

Fouga CM.170 Magister "Finland, Germany, Austria"

CZ

Cvičný proudový letoun Fouga Magister vznikl, ač se to může zdát neuvěřitelné, vývojem z celokovového motorizovaného větroně C.M.8.15 konstruktérů P. Mauboussina a J. Szydłowského. Tento větroň s proudovým motorem poprvé vzletl v roce 1949. Přes několik typů pokusných strojů, včetně dvoutrupého typu Gemeaux se oba konstruktéři dopracovali, podle požadavků Armée de l'Air, k typu CM.170 Magister. Všechny tyto typy spojovala koncepce ocasních ploch do "V". Nejprve byly objednány tři prototypy Magisteru. První z nich vzletl 23.7.1952. Jeho vlastnosti byly dobré, ale nakonec byla postavena desetikusová ověřovací série, na které byly testovány úpravy, které se objevily na sériových strojích. Výjimkou byl druhý prototyp, který nesl klasické ocasní plochy dle požadavků vojáků. Nevykazoval ale žádné lepší vlastnosti než stroje s motýlkovými ocasními plochami. Proto byly všechny sériové stroje vyráběny dále s ocasními plochami do "V". Kromě normální cvičné/lehké bitevní verze se v sérii vyráběla jen navalizovaná verze Magisteru, označená Fouga CM-175 Zéphyr. Tu používalo pouze francouzské námořnictvo pro nácvik přistání na palubách letadlových lodí. Tato verze se lišila celkově zesílenou konstrukcí odolnou vůči zvýšené zátěži během přistávacího manévru a mezi hlavní vnější odlišností patřil zesílený podvozek, předělaná příd, překrytí kabin odsunovatelné vzad a umožňující otevření kokpitu za letu a jeho případně rychlé opuštění během nepovedeného startu či přistání a samozřejmě také přistávací hák. Všechny ostatní verze Magisteru zůstaly v prototypech nebo v projektech.

Magistry zařadilo do výzbroje nejen francouzské Armée de l'Air. O letoun byl velký zájem a ve třech státech byl vyráběn licenčně. V roce 1958 začaly první kusy vyrobené v licenci dostávat letecké síly Finska a Německa. Oba státy před tím koupily část strojů přímo ve Francii. Licenční výroba v Izraeli dala první stroje v roce 1960. Izraelské stroje pojmenované Tzukit byly použity nejen k výcviku pilotů, ale bojově zasáhly také do několika izraelsko-arabských konfliktů. S úspěchem byly použity jako bitevníky. Pro bitevní akce byly montovány dva kulomety do přídě a používala se různá podvěšená výzbroj, od bomb, až po neřízené rakety. To se týká všech Magisterů obecně.

V Evropě se dalšími uživateli stala Belgie, Rakousko a Irsko. Ovšem mnohem širší je seznam uživatelů v Africe, Asii a Jižní Americe. Mezi exotické uživatele, kteří byli bezesporu osloveni především nízkými provozními náklady Magisterů, patřilo například Alžírsko, Bangladéš, Biafra, Brazílie, El Salvador, Libye, Maroko, Togo či Uganda. Jako civilní létají Magistry i dnes.

rozpětí: 12,50 m (s přidavnými nádržemi), délka: 10,06 m, max. rychlost: 715 km/h, dolet: 1200 km, dostup: 11 000 m

GB

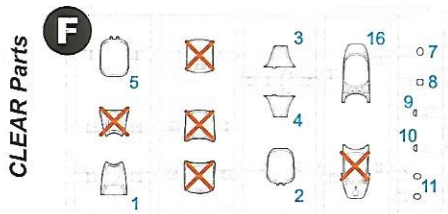
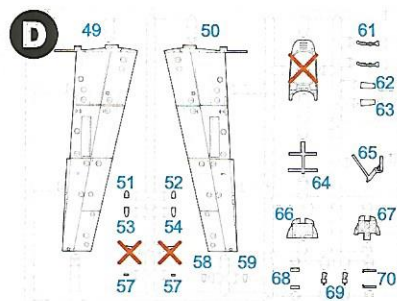
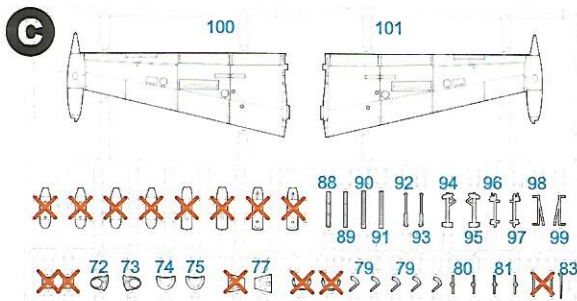
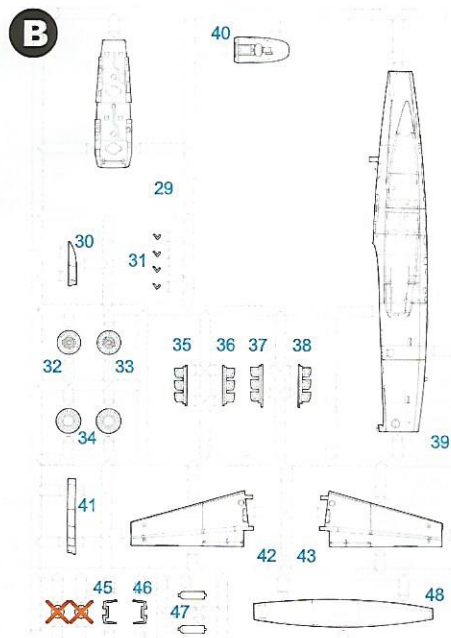
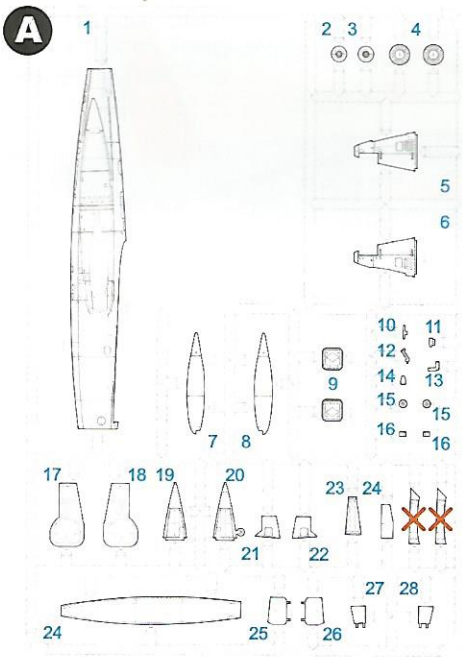
The successful French Fouga CM.170 Magister lightweight jet trainer found its origins in a powered glider design of all-metal construction called the C.M.8.15 which sported a butterfly style tail empennage and was designed by P.Mauboussin and J.Szydłowski. This turbojet-powered glider flew for the first time in 1949 and during development of this design a number of test machines emerged including a unique twin-fuselage aircraft designated as the Gemeaux. The final stage of development of the C.M.8.15 glider led to the CM.170 Magister which was designed to meet an Armée de l'Air specification and like the powered gliders which preceded it this also sported a distinctive butterfly-type empennage.

An initial order for three prototype Magisters was made, the first of which made its maiden flight on 23 July, 1952 and as the performance was found to be acceptable this led to a follow on order for a batch of ten pre production aircraft. As per usual most of the prototype and pre production aircraft were used for testing of various components and improvements which would later be incorporated into full production airframes, the only exception to this was the second prototype which at the request of the military was modified to accept a standard fin and tailplanes. However as the flying characteristics in this configuration were found to be no better, all subsequent machines continued to feature the trademark butterfly tail. As well as serving with the French military the Magister was also an export success for Fouga which sold the type to a multitude of foreign operators and it was even built under licence in three countries. The first licence-built Magisters entered service with the air forces of Germany and Finland in 1958 where they also joined French-built Magisters and the third licence producer of the Magister was Israel, which produced its first aircraft in 1960. The Israeli Magisters were known locally as the Tzukit (or Thrush) and as well as basic training they were also used in the light-attack role where they proved successful during several of the Israeli-Arab conflicts. In the ground attack role the Magister could carry a pair of machine guns fitted in the nose section and various weaponry was mounted under the wings in the form of bombs and unguided rockets.

Within Europe the Magister was flown by France, Belgium, Austria and Ireland but there were also many other operators worldwide in Africa, Asia and South America, many of whom were no doubt attracted by its lightweight design and low operating costs. Among these far flung operators were countries such as Algeria, Bangladesh, Biafra, Brazil, El Salvador, Libya, Morocco, Togo and Uganda. Some Fougas are still flying these days, many of them in civilian hands.

Besides the standard trainer and light attack versions there was also a navalized variant of the Magister known as the Fouga CM.175 Zéphyr which was operated solely by the French Navy to carry out deck landing training for its trainee fast jet pilots. This airframe was stronger to cope with the rigours of deck operations and the main external differences were a set of strengthened undercarriage legs, a different nose section incorporating rear-sliding canopy hoods which could be opened in flight to aid swift exit in case of emergency during take off and landing at sea and of course it was also equipped with an arrestor hook. Further variants of the basic Magister design concept were also proposed but most remained on the drawing board as paper projects or did not proceed past the prototype stages.

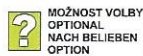
Wingspan: 12,50 m (with wing-tip fuel tanks), Length: 10,06 m, Max. Speed: 715 km/h, Range: 1200 km, Ceiling: 11 000 m

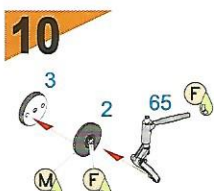
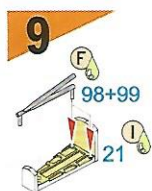
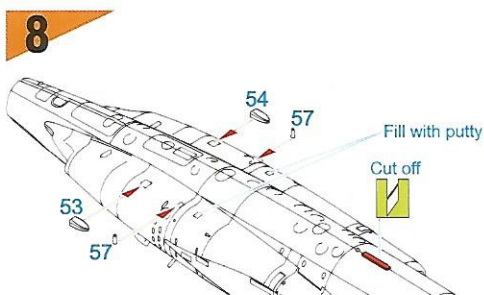
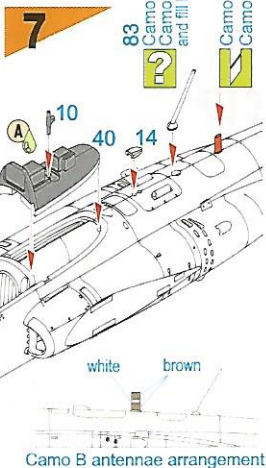
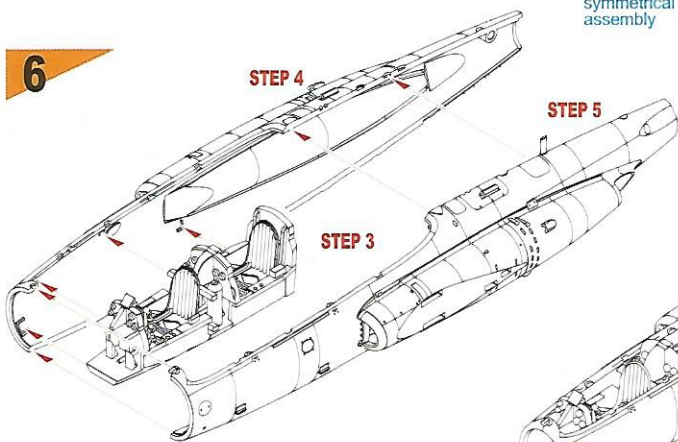
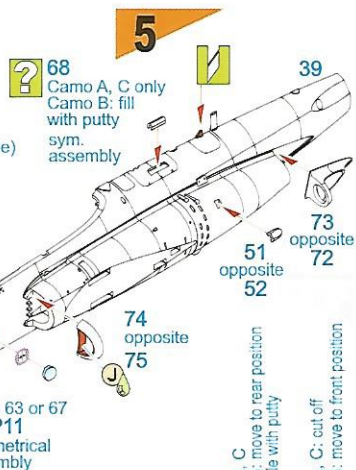
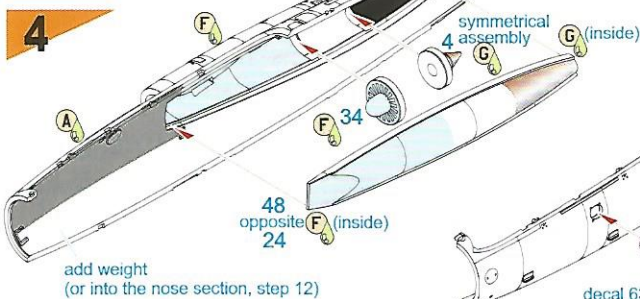
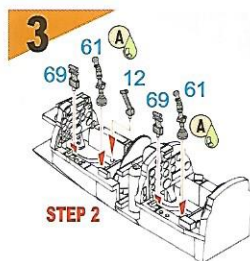
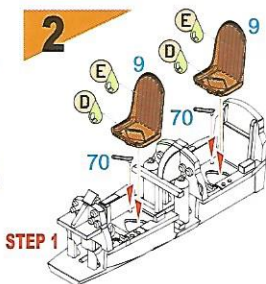
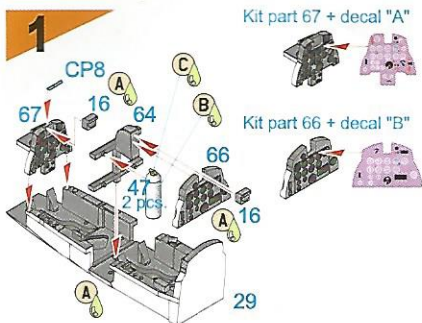


X = Tento díl nepoužít
Do not use this part

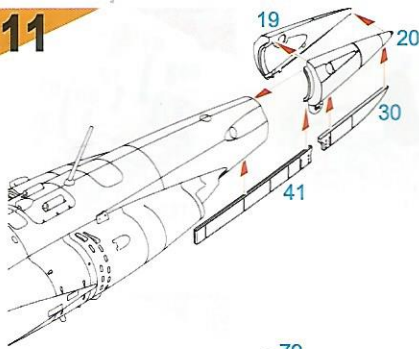
Barvy / Colors / Colour No.	Černá / BLACK	H12/C33
B	Bílá / WHITE	H11/C62
C	Mosaz / BRASS	MC219
D	Hnědočervená / BAKELITE	H47/C41
E	Hnědočervená / LEATHER	M47/C41+H92/C49
F	Hliník / ALUMINIUM	H8/C8
G	Opálený kov / BURNT IRON	H76/C61
H	Žlutá / YELLOW	H4/C4
I	Světle žlutá / PALE YELLOW	H34
J	Červená / RED	H3/C3
K	Červená čírá / CLEAR RED	H90/C47
L	Modrá čírá / CLEAR BLUE	H93/C50
M	Barva pneu / TIRE BLACK	H77/C137

SYMBOLS

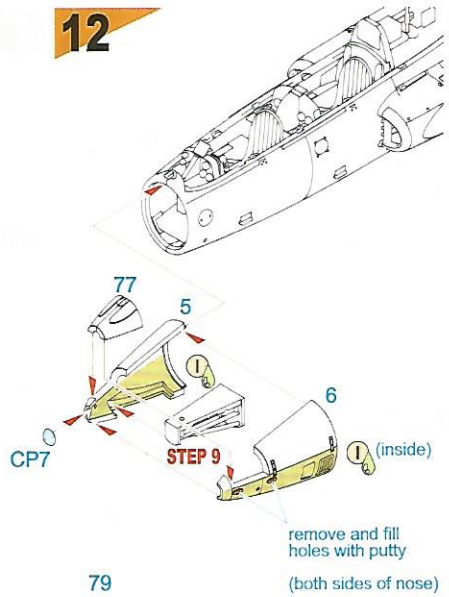




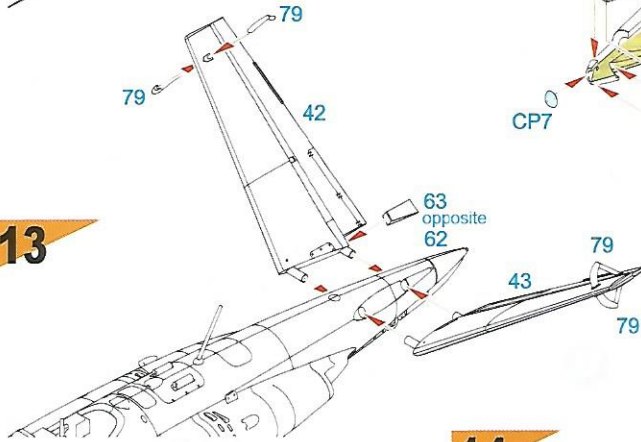
11



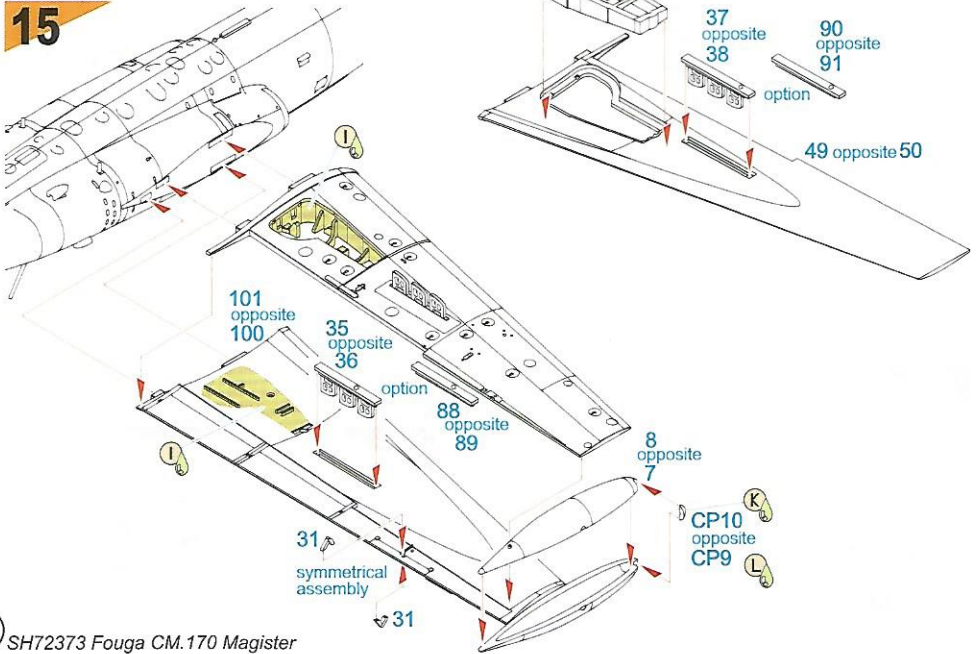
12



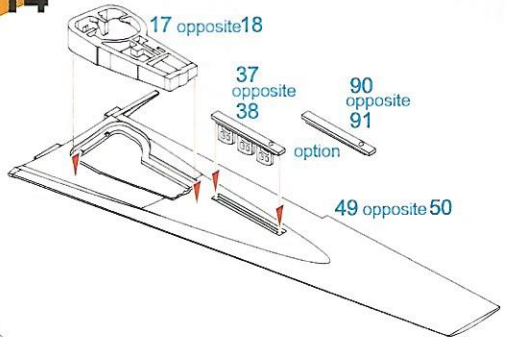
13



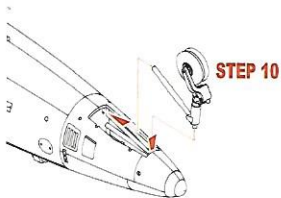
15



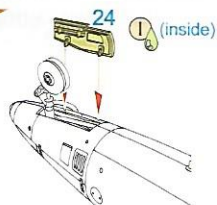
14



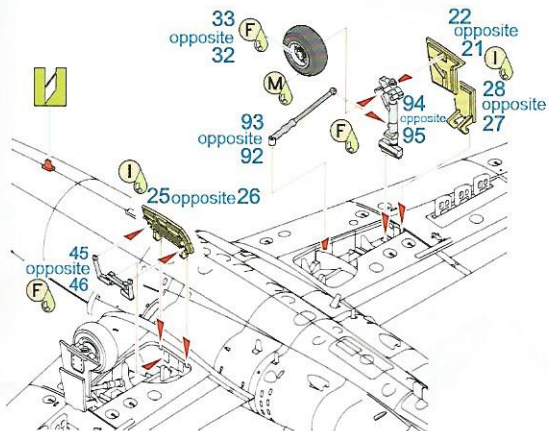
16



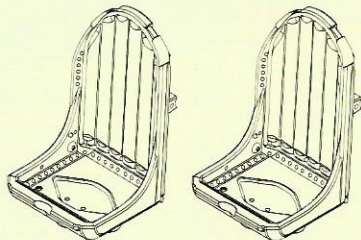
17



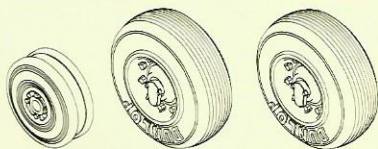
18



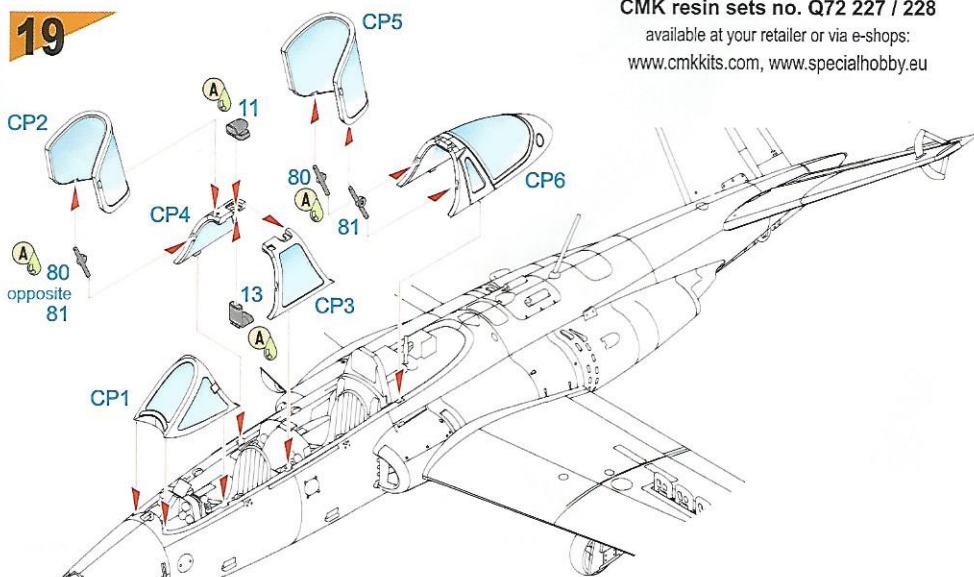
Q72 227 Resin Seats Set



Q72 228 Resin Wheels Set



19



CMK resin sets no. Q72 227 / 228

available at your retailer or via e-shops:

www.cmkkits.com, www.specialhobby.eu

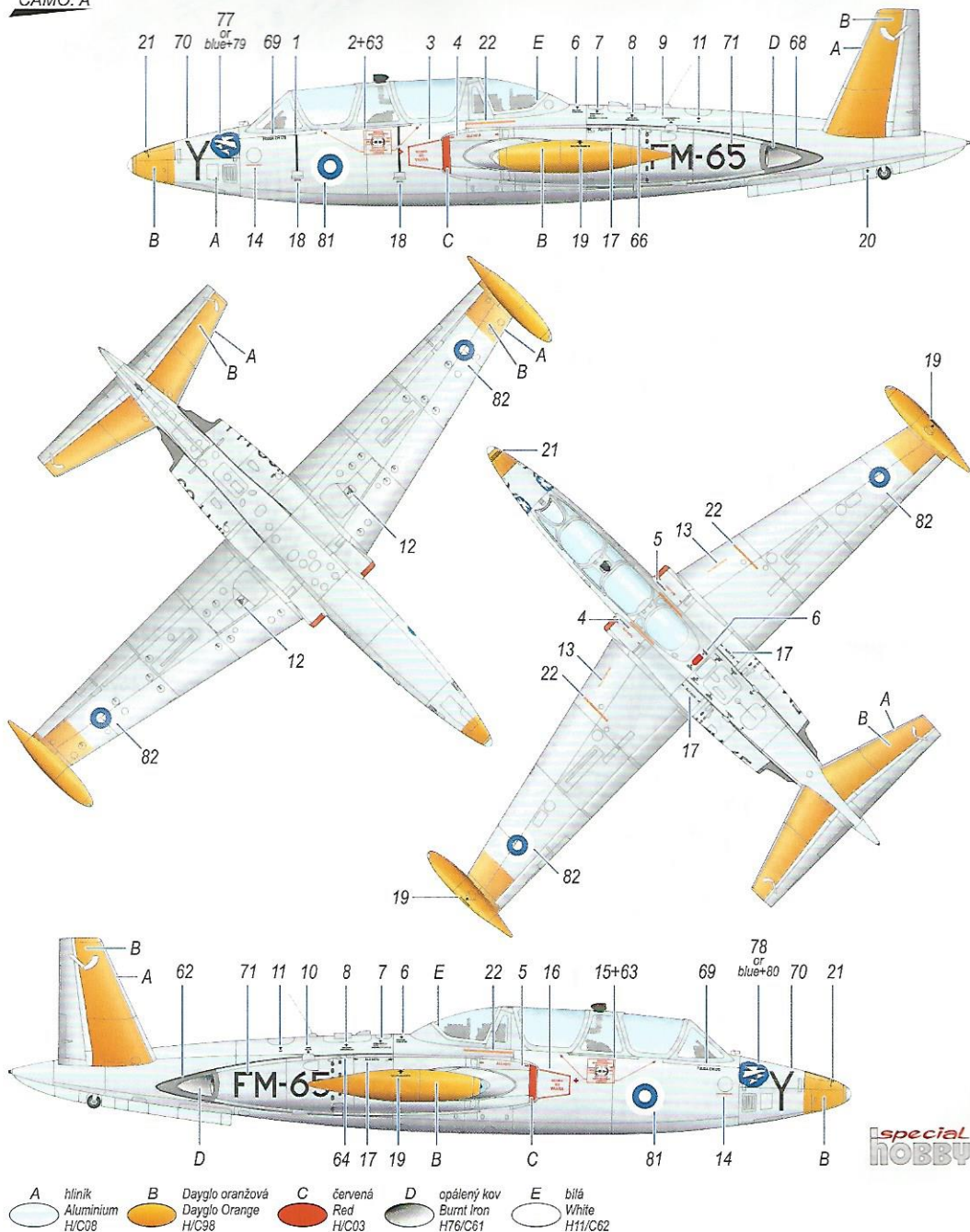
The canopies CP2 and CP5 can be posed either closed or open.

Kryty kokpitu, díly CP2 a CP5, mohou být jak otevřené, tak i zavřené.

Fouga CM.170 Magister, FM-65, finské letectvo, Kauhava, prosinec 1968. Tento stroj byl vyroben domácím dodavatelem Valmet a sloužil v letecké akademii.

Fouga CM.170 Magister, FM-65, Ilmavoimat (Finnish Air Force), Kauhava, December 1968. This Fouga was built in Finland by Valmet (and saw service with the Air Force Academy).

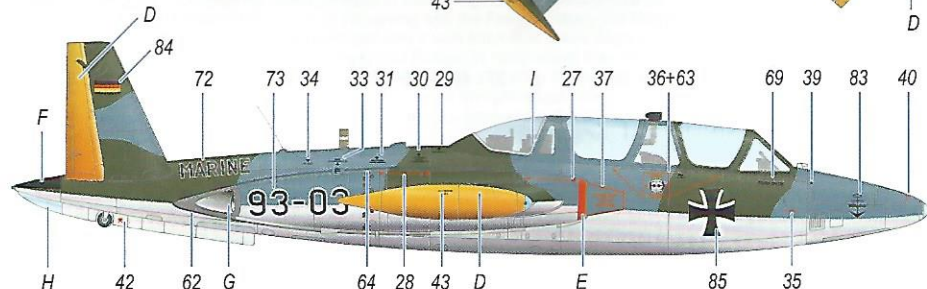
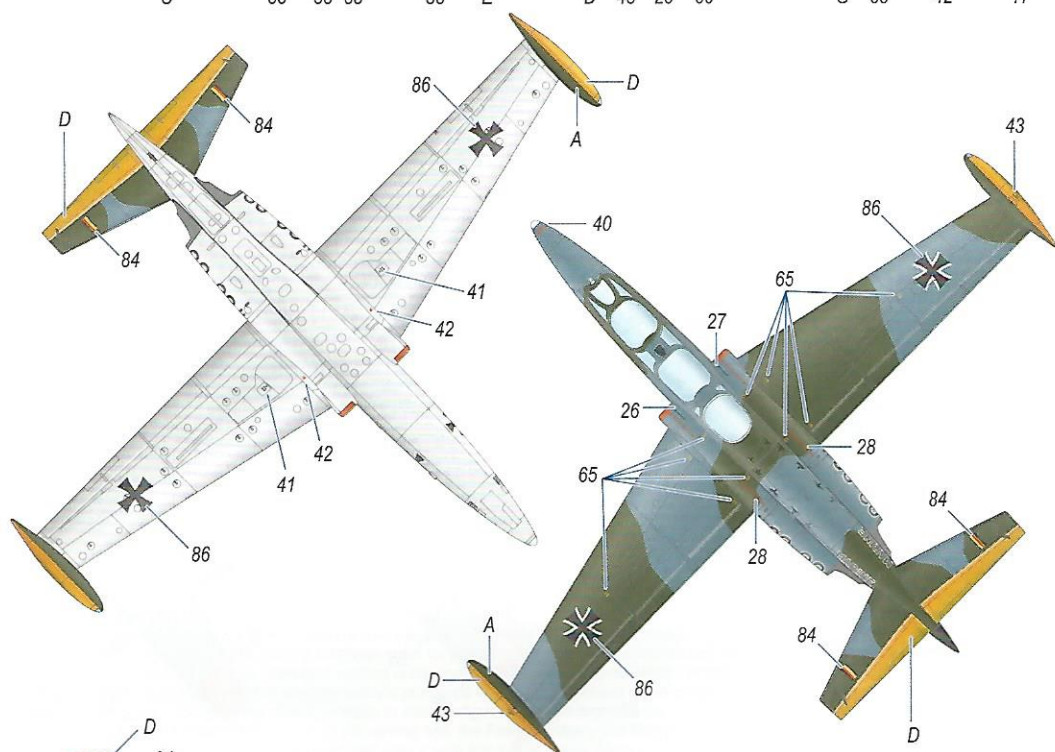
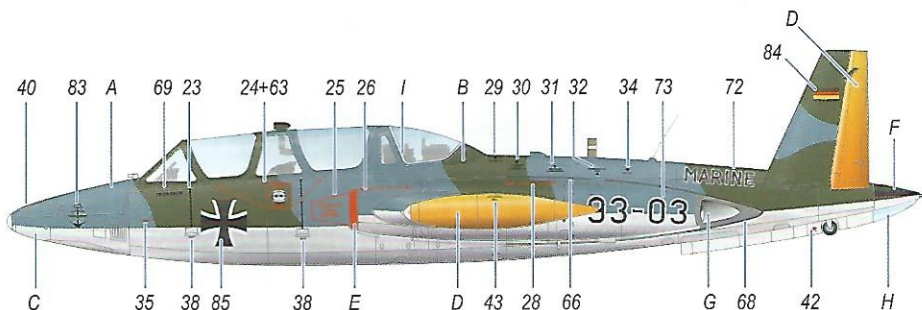
CAMO. A



Fouga CM.170 Magister, 93-03, MfG 1
Marineflieger Geschwader 1, letectvo německého
námořnictva, Schleswig-Jagel, 1968.

Fouga CM.170 Magister, 93-03, MfG 1
Marineflieger Geschwader 1, Bundesmarine
(German Navy), Schleswig-Jagel, 1968.

CAMO. B



- | | | | | | | | | |
|--|---|--|--|----------------------------------|------------------------------------|---|---------------------------------------|-----------------------------------|
| A olivově žlutá
Olive Yellow
RAL 6014
H/C340 | B stří. šedivá
Basaltgrau
RAL 7012
H/C301 | C sv. šedivá
Graualuminium
RAL 9007
H/C315 | D Dayglo oranžová
Dayglo Orange
Leuchtorange
RAL 2005
H/C98 | E červená
Red
H/C03 | F černá
Black
H12/C33 | G opálený kov
Burnt Iron
H76/C61 | H hliník
Aluminium
H/C08 | I bílá
White
H11/C62 |
|--|---|--|--|----------------------------------|------------------------------------|---|---------------------------------------|-----------------------------------|

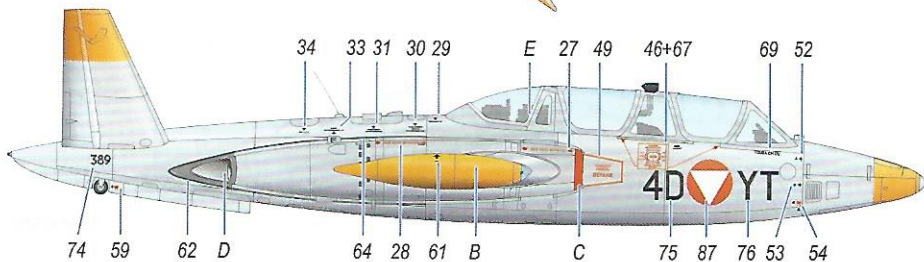
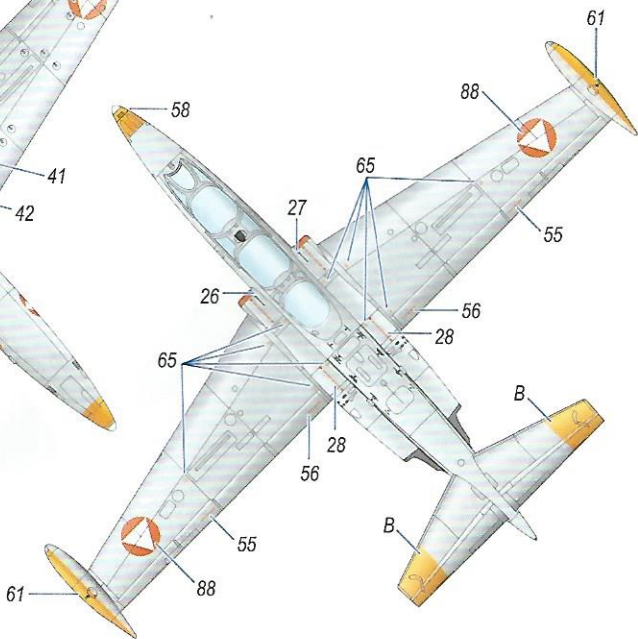
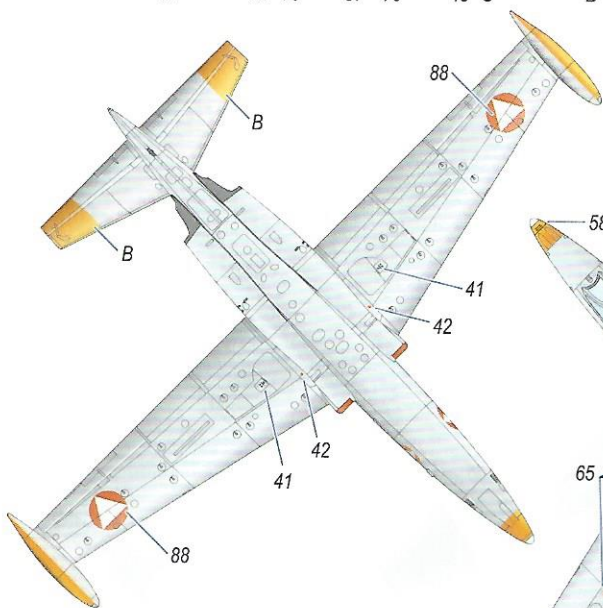
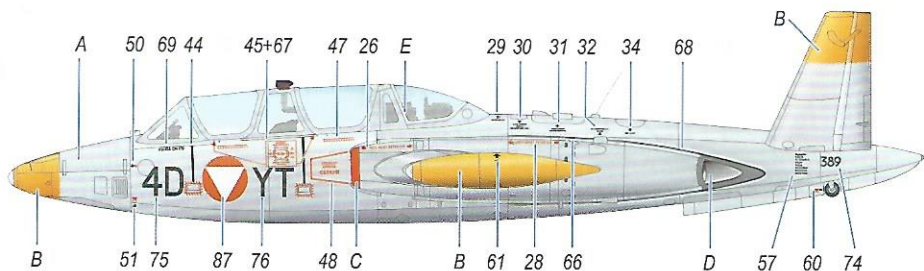
**Special
HOBBY**

SH72373 Fouga CM.170 Magister

Fouga CM.170 Magister, 4D-YT, výr.č. 389, rakouské letectvo, Graz-Thalerhof. V letech 1966-68, tato a tři další Fougy sloužily v akrobatickém display teamu Silver Birds.

Fouga CM.170 Magister, 4D-YT, sn. 389, Österreichische Luftstreitkräfte (Austrian Air Force), Graz-Thalerhof. Between 1966 and 1968, Austrian aerobatic display team Silver Birds operated this and three other Magisters as display mounts.

CAMO. C



- A hliník Aluminium H/C08
- B Dayglo oranžová Dayglo Orange H/C98
- C červená Red H/C03
- D opálený kov Burnt Iron H76/C61
- E bílá White H11/C62

special
HOBBY