Bereznyak-Isayev BI - an Alternative View

by Ora Lassila IPMS #33494

I was happy to see Jim Schubert's article about the Bereznyak-Isayev BI rocket fighter in a recent issue of the IPMS Journal [1]. However, I disagree with some of the details in that article. I recently built a model of the BI myself, starting from the same kit as Mr. Schubert (I bought it at Spare Time Shop near Boston for \$8.50).

The reference material available on this aircraft is scarce. Some good published material does exist, however, such as [2] and [3]. Additional material can be found in [4] and [5]. I used all the material I could find (plans, photographs, etc.) and produced my own set of plans against which I compared the kit.

There is some confusion about the overall dimensions. The wing span is often quoted as 6480 mm, the length as 6400 mm. Bill Gunston's massive book on Russian aircraft [5] suggests that some later aircraft had a wing span of 6600 mm and were 6935 mm long. The plans published in the IPMS Journal article have discrepancies between the plan and side views. The side view agrees with the measurement of 6400 mm, whereas the plan view depicts a 6700 mm long aircraft (when scale determination is based on the wing span) and quotes this as the length.

Based on my understanding of the measurements and shape of the aircraft, the kit's fuselage is about 4 mm too long. The wing span and chord are inaccurate as well. Schubert states that the chord is about 3 mm too small. I believe this to be true at the tip but not at the root: the chord is almost accurate at the root (the wings have a poor fit, though). Furthermore, the ailerons are inaccurate. To correct all these problems, I actually ended up building the wings from scratch (by laminating sheet plastic and sanding to shape; this technique allows the wheel wells to be built rather easily). I shortened the fuselage by cutting off a slice just in front of the windshield and subsequently doing some heavy sanding. Contrary to Schubert's article, I believe the span of the horizontal tail of the kit is accurate (and many published plans err in this respect). I base this on several photographs of the aircraft (especially the ones on page 48 of [3]).

Due to the poor quality I removed all original surface detail (intakes, "bumps", panel lines, etc.) from the fuselage, and built up the detail afterwards (guns, an intake scoop, an antenna). The cockpit interior I built entirely from scratch: an article in Air Enthusiast [2] has a cutaway drawing of this aircraft and gives some idea of how the cockpit was furnished; I have no idea how accurate this drawing is, however. A new canopy was made by heat-stretching clear plastic sheet over a mould made by reshaping the original kit canopy. A new rocket engine tailpipe is also needed: I built one by sharpening the end of a piece of styrene tube available at hobby shops. Various other detail was added, such as completely new gear doors and tailplane support struts (note, however, that the early glider prototypes of this aircraft did not have the support struts, and had the tailpipe faired shut).

All photographs I have seen of this aircraft show some type of two-color upper surface camouflage scheme with lighter color undersides (with a sharp – not a soft – dividing between top- and underside); this is in contrast to Schubert's article. I painted my model in a typical Russian green/brown scheme with light gray undersides. I used the decals from the kit which I found to be of reasonable quality and quite accurate.

My overall feeling is that this is not just a simple kit as Schubert warns, but actually a Very Bad Kit. It would not be much harder to build the entire model from scratch.

Note: Another review of this kit has been recently published in Scale Aviation Modeller [6]. Furthermore, Airmodel used to have a 1/72nd scale vacuum-formed kit of the BI (see, for example, [7]).

References

- [1] Jim Schubert, "Bereznyak-Isaev BI-1 Rocket Fighter", IPMS/USA Journal 5 (9), July/August 1997.
- [2] --, "The Devil's Broomstick", Air Enthusiast 6 (5), December 1973.
- [3] Yefim Gordon & Bill Sweetman, Soviet X-Planes, Motorbooks International, Osceola (WI), 1992.
- [4] --, "Fighter A to Z Bereznyak-Isayev BI", Air Enthusiast 4 (4), April 1973, p.201.
- [5] Bill Gunston, Encyclopedia of Russian Aircraft, Motorbooks International, Osceola (WI), 1995.
- [6] Richard A. Franks, "Berezniak-Isaev BI-1", Scale Aviation Modeller 7 (2), July 1996, pp.393-394.
- [7] --, "Kit Comment", Aviation News 11 (7), 27 October 1978, pp.14-15.