

THE ROYAL



OBSERVER CORPS

RECOGNITION

Journal
and R.O.C. GAZETTE



Vol. 3 DECEMBER 1961 No. 12

In Passing . . .

Code up the CREEK?

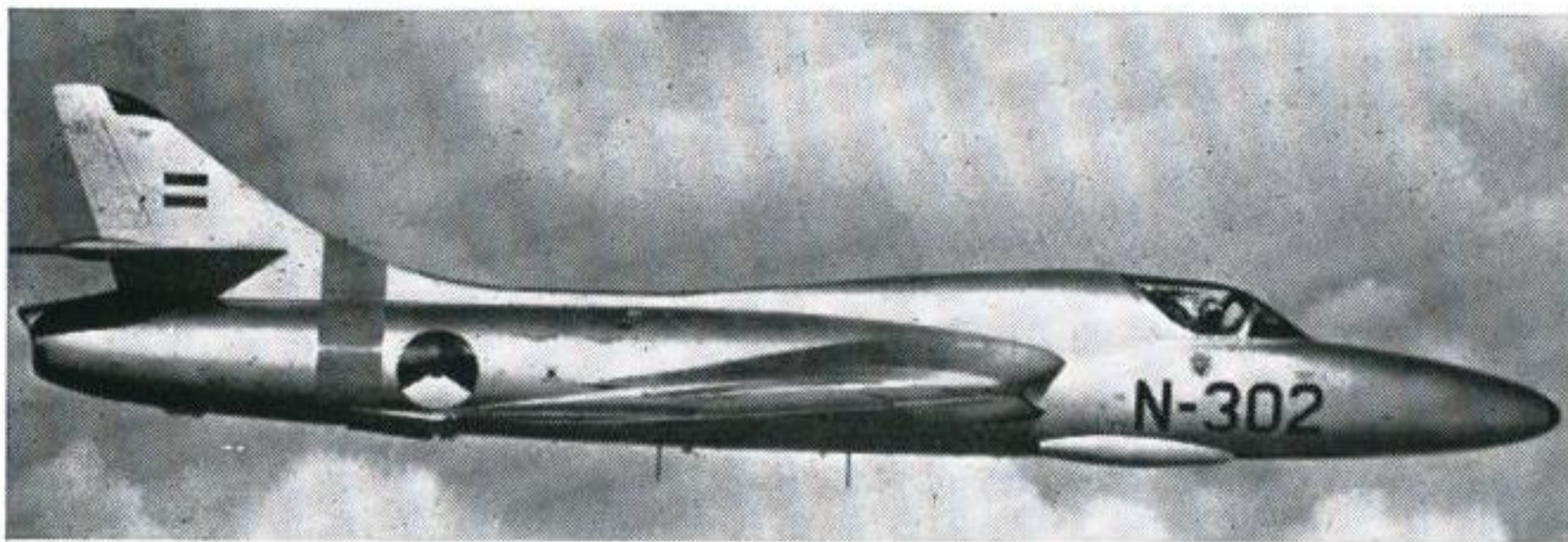
A witty poem to the aeronautical press poked fun at NATO Names for Russian aircraft. One verse went:—

Now BEAR I grant seems fairly logical
MOOSE and BISON likewise zoological
Is it consistent then, or bright
To dub the Yak-two-five FLASHLIGHT?

While there is little rhyme in NATO names there is at least one good reason of which the poet was evidently unaware. Firstly, each name starts with a significant initial letter such as "F" for Fighter and secondly, two-syllable words denote jets and single-syllable words propeller-driven aircraft—did you know that?



BOOK REVIEW



"Hawker Aircraft Since 1920," by Francis K. Mason, A.R.Ae.S. Published by Putnam. Price 63s.

A book that fully justifies its title. This copiously illustrated volume, with hundreds of photographs and drawings traces Hawker history over 40 years, taking the reader right up to date with no less than 40 pages on Hunters. Our photo above shows one of 20 (N-301 to N-320) Hunter Trainers (based on R.A.F. T.7) for the Dutch Government.



A Passing Airborne Headache

Confusion over Gnats and Swifts has been a bugbear in the past; indeed, after a Gnat Trainer had appeared in the R.A.F. Newspaper's recognition feature "Just For Fun," one reader challenged the Editor and maintained that it was a Swift. However, there should be no more confusion, for shortly before the recent announcement that the Gnat Trainer will enter service with Flying Training Command next Spring, came the announcement of the withdrawal of the Swift F.R.5 from service. No other Swifts are flying, but you will be seeing Gnats and, as early warning, the prototype Gnat Trainer is shown below.



"Put it on the Snag sheet. . . Test Pilot disagrees with Chief Draughtsman."



Lesson Instructions

To obtain the maximum benefit from the identification lessons in the *Journal*, you should carry out carefully the following procedure.

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. Prepare a list of the target numbers. This is important as you need not tackle the targets in numerical order.
3. Identify the target pictures by comparing them with the key-views, starting with the easy ones first so as to gain experience and using targets you have already identified to help you solve the more difficult ones.
4. When certain of the identity of a target, write down its name immediately against the appropriate target number on your prepared list. This is a most important part of the procedure.
5. Lessons should not be hurried or given a time limit. So far as beginners are concerned, it is more important to identify accurately rather than quickly; speedy identification will come with experience.
6. Don't try to memorise.

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*Identification Lessons

Farnborough '61

by

Observer Commander D. N. James

"THE Greatest Show over the Earth"—that is the title which has been given to the S.B.A.C. Flying Display and Exhibition held at the Royal Aircraft Establishment at Farnborough, and there can be few of the many thousands visiting the Show each year who doubt that this title is correct.

This year, with only three completely new types of aircraft on show, the sub-title "Variations on a Theme" could be added. Not that the manufacturers of the remaining 27 types were giving themselves airs on a shoestring, for variations to basic aeroplanes are exceedingly costly.

But it was good to be at Farnborough again: the giant Exhibition tent, gently billowing on top of the hill, appeared to hold the tall Blue Streak missile like a wand of office; while, at its feet, a multi-coloured array of aeroplanes stood glistening in their polished coats of silver, bronze and black, sparkled jewel-like in red, white, orange and blue, or crouched purposeful and aggressive in business-like camouflage. Here was glorious technicolour, on the widest of wide screens, and the music of thunderous power and riven air all rolled into one in the sunshine.

Dominating the Flying Display, were the massive efforts of the three Services.

The Navy played a large part, opening the Show in noisy fashion by despatching a Scimitar to photograph the carrier *Hermes*, steaming in the Channel. Later, nine Scimitars of No. 800 Squadron showed that the boys in navy-blue know a thing or three about formation aerobatics. They put these big fighters through a thunderous succession of tight loops in truly ship-shape and Bristol fashion. Three corpulent, radar-laden Gannets snarled past, nonchalantly feathering one co-axial propeller; a Sea Vixen, trailing a refuelling hose, fed one of its litter hungrily following in its wake; formations of Vixens and Scimitars surfed by at very high speed, while the rapid rolls of the solo Scimitar gladdened the hearts of many a matelot present and proved itself a Super-mariner indeed by flying very fast in impossible weather conditions on the opening day.

Beagle—Britain's youngest aircraft company—turned loose a small pack of new and not-so-new aeroplanes on the expectant spectators: an Auster A.O.P. 11, looking like a high-wing Stuka, with angular tail unit, spats and engine cowling; a Terrier, obviously related to the Auster A.O.P. 6; and an Airedale, looking very trans-Atlantic with swept fin, spats and Beagle-bronze paint. Pack leader was, of course, the Beagle 206, twin-engined by Rolls-Royce, and intended as an executive transport. It was, perhaps, the most significant and exciting new aeroplane seen at Farnborough, and soon to be seen elsewhere, if the reports that 250 of them are to be built are true.



The Argosy C.1 and the Olympus-powered Vulcan could not be spared from routine test-flying work, and each gave a necessarily short but effective demonstration before turning for home and duty: the Argosy with rear-loading crocodile-jaw doors agape to reveal a fuselage devoid of "costly bales", and the Vulcan after a steep, ear-splitting climb up and away from a near-ground-level pass.

A dashing Victor B.2, in its anti-flash white finish, manoeuvred like a fighter, its crescent wing cleaving the air in effortless fashion.

A Combined Operation by the R.A.F. and the Army entailed the use of six Whirlwinds, a brace of Belvederes, four

Beverleys and a Twin-and-Single Pioneer. They quickly landed some 300 troops, with vehicles, guns and supplies, under an air umbrella provided by eight Hunters.

Using three Austers and a Beverley respectively, the Army Air Corps and the R.A.F. each delivered a daily half-dozen parachutists to the Show: they all made delayed drops before landing on, or very near, a ground target.

A Comet 4C, in Middle East Airlines markings, showed the pace and grace of this world-proven type; while the two Dart-powered short-haul contenders—the Herald and the Avro 748—hummed smartly about in "anything you can do..." demonstrations. They are entirely dissimilar in appearance, which is interesting because it shows how two renowned





bomber firms have tackled the task of designing a DC-3 replacement.

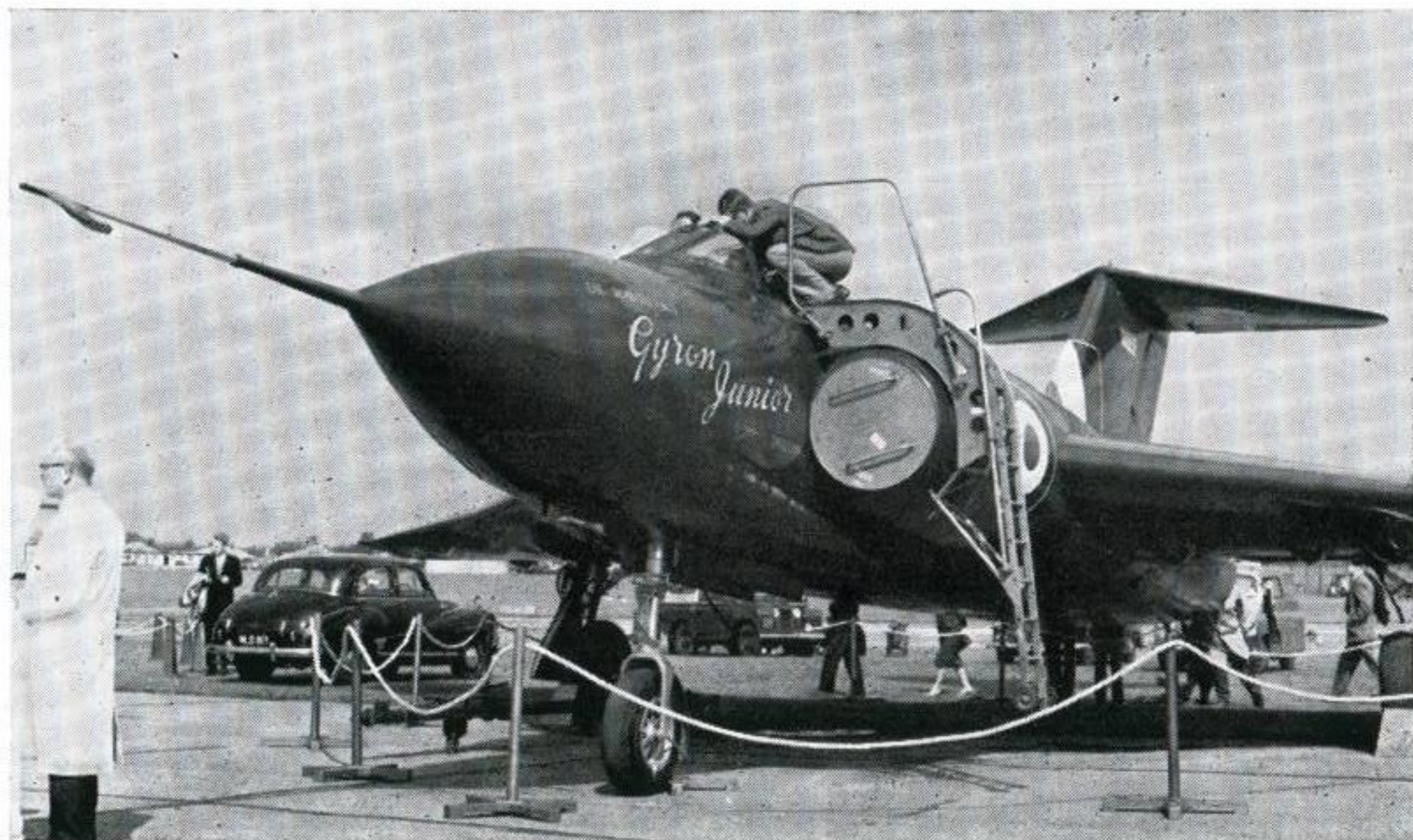
Although it seemed to be in the next parish before its Bristol Siddeley Viper finally swept it skyward, the slender, shiny

H.P.115, a completely new type for our log books, swooped and swished its way overhead in an agile manner and gave us a preview of the shape of Mach 2 wings to come into service in the world's airlines.

An all-blue Javelin stabbed its way steeply up off the runway, showing the power of its two Gyron Junior engines being developed for the all-white Buccaneer, which stormed along showing off its great weapons bay.

Yet another team event was the helicopter circus with Belvederes, Whirlwinds and Scouts going through a complex programme of fetching and carrying for the Army, who returned the compliment with a small cloud of Skeeters which entertained with some solemn four-square bashing and counter-marching. A Rotodyne, which could not quite make up its mind and carried a gay civil paint job and R.A.F. roundels, rushed back and forth like a 'bus trying to catch its

A panoramic view of the Farnborough aircraft park (top), the burnished Comet 4C G-AROV for Middle East Airlines (mid-page), the third pre-production Gnat T. Mk. 1 (left), and (right) the special Javelin F.A.W. Mk. 1 fitted with D.H. Gyron Junior engines.





The Avro 748 shows its capabilities at Farnborough. This first production (as apart from prototype) 748 heralds a series that will go into feeder-line service in 1962.

passengers; but it did not fail to impress the many potential inter-city centre commuters who were present.

Less spectacular, perhaps, but equally impressive, were aerobatics by a Jet Provost and Hawker's own civil-registered Hunter G-APUX, demonstrations of V.T.O.L. and "Flying-in-Several-directions-at-once" by the Short S.C.1, and some spirited high-g but dainty manoeuvring on the part of a snowy-white Gnat trainer.

But it was left to the R.A.F. to provide the big thrills of the display with three formation aerobatic teams: first, with four Jet Provosts of Central Flying School in two pairs, then with the 16 Hunters of No. 94 Squadron, who have taken over Treble One's mantle and are carrying on where they left off last year. The Hunter boys flew their usual immaculate formation loops, rolls and wingovers, with formation changes—including a new "Diamond Tee"—all ending with a smoke-trailing, two-stage downward bomb-burst.

Finally, the pilots of No. 74 Tiger Squadron struck twice with their Lightning fighters: once with their stream take-off, jetting up into the sky like a fountain, until it looked as if the runway was spouting aeroplanes; and once again, as they

returned to loop and roll their great Mach 2.0 mounts in impeccable formation. A direct descendant of these rapidly ascending fighters, the Lightning T.4 two-seat trainer, had earlier been put through two 360 degree turns within the airfield, its pilot hauling it round and round at high speed with its twin reheat flames crackling away at the business end.

On the ground, as in the air, the British Aircraft Industry displayed its wares—from nuts and rivets to guided missiles and targets. Who could resist the appeal of Napier's Icing-Research Lincoln which stood like an old warrior, its ice-test missions on its chest, and each exhaust stub carefully wrapped in a plastic bag against the elements! The Bloodhound, Firestreak, Thunderbird, Seacat and Seaslug missiles of today stood alongside Blue Streak, Blue Steel, Red Top and Jaguar of tomorrow, while radar aerials whirled and scanned overhead.

It is in this way that the S.B.A.C. Show is unique, providing a technical exhibition and an outstanding display of the latest aeroplanes of one nation—all on one field. It is a combination of science and spectacle unequalled anywhere in the world, and it is certain that Farnborough 1961 will be as memorable as any of its predecessors.

A wolf in sheep's clothing, the civil demonstration version of the trainer with combat potential, the Hunter T.66A, resplendent in a red and cream finish.



HOW!—do you say?



To enable you to identify aircraft so that their names roll off the tip of the tongue is our aim—but what if they give your tongue a twist? American aircraft are often named after Indian tribes and it is the present policy of the U.S. Army to give their own name to their aircraft from Indian folklore including tribal names. To enable you to roll these names off the tongue, we have refreshed your memory by featuring the aircraft and

giving it a proper and a phonetic spelling. The capital letters indicate syllables that need emphasis. Now try rolling them out—this is an oral exercise.



Apache a-PACH-ee. A light 4/5 seat cabin tourer by Piper of which nearly 2,000 have been built.



Iroquois EAR-o-kwoi. Standard utility helicopter of the U.S. Army; some Iroquois are armed with Nord S.S.11 missiles.



Mojave Mo-HAV-vay. A transport helicopter of the U.S. Army, comparable in fuselage size to the famous Dakota.



Seneca SEN-aka. A new helicopter called the Skyhook by its makers—Cessna—becomes the Seneca in U.S. Army service.



Sioux SOO. Military version of the Bell 47G Trooper helicopters which the U.S. Army have named Sioux.



Mohawk MO-hawk. A high-performance observation aircraft which may be seen carrying underslung surveillance equipment.



Choctaw CHOK-taw. As the H-34 Choctaw in the U.S. Army, this Sikorsky helicopter is built in Britain as the Wessex.



Seminole SEM-in-ole. Alias the Beechcraft Twin Bonanza in U.S. Army colours for observation and surveillance work.

P.S. Have you read the "Last of the mo-HE-kans"?

SAAB 35B DRAKEN

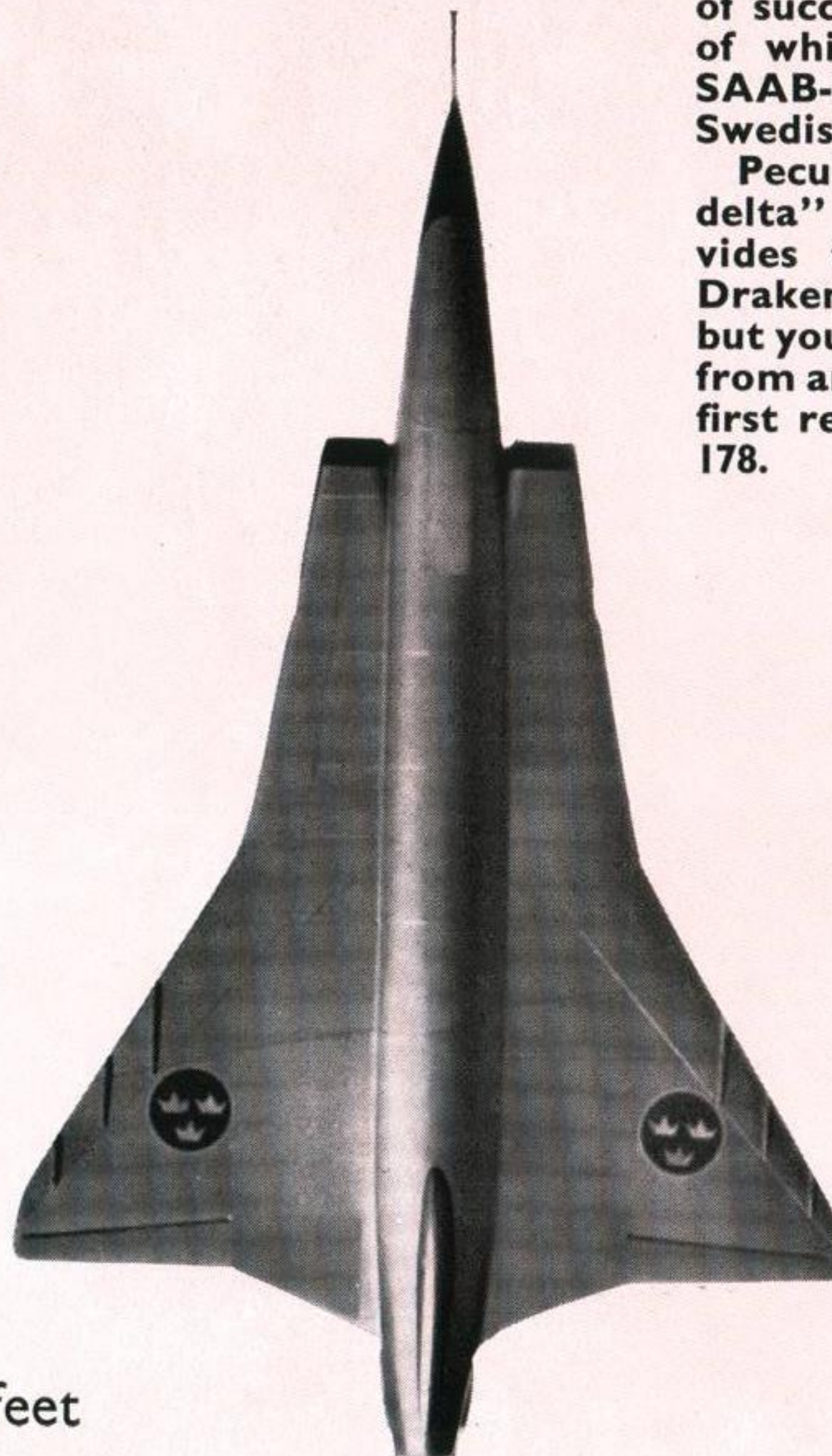
Sweden's Double Delta Fighter



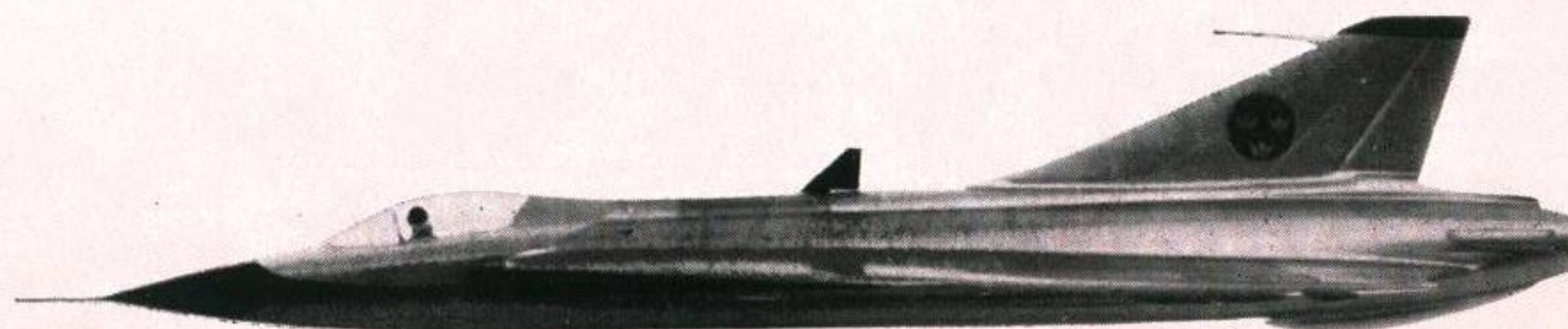
Sidewinder missiles can be carried beneath the wings and in a new model recently announced, the J35F, Falcon missiles are carried.

Using modern, bombproof, underground factories, the Svenska Aeroplan A.B. (SAAB Aircraft Company) have produced a series of successful jet fighter designs, the latest of which is their single-seat, supersonic SAAB-35 Draken fighter. It is in Royal Swedish Air Force service as the J35.

Peculiar to SAAB aircraft is the "double-delta" configuration of the wing which provides the most striking feature of the Draken (Swedish for Dragon) in plan view, but you are expected to identify the Draken from any angle, for which reason you should first read the Lesson Instructions on page 178.



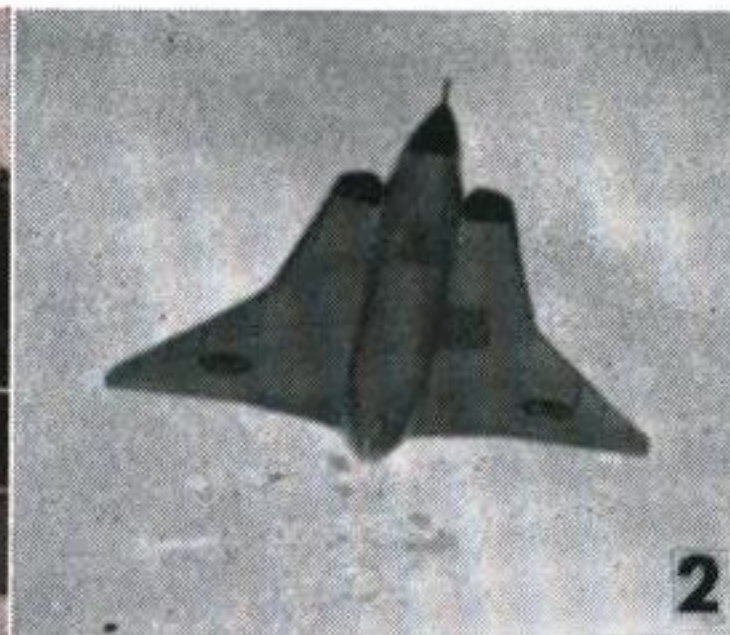
Span 31 feet





SAAB 35C DRAKEN

This is a dual-control two-seat trainer version of the 35A, to which it can be converted by an exchange of front fuselage sections. Note the extended canopy to accommodate pilot and pupil in tandem.



2



3



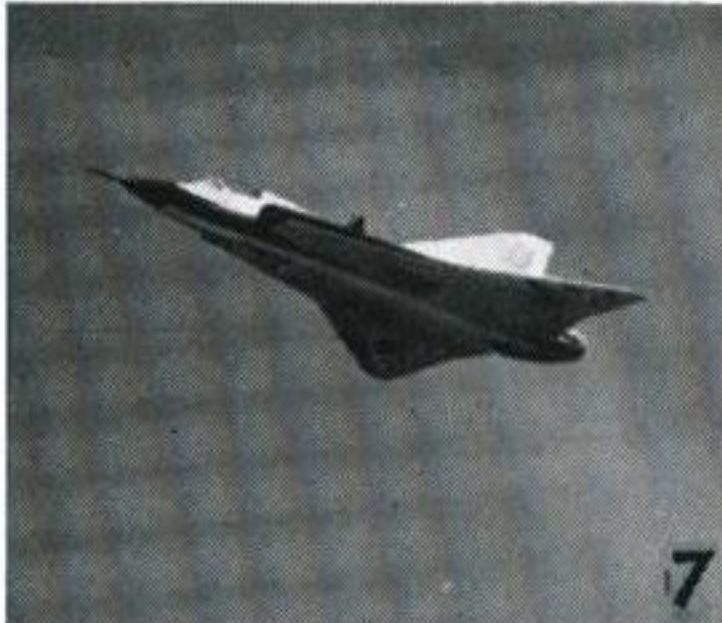
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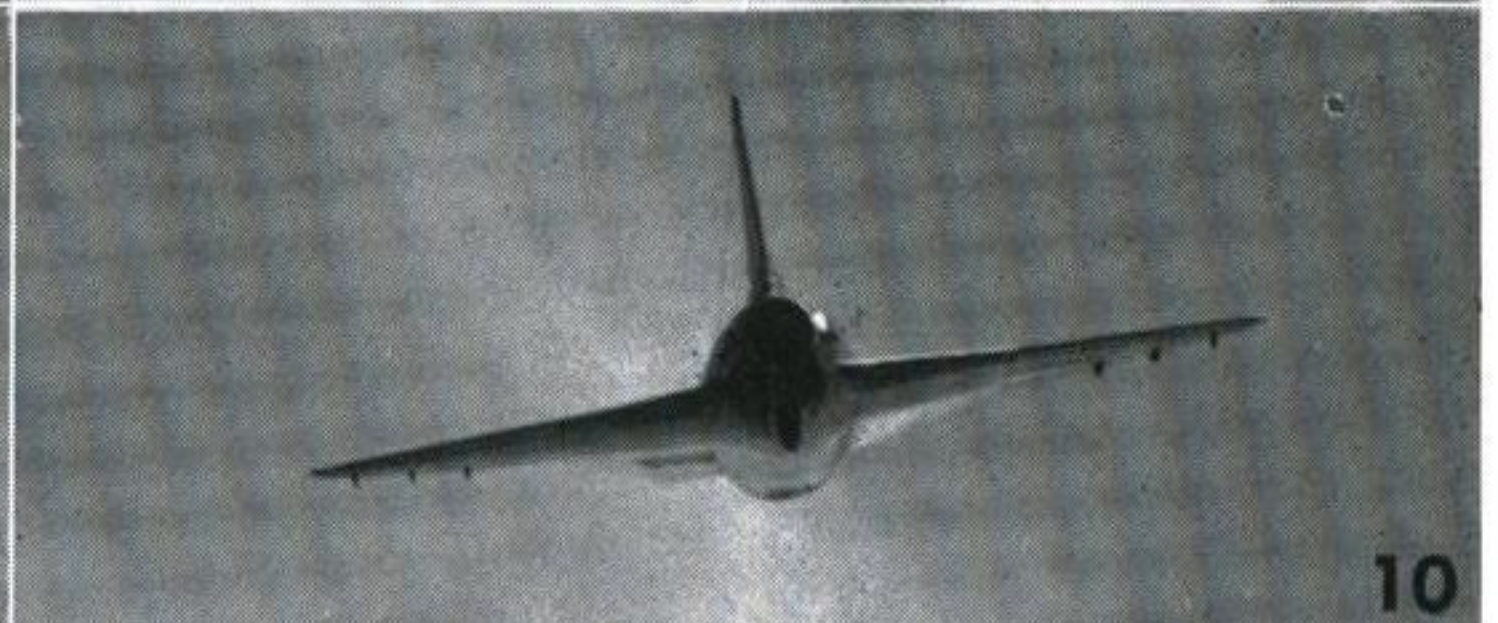
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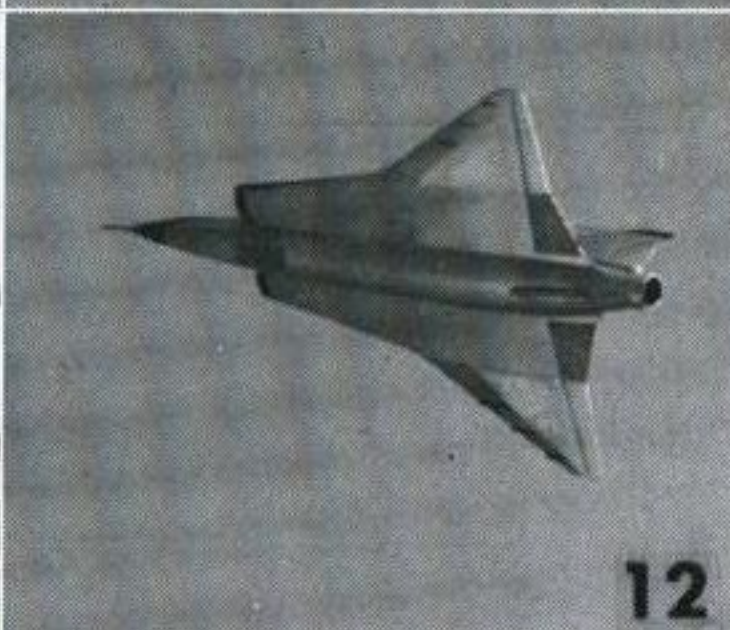
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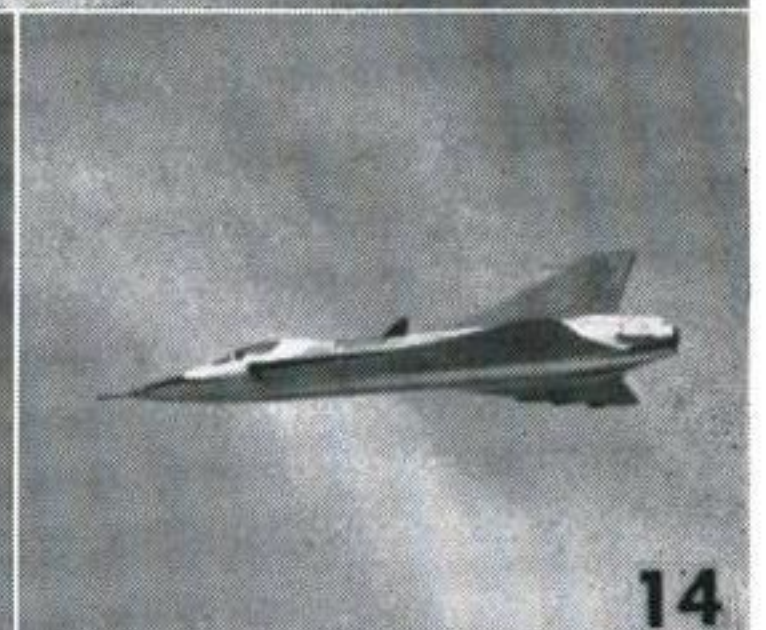
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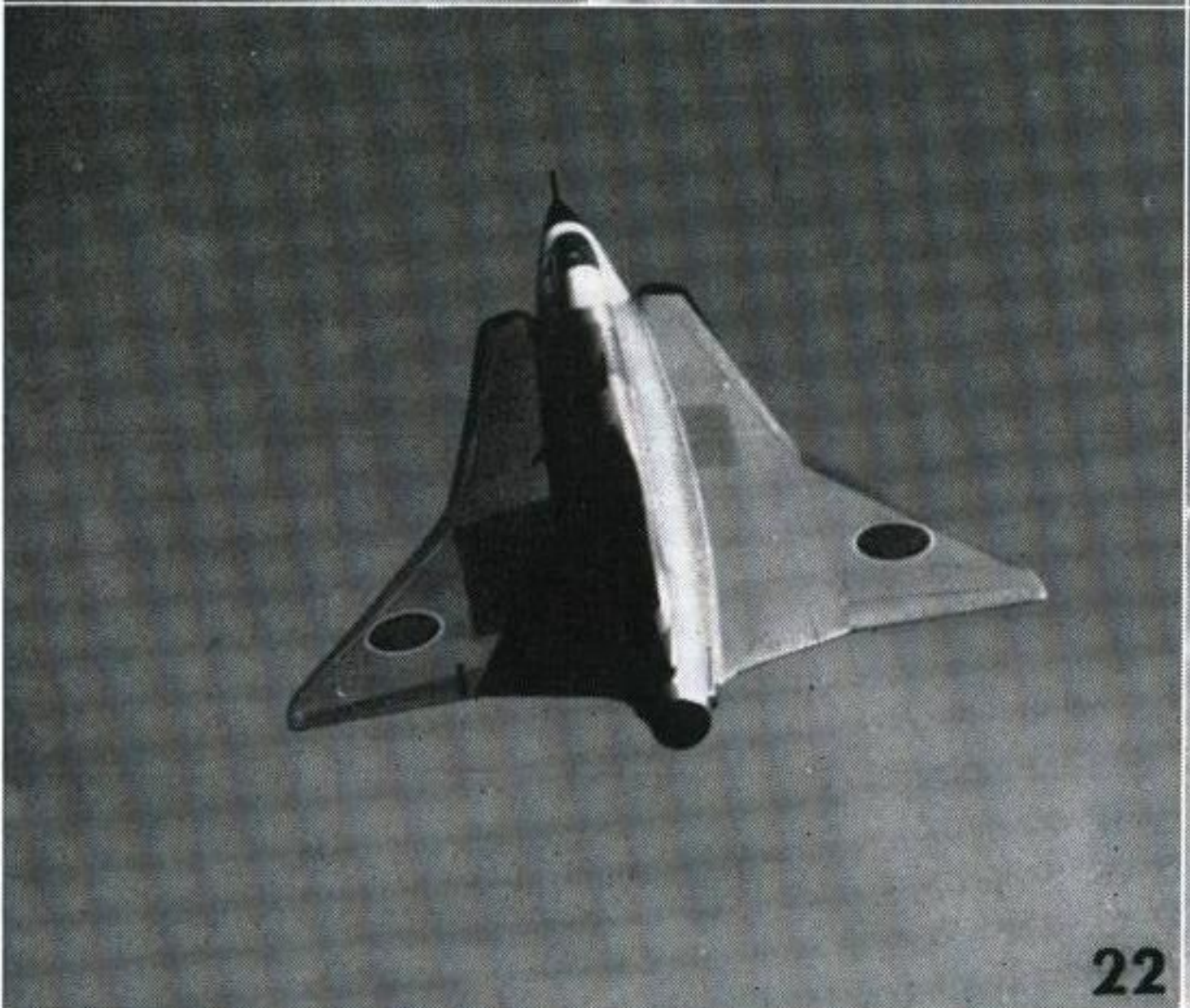
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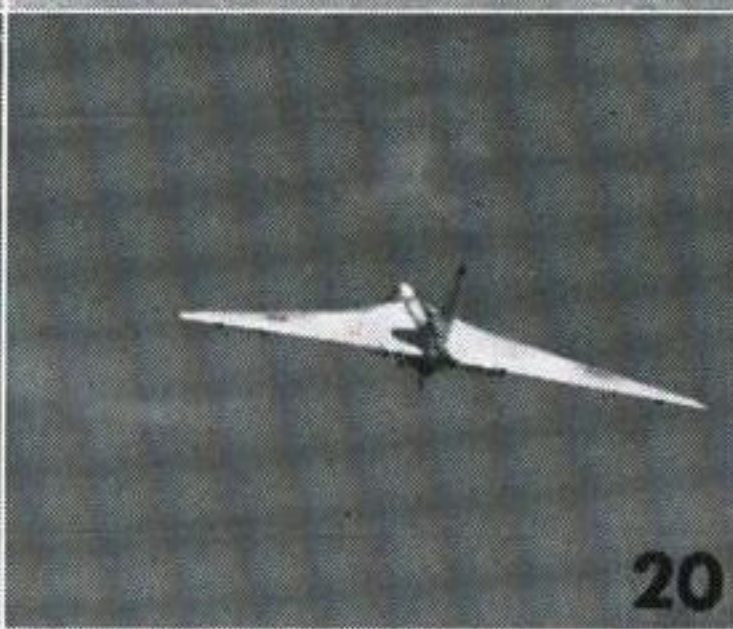
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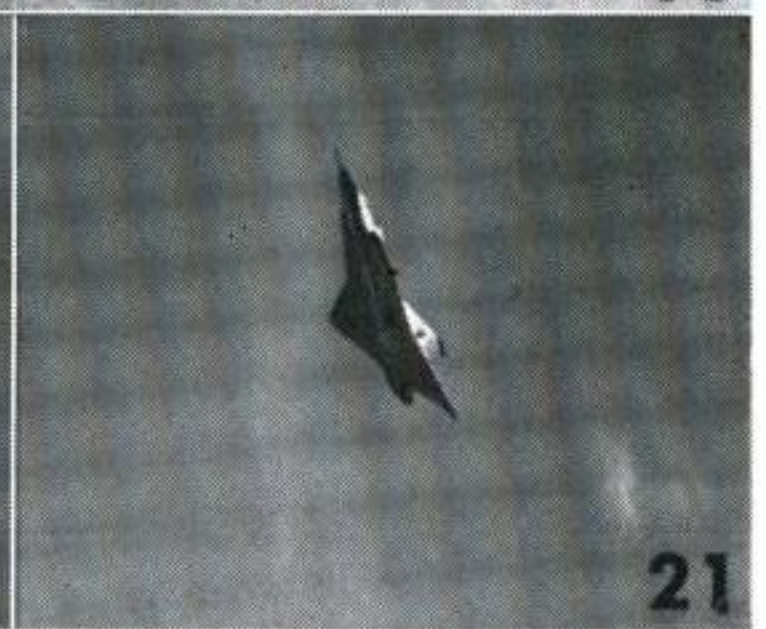
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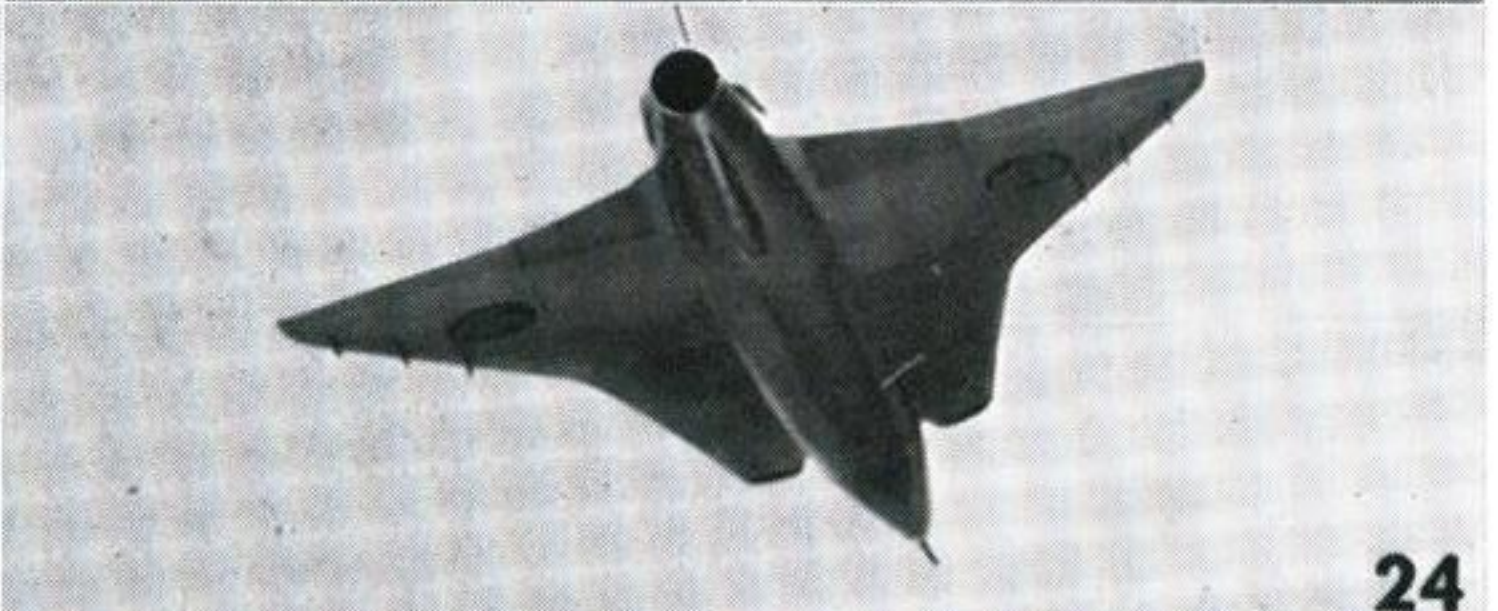
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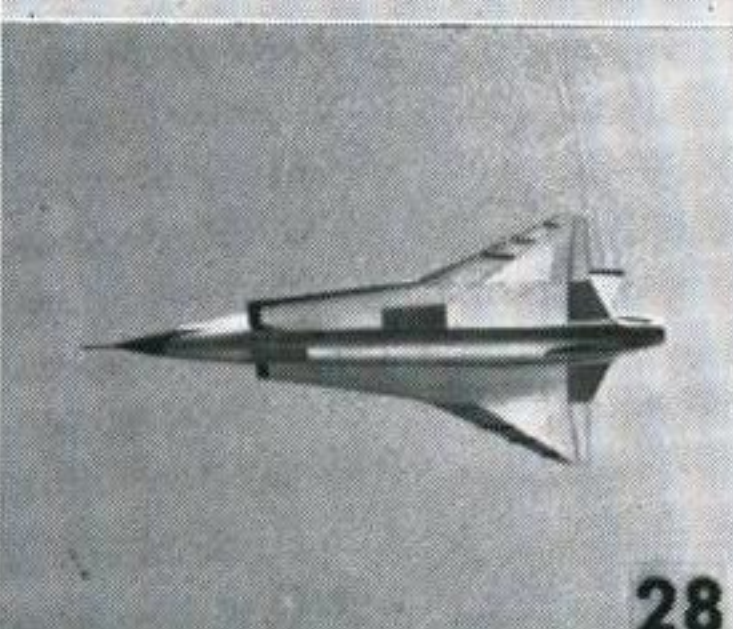
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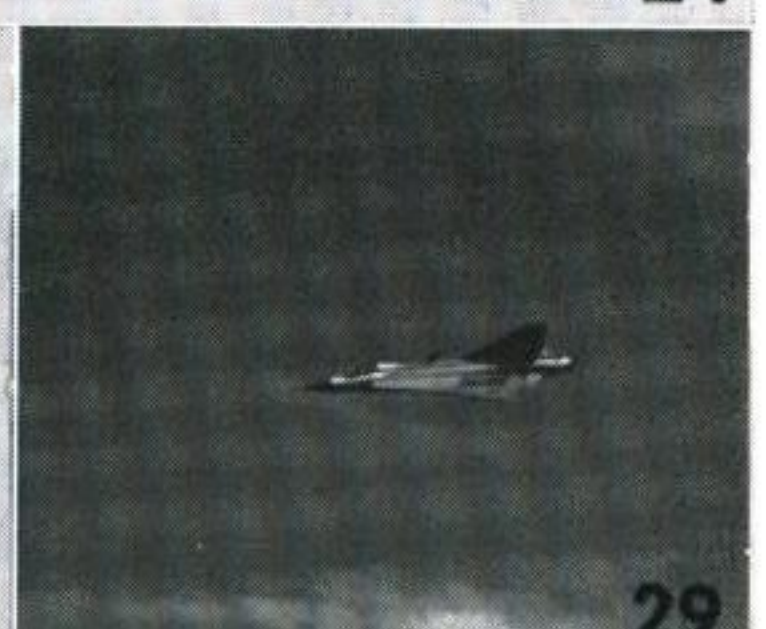
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27



28



29



Alouette Built by Sud-Aviation, who produce the Caravelle, is the successful S.E.3130 Alouette II military helicopter which—as Target No. 11 shows—can seat five.

While the uncovered skeleton framework of the Alouette provides a distinctive recognition feature, may we remind you that open framework is also a feature of Sud-Aviation's Djinn helicopter and of the U.S. Army's Sioux (Bell 47G Trooper). But, whereas the Djinn and Sioux are two-rotor helicopters, the Alouette II is the only three-rotor helicopter with a skeleton framework.

Alouettes abound and the example above is one of some 300 ordered for the French Forces; below is an example in British Army service—note that minor differences occur in the tail skid which should not be taken as an identification feature. Alouettes are being built under licence in the United States and in Sweden, and examples are in service all over the world. They may be seen with stretcher panniers on each side of the cabin and experiments are being conducted for the firing of Nord S.S.II missiles from this helicopter.

The Alouette I did not go into production.

Read the lesson instructions on page 178 and use the photographs above and below to identify the target views.



Rotor Diameter: 33½ feet.

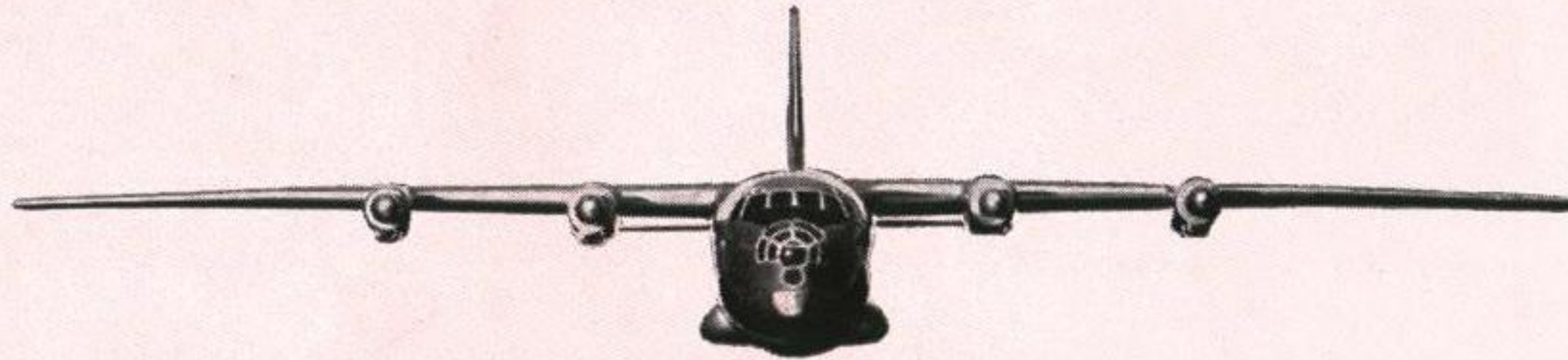
Overall fuselage length: 31½ feet



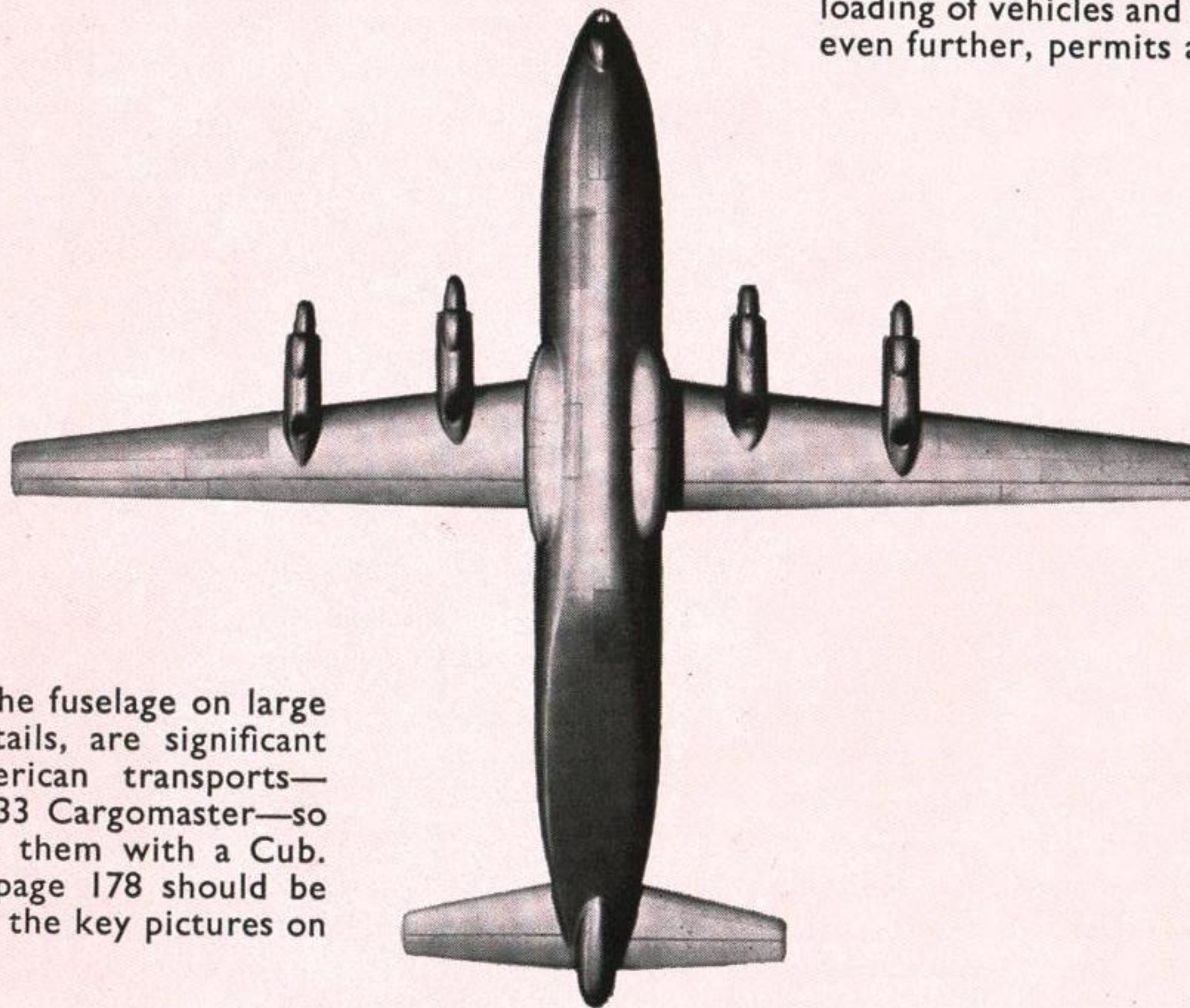


ANTONOV AN-12 CUB

Latest of the Soviet military transports, the Antonov An-12 Cub, is basically a military version of the An-10/10A Cat, with similar Ivchenko turboprop engines.

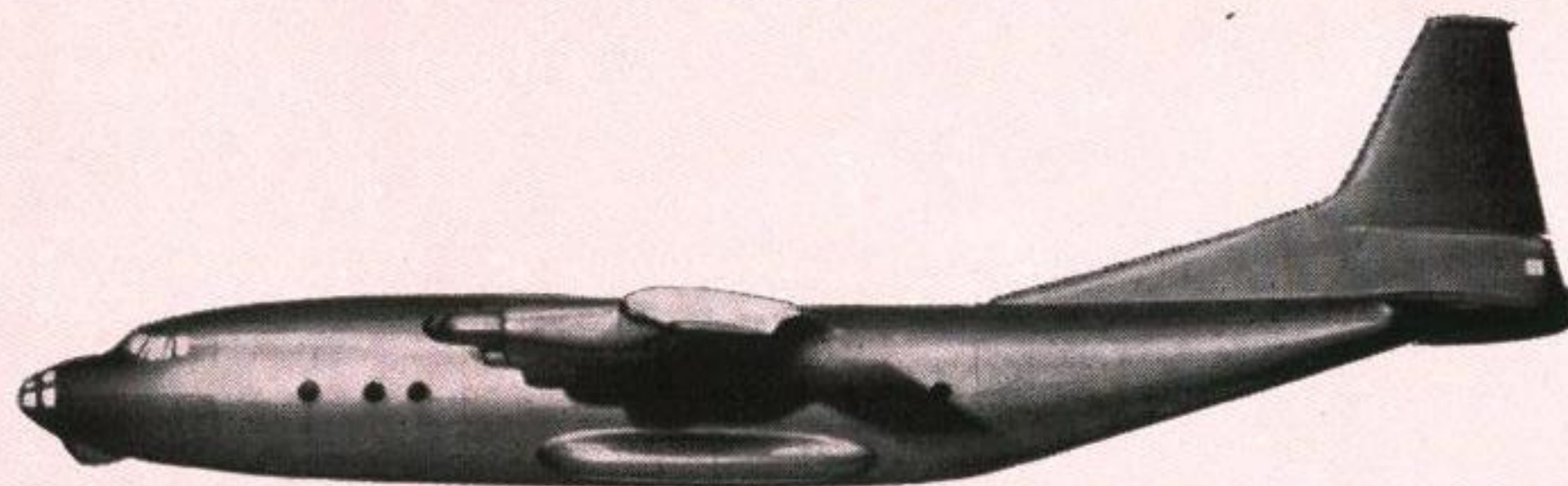


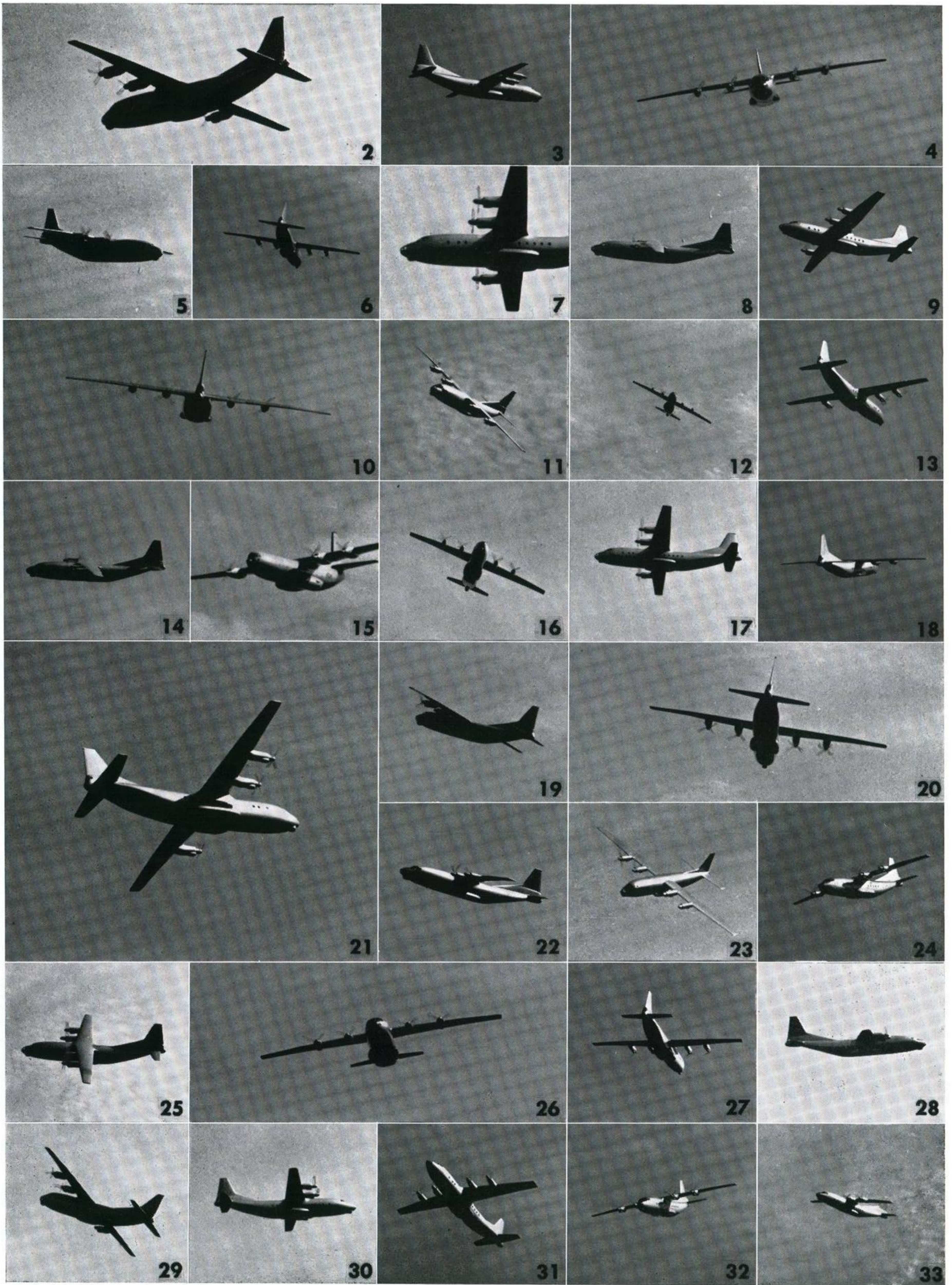
While retaining the nose and bulged undercarriage fairings on the fuselage of the Cat, it tails off—or rather up—into the rear fuselage and tail of a Camp—which is a twin-engined aircraft—remember? The raised tail is to permit rear-loading of vehicles and the fin and rudder, raised even further, permits a faired-in gun position.



Bulky fairings under the fuselage on large aircraft with a raised tails, are significant hallmarks of the American transports—C-130 Hercules and C-133 Cargomaster—so mind you don't confuse them with a Cub. Lesson instructions on page 178 should be used in conjunction with the key pictures on this page.

Span 120 feet





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