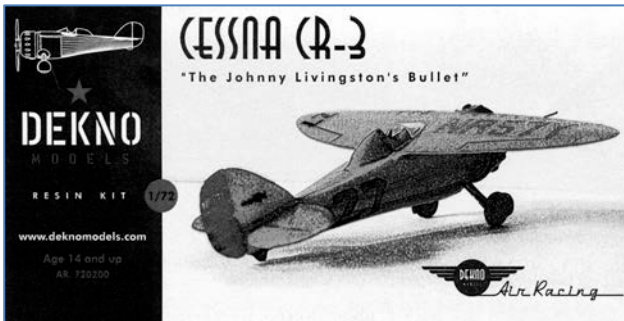


The Dekno 1/72 Cessna CR-3 – Kit review

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Dekno (kit No. AR. 720200) "**Cessna CR-3**". 1/72 kit, containing 26 resin parts, a vacuum-formed windscreen and full decals. Available from Dekno Models, www.deknomodels.com, Apartat Postal 9256, 08012 Barcelona, Catalonia, price EUR 24.50.

History

Johnny Livingston was one of the most active air racers of the early 1930s. In 1930 he bought a two-seat high-wing Monocoupe (NR501W, #14), which he modified thoroughly during the three years that he owned it. In the end it achieved 200 mph using a 145 hp Warner Super Scarab engine, clipped wings and lots of other modifications. He participated in hundreds of races and 501W is claimed to be the plane with most wins in air racing history. However, towards the end of 1932 it was getting beaten by purpose-built racers and Livingston was looking for a replacement. One of the planes that had beaten him was the Cessna CR-2, flown by Roy Liggett. Livingston contacted Cessna and ordered an improved version of the CR-2. The biggest difference was raising the wing from the CR-2's high mid-wing position to a shoulder position where the top surfaces merged with the fuselage top. This meant replacing the elliptical cross section fuselage with a flat-topped cross-section. Livingston also specified a higher gross weight, an enclosed canopy and bigger wheels. The engine was taken from the Monocoupe and a special short-blade propeller was by built by Hamilton Standard.

The plane flew for the first time on June 11th, 1933 and after sorting some teething troubles Livingston entered it in air races in Omaha, Minneapolis and Chicago and performed at shows in Peoria and Detroit. He won all the races that he entered and set a speed record for planes with an engine capacity below 500 cubic inches at 237.40 mph, 23.6 mph faster than the previous record. Livingston had already made some modifications, replacing the closed canopy with an open-top version and adding wheel covering doors. Arriving on a ferry trip to Columbus on August 1st, 1933 the retractable landing gear refused to lock down. Since there wasn't much protecting structure in the tiny plane and nothing to protect the pilot if the plane flipped inverted during a belly landing Livingston decided to bail out. He parachuted safely to the ground, but the plane crashed at high speed and was completely destroyed – a sad end to a plane that was very advanced for its time and apparently flew very well. Livingston disappeared from the air racing scene after the accident, becoming a test pilot for WACO, and no more Cessna racers were built. The CR-2 crashed on September 2nd, 1933 during the Chicago International Air Races, when the

cowling came loose. Pilot Roy Liggett was killed and Cessna lost interest in racing planes.

The kit

The fuselage consists of conventionally split vertical halves that enclose a seat, a stick and two little triangular landing gear fittings that should be fitted vertically inside the openings. The construction of the main airframe is straightforward – the one-piece wing is added to the top of the fuselage, the horizontal tail surfaces butt-join to stub ends and the rudder is separate. The "bumped" cowling is nicely done and covers a reasonable replica of the Warner engine. There were baffles between the cylinders, so there should be no see-through effect. The baffles and the crankcase cover look like they were painted the same red as the fuselage trim. The propeller is thin and sharp.

The big challenge of this kit will be the landing gear. The kit provides three very thin separate resin struts for each side, which should be made into a tripod structure fitted inside the fuselage. Personally I wouldn't even think of using them, but replace them with a bent metal wire that could connect both wheels solidly, go through the fuselage and be firmly attached. After fitting these "structural" landing gear legs the two additional pieces of each tripod could be added more or less cosmetically. On the real plane quite a bit of hardware was visible inside the landing gear openings, and nothing of that is represented in the kit. Just as with the cockpit interior, no living person probably knows exactly what that was. Warren Eberspacher has made an educated guess and believes that each tripod was raised by a vertical screw-jack that was attached slightly forward of the top (centre) tripod strut. Each tripod then slides on two parallel steeply inclined rods that were attached at the two lower (outer) struts. You will have to improvise something to fill the void inside the fuselage!

The decals consist of one main sheet and two additional sheets giving complete NR57Y wing registrations and different fuselage trim. I'm a bit confused by the fuselage trim, but I believe two of the three narrower trim strips on the additional sheet should be used, because the red trim on the main sheet looks too wide to me. The colour of the red paint used on the cowling and front fuselage of the model will have to be matched to the red colour of the decals, but it looks like a normal red colour. The trim for the flying surfaces is also given as decals.

Accuracy

The main dimensions of the plane are correct. The fuselage of the plane has a complex shape, with concave lines both in side and top view. It's difficult to imagine how the fuselage structure inside the stringers looks and where the longerons go. To my knowledge, the only ones to have tried to make serious drawings of the CR-3 are Warren Eberspacher and Bob Hirsch. In my opinion Hirsch has (for once...) done the better job. Both of them depict the plane with a flat bottom at the rear end of the fuselage. My impression from photos is that the fuselage cross section is almost rectangular below the horizontal tail. Somehow that has to merge into the more or less circular mid-fuselage, but how? The kit has quite pronounced concave lines when seen from below, and no flat bottom at all. The

kit fuselage looks very narrow at the rear. To my eyes it doesn't look quite right. However, it's very difficult to tell...

Conclusion

This is a very crisp, sharply cast kit of a very cute little plane – it almost looks like something that could have come out of the Disney studios! The wings have thin trailing edges and the fuselage has subtle fabric detail. Casting quality is very good and with exception of the tricky landing gear the kit should easily build into a good-looking model. The decals look thin and sharp. The ambitious modeller will probably want to add some detail to the landing gear openings and the cockpit. As stated above, I have my concerns about the shape of the rear fuselage, but that might not bother everybody.

References

- **Truman C. Weaver** "**Johnny Livingston's Cessna CR-3 Racer**" (in S. H. Schmid and Truman C. Weaver "The Golden Age of Air Racing – Pre-1940, Volume 1", EAA Aviation Foundation, 1983)
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- **Edward H. Phillips** "**Cessna – A Master's Expression**" (Flying Books, 1985)
- **Robert S. Hirsch and Ross N. Hirsch** "**Aircraft of Air Racing's Golden Age, Part 1**" (Robert S. Hirsch and Ross N. Hirsch, 2005)

Thanks to Dekno Models for the review kit!