SUPPLEMENT TO NBS CIRCULAR 509

Bibliography of Books and Published Reports on Gas Turbines, Jet Propulsion, and Rocket Power Plants

January 1950 through December 1953

UNITED STATES DEPARTMENT OF COMMERCE
NATIONAL BUREAU OF STANDARDS

UNITED STATES DEPARTMENT OF COMMERCE • Sinclair Weeks, *Secretary*
NATIONAL BUREAU OF STANDARDS • A. V. Astin, *Director*

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Ernest F. Fiock and Carl Halpern

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Preface

This Supplement to Circular 509 extends the period covered by the latter through December 1953, with an overlap of one year. Approximately 5,000 references to sources of information on gas turbines and jet propulsion that have been published in the last four years are included, as are some earlier reports that were originally classified for reasons of military security. To facilitate use of the bibliography, the references have been arranged according to their content.

Most of this literature survey has been made in the course of a broad program of combustion chamber research sponsored by the Bureau of Aeronautics, Department of the Navy.

A. V. Astin, Director.

Contents

Bibliography—Continued

200. Periodical reports through December 1953—Continued

Bibliography of Books and Published Reports on Gas Turbines, Jet Propulsion, and Rocket Power Plants

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SCOPE AND ARRANGEMENT OF THE BIBLIOGRAPHY

The topical subdivisions and the periods covered in this bibliography are shown in the table of contents. Each subdivision is arranged chronologically, and within the chronological sections the arrangement is alphabetical by author, followed by anonymous articles. For greater convenience in use, the number of topical subdivisions has been increased somewhat over the number used in the parent Circular.

The journal abbreviations are those employed in Chemical Abstracts, except that letters are used for the names of familiar organizations and societies, *viz.* NACA for National Advisory Committee for Aeronautics; ASME for American Society of Mechanical Engineers; ASTM for American Society for Testing Materials; and SAE for Society of Automotive Engineers. Volume numbers are in bold-faced type, and the date of issue is given where page numbers do not run consecutively throughout a given volume. Since the year of issue appears at the head of each chronological section, this is repeated in the individual references only when publication was in more than one year.

References made to unpublished papers presented before various Societies are designated by the abbreviations M. P. for Meeting Paper or Pre. for preprint. These may, in some instances, be purchased from the New York headquarters of the society concerned.

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202. TURBOJET AND PROPJET ENGINES

202.1 American Engines

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202.3 Engines of Other Nations

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203. OTHER TYPES OF GAS TURBINES

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292892—54——3

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292892—54——6

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AF takes wraps off Boeing XB-52. Aviation Week **56,** 14 (Jan. 14).
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A new Martin seaplane. Aeroplane **83,** 535.
A significant light plane. Western Aviation **32,** 20 (Dec.).
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Bell X-5 tries its wings. Aviation Week **56,** 17 (Jan. 21).
Better Cutlass. Aeroplane **82,** 265.
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Building the Canberra in the U. S. A. Aeroplane **83,** 362.
Convair YB–60 spreads its wings. Aviation Week **57,** 15 (Sept. 1).
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Directory of U. S. military aircraft. Aero Dig. **64,** 18 (Mar.).
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Douglas to build RB–66 at Chicago. Aviation Week **56,** 16 (Mar. 10).
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Four planes from two YF–93As. Aviation Week **57,** 18 (Nov. 3).
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Here are USAF's sluggers: Convair YB–60 and Boeing YB–52. Aviation Week **56,** 14 (May 19).
Know your bombers. Interavia **7,** 132.
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Navy shows new 700-Mph-plus F7U–3. Aviation Week **56,** 9 (Mar. 3).
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Public gets first look at 8-jet YB–60. Aviation Week **56,** 14 (Apr. 14).
Rockets push XF–91 past Mach 1. Aviation Week **57,** 17 (Dec. 15).
Sabres under the crown. Aeroplane **82,** 211.
Second B–52 bomber nears completion. Aviation Week **56,** 18 (Feb. 18).
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Specifications of aircraft and engines—U. S. military aircraft. Aviation Week **56,** 135 (Feb. 25).
Specifications of U. S. and foreign military aircraft. Automotive Inds. **106,** 242 (Mar. 15).
The air is full of giants. Aviation Week **56,** 9 (Apr. 28).
The Douglas B–66. Aeroplane **82,** 149.
The Naval combat airplane. Aero Dig. **65,** 62 (Oct.).
The old and the new in Navy fighter styles. Aviation Week **56,** 18 (Mar. 10).
The U. S. Air Force combat airplane. Aero Dig. **65,** 26 (Oct.).
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M. L. Everhart, Convair Sea Dart flies. Aero Dig. **67,** 20 (Sept.).
J. Fricker, Flying the Lockheed T–33. Aeroplane **85,** 225.
R. B. Hotz, Douglas Skyrocket reaches Mach 2.01. Aviation Week **59,** 13 (Nov. 30).
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H. F. King, North American F-86. Flight **63,** 136.
G. F. McLaughlin, F-100 Super Sabre. Aero Dig. **67,** 17 (Nov.).
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T. C. Pitts, Building the Stratojet. Aviation Age **19,** 24 (Feb.).
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E. G. Stout, High-speed water-based aircraft. Abstract: SAE Journal **61,** 17 (Mar.).
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B-47B tanker. Aviation Week **59,** 102 (Sept. 14).
B-57 shows off. Aviation Week **59,** 17 (Aug. 31).
Cessna twin-jet trainer design wins competition. Aviation Age **19,** 73 (Feb.).
Cessna wins USAF trainer competition. Am. Aviation **16,** 41 (Jan. 19).
Convair F-102 makes first flight. Am. Aviation **17,** 17 (Nov. 9).
Convair launches delta seaplane fighter at San Diego. Western Aviation **33,** 9 (Jan.).
Convair Sea-Dart. Aeroplane **85,** 190; Am. Aviation **16,** 19 (Jan. 5).
Cougar closeup. Aviation Week **58,** 17 (Feb. 16).
Details of new turboprop C-130. Aviation Week **58,** 14 (Feb. 23).
Douglas jet bomber tries its wings. Aviation Week **58,** 9 (Jan. 5).
Douglas Skyray viewed close up. Aviation Week **59,** 17 (Oct. 26).
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Inside details of Lockheed F-94C interceptor. Aviation Week **59,** 19 (Nov. 23).
Lockheed XF-104 fighter. Aeroplane **25,** 494.
Loss of the Bell X-2. Aeroplane **84,** 650.
More about the super Sabre. Aeroplane **85,** 624.
NACA takes over X-3 testing program. Aviation Week **59,** 13 (Nov. 23).
New B-47s. Aviation Week **59,** 21 (Aug. 31).
New F86-H Sabre. Aviation Week **58,** 9 (May 18).
North American XF-100. Aeroplane **84,** 821.
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Ryan reveals jet trainer design. Aviation Week **58,** 19 (May 25).
Sabre successor. Aeroplane **85,** 592.
Stratojets in the United Kingdom. Aeroplane **85,** 49.
Supersonic X-1A begins tests. Aviation Week **58,** 18 (Apr. 6).
The Douglas X-3. Aeroplane **84,** 594.
The North American Sabre. Aeroplane **85,** 20.
Turboprop C-130: the wraps come off. Am. Aviation **16,** 17 (Mar. 2).
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215.2 British Military Aircraft

1950

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D. A. Anderton, Meteor PV armed for infantry support. Aviation Week **53,** 27 (Oct. 16).
W. F. Bradley, New engines and planes at British aero display. Automotive Inds. **103,** 49 (Oct. 1).
F. R. Brewster, SBAC show stars turbine craft. Aviation Week **53,** 42 (Nov. 20).
A Vampire for two. Aeroplane **79,** 485.
Ashton reports for altitude duty. Aviation Week **53,** 42 (Nov. 20).

Australia builds British designs. Aviation Week **53,** 14 (Aug. 28).
Australia's first homegrown jet. Aviation Week **53,** 31 (Dec. 4).
Beauty on the wing. Aeroplane **81,** 244.
Britain puts new planes on view. Aviation Week **53,** 9 (Oct. 2).
British unveil new night fighter. Aviation Week **53,** 15 (July 10).
Canadian jet fighter. Mech. Eng. **72,** 781.
Canberra 2, by English Electric. Aviation Week **53,** 32 (Oct. 30).
de Havilland D. H. 115 turbojet trainer. Flight **58,** 462.
Equipment of the Royal Air Force. Aeroplane **79,** 13.
For high-speed research. Aeroplane **79,** 302.
"Meteor" night fighter. Aero Dig. **61,** 65 (Aug.).
Military aircraft at the show. Aeroplane **79,** 302.
Research aircraft. Engineering **170,** 468.
The Avro Ashton. Aeroplane **79,** 422.
Vickers Supermarine 535 fighter bows in. Aviation Week **53,** 18 (Sept. 8).

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W. F. Bradley, Latest British aircraft and engines at Farnborough show. Automotive Inds. **105,** 42 (Oct. 15).
D. D. Dempster, Flying the Meteor 8. Aeroplane **80,** 565.
D. Desoutter, Prototype air power. Aviation Age **16,** 25 (Oct.).
J. Isaacs, From Spitfire to Swift. Aeroplane **81,** 188.
H. F. King, Fighting breed; forty years of Sopwith and Hawker aircraft. Flight **60,** 677.
R. McLarren, The Canberra. Aero Dig. **62,** 17 (Apr.).
"Polygon," Jet trainers for the R. A. F. Aeroplane **81,** 521.
R. G. Worcester, Nine new designs to show at Farnborough. Am. Aviation **15,** 22 (Sept. 3).
A Boulton Paul project. Aeroplane **81,** 241.
A Delta at Dunsfold. Aeroplane **81,** 145.
A new jet for the R. A. F. Aeroplane **81,** 117.
A new Vampire. Aeroplane **80,** 65.
AF studies Canberra first hand. Aviation Week **54,** 14 (Mar. 5).
Age of the triangle. Aviation Age **16,** 15 (Sept.).
All-weather fighter aircraft. Engineering **172,** 512.
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Aviation Week design study: Supermarine 535. Aviation Week **54,** 32 (May 7).
Avro 707A. Aviation Week **55,** 27 (Sept. 3).
Avro's new delta. Aeroplane **81,** 125.
Britain's first four-jet bomber in production. Aviation Week **54,** 15 (June 4).
Britain's triple-threat jet. Aviation Week **55,** 33 (Nov. 12).
Britain's turbine aircraft; their development and present status. Flight **59,** 553.
British jet-propelled flying-boat tested. Science News Letter **59,** 27.
British launch new delta-wing fighter. Aviation Week **55,** 15 (Dec. 10).
Canberra across the Atlantic. Aeroplane **80,** 223.
CF–100 readied for trans-Atlantic test. Aviation Week **54,** 14 (Apr. 9).
Concerning the Canberra. Aeroplane **81,** 246.
Delta-wing progress. Aeroplane **81,** 178.
English Electric Canberra. Aeronautics **24,** 40 (Apr.).
Fairey delta-wing aircraft. Engineering **171,** 474.
Fairey's delta research F. D. 1 makes first flight. Aviation Week **54,** 16 (Mar. 26).
First flight for the Swift. Aeroplane **81,** 175.
Flying at Farnborough. Shell Aviation News No. 160, 4 (Oct.).
Flying display of British aircraft. Engineering **172,** 342, 353 and 391.
Four-engine jet-propelled heavy bomber. Engineering **171,** 625.
Four-jet British bomber now in production. Aviation Age **16,** 29 (July)
Future of the Short S. A. 4. Aeroplane **81,** 658.
Gloster G. A. 5 delta-wing. Flight **60,** 712.
Gloster Meteor 8. Flight **59,** 358.
Gloster's delta fighter. Aeroplane **81,** 718.
Jet arrival. Aeroplane **80,** 761.
Meteor 8—its genesis and structure. Aeroplane **80,** 685.
Meteor 8 performance. Aeroplane **80,** 368.

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Meteorific versatility. Aeroplane **81,** 242.
Naming our first jet bomber. Aeroplane **80,** 96.
Naval aircraft design. Aeroplane **80,** 407.
New aircraft at Farnborough. Aeroplane **81,** 384.
New twin-engine delta-wing fighter aircraft. Engineering **172,** 766.
Polar fighter. Aeroplane **80,** 41.
Royal Navy drafts the Fairey 17. Aviation Week **54,** 28 (Mar. 5).
SBAC display flying. Aeroplane **81,** 381.
Short's new bomber. Aeroplane **81,** 202.
Showing their paces. Aeroplane **81,** 394.
Side-by-side high-speed trainer. Aeroplane **81,** 16.
The Fairey F. D. 1. Aeroplane **80,** 340 and 343.
The Fairey F. D. 1 research aircraft. Engineer **191,** 382.
The SBAC flying display and exhibition. Engineer **192,** 341 and 372.
The Supermarine Swift. Aeroplane **80,** 590.
The Vickers "660" four-jet bomber. Engineer **191,** 687.
Third British delta wing makes first flight. Aviation Age **15,** 10 (May).

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R. B. Hotz, RAF transonic deltas star at SBAC show. Aviation Week **57,** 12 (Sept. 8).
N. McKitterick, RAF vs. MiG. Aviation Week **56,** 16 (Apr. 14).
R. G. Worcester, Farnborough: the wraps come off the newest. Am. Aviation **16,** 22 (Aug. 18).
A Delta for the R. A. F. Aeroplane **82,** 712.
A double for Britain. Aeroplane **83,** 350.
A new research aircraft. Aeroplane **83,** 769.
All-weather jet aircraft in service. Aeroplane **82,** 235.
British military aircraft. Aeroplane **83,** 358.
Camera reveals British design details at SBAC display. Aviation Week **57,** 30 (Oct. 13).
de Havilland D.H.113 Vampire night fighter. de Havilland Gazette No. 68, 43 (Apr.).
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Details of Australia's first jet plane. Aviation Week **56,** 34 (Jan. 7).
D.H.110; study of a fighter's evolution. Aviation Week **57,** 21 (Sept. 15).
English Electric Canberra. Flight **62,** 642.
English Electric Canberra B–2 twin-engined turbojet bomber. Flight **61,** 71.
English Electric Canberra twin-engined turbojet bomber. Am. Helicopter **26,** 13 (May).
Farnborough review. Flight **62,** 306 and 353.
First report from Farnborough. Aeroplane **83,** 342.
First thoughts on Farnborough. Interavia **7,** 579.
Flying display of British aircraft. Engineering **174,** 309 and 346.
Leading foreign aircraft. Aviation Week **56,** 172 (Feb. 25).
Loss of the Valiant. Aeroplane **82,** 58.
Military newcomers surveyed. Aeroplane **83,** 389.
Military types aloft. Aeroplane **83,** 384.
New data released on Fairey Gannet. Aviation Week **56,** 25 (Apr. 7).
New jets make their bow at Farnborough. Am. Aviation **16,** 17 (Sept. 15).
News from Hatfield. Aeroplane **83,** 233.
News from Kingston. Aeroplane **83,** 795.
Performance of "Vampire" night fighter aircraft. Engineering **173,** 635.
SBAC stars. Aviation Week **57,** 18 (Aug. 18).
Short SA–4 four-engined turbojet bomber. Aeronautics **26,** 33 (Mar.).

Some aspects of the Gannet. Aeroplane **82**, 45.
Specifications of aircraft and engines—foreign military and civil aircraft. Aviation Week **56**, 152 (Feb. 25).
Super priority lightning strikes. Aviation Week **56**, 17 (June 16).
The first Canberra squadron. Aeroplane **82**, 65.
The night-fighting Vampire. Aeroplane **82**, 156.
The SBAC flying display and static exhibition. Engineer **194**, 325, 355 and 376.
The Vampire 10 night fighter. Automotive Inds. **106**, 50 (June 1).
Two new British all-weather fighters. Aviation Age **17**, 24 (Jan.).
Valiant No. 2. Aeroplane **82**, 446.
Vickers-Supermarine Swift. Interavia **7**, 92.
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W. F. Bradley, New British planes reach production stage. Automotive Inds. **109**, 60 (Oct. 1).
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N. McKitterick, RAF picks new Swift F.4 over Hunter. Aviation Week **58**, 18 (June 29).
J. Quill, Sires of the Swift. Flight **64**, 461 (Oct.).
P. Scott, Design analysis of the Avro Vulcan. Aviation Age **20**, 24 (Oct.).
R. S. Stafford, Our latest four jet bomber. Aeroplane **84**, 6.
Avro Canada's Omega. Aeroplane **84**, 568.
Background to the Australian Sabre. Aeroplane **85**, 286.
"Crescent" wing bomber aircraft. Engineering **175**, 21.
Developing a naval jet fighter. Aeroplane **84**, 767.
Farnborough preview. Aeroplane **85**, 287.
Featherweight fighter. Aviation Age **20**, 26 (July).
First delta-wing trainer flies. Aviation Week **59**, 14 (July 20).
First flight for crescent-wing bomber. Am. Aviation **16**, 58 (Jan. 19).
First impressions from the show. Aeroplane **85**, 363.
Foreign military and civil aircraft. Aviation Week **58**, 236 (Mar. 2).
Gloster Javelin. Flight **63**, 529.
Military and naval aircraft at Farnborough. Aeroplane **85**, 407.
Newest Swift fighter makes debut. Aviation Week **59**, 16 (July 20).
New Handley Page crescent-wing jet bomber. Aviation Week **58**, 13 (Jan. 5).
New Swift tested. Aviation Week **58**, 17 (June 8).
New version. Am. Aviation **16**, 60 (Jan. 5).
Olympus engines for the Vulcan. Aeroplane **84**, 165.
Sweeping research. Aeroplane **84**, 223.
The aircraft industry's display at Farnborough. Engineering **176**, 330, 374, and 405.
The latest Vampire trainer. Flight **63**, 578.
The SBAC flying display and static exhibition. Engineer **196**, 307, 339, and 373.
The Short "S. B. 15" adjustable swept wing research aircraft. Engineer **195**, 281.
Three-way guide to British aircraft. Aeronautics **29**, 54 (Sept.).
Views of the Victor. Aeroplane **85**, 69.

215.3 Russian Military Aircraft

1950

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A. W. Jessup, Report from Korea on the MiG. Aviation Week **53**, 15 (Dec. 11).
Commies in profile. Air Trails **35**, 19 (Oct.).
MG–9 turbojet fighter, USSR. Interservices Aircraft Recognition Journal **4**, 207 (July).
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Soviet air power. Am. Helicopter **20**, 8 (Nov.).

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C. H. Goodlin, Evolution of Russia's fighters. Aviation Age **16**, 15 (Aug.).

C. H. Goodlin, The La-17. Aviation Age **15,** 21 (May).
C. H. Goodlin, The MiG-15. Aviation Age **15,** 21 (Feb.).
W. Green and R. Cross, Russia's jet aircraft. Ordnance **35,** 287.
M. I. Gurevich, I designed the MiG-15. Aero Dig. **63,** 17 (July).
A. W. Jessup, New MiG threat. Aviation Week **55,** 15 (Dec. 24).
A. W. Jessup, Red pilots sharpen skill in Korea. Aviation Week **55,** 11 (Dec. 17).
A. W. Jessup, Russians can make good planes. Aviation Week **54,** 15 (Feb. 19).
F. G. Swanborough, Aviation in Russia. Aeroplane **80,** 295.
F. G. Swanborough, Russian aircraft review. Aeroplane **80,** 349.
R. G. Worcester, How Russia's MiG-15 compares with F-86. Am. Aviation **14,** 24 (Feb. 19).
Design detail: Russia's MiG-15. Aviation Week **54,** 32 (Apr. 2).
Designing a Russian jet fighter. Aeroplane **81,** 266.
Gaspodin Zhigarev's TU-10 attack bomber. Air Trails **37,** 26 (Nov.).
It's that MiG again. Aeroplane **80,** 37.
Jet fighters. Mech. Eng. **73,** 505.
Jets of the Soviets. Aeronautics **24,** 41 (Feb.).
More about the MiG-15. Aeroplane **80,** 4.
Red air inventory. Aviation Age **16,** 40 and 44 (July).
Red fighters. Aeroplane **80,** 34.
Russian jets in action. Aeroplane **80,** 65.
Russian planes. Aviation Week **54,** 16 (Jan. 15).
Russia's A-bomber (TuG-75). Flying **49,** 11 (Dec.).
Russia's designers. Aviation Age **16,** 6 (July).
The derivation of the MiGs. Aeroplane **81,** 687.
The Russian twin-jet bomber. Aeroplane **81,** 458.
The Sabre and the MiG. Aeroplane **81,** 267.
The terrible twins. Aeroplane **80,** 65.
The Tu-10. Aviation Age **16,** 38 (July).
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N. McKitterick, RAF vs. MiG. Aviation Week **56,** 16 (Apr. 14).
I. Morton, Russia's jet warplanes. Automotive Inds. **106,** 53 (Apr. 1).
A new Russian fighter. Aeroplane **82,** 347.
Il-26 twin-engined turbojet bomber aircraft. Can. Aviation **25,** 29 (May).
Investigating the structure of the MiG-15. Aeroplane **83,** 160.
MiG-15. Product Eng. **23,** 194 (Aug.).
Russia's jet progress. Mech. Eng. **74,** 398.
Russia's new medium jet bomber. Aviation Age **18,** 33 (Oct.).
Russian or German? Aeroplane **83,** 679.
Russians push rocket fighter program. Am. Aviation **16,** 2 (Nov. 10).
Russians test new medium jet bomber. Am. Aviation **16,** 17 (Sept. 29).
Tu 75 six-engined turboprop swept-wing bomber aircraft. Interavia **7,** 138.
Type 150 twin-engined turbojet swept-wing bomber. Interavia **7,** 280.

1953

D. A. Anderton, Red MiG-15: AF test pilots analyze captive fighter. Aviation Week **59,** 16 (Nov. 30).
A. Vandyk, Technical data on MiG-15 revealed. Am. Aviation **17** (Oct. 12).
A. Vandyk, Turboprops power long range Red bombers. Am. Aviation **17,** 27 (Aug. 31).
A. Vandyk, What's in the air behind the Iron Curtain? Am. Aviation **16,** 24 (Feb. 16).
Analysis shows MiG limitations. Aviation Week **58,** 38 (June 15).
Curtain is raised on Red Ilyushin jets. Aviation Week **58,** 30 (Mar. 30).
Close-ups of a captured MiG 15 fighter. Aeroplane **85,** 656.
Fugitive MiG close-up shows new details. Aviation Week **58,** 17 (Apr. 13).
Fugitive MiG heads for U. S. test center. Aviation Week **59,** 13 (Sept. 28).
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1950

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L. Bresing, SAAB-29 turbojet fighter. SAAB Sonics No. 10, 2 (Apr./June).
Fiat G.80: First Italian turbojet plane. Aviation Week **53,** 28 (July 31).
Junkers Ju.287 turbojet swept-forward-wing bomber. Interavia **5,** 380.
Saab 29 turbojet fighter, Sweden. Aviation Age **14,** 24 (Sept.).

1951

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R. Hazeltine, French show: Many designs, few planes. Aviation Week **55,** 17 (July 9).
B. R. Olow, Flight-testing the Saab J29. Interavia **6,** 376.
I. Stone, Fokker S.14 jet trainer takes to the air. Aviation Week **55,** 29 (July 30).
J. H. Winchester, Swedish Hornet. Aviation Age **16,** 23 (Aug.).
D. H. Wood, Two new aircraft for French navy. Aviation Week **55,** 30 (Aug. 27).
A new French fighter. Aeroplane **80,** 164 and 178.
Breguet 960 Vultur turboprop/turbojet fighter. Les Ailes **31,** 8 (July 21).
Developments across the Channel. Aeroplane **81,** 457.
Fokker S.14 single-engined turbojet transition trainer. Interavia **6,** 510.
Holland's newest trainer. Aeroplane **81,** 69.
Italy's new trainer. Aeroplane **81,** 814.
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216. GUIDED MISSILES AND DRONES

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