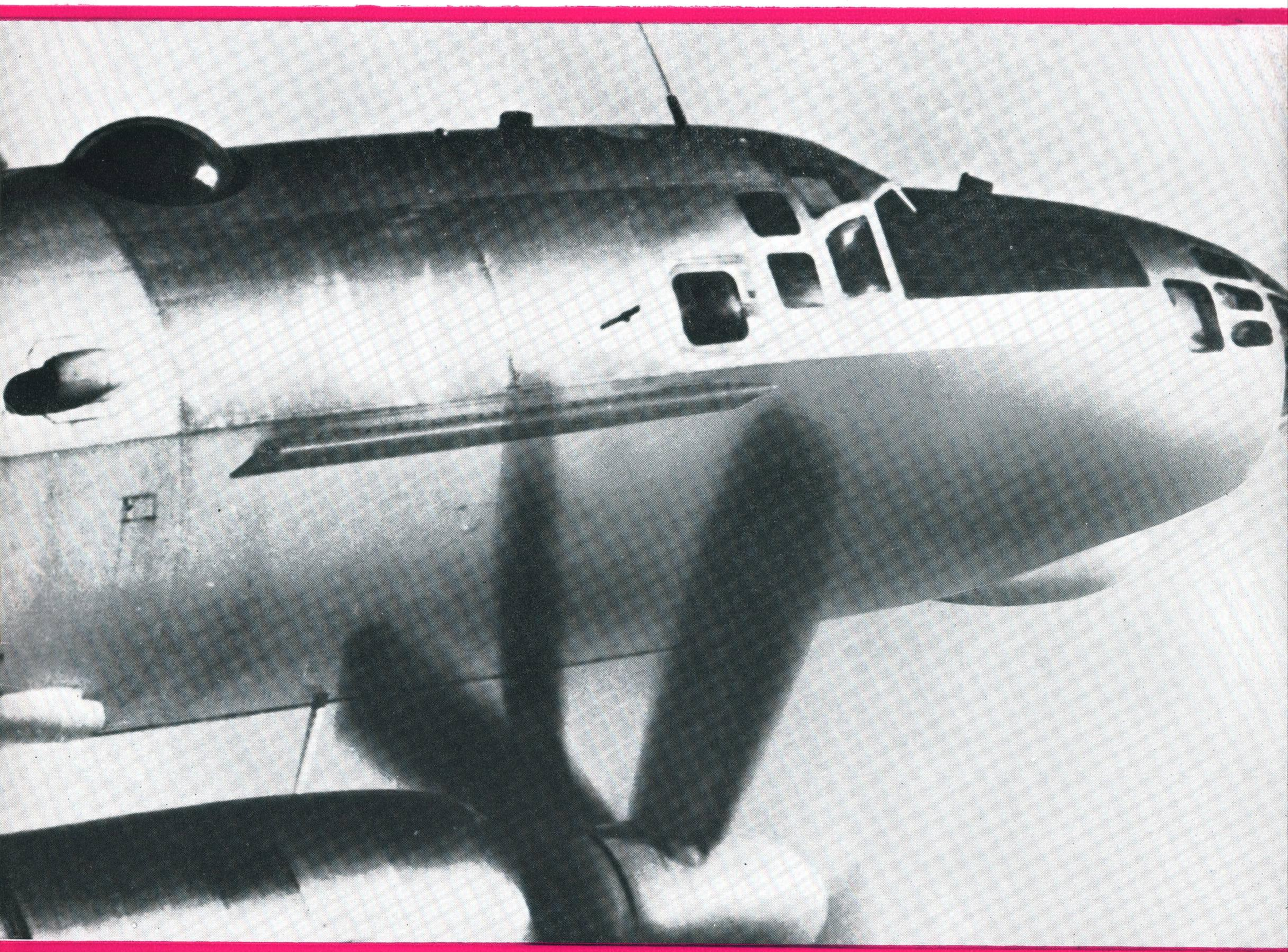
THE ROYAL OBSERVER CORPS

RECOGNITION

Journal

and R.O.C. GAZETTE



Vol. 6 SEPTEMBER 1964 No. 9

Bear facts

SEPTEMBER 1964 Vol. 6 No. 9

THE ROYAL OBSERVER CORPS

RECOGNITION JOURNAL

AND R.O.C. GAZETTE

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* *Identification Lessons*

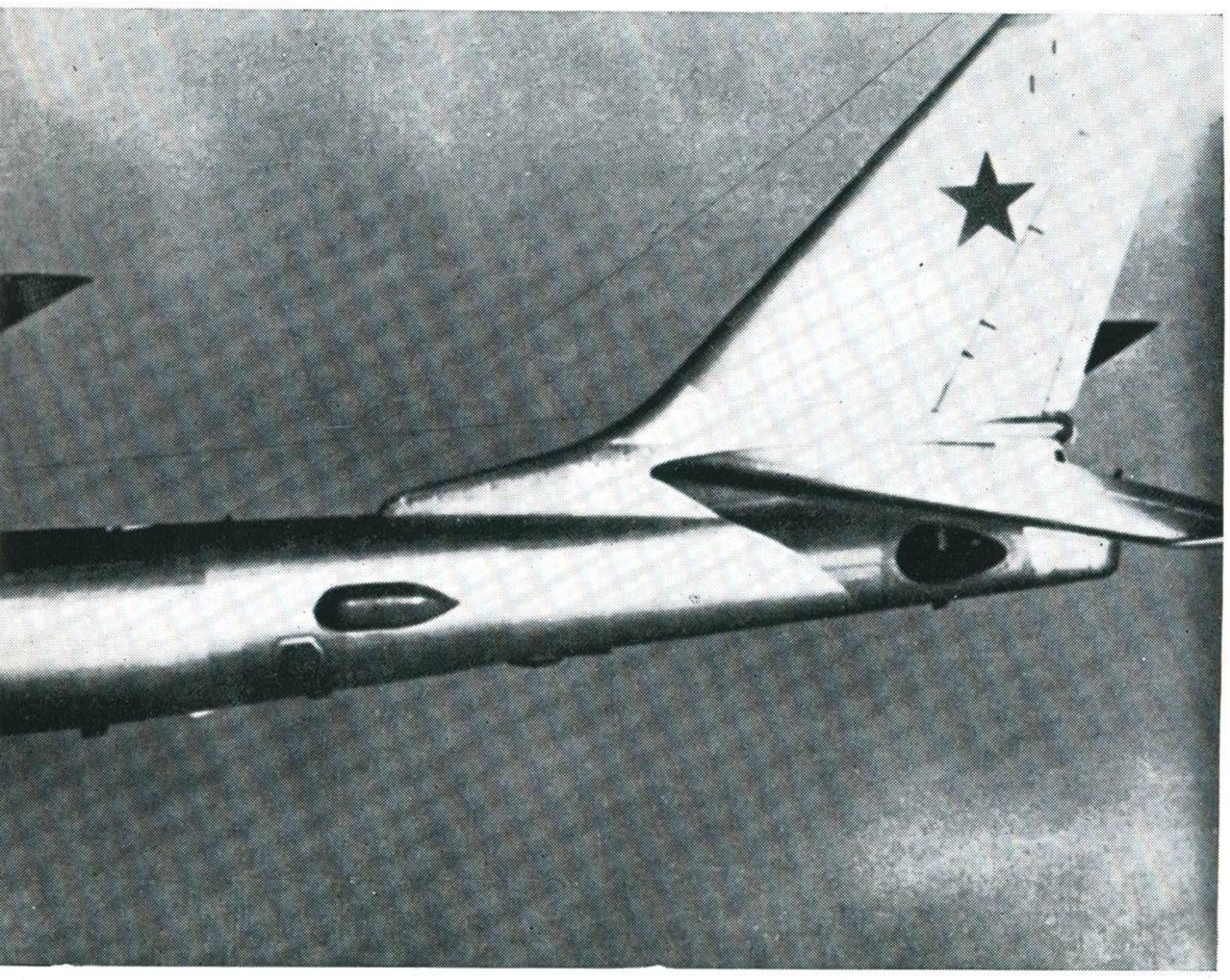
According to the United States Secretary for Defense the Soviet Tu-20 Bear has an un-refuelled range of 7,800 miles with a 25,000 lb. bomb-load and an over-target speed of 500 m.p.h. A formidable performance which suggests that these turbo-prop aircraft are unlikely to be replaced by pure-jet aircraft in the immediate future.

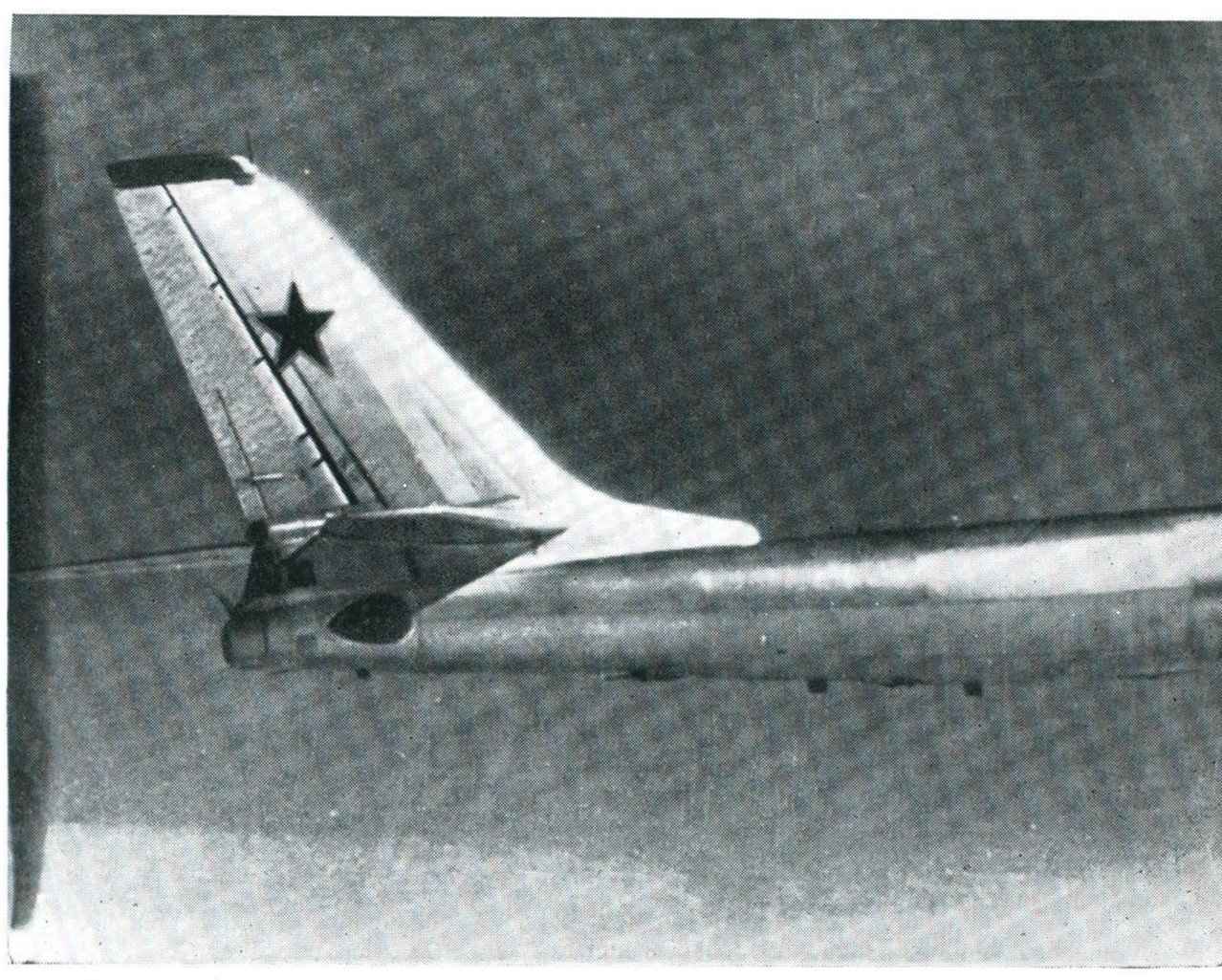
In our last exercise on Bear (September 1962 edition) we were able to show the new "B" version with a modified nose and provision for carrying a Kangaroo air-to-surface missile. The "B" version is now shown to have a large refuelling probe on the nose. Incidentally, a further lesson on Bear is in course of preparation and will appear shortly.

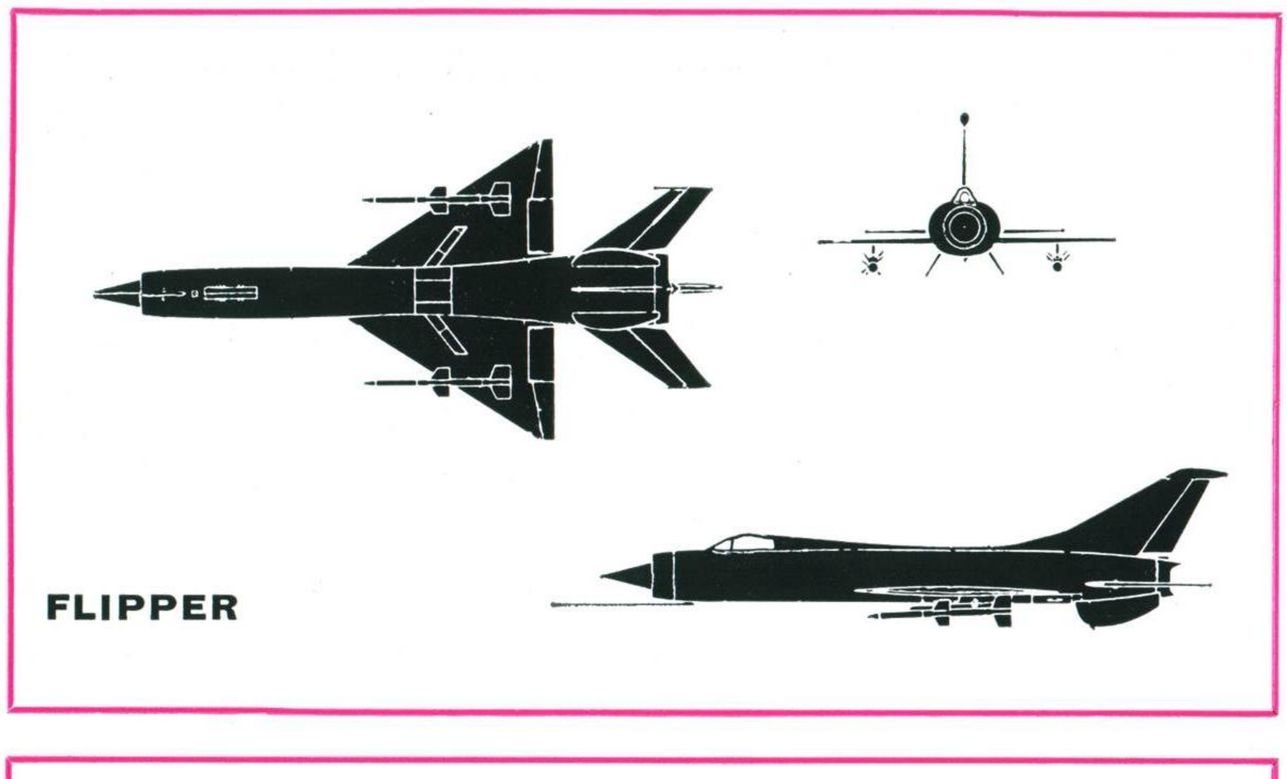
Since Bear "B" can be flight refuelled it may well be that Bear "A's" are now used as tanker aircraft. In comparing this four-engined maritime reconnaissance aircraft with our own Shackleton, it is interesting to recall that the Shackleton prototype had provision for inflight refuelling but initial production versions had increased internal tankage in lieu of this facility; when further range was required in the M.R.3, this was obtained by introducing wingtip tanks.

In other respects too, particularly armament, operational requirements appear to differ. The Shackleton has a large retractable radome under the fuselage, but no turret, whereas Bear has a conspicuous 2-gun ventral turret. The prototype Shackleton had turrets fore and aft, but while the M.R.3 had retained the nose armament and given over the tail to electronic equipment, the reverse appears to be the case with Bear "B".

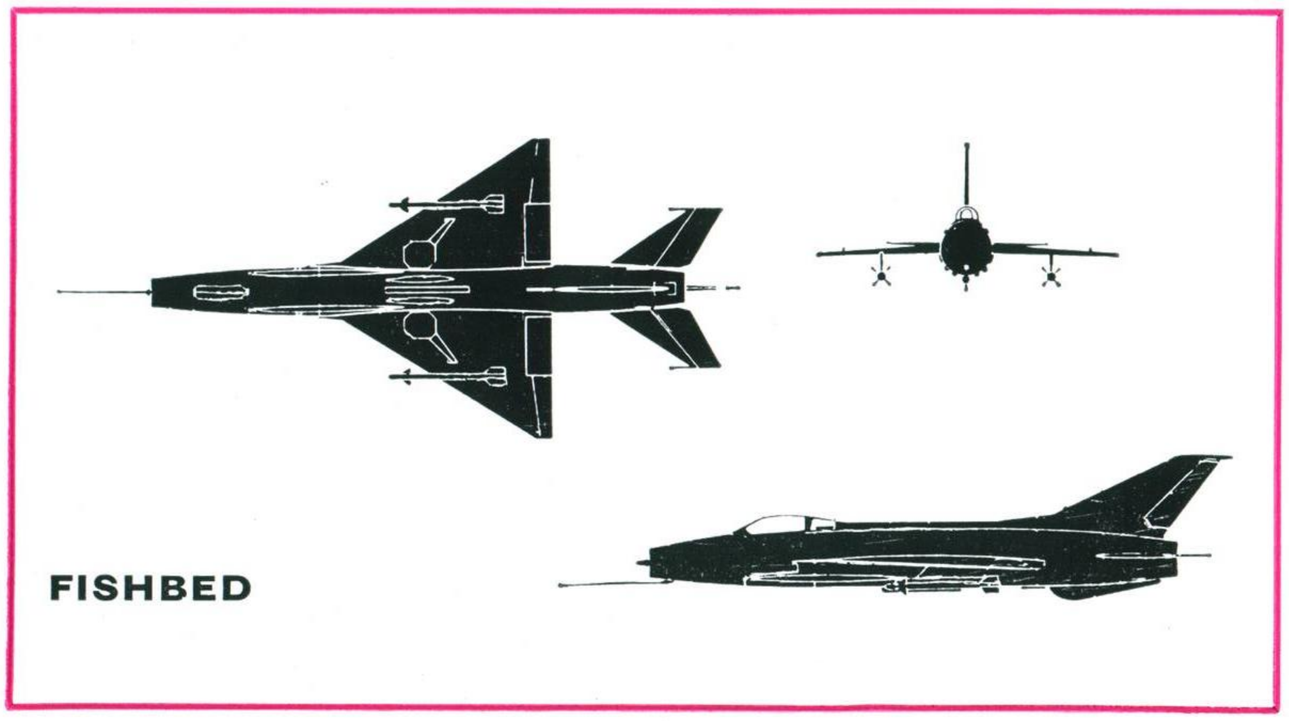
With a large astrodome above the cabin and other bumps and blisters including a faired bulge on one side of the fuselage on some aircraft, as the illustration below (left) shows, the Bear is not aerodynamically clean. An inconsistency is the national marking; on some Bears it is a plain red star and on others the star is outlined in yellow. But for all that, Bear, and its civil counterpart Cleat have an outline that can, with training, be instantly identified.







FLIPPER

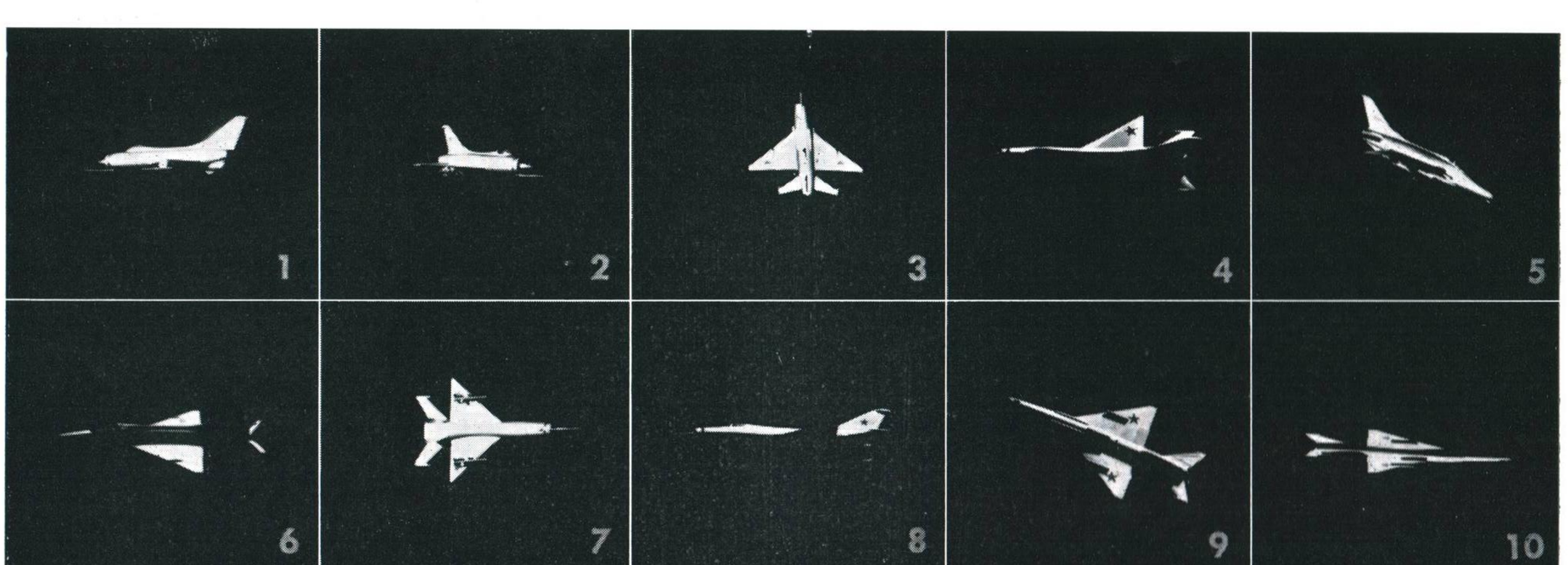


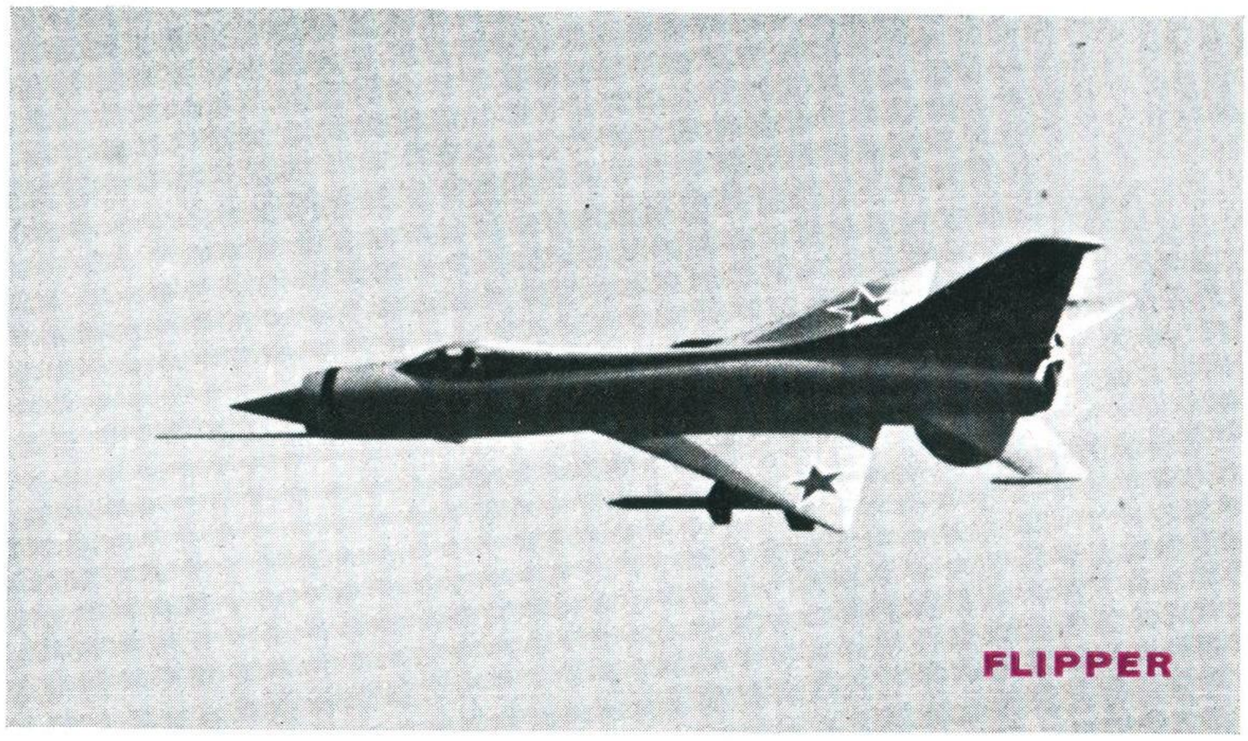
FISHBED

FISHBED and FLIPPER highlighted

Flipper is presumed to be a twin-engined development of Fishbed and from the recognition point of view, they are quite similar. Separate lessons have been given on each, Fishbed in our May 1963 edition and Flipper in March 1964.

In order that you do not confuse the form of one with the name of the other, you should, after writing down the target Nos. 1 to 48 twice, jot down all of one type first on one of the papers and, later, all of the other type on the second paper. Compare results separately with the solutions on the cover.





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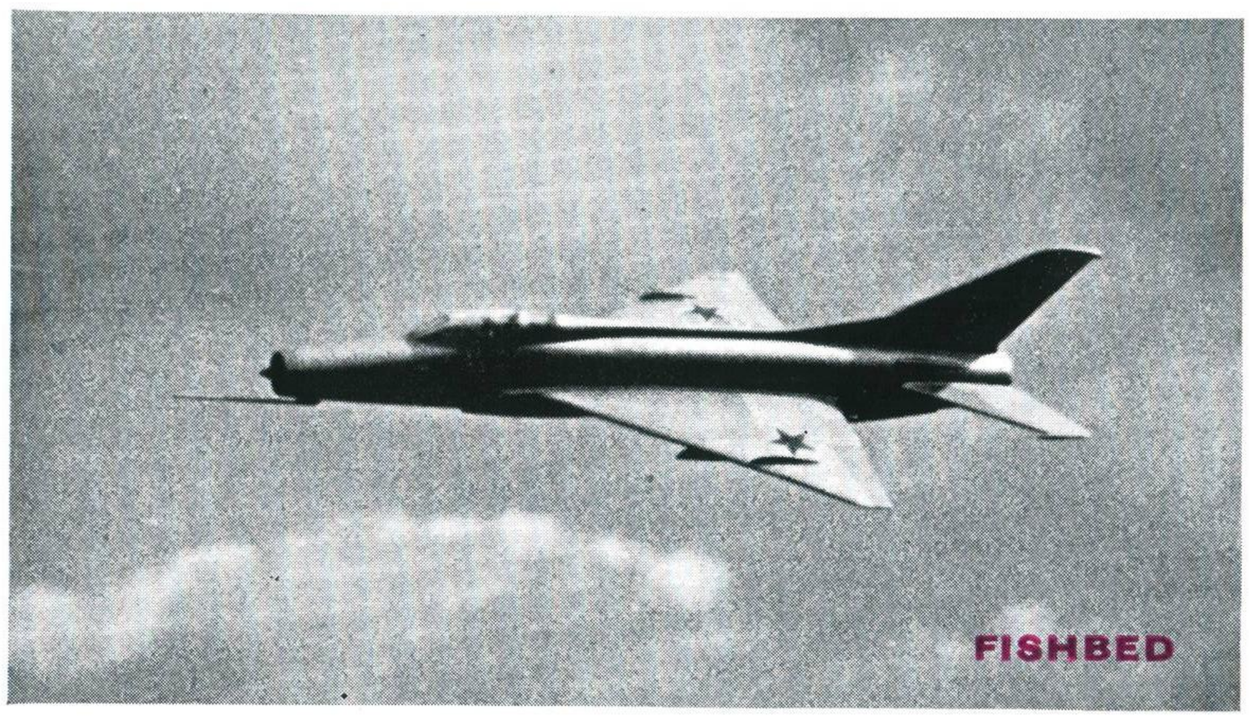
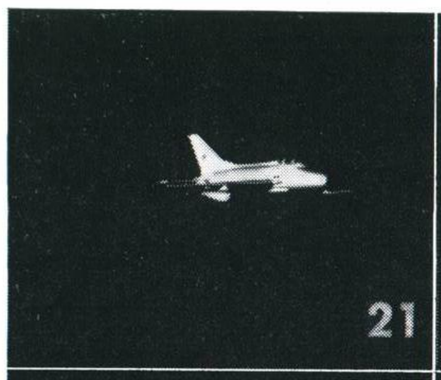


FISHBED



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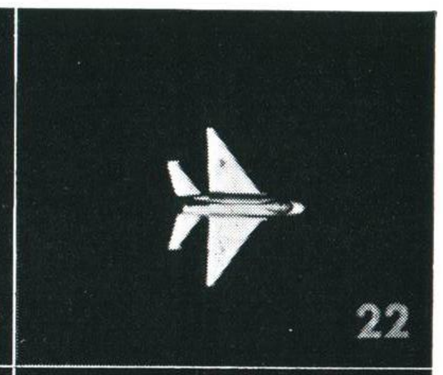

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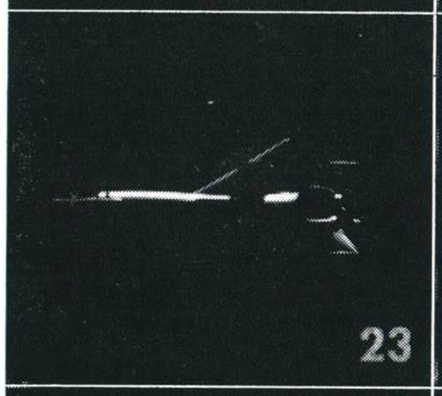

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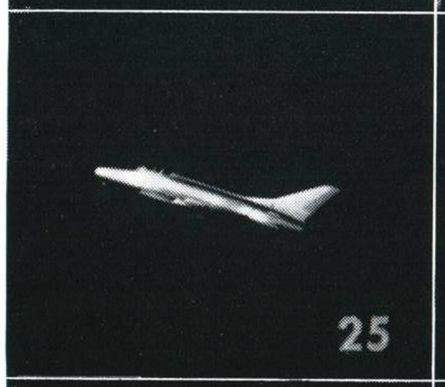

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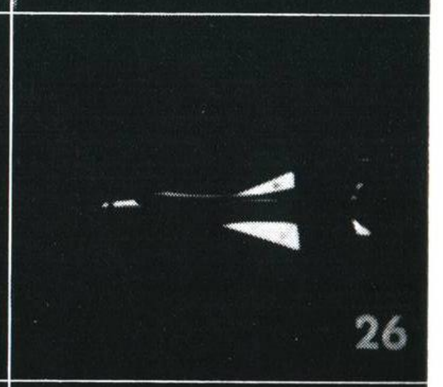

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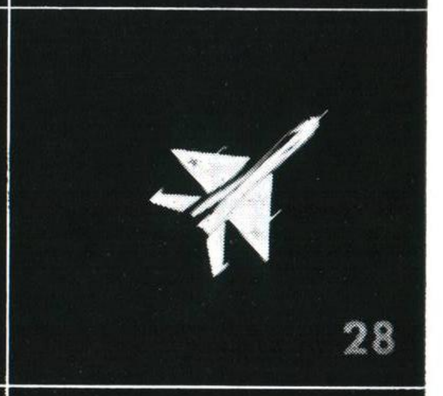

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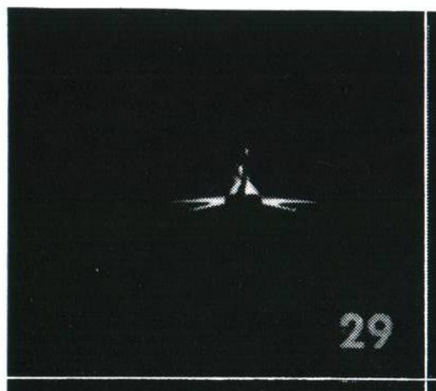

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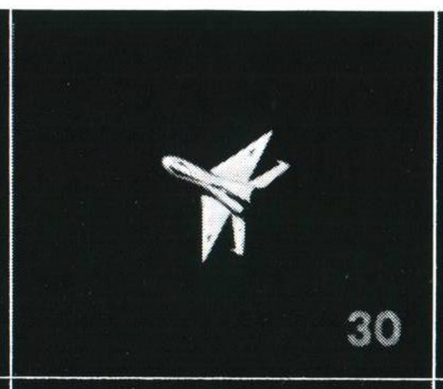

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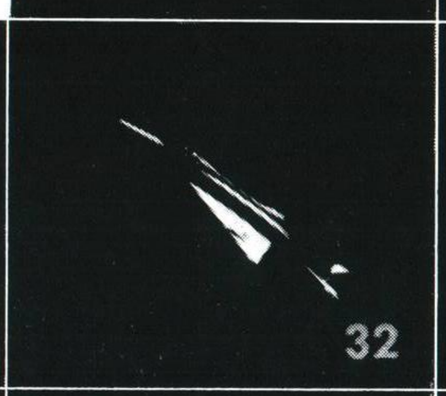

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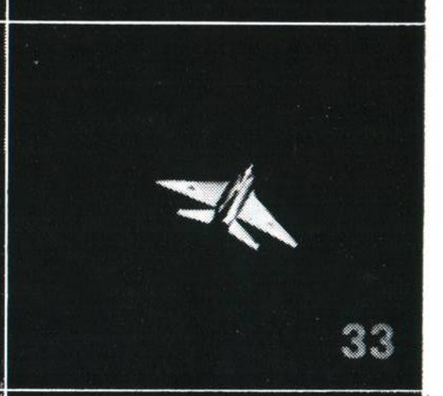

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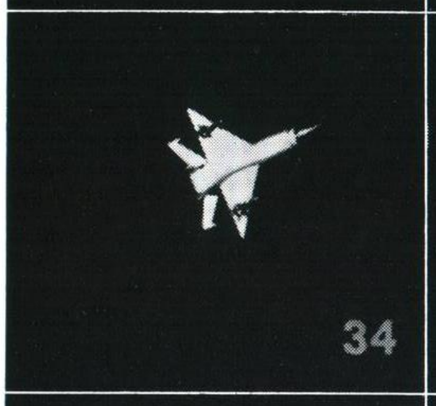

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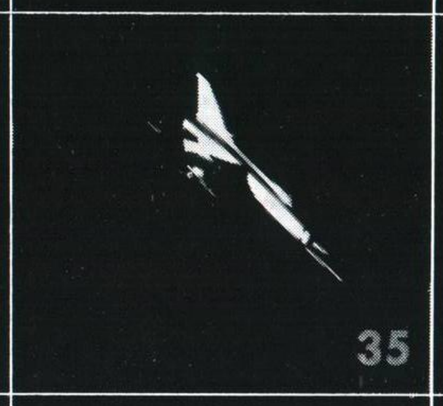

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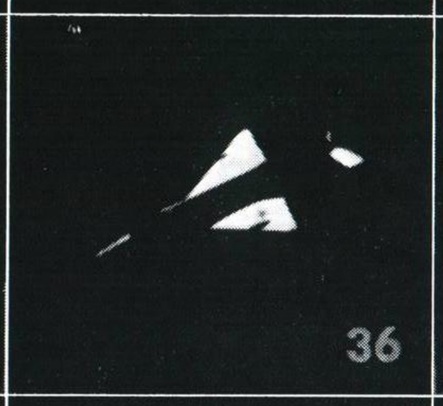

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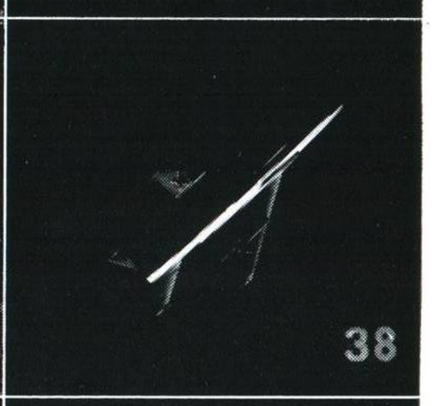

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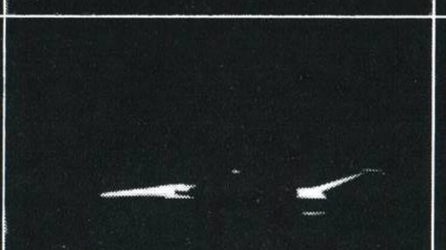

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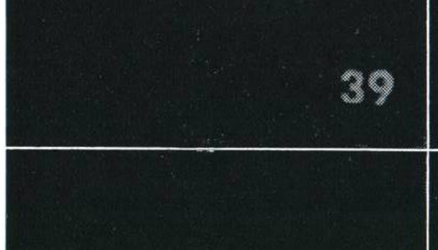

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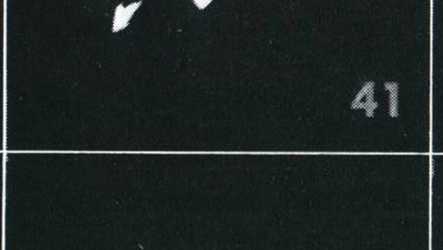

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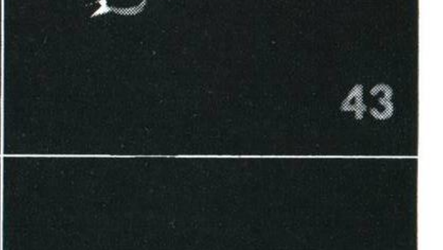

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U.S. LIGHTS

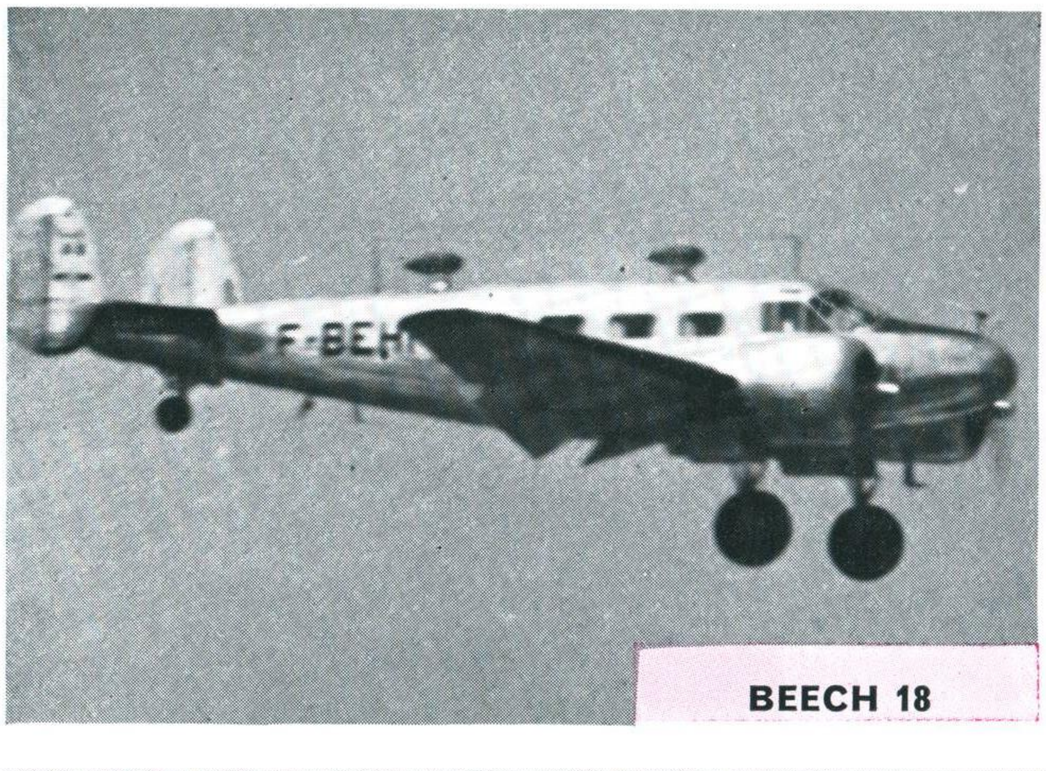
Claimed to be in production longer than any other aircraft type is the wartime C-45 Expeditor (Beech 18) of which the Super 18 is the modern version. The Twin Bonanza and Queen Air serve the U.S. Army as the U-8 Seminole. This constructor concentrates on executive and touring types of which examples are shown, but has also produced the Mentor trainer for which both the Argentine and Japan have construction licences. Additionally to types shown, are the new King Air and Musketeer which are twin and single-engined respectively.

MENTOR

BARON

TRAVEL AIR

SEMINOLE



BEECH 18

SUPER 18

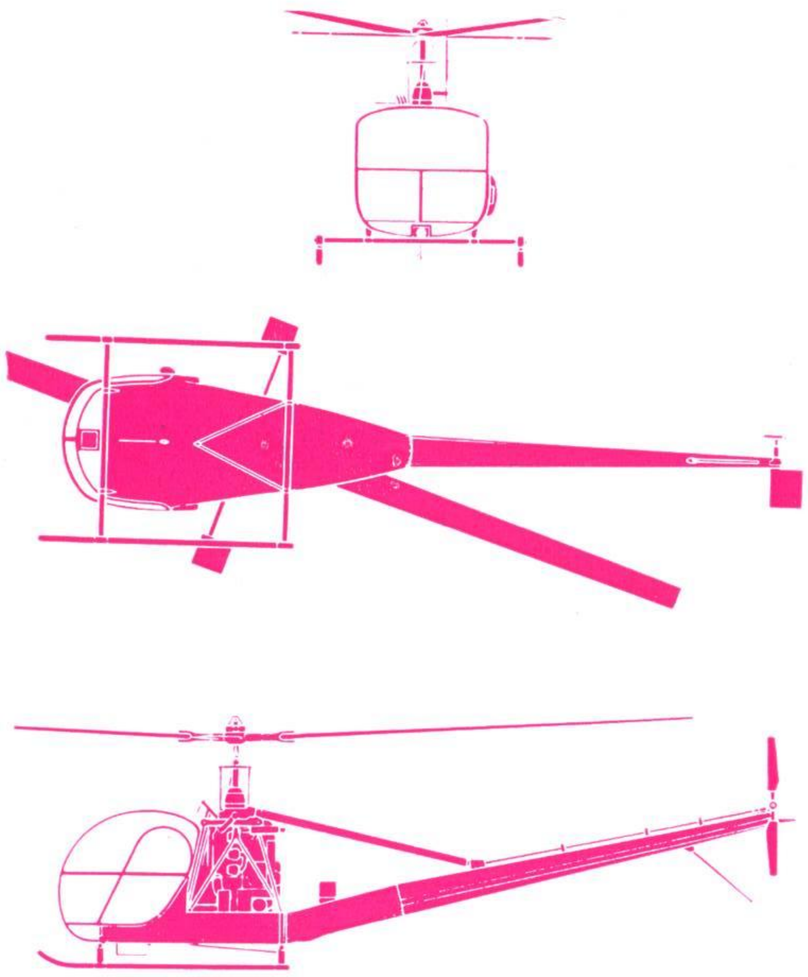
DEBONAIR

QUEEN AIR

BONANZA

TWIN BONANZA

HILLER E4 (OH-23F RAVEN in U.S. ARMY)



HILLER Helicopters

The Hiller series of helicopters, produced in America are widely used for both military and civil purposes and are in service with the Forces of America, Canada and Britain.

Hitherto, to report these types of Hiller helicopters, the U.S. Army's own name of Raven has been used. However, the Royal Navy who adopted Hiller 12E models for training have not adopted the name Raven. In these circumstances the name Hiller Helicopter can now be used for reporting. The different models do vary in detail, but all have a common Hiller helicopter characteristic which you will be able to distinguish by working out this lesson to the instructions on page 142. Solutions on the cover.

HILLER 12E

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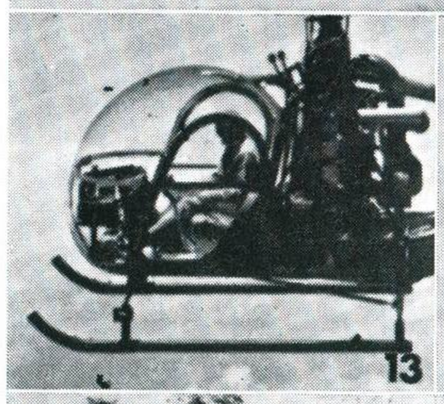
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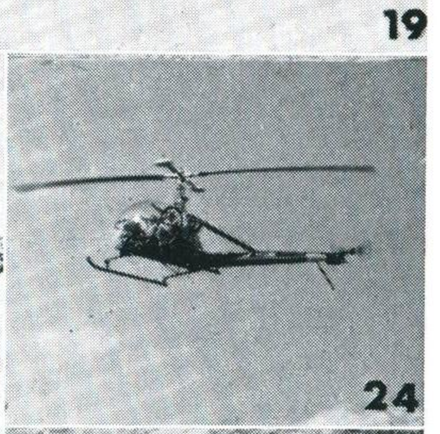
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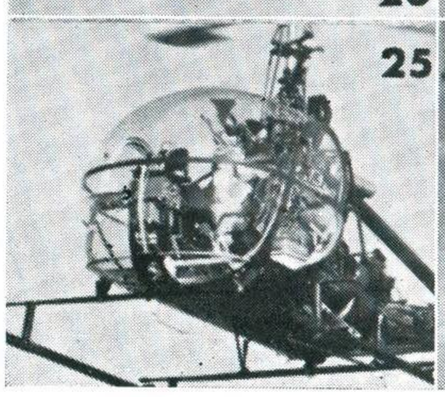
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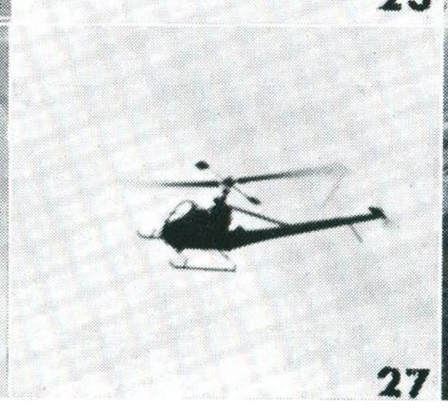
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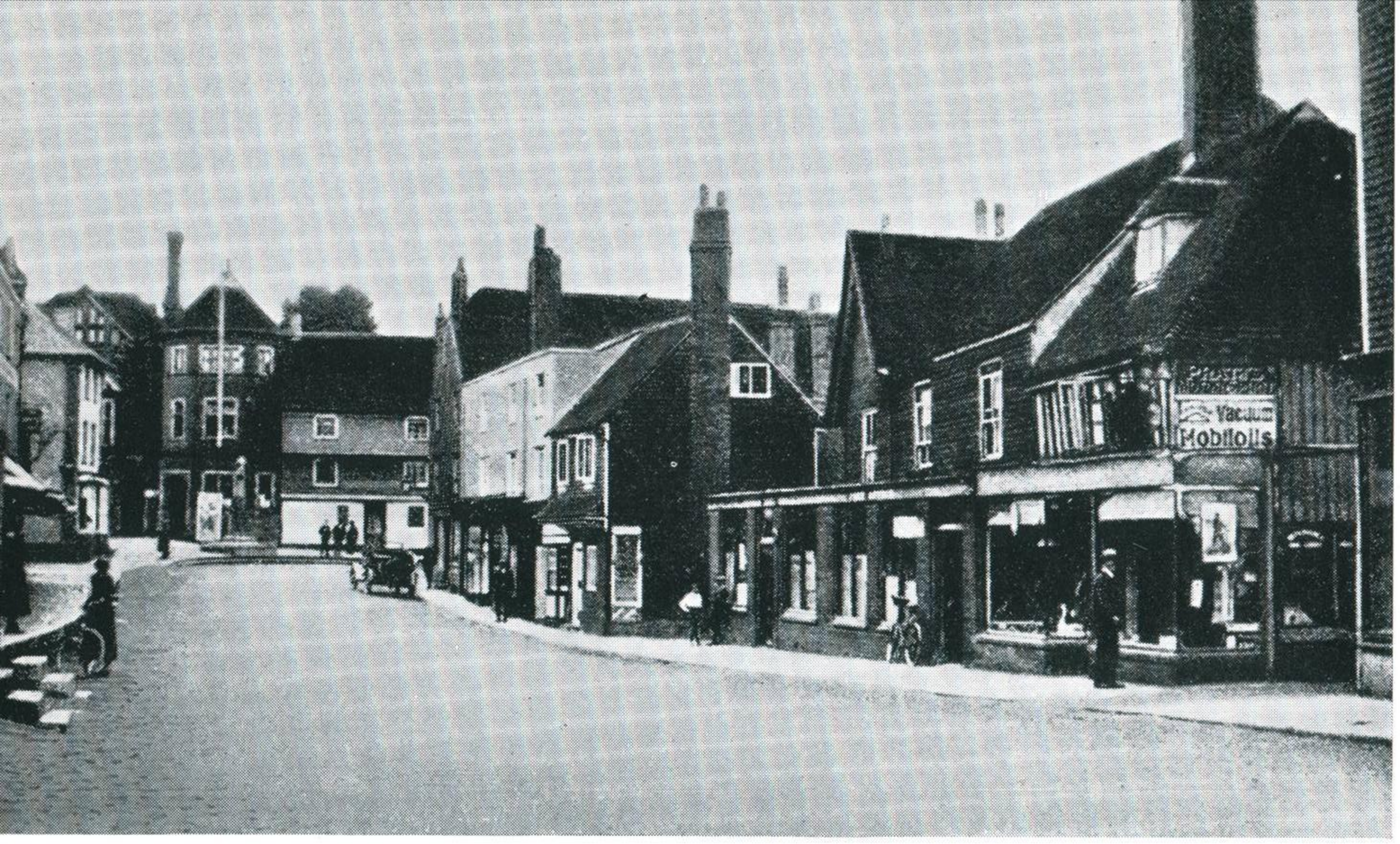


The old Cranbrook Post Office as it was. It was used in 1924 as a control reporting centre to observer posts sited at Cranbrook, Goudhurst, Hawkhurst, Sutton Valence, Marden, Biddenden, Bethersden, Ham Street and Tenterden. The administrative arrangements were made through the Chief Constable of Kent.

"WHERE IT ALL BEGAN: A MODERN PILGRIMAGE"

by Obs. H. A. Gordon, 1/G.3

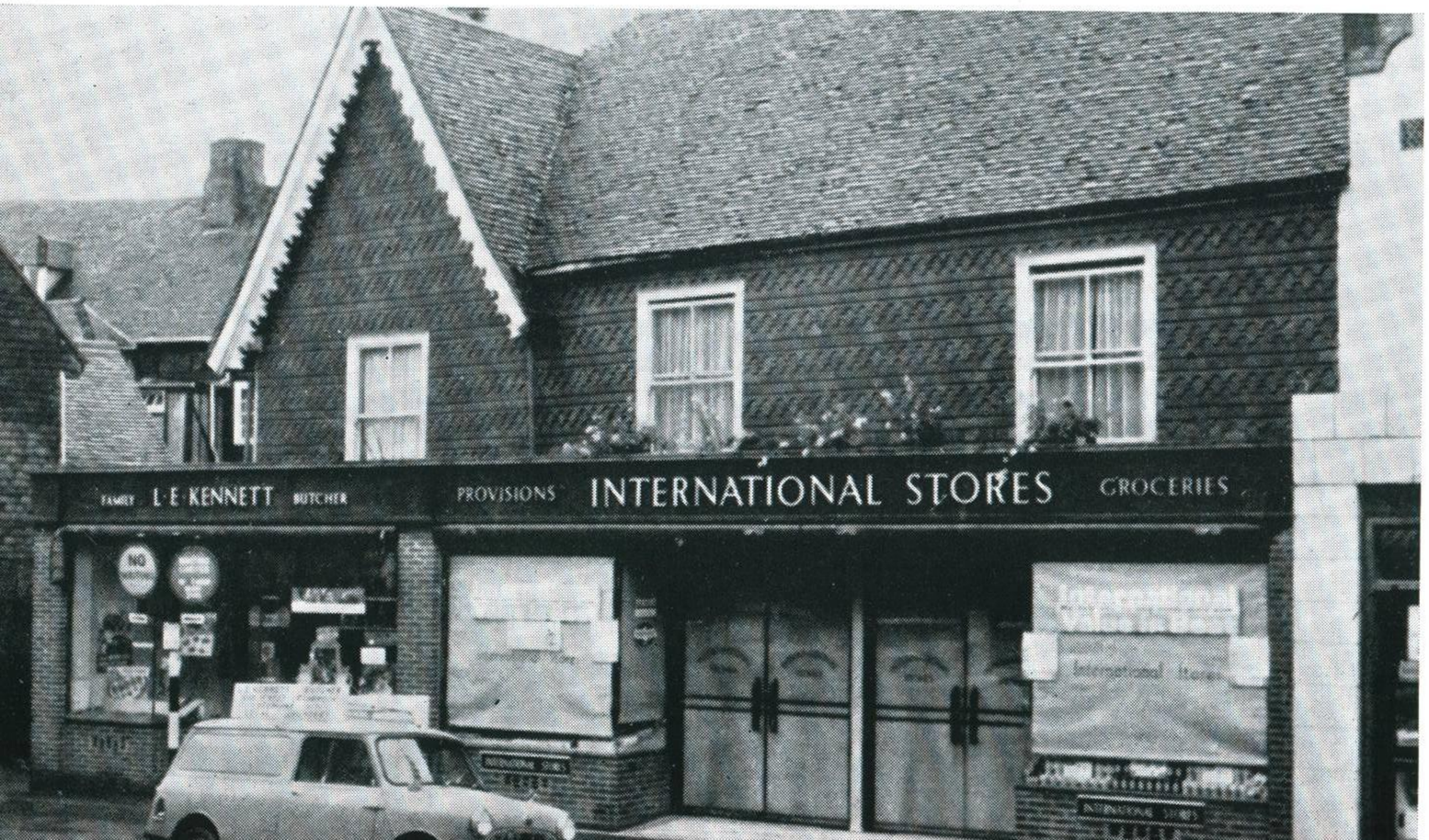
On September 4th 1963, Chief Observer P. S. Laurie and the writer made a journey from Bexhill to the old weald town of Cranbrook in Kent, for the specific object of seeing and photographing the Post Office there. We had read T. E. Winslow's history of the Corps "Forewarned is Forearmed", and the fact that in the first full-scale exercise planned and organised by Major General Ashmore, in August and September 1924, to test the feasibility of an effective air-warning and reporting system, the first experimental operations room was set up in a room over the Post Office in Cranbrook. This aroused our interest and we planned this trip more than a year previous, but various things had prevented us going until now.

Neither of us had visited Cranbrook before and due to the rather devious route, planned to take us over some of the ancient wealden track-ways, we approached the town from the east along the road from Golford rather than by the direct route from Bexhill. We were suddenly confronted by the town, compactly built on both sides of a small valley and dominated by a mellow stone, four-square church with a stout tower on the hill opposite. Descending the hill, leaving the great 19th century windmill on our right, we entered the long curiously right-angled main street.

Cranbrook—the name derives from the Crane's brook and the distinctive town signs carry a picture of a crane—being one of the centres of the important cloth-weaving industries in the 15th and 16th centuries, is full of interest. We at once decided on a quick "recce" of the whole main street to find the Post Office, and as soon as we spotted it our spirits fell to zero: it was a fine light coloured, modern building with plenty of glass—architecture at least 25 years too modern for our purpose! We quickly adjourned to the nearest hostelry in order to review the position and recover our morale. Over drinks a few tactful questions elicited the fact that the situation was not as black as we had feared for the building where the Post Office had been still stood and was now a butcher's shop, and a branch of the International Stores. This was later confirmed by an estate agent.

After lunch we found the old building and took a number of coloured and black and white photographs of it as we felt that there should be some permanent record of the place where, in truth, one can say that the Royal Observer Corps system as we know it today was born.

After a look at the church, and some of the old buildings we left Cranbrook by the same road we had entered by, well satisfied as we had accomplished what we had set out to do. In fact, I think we both had the feeling a devout Moslem must experience when he has made his pilgrimage to Mecca.

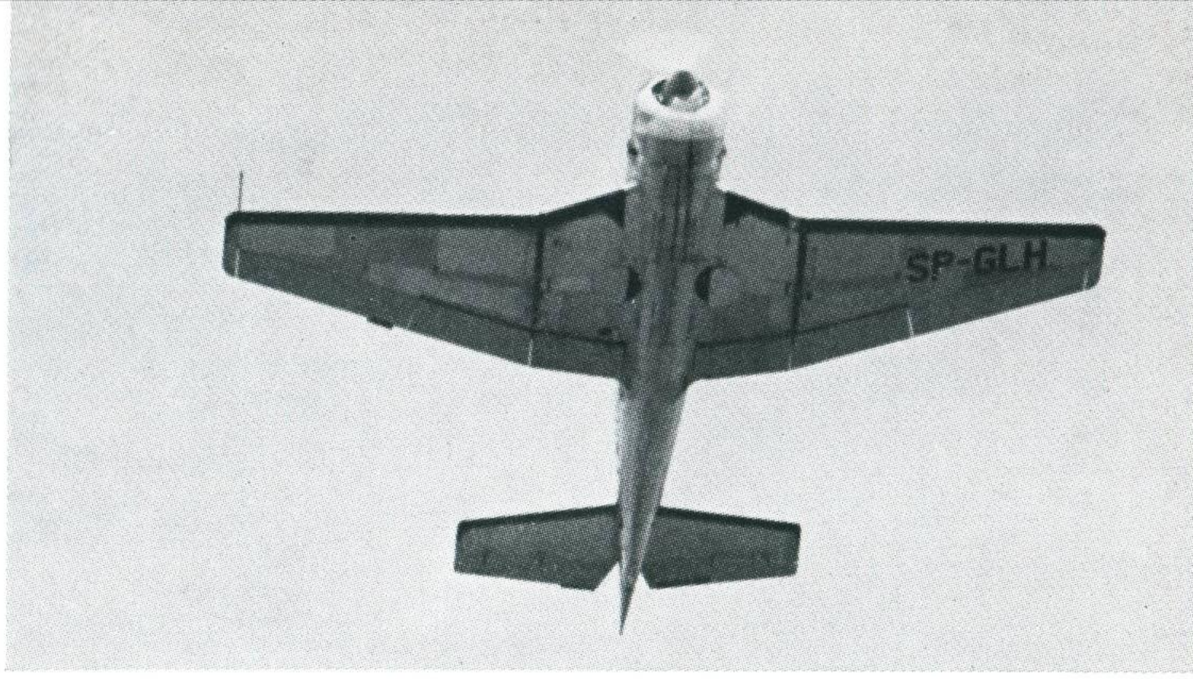


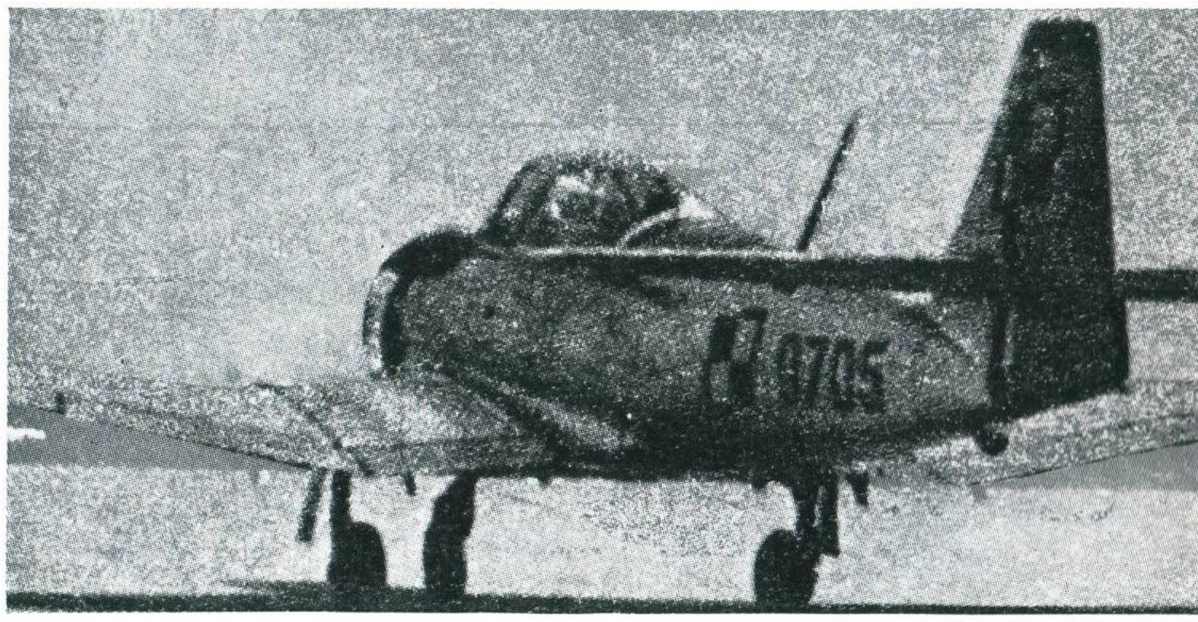
The old Cranbrook Post Office site as it is today. Here in 1924 the first experimental Observer Corps (as it then was) Operations Room was set up for the first aircraft reporting exercise. No. 1 and No. 2 Groups, based on Maidstone and Horsham, were established the following year.

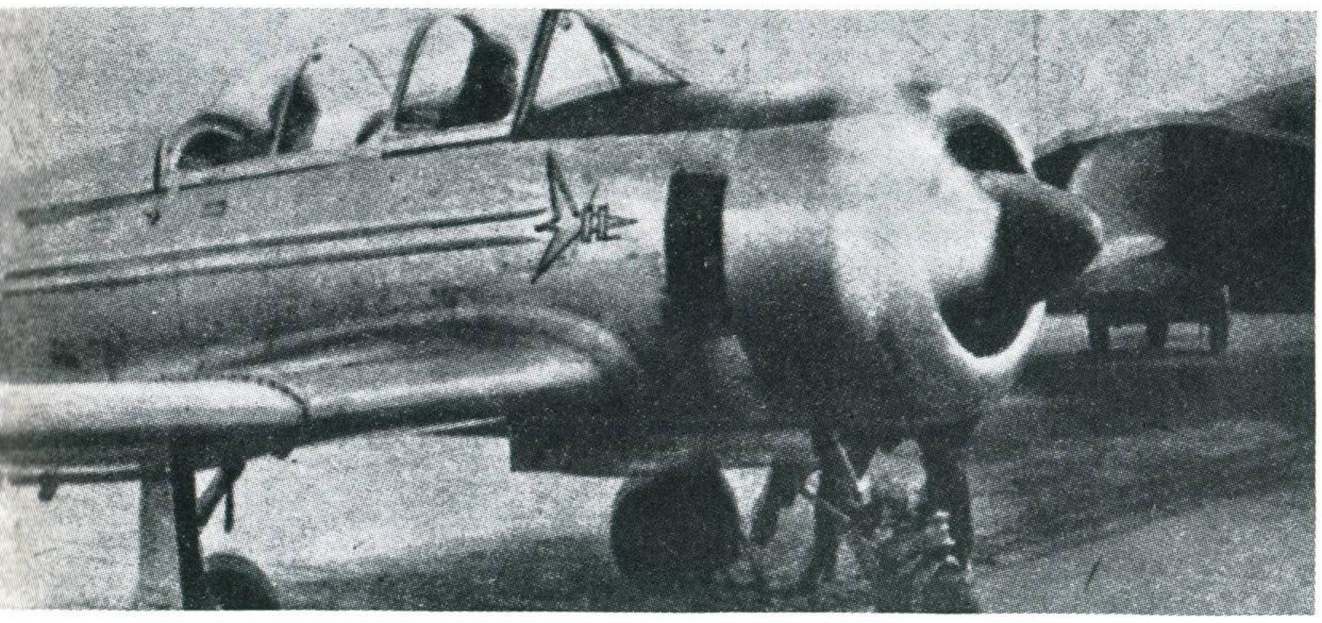
TS-8 BIES (pronounced Beese)

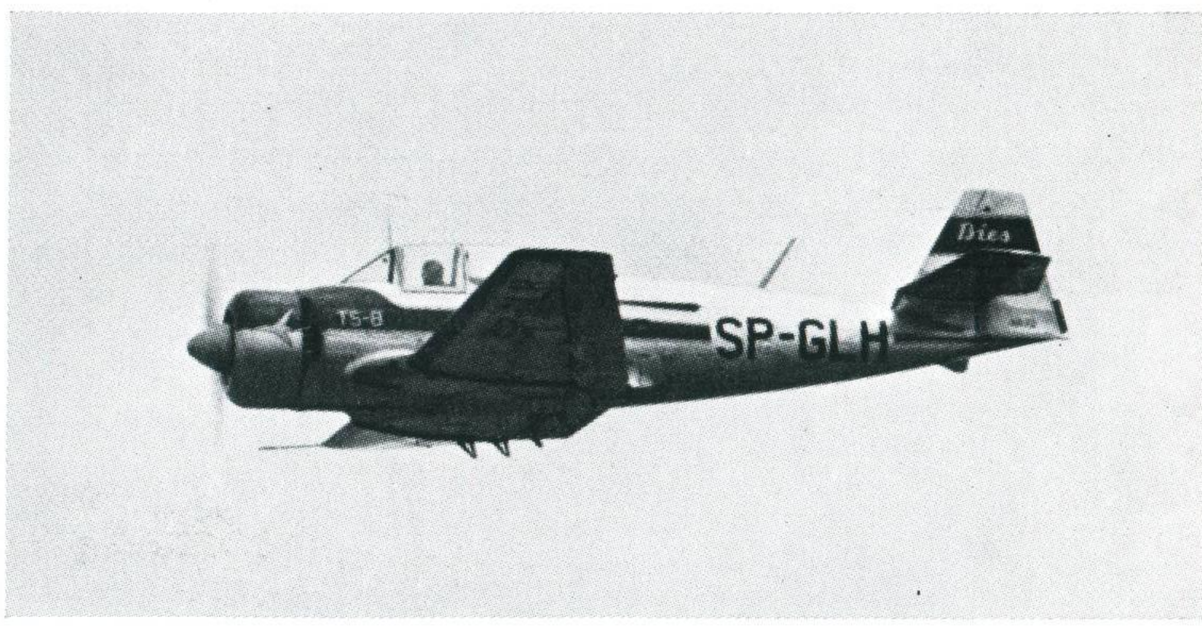
Bies, meaning Fiend, is the name of this two-seat basic trainer with a tricycle undercarriage which is widely used in Poland, where it is built, for training pilots both military and civil.

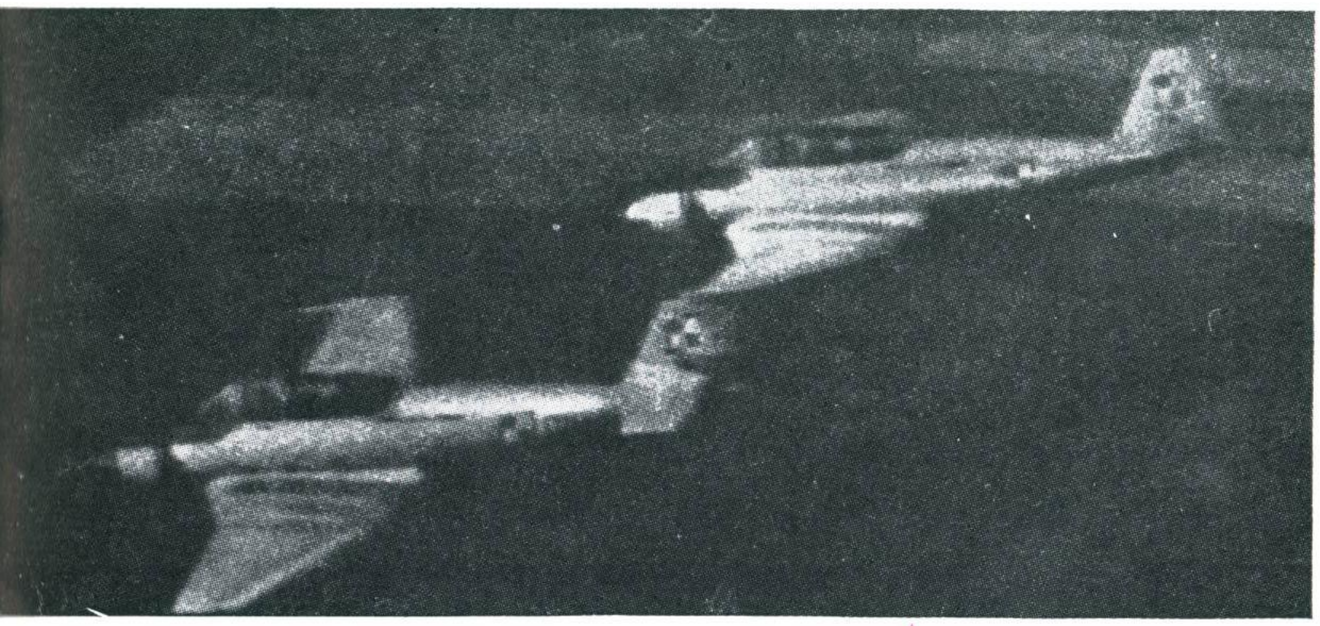
Powered by a 340 h.p. radial engine it has a maximum speed approaching 200 m.p.h.; bomb racks for armament training can be fitted under each wing.

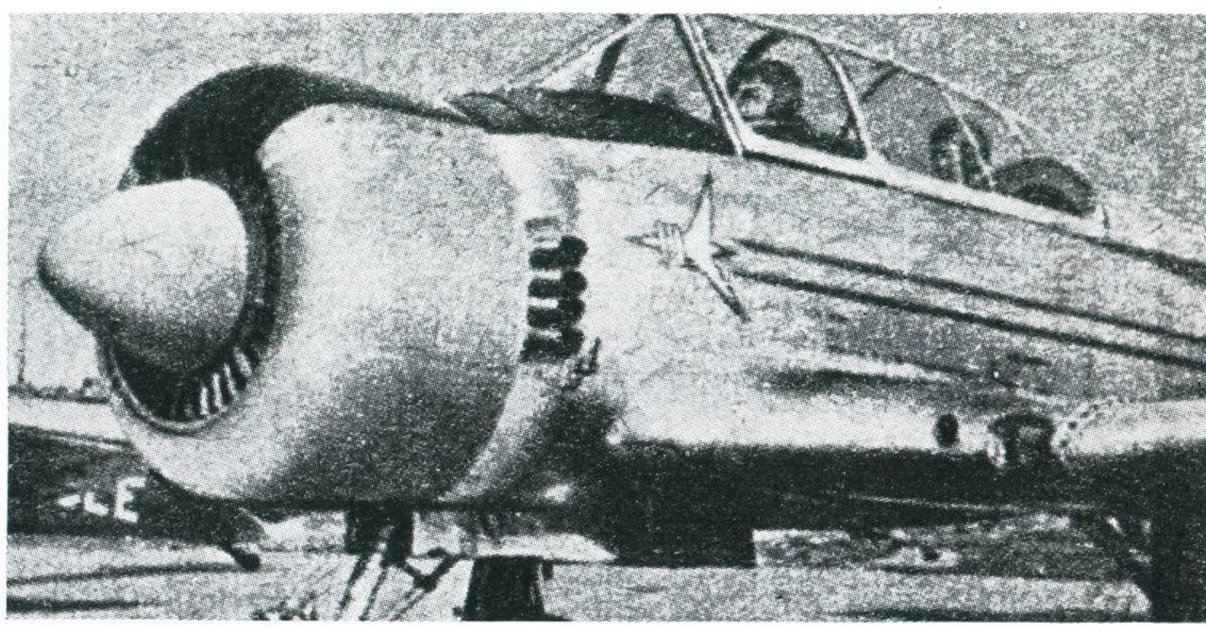


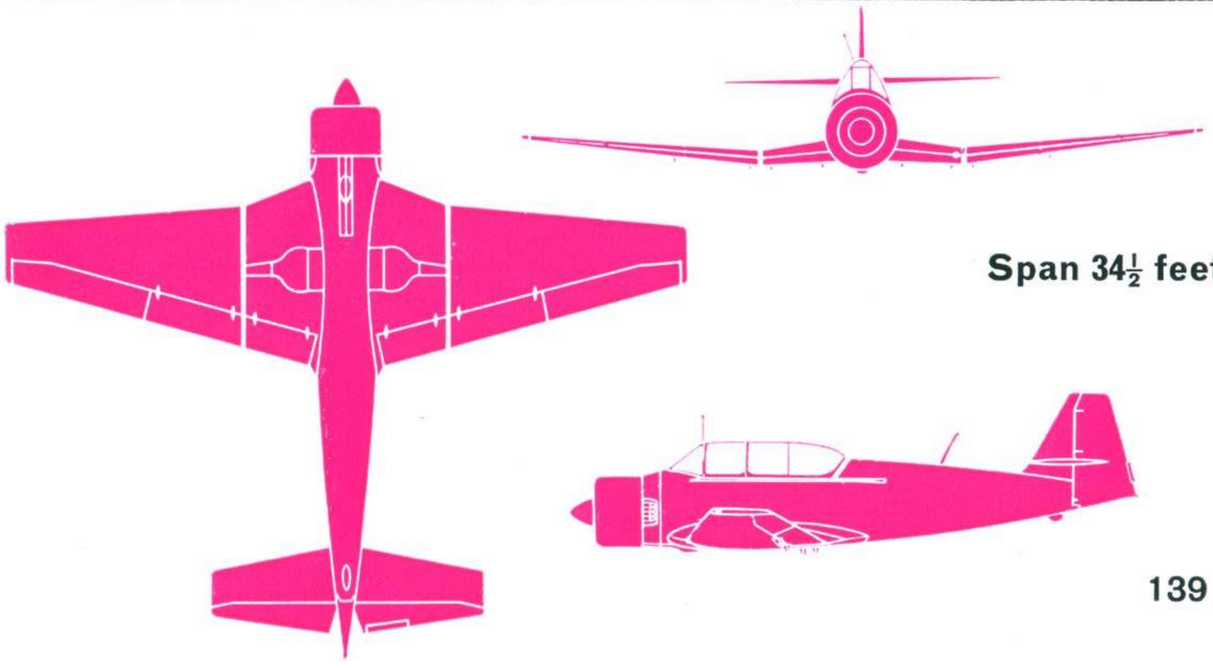












Span 34½ feet

ALOUETTE III

The French Alouette III is an enlarged and improved Alouette II (See August 1964 edition) with accommodation for seven persons. Its importance as a military helicopter can be gauged from the many countries that have placed orders for this aircraft to equip their Forces, including France, India, Denmark, South Africa, Malaya and Burma. Its outline may be affected by equipment and armament such as pontoons, or Nord SS-11 missiles which are carried externally.

Work to the lesson instructions on page 142 to identify this Alouette (meaning Skylark) which should be reported phonetically as AL-OO-ETT. Solutions on the cover.

Length of fuselage 33 feet

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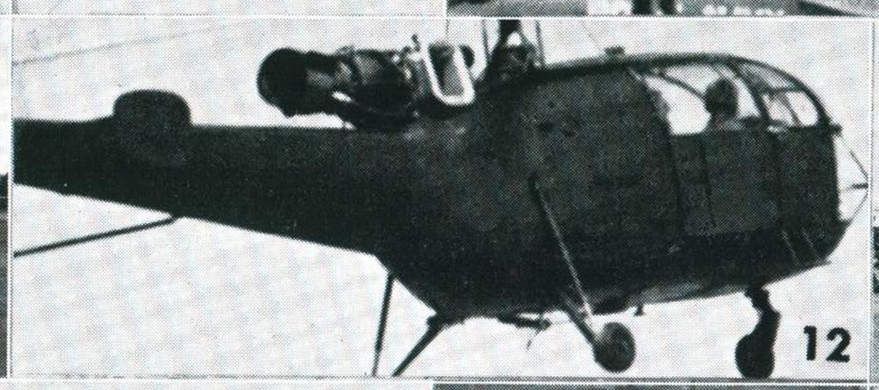
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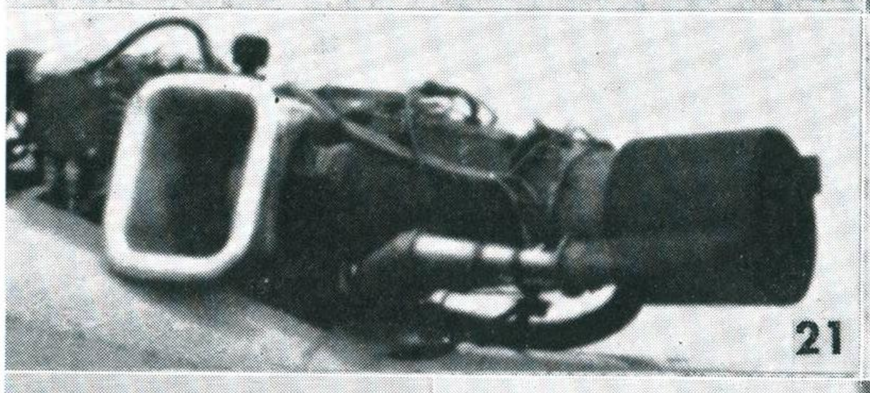
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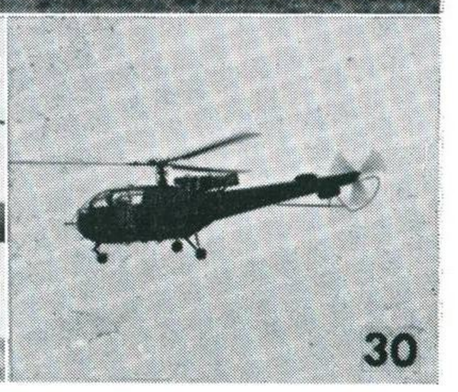
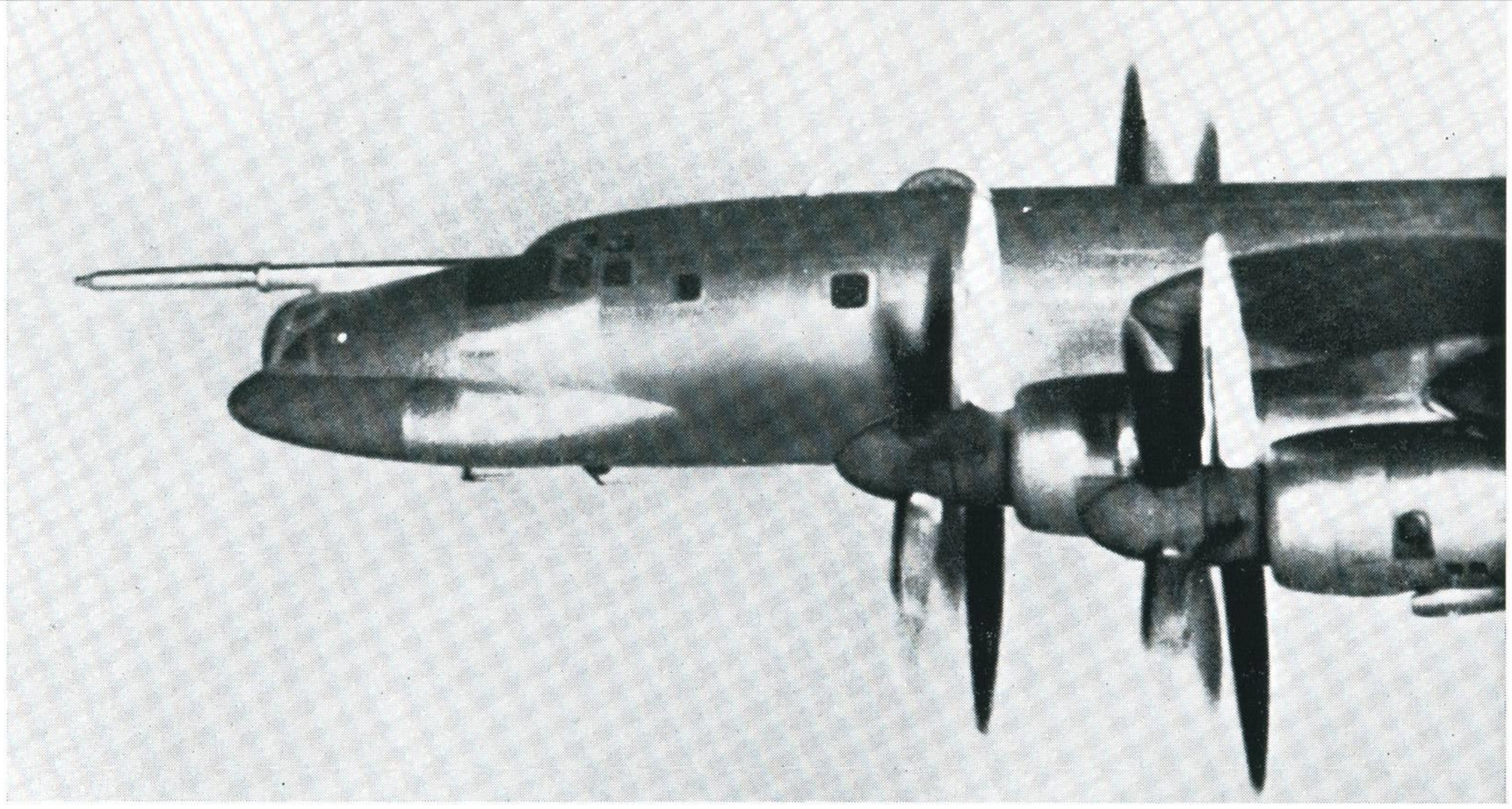
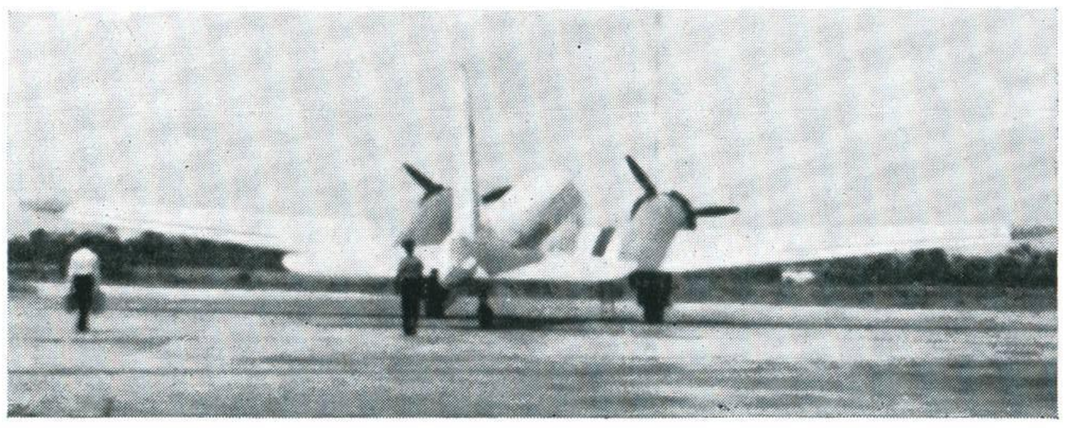

30

IN PASSING



BEAR VIEW ▶

Evidently a Bear B by the nose radome, but the large refuelling probe is a new feature of note. A further lesson on Bears "A" and "B" will appear shortly.



A SORT OF DAKOTA! A tricky identification problem was posed by Private Darcy of The Duke of Wellington's Regiment, who took this photo in British Honduras. A "sort of Dakota" is not far wide of the mark, but it is surprisingly a survivor of the 38 Douglas B-23 Dragons (the first U.S. service bomber to have a tail gun position) ordered in 1939. Twelve of these, of which this is evidently one, were converted late in the war to UC-67 transports with the tail gun position faired over. Sold after the war, this surviving example is operated by a company at Miami.

THUNDERCHIEF—AUGUST 1964 JOURNAL

References to F-105 and F-100 in this Thunderchief lesson should all read F-105. The F-100 is the Super Sabre.

LESSON INSTRUCTIONS

To obtain the maximum benefit from the training devices published in this *Journal*, the following procedure should be adopted.

1. **Read the text associated with the lesson.**
2. **Prepare a list of target numbers so as to be able to tackle the targets in any order.**
3. **Identify the target pictures by comparing them with the key views: start with the easy ones so as to gain experience: also use targets already identified to solve the more difficult ones.**
4. **When certain of the identity of a target write down its name *IMMEDIATELY* against the appropriate number on your list. THIS IS IMPORTANT.**
5. **Lessons should not be hurried or given a time limit. So far as beginners are concerned, it is more important to identify accurately than quickly.**
6. **Do not attempt conscious memorising of details, shapes, or names.**

POINTS OF VIEW! The helicopter hovering in the background on the port side of H.M.S. Ark Royal was captioned as a Wessex. Small and indistinct as the image was, a certain naval officer averred that it was a Whirlwind. Challenging his views by drawing attention to the apparent splay of the wheels, we were met by a full broadside. The angle between a vertical line through the fuselage centre and the oleo legs is—Wessex 22° Whirlwind 26° we were told, also that had it been a Wessex from the carrier it would have been painted in conspicuous yellow on the upper surfaces, but the parting shot carried the day as the officer's final point is that *he was the pilot of the Wessex from which the photo was taken!*

FLASH! To correct a statement in the February issue that Army aircraft do not have fin flashes, we present the Auster A.O.P.9. It is R.A.F. and Army aircraft that have red, white and blue fin flashes, Fleet Air Arm aircraft that do not.

Eastern briefs

1 In the small Tunisian Air Force, Safirs (SAAB-91D) form the main equipment.

2 The Herald and Friendship, both of the same basic configuration, are used in military and civil service. In this case the Herald is shown in military colours and the Friendship in airline service.

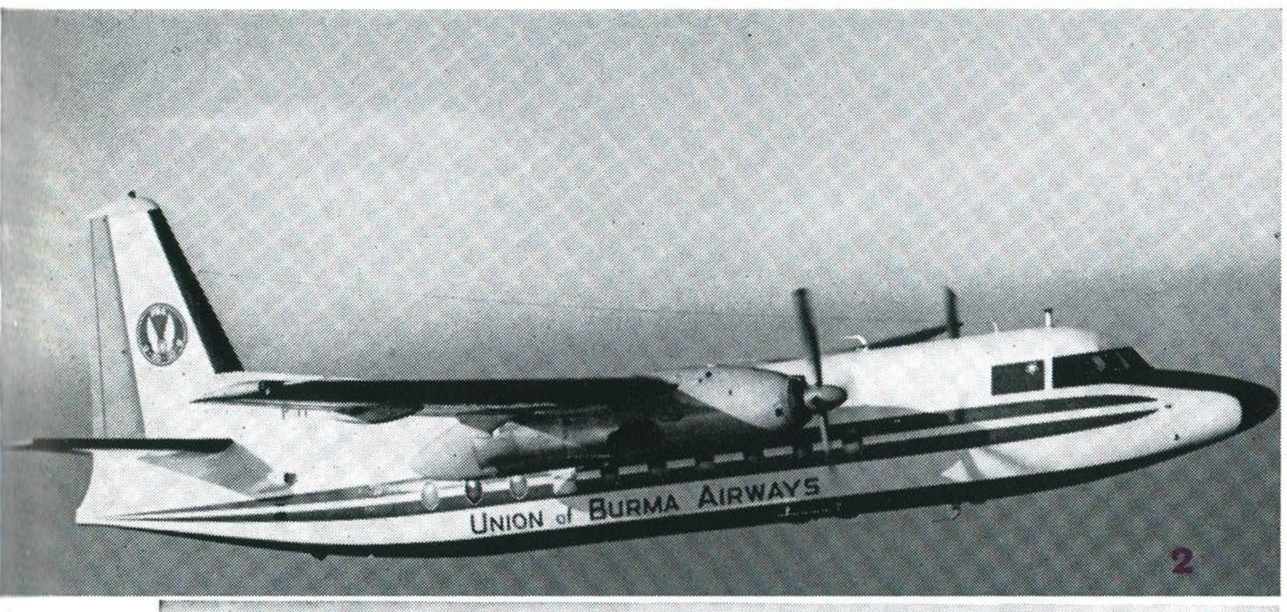
3 Both Provosts and Jet Provosts are in military service in Middle Eastern countries; in this case examples are of an Iraqi Provost and Kuwaiti Jet Provost.

4 A Russian transport, Cub, in Iraqi service. Cub was the subject of a lesson in the February 1964 edition.

5 No longer in active Royal Navy service but still with the Indian Navy is the Sea Hawk.

N.B. All photographs except Nos. 1 and 2 were taken in the United Kingdom where all types depicted may be observed.

1



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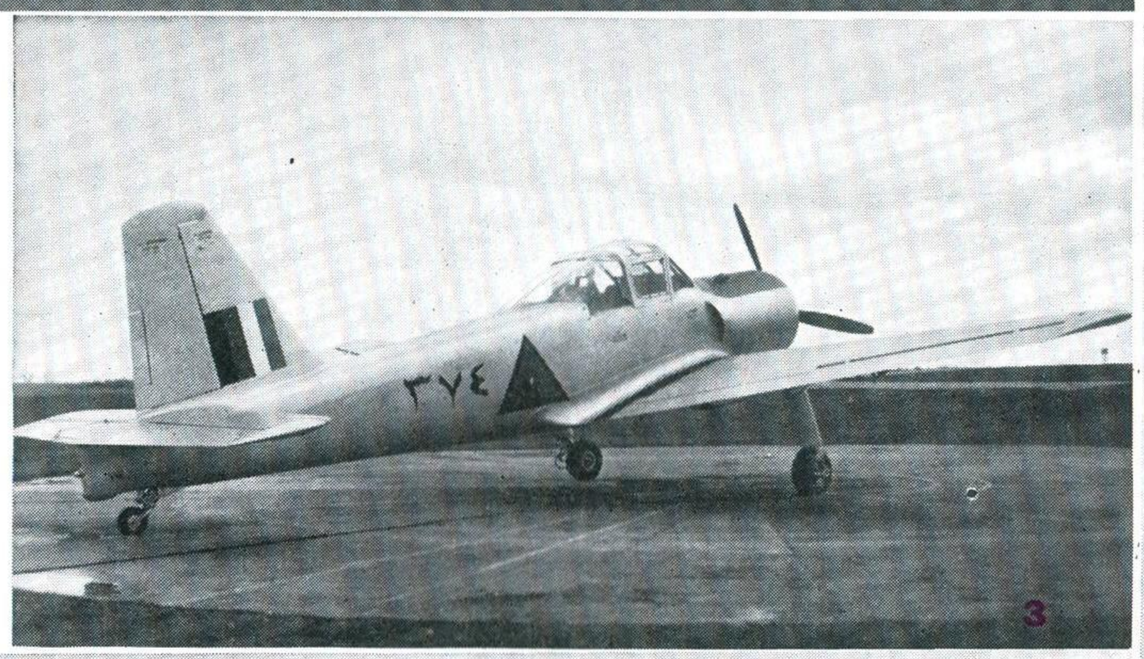

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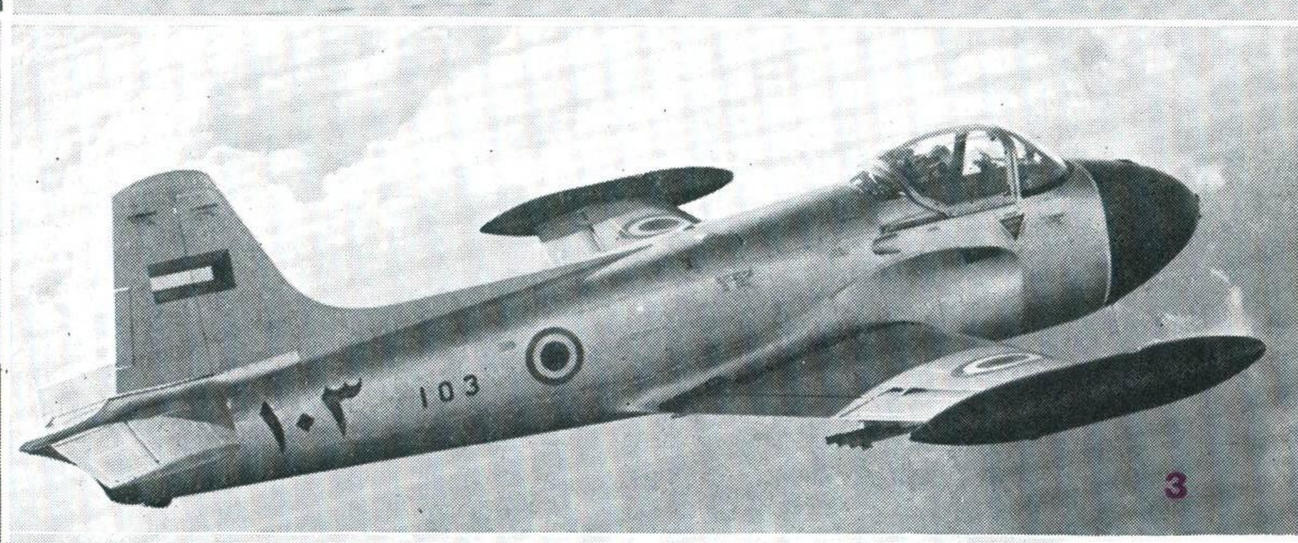

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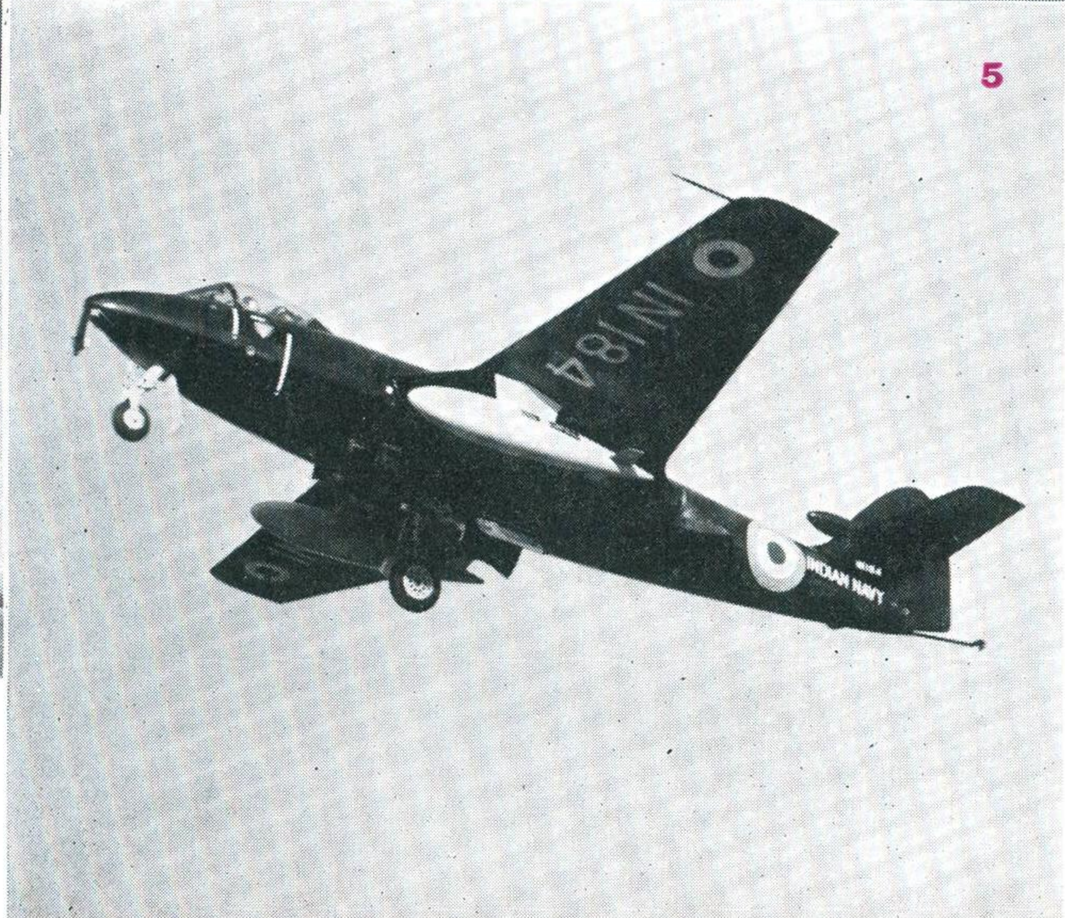

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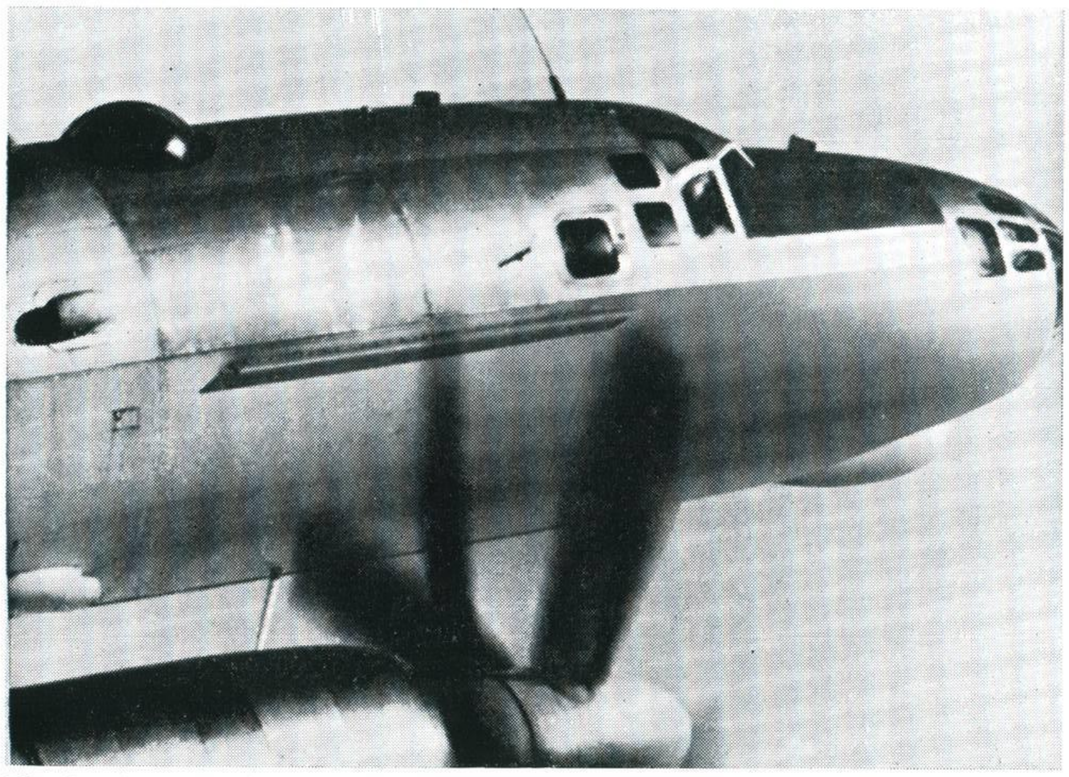
COVER PICTURE



The Russian equivalent of the Shackleton for maritime reconnaissance is the Bear of which this is a close-up of Bear "A". The Bear "B" has a re-designed nose as illustrated inside this issue.

Page 132 **FISHBED AND FLIPPER HIGHLIGHTED**

1 Flipper	13 Flipper	25 Fishbed	37 Flipper
2 Flipper	14 Fishbed	26 Flipper	38 Fishbed
3 Fishbed	15 Fishbed	27 Fishbed	39 Flipper
4 Flipper	16 Fishbed	28 Flipper	40 Flipper
5 Fishbed	17 Flipper	29 Flipper	41 Fishbed
6 Fishbed	18 Fishbed	30 Flipper	42 Fishbed
7 Flipper	19 Flipper	31 Fishbed	43 Flipper
8 Flipper	20 Flipper	32 Fishbed	44 Fishbed
9 Fishbed	21 Fishbed	33 Fishbed	45 Flipper
10 Fishbed	22 Fishbed	34 Flipper	46 Flipper
11 Flipper	23 Flipper	35 Flipper	47 Fishbed
12 Flipper	24 Fishbed	36 Fishbed	48 Flipper

SOLUTIONS TO TESTS AND EXERCISES IN THIS EDITION

Page 140 **ALOUETTE III**

All targets are of **Alouette III** helicopters except No. 16 which is of an **Alouette II** and No. 23 which is a **Hog**.

Page 136 **HILLER HELICOPTERS**

All targets are of **Hiller** helicopters except No. 11 which is a **Bell 47J Ranger**
For those interested in the precise model designations, these are as follows:

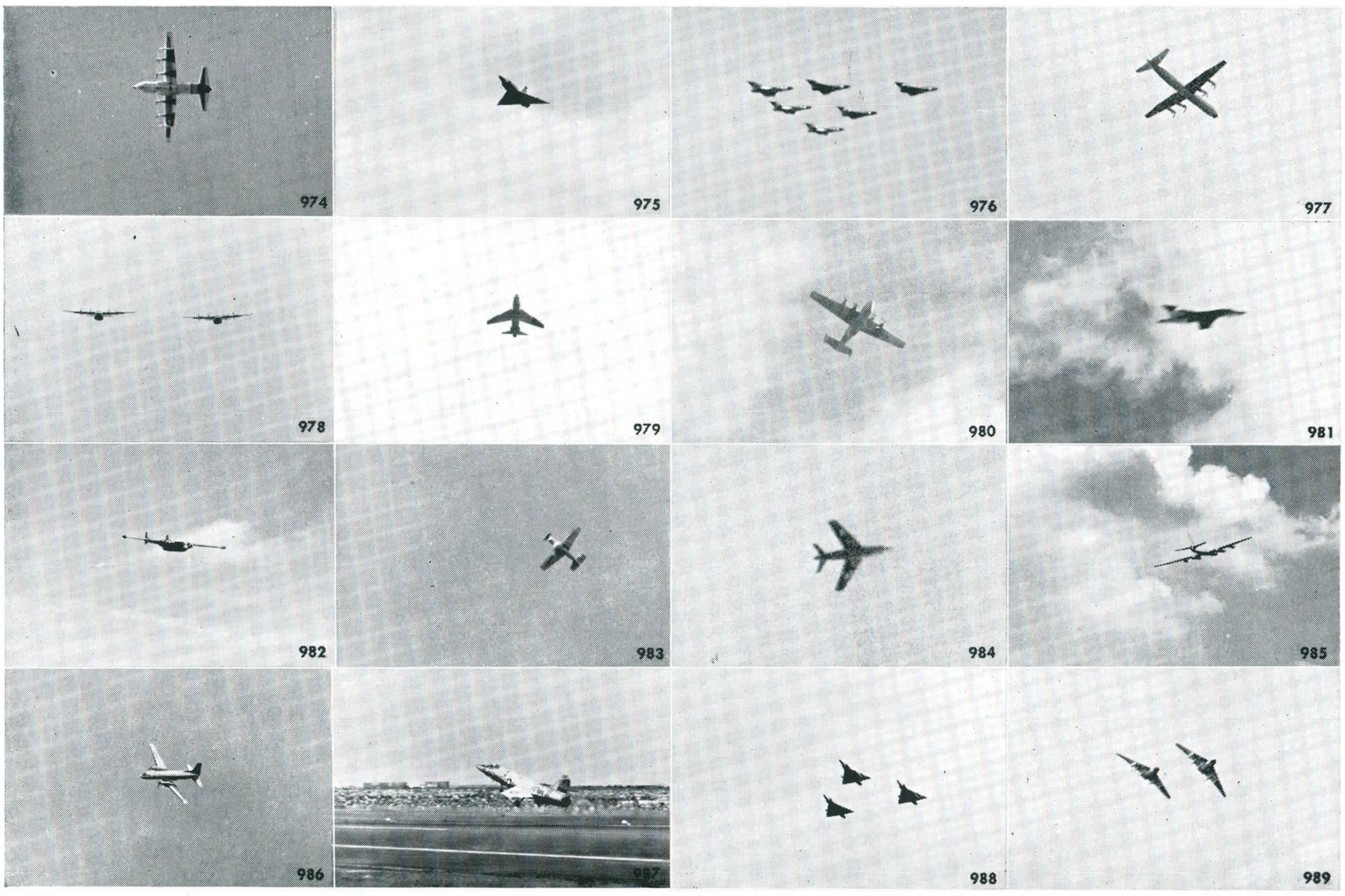
1 Hiller 12E	15 Hiller E4s
2 Hiller 12E	16 Hiller 12E
3 Hiller E4	17 Hiller OH-23F Raven
4 Hiller OH-23C Raven with stretchers outboard	18 Hiller OH-23D Raven
	19 Hiller 12E (Royal Navy)
5 Hiller OH-23C Raven	20 Hiller OH-23D Raven
6 Hiller 12E	21 Hiller E4
7 Hiller E4	22 Hiller 12E
8 Hiller OH-23D-2 Raven	23 Hiller OH-23F Raven
9 Hiller OH-23F Raven	24 Hiller 12E
10 Hiller E4 with zip-on flotation gear	25 Hiller 12E
11 Agusta Bell 47J Ranger	26 Hiller 12E
12 Hiller E4	27 Hiller 12E
13 Hiller 12E	28 Hiller E4
14 Hiller 12E	

Solutions to Airborne Headaches No. 94 in the July, 1964, edition:

958 Caravelle	963 Shackletons (3 M.R.2s leading, remainder M.R.1s)	967 DC-8
959 Tracker		968 Herald
960 Farmers		969 Tridents
961 B-52 Stratofortress	964 Scimitar	970 Boeing 707/720
962 Badger	965 Voodoo	971 Sea Vixen
	966 Jet Provosts	972 Belvedere
		973 Argosy

AIRBORNE HEADACHES

No. 95



Submission dates for answers to Airborne Headaches No. 95 will be notified at Group Headquarters.

Printed for H.M. Stationery Office by William Clowes & Sons, Limited, London and Beccles. 8051. 20,300. 9/64