

# FSPilot

Flight Simulation eMagazine : Review



## ALABEO *Cessna 404*



## General Description

The Cessna Model 404 Titan is an American twin-engined, propeller-driven light aircraft built by Cessna Aircraft. It was that company's largest twin piston-engined aircraft at the time of its development in the 1970s. Its US military designation is C-28, and Swedish Air Force designation TP 87.

## History:

The Cessna 404 was a development of the Cessna 402 with an enlarged vertical tail and other changes. The prototype first flew on 26 February 1975. It is powered by two 375 hp/280 kW turbocharged Continental Motors GTSIO-520 piston engines. Two versions were offered originally; the Titan Ambassador passenger aircraft for ten passengers, and the Titan Courier utility aircraft for passengers or cargo. By early 1982 seven different variants were available, including a pure cargo version, the Titan Freighter. The Freighter was fitted with a strengthened floor, cargo doors, and its interior walls and ceiling were made from impact-resistant polycarbonate materials to minimize damage in the event of cargo breaking free in-flight.

## Variants:

- Titan Ambassador - Basic 10-seat passenger aircraft.
- Titan Ambassador II - Ambassador with factory fitted avionics.
- Titan Ambassador III - Ambassador with factory fitted avionics.
- Titan Courier - Convertible passenger/cargo version.
- Titan Courier II - Courier with factory fitted avionics.
- Titan Freighter - Cargo version.
- Titan Freighter II - Freighter with factory fitted avionics.
- C-28A Titan - Designation given to two aircraft purchased by the US Navy.

## Specifications:

## General characteristics:

Crew: 2  
Capacity: 10  
Length: 39 ft 6¼ in (12.04 m)  
Wingspan: 46 ft 4 in (14.12 m)  
Height: 13 ft 3 in (4.04 m)  
Wing area: 242 ft² (22.48 m²)  
Empty weight: 4,834 lb (2,192 kg)  
Max. takeoff weight: 8,400 lb (3,810 kg)  
Powerplant: 2 × Continental Motors GTSIO-520-M flat-six geared turbosuper-charged injected piston, 375 hp (280 kW) each

## Performance:

Maximum speed: 267 mph (430 km/h)  
Cruise speed: 188 mph (303 km/h)  
Range: 2,119 miles (3,410 km)  
Service ceiling: 26,000 ft (7,925 m)

Source : [http://en.wikipedia.org/wiki/Cessna\\_404\\_Titan](http://en.wikipedia.org/wiki/Cessna_404_Titan) under the Wikipedia : Text of Creative Commons Attribution Share Alike 3.0 Unported License

## Appraisal - Introduction:

## Developers Description:

## Features:

Alabeo GNS430  
Alabeo Avidyne Multifunction Display  
Weather Radar  
Flight1 GTN 750\* integration  
Reality XP GNS530\* integration  
Startup vibration effect  
Superb material shines and reflections.  
Volumetric side view prop effect  
Gauges reflections  
Windows scratches and Blades shines  
High quality 3D model and textures.  
Realistic behavior  
Custom C404 Titan sounds

\*Flight1 GTN 750 and Reality XP GNS430 are sold separately.

## Included in the package:

5 HD liveries.  
1 HD Blank livery.  
C404 Emergency Procedures PDF.  
C404 Normal Procedures PDF.  
C404 Performance Tables  
C404 Reference PDF  
Avidyne Multifunction Display PDF  
Alabeo GNS430 Users Guide PDF  
Weather Radar Manual PDF

## Technical Requirements:

Windows Vista/7/8 (32 or 64 bits)  
Microsoft Flight Simulator FSX with SP1 and SP2 (or Acceleration Pack) installed or Lockheed Martin - Prepar3D Flight Simulator.  
Pentium V/2GHz or similar – 4GB RAM – 1GB graphics card.  
1.05GB available hard disk space  
INTERNET CONNECTION is required for installing this product.





## Appraisal - Exterior Model :

The modelling of the exterior of the aircraft is to Alabeo's usual very high standard with excellent detailing and shaping. There are no visible mesh errors to be seen and absolutely no bleed anywhere on this model.

The form of the fuselage especially the nose and cockpit areas are very nicely implemented. The window cut-outs etc. have smooth edges with great screw head detailing around the cockpit and cabin window framings.

All of the cockpit / cabin windows exhibit a slight green tint and very good reflective properties. The three animated nose baggage bays & main cabin doors also have smooth cut-outs. They have detailed structural edges and exhibit no bleed when closed. The main cabin door has three sections, though its latch is not animated neither inside nor out. The main bottom rear section of the cabin door has integral footsteps. The port cockpit window is also animated, but again with no latch animations. Strange that Alabeo did not animate the baggage bay doors aft of both engines, perhaps animation restrictions prevailed.

Other modelled details on the fuselage are antennas, pitot tubes and a tail position light. Various other ports, access panels, and the main cabin emergency exit door / window are detailed in the very highly detailed texture sets.

Wings, horizontal stabs, vertical fin and the associated flying controls are well modelled with good shaping / detailing where necessary, which includes static wicks which balance when the engines are running. The wing flex also gives a subtle balance when the engines are running with minimum flex during take-off and landing. Animation of all flying controls is smooth and linear.

The wing tip strobes / navigation / wing inspection lights are nicely modelled, having rather poor light sources which have almost no bloom effect. The strobe lights flash from within the wing giving a strange effect. The aircraft also sports two animated landing lights on the outboard lower wing area with again a poor lighting effects.

The Engine cowlings / intakes etc. are as equally well modelled as the rest of the exterior with excellent detailed and formed intakes. The propellers and the prop spinners are also very nicely modelled with the prop disk being well defined when the engines are running. The disk also responds well to power variations.

The three landing gear units are nicely modelled / detailed. Animation of the gear is sequential and smooth with no apparent interference with local structures. When closed the main gear wheels are exposed.

Gear bay detail is simple but has good textures and a little structural detailing. There is a taxi light mounted on the nose gear leg and like the main landing lights has a poor light source.

Exterior texture sets are very well defined HD textures with very nice detailing and alignment. They are both bump and specular mapped giving good effects to panels, rivet lines, fixings etc. The package comes with 5 color schemes.

## Appraisal - Interior Model:

The Virtual Cockpit of the model is very nicely modelled / textured with very good detailing on the instrument panel, console, CB's / switch panels, and the throttle / flap selector control quadrant.

The instruments on the panel are very easily read with clear fonts and crisp dials. They have good depth between the bezel glass and dial plates.

The Avidyne Multifunction Display and Wx radar displays have very crisp / clear character sets and smooth graphical movement.

Engine instrumentation is via conventional needle indications which again have crisp graphics, smooth movement and are easily readable.

The Comm / NAV / ADF / XPDR & GNS450 control heads are very well modelled and their appearance is just like the real units.

The Avidyne Multifunction Display unit in the central area of the panel can display Wx Radar, Terrain, & TCAS as well as general mapping etc.

In the center console below the throttle quadrant is an AP control panel which seems to operate as you would expect.

Other Annunciator Panels, auxiliary switch panels etc. located in and around the main panel are equally as well modelled.

Rudder pedals, control quadrants, trim wheels etc. are again very well modelled.

The virtual cockpit interior trim, crew seats, side panelling etc. is again nicely modelled and textured with the crew seats having cloth covered cushions and three point safety harnesses.

The cockpit side window on the port side of the cockpit opens through a hot spot over the latch and there are hingeable anti-glare panels on the forward cockpit windows.

Also through keystrokes 'Shift 4' you can select cockpit windshield tint and instrument reflections, wheel chocks, door functions etc. nice feature. 'Shift 5' displays the pop-up window key shifts and 'Shift 6' brings up the aircraft config menu for cold & dark start / ready for take-off options.



The nose section, cockpit windshield area, nose baggage bays, aircraft ground tug, pitot blanks, cones etc. are all very well defined in this package.



The shaping of the engine cowlings in particular the intakes are very well defined. The same can be said for the propeller and its cone.



The sections of the cowlings are also very well detailed, with smooth contours / top louvre vents. Pity they didn't animate the baggage bays.



Opening cabin doors / cockpit window have excellent detailing including curtains. Animation is very smooth with no bleed when closed!





*This front view of the cessna 404 Titan shows off the great smooth curvatures that Alabeo always seems to achieve in their modelling. The bump mapping of panel lines, fixings etc. also adds to the realism of the model.*



*This view shows the bottom of the wings, the main landing gear and the flap area of which the level of detailing through structure as well as the very impressive HD texture sets shows the lengths that this developer goes to in order to achieve the final product. The subtle weathering is also typical of Alabeo's modelling.*



*If you didn't know better you would think this was a real photo. The modelling is very authentic in its appearance with great detail.*



*This view shows the very nice profile of the Cessna 404 with its long nose and extended cabin.*



*This view shows off the equally great detailing of the lower section and the rear of the aircraft through the texture sets which include bump mapping of panel lines and rivets..*

*This view shows off the great detailing of the fuselage panel lines and the main cabin door. The vertical fin detailing is also very impressive.*







The passenger cabin is decked out with cloth covered seating and the wall / ceiling panelling etc. are modelled / textured to Alabeo's very high standards. Night lighting in both the cockpit and cabin gives a realistic night environment, great work.

#### Appraisal - Flying the Cessna 404 Titan:

The aircraft is relatively simple to operate in its basic functions with simple procedures for engine start etc. Procedures are detailed in various pdf files supplied along with a guide to the Avidyne Multifunction Display / Weather radar units.

Engine start-up is as realistic as the real aircraft with good start up engine sounds in the exterior environment, though in the cockpit the sound set for the engines is a little weak.

Taxying the aircraft is simple with turns easily maintained. During take-off acceleration is good when compared to videos of real aircraft, with the engine sounds also being reasonably realistic during take-off.

The aircraft climbs very well and is easily trimmed. Handling of the aircraft is again smooth with good reaction rates to control column inputs. The aircraft handles well in all flight regimes, being very nice to fly.

The aircraft's stall is nicely reproduced with a good stall warning.

Handling on approach was good and even at slow approach speeds the aircraft is stable and doesn't over react to control inputs. Braking action was very positive on landing.

The aircraft systems all appear to operate as intended, including the autopilot which was checked on various Nav tracks and using the APR function. The aircraft flew the ball as you would expect down to decision height as long as the approach was captured at recommended distances. We did not check short or steep angle captures. Overall the aircraft flies very nicely indeed and performs well. Though the sound set is a little weak especially in the cockpit.

#### Appraisal - Our Findings:

Overall Alabeo's rendition of the Cessna 404 Titan is to a very high standard of quality, both inside and outside as we have come to expect from this developer. If there is any issues regarding this product then its probably the sound set which needs to be a little more realistic internally as mentioned, though its not that big an issue unless of course you are a perfectionist at all levels.

Overall we give this product our gold seal for its quality and value for money.

Visit the Alabeo site for product purchase. [www.alabeo.com](http://www.alabeo.com)















*The main cabin is also very well defined, with cloth covered seating and nicely textured walls and panels. Looks comfortable!*

