

Tupolev Tu-16 (Badger-A)

History: At the beginning of the Cold War the United States' and the Soviet Union's main long range bomber was the Boeing B-29 and its Russian copy, the Tu-4. However, the development of the atomic bomb and the jet engine revolutionised the potential performance and striking power of strategic bombers and the Soviet Union began development of new jet bombers to match developments taking place in the West.

The stepping stone between the Tu-4 and the new bomber was the '82' that made its first flight on 24 March 1949. It was the first Soviet aircraft to fly with swept wings and had a speed of 934 km/hour. Using the '82' as the basis of development, Tupolev began work on the new bomber that made its first flight on 27 April 1952. It was given the service designation Tu-16. Approval to begin production was given in December 1952 and the Tu-16 was manufactured in three factories. Operational deployment commences in 1954 and NATO gave it the reporting name 'Badger'. Production continued until 1963 when a total of 1509 Tu-16s had been produced in the Soviet Union. In 1958 deliveries commenced to China which subsequently manufactured its own version of the Tu-16.



Because of its versatility the Badger soon took on new roles. One of the first was as air-to-air refuelling tankers that extended the range of Russia's strategic bomber fleet and another was in carrying stand-off weapons capable of engaging ships at sea. Other important versions include electronic intelligence gathering, electronic warfare, reconnaissance and air/sea rescue aircraft. It appears that almost all these new version were reconstructions of existing Badger-A airframes rather than construction of new aircraft. The most significant visible difference in many new versions was replacement of the original clear nose of the bomber with a large solid nose housing large electronic equipment. As each new version of the Badger appeared NATO gave it a new letter, beginning with the Badger-A in the 1954 and reaching the reporting name Badger-L by the end of its career.

Badger's remained in Russian service until 1993 and they were used operationally during the war in Afghanistan. Badgers were also used by Egypt, Iraq, Indonesia and China.

Data: *Engine* two Milulin AM-3M-500 turbojet engines of 93.2kN (20,900 lb) thrust each. *Wing span* 33.0m (108ft 3in). *Length* 34.80m (114ft 2in). *Maximum take-off weight* 79,000kg (174,000lbs). *Maximum speed* 1050km/h (656mph). *Range* 7200km (4500miles). *Armament* 9000kg (19,800lb) of free-fall weapons and seven NR-23 cannon. Crew four.

The kit: Trumpeter 1:72

Like many other aircraft from behind the iron-curtain, the Badger has been poorly represented in the model kit catalogues until now. It wasn't until the 1990s that anybody in the West knew enough about Russian aircraft to be able to make fairly accurate kits. But things have changed a lot in the past 15 years and it is not difficult to imagine people from the Chinese company Trumpeter with their cameras and tape measures on the flight line at some Chinese air force base measuring up the real thing. The resulting kit certainly has a sense of authority about it with so much moulded detail that it seems highly unlikely that they just made it all up.

Constructing the Trumpeter Badger is not a difficult. The moulds are lovely and crisp with finely engraved detail and the joints are precise and well fitting. The main problem is that there is just so much plastic in the box. Some of it was additional parts for different versions and some was in the options of a fully loaded bomb bay or stand off weapons. To make life simpler I decided to construct my model as an original Badger-A. It's not a version offered in this kit but the additional parts had everything you need to make one. Having decided that, I began by going through all the plastic in the box and keeping only the parts needed to make a Badger-A. A lot of plastic went into the spares box, so much that I almost needed a new spares box.

The only significant complaint I had about the kit was that it gives you the plates that go over the engine air intakes (which is not something you get everyday and therefore a welcome

addition). However, they forgot to give you what goes behind them. (Perhaps the Trumpeter team that measured a real Badger were let loose on one with the plates in place and they forgot to have a look at what was behind them.) I had to make my own intakes, which wasn't too hard.

The decal sheet gives you options for most of the versions flown by other countries. Oddly, there are only five Russian stars when six would have been

preferable, but that's what the spare decals box is for. I wanted to make an all metal finish Badger-A to show off the lines of this rather sleek aircraft rather than a camouflaged version. I also thought it would give me another opportunity to practise with polished aluminium finishes. However, while I was looking at photos of Badger-As I became aware that they had a protective metallic laquer coat over all so, instead of improving my technique with Alclad II, I instead used up a couple of tins of that good old reliable, Humbrol 11.

Usually I mask transparencies with little bits of tape and maskol but the Badger had so much, and there were many rounded corners. For a change I bought a set of masks and, although they took a while to arrive from overseas, it only took half an hour to apply them. I'm a convert. It appears that early Badger-As had only minimal marking and almost every picture shows different variations. Some had small seven digit numbers on the tail and large two digit number on the forward fuselage. Some had the small numbers and not the large numbers, some had the other way around. After pondering this for a while I decided to apply only the Russian stars because it is almost certain that many Badger-As flew with only these markings. And, if I find out more later I can always add whatever is necessary. I probably won't, but you never know.

The last touch was the aerial wires to give it that little touch of reality. The completed model looks, big, sleek and silver. I like it.

