

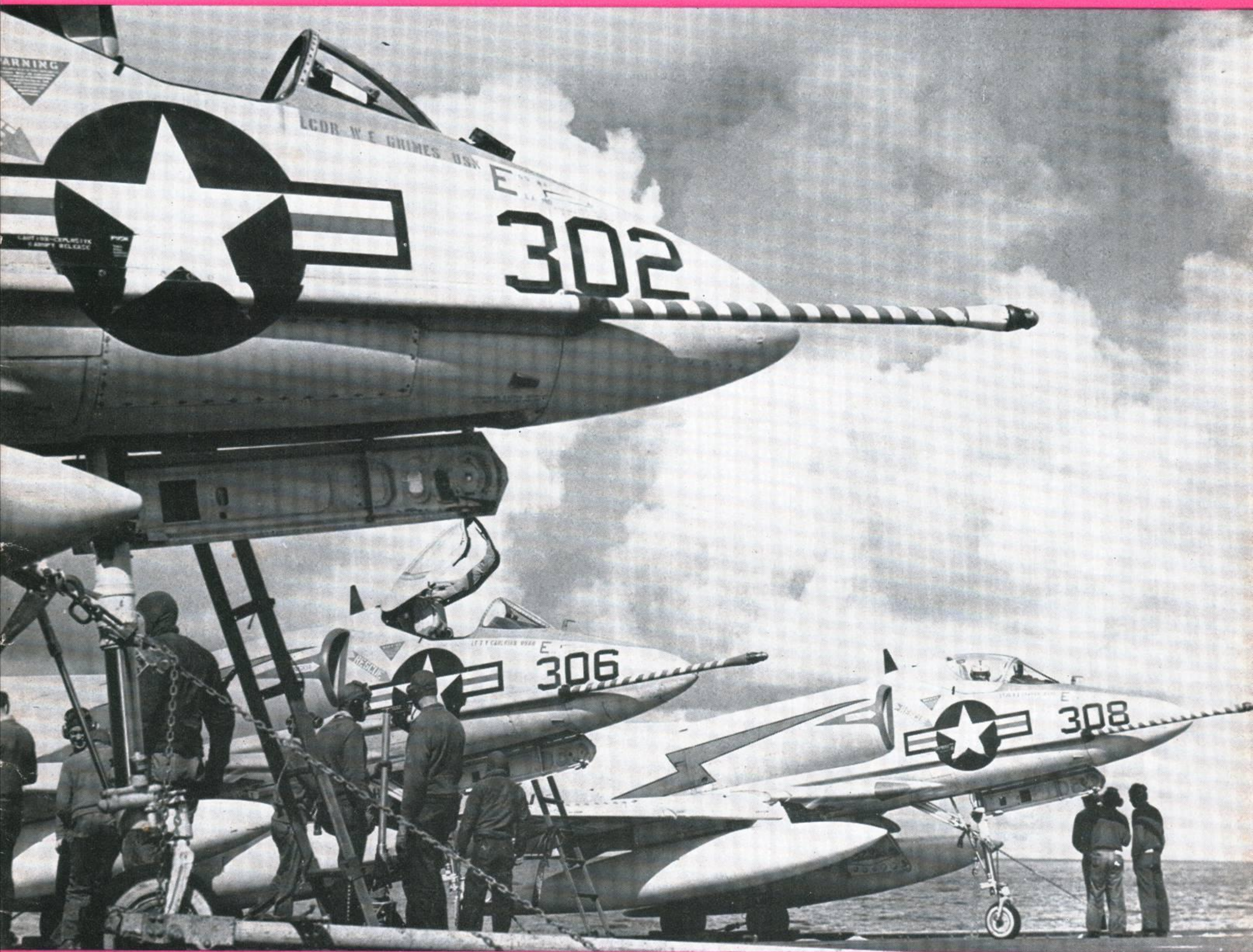
THE ROYAL



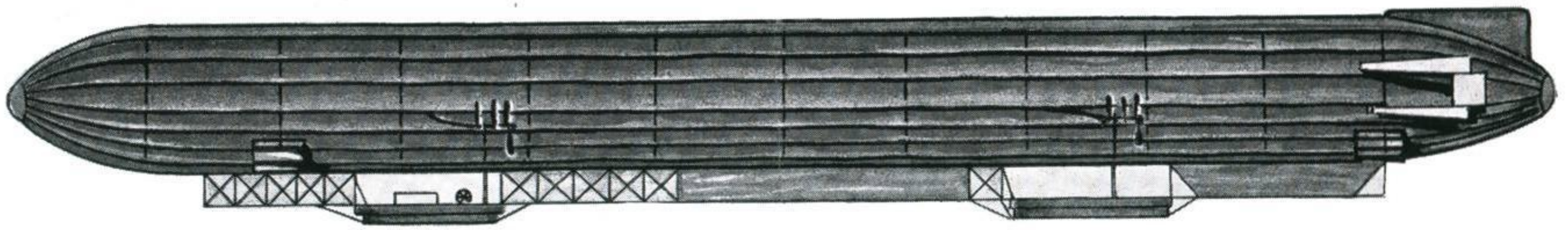
OBSERVER CORPS

RECOGNITION

Journal
and R.O.C. GAZETTE



Vol. 3 SEPTEMBER 1961 No. 9

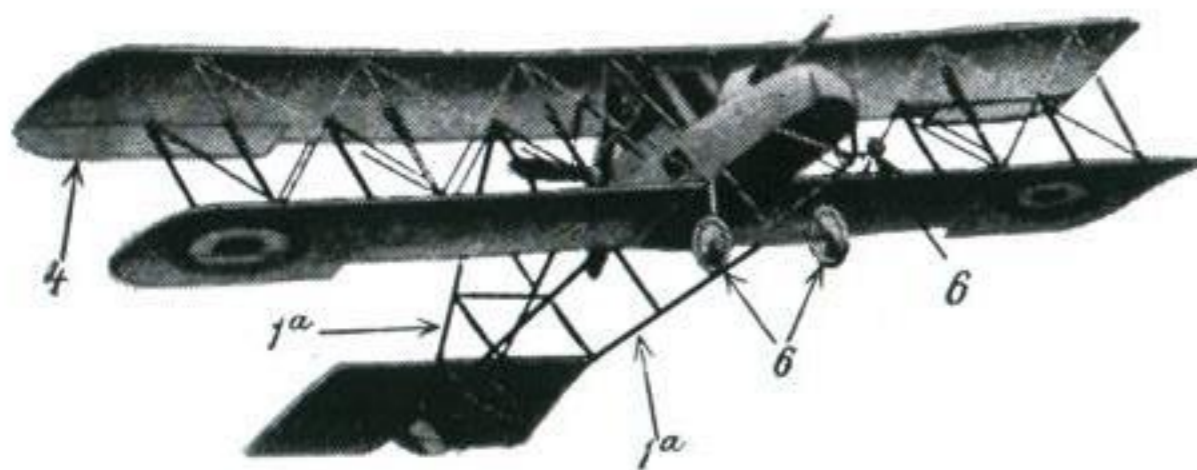


"ZEPPELIN" AIR-SHIP.
(RIGID)

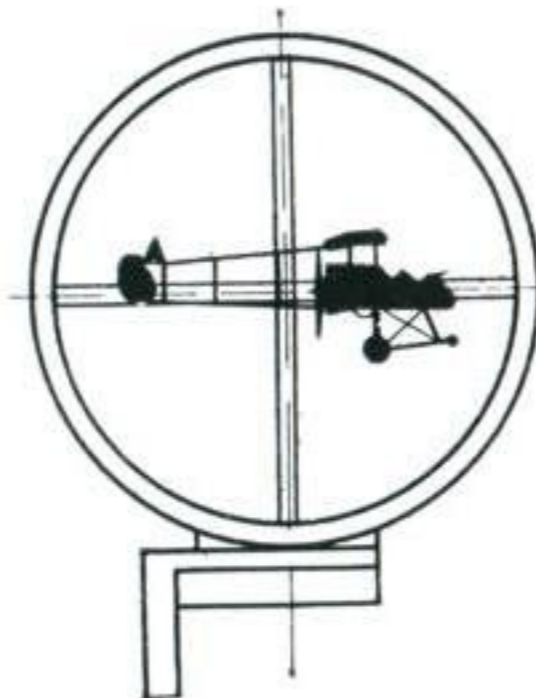
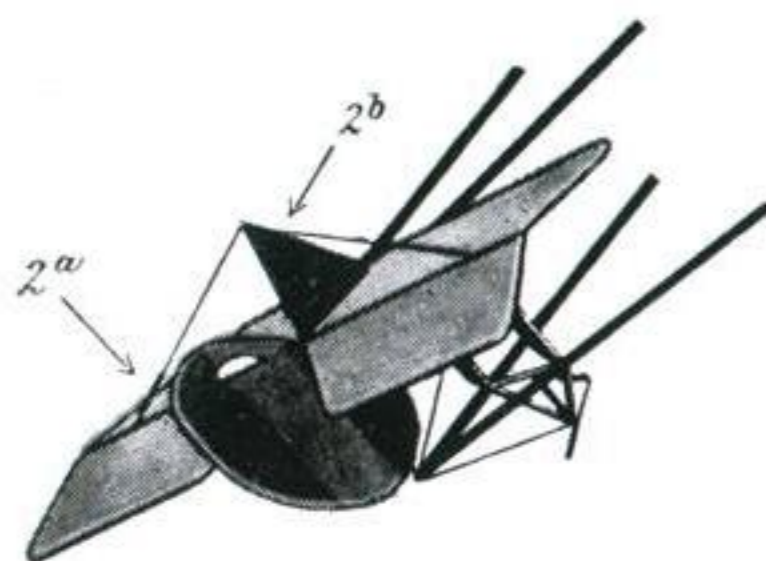
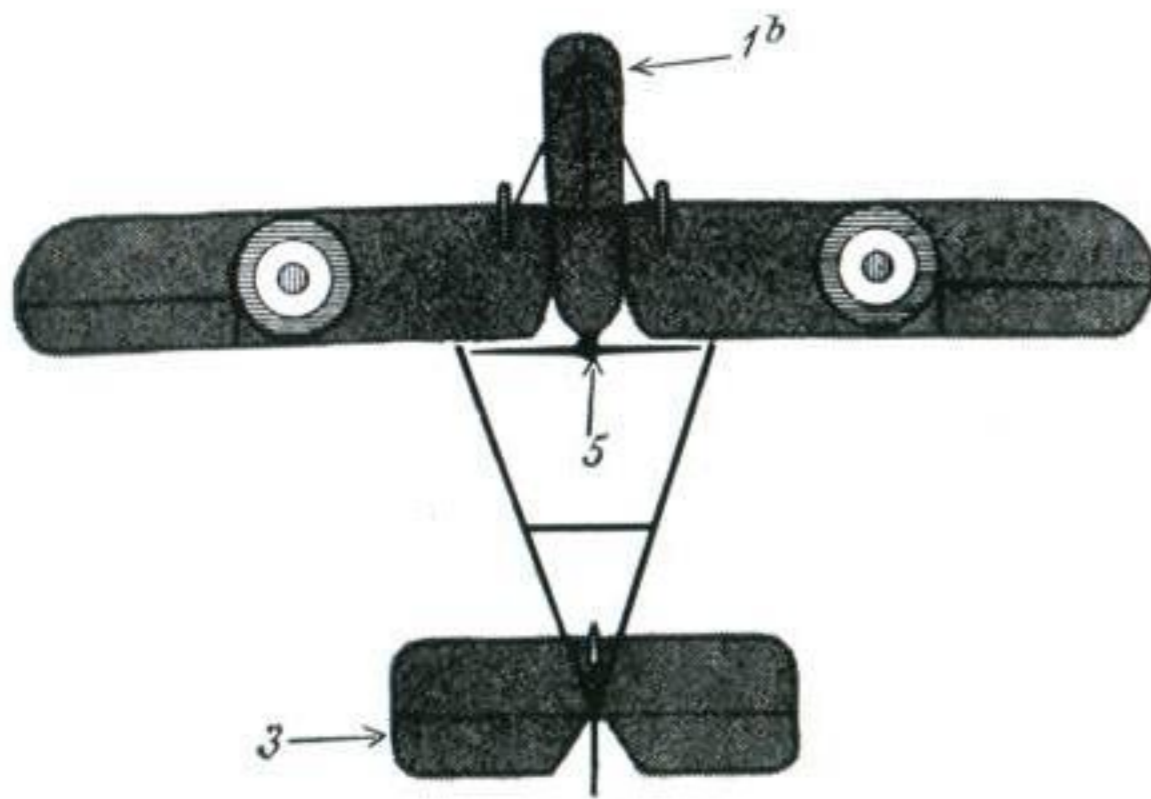
(The "Zeppelin" is the type of German Air-ship most likely to be seen in British Isles. All "Zeppelins" have the same general shape but there may be considerable minor differences from the above sketch, i.e. additional Gondolas, differently placed Tail-fins, etc.)



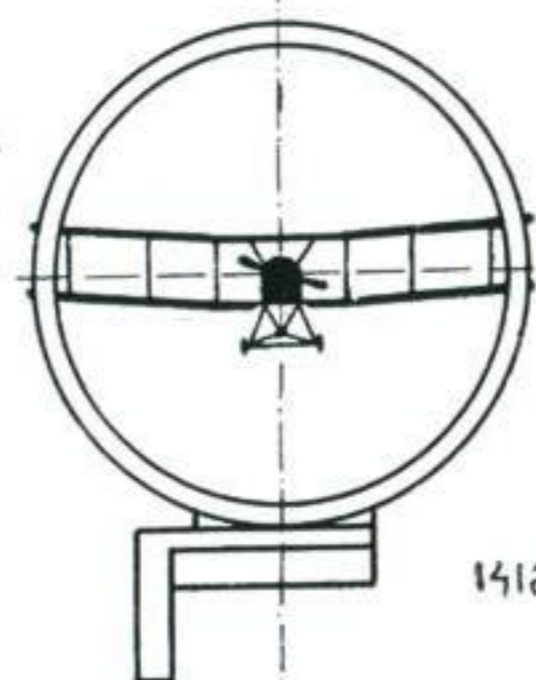
F. E.-Zweiffler.



A



Größe des Zielbildes im
Kreisform auf 300 m
Entfernung.



1412.

Examples from early British and German publications on aircraft recognition. Top: A German Zeppelin reproduced from a leaflet issued by the Admiralty in 1915. Bottom: A page from a German manual of 1917 showing a British F.E. 2B (described in German as an F.E. Two-seater). With typical German thoroughness, national markings, six-view sketches and aiming points were given for each Allied type featured in the manual. Opposite is an extract from Air Publication 1480, now discontinued.

EXACTLY fifty years ago, during August 1911, Sir John L. Lansdale, during Question Time in the House of Commons, asked the Secretary of State for War, Colonel Seely, if recent demonstrations of the utility of aeroplanes had received the attention of the War Office. The answer was "Yes."

From that time onwards there was a need for aircraft identification training; indeed, a few weeks later in 1911 a letter appeared in the Press asking if an aeroplane observed off the East Coast had been British or German.

However, not until the test of war in 1914, was the need for visual identification training considered, being forced upon the authorities by troops firing wildly into the air at friend and foe alike. In later years Air Chief Marshal Sir Philip Joubert de la Ferté recalled the roar of musketry that greeted him as he flew over a British infantry battalion! By the end of 1914 pamphlets showing the features of British, German and French aircraft were prepared and, together with posters, were issued to units of the British Expeditionary Force early in 1915.

Later in 1915, a Field Service Publication used the silhouette method to portray aircraft features and as the war progressed



THE ROYAL

OBSERVER CORPS

RECOGNITION JOURNAL
AND R.O.C. GAZETTE

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Briefs	140
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*Identification Lessons

NEED FOR 50 YEARS

and new types evolved, so subsequent editions appeared until by 1918 "de luxe" editions were available with silhouettes supplemented by plates of three-view photographs in separate booklets for British, Allied and German types. The Germans, on their part, produced similar booklets.

During the years following World War I official interest in the subject flagged, until the R.A.F. re-equipment and expansion programme was launched in 1933. Before the Second World War came an Air Publication, A.P. 1480 Handbook of Aircraft Recognition, had been produced, using the three-view silhouette method, later supplemented with six-view photographs; but something more was needed.

"The first requirement in warfare is to distinguish friend from foe," wrote Marshal of the R.A.F. Viscount Portal when Chief of the Air Staff in 1942. To help give effect to that requirement *The Inter-Services Journal Aircraft Recognition*, was produced and issued monthly from September 1942 onwards. With the end of the war, publication ceased in September 1945, only to reappear in June 1946.

It had long been realised, however, that training lacked punch and did not fully help many who needed it. Following scientific research and experiment more effective training techniques were developed, and from January 1951 the *Journal* began to include new self-training features and widened its scope to include ships and armoured fighting vehicles, for as Air Chief Marshal Sir Theodore McEvoy remarked, when the first of the new series was launched—"Although scientific developments continue to change the conduct of war, recognition of the enemy still depends mainly upon the eyes and ears of sailors, soldiers, airmen and observers."

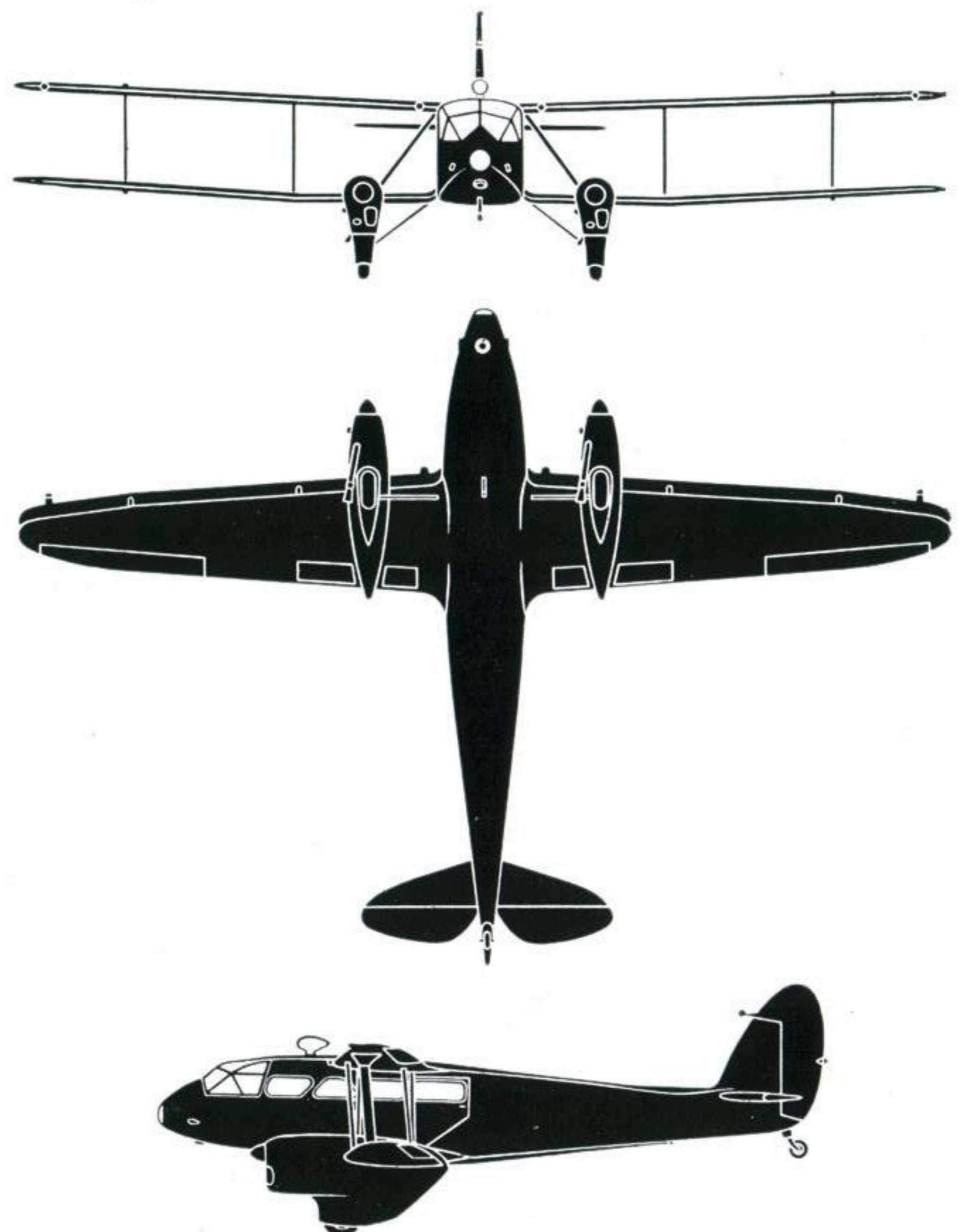
The need is still the same in 1961 but the need for such things as the Field Services Handbooks of Recognition of World War I, and the more familiar A.P.1480 Handbook of Aircraft Recognition and many other kinds of training material has passed. This *Journal*, together with the Joint Services Recognition Journal, is now the prime medium for identity training; through its specially designed lessons the ability to

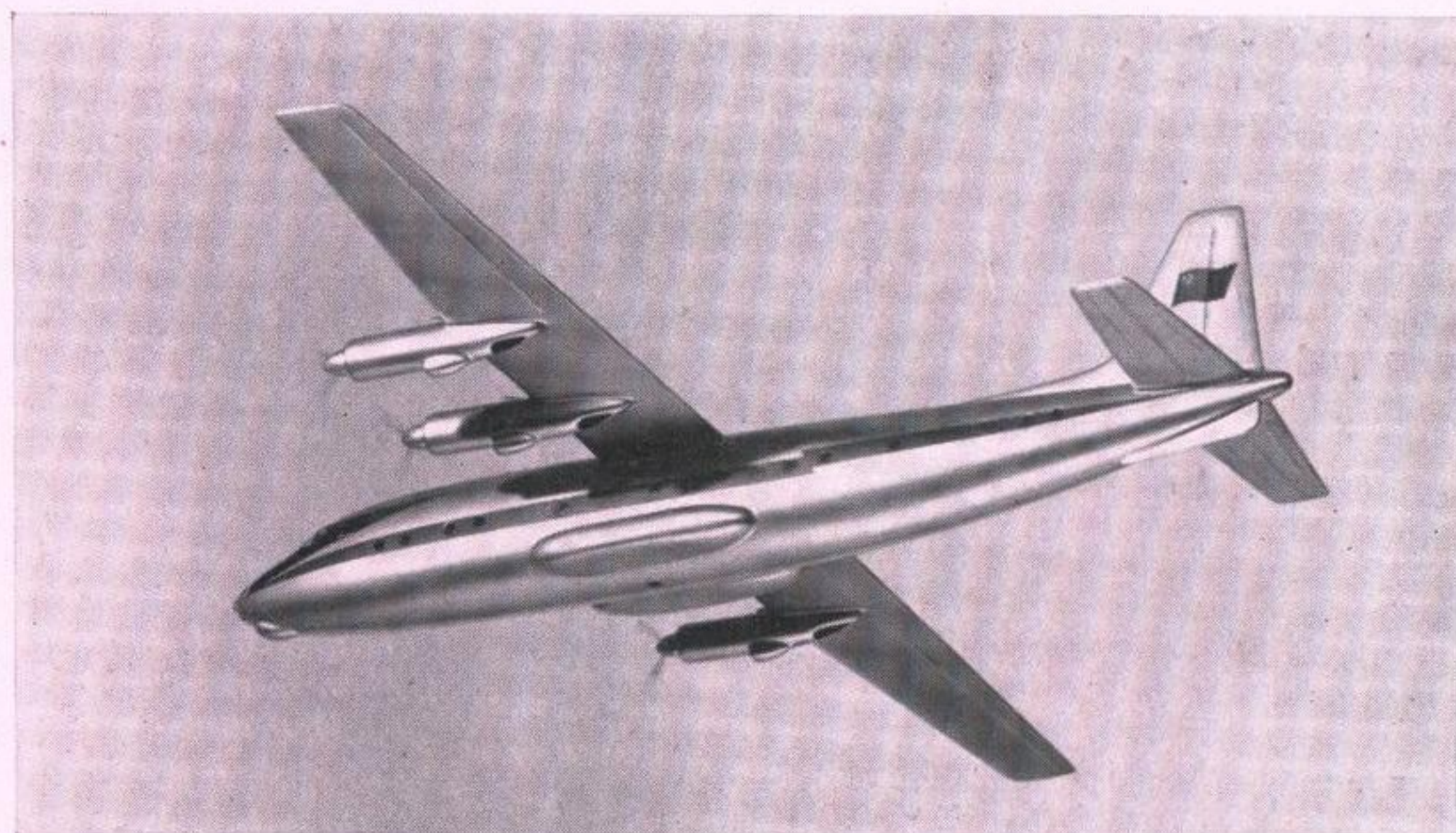
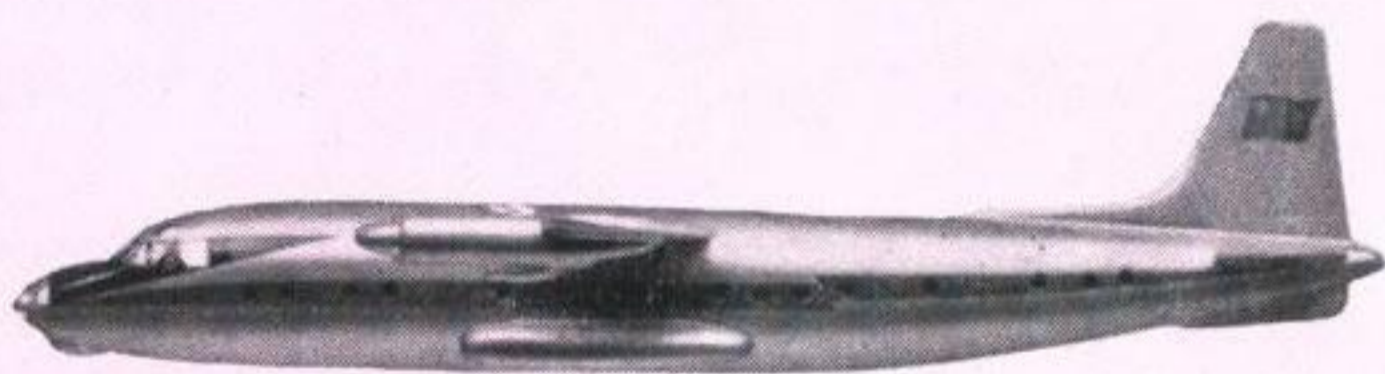
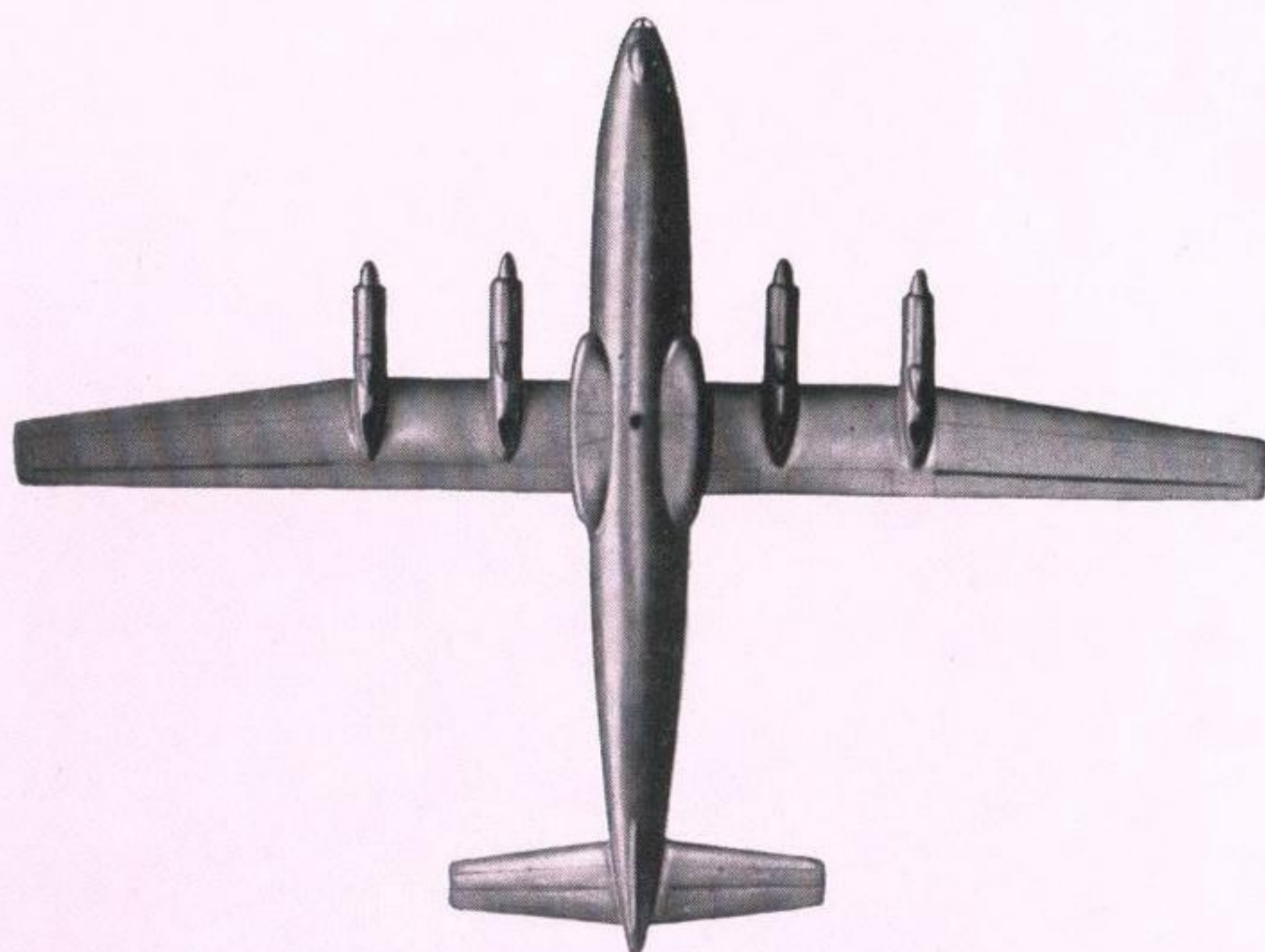
identify is no longer the prerogative of the natural spotter: everyone from the raw recruit upwards can, without previous experience, attain proficiency in accurate aircraft identification.

Here, then, is the need of 50 years fulfilled: it needs only your attention.

A.P. 1480/Brit., Sect. 1D

DOMINE I





CAT

Aliases: Antonov AN-10 and 10A; Ukraine.

Nationality and Function: Civil (and possibly Military) Transport of U.S.S.R.

Type of Aircraft: Four-engine high-wing monoplane of conventional design.

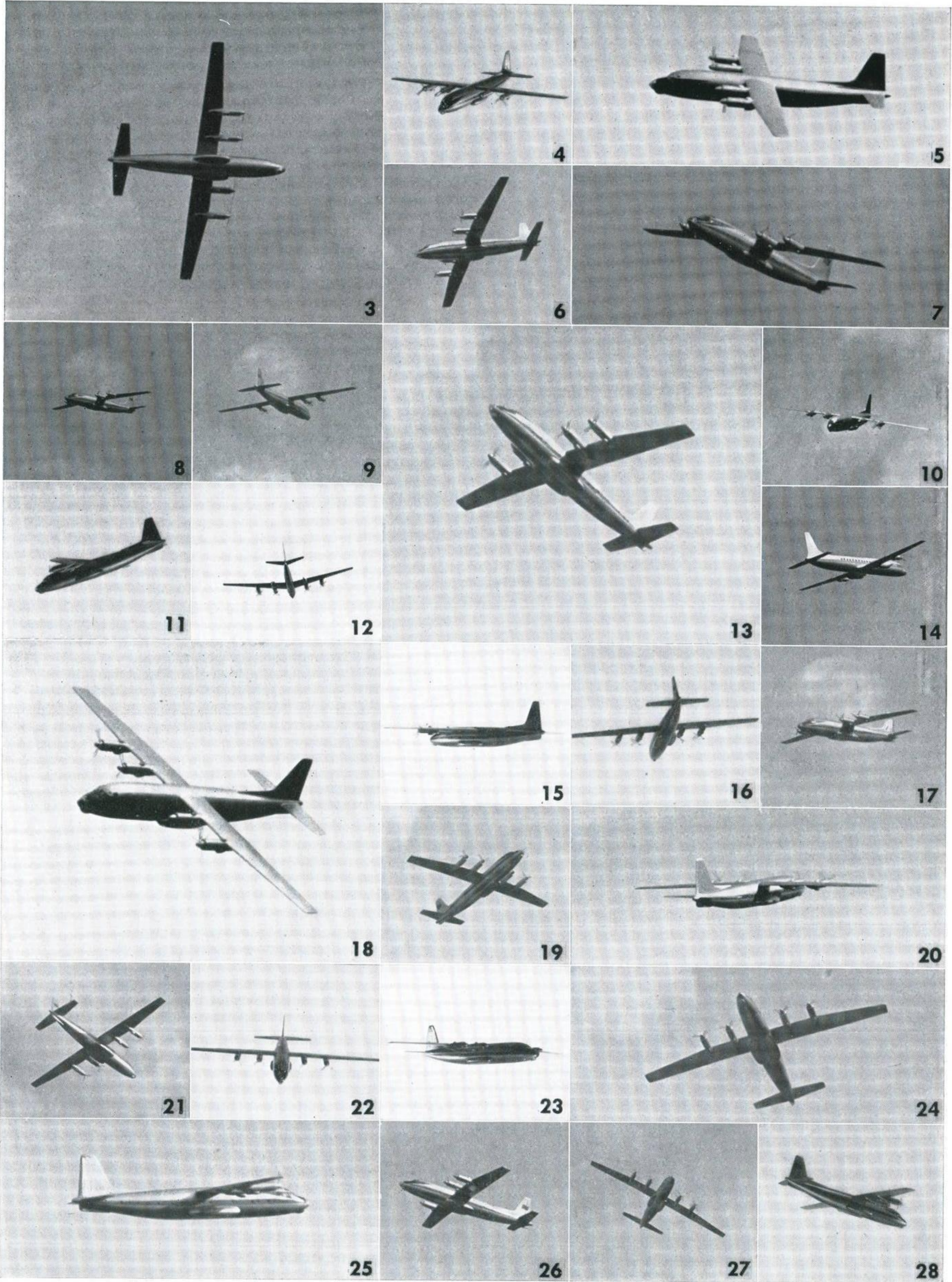
Main Characteristics: Four long turbo-prop engines; undercarriage blisters on fuselage; broken-tapered wing with strong visual droop in some views.

The Cat is flying for Aeroflot in some numbers in Europe and Asia and much has been written and spoken of its economy of operation. The Russians claim that it is the world's most economical transport aircraft—they *would*. There are two versions of the Cat: AN-10 and the AN-10A. The Cat A, so to speak, is a stretched version (by 7 feet) and so carries more passengers. As for identifying this feline, she shows herself pretty well here. On this page she appears at low altitude and in easily distinguishable attitudes: overleaf she's a bit more coy. But in each lesson the procedure set out below will see you through.

Lesson Instructions: Select an easy target and compare it with the silhouette view: if it is Cat write "Cat" on your target list. Then go on to identify the others.

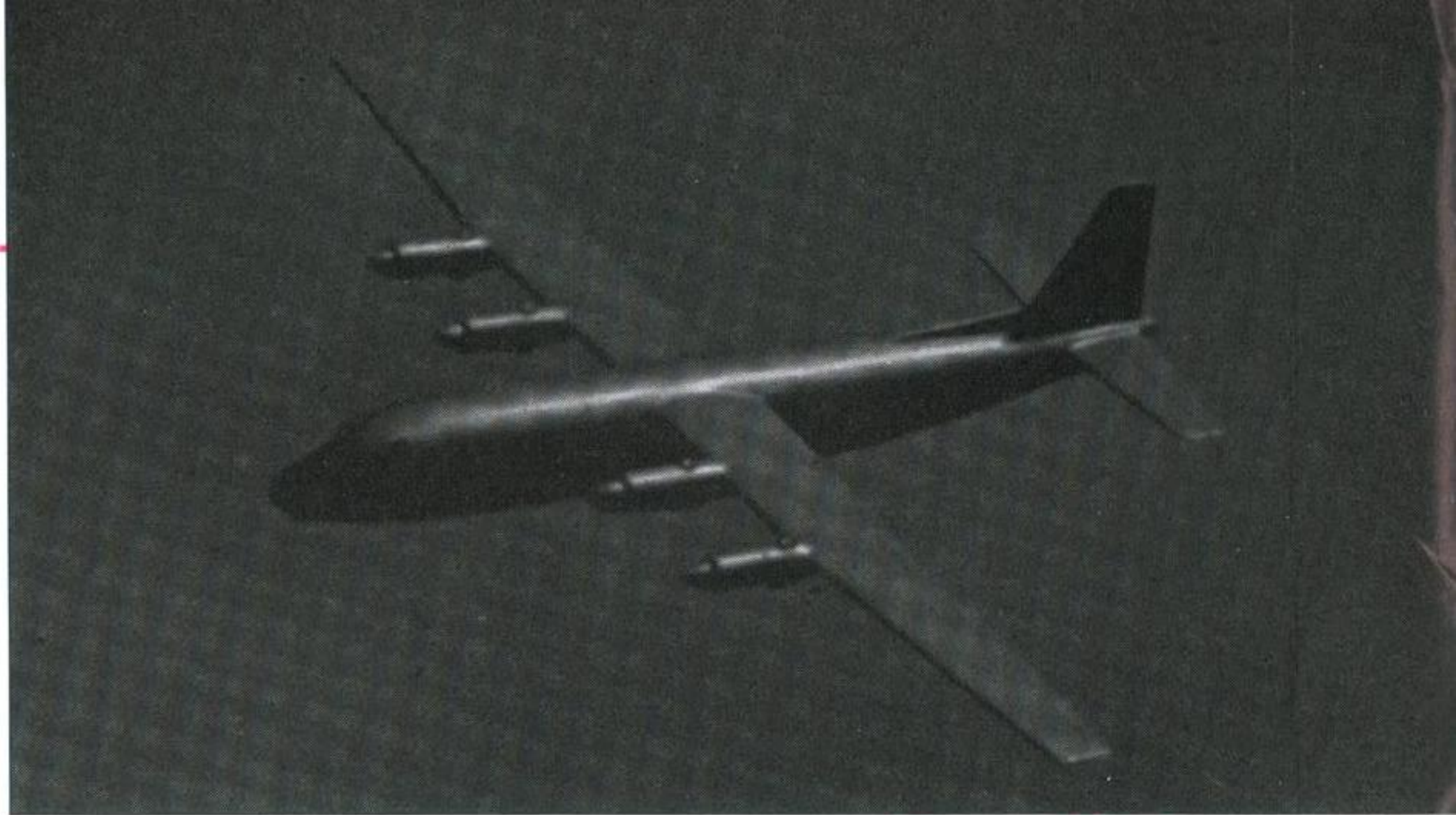
FIRST TARGET ▼



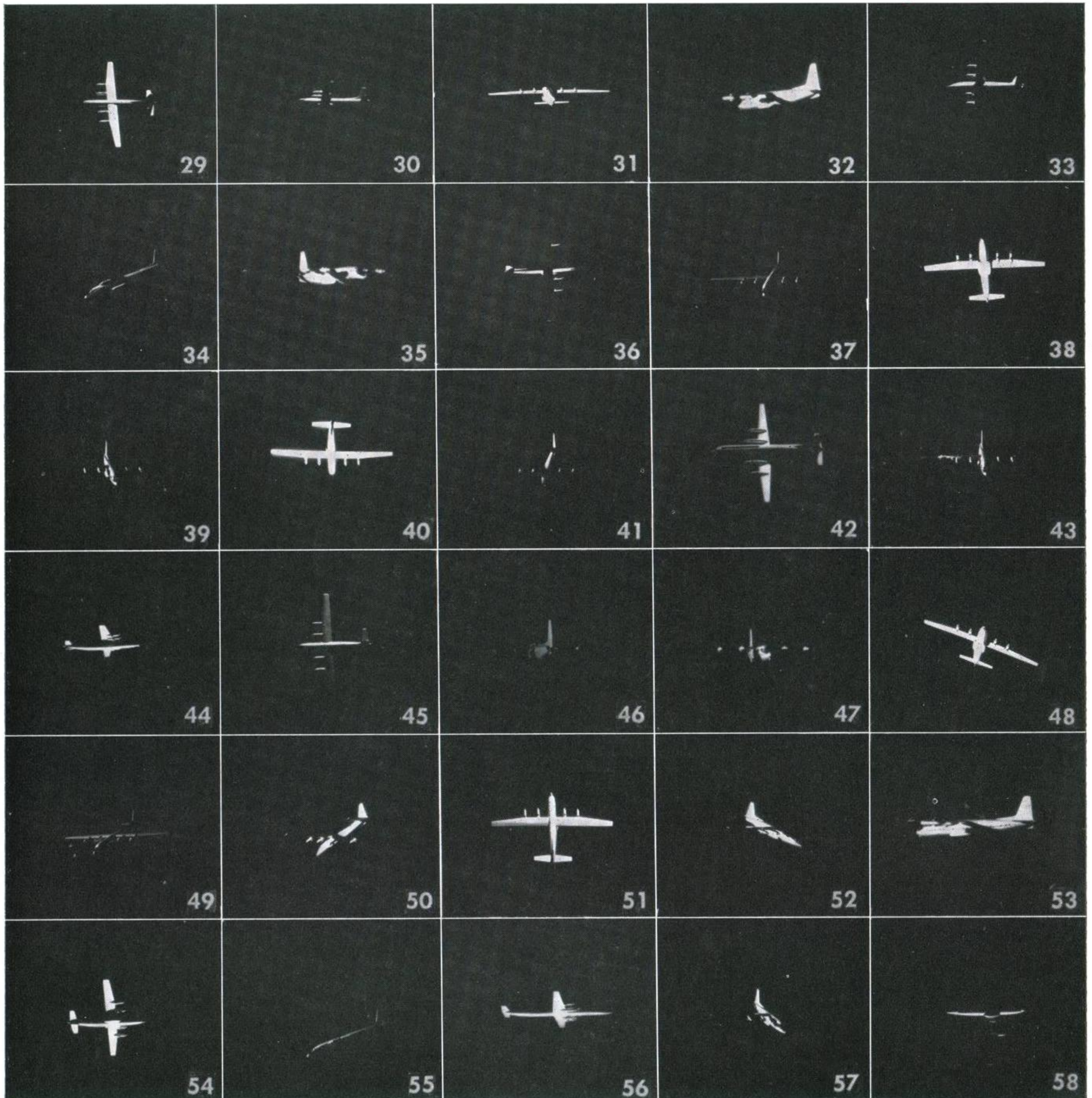


CAT in Highlights and

These are views of an aeroplane at altitudes where the air is rarified and sunlight is undiffused. Are they all Cats? Only part of the aircraft can be seen, strongly illuminated by strong sunlight, while the rest is lost in heavy shadow against the dark sky. To identify aircraft in these circumstances needs special training. However, the procedure is the same as for other forms of recognition training and is set out in full on page 142.

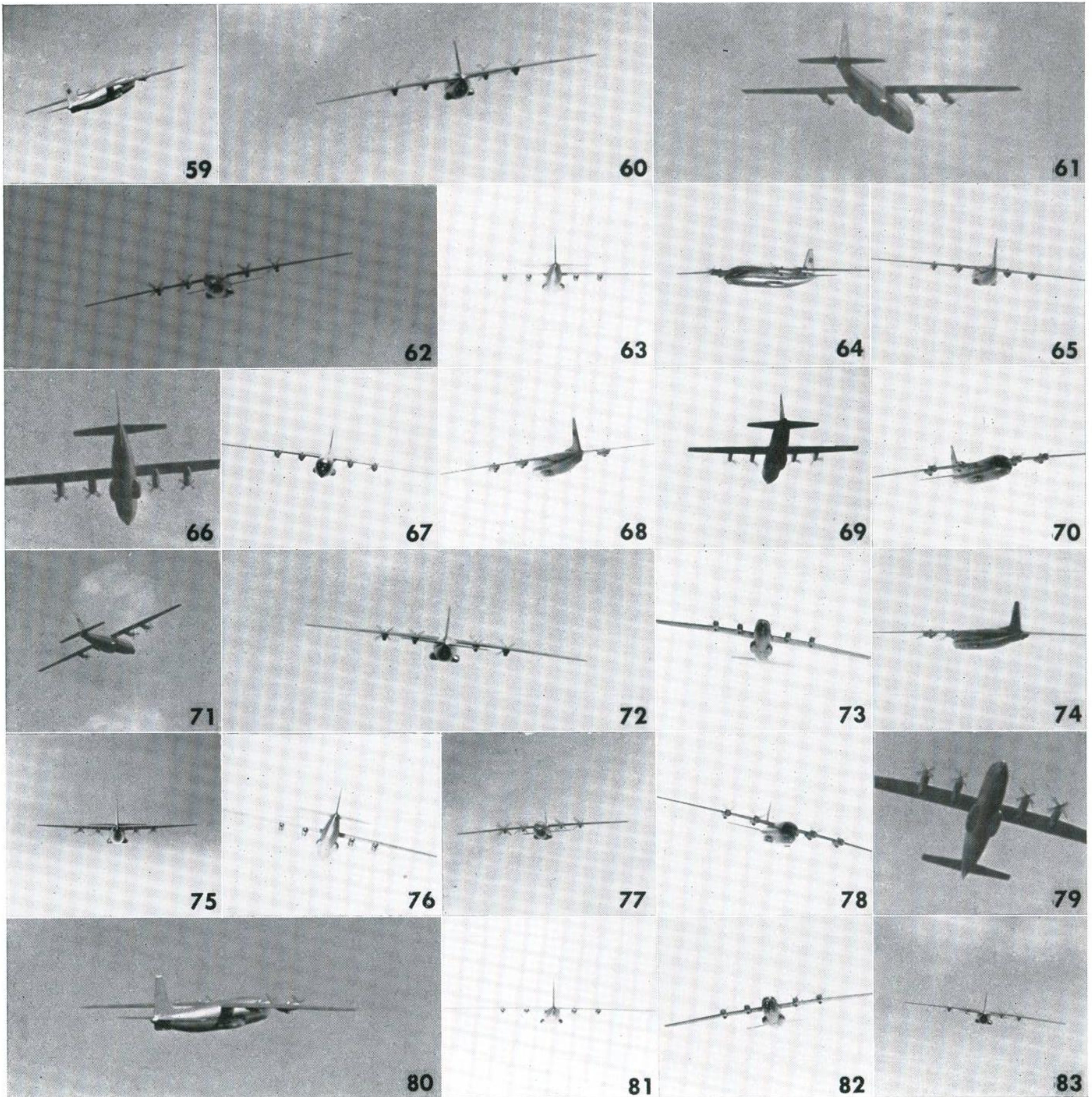
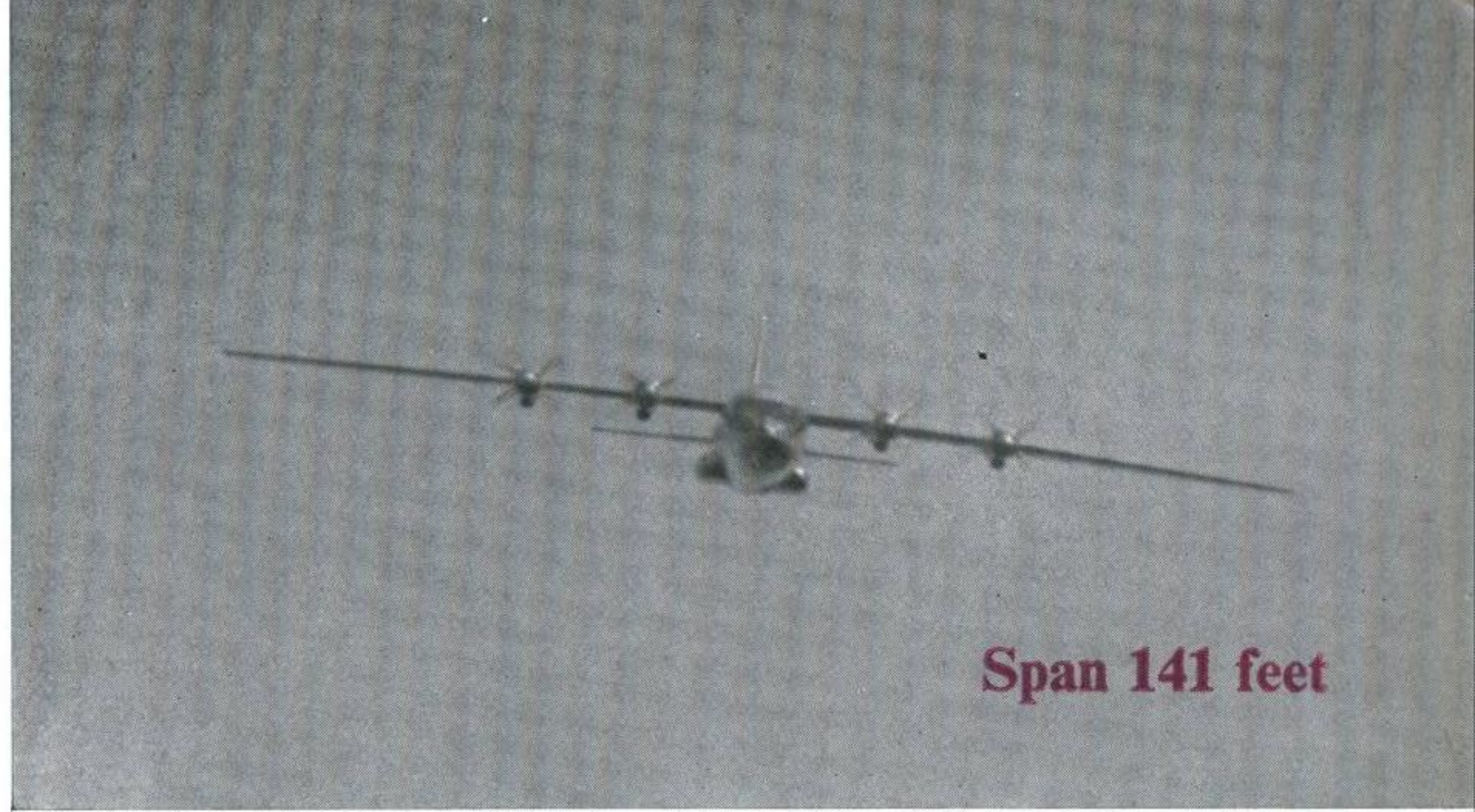


Span 120 feet



End-on

Aircraft seen end-on lose much character—indeed they become totally different, are much less distinctive and generally resemble each other much more closely. That means that special experience of identifying them in those aspects is necessary. This is how the Cat looks when end-on—or somewhere near end-on—but check on that! The usual lesson rules apply as for other recognition lessons and they are set out in full on page 142.



VANGUARD



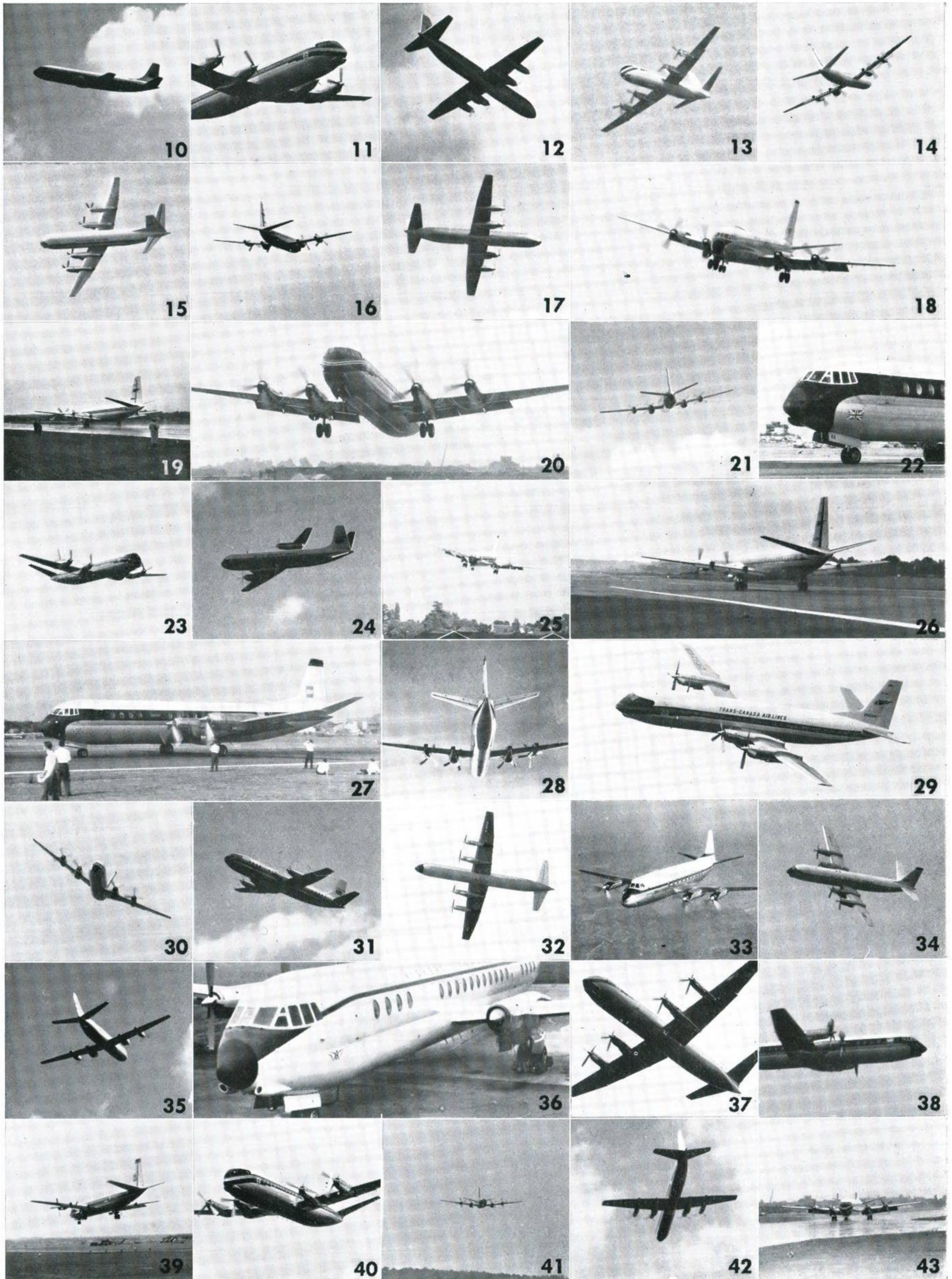
Following the successful Viscount from Vickers, comes the larger Vanguard with a similar configuration, except that, unlike the Viscount, the fuselage is longer than the wing span.

The first six went to British European Airways and fourteen, with a different mark of Rolls-Royce Tyne engines, to Trans-Canada Air Lines. Present production is for a further allotment to B.E.A. with increased payload. These various types are known respectively as Viscount Types 951, 952 and 953, but no changes in outline are involved.

With no variations to confuse you, other than landing gear and wing flaps as in Target No. 18, which shows a Vanguard coming in to land, this lesson should be a straightforward task. Full instructions appear on page 142.

Span: 118 feet

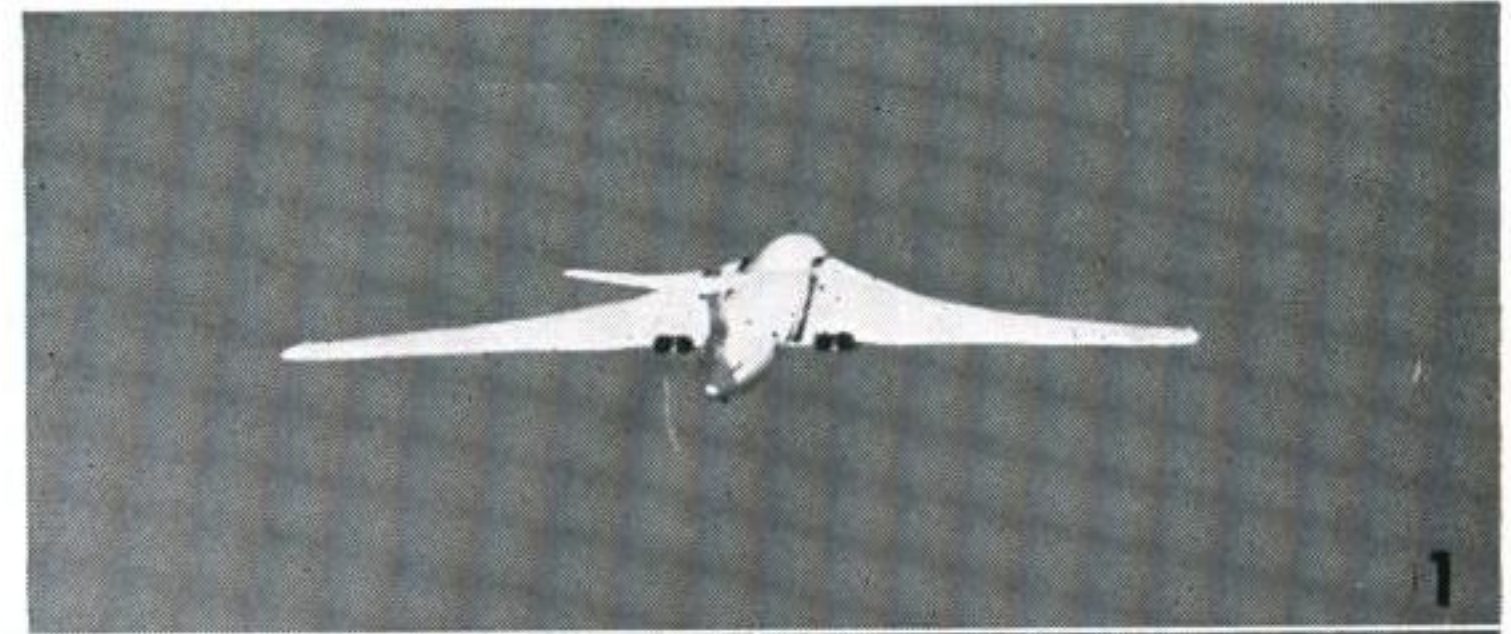




VICTOR Distinctive as the crescent-winged Victor is, there are variations on the Victor theme. The latest, B. Mk. 2 Victor features a small dorsal fin fillet (Target No. 15) and enlarged air intakes and increased wing span (Target No. 18). Armed with this information, can you be sufficiently sure of the Victor to avoid the "joker" in this Victor revision exercise?

Span B. Mk. 2—120 feet.

Span B. Mk. 1—110 feet.

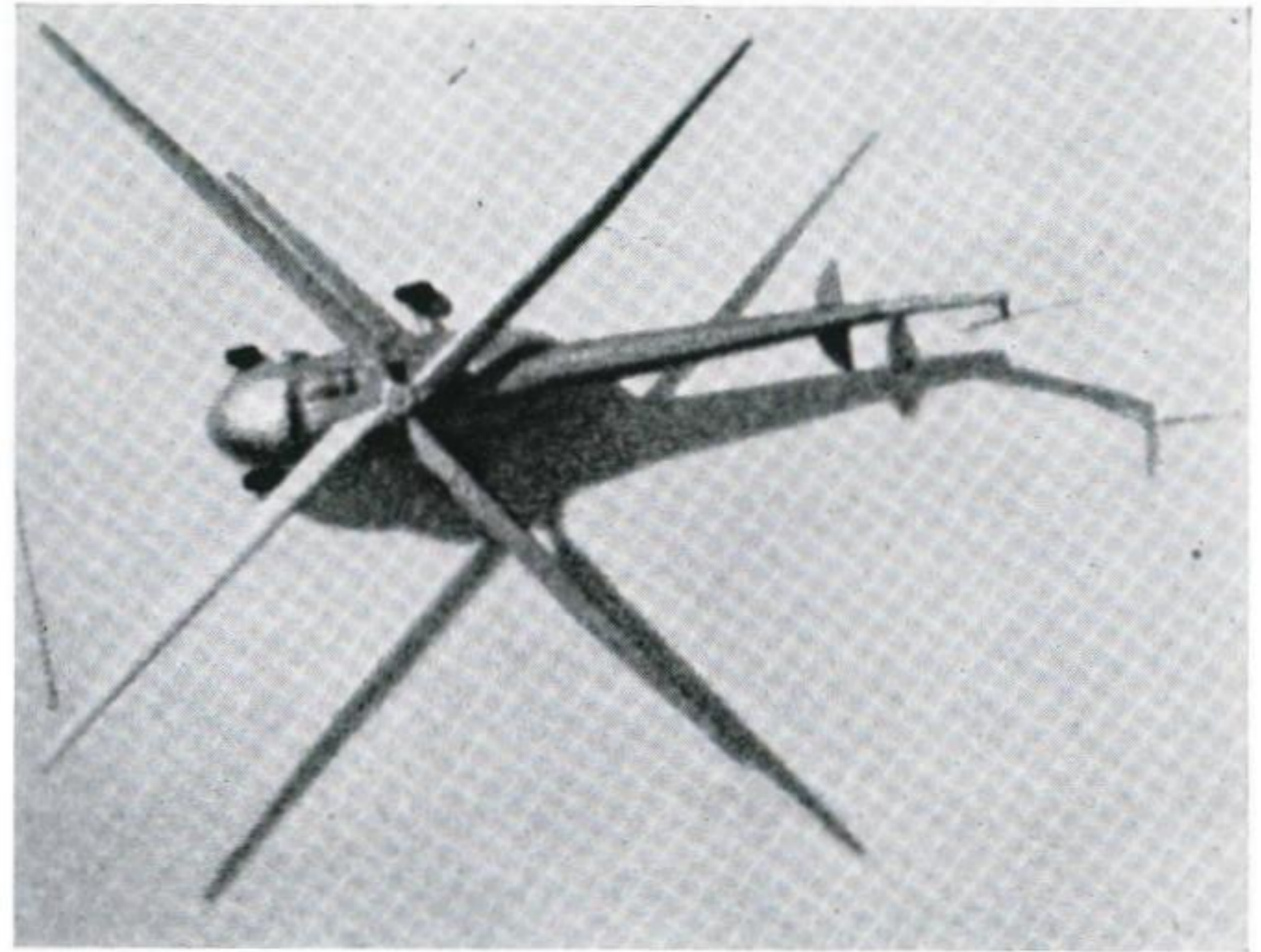


Briefs

A collection of items of news and interest.

A Northrop-cum-Douglas

An artist's conception of Northrop's re-design of two Douglas WB-66D weather reconnaissance aircraft for laminar flow control research. The engines are being re-positioned at the rear of the fuselage, and in their place under the wings will appear suction turbines for the "air-inhaling wings."



Indian Hounds

According to reports from India, the Indian Air Force has ordered eight Russian Mi-4 (HOUND) helicopters after evaluating one in competition with a French Alouette and an American Sikorsky S-62. An unusual bird's eye view of the HOUND is depicted. The HOUND also appeared in our May edition.



Jet Dragon

The new D.H. 125 executive aircraft is to be known as the Jet Dragon, after the famous D.H. 84 Dragon of pre-war days of which a few are still flying.



Hustler Tests

A series of drop-tests with a two-component bomb and fuel pod have been carried out by a B-58 Hustler over missile ranges in Nevada and New Mexico.



990 New Look Tests

Speeds of Mach 0.97 (a true air speed of 675 m.p.h.) have been reached with the first Convair 990 which has been modified to have the engine pods set back over two feet by shortening the pylons.



New U.S. Army Helicopter

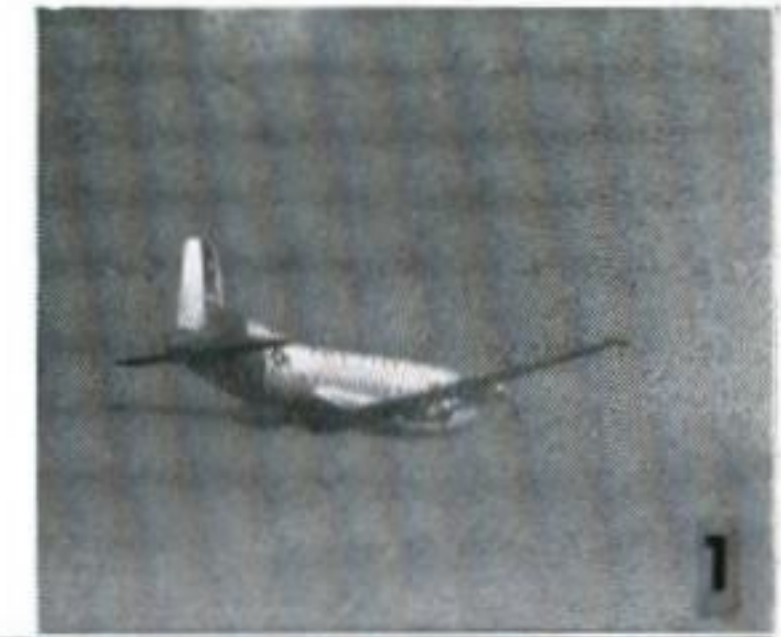
A full-scale mock-up of the Hiller model 1100 which is to be evaluated as a possible replacement for the light aircraft now in U.S. Army service, viz. the L-19 Bird Dog, H-13 Sioux and H-23 Raven.



Globemaster II

Although it went out of production in 1955, many of the 446 C-124 Globemaster IIs built are still serving as troop or freight carriers with the U.S.A.F., hence this revision lesson. Its large fuselage, capable of accommodating 200 troops, provides a recognition feature and the only variation concerns a nose radome, which distinguishes the C-124C from the C-124A. (The C-124B was an experimental version, with turboprops.) Use the lesson instruction on page 142 to do this revision exercise. Target No. 4 is a 124A; No. 11 is a 124C; use them as keys.

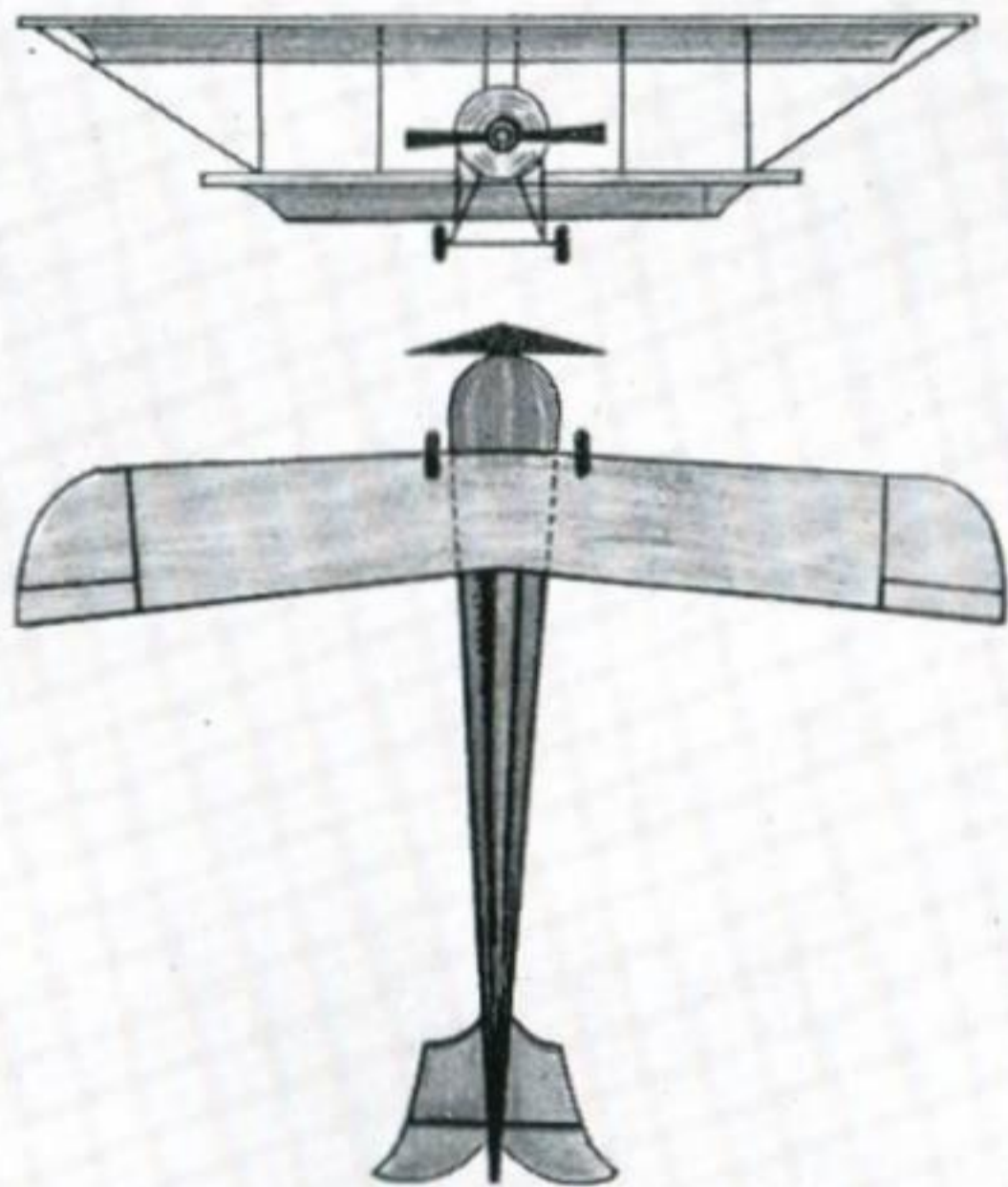
Span: 174 feet



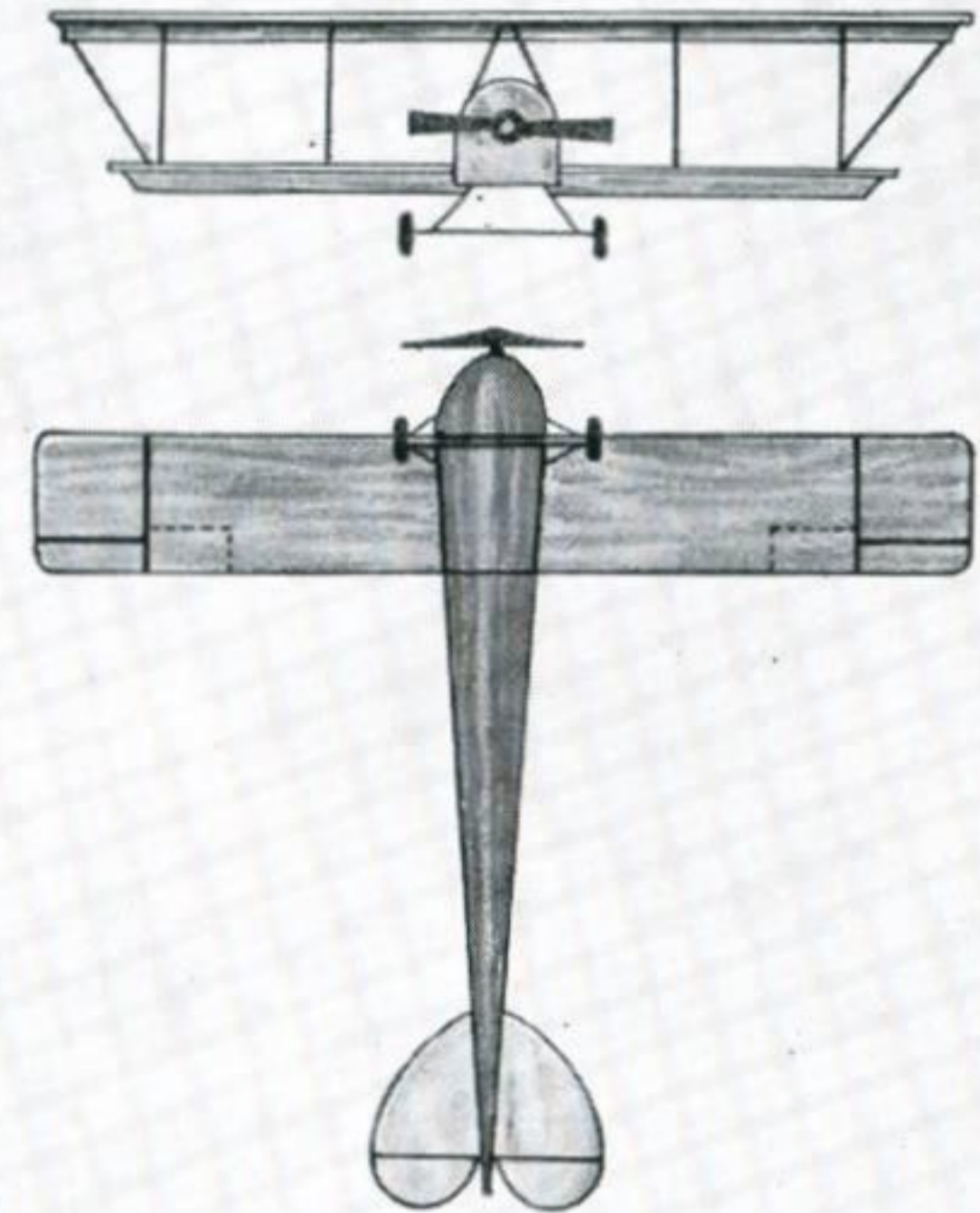
In Passing . . .

TYPES OF GERMAN AIR-CRAFT.

(ISSUED FOR INFORMATION BY THE ANTI-AIR-CRAFT SECTION, AIR DEPARTMENT, ADMIRALTY.)



"ALBATROS" BI-PLANE.



"AVIATIK" BI-PLANE.

In the Beginning:—One of the first examples of aircraft identification training material, taken from a poster issued by the Admiralty in January, 1915.



Instructions For Carrying Out Identification Lessons in the *Journal*.

To obtain the maximum benefit from the identification lessons in the *Journal*, the procedure set out below should be followed carefully.

1. Read all the text associated with the lesson. This may contain special lesson instructions and background information on the aircraft, ship or tank concerned.
2. List the target numbers on a piece of paper. This is important as targets need not be tackled in numerical order.
3. Use the main key pictures to identify the target pictures, starting with the easy ones first so as to gain experience. Use identified targets to help with the more difficult ones.
4. When certain of the identity of a target, write down its name immediately against the target number on your list. This is an important part of the procedure which ensures training in identification.
5. Lessons should not be hurried or given a time limit. So far as beginners are concerned, it is more important for trainees to identify accurately rather than quickly. Speedy identification will come with experience.
6. Don't try to memorise anything.

Hopping Hiller!

These two photographs are of the same aircraft! This is the United States Air Force X-18 experimental tilt-wing aircraft built by the Hiller Aircraft Corporation of California. It is the world's largest vertical take-off project and weighs 16½ tons, being powered by coupled turboprop engines giving a total of 11,000 horsepower.

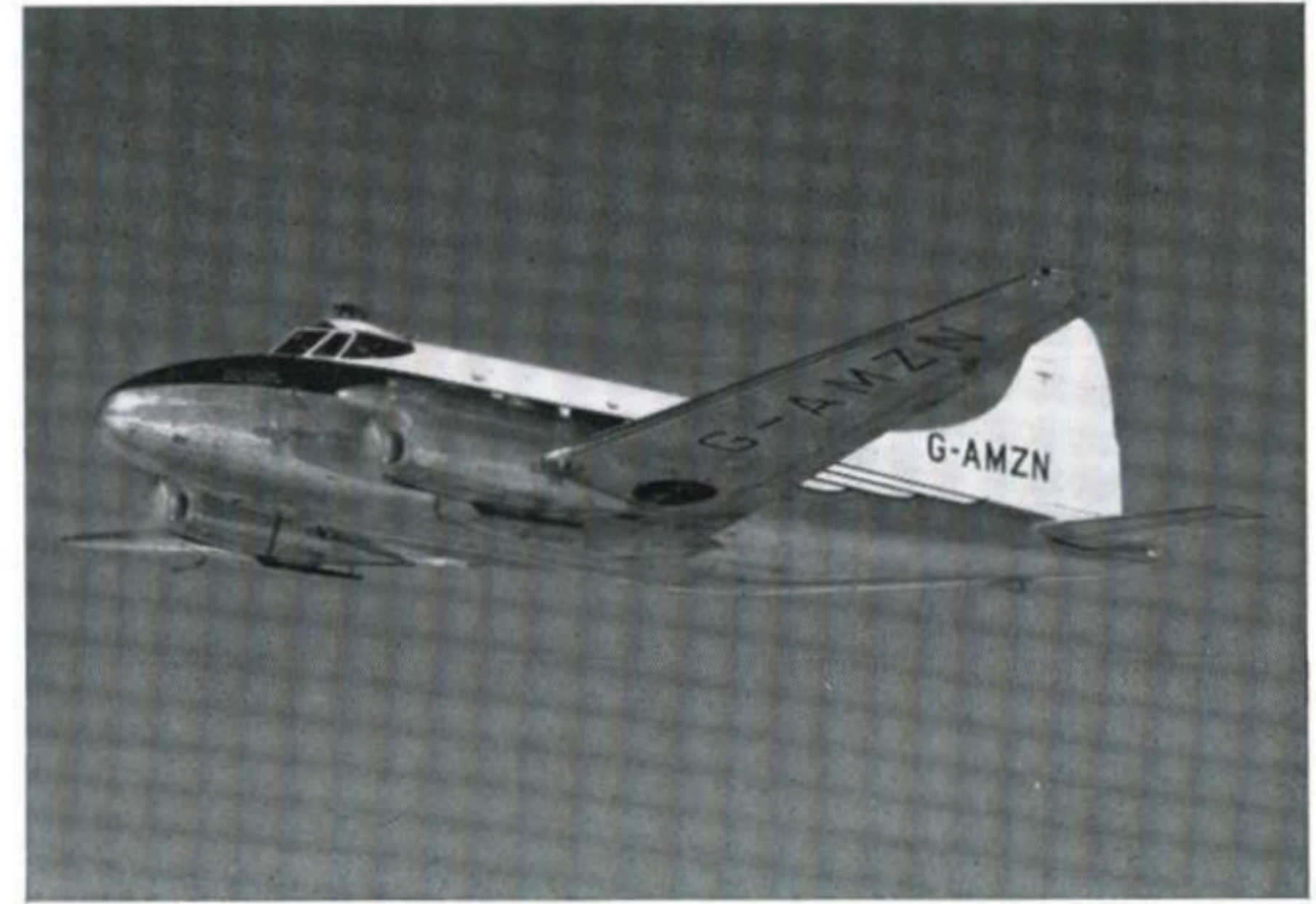


Still Going Strong

Transports of the Immediate Post-War Years Still in Flying Trim



The fact that the Royal Air Force still uses Dakotas was brought into focus by the Queen's visit to India; among other Air Forces still using the Dakota is the Dutch as shown here. Still in world-wide civil use, G-ANLF depicted is now with Silver City Airways.



De Havilland Doves, and their military counterpart the Devons, are still to be seen in many parts of the world, in civil use as light passenger or executive aircraft, and in military service as a V.I.P. transport for officers of Air Rank among other duties.



Vikings, the well-known Vickers product with lines reminiscent of the famous wartime Wellington "Wimpy" bombers, still fly as passenger or freight transports; and its military counterpart, the Valetta T.3, is still used as a "Flying Classroom" for R.A.F. navigational training.



DOUGLAS A4D SKYHAWKS on the U.S.S. *Franklin D. Roosevelt*. Skyhawks can carry a variety of stores including nuclear and H.E. bombs, Sidewinder infra-red missiles, Zuni or Mighty Mouse air-to-air rocket packs and Bullpup air-to-surface missiles, ground attack gun pods or torpedoes, added to which there is a fixed armament of two 20-mm. Colt cannons. Carrying a 3,000-lb. weapon load under the fuselage and with racks for two 1,000-lb. weapon or fuel loads under the wings, the Skyhawk rates as—a light attack bomber!—and there's about a thousand of them!

GOOD SHOW!

Prompt action by No. 17 Group saves three lives

Fall-out reporting exercises on the post can often be rather boring affairs but this was most certainly not the case during the exercise held on the 11th June this year in No. 17 Group, Caernarvon. Both the members of Charlie 3 post, Borth-y-Gest, and Crew 3 in the operations room were instrumental in saving the lives of three stranded yachtsmen whose boat overturned in rough seas off the coast.

One incident occurred at 13.45 hours when the dramatic message passed by the No. 2 observer on the cliff-top post alerted C/W/Obs. M. I. Owen who was acting as post controller at the time. The Borth-y-Gest post had reported that a boat had become stranded on a sandbank in rough seas and that the crew of four were hampered in their efforts to refloat it by a strong tidal current.

Observer Officer P. I. Jones immediately informed the Wrexham Police who in turn called out the Criccieth lifeboat. The Duty Controller then asked for further information from the post and was told that the four men were being swept out to sea by the current.

Criccieth reported difficulty with the lifeboat and so R.A.F. Valley were asked to provide a helicopter for the rescue. Within ten minutes a Whirlwind was on the scene but unfortunately too late to rescue one of the yachtsmen who was lost in the heavy sea.

The prompt action and efficient reporting by the members of the Borth-y-Gest post and the centre operations room crew without doubt contributed in no small way to the rescue operations and they are to be congratulated on their part in the unfortunate incident.

SOLUTIONS TO TESTS AND LESSONS

Page 132

An-10 CAT

All targets are **An-10 Cats** except number 12, which is a **Bear**, numbers 14 and 42, which are **IL-18 Coots**, number 69, which is a **C-130 Hercules**, and number 75 which is a **C-133 Cargomaster**.

Page 136

VANGUARD

All targets are of **Vanguards** except for number 33 which is a **Viscount**.

Page 139

VICTOR

All targets are **Victors** except for number 6 which is a **Valiant**.

Classified List:—

- | | | |
|-----------------------|---------------------|---------------------|
| 1. Victor B. Mk. 2 | 11. Victor B. Mk. 1 | 21. Victor B. Mk. 1 |
| 2. Victor B. Mk. 2 | 12. Victor B. Mk. 1 | 22. Victor B. Mk. 2 |
| 3. Victor B. Mk. 2 | 13. Victor B. Mk. 1 | 23. Victor B. Mk. 1 |
| 4. Victor B. Mk. 1 | 14. Victor B. Mk. 1 | 24. Victor B. Mk. 1 |
| 5. Victor B. Mk. 1 | 15. Victor B. Mk. 2 | 25. Victor B. Mk. 1 |
| 6. Valiant B(P.R.)K.1 | 16. Victor B. Mk. 1 | 26. Victor B. Mk. 2 |
| 7. Victor B. Mk. 1 | 17. Victor B. Mk. 1 | 27. Victor B. Mk. 1 |
| 8. Victor B. Mk. 2 | 18. Victor B. Mk. 2 | 28. Victor B. Mk. 1 |
| 9. Victor B. Mk. 1 | 19. Victor B. Mk. 2 | 29. Victor B. Mk. 2 |
| 10. Victor B. Mk. 2 | 20. Victor B. Mk. 1 | |

Page 141

GLOBEMASTER

All targets are **Globemasters** except for number 22 which is a **Breguet Sahara**. (Numbers 10, 11, 17, 20 and 24 can be identified as **C-124C Globemasters**.)

Solutions to Airborne Headaches No. 76 in the July, 1961, issue:—

- | | | |
|-------------------|---------------|-------------------|
| 678. Thunderchief | 683. Crusader | 688. Fitter |
| 679. Buccaneer | 684. Hustler | 689. Hunter |
| 680. Vanguard | 685. Electric | 690. Twin Pioneer |
| 681. Starfighter | 686. Cleat | 691. Voodoo |
| 682. Fiat G.91 | 687. Fresco | 692. Cat |

AIRBORNE HEADACHES

No. 77

