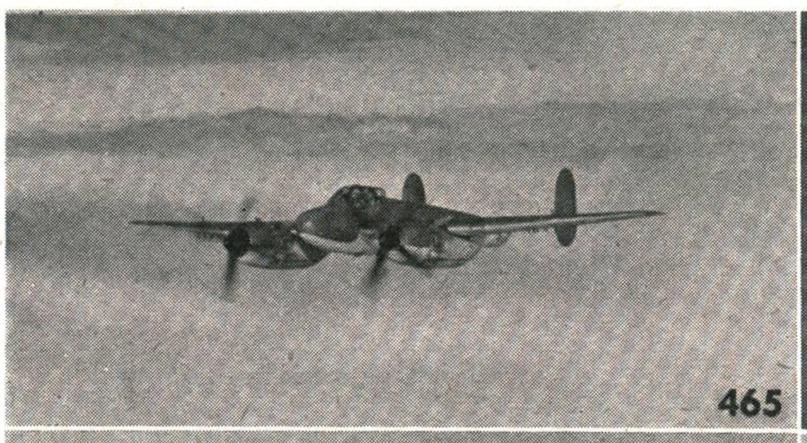
THE INTER SERVICES

AIRCRAFT RECOGNITION

Journal

Volume 3 SEPTEMBER 1948 No. 2

ELEMENTARY SPOTTING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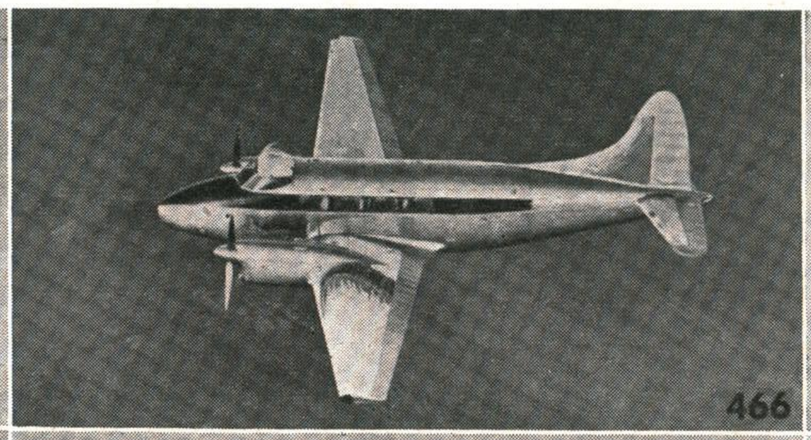
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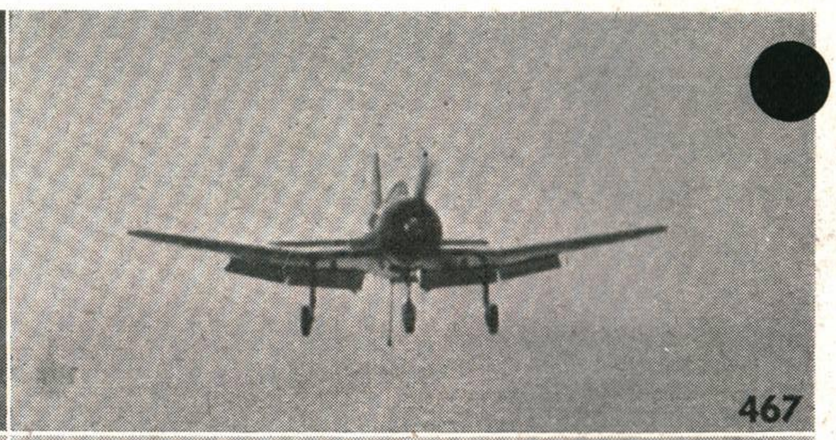
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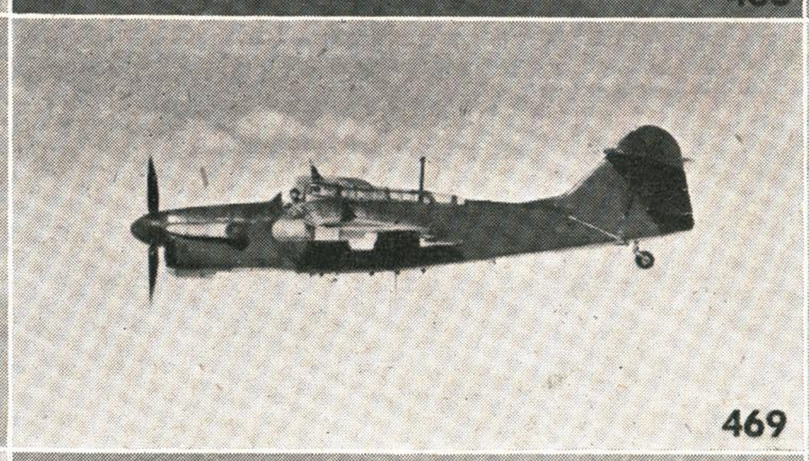
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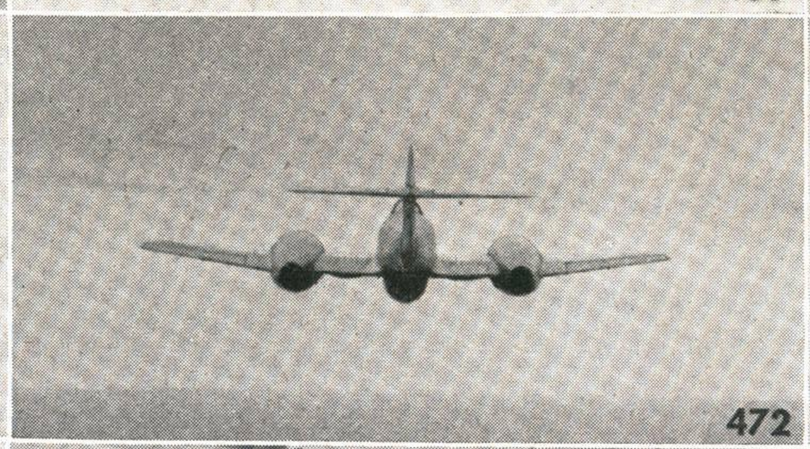
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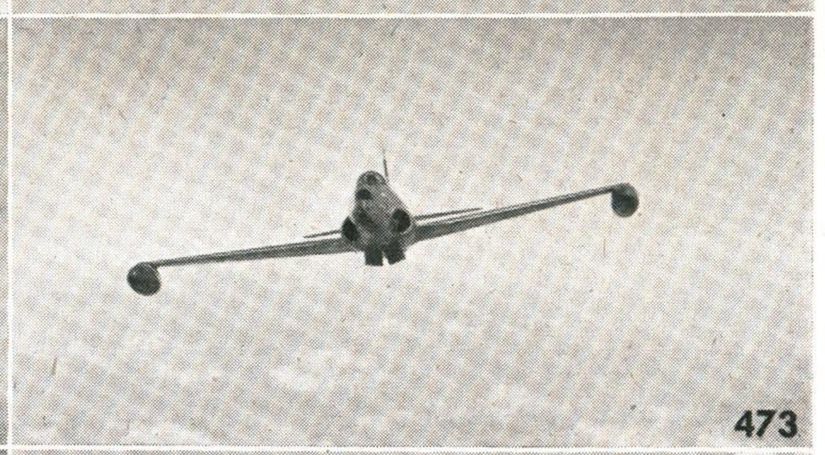
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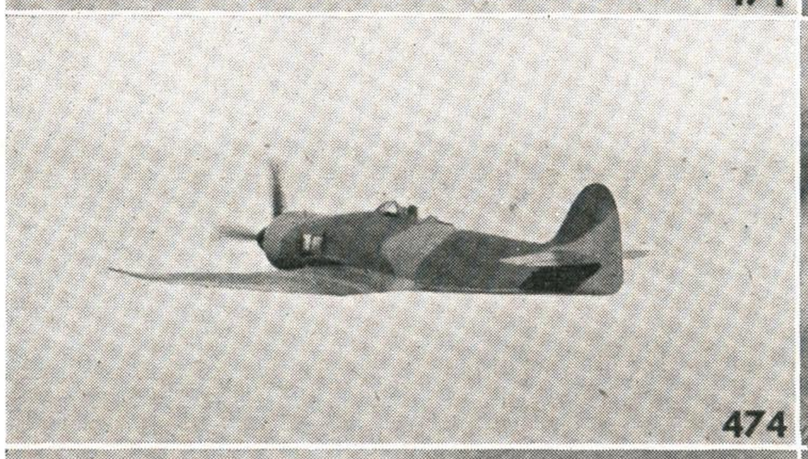
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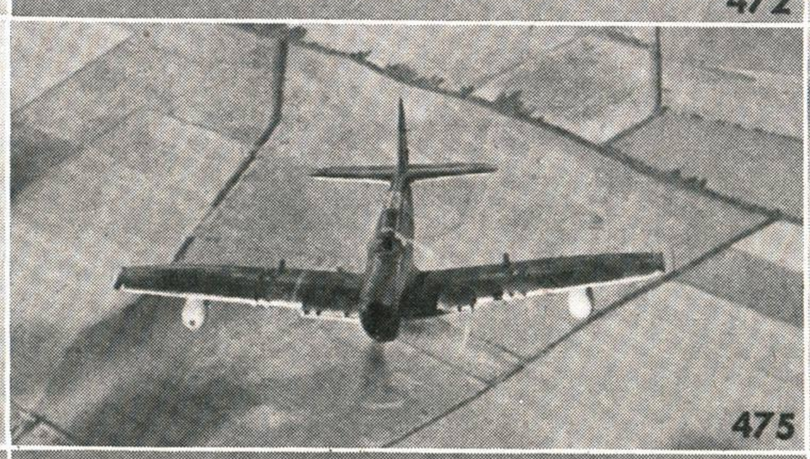
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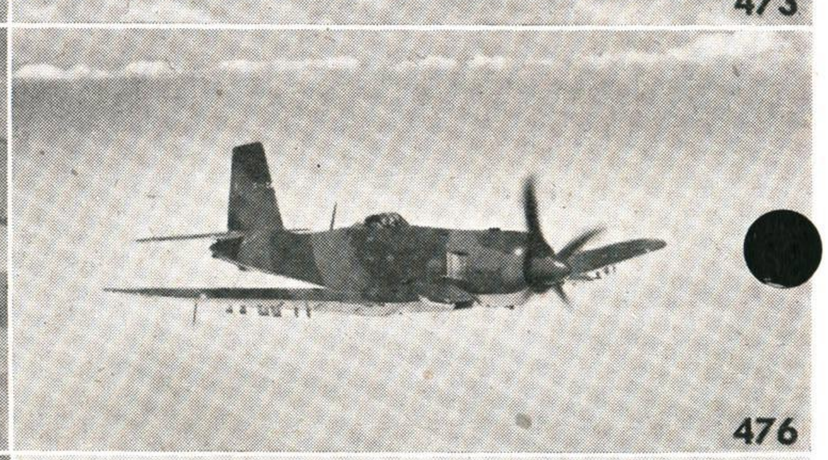
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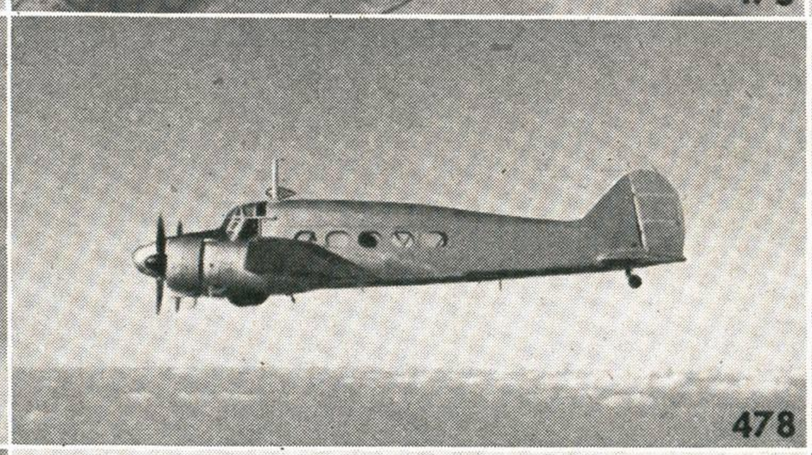
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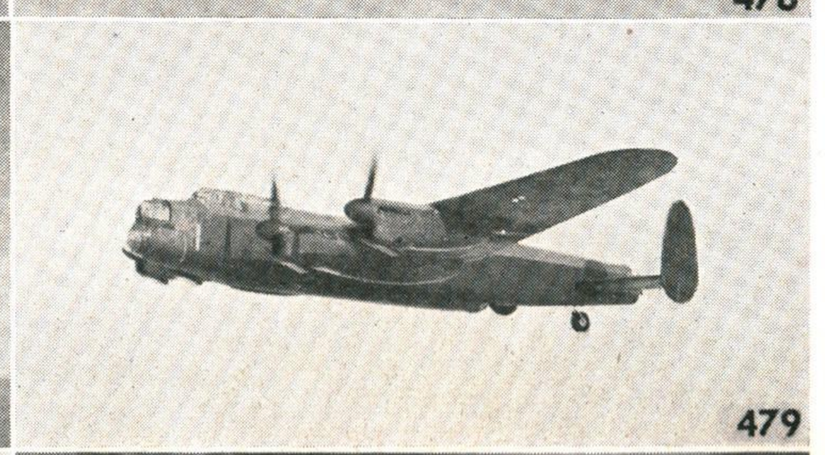
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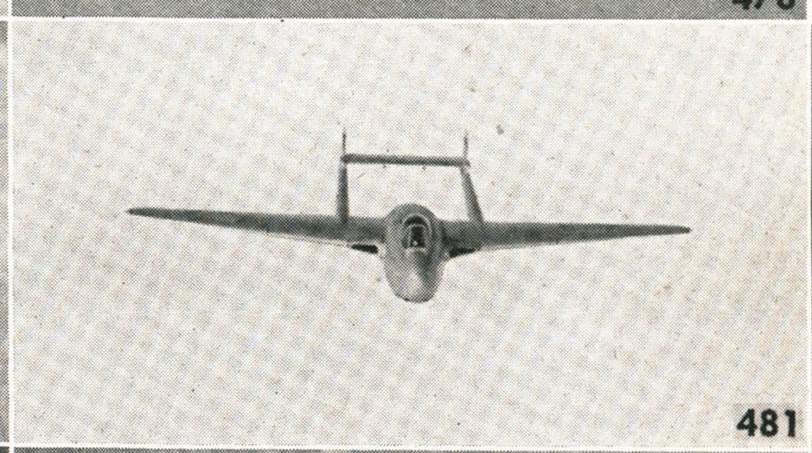
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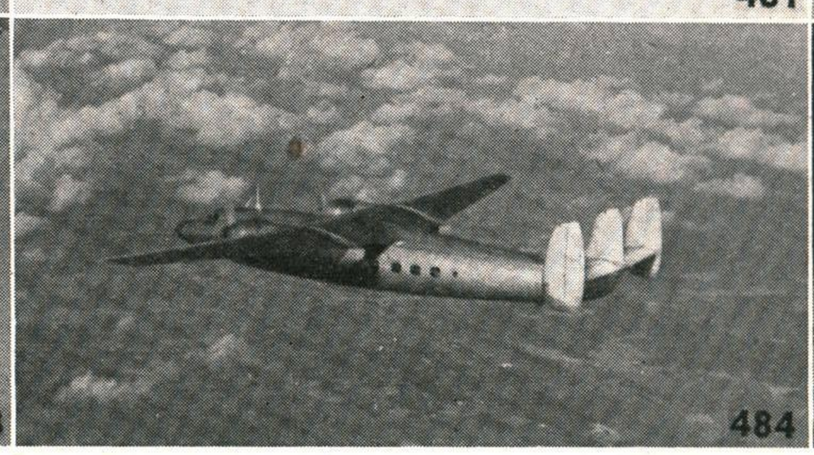
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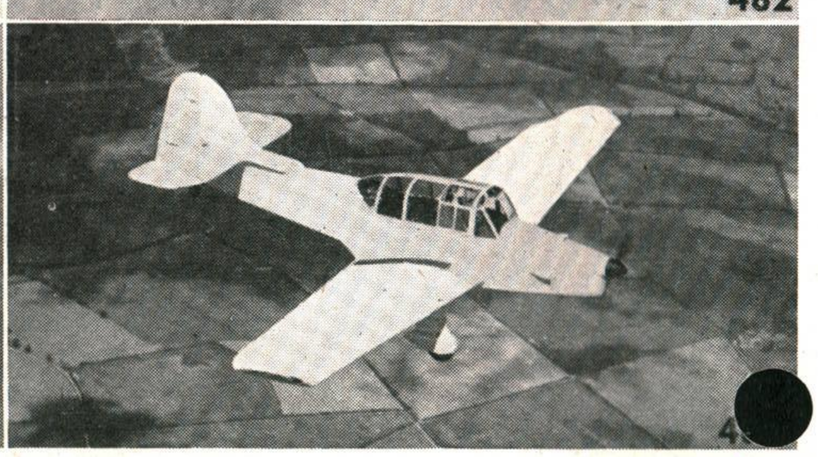
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SEPTEMBER 1948 Vol. 3. No. 2

THE INTER SERVICES AIRCRAFT RECOGNITION JOURNAL

(*Photo by courtesy of "The Aeroplane"*)

New Trans-Atlantic Traffic

Booming. Six De Havilland Vampire Mk. 3 fighters (5 of which are pictured above) of No. 54 Fighter Squadron were the first jet-propelled aircraft to fly the Atlantic Ocean. They flew by stages, east to west, from Odiham to Stornoway, Stornoway to Meeks Field, Iceland ; Iceland to Bluie West, Greenland ; and from Greenland to Goose Bay, Labrador ; and so on to Canada and the United States, where, at the time of writing, Uncle Sam is being thrilled by exhibitions of their aerobatics and formation flying, mostly, according to reports, at grass-top height.

Droop Snoot and Tip-tanks. Crossing the Ocean in the opposite direction only a day or so later, were sixteen Lockheed F-80As of the 56th Fighter Group, U.S.A.F. They followed a route the reverse of the Vampires, arriving at Odiham on July 21st, going on to Germany a few days later. During their stay in England, their Commanding Officer, Lieutenant-Colonel David Schilling, was good enough to allow one of his F-80s to play round our photographic Lancaster, and the accompanying picture—and others which we shall publish next month—resulted. The F-80A is most distinctive with wing-tip drop-tanks, and until these drop-tanks become too common, will be very easy to recognise. (*See bottom of page 24 in this edition of the* Journal).

Big-fin. The arrival of many Boeing B-29 Superfortress heavy bombers in Britain from across the Atlantic and their subsequent flights in formation over many parts of this country renewed the spotting enthusiasm of many observers and spotters. The B-29 (*three down*) is an easily recognisable aeroplane at almost any angle, but its "confusability factor" with the TU-70 is, naturally enough, high. Nevertheless there are many small points of difference (*see August, 1948, edition of* Journal).

Dutch Douglas. Another new-comer from across the Atlantic is the Douglas DC-6 (*bottom*). K.L.M. Royal Dutch Airlines have taken delivery of seven of them and are operating them on several of their trunk routes. It is distinguishable from the Douglas DC-4 by its longer fuselage and wider span equi-tapered tailplane.

THE HEAVY TYPES COMPARED—II

With this edition of the *Journal*, we complete the present series of comparisons of heavy aircraft types. We have illustrated 28 aircraft in all. Probably the oldest designs amongst them are those of the Handley Page Halifax and the Avro Lancaster (A.D. 1936) both of which are warriors of World War II, but which are still going strong in various new forms and under fresh coats of dope. The youngest type of all is the Boeing XB-47 Stratojet. Appropriate to youth, it boldly sports the "New Look" and takes pride of place in appearance and as the most easily recognizable aeroplane of them all. Despite its " distinguished " appearance, however, it retains the conventional wings-with-dependant-engines/fuselage/tail-unit type of layout ; and, on the evidence shown here in other new designs, and from what can be seen and heard of newer types, though individual structures are taking on new and distinctive shapes, this type of layout is going to die hard.

A word about " distinguishing features " to which reference will be found in the text relating to some of the aircraft. A distinguishing feature is naturally a great help in recognizing an aeroplane, but, for the benefit of those who are new to the study of aircraft recognition, to rely solely upon such features as a means of recognizing an aeroplane is unsafe because, except in rare cases, such features are not always in view. A distinguishing feature, to qualify as such, must be almost unique in shape and certainly large in size ; but, at the same time, it must form a part of the recognition character of the whole aeroplane and must not be considered as a thing apart. The noting of distinguishing features, and the comparison of similar types of aircraft to magnify smaller differences are only part of the process of complete familiarization with individual aircraft.

XB-45

NORTH AMERICAN XB-45

DUTY : Bomber

MOTORS : Four General Electric T.G.-180 turbojets of 4,000 lb. static thrust each

PERFORMANCE : Max. Speed : 480 m.p.h. plus (422 knots). Range : undisclosed

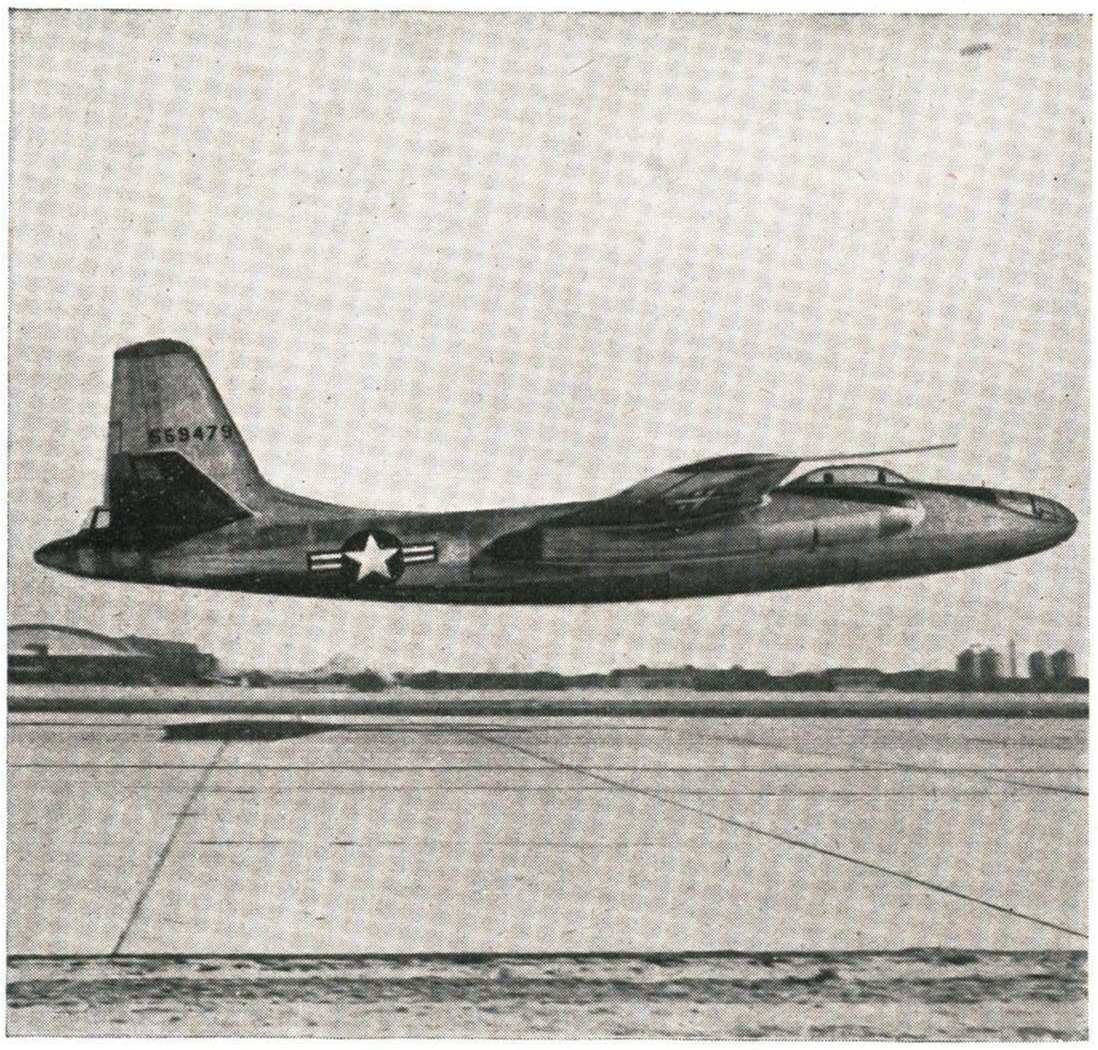
CREW : Three

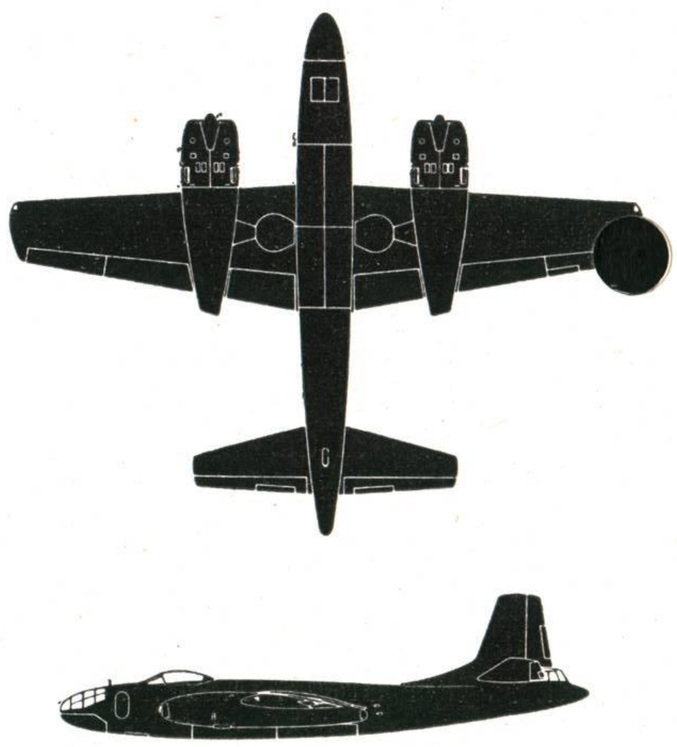
SPAN : 89 ft. 6 ins.

LENGTH : 74 ft. 1 ins.

REMARKS : 100 XB-45s are on order for the U.S.A.F.

DISTINGUISHING FEATURES : Anhedral angle in wing, twin twin-jet power-packs





XB-48

MARTIN XB-48

DUTY : Bomber

MOTORS : Six General Electric T.G.-180 turbojets of 4,000 lb. static thrust each

PERFORMANCE : Max. Speed : 500 m.p.h. plus (440 knots). Range : undisclosed

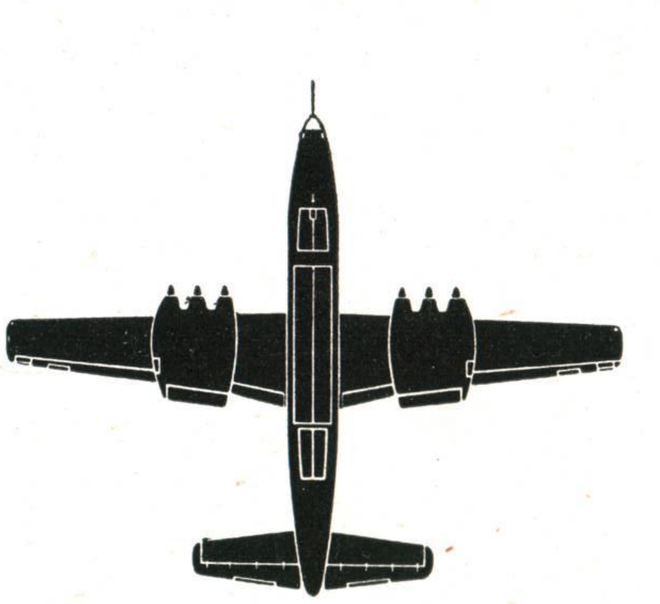
CREW : Three

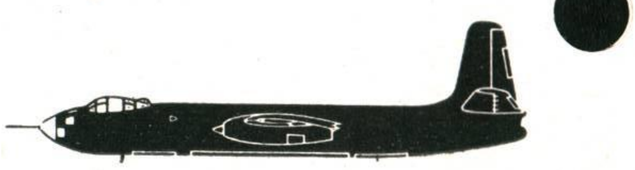
SPAN : 108 ft. 4 ins.

LENGTH : 85 ft. 9 ins.

REMARKS : Three XB-48s have been delivered to the U.S.A.F. for test so far ; production figures are not disclosed

DISTINGUISHING FEATURES : Twin triple-jet power-packs with knobs on





SM. 95

S.I.A.I. SM. 95

DUTY : Transport

MOTORS : Four Alpha-Romeo radial engines of 840 h.p. each

PERFORMANCE : Max. Speed : 225 m.p.h. (198 knots). Range : 2,100 miles (1,820 n.m.)

CREW : Five

PASSENGERS : up to 38

SPAN : 112 ft. 5 ins.

LENGTH : 82 ft.

REMARKS : The SM.95 is in production, and in service

LANGUEDOC

SE (SO) 161 LANGUEDOC

DUTY : Transport

MOTORS : Four Gnôme-Rhône radial engines of 1,260 h.p. each

PERFORMANCE : Max. Speed : 273 m.p.h. (240 knots). Range : 1,988 miles (1,722 n.m.)

CREW : Five

PASSENGERS : up to 33

SPAN : 96 ft. 5 ins.

LENGTH : 79 ft. 7 ins.

REMARKS : The Languedoc is in service with Air France. No production figures are known

DISTINGUISHING FEATURES : Backward tapered wing, small twin fins and rudders on tips of tailplane which has a dihedral angle

RAINBOW

REPUBLIC XF-12 AND RC-2 RAINBOW

DUTY : Photo-recce and Transport

MOTORS : Four Pratt & Whitney Wasp Major radial engines 3,500 h.p. each

PERFORMANCE : Max Speed : 450 m.p.h. (396 knots). Range : 5,000 miles (4,350 n.m.)

CREW : 5-7

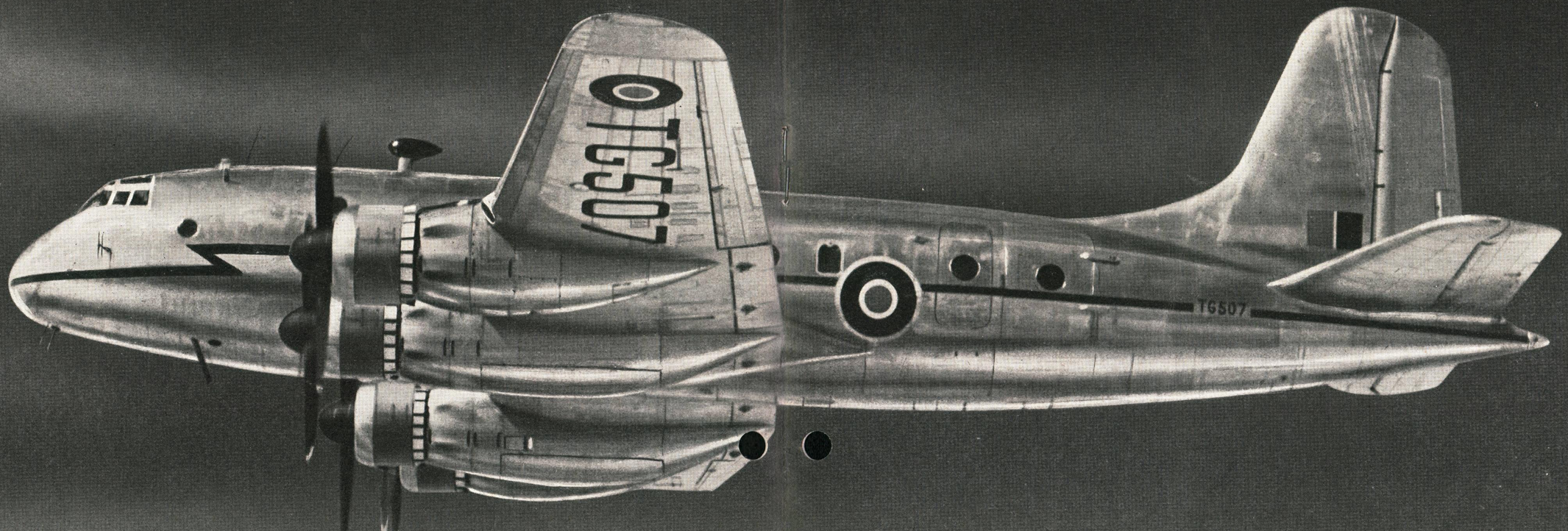
PASSENGERS : 40 (as RC-2 transport)

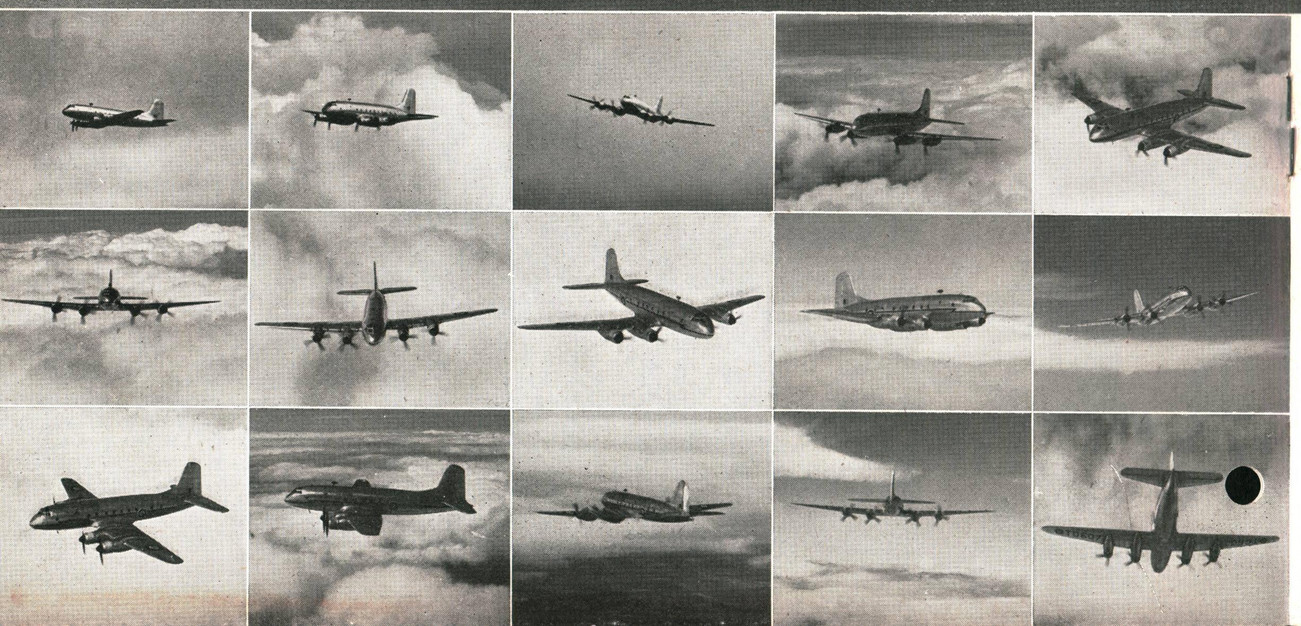
SPAN : 129 ft.

LENGTH : 94 ft.

REMARKS : Originally designed for photo-recce work for U.S.A.F. the Rainbow is at present undergoing tests. The RC-2 is a prospective transport version. Exhaust gases are " jetted " to give additional thrust. The high performance of the aircraft is noteworthy

DISTINGUISHING FEATURES : Four long, narrow " jet-like " engines and nacelles





HANDLEY PAGE

HASTINGS

The Handley Page Hastings C. Mk. 1 is replacing the Avro York in service in the Royal Air Force. A few weeks ago over twenty were delivered and the delivery rate is increasing. The Hastings has a top speed of over 350 m.p.h. and a maximum cruising speed of over 300 m.p.h. Its range exceeds 3,000 miles and it can operate comfortably at 27,000 feet. Amongst the many and varied duties it may take up are those of freighter, paratrooper, troop-transport, ambulance, dropping supplies, and glider towing. It will carry a load of $7\frac{1}{2}$ tons. In our view, the Hastings has no outstanding recognition characteristics : but of all the small items in its recognition make-up, the "power-eggs", consisting of four Bristol Hercules radial engines and large, deep nacelles slung beneath a wing which has little dihedral angle, are most noteworthy. Our large photograph shows off the Hastings : we think its fine fuselage form and stately bearing fully justify a title of "Handsome Hastings".

LANCASTRIAN

AVRO LANCASTRIAN

DUTY : Transport

MOTORS : Four Rolls-Royce Merlin in-line engines of 1,640 h.p. each

PERFORMANCE : Max. Speed : 315 m.p.h. (277 knots). Range : 4,100 miles (3,560 n.m.)

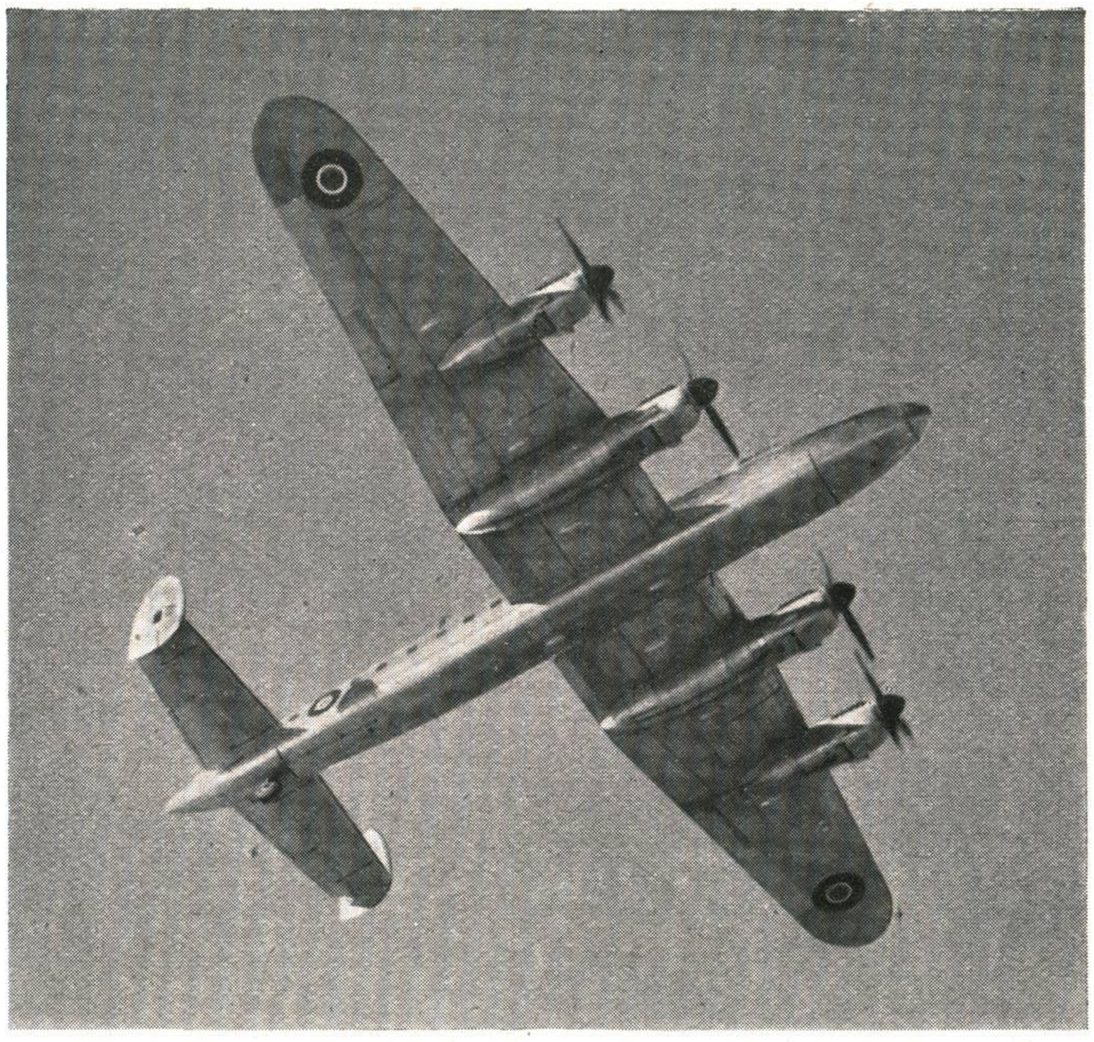
CREW : Six

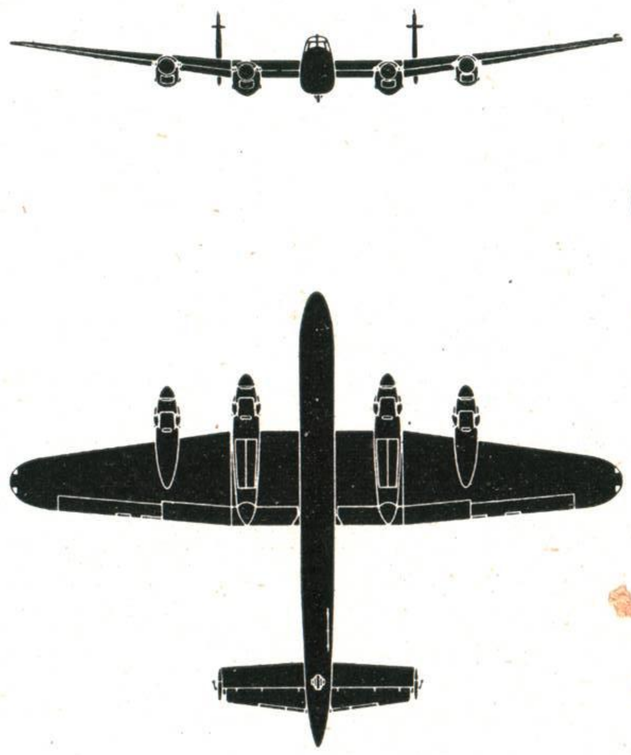
PASSENGERS : Nine

SPAN : 102 ft.

LENGTH : 69 ft. 4 ins.

REMARKS : This Lancaster conversion is in service with B.S.A.A. and R.A.F. Transport Command





LINCOLN

AVRO LINCOLN

DUTY : Bomber

MOTORS : Four Rolls-Royce Merlin in-line engines of 1,635 h.p. each

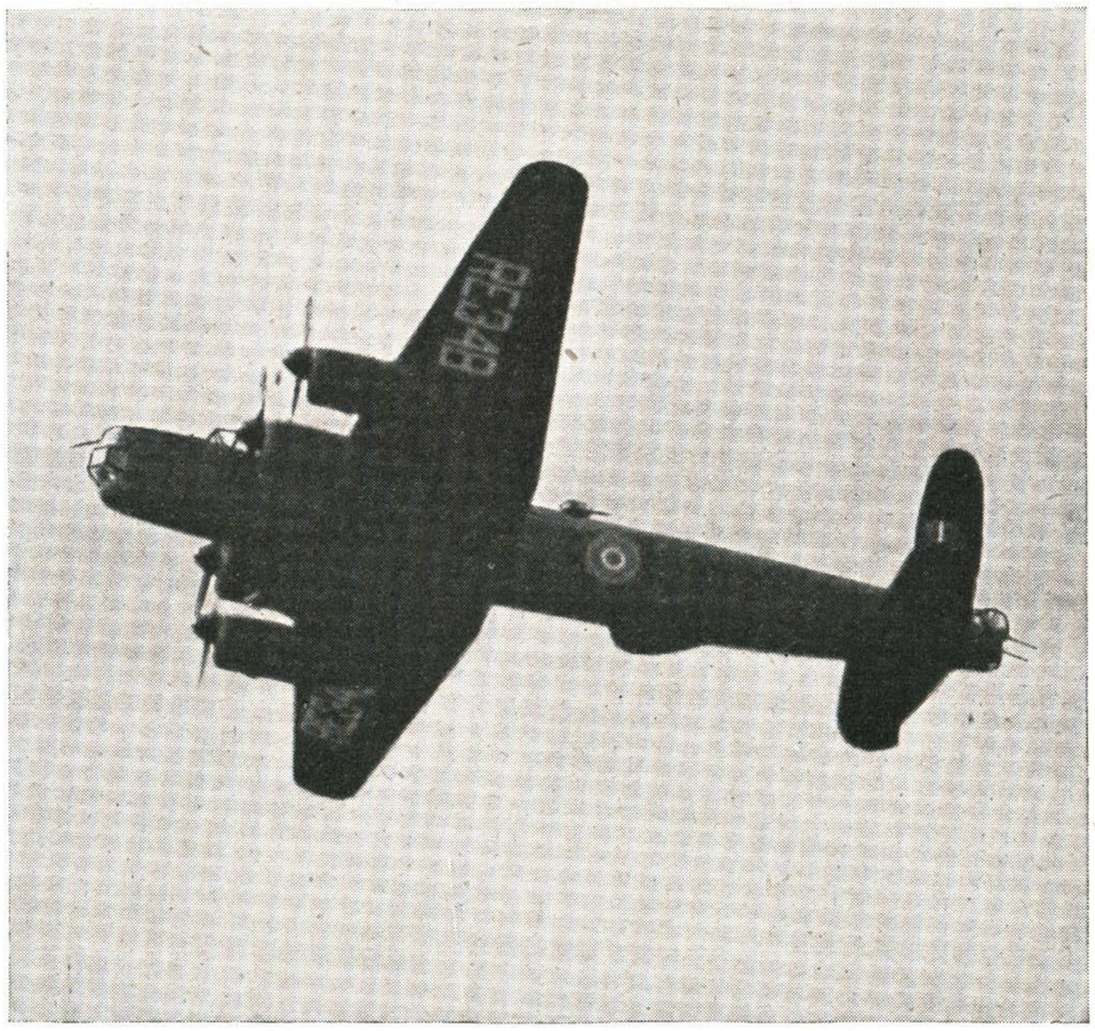
PERFORMANCE : Max. Speed : 310 m.p.h. (273 knots). Range : 4,450 miles (3,850 n.m.)

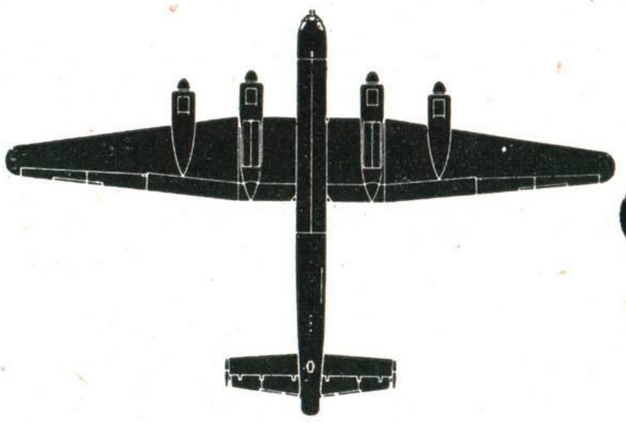
CREW : Seven

SPAN : 120 ft.

LENGTH : 77 ft. 6 ins.

REMARKS : This heavy bomber of the R.A.F. though passing into obsolescence is flying in squadron service





TUDOR II

AVRO TUDOR II

DUTY : Transport

MOTORS : Four Rolls-Royce Merlin in-line engines of 1,740 h.p. each

PERFORMANCE : Max. Speed : 325 m.p.h. (286 knots). Range : 2,500 miles (2,170 n.m.)

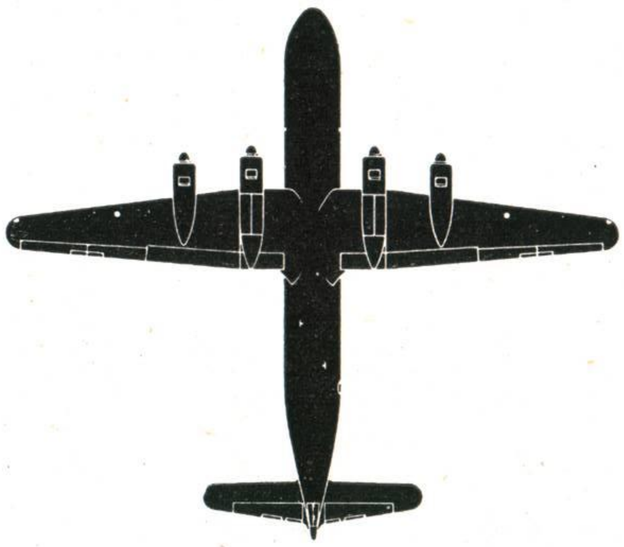
CREW : Six (including steward)

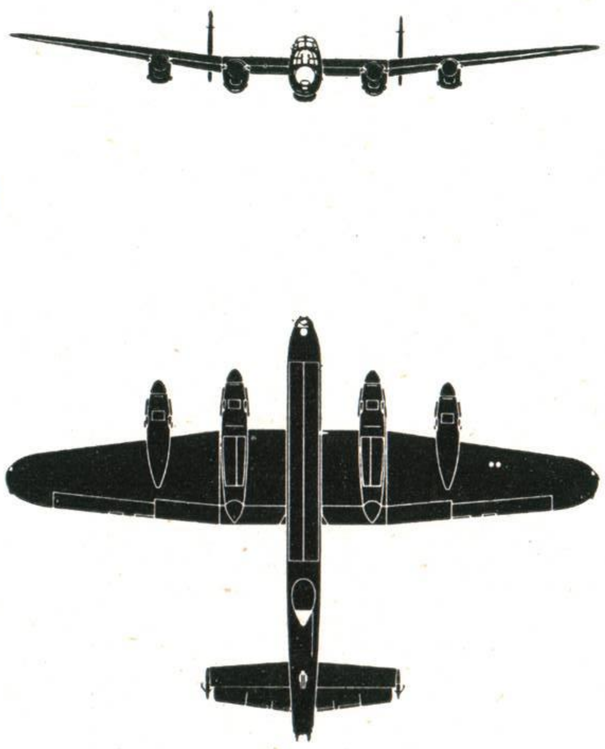
PASSENGERS : 20 by night ; 40 by day

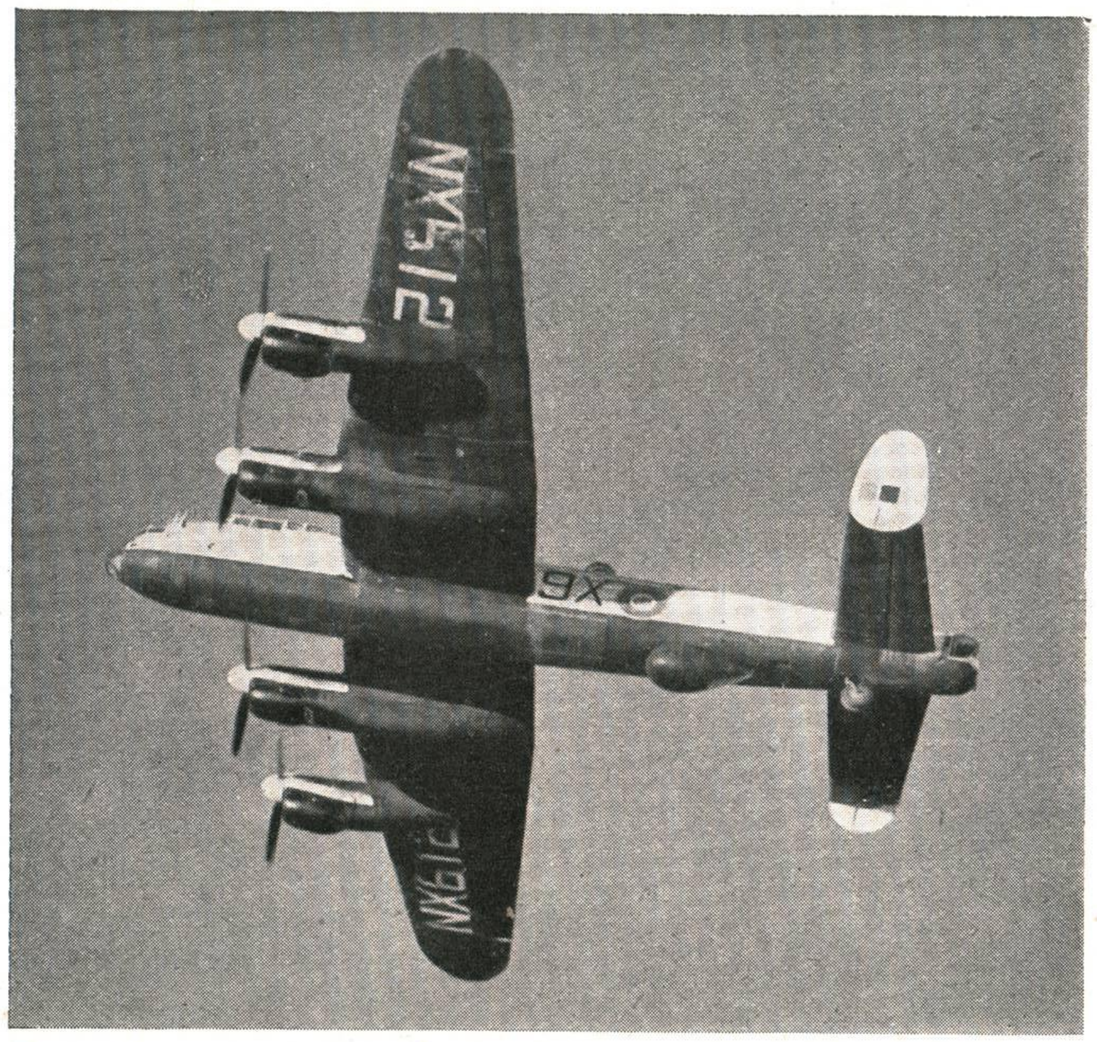
SPAN : 120 ft.

LENGTH : 105 ft.

REMARKS : This aircraft is now, unfortunately, only of historic interest since the decision has recently been taken not to proceed with its production. Some of those built will be converted to the medium-length-nose Mk IV type, featured opposite. The Tudor VIII, short-nose, jet-propelled model will fly very shortly







LANCASTER

AVRO LANCASTER

DUTY : Heavy Bomber

MOTORS : Four Rolls-Royce Merlin in-line engines of 1,640 h.p. each

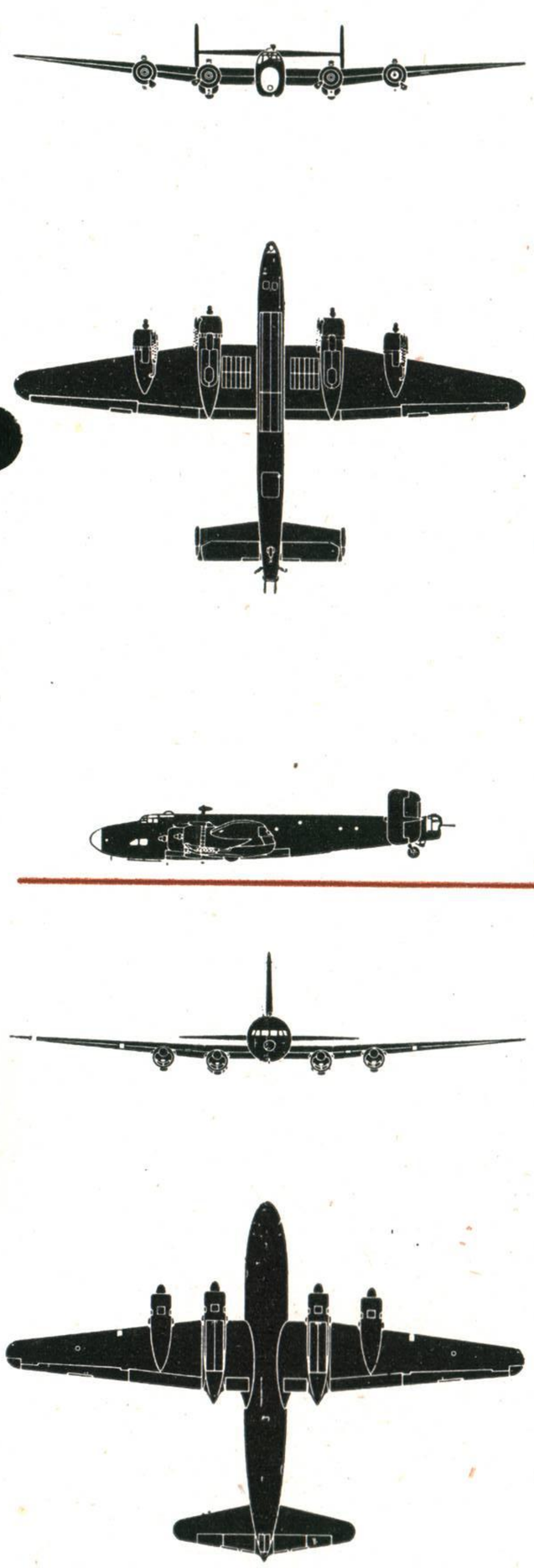
PERFORMANCE : Max. Speed : 287 m.p.h. (253 knots). Range : 2,230 miles (1,935 n.m.)

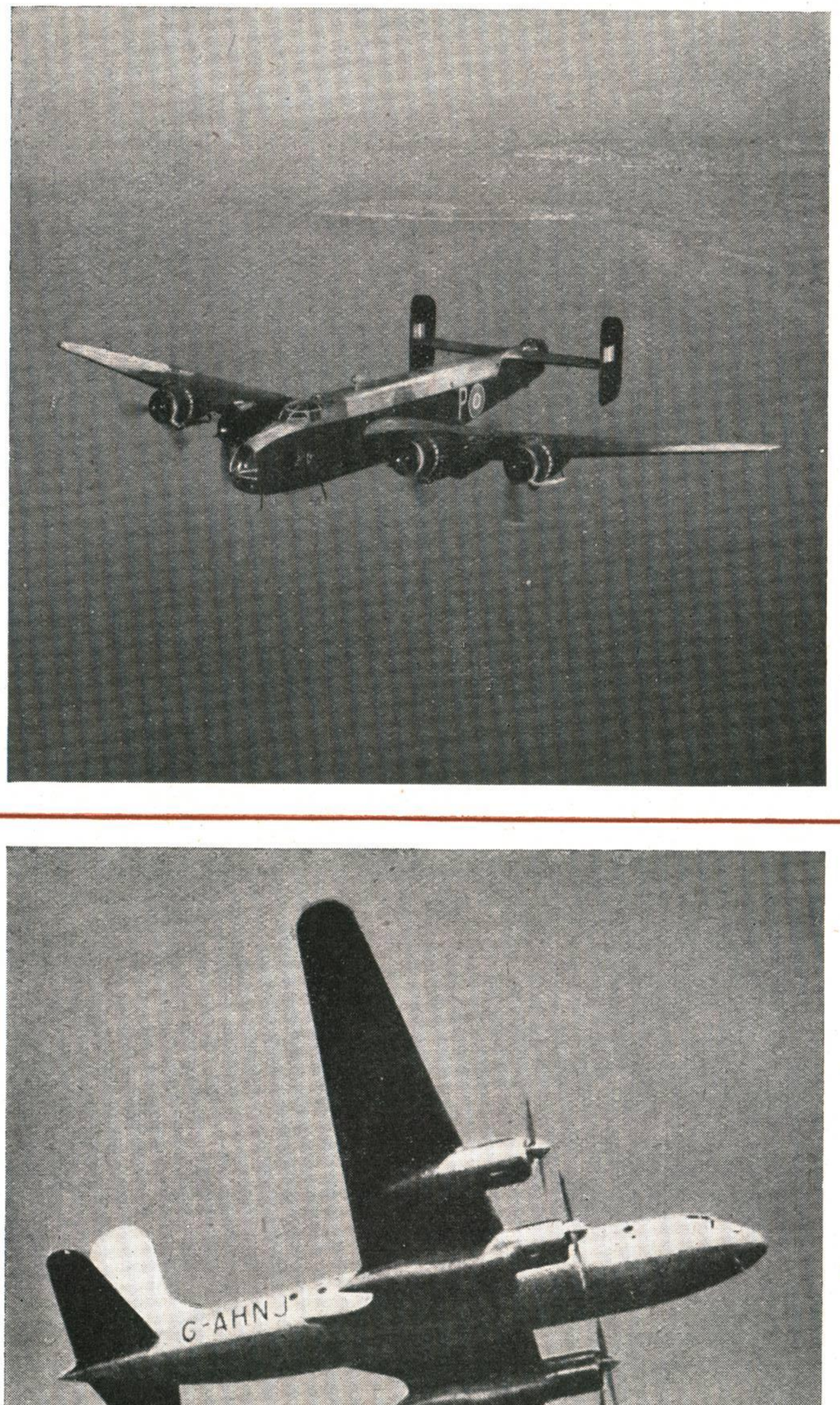
CREW : Seven

SPAN : 102 ft.

LENGTH : 69 ft. 4 ins.

REMARKS : Several thousand of these "warriors" were built and, though obsolescent, there are many still in service





HALIFAX A IX

HANDLEY PAGE HALIFAX A IX

DUTY : Transport

MOTORS : Four Bristol Hercules radial engines of 1,675 h.p. each

PERFORMANCE : Max. Speed : 320 m.p.h. (292 knots). Range : 2,080 miles (1,808 n.m.)

CREW : Five

PASSENGERS : 16

SPAN : 104 ft.

LENGTH : 75 ft. 7 ins.

REMARKS : The Halifax A IX is specially converted from the bomber form for use with airborne forces, and is used to drop jeeps and guns, and to tow gliders. It may also wear on its belly a pannier. Some Halifax bombers are in service with the French Air Force. A civil version of the Halifax, known as the Halton, is in service with B.O.A.C., and with some charter companies as a freighter

TUDOR IV

AVRO TUDOR IV

DUTY : Transport

MOTORS : Four Rolls-Royce Merlin in-line engines of 1,740 h.p. each

PERFORMANCE : Max Speed : 345 m.p.h. (304 knots). Range : 4,200 miles (3,640 n.m.)

CREW : Six

PASSENGERS : 12 by night ; 24 by day

SPAN : 120 ft.

LENGTH : 85 ft. 6 ins.

REMARKS : In service with B.S.A.A. B.O.A.C. are to have Tudor IVs unpressurized for cargo-carrying

DISTINGUISHING FEATURE : tall, narrow fin and rudder

MARATHON

HANDLEY PAGE MILES MARATHON

DUTY : Transport

MOTORS : Four De Havilland Gipsy Queen in-line engines of 330 h.p. each

PERFORMANCE : Max. Speed : 230 m.p.h. (202 knots). Range : 1,000 mile (870 n.m.)

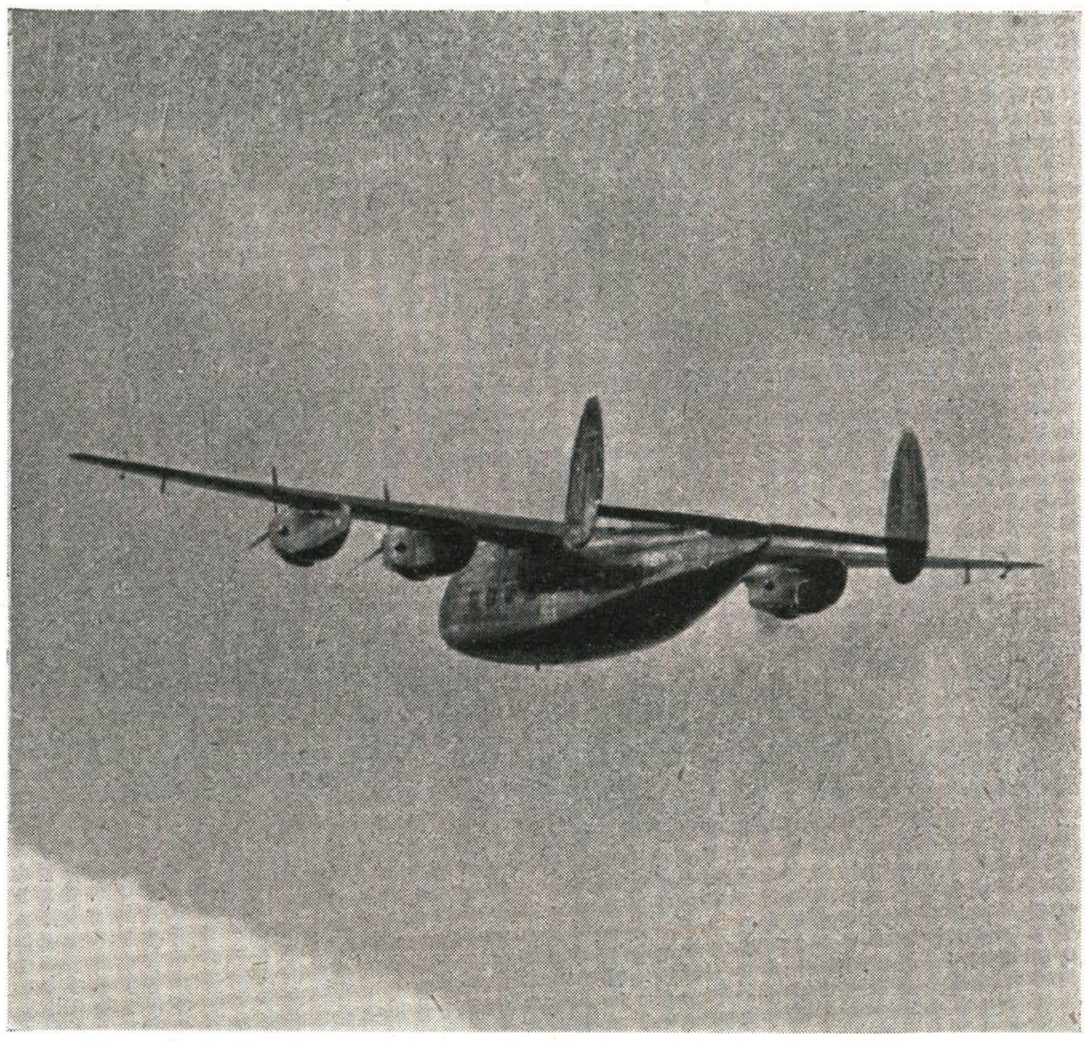
CREW : Two

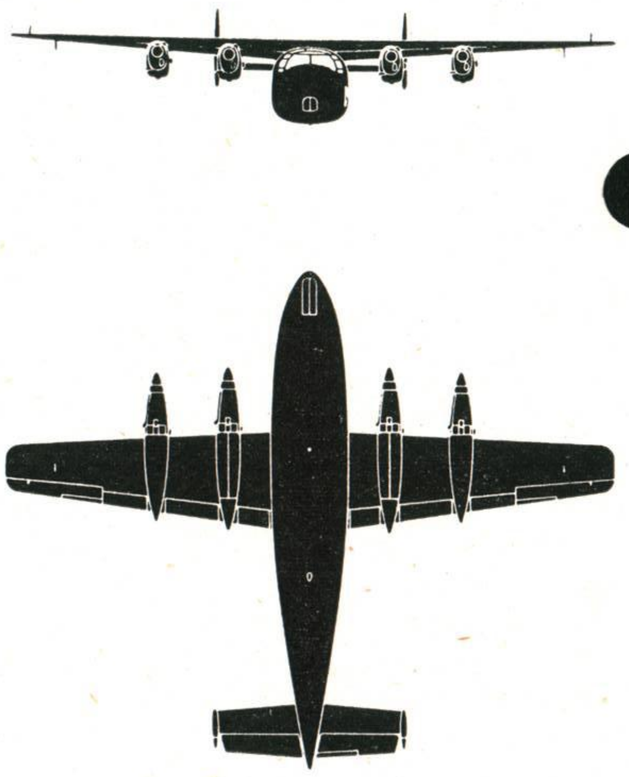
PASSENGERS : 18

SPAN : 65 ft.

LENGTH : 52 ft. 1 in.

REMARKS : 40 Marathons are to be produced by Handley Page (Reading). The production model will have twin fins and rudders





YORK

AVRO YORK

DUTY : Transport
MOTORS : Four Rolls-Royce Merlin in-line engines of 1,280 h.p. each

PERFORMANCE : Max. Speed : 290 m.p.h. (255 knots). Range : 3,100 miles

CREW : Four

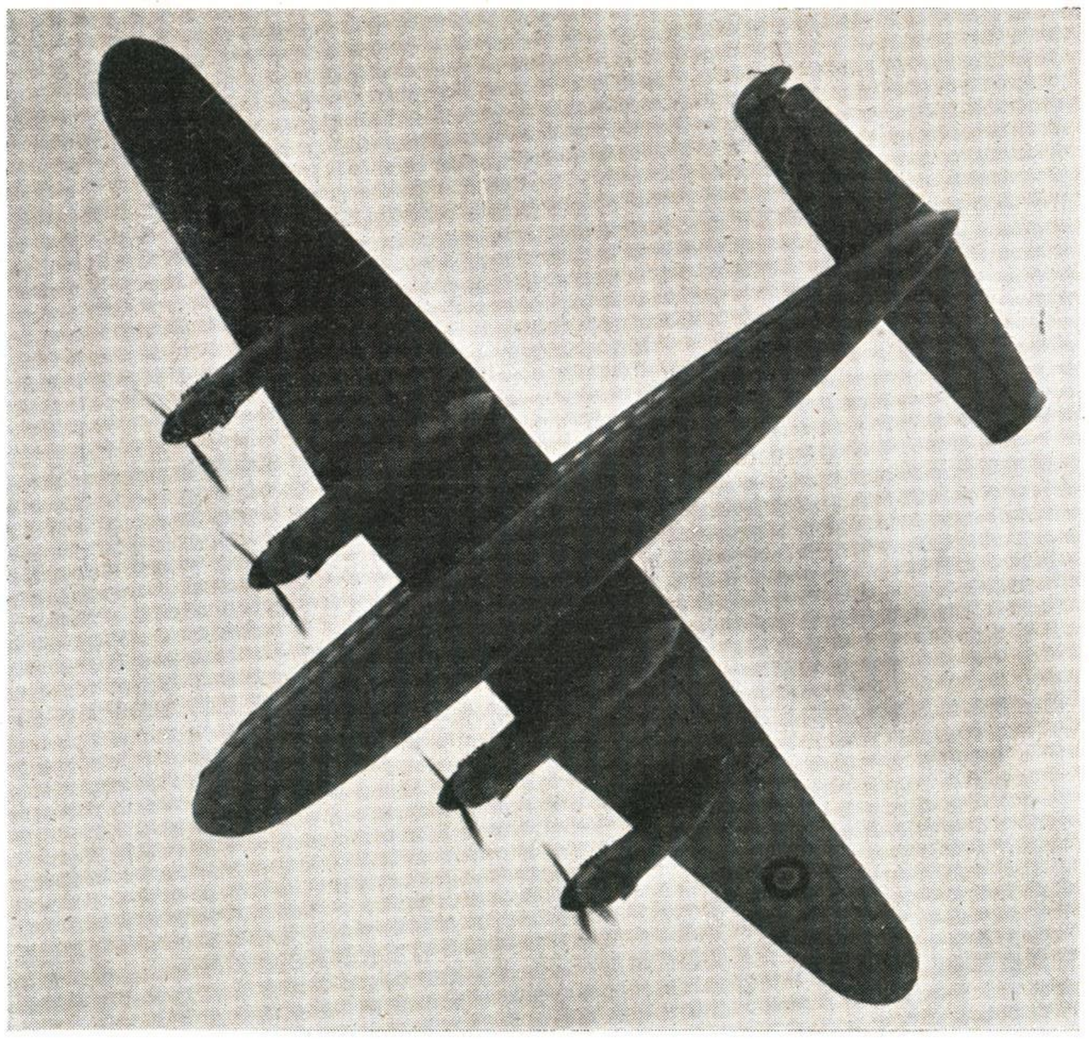
PASSENGERS : up to 56

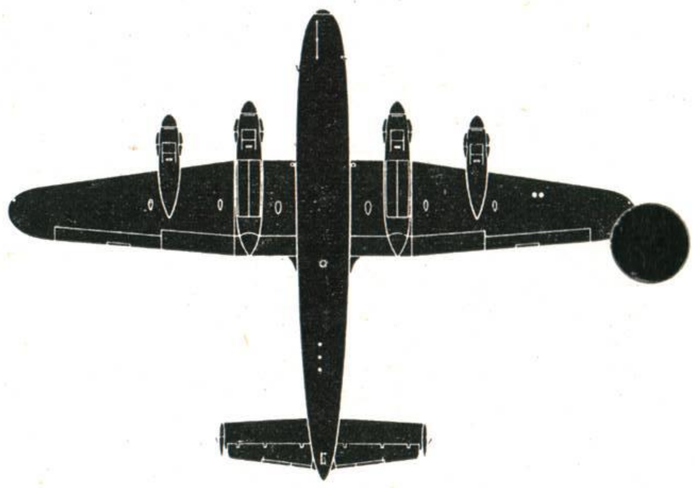
SPAN : 102 ft.

LENGTH : 78 ft.

REMARKS : 253 Yorks have been built and a good percentage of them are still flying in all parts of the World

DISTINGUISHING FEATURES : Triple fins and rudders





LIBERATOR

CONSOLIDATED LIBERATOR C-87

DUTY : Transport

MOTORS : Four Pratt & Whitney Twin Wasp radial engines of 1,200 h.p. each

PERFORMANCE : Max. Speed : 297 m.p.h. (262 knots). Range : 1,540 miles (1,335 n.m.)

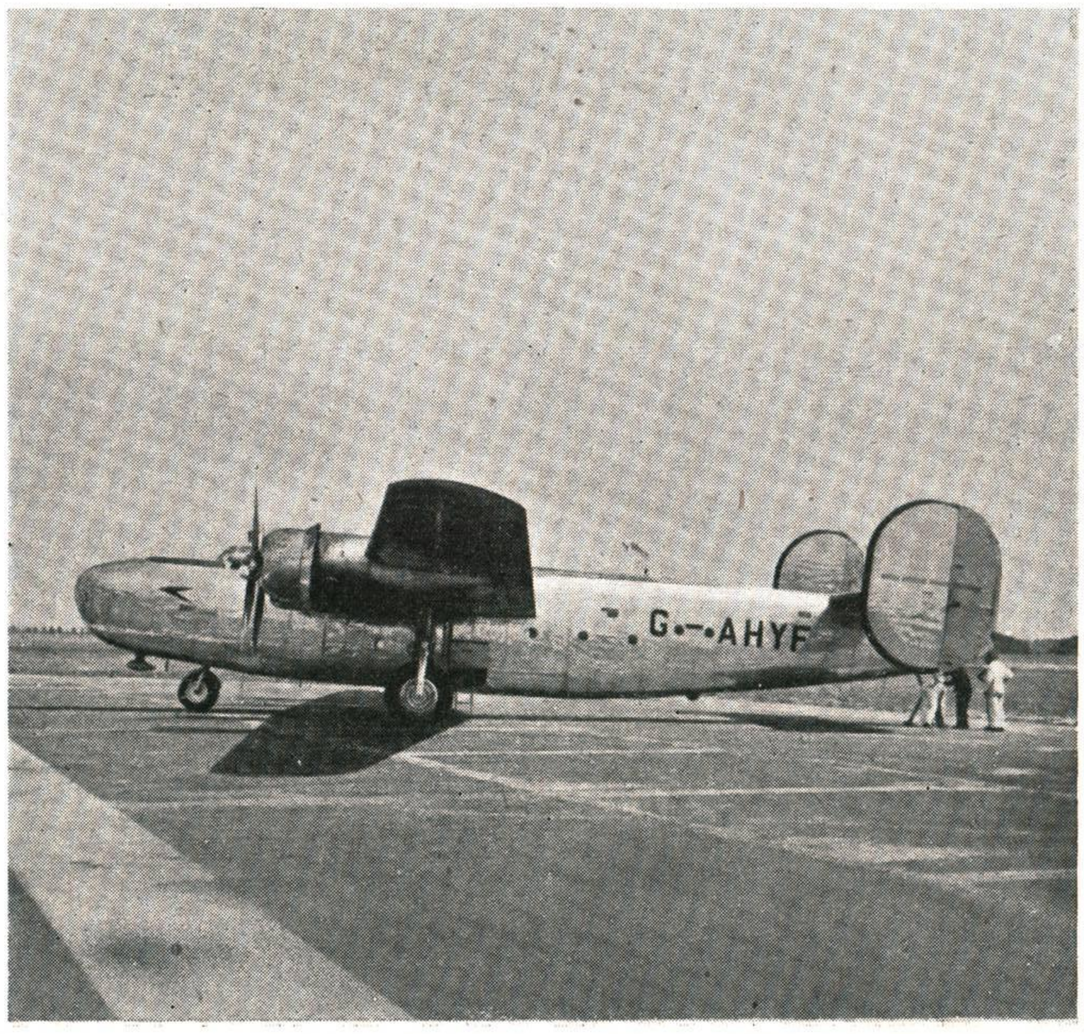
CREW : Ten

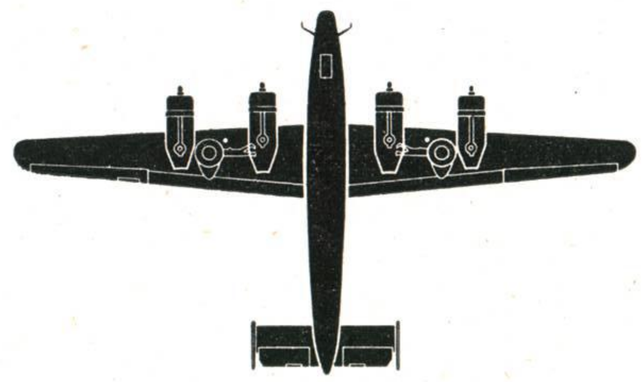
SPAN : 110 ft.

LENGTH : 67 ft. 2 ins.

REMARKS : Although obsolescent, this cargo-carrying version of the Liberator bomber is seen in many parts of the World.

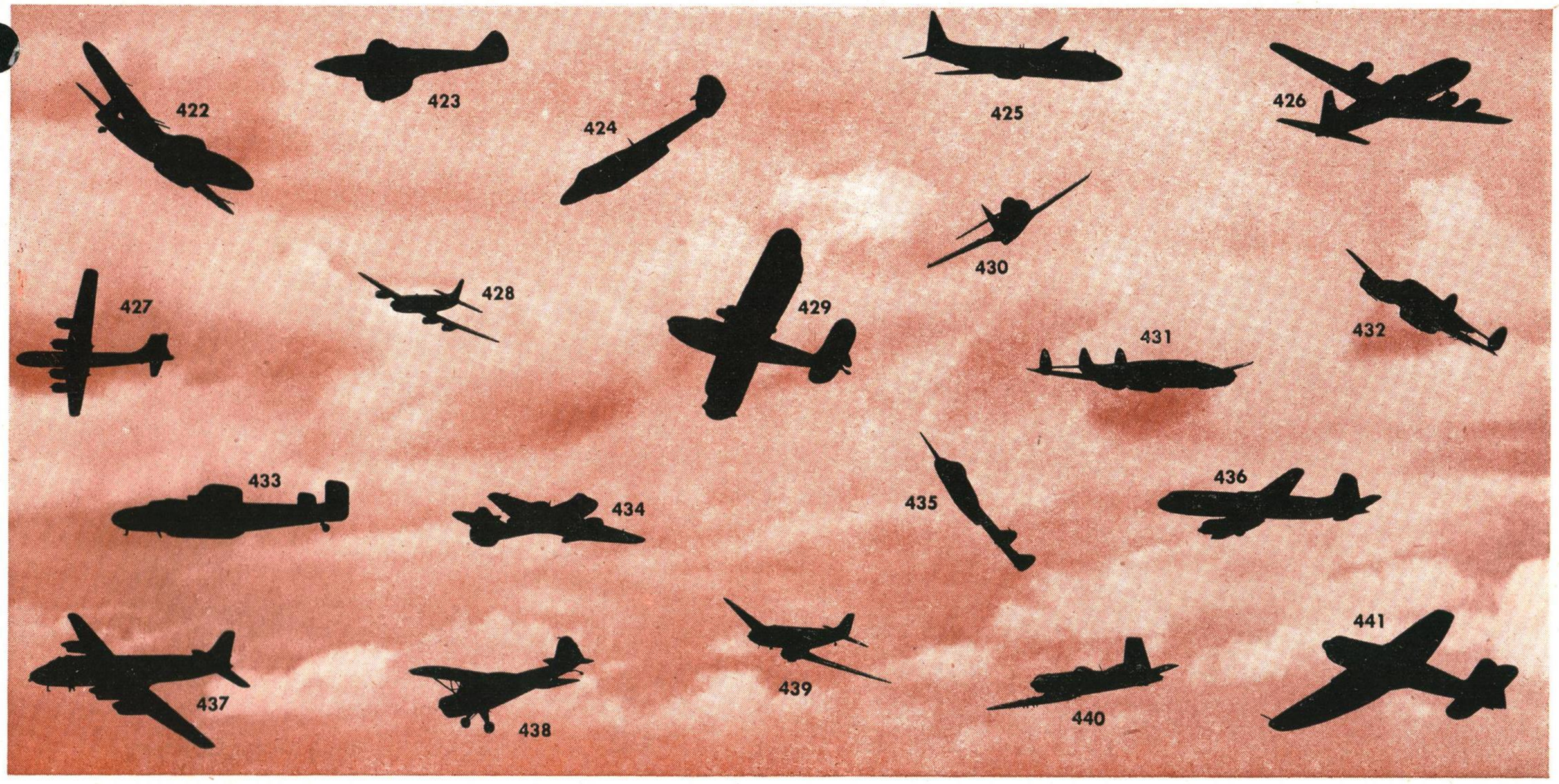
DISTINGUISHING FEATURES : Two large oval fins and rudders





SILLOGRAPHS

Recognition Test No. 76

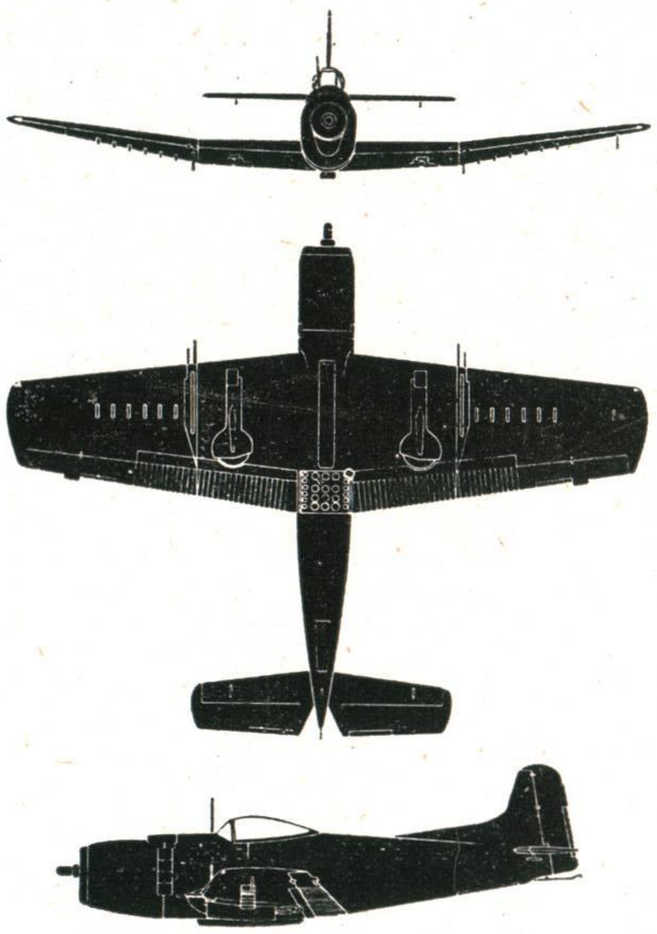


ADVANCED SPOTTING

Recognition Test No. 77

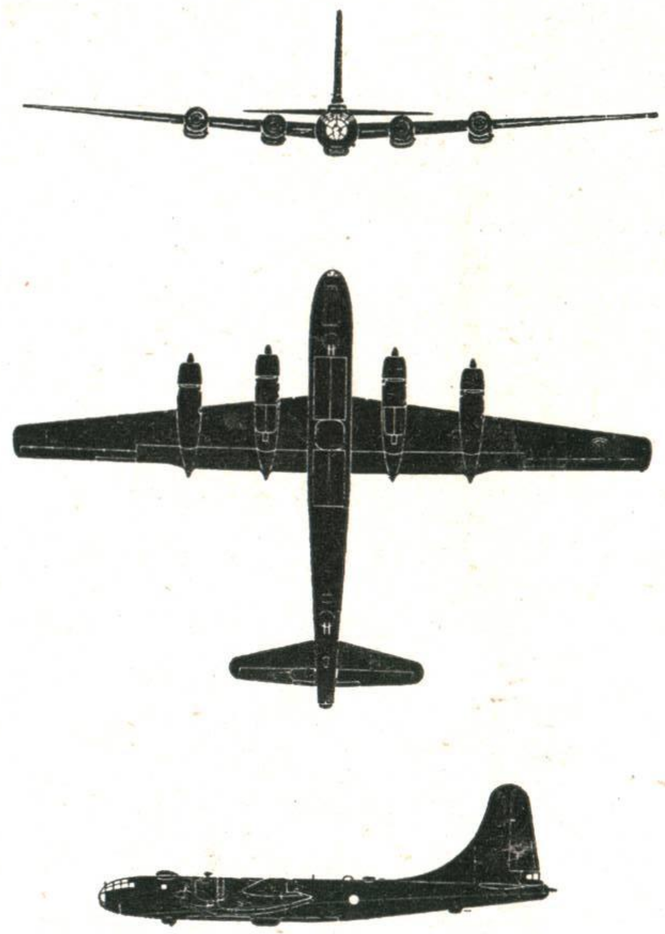
NEW and REVISED SILHOUETTES

MARTIN AM-1 MAULER



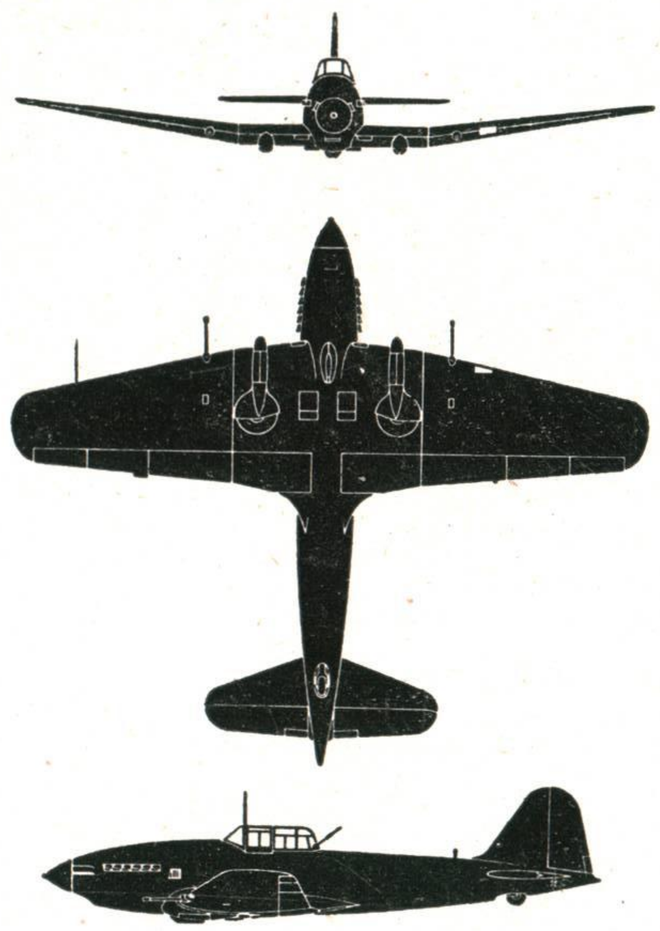
American Torpedo Bomber
1 P & W Wasp Major Radial. Span : 50 ft.

BOEING B-50



American Heavy Bomber
4 P & W Wasp Major Radials.
Span: 141 ft. 3 ins.

ILYUSHIN IL-10



Russian Attack Bomber
1 AM-42 in-line. Span : 45 ft. 6 ins.

SOLUTIONS TO RECOGNITION TESTS IN THIS EDITION :

FRONT COVER : *The Canadiar DC-4M*

No. 75 (ELEMENTARY)

465. Brigand
466. Devon
467. Fireball
468. Chipmunk
469. Barracuda 5
470. B-50
471. Hastings
472. Meteor 4 (Clipped)
473. F-80 A Shooting Star
474. Fury
475. Firefly 4
476. Firebrand 4
477. Messenger
478. Anson 19
479. Lancaster 7
480. Tempest 2
481. Vampire 3
482. Mosquito T. 3
483. Navion
484. Ambassador
485. Prentice !

No. 76 (SILLOGRAPHS)

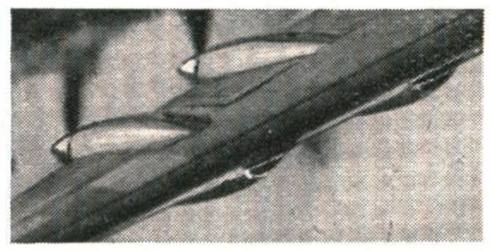
422. VB-10
423. Spitfire P.R.14.
424. Meteor 4
425. Constitution
426. DC-6
427. B-29 Superfortress
428. Hastings
429. Sea Otter
430. Panther
431. Constellation
432. Gemini
433. Halton
434. Meteor 3.
435. Vampire 3.
436. Hermes 2.
437. DC-4 M
438. Auster 4
439. Dakota
440. Firebrand 5.
441. Sea Fury

No. 77 (ADVANCED)

620. York
621. Beaufighter 10
622. Argus
623. Mariner
624. Lincoln
625. Catalina
626. Norseman
627. Sea Fury
628. Bear Cat
629. LA-5
630. Meteor 4 (Clipped)
631. Firefly 4
632. Prentice !
633. IL-10
634. IL-4
635. Goeland
636. Fiat G. 12 L
637. Mosquito T.3
638. Marathon
639. Hastings
640. Halifax A.9
641. Ambassador
642. Auster 4
643. Bell 47 B
644. A.W. 52

SIX TO FOUR

What may look like sabotage but which was, in fact, pure oversight, is that in the July edition of the *Journal* under the title "Troopships," we stated that the Convair XC-99 had four engines. Well, it has six. Here are the other two :



A CONSTITUTIONAL ISSUE

Through a genuine oversight, and not because we did not know any better, a "Constitution" (Elementary Spotting picture No. 454 in Recognition Test No. 72 in the August edition of the *Journal*) was labelled "Constellation." Sorry !

TRICKY TRIO-III

(L. to R.) Lockheed F-80 A, Grumman F9F-2 Panther, Republic F-84 Thunderjet.

TRICKY TRIO—III

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