# **Z-526**AFS Akrobat

## eduard

### 1/48 Scale Plastic Model Kit



# **ProfiPACK**

The small and simple sport plane, which was designed three quarters of a century ago is still popular today, and also a first class legend for many. Trener is really multitalent aircraft, as it won numerous aerobatic trophies, trained thousands of pilots, and towed countless gliders to the sky.

It was shortly after the Second World War when the Ministry of National Defense of then Czechoslovakia made a request in 1946 for the development of aircraft for the training of future military pilots. It was to be a type allowing comprehensive pilot training, including aerobatics and with a tandem cockpit arrangement.

The design work was undertaken by a team led by the director of the Zlín Aviation Company Karel Tomáš with further development subsequently taken over by Svatopluk Zámečník and Jiří Navrátil. The new trainer was of mixed construction with a welded tube frame fuselage covered in the middle and rear part with canvas. The wing was all-wood, with canvas cover from the spar to the trailing edge. The tail surfaces were also of wooden/canvas design The landing flaps were electromechanically operated, the brakes were hydraulically operated. A Walter Minor 4-III four-cylinder engine with a maximum output of 77 kW (105 hp) was selected and mated with the wooden propeller of the V-26.

### First changes

Factory pilot Ladislav Šváb flew the first prototype on October 20, 1947, and after design of Mr. Tomáš was preferred over the competing Praga E-112, serial production began in 1949 with the military designation C-5 and the civilian designation Z-26. Within two years, 163 of these aircraft were built, primarily for military training. However, trainers were also supplied to aero clubs, and export machines went to Poland or Romania.

Problems with the wooden wing led to its redesign to an all-metal structure and so were tail surfaces. The hydraulic brakes were replaced by simpler mechanical brakes. Some Z-26 and Z-126 aircraft received an electric starter, but these were later removed to save weight and replaced by a manual starter. In both cases they were flown solo from the front seat.

### The six-cylinder emerges

Thanks to the Trenér, aerobatic training became a common thing in the Czechoslovakia, and it was also shown that this type could be suitable for towing gliders. However, the four-cylinder Minor lacked power, so a six-cylinder Minor 6-III with 118 kW (160 hp) was installed, coupled with a specially designed towing propeller. The longer engine necessitated moving the oil tank from the engine bulkhead to the root of the left wing half, and some weight was saved by removing the instruments and controls in the forward cockpit, where only the seat remained. The electric control of the flaps was also removed and replaced with a mechanical one – a lever on the right side of the rear cockpit. All this created the "workhorse" of the aero clubs of the time, the Z-226B Bohatýr (Hero) tua.

#### **Aerobatics achievements**

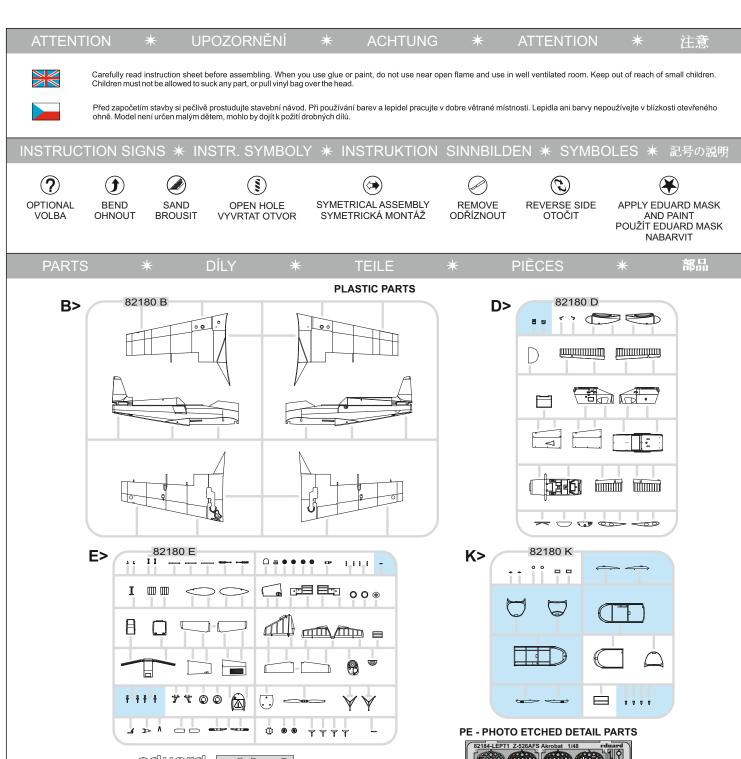
Due to the excellent experience with the Z-226B version, it was decided to build a trainer version, the Z-226T based on the six-cylinder design. In 1956, Jiří Bláha placed second in the unofficial aerobatic world championship, the Lockheed Trophy competition in Coventry, England, with his prototype. Top places for Czechoslovak aerobatic pilots flying Z-226T were guite usual at the time. Even the first official aerobatic world championship in Bratislava in 1960 was a proof of that with Ladislav Bezák becoming first official World Champion.

### This kit: Z-526AFS Akrobat

The history of aerobatic specials of the Z-26 series began on April 16, 1966 with the maiden flight of its first single seater Z-526A (A standing for Akrobat). However, the requirements of aerobatic pilots were higher, so two years later the Z-526AS (Akrobat Special) version was prepared for the World Championships in Germany. The aircraft met the requirements of FAR Part 23 for the Special aerobatic category with a +7/-4.5 g-force load compared to the previous +6/-3 g-force. The flaps were deleted, and the cabin received a new better shaped canopy. The Walter Minor 6-III developing 118 kW (160 hp) was retained. In 1969, the M-337 engine was modified to a fully aerobatic version, the M-137A offering 130 kW (180 hp) of power. It did not take long it was used for aerobatic version as well as for the Z-526 two seaters. All five Z-526AS produced were converted to the Z-526AF version by installing the M-137A into redesigned fuselage (shortened by 18 cm). In an effort to save weight, hydraulic landing gear with a hand pump was installed so the aircraft could fly without a battery and generator. Engine had to be started either by an external power source or manually.

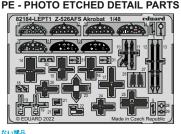
As a brand new type of aerobatic aircraft (which came in 1975 as Z-50L) was still in sight and another aerobatic world championship was being held in 1972, the Z-526AF was further redesigned. On September 25, 1970, the OK-YRA aircraft, converted from the AF version to the AFS, took off. The wingspan was shortened, earning this version its nickname "Kraťas" (translates "Shorty").

The wing received twin ailerons which together with new aerodynamic wing-to-fuselage joint provided further improvements in flight characteristics. Apart of five examples rebuilt from the Z-526AF, the new Z-526AFS examples received the electrically operated landing gear again. All the modifications resulted in a 35% increase in longitudinal axis maneuverability. And athough the Z-526AFS was no match for the top aerobatic specials, it became popular with pilots and 45 were manufactured. A number of successful pilots, such as Petr Jirmus, started their aerobatic career flying Z-526AFS. It also marked the peak of the Box Trenér group in 1982 with pilots Jiří Tlustý, Božej Struž, Antonín Klimenda and Laco Trebatický.





**BARVY** 



**PEINTURE** 

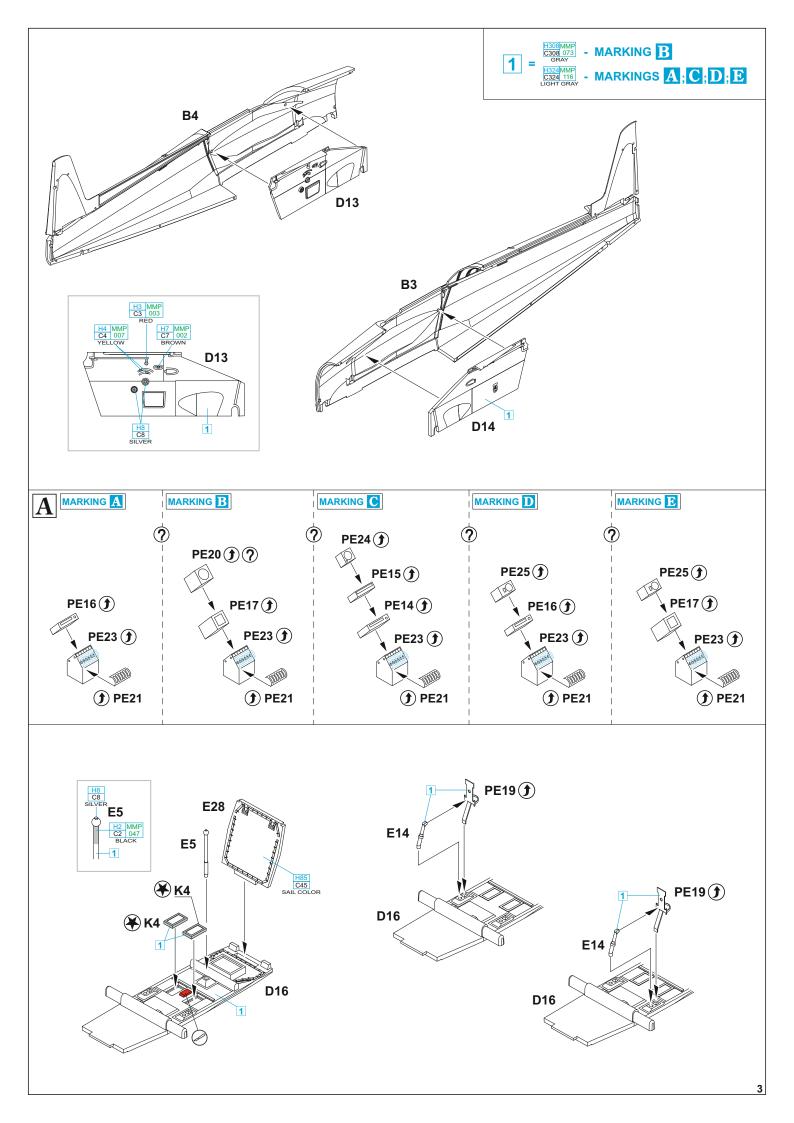
-Parts not for use. -Teile werden nicht verwendet. -Pièces à ne pas utiliser. -Tyto dily nepoužívejte při stavbě. - 使用しない認品

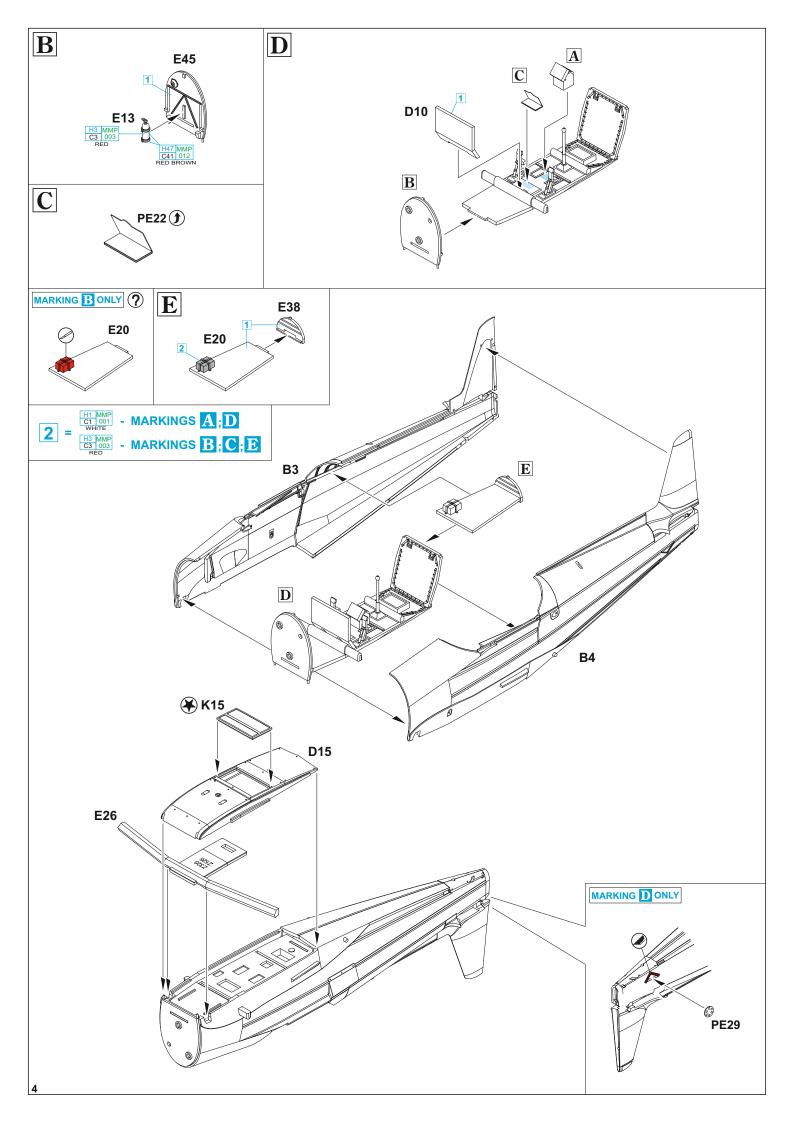
**FARBEN** 

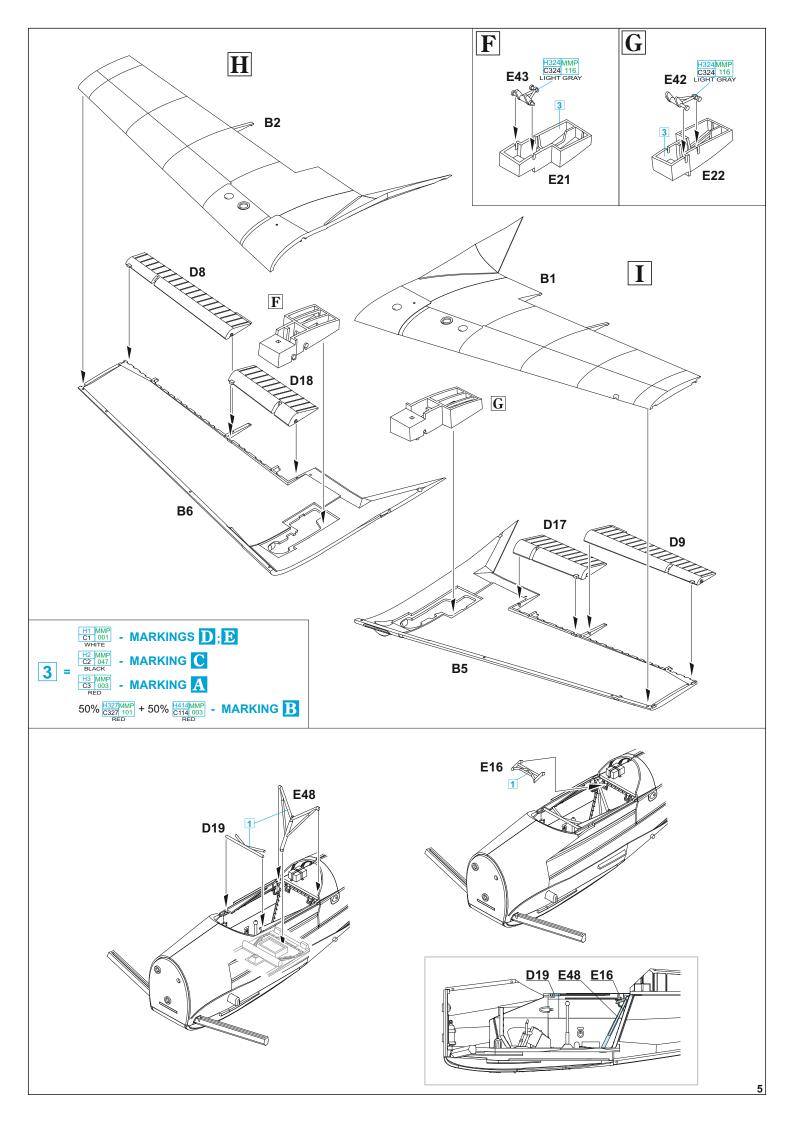
GSi Creos (GUNZE)		MISSION MODELS	
AQUEOUS	Mr.COLOR	PAINTS	
H1	C1	MMP-001	WHITE
H2	C2	MMP-047	BLACK
H3	C3	MMP-003	RED
H4	C4	MMP-007	YELLOW
H7	C7	MMP-002	BROWN
H8	C8		SILVER
H12	C33	MMP-047	FLAT BLACK
H15	C65		BRIGHT BLUE
H25	C34		SKY BLUE
H47	C41	MMP-012	RED BROWN
H77	C137	MMP-040	TIRE BLACK
H85	C45		SAIL COLOR
H90	C47		CLEAR RED
H94	C138		CLEAR GREEN
H308	C308	MMP-073	GRAY

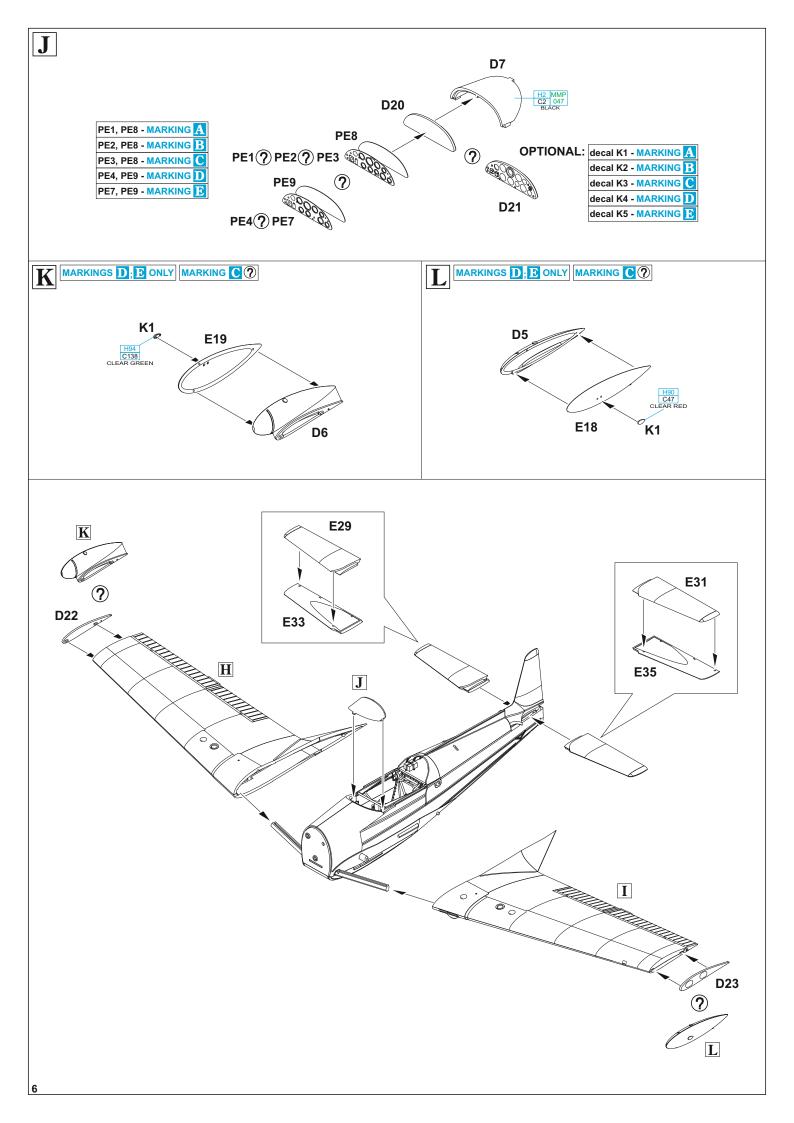
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H310	C310	MMP-060	BROWN
H324	C324	MMP-116	LIGHT GRAY
H327	C327	MMP-101	RED
H329	C329	MMP-041	YELLOW
H331	C331		DARK SEAGRAY
H414	C114	MMP-003	RLM23 RED
H413	C113	MMP-090	RLM04 YELLOW
	C25		DARK SEAGRAY
Mr.METAL COLOR		METALLICS	
MC214		MMM-001	DARK IRON
MC217			GOLD
MC218		MMM-003	ALUMINIUM
Mr.COLOR SUPER METALLIC		METALLICS	
SM201		MMC-001	SUPER FINE SILVER 2

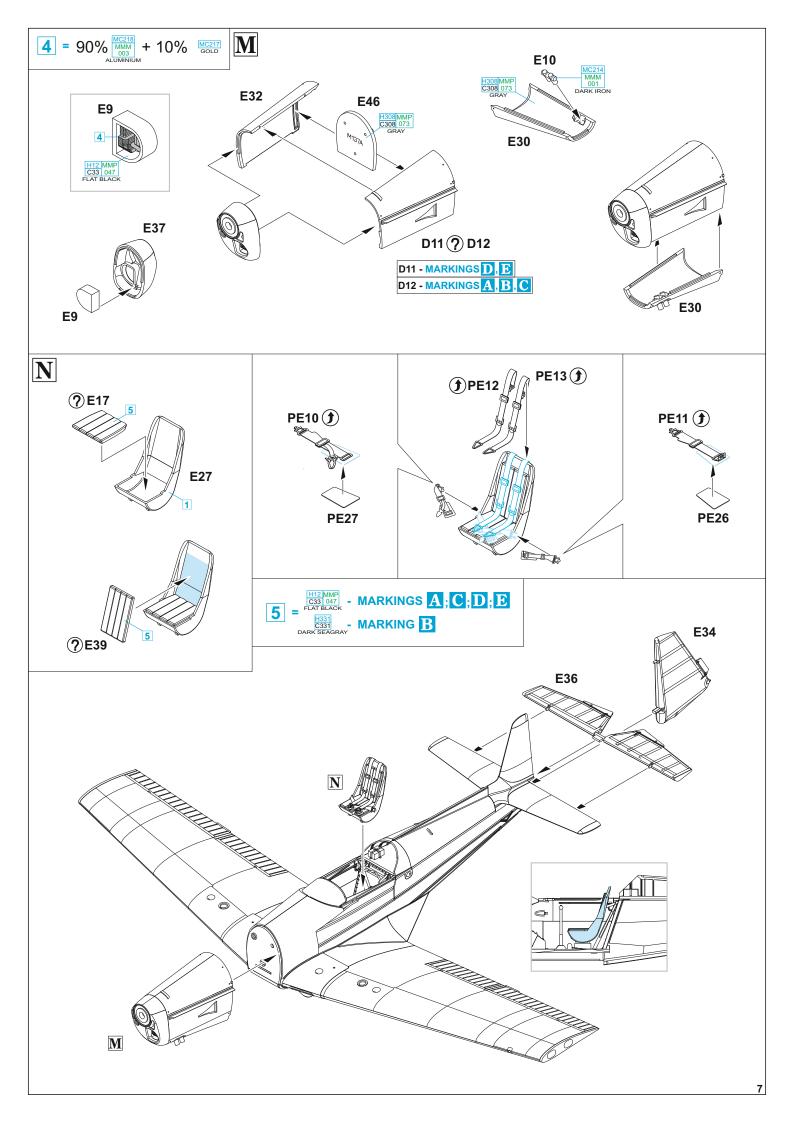
**COLOURS** 

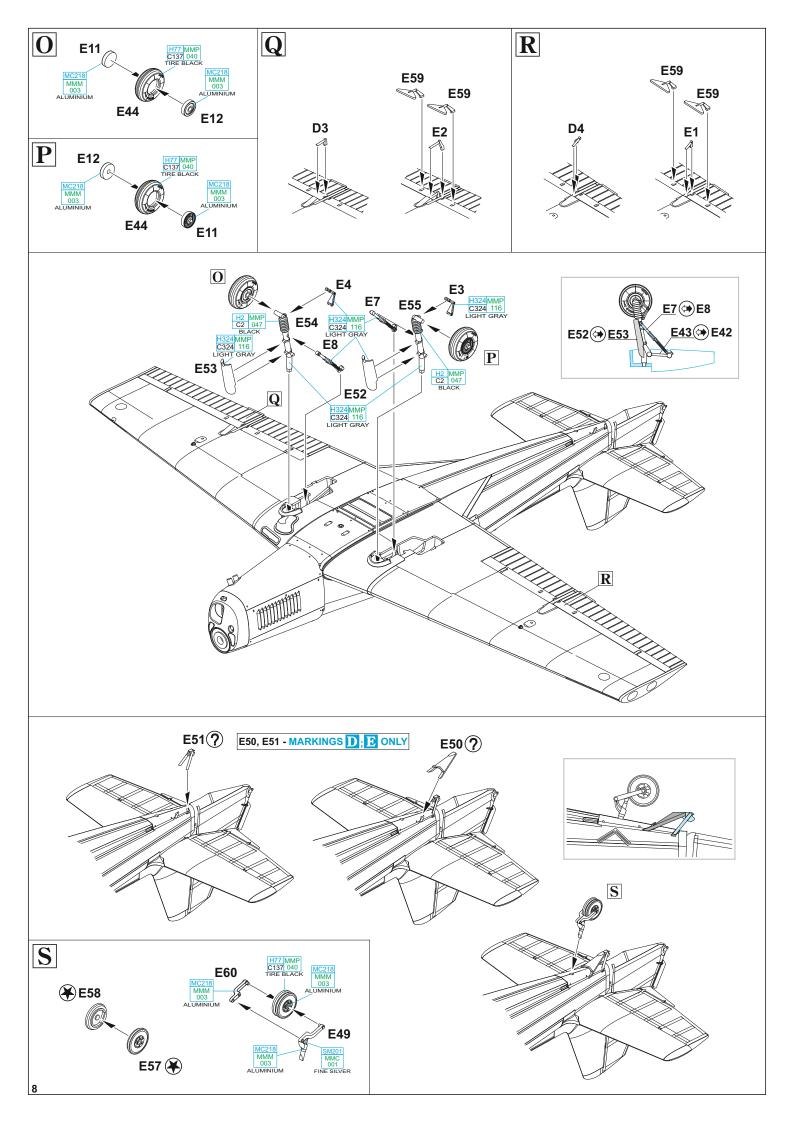


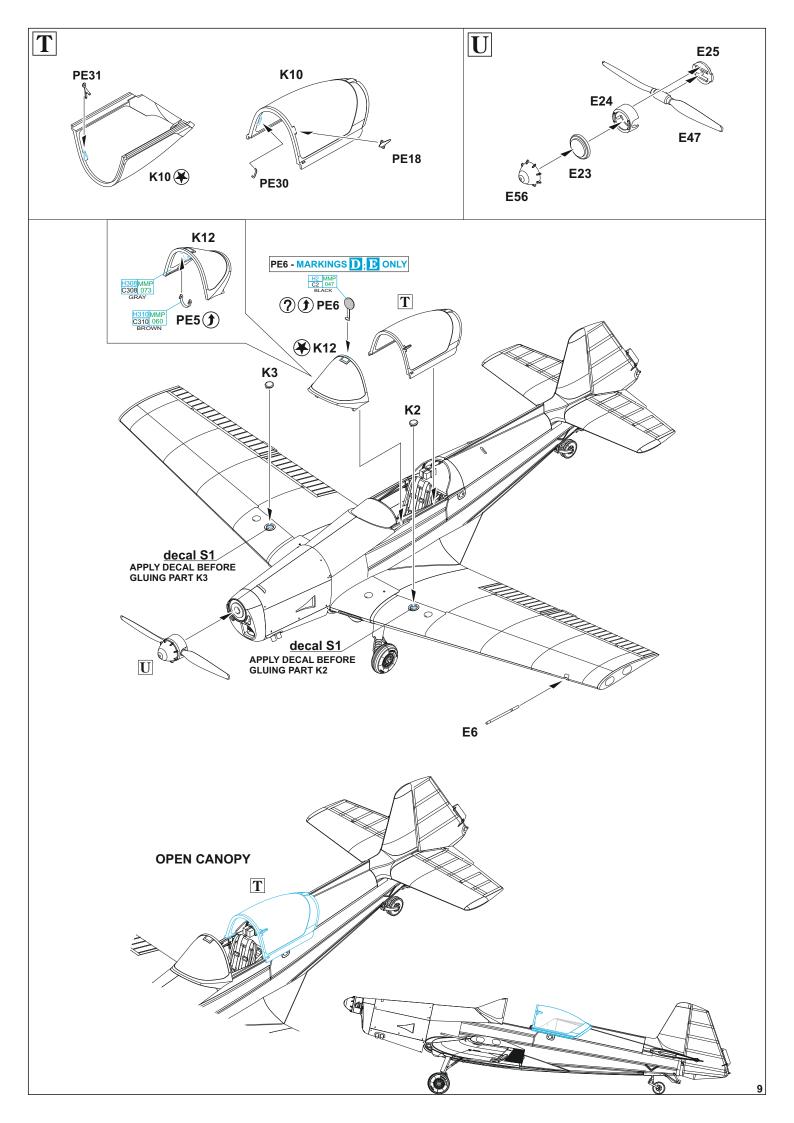




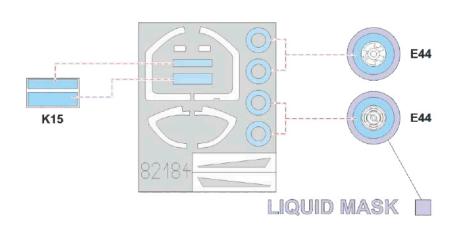


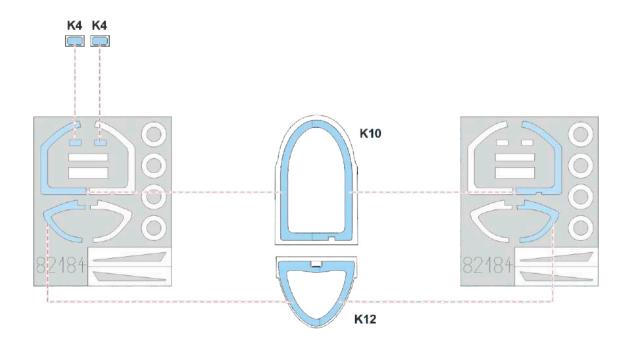


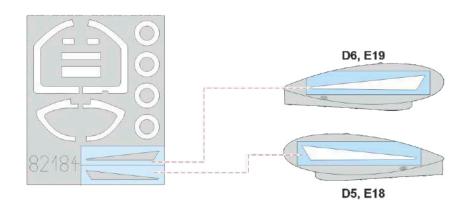


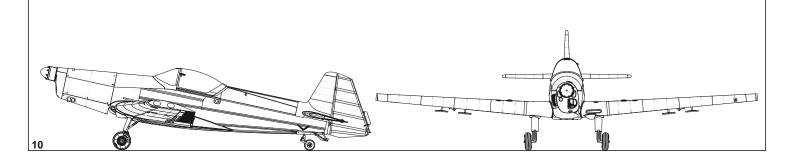






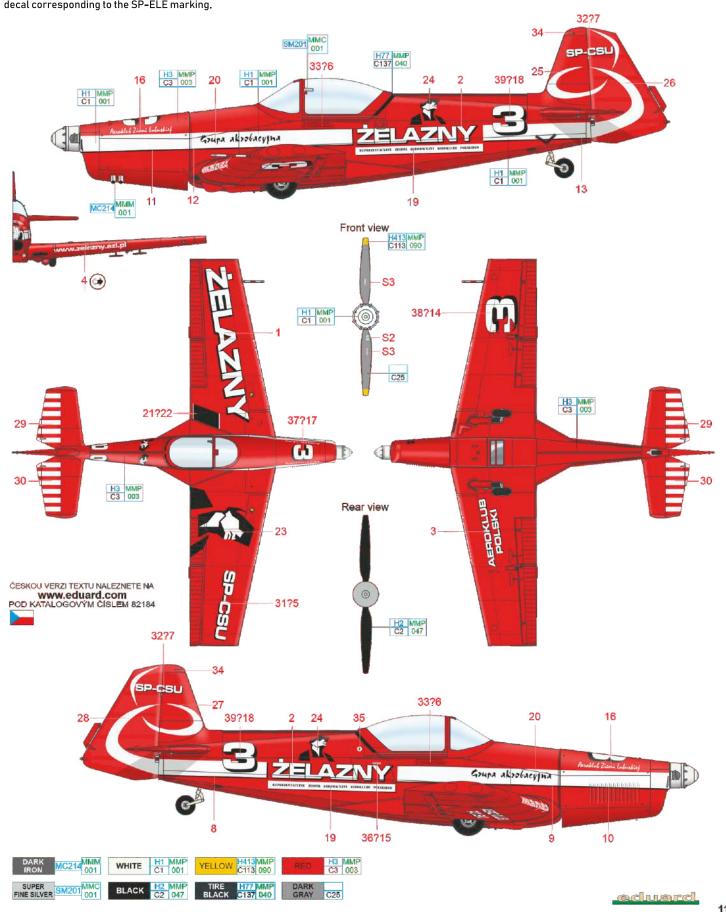






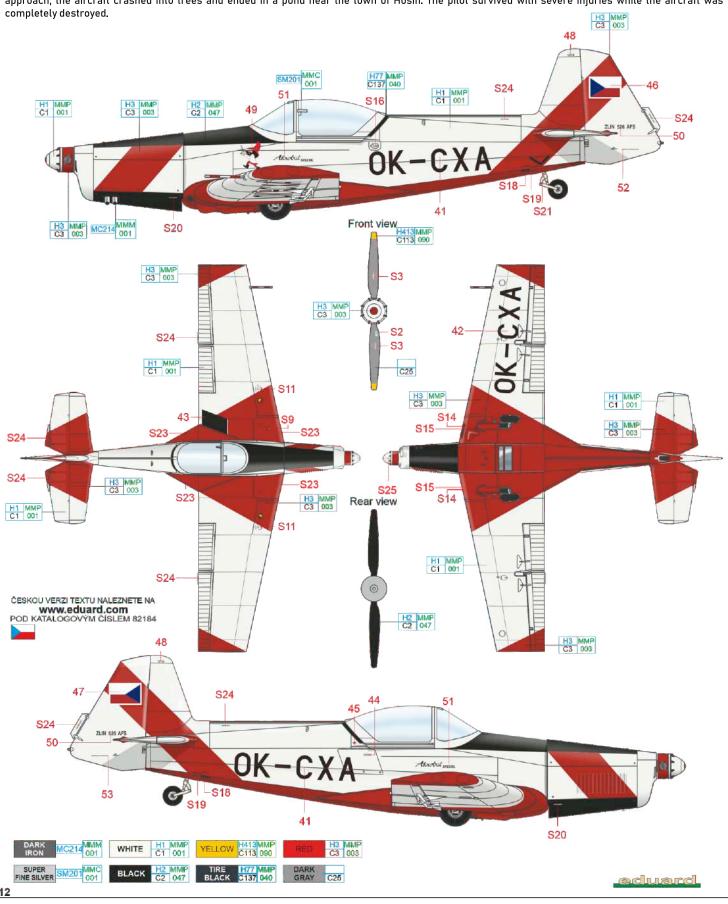
## Z-526AFS, SP-CSU, s/n 1226, Piotr Haberland, Żelazny Aerobatic Group, Zielona Góra airfield, Poland,

In December 1999, an aerobatic group was formed by members of Aero Club Zielona Góra, supported by then-emerging network of hardware stores Zelazny (Iron). In the beginning, the group had a pair of Z-526AFSs and one Z-50LA. In 2001, another plane, Z-526F was added. The pilots of the group amazed the public with their skillful flying at airshows not only in Poland but also in Germany and other countries. In 2004, Lech Marchelewski became leader of the group and three years later the Zelazny began rehearsing a six-planes formation with the debut planned for airshow in Radom. However, on September 1, tragedy struck during the premiere show. Conducting a maneuver called "the rose" aircraft No. 1 (Z-526F, SP-CDF) and No. 2 (Z-526AFS, SP-ELE) collided. Both pilots, retired Colonel Lech Marchelewski and Piotr Bachanowicz, were killed. The second Z-526AFS (SP-CSU) just narrowly missed the crash point... Today the group flies Z-50s, Z-526Fs and EA300 LC/LX and usually flies as formation of four. The decals supplied allow the SP-ELE to be built as an alternative to the SP-CSU. Where the question mark appears, it indicates option and the second number always belongs to the decal corresponding to the SP-ELE marking.



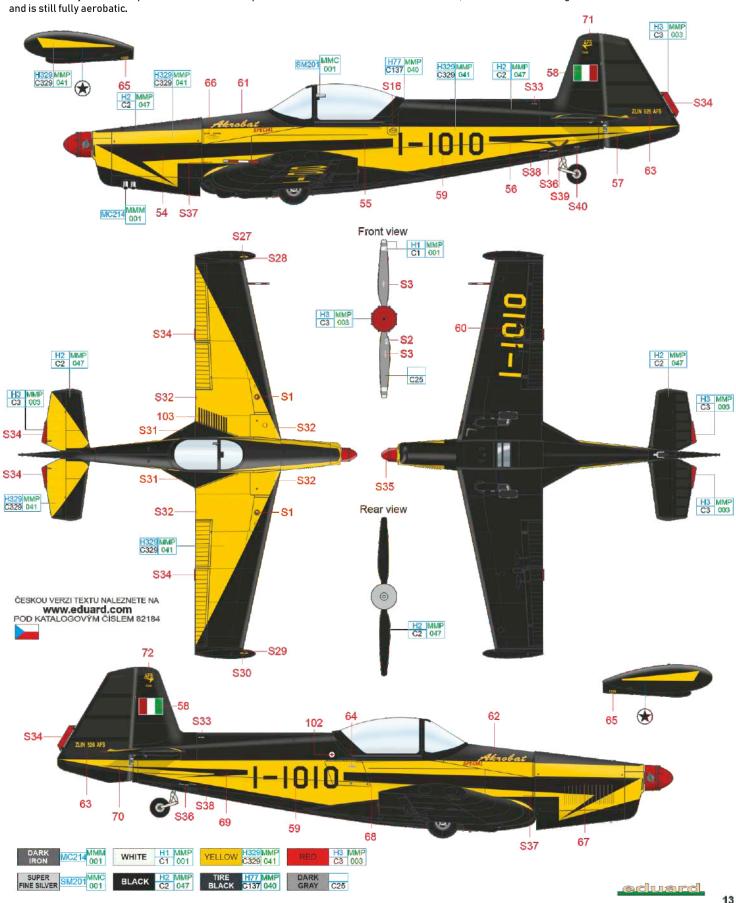
### Z-526AFS, OK-CXA, v. č. 1218, Jiří Kobrle, Jičín Aero Club, Czechoslovakia, 1975

This simple red and white livery was standard on the Z-526AFS, however aircraft manufactured in 1972 received a modified design, as the color fields on the wing undersurfaces were no longer distributed inversely to the upper side ones, but symmetrically. The aircraft was operated for many years by the Jičín Aero Club, where it was flown by "Sir" Jiří Kobrle, a successful aerobatic and test pilot, international aerobatics judge, publicist and long-time representative of Czechoslovakia and Czech Republic in the FAI aerobatics commission. He won the national championship in 1969 and was a member of the European Championships winning team in Esbjerg, Denmark, in 1975. The OK-CXA was given a "Rumcajs" fairy tale cartoon character drawing on the fuselage. In this form, she participated in the 1975 National Championships, for example. In 1977, the first overhaul was carried out in Trenčín, while the second, completed in May 1984, converted the OK-CXA to the Normal category as modified AFS-V version. She was also given a new blue and white livery and moved to the Aero Club of South Bohemian district. She was mostly flown by Hosín Aero Club and transferred to the ownership of the Aero Club České Budějovice in 1993. In March 1997, the CXA received a new white paint, which was complemented by "rainbow" stripes. On May 8, 2012, when on landing approach, the aircraft crashed into trees and ended in a pond near the town of Hosín. The pilot survived with severe injuries while the aircraft was completely destroyed.



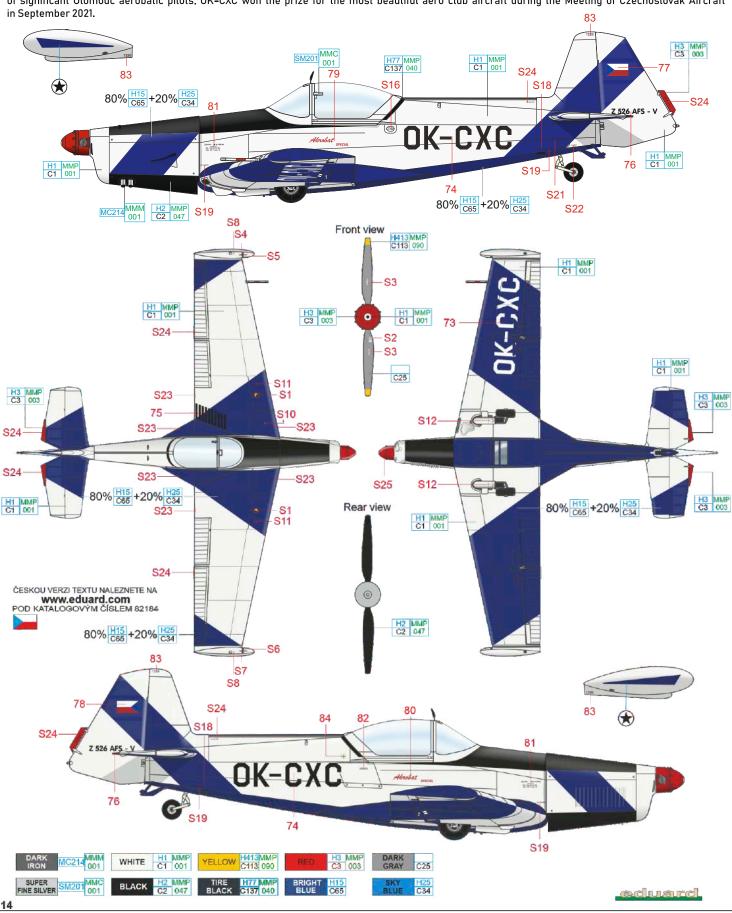
## C Z-526AFS, I-1010, s/n 1330, Silvio Bellei, Sassuolo airfield, Italy, 1994

This aircraft was produced in 1974 and it was the last of the Z-526AFS line. She was stored after the test flight on April 30, 1974, waiting for her buyer for two years. On May 26, 1977, she was flown to the new home in Parma by the famous Italian aerobatic pilot Valenti. Two years later, however, the I-I0IO changed hands. She was bought by Dr. Silvio Bellei, founder of the ceramics manufacturer NovaBell, long-time president of the Sassuolo Aero Club and a respected and renowned businessman and pilot. "Signor Bellei", as the people regularly called him, was awarded the Paul Tissandier Diploma by the International Aeronautical Federation for his aviation merit by the way. His aircraft was based at Sassuolo airfield near Modena until Dr. Bellei passed away (May 22, 2021, at the age of 84). The I-I0IO had one happy-ending accident when the pilot decided to make a landing without conducting the regular pattern after aerobatics flight. Unfortunately, he landed literally on the ridge of Partenavia Oscar, which was on her final in the moment. Nobody was hurt, but the I-I0IO had to be craned from the back of the Oscar and repaired. The last overhaul of I-I0IO was carried out by ZLÍN-AVION service company in 1993. She was check-flown by renowned pilot Vladimír Peroutka prior to her return to Sassuolo. Since then, she had been serving to the satisfaction of her owner and is still fully aerobatic.



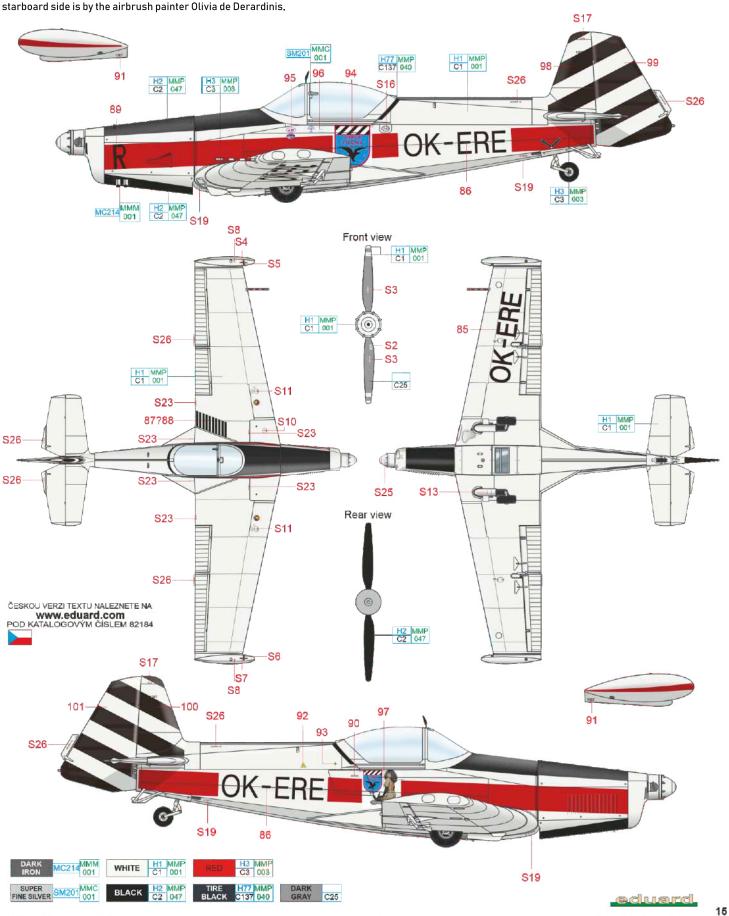
### Z-526AFS-V, OK-CXC, s/n 1220, Olomouc Aero Club, Czech Republic, 2011

This aircraft was manufactured at the beginning of 1972 and on March 7 was taken over by Svazarm organization together with OK-CXA, CXB and CXD aircraft of the same type. She was given a special paint job in her glory days, which was perhaps intended to be a gold metallic, however due to the shade used the aircraft was nicknamed "Brownie". OK-CXC was closely tied with aerobatic pilot Václav Šmíd, who saved her after engine failure by conducting emergency landing from a very "unpromising" position at the World Championships in Salon-de-Provence. When the time limit for aerobatics was depleted, she was converted by Aerotechnik Kunovice into a tow version with typical blue and white livery for these aircraft applied. For some time, she served with the Silesian Aero Club Zábřeh. Around 1994 she was acquired by the Aero Club Olomouc, which still operates her today. In 2012, OK-CXC belly landed in Bohuňovice, after pilot's omission to extend landing gear. She underwent overhaul in Otrokovice at ZLÍN-AVION service. Since then, she carries new livery (although blue and white again), which was last modified in spring 2021. The vertical tail surfaces are now decorated with signatures of significant Olomouc aerobatic pilots. OK-CXC won the prize for the most beautiful aero club aircraft during the Meeting of Czechoslovak Aircraft in September 2021.



### Z-526AFS-V, OK-ERE, s/n 1307, Točná Aero Club, Slaný airfield, Czech Republic, 2014

No. 1307 was manufactured in 1974 and was taken over by Svazarm on December 29 of the same year as its last Z-526AFS. The aircraft served mainly at the Točná airfield, and the local aero club also acquired it later. When the club was forced to move to Slaný airfield (after the purchase of Točná by a private owner), they took OK-ERE with them. This happened at the time she was already converted to the AFS-V tow version after reaching the aerobatic flying hours limit. The conversion was carried out at Aerotechnik Kunovice. In 2013, the OK-ERE was damaged in a failed landing, which ended up in the ditch behind the end of the runway. Another accident occurred during the return from an air meeting in Poland, when the pilot hit the power lines with the rudder and tore it off. During necessary repair, the black stripes disappeared from the rudder. In June 2019 the OK-ERE was sold to private owner, who used the engine for another airplane, and sold her engine-less. New owner plans full overhaul and engine installation. It is certainly worth mentioning that in the days of her aerobatic career OK-ERE served, among others, the later double European aerobatics champion Petr Jirmus. The drawing of the lady on the starboard side is by the airbrush painter Olivia de Derardinis.



## **Eduard** goodies for

# Z-526AFS Akrobat 1/48



