

## LANCASTER MK II in Service With 408 , 426, and 432 Sqns RCAF

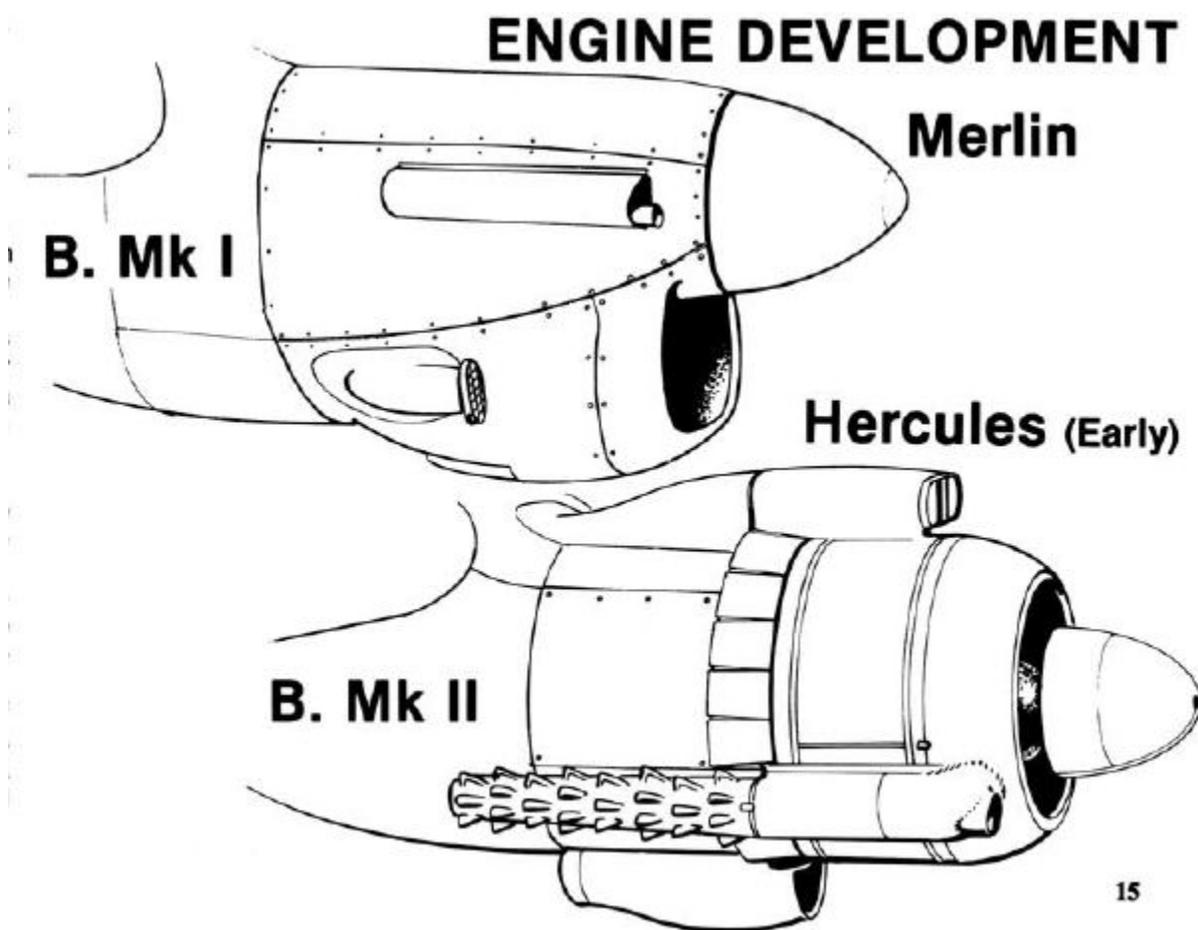


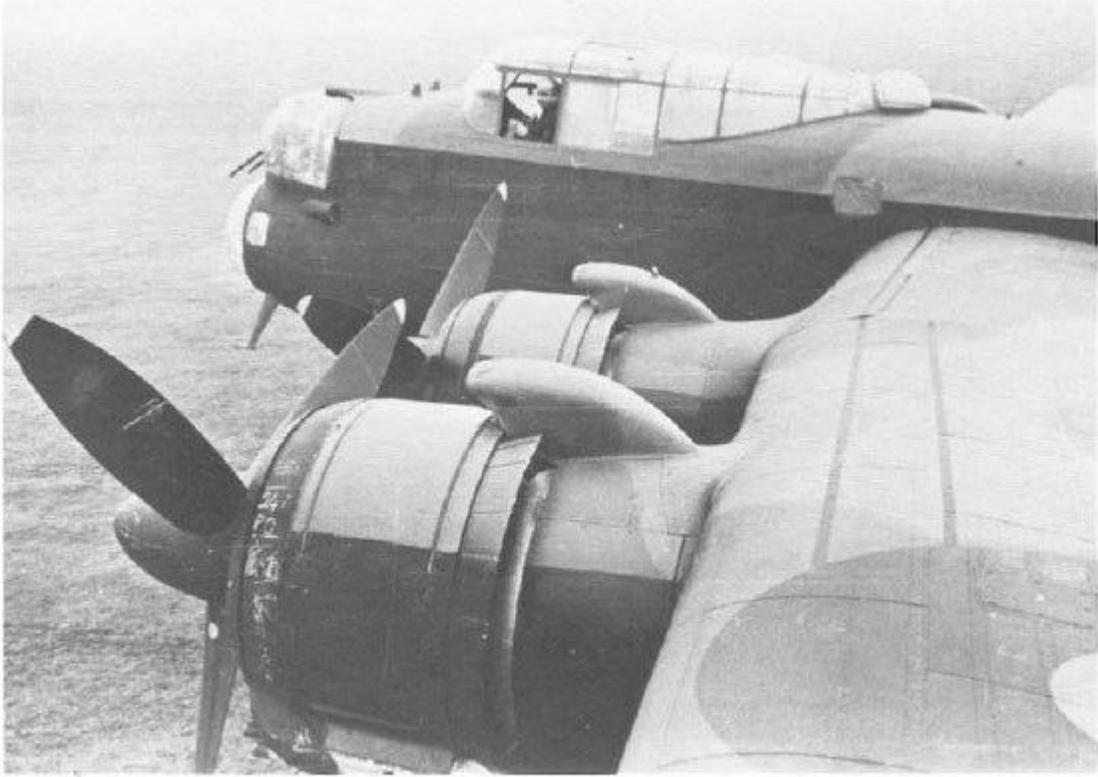
With the advent of full scale Lancaster production, the extra demand placed on Rolls-Royce Merlin supplies raised the spectre of an ultimate bottleneck occurring. That this bottleneck never occurred owes much to the Bristol company and its Hercules radial engine. Four of these were fitted to BT810 and flight tested on 16 November 1941 with good general results. Since Avro production lines were fully committed to Mk Is, a contract bid from Armstrong-Whitworth was accepted. Between September 1942 and March 1944, A.W. built 300 aircraft at Baginton, serialised DS601-852 and LL617-739.

Apart from DS601-627, which were powered by Hercules Vis, the standard engine was the Hercules XVI with Rotol airscrews which in contrast to the Merlin airscrews, rotated counterclockwise.

The outline of the Mk. II was initially similar to the Mk I/III, but in early production stage bulged bomb-doors were introduced as standard on the Mk II to accommodate 8,000 lb. bombs. H2S sets were not carried, and this allowed for the installation of FN64 belly turrets. Although this does not appear to be the case for any of the Mk IIs operated by the RCAF. Other refinements involved the engines; bell shaped spinner covers were fitted and Beaufighter patterned air intakes and flame damping exhausts were introduced. Photographic evidence indicates that the Mk IIs carried the shallow nose blister and early pattern pitot mast.

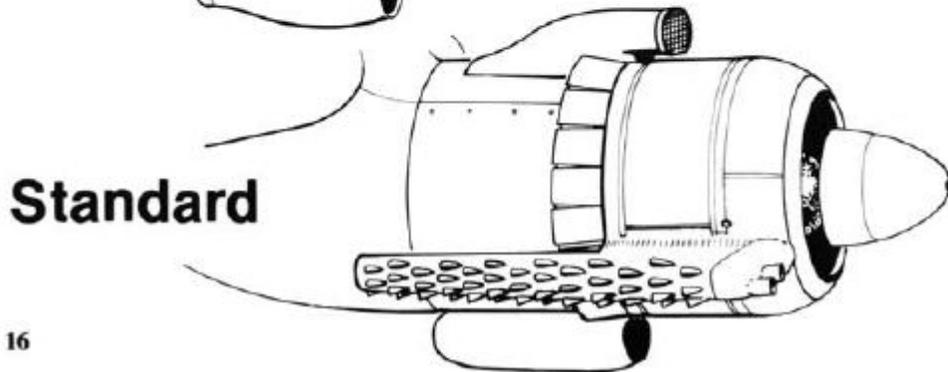
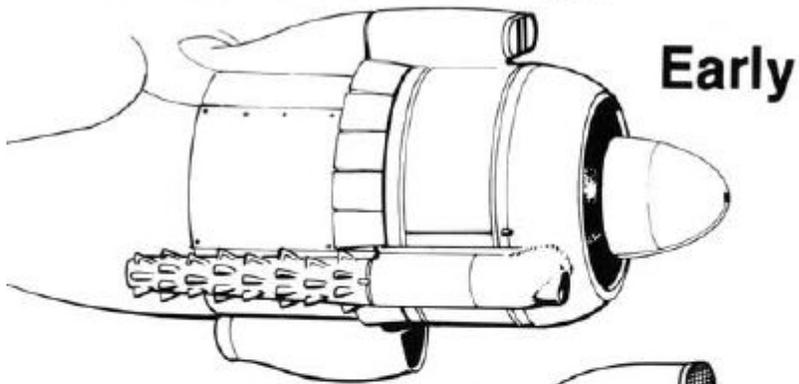
At an all up weight of 63,000 lbs. the performance of the Mk II was akin to that of the Mk I/ III, realizing a maximum speed of 265 mph at 14,000 feet and cruising at 167 mph. The Mk II had a superior rate of climb up to 18,000 feet, but progress above this level fell off quickly. Despite its lack of altitude as compared to the Mk I/IIIs, many a RCAF pilot preferred the performance and handling qualities of the Mk II. The air-cooled Hercules could sustain a greater degree of damage than its oil-cooled Merlin partner and the barbed exhausts cut down on exhaust glow.





Very early in the Mk II production run the Beaufighter pattern air intake became standard.

## Mk II ENGINES





A line-up of 514 Squadron at Waterbeach prior to a Berlin raid in January 1944. The distinctive shape of the B. Mk IIs bulged bomb bay can be seen on the nearest Lancaster. The barbed exhaust was more effective in dissipating heat and consequently glowed less in the night sky. (G. Henry)

## BOMBAY

B. Mk I



Standard Doors

B. Mk II



Bulged Doors

(Above Left) About to touch down at Sudbury, the home of the U.S. 486th Bomb Group is *Fanny Ferkin II* of No. 514 Squadron. Coded JI©F/DS842, she was written off during March 1945. (I. McTaggart)

*Fanny Ferkin II*, its cavernous 33 foot bomb bay receiving a covetous inspection by ordnance men of the U.S. 401st Bomb Group at Deenethorpe. (M.L. Gibson)

The first fully equipped Mk. II Squadron was No. 115 which began equipping in March 1943 and flew them until May 1944, then switching to the Merlin powered Lancasters. During the latter months of 1943 and for much of 1944, while most of the 6 Group RCAF squadrons were flying Halifaxes, three of the Canadian Squadrons were operating Bristol Hercules powered Lancaster Mk II's. 408 Squadron operated Mk II's from October 1943 to September 1944, 426 Squadron from July 1943 to May 1944, and 432 from October 1943 to February 1944. The final Mk. II was No. 514 formed in September 1943 and re-equipping with the Merlin powered Lancasters in September 1944.

In November 1943 Armstrong-Whitworth discontinued Mk. II production and converted to Merlin-powered Mk. I/III production, move in part by the priority demand for the Hercules Engine to power the Halifax Mk. III. During its relatively short operational career, the Mk. II played a full part in the crucial Battles of the Ruhr, Berlin, Hamburg, the pre-invasion Transportation Plan and the ground support raids following D-Day. Of the 300 Mk. II bombers built, no less than 60% were lost on operations.



**Demonstrating the power of the Hercules, DS704 is sustained aloft solely by her No. 1 engine. This machine was allotted to No. 408 (Goose) Squadron and was posted missing on 20/21 December 1943. (G. Henry)**

408 Squadron RCAF







# 426 Squadron RCAF



432 Squadron RCAF

