GYRONIMO

Performance Pad
Diamond Series

GYRONIMO
FOR AVIATORS

www.gyronimosystems.com info@gyronimosystems.com

The Gyronimo Performance Pad.

The Ultimate Flight Computer for Diamond DA40 NG, DA40 180 and DA42 NG

Mass & Balance and Performance Calculations have never been easier and faster. A new precision tool for students, instructors, private and professional pilots.

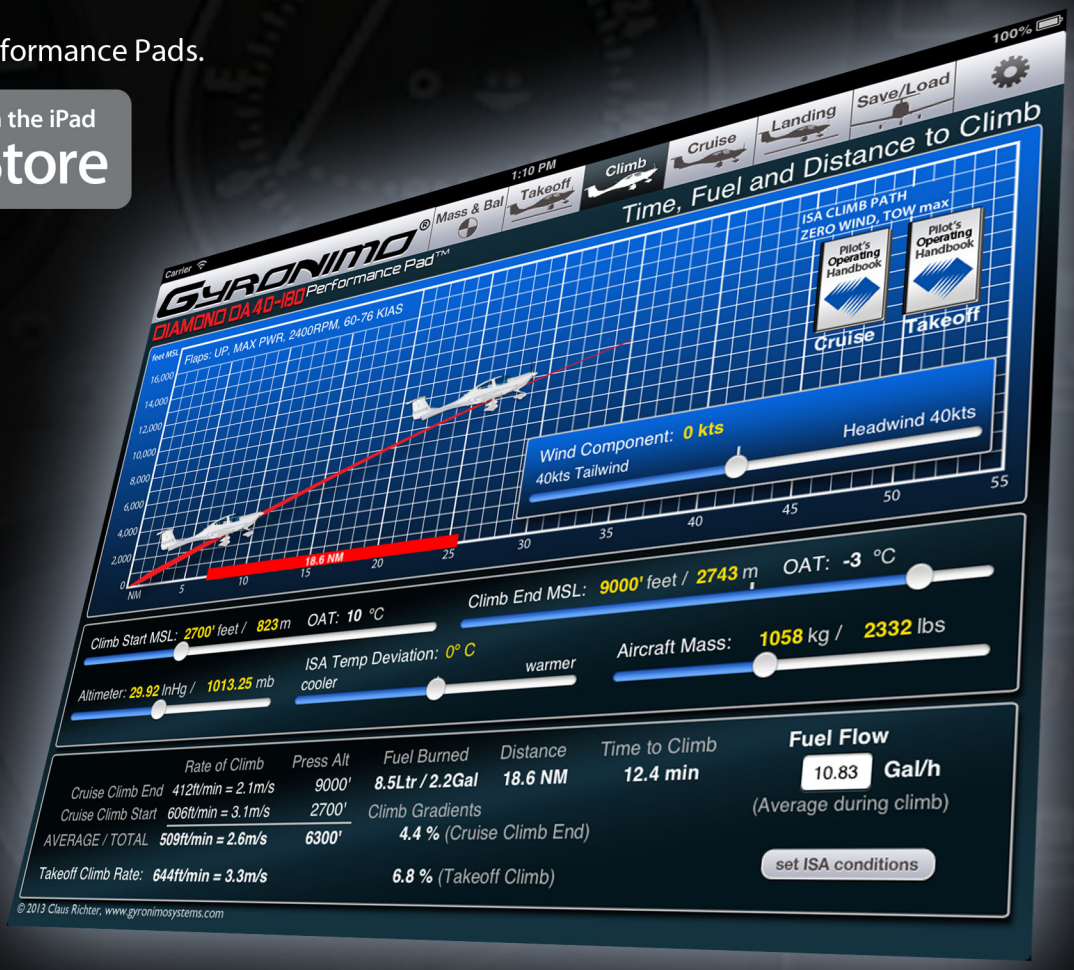
Calculate and interpolate performance data using the actual values from the Diamond Pilot's Operating Handbook.

Results are updated immediately and displayed in high resolution graphics. Change all important values quickly using sliders. Experiment with the results and create "what if" scenarios in no time.

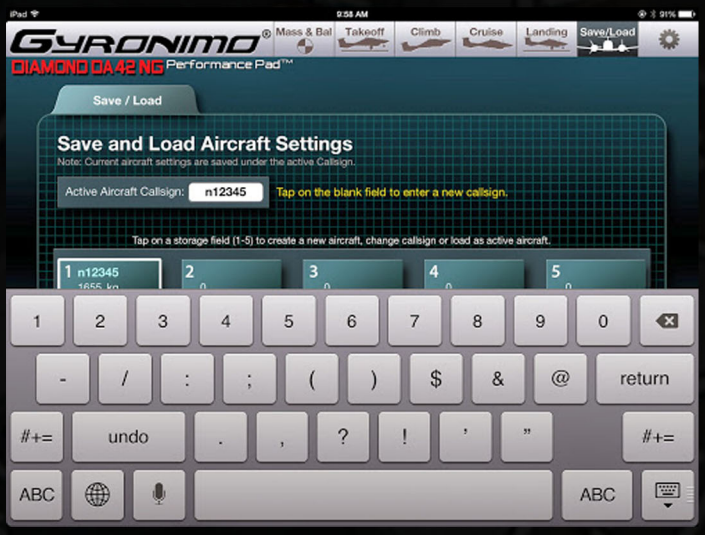
Find your optimal cruise altitude, takeoff ground roll, landing distance and climb data .

The Diamond Performance Pads.

Available on the iPad
App Store



The Mass & Balance Page

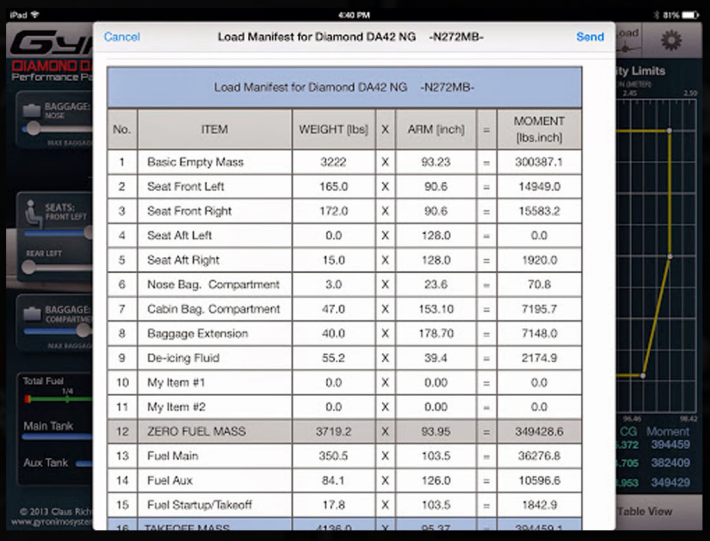


Entering weights for passengers, baggage and fuel is done by moving the sliders next to each station. If you find the sliders a bit touchy, just tap on the weight field to access a calculator style input. The calculator input provides conversions, too.

Once you've completed your w&b calculations, tap on Send Load Manifest to email the results to yourself, another pilot or dispatcher.

The first screen you'll see after launching is the mass and balance screen with a row of buttons across the top you can tap to access other functions. Your first stop should be Save/Load to enter the aircraft registration number for your aircraft.

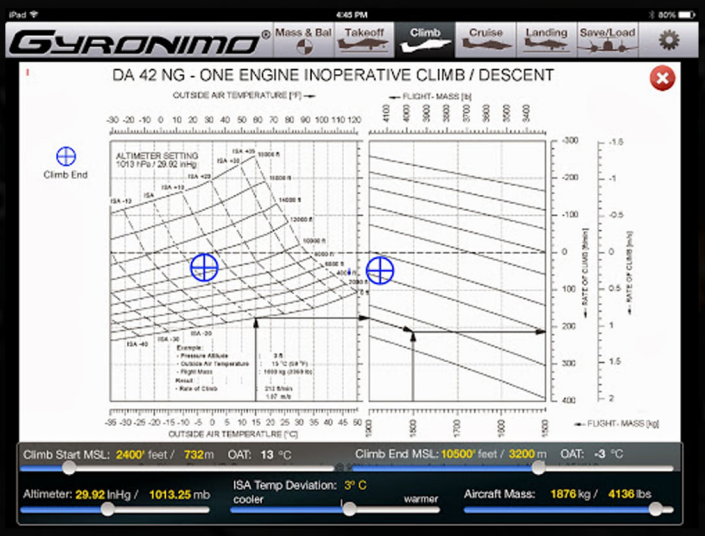
Return to the weight and balance page, tap on the Table View button in the lower right of the screen, and you can enter the empty weight and center of gravity (CG), taxi/run-up fuel allowance, and the like.



Takeoff & Climb Page

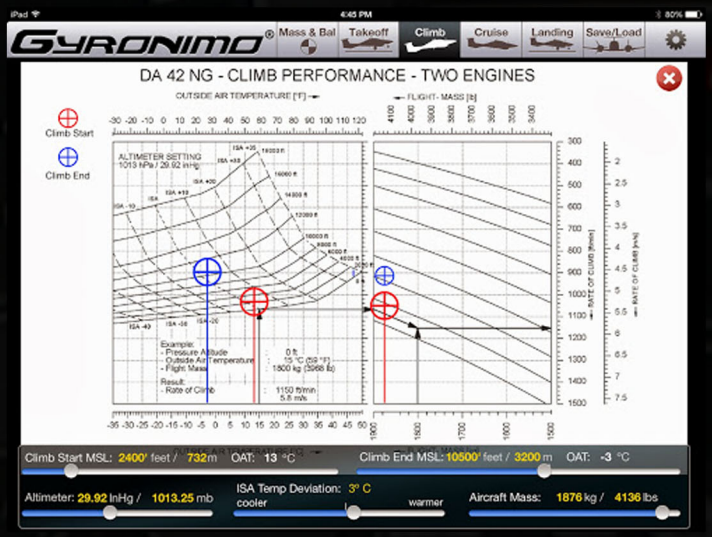
For the Diamond aircrafts, the manufacturer provides a graph and this where Gyronimo does something really awesome: It plots the calculations on the manufacturer's graph from the POH! Move the sliders and observe how performance changes.

For the DA42NG, you can display rate of climb (ROC) for two engines as well as estimated single-engine ROC, also plotted on the manufacturer's charts. Awesome!



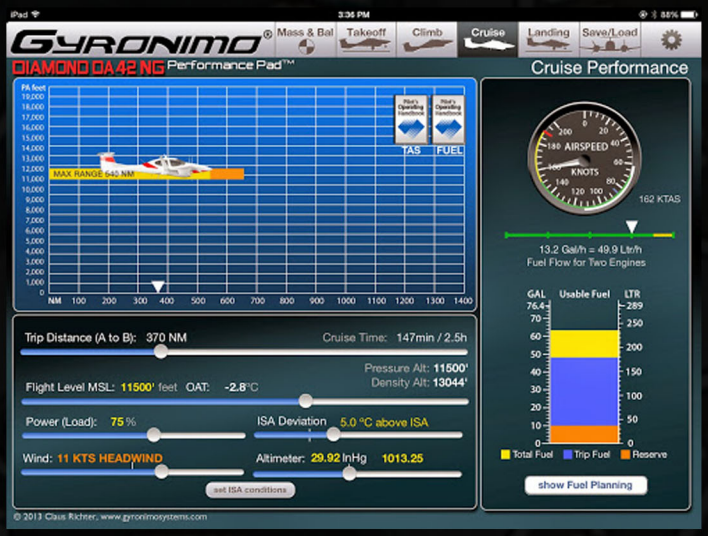
Where the Gyronimo apps really add value is calculating the important numbers. Remember that any performance numbers you calculate are based on a brand new aircraft piloted by an accomplished test pilot. Any numbers you come up with should be padded with a reasonable fudge factor, just to be safe.

The Diamond POH provides various tables that often require multiple interpolations, but Gyronimo does that for you. The takeoff weight is carried forward from the previous page and you can enter the surface winds, runway slope and runway surface. To display the manufacturer's table from the PIM, just tap on the book symbol in the upper right corner

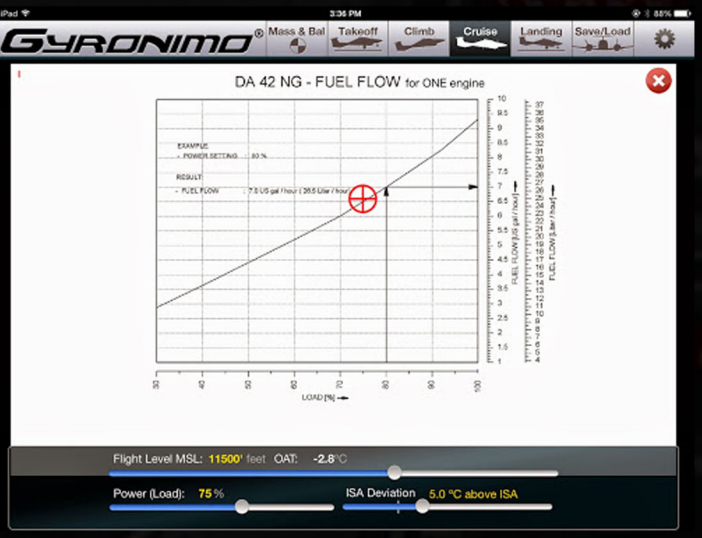


Estimating the DA42NG's single-engine service ceiling based on a given mass, temperature, and pressure is easy: Drag the Climb End MSL slider until a 50'/minute climb is shown.

Cruise Page

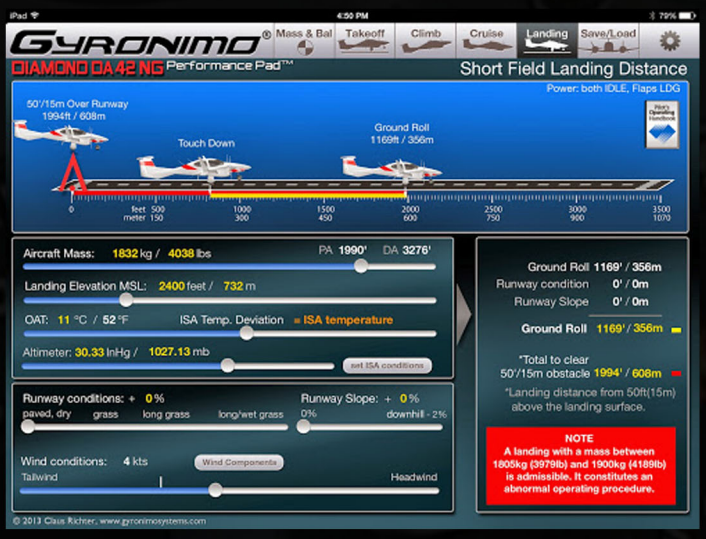


Gyronimo uses the same strategy for calculating cruise charts or graphs are used depending on what the manufacturer provides. For the DA42NG, just drag the sliders to set the desired power setting, headwind, temperature, and altimeter setting to see the effects. As with takeoff and climb, you can access the actual performance charts.



Landing Page

The calculations for landing are implemented the same way as takeoff calculations, based on the manufacturer's tables or graphs (which you can display by tapping on the book icon in the upper right).



Check it out! Gyronimo!

Text by John Ewing

Tap on the Wind Components button and you'll get an E6B style representation of the winds for takeoff and landing. This a great way to achieve a positive transfer of knowledge with student pilots.