

THE INTER



SERVICES

AIRCRAFT RECOGNITION

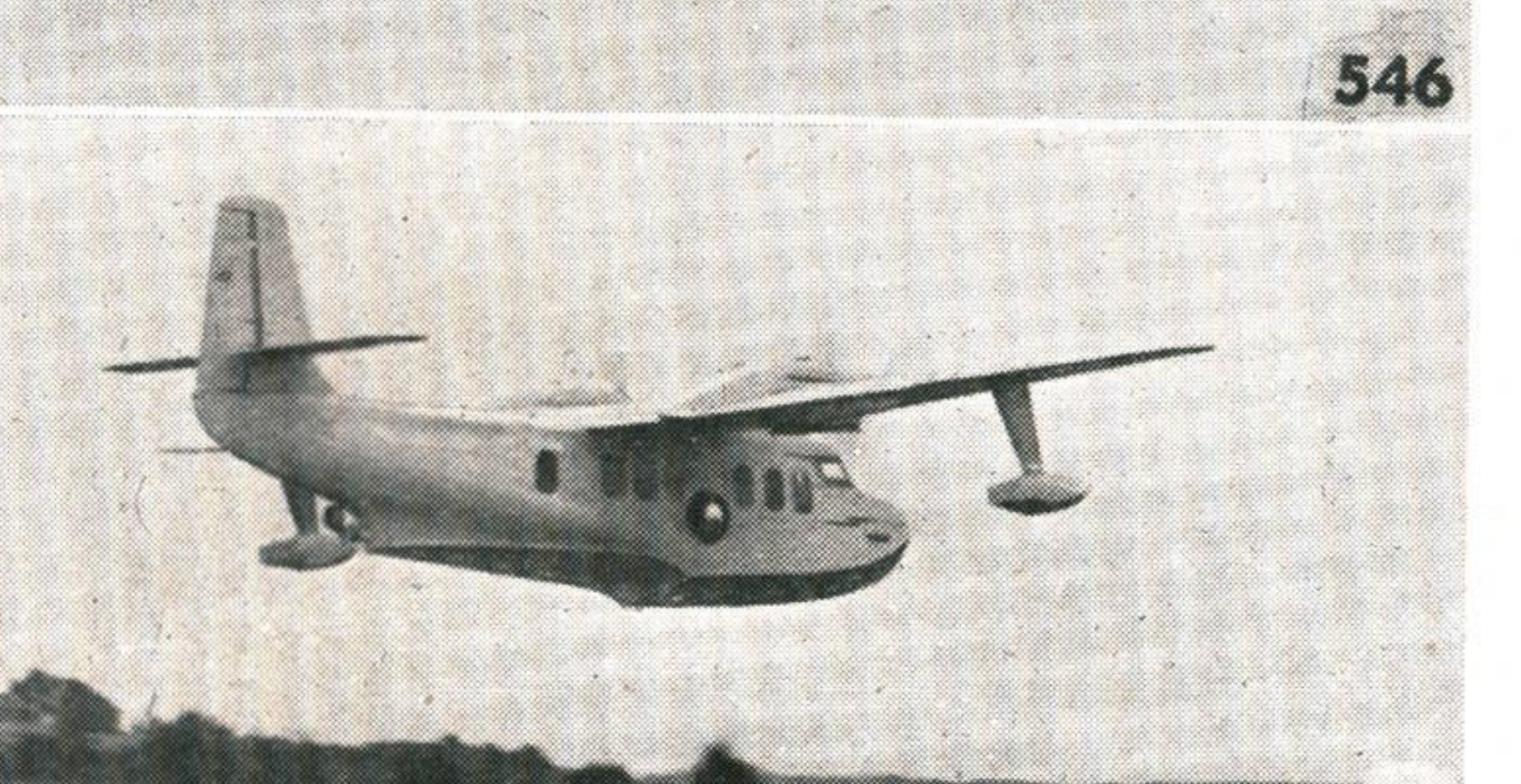
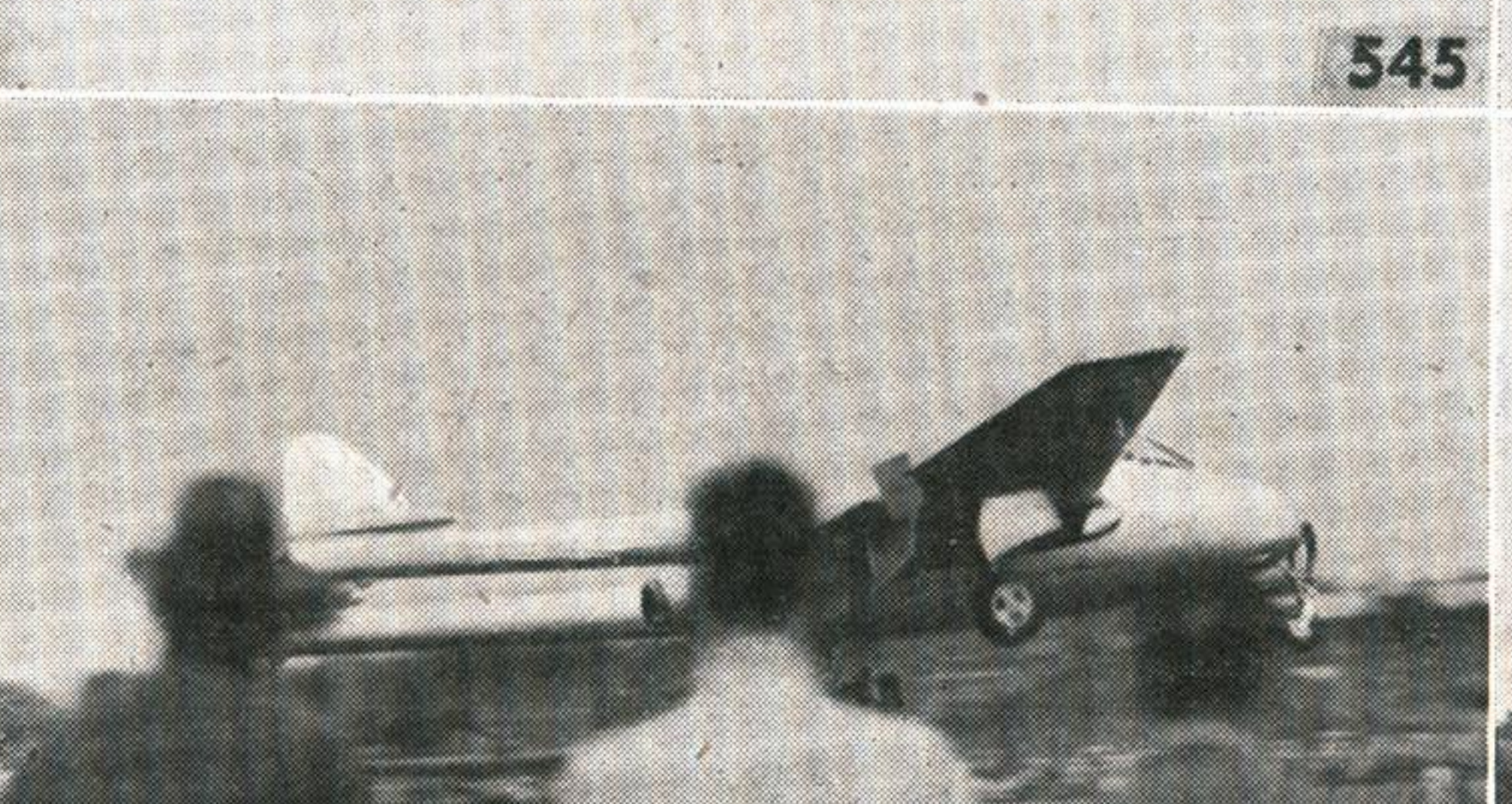
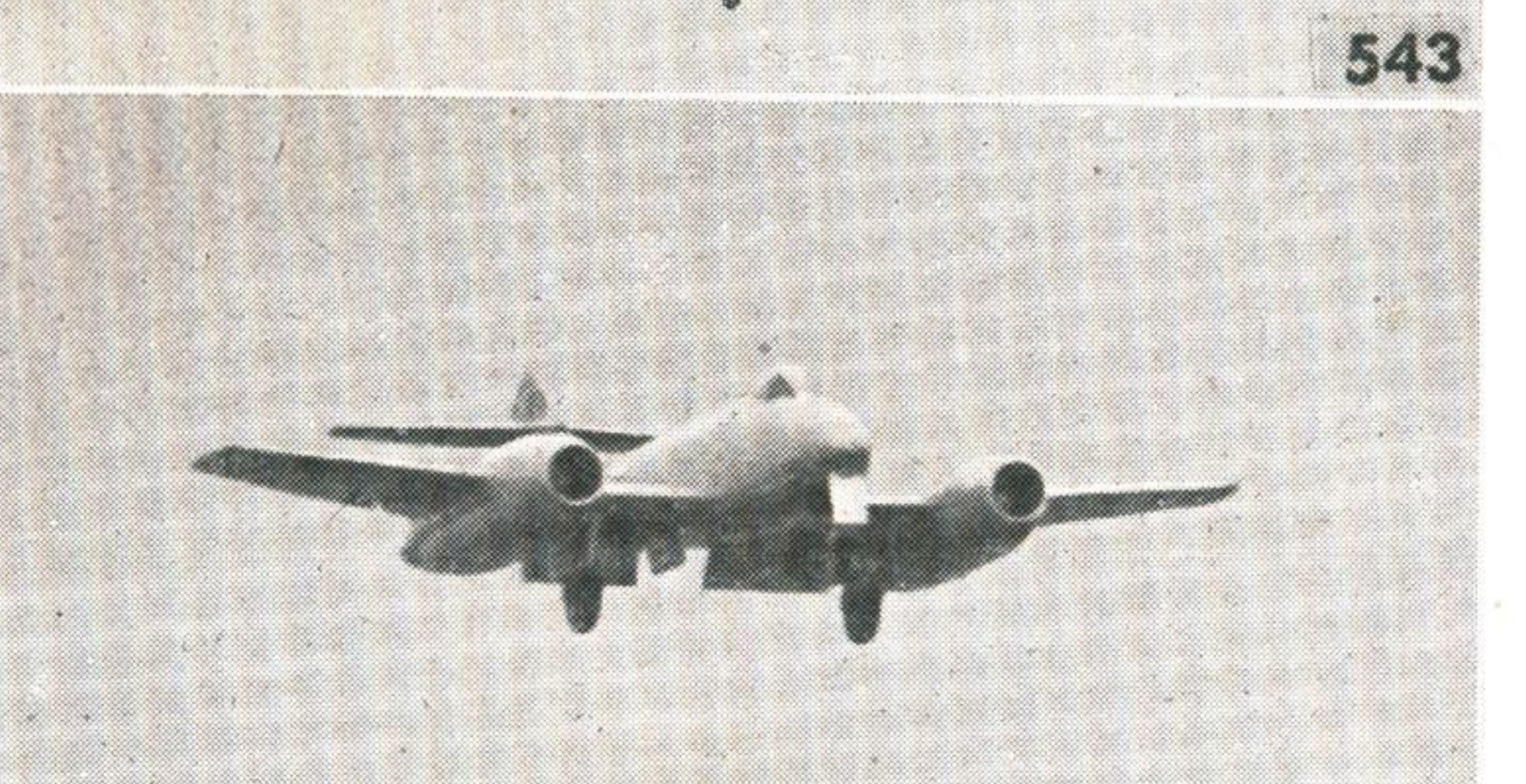
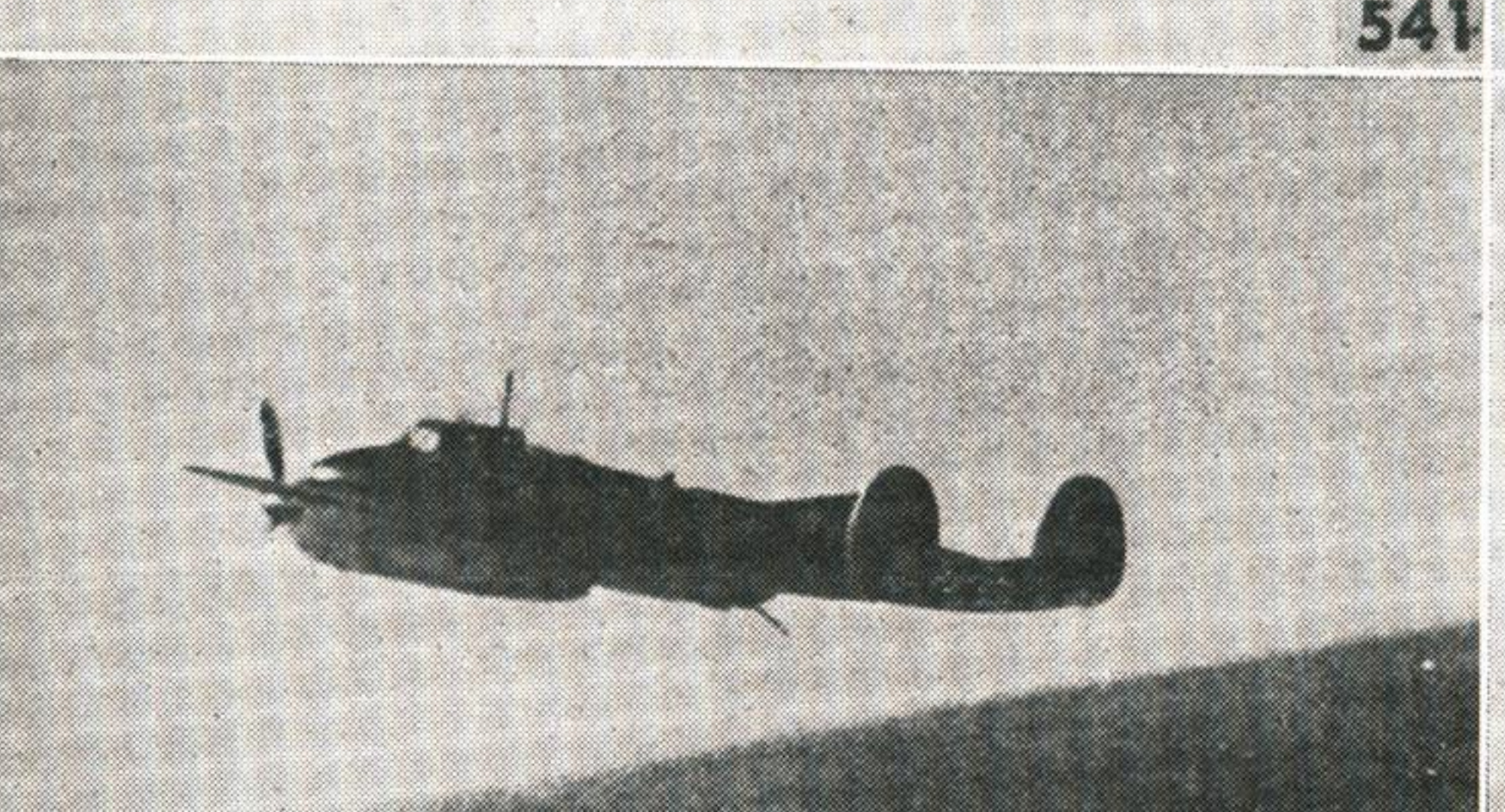
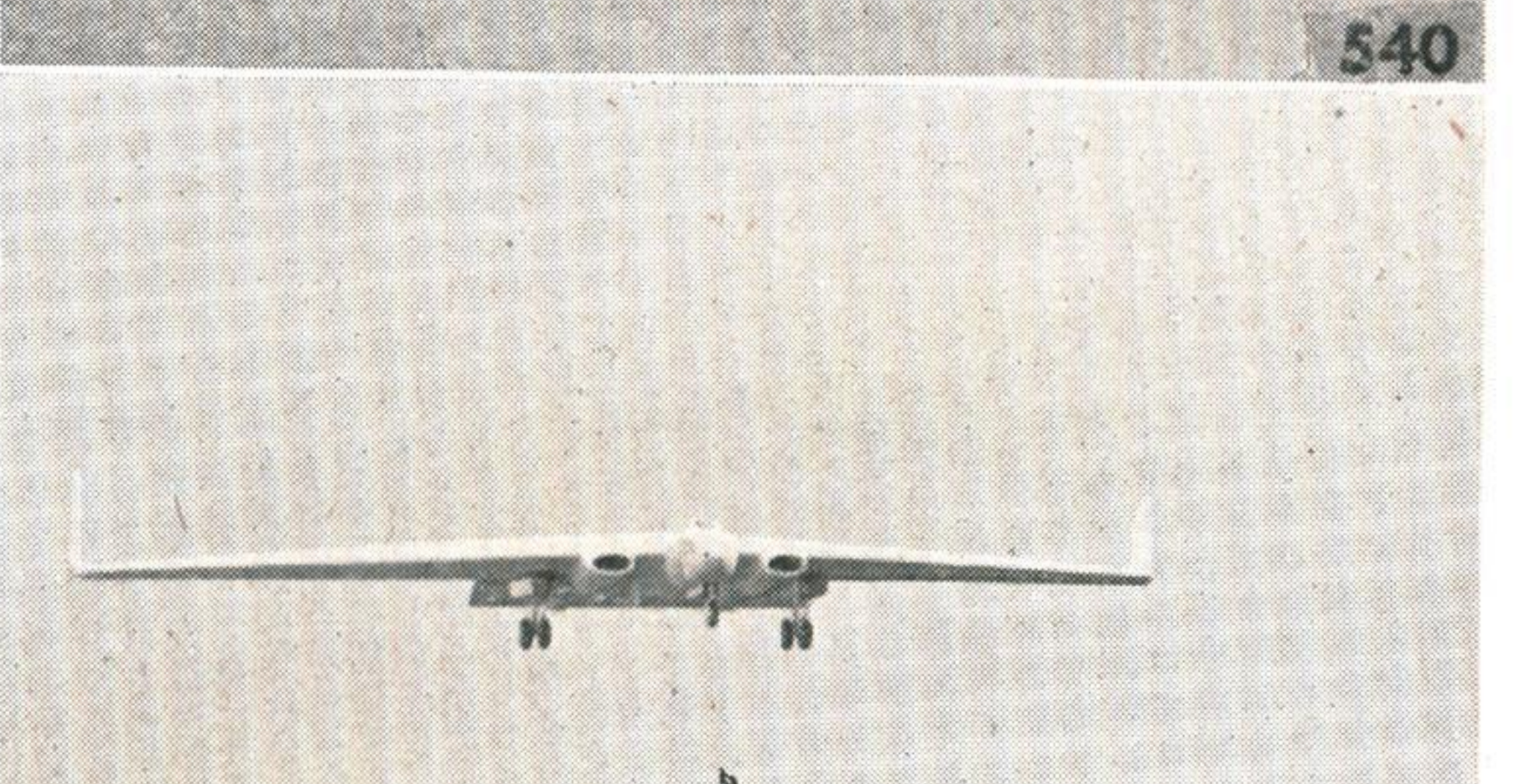
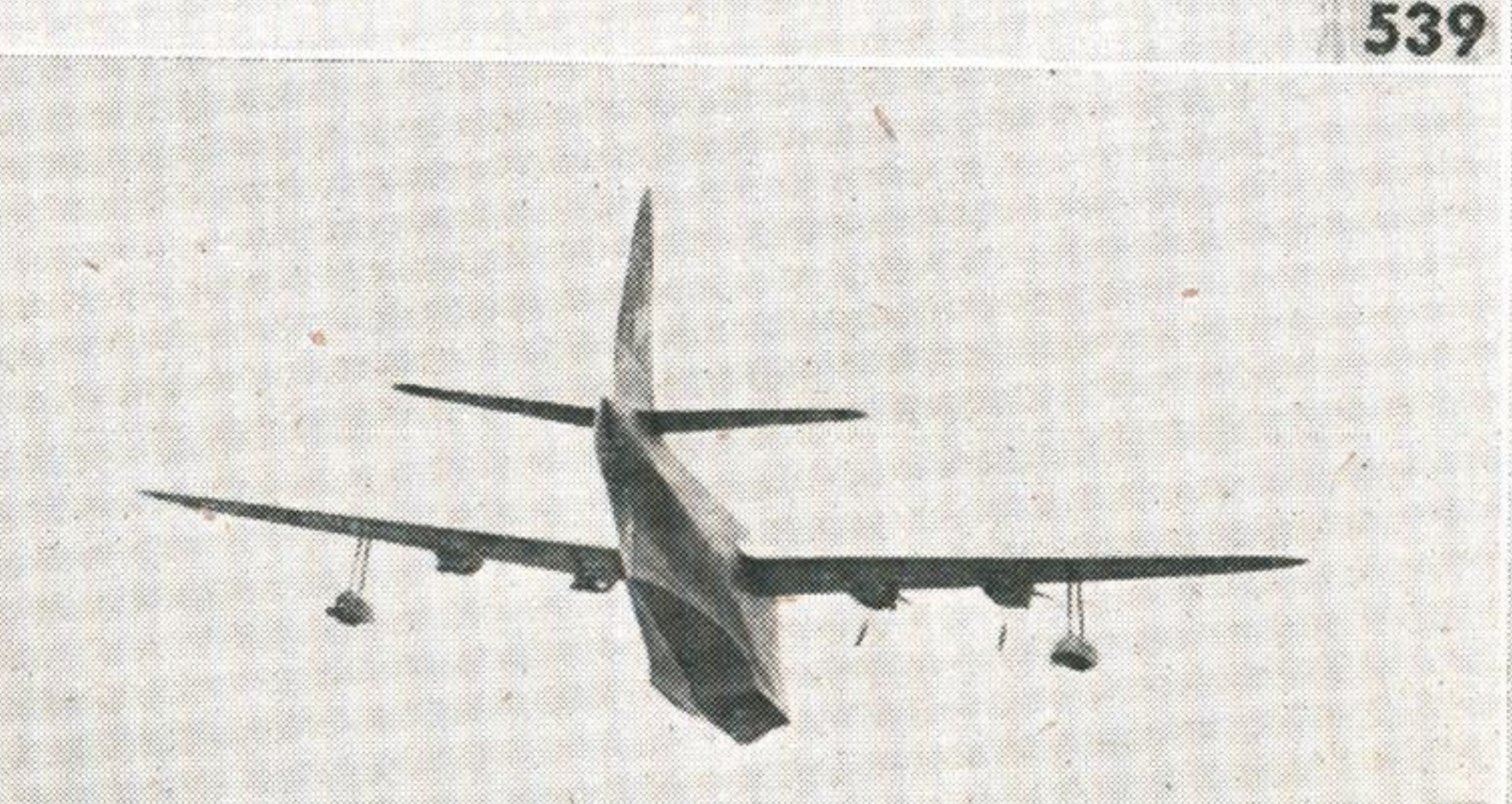
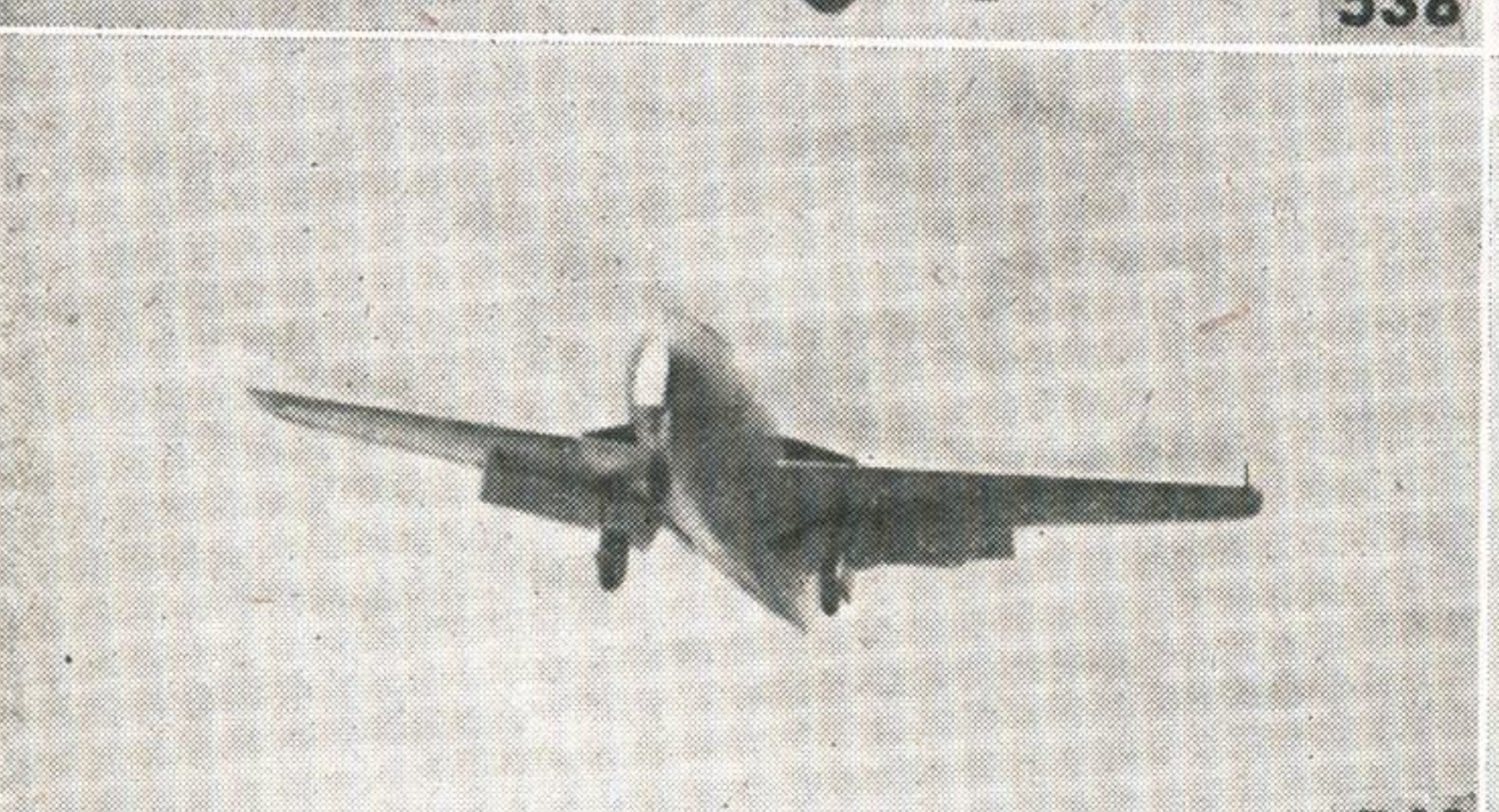
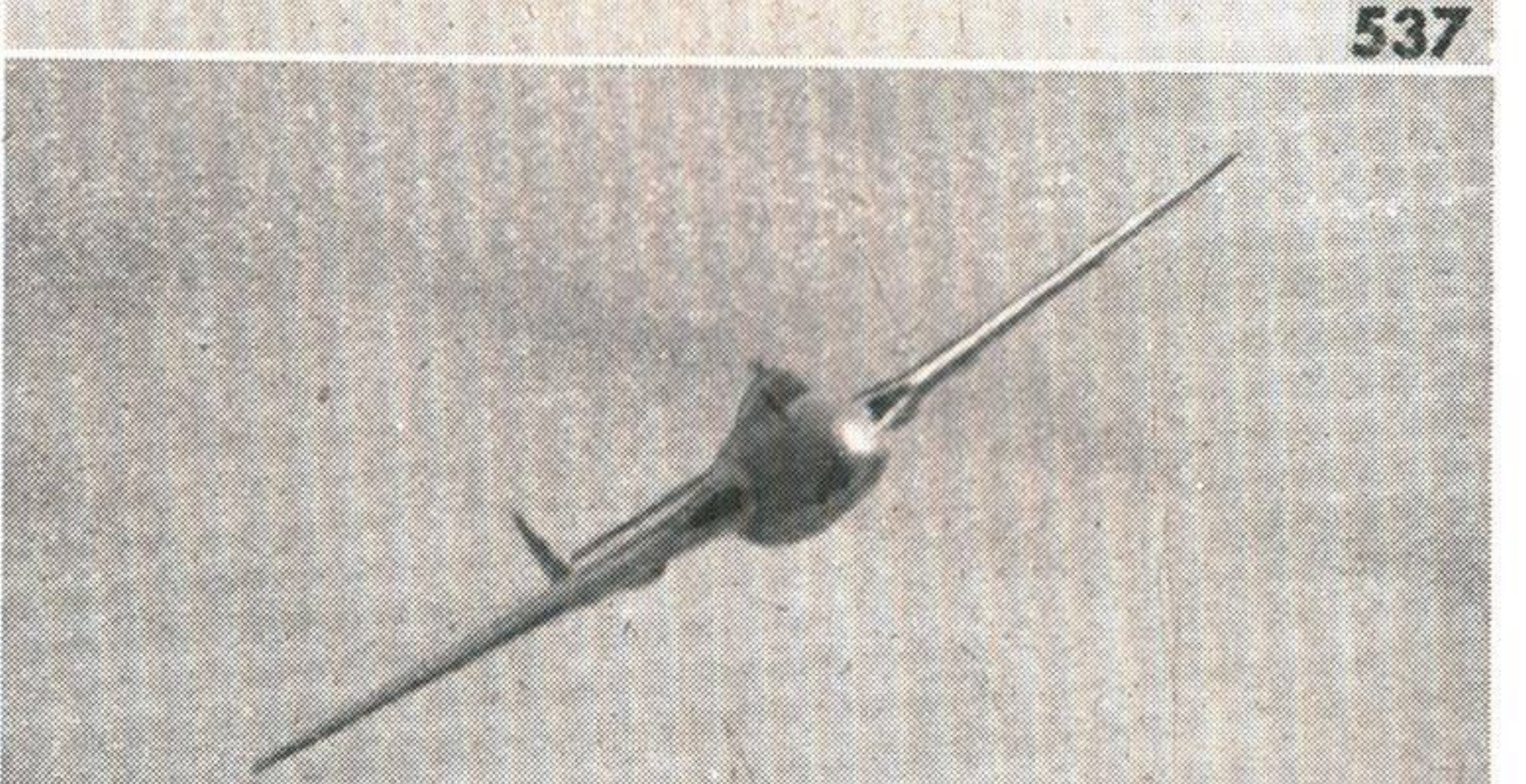
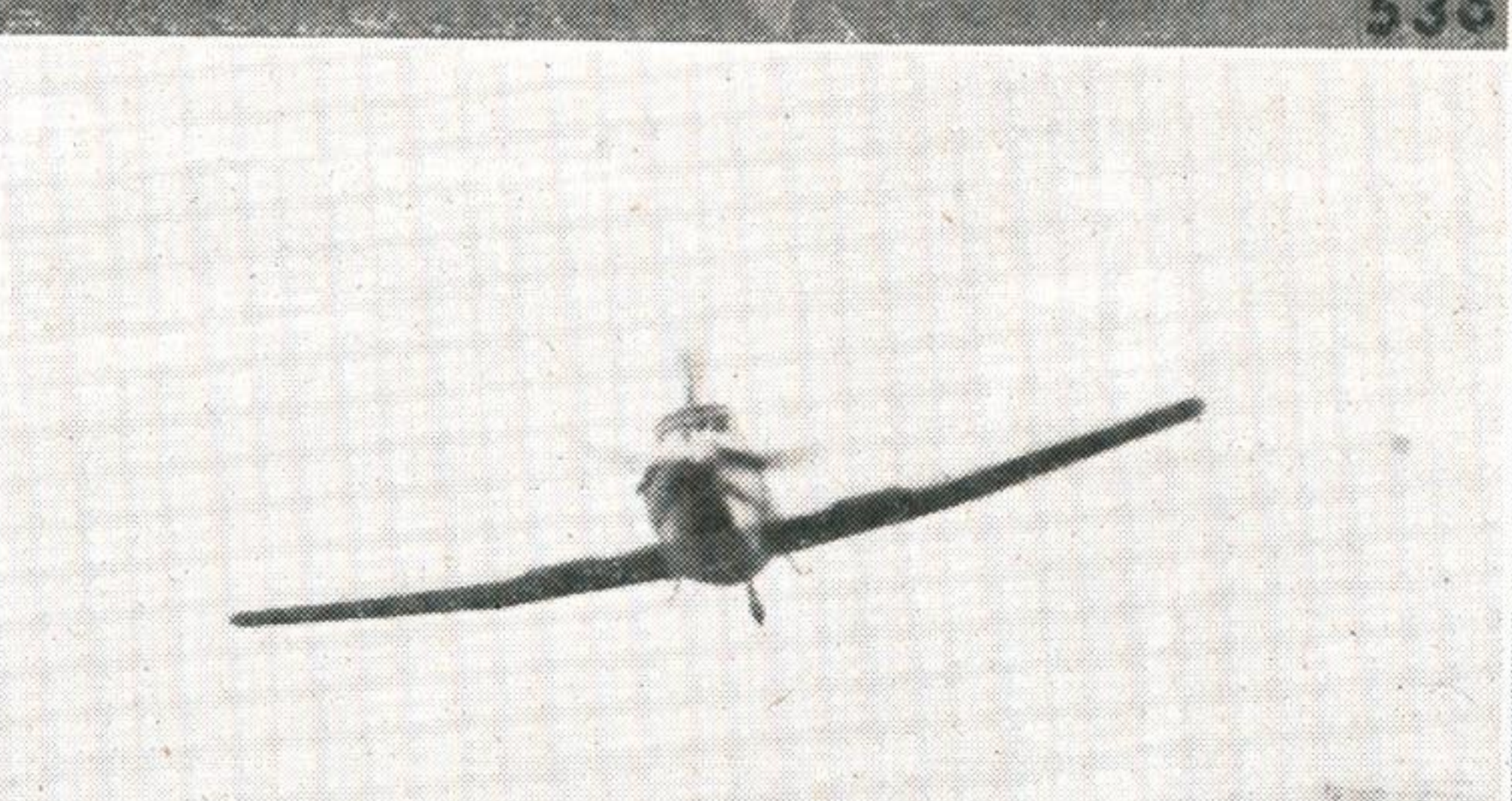
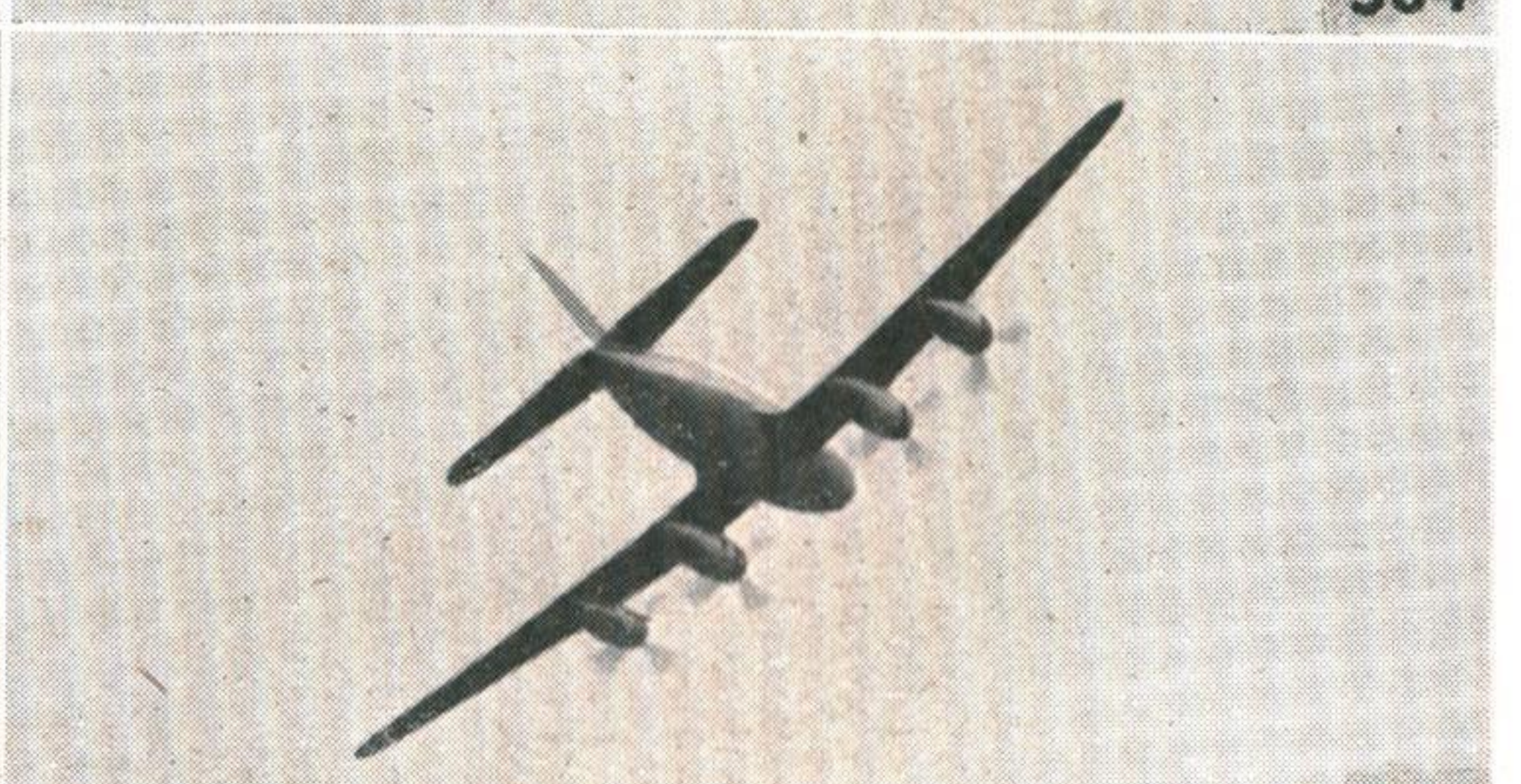
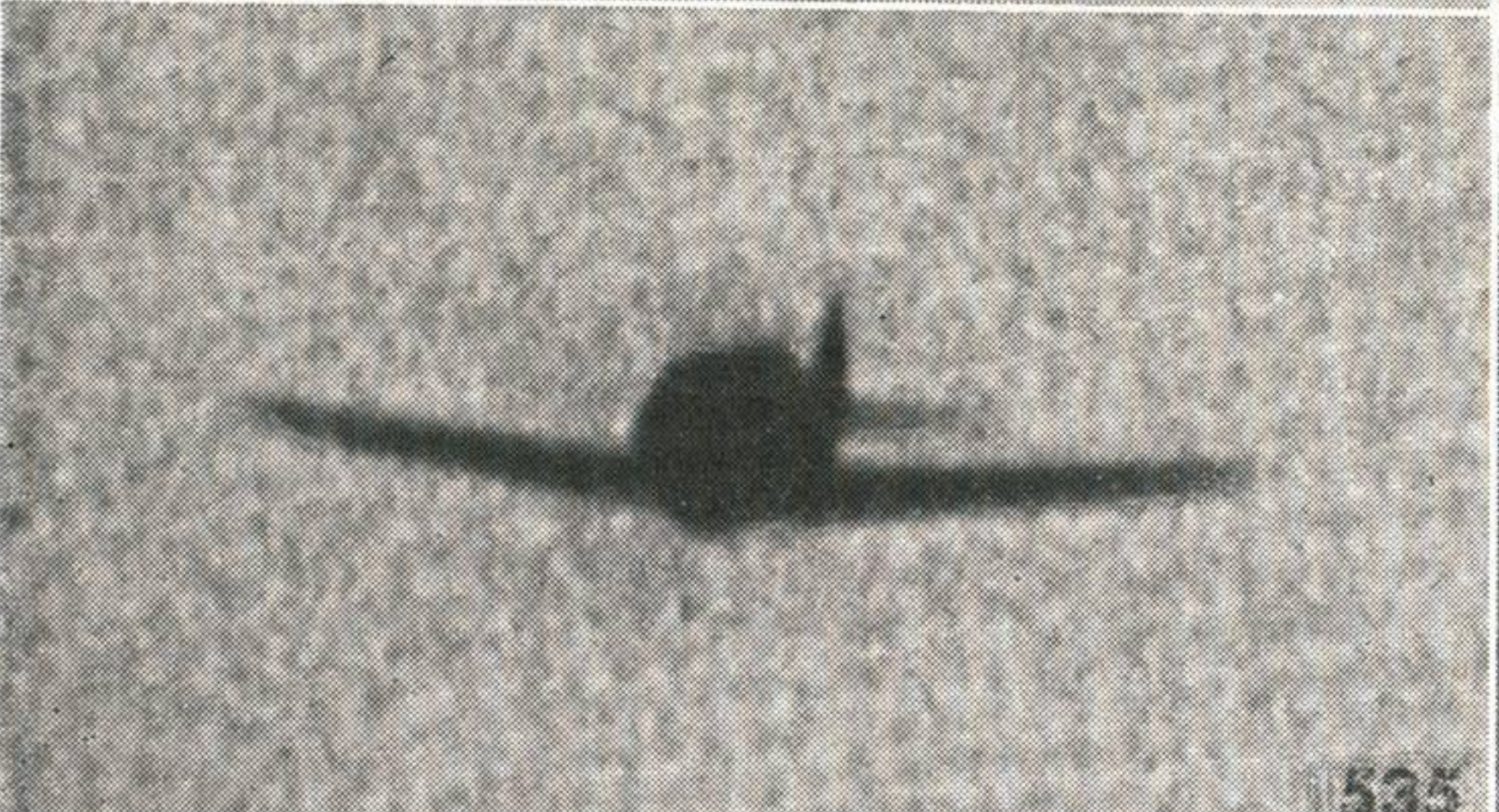
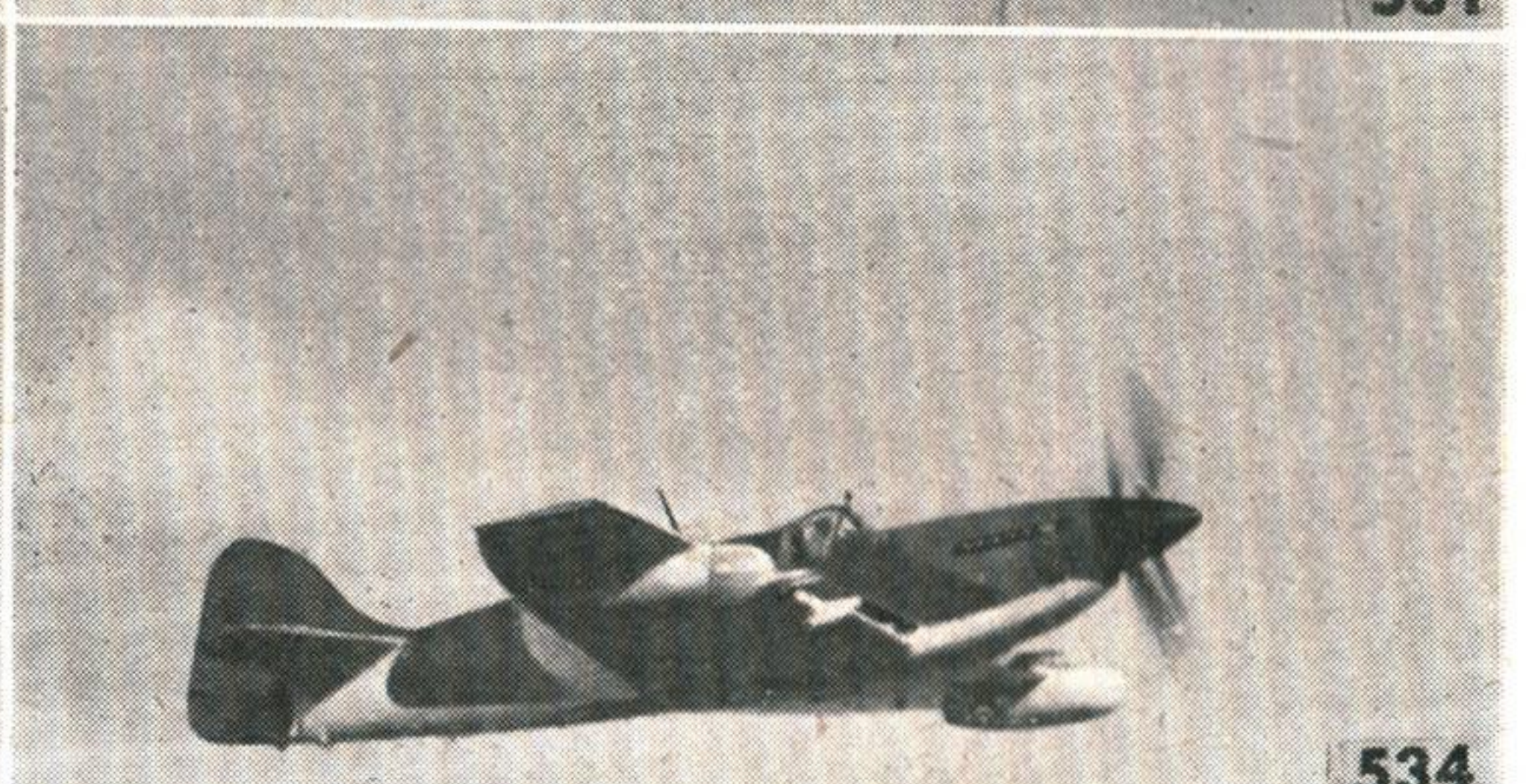
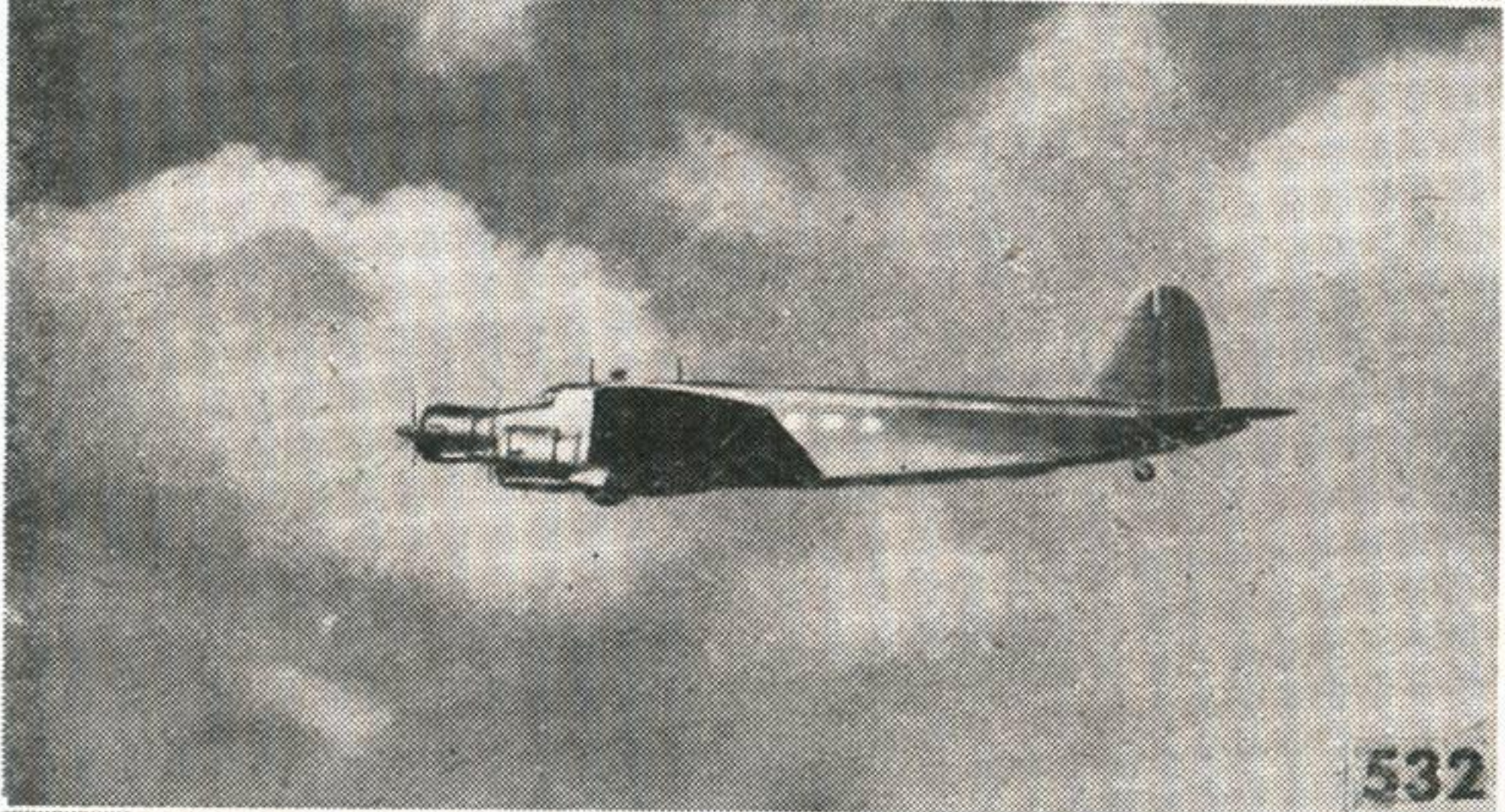
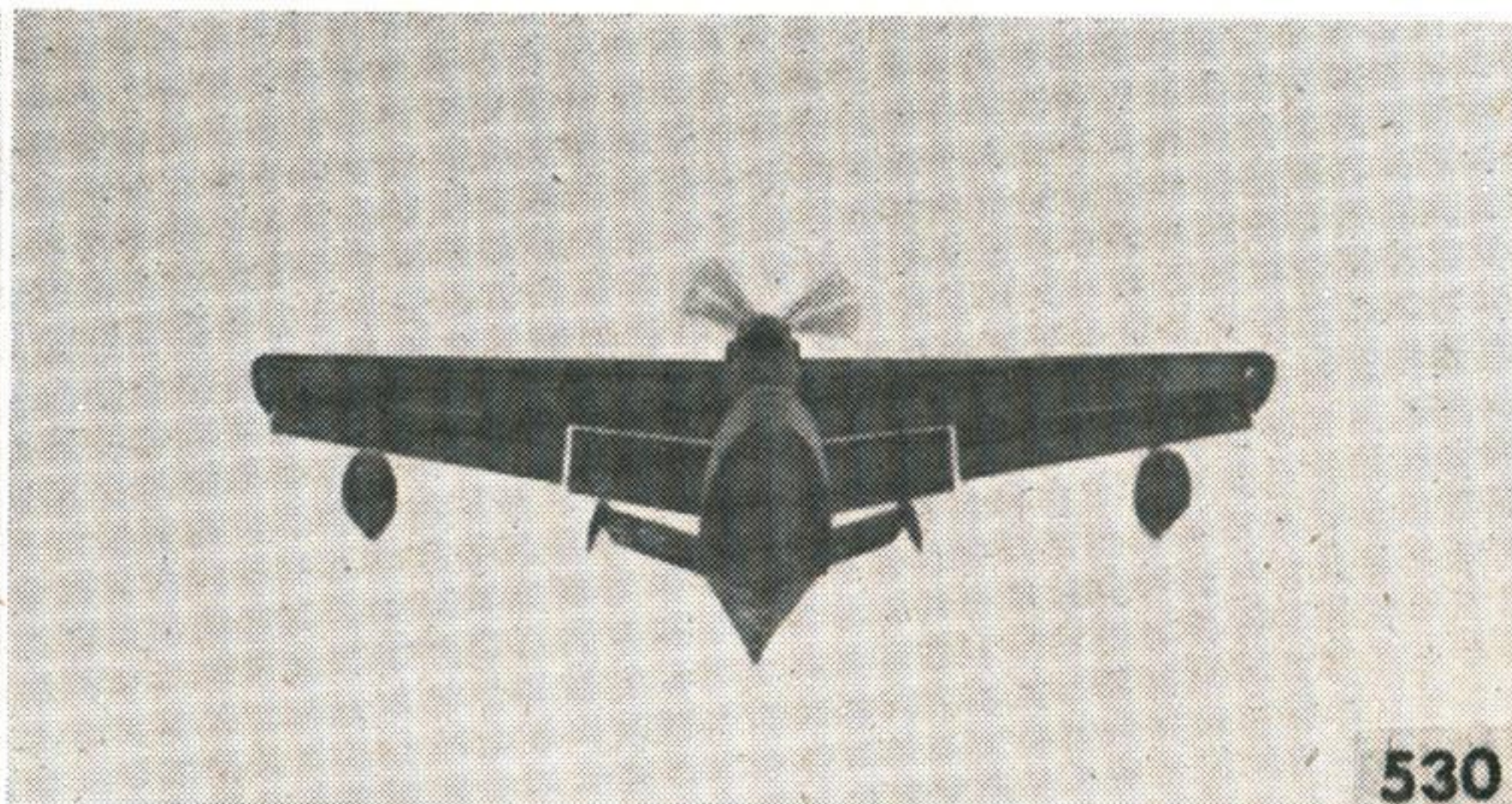
Journal



Volume 3

JANUARY 1949

No. 6



Aircraft in the

NEWS



B-50

BOEING B-50 SUPERFORTRESS

Super Superfort—Increased acreage of fin area characterizes the B-50; Pratt & Whitney Wasp Major radials with large ducts, long nose to "indian club" fuselage are other prominent features. Detail includes four remote-controlled gun-turrets and a triple-gun tail-turret and "waist" observation blisters. The B-50 is a standard U.S.A.F. long-range bomber and is in production.

BOEING XB-47 "STRATOJET"

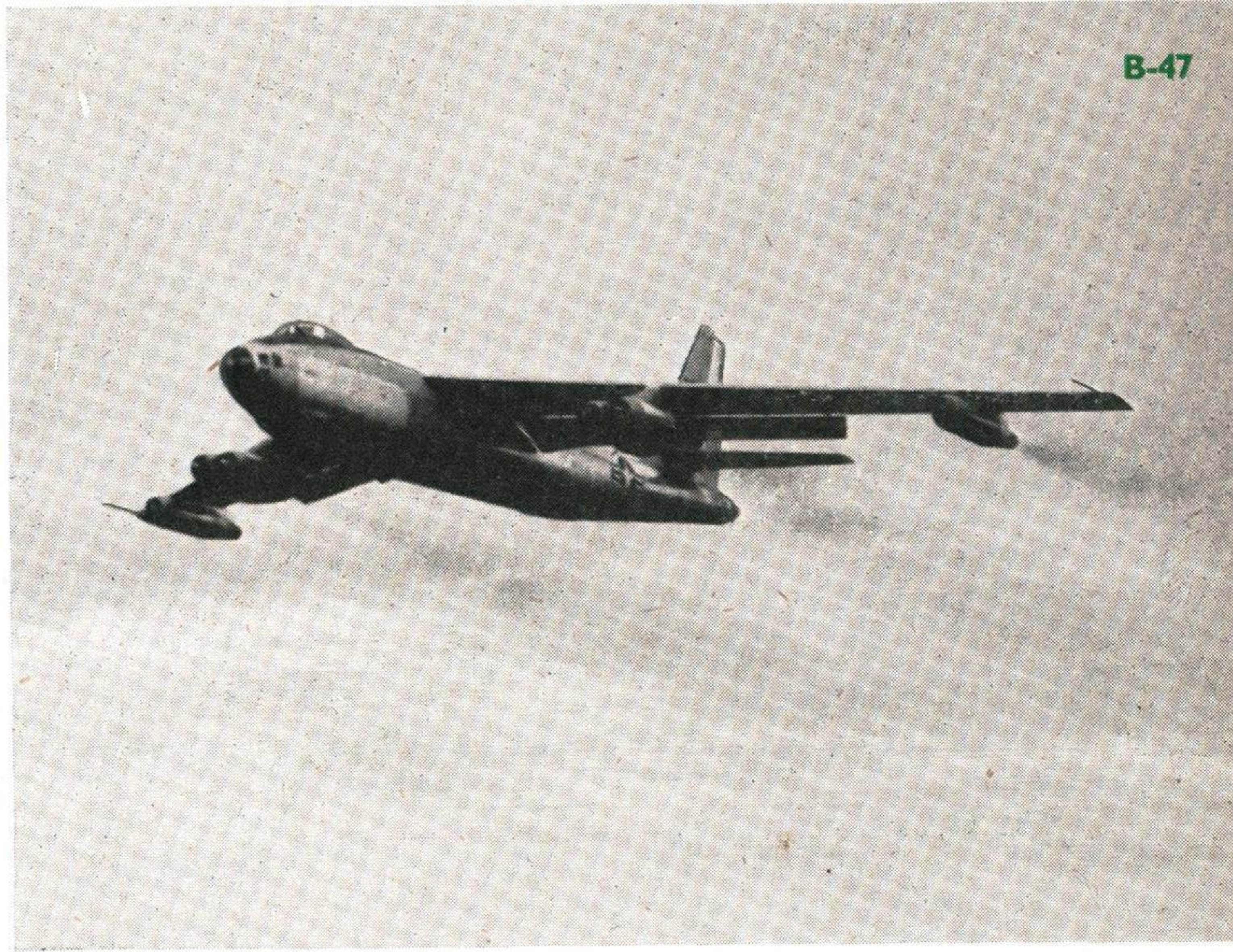
Sweep-back from Seattle—Underslung stalk-mounted siamese-twin turbojets, wing-tip turbojets, and back-swept flying surfaces produce the most "advanced-looking" bomber and an all-time "low" in confusability factors. Boeing XB-47 is well on its way through a test programme, and production arrangements are proceeding. Reports speak of small defensive armament consisting of only two 50 calibre guns in a remote-controlled rear-turret.

NORTHROP XF-89

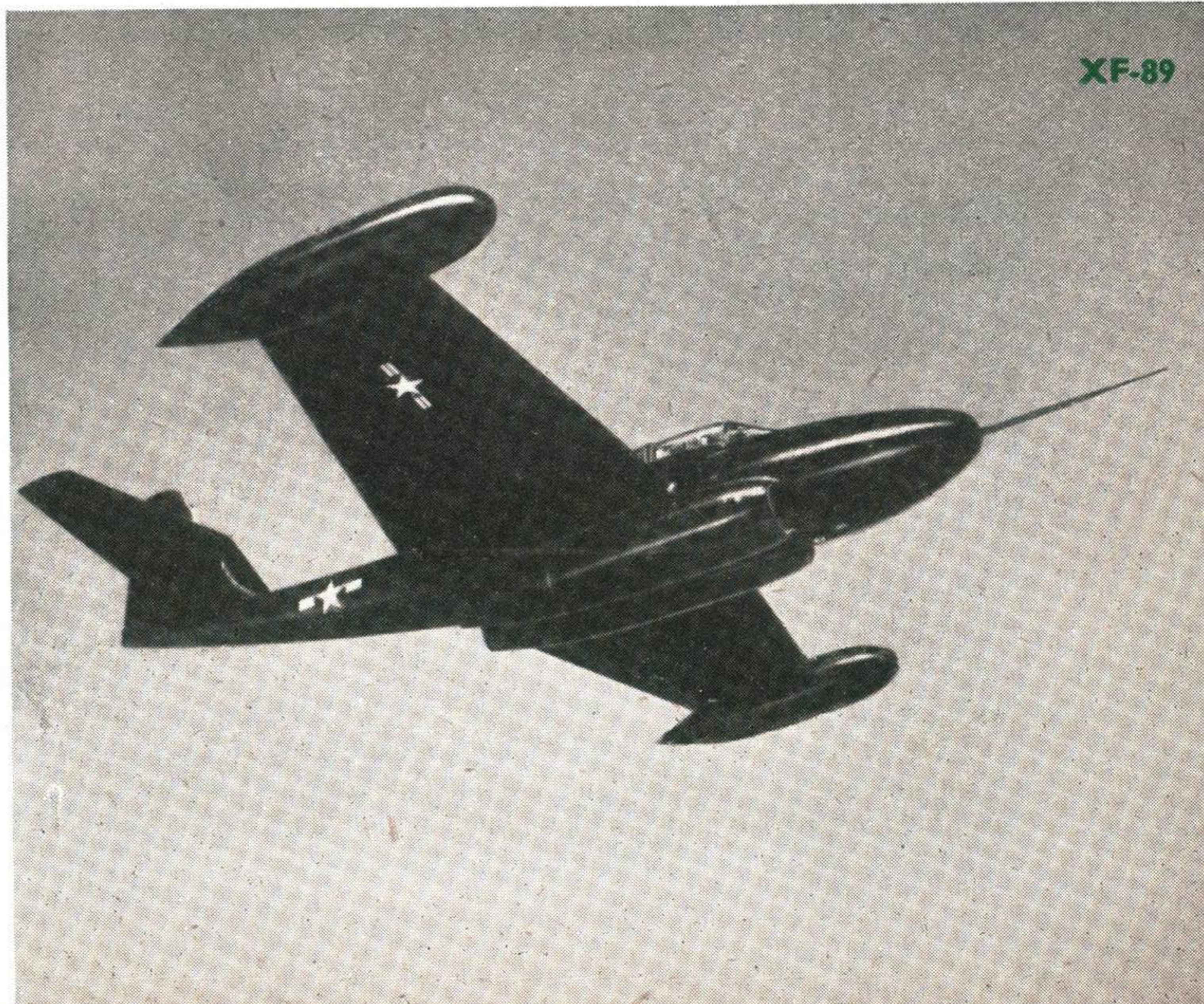
"Scorpions and Spiders"—High tail, forward-tapered wing and tip-tanks of Northrop XF-89 suggest excited scorpion. Half-submerged twin-turbojets below fuselage add another distinctive feature. Crew of two, pilot and radar-observer, sit beneath long canopy (power operated for opening and closing) of this all-weather fighter now under test by U.S.A.F. Two prototypes have been ordered.

DE HAVILLAND VAMPIRE F.B. MK. 5

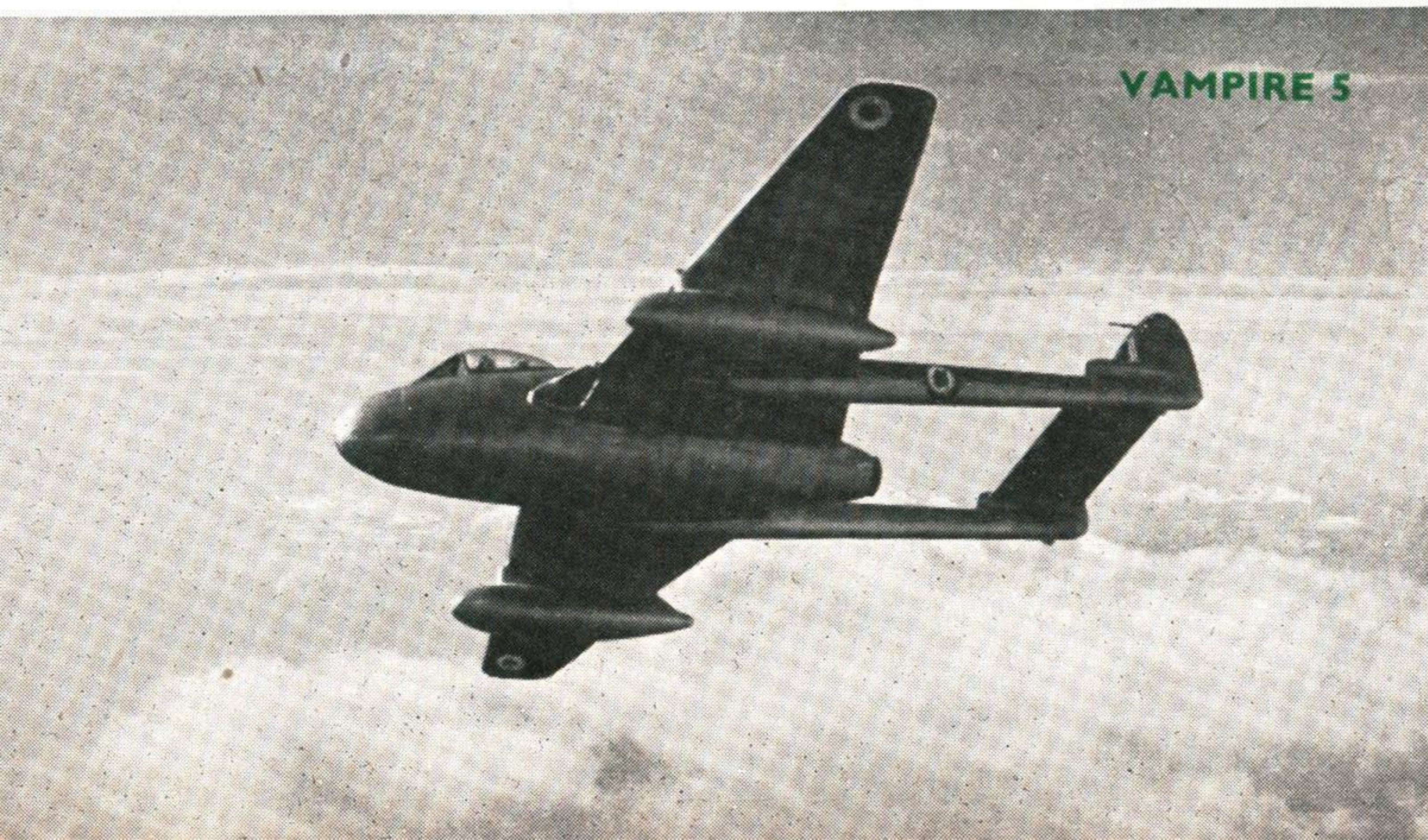
Boom Boom 1—A clipped Vampire (a standard F.B. Mk. 5) recently clipped non-stop flight time from England to Rome to 2 hours 50 min. 40 secs. This is a record. Distance covered was 916 miles; the average speed was 323 m.p.h. This is not the Vampire's fastest cruising speed. The clipped Vampire Mk. 5 is the latest to go into service with the R.A.F. as a ground attack aircraft. Other Vampires of this type now mentionable are the Mk. 6 (for Switzerland) and Mk. 50 (for Sweden).



B-47



XF-89



VAMPIRE 5



Impressions of Yorks at night.

AIR-BRIDGE TO BERLIN

THE tonnages of food, fuel, and other necessities of life lifted into Berlin by the Combined Airlift Task Force are given as 446,684 for the first four months of the operation. Of this amount the British lifted 32 per cent and the Americans 68 per cent. The cost to the British taxpayer for the first three months was over £1,000,000; and during the same period 10,000 tons of petrol were used up by British aircraft. The petrol figures impress *us* most.

The Airlift started on the 24th June last, shortly after the Russians had clamped down on road and rail connections with the Western sectors of Berlin. The Operation started in a small way under the code name "Knicker"; it grew out of that and assumed the name "Carter Paterson". Continuing to expand, it again changed its name, this time to "Plainfare". The Americans meanwhile called it Operation "Vittles". Now, however, it bears the sombre, and more realistic title of the Combined Air Lift Task Force, and is commanded by an American officer, General William Tunner, who has as his second-in-command an R.A.F. officer, Air Commodore J. W. F. Merer.

The roar of Merlin and Hercules aero-engines is no novelty to Berliners, though by a strange twist of fate these engines now haul heavy transport aeroplanes upon an errand of relief, in place of the Lancasters and Halifaxes they propelled on the grim business of bombing.

The numbers of aircraft engaged in this operation may not be disclosed, but discussion of types of aircraft is permitted. There have been, in fact, nearly 20 different types of Allied transport aircraft engaged, and if there are any aircraft spotters among the citizens of Berlin they are certainly having their money's worth of Western transport types, and a measure of Russian fighter types also.

The Goods

The freight flown in is largely food, and includes such things as flour, fish, butter, milk, dried-eggs and dehydrated potatoes. Various items of machinery vital to the life of the Western sector of the erstwhile German capital are also transported by air, including sets of electrical generating plant, complete with miles of cable. Newsprint, large quantities of petrol and diesel oil, and a high tonnage of coal are also lifted in.

The returning airlift aircraft bring out of Berlin articles manufactured in the Western sectors of the city. Typical exports are radio-sets, cameras, door-locks and pianos. Passengers are carried in and out when space permits.

British Effort

The British aircraft in use are a mixture of service and civilian types. Transport Command use Avro Yorks, and the ubiquitous Douglas Dakotas; and the new Handley Page Hastings has recently gone into service. Coastal Command fly Short Sunderland Mk. 5 flying boats. The Air Charter Companies, engaged under contract to the British Foreign Office, employ Avro Tudors Mk. 1, 2 and 5, Avro Lancastrians, Bristol Freighters and Wayfarers, Handley Page Halifaxes and Haltons, and Short Hythe flying boats. Vickers Vikings have been used, but they, together with some civilian Dakotas, are being replaced by larger aircraft. This is partly for air traffic control reasons, and partly because of their smaller carrying capacity.

American Effort

The Americans are using no civil aircraft—the whole of their effort being undertaken by their Military Air Transport Service (short title M.A.T.S.). Their work-horse is the Douglas C-54 Skymaster, which is

used for almost all kinds of freight haulage. On occasions a Douglas C-74 Globemaster is brought into service for special lifts, and for extra large and bulky loads the Fairchild C-82 packet is sent in to the beleaguered city.

Airfields

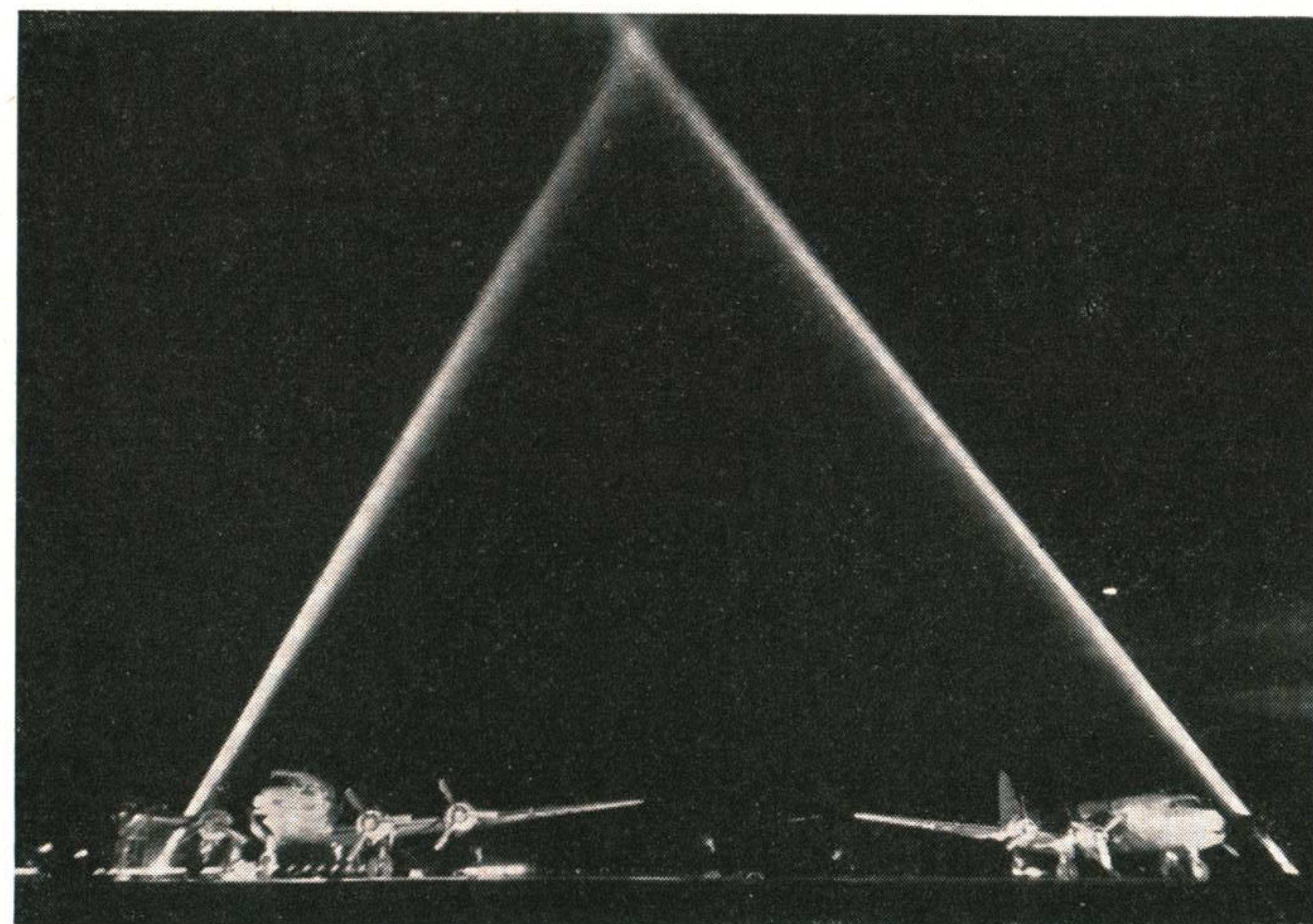
Wunsdorf is the main base in Germany for all Royal Air Force and civil-owned four-engine types of aircraft. Fassburg, an R.A.F. base, has been made into a coaling-station for the U.S. Skymaster colliers, and Celle, near Hanover, is also used by the Skymasters. Hamburg is the base for Coastal Command's and B.O.A.C.'s flying-boats which fly into Berlin and alight on the Havel See, a lake quite close to Gatow. The freezing-up of both flying-boat bases has, however, stopped the flying-boats for the winter. Another airfield recently brought into use is Schleswigland; it is being used by the Handley Page Hastings. The Americans also use Rhein-Maine.

Air Traffic Control

These airfields despatch their aircraft to three airfields within the Western sectors of Berlin, namely, Gatow and Templehof (U.S.) and Tegel, which has only just been opened. The large number of aircraft converging upon these airfields, not forgetting the Havel See flying-boat base, produces a traffic pattern of great intensity in the Berlin area and exercises the control system rigorously. The general idea of the system now in force is that all similar types of aircraft are despatched in what are called "blocks". A "block" is a four-hour period during which all Yorks, or all Dakotas, or all Skymasters, must get into and out of Berlin. In this way the Skymasters, for example, are not impeded by the slower moving Dakotas, as well they might be if all types operated together.

In a normal day's working in fine weather, aircraft are despatched at about three-minute intervals both into and out of Berlin's airfields. This is a very fast rate and calls for accurate timing and time-keeping.

Impressions of Skymasters at night.





A Skymaster lands at Templehof at dusk.

In point of fact, if an aircraft fails to touch down within a very short time (a matter of seconds) either side of its E.T.A. it must go back to base and await the next "block". The same thing applies if an aircraft is forced to overshoot; there is no such thing as "going round again", otherwise the traffic pattern would be wrecked.

Some Lessons

Without considering the international, political or humanitarian aspects of an operation of this kind, there are some good experiences being got out of it. For example, the amount of bad-weather and sustained precision flying which is being done, can only react favourably upon the qualities of the flying crews. Similarly, the conditions and intensity of servicing of aircraft give ground-crews an experience which had not previously been thought possible in peacetime.

We have already mentioned the crowded air traffic patterns around the airfields in Berlin; the Air Traffic Control system has in fact been described as a masterpiece. Such intense working in all sorts of weather has never been experienced before; it will serve as a model in the future and perhaps help provide the key to a number of air traffic control problems which have begun to crop up in other directions.

All in all it can be said that this operation has been giving those participating something which is very near to operational experience, such as could only otherwise come about in time of war. And we are not forgetting the recognition angle.

The Aircraft

At present there is wide variety of aircraft in use. Here is a table of technical data concerning them; cruising speeds and payloads quoted are only approximate.

AVRO TUDOR I

Engines: Four Rolls-Royce Merlin 621 in-lines of 1,740 h.p. each.
Performance: Cruising Speed : 207 m.p.h. (180 knots). Payload : 5½ tons.
Dimensions: Span : 120 ft. Length : 79 ft. 3 ins.
Remarks: The Tudor 1 aircraft operating on the airlift belong to British South American Airways (B.S.A.A.) Corporation.

AVRO TUDOR 2

Engines: Four Rolls-Royce Merlin 621 in-lines of 1,740 h.p. each.
Performance: Cruising Speed : 207 m.p.h. (180 knots). Payload : 10 tons.
Dimensions: Span : 120 ft. Length : 105 ft.
Remarks: The Tudor 2 has the greatest individual weight-lifting capacity of all the aircraft in regular airlift service.

AVRO TUDOR 5

Engines: Four Rolls-Royce Merlin 621 in-lines of 1,740 h.p. each
Performance: Cruising Speed : 207 m.p.h. (180 knots). Payload : 8½ tons.
Dimensions: Span : 120 ft. Length : 105 ft.
Remarks: The Tudor 5 is a modified Tudor 2 and the only external difference is in the windows which, in the "5", are round.

AVRO LANCASTRIAN

Engines: Four Rolls-Royce Merlin 28 or 38 in-lines of 1,280 h.p. each.
Performance: Cruising Speed : 232 m.p.h. (199 knots). Payload : 3 to 4 tons.
Dimensions: Span : 102 ft. Length : 69 ft. 4 ins.
Remarks: The Lancastrians are used as tankers and carry 1,500 gallons of petrol per trip into Berlin.

AVRO YORK

Engines: Four Rolls-Royce Merlin 24 in-lines of 1,280 h.p. each.
Performance: Cruising Speed : 195 m.p.h. (170 knots). Payload : 7 tons.
Dimensions: Span : 102 ft. Length : 78 ft.
Remarks: In use on the airlift almost from the first day. The York is due to be replaced by the Hastings in Transport Command services.

BRISTOL 170 FREIGHTER 2

Engines: Two Bristol Hercules 672 Radials of 1,700 h.p. each.
Performance: Cruising Speed : 160 m.p.h. (142 knots). Payload : 4 tons.
Dimensions: Span : 108 ft. Length : 68 ft. 4 ins.
Remarks: The Freighters in use are Mk. 2s having the squared-off wing-tips.

HANDLEY PAGE HALIFAX AND HALTON

Engines: Four Bristol Hercules 100 radials of 1,675 h.p. each.
Performance: Cruising Speed : 195 m.p.h. (170 knots). Payload : 5½ tons.
Dimensions: Span : 104 ft. Length : 73 ft. 7 ins.
Remarks: The Halifaxes are hauling coal among other things. A Halifax is also being used as a tanker and carries 1,200 gallons of diesel oil. Others are to be converted.

HANDLEY PAGE HASTINGS

Engines: Four Bristol Hercules 101 radials of 1,675 h.p. each.
Performance: Cruising Speed : 300 m.p.h. (264 knots). Payload : 8 tons.
Dimensions: Span : 113 ft. Length : 81 ft. 8 ins.
Remarks: The Hastings will be the standard long-range transport of the R.A.F. On the airlift it will act as a collier and also carry other cargoes.

SHORT HYTHE

Engines: Four Bristol Pegasus 48 radials of 1,000 h.p. each.
Performance: Cruising Speed : 117 m.p.h. (104 knots). Payload : 5 tons.
Dimensions: Span : 112 ft. 9 ins. Length : 85 ft. 6 ins.
Remarks: The "Hythes" operate between Hamburg and the Havel See.

SHORT SUNDERLAND V

Engines: Four Pratt & Whitney Twin Wasp radials of 1,200 h.p. each.
Performance: Cruising Speed : 117 m.p.h. (104 knots). Payload : 4½ tons.
Dimensions: Span : 112 ft. 9 ins. Length : 85 ft. 4 ins.
Remarks: Coastal Command operate the Sunderlands between Hamburg and the Havel See.

DOUGLAS C-47 DAKOTA

Engines: Two Pratt & Whitney Twin Wasp radials of 1,050 h.p. each.
Performance: Cruising Speed : 180 m.p.h. (163 knots). Payload : 3 tons.
Dimensions: Span : 95 ft. Length : 64 ft. 5 ins.
Remarks: First aircraft to be used on the airlift, it is being gradually replaced by larger aircraft.

DOUGLAS C-54 SKYMASTER

Engines: Four Pratt & Whitney Twin Wasp radials of 1,000 h.p. each.
Performance: Cruising Speed : 240 m.p.h. (210 knots). Payload : 5 tons.
Dimensions: Span : 117 ft. 6 ins. Length : 93 ft. 11 ins.
Remarks: The Skymaster is the work-horse of the U.S. lift force. Some R5D's (U.S. Navy Skymasters) are also in service.

DOUGLAS C-74 GLOBEMASTER

Engines: Four Pratt & Whitney Twin Wasp radials of 3,500 h.p. each.
Performance: Cruising Speed : 300 m.p.h. (264 knots). Payload : 18½ tons.
Dimensions: Span : 173 ft. 2 ins. Length : 121 ft. 1 in.
Remarks: Used occasionally on the lift itself; now on Transatlantic route bringing supplies up to Frankfurt. The twin "bug-eye" cockpits are being replaced by single overall cockpit canopies. Three C-74s are supporting the airlift force.

FAIRCHILD C-82 PACKET

Engines: Two Pratt & Whitney radials of 2,100 h.p. each.
Performance: Cruising Speed : 218 m.p.h. (187 knots). Payload : 6 tons.
Dimensions: Span : 106 ft. 5 ins. Length : 77 ft. 1 in.
Remarks: Used on special occasions to fly in such bulky things as bulldozers for building airfield runways.

From time to time Russian aircraft have been reported in the air corridors leading into Berlin, the undermentioned being among those seen.

YAK-3 FIGHTER

(Low-wing single-engine monoplane, single fin and rudder.)
Engine: One VK-107 in-line of 1,310 h.p.
Performance: Maximum Speed : 350 m.p.h. (303.9 knots).
Armament: One 20 mm. cannon. Two 12.7 mm. m/guns.
Dimensions: Span : 31 ft. Length : 28 ft. 11 ins.
Main Features: Short pointed nose—sharply tapered wing—"straight-through" fuselage—forward-leaning fin and rudder.

LA-9 FIGHTER

(Low-wing single-engine monoplane, single fin and rudder.)
Engine: One ASH 82 radial of 1,800 h.p.
Performance: Maximum Speed : About 400 m.p.h. (347 knots).
Armament: Two 20 mm. cannons. Two 12.7 mm. m/guns.
Dimensions: Span : 34 ft. 10 ins. Length : 30 ft.
Main Features: Short blunt nose—tapered, squared-off wing and tail plane—fuselage tapered sharply to rear—large triangular fin and rudder.

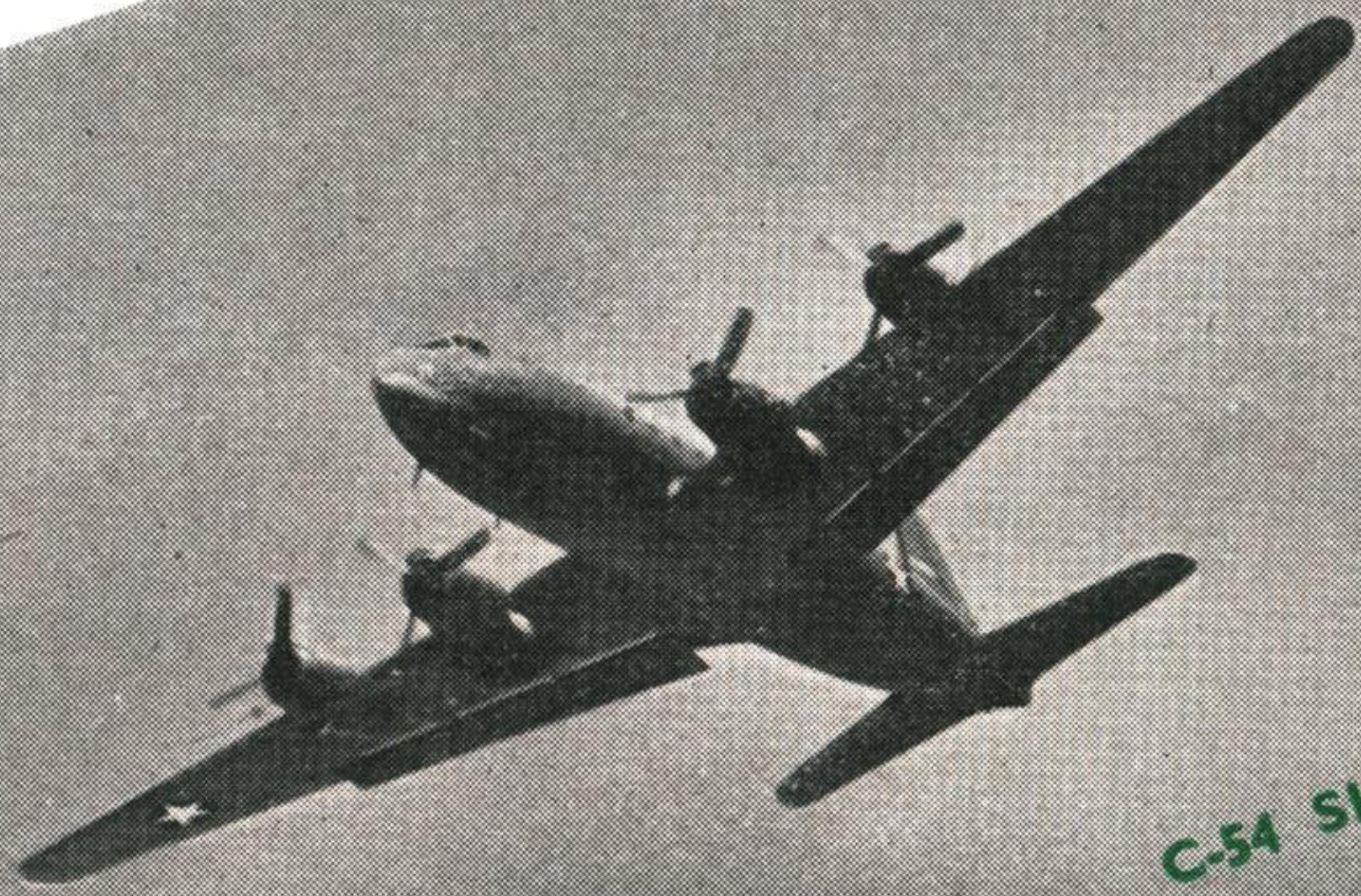
PE-2 FIGHTER

(Low-wing twin-engine monoplane, twin fins and rudders.)
Engines: Two UK-105 in-lines of 1,100 h.p.
Performance: Maximum Speed : 340 m.p.h. (295 knots).
Armament: Two to Four 7.62 mm. m/guns.
Night Fighter can be fitted with 20 mm. cannon.
Dimensions: Span : 56 ft. 3 ins. Length : 41 ft. 6 ins.
Main Features: Twin underslung engines—dihedral in tail plane—outrigger oval twin fins and rudders—sharply tapered pointed wing.

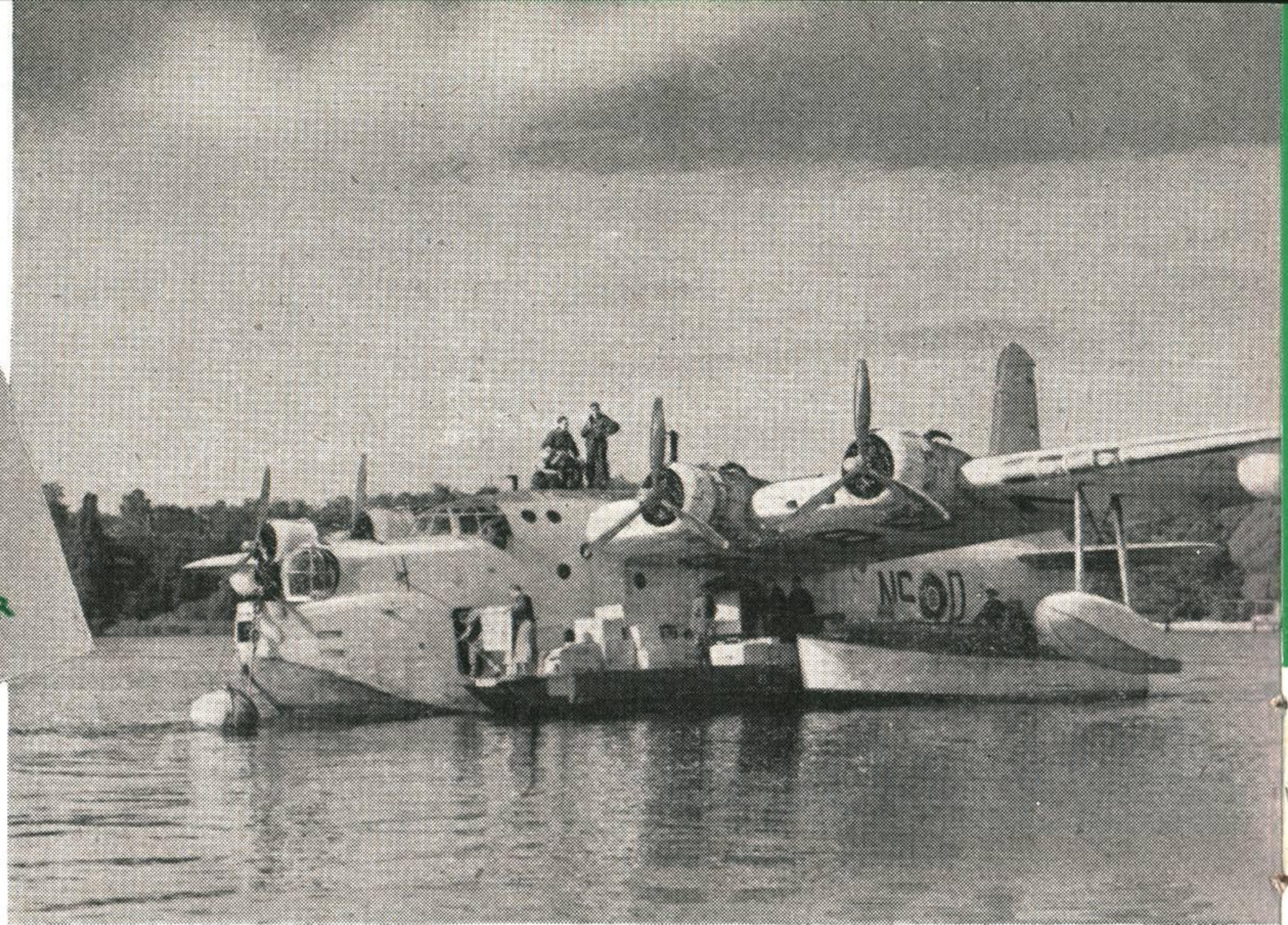
The Fairchild C-82 Packet.



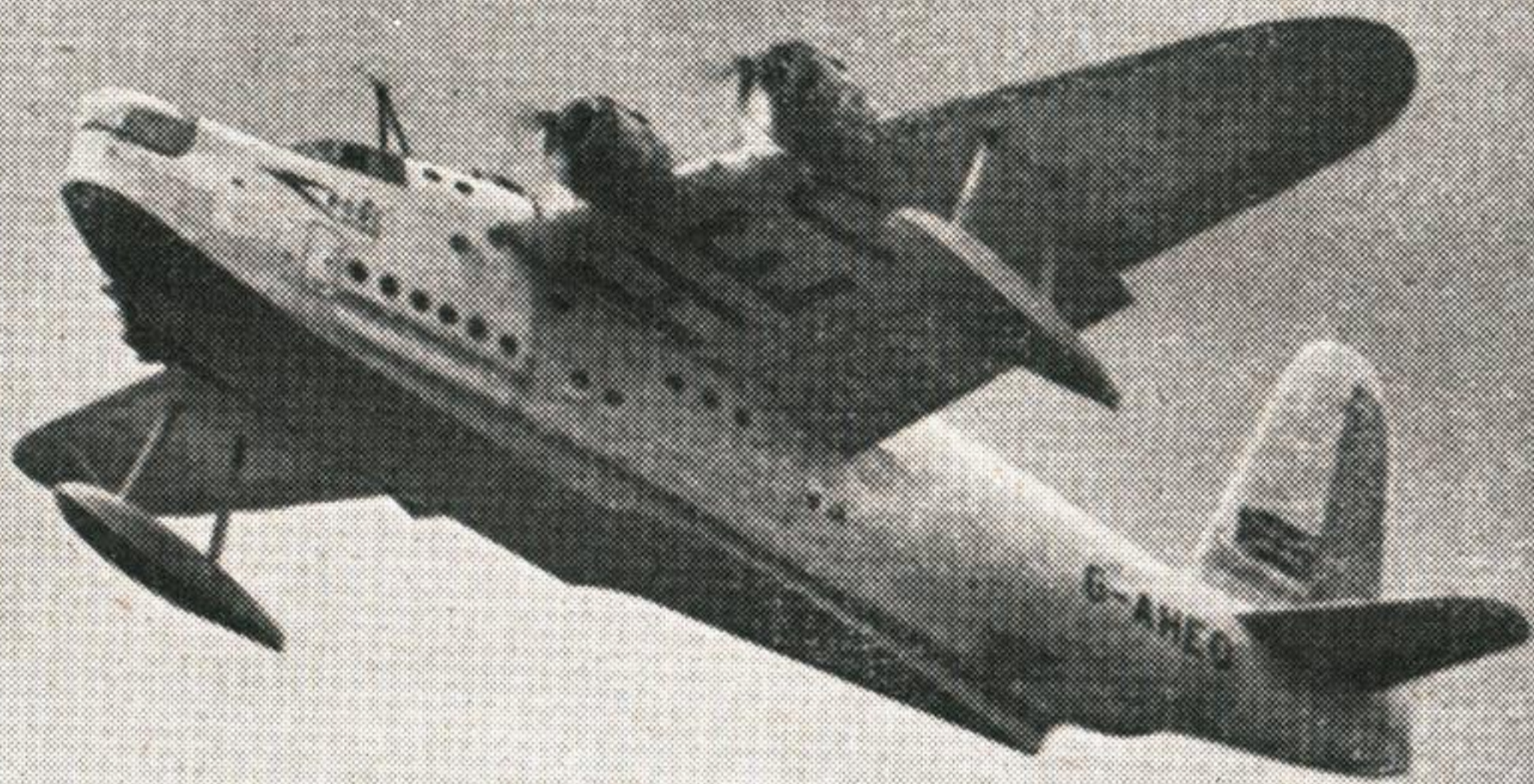
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C-54 SKYMASTER



Sunderland 5 loading up for Berlin



HYTHE



Tudor 2 refuelling and loading at Wunsdorf



C-47 DAKOTA



Yorks unloading at Gatow, wh

Russian Sillographs (Round the clock from one



HASTINGS



THE OFFICIAL ORGAN OF THE
ROYAL OBSERVER CORPS

A Farewell Message

*from Air Commodore THE EARL OF BANDON, C.B., D.S.O.,
upon relinquishing command of the Royal Observer Corps.*



SOUVENIRS: Celebrating with No. 23 Group Bristol in 1947.
I met 21 Group Exeter soon after taking over in 1945.
Memories of these, and of many other happy occasions I shall retain.

I HAVE HAD A WONDERFUL THREE YEARS and it is a very sad day for me that I have to leave you.

We can be proud of our achievements in the Royal Observer Corps since the war; that first difficult year when we were "stood-down" but were held together by your fine *esprit de corps* so that on 1st January, 1947, we were able to re-form with a sufficient nucleus of old hands to ensure the Corps and its spirit continued; the second year when we were building up and many difficulties were overcome; and this year when we can now say the Royal Observer Corps is again on a sound footing, as has been proved by the very good results obtained in practical exercises in those Groups who have been lucky enough to have them and again by the results of the Intermediate Test which have been outstanding.

Over and above all this, recruiting compares more than favourably with the other services; in fact we can say that we are second to none in any respect. All this speaks very highly for the work and enthusiasm of you all—officers and observers, old members and new recruits—who have retained and maintained the old enthusiasm and morale of the Observer Corps which is in no way less now than in those great days of the Battle of Britain.

I can also say that the esteem in which you have always been held by the Royal Air Force has, if anything, increased by the way you have turned out and done your job on the exercises and also by the exemplary behaviour and bearing of all those who attended the R.O.C. Training Camp at Thorney Island.

I am proud to have been associated with you during these last three years.

I shall always look back on them with the happiest memories, of the many friends I have made and the loyalty and help that you have always given me.

I take away with me, not only these memories, but a little thing that anyone who is not entitled to wear it will not understand—the Royal Observer Corps tie, and I shall wear it with pride.

I am unable as yet to give you the name of my successor, though you will, I hope, know this by the time my message reaches you. I am certain, whoever he may be, you will back him up in the same magnificent way that you have me.

Good luck to you all and *au revoir*.



Time - Lag -

A JET-BOMBER over Southend at 1600 hours could be over London's Dockland at 1603. At 700 m.p.h. over the ground—and that is a likely speed—it would cover about 12 miles in one minute, that's about one mile in five seconds, or 350 odd yards in one second. That's not loitering and calls for spot-on interception, and in interceptions the split-second is just about the most important thing. How to save them? Well, here's how.

Post Observers!

You tend to delay reporting until you can get a visual, or until you can be more certain about our sound recognition. All of us dislike reporting "heard": we would much rather lose a few precious seconds waiting to recognize the aeroplane and be able to report "Mosquito" or "Meteor" or whatever it may be. We might lose as much as fifteen or even twenty seconds over this. We'll say 15, shall we? . . .

15

Then, through sheer inertia, you might delay in getting the plan position of the aeroplane. You might also delay in estimating height or in sighting the instrument on to it. This could mean another delay of up to twenty seconds, but we'll call it ten. . . .

10



SESSIONS

. . . thirty thousand Meteors at one foot . . .

Having sighted, estimated the height, and found the plan position of the aeroplane you report to the Operations Room. If you stumble over figures, or use incorrect sequences and are thus not heard properly by the Operations Room, or if you have to repeat your plot: old age creeps inexorably on—shall we say ten seconds? . . .

10

We know it couldn't happen at your post—still, it does happen at others. You might hang this slogan somewhere in your post.



Main Table Plotters!

No matter how well the chap on the post may have done his work, you can easily gum-up the works: you, too, can let a few precious seconds fall by the wayside. How? Well, perhaps some of you war-time plotters remember those faulty hand-overs at

"change-of-crew"—you didn't get the "gen" from the plotter you were relieving; there was the casual chat about anything but plotting—perhaps you were anxious about the weather outside: then the telephone head-set jack didn't make contact as it should have done and you fiddled for 15 or 20 seconds while the tracks stood still. All this can happen still—especially on exercises. A good, efficient relief can save ten seconds. Ten from fifteen leaves five. . . .

5

You'll remember, too, how you had the wrong coloured counter in your hand. And the other occasion when you had the wrong type of counter, and you had to fumble for the right one. Alright!—five seconds. . . .

5

Do you also remember failing to move up the raid plaque to the head of the raid?—and there was the teller wondering which track it was supposed to cover. That's bad! There could easily be ten seconds delay there, but we'll say it was five. . . .

5

Then what about that time you failed to arrange the symbols in the proper order and someone had to stop to work out what they meant at a cost of about eight or ten seconds and some very terse comment. Time marched on—call it five seconds. . . .

5

Here's a good motto for you—



Inter-Centre Plotters!

Some of the remarks we make above also apply to you. Don't delay the display of all relevant information. Yours is rather a difficult job and requires attention all the time because you are listening on a uni-directional line with no "talk-back," and the flow of information is not continuous and gaps of a quarter-of-an-hour or even longer often occur. You may start dreaming of your last cup-of-tea, or your current girl-friend, perhaps wondering about the next one (cup-of-tea, we mean)—and miss the first plot on a new raid. This can mean anything up to three or four minutes delay until the next plot comes up. We will settle for two-and-a-half minutes for this occasion only. . . .

2 minutes 30

You really rate two slogans, the next above and this one—



Table Supervisors!

We can give you a slogan, too: "Intelligent Anticipation." You must anticipate the plotters' needs almost before they do. See that the raid orderlies have plaques ready made-up and ready to go on the table at a moment's notice.



"Intelligent Anticipation."

5

Selecting and arranging symbols on a plaque can take anything up to fifteen or twenty seconds, but we, in our big hearted way, will settle for ten. . . .

10

Here is your slogan framed—

Intelligent Anticipation!

Tellers!

They say you can't tell a teller anything he doesn't already know. Well, that is as it should be. But he must keep a constant watch on the table in order to pick up a new raid *at once*. Penalty for failure up to 30 seconds. To save argument we'll say it was only 15. . . .

15

But the thing that saves the fleeting seconds all round is the prompt, systematic, and rhythmic telling of the experienced plotter. This comes only of constant practice.

Promptness, for obvious reasons, is essential.

Systematic telling obviates omissions and ensures that each track has adequate attention having regard to its importance.



. . . anticipate the plotters' needs . . .

drawn a sizable picture on the drawing-room wall. But such a delay in raid reporting during war would undoubtedly spell disaster. If this really happened, our friend the enemy could have been in over the target, shovelled out his bombs, and be out, home, and safely tucked up in bed, while we are still fiddling with messages which have got stuck in the pipe—and clearing up the mess he's made. All because a few people in the chain of



. . . rhythm works wonders . . .

Rhythm works wonders. It makes for speed and is more easily heard the other end. Jerky, jumpy delivery practically guarantees that the inter-centre liaison will have to waste time repeating on your behalf and that the R.O.C.L.O. or Duty Controller Liaison will become distinctly hostile. And no wonder, for up to three or four minutes delay, even longer, is probable. Let's be conservative and allow two-and-a-half minutes. . . .

2 minutes 30

This is your slogan—

Prompt, Systematic and Rhythmic Telling

Adding Up

Now these things could happen to one plot. Look at the total time we have lost—

6 minutes 20 seconds!

Think what can happen in only five minutes in ordinary everyday life. Your forgotten electric iron can be sizzling its way through the bed in the flat below, or your small son can have



. . . Duty Controller Liaison will become distinctly hostile . . .

communication each lost a few precious seconds. It's silly isn't it? It's damn dangerous, too! But it can be avoided.

We have quoted a few of the obvious ways in which time can be lost : there are others. Perhaps we have exaggerated a bit : perhaps it doesn't happen in your Group : still, it does happen.

If you find time lagging anywhere

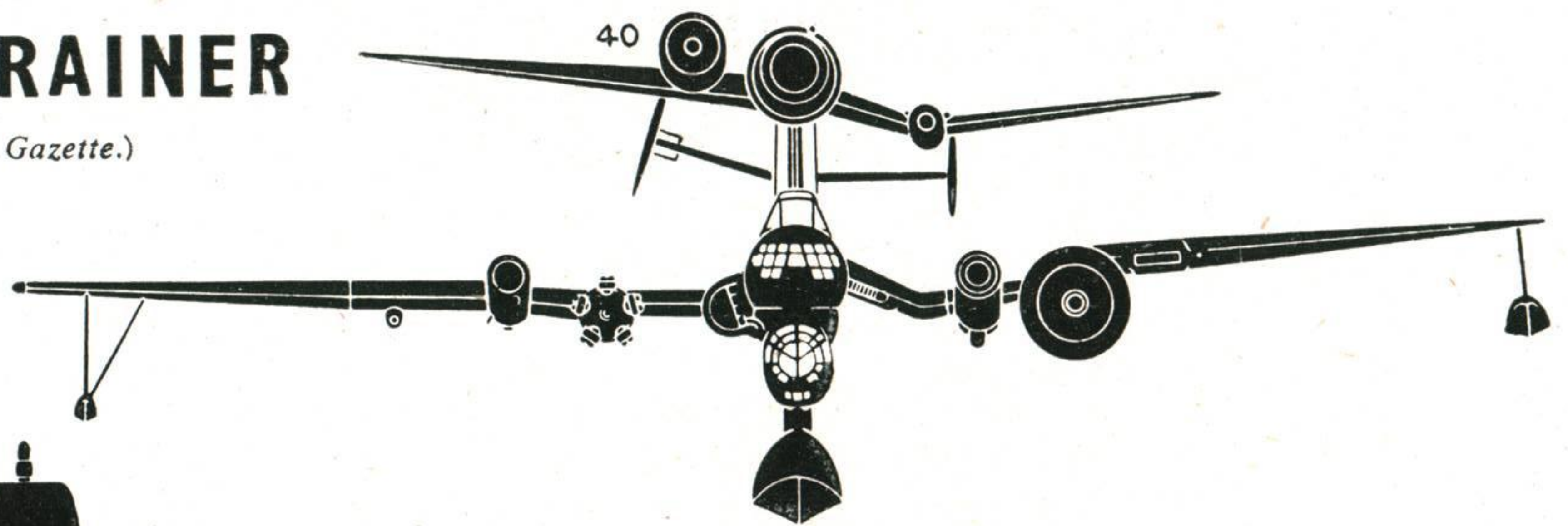
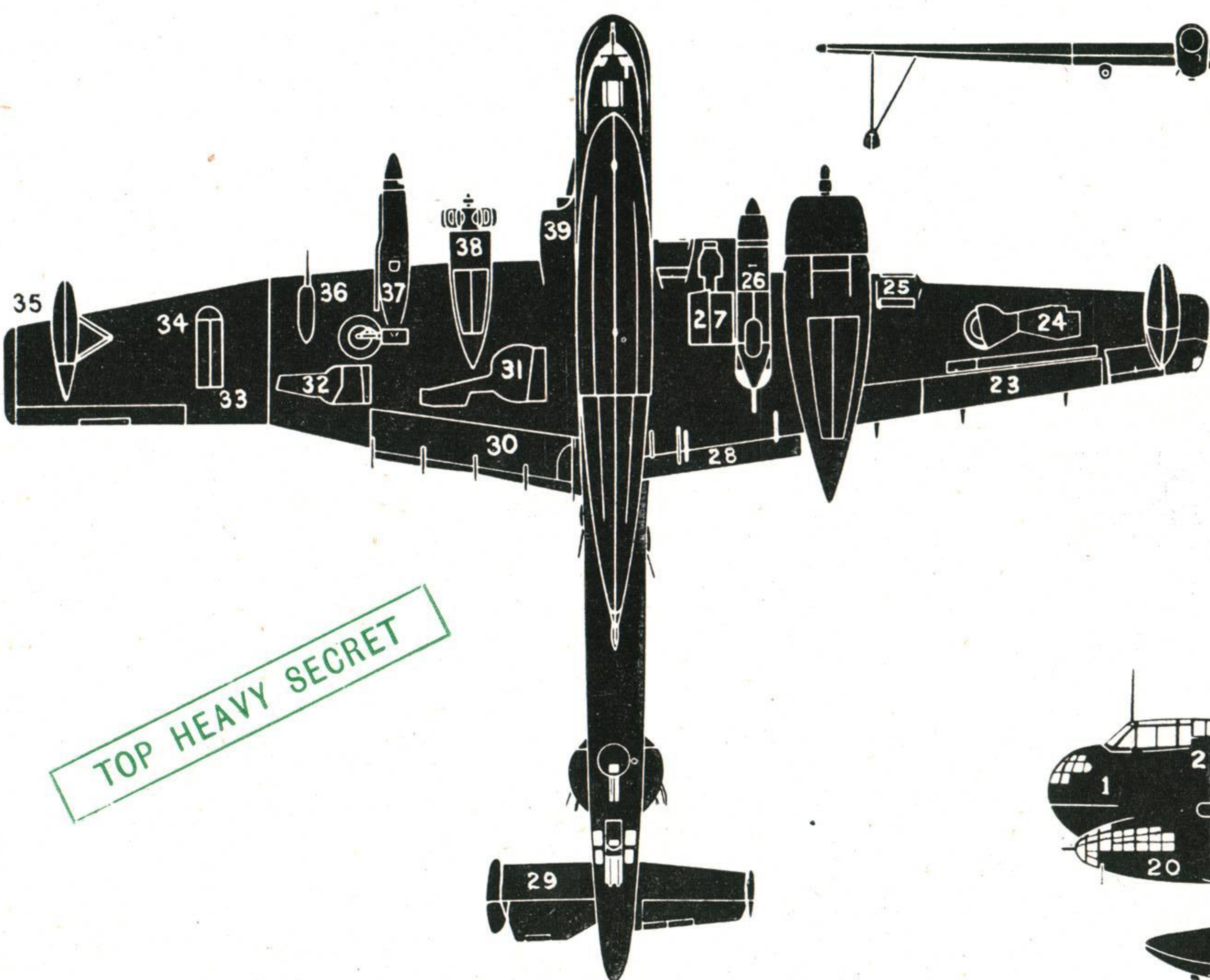
-Cut it Out!



The answers, headed "Airborne Headaches No. 8", must be sent on a post card to reach Group Headquarters by 1st March, 1949. Group Headquarters will forward answers so as to reach Area Training Officers by 8th March, 1949.

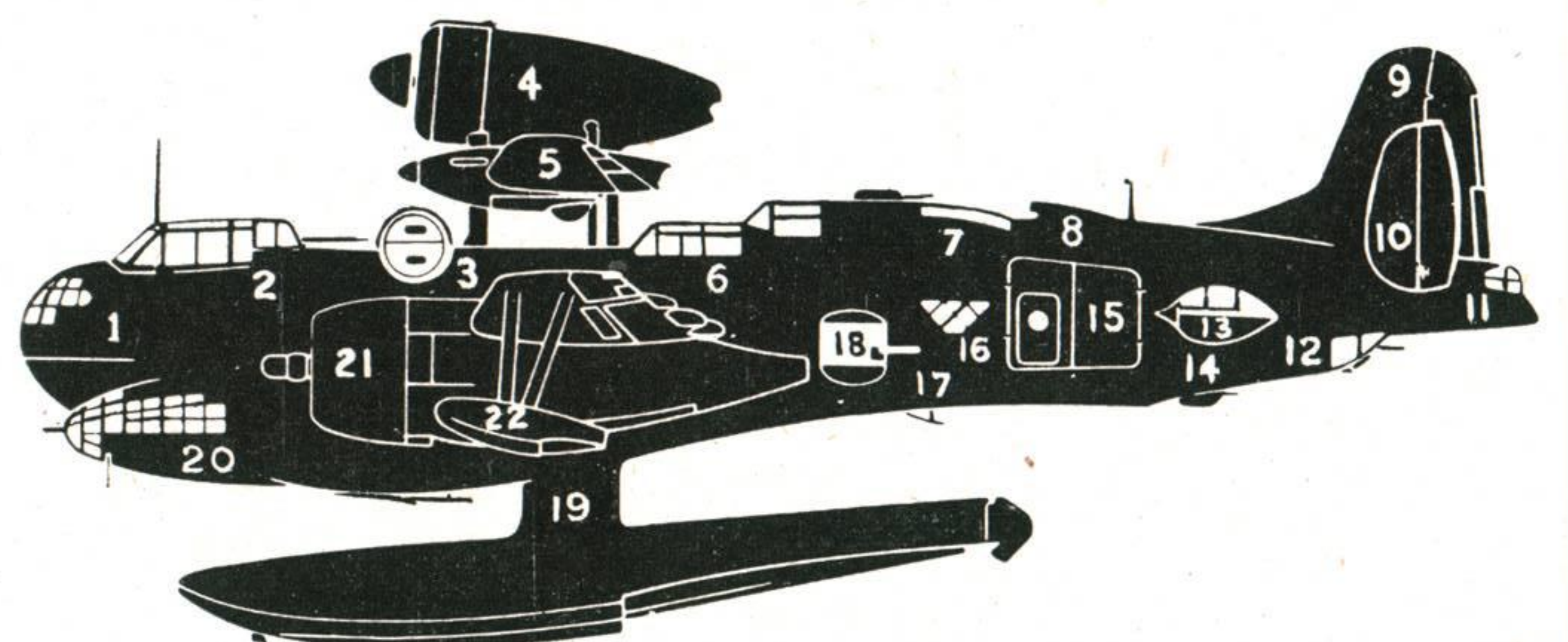
R.O.C. INTERMEDIATE TRAINER

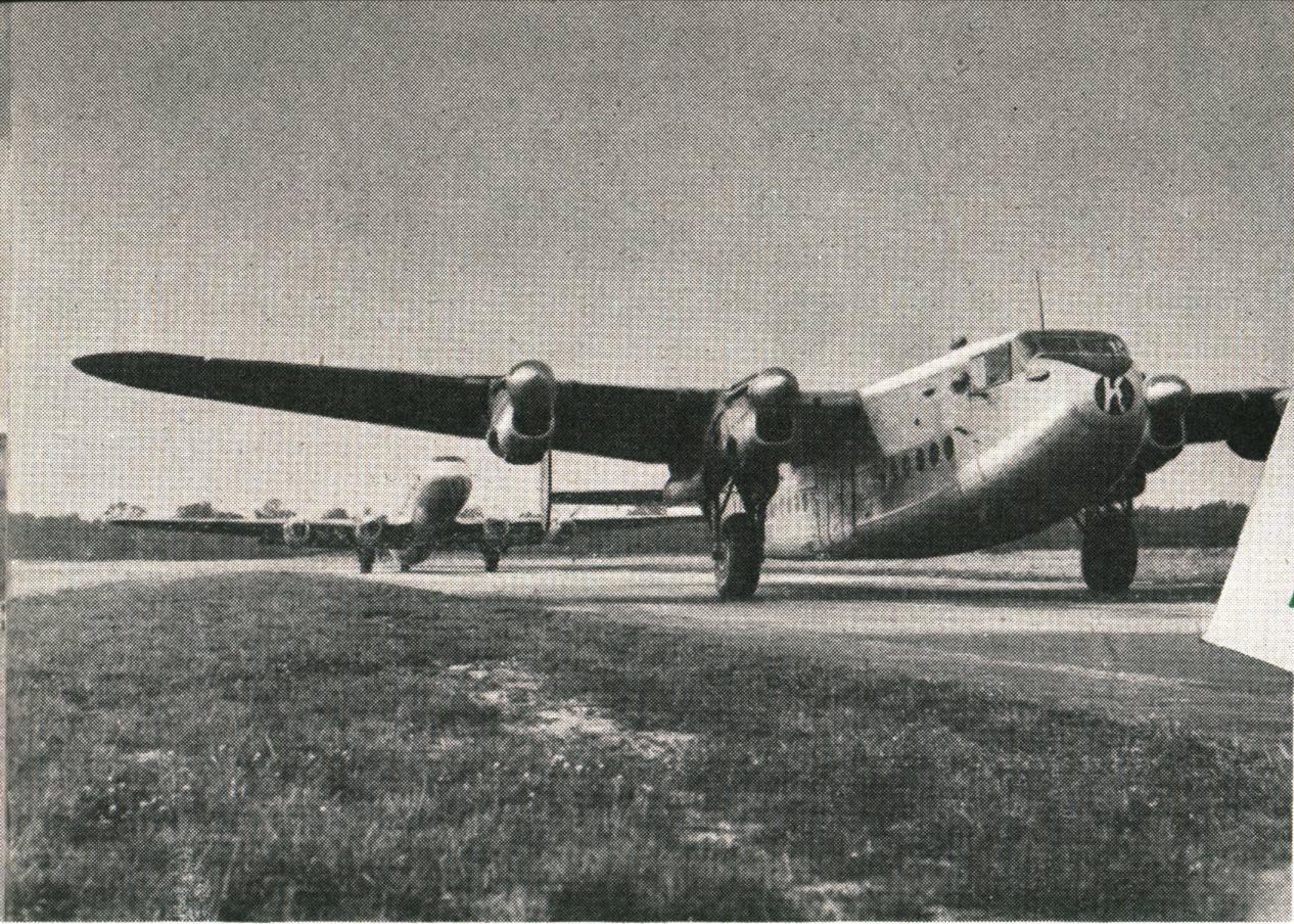
(The key to this "formation" will appear in the next R.O.C. Gazette.)



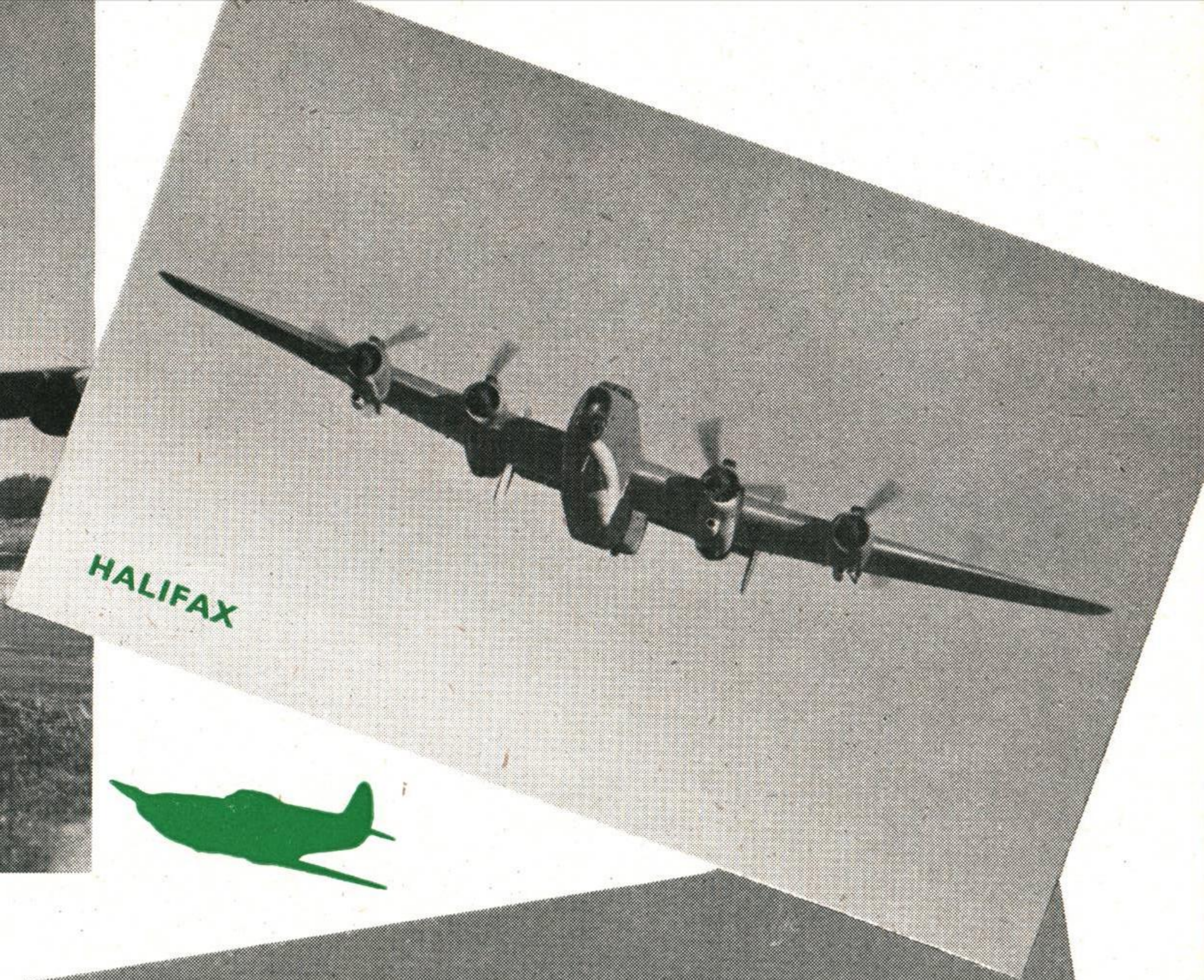
This is not a collective view of the Airlift, nor is it a new Naval type : it is a formation of spare parts, and was designed by Observer E. A. Yates, Roger 3 (12 Group Bedford). But he's alright now. Produced by Consolidated Aircraft Ink., it carries no defensive armament as it is considered that any self-respecting fighter pilot who intercepted it would return to base and report sick.

TOP HEAVY SECRET

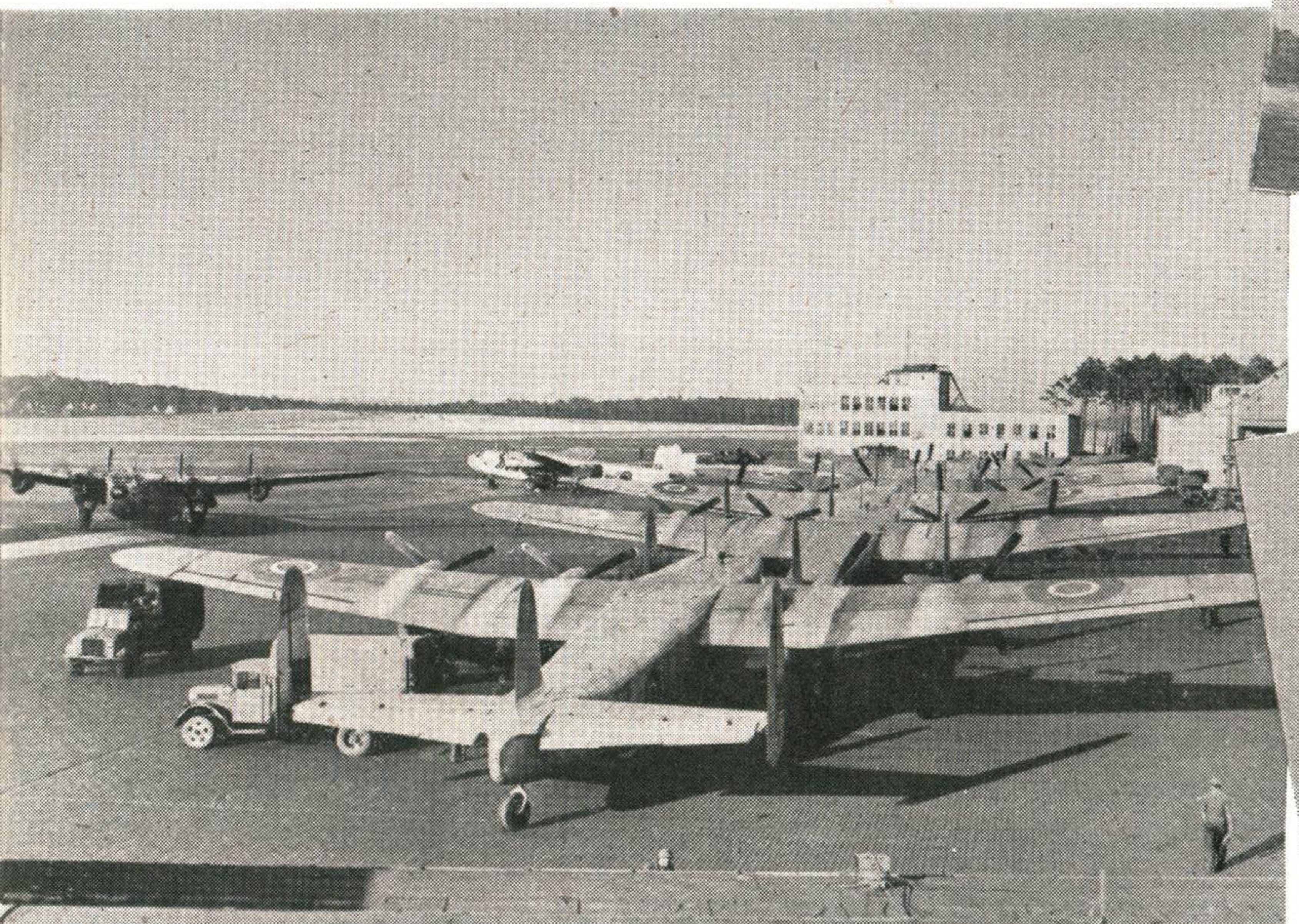
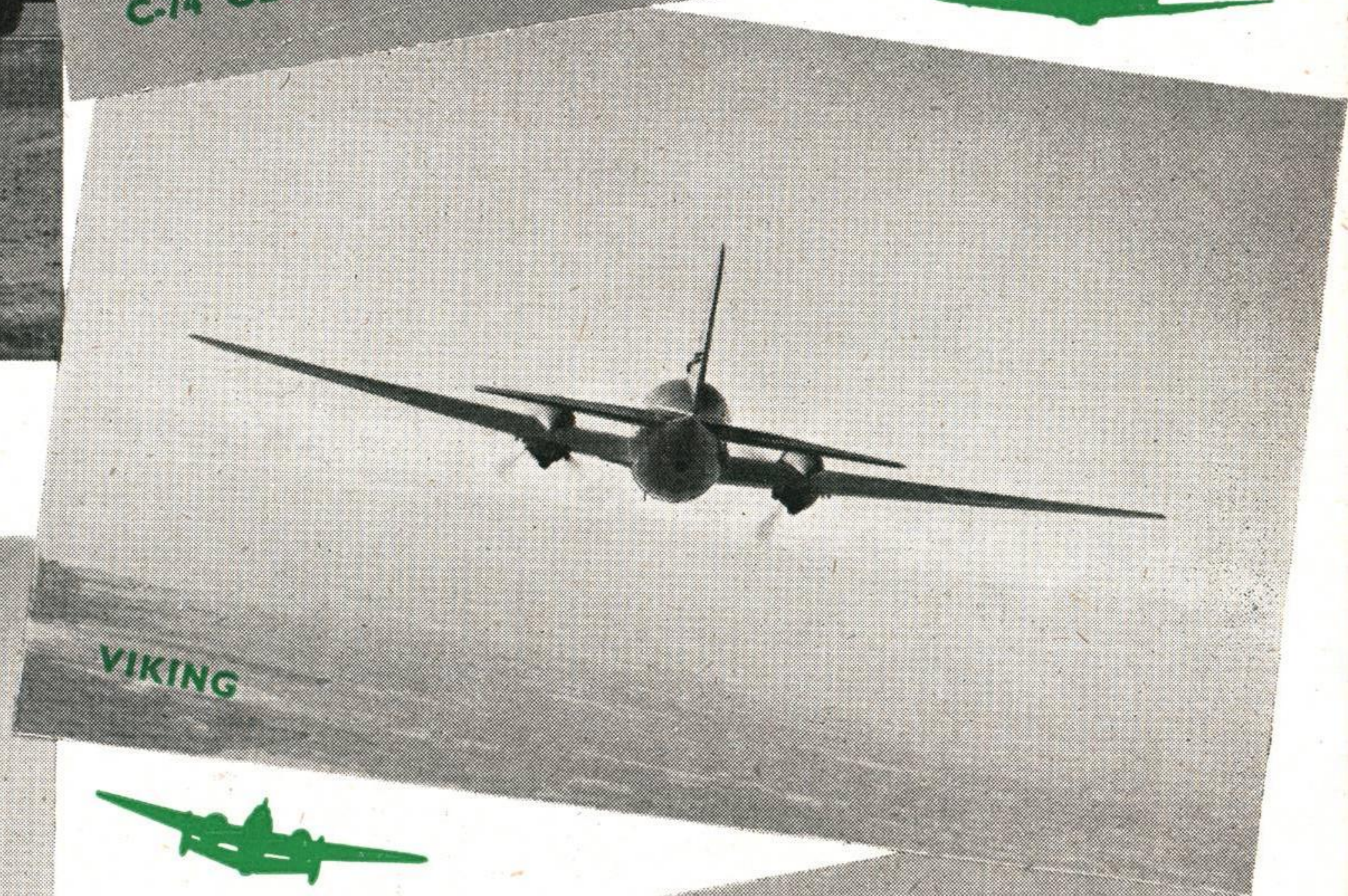




York and Tudor 2 taxi out at Wunsdorf



Lancastrian Tanker at Gatow



While a Lancastrian takes off (left)

(clockwise): YAK-3, LA-9, PE-2, LA-9, YAK-3, PE-2.



What's the Score?

No. 2



Deep fuselage—short-span low-mid wing—twin engines—



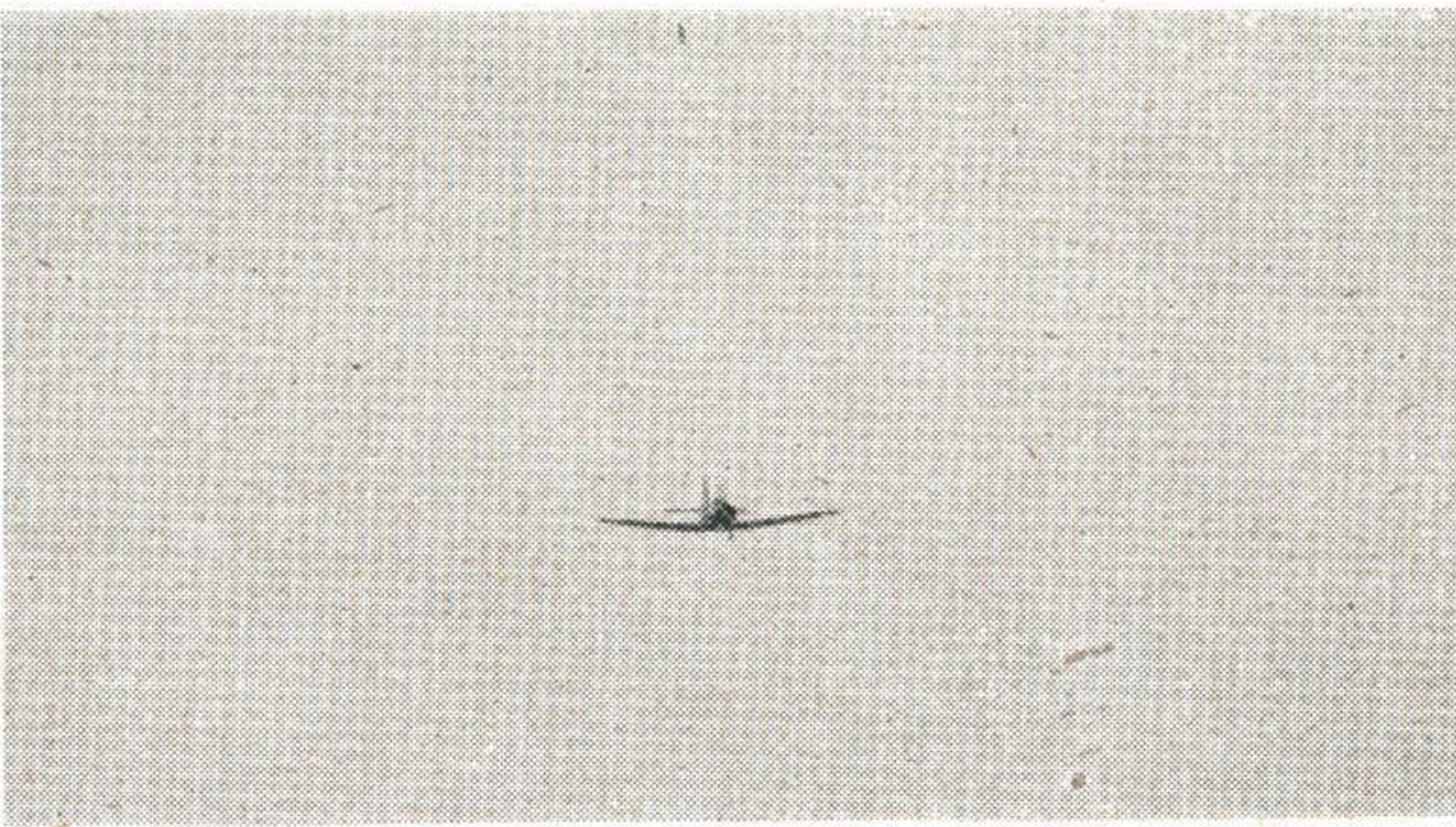
high tailplane—centrally-mounted engines, widely spaced—



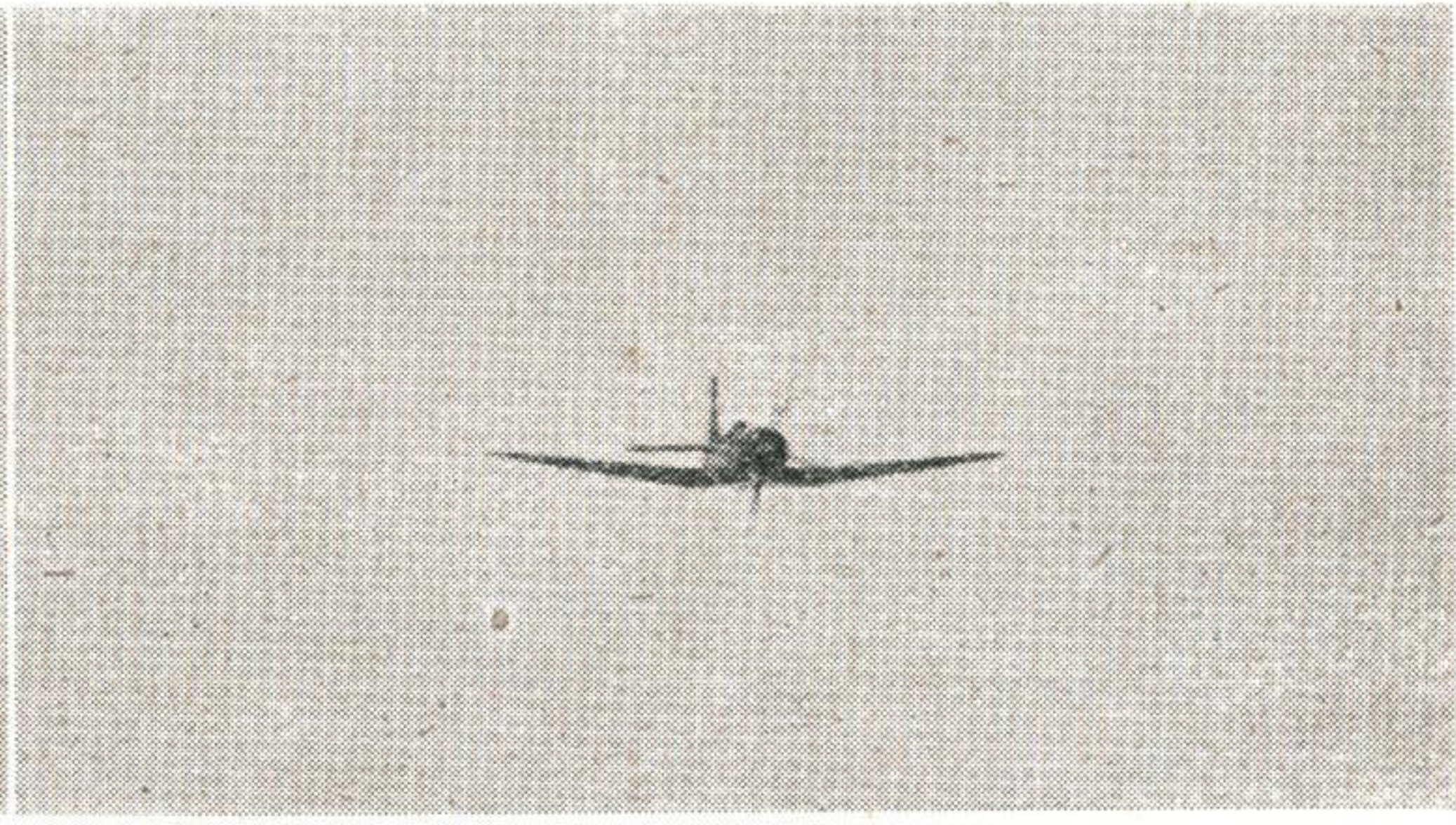
turbojets—low-wing after all, belly-tank on fuselage—small cockpit on nose—



Wide-span low-wing with dihedral angle—



radial motor?—single fin and rudder—
inverted gull wing?—



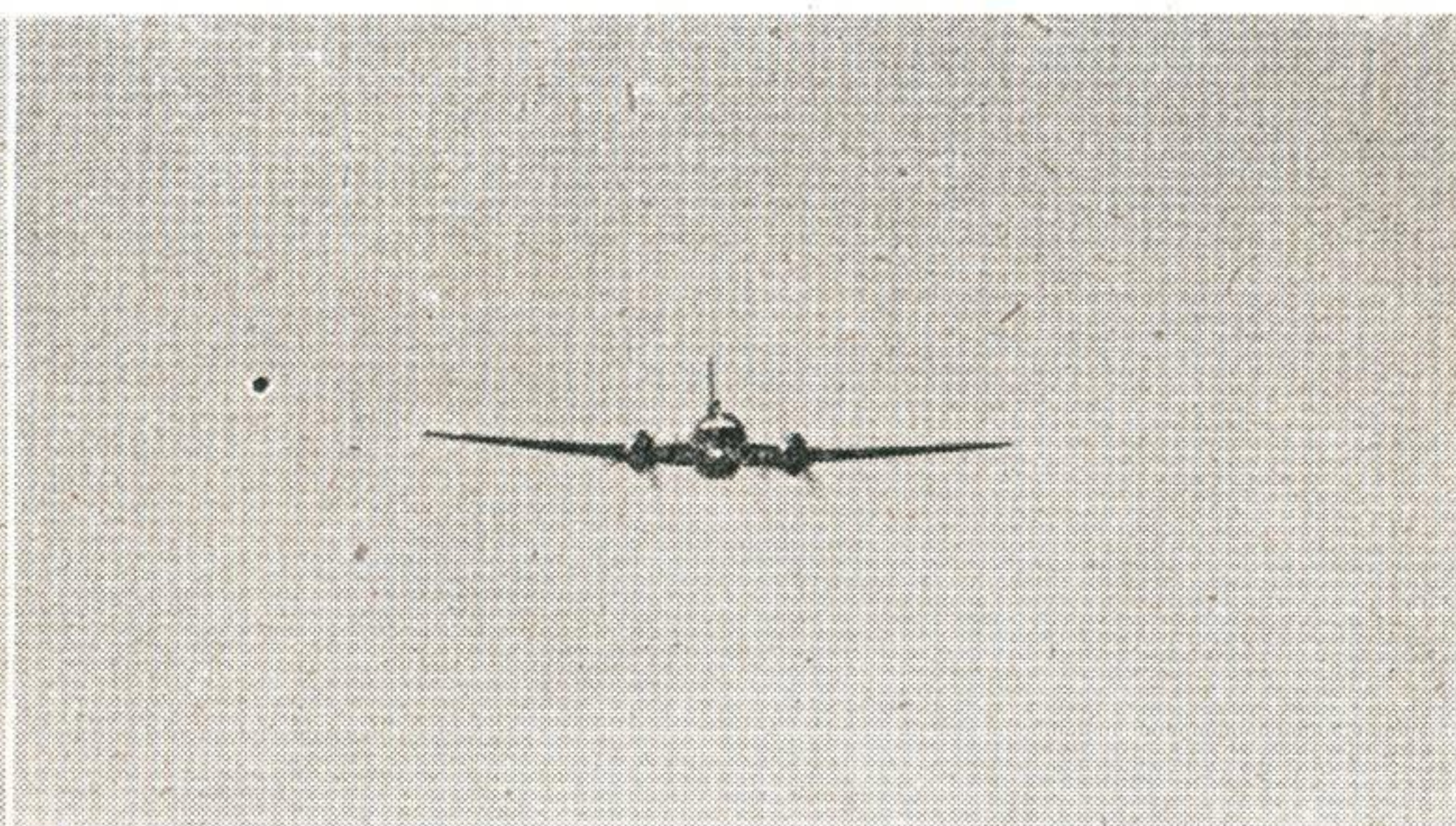
yes, radial motor—short straight centre section (no inverted gull)—small cockpit—single fin and rudder confirmed—



Twin-engines centrally-mounted—wide-span wing—no dihedral angle—



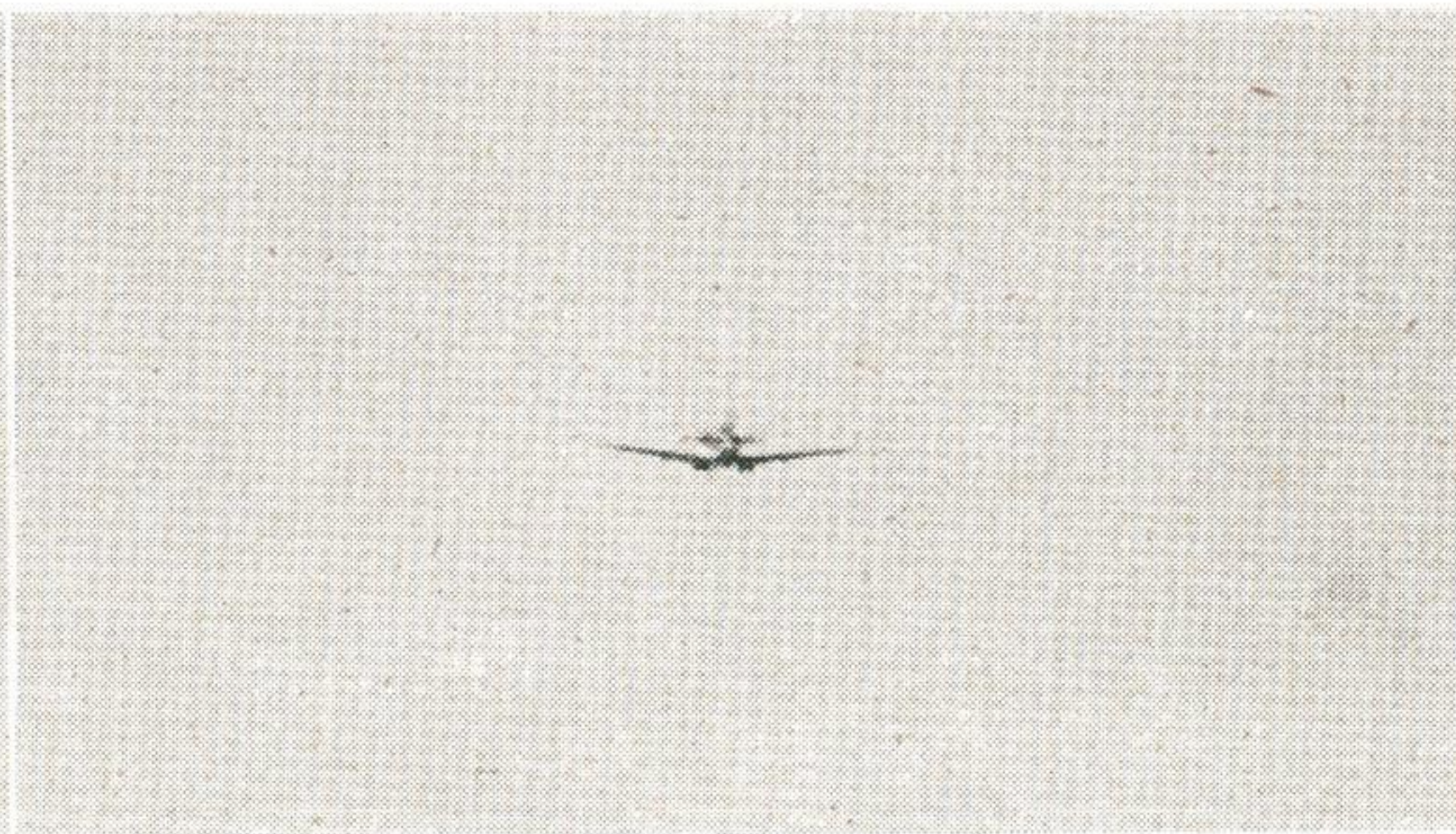
close-set engines—slight dihedral after all—single fin and rudder—



fat oval-section fuselage—radial engines—



Two deep wing-radiators—sharp dihedral angle to wing—



"spitfire" wing?—high-set tailplane—

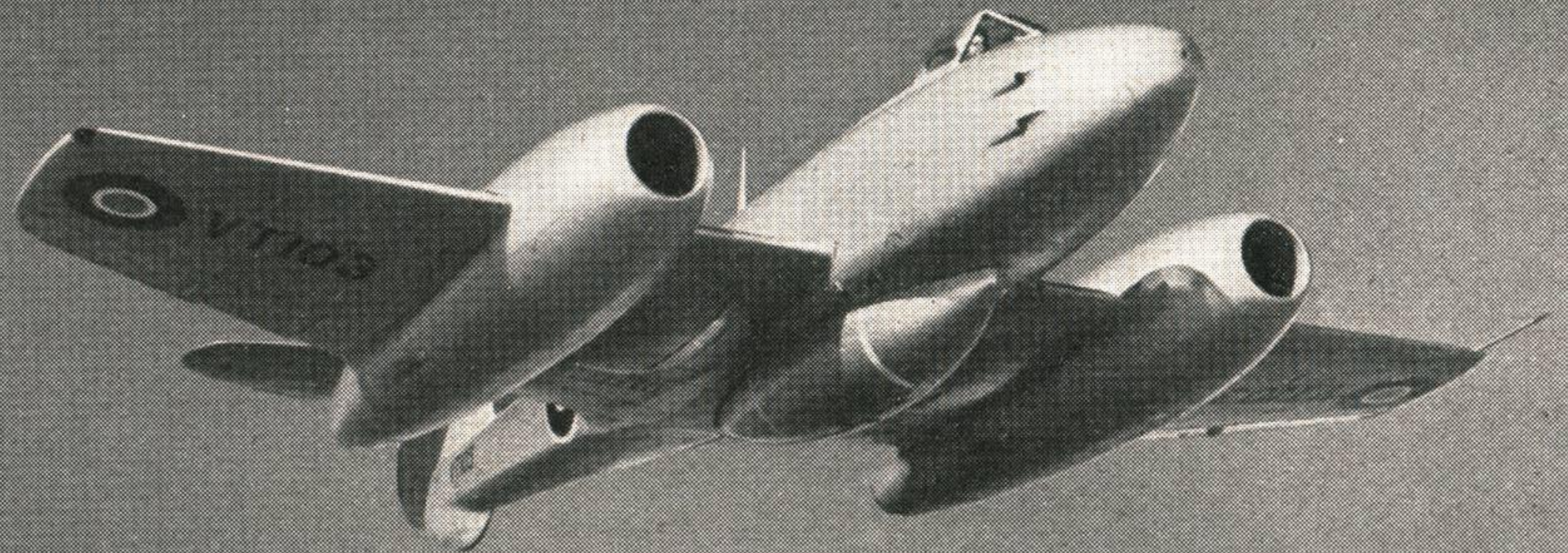


"spitfire" wing confirmed—single fin and rudder—

One idea behind these sequence shots is to aid long-range recognition, when aircraft are no more than specks on the horizon: in fact, we might have entitled this feature "Fly Spotting." Speed in fly-spotting is important. Here's a good lesson. It was necessary to photograph the Meteor with its air-brakes retracted, but the first run was so fast that only one shot was possible between the "fly-spot" stage and its reaching the photo-Lancaster's tail-turret. The second run was successful but, as will be seen, the distances between shots are noticeably greater for the Meteor than for the other aircraft. All this shows that when a jet-fighter means business there is not much time for recognition between sighting the speck and its being too close for comfort. Instantaneous recognition is the only answer, and that comes only with constant practice.



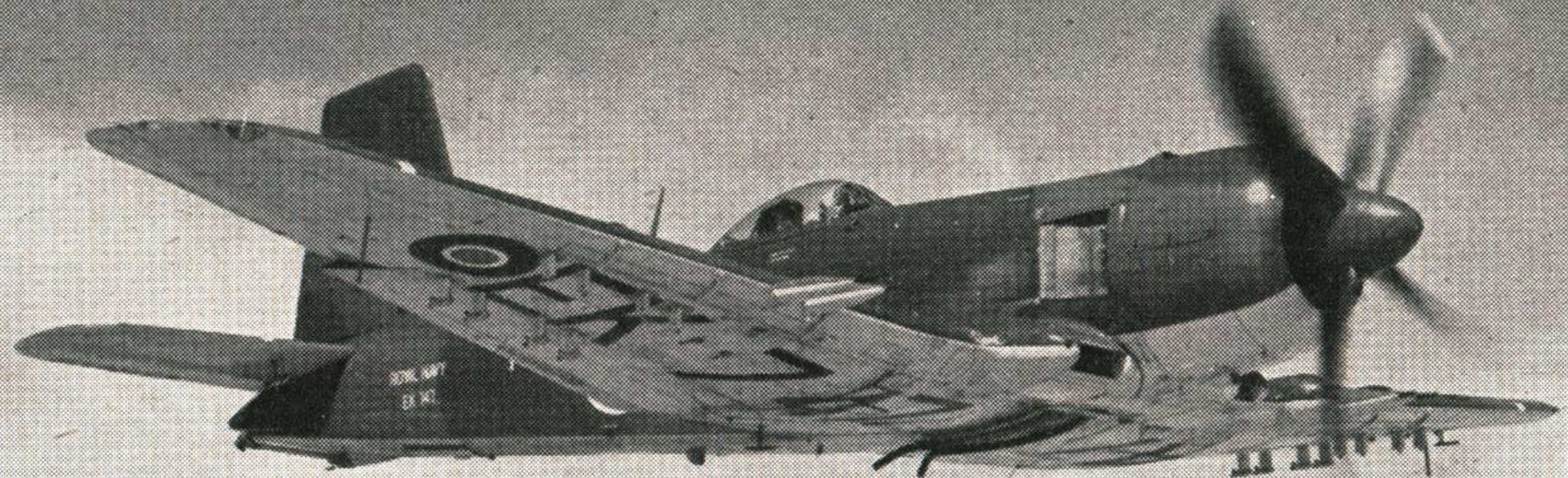
slender fuselage — fin-extension
beneath fuselage — short-span
clipped-wings.



Gloster Meteor F. Mk. IV (Span 37 ft. 2 ins.)



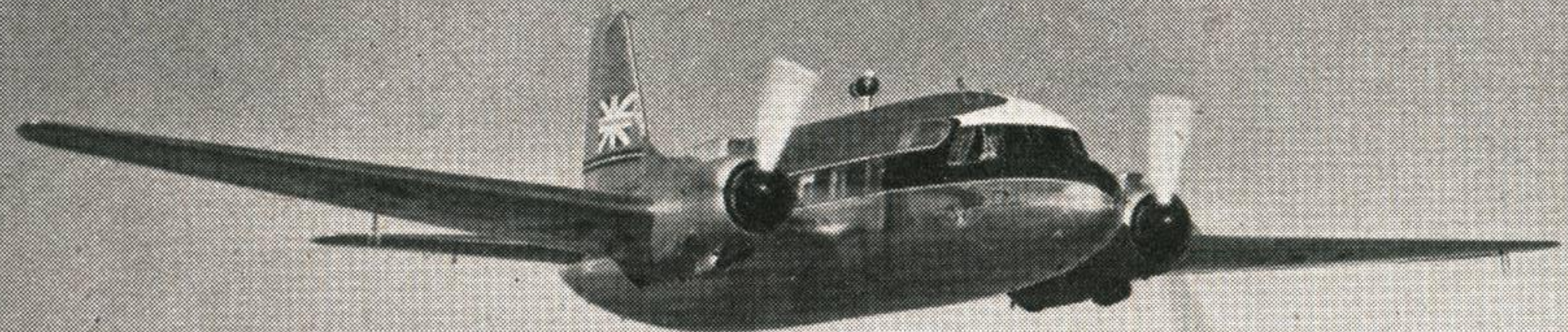
"straight-through" fuselage—
sharp angle of dihedral—tall fin
and rudder—tail-plane on fuselage.



Blackburn Firebrand T.F.B. Mk. 5 (Span 51 ft. 3 ins.)



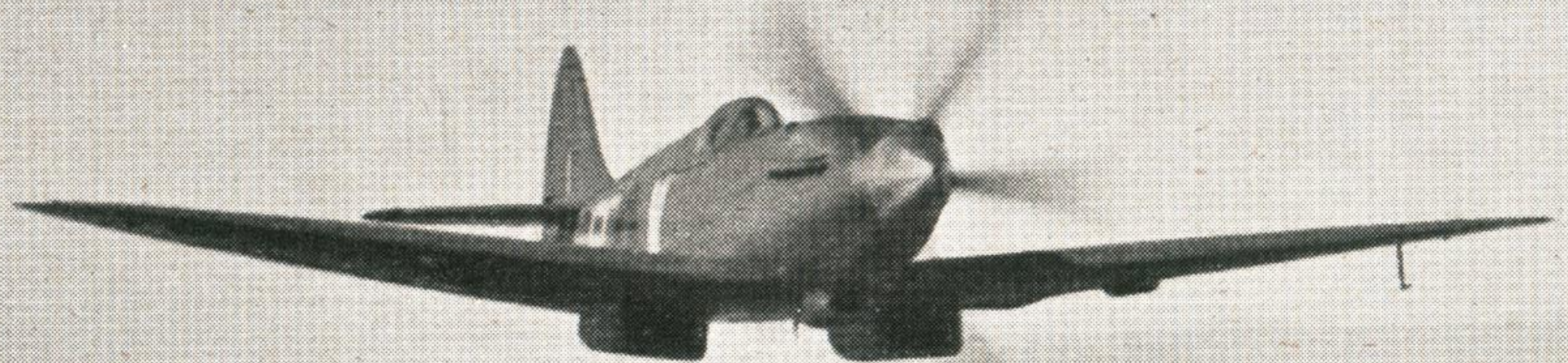
d/f loop on cabin—intakes above
and below radial-engine cowling.



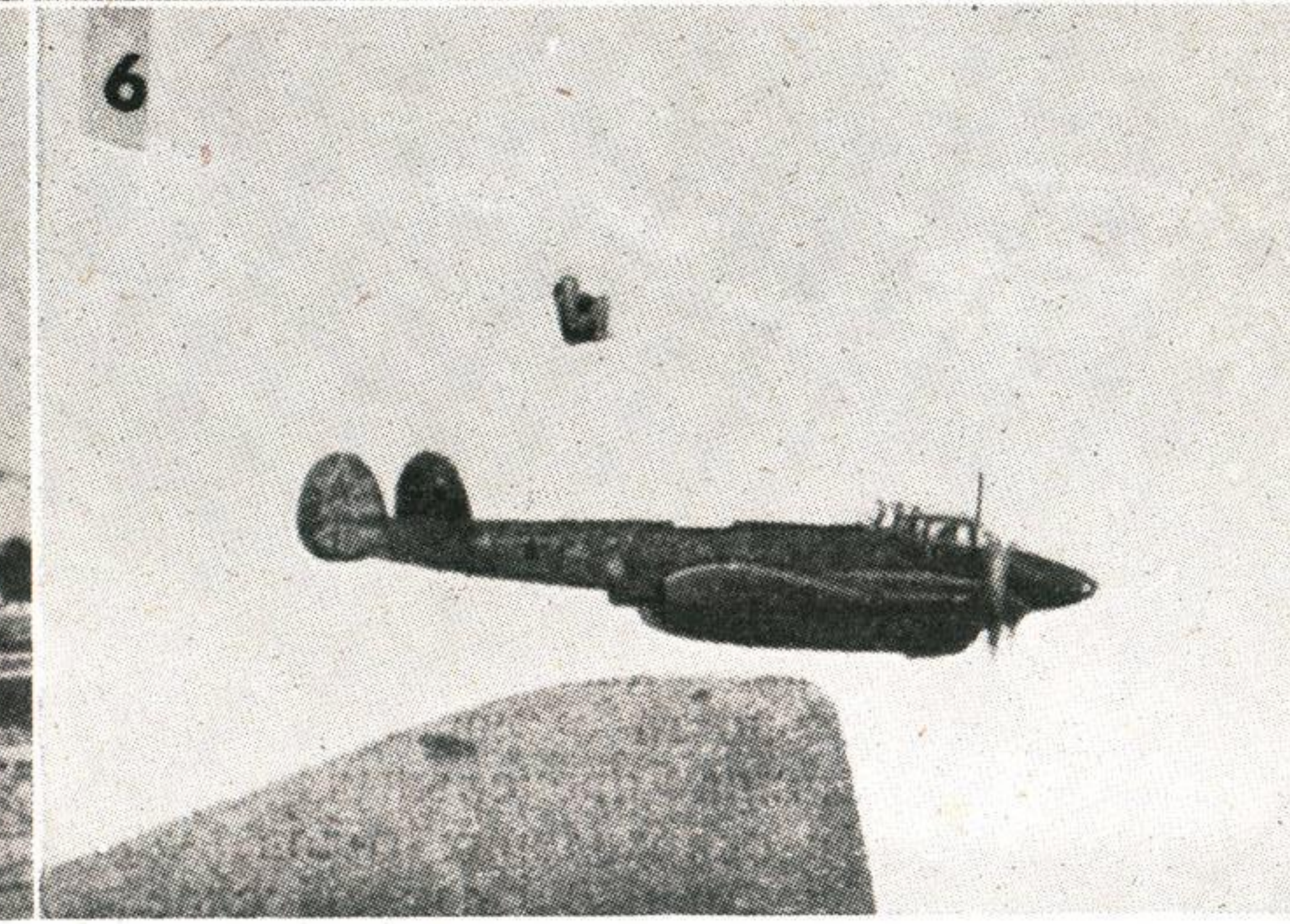
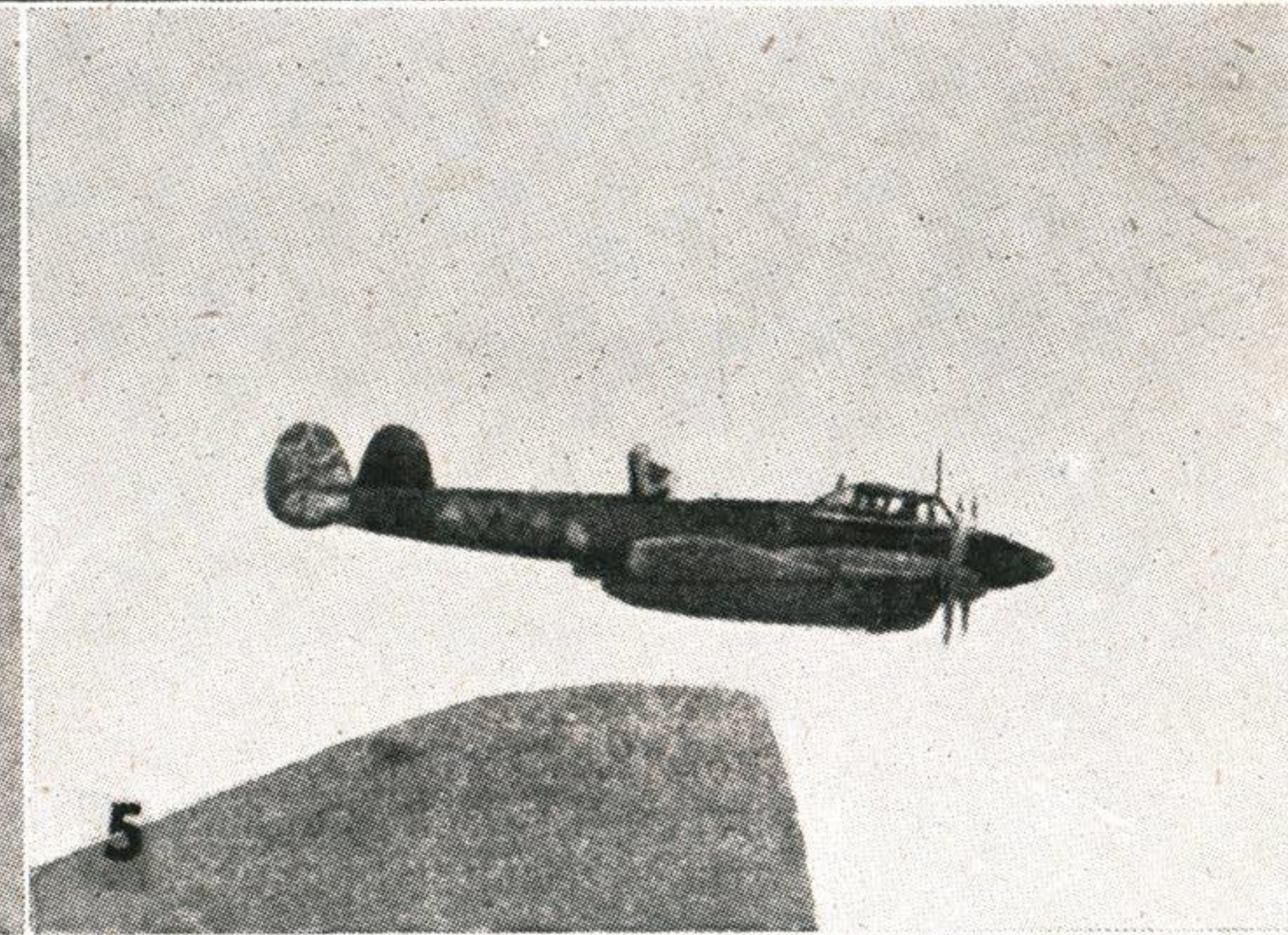
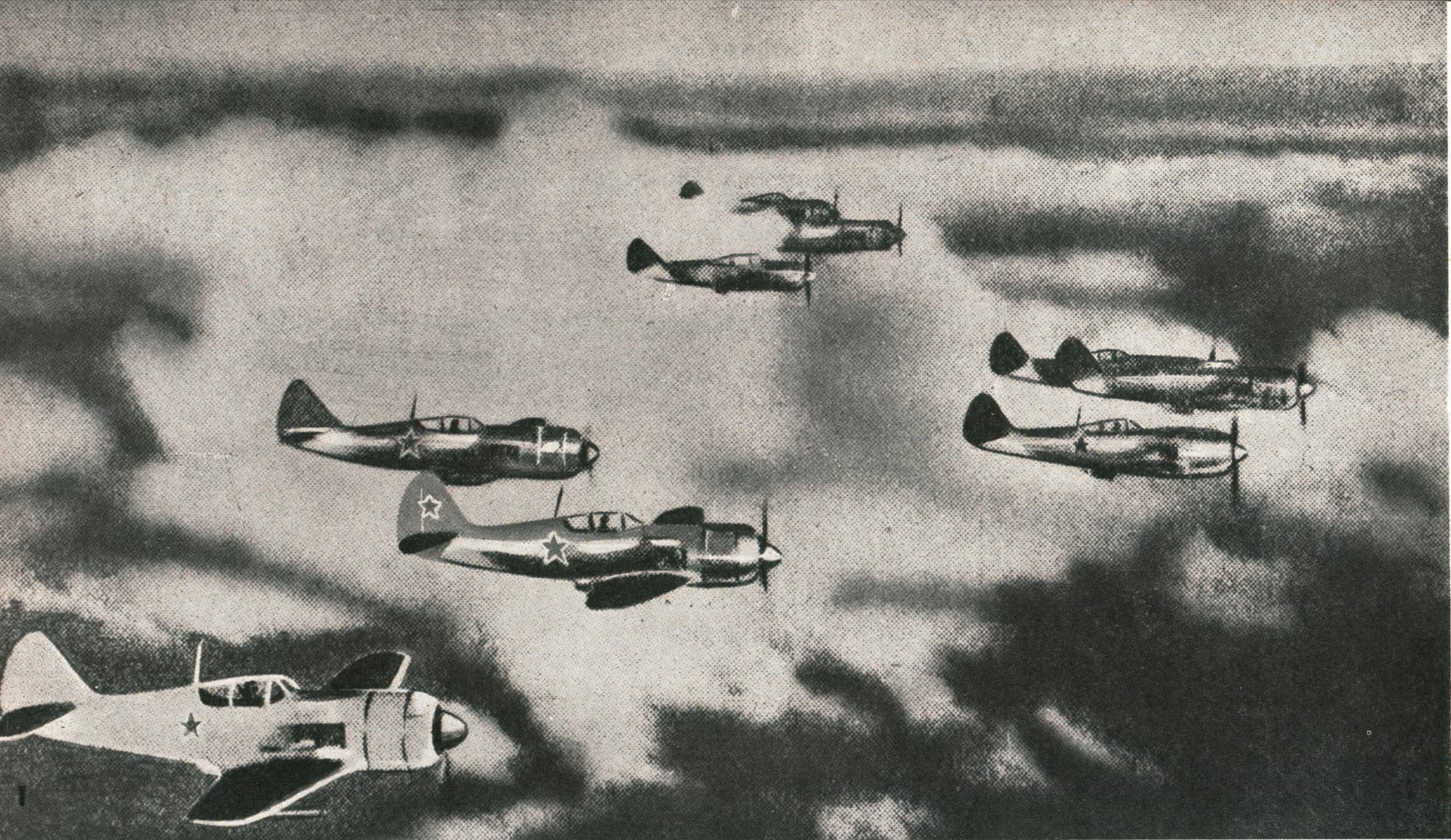
Vickers Armstrongs Viking Mk. 1B (Span 89 ft. 3 ins.)



small intake beneath "merlin"
type cowling—"spitfire" charac-
teristics.



Vickers Armstrongs Spitfire P.R. XIX (Span 36 ft. 10 ins.)



IRON CURTAIN AIRCRAFT IN THE NEWS

LA-9

1. **Oo La La !**—A formation of LA-9 fighters sporting in the cloud tops. Note characteristic nose-heaviness suggested by the large radial engine and spinner. The man-size fin and rudder tells a useful tail. (Wing span 34 ft. 9 ins.)

KAMOV VERTOLET

2. **Kamov It !**—At least it looks as though the pilot will : he's apparently a Russian version of Bob Hope. "Vertolet" means "vertical flight". This is the first photo seen of a Russian helicopter of the twin superimposed co-axial contra-rotating type.

BRATUKHIN HELICOPTER

3. **Improved "Bailey Bridge"**—This twin-engined helicopter is an improved version of the earlier twin laterally-disposed rotor type which has large "girders" supporting the motors and rotors. This type carries eight passengers.

YAK-16

4. **Yak Transport**—A new transport by Yakovlev. It is a low-wing, twin-engine transport monoplane with a single fin and rudder. Engines are two ASH-21 radials of about 600 h.p. each, mounted low. It seats ten passengers. (Wing span 56 ft. 0 ins.)

PE-2

- 5 and 6. **Petlyakov's Chucker-Out**—A PE-2, fitted with an ejector seat, gets shot of its passenger. Incidentally, we think the configuration of the PE-2's cockpit and nose in this view gives quite a rat-like expression to the aeroplane. Oval twin fins and rudder also aid recognition. (Wing span 56 ft. 0 ins.)

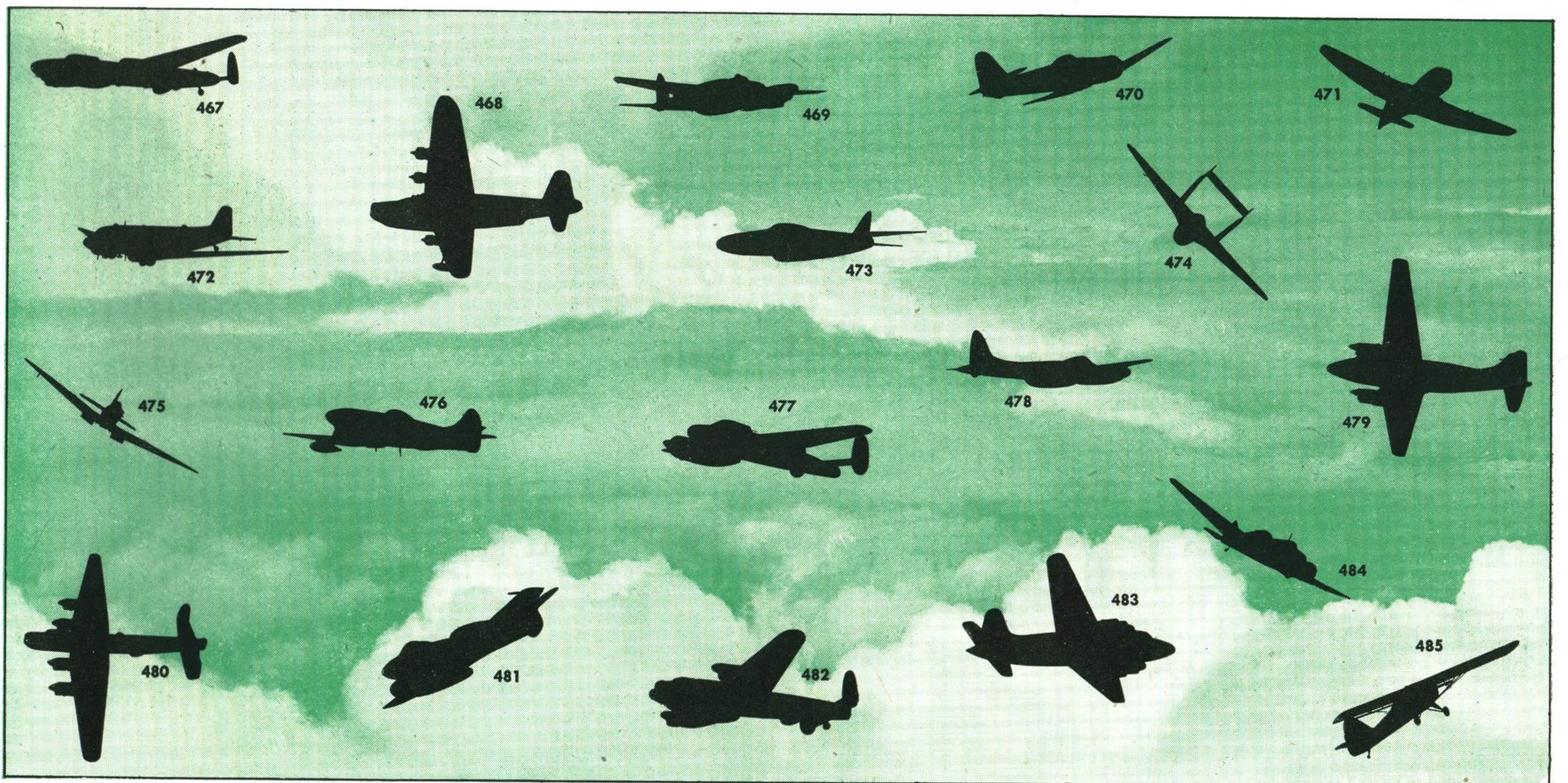
ADVANCED SPOTTING

Recognition Test No. 85



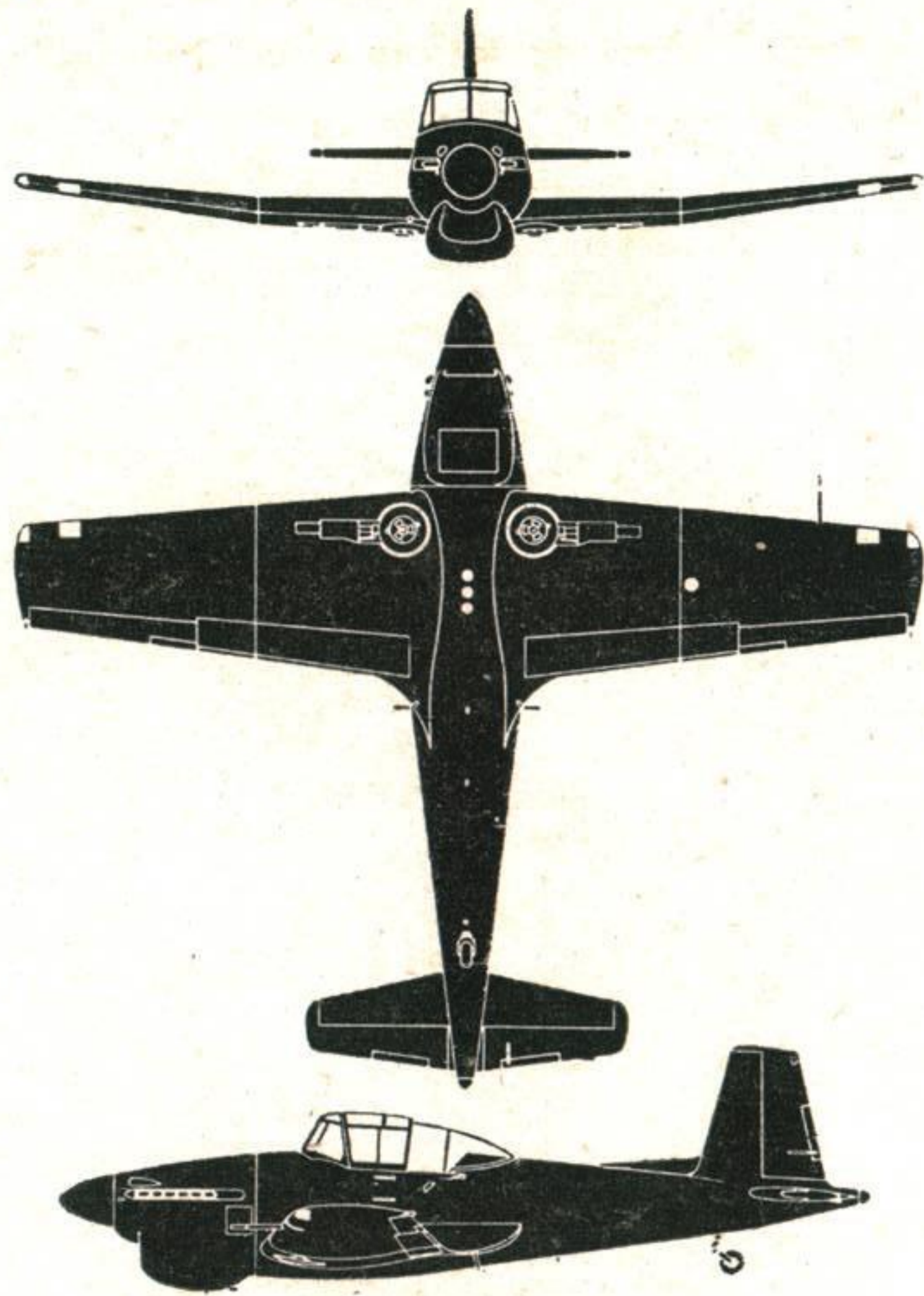
SILLOGRAPHS

Recognition Test No. 85



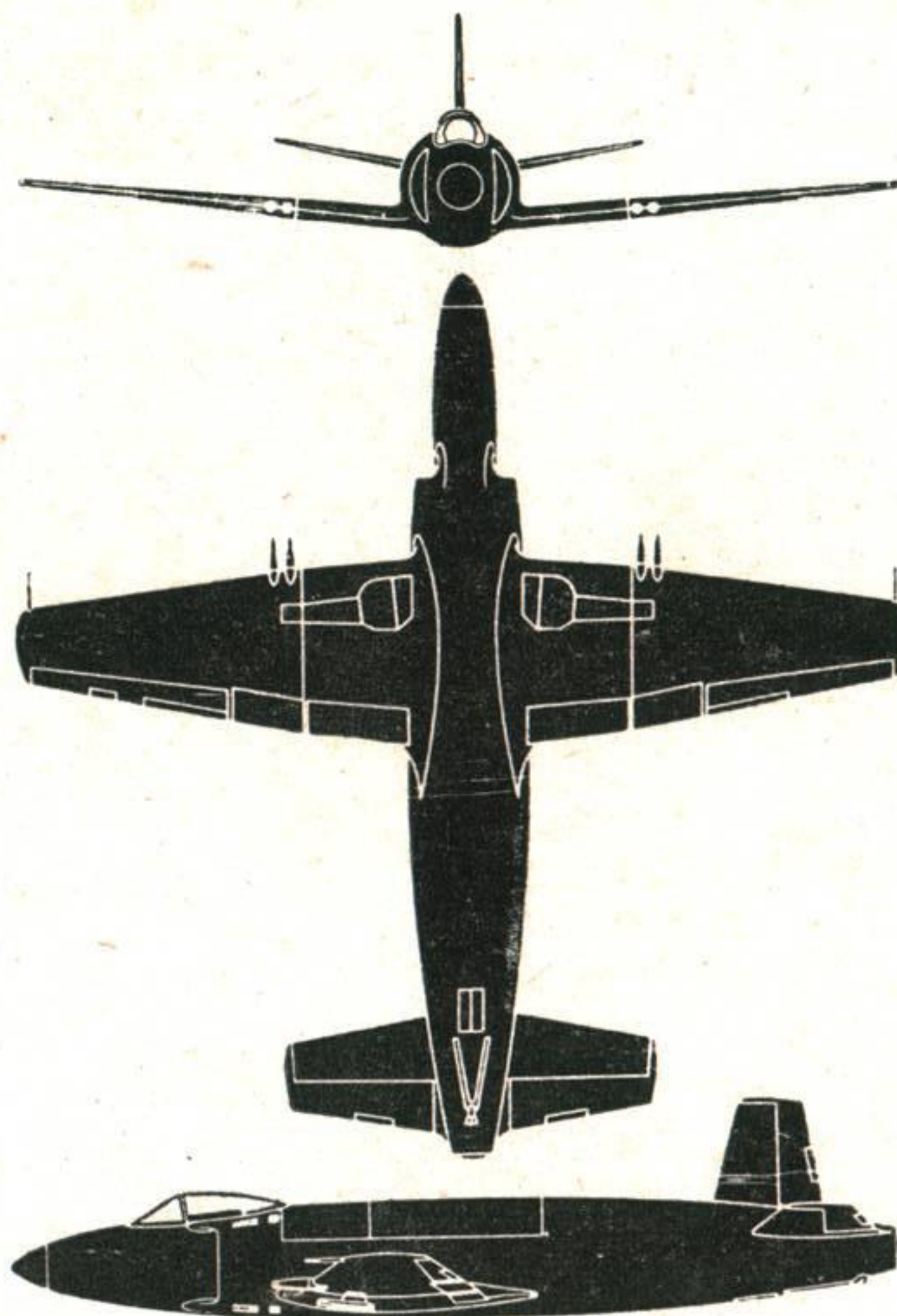
NEW and REVISED SILHOUETTES

BOULTON PAUL BALLIOL T MK. 7



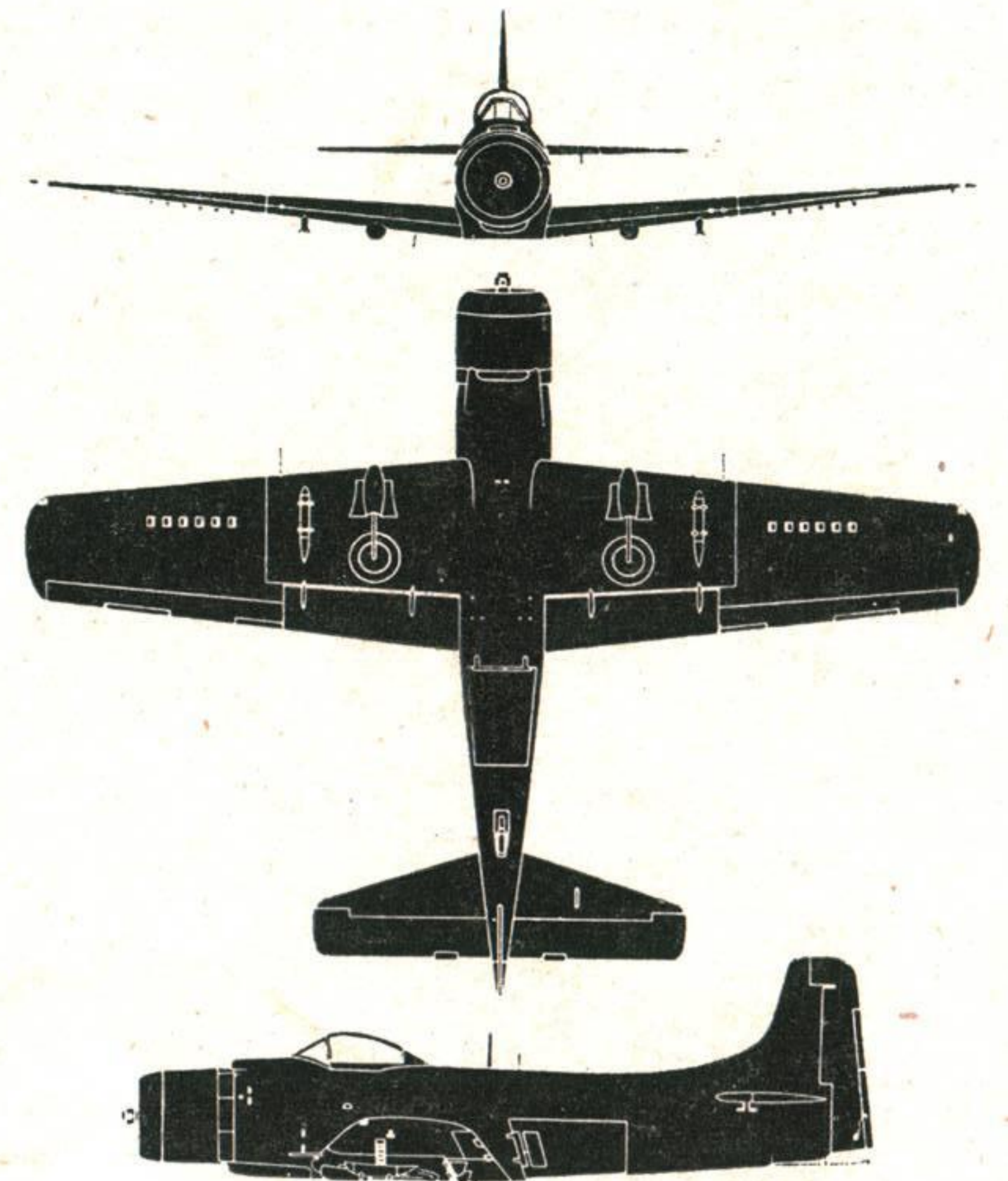
British Trainer
One Merlin 35 in-line
Span : 39 ft. 4 ins.
New Silhouette

VICKERS SEA ATTACKER



British Fighter
One Nene jet
Span : 36 ft. 11 ins.
New Silhouette

DOUGLAS AD-1 SKYRAIDER



American Bomber
One R-3350-24 radial
Span : 50 ft.
New Silhouette

SOLUTIONS TO RECOGNITION TESTS IN THIS EDITION :

FRONT COVER : *Handley Page Hastings landing at Schleswigland.*

No. 84 (ELEMENTARY)

- 529. Gyrodyne
- 530. Seagull
- 531. Hermes 4
- 532. Fiat G 12L
- 533. Eon
- 534. Firefly F.4
- 535. LA-5
- 536. Buckmaster T.1
- 537. Hastings C.1
- 538. Meteor T.7
- 539. Balliol T.2
- 540. Vampire F.B.5
- 541. Hawker P.1040
- 542. Solent
- 543. A.W.52
- 544. P.E-2 (modified)
- 545. S.52 Hoverfly 2
- 546. Meteor 4 (Beryls)
- 547. Viscount
- 548. Vampire F.B.5
- 549. Sealand

No. 85 (ADVANCED)

- | | |
|--------------------------|--------------------|
| 695. Prestwick "Pioneer" | 707. Lincoln B.1 |
| 696. Dove | 708. S.R./A.1. |
| 697. Balliol T.2 | 709. Firefly T.2 |
| 698. Dove | 710. Seagull |
| 699. PO-2 | 711. Athena T.1 |
| 700. Buckmaster T.1 | 712. Meteor T.7 |
| 701. Balliol T.2 | 713. Sealand |
| 702. Vampire F.B.5 | 714. Tudor 8 |
| 703. Chipmunk | 715. Gemini |
| 704. Solent | 716. Prentices T.1 |
| 705. S.M. 95 | 717. Freighter 21 |
| 706. Sea Fury F.10 | 718. Hastings C.1 |
| | 719. Valetta C.1 |

No. 86 (SILLOGRAPHS)

- 467. Lancastrian
- 468. Sunderland G.R.5
- 469. Mosquito P.R. 34
- 470. Sea Fury F.10
- 471. Tempest F.2
- 472. Dakota
- 473. Arsenal VG 70
- 474. Vampire F.3
- 475. Spitfire F.22
- 476. Tempest F.6
- 477. Brigand B.1
- 478. Hornet F.1
- 479. Dove
- 480. Lincoln B.2
- 481. Meteor F.4
- 482. Lancaster B.7
- 483. Viking 1
- 484. Oxford
- 485. Auster A.O.P. 6

TRICKY TRIO—V

Left to right, Boeing B-29, IL-18, Boeing B-50.

TRICKY TRIO—V

