

# DA50 RG SOAR ABOVE





DESIGNED FOR PILOT'S SATISFACTION



**SENSATIONAL. SPACIOUS. SUSTAINABLE.**

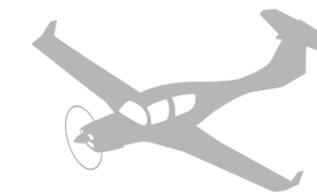
You want to stand out from the crowd? You want everyone on board to fly safe? You need comfortable leg, shoulder and head room? You care about the environment? And you think as well that flying with a retractable gear single is a touch more sophisticated?

Then the magnificent DA50 RG is your number one choice! The award-winning all carbon fiber DA50 RG with retractable gear, an extra-large luxurious cabin and excellent payload, powered by a 300hp Continental CD-300 jet fuel engine, will please private pilots and air charter companies alike.



**AT A GLANCE:**

• 5 seats, two-row seating • Retractable gear • Garmin G1000 NXi, Garmin GFC700 3-axis autopilot & yaw damper • 300hp jet fuel Continental CD-300 • Hinged double slotted flaps • High fuel efficiency • Superb performance in all phases of flight • TKS known ice protection (FIKI) • Luxurious interior



Meet the DA50 RG!



**DA50 RG KEYFACTS:**



Consumption at max. Range  
30.2 lt/h or 8 gal/h



Max. Speed  
335 km/h or 181 KTAS



Max. Altitude  
6,096 m or 20,000 ft



Useful Load  
549 kg or 1,210 lbs

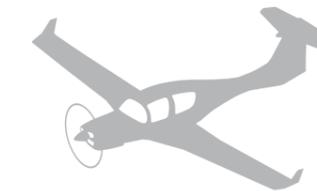
*"We are convinced that our all-new DA50 RG will be the new star on the piston single market for private pilots needing more seats and space and charter operators looking for a low-cost alternative."*

## SPACIOUS LUXURY MEETS HIGH TECH



### SPACIOUS INTERIOR DESIGN

You and your passengers will enjoy everything the extra-large cabin is offering you – just like the cabin of our marvelous twin-engine DA62: generous front seats with adjustable backrests, a 60/40 split folding three seat second row bench, easy access through the large gull wing doors. And your baggage is safely stowed in the rear of the cabin, offering you maximum loading capability for any kind of mission.



### FIRST CLASS CABIN

Luxury features abound throughout, including premium interiors in several styles, colors and materials, LED interior lighting and many optional features, such as removable right-hand control stick, oxygen system, electric air conditioning, TKS de-icing system, Garmin GCU 476 keypad or a built-in tablet mount.



*"We are very excited to be presenting the DA50 RG to the market. She is offering so much – space, efficiency, luxury, comfort, safety and retractable gear on a single piston aircraft that will make everyone really stand out."*

## SAFETY AND SUSTAINABILITY



### SAFETY BY DESIGN

Diamond's industry-leading safety record is the result of our commitment to protecting you and your passengers with a long list of active and passive safety features. Active safety features help to avoid accidents in the first place, the first and most important line of defense. Passive safety features are designed to minimize the probability and degree of injury, just in case the unexpected happens.

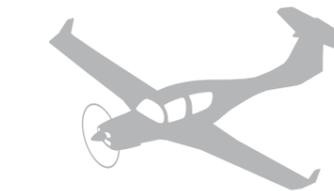
### ACTIVE SAFETY

The DA50 RG offers the ultimate in handling, stability and control, ease of operation as well as structural and system redundancies, all coupled with a high degree of crashworthiness.



### PASSIVE SAFETY

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. On top it is durable, easily maintained and will keep looking great for many years to come.



*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.*

For further information on Diamond safety please visit our website:

[www.diamondaircraft.com/en/private-pilots/safety/](http://www.diamondaircraft.com/en/private-pilots/safety/)

### TODAY FOR A BETTER TOMORROW

You care about the environment. You want your aircraft to be fuel efficient and to produce less CO<sub>2</sub> and noise emissions. With our line of jet fuel powered aircraft you fly as eco-friendly as possible, especially compared to AvGas:

- Jet fuel engines have much lower emissions compared to leaded and even low leaded aviation fuels.
- You save many gallons of fuel and money as you will burn up to 50% less at equal power.

# ADVANCED AVIONICS



Garmin avionics display system with two primary screens and various control knobs and buttons.

**Left Screen (Primary Flight Display):** Shows airspeed indicator (0-2000 KIAS), altimeter (0-130000 FT), heading indicator (092°), and engine parameters (RPM 770, Oil Temp, Oil Press, Coolant Temp, Fuel Temp, Fuel Qty Gal). Includes a terrain display and various data fields.

**Right Screen (Navigation Display):** Shows a navigation map with waypoints (e.g., WW265, WW375, WW665, WW990), a flight path, and engine parameters (RPM 770, Oil Temp, Oil Press, Coolant Temp, Fuel Temp, Fuel Qty Gal).

**Central Controls:** Includes COM (COMM) and NAV (NAV) frequency controls, INSTRUMENT LIGHT and FLOOD LIGHT dials, and a central display showing a heading indicator.

**Right Panel (Essential Bus):** Features a grid of buttons for various systems: GAM, AHRS, COM1, GPS/NAVI, XPDR, FLAPS, PITOT, LAND, PFD, MASTER CTRL, MAIN BUS, MFD, STROBE, POS, OCU, STALL, STAT, HT, AVIC, GPS, COM2, and GPS/NAVI.

Instrument panel with various master battery disconnect switches and lights.

**Master Battery Disconnects:** ENGINE START, ENGINE MASTER, ESS BUS, ELECT. MASTER, AV MASTER, PITOT/STATIC.

**Other Controls:** LANDING GEAR (V.M. = 101 KIAS), NOSE (UNSAFE LEFT, RIGHT), UP, DOWN, FLAPS (UP, T/O 151 KIAS, LDG 119 KIAS), ELT (ON, ARMED, RESET TEST, ECUA).

Environmental control panel with directional and temperature sliders.

**ENVIRONMENTAL CONTROL:** DIRECTION (T-shaped slider), TEMPERATURE (vertical slider).

**Other Controls:** FMS/NAV COM, RANGE, MENU, and other navigation controls.

## ADVANCED AVIONICS



### TOP-NOTCH AVIONICS

The fully integrated Garmin G1000NXi flight deck with standard 3-axis GFC700 Automated Flight Control System and yaw damper and Electronic Stability and Protection, is complemented by a long list of avionics options to perfectly suit your mission. Available are Traffic Alerting, Synthetic Vision, and much more. The Line Replaceable Units (LRU's) are located in a dedicated and externally accessible forward avionics bay, for ease of maintenance and trouble shooting.

### EASY PROGRAMMING

The Garmin GCU 476 alphanumeric keypad is an available option in the DA50 RG and makes programming the Garmin G1000 NXi easier than ever.



Join us on a video walkaround of the DA50 RG.



# PROPULSION



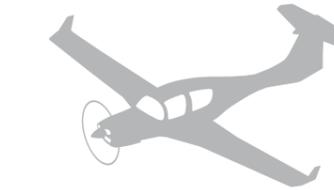
## JET-FUEL POWER

The DA50 RG is powered by the 300 hp Continental Aerospace Technologies CD-300. The CD-300 is a geared, liquid-cooled, turbo-charged and jet-A1-fueled engine controlled by two redundant full FADEC. Pilot workload is lightened using a single lever power control that adjusts thrust and propeller RPM's automatically. The 3 blade MT hydraulic variable pitch propeller features advanced blade geometry with state of the art aerodynamic airfoils for efficient performance, smoothness and low noise. The blades are built in natural composite design which leads to an exceptional vibration damping behavior and reduced weight. The extra benefits of operating a jet fuel powered aircraft are low emissions, low fuel consumption and global availability.



## ADVANCED AERODYNAMICS

We have developed several features for the DA50 RG to ensure the best flight performance, such as specially designed hinged double slotted flaps for high lift and superior slow speed behavior as well as many drag reduction features. State-of-the-art brakes and wheels ensure the highest performance with minimum landing distance.



*"Continental's CD-300 engine and valuable partnership with Diamond on the DA50 RG reinforces the global demand for jet-fueled piston aircraft in general aviation."*

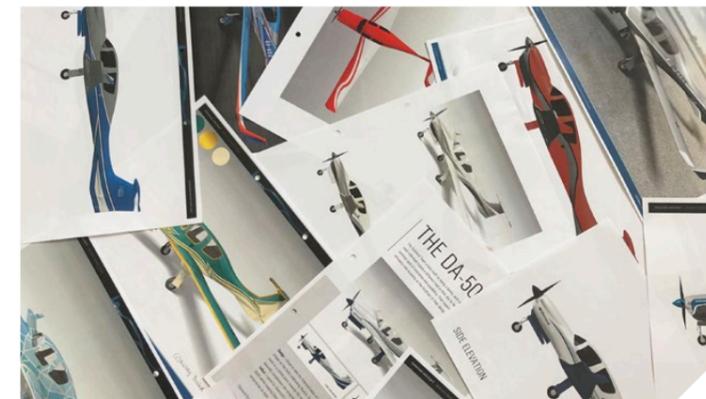
Robert Stoppek, President & CEO of Continental Aerospace Technologies™

## DIAMOND GOES ABOVE AND BEYOND!



### DA50 RG EXTERIOR DESIGN COMPETITION

On 15 May 2019 Diamond started a one of a kind contest for every aviation enthusiast: Designing the exterior paint scheme of an aircraft. Diamond gave the #DiamondAircraftFamily the chance to engage even closer with the company and was calling for exterior paint scheme design proposals for the DA50 RG demonstrator.

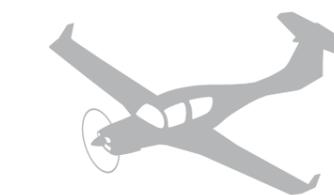


Over a period of three months, Diamond received an unbelievable number of well thought out designs. From bird's and racing designs to embracing the Diamond jewel theme. Some even accompanied with the story and intension behind the designs, that made the jury speechless. Given that, it was not easy at all to choose the winners (see left page):

1st place went to Kirk Smith (below). His design proposal was later implemented on the DA50 RG demonstrator. 2nd place went to Christian Jacobs (top left) and 3rd place to Michel Minne (top right).

### AEROKURIER INNOVATION AWARD

The aerokurier Innovation Award is a coveted award for all general aviation manufacturers where readers vote for the best products in different categories. Diamond Aircraft is honored to have received the 2020 Aerokurier Innovation Award for our DA50 RG, as the best new aircraft.



*"We are proud that our DA50 RG has been voted best new aircraft by the aerokurier readers. Thank you to each and everyone for your votes and the passion shared for our aircraft. I'd like to express my gratitude to the whole DA50 team – for their expertise and commitment. This award is for you."*





# DA50 RG FACTS AND SPECIFICATIONS



## POWER PLANT

Engine	Continental CD-300 turbocharged, FADEC controlled jet fuel engine with 300 hp TOP / 272 hp MCP	
Propeller	MT propeller MTV-12-D/210-56	
Fuel grades	JET A-1	

## DIMENSIONS / MASS / LOADING

Length	9.24 m	30 ft 3 in
Height	2.95 m	9 ft 8 in
Wingspan	13.41 m	44 ft
Seats	5	5
Empty weight without options	1,450 kg	3,197 lbs
Maximum useful load	549 kg	1,210 lbs
Max. take-off mass	1,999 kg	4,407 lbs
Fuel capacity total (usable fuel)	185 lt / 148 kg	49 US gal / 326 lbs

## PERFORMANCE (MTOM, ISA)

Max. cruising speed (16,000 ft, 1,700 kg, MCP)	335 km/h TAS	181 kts TAS
Cruise speed at 82% (14,000 ft)	319 km/h TAS	172 kts TAS
Stall speed, landing configuration	107 km/h CAS	58 kts CAS
Best rate of climb	3.96 m/s	780 ft/min
Max. range (FL180, 45% PWR) no climb, no reserves	1,520 km	820 nm
Max. range incl. 30 min. reserve no climb, no reserves	1,396 km	754 nm
Consumption at max. range (FL180, 45% PWR)	30.2 lt/hr	8 US gal/hr
Consumption (12,000 ft, 60% PWR)	38.9 lt/hr	10.3 US gal/hr
Take-off performance (MSL, ground roll / take-off obstacle)	407 m / 734 m	1,335 ft / 2,408 ft
Landing performance (MSL, ground roll / landing distance)	344 m / 678 m	1,129 ft / 2,224 ft
Max. operating altitude	6,096 m	20,000 ft

Specifications apply to standard equipped aircraft, typical configuration, average occupation, short trip loading, well serviced aircraft condition, 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

[www.diamondaircraft.com](http://www.diamondaircraft.com)



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