

The Dassault Mirage III in South African Air Force service



PART 8

SAAF Mirage III scale models

This E-book was compiled by Malcolm Reid
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Part 8 - SAAF Mirage III scale models

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For the modeler

As a builder of 48th and 32nd scale aircraft kits, the content of this document is limited to addressing models of the Mirage III in those two particular scales. My apologies to those of you who insist in building in 72nd...

1.1 Available kits (ref. scalemates.com) which can be used to build SAAF Mirage IIIs

Scalemates.com is a very useful source of information pertaining to all scales of plastic model kits. The attached list is effective as of January 2020.

I've stuck to the larger mainstream scales here (1/48th and larger) – running a search on scalemates.com provides at least 1,000 hits for Mirage III kits, decals and accessories !! Dates below are the original release dates. I have only listed the larger scales here – there are a myriad of 1/72, 1/100 and 1/144 scale models – see ScaleMates website.

48th scale :

- Kinetic Mirage IIIE/O/R/RD/EE/EA – 2014
- Kinetic Mirage IIIE / V – 2016
- Kinetic Mirage IIID/DS – 2017
- Kinetic Mirage IIIS/RS – 2016
- Wingman – using the Kinetic kits as the base, provides resin parts for various options for Mirage 5BA/BR/5F/Nesher/Dagger/Finger – 2015
- Eduard Mirage IIIC/CJ – 2004
- HobbyBoss Mirage IIIC – 2006
- Esci Mirage IIIC/CJ/CZ – 1980, re-released by Italeri in 2012
- Esci Mirage 5 – 1980, re-released by Italeri in as Nesher/Dagger in 2013
- Esci Mirage IIIE – 1980, re-released by Italeri in 2004
- Fonderie Miniature Mirage IIIE/R/5F - 2003
- Heller Mirage IIIB/C – 1979
- Academy Mirage IIIC and R – actually 1/50 scale - released 1990s based on the 1975 Fujimi kit

32nd scale :

- Italeri Mirage IIIC – 2015
- Italeri Mirage IIIE/R – 2016 (re-released in 2018 by Revell)
- Revell Mirage IIIE – 1973
- Revell Mirage 5J – 1975 (re-box of the original 1973 Revell kit)
- Revell Mirage 5BR – 1991 (re-box of the original 1973 Revell kit)

Aftermarket bits and pieces :

- Refer to *Scalemates.com* for a full listing of all aftermarket items available – search on “Mirage”
- ScaleWorx provides a nice array of 48th and 32nd resin items to correct aspects of the 48th and 32nd Mirage IIIs – they're on FaceBook

1.2 Building the Italeri 32nd scale Mirage IIIC and IIIE

A replacement for the old 1970's Revell 32nd scale Mirage III kit has been eagerly awaited by Mirage III modelers – this old Revell kit was way overdue for replacement being a typical product of the 1970's with a lack of detail, possessing of questionable fit and raised panel lines. The overall shape is, however, considered accurate. Italeri finally came through with two new Mirage III kits – the IIIC in 2015 followed by the E/R in 2016. Whilst many fellow Mirage fans (myself included) have welcomed these kits, they remain something of a curates egg. The kits show modern tooling with recessed panel lines. Riveting is not overdone. However, there are areas on the model which display distinctly sloppy CAD work and tooling issues. There are also some distinct inaccuracies which have been well covered on the various internet modeling forums. These are summarized below :

- The panel line detail is very crisp on the wing upper and lower halves. However, the detail is softer on the fuselage halves.
- The surface texture of the kit is rough. Some liberal sanding with a Tamiya 1,000 grit sanding sponge will take this off. Whilst this is time consuming, the sanding doesn't compromise the recessed surface detail. This is a very necessary step especially if one wants to paint their Mirage in a natural metal scheme. A final polish with some micromesh is recommended to give a really smooth surface.
- There are some very irritating mould seams on the rear fuselage halves – initially I thought this had something to do with slide moulding to allow for future tooling variations to be accommodated around the rear fuselage / vertical stabilizer junction (Kfir ?). I'm now convinced that this is most likely due to misaligned tooling. These areas have to be filled and sanded back and quite a bit of panel line detail can be lost in the process. This requires re-scribing which at the best of times is a tedious process.
- The rudder actuator on the left side of the vertical stabilizer is way too large and too triangular in appearance. This should be cut off and replaced with a slimmer more curved item best fashioned from plastic card.
- The rudder dimensions are incorrect both in height and width.
- Whilst the main undercarriage bays assemble nicely and fit well to the wing lower surfaces, they display very distinct differences in sharpness on some of the details from the one side to the other. I cannot figure out how this is possible with modern CAD, which should be a simple matter of replicating one side to the other. It's certainly not a major issue but still rather odd – the Italeri 32nd scale F-104 Starfighter displayed similar differences between the left and right fuselage halves, one displaying sharp detail, the other much softer.
- The main undercarriage legs appear to be too long – Italeri more than likely measured an unloaded aircraft (possibly a museum article where oleo spacers may have been installed resulting in a too long oleo strut). It's a relatively simple job to cut the gear legs at the oleo and shorten these by half and adding some brass rod for strength. The Mirage III has a distinct nose up stance when parked.
- The fit of the forward intake sections to the fuselage and wings can end up being a bit of dog's breakfast – this seems to be a common problem with all Mirage kits I've built including the 48th scale Eduard and Hobby Boss kits. On the Italeri kit, the intake/fuselage seam is located away from a natural panel line and runs straight through the intake blow in doors. This necessitates a lot of filler and elbow grease. Shoddy kit design in my opinion.
- The canopy emergency release handles and windows located just aft of the cockpit are not provided as separate parts but rather replicated using a decal. This is a distinct feature of Mirage IIIs and simple decals just won't do in this large scale. It's a relatively quick fix to hollow these out and apply some backing plastic card and fashion little handles from thin wire. Shaping and installing the clear cover is a bit of a pain though.

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- The shape and size of the inboard wing pylons for the RP62 1,300 liter tanks are incorrect (too small, too shallow). The diameter of the tanks is also too small. The details of the JL-100 rocket pods are questionable.

Particular issues relating to the C kit are :

- The main undercarriage legs are not the correct configuration for a C – see pics attached. The parts provided in the kit are correct for an E/R. This will be a major point of irritation for Mirage aficionados as these two gear configurations were distinctly different.
- Italeri would have one install the dual landing lights on the nose gear leg. This is applicable for the E/R version but not the C. The C has a single lens drop down landing light ahead of the nose landing gear leg. Oddly enough, Italeri does provide the lens for the C's drop down landing light.
- The C and E main wheel hub brake clusters are of different configurations. Both are provided in the kit – check your references to make sure you use the correct one. The wheel diameters are also off (too small).
- The nose cone is about 1.5 to 2mm too large in diameter where it fits to the forward fuselage resulting in a really nasty step between it and the fuselage. The nose cone thus has to be reduced in diameter with some aggressive sanding resulting in the loss of all surface detail. This has to be re-scribed. Yet again, in this day and age of CAD, this level of mismatch between parts is surprising.
- SAAF CZs had a slot in the main landing gear door – the kit doesn't provide this but it's a couple of minutes work to cut this out.

The following are particular issues relating to the E/R kit :

- The intakes are too long – about 3mm in 32nd scale – enough to be apparent to Mirage aficionados. Luckily its quite an easy job to cut this back – maybe 30 minutes work either side.
- I have not tried the E nose cone yet. The reconnaissance nose fits OK onto the forward fuselage. The camera windows on the reconnaissance nose cone are not correct for SAAF RZs requiring some modifications.
- The two shrouded vents at the lower rear fuselage located either side of the ventral fairing are represented as anemic little bumps. These need to be replaced with correctly shaped items.
- The fuel tank inspection window on the ventral fairing should be opened up and covered with a small piece of clear plastic.
- Apparently, the fairing at the base of the vertical stabilizer which includes the drag chute housing is undernourished.

The major challenge with the kit is the assembly of the wings to fuselage and the intakes. I've now built two CZs and one RZ (and two Es converted to a Cheetah E and IID2Z) and have tried several different assembly sequences. The one that seems to work best is as follows (references are to the C kit part numbers):

- The fuselage consists of three components – left and right halves (51A and 1A) and lower surface (1B). I glued each lower wing half (10C and 14C) carefully to the lower fuselage section (1B). If one is careful in doing this, the distinctive wing anhedral is achieved. Some light sanding of the mating surfaces prior to gluing is necessary to ensure a tight fit. And nice and tight it is indeed. Set aside to dry fully.
- Add upper and lower wing airbrakes and wing undercarriage bays.
- Glue upper wing halves (13C and 9C) to the bottom wing/fuselage assembly to ensure that the leading edge joint is tight. The undercarriage legs can be installed later.

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- Glue the left and right exhaust shroud halves (46B and 47B) to each corresponding fuselage section (51A and 1A). This is important to eliminate the possibility of a step at this point.
- Once dry, glue the left and right fuselage assemblies by applying glue only to the spine and rear portions. Leave the nose unglued to allow the bottom section with cockpit to be slipped into place later. Insert the assembled engine and intake trunking.
- Glue intake halves (46A and 45A) to each side of the fuselage. Glue carefully to allow the intake to conform to the fuselage.
- Glue nose bay and cockpit to the bottom section of fuselage/wing assembly and then glue this to upper fuselage assembly.
- Mine clicked nicely together with the aid of a 1mm shim on the right hand side to close the gap at the fuselage / wing seam.
- All that is left is to fill in all the various seams around the intakes – the single most irritating part of the build.

This is by no means a definitive way to assemble the kit, but it worked. The kit actually fits really well with the exception of the intakes. There have been many gripes on the various internet forums relating to the bad fit of this kit – with some care and taking one's time, the assembly should not pose major problems. I enjoyed the build experience – it's not slap together Tamiya quality but every time I build one, it is a really enjoyable experience. It's modeling after all.

So, do I like this kit ? Emphatic YES ! Once built it looks like a Mirage.

1.2.1 Italeri 32nd scale Mirage IIICZ

Italeri's 32nd scale Mirage IIICZ finished as #805 in the late natural metal scheme.



Finish – I used base colour of Tamiya TS83 metallic silver decanted from the can and airbrushed. Although Tamiya recommend a base coat of TS-14 black, I didn't bother. Various panels were masked and tonal variations of aluminium / steel were achieved using mixes of Tamiya X-11 silver / X-1 black mixes. The red trim was done with Tamiya X-7 red.



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Stores are a combination of centerline JL-100 combined rocket / fuel tanks and AIM-9B Sidewinder missiles. This was a standard training load for SAAF CZs.

1.2.2 Italeri 32nd scale Mirage IIICZ

Italeri's 32nd scale Mirage IIICZ finished as #805 as it was later repainted with the early gloss hard edge camouflage.



Paint colour mixes used were :

Underside blue – XtraColour X602 Russian SU27 Flanker Light Blue – perfect match !

Buff – Tamiya XF-59 + 30% Tamiya X-6 Orange

Green – Tamiya XF-11 straight

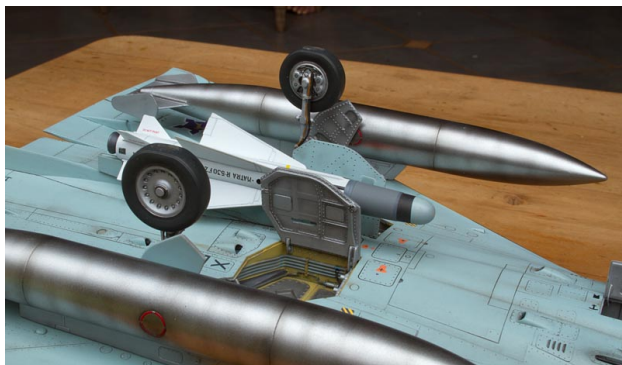
Antennae – base coat Tamiya X-2 white followed by light overspray of Humbrol H41 cream
Satin finish after decaling and light weathering to replicate early glossy delivery scheme



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Stores are a combination of centerline mounted Matra 530 air to air missile and two wing mounted 1,300 liter RP62 fuel tanks.



1.2.3 Italeri 32nd scale Mirage IIIRZ

Italeri's 32nd scale Mirage IIIR finished as RZ #835 in the low visibility blue/grey camouflage.



Paint colour mixes used were :

Light grey (all Tamiya enamels) - XF-19 + 50% X-2 White + 20% X-17 Pink + spot XF-8 Blue and spot X-16 Purple
Blue – (all Tamiya enamels) 1 part XF-8 Blue / 4 parts X-2 White / 4 parts XF-66 blue-grey / 1 part X-17 Pink / spot X-16 Purple (quite a cocktail !!)

This then oversprayed with highly thinned XF-20 medium grey
Then oversprayed with highly thinned mix of 70% XF-63 / 30% XF-8
Matt finish after decaling and light weathering



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Stores are a combination of centerline 825 liter RP825 and two wing mounted 500 liter RP18R fuel tanks.

1.2.4 Italeri 32nd scale Mirage IIIEZ converted to IID2Z using ScaleWorx resin set

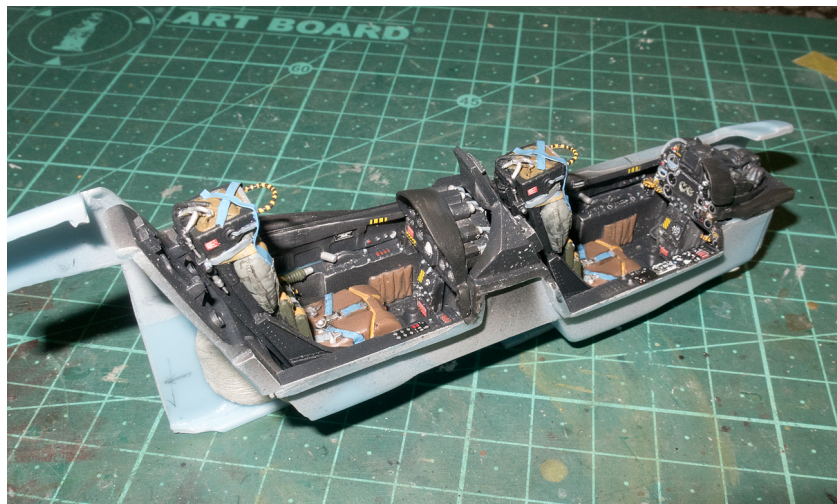
ScaleWorx brought out a really nice resin conversion set for the 32nd Italeri Mirage IIIE kit to produce a D2Z. This set is comprehensive and consists of a complete dual seat forward fuselage, separate nose, cockpit tub with two seats and corrected instrument panels, revised nose gear bay, revised nose gear retraction piston, shortened intakes, replacement spine, corrected vertical stabilizer with the correct dimension rudder and rudder actuator, corrected ventral fairing with tail hook, correct diameter main wheels and Atar 09C exhaust nozzle. ScaleWorx also provided two vacformed canopies. The conversion requires a fair bit of elbow grease and fettling to get the right fit (mine was the first test build for ScaleWorx). But the end result looks every bit Mirage IID2Z. By using the kit supplied doppler antenna, a DZ can also be built. I also used a set of ScaleWorx corrected JL-100 rocket pods as this was the standard training load for the D2Z. I also used the corrected inboard pylon as the kit provided items are too short and not deep enough.

Paint mixes used :

- Buff – Tamiya XF-59 Desert Yellow (10 parts) + Tamiya X-6 Orange (5 parts) + Tamiya X-2 white (2 parts)
- Green – Tamiya XF-11 Japanese Navy green
- Light blue – Model Master Russian Topside Blue



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ScaleWorx Resin cockpit



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1.2.5 Kinetic 48th scale Mirage IIID with ScaleWorx Mirage IIIBZ conversion

Kinetic 48th Mirage IIID converted to Mirage IIIB using the ScaleWorx resin set. Painted as #817 in the natural metal delivery scheme.



Stores are two wing mounted 500 liter RP18R supersonic fuel tanks.



1.2.6 Eduard 48th scale Mirage IIICZ

The Eduard 48th Mirage IIIC is a really nice little kit but suffers, like all others, with unnecessary complexity around the intakes requiring careful assembly. I finished mine to represent a CZ in the late matt soft edge buff/green camouflage with a standard combat load used by SAAF CZ over Angola.

Paint mixes used :

- Buff – XtraColour X224 RLM79A (85%) and Tamiya X-2 Yellow (15%)
- Green – XtraColour X144 green (FS14086) oversprayed with mix of 75% X144 / 25% X155 green (FS14096)
- Light blue – X602 Flanker light blue



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1.2.7 Hobbyboss 48th scale Mirage IIICZ

The Hobbyboss 48th Mirage IIIC is a really nice little kit providing a relatively simple build. I decided to add colour to my SAAF Mirage III collection by finishing this off as #800 in black and red celebrating 25 years of Mirage III service with the SAAF.



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