

Harvard Mk.III/IIA/IIB

'The British Commonwealth Air Training Plan'

(EN) The AT-6 Texan/Harvard is most likely the most famous of the WW2 training aeroplanes, it also arguably is one of the most famous aeroplanes ever built. Its origins dates back to the late 1930 when the designers of the recently established North American company proposed the NA-16 project to fit the requirements issued by the USAAF calling for a so-called basic trainer. The NA-16 was a standard low-wing monoplane of mixed construction, the pilot's cockpits were left open in a true old fashion way. The USAAF, however, sent back updated request for a handful of changes to be incorporated in a new prototype, including an enclosed cockpit, which give birth to the re-worked NA-18 prototype. This type was later produced for the USAAF under the designation the BT-9 and for the Navy as the NJ-1. Further modernization saw the change in the airframe construction which turned to being semi-monocoque and as such, the type was produced for the USAAF as the BT-14, under a contract with the RAF as the Yale Mk.I and for the French as the NA-64. Next version, the BC-1/SNJ-1 was already fitted with retractable undercarriage, it reverted to a fuselage with fabric covering though. The RAF placed an order for this version, calling it the Harvard Mk.I. The final version of the type became the BC-1A, which featured both the semi-monocoque fuselage construction and the retractable gear. The BC-1A became later redesignated the AT-6 as the USAAF introduced a new category of aeroplanes, the advanced trainers, differing from the earlier basic trainer by the increased weight and engine power. The US Navy operated the type as the SNJ-2. Several more versions were being developed to meet the still changing war needs, bringing to existence the AT-6A, B, C, D and F airframes, all of which were powered by various versions of the R-1340 engine. Only the AT-6E was fitted with a Ranger V-770 powerplant and the type did not go beyond the prototype stage. After the war, the production line was delivering the AT-6G version airframes. Both the Navy and Marines operated the Texans too, calling the SNJ-2 through to SNJ-7. The SNJ-4 was fitted with an arrestor hook and was used for carrier landing trainings of naval airmen. The Harvards produced for the UK differed in many respects, as required by the customer. The Mk.II version was the AT-6(BC-1A) in the US parlance, the Mk.IIA was basically the AT-6C. At the Noorduyn production plant, the Mk.IIB were produced under licence. The Harvard Mk.III originated in the AT-6D version, while the Mk.IV Harvard was a post-war development corresponding the AT-6G airframes and remained in production in Canada until 1951.

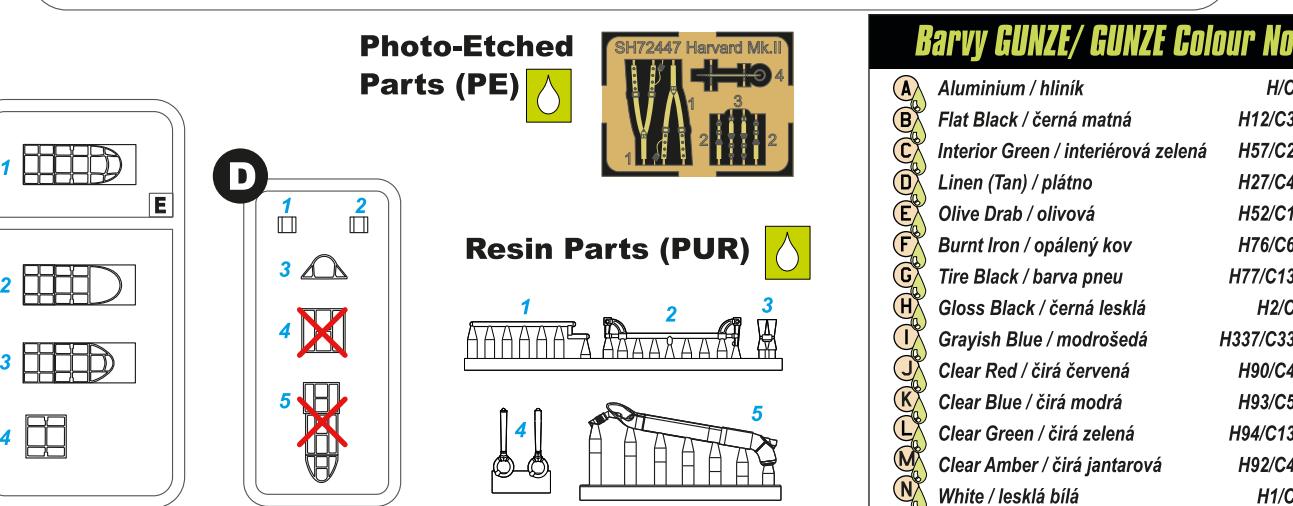
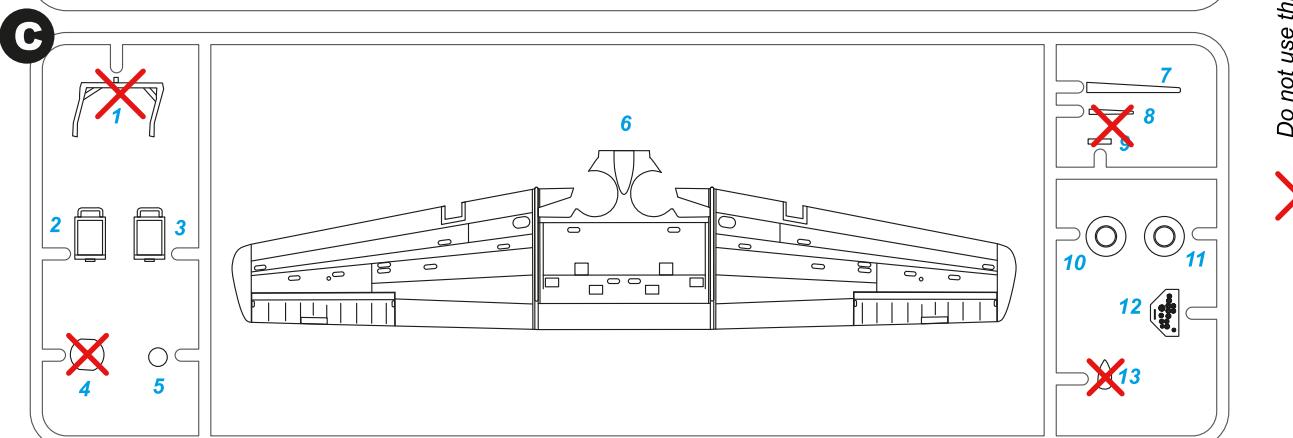
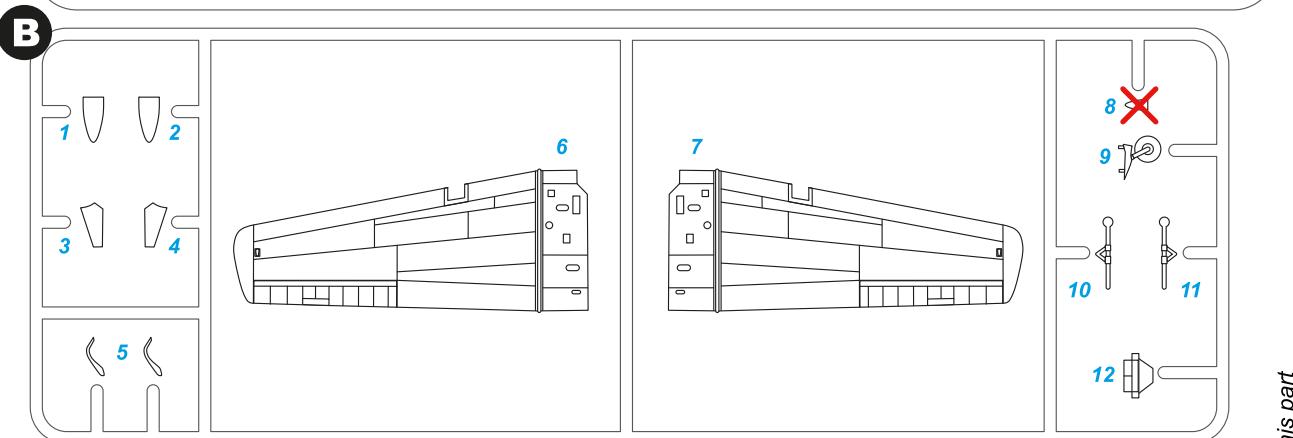
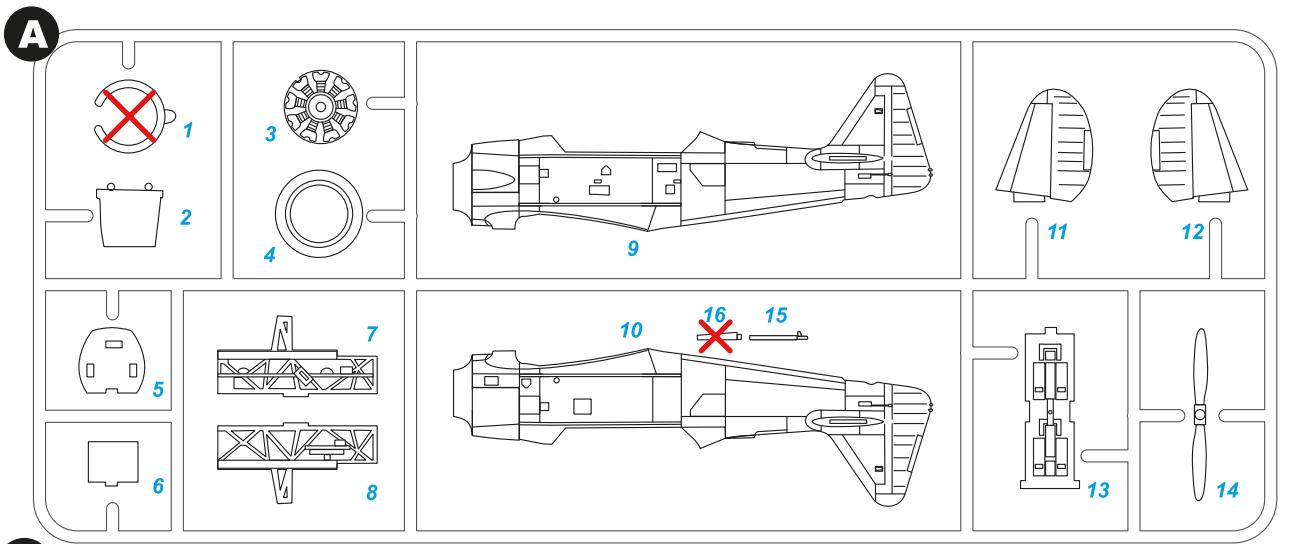
According to the version built, the Texans/Harvards were put in service either in pilot's or gunnery training role. The Harvards were operated not just with the RAF, they also went to other air forces of Commonwealth nations as were the RCAF, RNZAF, RSAAF, SRAF or the IAF. Because of the total number of built and also due to their excellent performance, they literally flooded the air forces across the world in the post war years. What also contributed to this was that the type had been really good at the light ground attack role, the type also saw the Korean War in the forward air control role. The total list of the military operators of the type is quite wide, indeed.

Span: 12.81 m, length: 8.84 m, height: 3.57 m, max. speed: 335 km/h, ceiling: 7,400 m, range: 1,175 km.

(CZ) AT-6 Texan/Harvard je patrně nejslavnější cvičný letoun druhé světové války a jeden z nejslavnějších letounů světa vůbec. Vznikl u mladé firmy North American na konci třicátých let minulého století. Pro soutěž vypsanou USAAF pro kategorii basic trainer zkonztruovali konstruktéři North American prototyp NA-16, dolnoplošník smíšené konstrukce s otevřenými prostory osádky. Podle požadavků USAAF dostal překonstruovaný prototyp, přeznačený na NA-18, uzavřený překryt osádky. Pro USAAF byl vyráběn jako BT-9, pro US Navy jako NJ-1. Další modernizace přinesla poloskořepinovou konstrukci trupu. S tou byl tento letoun vyráběn pro USAAF (BT-14), dle požadavků RAF (Yale Mk.I) a Francie (NA-64). Zatahovací podvozek se objevil u další verze, BC-1/SNJ-1, která se ale vrátila k trupu potaženému plátnem. RAF tuto verzi objednalo pod označením Harvard Mk.I. Finální verzí, kombinující poloskořepinovou konstrukci trupu se zatahovacím podvozkem se stala verze BC-1A, přeznačená na AT-6. USAAF totiž zavedlo novou kategorii advanced trainer, do které se stále těžší a výkonější letoun skvěle hodil. Pro US Navy se vyráběl pod označením SNJ-2. Další verze byly vyvíjeny dle válečných potřeb. Postupně byly do konce války vyrobeny verze AT-6A, B, C, D a F. Všechny tyto verze byly poháněny verzemi motoru R-1340. Verze AT-6E, poháněná motorem Ranger V-770, zůstala v prototypu. Po válce byla vyráběna verze AT-6G. US Navy a US Marines používalo Texany také, SNJ-2 až SNJ-7. Verze SNJ-4C dostala přistávací hák a byla používána pro výcvik námořních pilotů. Pro Velkou Británii byly vyráběny Harvardy s odlišnostmi dle britských požadavků. Verze Mk.II odpovídala AT-6(BC-1A), verze Mk.IIA odpovídala AT-6C. V licenci firmy Noorduyn byl pro RAF vyráběn Harvard Mk.IIB. Verze Harvard Mk.III vycházela z verze AT-6D. Harvard Mk.IV byl pak poválečnou verzí, odpovídající AT-6G. Ta byla vyráběna v Kanadě od roku 1951.

Podle verzí byly Texany/Harvardy používány k pilotnímu nebo střeleckému výcviku. Harvardy používalo nejen britské RAF, ale i další leteckva Commonwealthu, RCAF, RNZAF, RSAAF, SRAF nebo IAF. Vzhledem k počtu vyrobených letadel a jejich kvalitě se Texany/Harvardy během a po druhé světové válce masivně rozšířily po celém světě. K tomu přispělo i to, že se kromě výcviku dal použít jako lehký bitevní letoun. Poválečná verze AT-6G byla použita ve válce v Koreji jako letoun vzdušných návodčích. Výčet uživatelů je velmi široký.

Rozpětí: 12,81 m, délka: 8,84 m, výška: 3,57 m, maximální rychlosť: 335 km/h, dostup: 7 400 m, dolet: 1 175 km.



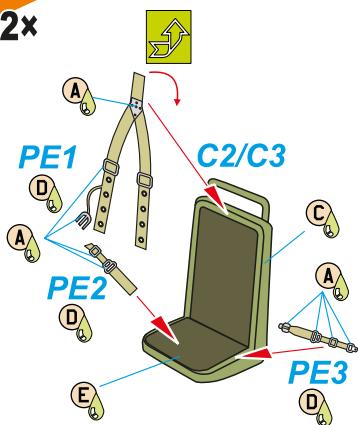
Barvy GUNZE/ GUNZE Colour No.

A	Aluminium / hliník	H/C8
B	Flat Black / černá matná	H12/C33
C	Interior Green / interiérová zelená	H57/C27
D	Linen (Tan) / plátno	H27/C44
E	Olive Drab / olivová	H52/C12
F	Burnt Iron / opálený kov	H76/C61
G	Tire Black / barva pneu	H77/C137
H	Gloss Black / černá lesklá	H2/C2
I	Grayish Blue / modrošedá	H337/C337
J	Clear Red / čirá červená	H90/C47
K	Clear Blue / čirá modrá	H93/C50
L	Clear Green / čirá zelená	H94/C138
M	Clear Amber / čirá jantarová	H92/C49
N	White / lesklá bílá	H1/C1

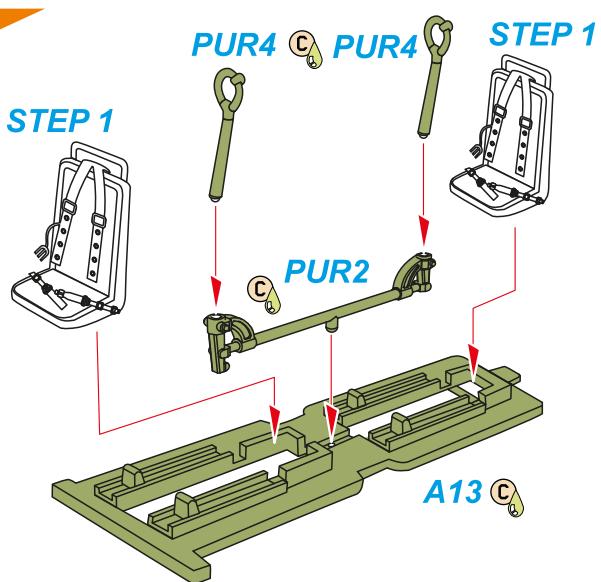
SYMBOLS

	OPTIONAL MOŽNOST VOLBY NACH BELIEBEN OPTION		INSTANT CYANOACRYLATE GLUE POUŽÍT KYANOAKRYLÁTOVÉ LEPIDLO ZYANOAKRYLATKLEBER ADHESIF CYANOACRYLAT		BEND OHNOUT BIEGEN COURBER		SCRATCH BUILD ZHOTOVIT NOVĚ FERTIGSTELLEN ACHEVER		CUT OFF/DRILL REZAT/VRTAT ENTFERNEN DETACHER		COLOUR NATŘÍT FARBEN PEINDRE
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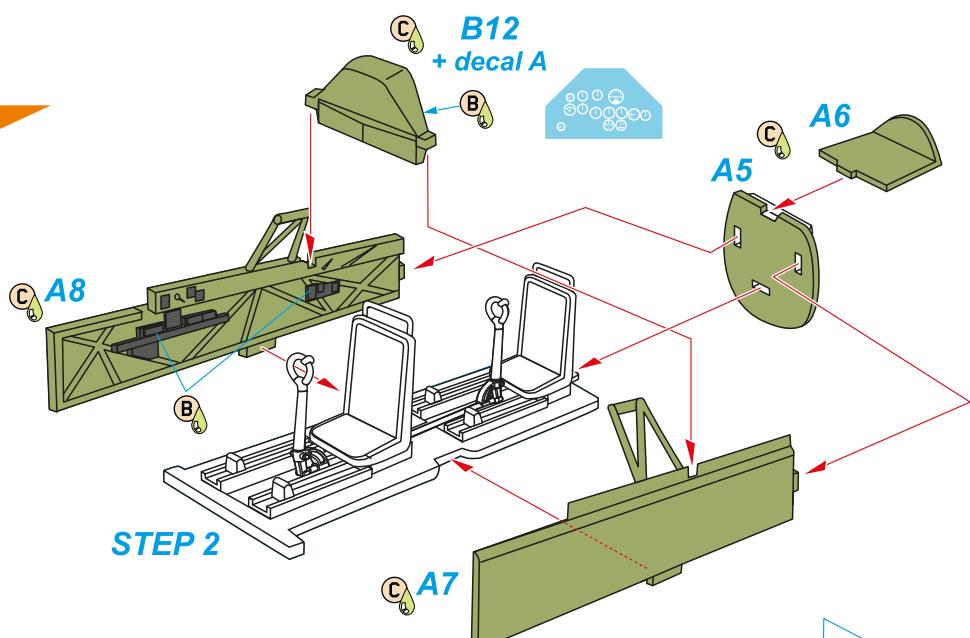
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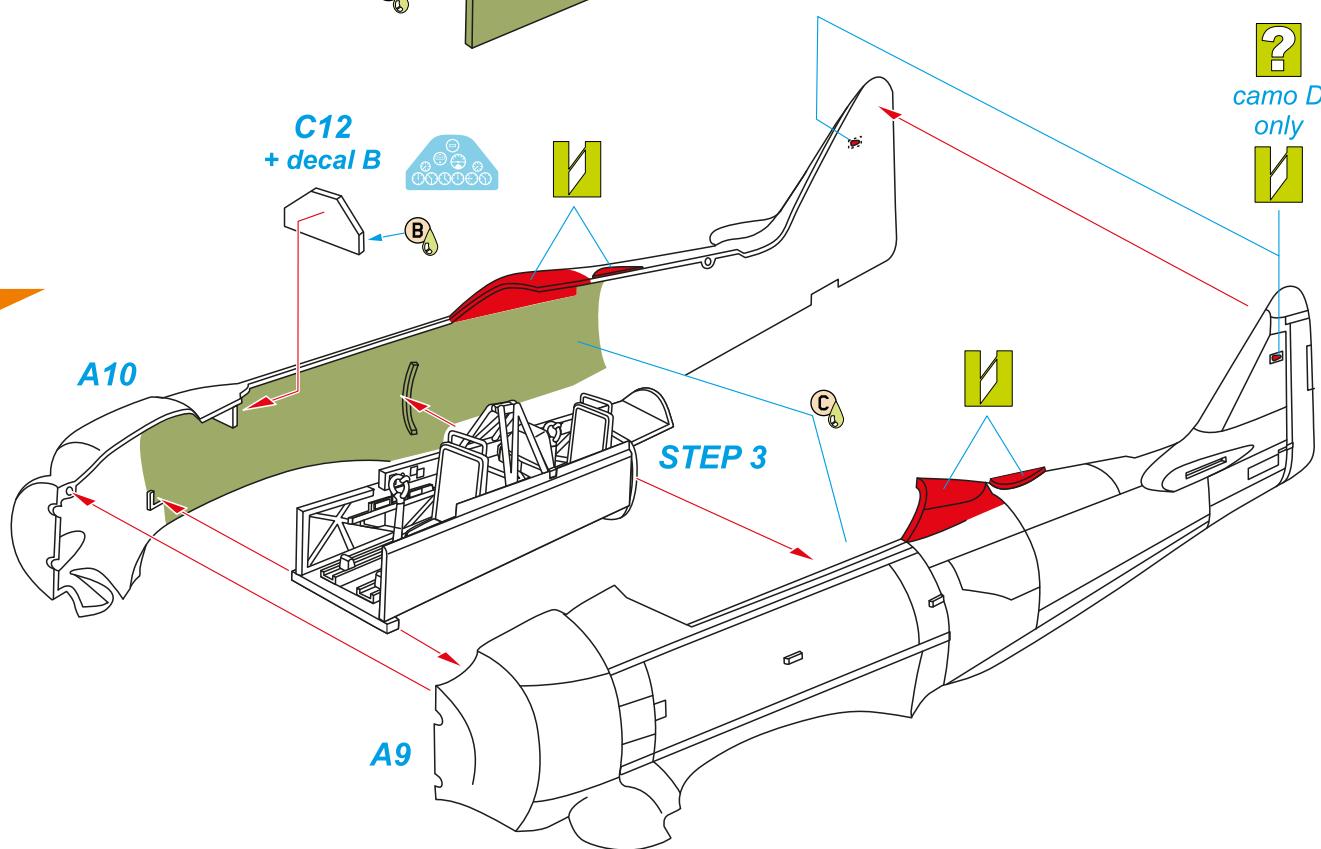
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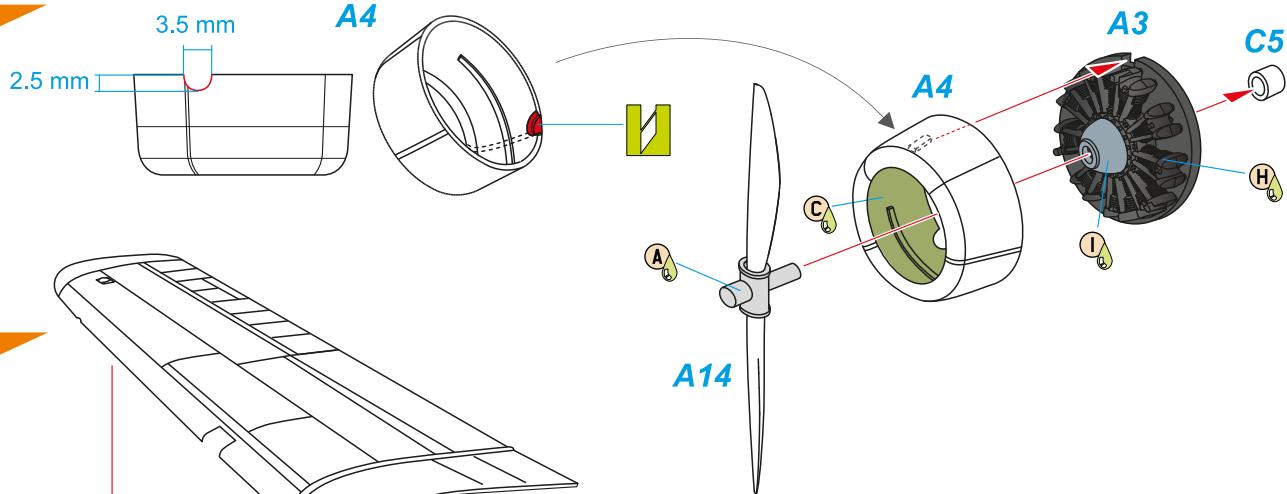
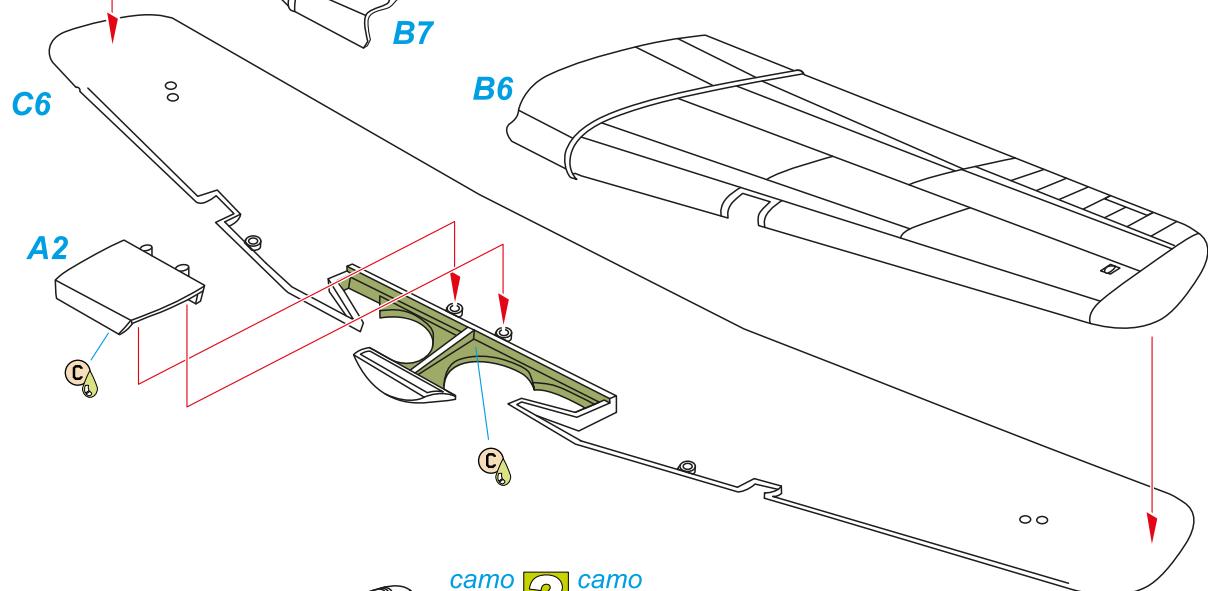


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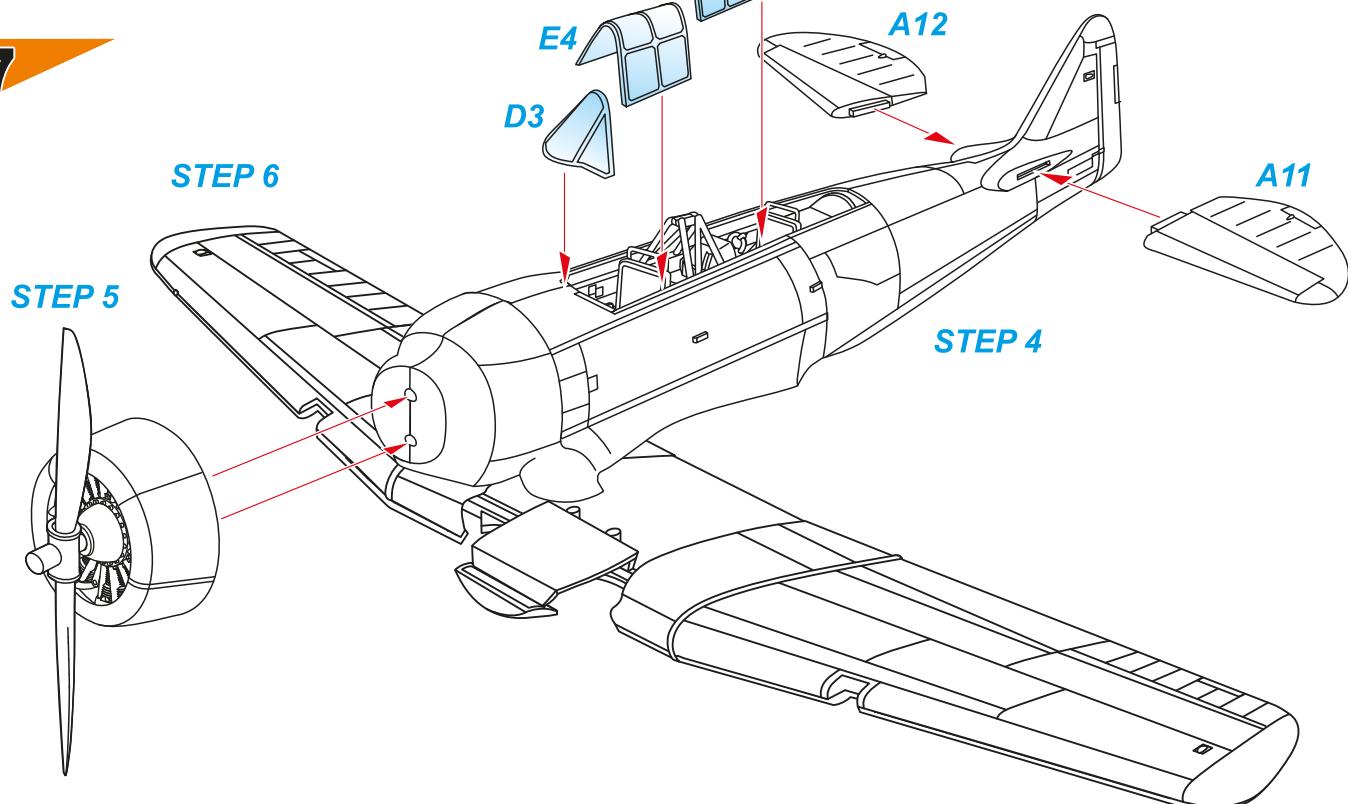


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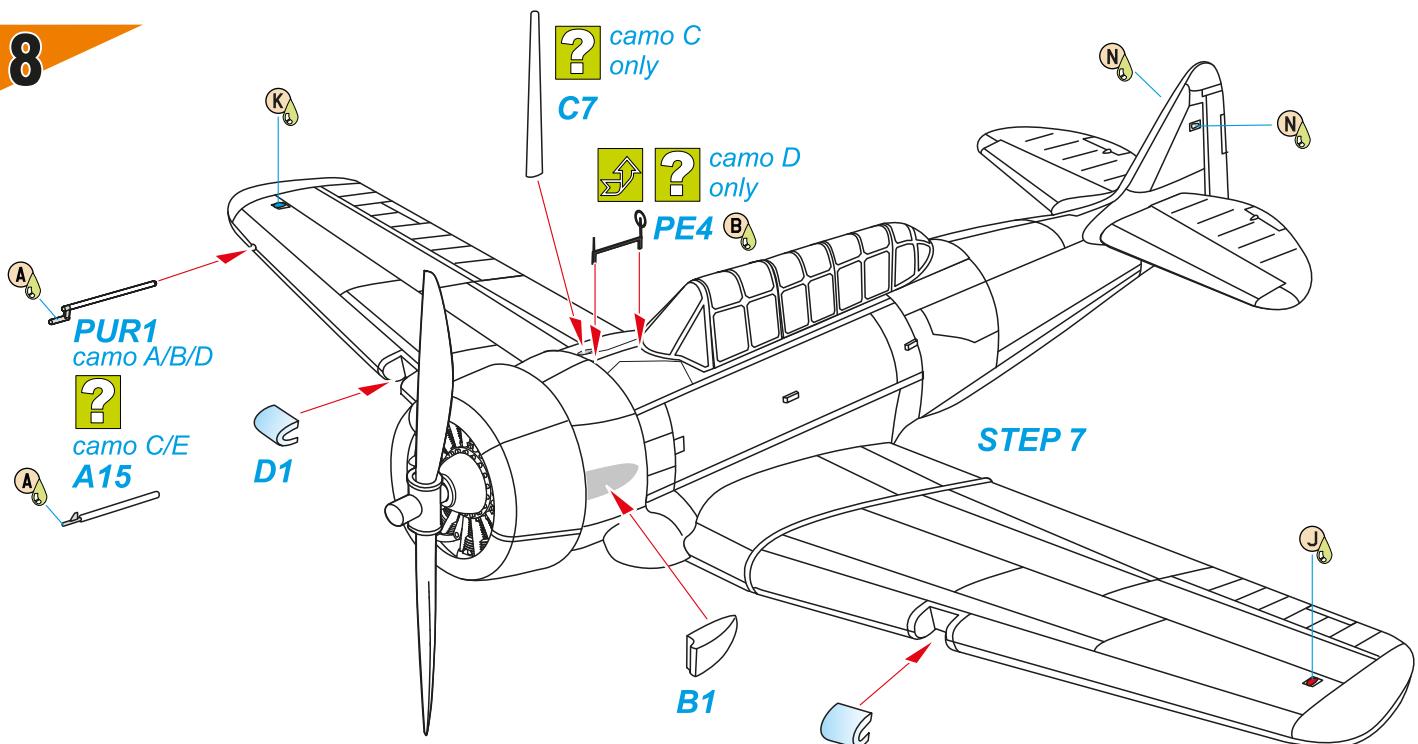


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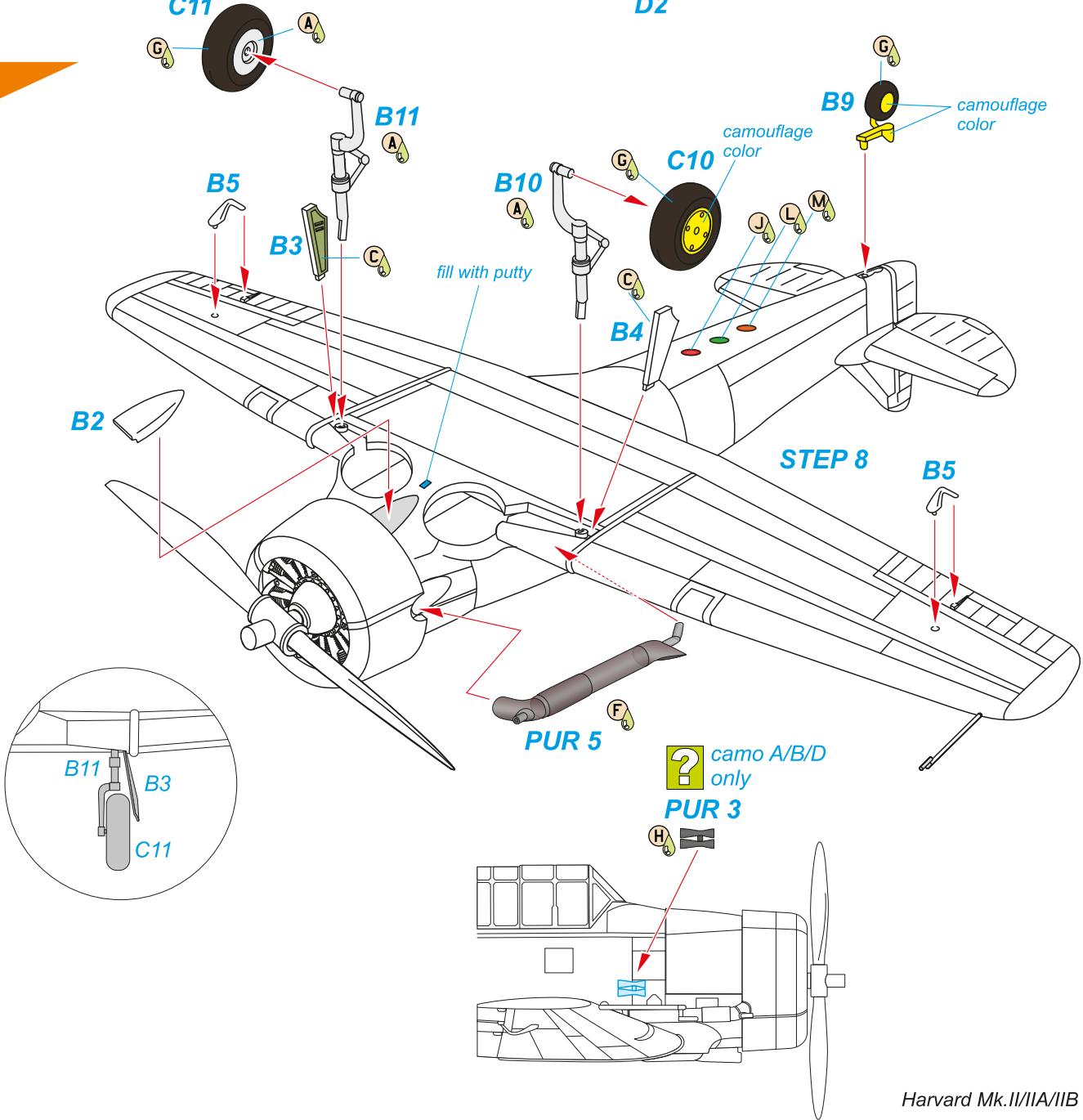
camo C ? camo A/B/D/E
E3 E1

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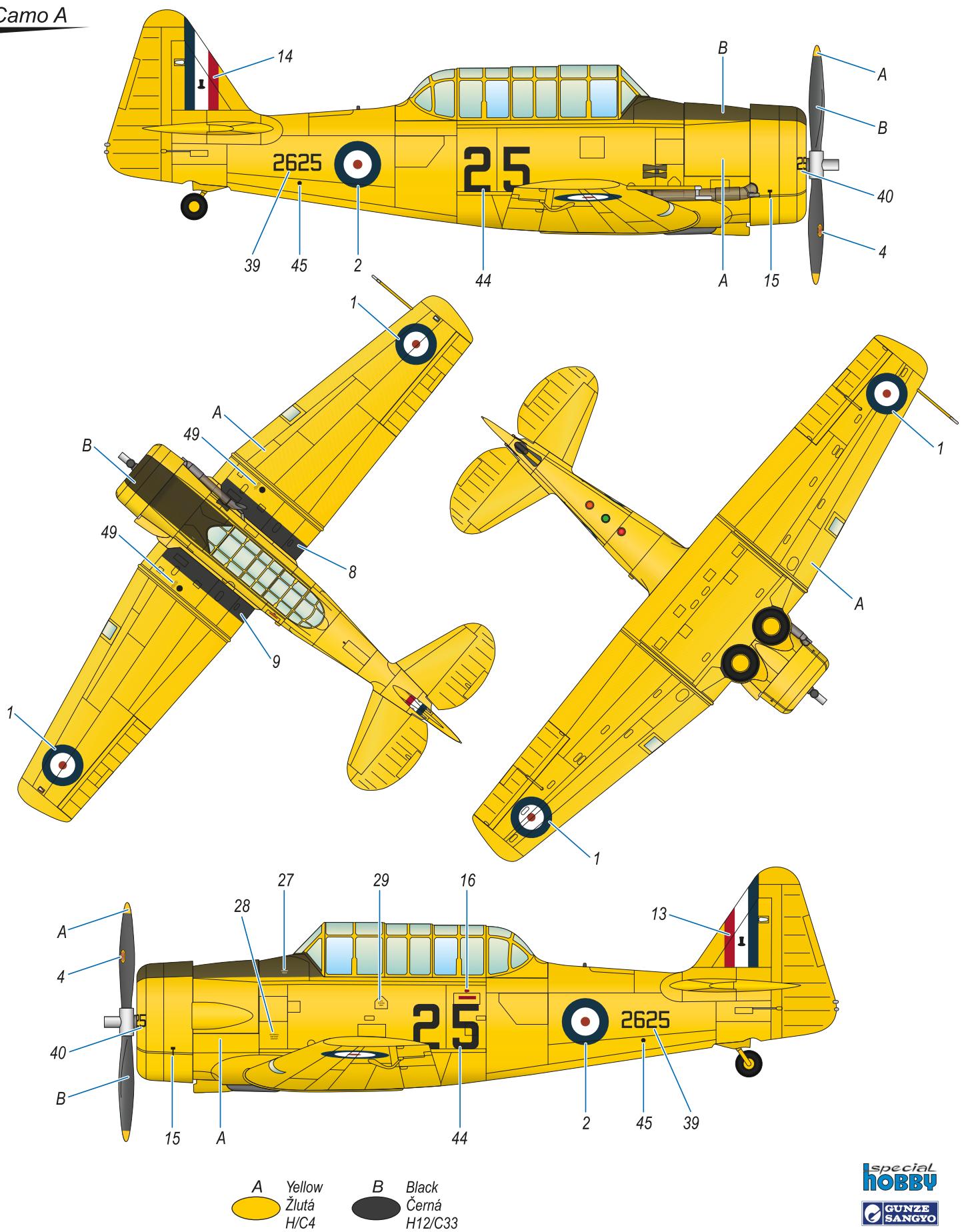
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Harvard Mk.II No.25/2625, 34. Service Flying Training School, RCAF, Medicine Hat, Alberta, Canada, 1943. Cpl. Josef Vavrik, who would later join No.312 (Czechoslovak) Sqn RAF, was photographed during a flight sitting in the cockpit of this aeroplane.

Harvard Mk.II No.25/2625, 34. Service Flying Training School, RCAF, základna Medicine Hat, Alberta, Kanada, 1943. V kabině tohoto stroje byl za letu vyfocen Cpl. Josef Vavřík. Ten se později zařadil mezi členy No.312 (Czechoslovak) Sqn.

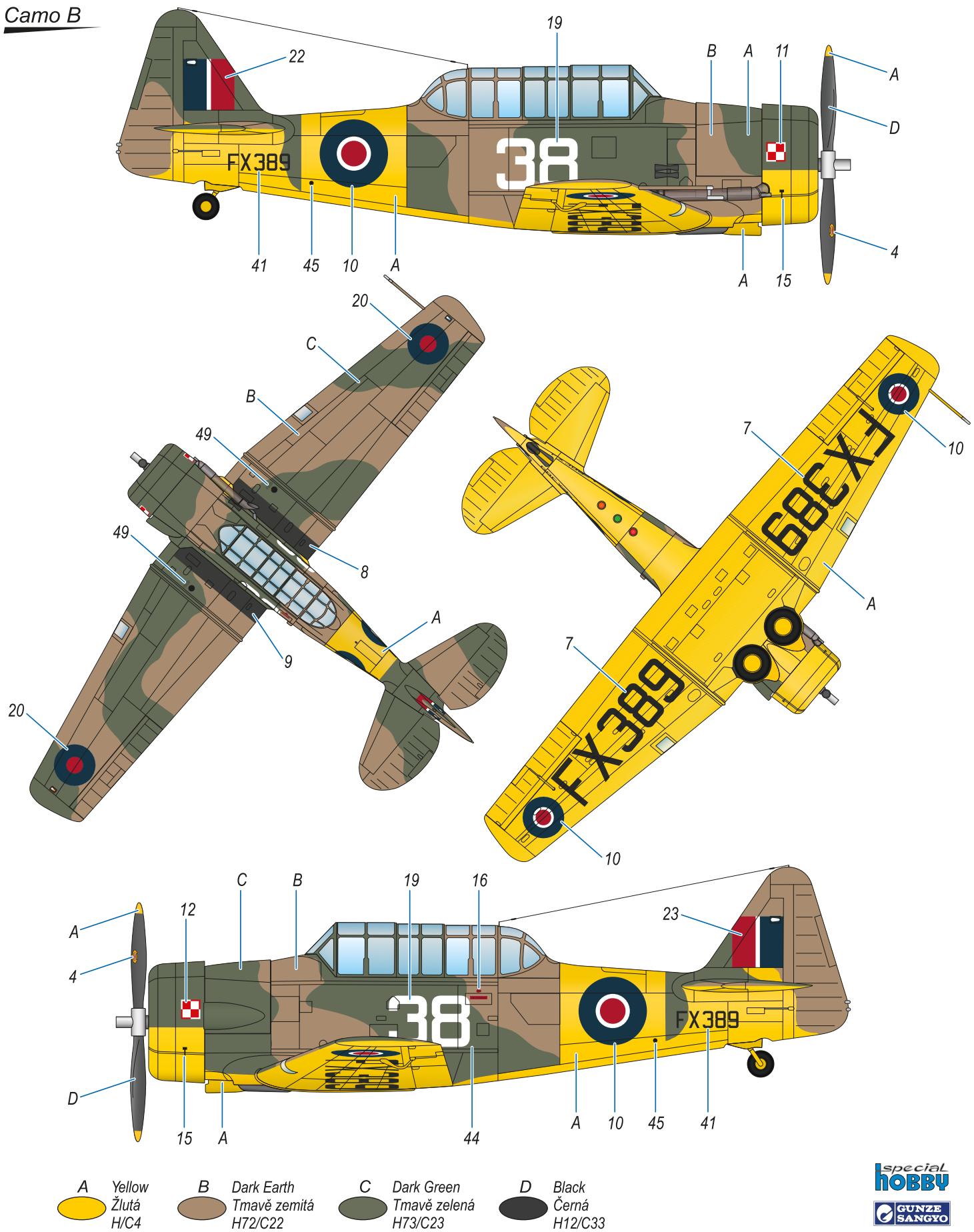
Camo A



Harvard Mk.IIB No.38/FX389, No. 16 (Polish) Service Flying Training School, RAF, Newton, Nottinghamshire, England.

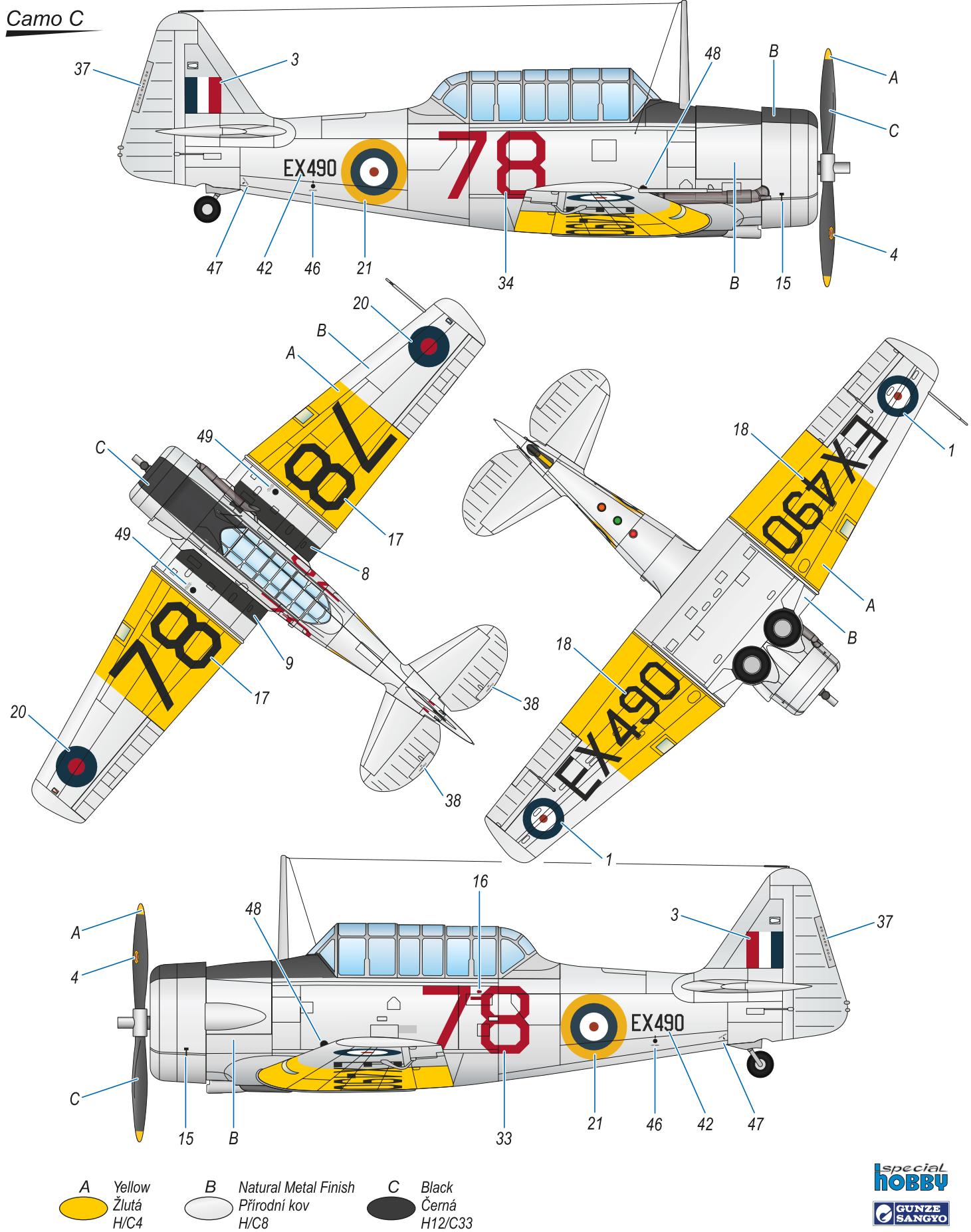
Harvard Mk.IIB No.38/FX389, No. 16 (Polish) Service Flying Training School, RAF, základna Newton, Nottinghamshire, Anglie.

Camo B



Harvard Mk.IIA No.78/EX490 (US serial 41-33463),
No. 20 Service Flying Training School, SRAF, Cranborne,
Salisbury, Southern Rhodesia, 1943. On 24 June 1944,
Harvard EX490 was destroyed in a mid-air collision with
Harvard Mk.II EX512.

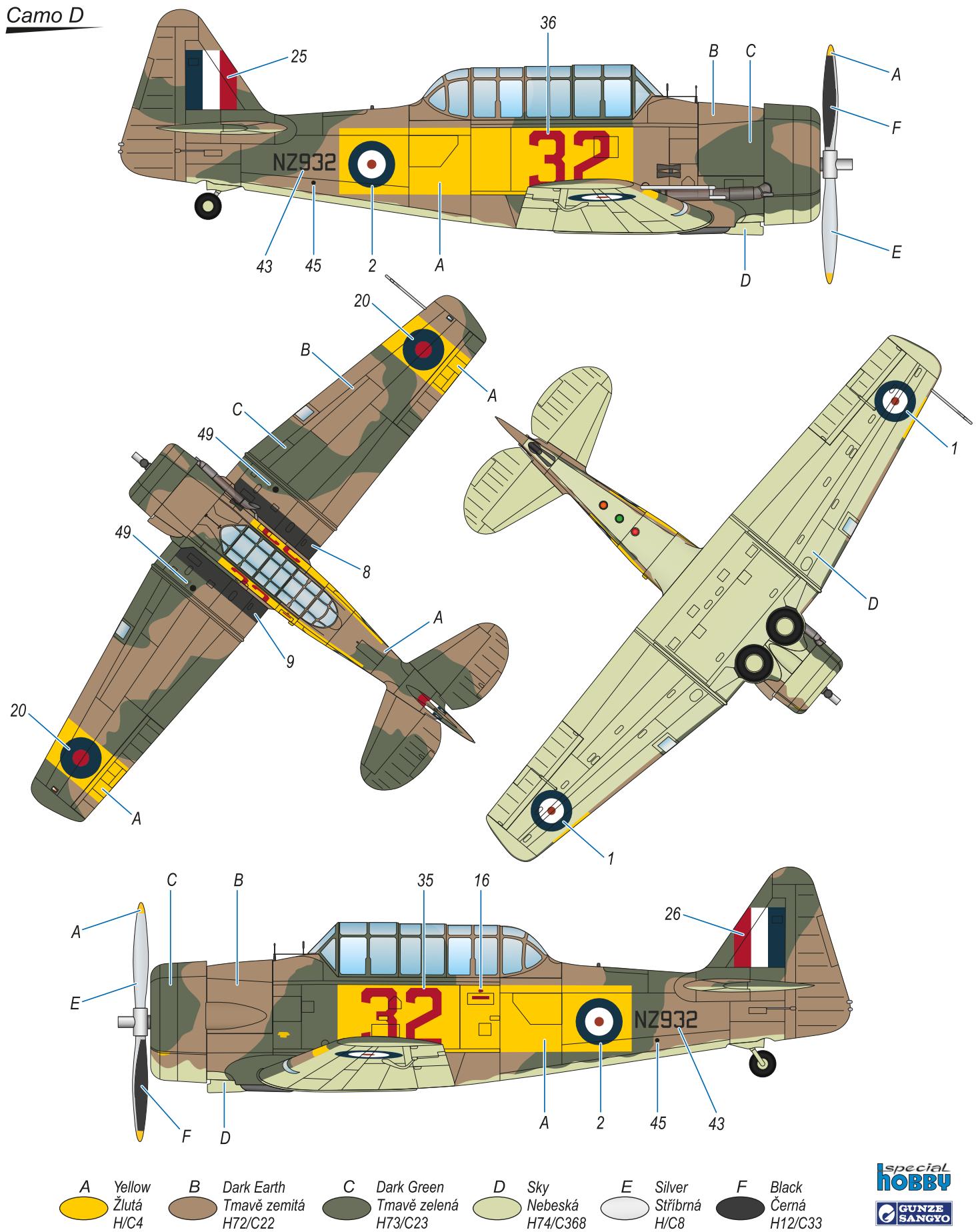
Harvard Mk.IIA No.78/EX490 (US serial 41-33463),
No. 20 Service Flying Training School, SRAF, základna
Cranborne, Salisbury, Jižní Rhodesie, 1943. Harvard
EX490 byl zničen při vzdušné kolizi s Harvarem Mk.II
EX512 24. června 1944.



Harvard Mk.II, No. 32/NZ932, No.2 Service Flying Training School, RNZAF, Woodbourne, 1942. NZ934 arrived in New Zealand along with other cargo aboard the merchant ship Limerick and saw service with the RNZAF until 1958 when it was sold to a civil operator.

Harvard Mk.II, No.32/NZ932, No.2 Service Flying Training School , RNZAF, Woodbourne, 1942. NZ934 dorazil na Nový Zéland jakou součást nákladu lodi Limerick a sloužil v rámci RNZAF do roku 1958, kdy byl prodán civilní společnosti.

Camo D



Harvard Mk.IIB No.14/FE479, No. 1 Service Flying Training School, RIAF, Ambala base, Haryana, India, 1944/45.

Harvard Mk.IIB No.14/FE479, No. 1 Service Flying Training School, RIAF, základna Ambala, Haryana, Indie, 1944/45.

Camo E

