F6F-5N Nightfighter

eduard

1/72 Scale Plastic Model Kit

item No. 7079

ProfiPACK edition

There are a few aircraft of WW2 with such one-sided record in terms of kill-to-loss ratio as the Hellcat. The performance step compared to its predecessor was just enormous ...

Representing another step in the "cat" line of the Grumman aircraft, Hellcat was a unique type right from its beginnings. As the war in the Pacific theatre moved on, it was more and more evident the Hellcat's predecessor, Wildcat, which carried the bulk of the strain of the Pacific air war in 1942 on its shoulders, was inferior to the Mitsubishi Zero. The Zero offered better maneuverability, also the top speed and endurance were better. So the need for an aircraft superior to the A6M was obvious.

With an eye on experience

In fact, Grumman were working on a successor to F4F Wildcat since 1938 (i.e., three years after the Wildcat had been developed), so they did not have to start from scratch when designing the XF6F-1. The original plan to further develop the F4F with more powerful engine was scrapped in order to deliver what Navy and Marine Corps were calling for. To find their real needs, Leroy Grumman and his chief designers Jake Swirbul and Bill Schwendler worked closely with experienced F4F pilots and US Navy Bureau of Aeronautics (BuAer) to develop brand new fighter. There were many inputs from pilots, like a higher position of the cockpit od sloped forward fuselage for better pilot's view. Finally, the design was completely different compared to the Wildcat, with wing position moved from center of the fuselage to its lower part, although still not fully low-wing design.

The "Sto-Wing" folding mechanism allowed for both hydraulic or manual folding. Folded position of the outer parts of the wing was parallel to the fuselage with the leading edges pointing down. Instead of the Wildcat's fuselage mounted narrow-track main undercarriage operated manually the new fighter was fitted out with robust wide-track hydraulically operated main gear legs, rotating 90° while retracting backwards into the wing.

More power needed

The Wright R-2600 Twin Cyclone 14-cylinder two-row radial 1,700 hp (1,300 kW) engine was originally intended for new carrier-based fighter, but the BuAer directed Grumman to use more powerful 18-cylinder Pratt & Whitney R-2800 Double Wasp 2,000 hp (1,500 kW) engine for second prototype as the engine already proved itself in use with the F4U Corsair.

The change necessitated strengthening the airframe, but the change paid off, as the performance raised significantly. The first prototype with the Cyclone engine flew for the first time on June 26, 1942, the XF6F-3 powered by the Double Wasp made its maiden flight on July 30, 1942. Two months later the first production F6F-3 powered by R-2800-10 engine made its inaugural flight (October 3, 1942) and the type reached its operational readiness with VF-9 on the deck of USS Essex in February 1943.

The name Hellcat was chosen to continue with the habit of "cat fighters" of Grumman design. The name not only suggested the place to which the enemies would be sent, it was also a play on words. The term in the old west referred to barroom brawlers, and that was what the Navy wanted: A tough fighter with hard fists, that could also absorb quite heavy punishment.

The Hellcat was some 60 percent heavier compared to Wildcat, armed with six .50 in (12,7 mm) M2 Browning machine guns in the wing with 400 rounds per gun. It had a more powerful engine, carried more fuel and was generally of a more robust design. It was, after all, over twice as heavy as its main adversary, the A6M Zero. But it was a fighter first and foremost in every sense of the word, designed around the requirements of the pilots to fulfill the combat missions for which it was designed.

Shooting turkeys

The first combat engagement of the enemy occurred on September 1, 1943, when an H8K Emily was sent down in flames by two Hellcats. The advantage over Japanese fighters was well demonstrated by Hellcat pilots on February 16, 1944, when, in the vicinity of Truk, they sent down over 100 Japanese fighters and destroyed more than 150 of them on the ground for the loss of only four own aircraft. Five days later, in the Marianas, a further 160 enemy aircraft were destroyed in the air and on the ground.

Often one-sided nature of combat was emphasized in the battle for the Philippine Sea that culminated on June 19, 1944, in the legendary "Great Marianas Turkey Shoot". There, Hellcat pilots claimed some 350 enemy aircraft destroyed! A further "turkey hunt" took place between October 12 and 14, 1944 over Formosa, now with some 300 of enemy aircraft destroyed for the loss of 27 Hellcats. Although the Hellcat was progressively replaced by its stablemate F4U Corsair, it served in the combat role until the end of the war. Under the designation F Mk.I and Mk.II, Hellcats served with the Royal Navy, notably in the Atlantic and also in the Far East. There were 12,275 Hellcats of all versions produced and for the loss of 270 of them, their pilots claimed 5,156 kills. That accounts for over half of USN and USMC victories during the war!

The kit: F6F-5N Nightfighter

The F6F-5 featured several improvements over the previous F6F-3. The more powerful R-2800-10W engine with water-injection system was the main technical change. The engine cover was slightly reshaped, as it had bulged area around the exhausts below the cooling regulation flaps on F6F-3, while the F6F-5 lacked it. Also, the windshield was different, as the F-6F3 had a rounded plexiglass piece with internally mounted armor glass, while the F6F-5 had the armor glass integrated in the windshield, so it was flat. The side windows behind the cabin were deleted. In addition, the rear fuselage and tail units were strengthened. All of the F6F-5s were capable of carrying one 20-mm M2 cannon in each of the gun bays along with pair of .50 in (12,7 mm) Browning machine guns. But this configuration was used only on F6F-5N night fighters, of which some were armed with for 20-mm cannons. These night fighters were also equipped with the AN/APS-6 radar in the right wing housing.

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 dobre 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 SINNBILDEN ✶ SYMBOLES ✶ 記号の説明

OPTIONAL VOLBA

BEND OHNOUT

SAND BROUSIT

OPEN HOLE VYVRTAT OTVOR

SYMETRICAL ASSEMBLY SYMETRICKÁ MONTÁŽ

REMOVE ODŘÍZNOUT

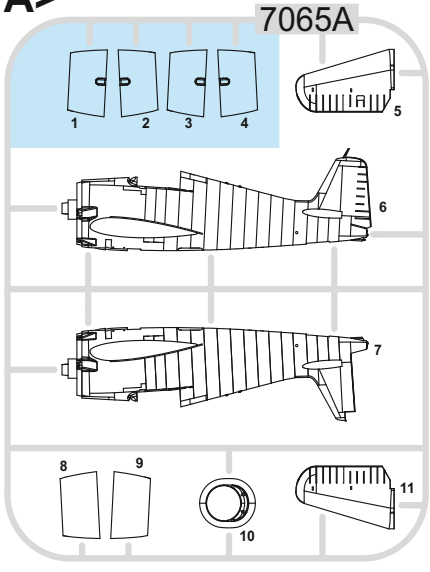
REVERSE SIDE OTOČIT

APPLY EDUARD MASK AND PAINT POUŽÍT EDUARD MASK NABARVIT

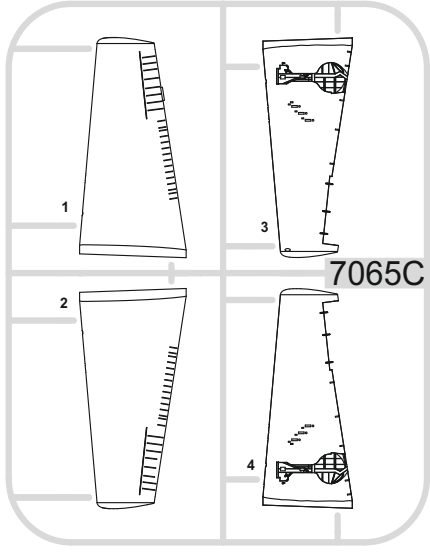
PARTS ✶ DÍLY ✶ TEILE ✶ PIÈCES ✶ 部品

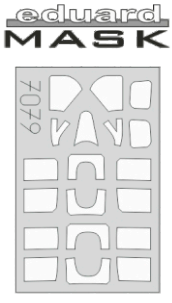
PLASTIC PARTS

A>

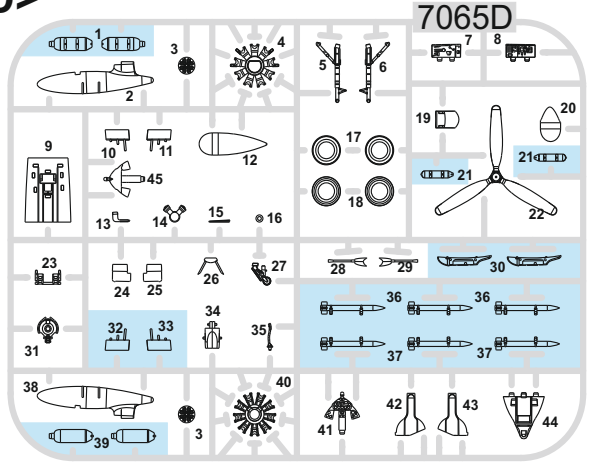


C>

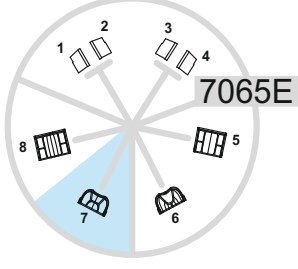




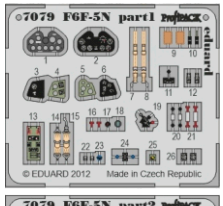
D>



E>



PE - PHOTO ETCHED DETAIL PARTS



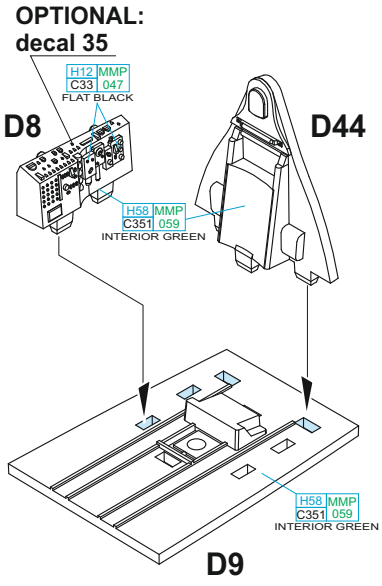
-Parts not for use. -Teile werden nicht verwendet. -Pieces a ne pas`utiliser.`-Tyto díly nepoužívejte při stavbě. -

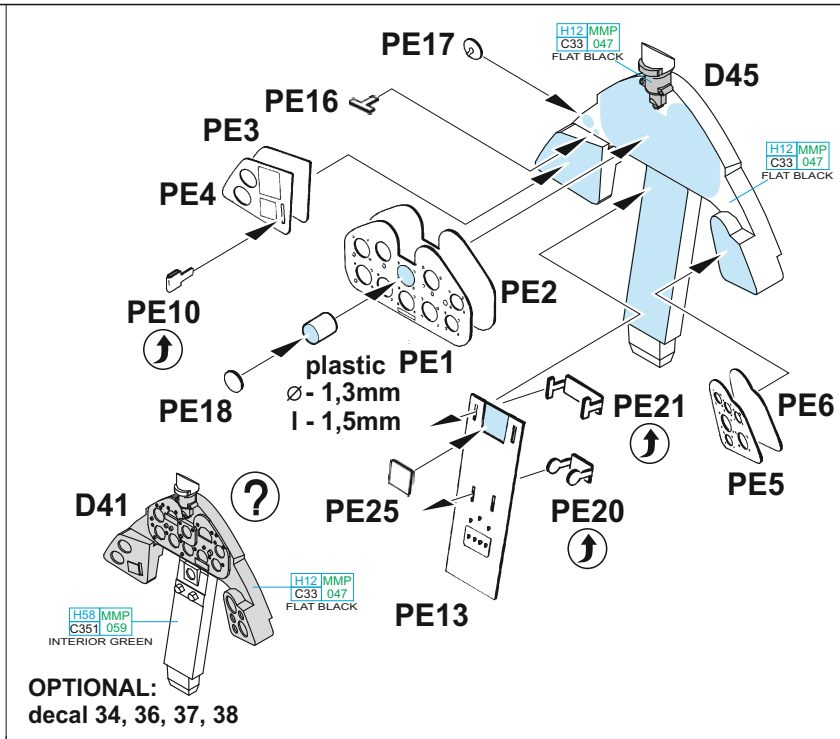
使用しない部品

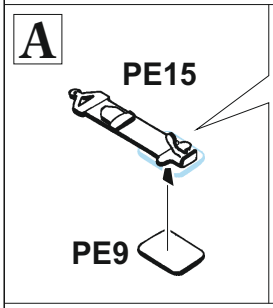
COLOURS ✶ BARVY ✶ FARBEN ✶ PEINTURE ✶ 色

GSi Creos (GUNZE)		MISSION MODELS	
AQUEOUS	Mr.COLOR	PAINTS	
H12	C33	MMP-047	FLAT BLACK
H13	C3	MMP-003	FLAT RED
H52	C12	MMP-091	OLIVE DRAB
H54	C365	MMP-065	NAVY BLUE
H58	C351	MMP-059	INTERIOR GREEN
H77	C137	MMP-040	TIRE BLACK
H306	C306	MMP-118	MEDIUM GRAY

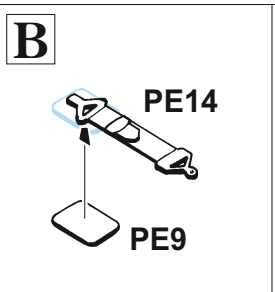
GSi Creos (GUNZE)		MISSION MODELS	
AQUEOUS	Mr.COLOR	PAINTS	
H316	C316	MMP-104	WHITE
H325	C325	MMP-063	GRAY
H329	C329	MMP-041	YELLOW
	C344		RUST
Mr.METAL COLOR		METALLICS	
MC214		MMM-001	DARK IRON
MC218		MMM-003	ALUMINIUM

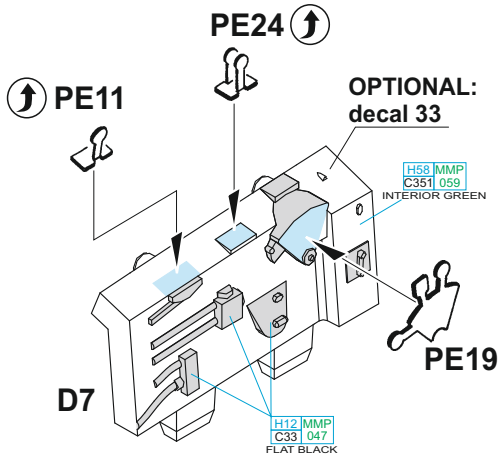

OPTIONAL:
decal 35
H12 MMP C33 047 FLAT BLACK
D8
D44
H58 MMP C351 059 INTERIOR GREEN
H58 MMP C351 059 INTERIOR GREEN
D9

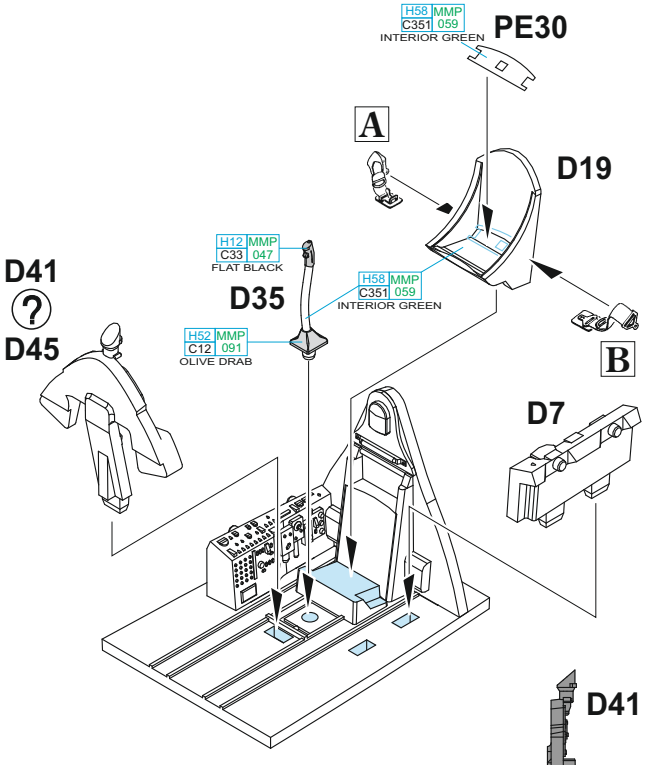

PE17
H12 MMP C33 047 FLAT BLACK
D45
PE16
PE3
PE4
H12 MMP C33 047 FLAT BLACK
PE2
PE10
PE18
plastic
⌀ - 1,3mm
l - 1,5mm
PE1
PE21
PE6
PE5
PE25
PE20
PE13
D41
H12 MMP C33 047 FLAT BLACK
H58 MMP C351 059 INTERIOR GREEN
OPTIONAL:
decal 34, 36, 37, 38

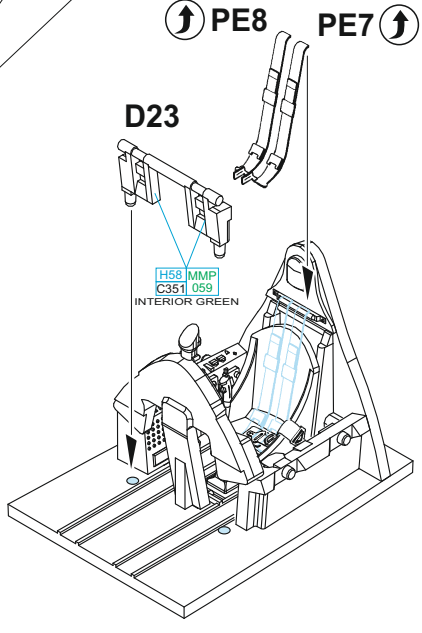

A
PE15
PE9

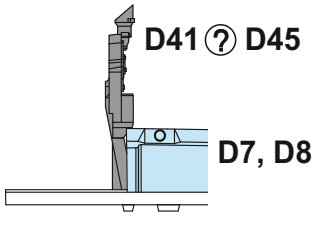

PE15

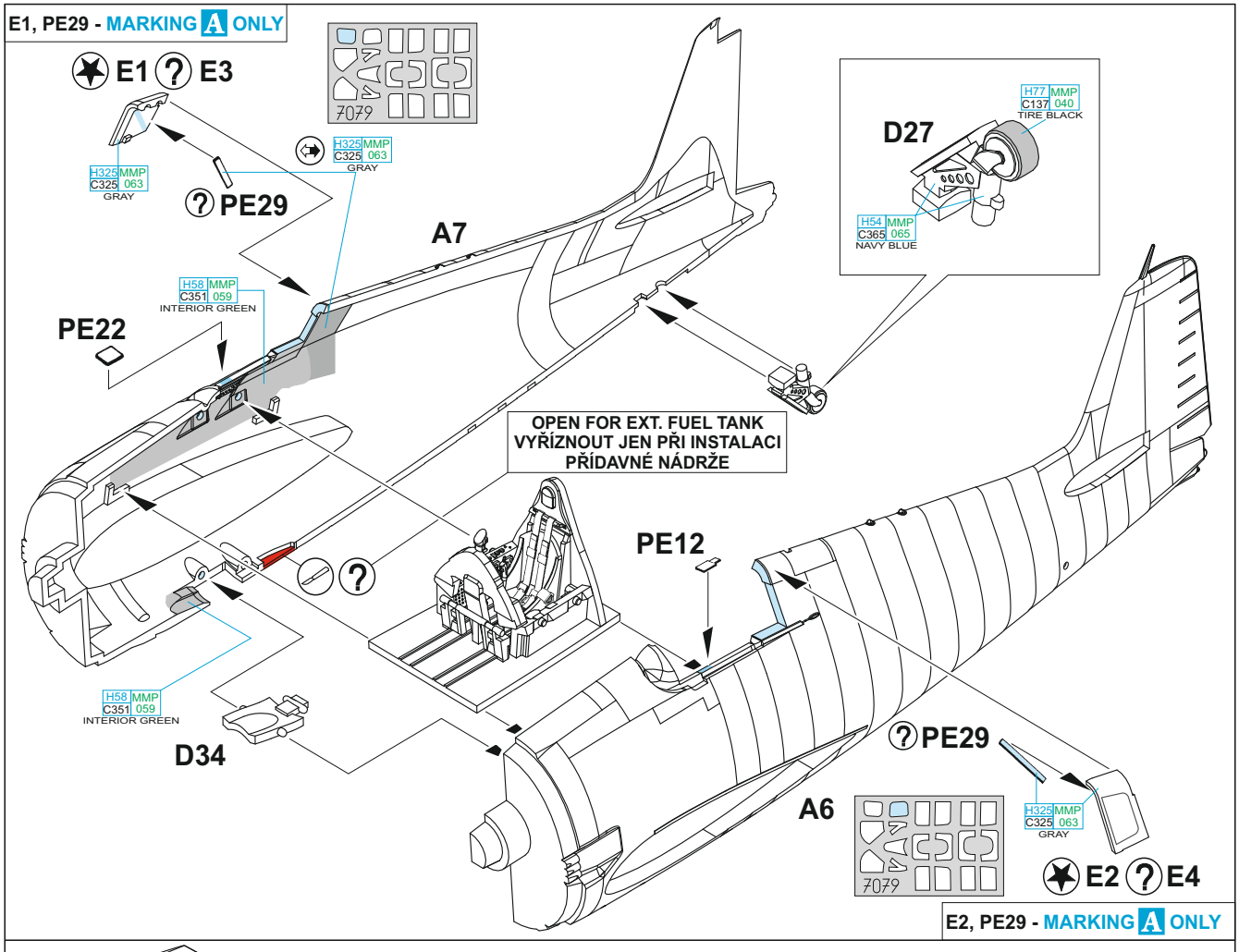

B
PE14
PE9

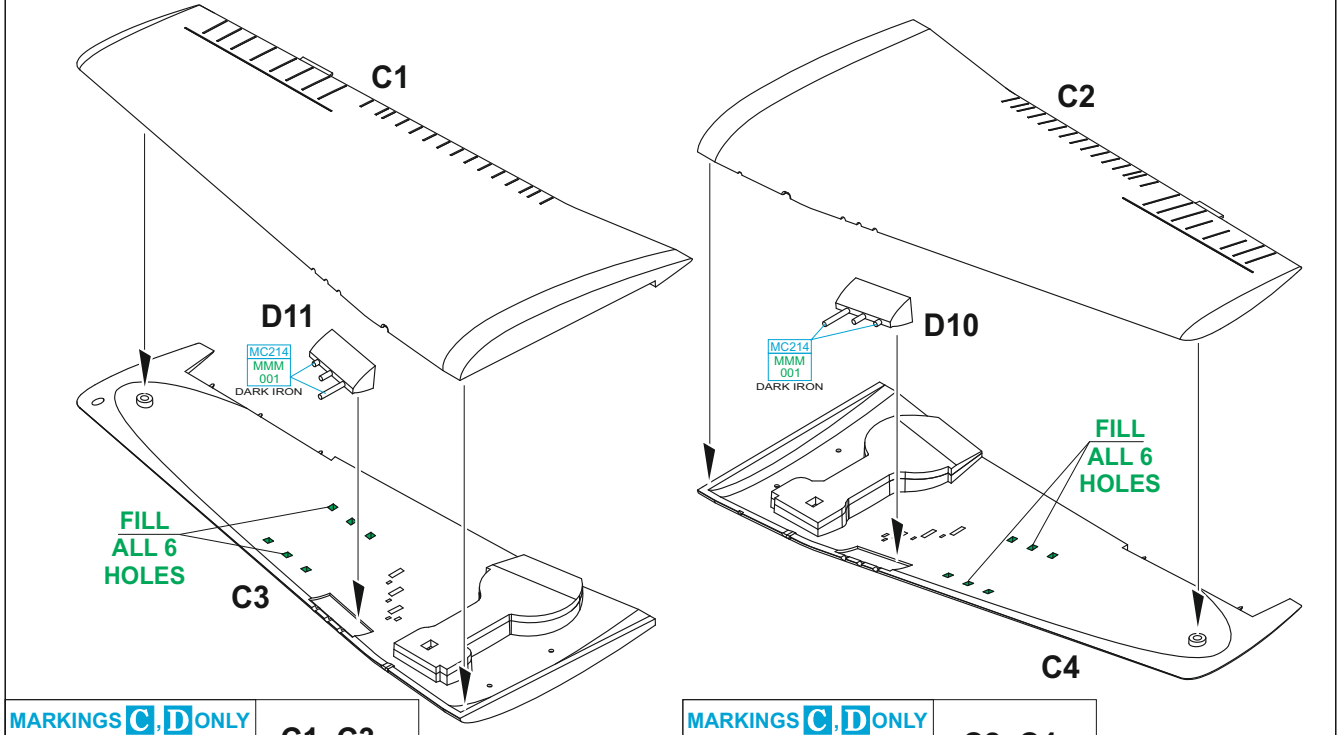

PE24
PE11
OPTIONAL:
decal 33
H58 MMP C351 059 INTERIOR GREEN
PE19
D7
H12 MMP C33 047 FLAT BLACK

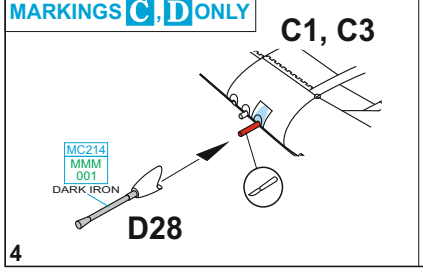

H58 MMP C351 059 INTERIOR GREEN
PE30
A
D19
H12 MMP C33 047 FLAT BLACK
D41
D35
H58 MMP C351 059 INTERIOR GREEN
D45
H52 MMP C12 091 OLIVE DRAB
B
D7

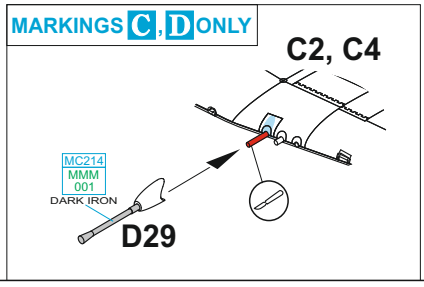

PE8
PE7
D23
H58 MMP C351 059 INTERIOR GREEN

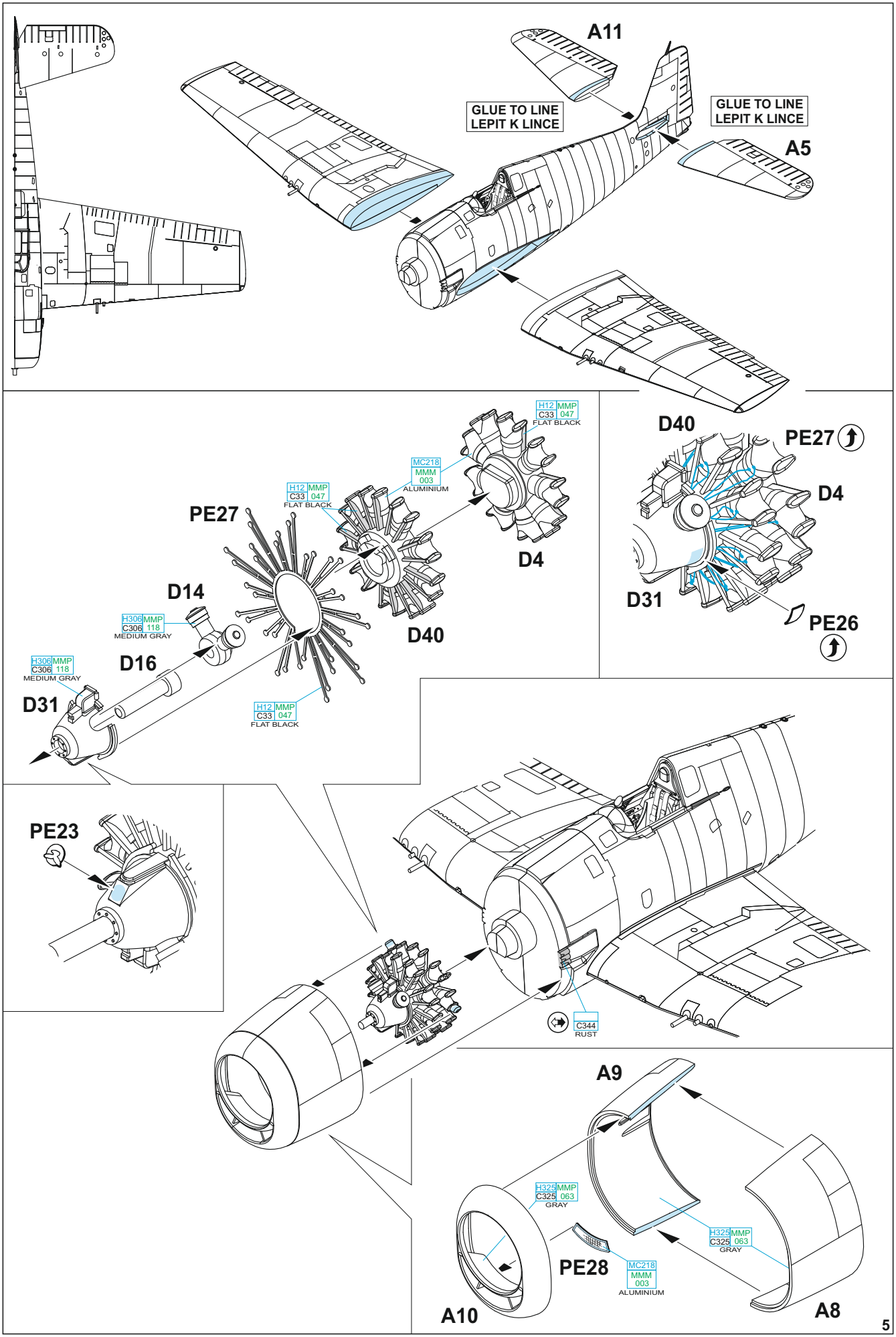

D41
D45
D7, D8

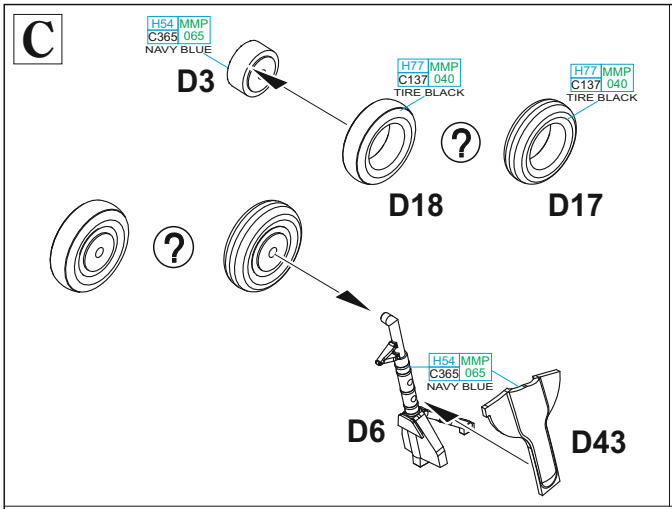

E1, PE29 - MARKING A ONLY
E1
E3
7079
H325 MMP C325 063 GRAY
H325 MMP C325 063 GRAY
PE29
A7
H58 MMP C351 059 INTERIOR GREEN
PE22
D27
H77 MMP C137 040 TIRE BLACK
H54 MMP C365 065 NAVY BLUE
OPEN FOR EXT. FUEL TANK
VYŘÍZNOUT JEN PŘI INSTALACI
PŘÍDAVNÉ NÁDRŽE
PE12
H58 MMP C351 059 INTERIOR GREEN
D34
PE29
A6
H325 MMP C325 063 GRAY
7079
E2
E4
E2, PE29 - MARKING A ONLY

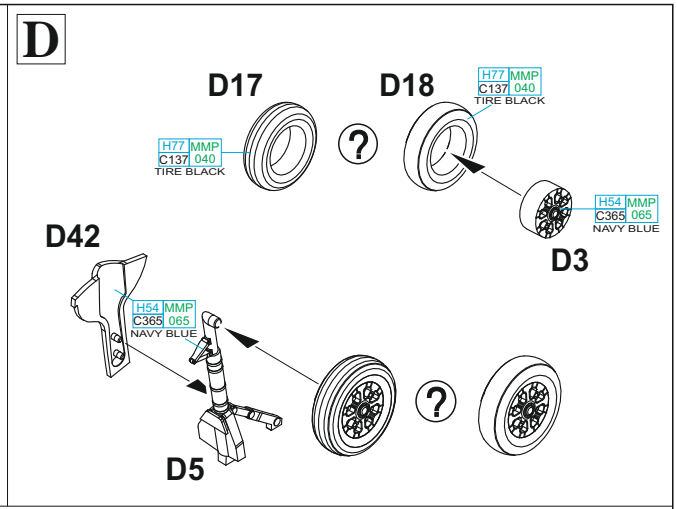

C1
D11
MC214 MMM 001 DARK IRON
FILL ALL 6 HOLES
C3
C2
D10
MC214 MMM 001 DARK IRON
FILL ALL 6 HOLES
C4

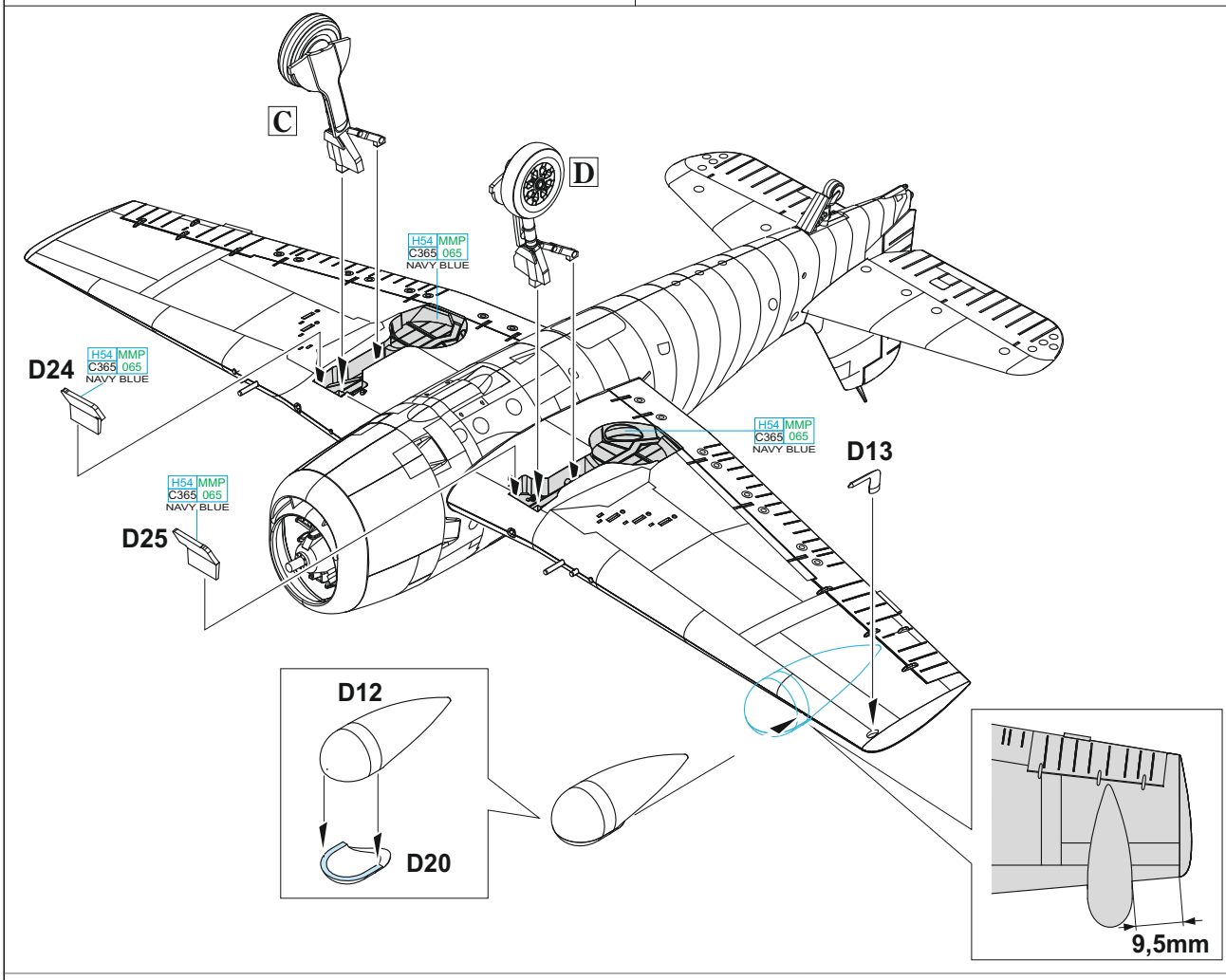

MARKINGS C, D ONLY
C1, C3
MC214 MMM 001 DARK IRON
D28

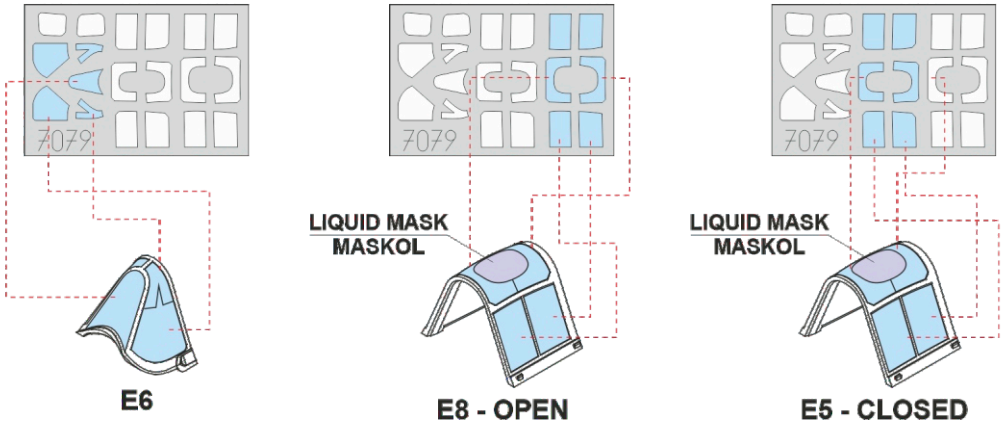

MARKINGS C, D ONLY
C2, C4
MC214 MMM 001 DARK IRON
D29

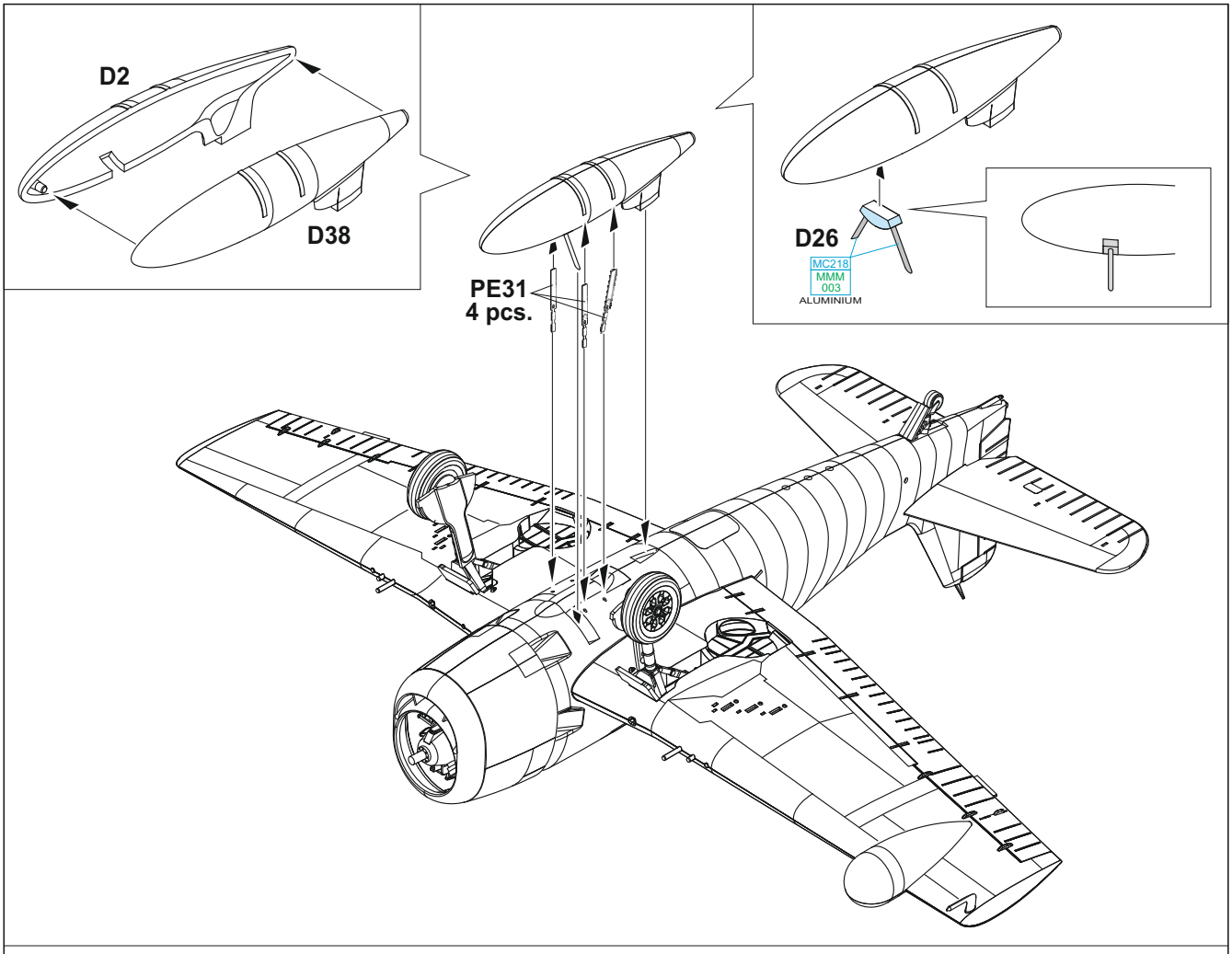

A11
GLUE TO LINE
LEPIT K LINCE
GLUE TO LINE
LEPIT K LINCE
A5
H12 MMP C33 047 FLAT BLACK
MC218 MMM 003 ALUMINIUM
H12 MMP C33 047 FLAT BLACK
PE27
D14
H306 MMP C306 118 MEDIUM GRAY
D16
H306 MMP C306 118 MEDIUM GRAY
D31
H12 MMP C33 047 FLAT BLACK
D4
D40
D40
PE27
D4
D31
PE26
PE23
C344 RUST
A9
H325 MMP C325 063 GRAY
PE28
MC218 MMM 003 ALUMINIUM
H325 MMP C325 063 GRAY
A10
A8

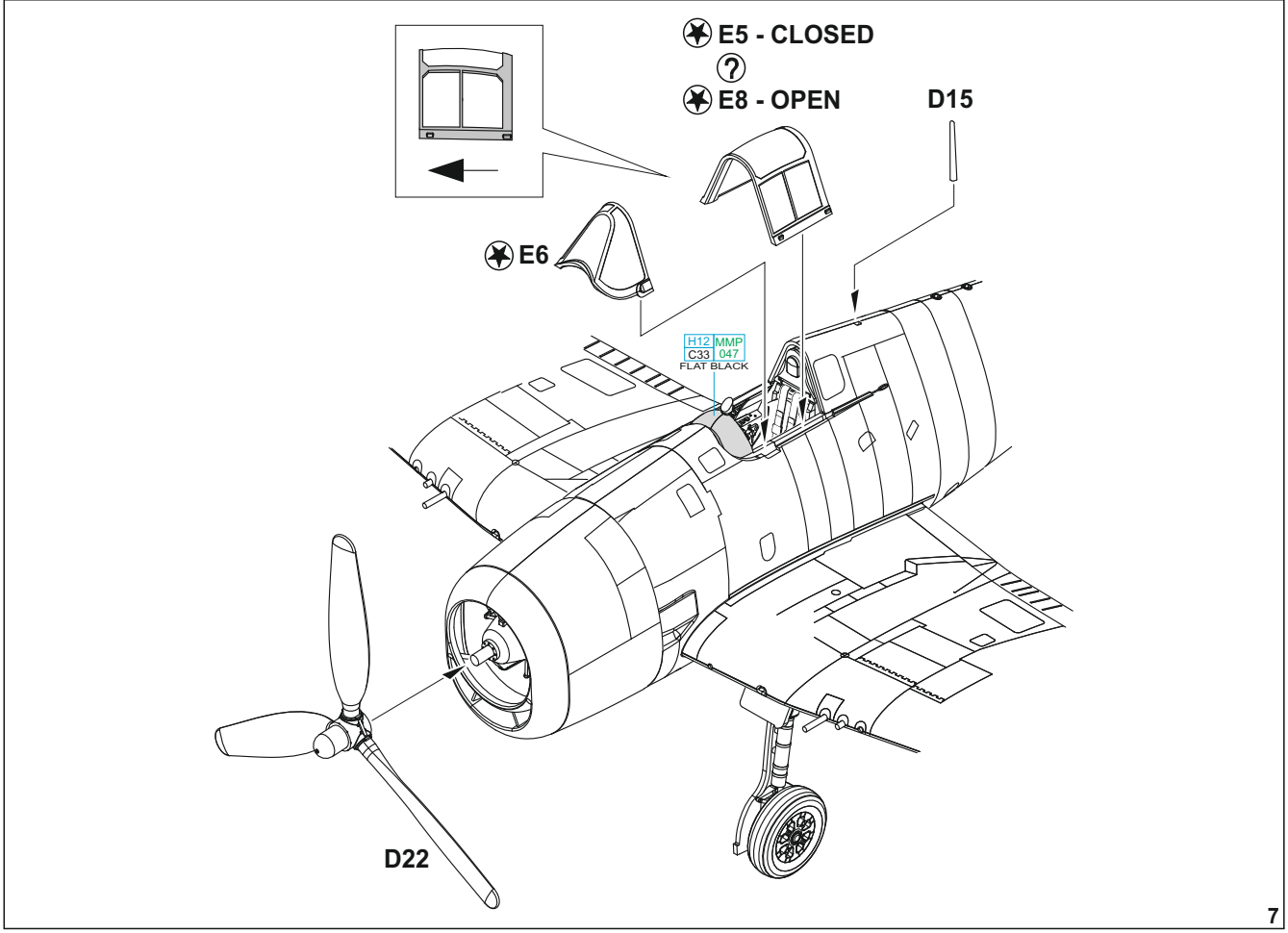

C
H54 MMP C365 065 NAVY BLUE
D3
H77 MMP C137 040 TIRE BLACK
D18
H77 MMP C137 040 TIRE BLACK
D17
?
?
H54 MMP C365 065 NAVY BLUE
D6
D43


D
D17
H77 MMP C137 040 TIRE BLACK
D18
H77 MMP C137 040 TIRE BLACK
?
H54 MMP C365 065 NAVY BLUE
D3
D42
H54 MMP C365 065 NAVY BLUE
D5
?


C
D
H54 MMP C365 065 NAVY BLUE
D24
H54 MMP C365 065 NAVY BLUE
H54 MMP C365 065 NAVY BLUE
D25
H54 MMP C365 065 NAVY BLUE
D13
D12
D20
9,5mm

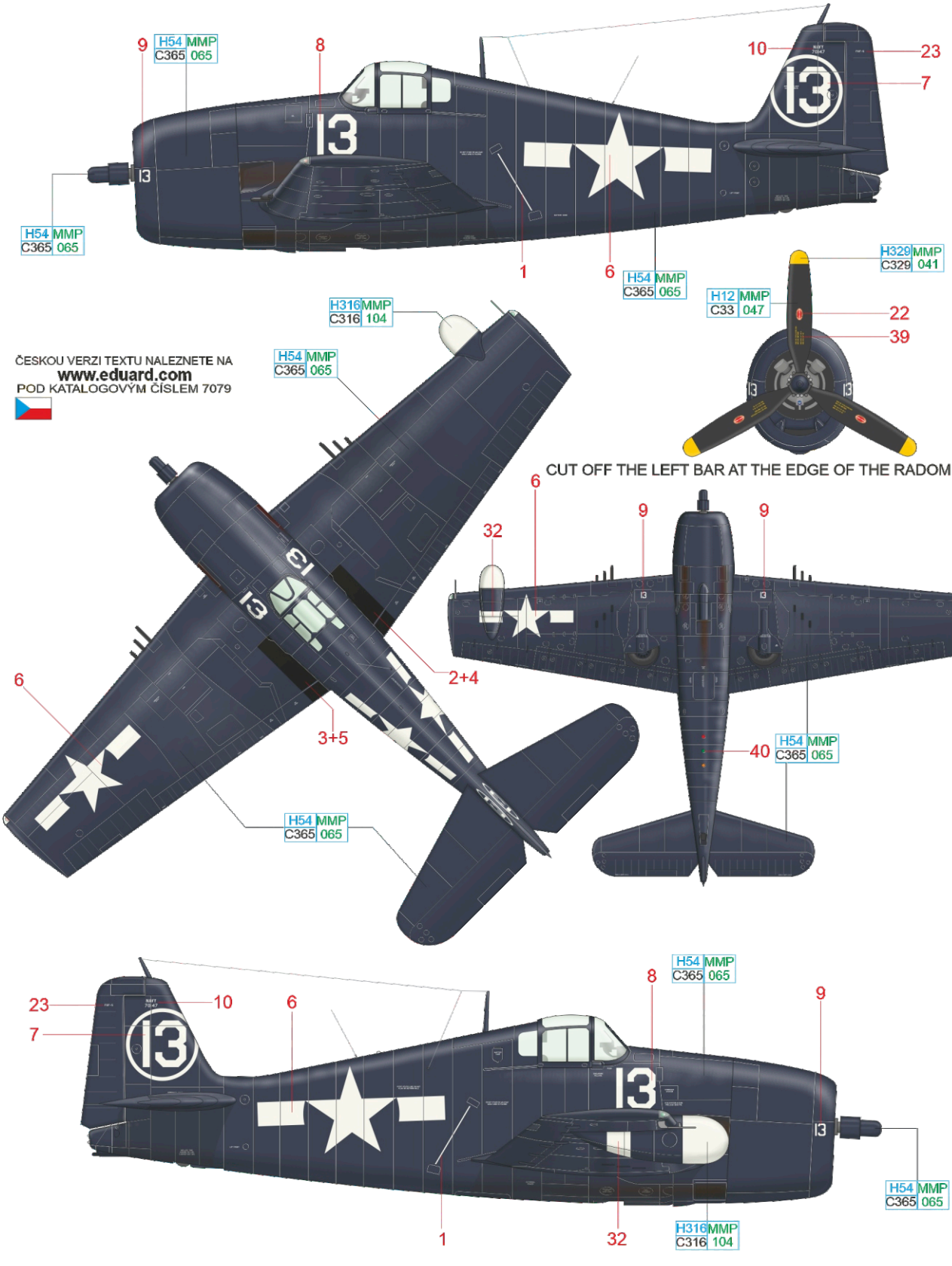

7079
E6
7079
LIQUID MASK
MASKOL
E8 - OPEN
7079
LIQUID MASK
MASKOL
E5 - CLOSED


D2
D38
PE31
4 pcs.
D26
MC218
MMM
003
ALUMINIUM


E5 - CLOSED
?
E8 - OPEN
D15
E6
H12
C33
MMP
047
FLAT BLACK
D22

A F6F-5N, Lt. William E. Henry, VF(N)-41, USS Independence (CVL-22), September 1944

This aircraft was flown by Lt. William E. „Bill“ Henry, the most successful night fighter ace within US Navy. He was credited with 9.5 kills achieved during the period from September 1944 to January 1945. Three of his victims were four engine “Emily” flying boats. This F6F-5N was sprayed Glossy Sea Blue color and represents the standard late-war Navy camouflage scheme. The markings and the radar cover were painted white.



WHITE	H316 MMP C316 104	YELLOW	H329 MMP C329 041	NAVY BLUE	H54 MMP C365 065	BLACK	H12 MMP C33 047

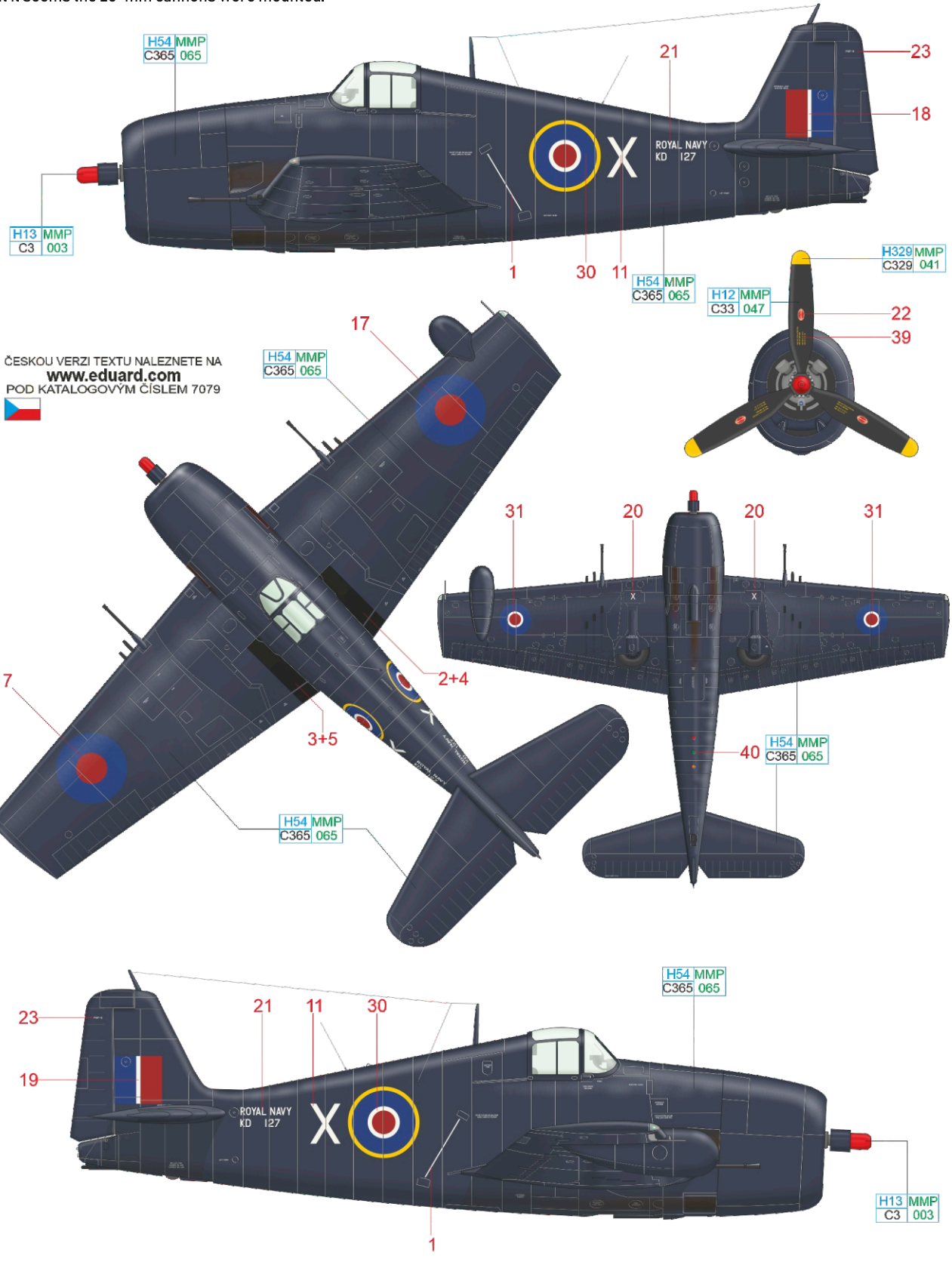
B F6F-5N, VMF-511, USS Block Island (CVE-106), April 1945

The first aircraft carrier to have a US Marine Corps night fighter unit on board was USS Block Island (CVE-106). VMF-511 embarked on Block Island in March 1945, and was a mixed group of eight Corsairs, two photo-reconnaissance F6F-5P Hellcats and eight F6F-5N Hellcat night fighters. The squadron joined the Okinawa battle on May 10, 1945 and was consequently sent to the eastern coast of Borneo to support landing operations at Balikpapan. The first and only success came on July 3, 1945, when 1st Lt. Bruce Reuter shot down an E13A "Jake" floatplane. The Hellcat nicknamed "Butch" was one of eight VMF-511 Hellcat nightfighters aboard Block Island. The White block with Blue "I" is a carrier identification symbol while the small Blue "M" signifies the USMC.

WHITE	H316 MMP C316 104	YELLOW	H329 MMP C329 041	NAVY BLUE	H54 MMP C365 065	BLACK	H12 MMP C33 047	ALUMINIUM	MC218 MMM 003

C Hellcat NF Mk.II, No. 892 Naval Air Squadron, Drem Airbase, Great Britain, May – August 1945

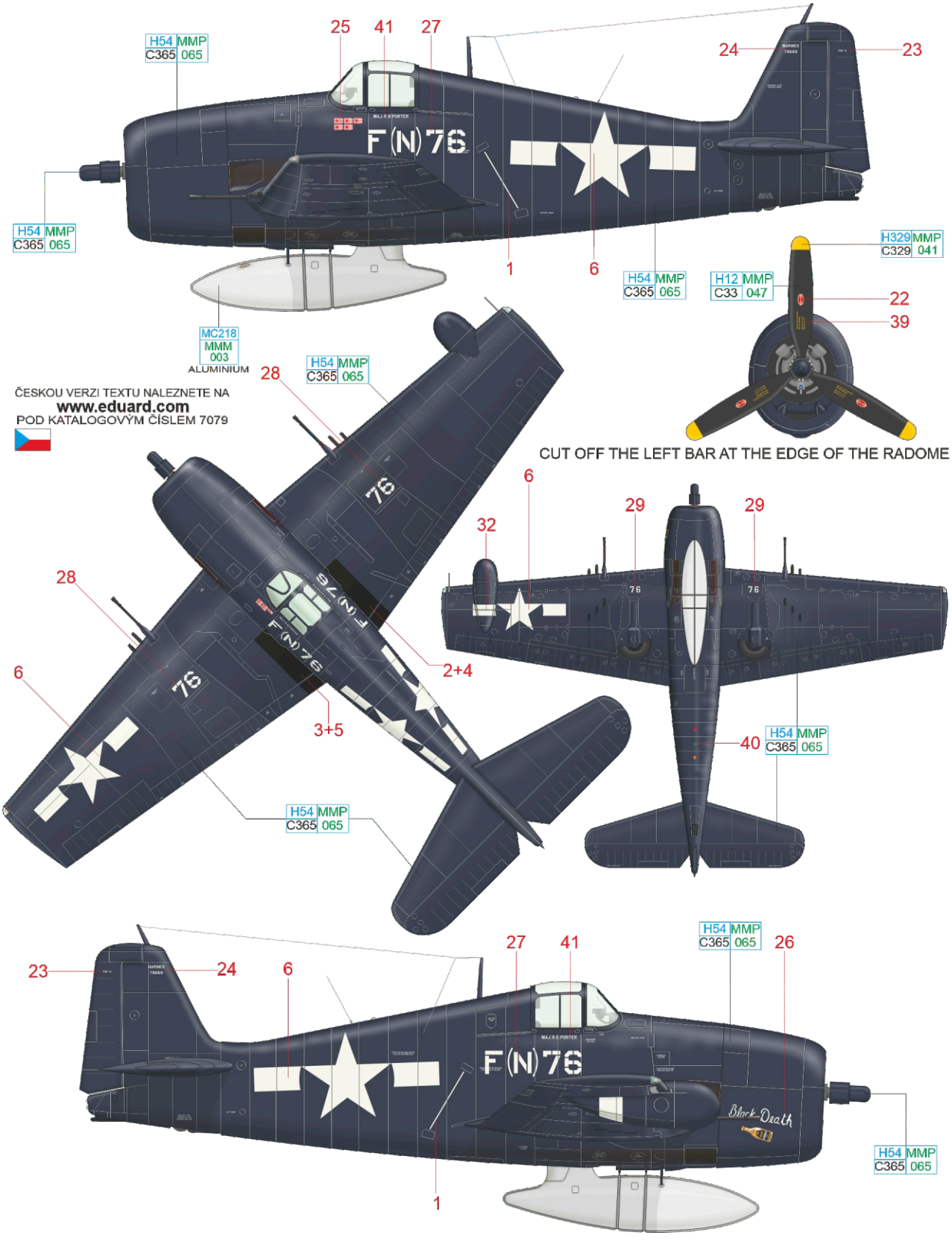
No. 892 Naval Air Squadron was reformed in April 1945 as a night fighter squadron with 16 NF Mk.II Hellcats. After a short deployment onboard HMS Premier, the squadron was subsequently undertaking night fighter training at Drem Airbase till the end of the WWII. The Hellcat depicted was built for the US Navy and bore the BuNo. 79015. It was purchased then by the Royal Navy and coded KD 127. The British roundels were applied on the original US camouflage scheme. The wing armament option is not clear from the reference photo, but it seems the 20-mm cannons were mounted.



YELLOW	H329 MMP C329 041	NAVY BLUE	H54 MMP C365 065	BLACK	H12 MMP C33 047	RED	H13 MMP C3 003

D F6F-5N, BuNo. 78669, Maj. Bruce Porter, CO of VMF(N)-542, Yontan Airfield, Okinawa, May 1945

Hellcat BuNo. 78669 was the personal mount of five-kills ace Maj. Bruce Porter, Commanding Officer of VMF(N)-542. He inherited this F6F-5N from his predecessor. The Hellcat carried a big red heart and the white name "Millie Lou" on the nose. Porter ordered his ground crew to overpaint it immediately after his arrival and a big bottle of Schenley bourbon and "Black Death" in white overpainted the previous nose art. Porter downed three Zeros over the Solomons in June/July 1943 while serving with VMF-121. On June 15, 1945 he added two more kills to his tally, shooting down a Kawasaki Ki-45 "Nick" heavy fighter and a "Betty" bomber carrying an Ohka suicide rocket plane.



YELLOW	H329 MMP C329 041	NAVY BLUE	H54 MMP C365 065	BLACK	H12 MMP C33 047	ALUMINIUM	MC218 MMM 003