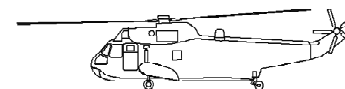


Belcher Bits BB-33: CS2F Tracker conversion 1/48

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Background

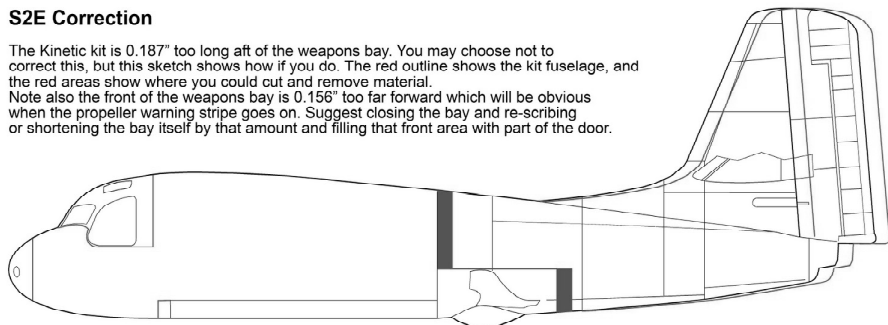
When the Royal Canadian Navy was looking for a replacement for the AS-3 Avenger in the ASW role, it was natural to consider what the USN was using, the Grumman S2F Tracker. The CS2F Tracker was manufactured by de Havilland Canada under license from Grumman. The first was delivered in 1956, and the last by 1960. They would operate from the new carrier HMCS Bonaventure. Forty two CS2F-1s were delivered (s/n 1502-1543) followed by fifty seven CS2F-2 (s/n 1544-1600); the -2s are distinguishable externally by an antenna over the cockpit and wingtip EM cans for the UPD-501. Starting in 1964, 45 a/c were upgraded to CS2F-3 standard. Trackers continued to operate in the ASW role until 1970 (shortly after Bonnie was decommissioned) then switched to sovereignty patrol duties until 1990. The recently released Kinetic S-2E tracker can be modified to represent a CS2F (or other early Trackers such as S2F-1 or -2). However, be prepared for some work, because the Kinetic kit is a long-fuselage E variant. Kinetic have promised a short-fuselage variant at some point, but even that may require some mods. Stay tuned.

Tracker Fuselage Modifications

As said, the Kinetic kit is an S-2E, the long fuselage version of the Tracker. For details on the configuration, Tommy Thomason's 'Tailhook Topics' is a good place to start, and he correctly states that the long fuselage Tracker had a 14" extension forward of the weapons bay and a 4" extension aft. So, you would think cutting out 14" forward and 4" aft would do the trick; you could even ignore that aft 4" as it's only 0.083" in 1/48. Not so simple, unfortunately. Kinetic's kit is already too long, even for an S-2E, and it's all in the aft end. In fact, the S2E kit is 0.187" (a scale 9") too long behind the weapons bay. It's not really obvious, and many modellers won't want to bother if they're just building an S2E. However, to shorten the kit for an early Tracker, you need to remove 0.27" out of the aft end somewhere and it really starts to show. A second problem which came to light is that the kit weapons bay is too long by 0.153" (scale 7.5") at the front. Again, not a big problem by itself, but you will notice it when you come to put the decals on. The prop strike band circles the fuselage just ahead of

S2E Correction

The Kinetic kit is 0.187" too long aft of the weapons bay. You may choose not to correct this, but this sketch shows how if you do. The red outline shows the kit fuselage, and the red areas show where you could cut and remove material. Note also the front of the weapons bay is 0.156" too far forward which will be obvious when the propeller warning stripe goes on. Suggest closing the bay and re-scribing or shortening the bay itself by that amount and filling that front area with part of the door.



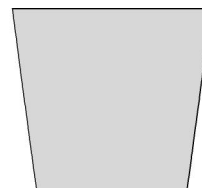
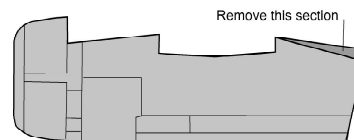
the weapons bay, and if you don't shorten up that bay, the band will either cut across the front of the bay doors (if it's in line with the prop) or will have to sit forward of the bay placing it obviously too close to the windows for an S-2E. The weapons bay issue is complex if you want it open, and dead easy if you close the doors (just scribe in a new front edge).

If you are going to shorten up the fuselage, you can attack the problem with the weapons bay at the same time. The combination of cuts and chops to make an S2-E into an early S2-A/B is pretty ugly; the last page shows how.

Nacelles sonobuoy launchers

The Kinetic kit provides nacelle ends which represent the taller variants seen on the S-2D or E. What the RCN used was identical to the first USN Tracker S2F-1. The top of the nacelle rear was flush with the wing top surface, sloping down as it moved aft. This set provides resin nacelle ends; some kit modifications will need to be made to fit these.

First, modify the main wheel wells. Cut the rounded portion of the rear wall of the wheel well (E3) off level with the side walls, and sand the back, tapering from the cut line down 1/8". The goal is to have the wheel well not protrude beyond the nacelle ends. Assemble the nacelles without the rear parts but do not install in the wing yet. When the nacelles are dry, cut off the top rear of both nacelles down to the panel line shown below. Cut a piece of 0.020" (0.5mm) plastic sheet according to the template provided. Glue the nacelle into the wing and glue the filler piece on the top rear of the nacelle; it should fill the hole in the wing trailing edge. Now glue on the resin nacelle ends, fill and sand. The goal is to have a smooth flat top surface of the nacelle coming out from the wing.



Nacelle Top fill piece

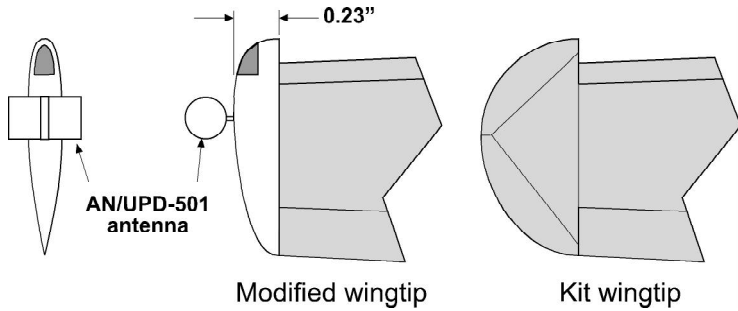


The view above right shows the launcher retainer latches. Impossible to mould in resin, these can be represented by gluing strips of plastic across the tubes.

Wingtip Modifications

Early Trackers had blunt wingtips rather than the semi-circular ones on the S-2E. If you can make the necessary fuselage corrections for an early Tracker, making new wingtips is a breeze. Cut off the wingtips just outboard of the ailerons, glue on a piece of 0.187" x 0.25" strip and file and sand to shape. If you want to build in the wingtip lights, file in a notch, glue in some coloured plexiglass and sand and polish. Use the diagram below to guide you on shape.

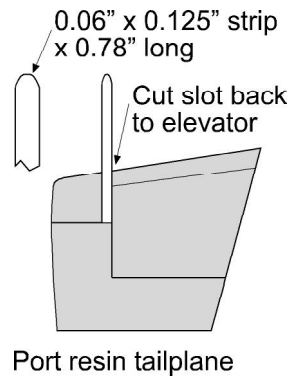
CS2F-2s were fitted with AN/UPD-501 ECM pods on the wingtips. These were very simple shapes, cylindrical cans mounted on a short standoff on the wingtip. Rather than a resin part, you can simply use one of the rocket pod bodies (part H2) which are



the exact diameter required. Cut into two lengths of 0.375", drill a small hole in the side and in the wingtip and use a piece of wire to hold it in position.

Tailplane Modifications

Early (short fuselage) Trackers had tailplanes of reduced span with balanced elevators. These are provided as resin replacements for the kit parts, and mount the same way. However, the port tailplane incorporated a long antenna sticking out of the leading edge. It is easier and stronger to put this into the resin tailplane than cast it in. Cut a 1/16" wide slot where indicated. Cut the piece of 0.625" x 0.125" strip provided to 0.78" long and shape the front end as shown. Glue it into the slot and fill the seams.



References

1. Royal Canadian Navy Aircraft Finish and Markings, Pat Martin, 2007.
2. Warpaint Series No.76 S2F Tracker, C. Stafrace
3. RT Vol 9, IPMS Canada
4. www.tailspintopics.blogspot.com (Tommy Thomason)
5. belcherbitsblog.blogspot.com (Mike Belcher)

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S2A Backdating

The S2E was stretched from an S2A by 14" (0.29") forward of the weapons bay and by 4" (0.08") aft. The Kinetic kit is already 0.187" too long aft of the weapons bay for an S2E, so you need to cut both fore and aft of the weapons bay to backdate to an S2A. The outline shows the kit fuselage and the shaded areas show where you cut and remove material. Note also the weapons bay is 0.156" too long on the kit. When shortened, the front end of the weapons bay should end up where shown.

