

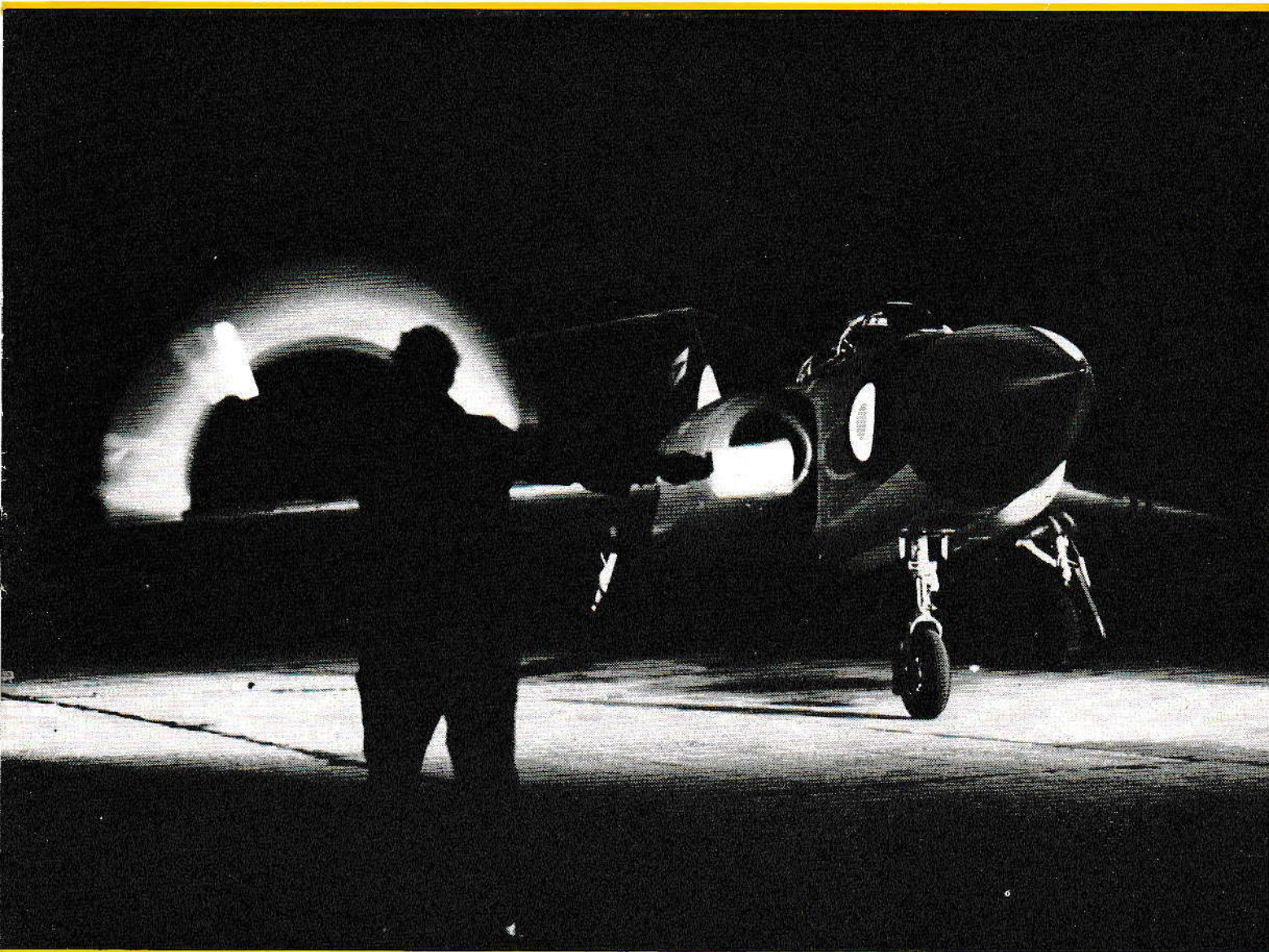
THE ROYAL



OBSERVER CORPS

RECOGNITION

Journal
and R.O.C. GAZETTE

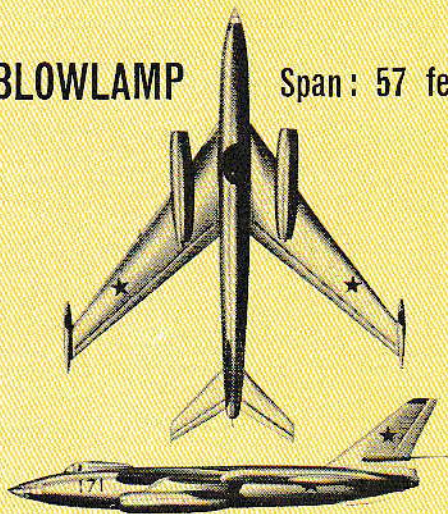


Vol. I APRIL 1959 No. 4



BLOWLAMP

Span: 57 feet



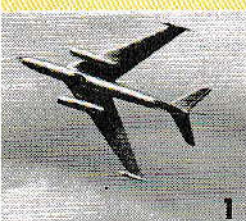
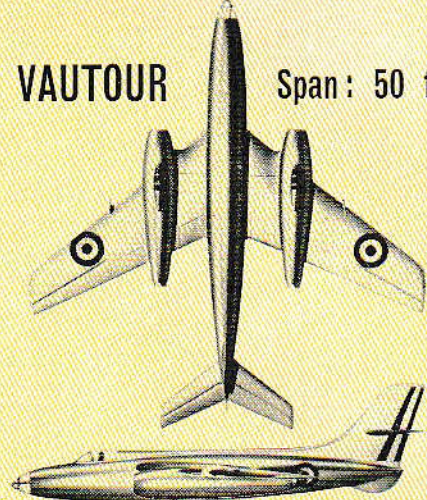
Who's Who-1.

Russia's Blowlamp and the Vautour de France are not as two peas in a pod, and a glance at their pods will prove it. There is a host of other features by which one is distinguishable from the other, and this lesson makes you work out for yourself what they are. Use the 3-views as keys to solve the targets below, and a pencil to write down your answers. Ours are on the back cover.



VAUTOUR

Span: 50 feet



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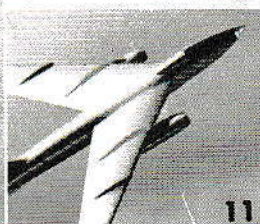
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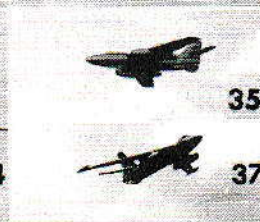
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THE ROYAL



OBSERVER CORPS

RECOGNITION JOURNAL

AND R.O.C. GAZETTE

The Royal Observer Corps Recognition Journal and Gazette is a monthly publication produced in the Department of the Assistant Chief of the Air Staff (Training), Air Ministry, and prepared in collaboration with the Ministry of Supply (Air Technical Publications). Applications for copies must be submitted through the normal official publications supply channels—not to the Editorial Office or direct to the Air Ministry.

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* Identification lessons.

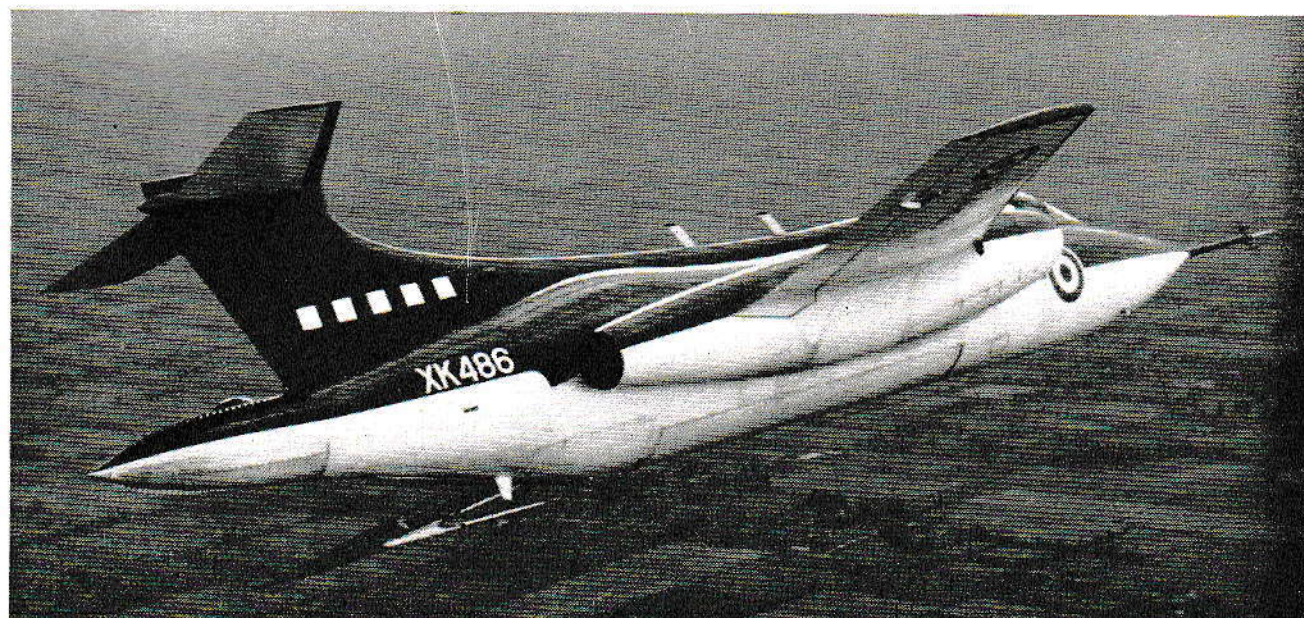
The Bomber from Brough

A MORE complete contrast to Blackburn's last serving naval aircraft, the Firebrand, than their N.A.39 strike fighter would be hard to conceive. A massive, heavy-weight, jet-driven, nuclear weapon-carrying brute of a machine, it doubles the speed of any of its predecessors, and all its speed and strength is aimed at producing its best performance at low level, so that it may dash in towards its target "on the deck" at top speed underneath the enemy's radar.

The N.A. 39 prototype made its first flight last April, powered by a pair of de Havilland Gyron Junior turbojets. It accommodates a pilot and navigator seated in tandem, and has a large internal bay for stowage of a great variety of conventional or nuclear weapons. It appears to be a larger aircraft than, say, the Scimitar, and a rough estimation of its size suggests a wing span of some 45 feet and an overall length of about 60 feet. Boundary layer control, in the form of air "blown" over the lifting surfaces, is applied to both wings and tailplane: air brakes are

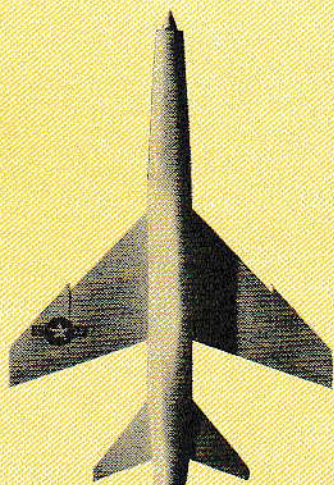
embodied in—in fact, they constitute—the long cone aft of the horizontal tail. Main units of the tricycle landing gear retract inwards to lie under the jet pipes, the nosewheel retracting rearwards. The wings will fold for carrier stowage.

Considerable U.S. financial support went into the development of the N.A.39, and keen interest is being shown in the completed aircraft by the U.S. Navy. Production is at present concentrated on completing the large pre-production batch ordered by the Ministry of Supply, and from the practical spotting standpoint the N.A.39 is most likely to be seen, for the next year or two at any rate, in the vicinity of such places as Brough, Bedford or Boscombe Down. Although it has a fairly distinctive shape it could, in certain combinations of viewpoint and circumstances, be confused with other types—notably the Scimitar or the Javelin—and it will obviously need to be distinguished from these and others of its own visual group.



"Mach Busters"

FROM the key 3-views immediately below you will gather all the information necessary to begin identifying the numbered views of these two aircraft which start at the bottom of the page. Make a list of these numbers before you begin, then, as you identify the target views, write the appropriate aircraft name against each number. Don't rely entirely on the silhouettes once you have identified a few target views: your experience of each aircraft will soon grow and this additional information can be applied in solving the remainder. Finally, check your results over and compare with the solutions on the rear cover.



Span 36 feet



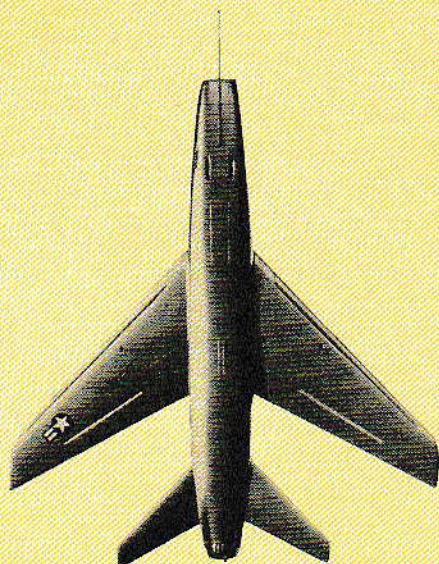
CRUSADER

(F8U-1)

U.S. Navy

CARRIER FIGHTER

Latest fighter to enter U.S. Navy service, the Crusader is capable of speeds of over 1,000 m.p.h. and can carry air-to-air guided weapons.



Span 38 feet



SUPER SABRE

(F-100C)

U.S. Air Force

FIGHTER-BOMBER

The Super Sabre was the U.S. Air Force's — and the world's — first operational supersonic fighter and is capable of carrying a nuclear weapon.



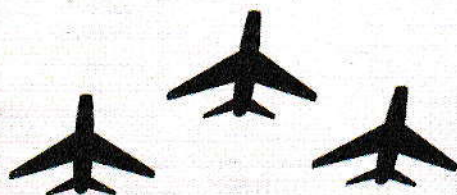
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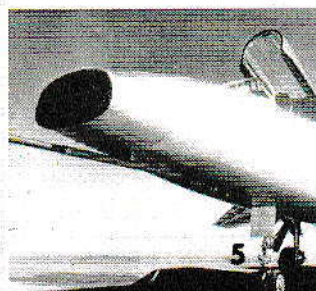
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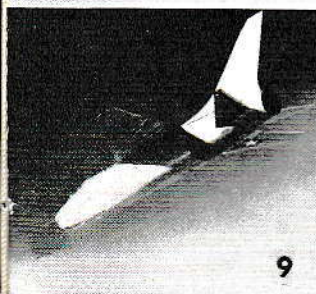
THE F-100F SUPER SABRE can be distinguished from its kin by the longer canopy for a crew of two and the small radar box above the rudder. See if you can pick out the F-100F anywhere among the targets.



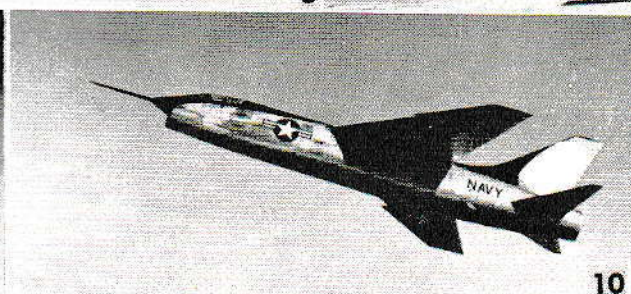
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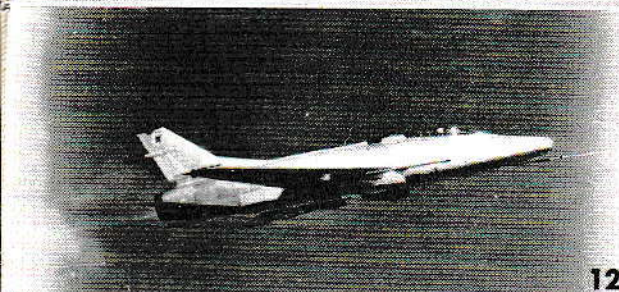
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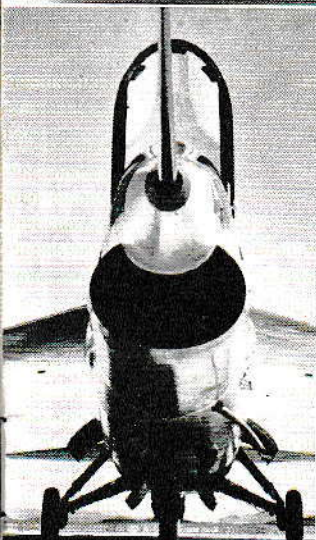
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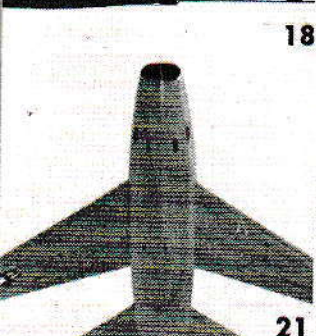
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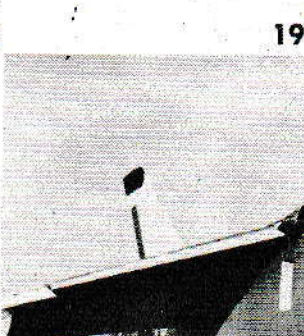
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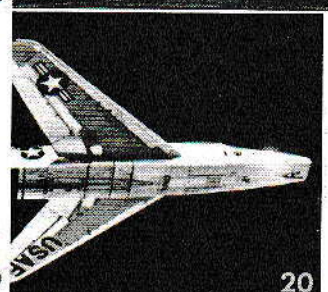
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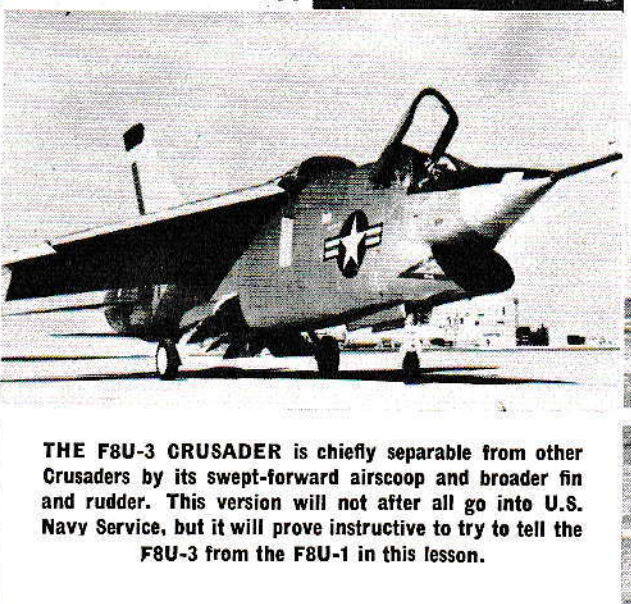


(more overleaf)

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THE F8U-3 CRUSADER is chiefly separable from other Crusaders by its swept-forward air scoop and broader fin and rudder. This version will not after all go into U.S. Navy Service, but it will prove instructive to try to tell the F8U-3 from the F8U-1 in this lesson.



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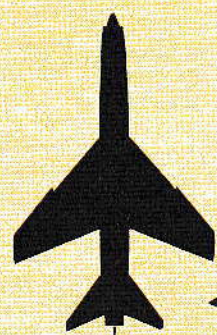


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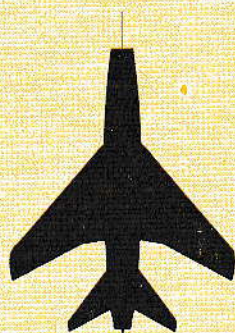


36

"MACH BUSTERS" ...



CRUSADER



SUPER SABRE



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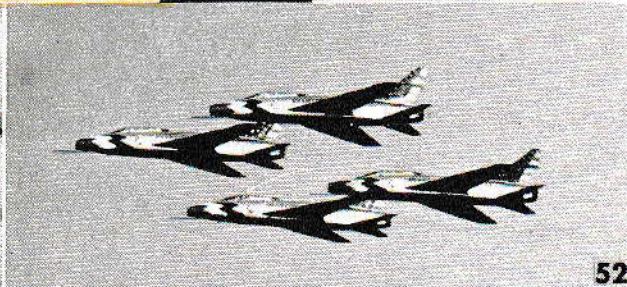
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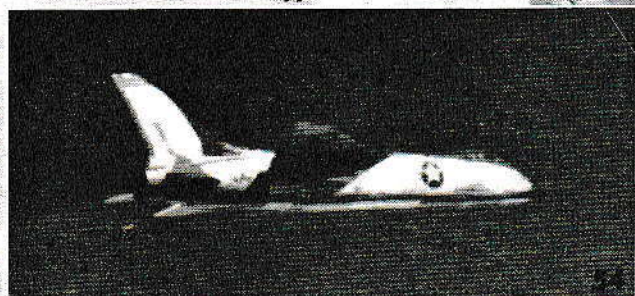
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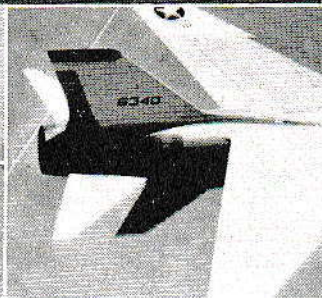
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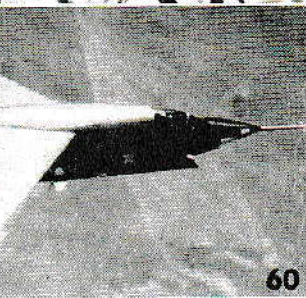
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The Light BOMBER

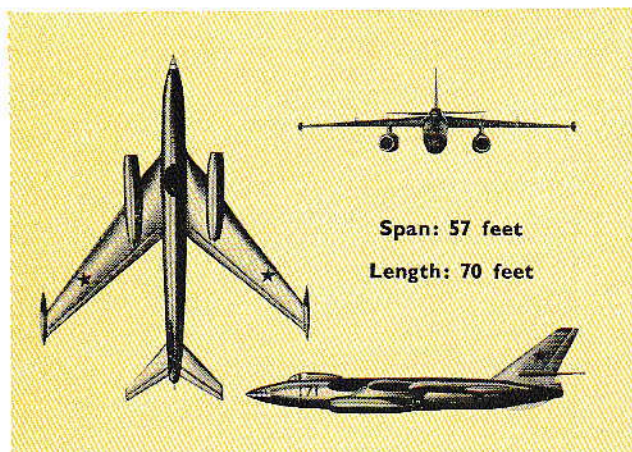
BLOWLAMP

☆☆☆☆☆☆☆☆☆☆☆☆☆☆☆☆☆☆☆☆☆☆☆☆☆☆☆☆

WITH a little more care and attention, one feels, the Russian Blowlamp bomber could have been a fairly attractive-looking aeroplane; but as we have remarked before, Soviet aircraft designers are not renowned for having an eye to the beauty of their products. No one will deny, however, that the Blowlamp has a purposeful air about it—an air which Frank Wootton inevitably captures very well in this month's centrespread.

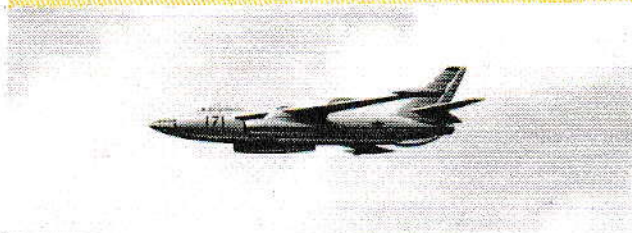


Press opinion is divided on the origin of the design, some sources attributing it to Yakovlev (to whose Flashlight-B it admittedly bears some outward resemblance), others believing it to emanate from Ilyushin (whereat one must admit also that it does suggest a swept-wing Beagle); you pay your money and you take your choice. Blowlamp is, however, supposed to be a replacement for the Beagle operation-wise, and is believed to have a transonic performance (*i.e.*, it is able to pass the speed of sound in a shallow dive). It is a shoulder-wing monoplane, thick at the roots and swept at about 55 degrees, with boundary layer fences at about quarter- and



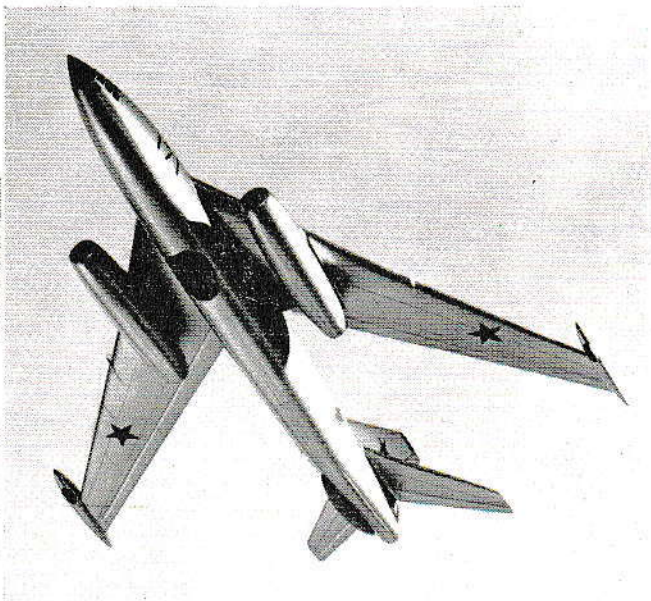
Span: 57 feet

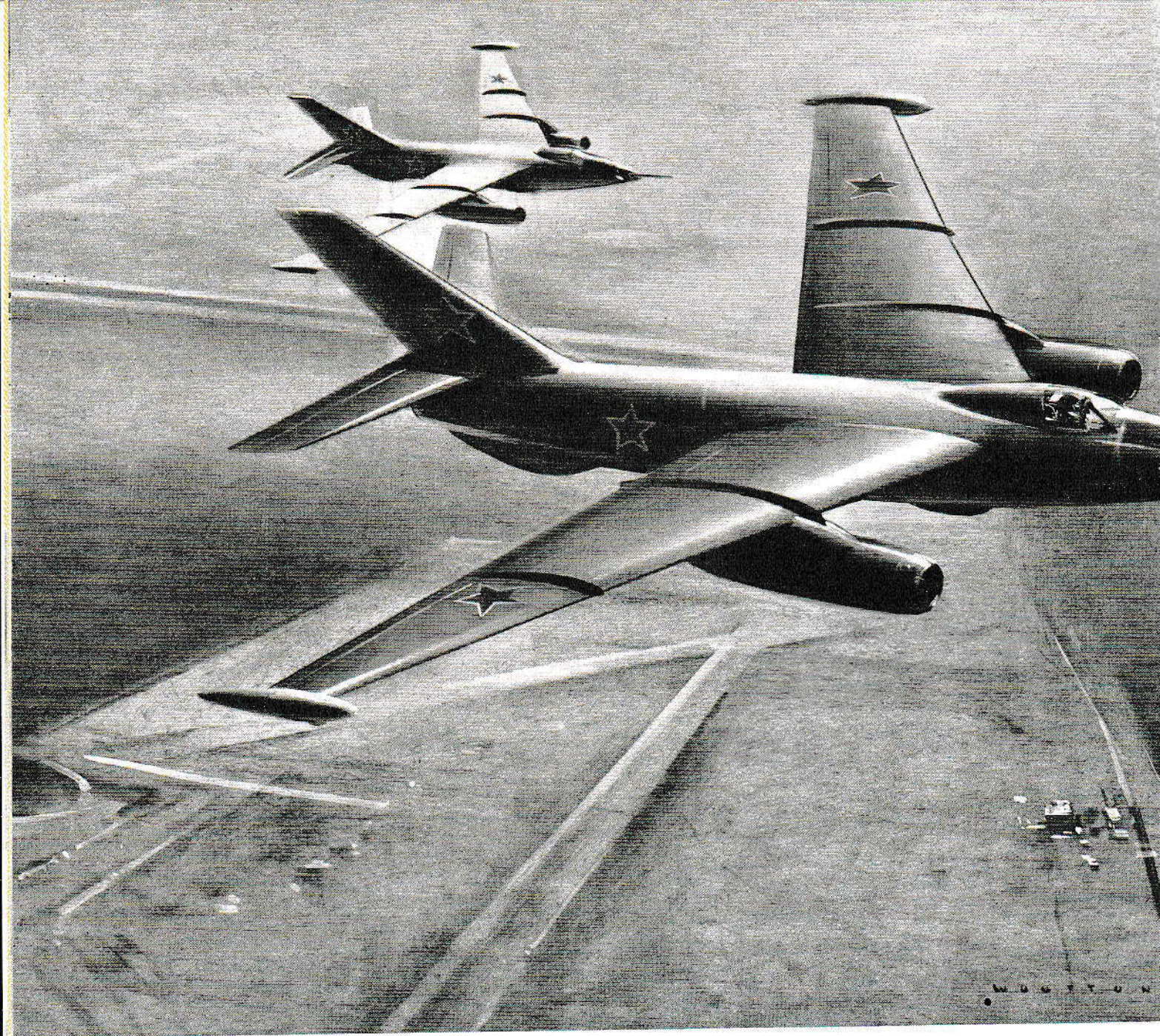
Length: 70 feet



half-span. The power plant consists of two pod-type turbojets suspended on underwing pylons and positioned close in to the body of the aircraft. The main landing gear lies in the fuselage, with bullet-shaped fairings at the wingtips containing small balancer wheels. Below the belly of the aircraft, about in line with the jet pods, is the inevitable Russian bomber's radome, while at the rear end a pair of shallow fins or skids protrude below the tail cone. The tail unit itself is all-swept.

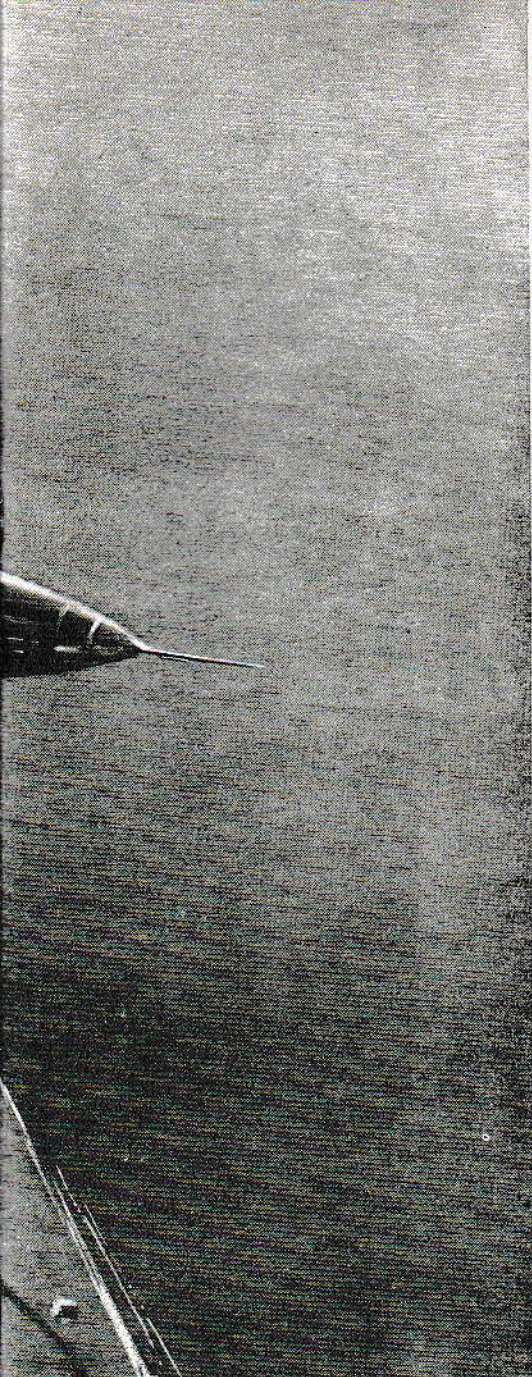
Aside then from such considerations as chopped-off jet pods, lumps on top and underneath, fences, fins, bullets, and the generally severe cut of the flying surfaces, we have in the Blowlamp a passably good-looking aeroplane. But what is more significant, we have an aeroplane whose general configuration is too close for comfort to such Western types as the Vautour and the Destroyer. Lessons such as that on page 50 must therefore be diligently absorbed if confusion is not to arise.



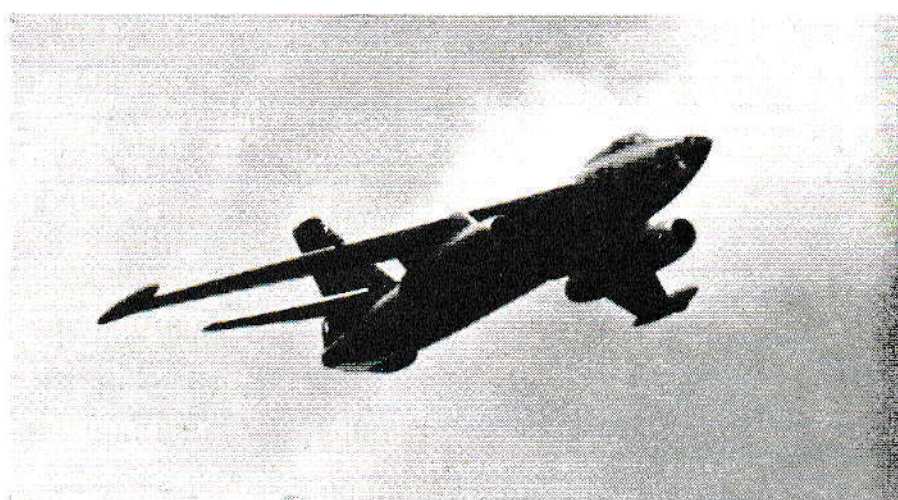


Blowlamp





THIS new drawing for the *Journal* by Frank Wootton captures splendidly the personality of the Soviet Union's new light bomber. It also serves as a reminder that the design of the Blowlamp follows a pattern adopted by some aircraft of the NATO powers—notably the S.O.4050 Vautour, the B-66 Destroyer and the A3D Skywarrior. The swept-back shoulder wing, the twin podded jet engines and the swept tail assembly are features common to all of these, and it is obvious that we must learn not only to recognise them, both singly and collectively, but to name each one unerringly at an instant's notice. On page 50 there is a lesson in doing just that, with the French Vautour chosen as the Blowlamp's "partner" for this occasion.



Briefs

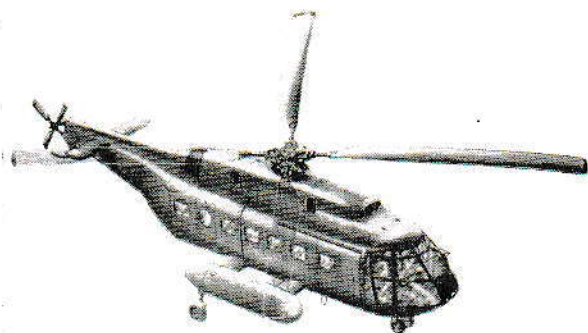
A collection of items of news and interest which may help your recognition.

Seahawk Sales

It has been announced that the Indian Government is to purchase a number of Seahawk aircraft for operation from its sole aircraft carrier, the *Hercules*.

Vautour Service

The Vautour is now in wide service with the French Air Force, the 100th machine (an all-weather fighter version) being delivered at the end of last year.



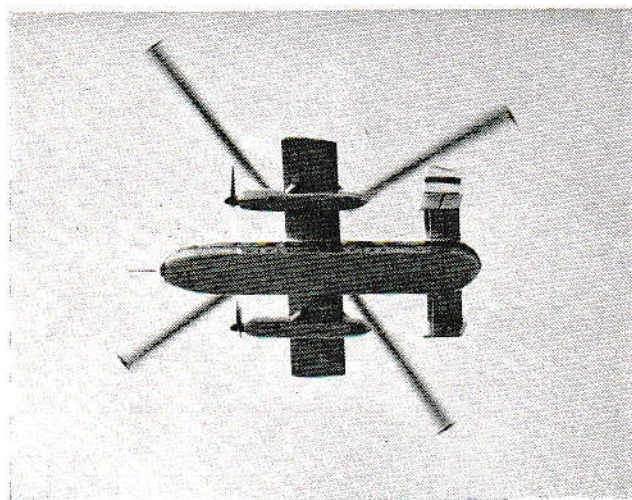
Nouvel Hélicoptère

This picture shows a new Sud Aviation design for a passenger helicopter, the S.E.3200, capable of carrying 20-30 people. Powered by three free turbines driving a single rotor, the S.E.3200 is said to be equally suitable for military use.

New R.A.F. Aircraft

The Air Ministry has decided to go ahead with the oft-discussed "Canberra replacement"—though in fact the aircraft to be produced will be able to do all that the Canberra can do, and more. With the official designation T.S.R.2 (tactical support reconnaissance), it is to be produced as a combined operation by Vickers-Armstrongs (Aircraft) Ltd. and the English Electric Company, with the Bristol Siddeley Olympus as its powerplant. It will be capable of operating from small airfields with rudimentary surfaces, and will have a very high performance at all levels, including supersonic capability. Any type of weapon, including nuclear bombs, may be carried, and provision will also be made for air-to-air missiles to be carried, indicating potential employment as a fighter as well as a bomber.

The 1959 Defence White Paper outlined further R.A.F. changes, some operating now and some to come in the future. The entry into service this year of Britannia troop transports (see paragraph and photo in next column) will release Hastings for tactical transport duties, a role which the Argosies now on order will ultimately take over. Twin Pioneers now coming into service (and, later, Bristol 192 helicopters) will be used for shorter range transport duties. Following publication of the White Paper the ordering was announced of a new strategic freighter, the Britannic—a development by Shorts of the Britannia, but with an entirely new fuselage and tail.



Rotodyne Record

The F.A.I. has confirmed a record which the Fairey Rotodyne (see photo) set up on 5th January—the first world-class record for converti-planes—a 100 km. closed circuit record of 190.9 m.p.h.

Fairey Sale

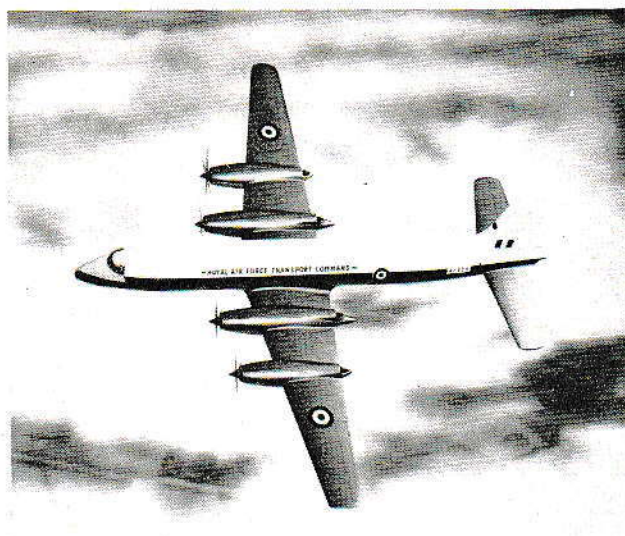
Six Fairey Gannets are to be sold to Indonesia; sale of a further 12 may be authorised later.

Darting About

The second prototype of the Dart Herald is now flying; it differs from the first machine (which was lost last year) by the addition of a dorsal extension to the fin leading edge.

R.A.F. Britannia

The first Britannia 253, developed by Short Bros. & Harland from the civil airliner as an R.A.F. troop carrier and freighter, has made its first flight. A fleet of 20 has been ordered for Transport Command. Picture is an artist's impression.

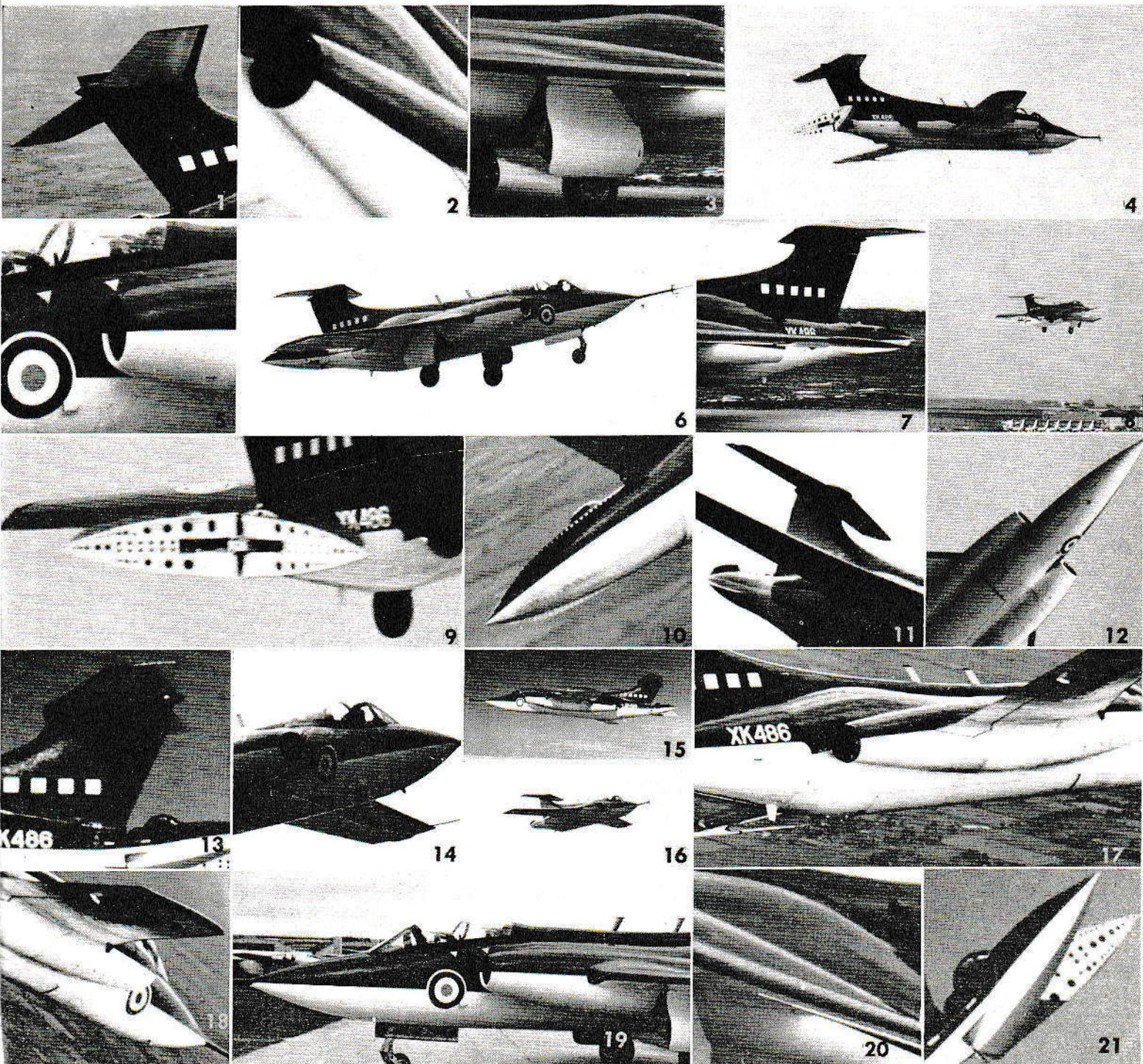


The Bomber from Brough

The view opposite is of the **Blackburn N.A. 39** strike aircraft for the Royal Navy: so is view No. 6. Are the remaining views of the N.A. 39? Clearly view No. 9 has some connection with view No. 4. But what is view No. 3? Well, you can get at this through view No. 19 perhaps? But we are giving the whole game away at this rate so write down the list of numbers (1 to 21) for yourself and work out each target on your own. When you have done that—and not before—look at the solutions on the cover.

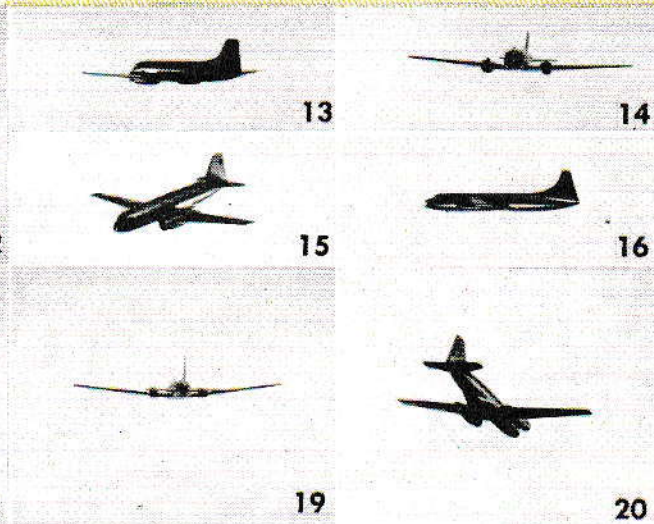
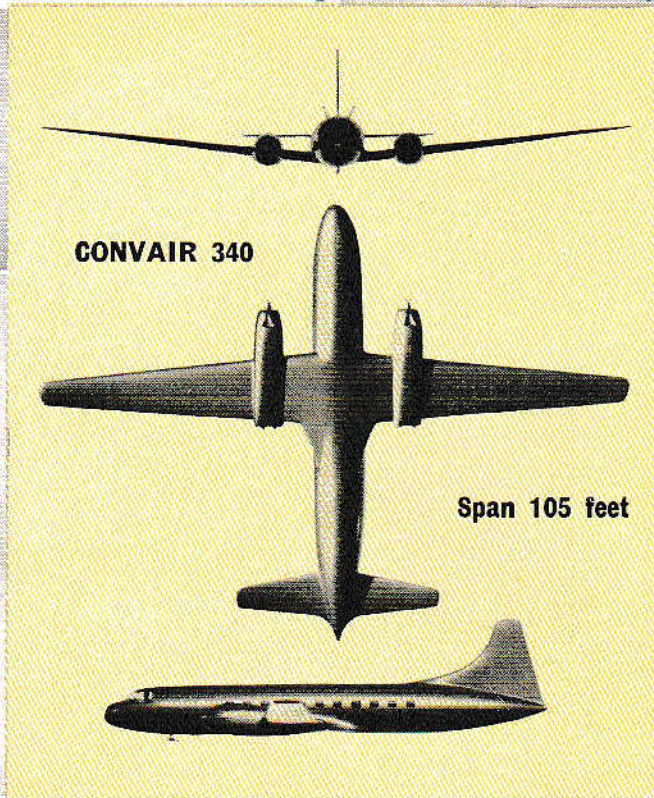
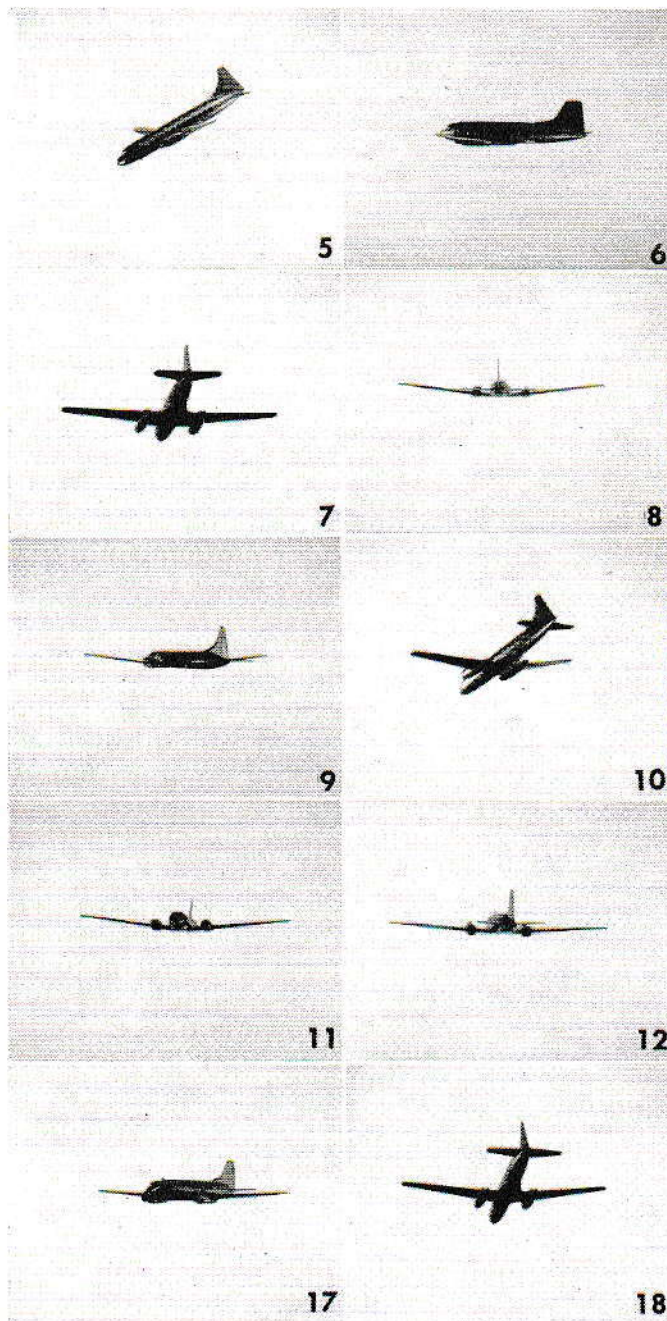
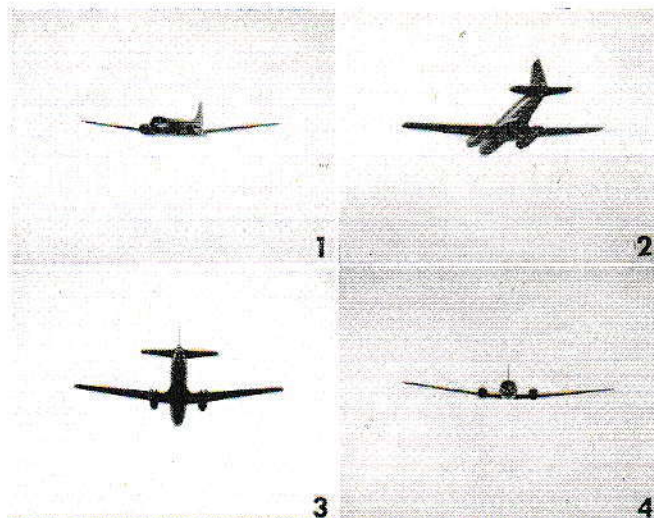


The BLACKBURN N.A.39



CRATE and CONVAIR

SPOTTERS in Europe particularly have the chance of seeing both of these aeroplanes, and they may be glad of a little help in identifying them. Others denied the opportunity for practical experience may still need to know them, and will find this short lesson equally useful. The important thing is to be sure to write down their names as you identify them here, so as to stamp home the identity of the recognised shape. Further practice at these two can be had by turning back to the December 1958 edition.





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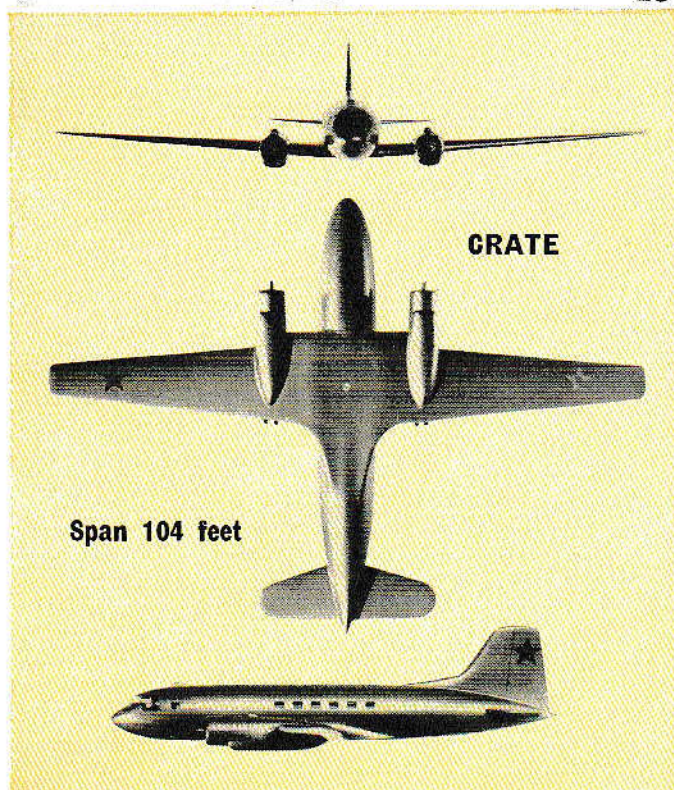
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ETERNAL TRIANGLE

TIME was when the Greek letter delta meant nothing more than a perfectly ordinary geometric triangle. But that was before today's aeroplane designers got at it; now we

have clipped deltas, cranked deltas, double-deltas and all manner of other variations. We spotters should be glad of this, though, for it makes our job easier. Here are six of the world's leading delta-wing aircraft; Britain's **VULCAN** (view No. 1) and **JAVELIN** (No. 5), the **SKYHAWK** (No. 60), **SKYRAY** (No. 3) and **DELTA DAGGER** (No. 8) from the United States, and the **DRAKEN** (No. 30) from Sweden. Your job is to identify the remaining views, using those we have named as starting points. Don't forget to write down all your answers: we have — on the rear cover.

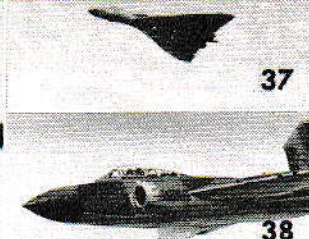




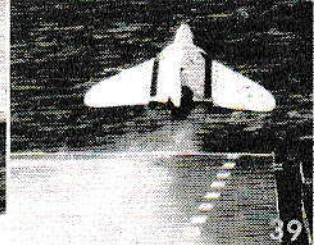
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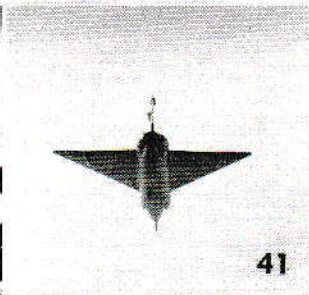
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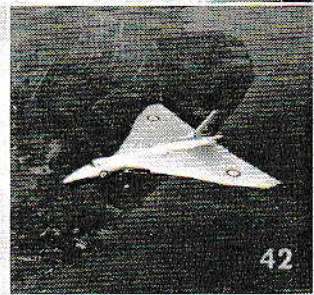
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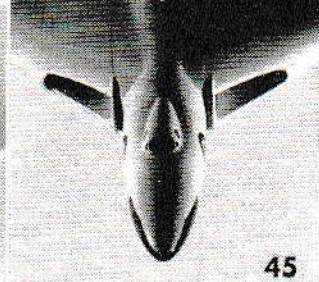
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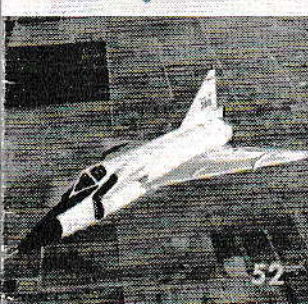
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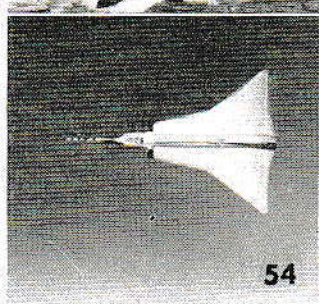
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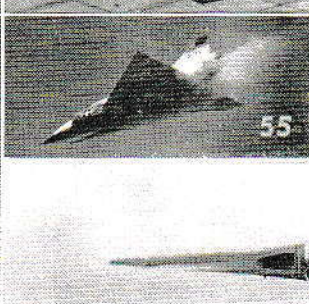
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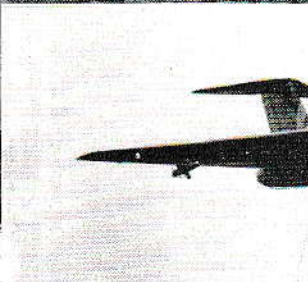
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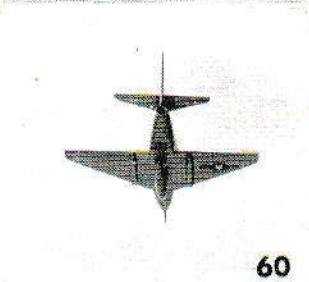
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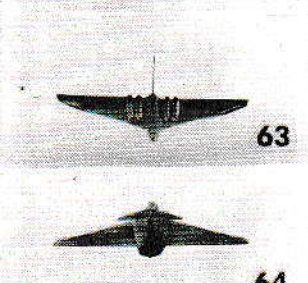
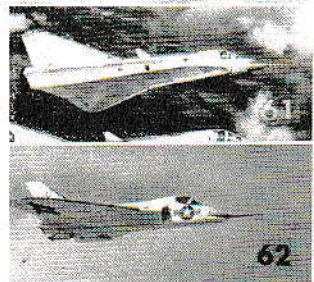
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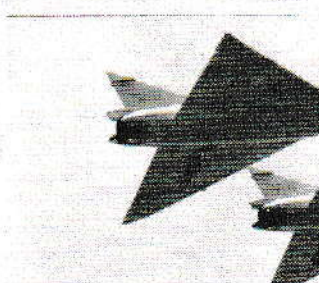
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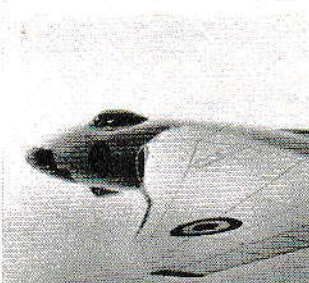
63



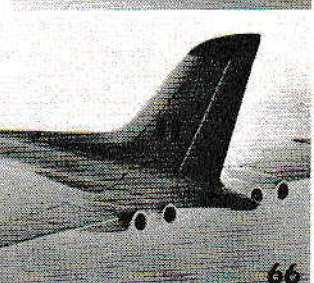
65



66



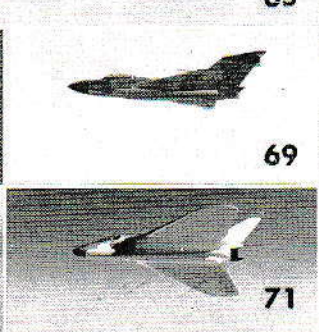
67



67



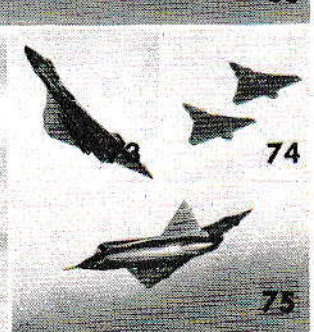
70



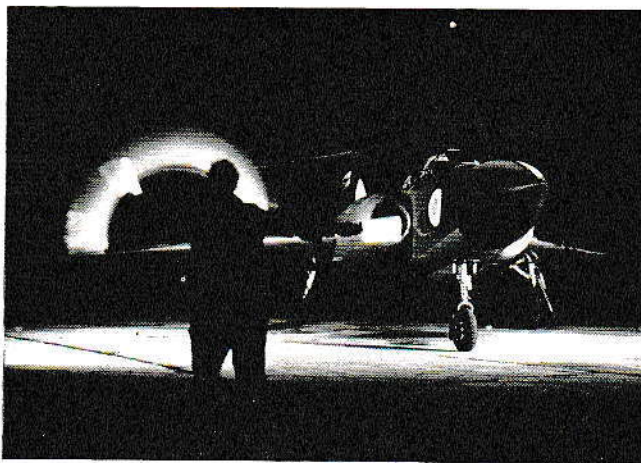
71



72



75



Cover Picture: A Gloster Javelin all-weather fighter being marshalled on the runway during a night manoeuvre.

THE ETERNAL TRIANGLE

- | | | | |
|------------------|------------------|------------------|------------------|
| 1. Vulcan | 20. Delta Dagger | 39. Skyray | 58. Javelin |
| 2. Javelin | 21. Draken | 40. Skyray | 59. Vulcan |
| 3. Skyray | 22. Skyray | 41. Delta Dagger | 60. Skyhawk |
| 4. Skyhawk | 23. Javelin | 42. Vulcan | 61. Draken |
| 5. Javelin | 24. Skyray | 43. Skyray | 62. Skyray |
| 6. Draken | 25. Vulcan | 44. Draken | 63. Vulcan |
| 7. Javelin | 26. Vulcan | 45. Vulcan | 64. Javelin |
| 8. Delta Dagger | 27. Skyray | 46. Skyhawk | 65. Delta Dagger |
| 9. Delta Dagger | 28. Vulcan | 47. Vulcan | 66. Vulcan |
| 10. Javelin | 29. Javelin | 48. Skyray | 67. Javelin |
| 11. Skyray | 30. Draken | 49. Javelin | 68. Skyhawk |
| 12. Delta Dagger | 31. Skyhawk | 50. Delta Dagger | 69. Javelin |
| 13. Skyhawk | 32. Delta Dagger | 51. Javelin | 70. Draken |
| 14. Vulcan | 33. Draken | 52. Delta Dagger | 71. Skyray |
| 15. Draken | 34. Skyhawk | 53. Skyhawk | 72. Vulcan |
| 16. Vulcan | 35. Javelin | 54. Draken | 73. Vulcan |
| 17. Delta Dagger | 36. Skyhawk | 55. Delta Dagger | 74. Javelin |
| 18. Vulcan | 37. Vulcan | 56. Vulcan | 75. Delta Dagger |
| 19. Skyhawk | 38. Javelin | 57. Vulcan | |

CRATE AND CONVAIR

- | | | | |
|------------------|------------------|------------------|------------------|
| 1. Convaair 340 | 12. Crate | 23. Crate | 34. Crate |
| 2. Crate | 13. Crate | 24. Crate | 35. Convaair 340 |
| 3. Convaair 340 | 14. Crate | 25. Convaair 340 | 36. Crate |
| 4. Convaair 340 | 15. Crate | 26. Crate | 37. Crate |
| 5. Convaair 340 | 16. Convaair 340 | 27. Crate | 38. Crate |
| 6. Crate | 17. Crate | 28. Crate | 39. Convaair 340 |
| 7. Crate | 18. Convaair 340 | 29. Convaair 340 | 40. Crate |
| 8. Convaair 340 | 19. Convaair 340 | 30. Convaair 340 | 41. Convaair 340 |
| 9. Convaair 340 | 20. Crate | 31. Convaair 340 | 42. Convaair 340 |
| 10. Convaair 340 | 21. Crate | 32. Convaair 340 | 43. Crate |
| 11. Convaair 340 | 22. Convaair 340 | 33. Convaair 340 | 44. Crate |

SOLUTIONS TO TESTS AND LESSONS IN THIS EDITION

BLOWLAMP AND VAUTOUR

- | | | | |
|--------------|--------------|--------------|--------------|
| 1. Blowlamp | 11. Blowlamp | 21. Vautour | 31. Vautour |
| 2. Vautour | 12. Vautour | 22. Vautour | 32. Vautour |
| 3. Vautour | 13. Blowlamp | 23. Vautour | 33. Vautour |
| 4. Blowlamp | 14. Vautour | 24. Blowlamp | 34. Blowlamp |
| 5. Blowlamp | 15. Blowlamp | 25. Blowlamp | 35. Vautour |
| 6. Blowlamp | 16. Blowlamp | 26. Vautour | 36. Vautour |
| 7. Vautour | 17. Vautour | 27. Blowlamp | 37. Blowlamp |
| 8. Blowlamp | 18. Blowlamp | 28. Vautour | 38. Vautour |
| 9. Vautour | 19. Blowlamp | 29. Vautour | 39. Vautour |
| 10. Blowlamp | 20. Blowlamp | 30. Blowlamp | 40. Blowlamp |

THE BOMBER FROM BROUGH

All the target views are of the Blackburn N.A. 39.

"MACH BUSTERS"

- | | | | |
|-----------------|-----------------|-----------------|-----------------|
| 1. Crusader | 18. Crusader | 35. Crusader | 52. Super Sabre |
| 2. Crusader | 19. Super Sabre | 36. Super Sabre | 53. Super Sabre |
| 3. Super Sabre | 20. Super Sabre | 37. Crusader | 54. Crusader |
| 4. Super Sabre | 21. Super Sabre | 38. Super Sabre | 55. Crusader |
| 5. Super Sabre | 22. Super Sabre | 39. Super Sabre | 56. Super Sabre |
| 6. Super Sabre | 23. Super Sabre | 40. Crusader | 57. Super Sabre |
| 7. Crusader | 24. Crusader | 41. Super Sabre | 58. Crusader |
| 8. Super Sabre | 25. Crusader | 42. Crusader | 59. Super Sabre |
| 9. Crusader | 26. Super Sabre | 43. Super Sabre | 60. Crusader |
| 10. Crusader | 27. Crusader | 44. Crusader | 61. Super Sabre |
| 11. Super Sabre | 28. Super Sabre | 45. Super Sabre | 62. Super Sabre |
| 12. Super Sabre | 29. Super Sabre | 46. Super Sabre | 63. Crusader |
| 13. Crusader | 30. Super Sabre | 47. Crusader | 64. Crusader |
| 14. Super Sabre | 31. Crusader | 48. Crusader | 65. Super Sabre |
| 15. Super Sabre | 32. Super Sabre | 49. Crusader | |
| 16. Crusader | 33. Super Sabre | 50. Super Sabre | |
| 17. Crusader | 34. Crusader | 51. Super Sabre | |

The F-100F Super Sabre appears in targets 19 and 50, and the F8U-3 Crusader in targets 44, 47, 48, 49, 55, 60 and 63.

AIR DISPLAY DATES

BATTLE OF BRITAIN WEEK this year will be held from September 14th to 20th. The R.A.F. "At Home" day, when stations are open to the public, will be Saturday, September 19th. Last year 34 R.A.F. stations were open to the public and over a million visitors were received.

The Society of British Aircraft Constructors' **FLYING DISPLAY AND EXHIBITION** will be held at the Royal Aircraft Establishment, Farnborough, from September 7th to 13th. Public days will be Friday 11th, Saturday 12th and Sunday 13th.

THOSE WERE THE DAYS!!

