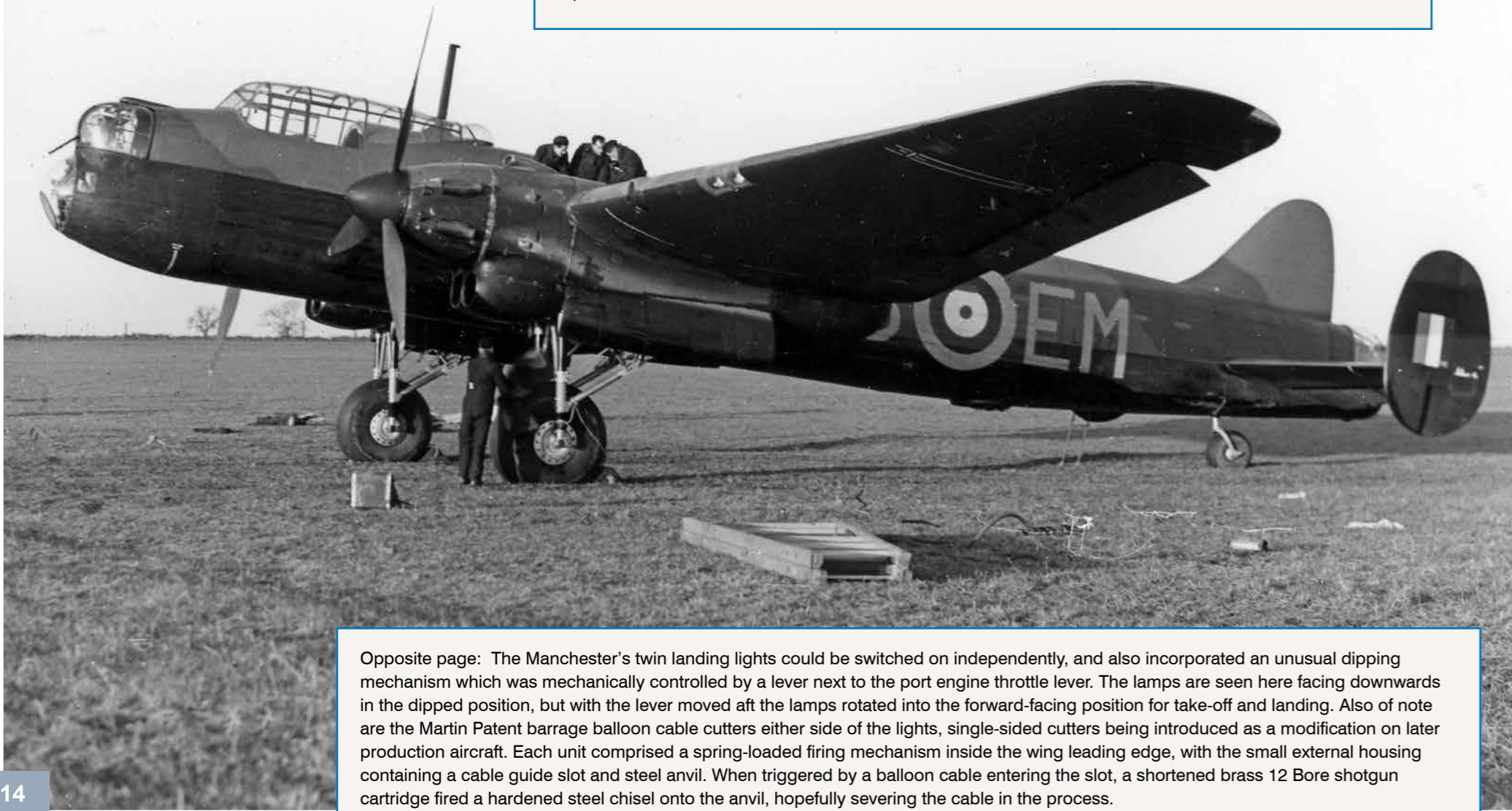


In late 1940 207 Squadron became the first operational Manchester unit, the first aircraft delivered to the squadron being 4th production airframe L7279 EM-B seen here at Waddington. The aircraft was completed with extended wings, short span tailplane with fabric covered steel elevators, and small carburettor intakes. Soon to be removed, the FN21A ventral turret and its footwells are fully retracted and guns are not installed. In December 1940 RAF camouflage was standardized as the Dark Earth/Dark Green 'Temperate Land Scheme' with L7279 being finished in the rare 'A' camouflage pattern, the dull red serial number having been overpainted by the grey squadron codes. The Air Ministry Order in force at the time permitted squadron codes to be located on either side of the roundel, and although the starboard side codes were always in the standard position on the Manchester, as seen here earlier production machines frequently featured port side squadron codes aft of the roundel.



Opposite page: The Manchester's twin landing lights could be switched on independently, and also incorporated an unusual dipping mechanism which was mechanically controlled by a lever next to the port engine throttle lever. The lamps are seen here facing downwards in the dipped position, but with the lever moved aft the lamps rotated into the forward-facing position for take-off and landing. Also of note are the Martin Patent barrage balloon cable cutters either side of the lights, single-sided cutters being introduced as a modification on later production aircraft. Each unit comprised a spring-loaded firing mechanism inside the wing leading edge, with the small external housing containing a cable guide slot and steel anvil. When triggered by a balloon cable entering the slot, a shortened brass 12 Bore shotgun cartridge fired a hardened steel chisel onto the anvil, hopefully severing the cable in the process.

MANCHESTER Mk.I L7279 EM-B 207 SQUADRON, NOVEMBER 1940



Modeller's notes

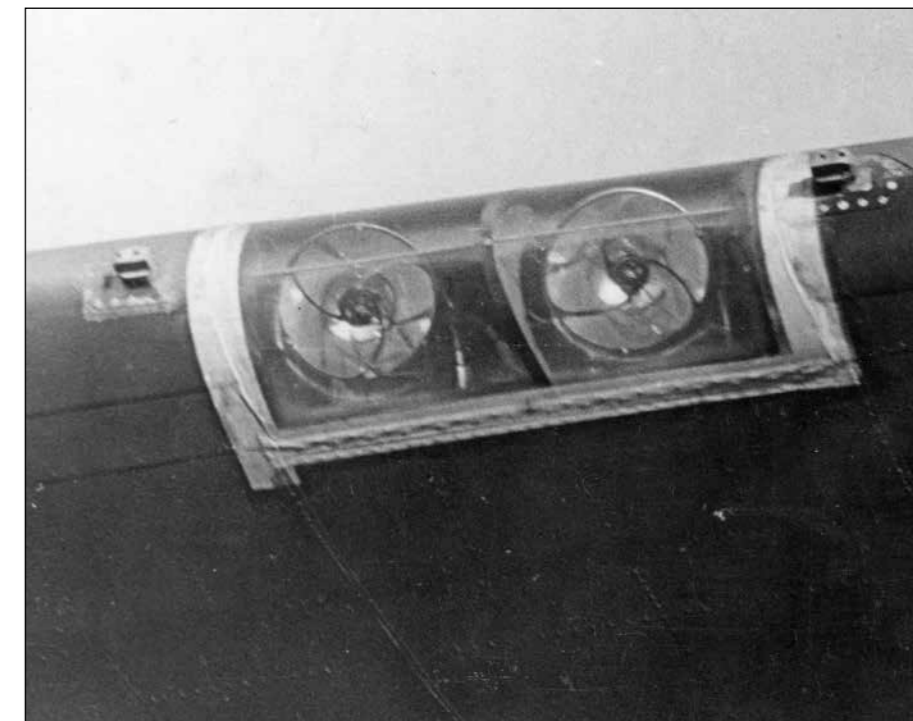
Delivered to 207 Squadron 6 November 1940.
 Transferred to 61 Squadron 15 April 1941.
 Struck Off Charge 11 October 1943.

Aircraft

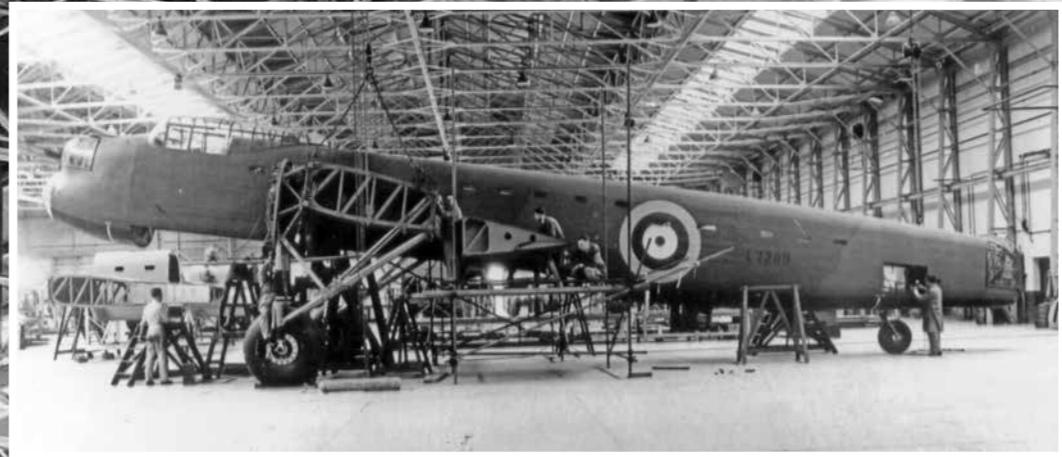
90ft 1in wings and 28ft tailplane with production type centre fin.
 Small carburettor intakes.
 Additional engine nacelle cooling inlets/exhausts.
 Automatic Bomb Sight Mk.II support arms and bombsight.
 Single small circular Perspex window beneath bomb aimer's blister.
 Fully retracted FN21A ventral turret and footwells without guns installed.

Colours and Markings

DTD 308 Dark Earth/Dark Green 'A' pattern with mid demarcation line and camouflaged upper rear fuselage and centre fin. DTD 308 Night on lower surfaces and outboard fins/rudders.
 Grey trestle markings and fuselage codes with port-side squadron code aft of roundel and codes painted over serial number.
 Post-May 1940 type fuselage roundels.
 Post-August 1940 type fin flashes.
 Dull red serial numbers.



Despite the original caption L7280 was in fact the fifth production Mk.I, and is seen here during construction at Woodford in the summer of 1940, finished in 'B' pattern camouflage. Although one serial number later than L7279, this photograph was taken some months prior to the one on page 14 hence the earlier, lower straight camouflage demarcation line which was applied between mid-1939 and late 1940. Although never implemented it was intended to change production as soon as possible from the FN4A (seen here) to the improved FN20, and to this end L7280 was used for FN20 installation trials.



*L.7280 at Woodford Assembly Shops.
No. 6 production Machine*

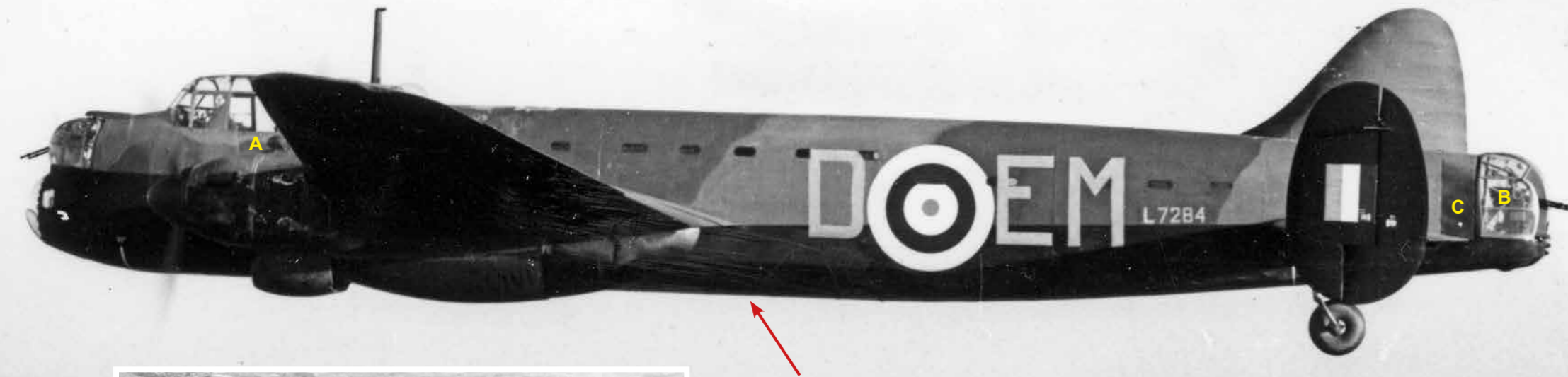
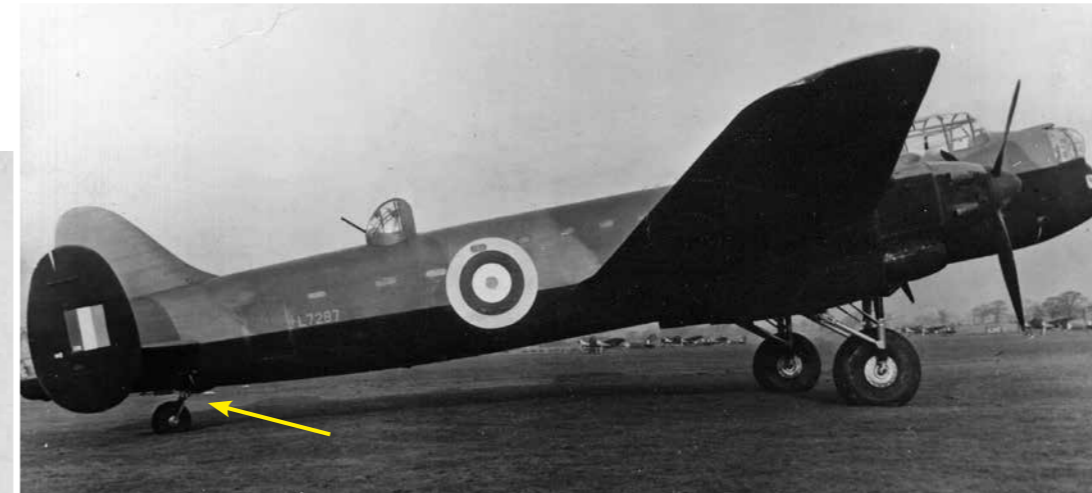
Items of interest include the chain falls attached to the centre section and to the rear fuselage slinging eyebolt, absence of brake units, white 'Dunlop' on the main wheel tyre and the length of the normally hidden undercarriage rear struts (arrowed). Beginning with 207 Squadron, L7280 served on a succession of squadrons and training units before being Struck Off Charge in October 1943.

The Manchester's Dark Earth/Dark Green camouflage was sprayed in DTD 308 cellulose paint and the lower surfaces in either DTD 308 Night (very early production aircraft only) or RMD 2A Special Night (later examples), L7282 being finished in the latter. The first batch of airframes delivered to 207 were not considered operationally fit and were initially used only for training purposes, the ventral turrets (L7282's example seen here fully retracted) all being removed prior to commencing operations. Other points of note include the differing sizes of grey squadron and aircraft code letters, dull red serial number and nose production joint tape which appears to be unpainted or missing. After further service on 97 Squadron L7282 was recategorized as an instructional airframe and transferred to No.12 School of Technical Training at RAF Melksham.



L7284 displays the more pleasing proportions of the extended wings as she cruises serenely above a rural landscape on a sunny day in the winter of 1940/41. A wooden escape hatch was installed in place of the deleted FN21A ventral turret, the hatch's external profile being shaped to match the surrounding fuselage skin contours (unlike the flat ventral fairing later fitted to some Lancasters). Other points of interest are enlarged carburettor intakes (A), and the light-coloured structure and more rounded profile of the FN4A (B), complete with air flow deflector fairing (C). Erk's boots have left their marks on the centre section, and the hydraulically-operated radiator flaps of the usually hot-running Vultures are fully closed – presumably it was a cold day!

The early Manchesters' straight bomb bay doors (arrowed) are very apparent in this view.

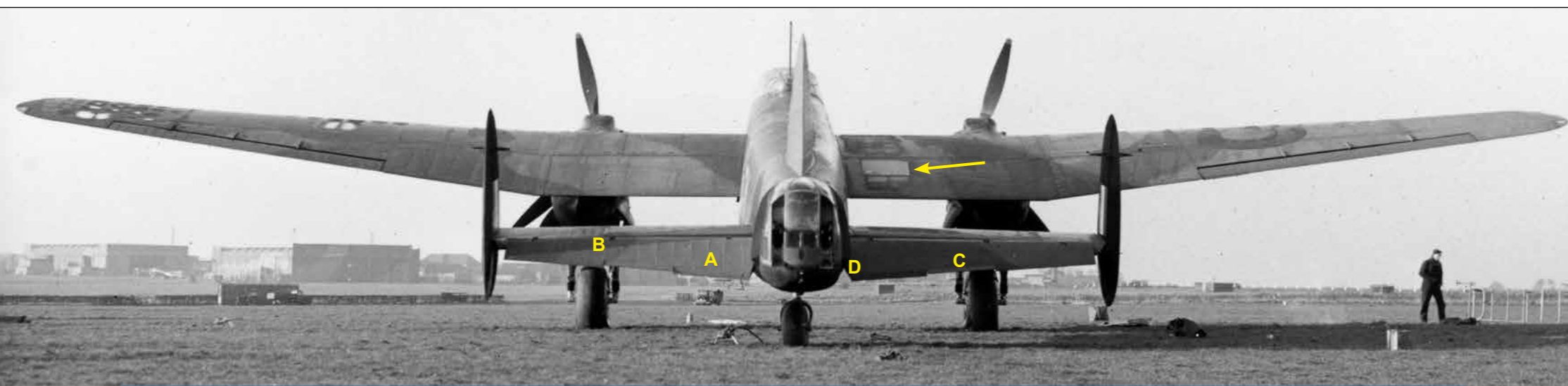


Left: Thanks to seemingly never-ending technical problems 61 Squadron suffered a very protracted changeover to the Manchester, not achieving true operational status until December 1941. L7284 was transferred from 207 to 61 Squadron in April 1941 and is seen here during an air test in July of that year. Prior to entering service with 61 Squadron, the aircraft was re-painted in the February to October 1941-period camouflage scheme with widely spaced wavy demarcation line. Other visual differences from the above photo including the addition of a 33ft tailplane and an FN7A mid-upper turret. The starboard outboard trailing edge has also evidently been replaced at some point, repainting of the rear part of the roundel seemingly having been overlooked!



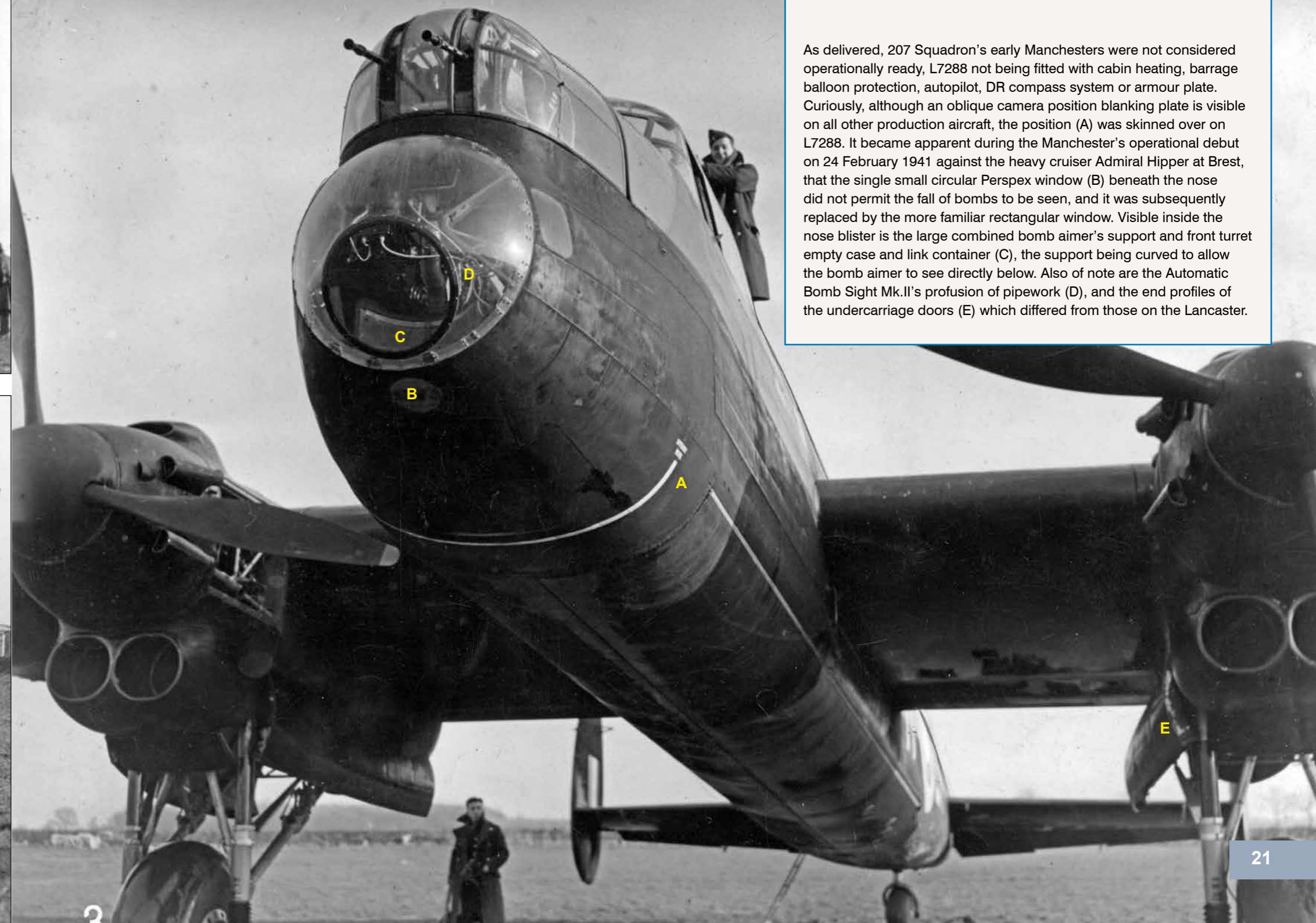
Main and upper left - Following completion in November 1940, L7287 was retained by Avro for trials work and is seen here with an FN7A mid-upper turret. Tailwheel shimmy was soon found to be a problem on the Manchester, and L7287 has an experimental tail oleo (arrowed) with torque link on the forward side and large hydraulic shimmy damper on the aft (also visible in the upper image of L7320 on page 48). Also of note are the presence of cockpit canopy blisters.

Top right: Transferred to 49 Squadron in April 1942, L7287 displays its later paint scheme. Frequently given the unofficial post-war description 'C.1', the later style fuselage roundel's period designation was 'National Marking - Roundel III'. Although officially promulgated by Air Ministry Order A.664/42 in early July 1942, the later style roundel, fin flash and dull red codes were all in use several months earlier. The lack of mid-upper turret and non-standard fuselage code positioning give the aircraft an unusual appearance. Skipped by F/L Roger Paramore DFC, L7287 was lost at sea during an attack on Emden on 7 June 1942



L7288 was delivered without mid-upper or ventral turrets and, as seen in the following winter 1940/41 images, it featured in a photo shoot intended to publicise the RAF's new bomber. The aircraft possesses more pleasing proportions than the prototypes thanks to the increased span tailplane and wings. Noticeable in most 1940/41 period Manchester photographs, L7288 stands on grass, typical Bomber Command airfields of the era being without hard runways, perimeter tracks or dispersals.

In the lower photo, Waddington's Type C hangars form the background to this rear view of L7288 which highlights the ribs (A) and inset hinges (B) of the improved fabric covered steel tube elevators. With the elevators in the down position the balance tabs (C) have automatically moved in the opposite direction, while the trim tabs on the elevator's inboard ends remain aligned with the trailing edges. The elevator's modified chamfered inboard ends (D) can also be seen. The smaller, modified aileron hinges and the thickness of the third fin are very evident from this angle, while early morning frost has also made the dinghy stowage in the starboard wing root more apparent than usual (arrowed). A legacy of the original shorter wingspan, the upper wing roundels remained in the inboard position on earlier airframes (see page 28 for later position).



As delivered, 207 Squadron's early Manchesters were not considered operationally ready, L7288 not being fitted with cabin heating, barrage balloon protection, autopilot, DR compass system or armour plate. Curiously, although an oblique camera position blanking plate is visible on all other production aircraft, the position (A) was skinned over on L7288. It became apparent during the Manchester's operational debut on 24 February 1941 against the heavy cruiser Admiral Hipper at Brest, that the single small circular Perspex window (B) beneath the nose did not permit the fall of bombs to be seen, and it was subsequently replaced by the more familiar rectangular window. Visible inside the nose blister is the large combined bomb aimer's support and front turret empty case and link container (C), the support being curved to allow the bomb aimer to see directly below. Also of note are the Automatic Bomb Sight Mk.II's profusion of pipework (D), and the end profiles of the undercarriage doors (E) which differed from those on the Lancaster.