

Ryan FR-1 Fireball

US Navy Dual-Power carrier Fighter

Czech Model 1/48 #4815



The Ryan FR-1 Fireball was designed in 1943 in response to a Navy requirement for a new carrier borne fighter, which would use the reliability of a piston engine and the new technology of a jet engine. It utilized a nine cylinder 1350 hp Wright Cyclone engine and a rear fuselage mounted General Electric J-31 1600 lb thrust jet engine. Deliveries were started in early 1945 to minimize the threat of the Kamikaze, but the war ended before they became operational.

I chose the kit because of its uniqueness as the Ryan Company produced only 66 of these before the Navy cancelled the contract. One of these aircraft is on display in the "Hanger Deck" building at The Planes of Fame Museum in Chino, California. An attached photo is attached. The picture was taken from a simulated "catwalk" in the Hanger Deck. So it was quite crowded, just as you would see on a real aircraft carrier of WW II.



The kit consists of 3 sprues of plastic parts, a pair of vacuum formed canopies and 4 stubs of resin parts, that included the engine cylinders, wheel well boxes, side cockpit panels, front wheel well and wheels. I started by washing all the parts in a solution of warm soapy water, rinsing and letting them air dry. I then wiped down all the plastic sprues with Plastic prep.



The cockpit tub was then assembled using Interior Green for the seat, instrument panel, seat armor shield. The side panels and grip were painted Flat Black. I used some Navy WW II photo etch seat belts and touched up the side consoles with various dabs of yellow, red and silver highlights. I then added some 1/48 scale gauges (Mike Grant Decals) to the instrument panel. This was now ready to be installed in one side of a fuselage. After doing some dry fitting, it was obvious that I couldn't determine a correct position for the tub. I then taped the fuselage halves together to see if I could get a better idea on how to position the tub. It was decided to glue the fuselages halves together and then glue the finished tub to get the best position possible.

The next step was to glue the horizontal elevators and the jet exhaust to the fuselage. I did not insert the jet exhaust at this time because I would have to mask it when I painted the plane.

The next part of the assembly was to position the resin wheel well boxes in the lower wing. Of course the resin parts were too thick and had to be sanded down to fit comfortably when the upper portions of wing were attached. This took a lot of time of sanding and dry fitting to insure of a good fit. It also indicated the intakes for the jet engine were to be glued in place at this time. Again some dry fitting determined that it would be easier to wait till be further along in the construction process.

The assembly of the engine was next. It consisted of 19 pieces of resin, 9 cylinders, 9 heads and a central core. This took some time, as I then added 2 pushrods (thin brass rods) to each cylinder head. I then followed it up with painting the assembled engine medium gray, followed by a thin black wash to bring out the engine detail. I then checked the fit of the engine with cowling; nope it did not fit very well. It

was time to get out the Dremel tool and a grinder head. I spent about 30 minutes grinding out excess plastic and dry fitting before I was satisfied with the fit. The engine would not be attached till after I painted the plane.



Now it was time to attach the front wheel well to the lower wing. This was not the sequence as suggested by the instructions. Matter of fact most construction sequences were not followed because of fit and painting issues. There was the issue of adding extra weight in the nose area to keep the plane from being a tail sitter. I took some model railroad weights and flattened them out, shaped them to fit on the inside of the fuselage and glued them in place. I also added some weight to the top of the front wheel well box. Assuming that close to 1.5 oz. of lead and the resin engine would solve the tail sitting issue.

The propeller came in 4 pieces, 3 blades and a hub. I created a jig to insure when I glued the blades to the hub, they would be sitting at the correct angle. I then painted the prop assembly a semi gloss black. Next was to remove the wheels from the resin stubs and paint the wheels. I used a few drops of flat black and light grey mixed together to paint the wheels. The hubs were painted with magnesium paint from a spray can. The struts were also painted with aluminum from a spray can. I just sprayed some paint into plastic cups and used a brush to apply these metallic paints.

Next came the attachment of the lower wing to the fuselage, though the instructions called for the upper wings to be attached to the lower wing before attaching to the fuselage. A tip I learned from the

more experienced modelers in our club was to wait till after the lower wing was attached. This would insure a better fit to the fuselage and less filling and sanding. This worked well on this model. There was a little step left at the right wing root. I took some Elmer's white wood filler to fill up the step and did a little sanding to make it look correct. This is when I added the intakes for the jet engine to the wings rather than earlier in the build process, to insure a better fit.



I then masked off the canopy frame and painted the frame Model Master Interior Green prior to putting on the final coat of Dark Sea Blue. Also I got the wheel well doors and auxiliary fuel tanks ready for painting. I drilled some holes in the fuel tanks and mounted them on some toothpicks. I attached the tank pylons to the wing at this time

At this time everything was ready for painting. I started by painting the airplane Model Master Light Ghost Grey to highlight any errors in need of sanding and re-filling. I touched up a few errors and proceeded with painting the upper half of the plane Model Master Dark Sea Blue (Acryl). After letting it dry for a few hours I then painted the lower half of the plane. The next day I attached the plane to a dowel rod via the jet exhaust opening. I then gave it another coat of paint and let it dry for a few days, along with painting the engine cowl, all the wheel well doors and canopy. These parts also received a second coat of paint.

After letting it dry for another day, a coat of Future was applied to insure a good surface for putting the decals down. Another day passed and I added the landing gear and behold it sat on its tail. Since I hadn't attached the engine at this time, there was still room in the front to add additional weight. I put in close

to 15 lead fishing weights, but alas this did not solve the problem. So I then attached the engine and cowling, the auxiliary fuel tanks, wheel well doors. Also at this time I added the jet exhaust tailpipe.



The decals were then added to the plane and prop assembly. They went down without a problem and I didn't have to use any setting solution. Silvering occurred on the upper wing. This could have been avoided by trimming the decal into separate pieces. I then attached the oxygen tank behind the pilot's seat. The canopy was glued to the fuselage using some Elmer's white glue, thinned out a little with some water.

Overall it wasn't bad model to build; I spent approximately 20 hours putting it together. I have a copy of the Czech Model Ryan XF2R-1 Dark Shark dual powered turbo-prop and turbo-jet, which is a close cousin of this model and with the Dark shark model I will grind out as much plastic as I can from the fuselage, since the Czech models seem to use a thicker plastic than some of the other manufacturers.

