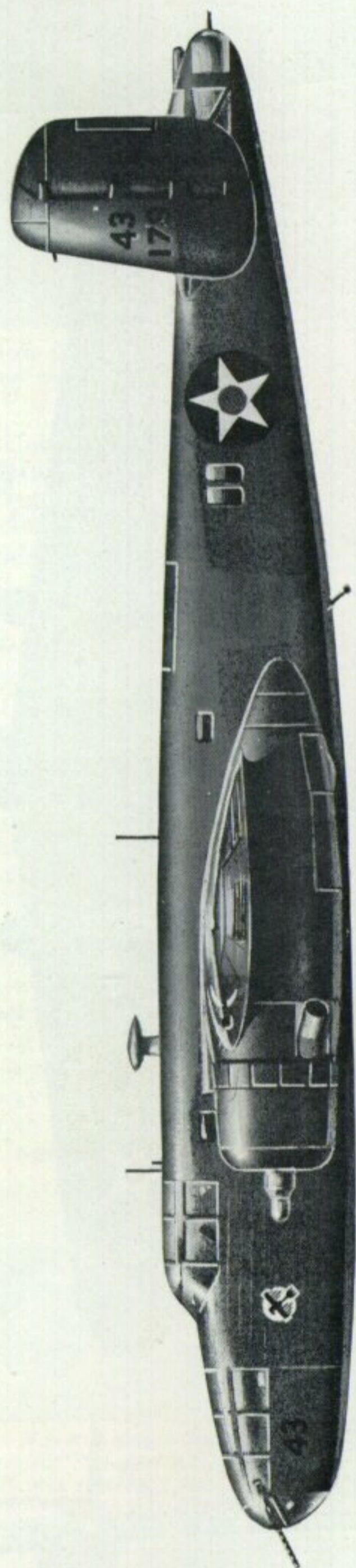
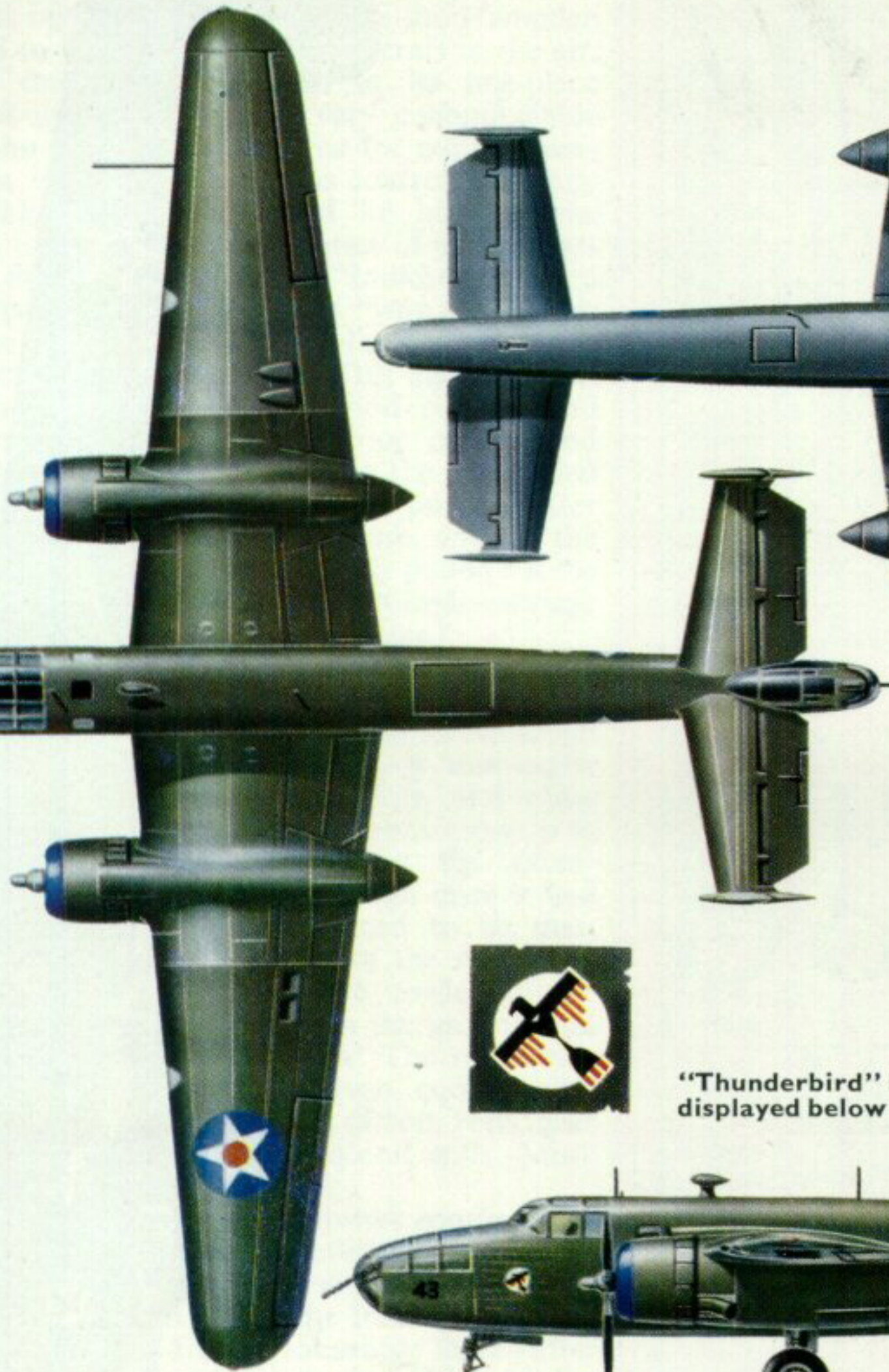
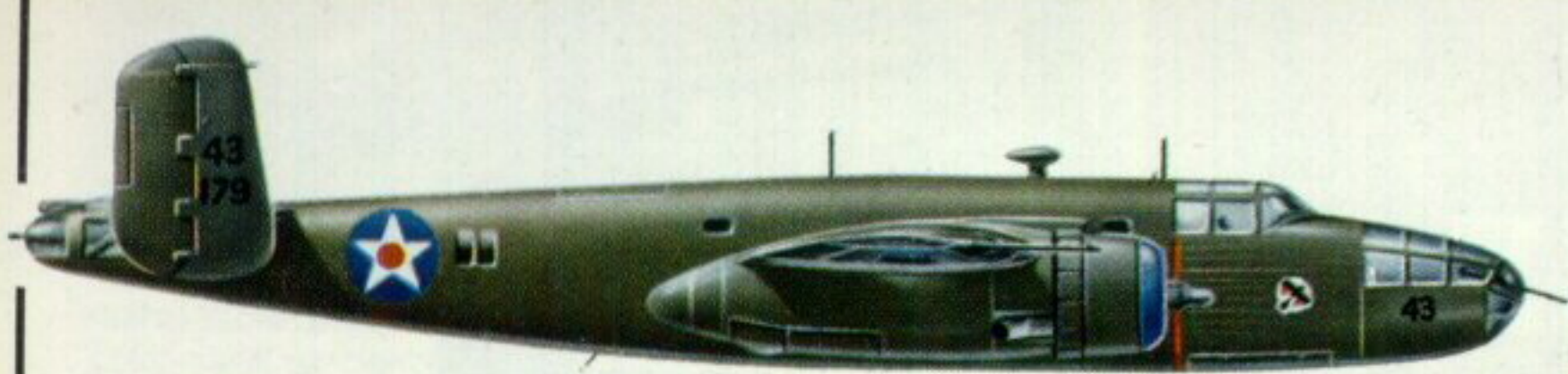


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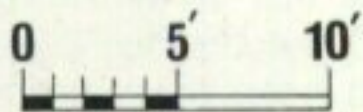
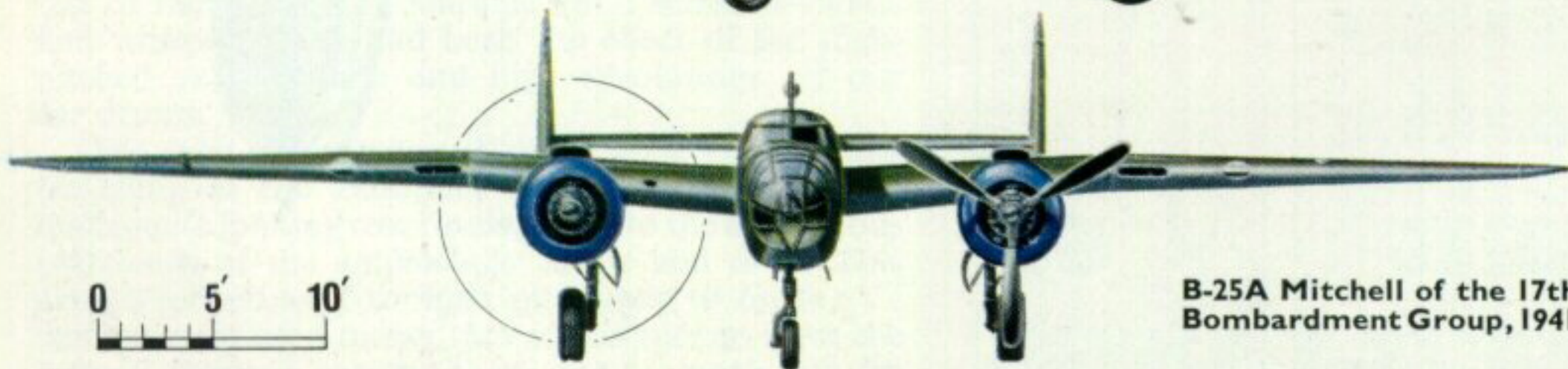
The
North
American
B-25A to G
Mitchell

NUMBER 59
TWO SHILLINGS





"Thunderbird" insignia displayed below cockpit



B-25A Mitchell of the 17th Bombardment Group, 1941

© KEITH BROOMFIELD

C

The North American B-25 A to G Mitchell



by Ray Wagner

Although painted in the markings of the aircraft in which Lt.-Col. J. H. Doolittle led the famous Tokyo raid of 18th April 1942, this Air Force Museum replica is actually a late C or D model, as indicated by the exhaust stacks. (Photo: via N.A.A.)

The most widely used American bomber in W.W.II was the North American B-25 Mitchell. A steady increase of firepower, adaptability to combat and good flying qualities made this twin-engined medium bomber the most popular plane in its class.

Actually, there was no B-25 prototype as such, but the North American NA-40 introduced the twin-engined, twin-tail, and nose-wheel layout. The NA-40 was developed in response to the Army Air Corps Circular Proposal for attack bombers, dated 18th January 1938. A high-wing, three-place design, it was armed with seven .30 calibre guns; four fixed in the wings outboard of the underslung engine nacelles, one in a ball and socket nose mount, an upper gun in a rear cupola and a tunnel gun, both fired by the rear gunner.

Originally planned for Pratt & Whitney R-1830 engines, the NA-40B had Wright R-2600-A71 Cyclones giving 1,500 h.p. at take-off and 1,275 h.p. at 12,000 ft., when it was flown to Wright Field in March 1939. Weighing 13,961 lb. empty and 19,741 lb. loaded, it was credited with a top speed of 309 m.p.h. at 14,000 ft. and a design range of 1,200 miles with a 1,200 lb. bomb load and 476 gallons. After passing Air Corps tests, the attack bomber was destroyed by fire after a crash. Although this was subsequently determined not to have been due to any fault of the aircraft, the Army's attack bomber contract went to the Douglas A-20 design.

In the meantime a new Circular Proposal, No. 39-640, for a five-place bombardment airplane, was issued 11th March 1939. North American submitted a bid on 30th June including 81 different design combinations. Bids were opened 5th July, and an Army contract for 184 B-25 aircraft costing \$11,771,000 was announced 10th August, and finally approved 20th September 1939. A production contract for a "paper airplane" without tests of a prototype, was a new Air Corps policy forced by the need to supply service units with up-to-date equipment.

North American's project designation was NA-62, with the first engineering man-hours charged on 12th August 1939 and the contract authorisation made on 5th September. Between these dates, Hitler's invasion of Poland opened W.W.II. A 1/9th scale model of the B-25 was made for wind tunnel tests, and a full-scale wooden mock-up was approved by an Air Corps board on 9th November 1939. Design work at the

Inglewood, California factory consumed about 200,000 engineering hours and 8,500 drawings. Performance estimates included a top speed of 322 m.p.h. at 15,000 ft. and a range of 2,000 miles with 3,000 lb. bomb load. Weight was to be 16,767 lb. empty, and 23,714 lb. loaded.

THE B-25 IN PRODUCTION

A static test airframe was shipped to Wright Field on 4th July 1940 and the first complete B-25, 40-2165, was test flown on 19th August 1940. Powered by two Wright R-2600-9 Cyclones of 1,700 h.p. for take-off and 1,350 h.p. at 13,000 ft., the B-25 had the NA-40's twin rudders and tricycle gear, but had a wider fuselage for the larger crew and bomb-load.

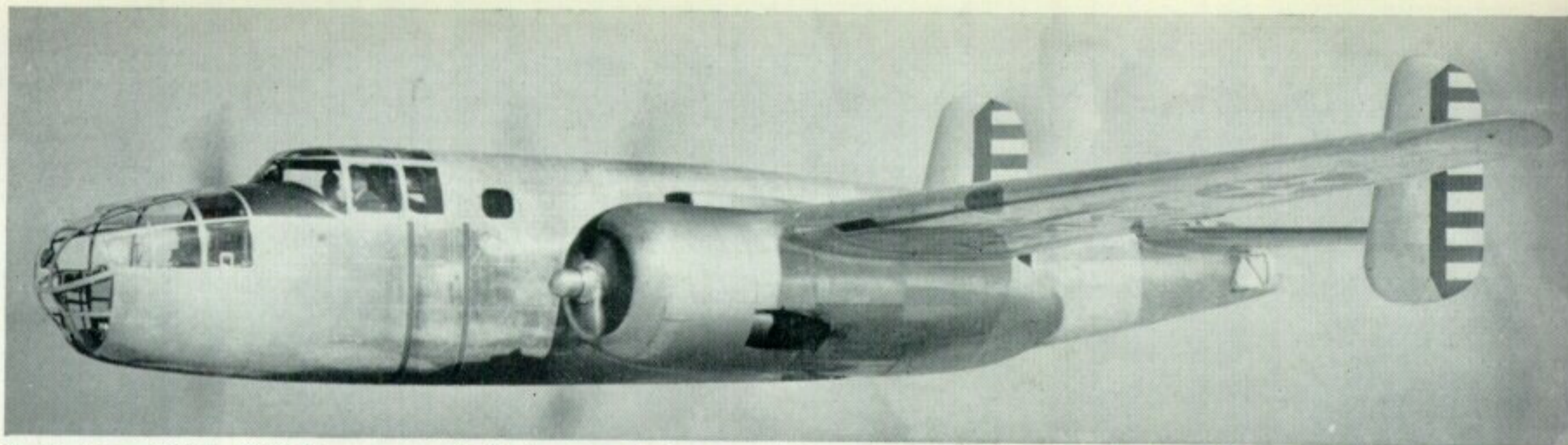
The first five B-25s were accepted in February 1941, and had unbroken dihedral from wing root to tip. To improve directional stability, the outer wing was made horizontal on the tenth and all subsequent aircraft. This wing shape remained the same for the rest of the bomber's history.

Armament of the B-25 reflected the modest standards of 1939, with four hand-held flexible guns. A .30 calibre gun was moved by the bombardier between three sockets in the nose enclosure. Two more .30 calibre guns were mounted to fire through waist

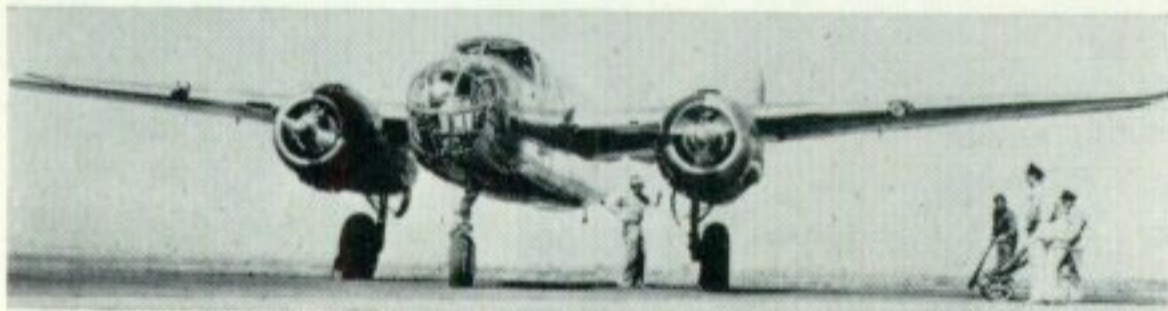


Two views of the NA-40B attack bomber, precursor of the B-25 layout. Armament for this aircraft, which crashed after passing U.S.A.A.C. trials, was envisaged as seven .30 cal. machine guns, including two fixed weapons in each wing outboard of the nacelle.





The first true B-25, 40-2165, on an early flight. One of the main differences between the B-25 and the NA-40 was the former's wider fuselage to accommodate the larger crew and bomb-load. (Photo: N.A.A.)



Head-on view of the first B-25. Note the unbroken dihedral, peculiar to the first nine aircraft. (Photo: N.A.A.)

windows and panels in the fuselage top and bottom. A .50 calibre gun in the tail was fired by a prone gunner.

Wartime experience had demonstrated that more protection was necessary, and the B-25A appeared in May 1941, with $\frac{3}{8}$ -inch armour back of the pilot's, co-pilot's and bombardier's seats, and in the gunner's compartments. Self-sealing protection was provided for the four fuel tanks in the wings, but capacity was reduced from 912 to 694 gallons. A 418 gallon dropable tank could be carried in the bomb bay. Weighing 17,870 lb. empty, 25,322 lb. gross, and 27,100 lb. maximum, the B-25 was credited with a top speed of 315 m.p.h. at 15,000 ft., climbing to that altitude in 8.4 minutes, Service ceiling was 27,000 ft., and range with 3,000 lb. of bombs was 1,350 miles.

Twenty-four B-25 models were followed into service by 40 B-25As. The first Air Corps operational unit with these new bombers was the 17th Bombardment Group, including the 34th, 37th and 95th Squadrons, plus the attached 89th Reconnaissance Squadron. This unit formerly operated Douglas B-18s from McChord Field, and moved to Pendleton, Oregon, in June 1941.

Power-operated turrets were provided for the remaining ships on the contract, labelled B-25B. The tail and waist guns and windows were deleted, and two .50 calibre guns with 400 rounds each were in the top Bendix power turret. Two more with 350 rounds each were in a retractable belly turret lowered behind

the bomb bay and aimed through a periscopic sight by a kneeling crewman. The bombardier's hand-held .30 calibre gun, with 600 rounds, was retained in the nose.

Length was reduced from 54 ft. 1 in. on the B-25A to 52 ft. 11 in. on the B-25B, but weight was increased to 20,000 lb. empty, 26,208 lb. gross, and 28,460 lb. maximum. Performance was listed as 300 m.p.h. top speed at 15,000 ft., 23,500 ft. service ceiling, and range 1,350 miles with 3,000 lb.

The first 14 B-25Bs were accepted in August 1941, but the next, 40-2243, was destroyed before delivery and deleted from the order. North American had delivered 130 bombers on this contract at the time of the Pearl Harbor attack, and 171 by the end of 1941. During January 1942, with 119 B-25Bs accepted, deliveries shifted to the new B-25C contract.

THE B-25C AND D

At first, the B-25C was identical to the B-25B in appearance and armament. The internal differences included R-2600-13 Cyclones with Holley carburetors, a 24-volt electrical system, and an anti-icer and de-icer system. Fuel capacity was increased to 974 gallons in wing tanks, beginning ship No. 384, and 1,520 gallons on maximum load. Redesigned bomb bay racks could accommodate one 2,000 lb., or two 1,600 lb., three 1,000 lb., six 500 lb., eight 250 lb. or twelve 100 lb. bombs.

The first B-25C contract had been approved 24th September 1940 for 863 aircraft designated NA-82. An additional 162 were ordered by the Netherlands on 24th June 1941 as the NA-90, which later became the B-25C-5. Lend-lease funds financed contracts made 23rd January 1942 for 150 NA-94 (B-25C-10) for Britain and 150 NA-93 (B-25C-15) for China. In the event, these allotments were not followed in the delivery of the actual aircraft.

By this time, the bomber had been named

Drab-painted early-model B-25. Compare the "flattened" wing configuration with illustrations of the first B-25.





B-25A of the 34th Bomb Squadron, 17th Bomb Group. The first Group fully equipped with the B-25, 17th B.G. served on anti-submarine operations in both Pacific and Atlantic.
(Photo: Peter Bowers' collection)

"Mitchell", after the pioneer of American air power. After 605 B-25C's had rolled out of the Inglewood factory, 258 B-25C-1s introduced external racks which could accommodate eight 250 lb. bombs under the wings, or a 2,000 lb. torpedo below the fuselage. Maximum bomb load on short trips was thus increased from 3,200 to 5,200 lb. If the torpedo was carried, no bombs could be, although a bomb bay fuel tank could be used. A scanning blister was added over the navigator's compartment in all Cs beginning with aircraft No. 384.

The .30 calibre gun in the nose was replaced by a .50 flexible gun, and a fixed .50 calibre gun for the pilot was added in the B-25C-5. Both guns had 300 rounds, with the fixed gun on the right side of the nose. North American delivered the 162 B-25C-5s through October to December 1942.

Only minor changes such as improved winterisation and compass equipment distinguished the B-25C-10, but the B-25C-15 introduced flame dampening exhaust stacks for individual cylinders. Appearing in January 1943, this system corrected the problem caused on night raids by the bright spurts of flame from the old exhaust pipes.

Deliveries on a new contract (NA-96) began in February 1943 with the similar B-25C-20, but the B-25C-25 provided a self-sealing 230 gallon bomb bay tank, optional provision for a 325 gallon metal bomb bay tank, and a new clear vision tank. Production of the B-25C series was completed at Inglewood in May 1943 with 1,619 aircraft built.

Shortly after the first B-25 had been flown, the government had decided to increase future bomber output by establishing new aircraft factories in the Mid-western part of the United States. These plants

would be government-owned, but operated by established aircraft manufacturers using parts and major assemblies fabricated by the automotive industry. North American was put in charge of the Kansas City bomber assembly plant authorised in December 1940, with the Fisher Body Division of General Motors as the major subcontractor.

An initial order for 1,200 B-25D (NA-82) bombers was approved on 28th June 1941. This model was identical to the early B-25C, and the Inglewood plant manufactured and supplied all detail parts for the first 100 aircraft. Parts for the first six were assembled into major assemblies in Inglewood and shipped to Kansas City to be joined together. The first two were accepted in February 1942, and three more were added in March. Beginning with ship 101, Fisher Body supplied such items as wing outer panels, and fuselage side panels to be fed into the Kansas City line to mate with centre sections and other parts made there.

After 200 B-25Ds had been accepted, delivery began in November 1942 on 100 B-25D-1s which added the external racks, scanning blister, outboard fuel cells, and carburettor air filters provided on concurrent Cs. The B-25D-5 in December had the two .50 calibre nose guns, while the B-25D-10 had the improved compass and winterisation provisions. Flame dampening exhaust stacks were used on the B-25D-15, while the new windshield and bomb bay tanks were on the B-25D-20, whose completion wound up deliveries on the original contract in June 1943.

A supplement to the original contract brought about production of the similar B-25D-30 and the B-25D-35. The latter had winterisation changes and was seen with the added armament then being introduced on the H and J models; a tail turret, and two .50s in

The B-25B with power-operated dorsal and retractable belly turret.





All-black B-25C which, minus armament and other internal fixtures, was used for courier service in Indo-China. Photographed at Calcutta, 27th September 1945. (Photo: Peter Bowers' collection)

waist positions. Production of the 2,290 bombers in the B-25D series ended at Kansas City in March 1944.

All the added equipment during B-25C/D production increased Mitchell weight to 33,500 lb. gross. Top speed was 264 m.p.h. at sea level and 284 m.p.h. at 15,000 ft. Range with 974 gallons in wing tanks and 3,200 lb. of bombs was 1,525 miles. A 585 gallon bomb bay tank could increase ferry capacity to 1,559 gallons. Some Ds could add a 125 gallon tank in the waist.

THE MITCHELL IN SERVICE

Wartime service began for the Mitchell with anti-submarine patrols by the 17th Bombardment Group, the only Air Corps unit completely equipped with B-25s at the time of the Pearl Harbor attack. One of their planes did bomb a Japanese submarine off the Pacific coast 24th December 1941, but the crew's impression that they had sunk it was not confirmed by post-war accounting.

February 1942 saw the Group transferred from Oregon to South Carolina to meet the greater threat of German submarines off the East coast. The 13th and 21st Bombardment Groups, also with B-25s, shared in this work until the 17th re-equipped with B-26s, the 13th was inactivated in November 1942, and the 31st was dropped from active list in 1943. Two more B-25 outfits, the 309th and -334th, were limited to service in the United States as operational training units.

It was the 17th Group, however, that supplied the 24 B-25B aircraft and crews trained for the most unusual bombing mission in the Mitchell's story; the Doolittle Raid on Tokyo. Two Mitchells had been flown off the carrier U.S.S. *Hornet* on 3rd February 1942, demonstrating that this bomber was capable of making an attack from a carrier. No other Army bomber at the time had the short take-off run, and range required for the mission.

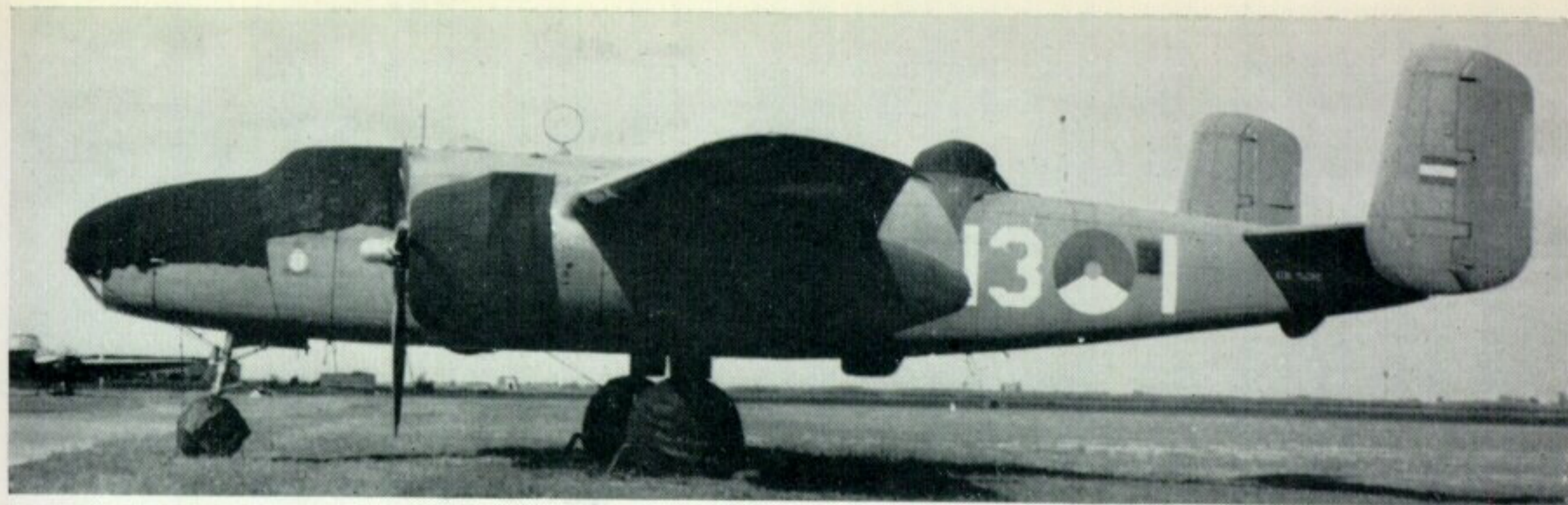
Modifications made to the B-25B reflected the special requirements; the lower turret and Norden bomb sight were removed, and replaced by more fuel and a makeshift bomb sight that proved satisfactory for the low-altitude attack. A pair of wooden broomsticks were painted black and stuck out of the tail as fake guns. The fuel load included 1,141 gallons, 646 in the wing tanks, 225 in the bomb bay tank, 160 in a collapsible crawl-way tank, 60 in the bottom turret spot, and ten 5-gallon cans used to refill. Bomb load consisted of four 500 lb. demolition or incendiary bombs.

Sixteen B-25Bs were as many as could be loaded on the *Hornet*, although all the spare crews went along as possible replacements. An encounter with enemy picket boats forced launching of the raid at a distance greater than the 400 miles off-shore originally planned. At 8.20 a.m., 18th April, Lt.-Col. James H. Doolittle's 31,000 lb. plane, 40-2344, started down the 467 feet of flight deck, and lifted off to head for the Japanese shoreline 620 nautical (714 statute) miles away. The last of the 16* was off an hour later.



*Serial numbers of the others, in order of take-off were: 40-2292, -2270, -2282, -2283, -2298, -2261, -2242, -2303, -2250, -2249, -2278, -2247, -2297, -2267, -2268, according to C. V. Glines, Doolittle's Tokyo Raiders.

The 390th North American B-25C in flight. (Photo: North American Aviation)



Mitchell of the Royal Netherlands Air Force. Note squadron badge on nose.

(Photo: via Richard Ward)

The raiders successfully bombed Tokyo and other targets from an altitude of about 1,500 feet, without any loss to enemy defence efforts. Bad weather over China frustrated the airmen's efforts to find their prearranged landing fields, and eleven of the crews had to bale out, while four others crash-landed, and one, 40-2242, was safely flown to Vladivostock, where the crew was interned in the Soviet Union.

While the Doolittle raid was the most famous B-25 combat mission, it was not the first. That was flown by the 3rd Bombardment Group of the 5th Air Force. This group had received twelve Mitchells, probably B-25Cs, which had been ferried across the Pacific to Australia in March, and were intended for the Dutch. Ten were flown by this group's 90th squadron to the Philippines on 11th April, where they raided Japanese shipping and returned to Australia without loss.

Throughout 1942, the 3rd Group's 13th and 90th squadrons, joined in August by the 38th Group, flew B-25 bombing and reconnaissance missions against Japanese forces in New Guinea. The Fifth Air Force added a new modification to the Mitchell line when they modified B-25C-1s for strafing. The bombardier's position and the lower turret were removed, and two pairs of guns were added to the nose, and another pair attached in a blister on each side. These eight forward-firing .50's were supplemented by the two in the upper turret. A crew of three operated the strafers, and sixty small fragmentation plus six 100 lb. demolition bombs could be carried.

The first example was tested in December 1942, and 175 B-25C and Ds had been so converted for low-level strafing by the depot at Townsville, Australia, by September 1943. Deadly work was done by the Mitchells against shipping in the Battle of the Bismarck Sea, and against Japanese airfields in the Rabaul area. Lt.-Colonel Paul Guon and N.A.A. representative Jack Fox, who had developed the strafing modification, also

tried an arrangement with a 20 mm. gun and four .50 cal. guns in the nose, plus two .30 calibre guns in each of the wing landing light bays.

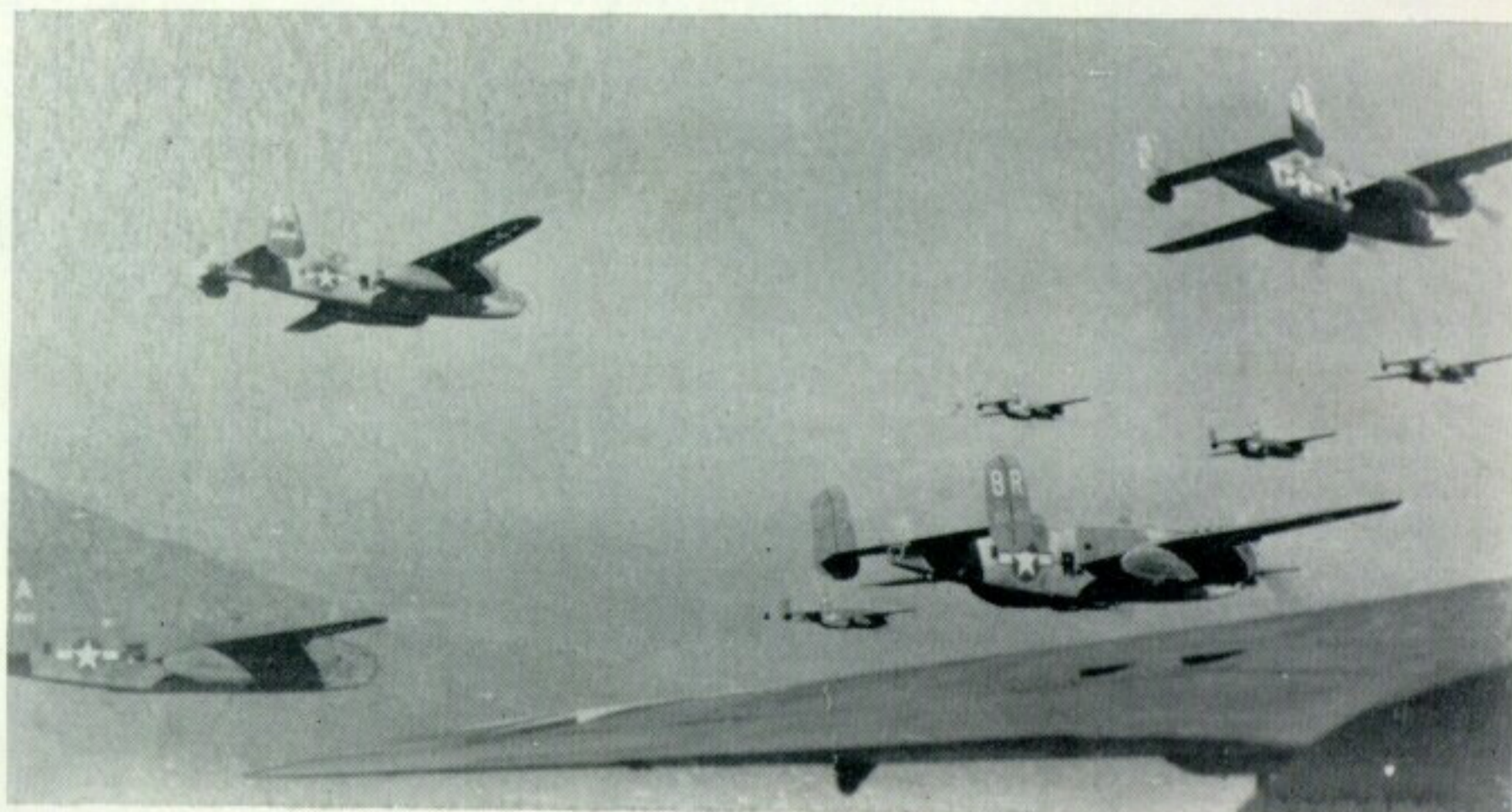
Another B-25 group joined the 5th Air Force with the arrival of the 345th in June 1943, and shortly afterwards the 22nd converted to B-25s with the departure of the Martin B-26 Marauder from the Pacific war scene. The B-25's rival was considered more suitable for Europe, because the B-26 needed larger airfields and had less range.

Next Air Force to use the Mitchell was the 10th, in the China-Burma-India theatre. Two squadrons of the 7th Bombardment Group got B-25s, with the 11th Squadron flying into China in June 1942, and the 22nd remaining in India to become the nucleus of the 341st Group activated in September. The latter group became famous as the Burma "bridge busters," while the 11th Squadron shared its raids on Japanese-occupied China and Formosa with the Chinese-American Composite Wing's First Bombardment Group formed in October 1943.

Alaska's 11th Air Force received B-25s for its 28th Group in December 1942. After the recapture of Attu, they became the first Mitchells since Doolittle's to visit Japan itself with a raid on Paramushiru on 10th July 1943.

Still more pressure on Japan from Mitchells came with the appearance in the Central Pacific of the 13th Air Force's 42nd Group in June 1943, and the 41st Group in December 1943.

Germany's airmen first found themselves fighting the Mitchell in Egypt. The 12th Bombardment Group arrived there in August 1942 after flying via Florida,



B-25s of the 488th Bomb Squadron, 340th Bomb Group, 12th Air Force, attacking Cassino, 15th March 1944. (Photo: via Richard Ward)

A B-25C-5 on an operational mission; this was the first variant to mount a flexible .50 cal. nose gun. The voluptuous blonde painted on this machine's nose is appropriately captioned "WORTH FIGHTING FOR".
(Photo: Army Air Corps)



the Antilles, Brazil, Ascension and central Africa without losing a plane. The Americans went into action gradually as part of R.A.F. formations. Night operations against Axis ports and airbases on the African coast proved that without flame dampeners their exhausts made the B-25s easy targets; four being shot down the night of 13 September. Day operations were more successful, and the 12th Group contributed 46 B-25s to the Allied air offensive during the Battle of El Alamein.

After the Americans landed in North Africa, three more B-25 groups joined the struggle for the Mediterranean under the direction of the 12th Air Force. They were the 310th, which went into action in December 1942, the 321st in March 1943, and the 340th in April 1943. The United States Air Forces, however, never used the Mitchell on raids from United Kingdom bases, reserving these for the B-26.

R.A.F. MITCHELLS

It was the Royal Air Force itself that used the B-25 to attack German-occupied Europe from the United Kingdom. The R.A.F. had received 23 B-25Bs with serials beginning *FK161*, named them Mitchell I, and used them for operational training. The B-25C and B-25D became the Mitchell II, commencing *FL164*, which was issued to No. 98 and No. 180 squadrons when these units reformed at West Raynham. The first nine Mitchells to reach No. 98 arrived 18th September 1942. Six Mitchells from No. 98 and six from No. 180 flew their first combat mission on 22nd January 1943. Oil installations at Ghent were bombed, with the loss of two Mitchells to enemy fighters, and one to flak.

Mitchell IIs were also issued to No. 320 (Dutch)

Rare combat photo of a 5th Air Force B-25 being attacked by a J.A.A.F. Ki-43 "Oscar" over Hansa Bay, New Guinea.

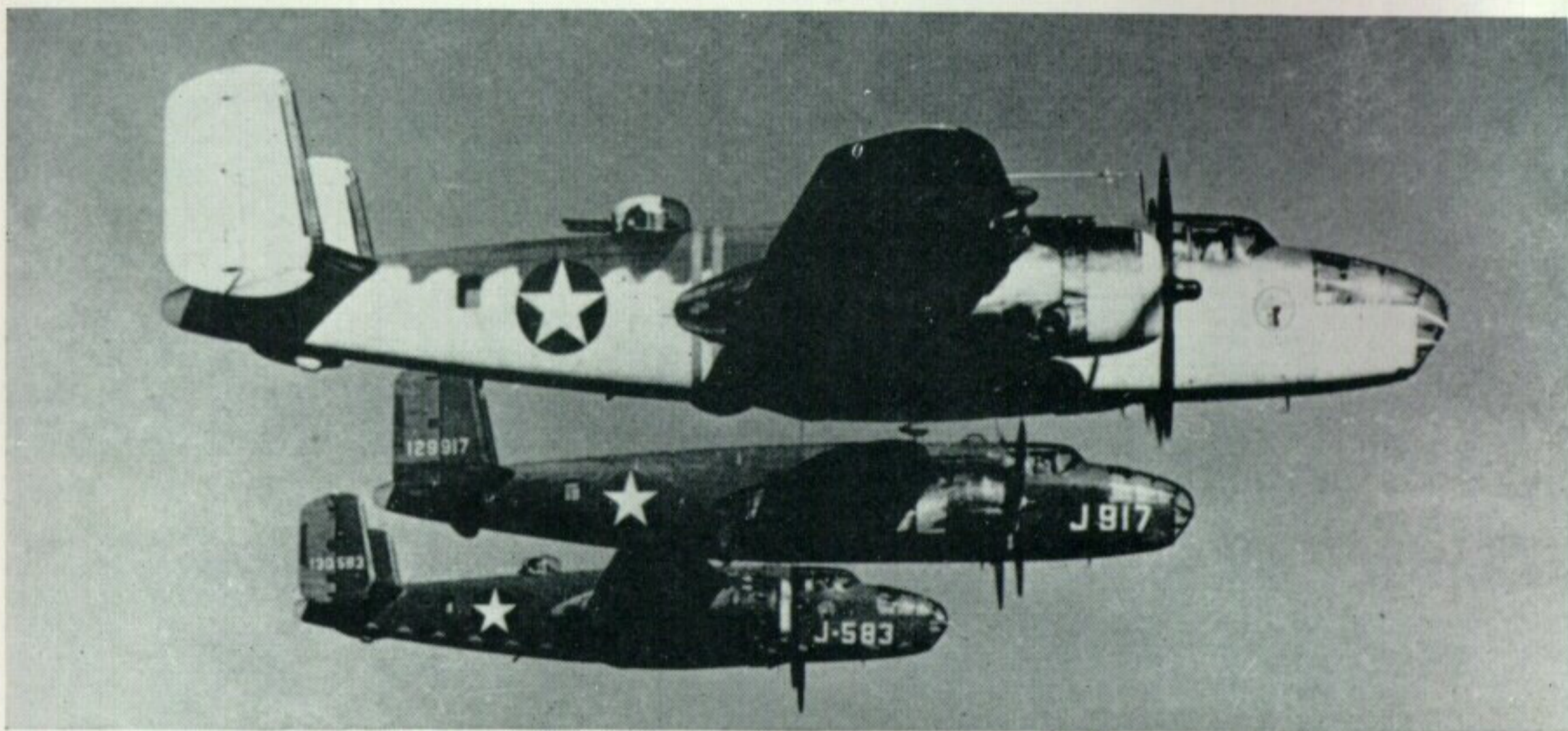
(Photo: A.A.F. via Louis Lowry)



SPECIAL MODIFICATIONS

Besides the main production run of B-25C/D models, known in the R.A.F. as the Mitchell II, there were

various modifications made on aircraft produced to the original contracts. The XB-25E was a B-25C-10, 42-3228, reworked to include heated surface type anti-



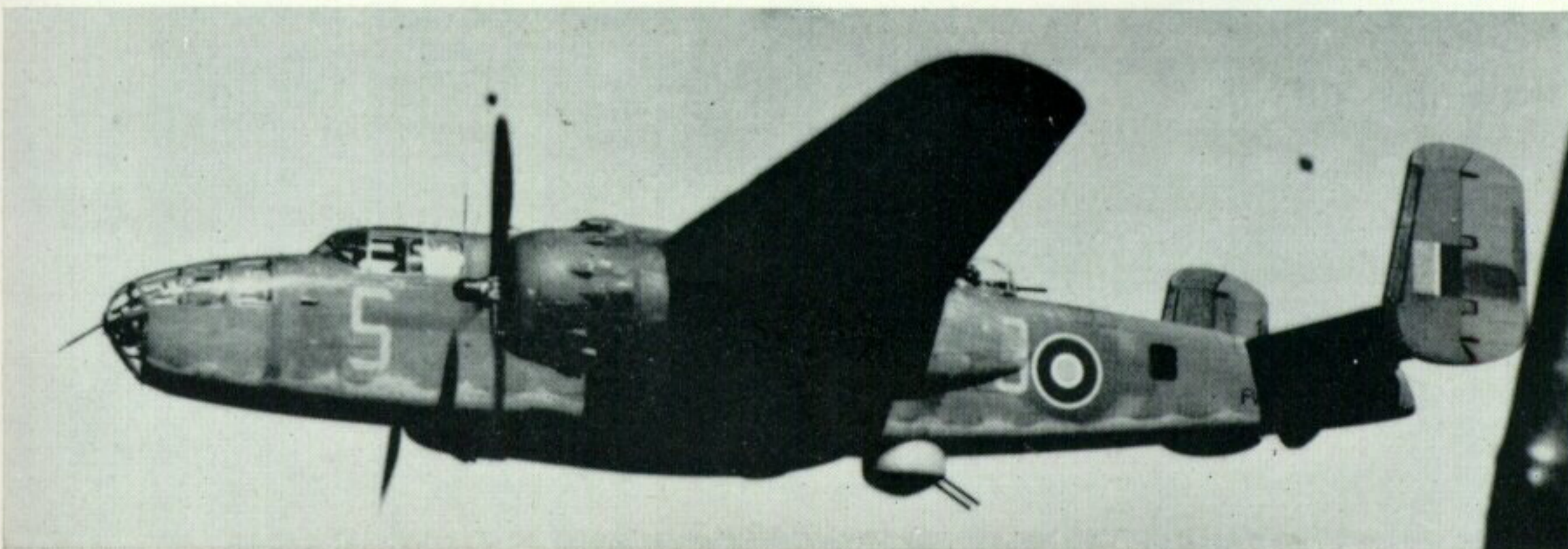
A B-25C (41-12848) in white and drab "Seasearch" colour scheme, in flight with B-25D-1 (41-29917) and D-20 (41-30585). Note absence of dorsal turret on 41-29917.

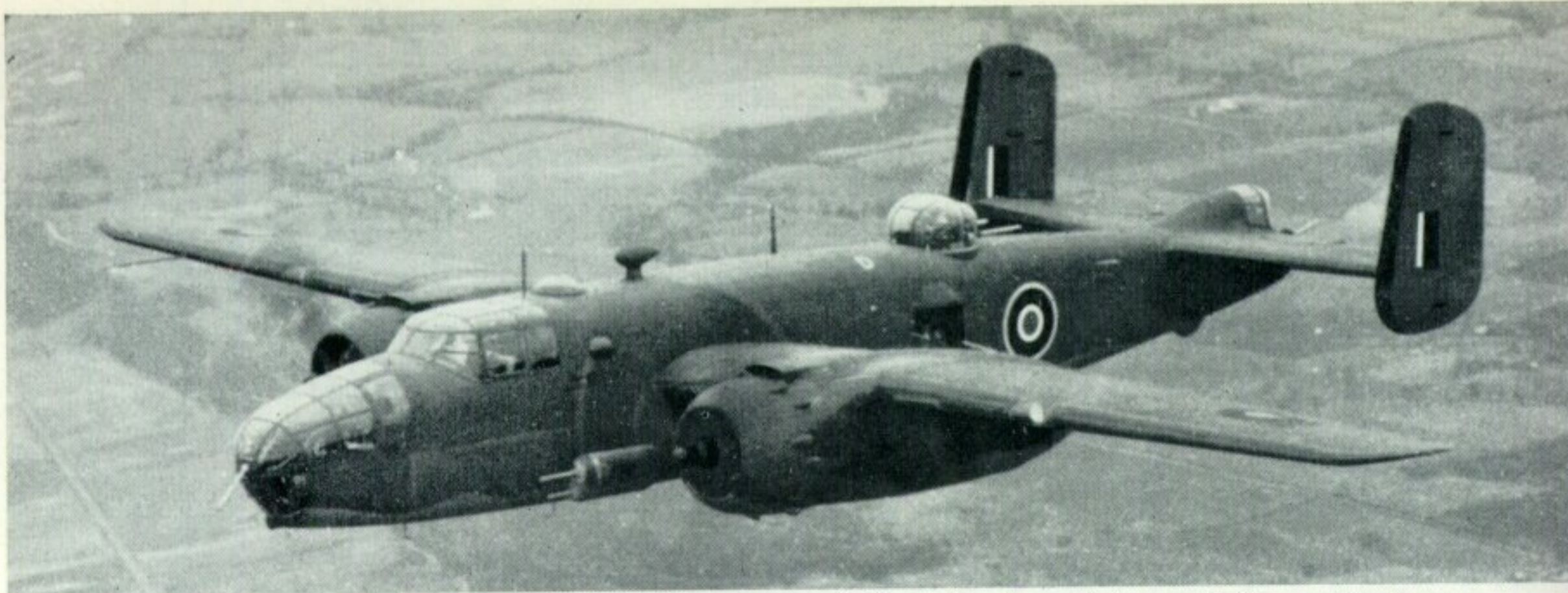


Mitchells of the 83rd Bomb Squadron, 12th Bomb Group, over Tunisia. Insignia on nose of nearest aircraft reads "Desert Vagabond Jr.". (Photo: U.S.A.F.)

A Mitchell II of No. 98 Squadron, R.A.F., with ventral turret lowered.

(Photo: Imperial War Museum)





An R.A.F. B-25D (Mitchell II) displays waist turrets and .50 cal. "pack guns" low on the forward fuselage.



FV914 of No. 98 Squadron.



No. 320 (Dutch) Squadron Mitchells bomb up.
(Photo: via Richard Ward)

icing equipment, while thermo anti-icing was used on another C labelled XB-25F.

Mitchells used for training were sometimes redesignated AT-24, the AT-24A being a stripped B-25D, while the AT-24B and AT-24C were converted from

the B-25G and B-25C. Older model B-25As and B-25Bs were labelled RB-25A and RB-25B when restricted to training in October 1942. In 1944, however, trainer conversions of bombers became TB-25D, etc. Ten B-25Ds with guns removed and tri-metrogon cameras in the nose for photo mapping were designated F-10.

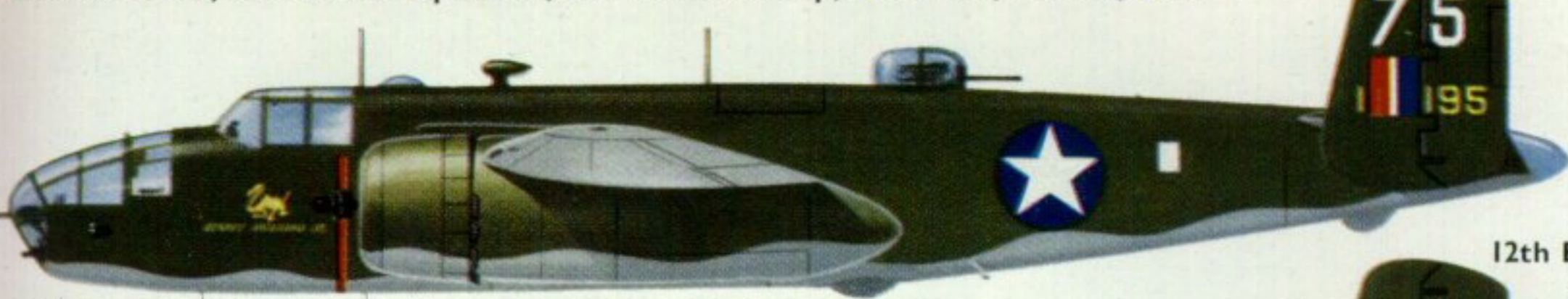
The most outstanding Mitchell modification was the fitting of a standard 75 mm. M-4 cannon, which fired a 20 lb., 26 inch round. The first Mitchell to test it was the last B-25C-1, 41-13296, redesignated XB-256 and sent to Columbia, South Carolina Air Force Base in January 1943 for tests with water targets off Myrtle Beach. The muzzle blast ruptured the area adjacent to the muzzle at a rivet joint, so production installations had the barrel lengthened about three inches. Then five B-25C-15s were completed as B-25Gs for service trials, and the last 400 aircraft on the NA-96 (B-25C-20) contract were completed as B-25Gs from May to August 1943.

The 75 mm. gun was mounted in the lower left nose and hand-loaded with 21 rounds from the loading tray behind the pilot. The shortened solid nose had two fixed nose guns with 400 rounds each, and armour $\frac{3}{8}$ " thick covers the front and left side of the pilot's cockpit, with armour panels covering the shell rack and backs of the pilot and cannoneer. The usual two-gun top turret and its armour bulkhead was retained, but the two-gun lower turret on the first 221 Gs was omitted on later ships. Weighing the same as the Cs the B-25G was credited with a top speed of 268 m.p.h. at sea level and 281 m.p.h. at 15,000 ft., a 24,300 ft. service ceiling, and a range of 1,525 miles with 3,000 lb. bomb load, and 2,200 miles ferry.

The devastating forward battery of this B-25G-1 includes a 75 mm. gun in a "tunnel" low on the port side of the nose. The gun was loaded with individual shells through a tray behind the pilot's seat.

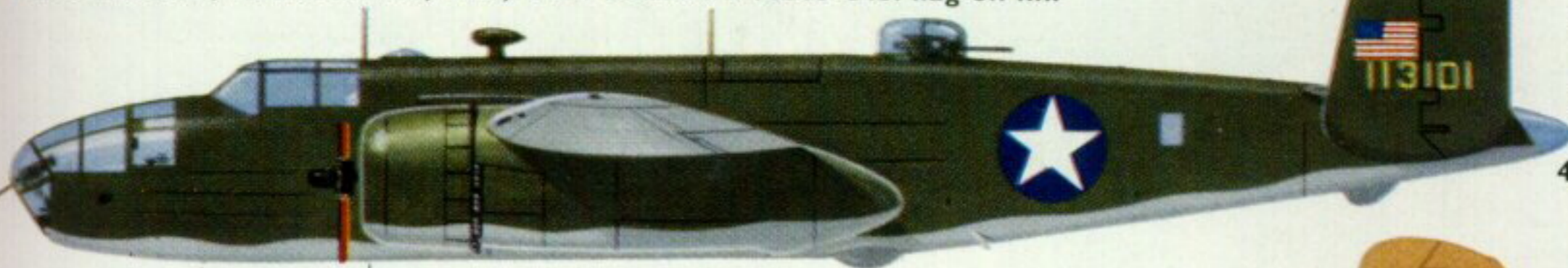


B-25C Mitchell, 83rd Bomb. Squadron, 12th Bomb. Group, Medenine, Tunisia, 1943.



12th Bombardment Group
81st Bomb. Squadron
numbers 1-25
82nd Bomb. Squadron
,, 26-50
83rd Bomb. Squadron
,, 51-75
434th Bomb. Squadron
,, 76-99

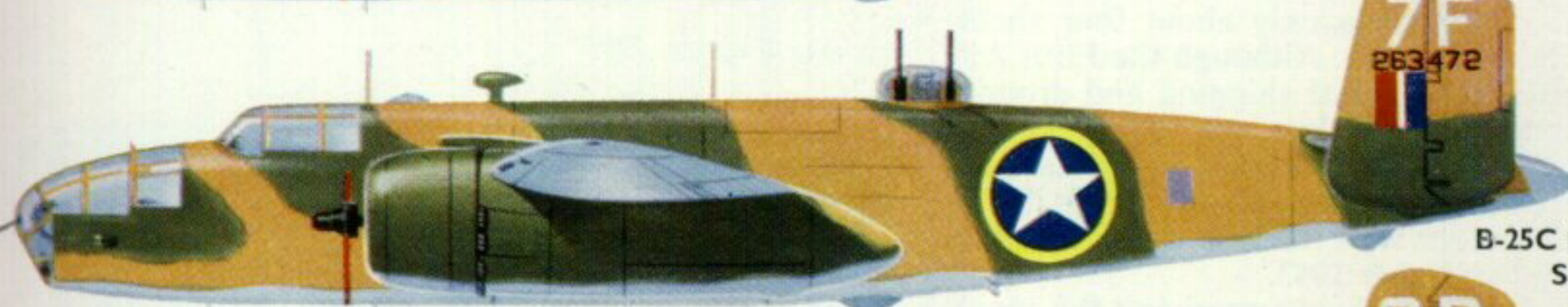
B-25C Mitchell, North Africa, 1942, Unit unknown. Note U.S. flag on fin.



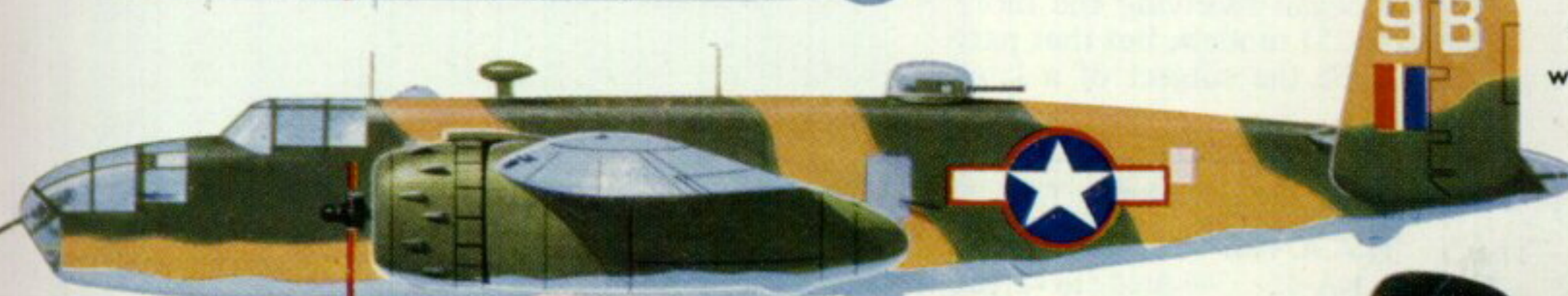
B-25C Mitchell, 82nd Bomb. Squadron, 12th Bomb. Group, Western Desert, 1942-43.



B-25C Mitchell, 487th Bomb. Squadron, 340th Bomb. Group, Western Desert, 1942-43. The national marking with yellow border was marked port and starboard on the upper surface of the wings.



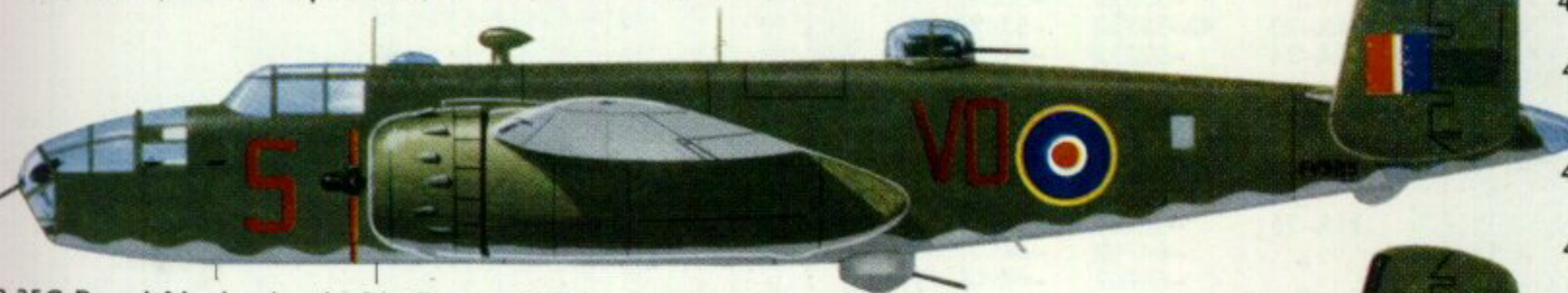
B-25C Mitchell, 489th Bomb. Squadron, 340th Bomb. Group, Tunisia, 1943. The national marking with white bar and red border was marked port and starboard on the upper surface of the wings.



B-25C Mitchell, used for courier flights between India and China, Calcutta, 1945.

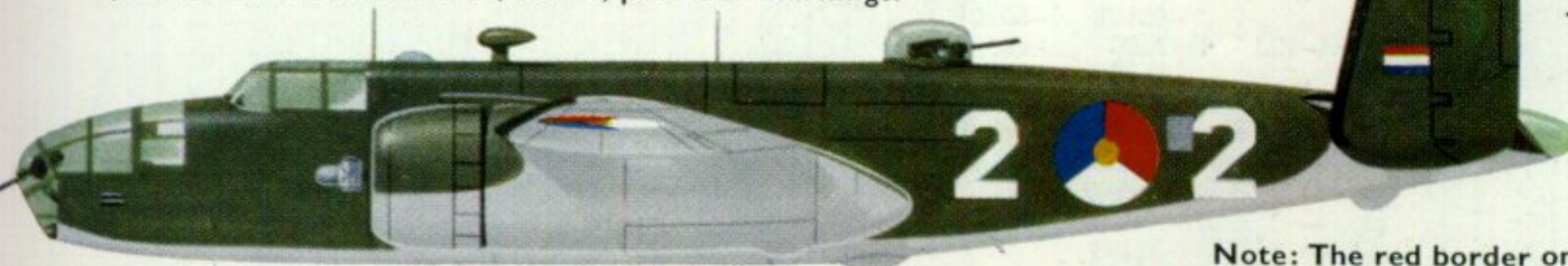


Mitchell II, No. 98 Squadron, R.A.F., Dunsfold, U.K., 1944.



340th Bombardment Group
486th Bomb. Squadron
number 6
487th Bomb. Squadron
,, 7
488th Bomb. Squadron
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489th Bomb. Squadron
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B-25C Royal Netherlands Air Force, N.E.I., post-war markings.



Note: The red border on national marking was used from June 1943 until September 1943.



This well-known photograph of a Mitchell of No. 320 Squadron R.A.F. in action over Europe shows the D-Day invasion stripes to good effect. The machine illustrated is NO-K; note that the R.A.F. fin flashes are marked on the inner and outer vertical tail surfaces. (Photo: Imperial War Museum)

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Although two B-25Gs (FR208 and FR209) were tried by the R.A.F., and one PBJ-1G (35097) by the U.S. Navy, most were used by the 5th, 10th, and 12th Air Forces. The cannon was accurate, but the aircraft had to be held steady while only about four shells could be fired in a single run. Although the Fifth Air Force used them often against shipping and ground targets, the cannons were taken out of 82 B-25Gs and replaced by two .50 calibre guns in the cannon tunnel, two more in the nose, and a pair of .30s in the tail. These modifications were made in the Townsville depot, beginning November 1943.

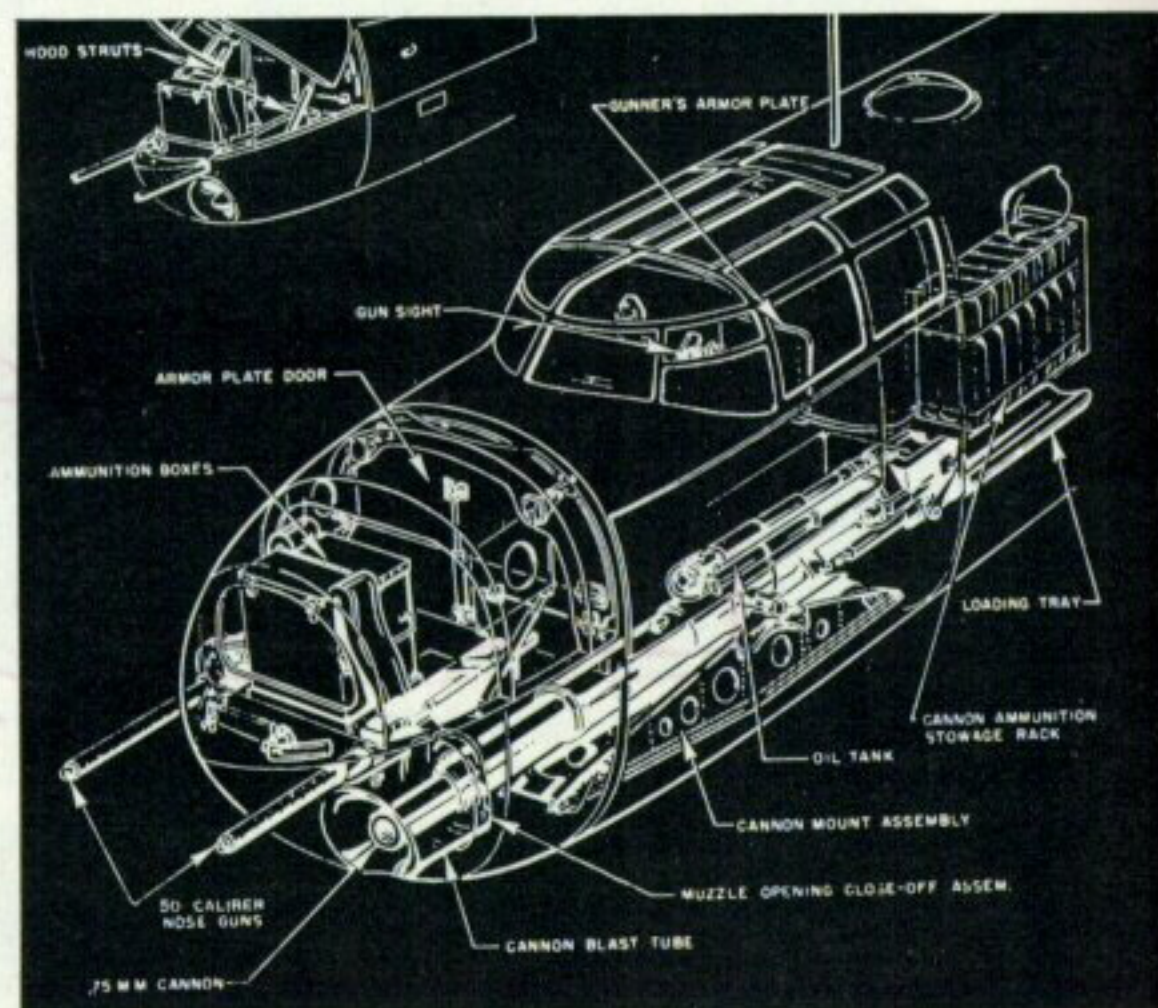
By 1944, the Air Force began receiving the more heavily armed B-25H and B-25J models, but that part of the Mitchell story shall be the subject of a later Profile.

B-25 to B-25G SERIAL NUMBERS

No. a/c	Type	N.A.A. No.	Serials
24	B-25	NA-62	40-2165 to -2188
40	B-25A	"	-2189 -2228
14	B-25B	"	-2229 -2242
1	Cancelled	"	-2243
105	B-25B	"	-2244 -2348
605	B-25C	NA-82	41-12434 -13038
258	B-25C-1	"	-13039 -13296
(1)	(XB-25G)	"	(41-13296)
200	B-25D	NA-87	41-29648 -29847
100	B-25D-1	"	-29848 -29947
225	B-25D-5	"	-29948 -30172
180	B-25D-10	"	-30173 -30352
180	B-25D-15	"	-30353 -30532
315	B-25D-20	"	-30533 -30847
162	B-25C-5	NA-90	42-53332 -53493
48	B-25C-10	NA-94	-32233 -32280
1	XB-25E	"	-32281
101	B-25C-10	"	-32282 -32382
1	B-25C-15	NA-93	-32383
5	B-25G-1	"	-32384 -32388
144	B-25C-15	"	-32389 -32532
200	B-25C-20	NA-96	-64502 -64701
100	B-25C-25	"	-64702 -64801
100	B-25G-1	"	-64802 -64901
200	B-25G-5	"	-64902 -65101
100	B-25G-10	"	-65102 -65201
340	B-25D-30	NA-100	43-3280 -3619
250	B-25D-35	"	-3620 -3869

Early U.S. Navy PBJ-1 Serials

50	PBJ-1C	34998-35047
49	PBJ-1D	35048-35096
1	PBJ-1G	35097
96	PBJ-1D	35098-35193
7	PBJ-1D	35196-35202



B-25G nose armament diagram.

SPECIFICATION

North American B-25C/D "Mitchell II"

Powerplant: Wright R-260-13, 1,700 h.p. takeoff, 1,700 h.p. at 4,500 ft.; and 1,400 h.p. at 13,000 ft. military power, 1,500 h.p. at 6,700 ft. and 1,300 h.p. at 13,500 ft. maximum continuous power. (Alternate engine is R-2600-29 of similar power.) Hamilton Standard 12 ft. 7 in. diameter three-bladed propeller.

Dimensions: Wing Span 67 ft. 6.7 in., Length 52 ft. 10½ in. Height 15 ft. 9 in. Tread 19 ft. 4 in. Wing Area 610 sq. ft. **Weights:** Empty 20,300 lb., Gross 33,500 lb., War maximum 35,000 lb.

Performance: Top speed 264 m.p.h. at sea level, 284 m.p.h. at 15,000 ft.; Cruising 233 m.p.h.; Landing 105 m.p.h. at 24,000 lb. Climb 1,375 ft. first minute, 15,000 ft/16.5 minutes. Service ceiling 21,200 ft. Range 1,525 miles with 3,200 lb. of bombs, 1,350 miles with 2,000 lb. torpedo, 1,225 miles with 5,200 lb. of bombs; all with 974 gallons of fuel. Ferry range is 2,500 miles with 1,559 gallons, or 2,650 miles with 1,684 gallons (D only).