

THE INTER



SERVICES

# AIRCRAFT RECOGNITION

*Journal*



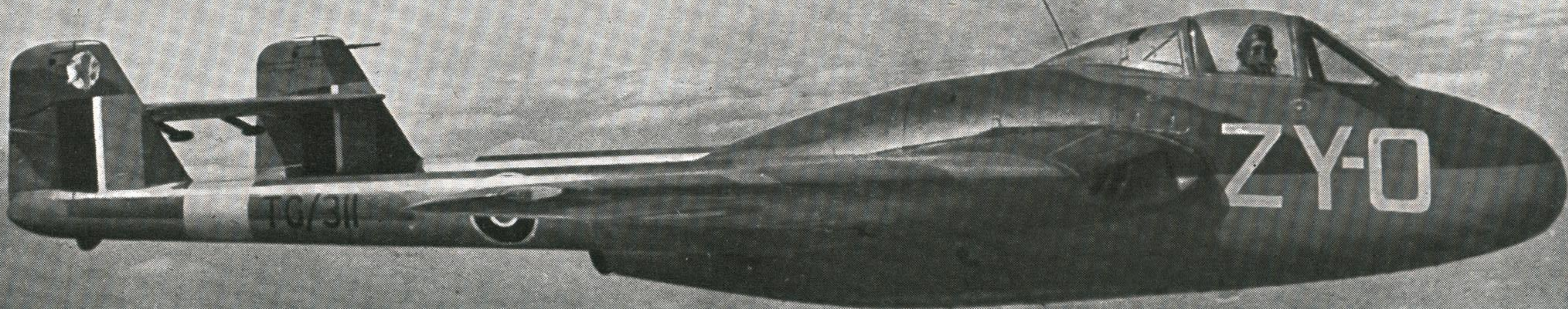
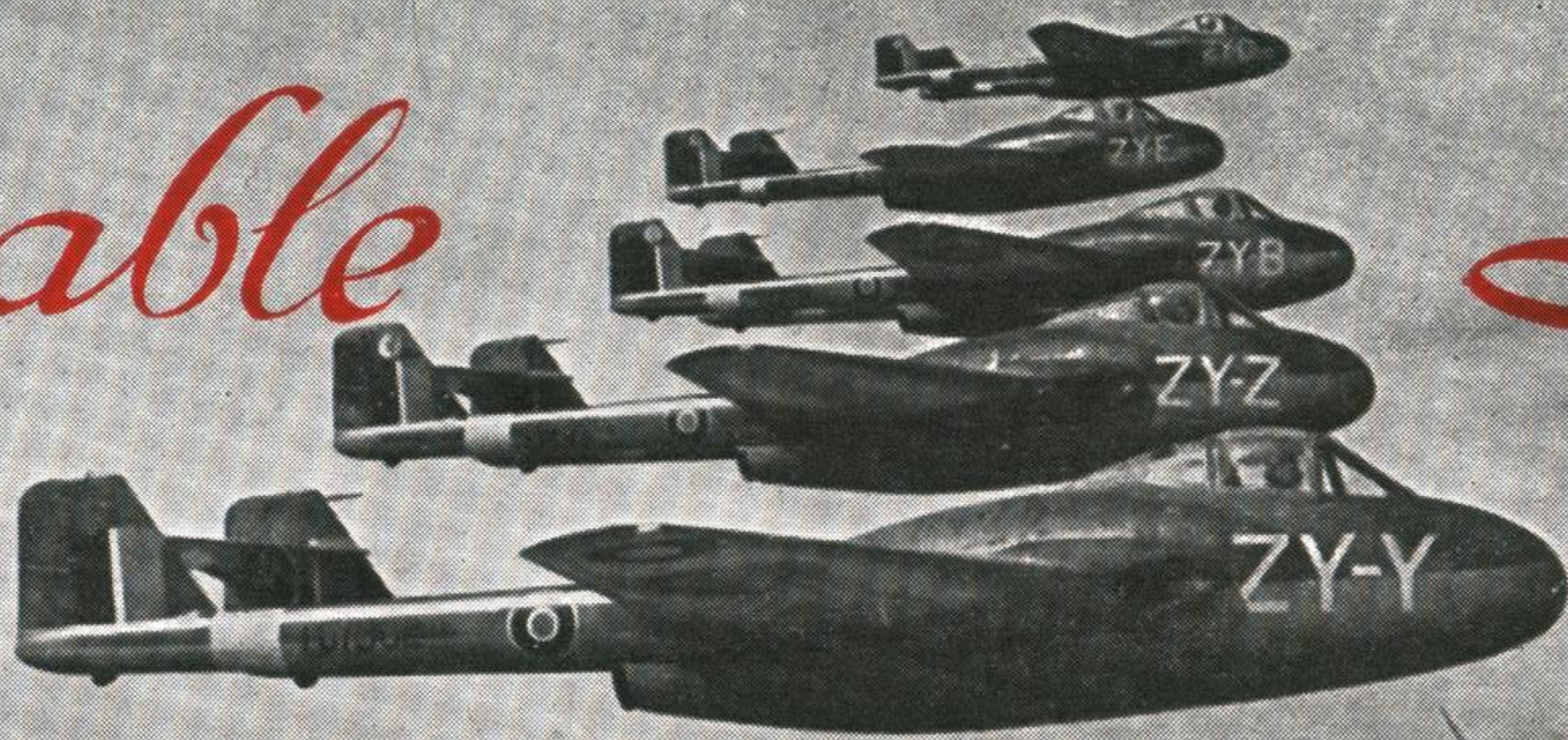
New Series

DECEMBER 1946

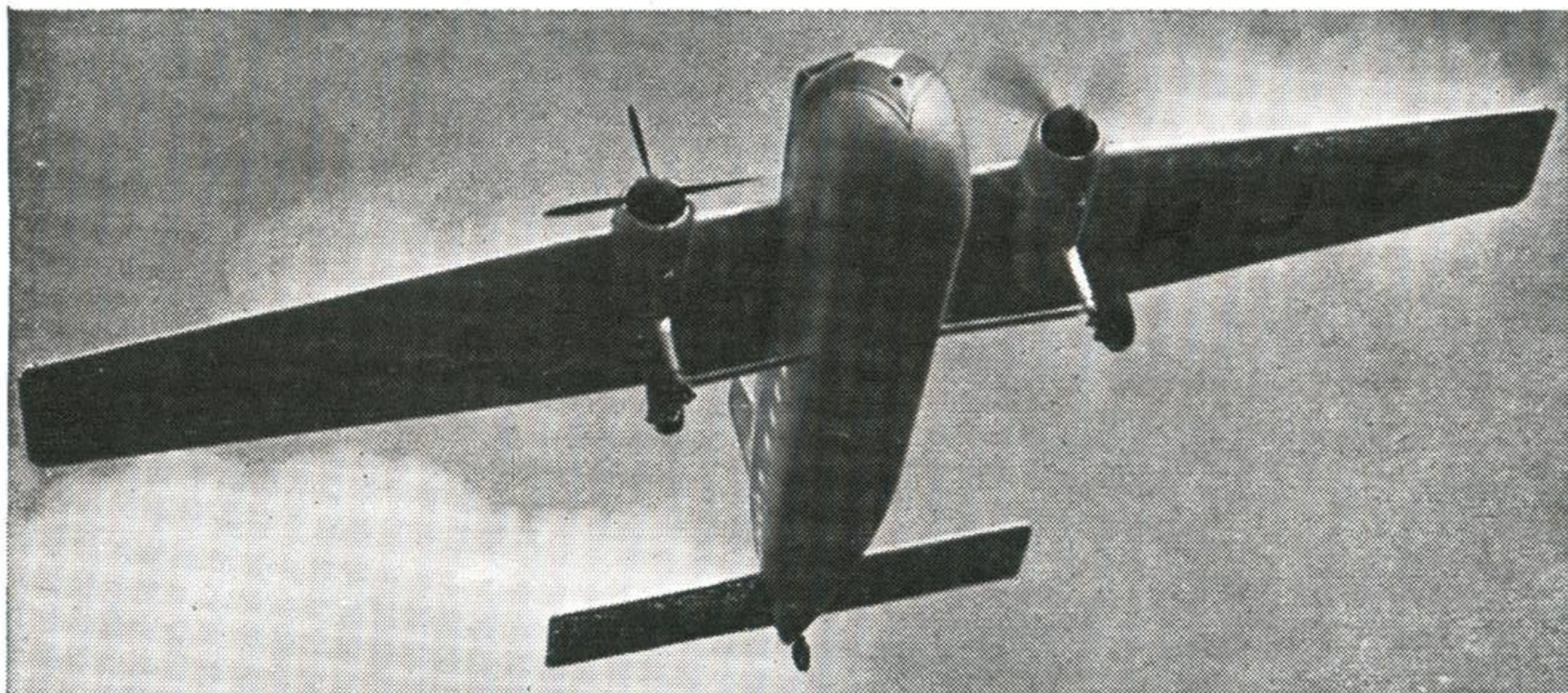
Volume I. No. 6

*Seasonable*

*Schnapps!*



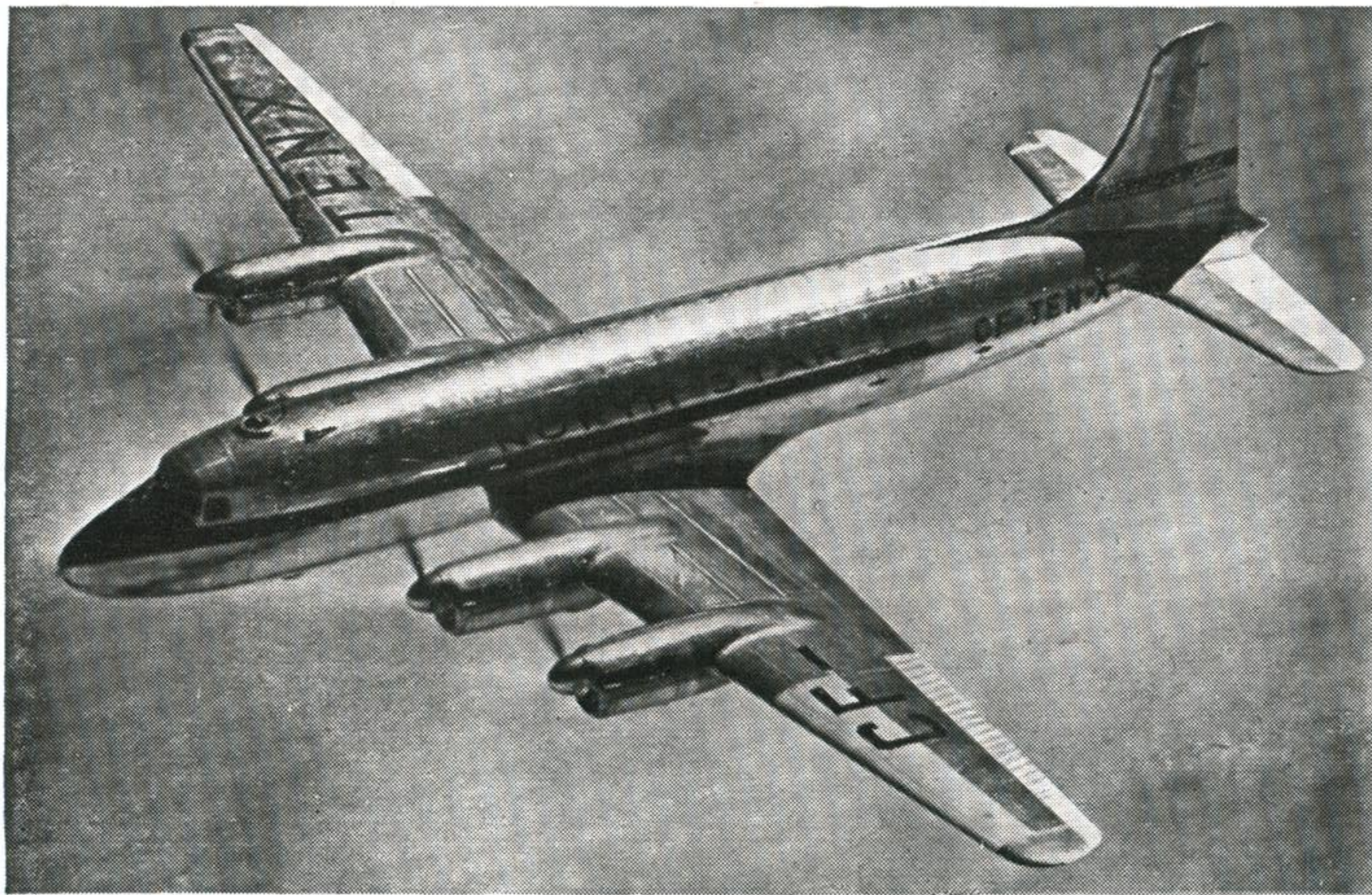
**Goblin up the Knots**—Zebra Yoke Oboe leads a formation of D.H. Vampires of No. 247 Fighter Squadron. This fine picture shows clearly the sleek, fat nacelle housing the Goblin jet unit, and the compact cockpit canopy formed into it. Later canopies will be of the "bubble" type. Note the tail assembly with its mass balances and pitot pressure head. (Span 40 ft. 0 in.)



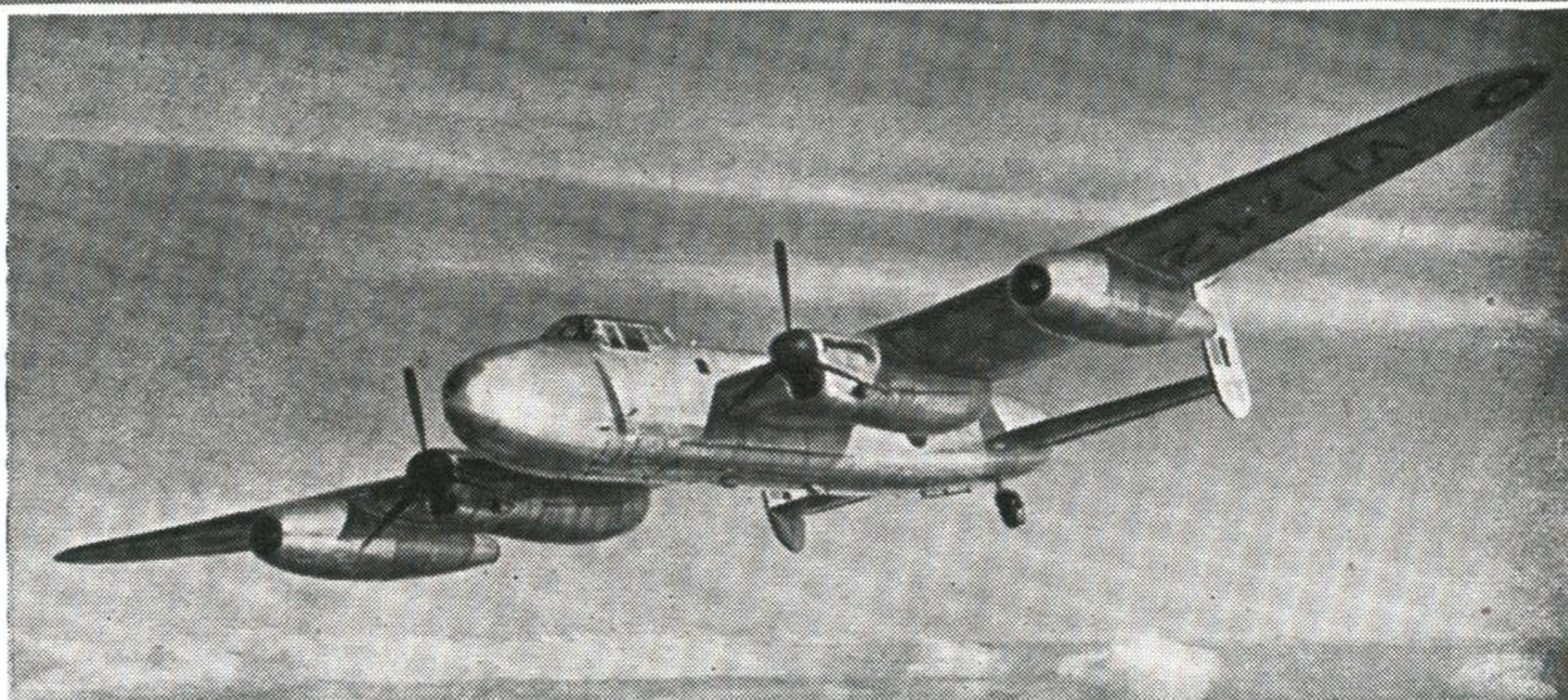
**Practical Ugliness**—The Bristol 170 Wayfarer demonstrates its ability to climb on one of its Bristol Hercules 131 engines, even with a reasonable load aboard. At least 60 Wayfarers and Freighters have been ordered for transporting passengers and freight at home and overseas. B.E.A. will have two Freighters specially equipped as "flying workshops." Recognition features?—well, help yourself. (Span 98 ft. 0 in.)



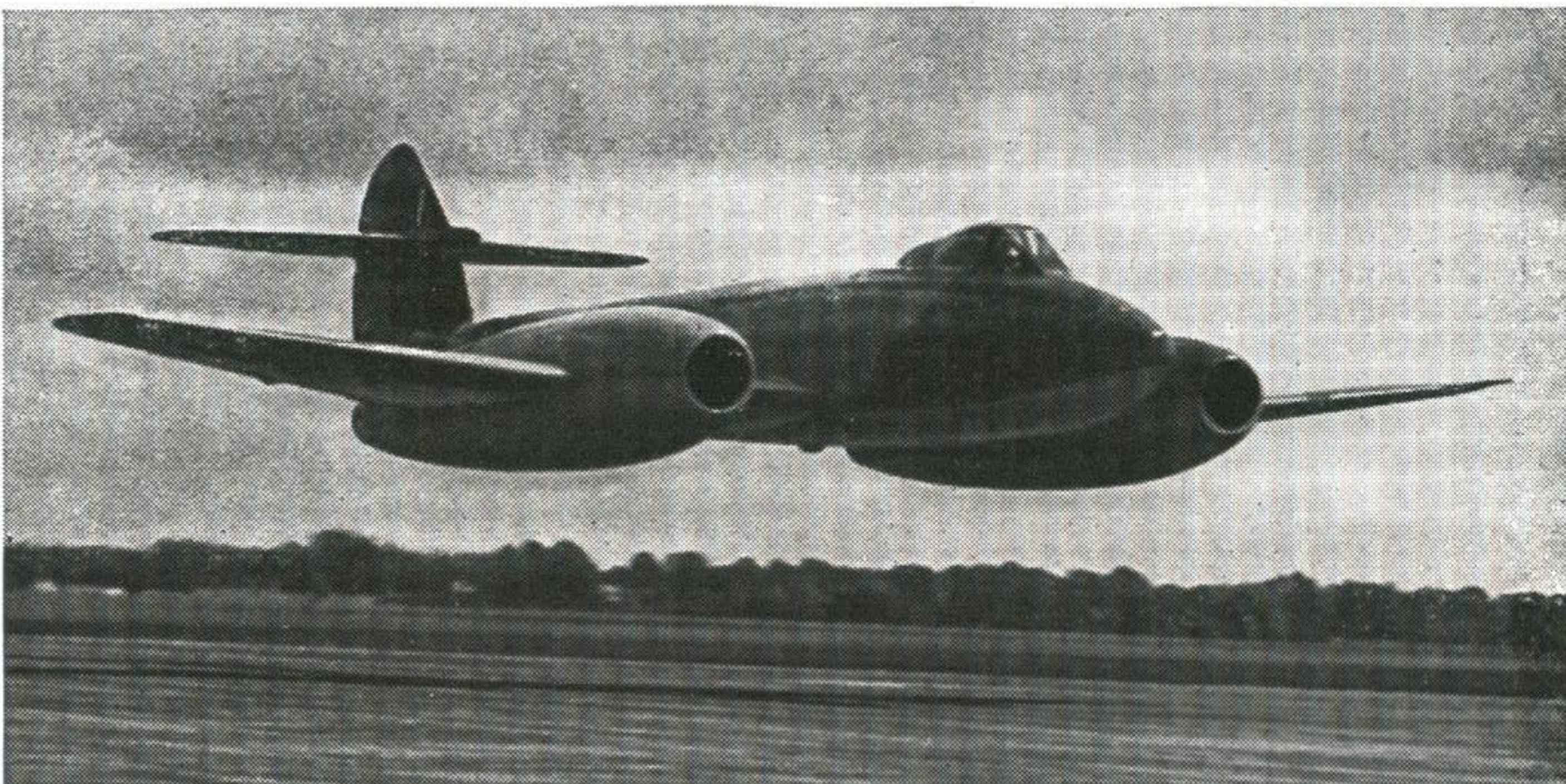
**Fin Formation**—A Miles Messenger on Communication Duties—and another gift to the brotherhood of spotters. That is, provided you can see the three fins, or the flaps, or the fixed undercarriage which, together with the "Miles" appearance, all add up to the Messenger. With 3 or 4 people aboard, its Blackburn Cirrus III engine gives a top speed of 135 m.p.h.—range is 460 miles. (Span 36 ft. 2 in.)



**Anglo-American-Canadian**—The Douglas D.C.4M Skymaster "North Star", built in Canada, is fitted with British-built Rolls-Royce Merlin 620 engines of 1740 h.p. On a demonstration flight from Montreal to the Douglas factory at Santa Monica, it greatly impressed the Douglas technicians with its improved performance—the "Lincoln type" Merlins give 40 per cent more power, cruising at 325 m.p.h. (Span 117 ft. 6 in.)



**First Jet Air Liner**—This Avro Lancastrian has Rolls-Royce Nene jet engines in place of the two outer Merlins. As can be seen, the inner Merlins are "dead", with their props feathered. Passengers have commented on the comparative smoothness and quietness when flying in this manner. Rolls-Royce Ltd. are using this Lancastrian as a flying test-bed for their jet-propulsion units. (Span 102 ft. 0 in.)



**Beat-up**—No thoroughbred was more carefully groomed than the Gloster Meteor IV for record flying, the highly polished skin adding many m.p.h. This type of fighter probably represents the limits which can be reached by current airframe design methods—it is said to be almost impossible to use full throttle without getting uncomfortably near the sonic barrier. The Rolls-Royce Derwent V units give the standard fighter a top speed of 595 m.p.h. at 30,000 ft. (Span 43 ft. 0 in.)



**The American Way**—The Taylorcraft BC 12D is blood brother to our own Auster, since the British Auster Aircraft firm was originally an offshoot of Taylorcraft of U.S.A. It is now "on its own". The American has a "solid" cabin roof, spats, and a 65 h.p. Continental engine; otherwise, the similarity of shapes and forms is obvious. The top speed of the 12D is 117 m.p.h. (Span 36 ft. 0 in.)

THE INTER



SERVICES

# AIRCRAFT RECOGNITION JOURNAL

(NEW SERIES)

## The Sky's the Limit

**C**HRISTMAS comes but once a year . . . but Aircraft Recognition is always with us. Like Christmas, it has a strong attraction for boys. Indeed, there is something about it which appeals to the boy that is in every man. We have always been aware of this, and it is borne out by our post-bag. Letters come to us from men, women and boys, from the British Isles, and from Europe and America; from past and present members of the Services, the R.O.C. and the A.T.C. Business men, tradesmen, farmers—from every walk of life comes evidence of the intense interest which is aroused by the subject to which this Journal is devoted.

Although the two words "Aircraft Recognition" have an obvious and accepted meaning, to many they have come to mean much more than simply recognizing an aeroplane. An interest in Recognition goes hand in hand with a general interest in aviation and its many allied subjects. We try to stimulate this interest by publishing informative articles, some of which, to the uninitiated, may seem to have little bearing on Recognition. Coupled with an appreciation of the wider aspect of the subject is an equal appreciation of the great help we derive from a knowledge of the past. If you are new to the "trade", you will find it immensely interesting to look up the histories of the types—and knowledge is based on interest—or have we said that before somewhere?

The Editorial Committee decided that this issue of the Journal would be a suitable one in which to present two pages of pictures of the British aircraft which made history in World War II. They will arouse nostalgic memories in those who knew them in the warring years, while for newcomers they will help in establishing a background for the learning of current types. For all of us, they typify our pride in British aircraft and in the Royal Air Force. And that is a Good Thing.

## Make a Note

Rare birds seen over here—**Douglas A-26 Invader** 2-motor attack bomber; **KZ.III**, Danish small high-wing monoplane with Blackburn Cirrus motor; **Lockheed Lodestar**; **Fieseler Fi 156 Storch**; **Siebel Si 204**; **Messerschmitt Me 108**. (We shall be pleased to hear of other rare types seen by our readers.)

**Correction**—The "Flying Salami" is the Consolidated-Vultee six-engined **XB-36**, not the Northrop B-35, as stated in our October issue. We are brushing up on our sausage recognition.

**Superfortress sequence**—The Boeing **XB-44** is an experimental development of the **B-29 Superfortress**. In its production form, it is the **B-50**. The B-29 has Wright Duplex Cyclones, the XB-44 and the B-50 have Pratt and Whitney Wasp Majors. The Recognition differences are in the huge air intakes beneath the Wasps, which cause all four nacelles to project beyond the trailing edge instead of only the inner nacelles, as on the B-29. 3,000 B-29's are still in serviceable condition.

An **Airspeed Oxford** is being used to test the new 515 h.p. Alvis Leonides 9-cyl. radial engine.

**Avro XIX** (ex-Anson)—all British Air Attaches are to have one and many are being sold for service all over the world.

The **Saunders-Roe SR/A1** single-seat jet propelled flying boat fighter (August Journal, p. 15) is well advanced. It has a pressurized cabin, two Metropolitan-Vickers F2/4 axial-flow jet units at the wing roots: span 46 ft.

**B.O.A.C.** are operating a fleet of Short Hythe Class (ex-Sunderland III) flying boats. Twelve Short Solents (civvy version of the military Seaford) are on order. The Sandringham, like the Hythe, derives from the Sunderland, but is civil from the start, not a conversion. Hythes have faired-over turrets, Sandringhams are gracefully streamlined fore and aft.

**Handley Page** bombers are being converted into **Mk.A.IX** (A for Airborne) for para-troop and military freight purposes.

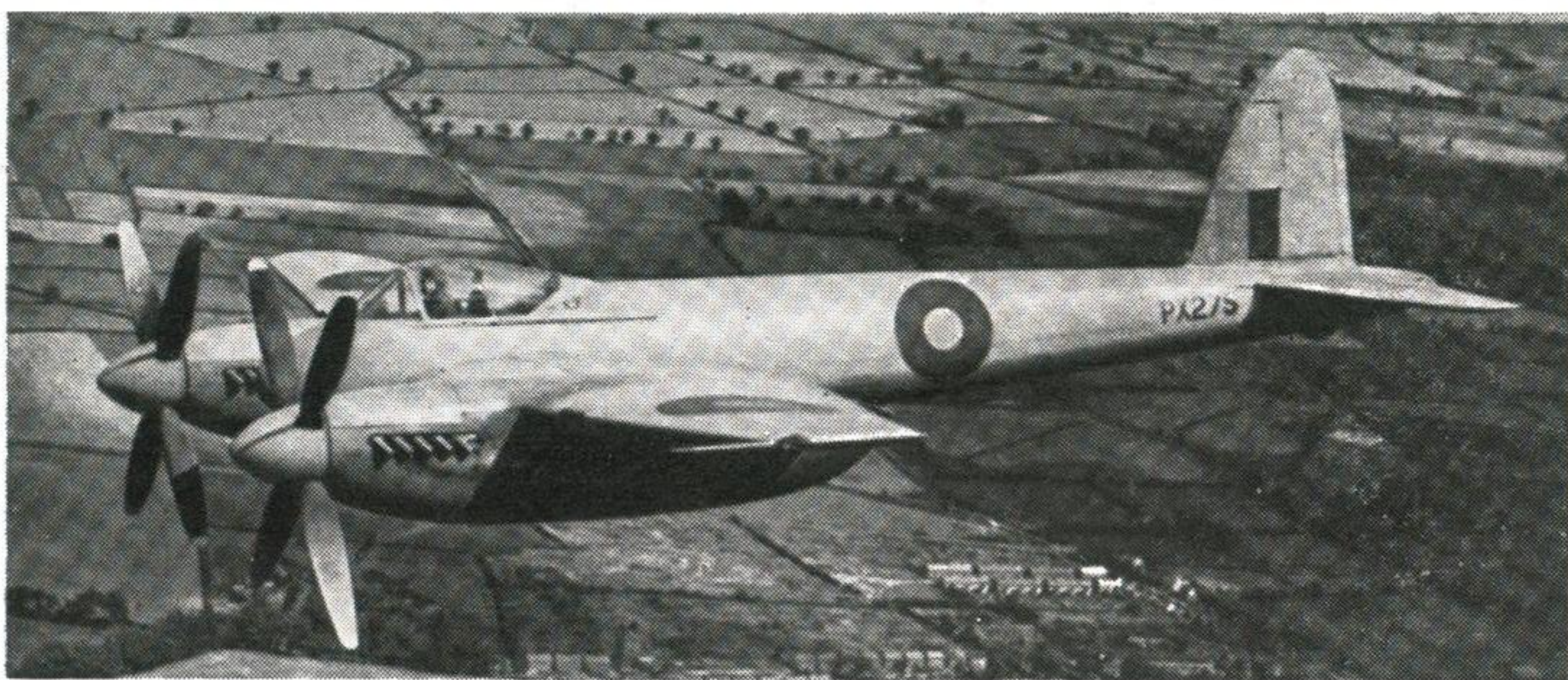
**Blackburn Firebrand** production is ending.

The first production **Fairey Spearfish T.D.Mk.I** torpedo/dive-bomber has been completed.

The **Tipsy "Belfair"** 2-seat lightweight monoplane is the first Belgian-built aircraft in six years. It is a product of Avions Fairey, hence the name.

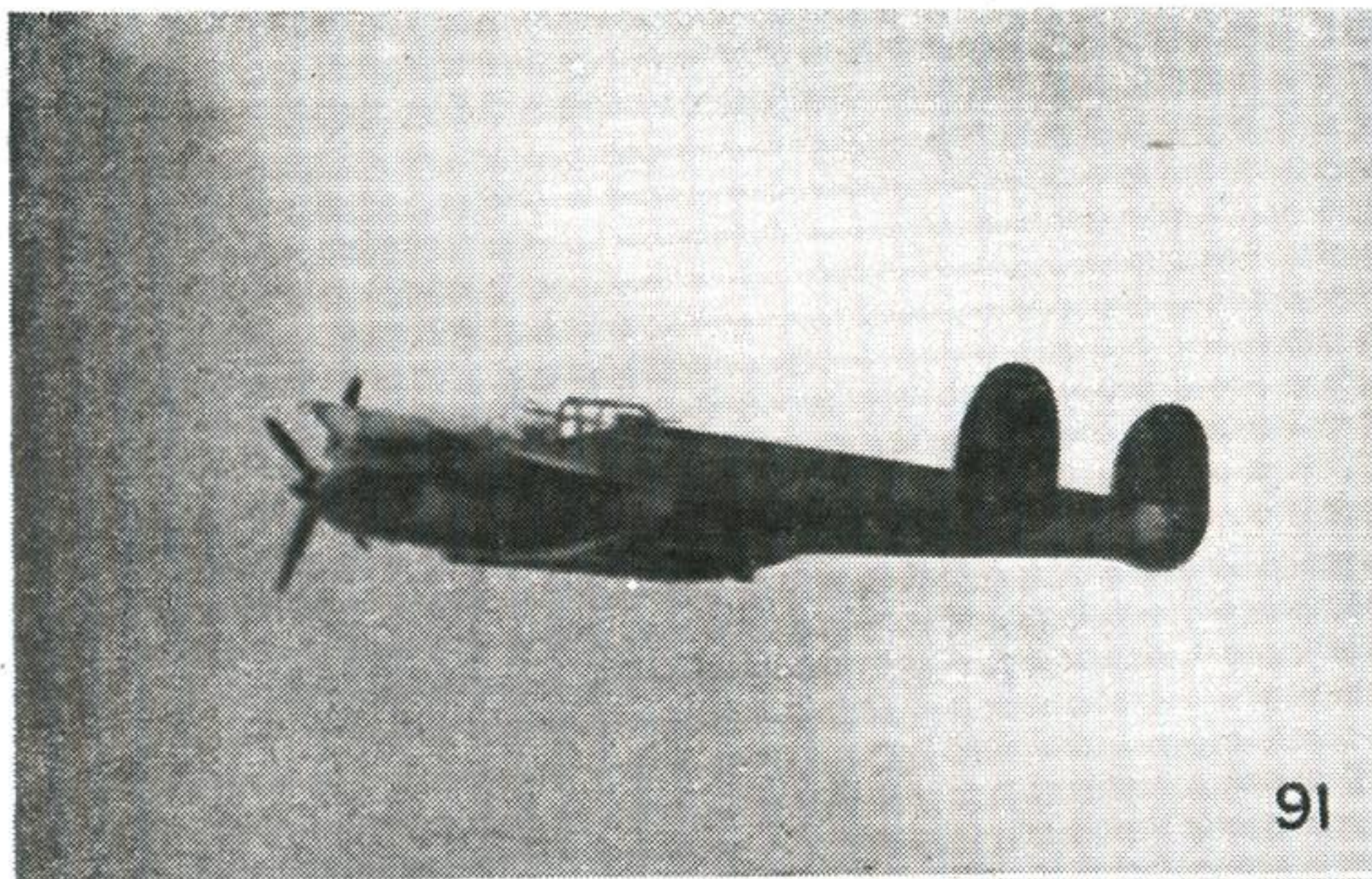
**De Havilland Dove**—255 have been ordered by customers in many countries.

**Republic**—The P-84 Thunderjet fighter and the 4-motor RC-2 Rainbow (civvy version of XF-12 "photographic ship") are scheduled for production in considerable quantity

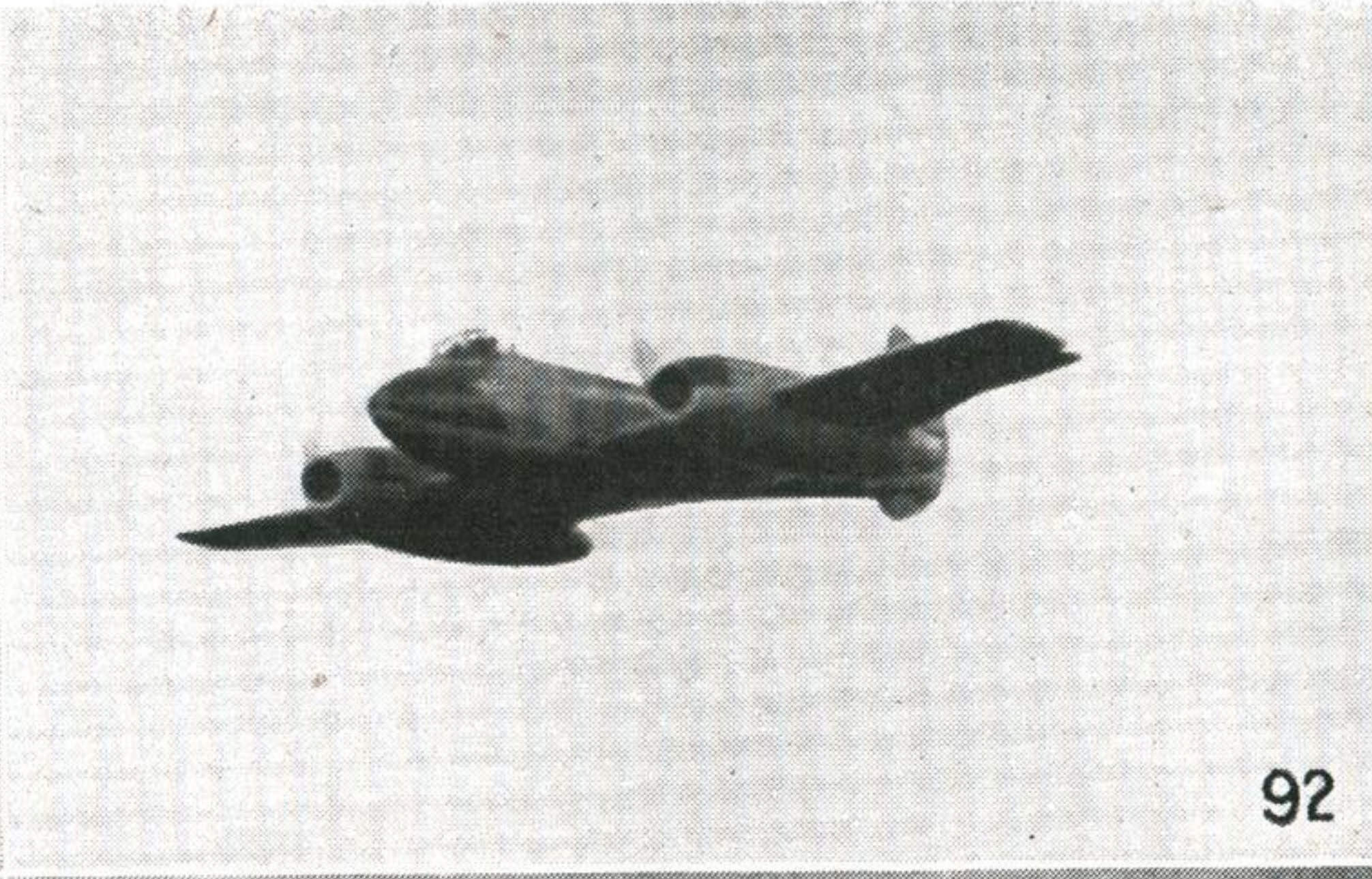


**"FAN"-TASIA**—A remarkable photograph of a **De Havilland Hornet F. Mk. I** (top left). Both propellers are feathered and the engines are dead, with the result that the Hornet seems to be stationary in mid-air, posing for us to study its distinctive Recognition features. On the other hand, the **Sikorsky Hoverfly Mk. I** (bottom left) really is poised—and finds it very necessary to keep both its fans turning, as all its lift and control are derived from them. It is almost a relief to switch our gaze to the **Hawker Tempest F. Mk.V's** below. They represent the peak of design in propeller-driven fighters, a type of aeroplane which is now approaching the end of its long and glorious life.

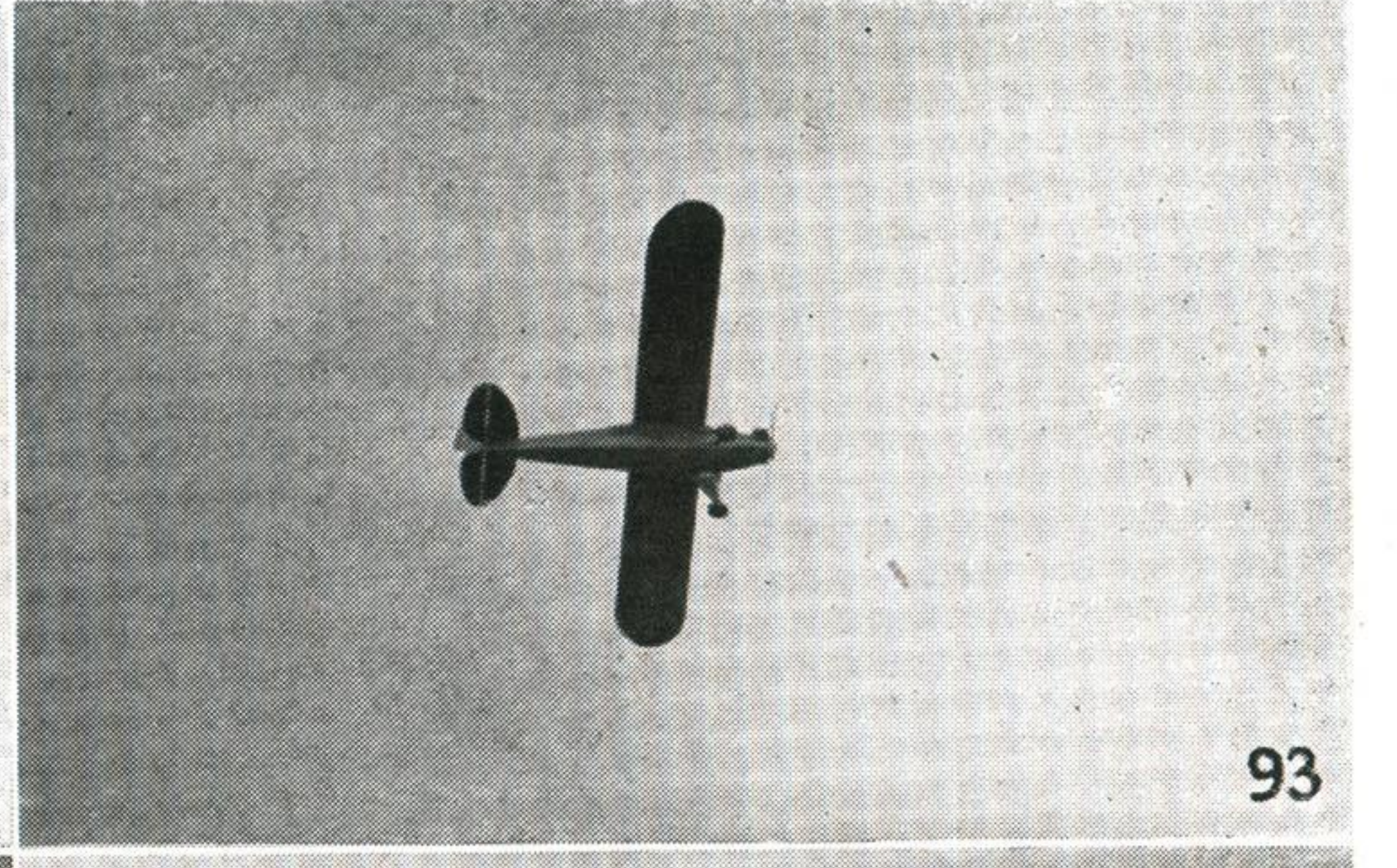




91



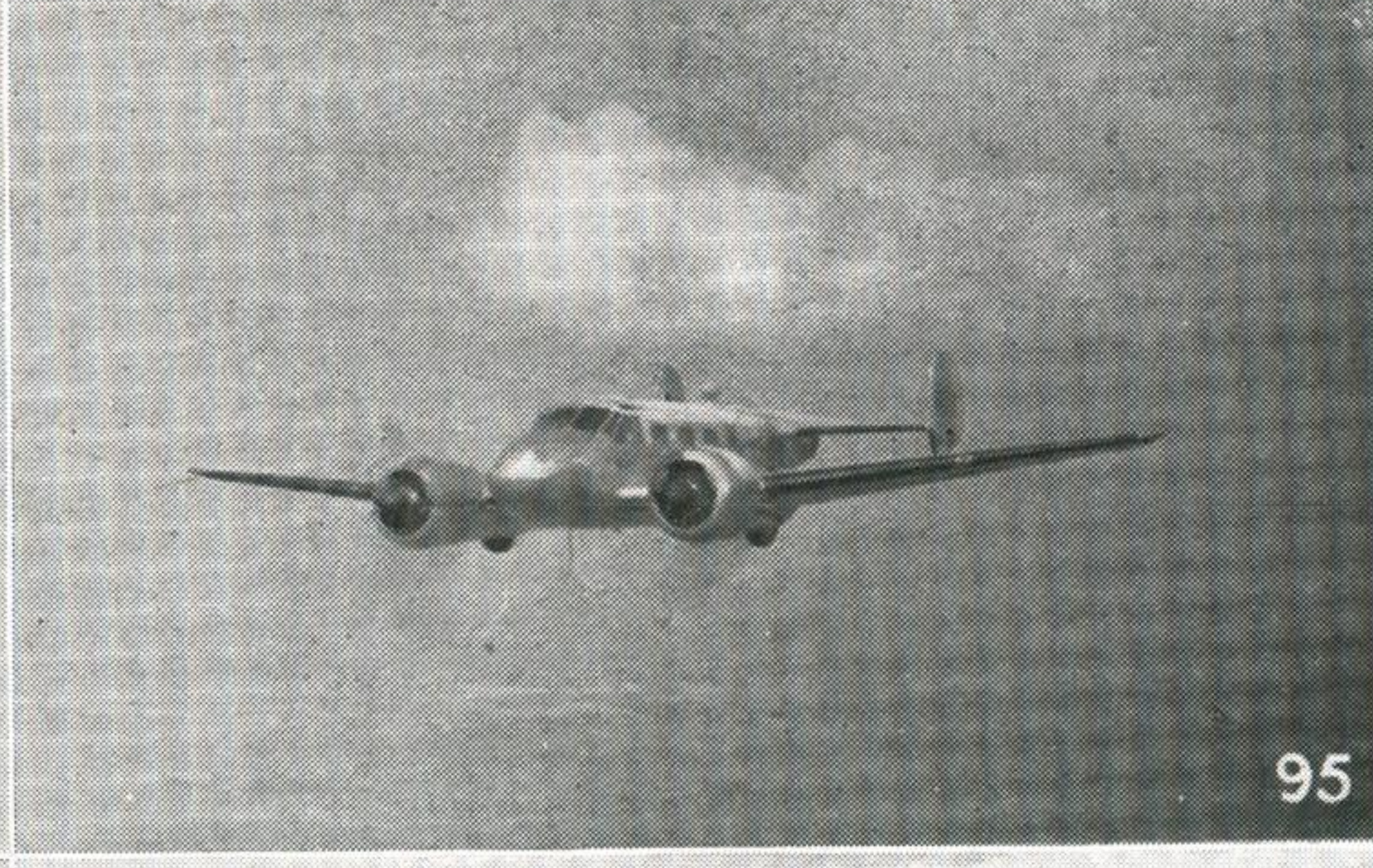
92



93



94



95



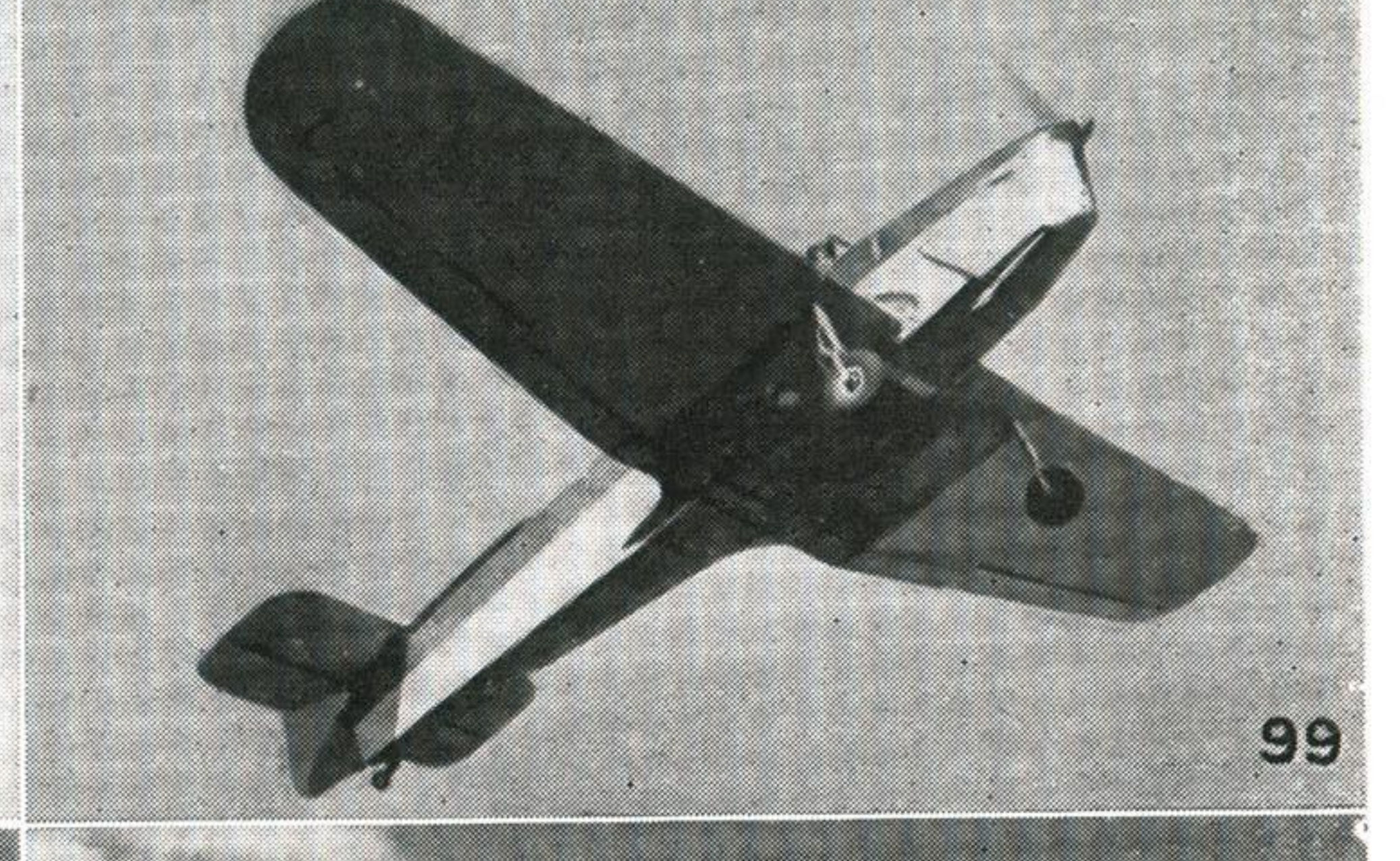
96



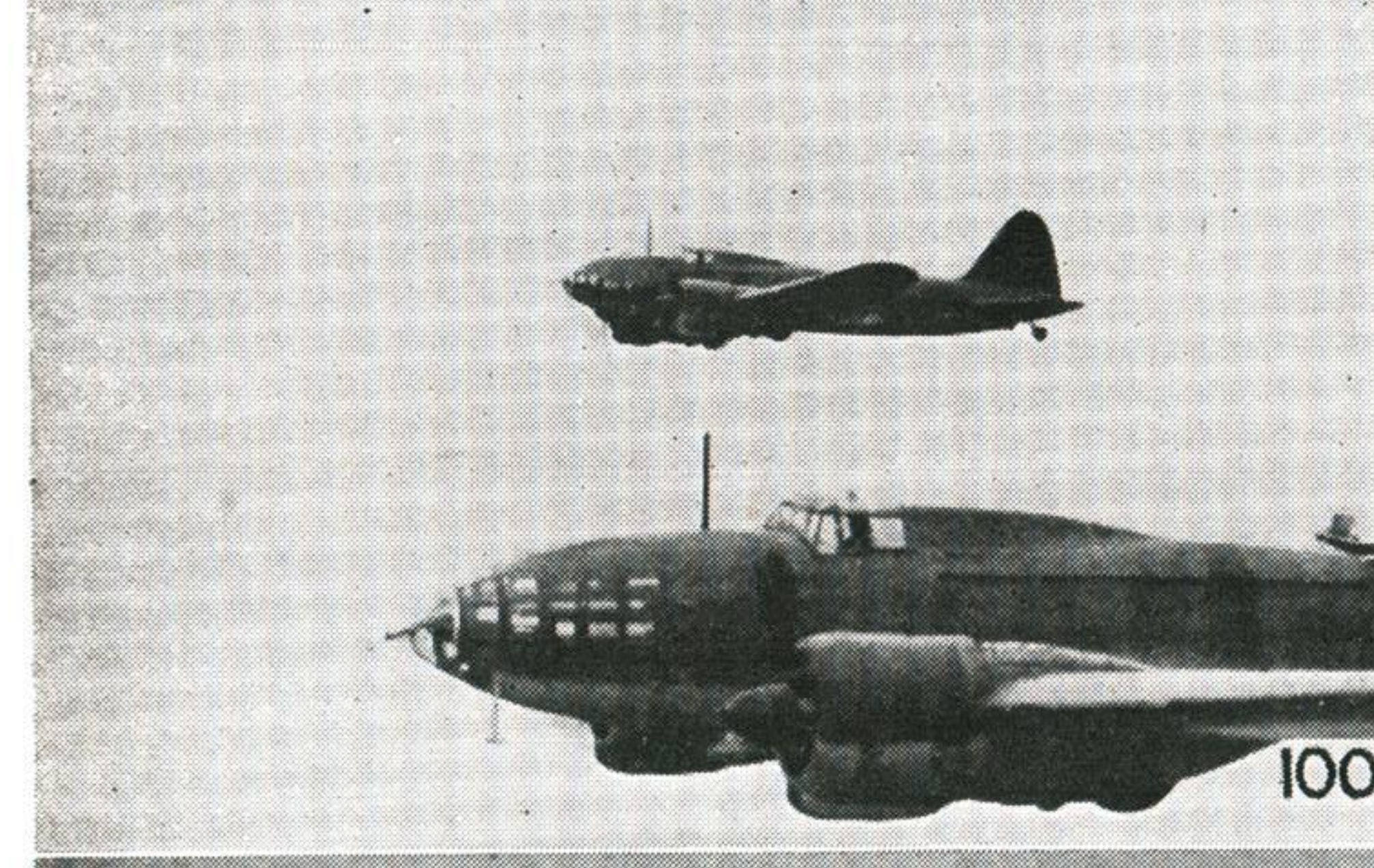
97



98



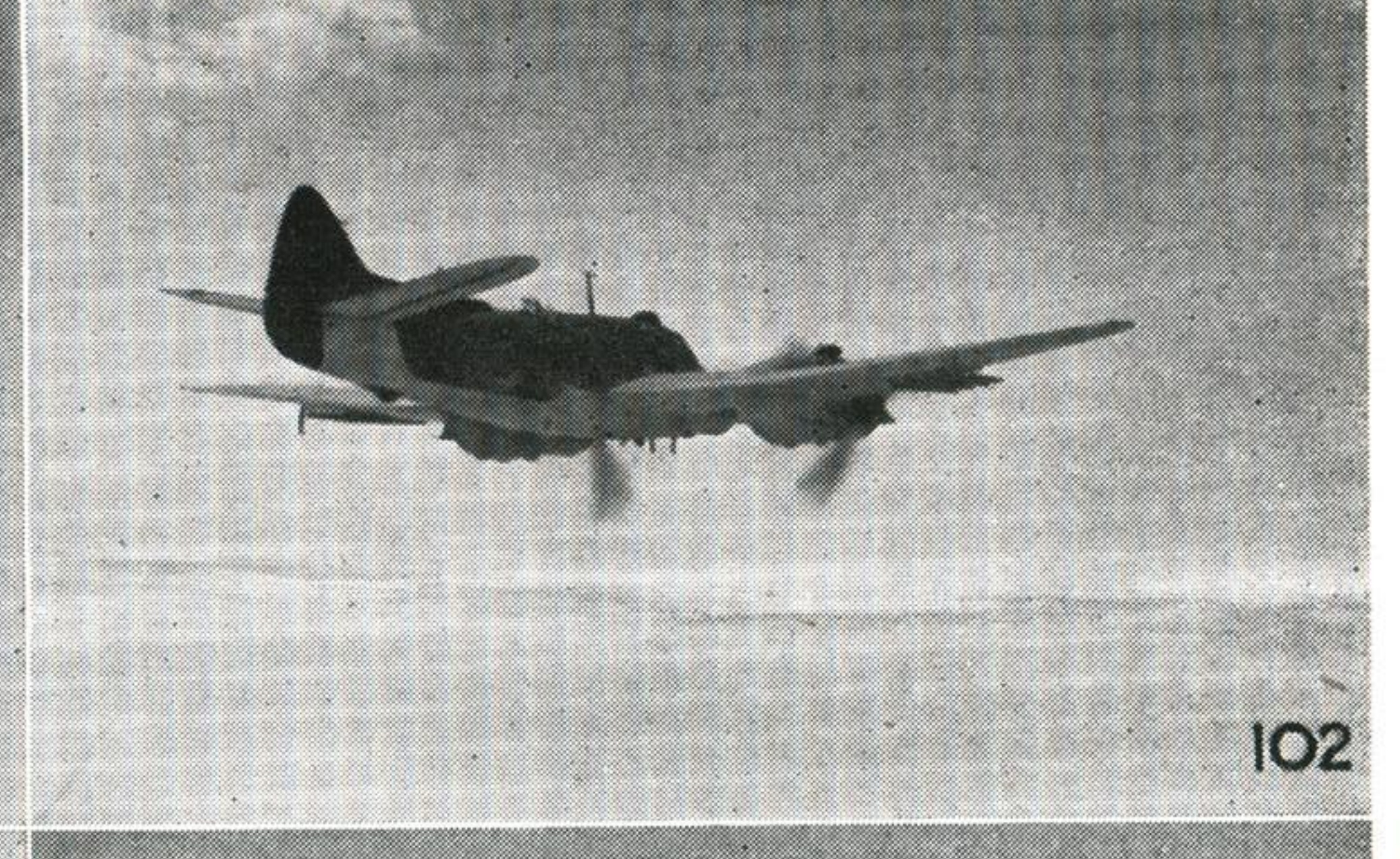
99



100



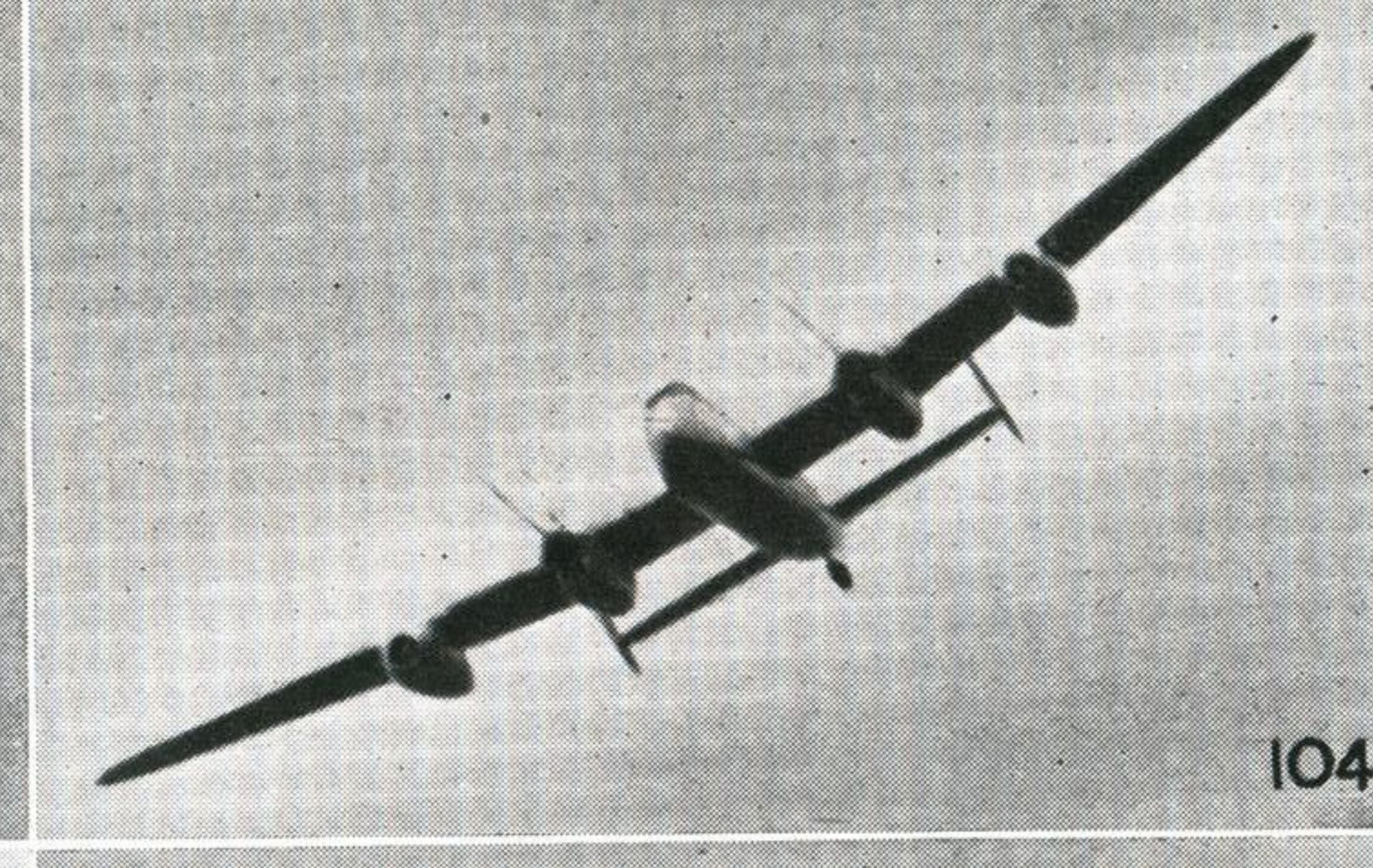
101



102



103



104



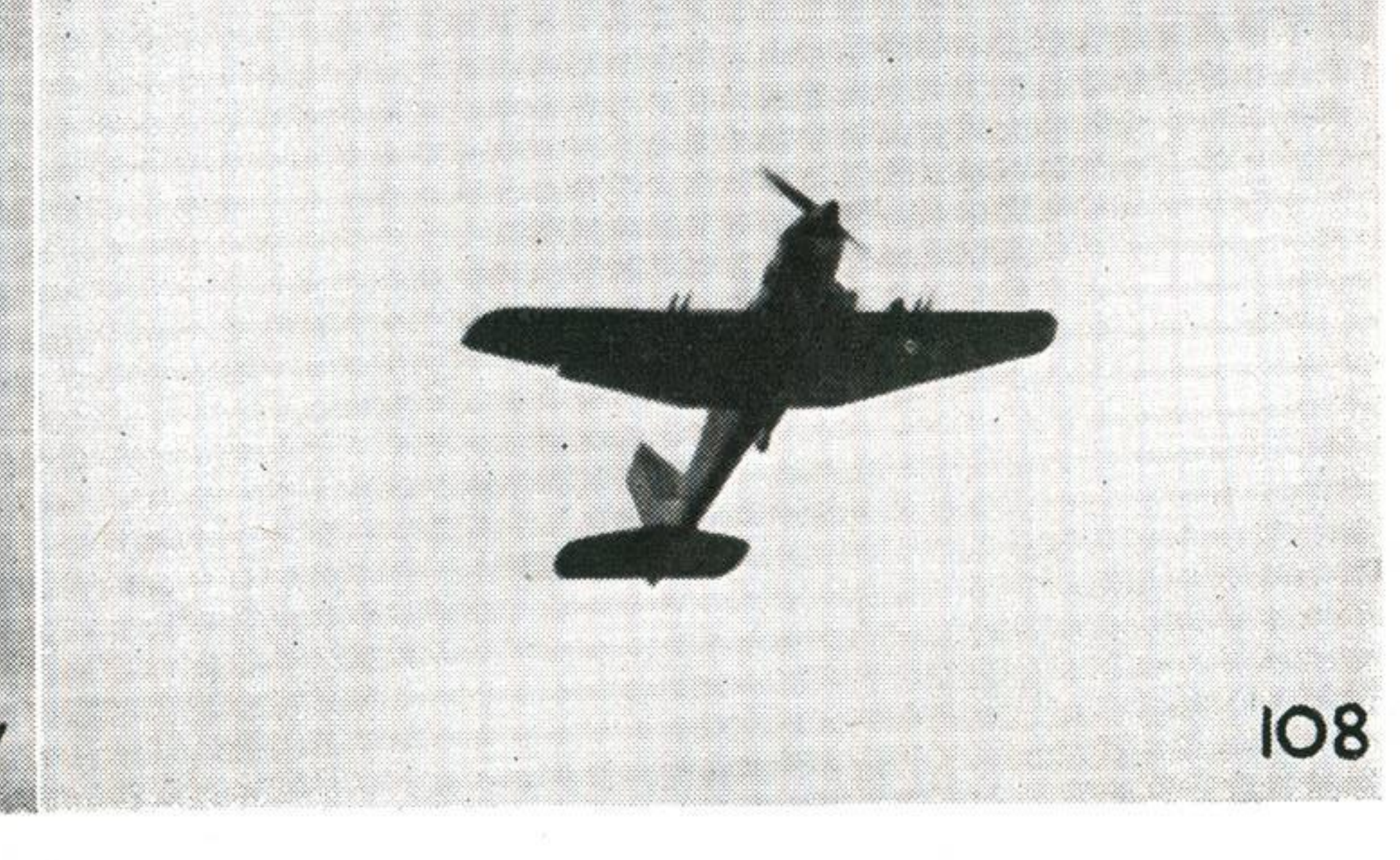
105



106



107



108

# NURFLÜGEL and SCHWANZLOS!

The "flying wing" is the Coming Thing and our desire to present interesting information led us to ask John Sizer to contribute a few words of wisdom on this intriguing subject. He explains the difference between the "all-wing" and the "tail-less" but we must confess that we are still a little uncertain as to where one ends and the other begins. But read for yourself.

by John A. Sizer, A.R.Ae.S., A.I.N.A.

**F**IRST, some definitions. There is a distinct difference between all-wing aircraft and tail-less aircraft. The first type has everything housed within the wing—engines, crew, fuel, etc. The tail-less type employs nacelles for the accommodation of power units and crew. The Germans call them "Nurflügel" (literally, "only wing") and "Schwanzlos" ("tail-less").

The all-wing type is especially suitable for large aeroplanes capable of long range operation, where fairly high cruising speed, with no great emphasis on high top speed, is required. The tail-less type is suitable only for smaller, very high speed designs and is an interim type only.

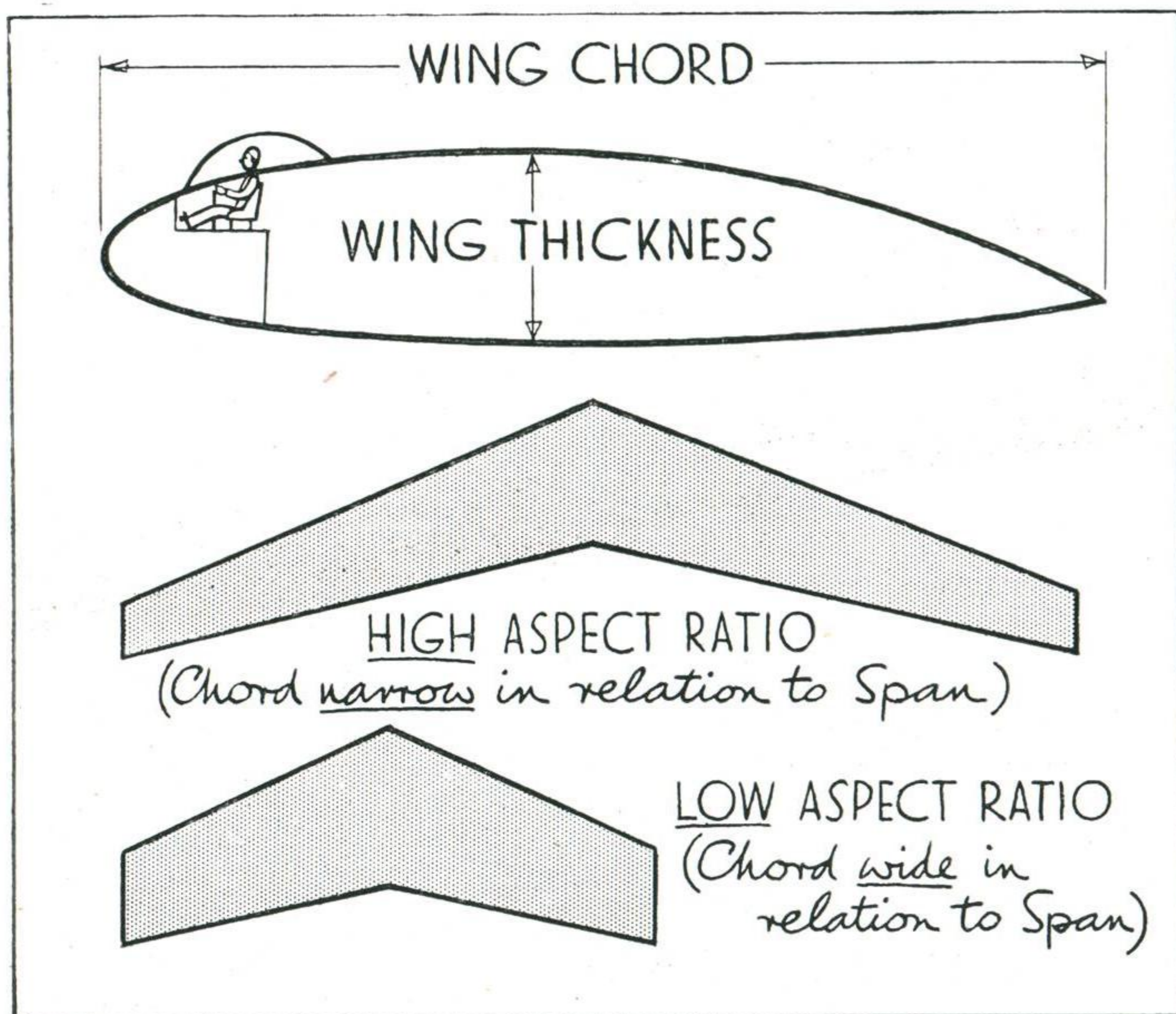
Few of the all-wing designs built to date have been really successful. This is due not so much to lack of design skill as to lack of extensive experience in this field to guide a designer. To be successful, the all-wing aircraft must be large. This is quite clear, when you realize the depth and space necessary for a wing to house a crew, fuel, oil, motors and everything else.

And the large aircraft, even in the conventional form, has not advanced in size any faster than constructional materials would allow.

**The size of it**—Accepting the fact that we need a wing of some depth to avoid having everybody crawling on their stomachs within, then to give the thing some aerodynamic merit, we have to provide enough chord to keep the thickness/chord ratio within reasonable limits. A wing depth of 6 to 10 ft. will not be uncommon soon, and since a ratio of thickness to chord of about 0.20 must be aimed at, the appropriate chord for a 6 to 10 ft. deep wing would be between 30 ft. and 50 ft.; high aspect ratio is some measure of aerodynamic efficiency, and with a chord of 50 ft., a span to suit would result in a pretty substantial wing area. To maintain structural weight at a tolerable percentage, the wing loading must be higher for large aircraft. So that with the fairly ample wing area, resulting from having a deep chord aerofoil section, the flying wing *must* be big.

**Why sweep back?**—It is not absolutely necessary to have sweep-back in the flying wing's plan form, but it is useful because otherwise the "elevons", and (when fitted) the rudders, would have such poor leverage about the centre of gravity. In fact, control has been one of the most difficult problems in the evolution of the flying wing. Then, of course, there are some snags associated with the undercarriage, especially in small flying wings. There is so little distance fore and aft to get adequate wheel base. The designer is more or less compelled to adopt the nose-wheel layout. Since much more experience has been gained of late in the design and performance of nose-wheeled undercarriages, and since it seems to be appreciated that the flying wing is good only in large sizes, the undercarriage problem has become less acute. The Northrop XB-35 gives some idea of what we may expect to see as a practical example of the flying wing.

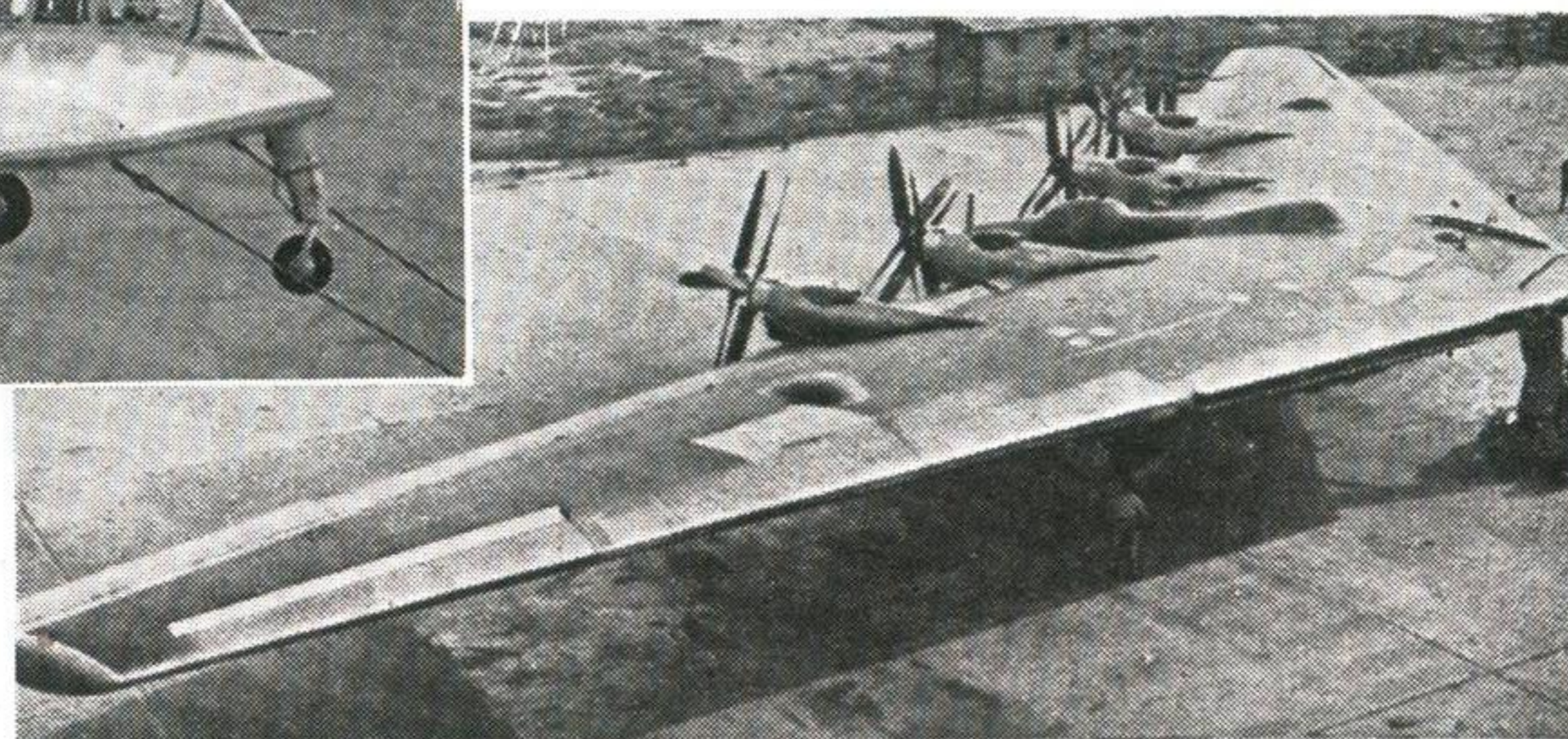
As with other "fashions" in aviation, it is to be expected that the cult of the flying wing will not last, though it will serve its turn, the same as many another pendulum swing in aviation engineering has done. Logically, the solution for transport is a *no-wing* effort which will have the external geometry of a stabilized projectile at all times other than at take-off and alighting, when it will wind out its wings and grab enough lift to make it airborne in safety.



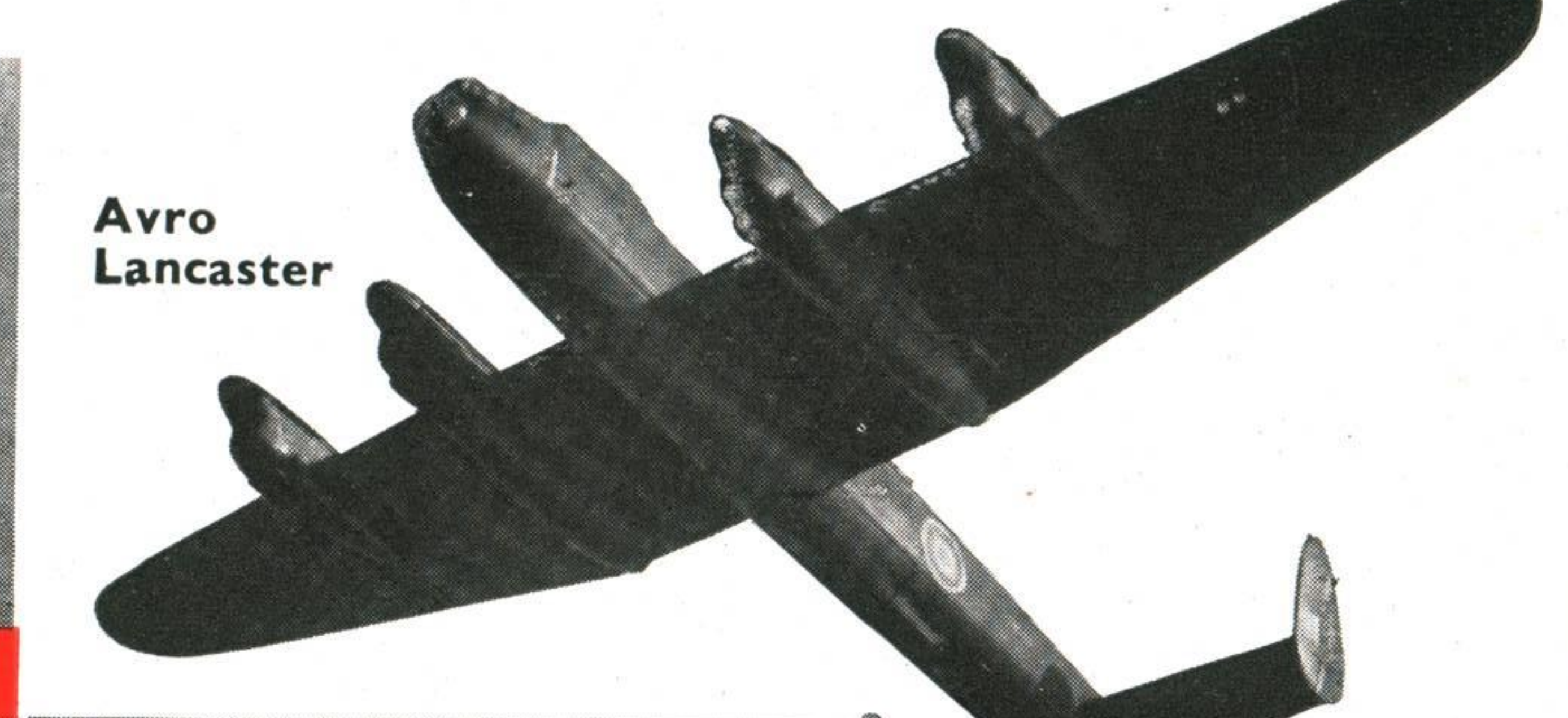
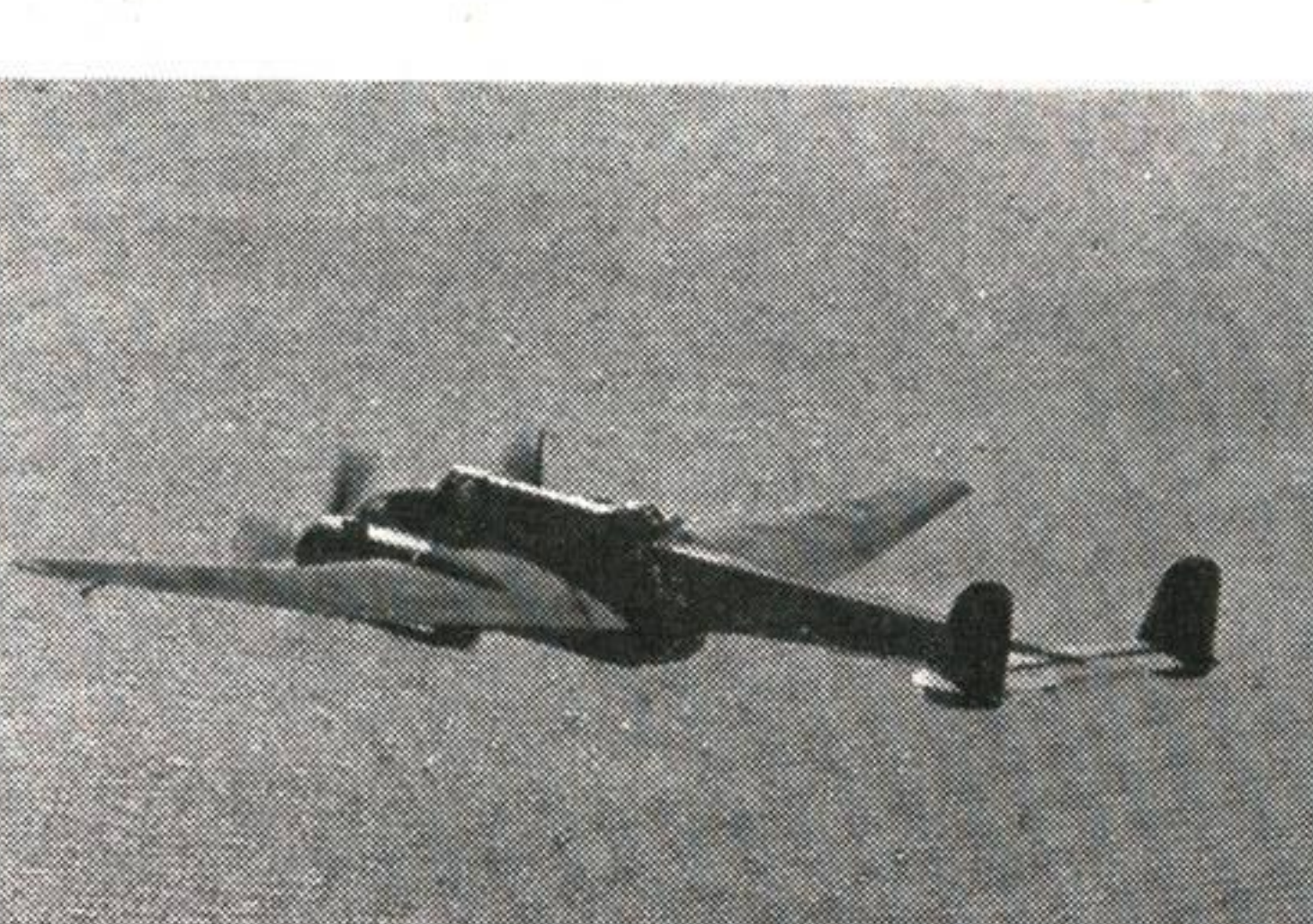
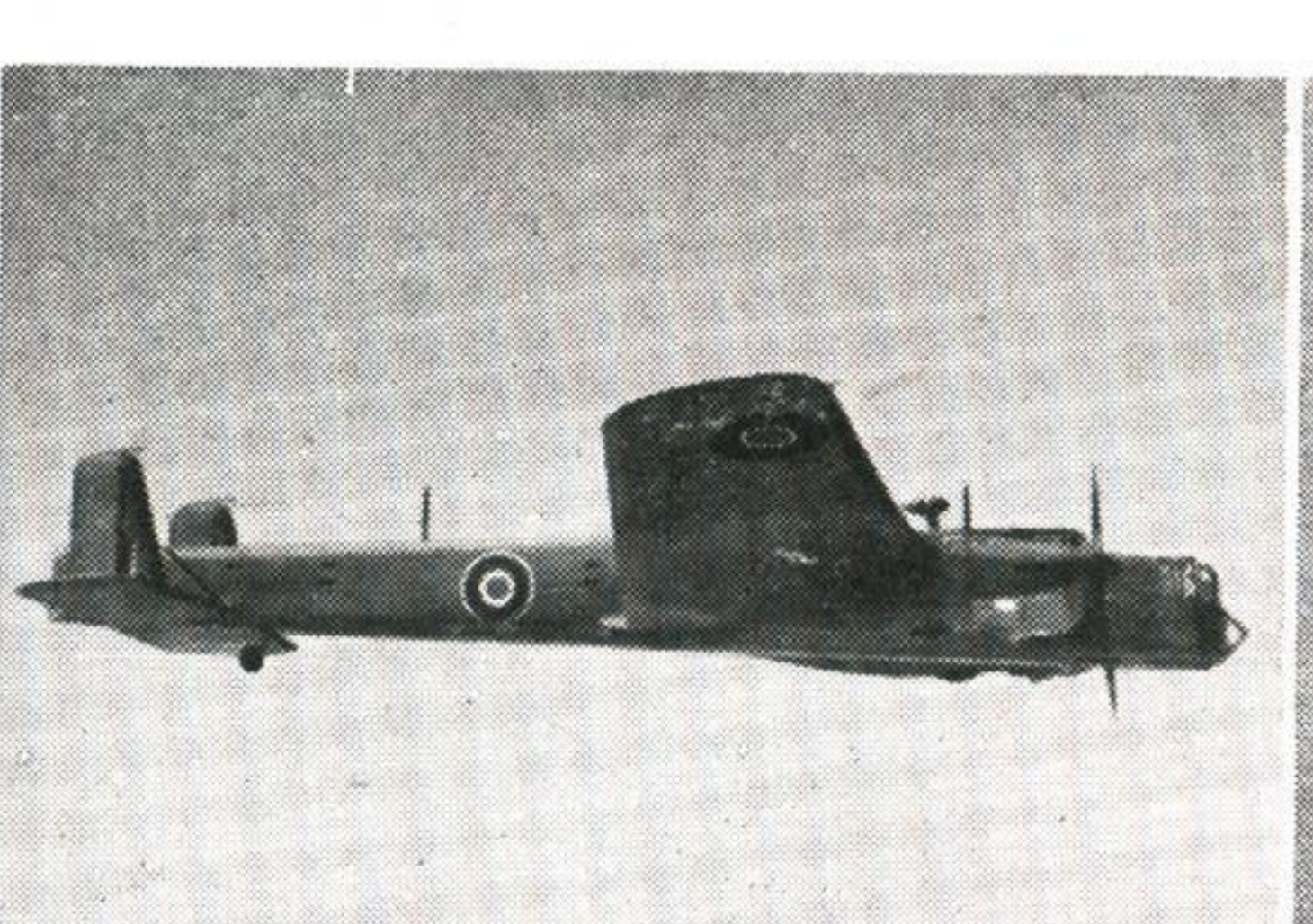
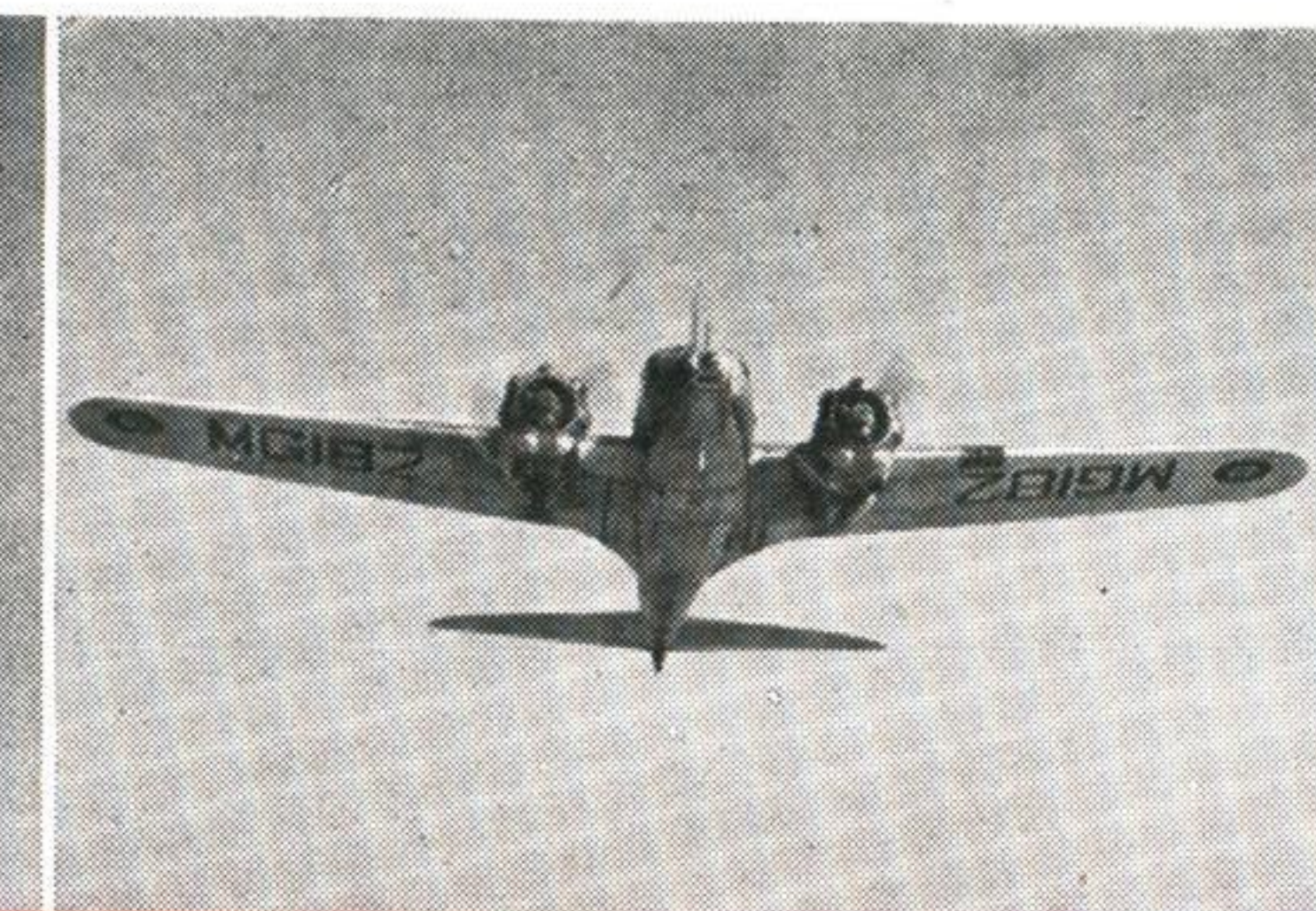
The Northrop XB-35, seen below, represents the ideal application of the "flying wing" principle. The only protuberances are the cockpit canopy, armament "blisters," and the cowlings over the driving mechanisms to the contra-rotating propellers.



Above is the Armstrong Whitworth A.W.52G experimental glider, which is in the "flying wing" class. By dispensing with the fuselage and tail unit, both weight and drag are reduced. The small propellers on the undercarriage legs drive generators for providing power for the aircraft's electrical services.



The Handley Page "Manx"—As the name so subtly suggests, this is a "tail-less" type. The War held up the development of this experimental aircraft, designed nearly ten years ago. The wing-tip fins and rudders were installed as a safety measure in case one of the two engines should fail



Airspeed Oxford

Avro Anson

Miles Master

D.H. Tiger Moth

Fairey Swordfish

Armstrong Whitworth Whitley

Handley Page Hampden

Avro Lancaster



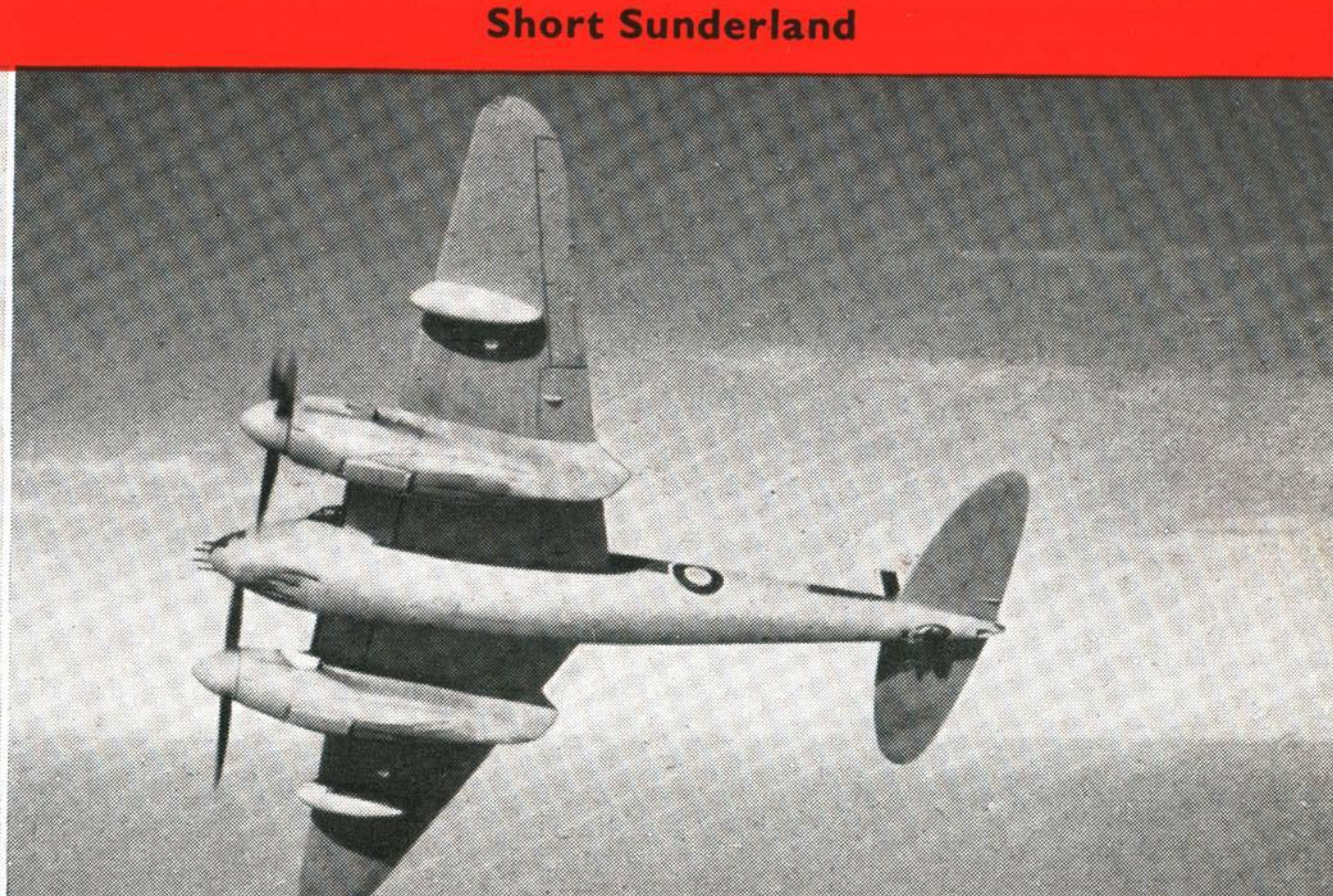
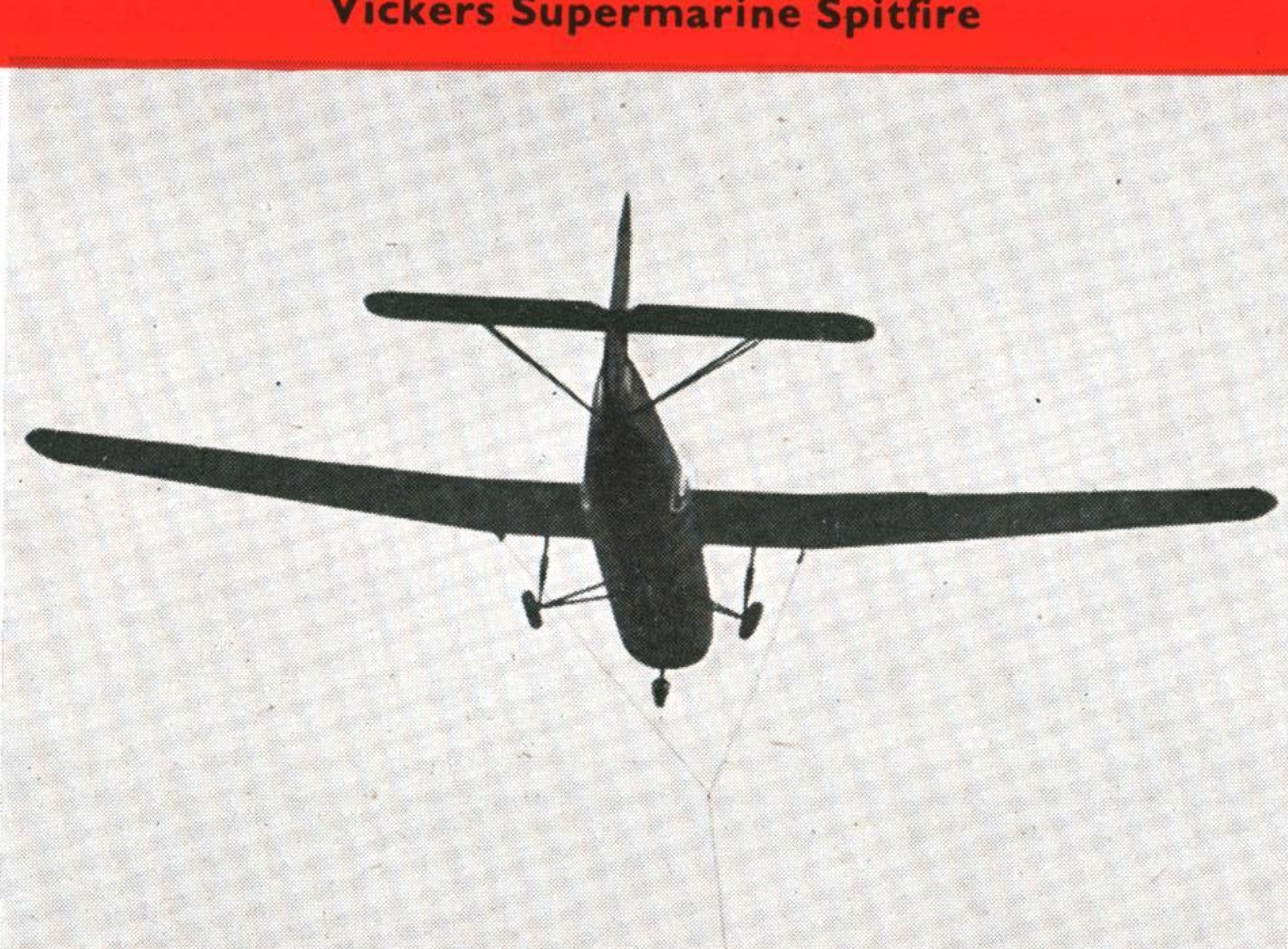
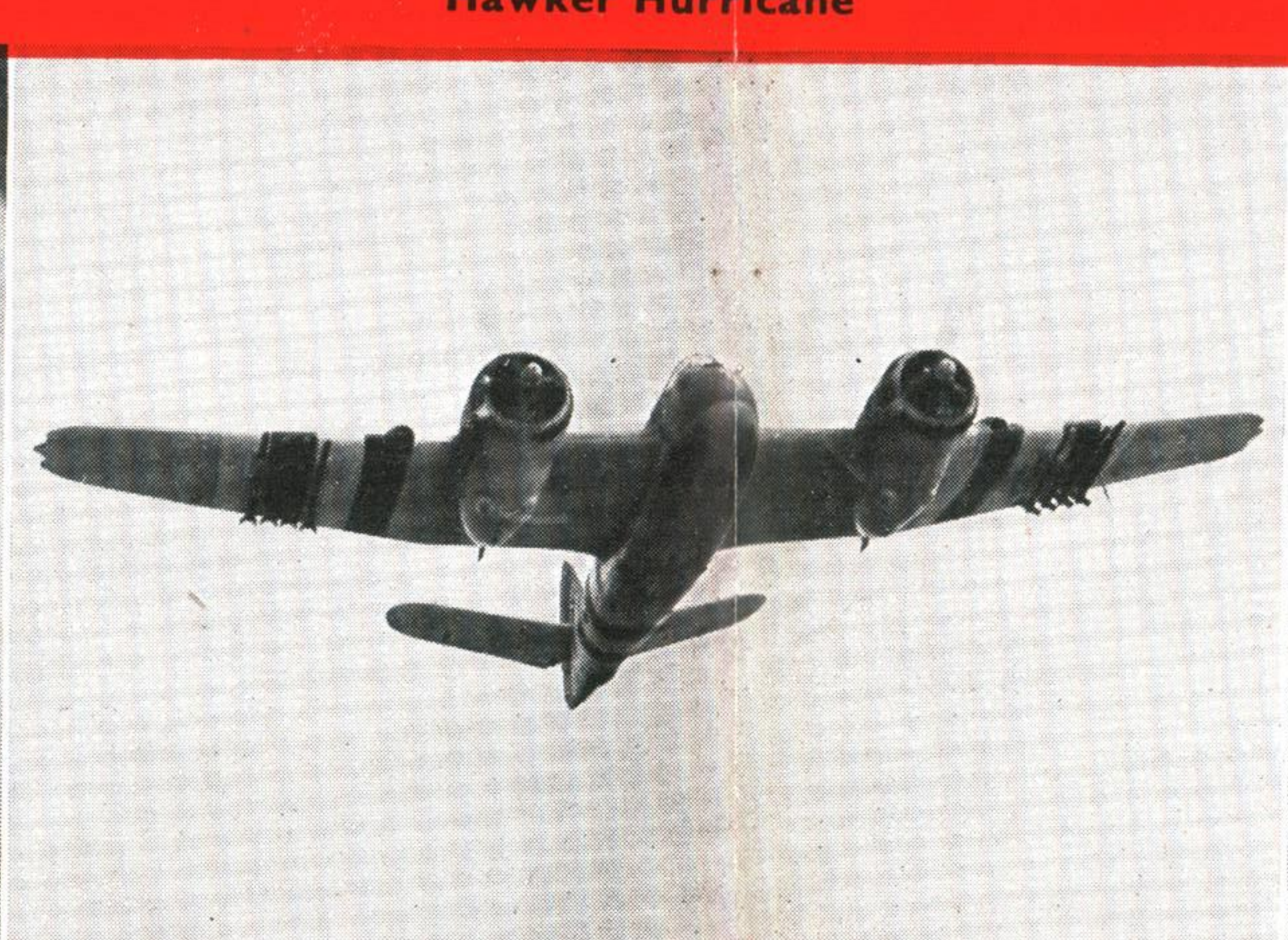
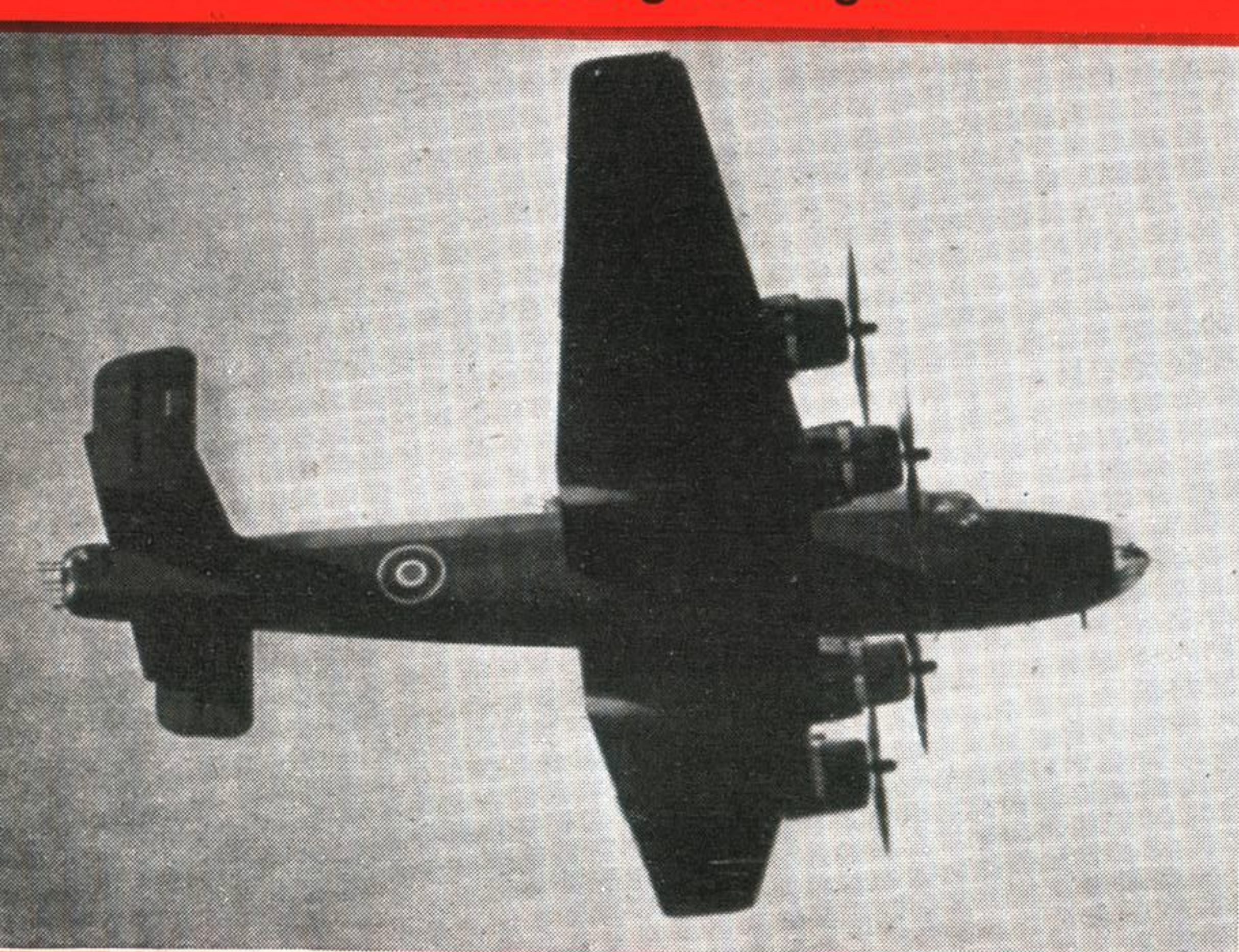
Vickers Armstrong Wellington

Bristol Blenheim

Hawker Hurricane

Vickers Supermarine Spitfire

Short Sunderland



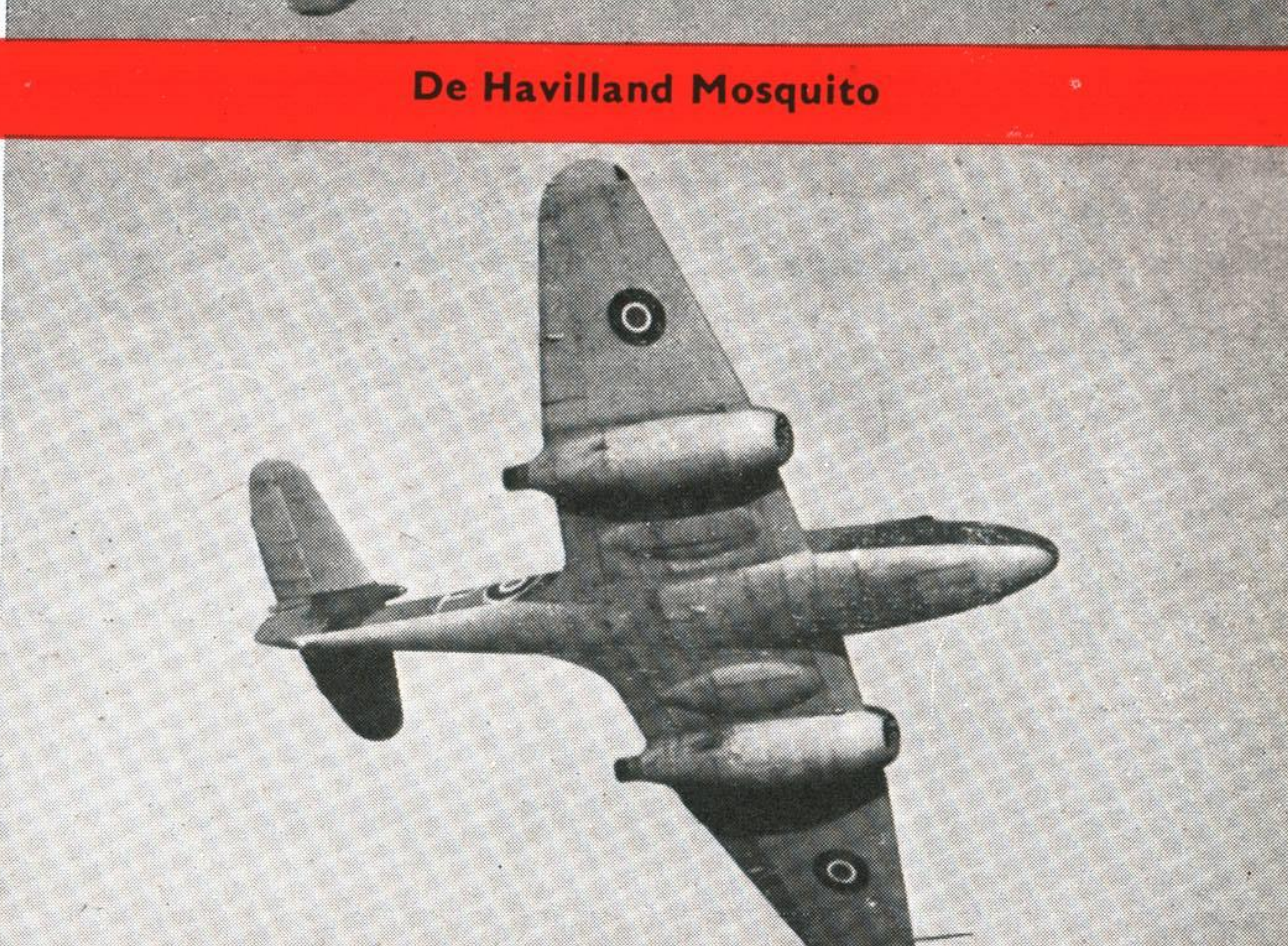
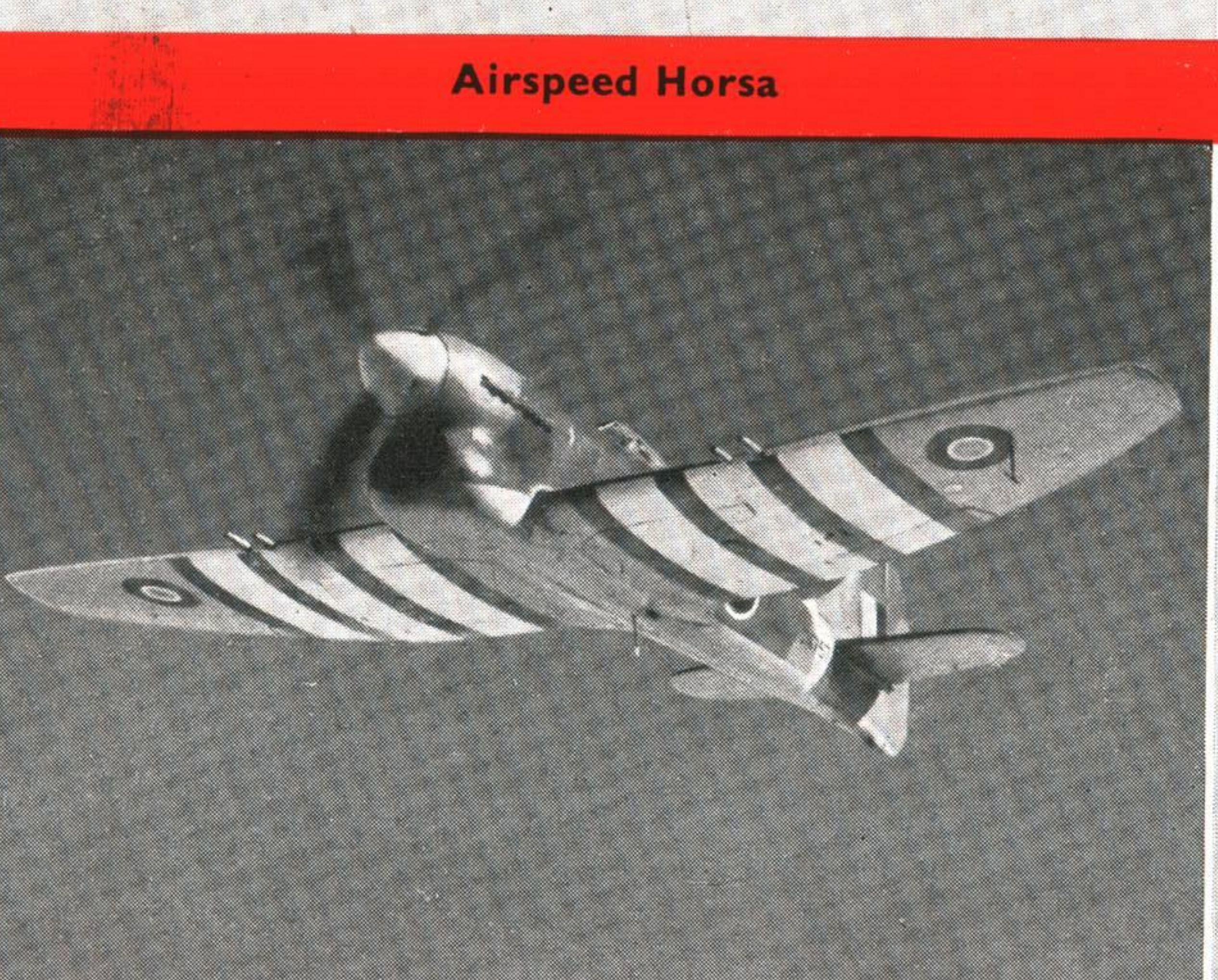
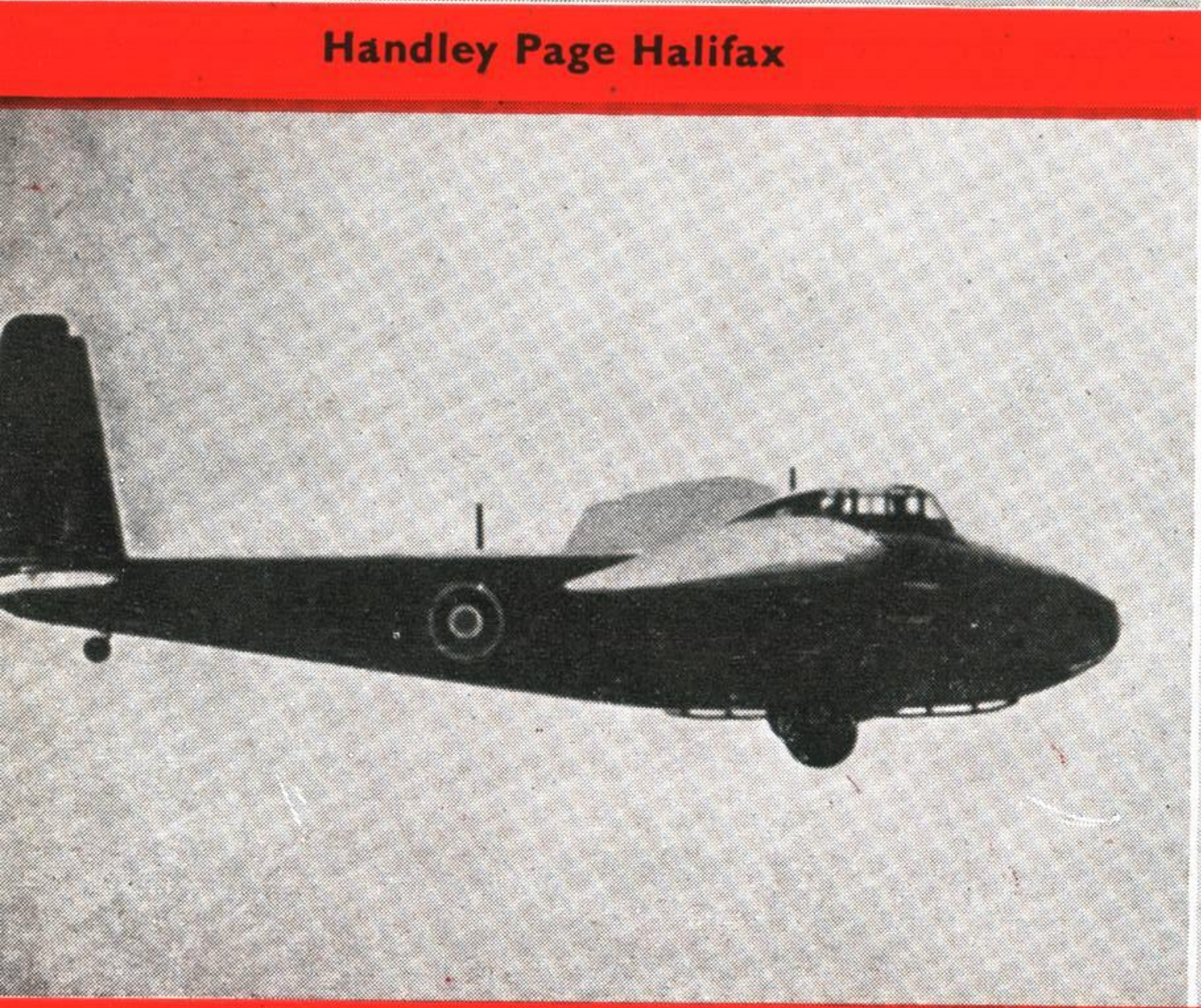
Handley Page Halifax

Short Stirling

Bristol Beaufighter

Airspeed Horsa

De Havilland Mosquito



General Aircraft Hamilcar

Hawker Typhoon

Fairey Firefly

Hawker Tempest

Gloster Meteor

*Britain made them . . .* AIRCRAFT OF THE ROYAL AIR FORCE IN WORLD WAR II

# U.S.A.A.F Designations

by Sergeant H. B. Cottee,

Instructor, R.A.F. Central School of Aircraft Recognition

**M**ANY people have probably been baffled, when examining U.S. Army aircraft, to find a string of designation letters stencilled along the side of the fuselage, just forward of the cockpit on the port side. Part of this designation is already well known, but for the sake of completeness let us explain the method throughout.

A letter is allotted to each major class of aircraft according to its function; the B for Bombardment, C for Cargo, P for Pursuit (Fighter), etc., are widely known. Each military aircraft considered, or accepted, by the U.S. Army Air Force is given its own number, together with the letter of the functional class to which it belongs. Thus the first bomber was the B-1, the first transport C-1, and the first fighter P-1, and so forth, the subsequent numbers being allotted in strict numerical sequence. They have no connection with the manufacturer, the sequence being in chronological order; examples are provided by the Douglas B-23, Consolidated B-24, North American B-25, and Martin B-26, four bombers of about the same period.

When a basic type of aircraft is structurally modified or is fitted with new motors, it is given a further letter to denote this, as in P-51H or B-29C, and these sub-type letters are allotted alphabetically, the first variant being the P-51A or B-29A and the next being the P-51B, B-29B.

This type of designation was the only one used for many years, but in 1941 an addition was made to the scheme, and the whole thing is now rather more complicated, including as it does block numbers and makers' letters.

## HOW IT GOES—

If we examine the first version of a new aircraft (for example, the Douglas Globemaster) off the production lines, we shall find on its side a designation which will read something like this:—C-74-1-DO. The -1 is known as the block number and indicates that it is the first production batch of the C-74, while the DO shows that it has been built at the main DOuglas factory at Santa Monica, being an abbreviation of the maker's name. The next production batch would be the C-74-5-DO, incorporating minor modifications, and we find that these block numbers go up in fives, the next batch being C-74-10-DO,

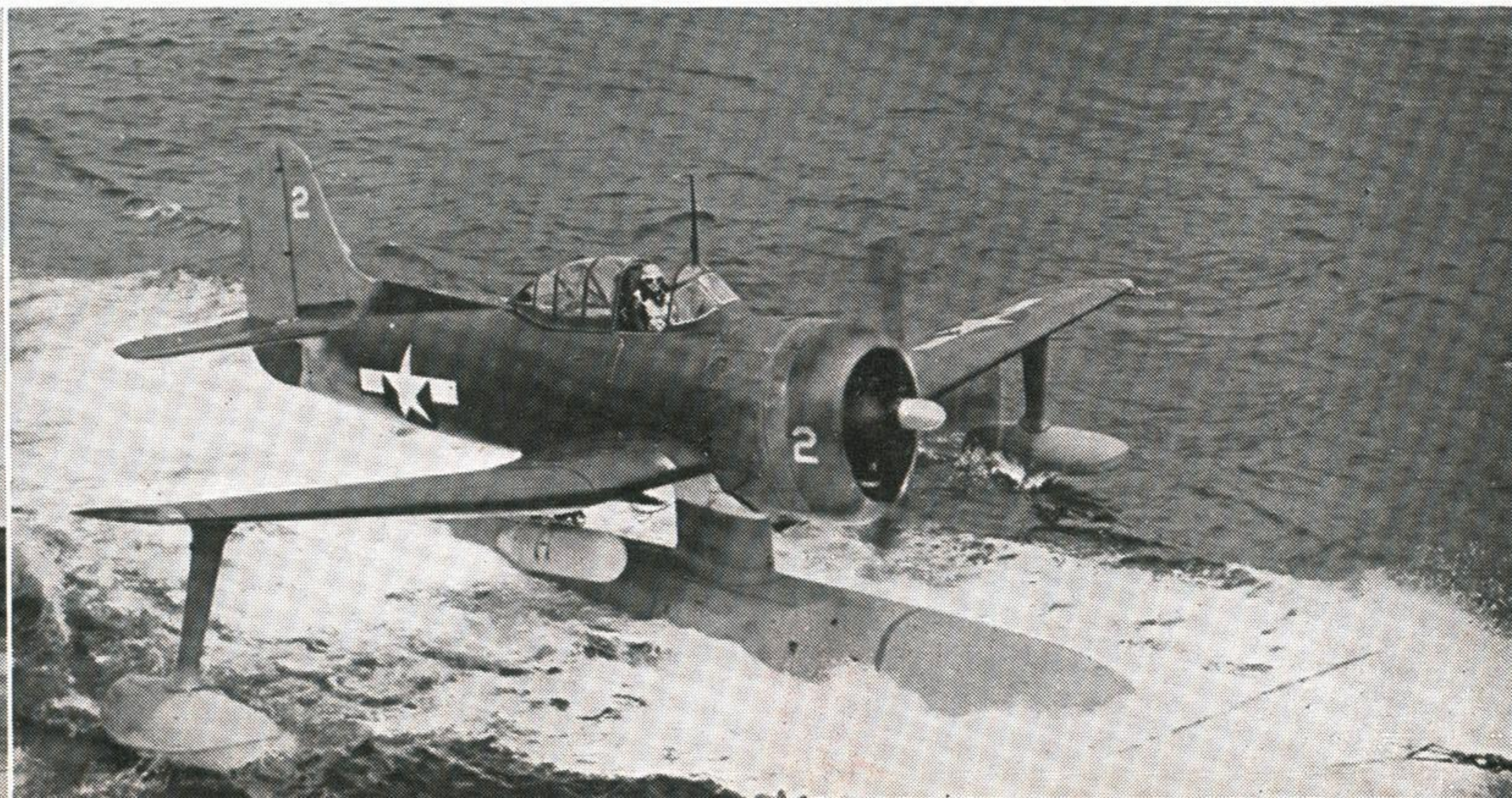
The **Douglas C-74-1-DO Globemaster** U.S. Army transport of which only a few are being built, is a development of the Douglas D.C.7 which will not now be built. Of recognizable Douglas heritage, amongst the smaller important details are the two "bug eye" cockpits and rather large flap guide fairings—eight of them on each wing. Four Pratt and Whitney Wasp Majors supply 3,000 h.p. each. (Span 173 ft. 0 ins.

followed by the C-74-15-DO and so on, the spaces in between being left for local modifications after leaving the factory. Thus if a C-74-1-DO was modified by its own squadron it would become the C-74-2-DO, and further changes would result in C-74-3-DO, C-74-4-DO. If these modifications were considered important, though small, they would be incorporated on the next production model, the C-74-5-DO. A practical example of this is the Thunderbolt, which first had its teardrop canopy fitted as a local modification as the P-47D-24-RE, but also

## CONSTRUCTOR'S LETTERS

Letters	Maker	Factory
BA	BELL	Atlanta
BE	BELL	Buffalo
BN	BOEING	Renton
BO	BOEING	Seattle
BR	BREWSTER	Buffalo
BW	BOEING	Wichita
CE	CESSNA	Wichita
CF	CONSOLIDATED	Fort Worth
CK	CURTISS	Louisville
CO	CONSOLIDATED	San Diego
CS	CURTISS	St. Louis
CU	CURTISS	Buffalo
DC	DOUGLAS	Chicago
DK	DOUGLAS	Oklahoma
DL	DOUGLAS	Long Beach
DO	DOUGLAS	Santa Monica
DT	DOUGLAS	Tulsa
FA	FAIRCHILD	Hagerstown
FO	FORD	Willow Run
LO	LOCKHEED	Burbank
MA	MARTIN	Baltimore
MO	MARTIN	Omaha
NA	NORTH AMERICAN	Inglewood
NC	NORTH AMERICAN	Kansas City
NK	NASH	Kelvinator
NO	NORTHROP	Hawthorne
NT	NORTH AMERICAN	Dallas, Texas
PI	PIPER	Hagerstown
RA	REPUBLIC	Evansville
RE	REPUBLIC	Farmingdale
VE	VEGA	Burbank
VN	VULTEE	Nashville

The **Curtiss SC-1 Seahawk** Single Seat Shipborne clipped wing scout seaplane of the U.S. Navy shown taxiing on to the towed net, to which it attaches itself by a hook beneath the float. The SC-1 saw operational service in the Pacific. A later model is the SC-2 which has a modified cowling and a larger exhaust outlet. One 1350 h.p. Wright R-1820. (Span 41 ft. 0 in.)



incorporated the new feature on the next factory variant, the P-47D-25-RE and subsequent.

A new block number is only assigned if the modification concerned complies simultaneously with the following conditions :

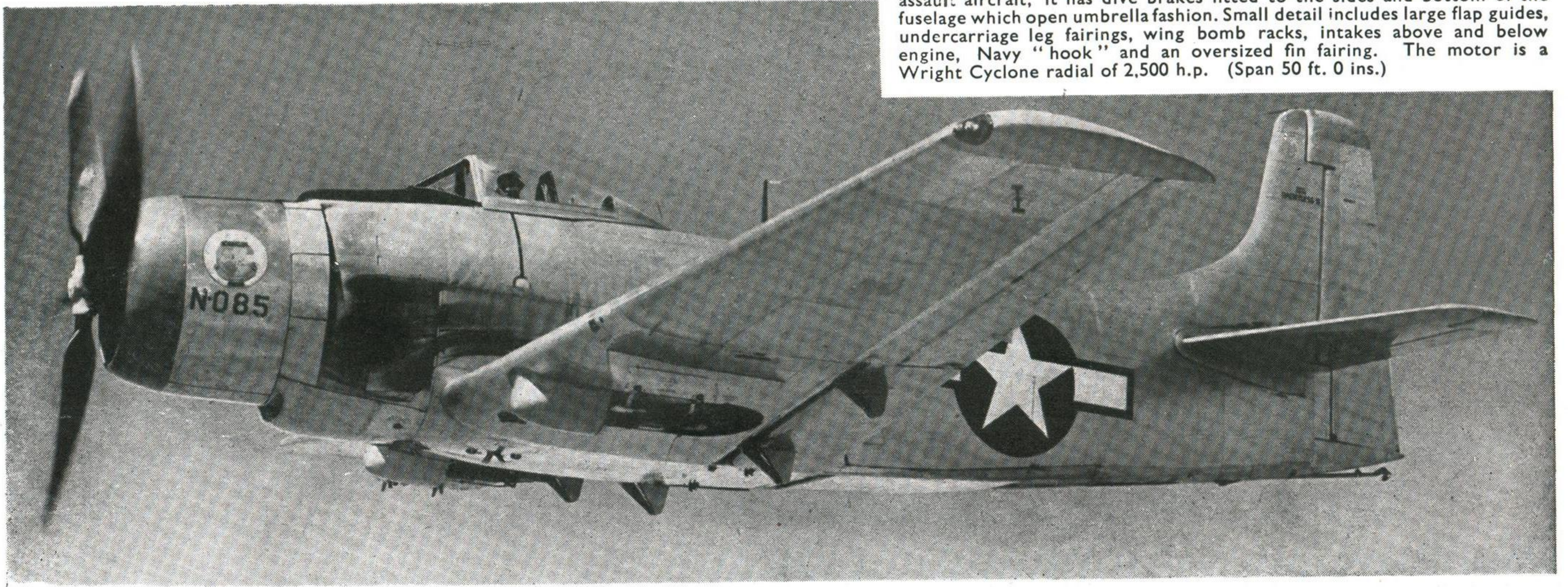
- (i) It must not materially change the load or safety factors of the aircraft in part or as a whole.
- (ii) It must not reduce the utility of the aircraft, *i.e.* speed, range, etc.
- (iii) It must not seriously reduce the ease of maintenance of the aircraft or change its serviceability with respect to spares, etc.

If these conditions are not fulfilled by the modification, then a new sub-type letter must be assigned and our C-74-5-DO becomes

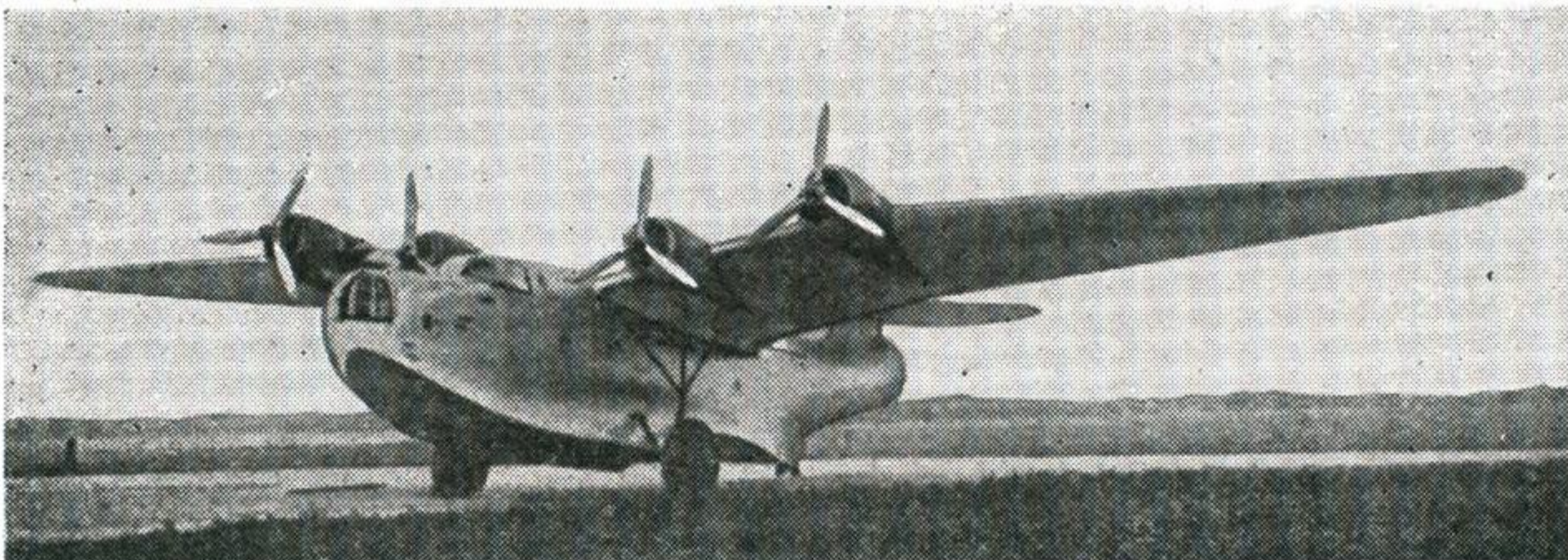
the C-74A-1-DO. Notice that as soon as a new sub-type letter comes into play, the block number reverts to -1.

Constructor's letters are always a contraction of the manufacturer's name, irrespective of the designing company, although the two are usually synonymous. Where a manufacturer has several different plants, a different lettering system is used, which includes something to indicate the location of the other factory. Thus the DO of Douglas's chief factory at Santa Monica changes to DL for aircraft built at Douglas, Long Beach and DK for Douglas, Oklahoma. A list of these manufacturers' letters will form a handy reference for enthusiasts and one is therefore included.

The **Douglas AD-1 Skyraider (ex BT2D-1)**. A U.S. Navy assault aircraft, it has dive brakes fitted to the sides and bottom of the fuselage which open umbrella fashion. Small detail includes large flap guides, undercarriage leg fairings, wing bomb racks, intakes above and below engine, Navy "hook" and an oversized fin fairing. The motor is a Wright Cyclone radial of 2,500 h.p. (Span 50 ft. 0 ins.)

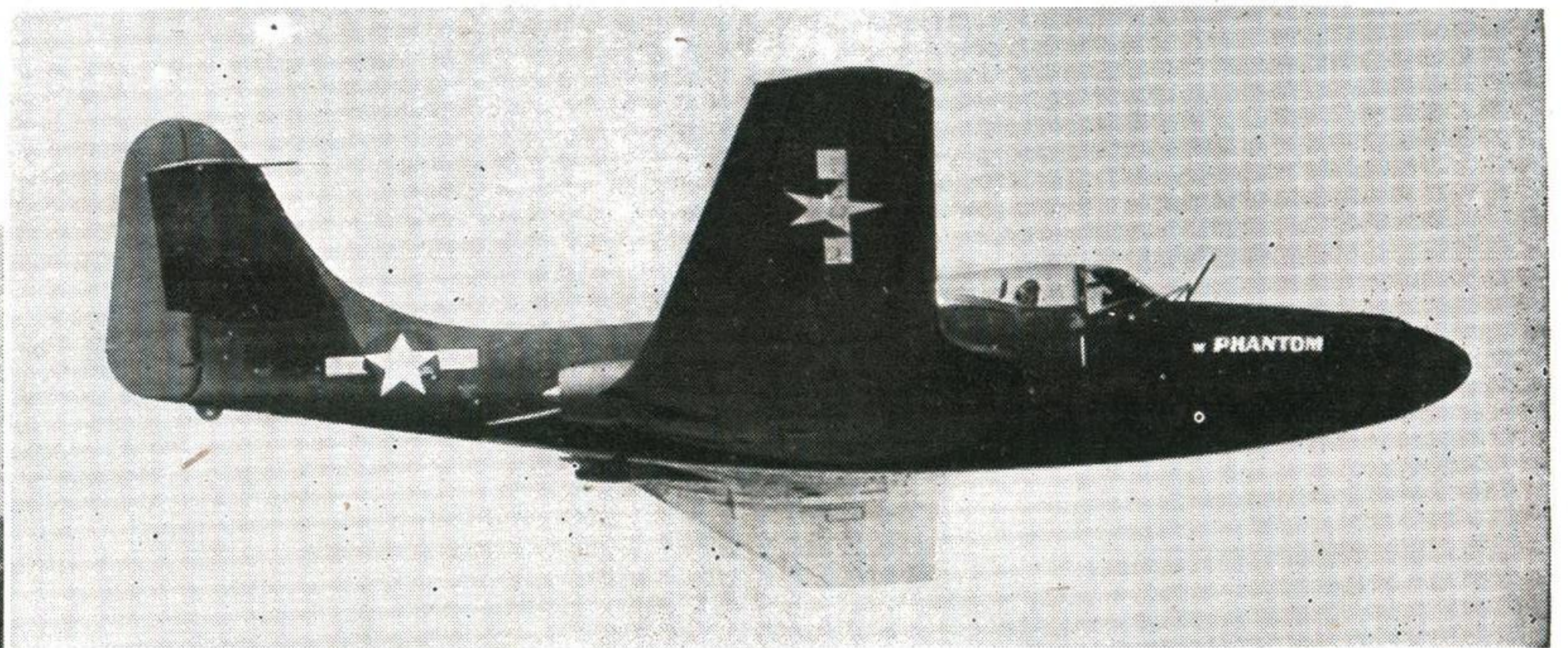


## ONE HOME, THREE AWAY



**RUSSIA**—Designed by A. N. Tupolev, the **ANT-44** was produced during the War. It is not believed to have been made in any quantity and we publish this picture largely as a matter of interest. This Soviet flying boat, here seen on a beaching chassis, contains several obvious British and American design features. No further information is available.

**FRANCE**—From the Sud-Ouest (South West) factory, the **S.O. 30R Bellatrix**, was ready in 1943 but the Germans refused to allow it to fly, whereupon it was dismantled and hidden until more favourable times. Engines: Gnome-Rhone radials of 1600 h.p. each; max. speed 305 m.p.h. It carries 32 passengers, 2200 lb. of freight. Span 79 feet.

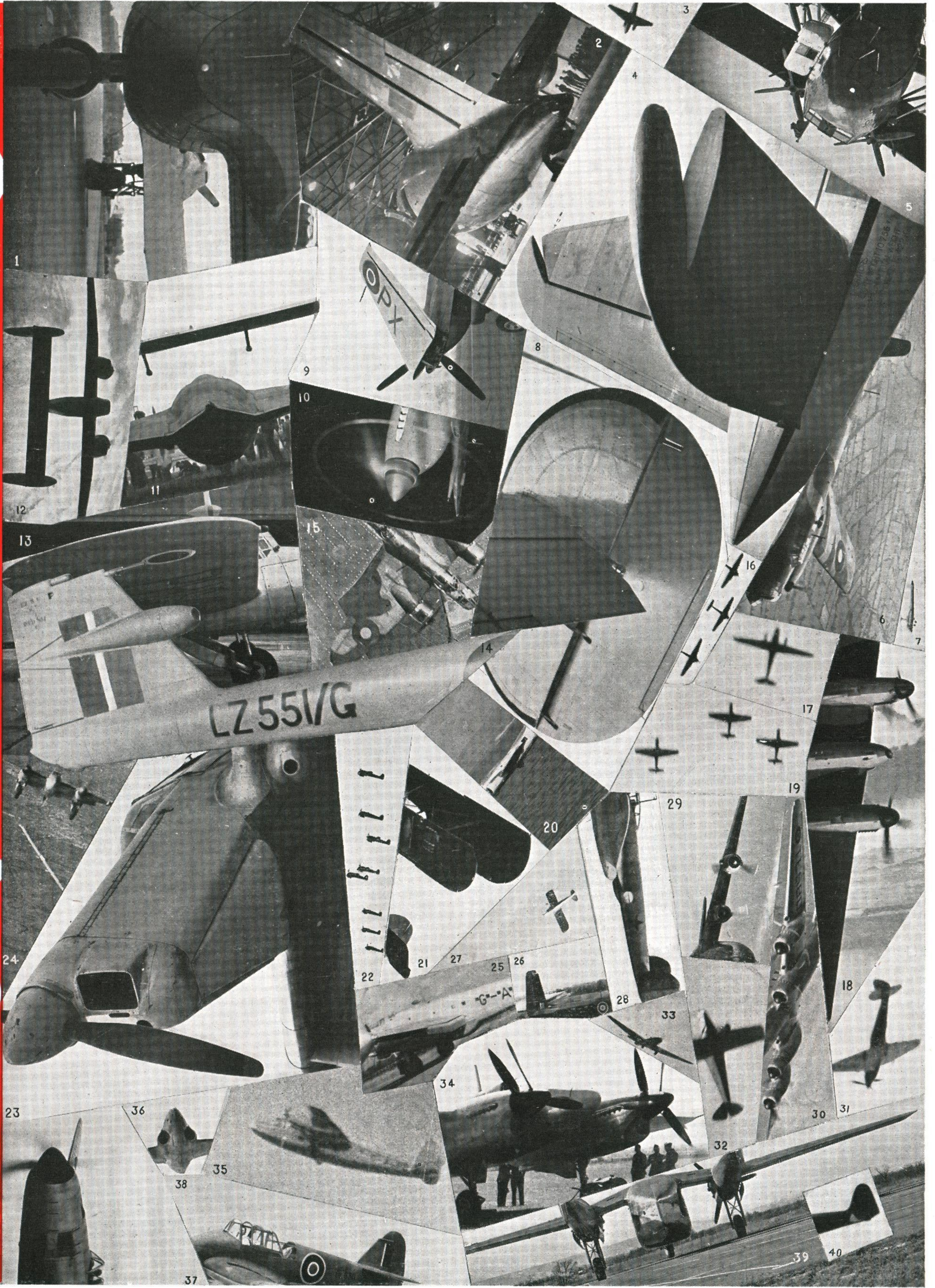


**U.S.A.**—The **McDonnell FD-1 Phantom** is a single seat carrier fighter, powered by two Westinghouse I9-B axial-flow jet units which are housed in the very thick wing roots. It has a tricycle undercarriage, a "belly" arrester hook and the outer wing panels fold upwards. Top speed is over 500 m.p.h., span is 40 feet.

**U.K.**—The home team is represented by a Transport Command **Avro York**. The bold sweep and dihedral of the Lancaster wing is emphasized in this fine picture. The high wing puts the body nearer the ground and helps loading, and affords passengers a good view when airborne. Many Yorks are operating throughout the world. Top speed 310 m.p.h., span 102 feet.



ODD  
but  
SLOW



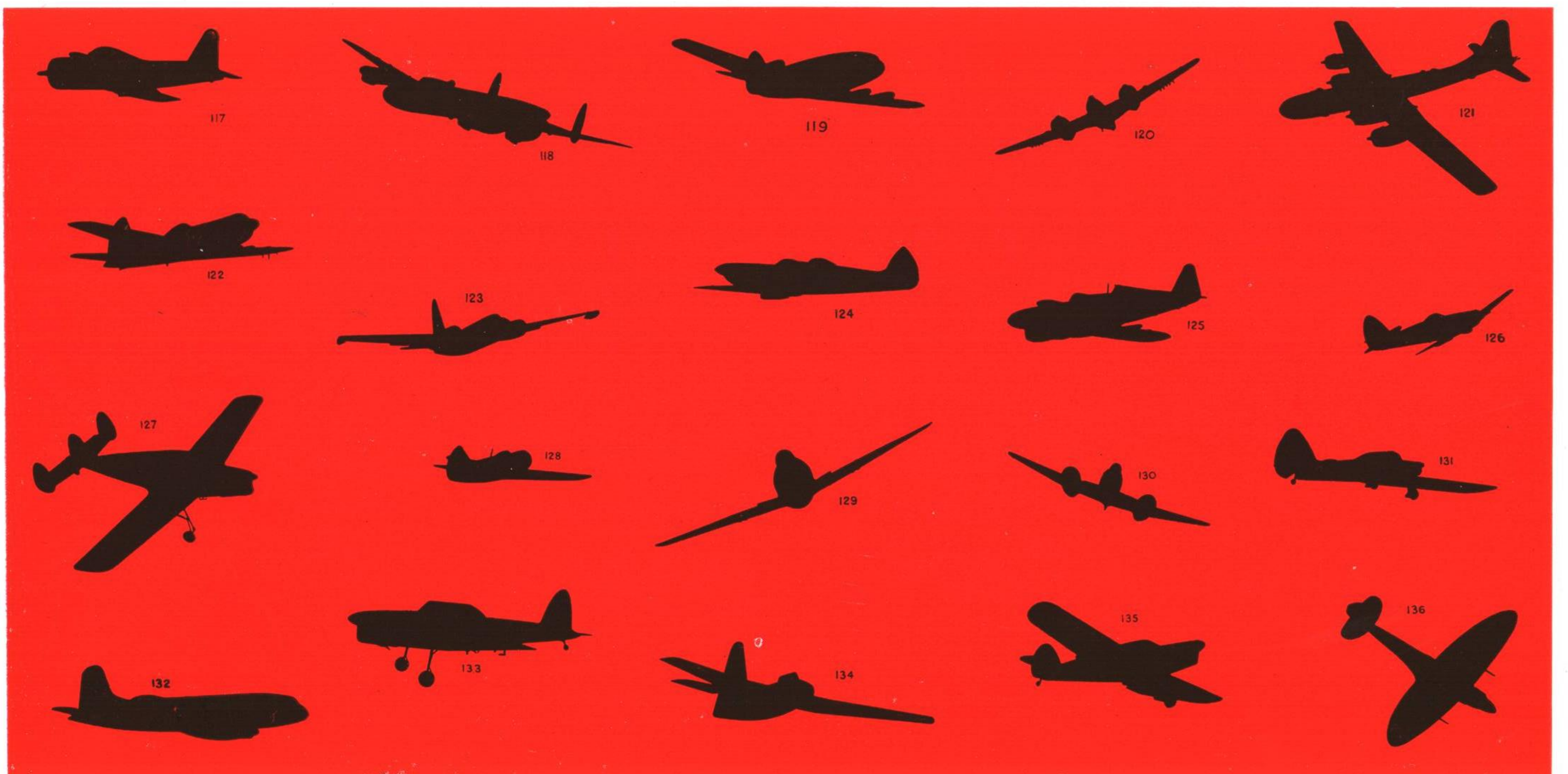
# ADVANCED SPOTTING

Recognition Test No. 20

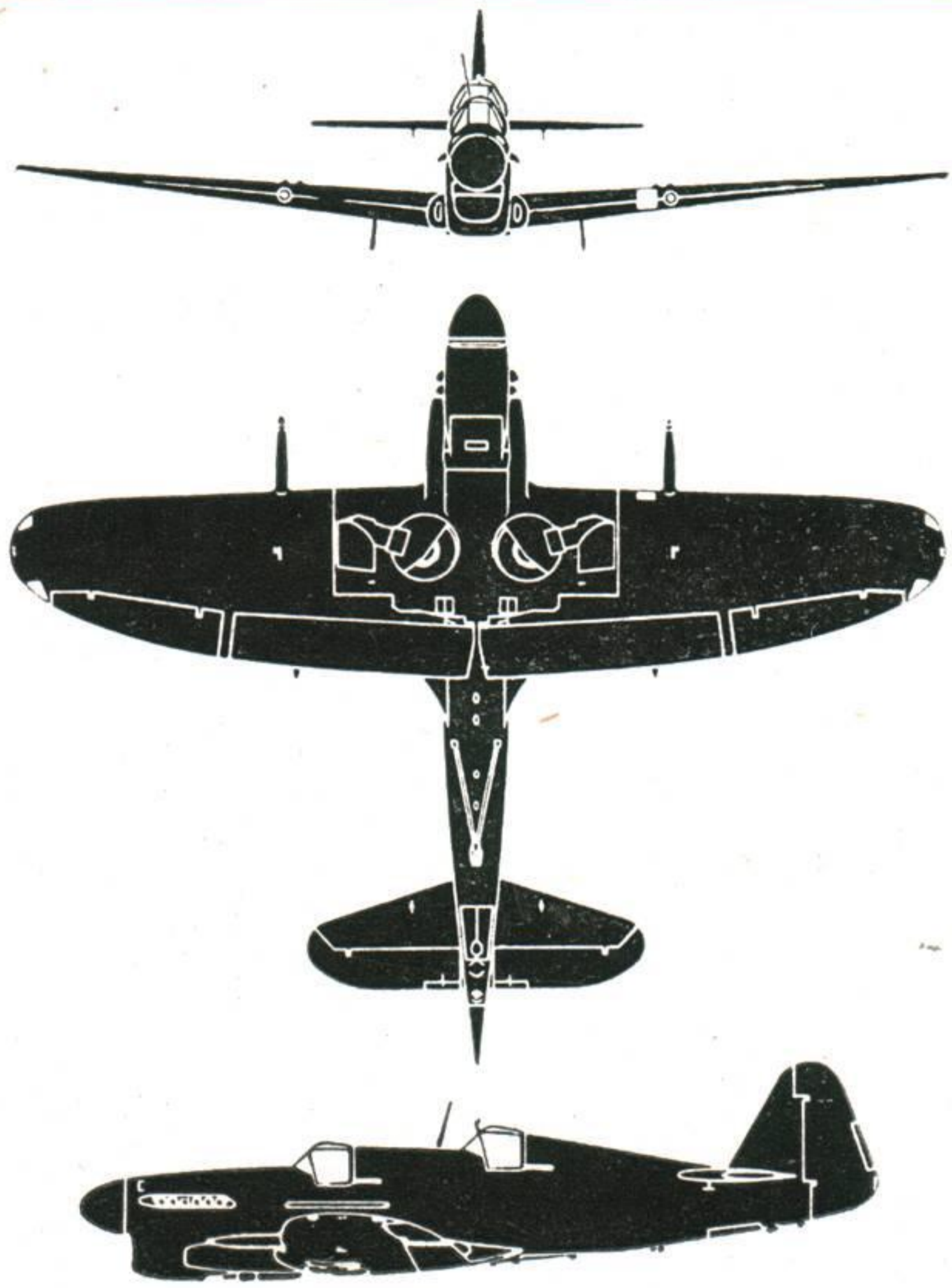


# SILLOGRAPHS

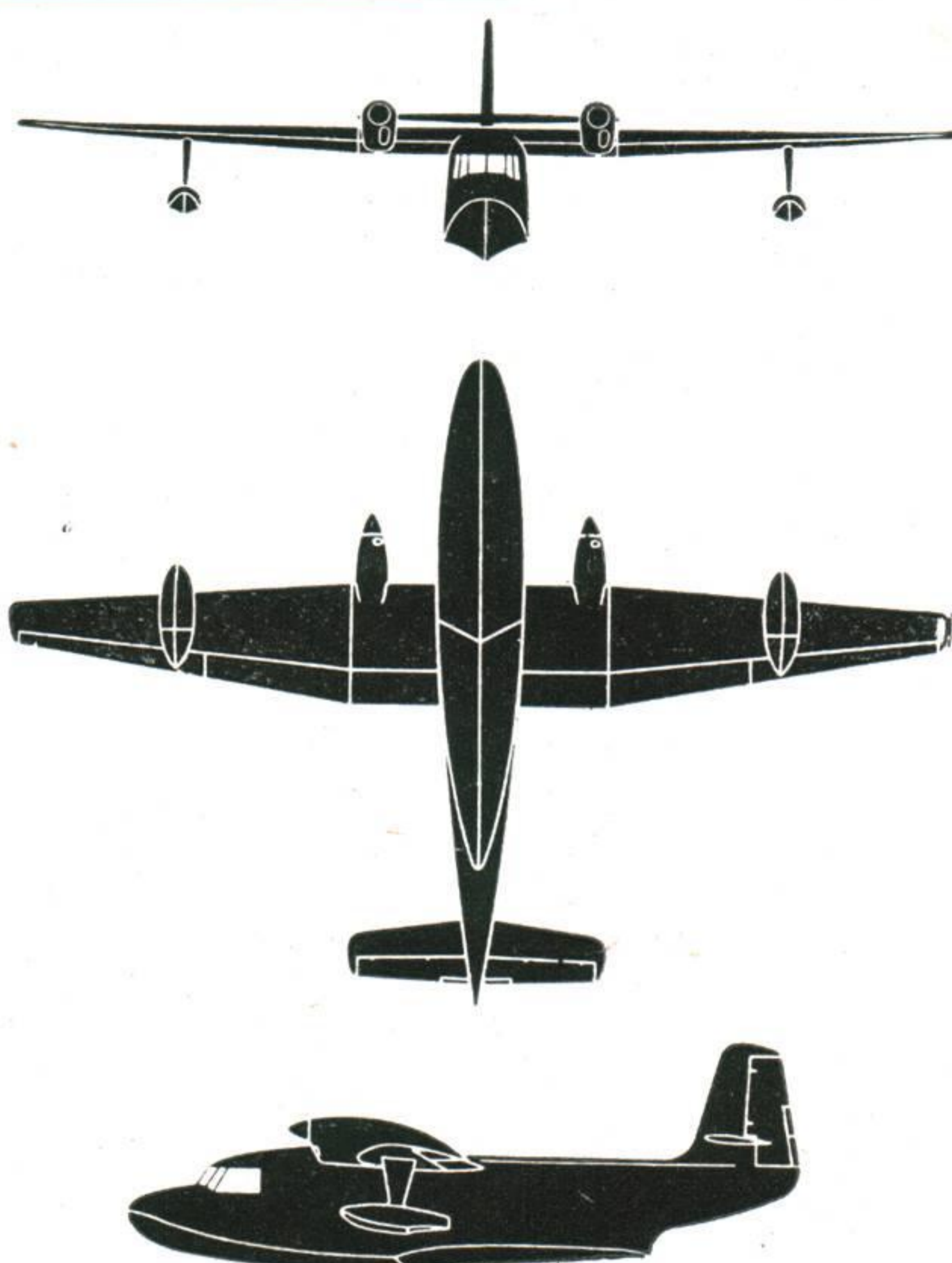
Recognition Test No. 21



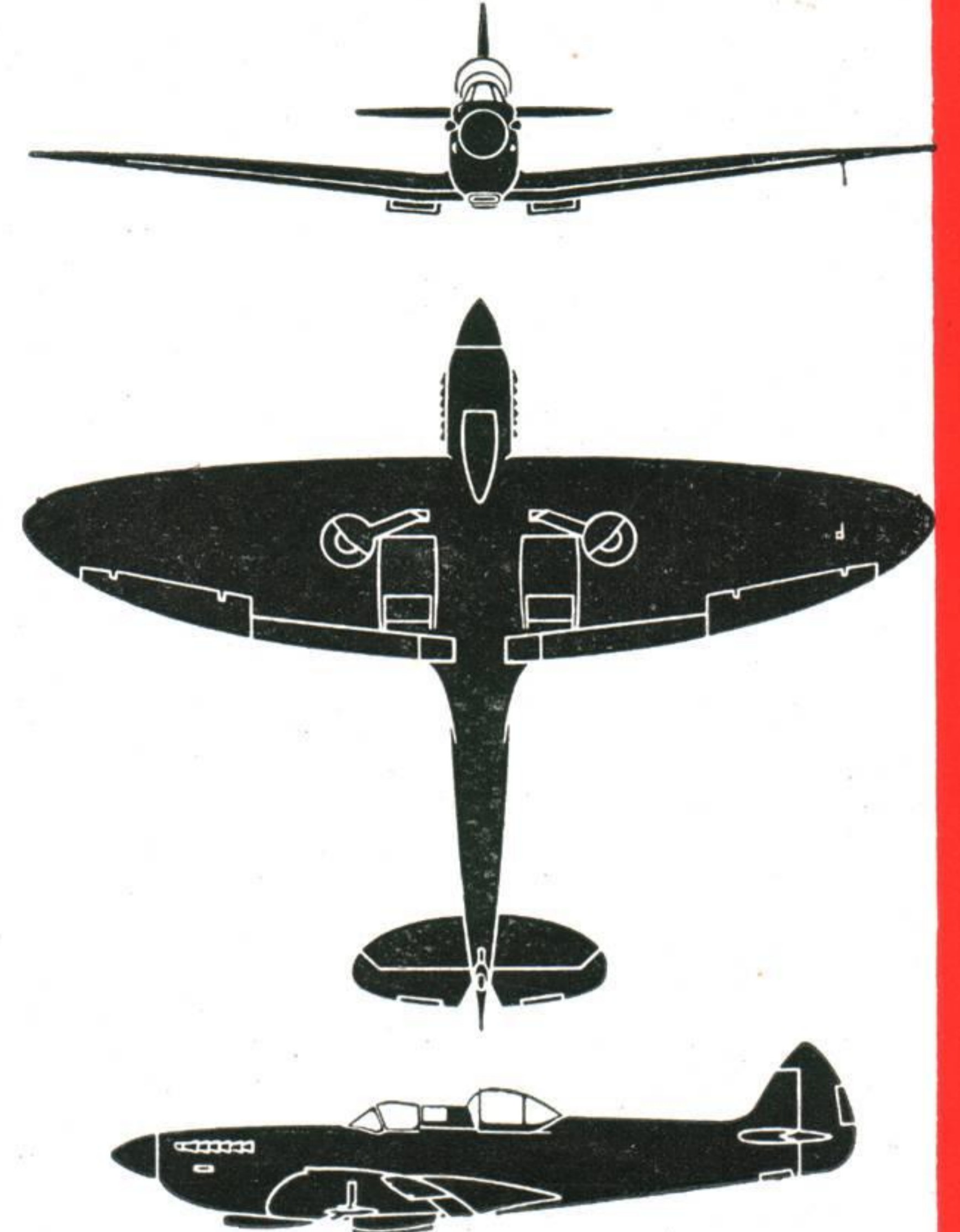
# NEW and REVISED SILHOUETTES



**FAIREY FIREFLY TRAINER Mk. I**  
British Advanced Trainer  
(Griffon) Span 44 ft. 6 in.



**SHORT SEALAND**  
British Amphibian Transport  
(2 Gipsy Queen 71) Span 59 ft. 0 in.



**SUPERMARINE SPITFIRE TRAINER**  
British Advanced Trainer  
(Merlin) Span 36 ft. 10 in.

## SOLUTIONS TO RECOGNITION TESTS IN THIS ISSUE :

**FRONT COVER :** *Vickers E.10/44*

### No. 18 (ELEMENTARY SPOTTING) :

- |                         |                          |
|-------------------------|--------------------------|
| 91. Brigand             | 100. IL-4                |
| 92. Meteor IV (Clipped) | 101. P2V Neptune         |
| 93. Piper Cub           | 102. Beaufighter X       |
| 94. Lincoln II          | 103. Spearfish T.D.1     |
| 95. Expeditor           | 104. Lancastrian (Nenes) |
| 96. Vickers E.10/44     | 105. Consul              |
| 97. Gemini              | 106. Harvard II          |
| 98. B-29 Superfortress  | 107. Sandringham         |
| 99. Magister I          | 108. Firebrand V         |

### No. 19 (ODD but OBVIOUS) :

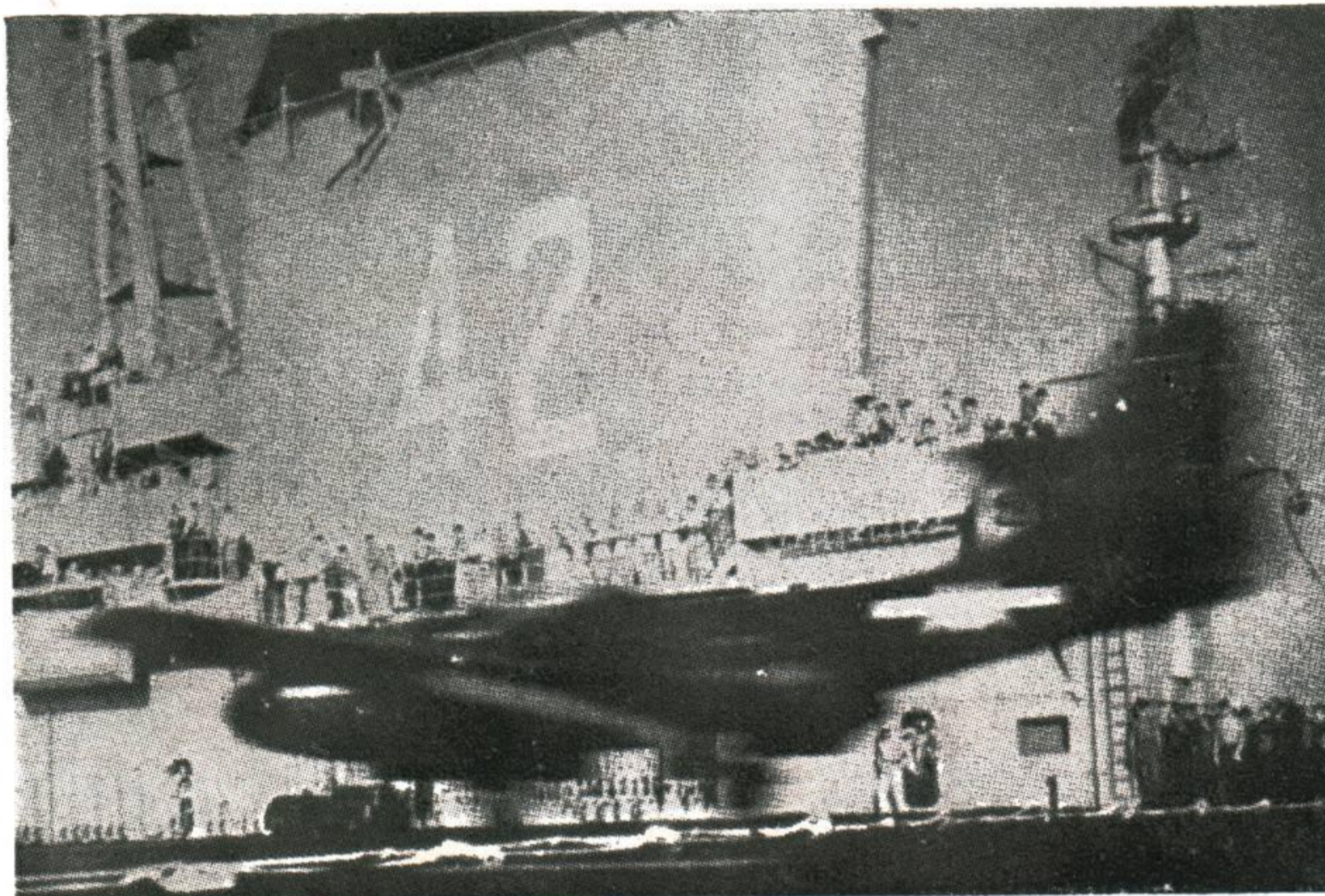
- |                   |                    |
|-------------------|--------------------|
| 1. Dakota         | 21. Swordfish      |
| 2. Hastings C.1   | 22. Typhoons       |
| 3. Dakota         | 23. Proctor        |
| 4. Viking         | 24. Sea Mosquito   |
| 5. H.P. Hannibal  | 25. Halifax C.VIII |
| 6. Whitley        | 26. Hamilcar X     |
| 7. W.9 Helicopter | 27. Autocrat       |
| 8. Liberator      | 28. PE-2           |
| 9. Sea Hornet     | 29. DC-4 Skymaster |
| 10. Spitfire      | 30. Hastings C.1   |
| 11. Sea Vampire   | 31. Seafang        |
| 12. Buckmaster    | 32. Hornet Moth    |
| 13. Anson         | 33. B.A. Swallow   |
| 14. Sea Vampire   | 34. Sturgeon       |
| 15. Blenheim IV   | 35. Marathon       |
| 16. Firebrands    | 36. P-80           |
| 17. Rapide        | 37. Spearfish      |
| 18. Welkin        | 38. Master         |
| 19. Mustangs      | 39. Packet         |
| 20. Fortress II   | 40. Sea Fury X     |

### No. 20 (ADVANCED SPOTTING) :

- |                         |                    |
|-------------------------|--------------------|
| 122. Consolidated XB-36 | 135. Proctor       |
| 123. Hastings C.1       | 136. Messenger     |
| 124. Vickers E.10/44    | 137. Saturn        |
| 125. FR-1 Fireball      | 138. Firefly I     |
| 126. Firefly Trainer    | 139. Autocrat      |
| 127. Tempest V          | 140. Mosquitoes    |
| 128. Junkers Ju 52      | 141. Lancastrian   |
| 129. Spitfire XIV       | 142. Lancaster III |
| 130. Fury (Sabre)       | 143. A-26 Invader  |
| 131. Hornets            | 144. Tempest II    |
| 132. Buckmaster         | 145. Viking        |
| 133. Dakota             | 146. Mosquito VI   |
| 134. Seafang 32         |                    |

### No. 21 (SILLOGRAPHS) :

- |                                 |                      |
|---------------------------------|----------------------|
| 117. FR-1 Fireball              | 127. Messenger       |
| 118. Lancastrian                | 128. LA-5            |
| 119. Armstrong Whitworth A.W.55 | 129. Vickers E.10/44 |
| 120. Beaufighter X              | 130. Meteor III      |
| 121. B-29 Superfortress         | 131. Prentice        |
| 122. Firebrand IV               | 132. Hastings        |
| 123. P2V Neptune                | 133. Chipmunk        |
| 124. Spitfire Trainer           | 134. Spearfish       |
| 125. Firefly I Trainer          | 135. Proctor         |
| 126. Spiteful                   | 136. Seafire XV      |



### GHOSTLY GHOST

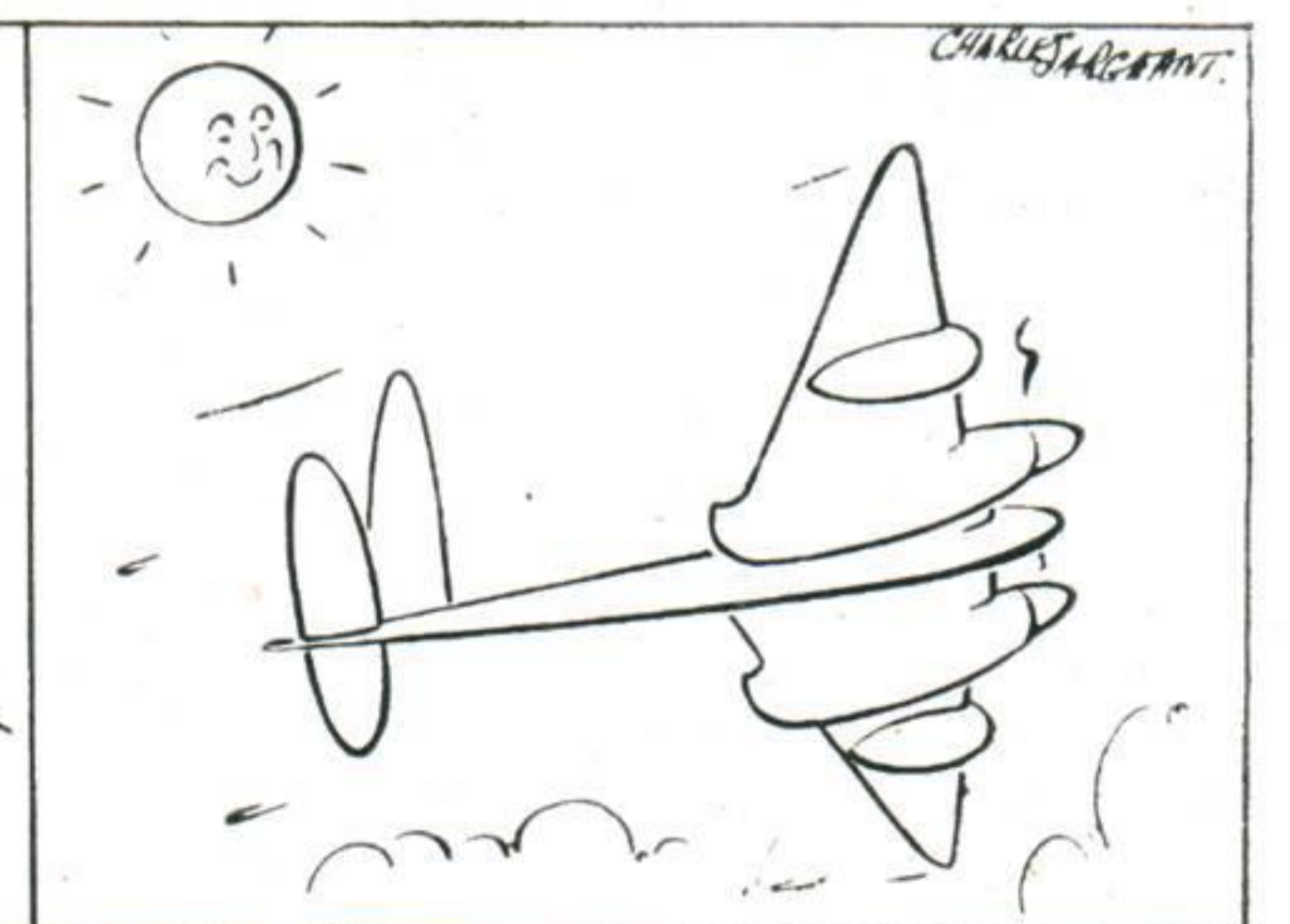
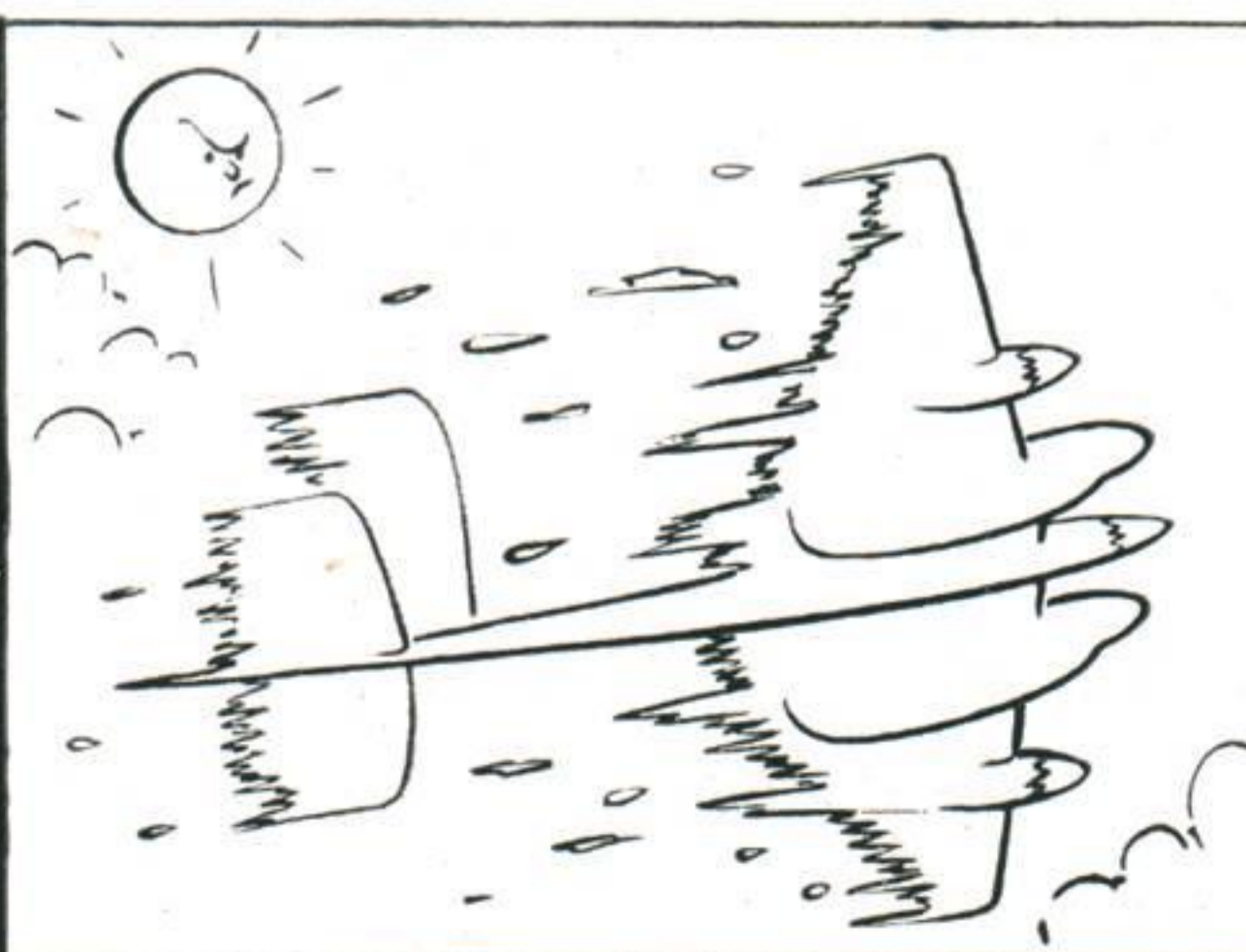
From the deck of the U.S.N. Carrier Franklin D. Roosevelt a strange shape takes off. The blurred impression of tricycle undercart, low wing and dihedral tailplane presents an interesting study in trick recognition. Can you sort it out? If not, there is a clear clue on Page 69.

The "ghost" is a "Phantom" — the McDonnell FD-1.

**Acknowledgments**—The following photographs are Crown Copyright :—P.62, Vampires, Meteor ; P.63, Hornet, Hoverfly, Tempests ; P.69, York.

### FOR YOUR INFORMATION

The Inter-Services Aircraft Recognition Journal is an OFFICIAL ISSUE and is not for sale. Contributions, in the form of articles and photographs and drawings, will be welcomed. Send them to :—The Editor, Aircraft Recognition Journal, Air Ministry, T.Lit., Kingsway, London, W.C.2.



### ICE-O-THERMAL RECOGNITION

The Inter-Services Aircraft Recognition Journal is a monthly publication, prepared and produced by Air Ministry, T.Lit., in collaboration with the Ministry of Supply, A.R.Mat. The subject matter is decided by an Editorial Committee consisting of the following members—AIR MINISTRY : T.Lit., Wing Commander G. G. N. Barrett, A.F.C. (Chairman), Flight Lieutenant E. A. Wren (Secretary and Editor) and Flight Lieutenant C. E. Sargeant ; T.O.5, Squadron Leader R. H. Adams, O.B.E., A.I.2(g), Flight Lieutenant J. L. Newton ; Central School of Aircraft Recognition, Flight Lieutenant D. A. V. Nicholson, D.F.M. ; ROYAL NAVY : Lieutenant (A) J. A. O'Dwyer, D.F.M., R.N.V.R. ; ARMY : Captain F. J. B. Crosse, R.A. ; MINISTRY OF SUPPLY : A.R.Mat., Mr. A. E. Dollery ; ROYAL OBSERVER CORPS : Observer Commander R. R. Poole ; AIR TRAINING CORPS : Mr. J. A. Coubrough, Civilian Instructor.