Israeli Defense Force AMX13 - Heller AMX 13-75 backdate

According to Christopher Chant (World Encyclopedia of the Tank), the AMX-13 finds its origins in a 1946 requirement of the French airborne forces for an air portable tank to provide fire support. The resulting light tank with high velocity 75 mm gun has been used by the French army, as well as a number of other armies, for reconnaissance and tank destroying purposes. It is interesting to note that the French AMX 13 75mm gun was derived from the German Panther.

The prototype appeared in 1948, and consisted of an all-welded hull, with five road wheels with torsion bar suspension, and two return rollers. Driver (left) and engine (right) are at the front, with a Fives-Cail Babcock FL-10 oscillating turret at the rear, in which the commander is seated on the left, and the gunner on the right. An automatic loader with two six round revolver magazines occupies the turret bustle, the main drawback of which is the fact that the magazines have to be reloaded from outside the tank.

The AMX-13 has been up armed with both 90 mm and 105 mm guns, as well as, in some cases, getting four SS-11 ATGWs mounted next to the original 75 mm gun (two on either side). In addition the chassis has been used as a basis for a number of other vehicles.

The Model

The kit (#81122) is a later version, one the Israelis never used, by the way, so I decided to backdate it using what little reference material I had. Tanks Illustrated 3, Israeli tanks and combat vehicles and Concord 7008, Tank battles of the Mid-East wars: (1) The wars of 1948-1973, both by Zaloga; The illustrated history of tanks, by Light body and Poyer; Taschenbuch der Panzer, by von Senger und Etterlin; and Modern Tanks & Fighting Vehicles, by Miller, all have a few pictures or drawings in them. I'm sure I'm still missing some details for a completely correct backdate, but this was what I had to work with. I used the first edition of the kit, in the green box, so I don't know if the parts numbers would be the same for the re-release.

Construction - Hull

I started of with the lower hull, as per the instructions. It goes together well enough, but as it consists of bottom (two parts), sides, rear, front, and one supporting part, you need to make sure everything's square. This is also where you need to make the first modification: fill and sand the second through fourth locations for return rollers, then mark the position for a new one. The Israeli version only had two return rollers. The new location will be 4.2 mm behind the first one, or between the third and fourth road wheel, slightly closer to the fourth. Make sure it's in a straight line with the sprocket, other return roller, and idler.

Also, remove the notches on the lower hull front, as these are for the splash plate, which isn't needed. Adding the suspension is straightforward, but it looks kind of delicate, so be careful. I believe the glacis plate should be one piece (correct me if I'm wrong), so I sanded the joint between #13 and 19.

The upper hull, #85, lies on the hull sides, and requires seam cleanup (partly covered by panniers, though). The track guards are a real patience job, be careful of warping (why did they use clear parts?!). I left of #78, as I couldn't figure out where to put it, and my references didn't show it either.

The idlers are the wrong type, so I filled them with epoxy, sanded until I had hollow discs, and drilled six holes in them. #113 of the driver's hatch is also unclear, and not shown in references, so I left it off, along with #95 and 96. As this version only has two headlamps on the glacis plate, I removed the other two, and made brush guards out of PE scrap for both lamps, and the extra lamp on the left pannier. The barrel lock halves are switched in the instructions, and need a clamp in the centre of the glacis. I added all hull details, except for #15, 40, 4, and 21. I filled the slots in the rear hull for the towing hooks, as they were too big, sanded the locator pins down and glued the hooks on with superglue. Lastly I decided to put a Hudson & Allen barbed wire roll under the barrel lock assembly to make it look a bit better, and use Accurate Armour's resin tracks. It was the first time I used resin tracks like that, so it took some effort, and things didn't work out quite the way I'd hoped, but on the whole I think I did alright for a first time. I have to say I was kind of disappointed at the amount of flash and bubbles on the track sections, though.

Construction - Turret

I put together the lower and upper turret halves while working on the lower hull. The upper half needs some TLC, but looks OK once done. You can add the connector pins, #77, from the bottom, so the roof can be added at this stage. As the Israeli version didn't have a canvas cover, I sanded this off the mantlet at this point. Also, you can leave off the SS-11 assembly, including the guidance box on the turret roof (#122 and 123), and sand off the mounting tabs for the box, as the Israeli's never got this assembly. Be careful when fitting the turret pins, as the holes don't quite line up. I drilled out the holes for the turret handles etc. The fit of the gunner's sight (#66) is awful, and there are ugly ejector marks on the antenna bases. The upper smoke dischargers need to be angled out more, so you need to sand the mounts down somewhat. Lastly, I used guitar string antennas.

Finishing

For the painting I used Tamiya XF-60, close to the paint chip for an Israeli upgraded 1973 Centurion in AFV-G2 Vol.6 No.8. Details were picked out as necessary (tires, lights, exhaust, etc.), after which I used Micro Kristalkleer to replicate the episcopes. I used dry transfers from one of Verlinden's Israeli sets, another first for me, and quite a nice surprise, as they went on very easily. The whole was then given an oil paint wash, a dry brush with lightened base colour, a coat of Hudson & Allen "Mud", and mounted on a simple base.

Conclusion

Not exactly easy, but a good learning experience, and I rather like the final result, especially considering the quality of the kit.