TuAF F-104S

MM6851-MM6868 project Bora I (18 aircraft) 142 Filo

AMI serial	TuAF serial	notes / fate
MM6851	<u>74-6851</u>	delivery date December 18, 1974, "851" 142 Filo Murted AB; crashed August 12, 1975 at Beypazari, pilot ejected safely.
MM6852	<u>74-6852</u>	delivery date December 19, 1974, "852" 142 Filo Murted AB; coded "9-852" to 191 Filo at Balikesir AB September 1, 1980; crashed on takeoff at Balikesir AB, Turkey April 28, 1986 with 191 Filo, pilot Capt Mustafa Kemal Saltik (26) was killed, withdrawn from use.
MM6853	<u>74-6853</u>	delivery date December 18, 1974, "853" 142 Filo Murted AB; coded "9-853" to 191 Filo at Balikesir AB September 1, 1980; "9-853" crashed June 3, 1982 at Catalkaya, near Izmir with 191 Filo hitting a hill during ground attack training, pilot was killed.
MM6854	74-6854	delivery date December 18, 1974, "854" 142 Filo Murted AB; crashed September 11, 1975 at or near Murted AB, 1st/Lt Hüsamettin Yünden (25) was killed.
MM6855	<u>74-6855</u>	delivery date December 18, 1974, "855" 142 Filo Murted AB; coded "9-855" to 191 Filo at Balikesir AB September 1, 1980; "9-855" 191 Filo crashed October 29, 1981; aircraft hit the mountain Uludag, near Bursa, Turkey, because of bad weather; Capt Sebahattin Culha (32) was killed.
MM6856	<u>74-6856</u>	delivery date December 18, 1974, "856" 142 Filo Murted AB; coded "9-856" to 191 Filo at Balikesir AB September 1, 1980; crashed July 13, 1977 at Toros Dagi; pilot was killed.
MM6857	<u>74-6857</u>	delivery date February 11, 1975, "857" 142 Filo Murted AB; coded "9-857" to 191 Filo at Balikesir AB September 1, 1980; "9-857" 191 Filo crashed June 21, 1984 after midair collision with 75-6883 F-104S near Tire, Izmir, Turkey, pilot was killed.
MM6858	<u>74-6858</u>	delivery date February 11, 1975; "858" 142 Filo Murted AB; September 1, 1980 coded "9-853" to 191 Filo at Balikesir AB; "9-858" crashed with 191 Filo February 22, 1988 near Balikesir AB, pilot ejected safely.
MM6859	74-6859	delivery date February 10, 1975; "859" 142 Filo Murted AB; to 191 Filo of 9.AJU at Balikesir September 1, 1980 coded "9-859"; withdrawn from use May 1993; stored Eskisehir AB 1994; display at Turkish AF Air Logistics Command Etimesgut, town barracks, Ankara, Turkish camouflage color scheme July 1998 first noted; October 2013 noted; June 2022 noted. 39°54'52.77"N 32°43'2.43"E
MM6860	<u>74-6860</u>	delivery date February 10, 1975; "860" to 142 Filo Murted AB; crashed June 16, 1977 after midair collision with leader aircraft over Incirlik, Adana, Turkey, Capt Sadik Dülger (28) was killed, leader aircraft landed safely at Incirlik AB.
MM6861	74-6861	delivery date February 10, 1975; "861" to 142 Filo Murted AB; 191 Filo of 9.AJU at Balikesir September 1, 1980 coded "9-861"; crashed January 22, 1987 at Balikesir AB during approach (controlled by GCA) because of very low visibility; 1/Lt Kemal Uygunturk (26) was killed.
MM6862	74-6862	delivery date February 10, 1975; "862" to 142 Filo Murted AB; 191 Filo of 9.AJU at Balikesir September 1, 1980 coded "9-862"; withdrawn from use May 1993 with 9 AJU; stored Eskisehir AB for CFE 1994; May 1995 gone; 1 HIBM.K in June 1995; in storage at Akhisar AB February 6, 1996; "9-862" on display at the campus of Pamukkale University in Denizli town July 3, 2012 noted still wearing its old GAF camouflage paint but missing its S ventral fins; September 2023 noted. 37°44'58.1"N 29°05'29.2"E
MM6863	74-6863	delivery date May 8, 1975; "863" to 142 Filo Murted AB; 191 Filo of 9.AJU at Balikesir September 1, 1980 coded "9-863"; crashed April 2, 1981 into the Golf of Marmara at Golmarmara, Manisa with 191 Filo, pilot ejected safely.
MM6864	<u>74-6864</u>	delivery date May 10, 1975; "864" to 142 Filo Murted AB; "9-864" with 191 Filo of 9.AJU at Balikesir September 1, 1980; withdrawn from use and stored at Eskisehir AB April 12, 1991; CFE cut-up and scrapped date unknown.

AMI serial	TuAF serial	notes / fate
MM6865	<u>74-6865</u>	delivery date May 8, 1975; "865" to 142 Filo at Murted AB; 191 Filo of 9.AJU at Balikesir September 1, 1980 coded "9-865"; crashed near Balikesir AB
MM6866	<u>74-6866</u>	shortly after take-off on May 14, 1990, the pilot 1st Lt Mumin Demiralp (24) was killed. delivery date May 8, 1975; "866" to 142 Filo at Murted AB; 191 Filo of 9.AJU at Balikesir September 1, 1980 coded "9-866"; crashed June 13, 1985 at
MM6867	<u>74-6867</u>	Kepsut near Balikesir, Turkey with 191 Filo, Capt Gultekin Basargan (31) was killed. delivery date May 8, 1975; coded "867" to 142 Filo at Murted AB; 191 Filo of 9.AJU at Balikesir September 1, 1980 coded "9-867"; crashed January 22,
MM6868	74-6868	1992 at or near Balikesir AB with 191 Filo, pilot ejected safely. delivery date May 10, 1975; "868" to 142 Filo at Murted AB; 191 Filo of 9.AJU at Balikesir September 1, 1980 coded "9-868"; last seen operational at Akhisar AB in July 1992; withdrawn from use in My 1993, to TUSAS (Tusas Ucak Sanayii AS) in Eskisehir; stored Eskisehir AB in May 1993; in storage at Akhisar AB February 6, 1996; preserved Istanbul, Yesilkoy Aviation Museum, Istanbul April 2005 first noted in SEA camo color scheme; January 2024 last noted.
		40°57'50.07"N 28°49'31.73"E



MM6882-MM6906 project Bora II (18 aircraft + 4 spare aircraft) 193/192 Filo

<u>AMI serial</u>	TuAF serial	notes / fate
MM6882	<u>75-6882</u>	delivery date April 7, 1976; 193 Filo at Balikesir AB coded "882"; to 192 Filo July 1, 1976; 191 Filo of 9.AJU coded "9-882" June 1, 1984; withdrawn from
		use and stored May 1993; stored Eskisehir AB for CFE cut-up on July 4, 1995; scrapped.
MM6883	<u>75-6883</u>	delivery date January 21, 1976; 193 Filo at Balikesir AB coded "883"; to 192 Filo July 1, 1976 coded "883"; 191 Filo of 9.AJU coded "9-883" June 1, 1984; crashed June 21, 1984 near Tire, Izmir, after midair collision with F-104S
MM6884	<u>75-6884</u>	6857 (see 9-857), Maj Muammer Sezer (35) ejected safely. delivery date January 21, 1976; 193 Filo at Balikesir AB coded "884"; to 192 Filo July 1, 1976 coded "884"; crashed coded "9-884" April 29, 1983 at Manyas, near Kiziksa; Lt Umit Bekem (28) was killed.
MM6885	<u>75-6885</u>	delivery date March 15, 1976, 193 Filo at Balikesir AB coded "885"; to 192 Filo July 1, 1976 coded "885"; 191 Filo of 9.AJU coded "9-885" June 1, 1984; withdrawn from use May 1993; stored Eskisehir AB; CFE cut-up July 5, 1995; scrapped.

AMI serial	TuAF serial	notes / fate
MM6888	<u>75-6888</u>	delivery date August 6, 1976 to 192 Filo coded "888"; "9-888" to 191 Filo of 9 AJU at Balikesir AB June 1, 1984; crashed coded "9-888" with 191 Filo October 22, 1992 near Akhisar AB after fuel pump failure and subsequent fuel leaking into the fuselage, causing explosions, First Lieutenant Kadrican Pehlivan ejected safely, but was injured; written off.
MM6889	<u>75-6889</u>	delivery date March 15,1976 to 193 Filo of 9 AJU; "889" 192 Filo July 1, 1976; 191 Filo of 9.AJU coded "9-889" June 1, 1984; withdrawn from use and stored Eskisehir AB in 1990; CFE cut-up later and scrapped.
MM6891	<u>75-6891</u>	delivery date March 15, 1976 to 193 Filo at Balikesir AB; "891" to 192 Filo on July 1, 1976; to 191 Filo on June 1, 1984; "9-891" withdrawn from use and stored April 12, 1991; at Eskisehir AB; CFE cut up later and scrapped.
MM6892	<u>75-6892</u>	delivery date June 11, 1976 to 193 Filo at Balikesir AB; "892" to 192 Filo on July 1, 1976, crashed May 6, 1980 at Balikesir AB, pilot ejected safely.
MM6893	<u>75-6893</u>	delivery date May 7, 1976 to 193 Filo at Balikesir AB; "893" to 192 Filo on July 1, 1976; "9-893" to 191 Filo on June 1, 1984; withdrawn from use and stored May 1993 at Eskisehir AB; CFE cut-up July 7, 1995; scrapped.
MM6894	<u>75-6894</u>	delivery date June 11, 1976 to 193 Filo at Balikesir AB; "894" to 192 Filo on July 1, 1976; crashed August 22, 1979 at or near Balikesir AB, pilot ejected safely.
MM6895	<u>75-6895</u>	delivery date June 11, 1976 to 193 Filo at Balikesir AB; "895" to 192 Filo on July 1, 1976; "9-895" to 191 Filo on June 1, 1984; withdrawn from use and stored at Eskisehir AB until late 1995; preserved in Istanbul at Rahmi Koc Museum of Industry October 1996, grey color scheme, no serials, coded 75-6895 in December 2004 first noted; June 2023 noted. 41°02'33.1"N 28°56'57.5"E
MM6896	<u>75-6896</u>	delivery date May 7, 1976; "896" to 193 Filo at Balikesir AB; "896" to 192 Filo on July 1, 1976; "9-896" to 191 Filo on June 1, 1984; crashed July 22, 1985 near Istanbul, Lt. Tamer Polat (25) was killed.
MM6897	<u>75-6897</u>	delivery date May 7, 1976; to 193 Filo at Balikesir AB; "897" to 192 Filo on July 1, 1976; "9-897" July 1981 at Lechfeld AB, Germany; to 191 Filo on June 1, 1984; withdrawn from use and stored May 1993 at Eskisehir AB; CFE cut-up July 3, 1995; scrapped.
MM6898	<u>75-6898</u>	delivery date June 11, 1976; to 193 Filo at Balikesir AB; "898" to 192 Filo on July 1, 1976; "9-898" to 191 Filo on June 1, 1984; "9-898" crashed August 9, 1988 at Kepsut, near Balikesir AB, Lt Sabri Aksu (26) was killed.
MM6899	<u>75-6899</u>	delivery date June 11, 1976; to 193 Filo at Balikesir AB; "899" to 192 Filo on July 1, 1976; "9-899" to 191 Filo on June 1, 1984; "9-899" crashed September 17, 1992 at Kepsut, near Akhisar AB, Manisa, Turkey, pilot 1/Lt Sinan Erkan (29) was killed.
MM6900	<u>75-6900</u>	delivery date June 11, 1976; "900" to 193 Filo at Balikesir AB; "9-900" to 192 Filo on July 1, 1976; to 191 Filo on June 1, 1984; withdrawn from use and stored Eskisehir AB; CFE cut-up 1995, scrapped.
MM6901	<u>75-6901</u>	delivery date Aug 6.1976; "9-901" to 193 Filo at Balikesir AB; to 192 Filo on July 1, 1976; to 191 Filo on June 1, 1984; withdrawn from use and stored Eskisehir AB for CFE cut up; scrapped.
MM6902	<u>75-6902</u>	delivery date August 6, 1976; "902" to 192 Filo of 9.AJU at Balikesir AB; "9-902" at Lechfeld AB July 1981; crashed October 3, 1983 at Yenice, pilot ejected safely.
MM6903	<u>75-6903</u>	delivery date August 6, 1976; "903" to 192 Filo of 9.AJU at Balikesir AB; "9-903" July 1981 exchange at Lechfeld AB, Germany; crashed March 27, 1984 at Murted AB, pilot ejected safely.
MM6904	75-6904	delivery date October 27, 1976; "904" to 192 Filo of 9.AJU at Balikesir AB; June 1, 1984 to 191 Filo; crashed October 6, 1991 near Balikesir Dursunbey after a midair collision with F-104G "9-301" of 191 Filo, Lt Bahadir Demirel (26) was killed.
MM6905	<u>75-6905</u>	delivery date October 27, 1976; "905" to 142 Filo Murted AB, crashed July 12, 1979 near Kizilcahamam, Ankara, Turkey, Capt Ismail Salci (25) was killed.
MM6906	<u>75-6906</u>	delivery date October 27, 1976; "906" to 142 Filo at Murted AB; 191 Filo of 9.AJU at Balikesir September 1, 1980 coded "9-906"; withdrawn from use and stored Eskisehir AB; CFE cut-up July 10, 1995, scrapped; dump Yeni Foca near Izmir October 1996 last noted.

TuAF sqn wing Turkish Air Force F-104S base

142 Filo 4 AJU Murted AB, first delivery December 18, 1974,
official ceremony on March 14, 1975
F-104S transferred 1980 to 191 Filo 9 AJU Balikesir AB

191 Filo 9 AJU Balikesir AB, 1980 - 1993
Balikesir AB, July 1976 - 1983
Balikesir AB, July 1976 - 1983
Balikesir AB, first delivery January 21,1975, merged into 192 Filo on July 1, 1976

AJU: Ana Jet Ussu (Main Jet Base)

Note: 60 percent of the TuAF F-104S fleet was lost in 18 years of operations

Italy and Turkey, officially the construction numbers are 1001-1246. The 40 Turkish F-104S were 6851/6868, 6888/6889, and 6891/6906.

The F-104S (S for "Sparrow") was the most potent version of the Starfighter to be built. It was an upgraded and improved version of the F-104G that was built by Fiat. The aircraft was initially built to meet a requirement issued by the Aeronautica Militare Italiana (AMI). However, it has also been exported to Turkey.

The F-104S was the winner of the AWX (All-Weather Interceptor) design competition held in 1965 by the Italian air force for a new all-weather interceptor. The Lockheed CL-980 design (ultimately to be named F-104S) was selected for this requirement after extensive evaluation of other designs such as the Dassault Mirage III, McDonnell Douglas F-4 Phantom, Northrop F-5, and North American F-100. The Fiat group produced a total of 246 F-104S, 206 of them for the AMI and 40 for Turkey. AMI serials were MM6701/6850, MM6869/MM6881, MM6886/MM6887, MM6890, and MM6907/MM6946, a total of 206 being delivered. A further 20 were laid down for a subsequently cancelled Turkish order. Only one of these, MM6946 was completed as a replacement for MM6766 which crashed before delivery. Turkey's forty F-104S were dispersed through the production run.

References:

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March 9, 2024

F-104S in the Turkish Air Force

from the Zipper magazine Nr.37 March 1999

The story about the F-104S Starfighter within the Turkish Air Force, written by Serhat Guvenc.

"The F-104S began to figure in Turkish military procurement plans at the heyday of Turkish military operations In Cyprus. These operations took their toll on the TUAF fleet. To sustain the force levels, a stop-gap aircraft was needed. Although Turkey had two squadrons of F-4E "Phantom" on order, the delivery schedule ruled out an early deployment of F-4 squadrons.

Among others, thus two conditions pretty much dictated the supplier for the stop-gap aircraft. First, the aircraft had to be already in TUAF inventory so that existing infra-structure, support facilities, training and operating procedures could be utilized with minimum or no modification. Second, the manufacturer had to be willing and able to start deliveries immediately. These two conditions almost singled out Aeritalia-built F-104S as the choice. The manufacturer already notified TUAF that an initial batch of six fighters could be diverted from Italian Air Force stocks to Turkey as soon as an agreement was signed.

Turkey decided to buy F-104S Starfighters. The 142 Filo in 4 AJU Murted was named the first squadron to receive F-104S. The 142 transferred its F/TF-102A Delta Daggers to 182 Filo, another Murted resident, in anticipation of the arrival of the F-104S.

The 142 Filo was slated to receive the first 18 F-104S under BORA I project. The F-104S fighters were ferried by Turkish pilots from Italy to Turkey. Due to the tension between Turkey and Greece, rather than seeking overflight permission from Greece, TuAF charted an unusual course crisscrossing the Mediterranean. The first leg of the ferry flight ended in Tobruk, Libya. The aircraft were then flown to Turkey from Libya. With the F-104S, 142 Filo switched to Ground Attack from interceptor role.

142 Filo received its first F-104S on December 18, 1974 and last F-104S on May 10, 1975. Number 142 Filo transferred its F/TF-102As to 182 Filo on January 15, 1975. Official ceremony tor conversion to F-104S was held on March 14, 1975.

The US arms embargo prompted Turkey to look for additional fighters in the aftermath of the Cyprus conflict. TuAF decided to go for another squadron of F-104S. Number 9.AJU Balikesir was to host this second squadron. In October 1975, the 193 Filo was activated to receive F-104S. A second batch of 18 (+4 attrition replacements) F-104S was ordered under BORA II project. These F-104S Starfighters were also ferried via Tobruk, Libya. Indeed, one ferry flight of three F-104S encountered heavy sandstorm over Libya. One Zipper was heavily damaged upon landing right in the eye of the storm and was subsequently returned to Aeritalia for repair. The 193 received its first F-104S in January 1976. Shortly afterwards, the Filo was amalgamated into the 192 Filo which recently dispersed its F/RF-5A/Bs to other F-5 operators in Turkey. Thus 9.AJU standardized on a single type - F-104 with both and G and S versions in service.

193 Filo was re-activated on October 21, 1975. The first two F-104S for the 193 Filo were received on January 21, 1976. Number 193 Filo was renumbered (merged into) 192 Filo in July 1976.

In 1980, each AJU (Ana Jet Ussu: Main Jet Base) was slated to specialize on one aircraft type. Thus, the 142 Filo transferred its F-104S to 191 Filo in Balikesir. The 142 Filo reverted to interceptor role with ex-KLu F-104Gs (in AWX configuration) which were delivered in 1980.

191 Filo had been long-time operator of F-104G in strike role. During the Cyprus conflict, Washington asked Ankara to dismantle all nuclear weapons on strike aircraft, a request that practically marked the end of QRA for the Turkish F-100 and F-104 pilots. Because of the US arms embargo, Turkey did not allow the return of nuclear weapons to Turkish squadrons. When, in 1980, TUAF decided to resume the strike role, number 191 Filo handed its nuclear capable MAP F-104Gs to 141 Filo to augment the 141 Filo fleet in the strike role. During this reshuffling the 191 received the ex-142 Filo F-104S in FGA role.

In the 1980s, the TUAF received a wealth of hand-me-down Starfighters from its NATO allies. The TUAF F-104S fleet was in the meantime fast dwindling due to attrition. These two factors resulted in concentration of all surviving F-104S fighters in 191 Filo in 1983. The 192 re-equipped with F/TF-104Gs received from Norway, Belgium and Germany. This diversity in 192 Filo's fleet was put an end with the arrival of ex-German Starfighters in large numbers.

F-104S Turkish Air Force serials

During the rest of their career, the F-104S remained a prerogative of the 191 Filo. When retired in 1993 TUAF F-104S Starfighters logged 2500 to 3000 flight hours on average each and were surprisingly survived by much older F-104Gs and CF-104s.

A number of reasons accounted for this early retirement of the Turkish F-104S fleet. In the first place, as mentioned above, the F-104S was a stop-gap aircraft and never intended to form the backbone of the TUAF. Only 40 examples were purchased to equip two Filos. Although appreciated for its superior avionics and power-plant over the F-104G, in terms of build-quality and reliability, the F-1 04S was found inferior to F-104G.

High attrition rate and reliability problems caused sharp declines in the number of operable aircraft. Therefore, all F-104S were first transferred to form a single squadron, and when the number of operable aircraft dropped below a certain level the entire fleet was retired.

Although F-104S offered an edge over the F-104G in avionics and engine, the choice of F-104G and particularly CF-104 also reflected a choice of availability and supportability over such qualities.

Because as opposed to ever shrinking F-104S fleet, Turkey received plenty of F-104Gs and CF-104s and huge-stocks of free spare-parts to support both fleets. Thus edge the F-104S offered over the F-104G or the CF-104 did not justify the extra cost of supplies and spare parts for the former. The Zipper's days in Turkish service were numbered anyway as the F-16C/Ds began to emerge out of assembly lines at TAI in the late 1980s. Finally, although featured provisions for AIM-7 Sparrow/Aspide AAMs, Turkish F-104S remained gunfighters throughout their career with their gunbays always occupied by M-61 Vulcan gun rather than additional avionics for Sparrows or Aspides."

References: Zipper magazines https://www.i-f-s.nl/

March 9, 2024