

## US JET FIGHTER 1:48 SCALE PLASTIC KIT



eduard

### intro

Every era has its icons, and for aviation of the early fifties, those were without a doubt, the American F-86 Sabre and the Soviet MiG-15, clashing over the Korean peninsula during the Korean War.

The genesis of the F-86 Sabre evolution was a step-by-step approach in the interest of improving performance and flying characteristics. Thus, the early F-86F Sabre was generally an F-86E with a more powerful J-47GE-27 engine. With more power, the F-86F was now almost the equal to the MiG-15 in rate of climb while being some 30 mph (48 km/h) faster. Apart from a lower service ceiling, another weak point that remained with the early F variants was that they were unable to outmaneuver the MiG-15 at combat altitudes of over 40,000 ft (12,200 m). Ultimately, this was solved with a new wing.

Work on the new F-86F Sabre began on 31st July 1950, and, after successful tests, a contract for the first 109 F-86Fs was approved on the 11th of April, 1951. Because of technical problems with the new power unit, the first planes did not make it into service until December, 1951. Apart from the more powerful engine, the F-86F introduced a standard flat windscreen and a simpler, but more reliable A-4 gunsight with a gun camera. The strengthened wing was another improvement, so that drop tanks and bombs of up to 1,000 lb could be carried, beginning with the F-86F-5.

Starting with the F-86F-25 and F-30 versions, a second pair of underwing pylons was added, solving another problem. When bombs were carried on the two existing pylons, no drop tanks could be fitted and the combat radius was as small as 50 miles. Therefore, another pair of underwing pylons helped substantially, as it allowed for carriage of both bombs and drop tanks. As a result, the combat radius for bombing missions rose to 568 miles, and the Sabre became a true fighter-bomber. The F-86F-25 and F-30 were basically the same aircraft, the F-25 being produced at a Columbus factory and the F-30 in Inglewood. They were, as stated previously, nearly equal to the MiG-15 in performance, with one exception - combat maneuverability. This weakness was addressed with the development of a new wing called the '6-3'. With it, the 'definitive Sabre' of the Korean War emerged. This new wing had the leading edge extended by 6 in (152 mm) at the root and 3 in (76 mm) at the wingtip and that's why it became known as the '6-3 wing'. The wing area increased from 287.9 sq ft (26.78 m<sup>2</sup>) to 302.3 sq ft (28.12 m<sup>2</sup>). Automatic slats on the leading edge were deleted and, in order to optimise airflow over the wing, a 5 in (127 mm) high wing fence was installed on the leading edge at 70 per cent span. With the new wing, the maximum speed of the Sabre increased from 688 mph (1106 km/h) to 695 mph (1118 km/h) at sea level and from 604 mph (972 km/h) to 608 mph (978 km/h) at 35,000 ft (10 688 m). Of greater importance was the improvement in maneuverability at high altitudes and Mach numbers. The new wing effectively enabled Sabre pilots to keep inside the MiG-15 in a dogfight. The only major drawback of the 6-3 wing was an increase of stall speed from 128 mph (205 km/h) to 144 mph (231 km/h). The first fifty conversion kits for modification of existing F-86Fs in Korea to the 6-3 standard were shipped in September, 1952, and pilots soon discovered its advantage. All the F-86Fs were upgraded with the new wing shortly afterwards and starting with production numbers 51-133341 (171st produced F-86F-25) and 52-4505 (200th produced F-86F-30), all new aircraft were delivered with the 6-3 wing. Later on, some of the aircraft received the wing from the F-86F-40, which sported the automatic slat on the leading edge of 6-3 wing and the wingspan was lengthened by 12 in (305 mm). Because of this development, it is possible to spot the same aircraft with any of these wing configurations during different stages of its service life.

### úvodem

Každá doba má své ikony a pro letectví padesátých let jsou jimi nepochyběně americký F-86 Sabre a sovětský MiG-15, které se střetávaly v soubojích nad korejským poloostrovem.

Geneze vývoje F-86 Sabre se ubírala směrem evolučního zvyšování výkonů a vylepšování letových vlastností prvního provedení F-86A. Tudíž i verze F-86F Sabre byla v zásadě F-86E, ovšem s výkonnější pohonnou jednotkou J-47GE-27. Díky ní se Sabre téměř dokázal vyrovnat MiGu-15 ve stoupavosti a mírně jej předčil v maximální rychlosti (o 48 km/h). Kromě menšího dostupu však i nadále zaostával za svým protivníkem v manévrovatelnosti na bojových výškách, tedy nad hranicí 12 000 m. Ale i tento problém se v průběhu výroby F-86F podařilo vyřešit.

Práce na vývoji verze F-86F byly zahájeny 31. července 1950, kontrakt na sériovou výrobu prvních 190 kusů F-86F-1 byl podepsán 11. dubna 1951, první stroje se však kvůli problémům s novým motorem dostaly k jednotkám až v prosinci 1951. Kromě silnějšího motoru dostala verze F-86F-1 standardně plochý celní štítek kabiny, či zjednodušený a na údržbu jednodušší zaměřovač A-4 s fotokulometrem. Další změnou byla zesílená konstrukce křídla, díky které mohl Sabre nosit pumy o hmotnosti až 453 kg. Pozdější verze F-86F-25 a F-30 navíc dostaly další dvojici závěsníků pro umístění přídavných nádrží. Pokud totiž byly na dvou existujících závěsnících podvěšeny bomby, nebylo kam podvěsit přídavné nádrže a bojový dolet pak činil pouhých 80 km. Dvojice přidaných závěsníků tedy pomohla zásadním způsobem problém řešit, protože Sabre mohl nyní nést jak bomby, tak přídavné nádrže a jeho bojový dolet pro bombardovací mise se zvýšil na 914 km. Ze Sabru se tak stal plnohodnotný stíhací bombardér.

Sabre F-86F-25 a F-30 byly v zásadě shodné verze s tím, že jako F-25 se označovaly stroje vyrobené v továrně v Columbusu, zatímco F-30 byly vyráběny v Inglewoodu. Tyto verze se MiGu-15 po stránce výkonů téměř vyrovnaly, ovšem s výjimkou zmíněné manévrovatelnosti na bojové výšce, kde i nadále zaostávaly. Tento problém byl vyřešen díky křidlu neoficiálně označenému 6-3. Tak vznikl „definitivní Sabre“ korejské války. U nového křídla byla zvětšena hloubka profilu prodloužením náběžné hrany o šest palců (152 mm) u kořene a o tři palce (76 mm) u koncového oblouku. Odtud neoficiální označení 6-3. Plocha křídla narostla z 26,78 m<sup>2</sup> na 28,12 m<sup>2</sup>. Automatické slaty byly odstraněny a v zájmu optimalizace obtékání křídla byl v 70 procentech rozpětí instalován na náběžné hraně aerodynamický plátek vysoký 127 mm. S novým křídlem se maximální rychlosť zvýšila z 1106 km/h na 1118 km/h u hladiny moře a z 972 km/h na 978 km/h ve výšce 10 688 m.

Důležitější než rychlosť však bylo zlepšení manévrovatelnosti na velkých výškách a Machových číslech. Nové křídlo znamenalo pro piloty F-86F možnost udržet se uvnitř zatačky MiGu-15 v manévrových soubojích. Jediným negativem nového křídla bylo zvýšení pádové rychlosti z 205 km/h na 231 km/h.

Prvních padesát konverzních setů pro modifikaci F-86F v Koreji na standard 6-3 bylo zasláno v prosinci 1952 a piloti brzy zjistili, jaké jsou výhody nové úpravy. Křídlo 6-3 bylo postupně vybaveny prakticky všechny již vyrobené F-86F nasazené v Koreji, nejen stroje F-86F-30 a F-25. Další stroje verzí F-25 a F-30 již dostávaly nové křídlo již ve výrobě. V případě verze F-86F-25 od výrobního čísla 51 13341 (171. vyrobený stroj) a v případě verze F-86F-30 od 52 4505 (200. vyrobený stroj). Ještě později dostaly některé stroje křídlo z verze F-86F-40, které si zachovalo zvětšenou hloubku křídla 6-3, ale dostalo zpět automatické slaty a navíc bylo prodlouženo o 305 mm. Díky tomuto vývoji je možno jeden a tentýž Sabre verzí F-25 nebo F-30 zastihnout v různých fázích služby s kterýmkoli ze tří použitých typů křídla.

ATTENTION



UPOZORNĚNÍ



ACHTUNG



ATTENTION



注意



Carefully read instruction sheet before assembling. When you use glue or paint, do not use near open flame and use in well ventilated room. Keep out of reach of small children. Children must not be allowed to suck any part, or pull vinyl bag over the head.



Před započetím stavby si pečlivě prostudujte stavební návod. Při používání barev a lepidel pracujte v dobré větrané místnosti. Lepidla ani barvy nepoužívejte v blízkosti otevřeného ohně. Model není určen malým dětem, mohlo by dojít k požití drobných dílů.

## INSTRUCTION SIGNS \* INSTR. SYMBOLY \* INSTRUKTION SINNBILDER \* SYMBOLES \* 記号の説明



PARTS



DÍLY



TEILE



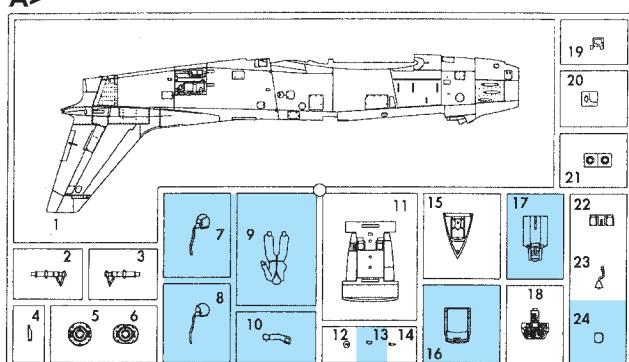
PIÈCES



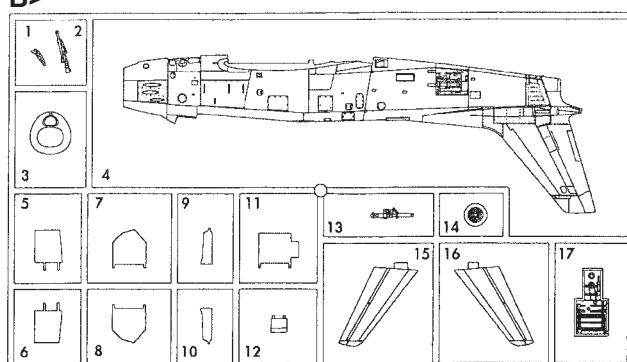
部品

A&gt;

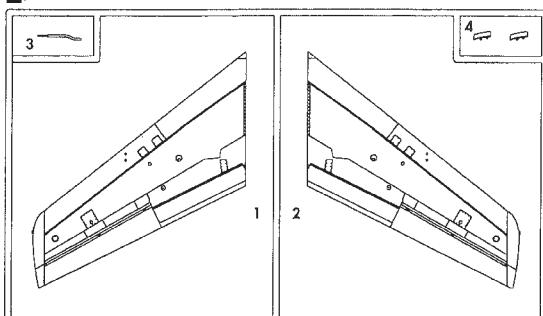
## PLASTIC PARTS



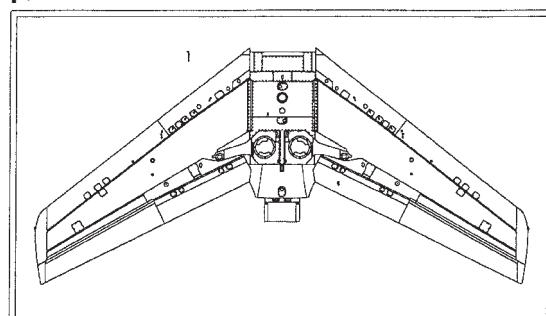
B&gt;



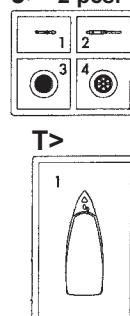
E&gt;



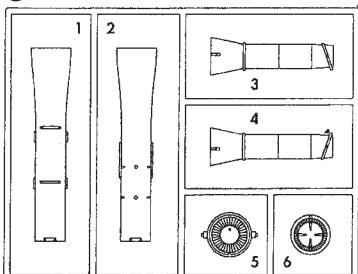
F&gt;



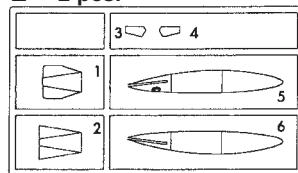
J&gt; 2 pcs.



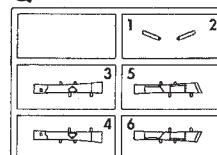
G&gt;



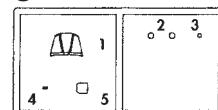
L&gt; 2 pcs.



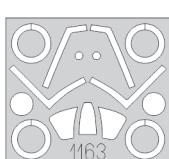
Q&gt;



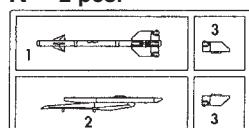
S&gt;



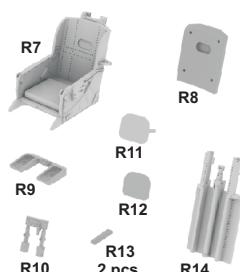
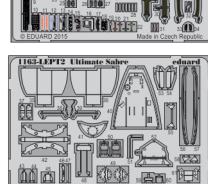
RP - RESIN PARTS

eduard  
MASK

N&gt; 2 pcs.



## PE - PHOTO ETCHED DETAIL PARTS



-Parts not for use. -Teile werden nicht verwendet. -Pièces à ne pas utiliser. -Tyto díly nepoužívejte při stavbě. - 使用しない部品

COLOURS

BARVY

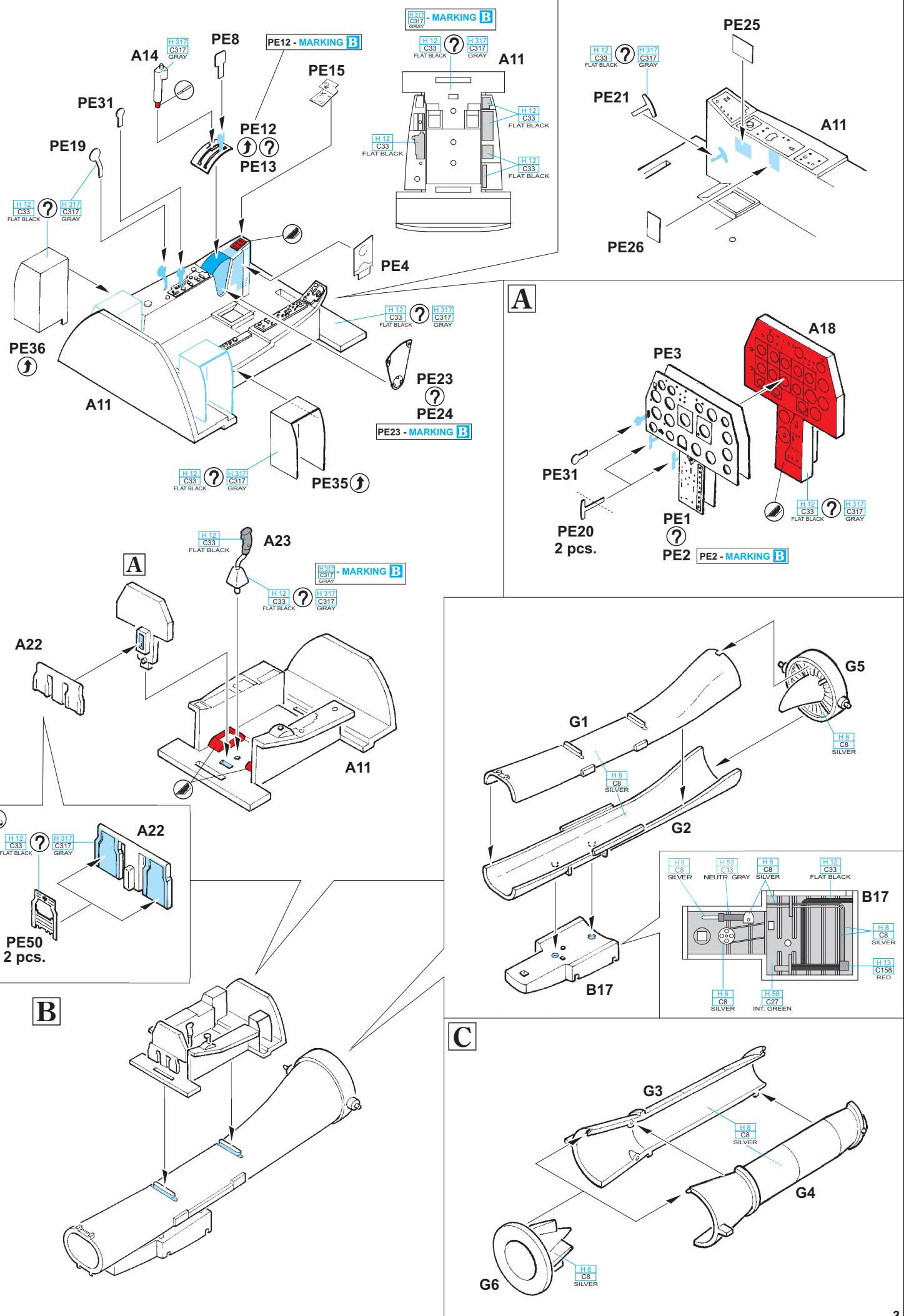
FARBEN

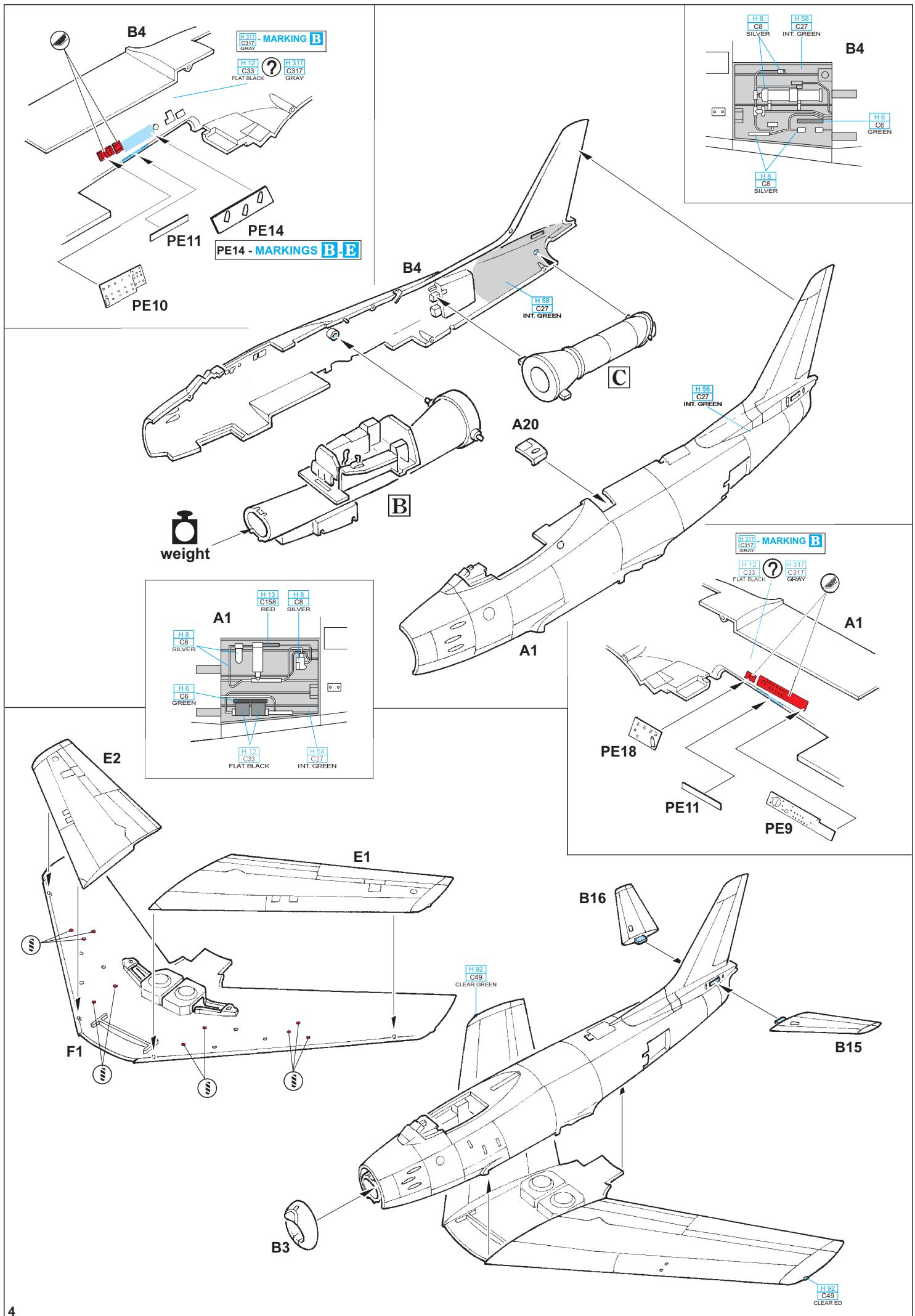
PEINTURE

色

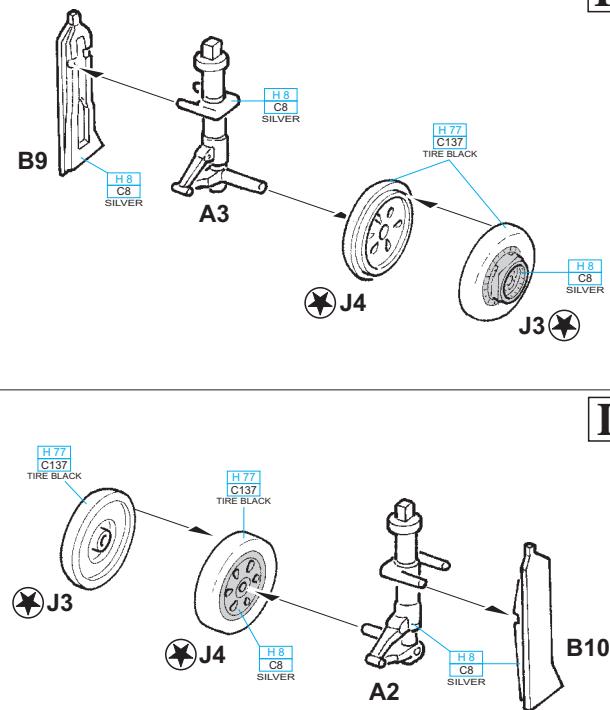
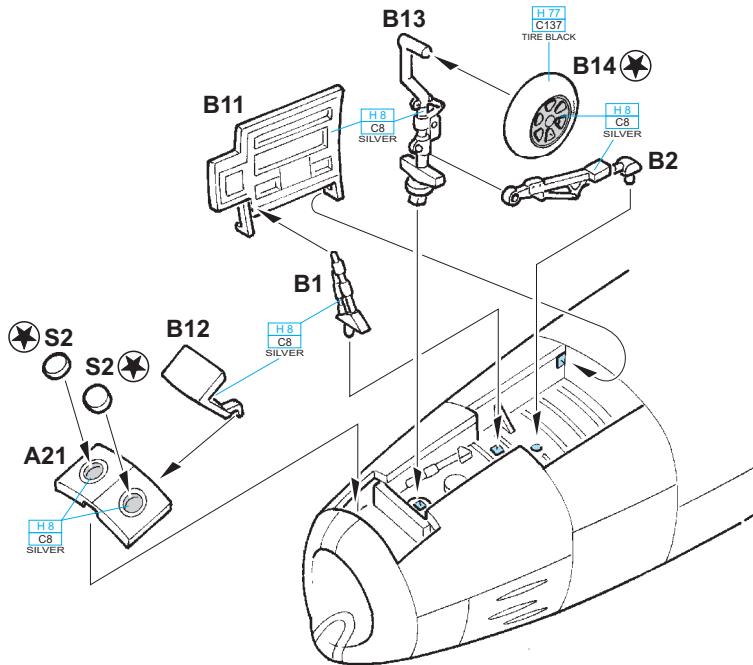
GSi Creos (GUNZE)	
AQUEOUS	Mr.COLOR
[H 6]	[C6]
[H 8]	[C8]
[H 11]	[C62]
[H 12]	[C33]
[H 13]	[C158]
[H 15]	[C65]
[H 27]	[C44]
[H 47]	[C41]
[H 51]	[C11]
GREEN	
SILVER	
FLAT WHITE	
FLAT BLACK	
RED	
BLUE	
TAN	
RED BROWN	
LIGHT GULL GRAY	

AQUEOUS	Mr.COLOR	
[H 53]	[C13]	NEUTRAL GRAY
[H 58]	[C27]	INTERIOR GREEN
[H 77]	[C137]	TIRE BLACK
[H 90]	[C47]	CLEAR RED
[H 92]	[C49]	CLEAR ORANGE
[H 94]	[C138]	CLEAR GREEN
[H 317]	[C317]	GRAY
[H 329]	[C329]	YELLOW
Mr.METAL COLOR		
[MC213]		STAINLESS

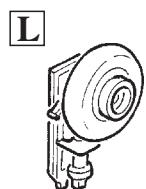
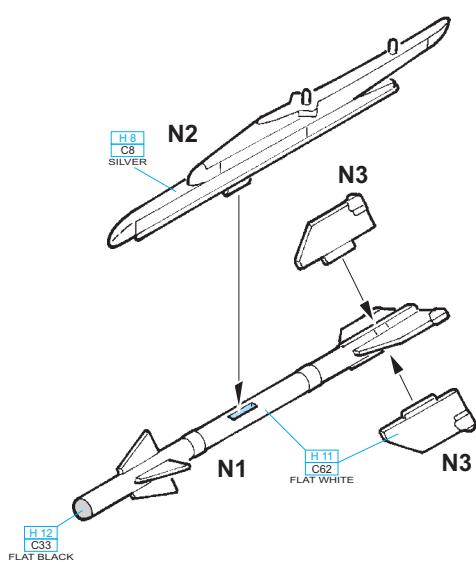




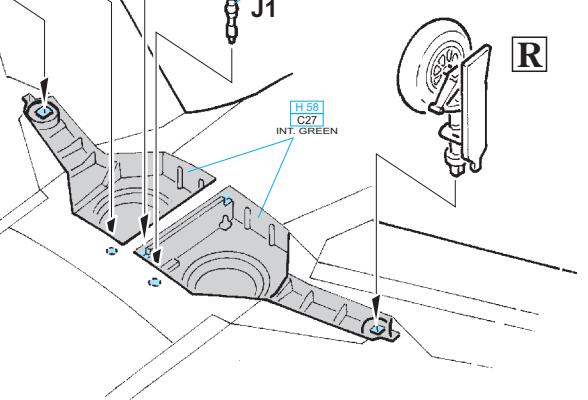
R



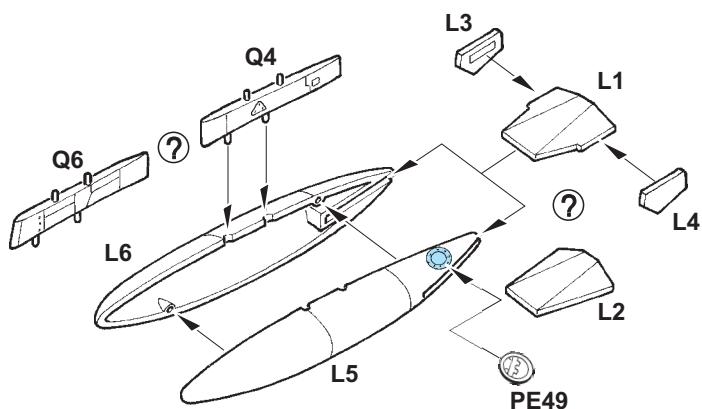
D



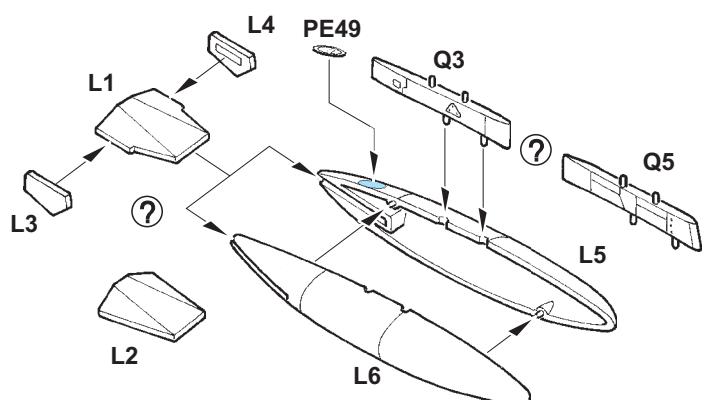
R

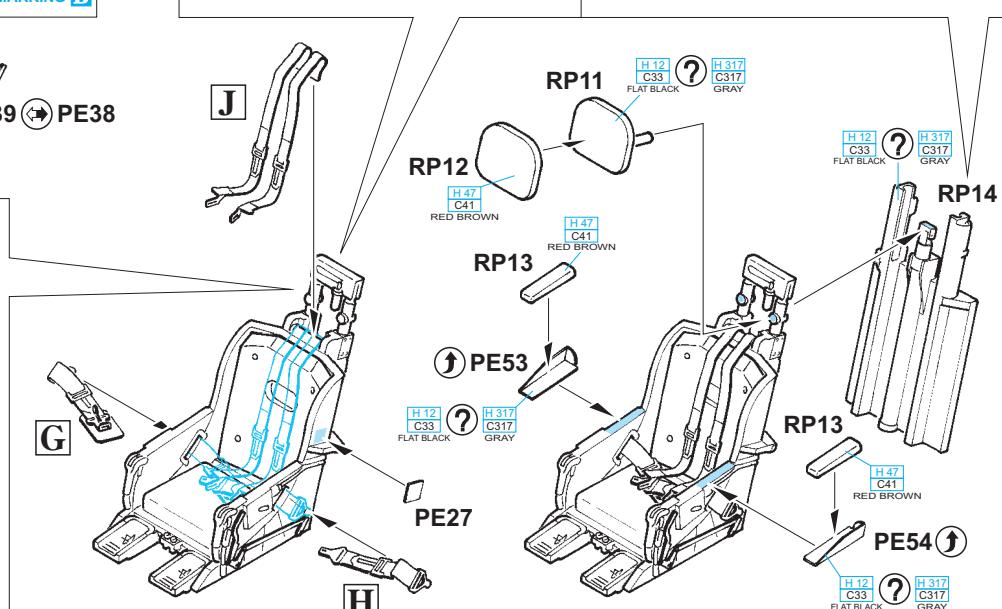
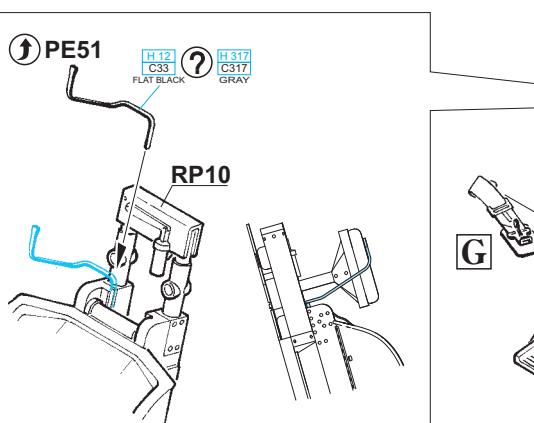
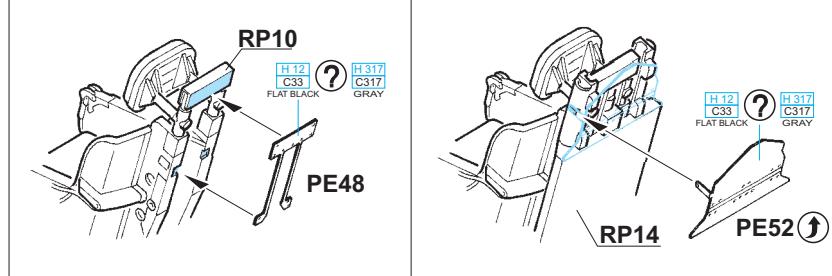
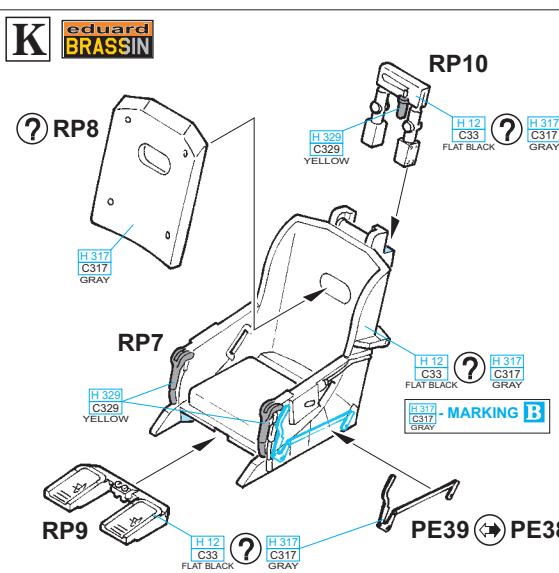
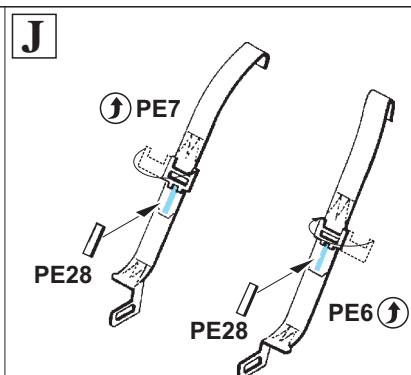
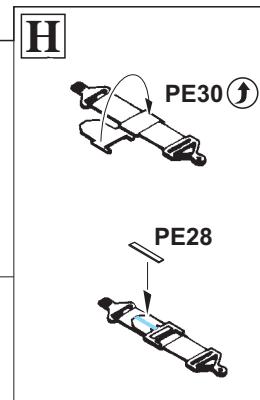
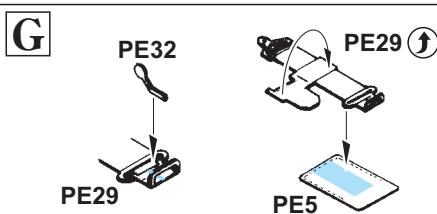
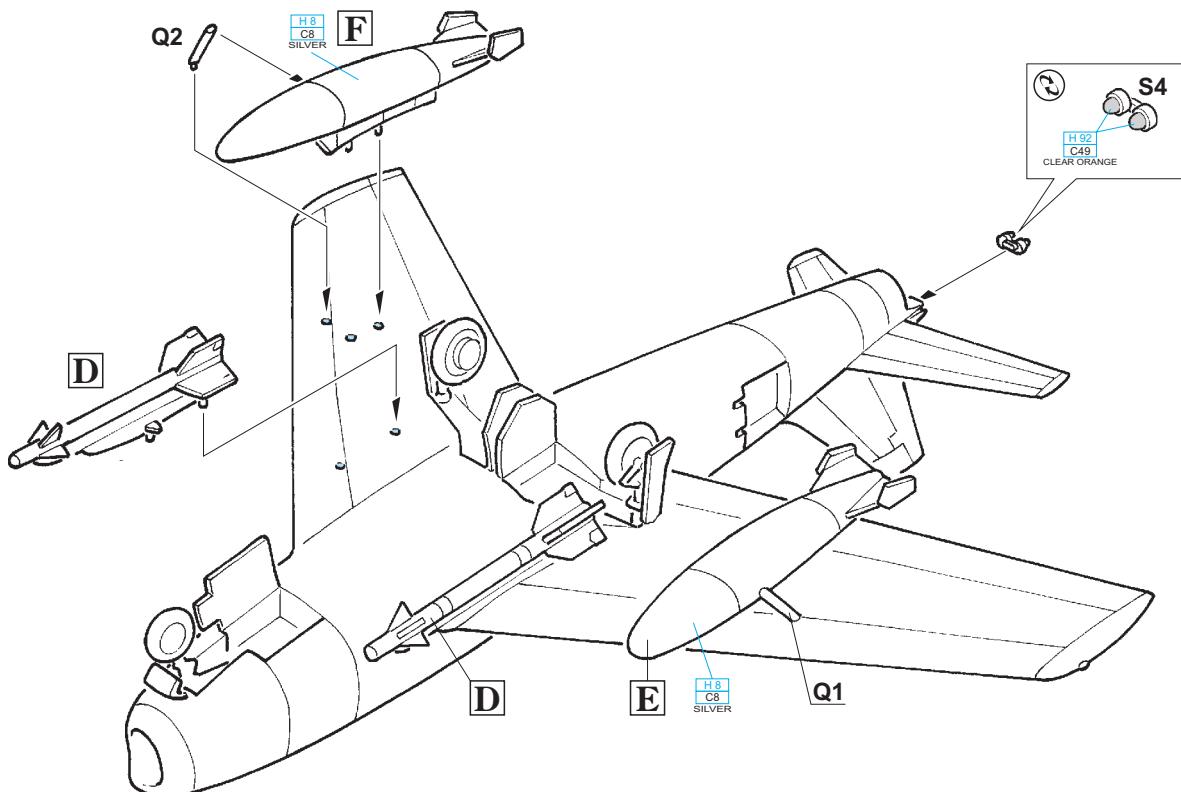


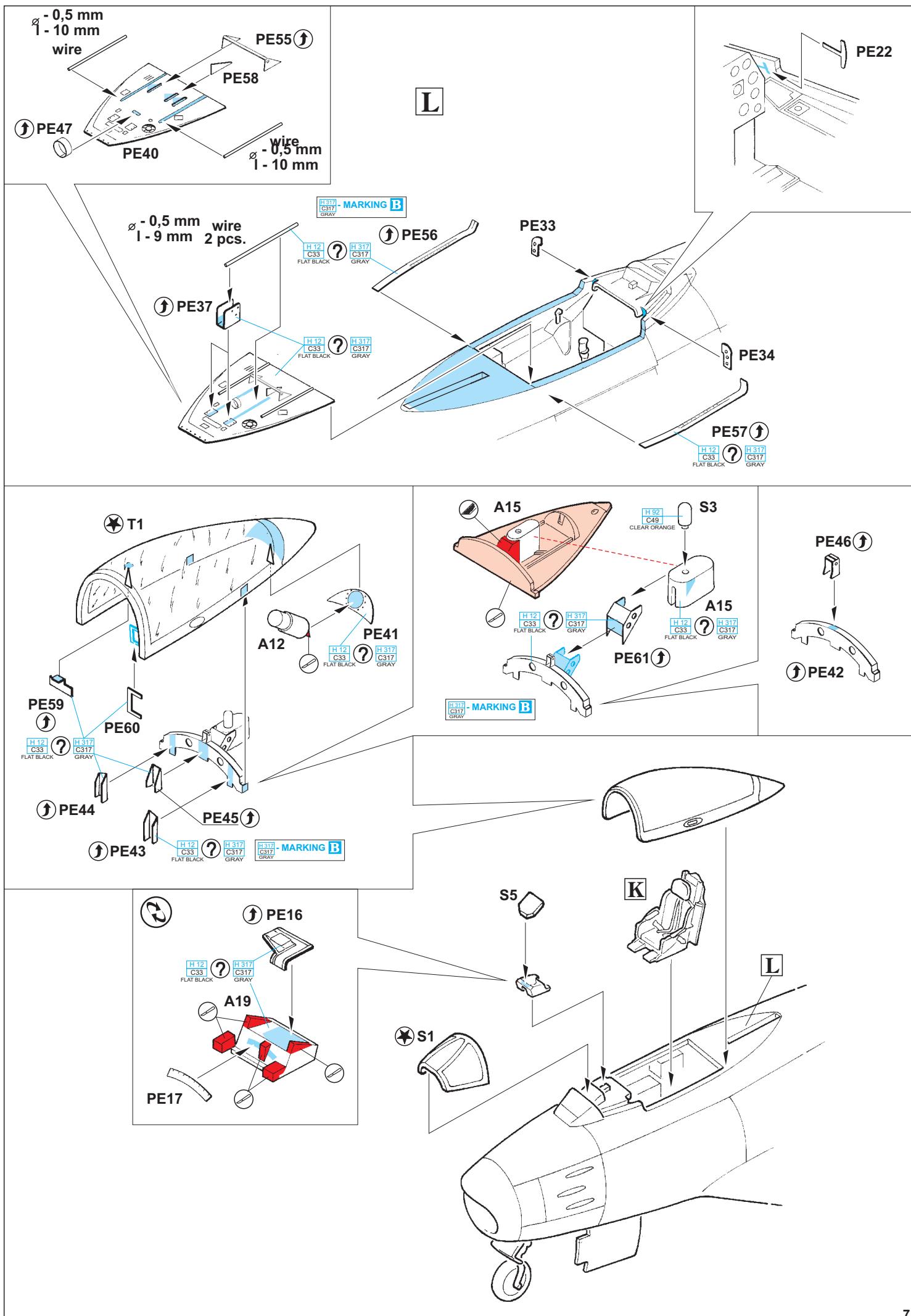
E

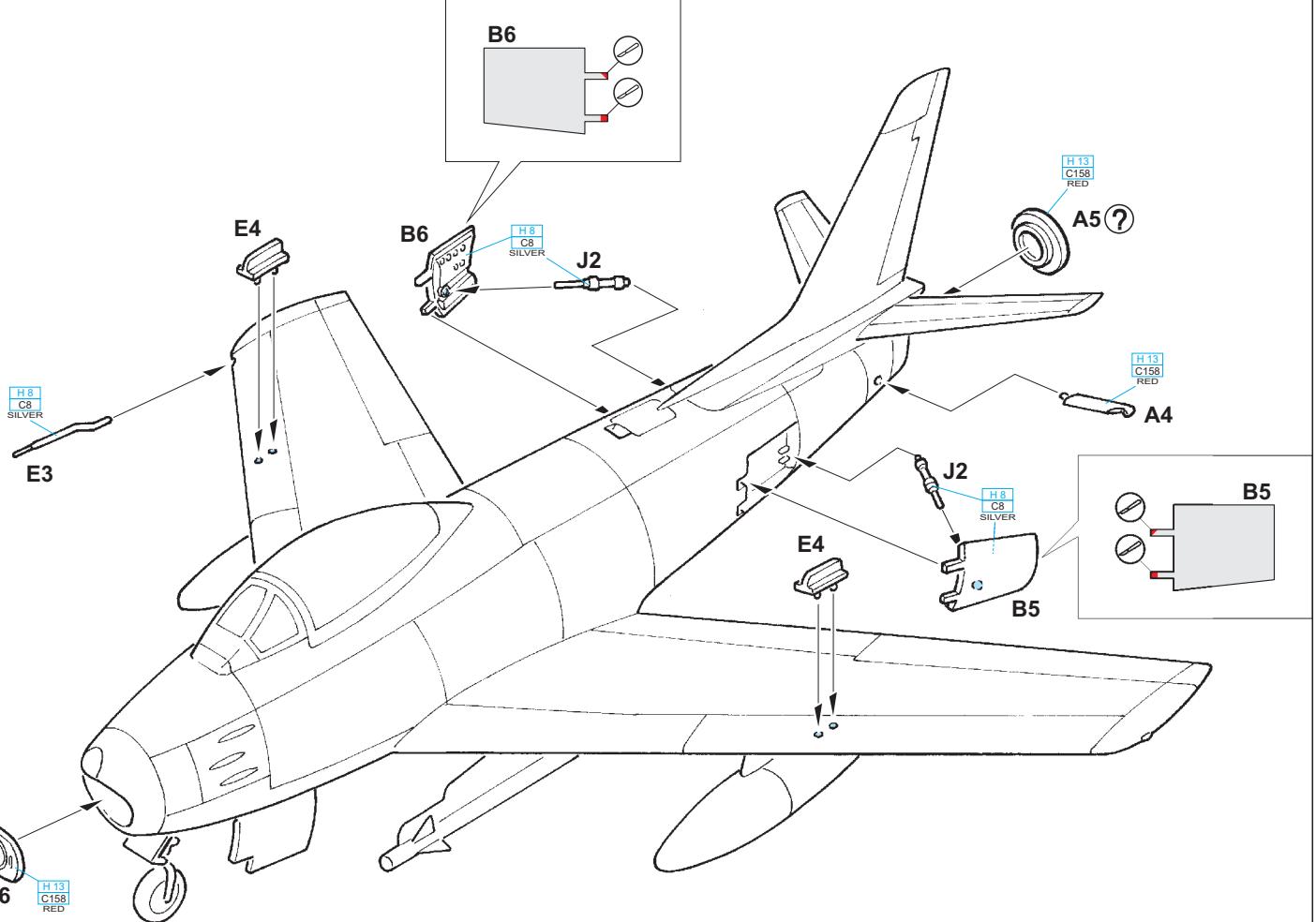


F

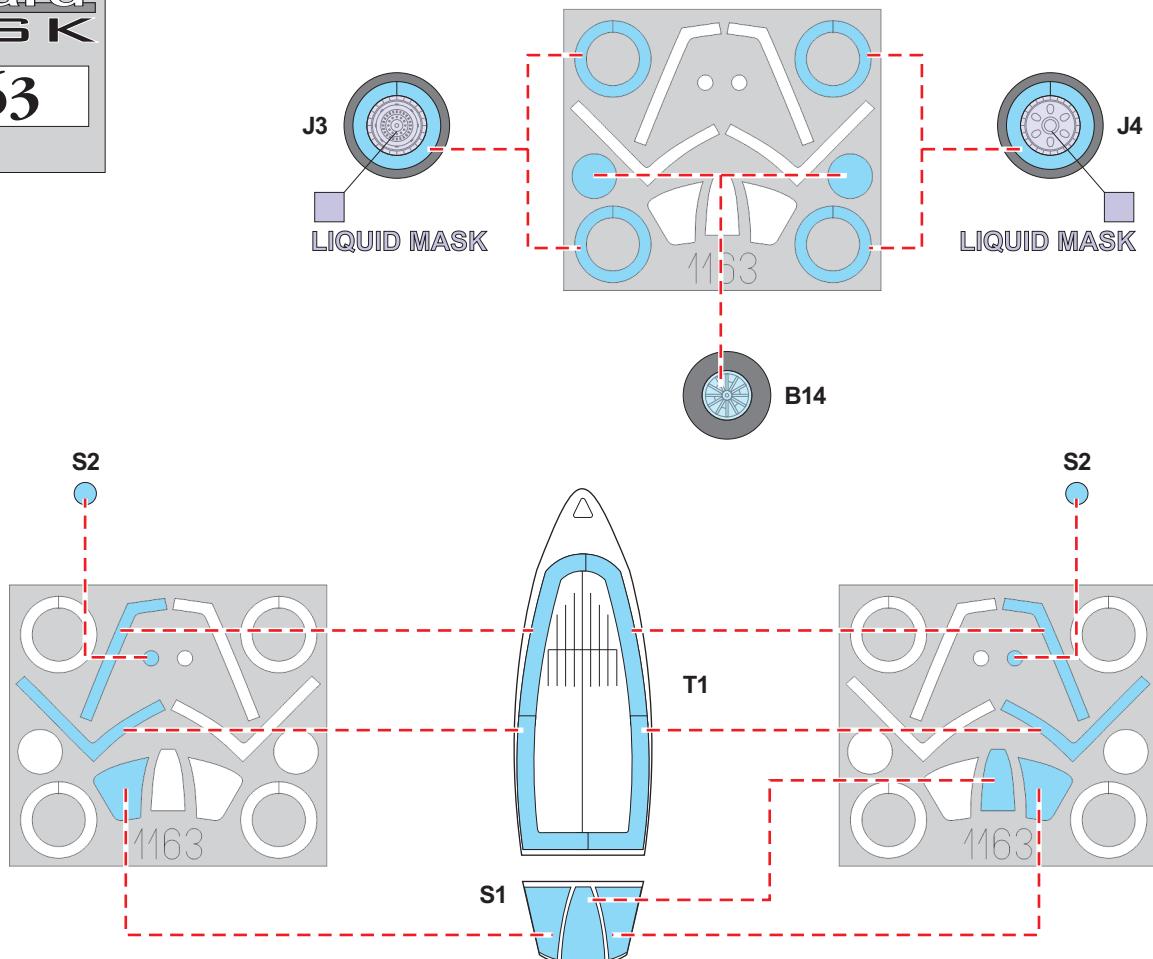






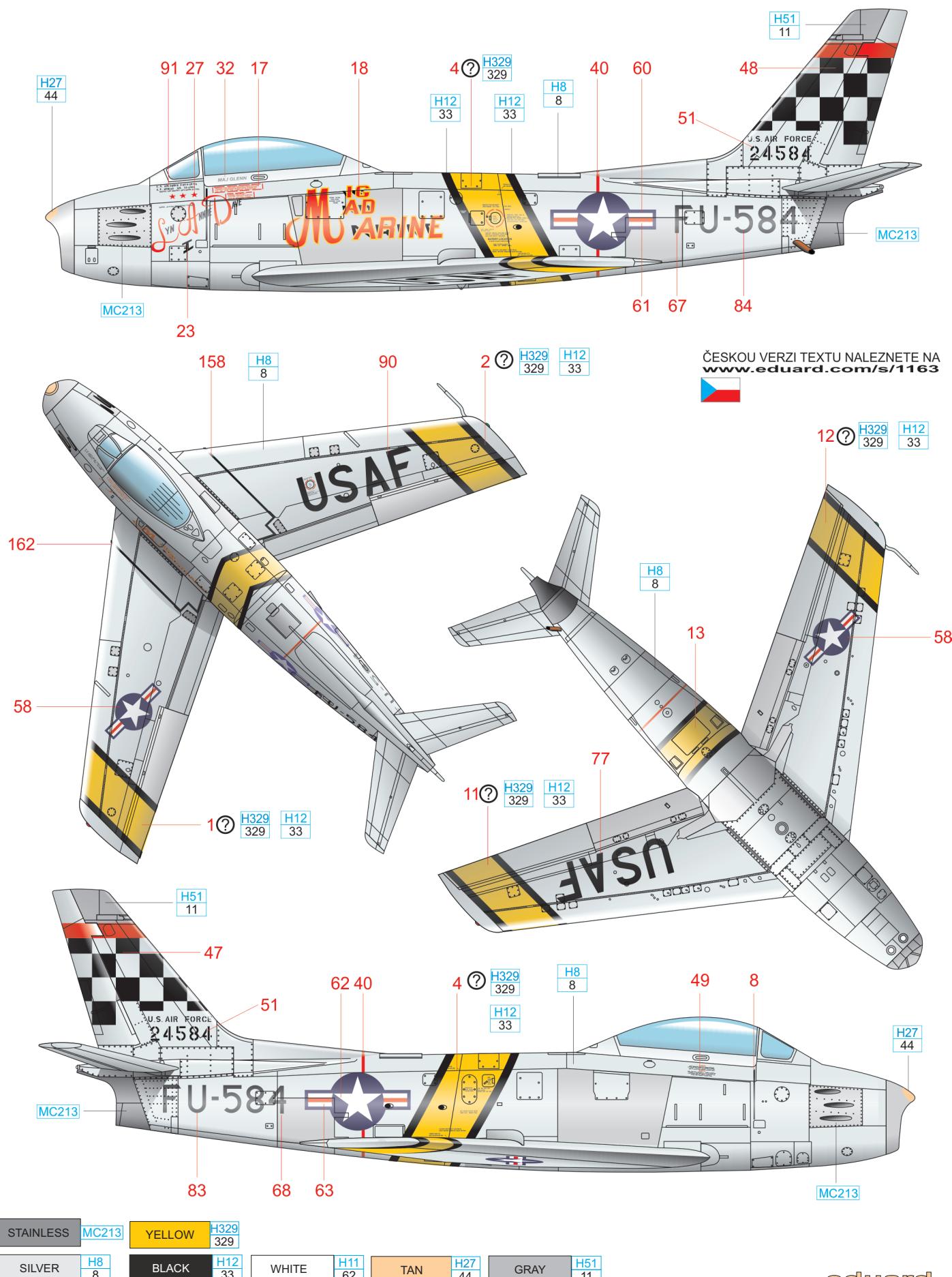


**eduard  
MASK  
1163**



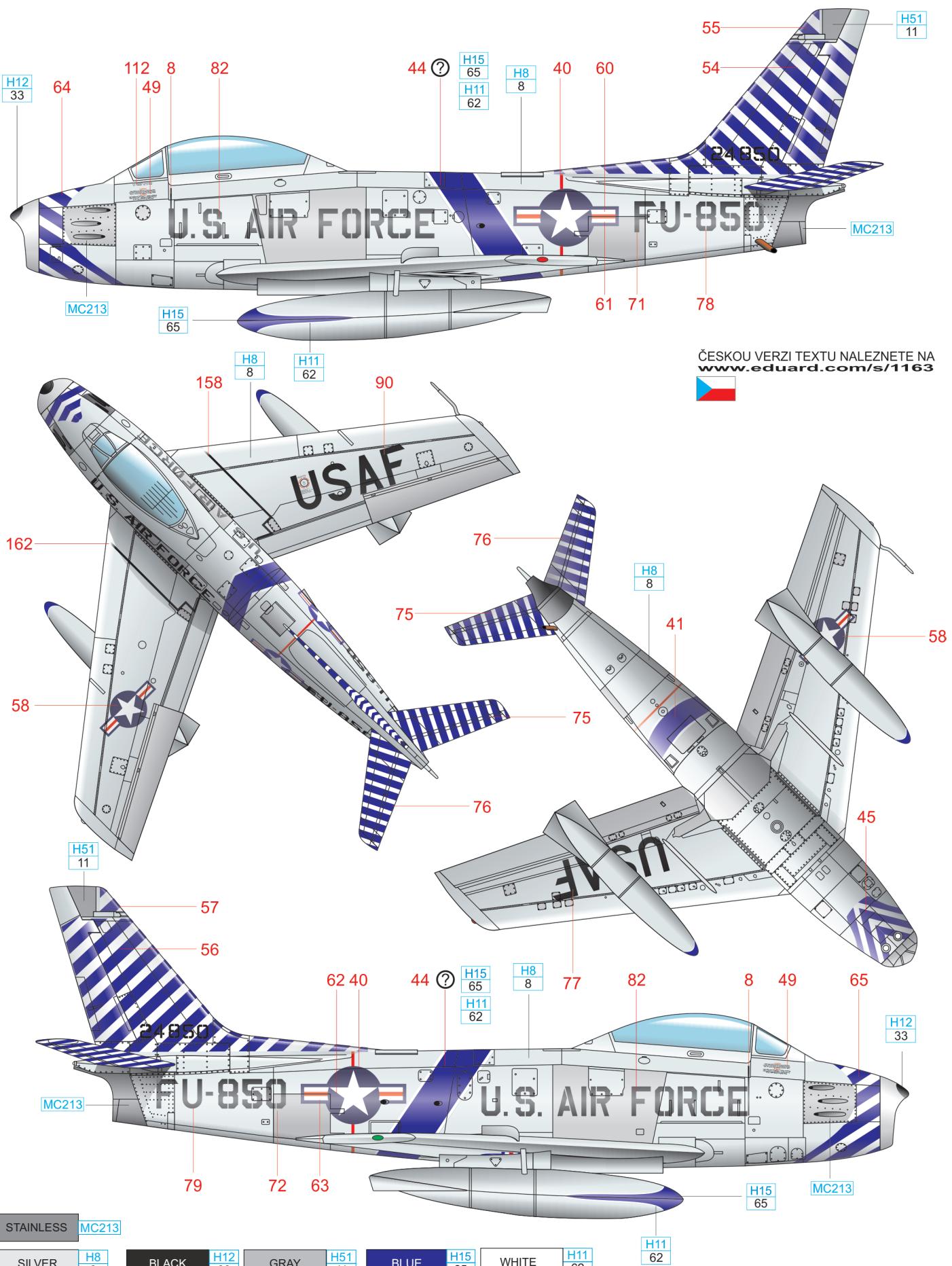
# A F-86F-30, Maj. John H. Glenn, 25th FIS/51st FIW; Suwon Air Base (K-13), Korea 1953

Sabre of the first American astronaut to orbit the Earth. John Glenn flew his second Korean combat tour under an interservice exchange program between the US Marines and the USAF, thus changing from a VMF-311 F9F Panther to a 25th FIS Sabre. He flew this aircraft with the famous 'Mig Mad Marine' inscription, shooting down two of his three MiGs, finishing this tour with 27 missions flown.



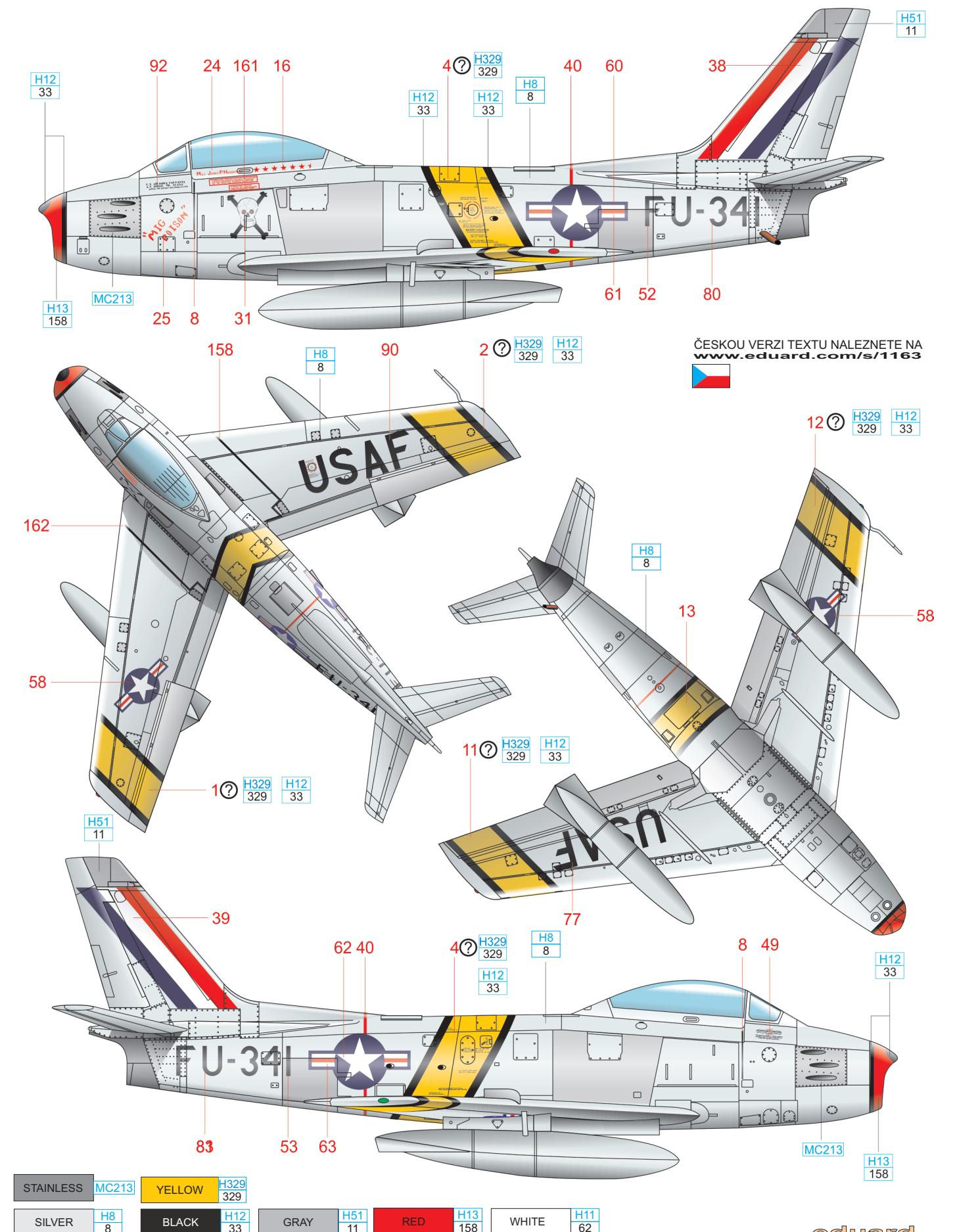
**B F-86F-30, FU-850, 390th FBS, Alexandria AFB, Louisiana, USA, 1955**

This Sabre served with the 390th Fighter Bomber Squadron of the 366th Fighter Bomber Wing, 50th Fighter Bomber Group. It was assigned to the 450th FIS/322th FIG in 1955, later stationed at AMARC (Aerospace Maintenance and Regeneration Center) known as the 'Aircraft Boneyard'. From there, this plane was handed over to the Philippine Air Force. The 366th FBW currently flies F-15s and bears the nickname 'Gunfighters' from the time of the Vietnam War.



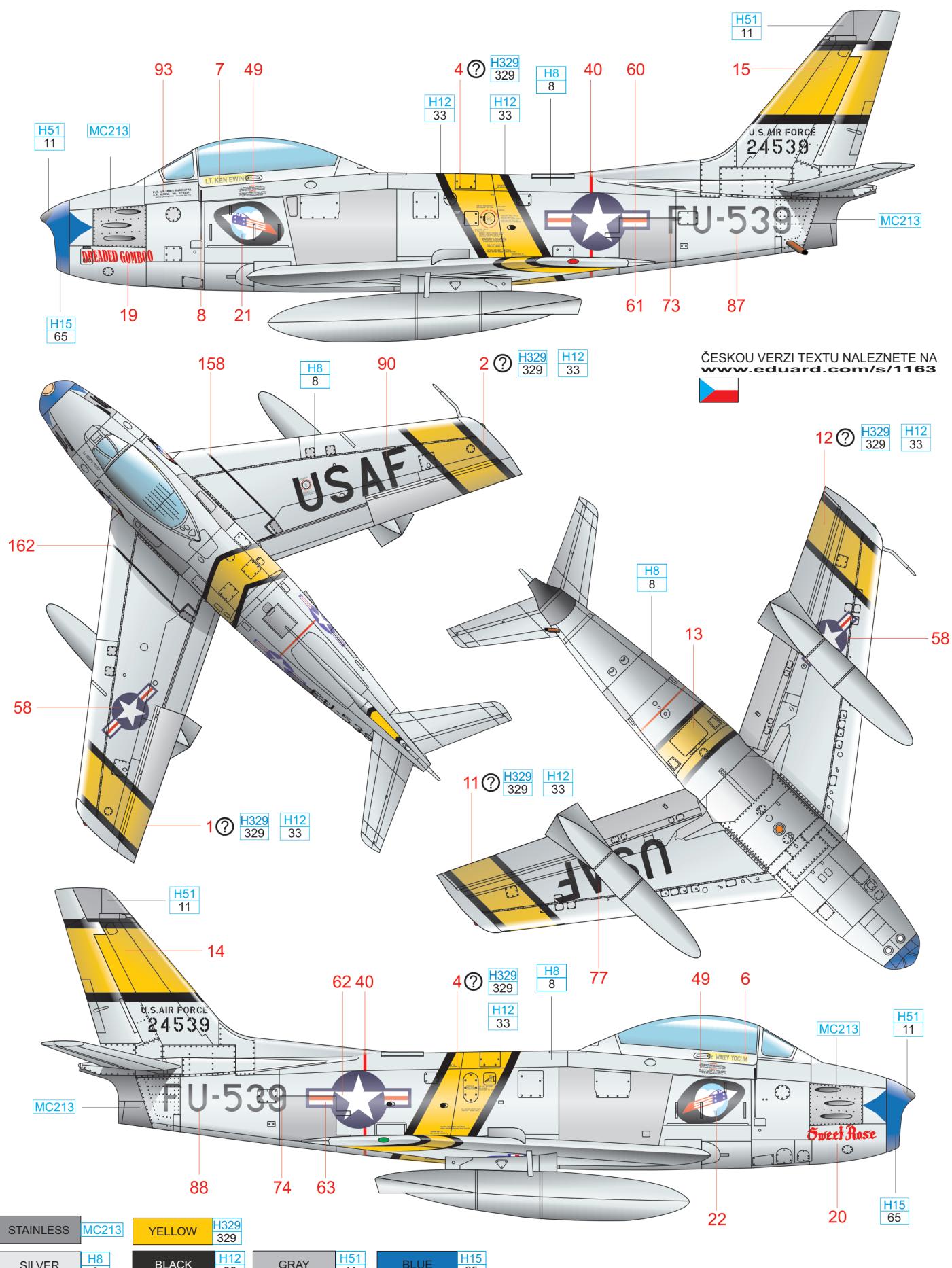
# C F-86F-30, 67th FBS, 18th FBG, Maj. James P. Hagerstrom, Osan-ni Air Base (K-55), Korea 1953

The Sabre of two war ace James P. Hagerstrom sported the name 'Mig Poison' and a drawing of a skull on the left side. Hagerstrom was the sole pilot of 18th FBG with ace status in Korea. He got the first two of his 8.5 kills with the 334th and 335th FIS during November and December 1952. He was transferred to the 67th FBS to help with the transition from propellor driven P-38s to the F-86. Here, he recorded 6.5 victories flying this Sabre. The plane was destroyed, crashing near Chia-Yi base on Formosa on the 28th of January, 1955.



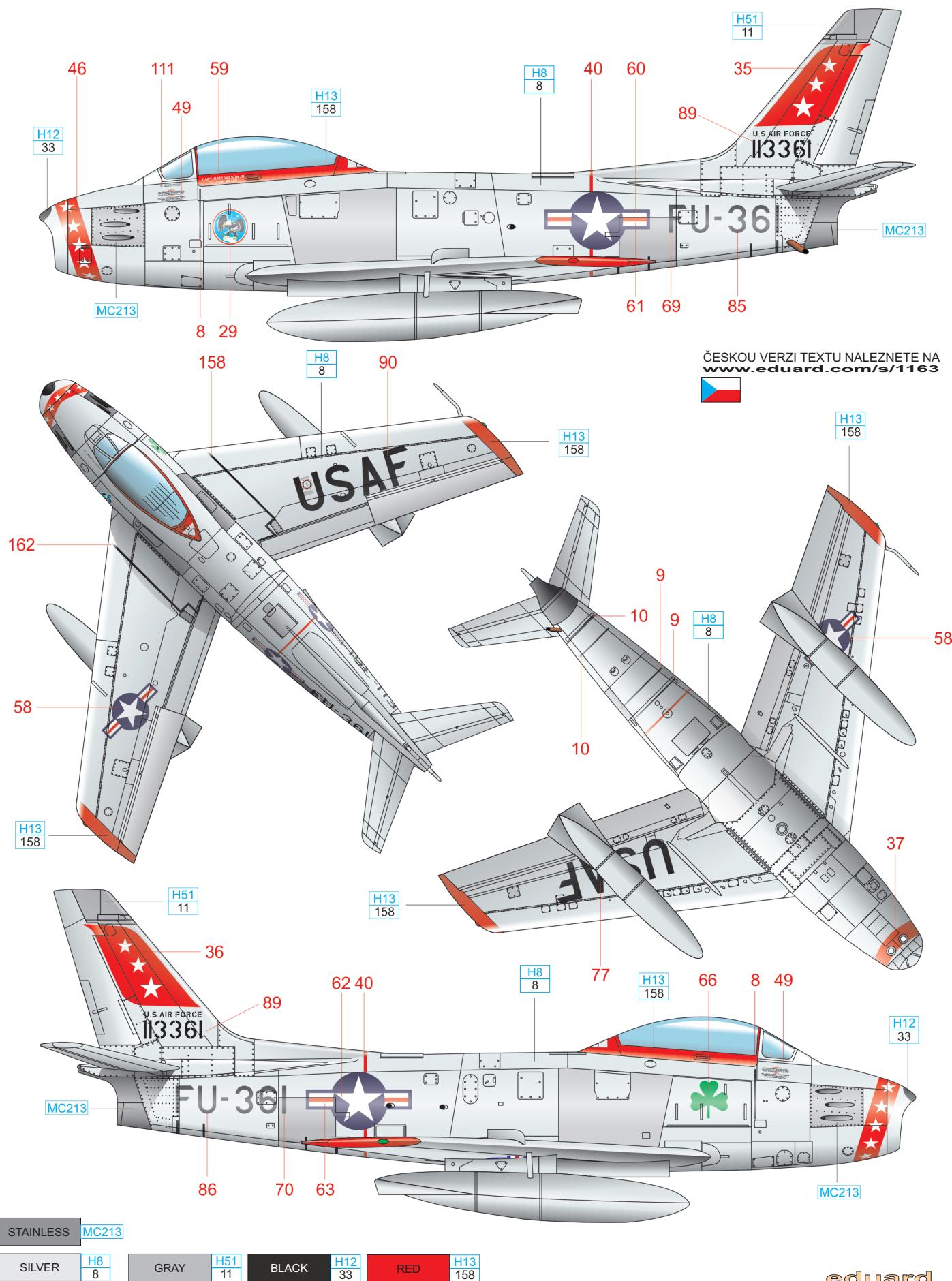
# D F-86F-30, Lt. Ken Ewing, 336th FIS "Rocketeers", 4th FIG, Kimpo Air Base (K-14), Korea 1954

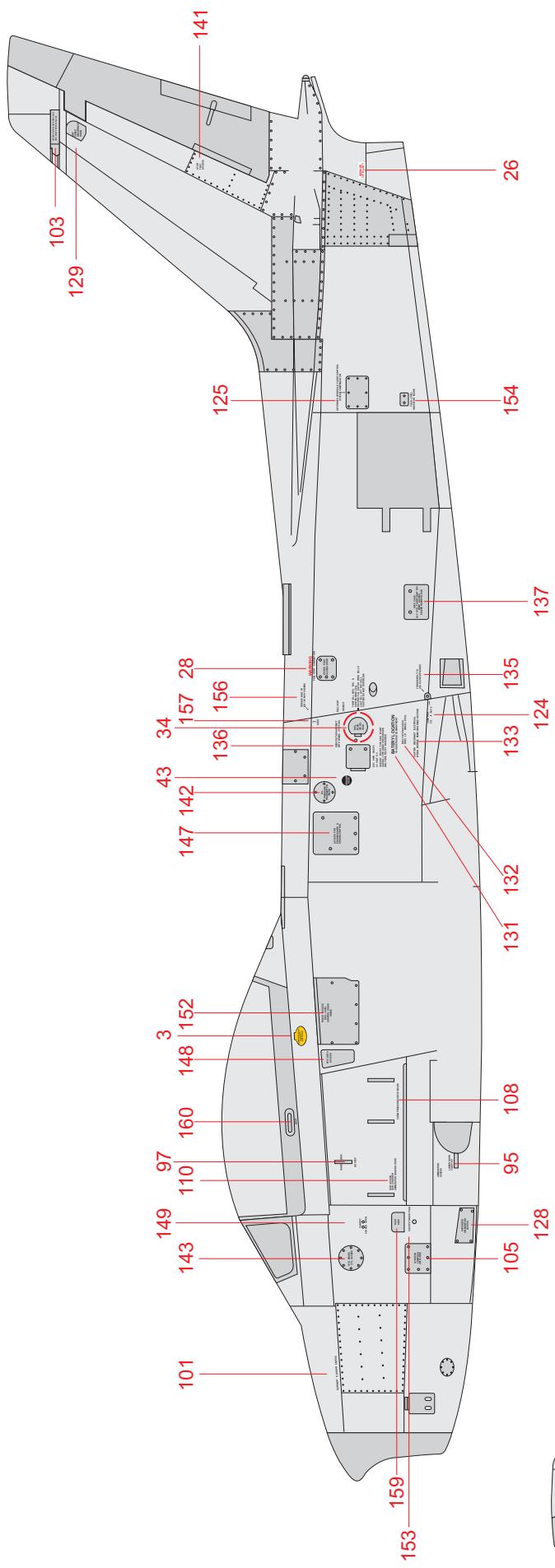
This Sabre initially served with the 6408th MSG (Maintenance Servicing Group), later being sent to Korea, where it flew with the 336th FIS of the 4th FIG until 1954. Pilot Lt. Ken Ewing named the plane 'Dreaded Gombo' on his side of the aircraft, while Crew Chief Walter Yocom named the Sabre on the other side 'Sweet Rose', after his fiancée, whom he later married. After the Korean War this Sabre was transferred to the Taiwan Air Force.

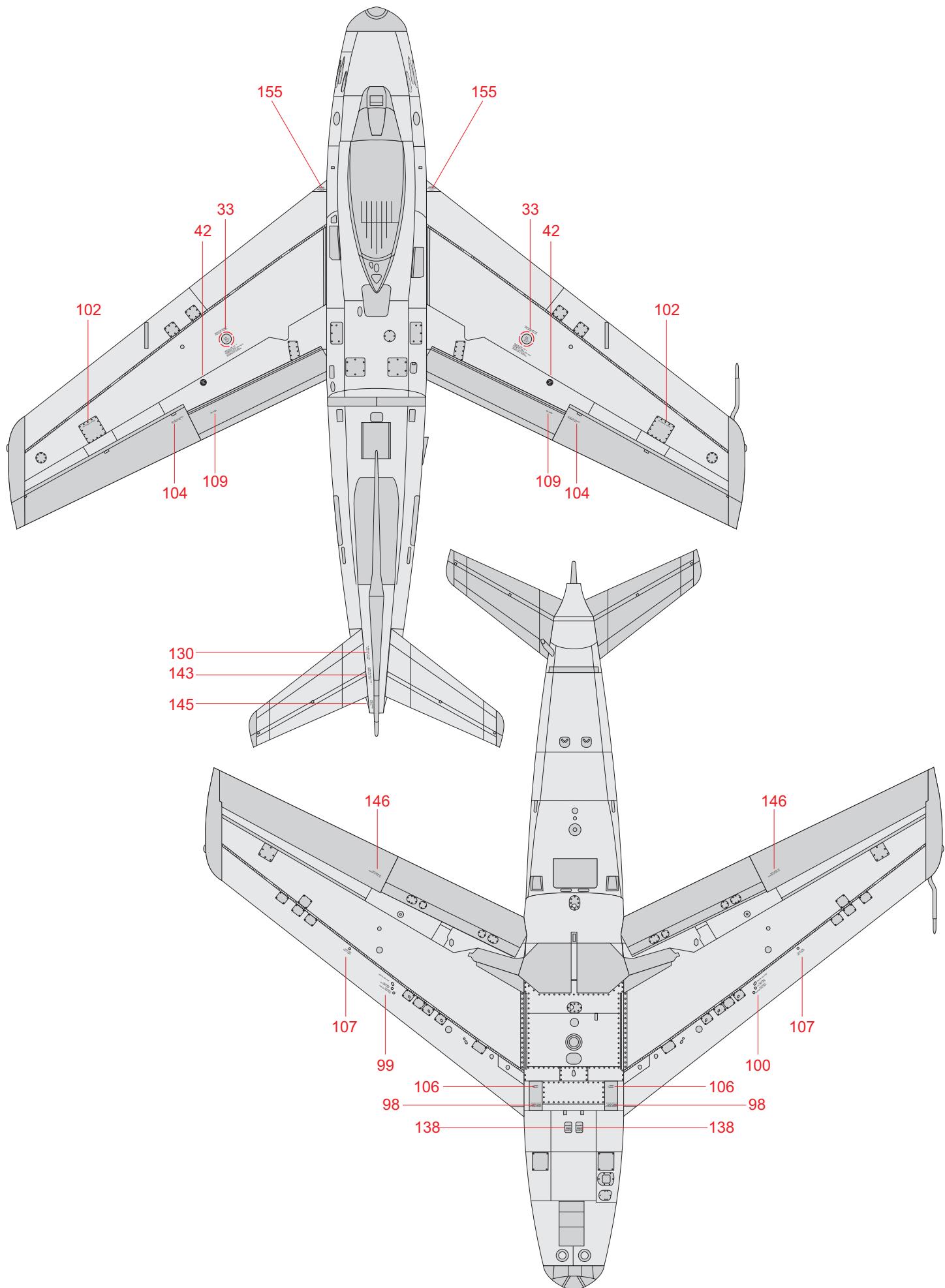


# E F-86F-25, FU-361, 435th FBS, Detroit AFB, Michigan, USA 1952

You can find this Sabre on display at Shizuhama Air Base. Shizuhama is the smallest Japanese military airfield and serves as a pilot training base. That is an interesting coincidence, because the 435th Squadron, where this Sabre was assigned, has served as a training unit from 1998 flying T-38 Talons. Reflecting the glory fighting days is a squadron badge with an eagle firing 0.50 machine gun from under its wing. This Sabre was sent to Japan with a changed serial number, 62 7417 instead of the original 51 13361.

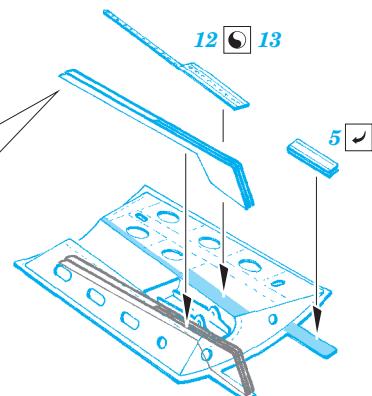
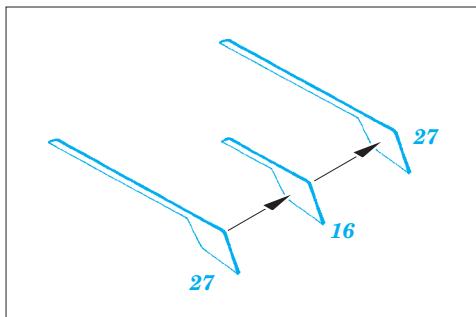
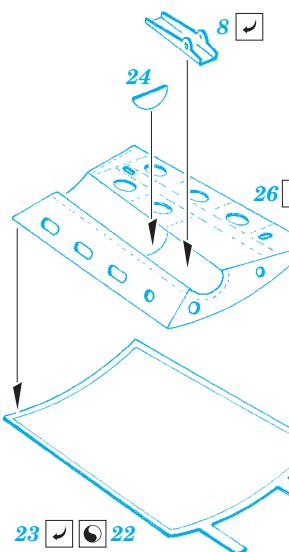
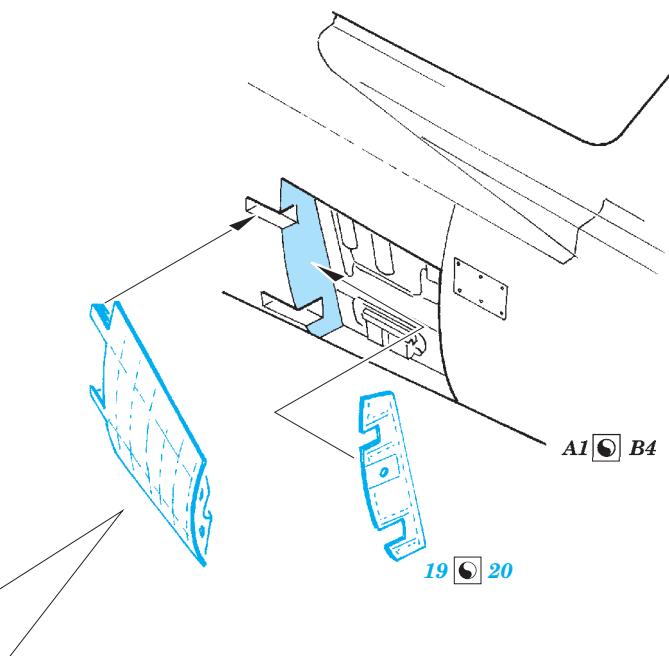
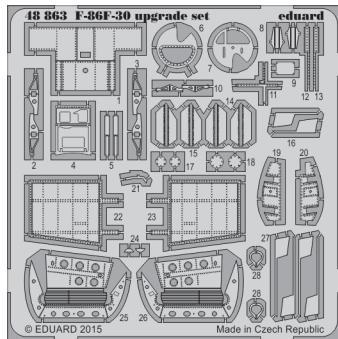






# RELATED PRODUCTS

## 48 863 F-86F-30 upgrade set



## 648 235 F-86F wheels



**BRASSIN**

