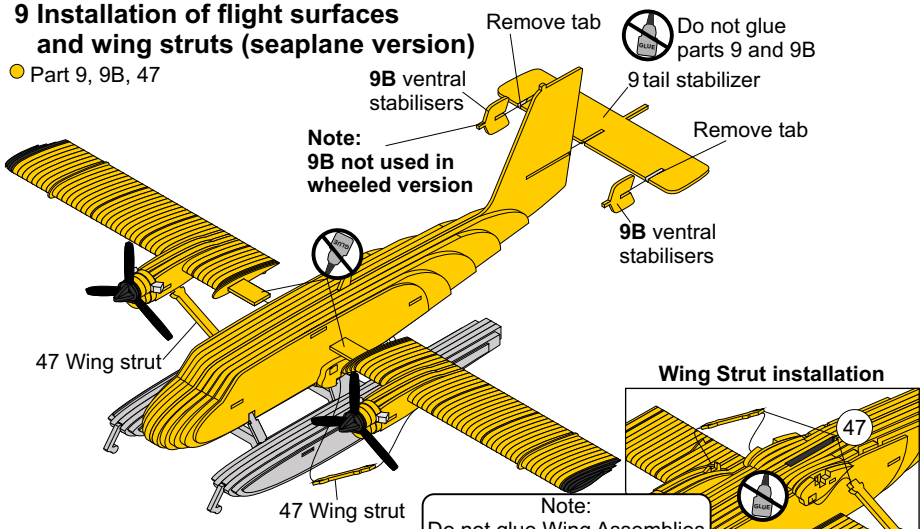
9 Installation of flight surfaces and wing struts (seaplane version)

Part 9, 9B, 47

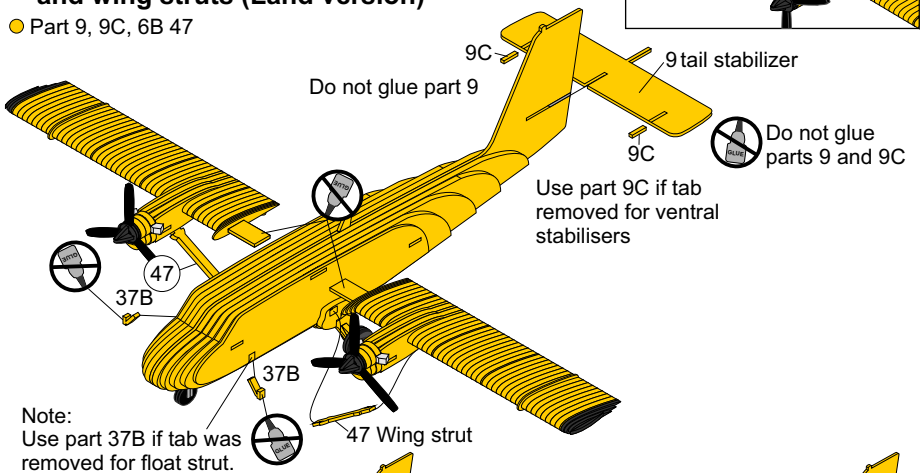


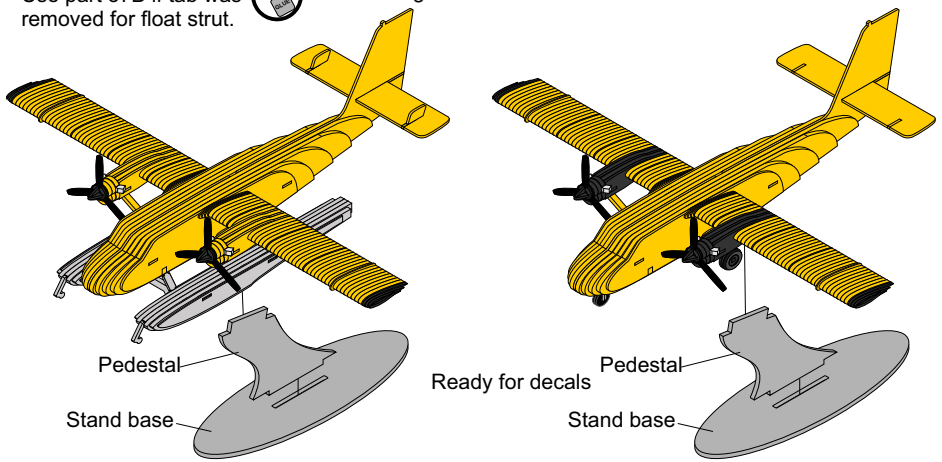
Wing Strut installation

Note:
Do not glue Wing Assemblies and Wing Struts into place until decals are installed

9B Installation of flight surfaces and wing struts (Land version)

Part 9, 9C, 6B 47





de Havilland Canada DHC-6 Twin Otter

The de Havilland Canada (DHC) DHC-6 Twin Otter is a Canadian aircraft developed by de Havilland Canada in the mid-1960s. It incorporates many of the same features found on other DHC aircraft. The Twin Otter short takeoff and landing (STOL) ability makes it well suited to operate in many configurations. It can be flown from short unprepared runways using it's rugged tundra landing gear, or when equipped with skis it can operate from frozen snow covered lakes and fields. The Twin Otter can also be equipped with floats allowing it to access waterways in the back country.

Development of the aircraft began in 1964, with the first flight on May 20 1965. Production continued until 1988 producing 844 airframes in three different series. All Twin Otters are powered by the Pratt & Whitney Canada PT6A turboprop engine. Power ratings varied depending on the version used but general produced between 578-680shp. Two nose configurations were used, a long nose and a short nose. The short nose being popular with military and seaplane operators.

Because of it's versatility the Twin Otter has been used by many different customers all around the world. It has been used by small airlines, military, research and search and rescue to name a few. As of 2018 there are currently over 450 still active. In 2006 Viking Air purchased the types certificate from Bombardier and restarted production in 2008 with the series 400.

The markings in this kit are from S/N 243. Delivered to the Ontario Provincial Air Service, a division of the Department of Lands and Forest in August of 1969. C-FOPI has been in service for over 50 years and still is operated by the Province of Ontario, Ministry of Natural Resources, Aviation & Forest Fire Management Branch, Sault Ste Marie, Ontario.

Twin Otter Series 300 short nose
Specifications

Length	51' 9"
Wingspan	65'
Power	Two PT6A-27
Performance	210mph or 182knots
Seating capacity	20

Building tips:
All parts will be a tight fit. If you find a part is too tight give it a bit of a sanding with 220 grit sandpaper. **DO NOT FORCE PARTS.** A hobby knife is suggested to cut the pieces from the part tree but most parts will break free easily. We recommend removing the burnt edge left by the laser with 220 grit sandpaper. This makes it easier for painting also it makes for a better appearance, especially if you are going to leave the model in it's natural wood state. Although the model is designed to be assembled without glue, we do suggest glueing your model together. Noting indicated parts that are not to be glued. Any black substance that gets on your hands is non toxic and can be removed with soap and water

Indicates do not glue part or assembly

F Indicates part is a friction fit in order to hold in place

Indicates parts need sanding

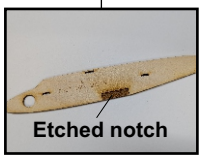
Recommended Tools:
Hobby Knife, Scissors, White Glue, 220 grit sandpaper, paint brush
We recommend painting your model as you build.
Paint colours Yellow Black Aluminum Orange Red

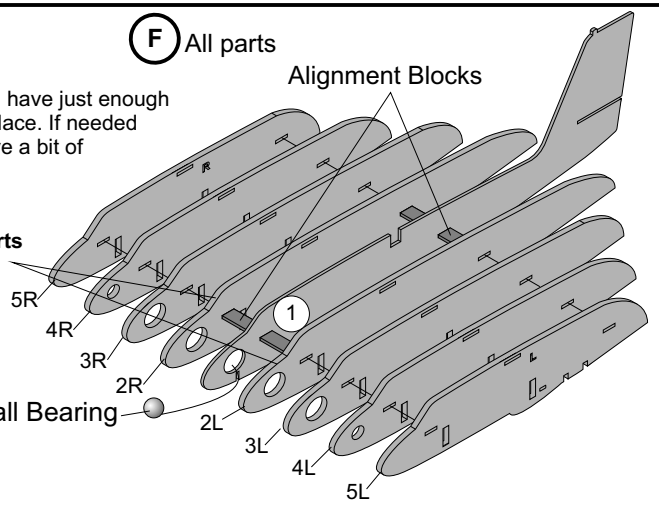
1 Inner Fuselage

F All parts

Note:
Alignment blocks should have just enough friction to hold parts in place. If needed use sandpaper to remove a bit of the edge of the block.

Note:
Etched notches on parts 2L and 2R face inward

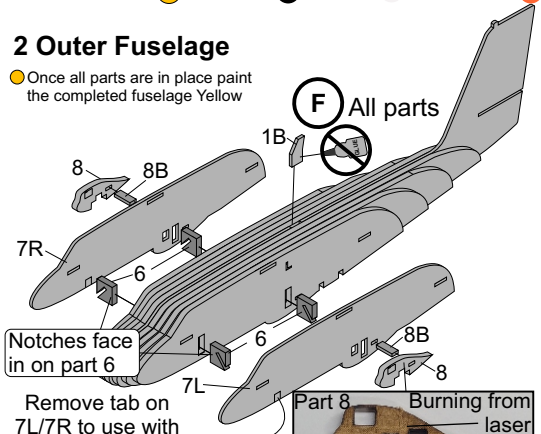


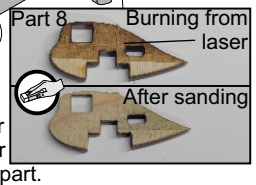


2 Outer Fuselage

Once all parts are in place paint the completed fuselage Yellow

F All parts

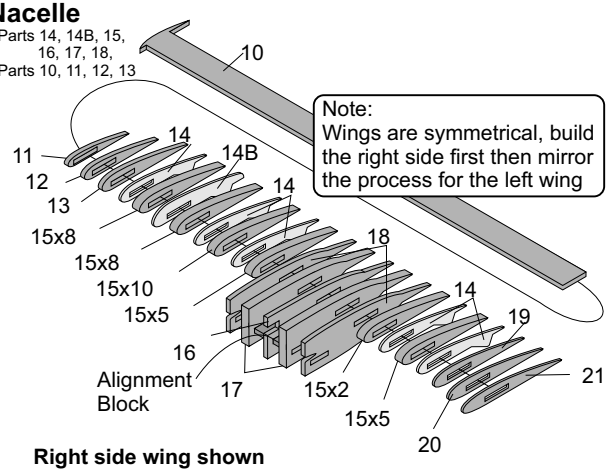




Sand burning from laser on part 8 to form a taper inward at the top of the part.

3 Wings and Engine Nacelle

Parts 14, 14B, 15, 16, 17, 18,
Parts 10, 11, 12, 13



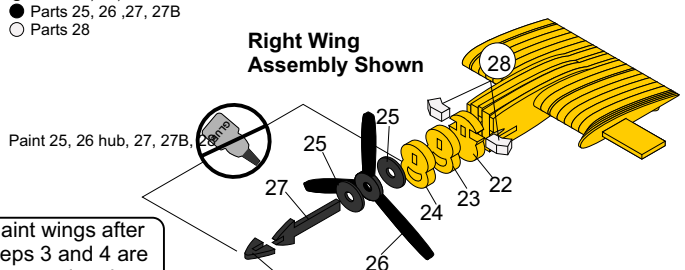
Note:
Wings are symmetrical, build the right side first then mirror the process for the left wing

Right side wing shown

4 Engine cowl propeller and exhaust

Parts 22, 23, 24
Parts 25, 26 ,27, 27B
Parts 28

Right Wing Assembly Shown



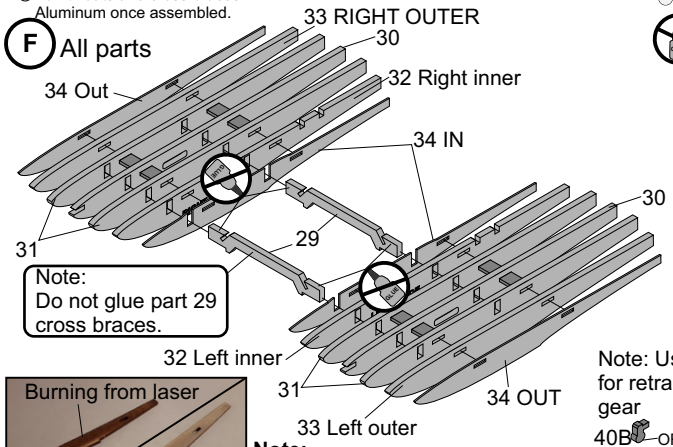
Paint wings after steps 3 and 4 are completed

Repeat on left wing

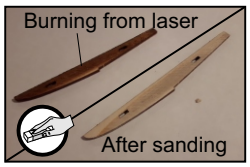
5 Floats for seaplane version

Paint floats and cross braces Aluminum once assembled.

F All parts



Note:
Do not glue part 29 cross braces.



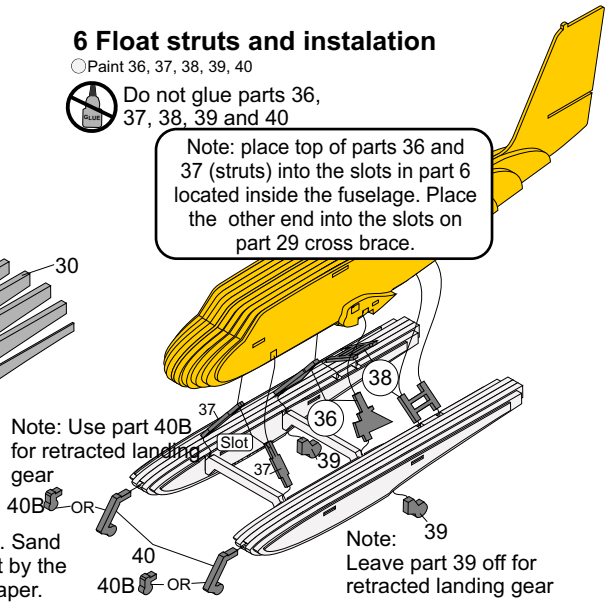
Note:
Parts 32 and 33 need to be sanded. Sand till you remove all the burn mark left by the laser. This will give the one side a taper.

6 Float struts and instalation

Paint 36, 37, 38, 39, 40

Do not glue parts 36, 37, 38, 39 and 40

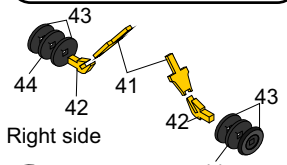
Note: place top of parts 36 and 37 (struts) into the slots in part 6 located inside the fuselage. Place the other end into the slots on part 29 cross brace.



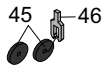
7 Landing gear for land base version

41, 42,
43, 44, 45
46

Note:
Not glueing the float struts or landing gear allows them to be swapped out if desired

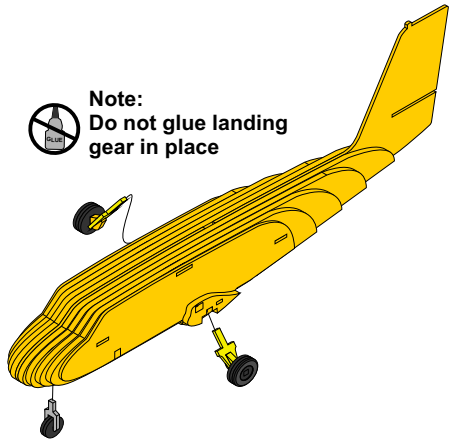


F All parts



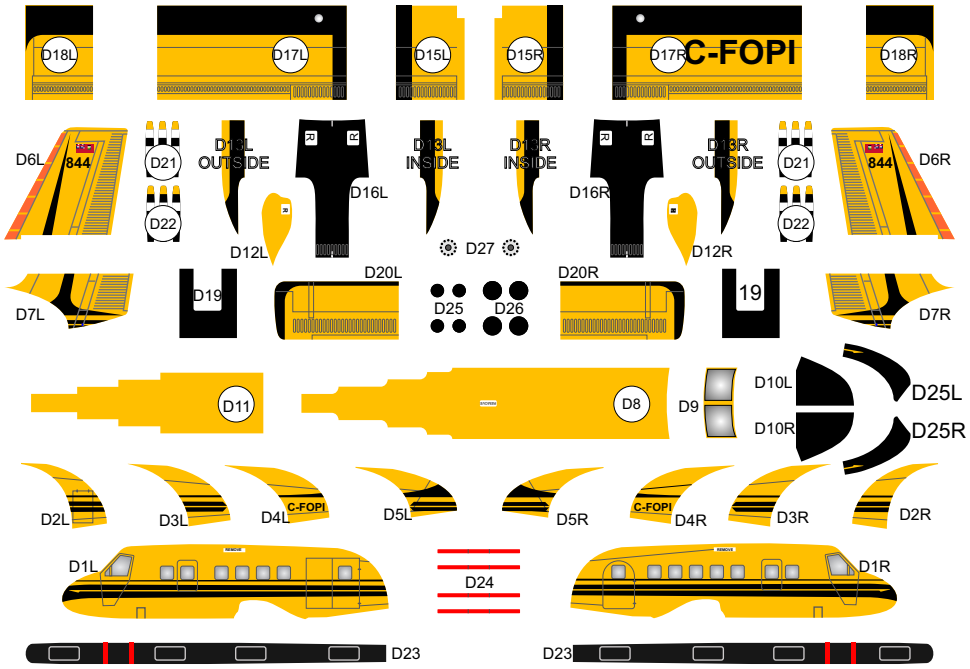
8 Landing gear installation

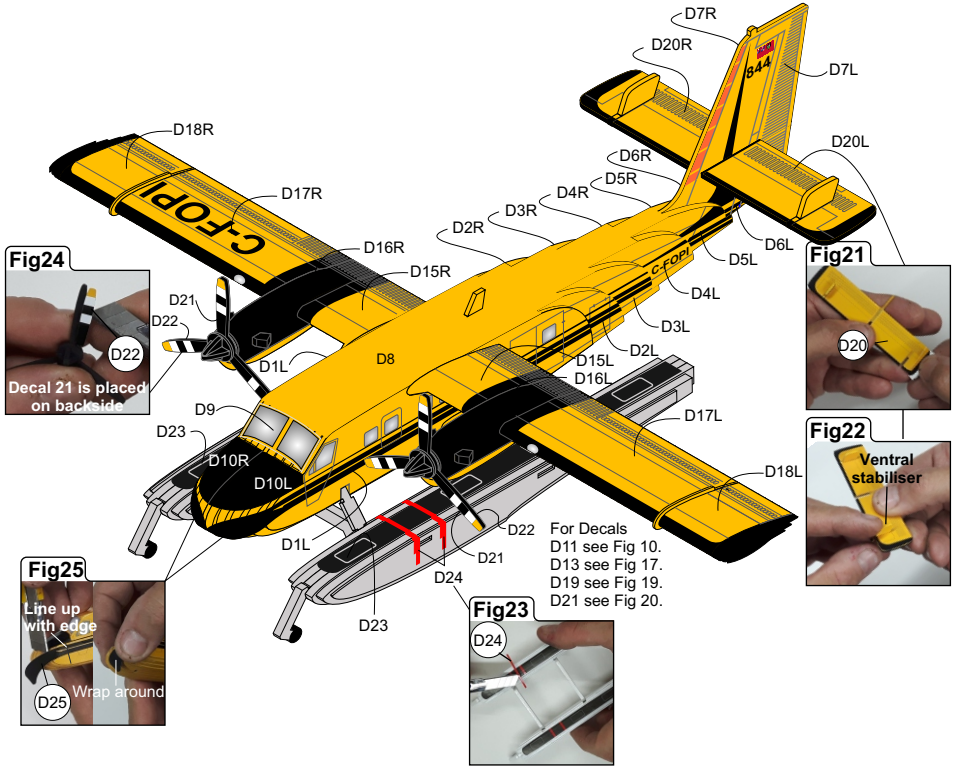
Note:
Do not glue landing gear in place



Decals should be placed into position in numerical order. You will need to remove part 1B, tail stabilizer, ventral stabilisers, wing assembly and struts, propeller assembly, exhaust pipes, floats or landing gear as they need to be removed to apply decals.

Take your time.





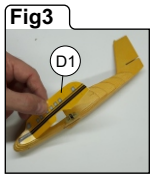
Applying decals

Tools needed to apply decals

Scissors, Utility knife

Make sure your hands are clean before applying decals. Avoid contact with the adhesive as this can cause the decal to loose some of its adhesion. Decals will adhere better to a smooth clean surface so we do recommend painting your model for best results.

Note: Paint fuselage and all flight surfaces Yellow before applying decals. The following is a series of illustrations that will help in painting and applying the decals



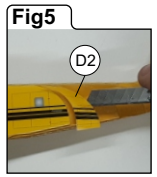
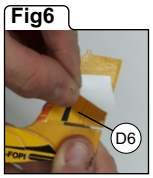
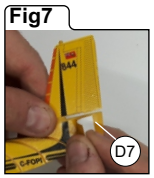
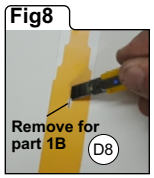
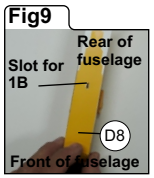


Fig 1. Cut out each decals as close to the edge as possible. **Fig 2.** For the large decals, remove about a 1/4" of the backing and cut off with scissors. **Fig 3.** Place the exposed section on the surface making sure that your decal is properly aligned on the part. **Fig 4.** Slowly remove the backing by cutting backing in stages to make sure the decal is staying aligned on the surface. **Fig 5.**For small decals you may use a utility knife to remove them from the backing and place in position.









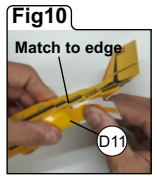
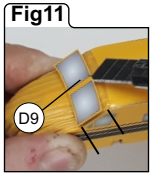
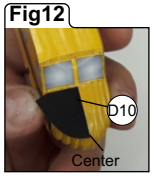
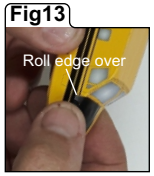
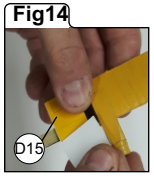


Fig 6. Peel/cut away a portion of the backing on decal 6 and align on the upper tail then apply. **Fig 7.** Repeat for decal 7. **Fig 8.** Remove piece of vinyl on D8 for part 1B. **Fig 9.**Remove backing up to the slot on D8 and cut off the backing. Line the slot of D8 to the slot on top of the fuselage making sure it is centered, apply the remaining part of the decal. **Fig 10.** Apply decal 11 to the bottom tail section lining up to the edges on the bottom of the fuselage.









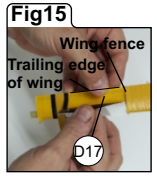
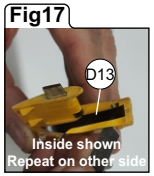
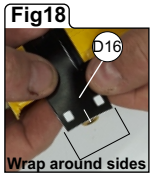


Fig 11. Line up D9 with the side cockpit windows, make sure D9 is centered. **Fig 12.** Apply D10 to one side of the nose of the fuselage, line up the inside edge with the center of the fuselage. **Fig 13.** Roll the outer edge over the side of nose. Repeat on the other side. **Fig 14.** Place D15 onto the inner part of the wing starting from the trailing edge working forward then wrapping around front of wing**. Fig 15** Center D17 in between the edge of the engine nacelle and the wing fence, start from the trailing edge working forward then wrapping around front of wing**.**





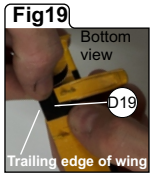


Fig 16. D18 is placed on the outer part of the wing. Line D18 up to the edge of the wing fence. Start applying from the trailing edge working forward then wrapping around front of wing **Fig 17.** Place D13 L/R into position on the side of the nacelle**. Fig 18.** Place D16 onto the top center of the engine nacelle starting from the trailing edge working forward**.** Wrap edges around the sides of the nacelle. **Fig 19.** Place D19 onto the bottom of the wing starting from the trailing edge centering to the engine nacelle. **Fig 20.** Place D12 into position on part 8.

Colour Scheme of Harbour Air DHC-6 TwinOtter C-GHAP

Suggested colours by Tamiya Model Paints

1 **Yellow** X8
All fuselage and flight surfaces
2 **Black** X1
Leading edges of flight surfaces
to match decals
Engine Nacelles
Propeller
Wheels
3 **Aluminum** Xf16
Floats, struts and braces
Ladders
Exhaust pipes,
Front landing gear
4 **Orange** X6
Touch up for identification stripe
5 **Red** X7
Navigation light

Note:
Use a matte tan acrylic paint on all surfaces to seal the wood. Once dry sand smooth with a fine sandpaper like 320 grit. Proceed in painting all fuselage and flight surfaces yellow before adding decals.

Landing gear equipped