

Black Square

What's new since the Analog Caravan?

While the panel of the Caravan Professional might look familiar, almost all other aspects of the aircraft have been rebuilt with Black Square's current technology and high standards of quality.

This expansion of the Analog Caravan represents 1,000+ hours of dedication, and roughly a doubling of the aircraft's code complexity. Think of it as bringing Black Square's older catalog up to the quality of the Piston & Turbine Dukes. Once you experience Black Square's latest technology in your favorite C208, the difference will be clear!

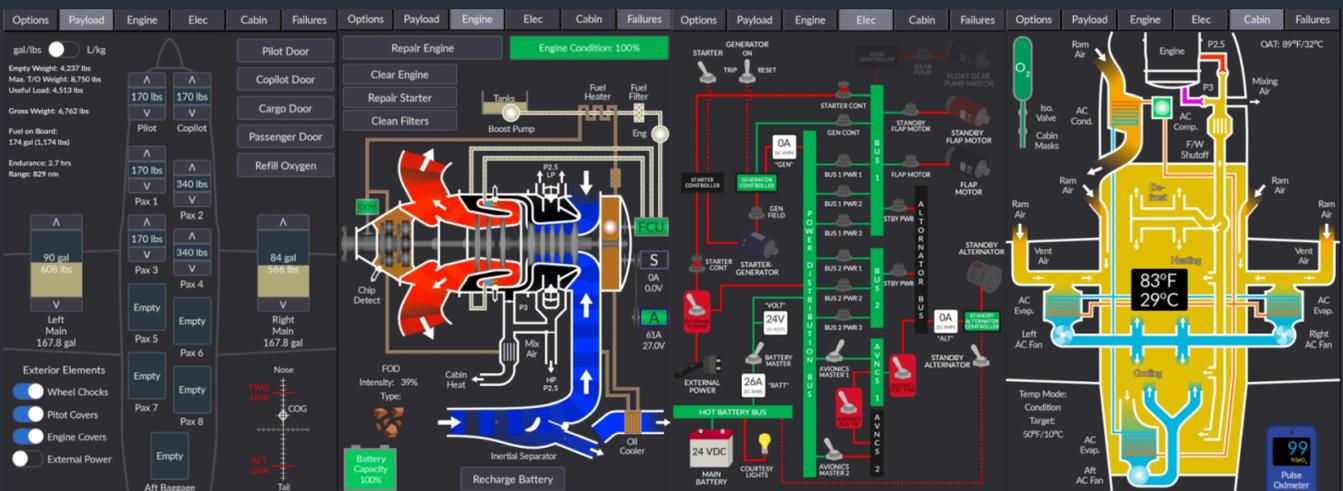


- **A completely custom exterior model** was created for the Caravan Professional to accurately portray each version of the C208 with high resolution materials.
- **Three aircraft in one!** The Analog Caravan was a poor facsimile of a 1990's C208, with the interior of an older Grand Caravan, and the exterior of a modern Grand Caravan EX. The Caravan Professional series features an accurate 1990's Grand Caravan (with/without cargo pod), Caravan Amphibian, and Super Cargomaster, accurate inside and out.
- **A custom sound package** for the Caravan Professional from Boris Audio Works brings the airframe and systems to life with the best quality sound available.
- **Twelve paint schemes (liveries) across all variants**, fit anyone's taste across four decades of service. Several paints are available for multiple airframes.

- Improved interior modeling and materials show increased wear. (Doors finally open!)
- Five interior upholstery packages & Cargomaster Interior with cargo pallets.
- Double the number of hot-swappable radio configurations with the KLN-90B, GTN 650, and accurate bezels for the TDS GTNxi.



- **TABLET INTERFACE!** The Caravan Professional includes the same tablet interface that first debuted with the Black Square Dukes, and is now being extended to the whole fleet. The tablet interface is the most complete system for visualizing aircraft systems in MSFS, as well as configuring avionics, payload, and 100+ failures.



- Greatly improved turboprop dynamics, including (ITT, TRQ, Ng, FF, FP), hot starts, residual heat, exhaust back pressure, P2.5 HP & LP valves, and fuel-oil heat exchanger. The Analog Caravan had only Black Square's most primitive turboprop simulation. Now, even the internal temperatures of equipment are simulated to drive the tablet visualizers.

- **Turbine engine failures**, such as compressor stall and surging, fuel control failure, fuel filter clogs, propeller governors, and fire detection systems.
- **FOD damage based on surface type**. Use the inertial separators to avoid engine damage. Tablet interface displays the type and intensity of FOD.
- **The fully simulated environmental control system** has been improved significantly to provide all the information needed for the tablet's cabin visualizer. This includes many cockpit controls that were previously non-functional, or had limited functionality.



- **Several new random, scheduled, or performance triggered failures** have been added, settable via the tablet, including engine damage, compatible with 3rd party UI's and instructor stations.
- **Physics-based sound system**. Sounds like engine starting are not mere recordings, but instead many layered sounds, constructed based on the underlying simulation.

- **Functional exterior elements & control locks** have been added for your preflight, including chocks, pitot covers, engine covers, and external power cart. Pitot cover flags blow in the wind, and leaving items covered can have catastrophic effects.



- **New performance tables** reflect fine tuned aerodynamic and engine cruise performance, whereas no power setting guidance was given for the Analog Caravan.
- **Physics-driven propeller governor and feathering simulation** and beta range from the Black Square Duke & Starship.
- **Voltage-based light dimming**, an immediately recognizable effect to nighttime pilots.
- **Gyroscope physics simulation** for electric and pneumatic gyroscopes with precession, and partial failures, based on a coupled quadrature oscillator, create a visually stunning effect.
- **Strobe lights now** cause realistic distracting flashes in clouds.
- **The KNS-80 RNAV now supports autopilot** while using the No-GPS configuration.





- The all new Caravan Amphibian and Super Cargomaster variants.

As a measure of complexity and care, the 73 page Analog Caravan user manual has grown to 148 pages, with lots of new images, explanations, and tutorials.