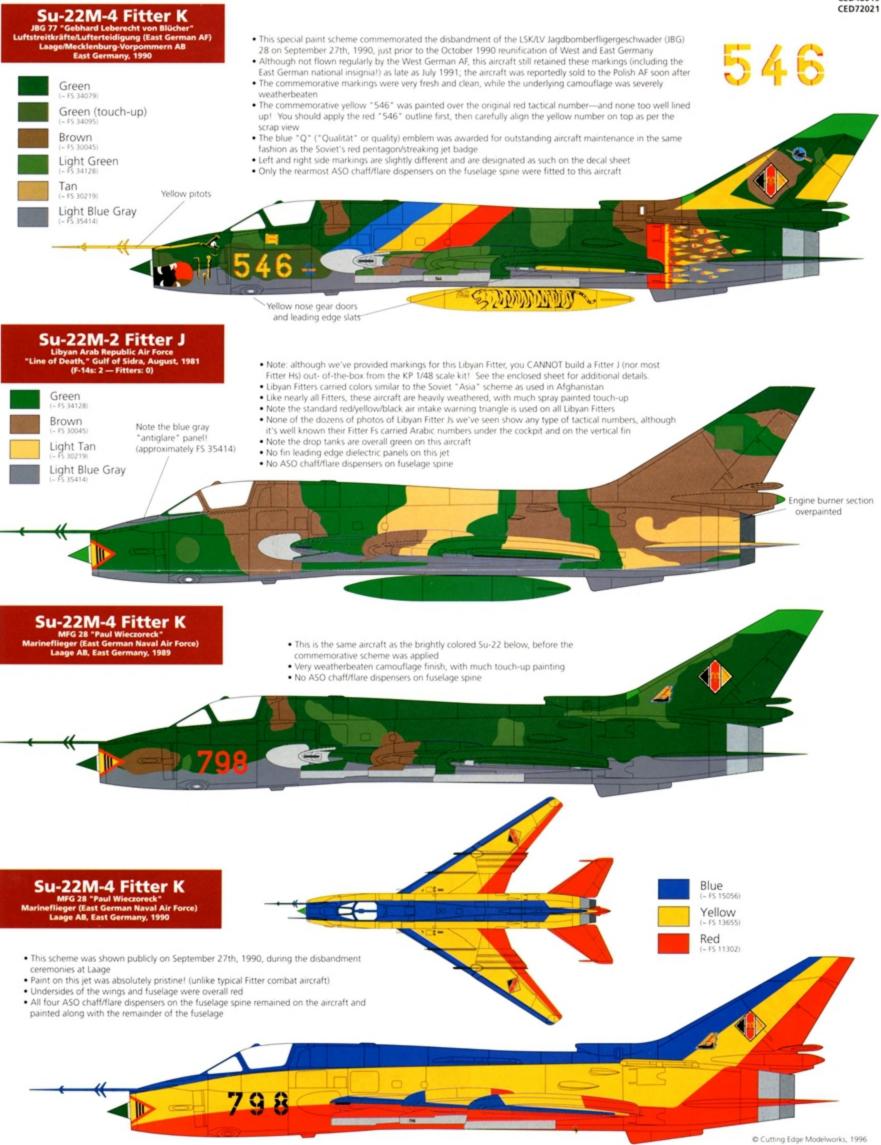
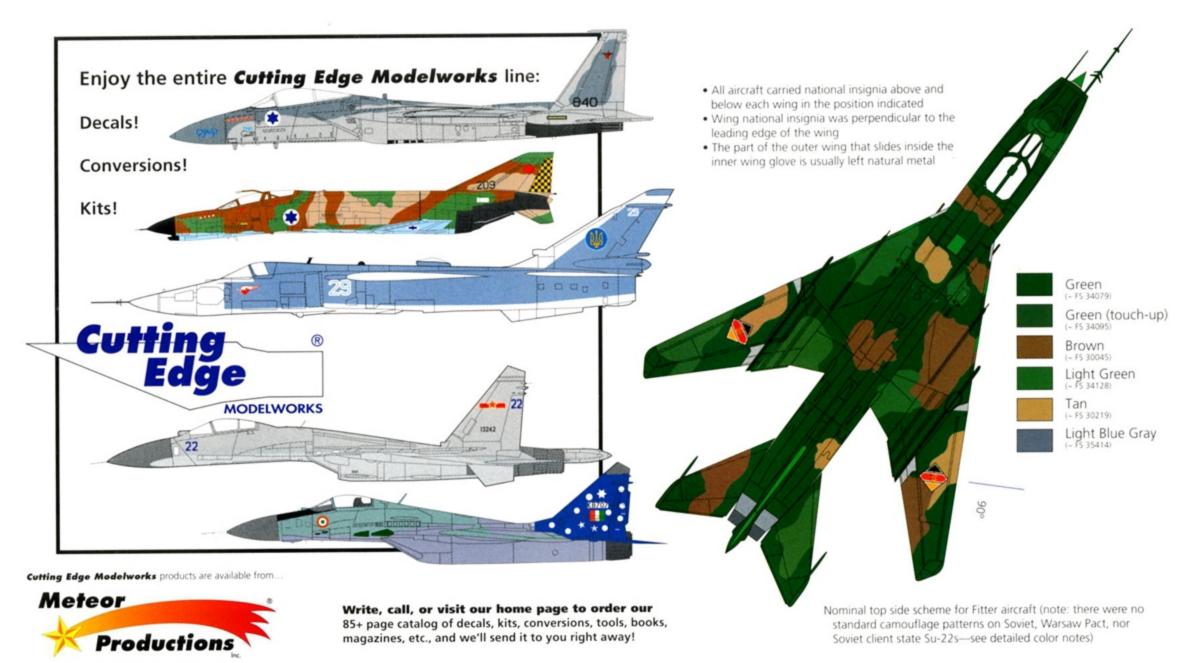


Su-22M-4 Fitter K, MFG 28, retirement scheme, East German Navy, 1990



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CED48019 Fancy Fitters CED72021

### **General Technical Notes**

- Although not quite the kit we'd hoped it would be, the 1/48 KP Su-22M-4 (from original OEZ patterns) can still build up into a fascinating model of this important aircraft
- The best overall reference on the Sukhoi Fitter is in World Air Power Journal #2; the best single reference on the Su-22M-4 is the 4 + book (both listed in the references)
- Although apparently always fitted to the Su-22M-4, the ventral fin was usually, but not always, fitted to the Su-22M-1/2/3, so check your photos carefully if you're building one of the earlier versions

#### Fitter J

 The Su-22M-2 Fitter J is the export version of the Su-22M-1 but has the Lyulka AL-21 jet engine replaced with the Tumanskii R-29 engine as used in the MiG-23/27 as well as other significant airframe changes. Since the R-29 is shorter and fatter, the entire rear fuselage contours are, duh, shorter and fatter... Although I haven't yet been able to confirm it, the Libyan Fitter Js probably carry the earlier KS-4 ejection seat, which is quite unlike the KM-1 fitted to the MiG-21 or the modern K-36 fitted to most Russian aircraft (the K-36 is the correct seat for the Su-22M-3 & M-4).

## General Camouflage & Markings Notes

- While there was some standardization in the Su-22 colors used in the various Soviet, Warsaw Pact, and Soviet client state air forces, there was essentially no standardization of camouflage patterns. Although some sort of general guidelines may have been provided, paint patterns were clearly left up to the individual painters and no two aircraft were alike, even in the same squadron.
- Soviet camouflage paint used on Fitters was prone to extreme fading and oxidation, and frequently chipped off on the leading edges of the tail and wings. This required considerable touch-up painting, usually with similar (but not exact) paint colors. Touch-up paint seems to have most frequently been sprayed on, usually with a very soft feathered edge. Often, touch-up colors were much darker than the surrounding paint. Even on the same aircraft the colors could vary widely (for an excellent example, see the Verlinden book on the Hungarian Su-22M-3s, which illustrates darker paint on the front fuselage, which was normally covered by a protective tarp, than the badly faded paint on the rear fuselage and wings!).
- All aircraft carried national insignia above and below each wing, generally in the positions indicated
- All the Federal Standard FS 595 matches listed here were matched directly to actual aircraft; however, for all the reasons cited above, you should best consider them near approxima-
- Unless otherwise noted, the fuselage skin around the afterburner was natural metal
- · Many aircraft have their serial number (construction number) painted on the main landing gear door (see drawing):



Typical landing gear door serial number location

## General color notes:

- It is no exaggeration to say that Su-22 paint colors remind us of an artist's well-used oil paint palette—a whole rainbow of colors, with both bold and subtle color differences
- European theater camouflage, as used on the East/West German, Polish, and Slovakian aircraft is, in its original form, an extremely dark scheme. Obviously, as the paint ages, it weathers and oxidizes, which lightens it somewhat, but it's still much darker than the socalled "Afghanistan" scheme.
- · The lighter colored scheme used on the Soviet, Angolan, and Libyan Fitters is the "Afghanistan" scheme—note that it is different from the "Afghanistan" scheme used on the Su-25 Frogfoot, which used a very light blue underside color.
- The underside color appears to be light blue in many published photos; this is optical illusion or inaccurate color representation in the printed photos. All aircraft wear the light blue gray underside color.
- For all of the reasons cited above, the FS 595 matches are approximate
- Note that the area of the outer wing panels that slides into the inner wing when they rotate is left natural metal, as are the small sections at the trailing edge next to the aileron and, on some aircraft, a small patch at the leading edge of the wing (see drawings)
- Remember that a long, large rectangular patch on the belly skin under the engine was normally left in natural metal
- When mounted, the fuselage spine mounted ASO chaff/flare dispenser pylons tend to be painted the same as the surrounding fuselage, but the actual cartridge ejector sections are usually natural metal
- The large oval shaped device on the fuselage at the leading edge of the wing is a gun blast reflector and is bright silver natural metal (usually highly polished); the East Germans, at least, would rub a thick coat of dark brown axle grease on the panels just before a firing mission to make it easier to clean the gunsmoke off afterwards! These panels were not always exactly the same shape, so check your references.
- The fin cap was a dielectric radome and colored green, approximately FS 34138

## **Detailed Markings Notes**

- East German Fitters had no set paint scheme, and massive touch-up painting, both hardedged and sprayed, covered every aircraft. Touch-up colors tended to be darker (in some cases much darker) but otherwise only vaguely similar to the original camouflage paint. In other words, the East German Fitters, like those of literally every other Fitter operator, tended to quickly acquire a "spotted" look similar to US Navy aircraft upon their return from a long cruise!
- Note that the East Germans did NOT use yellow tactical numbers on operational aircraft; combat Su-22s of both JBG 77 and MFG 28 used red numbers and the Su-22UM trainers used black numbers
- East German drop tanks had gray bottoms and either dark green or tan top sides. Both color combinations could be seen on the same aircraft.

### East German Yellow 546:

- WARNING: the decal markings are "handed;" check the decal sheet carefully before you apply the decals!
- NOTE! The aircraft number (Yellow 546) on this jet was painted on TWICE! In the initial version, the yellow 546 was painted over the original red 546 (see the color sheet for details of how this appeared). Later, however, the entire area, including the blue "Q" insignia behind the number was overpainted in dark green paint and the same yellow 546 reapplied in the same position, this time WITHOUT the red 546 showing underneath. The blue "Q insignia was also reapplied in its original position. The color profile shows the shape of the repainted area for the yellow-only (no red showing) 546 aircraft number.
- The yellow 546 was stencilled and definitely NOT solid block figures
- · Paint the leading edge slats yellow to match the decal
- The leading edge of the fin was badly abraded, with much natural metal showing through
- No ASO chaff/flare dispensers were fitted to this aircraft, ALTHOUGH only the base mounting plate for the rear pair of dispensers was attached to the aircraft

#### East German Black 798

- The colorful paint on this aircraft was pristine; all radomes, etc., were overpainted except the top "bullet" radome above the brake chute fairing on the tail, which was left in its original dark gray color
- The rear ASO chaff/flare dispensers on the fuselage spine were yellow; the front dispensers were blue. On this aircraft the actual ejector sections were also overpainted.

#### East German Red 798

- This is the same aircraft as Black 798, but in its original camouflage scheme. All the notes above regarding East German camouflage apply to this scheme.
- All four ASO chaff/flare dispensers were fitted

#### Libyan AF:

- Libyan Fitter Js do not display any serial numbers, although Libyan Fitter Fs have been seen with large black arabic numbers on the tail and under the cockpit
- As confirmed by numerous color photos, the air intake warning triangle on the Libyan Fitter J was, as on all Libyan Fitters, the standard yellow/red/black marking, NOT yellow/red as has been reported
- · These Libyan Fitters did not carry the ventral fin at the rear of the fuselage
- Note the odd light blue gray "antiglare" panel (odd because of the light color, and odd because very few fitters had antiglare panels). The color was FS 35414.

#### **Color Cross References**

ssion from the 1944S Color Cross Reference Guide by David H. Klaus, and is typical of the This information is excerpted with p information that book contains.

FS 30045 FS 30219

FS 11302

Pactra Acrylics A22, Tamiya XF10
Xtracolor X102, Gunze Sangyo H310, ModelMaster 1742, Poly Scale 505392, Floquil Classic Military 303345
Gunze Sangyo H023, Pactra MG555/M8
Xtracolor X108, Floquil Classic Military 303239, Tamiya X08/XF03
Xtracolor X110, ModelMaster 1710, Tamiya XF58, Poly Scale 505250, Floquil Classic Military 303143
None (like 34102, but slightly darker and slightly more yellow) FS 13655 FS 34079

FS 34095

FS 34128 FS 15056 FS 35414

Tamnya XF26 None (a very dark royal blue) Xtracolor X127, Gunze Sangyo Aq H067, Poly Scale 505318, Floquil Classic Military 303257, Tamnya XF23

## **Cutting Edge Modelworks conversions:**

CEC48004 Soviet Smart Weapons Set #1 (2 x AS-14 Kedge and 2 x AS-11 Kilter smart weapons)

CEC48018 Soviet Smart Weapons Set #2: (2 x AS-14 Kedge smart weapons)

CEC48019 Soviet Smart Weapons Set #3: (2 x AS-11 Kilter smart weapons)

CEC48072 AA-11 Archer (R-73 RMD2) Air-to-Air Missiles (4) CEC48079 Su-22 Cockpit Super Detailing Set

CEC48080 Su-22M-4 'Burner Can & Nozzle

CEC48081 Su-22 Bulged Wheels

CEC48082 Su-22 Exterior Detailing Set (slats, flaps, speed brakes and bays, wing fences, etc.)

CEC48083 Su-22M-1/2/3 Revised Fin Base (no heat exchanger)

CEC48084 Su-22M-2 Fitter J Conversion Set

# References:

Su-22M-4, UM-3K, by Jiri Basny, et al. 4 + v.o.s., 1992

Su 22M4, by Jacek Gadomski. Altair, 1991

Suchoj Su-22M4, by Kreslil Martinec, Hobby Manual #16

Sukhoi Fitters in action, by Hans-Heiri Stapfer. Squadron/Signal, 1989 Su-22 M3, by Zoltán Buza. Lock On No. 27, Verlinden Productions, 1994

Swing-Wing Sukhoi 'Fitters,' Warplane #37, pp 726-735, 1986

'Fitter' Family, by Bill Gunston. World Air Power Journal #2, pp 106-129, 1990 'Baltic "humpbacks,"' by Duncan Cubitt, Air Forces Monthly #29

Air international, May 1992, pp -209-260

Former East German Aircraft Sales, Air Forces Monthly, May 1993

Sukhoi's Fitter, Eine Typendokumentation von Marcus Fülber, Flugzeug 2/91, p 25
Die letzten Tage der Luftstreitkräfte der NVA, Flugzeug, 6/90, p 28
Sukhoi Su-20 Fitter C in Poland, by Marek Laz, Journal of Military Aviation, March-April, 1992, pp 10-14 Air International, February 1991, p 80

East German Air Force Revealed, Aviation News, 3-16 August 1990, pp 251-255

Defence for the Magyars, Air International, August 1992

Airforce Report, Air Forces Monthly, November 1995, p 26

Various issues of Koku-Fan

Photos in Flugzeug, 4/1994

Color & B&W photos & slides from the David H. Klaus collection

Photos in Aviation News, 128 August - 10 September 1992, p 341 Photos in Journal of Military Aviation, May-June 1992, p 43

Photos in Journal of Military Aviation, January-February, 1992, rear cover