

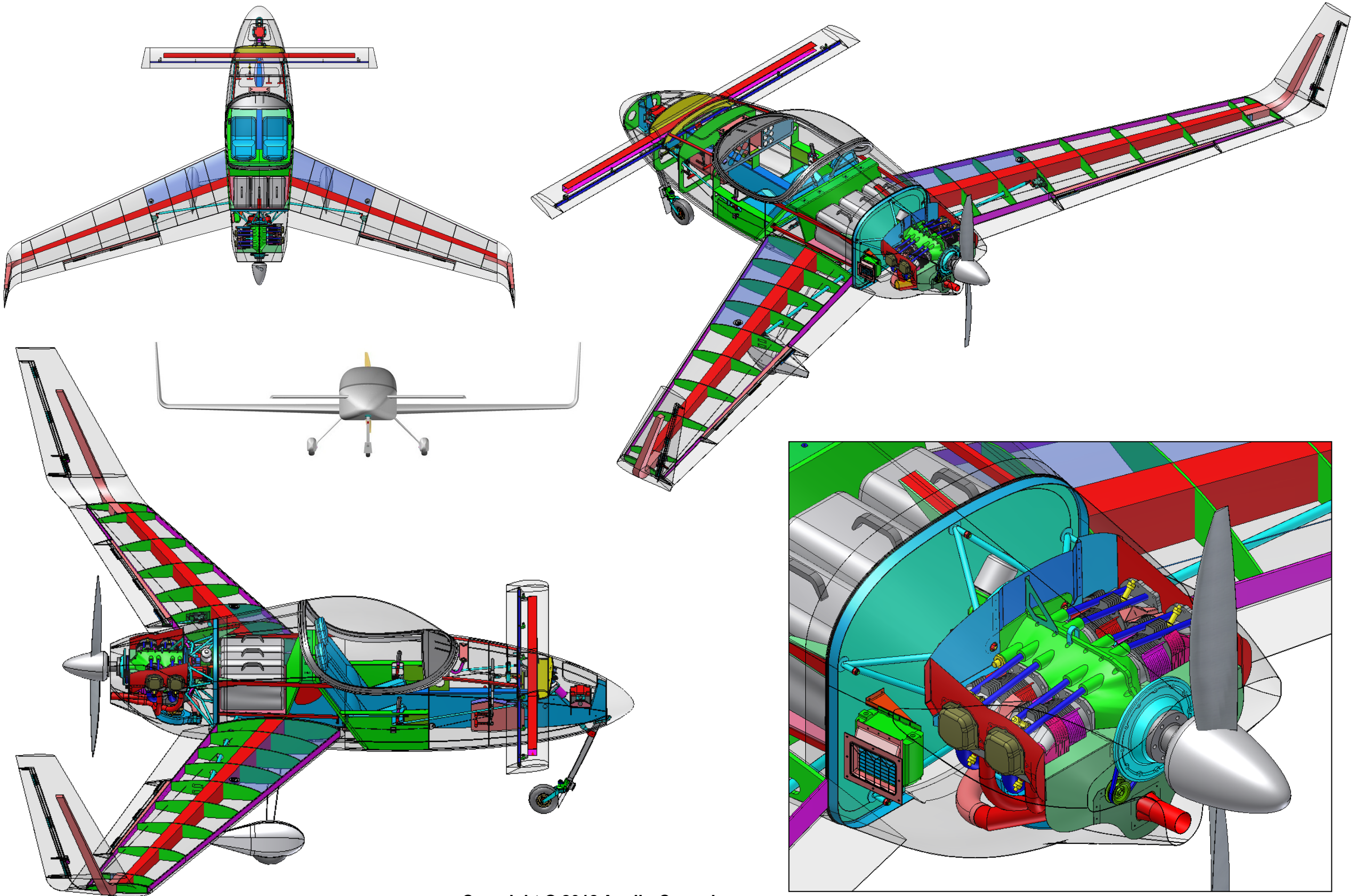
# Rendered Ghost Views Show Internal Structure of the Apollo Aircraft

## Airframe Specs:

Empty Weight: 1200 lbs  
Gross Weight: 1900 lbs  
Fuel Capacity: 45 gallons  
Payload with Full Fuel: 430 lbs  
Powerplant: Lycoming O-360A,  
180 hp @ 2700 rpm  
Propeller: 66" Dia. Fixed Pitch  
Length: 17.125 ft  
Height: 7.75 ft  
Wingspan: 29.0 ft with Winglets  
Wing Area: 100.5 sq ft  
Aspect Ratio: 7.80  
Cabin Width: 45.5"  
Baggage Limit: 60 lbs  
Main Gear: Fixed, 5.00-5 Tires  
Nose Gear: Retractable, 10" Tire

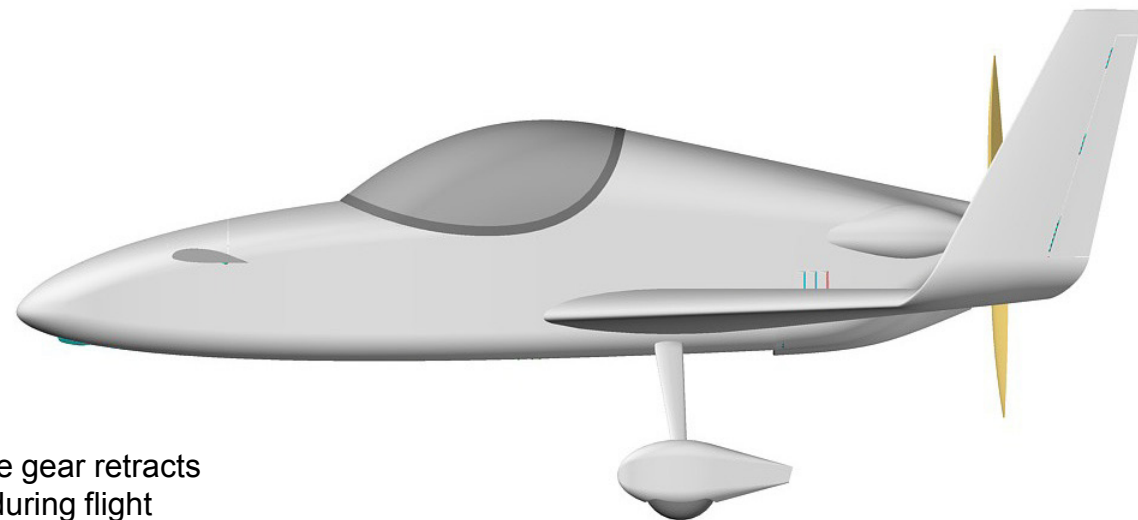
## Performance Specs:

Top Speed: 184 kt (212 mph)  
Cruise Speed: 175 kt (202 mph)  
Canard Stall: 62 kt (71 mph)  
Range at 175 kt: 600 nm with reserve  
Range at 150 kt: 800 nm with reserve  
Climb Rate: 1100 fpm (at gross)  
Takeoff Distance: 1200 ft  
Landing Distance: 1200 ft



## Design Features

- Advanced wing outperforms wing/strake combination used by other canards
- 45.5" wide cabin accommodates pilots up to 95<sup>th</sup> percentile in size
- Seatback angle of 35° from vertical provides better ergonomics than 45° angle used by most canard aircraft
  - Allows full knee-thigh rotation from seated position, for in-flight comfort adjustments and entry/exit ease
  - Permits taller instrument panel with more space for avionics
  - Better visibility over the nose during climb and slow flight maneuvers
- CG range accommodates 140 lb to 430 lb pilot and passenger combination without using movable ballast
- Baggage compartment has room for three large carry-on bags
- Bubble canopy and low wing provide excellent visibility
- Remote control electronic canopy lock and theft deterrent system
- Quieter cabin due to composite construction and rear engine installation
- Wide track main landing gear is outside the propeller arc, greatly reducing foreign-object-damage to the prop
- Full size 5.00-5 main gear tires for better braking and ground handling
- Retractable nose gear allows aircraft to "kneel" on ground for entry/exit ease
- Tab and slot construction eliminates assembly jigs
- Optimized for the Lycoming 180 hp engine installation



Nose gear retracts  
during flight

## Safety Features

- Canard design is stall and spin resistant
- Robust structure designed for +10/-5 g ultimate loads
- Proprietary airfoils reduce emergency landing speeds
- Reserve fuel tank aids prevention of accidents due to fuel mismanagement
- Fuselage nose provides four foot long crush zone to absorb forward impacts
- Energy absorbing seats help to prevent spinal cord injuries
- Seatbelt restraints and engine mount are designed for 40 g forward impacts
- Low wing absorbs vertical crash loads to reduce deformation of cabin area
- Center keel helps to maintain cabin integrity during forward & side impacts
- Canopy fuselage frame provides rollover protection
- Static load tests will be performed on wing, canard, winglets and fuselage
- Optional seatbelt airbags available for greater protection

