified Ceiling, Single Engine:	18,000 ft

## Climb Performance

1,169 fpm @ 92% power <sup>1</sup>	6,000' Density Altitude, ISA
1,337 fpm @ 100% power <sup>1</sup>	Sea Level, ISA

Note: <sup>1</sup> @ 4,200lbs

CONTACT US TODAY



LifeStyle Aviation

Raleigh Durham International Airport, 1725 E. International Dr. Suite 100, Morrisville, NC 27560  
(406) 359-1669 | sales@lifestyleaviation.com | www.lifestyleaviation.com