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U.S. WORKS PROGRESS ADMINISTRATION

B I B L I O G R A P H Y

OF

A E R O N A U T I C S

Part 8 - Autogiros
Part 9 - Helicopters
Part 10 - Cyclogiros,
Gyroplanes

Compiled from the
INDEX OF AERONAUTICS
of the

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U.S. WORKS PROGRESS ADMINISTRATION

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FOREWORD

This bibliography is one of a series which aims to cover a large part of aeronautical literature. It is published by the U. S. Works Progress Administration Project 465-97-3-21 (formerly 165-97-6055) under the sponsorship of the New York City Department of Docks with the cooperation of the Institute of the Aeronautical Sciences.

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ABBREVIATIONS

- A.R.C. R. & M. - Great Britain. Aeronautical research committee. Reports and Memoranda.
- A.S.M.E. - American society of mechanical engineers, New York.
- Atti Assoc. ital. aerotecn. - Atti dell'Associazione italiana di aerotecnica. Roma.
- C.I.N.A. - Commission internationale de navigation aérienne, Genève.
- C. R. Acad. sci. - Comptes rendus hebdomadaires des séances de l'Académie des sciences, Paris.
- D.V.L. - Deutsche versuchsanstalt für luftfahrt, Berlin.
- F.A.I. - Fédération aéronautique internationale, Paris.
- H.M. Stat. off. - His Majesty's Stationery office, London.
- N.A.A. - National aeronautic association, Washington.
- N.A.C.A. - National advisory committee for aeronautics, Washington.
- N.P.L. - National physical laboratory, Teddington, England.
- Pub. scient. tech. Min. de l'air. - Publications scientifiques et techniques du Ministère de l'air. Service des recherches de l'aéronautique, Paris.
- R.A.F. - Royal air force (Great Britain)
- R.A.S. - Royal aeronautical society (Great Britain)
- Rend. Istituto sper. aer. - Rendiconto dell'Istituto, sperimentale aeronautico, Roma.
- S.A.E. - Society of automotive engineers, New York.
- U.S. Govt. print. off. - U.S. Government printing office, Washington.
- V.D.I. - Verein deutscher ingenieure, Berlin.
- W.G.L. - Wissenschaftliche gesellschaft für luftfahrt, Berlin.
- Z.A.M.M. - Zeitschrift für angewandte mathematik und mechanik, Berlin.
- Z.F.M. - Zeitschrift für flugtechnik und motorluftschiffahrt, München.

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Part I

BIBLIOGRAPHY ON AUTOGIROS

DESIGN AND CONSTRUCTION

- Hafner and Cierva gyroplanes (Cierva C.30, A.R.III), by R. Hafner. *Flight*, London, Nov. 11, 1937, v. 32, no. 1507, p. 471-472. illus.
- Gyroplane and autogiro, by J. A. J. Bennett. *Flight*, London, Oct. 28, 1937, v. 15, no. 4, p. 25-26. illus.
- Roadable autogiro, by Alexander Klemin. *Scientific american*, New York, Jan. 1937, v. 156, no. 1, p. 33. illus.
- Direct take-off type autogiro. *Mechanical engineering*, New York, Dec. 1936, v. 58, no. 12, p. 846. (Also *Engineering*, London, July 31, 1936, v. 142, no. 3681, p. 129 and *Engineer*, London, July 31, 1936, v. 162, no. 4203, p. 120)
- Roadable autogiro. *Aviation*, New York, Nov. 1936, v. 35, p. 33-34. diags., illus. (Also *Automotive industries*, New York, Oct. 10, 1936, v. 75, p. 468 and *Aero digest*, New York, Mar. 1936, v. 28, p. 35)
- Alcune considerazioni sull'autogiro, di Guidantonio Ferrari. *L'Aerotecnica*, Roma, May 1936, v. 16, no. 5, p. 360-72. diags.
- Autogiro rebirth. *Fortune*, New York, Mar. 1936, v. 13, p. 88-93. diags., illus.
- Giro's return. *Aviation*, New York, Mar. 1936, v. 35, no. 3, p. 98. diagr.
- Direct control autogiros. Autogiro company of America. Willow Grove, Pa., The Pitcairn company, 1936. 18 p.
- Study of autogiro rotor-blade oscillations in plane of rotor disk, by John Brooks Wheatley. Washington, D.C., 1936. 14 p. (N.A.C.A. Technical notes no. 581)
- The Cabin autogiro. *Aeroplane*, London, Dec. 18, 1935, v. 49, no. 1282, p. 737. illus.
- Avoid traffic jams - drive an airmobile. *National aeronautic magazine*, Washington, May 1935, v. 13, no. 4, p. 24. illus.
- Autogiro for private flying. *Science*, New York, Apr. 5, 1935, v. 81, no. 2101, p. 8.

- Rotating-winged flight. Flight, London, Aug. 2, 1934, v. 26, no. 1336, p. 788-92. illus.
- Caractères généraux aérodynamiques des appareils d'aviation à voilure tournante, par A. Lapresle. La Science aérienne, Paris, July-Aug. 1934, v. 3, no. 4, p. 336-39. diagrs., illus.
- The "Direct control" autogiro (Cierva-C-30), by John Josselyn. Current science, Bangalore, India, May 1934, v. 2, no. 11, p. 415-18. diagrs., illus.
- Algunos detalles del autogiro "C-30-P." Revista de aeronáutica, Madrid, Apr. 1934, v. 3, no. 25, p. 205-06. illus.
- Choice of airfoils for rotating-wing aircraft, by John Brooks Wheatley. Journal of the aeronautical sciences, New York, Apr. 1934, v. 1, no. 2, p. 88-90.
- Latest autogiro (Cierva C-30). Mechanical engineering, New York, Feb. 1934, v. 56, no. 2, p. 199-201.
- Direct-control autogiro. Aircraft engineering, London, Jan. 1934, v. 6, no. 59, p. 24-25.
- A New autogiro (Cierva C-30). Aeroplane, London, Nov. 15, 1933, v. 45, no. 20, p. 858-60. (Also Flight, London, Nov. 9, 1933, v. 45, no. 46, p. 1116 and Air and airways, London, June 1933, v. 10, no. 3, p. 87-88)
- Tilting rotor steers new autogiro. Popular science monthly, New York, Oct. 1933, v. 123, p. 19. illus.
- Center of gravity position of an autogiro, by J. H. Crowe. Flight, London, Sep. 28, 1933, v. 25, no. 1292, p. 972-a-d.
- Ways and future outlook of soviet auto-giro making, by A. M. Izakson. Tekhnika vozdušnovo flota, Moscow, Aug.-Sep. 1933, no. 7, p. 7-13. diagrs., illus.
- Entwicklungsrichtungen im gegenwärtigen flugzeugbau, von Martin Schrenk. Z.F.M., Berlin, May 29, 1933, v. 24, no. 10, p. 273-79. diagrs. (Abstract Journal of the R.A.S., London, Mar. 1934, p. 260)
- El Primer accidente fatal en autogiro y sus detalles estructurales, por Ricardo Brea. Chile aéreo, Santiago, Feb.-Mar. 1933, v. 3, no. 46-47, p. 15-18. illus.
- Five seater autogiro. Aviation engineering, East Stroudsburg, Pa., Feb. 1933, v. 8, no. 2, p. 18.
- The Autogiro rotor, by H. Alfaro. Aeronautical engineering, New York, Oct.-Dec. 1932, v. 52, p. 151-55.

- Kellett solves autogiro structural problems by using model fuselage, by J. Geschelin. Automotive industries, New York, June 4, 1932, v. 66, p. 808-10.
- Engineering aspects of the modern autogiro, by Agnew E. Larson. S.A.E. journal, New York, June 1932, v. 30, p. 241-53. diags.
- El Primer autogiro alemán. Ibérica, Barcelona, Feb. 27, 1932, v. 19, no. 917, p. 135.
- Kellett designs detachable hood for open-cockpit-type autogiro. Automotive industries, New York, Feb. 20, 1932, v. 66, p. 253. diags., illus.
- Cabin giro (Cierva C-24). Aviation engineering, East Stroudsburg, Pa., Jan. 1932, v. 6, no. 1, p. 37. illus.
- Two-place autogiros with cabins. Aero digest, New York, Jan. 1932, v. 20, no. 1, p. 58. illus.
- Autogiro highlights of 1932. Willow Grove, Pa., Autogiro company of America, 1932. 27 p.
- Two new autogiros (Cierva C-19 mark IV, C-24). Flight, London, Nov. 20, 1931, v. 23, no. 47, p. 1145-48. illus.
- Design problems of the autogiro, by Wynn L. Le Page. S.A.E. journal, New York, Nov. 1931, v. 29, p. 372-78. diags., illus. (Also Aviation, New York, May 1931, v. 30, p. 285)
- Metal rotors of autogiro hinged for stability, by L. von Lansdowne. Iron age, New York, July 30, 1931, v. 128, p. 302-03. illus.
- Heart of the autogiro - the rotor hub. Aviation engineering, East Stroudsburg, Pa., July 1931, v. 5, no. 1, p. 24-25. illus.
- Construction of the autogiro rotor. Aviation, New York, June 1931, v. 30, p. 377. illus.
- Autogiro attachments now available; units for ships up to 4,000 lbs., by Joseph S. Pecker. Automotive industries, New York, May 9, 1931, v. 64, no. 19, p. 732-34. diags., illus.
- Sport model autogiro shown at Detroit. Southern aviation, Atlanta, Ga., May 1931, v. 2, no. 9, p. 39. illus.
- The Autogiro, by Alexander Klemin. Scientific american, New York, Mar. 1931, v. 144, no. 3, p. 192-94. illus.
- Autogiro is new flying machine, by V. C. Odhner. Aircraft age, Kansas City, Mo., Feb. 1931, v. 2, no. 4, p. 10-12.

- Autogiro. Mechanical engineering, New York, Aug. 1930, v. 52, no. 8, p. 787. illus. (Also Flight, London, Apr. 4, 1930, v. 22, no. 14, p. 391)
- The Autogiro, by E. D. Rice. Engineers and engineering, Philadelphia, Feb. 1930, v. 47, no. 2, p. 25-29. illus.
- The Autogiro, by F. A. de V. Robertson. Aircraft, Melbourne, Jan. 31, 1930, v. 8, no. 5, p. 206, 208.
- Junior autogiro, by R. E. Dowd. Aero digest, New York, Jan. 1930, v. 16, no. 1, p. 202-04. diags., illus.
- Light cars of the air (Cierva C-19), by Theodore Stanhope Sprigg. Airways, London, Sep. 1929, v. 5, no. 13, p. 471-74. diags.
- Aerodynamic trend in design, by A. D. Kligman. Airway age, New York, Aug. 1929, v. 10, no. 8, p. 1192-97. diags.
- New flying machine to rise vertically. English mechanics, London, Apr. 5, 1929, v. 5, no. 128, p. 549-50. diags.
- The Autogyro, by V. E. Bertrandias. Engineers and engineering, Philadelphia, Jan. 1929, v. 46, no. 1, p. 26-28.
- Aircraft with rotative wings. Popular aviation, Chicago, Oct. 1928, v. 3, no. 4, p. 124-29. illus.
- Autogiro light 'plane. Flight, London, Aug. 30, 1928, v. 20, no. 35, p. 749-50. illus., tables.
- Construcción del autogiro en el extranjero y en España. Ibérica, Barcelona, Sep. 11, 1926, v. 13, no. 643, p. 146.

DEVELOPMENT

- New developments of the autogiro, by Juan de la Cierva. Journal of the R.A.S., London, Dec. 1935, v. 39, no. 300, p. 1125-43. illus.
- El Porvenir del autogiro como vehículo de turismo. Revista de aeronáutica, Madrid, Sep. 1935, v. 4, no. 42, p. 480-81.
- Évolution de l'autogire, par Chossat. Revue du ministère de l'air, Paris, July 15, 1935, v. 1, no. 7, p. 841-64. illus.
- L'Autogire: progrès considérable dans la navigation aérienne, par Raymond Saladin. La Nature, Paris, May 1, 1935, pt. 1, p. 400-03. illus.

AUTOGIROS - DEVELOPMENT

- Airway or highway, recent autogiro developments point way to road running aircraft. Aviation, New York, May 1935, v. 34, p. 189.
- L'Autogire - son passé, son présent, son avenir, par G. Lepère. La Science aérienne, Paris, Jan.-Feb. 1935, v. 4, no. 1, p. 1-11.
- El Autogiro - ayer, hoy, mañana, por Tomás de Martín-Barbadillo. Madrid, Talleres Espasa-Calpe, s. a., 1935. 179 p. plates. (Review Revista de aeronáutica, Madrid, Jan. 1936, v. 5, no. 46, p. 53)
- Giros advance. Aviation, New York, Dec. 1934, v. 33, p. 408-09. diagr., illus.
- Autogiro developments. Aeroplane, London, Aug. 1, 1934, v. 47, no. 5, p. 141-43.
- The Evolution of the autogiro. A brief history of the development of this type of aerodyne from its inception, by Juan de la Cierva. Aircraft engineering, London, May 1934, v. 6, no. 63, p. 132-33.
- El Desarrollo del autogiro Cierva. Revista de aeronáutica, Madrid, Apr. 1934, v. 3, no. 25, p. 25.
- Ante el nuevo autogiro. Revista de aeronáutica, Madrid, Mar. 1934, v. 3, no. 24, p. 117-18. illus.
- La Difusión del autogiro La Cierva. Revista de aeronáutica, Madrid, Feb. 1934, v. 3, no. 23, p. 99.
- Le Vol vertical. Théorie générale des hélicoptères. Les appareils à voilures tournantes de leurs origines à 1934, par Maurice Luc Valère Lamé. Paris, E. Blondel La Rougery, 1934. 242 p. illus.
- L'Autogire a-t-il un intérêt? Un avenir? par H. Lauwick. Les Annales politiques et littéraires, Paris, Nov. 24, 1933, v. 101, p. 589. illus.
- Autogiro development, by R. W. Morse. S.A.E. journal, New York, June 1933, v. 32, supp. 31.
- Entwicklungsrichtungen im gegenwärtigen flugzeugbau, von Martin Schrenk. Z.F.M., Berlin, May 29, 1933, v. 24, no. 10, p. 273-79. diagrs. (Abstract Journal of the R.A.S., Mar. 1934, p. 260)
- Early setbacks in autogiro development, by Alvin Edward Moore. Popular aviation, Chicago, Jan. 1933, v. 12, p. 21-22, 59-61. illus.
- Autogiro development, by Agnew E. Larson. Aviation engineering, East Stroudsburg, Pa., Nov. 1932, v. 7, no. 5, p. 15. illus.

- L'Autogire fait-il des progrès? par Henri Bouché. L'Illustration, Paris, Aug. 15, 1931, v. 179, p. 528-29. illus.
- Progress of the autogiro, by John Josselyn. Air and airways, London, Aug. 1931, v. 1, no. 4, p. 145-47.
- Your next garage may house an autogiro, by Amelia Earhart. Cosmopolitan, New York, Aug. 1931, p. 58-59.
- Collier trophy for 1930 awarded to Harold F. Pitcairn for autogiro development. National aeronautic magazine, Washington, Apr. 1931, v. 9, p. 33-34. illus.
- Will autogiro banish present plane? by A. Jordanoff. Popular science, New York, Mar. 1931, v. 118, p. 28-30. illus.
- Où est l'autogire? L'Aéronautique, Paris, Feb. 1931, v. 13, no. 141, p. 38. illus.
- Wings of tomorrow; the story of the autogiro, by Juan de la Cierva and Don Rose Cierva. New York, Brewer, Warren and Putnam, 1931. 300 p. diagrs., ills. (Abstract Forum, New York, Mar. 1931, p. 172-77)
- Development of the autogiro, by Agnew E. Larson. Aero digest, New York, Oct. 1930, v. 17, no. 4, p. 54-56. illus.
- Progress along conservative lines, by Thomas Carroll. Aviation, New York, Mar. 15, 1930, v. 28, no. 11, p. 526-27.
- Autogiro. Flight, London, Feb. 21, 1930, v. 22, no. 8, p. 239-41. diagr., illus. (Also Aeroplane, London, Feb. 19, 1930, v. 38, no. 8, p. 298-302)
- The Autogiro, by E. D. Rice. Engineers and engineering, Philadelphia, Feb. 1930, v. 47, no. 2, p. 25-29. illus.
- The Story of vertical flight, by Ernest W. Fair. Popular aviation, Chicago, Sep. 1929, v. 5, p. 15-16, 67-68.
- I Pregi e l'avvenire dell'autogiro, di Juan de la Cierva. L'Aerotecnica, Roma, Mar. 1929, v. 9, no. 3, p. 107-14. illus.
- Une Date de l'aviation: l'autogire, par A. Demaison. Revue des deux mondes, Paris, Oct. 1, 1928, v. 47, p. 710-711.
- La Consécration de l'autogire, par Henri Bouché. L'Aéronautique, Paris, Oct. 1928, v. 10, no. 112, p. 338-44. diagrs., illus.
- L'Autogire et le progrès aéronautique, par Henri Bouché. L'Illustration, Paris, Sep. 29, 1928, v. 86, pt. 2, p. 322-23. diagrs., illus.

- The Autogiro - its future as a service aeroplane. U. S. Naval institute proceedings, Washington, D. C., Aug. 1928, v. 54, no. 8, p. 696-701. diagsr.
- Progress of the autogiro. Flight, London, Feb. 16, 1928, v. 20, no. 7, p. 102-03.
- Autogiros of the future, by Juan de la Cierva. Airways, Apr. 1926, v. 1, p. 244-245. illus.
- The Development of the autogyro, by Juan de la Cierva. Mechanical engineering, New York, Mar. 1926, v. 48, p. 264-65. (Also Journal of the R.A.S., London, Jan. 1926, v. 30, p. 8-29)
- The Evolution of the Cierva "Autogiro." Flight, London, Nov. 5, 1925, v. 17, no. 45, p. 733. illus.

FLIGHT INSTRUCTION

- L'Autogire et son pilotage, par Reginald A. C. Brie. Paris, Dunod, 1936. 125 p. illus.
- Autogiro instruction. Flight, London, Oct. 25, 1934, v. 26, no. 1348, p. 1133.
- Flying the autogiro, by C. N. Colson. Flight, London, Aug. 9, 1934, v. 26, no. 1337, p. 813-16.
- The Autogiro and how to fly it, by Reginald A. C. Brie. London and New York, Sir Isaac Pitman and sons, 1933. 82 p. illus.
- Autogiro flight instruction, by Guy Miller. Aviation engineering, East Stroudsburg, Pa., Sep. 1932, v. 7, no. 3, p. 24-25.
- Flying the autogiro, by Frank M. Hawks. U. S. Air services, Washington, D.C., Dec. 1930, v. 15, no. 12, p. 36-37.
- Flying the autogiro (Cierva C 19), by E. H. Alllott. Airways, London, Dec. 1930, p. 555-56.
- Flying an autogiro. James G. Ray feels that learning to fly an autogiro offers no particular difficulties. Airway age, New York, Nov. 1930, v. 11, no. 11, p. 1427-29. illus.
- It's easy to fly autogiro, declares inventor. Popular mechanics, Chicago, Jan. 1930, v. 53, p. 45.
- Le Pilotage de l'autogire, par Loriga. L'Aéronautique, Paris, Jan. 1925, v. 7, no. 68, p. 13. illus.

- Tragflügelmessungen mit kleinstwindkanälen, von Bruno Eck. Zeitschrift für technische physik, Berlin, Jan. 1937, no. 1, p. 14-20. diagrs., tables.
- Direct take-off type autogiro. Mechanical engineering, New York, Dec. 1936, v. 58, no. 12, p. 846. (Also Engineering, London, July 31, 1936, v. 142, no. 3681, p. 129 and Engineer, London, July 31, 1936, v. 162, no. 4203, p. 120)
- Essais d'autogires, par M. S. Ducout. L'Aérophile, Paris, Aug. 1936, v. 44, no. 8, p. 179-80. illus.
- Roof top landings. Scientific american, New York, Jan. 1936, v. 154, p. 33-34.
- Direct control autogiros. Autogiro company of America. Willow Grove, Pa., The Pitcairn company, 1936. 18 p.
- The Effect of blade twist on the characteristics of the C 30 autogiro, by J. A. Beavan and C. N. H. Lock. London, H. M. Stat. off., 1936. (A.R.C. R. & M. no. 1727)
- Wind-tunnel tests of 10-foot diameter autogiro rotors, by John Brooks Wheatley and Carlton Bioletti. Washington, U. S. Govt. print. off., 1936. 14 p. diagrs., illus., tables. (N.A.C.A. Report no. 552)
- Autogyro model tests by the N.P.L. Engineering, London, Oct. 25, 1935, p. 438.
- L'Envol vertical de l'autogire, par Pierre Léglise. Revue de l'armée de l'air, June 1935, v. 7, no. 71, p. 699-705. diagrs., illus.
- L'Autogire à montée directe. L'Aérophile, Paris, Apr. 1935, v. 43, no. 4, p. 110. diagrs.
- Landing in your back yard, by Juan de la Cierva. Popular aviation, Chicago, Apr. 1935, p. 235.
- Extending the giro. Aviation, New York, Jan. 1935, v. 34, no. 1, p. 33.
- Full-scale wind-tunnel tests of a PCA-2 autogiro rotor, by John Brooks Wheatley and Manley J. Hood. Washington, U. S. Govt. print. off., 1935. 10 p. (N.A.C.A. Report no. 515)
- Comparison of various types of aircraft, by Juan de la Cierva. Mechanical engineering, New York, Nov. 1934, v. 56, p. 68. (Also L'Aéronautique, Paris, Feb. 1934, v. 16, no. 177, p. 26-31)

- Rotating wing aircraft compared to conventional airplanes, by John Brooks Wheatley. S.A.E. journal, New York, Apr., Aug. 1934, v. 34-35, p. 114-18, 131, 287. illus., tables.
- Performance of an autogiro, by J. H. Crowe. Aircraft engineering, London, May 1934, v. 46, no. 63.
- Landing characteristics of an autogiro, by William C. Peck. Washington, D. C., 1934. 8 p. illus. (N.A.C.A. Technical notes no. 508)
- Le Escursioni in altezza col motore a reazione, di A. Bartocci. L'Aerotecnica, Roma, Dec. 1933, v. 13, no. 12, p. 1646-66. diags., tables.
- Possibilities of cabin type autogiros (Cierva C-24, Kellett K-3), by Agnew E. Larson. A.S.M.E. transactions, New York, Oct.-Dec. 1933, v. 55, no. 4, p. 159-61.
- Über den flug eines autogiro mit grosser geschwindigkeit, von J. A. J. Bennett. Z.F.M., Berlin, Sep. 14, 1933, v. 24, no. 17, p. 465-70. tables.
- Safe flying in the autogiro. Discovery, London, July 1933, v. 14, p. 225-26. illus.
- The Autogiro of today. The new wingless direct control autogiro now challenges comparison with any normal aircraft of similar power, by Reginald A. C. Brie. Air and airways, London, Apr. 1933, v. 10, p. 17-18.
- Revolutionary reflections. Aeroplane, London, Oct. 12, 1932, v. 43, no. 15, p. 700-02. illus.
- Über den senkrechten abstieg eines autogiro, von J. A. J. Bennett. Z. F. M., München, Apr. 28, 1932, v. 23, no. 8, p. 219-22. diags., tables.
- The Autogiro answers its critics, by Harold F. Pitcairn. Aviation, New York, Apr. 1932, v. 31, no. 4, p. 169-72. illus.
- Pros and cons of the autogiro, by Alexander Klemin. Scientific american, New York, Mar. 1932, v. 146, p. 170. illus.
- Autogiro highlights of 1932. Willow Grove, Pa., Autogiro company of America, 1932. 27 p.
- Lift and drag characteristics and gliding performance of an autogiro as determined in flight, by John Brooks Wheatley. Washington, U. S. Govt. print. off., 1932. 10 p. diags., illus., tables. (N.A.C.A. Report no. 434)
- Defence of the autogiro, by Harold F. Pitcairn. Aeroplane, London, Nov. 25, 1931, p. 1228-30.
- Two new autogiros (Cierva C-19 mark IV, C-24). Flight, London, Nov. 20, 1931, v. 23, no. 47, p. 1145-48. illus.

- Airplane and autogiro compared, by E. Ovington. Popular aviation, Chicago, Nov. 1931, p. 36.
- Debate about the autogiro, by Alexander Klemin. Scientific american, New York, Nov. 1931, v. 145, p. 337. illus.
- On the autogiro. Aeroplane, London, July 15-22, 1931, v. 41, no. 3-4, p. 149-50, 152, 154, 156, 228. diagsr.
- In the driftway. On the wonders of the autogiro. Nation, New York, July 8, 1931, v. 133, p. 39-40.
- Performance features of the autogiro, by W. E. Debnam. Southern aviation, Atlanta, Ga., July 1931, v. 2, no. 11, p. 13-14. illus.
- El Viaje más largo hecho en autogiro. Ibérica, Barcelona, May 23, 1931, v. 18, no. 879, p. 325-26.
- The Autogiro, by Alexander Klemin. Scientific american, New York, Mar. 1931, v. 144, no. 3, p. 192-94. illus.
- La Seguridad comparada de ala fija y los sistemas rotativos, por Juan de la Cierva. Ingenieria y construcción, Madrid, Jan. 1931, v. 6, no. 97, p. 10-13. diagsr. (Also Revista de obras públicas, Madrid, Dec. 15, 1930, v. 78, no. 24, p. 548-49)
- Relative flight safety of the autogiro, by Thomas Carroll. Aero digest, New York, Dec. 1930, v. 17, p. 72. illus.
- The Autogiro - its characteristics and accomplishments. Aviation engineering, East Stroudsburg, Pa., July 1930, v. 3, no. 7, p. 19-23. (Also Journal of the Franklin institute, Philadelphia, Pa., May 1930, v. 209, no. 5, p. 571-84)
- Vertical descent, by Max Michael Munk. Aero digest, New York, June 1930, v. 16, p. 73.
- Autogiro. Flight, London, Feb. 21, 1930, v. 22, no. 8, p. 239-41. diagr., illus. (Also Aeroplane, London, Feb. 19, 1930, v. 38, no. 8, p. 298-302)
- The Autogiro, by E. D. Rice. Engineers and engineering, Philadelphia, Feb. 1930, v. 47, no. 2, p. 25-29. illus.
- The Autogiro, by F. A. de V. Robertson. Aircraft, Melbourne, Jan. 31, 1930, v. 8, no. 5, p. 206, 208.
- Safety features and performance of the modern autogiro, by E. D. Rice. Aero world, New York, Jan. 1930, p. 29-30.
- Improved Cierva autogiro tested in flight by inventor, by H. Hosking. Automotive industries, New York, Aug. 31, 1929, v. 61, no. 9, p. 302-303, 306. illus.

- Characteristics of an autogiro, by Hermann Glauert and C. N. H. Lock. Mechanical engineering, New York, July 1929, v. 51, p. 536. (Also Aviation engineering, East Stroudsburg, Pa., May 1929, v. 2, no. 5, p. 9-10)
- Windmill that flies, by D. F. Rose. North american review, New York, June 1929, v. 227, p. 675-84.
- L'Autogiro perfezionato per il decollaggio. L'Aerotecnica, Roma, May 1929, v. 9, no. 5, p. 373.
- Efficiency of the autogiro. Aircraft engineering, London, Mar. 1929, p. 23-24. diags.
- The Autogiro, by V. E. Bertrandias. Engineers and engineering, Philadelphia, Jan. 1929, v. 46, no. 1, p. 26-28.
- Wind tunnel experiments on a model autogiro at small angles of incidence, by C. N. H. Lock and H. C. H. Townsend. London, H. M. Stat. off., 1929. 61 p. diags., tables. (A.R.C. R. & M. no. 1154)
- La Traversée de la Manche de l'autogire. La Nature, Paris, Nov. 1, 1928, v. 56, no. 2796, p. 423.
- Demonstratie met de autogiro. Het Vliegvelde, Amsterdam, Oct. 1928, v. 12, no. 10, p. 287-90. illus.
- La Sicurezza del volo e l'autogiro la Cierva. L'Ala d'Italia, Milano, Oct. 1928, v. 7, no. 10, p. 981-82. illus.
- L'Autogire a traversé la Manche. L'Illustration, Paris, Sep. 22, 1928, v. 86, no. 4464, p. 292.
- Impressions d'un passager d'autogire, par Charles Dollfus. L'Aéronautique, Paris, June-July 1928, v. 10, no. 109-110, p. 213.
- Novel airplanes for safe flying, by W. Davis. Science newsletter, Washington, D. C., Mar. 24, 1928, v. 13, no. 363, p. 179-80, 187-88. illus.
- Wind tunnel and dropping tests of autogiro models, by L. E. Caygill and A. E. Woodward Nutt. London, H. M. Stat. off., 1928. 5 p. (A.R.C. R. & M. no. 1116)
- Essai des nouveaux autogires. L'Aéronautique, Paris, Dec. 1927, v. 9, no. 103, p. 406. illus.
- Testing a windmill airplane "autogiro," by R. Seiferth. Washington, 1927. 9 p. illus., tables. (N.A.C.A. Technical memorandums no. 394) (From Z.F.M., Berlin, Nov. 27, 1926, v. 17, no. 22, p. 483-85)

- Airplane with revolving wing flies vertically or level. Popular mechanics, Chicago, Apr. 1925, v. 43, p. 541. illus.
- Il Problema dell'elicottero, di G. De-Santis. L'Ala d'Italia, Milano, Mar. 1925, v. 4, no. 3, p. 85-90. diags., illus.
- Essais aérodynamiques d'un modèle d'autogire, par Juan de la Cierva, L'Aéronautique, Paris, Apr. 1924, v. 6, no. 59, p. 47-49. diags., illus.

THEORY

- Considérations sur les aérogyres, par Maurice Luc Valère Lamé. Ecole nationale supérieure aéronautique, Paris, Mar.-Apr. 1937, no. 2. 8 p. illus.
- Die Hubschraube in bodennähe, von A. Betz. Zeitschrift für angewandte mathematik und mechanik, Berlin, Apr. 1937, v. 17, no. 2, p. 68-72. diags., tables.
- Influence du nombre fini de pales des hélices sustentatrices, par Svetopolk Pivko. C. R. Acad. sci., Paris, Mar. 31, 1937, v. 204, no. 13, p. 1033-37. diags., tables.
- Fragen des drehflueglers, von T. Mohring. Luftwissen, Berlin, Aug. 1936, v. 3, no. 8, p. 208-14, Jan. 1937, v. 4, no. 1, p. 12-21. diags., tables.
- An Analysis of the factors that determine the periodic twist of an autogiro rotor blade, with a comparison of predicted and measured results, by John Brooks Wheatley. Washington, U. S. Govt. print. off., 1937. 11 p. diags. (N.A.C.A. Report no. 600)
- An Analytical and experimental study of the effect of periodic blade twist on the thrust, torque and flapping motion of an autogiro rotor, by John Brooks Wheatley. Washington, U. S. Govt. print. off., 1937. 7 p. diags., tables. (N.A.C.A. Report no. 591)
- Zusammenfassender bericht über den instationären auftrieb von flügeln, von H. G. Küssner. Luftfahrtforschung, Berlin, Dec. 20, 1936, v. 13, p. 410.
- Die Gleitzahl des tragschraubers, von S. Schoppe. Luftwissen, Berlin, Aug. 1936, v. 3, no. 8, p. 216-18.
- Il Problema dell' ala rotante, di E. Pistolesi e L. Poggi. L'Aerotecnica, Roma, May 1936, v. 16, no. 5, p. 348-59.
- Autogiro rebirth. Fortune, New York, Mar. 1936, v. 13, p. 88-93. diags.

AUTOGIROS - THEORY

- Analysis and model tests of autogiro jump take-off, by John Brooks Wheatley and Carlton Bioletti. Washington, 1936. 31 p. (N.A.C.A. Technical notes no. 582)
- New developments of the autogiro, by Juan de la Cierva. Journal of the R.A.S., London, Dec. 1935, v. 39, no. 300, p. 1125-43. illus.
- Autogiron teoria, fon E. Wegelius. Teknillinen aikakauslehti, Helsingfors, Finland, Apr. 1935, no. 4, p. 133-47.
- Resistance of rotating sectors and the autogiro, by Dimitri P. Riabouchinsky. Journal of the R.A.S., London, Apr. 1935, v. 39, p. 297-302. diags., illus.
- Rotary-wing aircraft. Mechanical engineering, New York, Apr. 1935, v. 57, no. 4, p. 244.
- The Influence of wing setting on the wing load and rotor speed of a PCA-2 autogiro as determined in flight, by John Brooks Wheatley. Washington, U. S. Govt. print. off., 1935. (N.A.C.A. Report no. 523)
- El Autogiro en el momento actual, por Juan de la Cierva. Revista de obras públicas, Madrid, Dec. 1, 1934, v. 81, no. 2634, p. 518-22.
- Problem of vertical flight, by J. H. Crowe. Aircraft engineering, London, Nov.-Dec. 1934, v. 6, no. 69-70, p. 292-96, 315-18. diags., illus.
- De Autogiro, von A. G. von Baumhauer. De Ingenieur, Gravenhage, Oct. 26, 1934, v. 49, no. 43, p. 131-38. illus.
- Autogyro rotor as a sail, by J. T. C. Moore and Brabazon. Journal of the R.A.S., London, Sep. 1934, v. 38, p. 771-75. illus.
- Sobre la estabilidad del movimiento de las palas del autogiro, por P. Adam Puig. Revista de aeronáutica, Madrid, Sep. 1934, v. 3, no. 30, p. 478-85. diags., tables.
- Juan de la Cierva y sus autogiros, por Herbert Frensdorff. Revista de aeronáutica, Madrid, Aug. 1934, v. 3, no. 29, p. 411-14.
- Die Flugtechnische bedeutung des drehflügels, von Martin Schrenk. Zeitschrift des V.D.I., Berlin, June 23, 1934, v. 78, no. 25, p. 776-77. illus.
- Nueva contribución al estudio del problema matemático del autogiro ultra rápido, por J. M. Orts. Ibérica, Barcelona, June 16, 1934, v. 41, no. 1029, p. 376-77. tables.

- Drehflügel, von Martin Schrenck. Luftwissen, Berlin, May 15, 1934. 6 p. diags., illus.
- Choice of airfoils for rotating-wing aircraft, by John Brooks Wheatley. Journal of the aeronautical sciences, New York, Apr. 1934, v. 1, no. 2, p. 88-90. diags.
- Puede el rotor de un autogiro pararse en el aire? por Emilio Herrera. Revista de aeronáutica, Madrid, Apr. 1934, v. 3, no. 25, p. 204-05. diags.
- An Aerodynamic analysis of the autogiro rotor with a comparison between calculated and experimental results, by John Brooks Wheatley. Washington, U. S. Govt. print. off., 1934. 17 p. diags., illus. (N.A.C.A. Report no. 487)
- Aerodynamic principles of direct lifting propeller, by Martin Schrenk. Washington, 1934. 60 p. diags., tables. (N.A.C.A. Technical memorandums no. 733) (From Z.F.M., München, Aug. 14-28, Sep. 14, 1933, v. 24, no. 15-17, p. 413-19, 449-54, 473-81)
- Les Fondements de l'autogire, par Juan de la Cierva. Bulletin de l'Association technique, maritime et aéronautique, Paris, 1934, no. 38, p. 329-38. illus., tables.
- Rotary wing aircraft, by Juan de la Cierva. Cambridge university engineering and aeronautical society journal, Cambridge, 1934, v. 9, p. 13-20. (Abstract Aircraft engineering, London, June 1934, v. 6, no. 64, p. 159-60)
- Zur theorie der tragschraube für flugzeuge, von Martin Schrenk. Zeitschrift des V.D.I., Berlin, Nov. 4, 1933, v. 77, no. 44, p. 1192.
- Du boomerang à l'autogire, par Jacques Mottez. L'Aéronautique, Paris, Sep. 1933, v. 15, p. 207-13.
- Roues sustentatrices et propulsives, par C. B. Strandgren. L'Aéronautique, Paris, Sep. 1933, v. 15, no. 172, p. 81-88.
- Theory of rotor autogiro, by I. P. Bratukhin. Tekhnika voz-dushnovo flota, Moscow, Aug.-Sep. 1933, no. 7, p. 13-34. diags., illus., table.
- Les Essais de stabilité, par J. Quessette. L'Aéronautique, Paris, June-July 1933, v. 15, no. 169-70, p. 49-59, 65-67.
- The Autogiro principle, by J. R. Porter. Engineer, London, May 26, 1933, v. 155, no. 4037, p. 524. diags.
- The Flight of an autogiro at high speed, by J. A. J. Bennett. Washington, 1933. 14 p. diags. (N.A.C.A. Technical memorandums no. 729)

AUTOGIROS - THEORY

- Wing pressure distribution and rotor-blade motion of an autogiro as determined in flight, by John Brooks Wheatley. Washington, U. S. Govt. print. off., 1933. 11 p. diags., illus., tables. (N.A.C.A. Report no. 475)
- The Autogiro rotor, by H. Alfaro. Aeronautical engineering, New York, Oct.-Dec. 1932, v. 52, p. 151-55.
- Das Drehflügelflugzeug, von Martin Schrenk. Zeitschrift des V.D.I., Berlin, Aug. 27, 1932, p. 843-46. (Abstract Journal of the R.A.S., London, Jan. 1933, p. 101)
- La Aerodinámica de un autogiro natural, por J. M. Artajo. Anales de la Asociación de ingenieros del Instituto católico de artes e industrias, Madrid, July-Aug. 1932, v. 11, no. 7-8, p. 387-89, 439-42.
- How an autogiro flies and why, by S. E. Kneupfer. Popular aviation, Chicago, Aug. 1932, p. 91-92.
- Effective rejoinder for the autogiro, by Alexander Klemin. Scientific american, New York, July 1932, v. 147, p. 43-47.
- The Autogiro, by A. L. Pilch. Sibley journal of engineering, New York, May 1932, v. 46, no. 5, p. 17-19, 138-39. diags., illus.
- And thus it flies, by Hilton F. Lusk. U. S. Air services, Washington, D. C., Apr. 1932, v. 17, no. 4, p. 27-30.
- Lift and drag characteristics and gliding performance of an autogiro as determined in flight, by John Brooks Wheatley. Washington, U. S. Govt. print. off., 1932. 10 p. diags., illus., tables. (N.A.C.A. Report no. 434)
- Vertical descent of the autogiro, by J. A. J. Bennett. Washington, D.C., 1932. 13 p. tables. (N.A.C.A. Technical memorandums no. 673)
- Autorotation, by Harold F. Pitcairn. Western flying, Los Angeles, Dec. 1931, v. 10, no. 6, p. 25-26. illus.
- Autogiro, as I see it, by Harold F. Pitcairn. Aviation, New York, Nov. 1931, v. 30, p. 630-32.
- Why the autogiro? by Raymond W. T. Ricker. Worcester polytechnic institute journal, Worcester, Mass., Nov. 1931, v. 35, p. 11-14. illus.
- Vliegende windmolens, van P. J. J. Mounier. Het Vliegveld, Amsterdam, Oct. 1931, v. 15, no. 10, p. 350-54. illus.
- Die Seitenwege der luftfahrt, von Theodore von Kármán. Z.F.M., München und Berlin, Aug. 28, 1931, v. 22, no. 16, p. 481-88. diags., illus.

- The Autogiro, by Juan de la Cierva. Aeroplane, London, Aug. 19, 1931, v. 41, no. 8, p. 462-64. (Also Mechanical engineering, New York, Feb. 1931, v. 53, no. 2, p. 141-42 and Journal of the R.A.S., Nov. 1930, v. 34, no. 239, p. 920-21)
- Autogiro demonstration, by H. Alfaro. S.A.E. journal, New York, July 1931, v. 29, no. 1, p. 25.
- Fundamentals of autogiro, by Harold F. Pitcairn. Pacific flyer, San Francisco, Cal., June 1931, p. 7.
- Cierva autogiro - a pegasus of mathematics, by V. C. Odhner. National glider, New York, May 1931, p. 26-28.
- Development in stability and rotor starting characteristics of the autogiro, by Ralph H. McClarren. Aviation engineering, East Stroudsburg, Pa., Apr. 1931, v. 4, no. 3, p. 20-22. diags.
- How the "galloping windmill" flies, by James V. Piersol. Bulletin of the Associated technical societies of Detroit, Detroit, Michigan, Apr. 1931, v. 10, no. 4, p. 5-7. diags.
- Autogiro is new flying machine, by V. C. Odhner. Aircraft age, Kansas City, Mo., Feb. 1931, v. 2, no. 4, p. 10-12.
- The Book of the C-19 autogiro; the principle of operation described, together with notes on runnings and maintenance, by C. J. Saunders. London and New York, Sir Isaac Pitman and sons, 1931. 112 p. illus.
- Autogiro, by Harold F. Pitcairn. Engineers and engineering, Philadelphia, Pa., Dec. 1930, v. 47, p. 305-12. illus.
- The Autogiro analyzed, by Wynn L. Le Page. S.A.E. journal, New York, Sep. 1930, v. 27, no. 3, p. 257-62. illus.
- Considerazioni sul momento laterale di un' elica autorotante di costruzione rigida, di Giovanni Serragli. L'Aerotecnica, Roma, Mar. 1930, v. 10, no. 3, p. 149-62. diags., tables.
- Autogiro. Flight, London, Feb. 21, 1930, v. 22, no. 8, p. 239-41. diags., illus. (Also Aeroplane, London, Feb. 19, 1930, v. 38, no. 8, p. 298-302)
- The Theory of the autogiro, by Juan de la Cierva. A.S.M.E. transactions, New York, 1930, v. 52, p. 13-14. illus. (Also Aero digest, New York, Oct. 1929, v. 15, no. 4, p. 124-26)
- Studio generale dell'elica sostentiva, di Giovanni Serragli. Notiziario tecnico di aeronautica, Roma, Dec. 1929, v. 8, no. 12, p. 17-33. diags., illus.

- Discussion of autogiro principles, by Juan de la Cierva.
Airway age, New York, Oct. 1929, v. 10, no. 10, p. 1629-1632.
- How the autogiro flies, by Earl D. Osborn. Scientific american, New York, Oct. 1929, v. 141, p. 290-92, 336. diagsr.
- The Autogiro, by Juan de la Cierva. S.A.E. journal, New York, Sep. 1929, v. 25, no. 3, p. 204-06. illus. (Also Cambridge university engineering and aeronautical society journal, Cambridge, London, 1929, v. 4, p. 107-15)
- L'Avion, l'hélicoptère, l'autogire, par C. Martinot et Lagarde. Technique moderne, Paris, May 1, 1929, v. 21, no. 9, p. 257-66.
- Airplane with rotating wing and under carriage, by Juan de la Cierva. Popular aviation, Chicago, Dec. 1928, v. 3, no. 6, p. 122-28. illus.
- L'Autogire, par Juan de la Cierva. L'Aéronautique, Paris, Nov. 1928, v. 10, no. 114, p. 381-86. illus. (Also Ingenieria y construcción, Madrid, Apr. 1928, v. 6, no. 64, p. 184-89)
- Le Tourbillon aérien, par E. de Geoffroy. Le Correspondant, Paris, Oct. 25, 1928, v. 313, no. 1586, p. 178-86. (principle of autogiro and autorotation)
- L'Autogyre, par Henri Bouché. L'Aéronautique, Paris, Oct. 1928, no. 113, p. 338-44. diagsr.
- Teoria dell'elica sustentatrice, di Otto Flachsbart. L'Aerotecnica, Roma, Sep. 1928, v. 8, no. 9, p. 638. (From Z.F.M., München, Apr. 28, 1928, v. 19, no. 8, p. 177-83)
- Property of rotating wings, by V. Pyshnov. Tekhnika vozdushnovo flota, Mar. 1928, no. 3, p. 162-68. diagsr., illus., tables.
- Esperienze con elica autorotante, di Carlo Ferrari. IV Congresso internazionale di navigazione aerea, Roma, Oct. 24-30, 1927. Roma, 1928, v. 4, p. 69-74. diagsr., illus., tables.
- Further development of autogyro theory, by C. N. H. Lock. London, H. M. Stat. off., 1928. 43 p. diagsr., illus., tables. (A.R.C. R. & M. no. 1127)
- A General theory of the autogiro, by Hermann Glauert. London, H. M. Stat. off., 1928. 36 p. diagsr., illus., tables. (A.R.C. R. & M. no. 1111) (Also Journal of the R.A.S., London, June 1927, v. 31, no. 198, p. 483-508)

- Lift and torque of an autogyro on the ground, by Hermann Glauert. London, H. M. Stat. off., 1928. 4 p. diagrs., tables. (A.R.C. R. & M. no. 1131)
- The Rotating wing in aircraft, by H. E. Wimperis. London, H. M. Stat. off., 1928. 7 p. illus. (A.R.C. R. & M. no. 1108)
- A Summary of the experimental and theoretical investigations of the characteristics of an autogyro, by Hermann Glauert and C. N. H. Lock. London, H. M. Stat. off., 1928. 24 p. (A.R.C. R. & M. no. 1162)
- Studio sperimentale delle velature rotanti, di A. Lapresle. L'Aerotecnica, Roma, July 1927, v. 7, no. 7, p. 444.
- Considerazioni sull' "autogyro," di Enrico Pistolesi. L'Aerotecnica, Roma, Oct. 1926, v. 6, no. 6, p. 409-23. illus.
- The Rotating wing in aircraft. Engineering, London, Aug. 13, 1926, v. 122, no. 3161, p. 207.
- Avion à voilure tournante. La Technique moderne, Paris, July 15, 1926, v. 18, no. 14, p. 443.
- Flugzeuge mit umlaufenden tragflügeln, von Werner von Langsdorff. Technische blatt, Frankfurt am Main, Mar. 26, 1926, v. 8, p. 60. diagrs., illus.
- A New flight principle. Tech engineering news, Cambridge, Mass., Dec. 1925, v. 6, no. 5, p. 194. illus.
- The Cierva "autogyro." Noteworthy lecture at the Royal aeronautical society. Flight, London, Oct. 29, 1925, v. 17, no. 44, p. 709-11.
- Come ho concepito l'"Autogyro," di Juan de la Cierva. L'Ala d'Italia, Roma, Oct. 1925, v. 4, no. 10, p. 356-59. illus. (Also L'Aérotechnique, Paris, Apr. 1925, v. 7, no. 71, p. 135-40)
- Ce qu'est l'autogire? par Juan de la Cierva. L'Aéronautique, Paris, Apr. 1923, v. 5, no. 47, p. 162.

AUTOGIROS - TYPES

AVRO

(A. V. Roe and company, ltd.)

- Avro autogyro "C30." Flight, London, Nov. 15, 1934, v. 26, no. 1351, p. 1202.

- Rotating-winged flight. The autogiro, its construction and manufacture. *Flight*, London, Aug. 2, 1934, v. 26, no. 1336, p. 788-92. diags., illus. (Avro C-30a)
- Autogiro developments. *Aeroplane*, London, Aug. 1, 1934, v. 47, no. 5, p. 141-43. illus. (Avro C-30P)
- Avro C. 30 direct control autogiro (british), by C. N. Colson. Washington, 1934. 6 p. diags., illus. (N.A.C.A. Aircraft circulars no. 196)

BUHL

- L'Autogire Buhl à hélice propulsive. *L'Aéronautique*, Paris, June 1932, v. 14, no. 157, p. 192. diagr., illus.
- Un Autogiro américain à hélice propulsive; le biplace Buhl. *L'Aérophile*, Paris, Feb. 1932, v. 40, no. 2, p. 36. illus.
- Buhl pusher type autogiro, by Mitchel Haifter. *Aviation engineering*, East Stroudsburg, Pa., Feb. 1932, v. 6, p. 24-32. illus.
- Three commercial autogiros. *Aviation*, New York, July 1931, v. 30, no. 7, p. 408-15. diags., illus.

CIERVA

- Hafner and Cierva gyroplanes (Cierva C-30, A.R.III), by R. Hafner. *Flight*, London, Nov. 11, 1937, v. 32, no. 1507, p. 471-72. illus.
- Gyroplane and autogiro, by J. A. J. Bennett. *Flight*, London, Oct. 28, 1937, v. 15, no. 4, p. 25-26. illus.
- L'Autogire de Juan de la Cierva, par R. J. de Margolles. *Le Génie civil*, Paris, Mar. 13, 1937, v. 110, no. 2849, p. 241-45. diags., illus.
- Juan de la Cierva, par Henri Bouché. *L'Illustration*, Paris, Dec. 19, 1936, v. 195, p. 514-15. illus.
- Juan de la Cierva, par Georges Lepère. *L'Aéronautique*, Paris, Dec. 1936, v. 18, no. 211, p. 316-18. illus.
- Flight on rotating wings, by Wynn L. Le Page. *Journal of the Franklin institute*, Philadelphia, Pa., Sep.-Oct. 1936, v. 222, no. 3-4, p. 255-88, 461-74. illus.
- Rotating aircraft wings. *Aircraft engineering*, London, July 1936, p. 210. illus.

- Autogiro rebirth. Fortune, New York, Mar. 1936, v. 13, p. 88-93. diags., illus.
- The Effect of blade twist on the characteristics of the C.30 autogiro, by J. A. Beavan and C. N. H. Lock. London, H. M. Stat. off., 1936. (A.R.C. R. & M. no. 1727)
- Tragschrauber "Cierva 30," von S. Hörner. Zeitschrift des V.D.I., Berlin, Oct. 5, 1935, v. 79, no. 40, p. 1192-94. diags., illus.
- Drehflügelflugzeug "autogiro" von de la Cierva. Flugsport, Frankfurt am Main, Sep. 4, 1935, v. 27, no. 18, p. 404-08. diags., illus.
- C. 30 autogyro demonstrated at Essendon. Aircraft, Melbourne, July 1, 1935, v. 13, no. 10, p. 12, 28.
- Direct take-off autogiro, by Alexander Klemin. Scientific american, New York, June 1935, v. 152, no. 6, p. 317. diags.
- L'Autogire à montée directe. L'Aérophile, Paris, Apr. 1935, v. 43, no. 4, p. 110. diags.
- The Direct-start autogiro. Flight, London, Mar. 21, 1935, v. 27, no. 1369, p. 308-10. (Also Aeroplane, London, Mar. 20, 1935, v. 48, no. 1243, p. 330-32)
- The Problem of vertical flight, by J. H. Crowe. Aircraft engineering, London, Nov.-Dec. 1934, v. 6, no. 69-70, p. 292-296, 315-318. diags., illus.
- Juan de la Cierva y su autogiro, por Herbert Frensdorff. Revista de aeronáutica, Madrid, Aug. 1934, v. 3, no. 29, p. 411-13.
- The "Direct control" autogiro (Cierva C-30), by John Josselyn. Current science, Bangalore, India, May 1934, v. 2, no. 11, p. 415-18. diags., illus.
- Algunos detalles del autogiro Cierva "C.30-P." Revista de aeronáutica, Madrid, Apr. 1934, v. 3, no. 25, p. 205-07.
- El Desarrollo del autogiro Cierva. Revista de aeronáutica, Madrid, Apr. 1934, v. 3, no. 25, p. 25.
- La Difusión del autogiro La Cierva. Revista de aeronáutica, Madrid, Feb. 1934, v. 3, no. 23, p. 99.
- Latest autogiro (Cierva C-30). Mechanical engineering, New York, Feb. 1934, v. 56, no. 2, p. 100-01.
- Possibilities of cabin type autogiros (Cierva C-24, Kellett K-3), by Agnew E. Larsen. A.S.M.E. transactions, New York, Oct.-Dec. 1933, v. 55, no. 4, p. 159-61.

AUTOGIROS - CIERVA

- Introducing the C.30 P., by Juan de la Cierva. Flight, London, Nov. 16, 1933, v. 25, no. 26, p. 1157. illus.
- A New autogiro (Cierva C-30). Aeroplane, London, Nov. 15, 1933, v. 45, no. 20, p. 858-60. (Also Flight, London, Nov. 9, 1933, v. 45, no. 46, p. 1116 and Air and airways, London, June 1933, v. 10, no. 3, p. 87-88)
- The Cierva autogiro C.30. Flight, London, May 4, 1933, v. 25, no. 18, p. 425-28.
- The Autogiro of today. The new wingless, direct control autogiro now challenges comparison with any normal aircraft of similar power, by Reginald A.C. Brie. Air and airways, London, Apr. 1933, v. 10, p. 17-18. illus.
- Revolutionary reflections. Aeroplane, London, Oct. 12, 1932, v. 43, no. 15, p. 700-02. illus.
- El Primer autogiro alemán. Ibérica, Barcelona, Feb. 27, 1932, v. 19, no. 917, p. 135.
- Les Voilures tournantes. Autogyres et hélicoptères (Cierva C-19, C-24, par Jean Lecaine. La Nature, Paris, Jan. 1, 1932, v. 60, p. 14-21. diags., illus.
- Autogiro comes of age (C-19, C-24). Air and airways, London, Jan. 1932, p. 321.
- Cabin giro (Cierva C-24). Aviation engineering, East Stroudsburg, Pa., Jan. 1932, v. 6, no. 1, p. 37. illus.
- Two new autogiros (Cierva C-19 mark IV, C-24). Flight, London, Nov. 20, 1931, v. 23, no. 47, p. 1145-48. illus.
- Cierva autogiro adds another chapter to the annals of aviation. Dun's international review, New York, May 1931, v. 57, p. 34-35. illus.
- Cierva autogiro - a pegasus of mathematics, by V. C. Odhner. National glider, New York, May 1931, p. 26-28.
- The Cierva autogiro. The Meccano magazine, Liverpool, Apr. 1931, v. 16, no. 4, p. 362-63, 437. illus.
- L'Autogire de M. de la Cierva, par R. J. de Margolles. Le Génie civil, Paris, Mar. 7, 1931, v. 98, p. 245-46. diags., illus.
- Revolutionary aviation, by Daniel C. Sayre. Technology review, Concord, N. H., Mar. 1931, v. 33, p. 282-83, 307. illus.
- The Book of the C.19 autogiro, by C. J. Saunders and A. H. Rawson. London and New York, Sir Isaac Pitman and sons, ltd., 1931. 112 p. illus.

- El Autogiro La Cierva en los EE. UU. de N.A. Ibérica, Barcelona, Dec. 27, 1930, v. 17, no. 858, p. 386.
- Flying the autogiro (Cierva C.19), by E. H. Alllott. Airways, London, Dec. 1930, p. 555-56.
- Juan de la Cierva's windmill, by Robert B. Renfro. Sportsman pilot, New York, Dec. 1930, v. 4, no. 4, p. 30-31. illus.
- Un Artículo inglés sobre el autogiro. Descripción del Cierva autogiro Mark III. Aérea, Madrid, Aug. 1930, v. 8, no. 85, p. 11-12. illus.
- La Cierva viene a España a bordo de su autogiro. Aérea, Madrid, Aug. 1930, v. 8, no. 85, p. 28.
- Autogiro. Flight, London, Apr. 4, 1930, v. 22, no. 14, p. 391.
- How I invented the autogiro. Aero news and mechanics, New York, Feb. 1930, p. 10-13. (interview with Juan de la Cierva)
- The Cierva "Autogiro" Mark III. (british). Armstrong-Siddeley "genet major" engine). Washington, 1930. .6 p. illus. (N.A.C.A. Aircraft circulars no. 120) (From Flight, May 9, 1930, v. 22, no. 19, p. 501-06) (Abstract Mechanical engineering, New York, Aug. 1930, v. 52, no. 8, p. 787)
- Harold Pitcairn describes the Cierva autogiro. Southern aviation, Atlanta, Ga., Dec. 15, 1929, p. 60-62.
- Le Nouvel autogire la Cierva 80 CV., par Juan de la Cierva. L'Aérophile, Paris, Nov. 1-15, 1929, v. 37, no. 21-22, p. 339-40. illus.
- From glider to autogiro. The inventor of the famous "flying windmill," latest sensation in aviation, tells for the first time the story of his aeronautical achievements, by Juan de la Cierva and D.F. Rose. North american review, New York, Nov. 1929, v. 228, p. 530-35.
- L'Autogire de la Cierva, par André Frachet. La Nature, Paris, Oct. 15, 1929, v. 57, no. 2819, p. 349-54. illus.
- Autogire La Cierva C 19 - nouveau modèle. Les Ailes, Paris, Sep. 5, 1929. 3 p. illus.
- Light cars of the air (Cierva C-19), by Theodore Stanhope Sprigg. Airways, London, Sep. 1929, v. 5, no. 13, p. 471-74. diags.
- Improved Cierva autogiro tested in flight by inventor, by H. Hosking. Automotive industries, New York, Aug. 31, 1929, v. 61, no. 9, p. 302-03, 306. illus.
- The Cierva autogiro co. ltd. Flight, London, July 11, 1929, v. 21, no. 28, p. 598-99.

AUTOGIROS - CIERVA

- Autogiroing in America. How and why Harold F. Pitcairn regards the child of Cierva, by Ralph Westing. *Aeronautic review*, Washington, July 1929, v. 7, no. 7, p. 24-25. illus.
- Windmill that flies, by D. F. Rose. *North american review*, New York, June 1929, v. 227, p. 675-84.
- New flying machine to rise vertically. *English mechanics*, London, Apr. 5, 1929, v. 5, no. 128, p. 549-50. diagsr.
- L'Autogyre de l'ingénieur de la Cierva, par G. le Touvet. *La Science moderne*, Paris, Nov. 1928, v. 5, no. 11, p. 499-502. diagsr., illus.
- The Cierva type C. 17 autogiro, by Juan de la Cierva. *Aeroplane*, London, Oct. 31, 1928, v. 35, no. 18, p. 746.
- The Cierva autogiro, by W. H. Sayers. *Aviation*, New York, Oct. 27, 1928, v. 25, no. 18, p. 1320-21, 1340-50. illus.
- L'Autogire de la Cierva, par M. Ducout. *L'Aérophile*, Paris, Oct. 1928, v. 36, no. 19-20, p. 295-98. diagsr., illus.
- Cierva autogiro flown across channel. *Aviation*, New York, Sep. 29, 1928, v. 25, p. 1030. illus.
- Cierva windmill airplane tour. *Automotive industries*, New York, Sep. 29, 1928, v. 59, p. 450.
- Autogiro light 'plane. *Flight*, London, Aug. 30, 1928, v. 20, no. 35, p. 749-50. illus., tables.
- The Cierva "autogiro" C 8. Mark II. *Flight*, London, July 5, 1928, v. 20, no. 27, p. 543. illus., tables.
- The Cierva autogiro, by H. M. Yeatman. *Aero digest*, New York, Apr. 1928, v. 12, no. 4, p. 580-82. illus.
- Essai des nouveaux autogires, par Juan de la Cierva. *L'Aéronautique*, Paris, Dec. 1927, v. 9, no. 103, p. 406. illus. (Also *Automotive abstracts*, Cleveland, Mar. 20, 1928, v. 6, no. 3, p. 69)
- Autogiro de la Cierva. *Flugsport*, Frankfurt am Main, Sep. 15, 1926, v. 18, no. 19, p. 382-84. diagsr., illus.
- The Rotating wing in aircraft. *Engineering*, London, Aug. 13, 1926, v. 122, no. 3161, p. 207.
- Une Nouvelle machine volante, l'autogire de la Cierva, par Maurice Luc Valère Lamé. *La Vie technique et industrielle*, Paris, June 1926, p. 129-31. illus.
- L'Autogiro La Cierva. *Rivista aeronautica*, Roma, Mar. 1926, v. 2, no. 3, p. 102-13. illus.

- Über den autogiro von de la Cierva. Z.F.M., Berlin, Feb. 27, 1926, v. 17, no. 4, p. 69-73. illus.
- De la Cierva autogiro achieves more success. Scientific american, New York, Jan. 1926, v. 134, p. 48, 50, 52-53. (Also Aviation, New York, Nov. 16, 1925, v. 19, no. 20, p. 711-12)
- The La Cierva "autogiro," by George McLaughlin. Aero digest, New York, Dec. 1925, v. 7, no. 6, p. 660, 688. illus.
- El Autogiro español de la Cierva en Inglaterra, por Joaquin de la Llave. Ibérica, Barcelona, Spain, Nov. 21, 1925, v. 24, no. 603, p. 306-07. illus.
- The Autogiro of Monsieur de la Cierva. English mechanics, London, Nov. 20, 1925, v. 122, p. 273, 278. diagsr.
- Rotating planes above fuselage are used on Cierva's helicopter, by M. W. Bourdon. Automotive industries, New York, Nov. 19, 1925, v. 53, p. 874.
- Une Nouvelle formule de machine volante; l'autogire "La Cierva," par Jean-Abel Lefranc. La Nature, Paris, Nov. 14, 1925, v. 53, pt. 2, p. 305-07. illus.
- Cierva auto-gyro, by L. Bairstow. Nature, London, Oct. 31, 1925, v. 116, p. 649-50.
- The Cierva "autogiro." Flight, London, Oct. 29, 1925, v. 17, no. 44, p. 709-11.
- L'Autogire de la Cierva "C-6 bis." L'Aéronautique, Paris, Sep. 1925, v. 7, no. 76, p. 342. illus.
- Il Problema dell'elicottero, di .. De-Santis. L'Ala d'Italia, Milano, Mar. 1925, v. 4, no. 3, p. 85-90. diagsr., illus.
- L'Autogire C-7. L'Aéronautique, Paris, Feb. 1925, v. 7, no. 69, p. 64.
- Sonderarten von flugzeugen Juan de la Cierva, Madrid, flugzeug mit umlaufenden tragflächen. Flugsport, Patentsammlung, Frankfurt am Main, 1925, no. 11, p. 3-4.
- L'Autogyre de la Cierva. L'Aérophile, Paris, Dec. 1-15, 1924, v. 32, no. 23-24, p. 379. illus.
- More about La Cierva "autogiro." Flight, London, Sep. 20, 1923, v. 15, no. 38, p. 557. illus.
- The Cierva "autogiro." Flight, London, May 24, 1923, v. 15, no. 21, p. 275. illus.
- La Cierva autogiro, by Alfaro. Aviation, New York, Apr. 9, 1923, v. 14, no. 15, p. 397-98. illus.

AUTOGIROS - KELLETT

Army buys five S-43s and six Kellett autogiros added to roster. Aviation, New York, Apr. 1937, v. 36, no. 4, p. 96.

Kellett KD - 1A. Aero digest, New York, Mar. 1937, v. 30, p. 70. diags., illus.

Flight on rotating wings, by Wynn L. Le Page. Journal of the Franklin institute, Philadelphia, Pa., Sep.-Oct. 1936, v. 222, no. 3-4, p. 255-88, 461-74. illus. (Type K2 and K3)

Kellett KD-1. Aero digest, New York, Apr. 1936, v. 28, no. 4, p. 70. diags., illus.

Kellett for the army. Aviation, New York, Jan. 1936, p. 35.

Giro without wings - K.D.-1. Aviation, New York, Dec. 2, 1935, v. 35, no. 12, p. 30-32.

"Fifty below." An article on the operation of the Kellett autogiro on the 1933-1934 Byrd-Antarctic expedition. Flight, London, Nov. 21, 1935, v. 28, no. 1404, p. B-C. illus.

Autogiro in the Antarctic, by W. S. McCormick. Popular aviation, Chicago, Nov. 1935, p. 307-08.

Kellett autogiro flügellos direkt gesteuert. Flugsport, Frankfurt am Main, June 12, 1935, v. 27, no. 12, p. 264-65. illus.

Kellett KD-1. Aero digest, New York, Apr. 1935, v. 26, no. 3, p. 76. diags., illus.

The First Kellett direct control autogiro. Aeroplane, London, Feb. 20, 1935, v. 48, no. 1239, p. 214-15.

La Expedición Byrd al Polo-sur y el autogiro. Revista de aeronáutica, Madrid, Apr. 1934, v. 3, no. 25, p. 223.

Possibilities of cabin type autogiros (Cierva C-24, Kellett K-3), by Agnew E. Larsen. A.S.M.E. transactions, New York, Oct.-Dec. 1933, v. 55, no. 4, p. 159-61.

Kellett - K-4 autogiro. Aero digest, New York, Oct. 1933, v. 23, no. 4, p. 48. illus.

A New Kellett giro - model K-4. Aviation, New York, Oct. 1933, v. 32, no. 10, p. 332-33. illus.

Kellett K-3. Western flying, Los Angeles, Calif., Aug. 1932, v. 12, no. 2, p. 47.

Kellett solves autogiro structural problems by using model fuselage, by J. Geschelin. Automotive industries, New York, June 4, 1932, v. 66, p. 808-10.

- Kellett convertible autogiro. Aviation, New York, June 1932, v. 31, p. 280-81. illus.
- Autogiros at the show. Pitcairn and Kellett models reveal many improvements and refinements in design and performance. Aviation engineering, East Stroudsburg, Pa., May 1932, v. 6, no. 5, p. 30-31. illus.
- Kellett K-3 autogiro at aircraft show. Southern aviation, Atlanta, Ga., May 1932, v. 3, no. 9, p. 27.
- Kellett designs detachable hood for open-cockpit-type autogiro. Automotive industries, New York, Feb. 20, 1932, v. 66, p. 253. diags., illus.
- Kellett cabin autogiro. Aviation engineering, East Stroudsburg, Pa., Feb. 1932, v. 6, p. 32.
- The Kellett autogiro. National glider and airplane news, New York, Sep. 1931, v. 3, no. 2, p. 8, 62. illus.
- Kellett autogiro K-2 is a two-passenger plane designed for owners without airport facilities. Automotive industries, New York, Aug. 8, 1931, p. 200-01.
- Kellett autogiro. Aircraft age, Kansas City, Mo., Aug. 1931, v. 2, no. 10, p. 6. (Also Aviation engineering, East Stroudsburg, Pa., July 1931, v. 5, no. 1, p. 23-24)
- A Plane for the sportsman - the Kellett autogiro. Sportsman pilot, New York, Aug. 1931, v. 6, no. 1-2, p. 39, 50. illus.
- Kellett autogiro is introduced. Airway age, New York, July 4, 1931, v. 13, no. 1, p. 60-61. illus.
- Kellett autogiro ready July 15. Southern aviation, Atlanta, Ga., July 1931, p. 40.
- Kellett side by side autogiro. Aero digest, New York, July 1931, v. 19, no. 1, p. 70-72. illus.
- Three commercial autogiros. Aviation, New York, July 1931, v. 30, no. 7, p. 408-15. diags., illus.
- Kellett autogiro K-2. Airway age, New York, June 20, 1931, v. 12, no. 12, p. 2. illus.
- Kellett aircraft to produce autogiros. Airway age, New York, Feb. 1931, v. 12, p. 175.

Lioré ET OLIVIER

- Les Travaux de Lioré et Olivier dans le domaine des autogires. Les Ailes, Paris, May 7, 1936, v. 16, no. 777, p. 5. illus.

AUTOGIROS - LIORÉ ET OLIVIER

L'Autogire Lioré et Olivier C.L. 10. L'Aéronautique, Paris, Dec. 1932, v. 15, no. 163, p. 391. diagrs.

A LeO autogiro. Flight, London, Nov. 3, 1932, v. 24, no. 45, p. 1132. illus.

PITCAIRN

Avoid traffic jams - drive an airmobile. National aeronautic magazine, Washington, May 1935, v. 13, no. 4, p. 24. illus.

Pitcairn model Pa-33. Aero digest, New York, Apr. 1935, v. 26, p. 90. diagrs., illus.

The Direct control autogiro. Willow Grove, Pa., The Autogiro company of America, 1935. 2 p. illus.

Full-scale wind-tunnel tests of a PCA-2 autogiro rotor, by John Brooks Wheatley and Manley J. Hood. Washington, U. S. Govt. print. off., 1935. 10 p. diagrs., illus., tables. (N.A.C.A. Report no. 515)

The Influence of wing setting on the wing load and rotor speed of a PCA-2 autogiro as determined in flight, by John Brooks Wheatley. Washington, U.S. Govt. print. off., 1935. (N.A.C.A. Report no. 523)

Pitcairn autogiro PA-19. Western flying, Los Angeles, Calif., Sep. 1933, v. 8, no. 9, p. 28.

Pitcairn, worlds largest autogiros. Aviation engineering, East Stroudsburg, Pa., Mar. 1933, v. 8, p. 16. illus.

The World's largest autogiro (PA-19). Southern aviation, Atlanta, Ga., Mar. 1933, v. 4, no. 7, p. 24. illus.

Autogiro Pitcairn, PA-19, by R. B. C. Noorduyne. Aero digest, New York, Feb. 1933, v. 22, p. 48-50. diagrs., illus. (Also U. S. Air services, Washington, D. C., Feb. 1933, p. 15-16)

Meet P. cabin autogiro. Sportsman pilot, New York, Feb. 1933, v. 9, no. 2, p. 37, 41. (PA-19)

Cabin autogiro. Aviation, New York, Nov. 1932, v. 31, p. 457-58. illus.

Pitcairn PA-18. Western flying, Los Angeles, Calif., July 1932, p. 50.

Autogiros at the show. Pitcairn and Kellett models reveal many improvements and refinements in design and performance. Aviation engineering, East Stroudsburg, Pa., May 1932, v. 6, no. 5, p. 30-31. illus.

AUTOGIROS - PITCAIRN

- New Pitcairn autogiro. Southern aviation, Atlanta, Ga., Apr. 1932, v. 3, no. 8, p. 30. (Also Aviation engineering, East Stroudsburg, Pa., Apr. 1932, v. 6, p. 40)
- Pitcairn PCA-3. Western flying, Los Angeles, Cal., Nov. 1931, p. 56.
- Navy purchases two more autogiros. Airway age, New York, July 4, 1931, v. 13, no. 1, p. 68.
- Three commercial autogiros. Aviation, New York, July 1931, v. 30, no. 7, p. 408-15. diags., illus.
- Pitcairn PCA-1; PCA-2. Aviation, New York, June 1931, v. 30, no. 6, p. 370.
- Pitcairn autogiro PCA-2. Western flying, Los Angeles, Cal., June 1931, v. 9, no. 6, p. 76.
- Small autogiro. Airway age, New York, May 2, 1931, v. 12, no. 5, p. 488. illus.
- Sport model autogiro shown at Detroit. Southern aviation, Atlanta, Ga., May 1931, v. 2, no. 9, p. 39. illus.
- Collier trophy for 1930 awarded to Harold F. Pitcairn for autogiro development. National aeronautic magazine, Washington, Apr. 1931, v. 9, p. 33-34. illus.
- Pitcairn-Cierva autogiro PCA-2, by M. L. Hoffman. Air transportation, Flushing, N. Y., Nov. 1, 1930, p. 15.
- The Pitcairn autogiro, by Earl D. Osborn. Aviation, New York, June 22, 1929, v. 26, no. 25, p. 2187-89. illus.
- Pitcairn autogiro concern formed. Aviation, New York, Feb. 23, 1929, v. 26, p. 568.

WEIR

- Rotating-wing aircraft. Flight, London, Mar. 18, 1937, v. 31, no. 1473, p. 266. illus.
- Autogiro W-3. Interavia, Geneva, July 27, 1936, no. 345, p. 5.
- Autogiro monoplaza ligero "Weir W-2." Revista de aeronáutica, Madrid, Oct. 1934, v. 3, no. 31, p. 540-42. illus.
- The Weir autogiro. Aeroplane, London, Aug. 8, 1934, v. 47, no. 6, p. 177. illus.
- Autogiro monoplaza ligero "Weir W-2." Chile aéreo, Santiago, Mar. 1935, v. 7, no. 71, p. 32-34. illus.

AUTOGIROS - WESTLAND

The Cabin autogiro. *Aeroplane*, London, Dec. 18, 1935, v. 49, no. 1282, p. 737. illus.

Westland-Lepere autogiro. *Flight*, London, Dec. 12, 1935, v. 28, no. 1407, p. 616. illus.

Westland autogiros. *Flight*, London, Nov. 29, 1934, v. 26, no. 1353, p. 1286.

ZAGI

Travaux soviétiques sur l'autogire Zagi A-4, par Jean Tourkia. *L'Aérophile*, Paris, Apr. 1935, v. 43, no. 4, p. 105-09. diags.

USES

Air mail by autogiro. *Aero digest*, New York, Sep. 1937, v. 31, no. 3, p. 47.

Autogiro on farm, dusts and sprays against insects. *Business week*, New York, May 15, 1937, p. 38-39. illus.

Autogiro application. *Aviation*, New York, Feb. 1937, v. 36, no. 2, p. 34.

L'Autogiro come mezzo bellico. *Rivista aeronautica*, Roma, Apr. 1936, v. 12, no. 4, p. 50-52.

L'Impiego degli autogiri in guerra, di A. Kusniescioff. *Rivista aeronautica*, Roma, Oct. 1935, v. 11, no. 10, p. 110-11.

Les Applications militaires de l'autogire. *Revue de l'armée de l'air*, Paris, June 1935, v. 7, no. 71, p. 668-75. diags., illus.

Rotative wing aircraft possibilities, by Wynn L. Le Page. *Journal of the aeronautical sciences*, New York, Mar. 1935, v. 2, no. 2, p. 67.

Army autogiros - experiments in manoeuvres. *Times trade and engineering supplement*, London, Feb. 24, 1935, v. 33, no. 816, p. 520.

Autogiro solves air mail problem, by O. Stewart. *Saturday review*, London, Sep. 15, 1934, v. 158, p. 109.

Nuevas aplicaciones del autogiro. *Revista de aeronáutica*, Madrid, Sep. 1934, v. 3, no. 30, p. 499.

- The Alleged vulnerability of the autogiro, by R. Hilton.
Fighting forces, London, Aug. 1934, v. 11, p. 231-39.
- Emploi de l'autogire dans le remorquage des panneaux de
publicité, par Pierre Léglise. L'Aéronautique, Paris,
June 1934, v. 16, no. 181, p. 135-36.
- Las Aplicaciones militares del autogiro y su técnica de
observación, por Carlo De Souza y Riquelune. Revista
de aeronáutica, May 1934, v. 3, no. 26, p. 240-44.
diagrs.
- El Autogiro en el ejército, por Cipriano Rodriguez Diaz.
Revista de aeronáutica, Madrid, Mar. 1934, v. 3, no. 24,
p. 131-33. illus.
- Hovering police of the air. Scientific american, New York,
Jan. 1934, v. 150, p. 8. illus.
- Autogiro ambulances, by Alexander Klemin. Scientific american,
New York, Dec. 1933, v. 149, p. 280.
- Giros versus kite balloons for military observation, by J. E.
Fechet. Aero digest, New York, Dec. 1933, v. 23, p. 14-
15. illus.
- The Case for the transport autogiro, by Wynn L. Le Page.
Aviation, New York, Nov. 1933, v. 32, no. 11, p. 335-38.
diagrs., illus.
- Autogiros for the Royal air force. Aeroplane, London, Oct. 4,
1933, v. 45, no. 14, p. 592.
- Ambulance takes to the air, by G. P. Lawrence. U. S. Air
services, Washington, June 1933, v. 18, no. 6, p. 16-21.
- Sky advertising developed by the Kellett autogiro company,
by Alexander Klemin. Scientific american, New York,
Feb. 1933, v. 148, p. 105. illus.
- Les Possibilités d'utilisation militaire des autogires, par
Otto Thelen. L'Aérophile, Paris, Nov. 1932, v. 40, no. 11,
p. 329-30. illus.
- The Military value of the autogiro, by H. Latane Lewis II.
U. S. Air services, Washington, Oct. 1932, v. 17, no. 10,
p. 36-37.
- Beech-nut's autogiro. Printers' ink, New York, Oct. 1931,
v. 23, p. 76. illus.
- Autogiro now claims a place, by H. F. Woods, Jr. Nation's
business, Washington, Aug. 1931, v. 19, p. 62. illus.
- Patrolling cities from the air - a forecast, by A. E. Davison.
American city, New York, July 1931, v. 45, p. 95-96.

AUTOGIROS - USES

- Uses and possibilities of the autogiro, by Juan de la Cierva.
Aero digest, New York, Dec. 1930, v. 17, no. 6, p. 34-35.
- Les Autogires dans l'industrie aéronautique. L'Aéronautique,
Paris, Apr. 1926, v. 8, no. 83, p. 125. illus.
- Trois vols décisifs, réussis à Madrid par le Capitaine Loriga,
prouvent le haut intérêt de l'autogire, par Henri Bouché.
L'Aérophile, Paris, Jan. 1925, v. 7, no. 68, p. 15.

GENERAL

- Drehflügelflugzeuge, trag - und hubschrauber, von E. Zschka.
Berlin, Verlag Volckmann, 1936. 80 p. illus., tables.
- A Giratory excursion. Aeroplane, London, July 17, 1935,
v. 49, no. 1260, p. 102.
- Wings that turn, by R. M. Cleveland. Scientific american,
New York, July 1935, v. 153, p. 32-33. illus.
- El Ómnibus-autogiro. Revista de aeronáutica, Madrid,
Apr. 1934, v. 3, no. 25, p. 215.
- Ante el nuevo autogiro, por F. F. G. Longoria. Revista de
aeronáutica, Madrid, Mar. 1934, v. 3, no. 24, p. 117-18.
illus.
- American airplane specification. Aviation, New York, Jan. 1933,
v. 32, p. 28-31.
- Servicing the autogiro, by H. H. Haeberly, Jr. Aviation
engineering, East Stroudsburg, Pa., Jan. 1933, v. 8,
no. 1, p. 14-15, 28. diags.
- First fatal autogiro accident. Flight, London, Dec. 29, 1932,
v. 24, no. 53, p. 1233. illus.
- So you fly an autogiro! by Herbert C. Mayer. U. S. Air ser-
vices, Washington, Nov. 1932, v. 17, no. 11, p. 33-35.
- Miscelánea sobre el autogiro, por Tomás G. Acebo. Ibérica,
Barcelona, Sep. 3, 1932, v. 19, no. 940, p. 101-02.
- Windmilling about, by G. Miller. Sportsman pilot, New York,
Sep. 1932, p. 11.
- When the autogiro visited the Temple of Ku Kul Can. U. S.
Air services, Washington, June 1932, v. 17, no. 6,
p. 28-29. illus.
- Week-end autogiroists, by R. E. Lees. National aeronautic
magazine, Washington, Feb. 1932, p. 13-15.

- What of the flying windmill? by J. E. Fechet. Sportsman pilot, New York, Feb. 1932, p. 16-17.
- The Autogiro. Philadelphia, Pa., Autogiro company of America, 1932. 94 p. illus.
- Gyratory traffic at Hanworth. Aeroplane, London, Nov. 25, 1931, v. 41, no. 22, p. 1224-1230.
- The Autogiro; a revolution in the aviation industry, by Mason Sears. Harvard business school alumni association bulletin, Boston, July 1931, v. 7, p. 299-304.
- Autogiros, load factors, seaplane corrosion. Aviation, New York, May 1931, p. 284-86.
- El Autogiro, por Tomás G. Acebo. Revista de obras públicas, Madrid, Apr. 1, 1931, v. 79, no. 2570, p. 137-39. diags.
- Stranger in the skies, by H. H. Gay. Country life, New York, Apr. 1931, v. 59, p. 43-44. illus.
- De Autogiro. Het Vliegveld, Amsterdam, Mar. 1930, v. 14, no. 3, p. 89-91. illus.
- Autogiro flown by Sir Sefton Brancker. Flight, London, Jan. 17, 1930, p. 120-21.
- The Autogiro. Philadelphia, Pitcairn-Cierva autogiro company of America, 1930. 1 p. illus.
- New way to fly, by Juan de la Cierva. Saturday evening post, Philadelphia, Nov. 2, 1929, v. 202, p. 20-21. illus.
- Aircraft provided with rotating wing surfaces. Aeronautics, Chicago, June 1929, v. 4-5, no. 6-7, p. 106-13. diags.
- The Autogiro's european tour. Flight, London, Nov. 1, 1928, v. 20, no. 44, p. 960-61.
- Gli Apparecchi a superfici di sustentamento ruotanti, gli elicotteri, l'autogiro, di E. Garuffa. L'Ala d'Italia, Milano, Oct. 1928, v. 7, no. 10, p. 1027-28. tables.
- L'Accident de l'autogire. L'Aéronautique, Paris, Apr. 1927, v. 9, no. 95, p. 127.
- L'Autogire en Angleterre. L'Aéronautique, Paris, Nov. 1925, v. 7, no. 78, p. 439.
- De Autogiro. Een geheel nieuw luchtvaartuig. Het Vliegveld, Amsterdam, Sep. 1925, v. 9, no. 9, p. 234-35. illus.
- A New type of flying machine. Engineer, London, June 15, 1923, v. 135, no. 3520, p. 629.

Part II

BIBLIOGRAPHY ON HELICOPTERS

DESIGN AND CONSTRUCTION

- The Focke helicopter, by H. Focke. Washington, 1938. 14 p. diags., illus., tables. (N.A.C.A. Technical memorandums no. 858) (From Luftwissen, Berlin, Feb. 1938, v. 5, no. 2)
- Zur festigkeit von umlaufenden und quer zur drehebenebelasteten stäben, di gelenkig an die drehachse angeschlossen sind. Festigkeit bei biegesteifem anschluss, von K. Hohenemser. Ingenieur archiv, June 1937, v. 8, no. 3, p. 203-16. illus.
- About rotating-winged aircraft. Aeroplane, London, Apr. 14, 1937, v. 52, no. 1351, p. 435-38. diags., illus. (Also Luftwissen, Berlin, Aug. 1936, Jan. 1937, p. 204-08; 12-21)
- The Helicopter: propulsion and torque, by Haviland H. Platt. Journal of the aeronautical sciences, New York, Sep. 1936, v. 3, no. 11, p. 398-405.
- Gran Bretaña construye un nuevo helicóptero. Chile aéreo, Santiago, Feb. 1935, v. 7, no. 70, p. 21-26. illus.
- Recherches sur l'hélicoptère, par N. Florine. La Science aérienne, Paris, Sep.-Oct. 1934, v. 3, no. 5, p. 375-83. illus.
- Caractères généraux aérodynamiques des appareils d'aviation à voilure tournante, par A. Lapresle. La Science aérienne, Paris, July-Aug. 1934, v. 3, no. 4, p. 336-39. diags., illus.
- Apparecchio elicottero ad eliche orientabili, di L. Marmonier. L'Aeronautica, Milano, Mar. 1932, v. 6, no. 3, p. 180-83.
- Un Projet d'avion hélicoptère à hélices orientables. L'Aéro-phile, Paris, Nov. 15, 1931, v. 39, no. 11, p. 342. illus.
- An Italian helicopter. Scientific american, New York, Feb. 1931, v. 144, no. 2, p. 124. illus.
- Sistemas aeronáuticos de sustentación rotativa, por P. M. Cardona. Revista general de marina, Madrid, Jan. 1931, v. 54, p. 137-63. diags.
- Tres aspectos del helicoptero de Curtiss-Bleecker. Boletín de aero club Argentino, Buenos Aires, Oct. 1930, v. 1, no. 1, p. 21. diags., illus.

- Linee fondamentali per un nuovo tipo di elicottero, di L. S. da Rios. Notiziario tecnico di aeronautica, Roma, June 1930, v. 6, no. 6, p. 251-57. diagr.
- Un Nuovo elicottero americano. Rivista aeronautica, Roma, Apr. 1928, v. 4, no. 4, p. 162-63. illus.
- The Relationship of physics to aeronautical research, by H. E. Wimperis. Engineer, London, June 11, 1926, v. 141, no. 3674, p. 613-14. (Theory and design of the helicopter)
- An Introduction to the helicopter, by Alexander Klemin. Washington, 1925. 57 p. diagrs., illus., tables. (N.A.C.A. Technical memorandums no. 340) (From Mechanical engineering, Nov. 15, 1924, v. 46, no. 11a, p. 739-51)
- Les Machines à ailes rotatives et les hélicoptères, par T. Vuia. La Technique aéronautique, Paris, Oct. 15, 1923, n.s., v. 14, no. 24, p. 766-79. illus., tables.
- Helicopter calculations. Aviation, New York, Aug. 20, 1923, v. 15, no. 8, p. 216.
- The Helicopter, by Georges de Bothezat. Aeronautical digest, New York, July 1923, v. 3, no. 1, p. 23. illus.
- Note sur l'hélicoptère Oehmichen, par Étienne Oehmichen. Recherches et inventions, Paris, June 30, 1923, v. 4, p. 601-08. illus.
- Les Hélicoptères. L'Aérophile, Paris, Jan. 1-15 - Mar. 1-15, June 1-15, 1923, v. 31, no. 1-6. 7 p. illus.
- Some experiments on air screws at zerotorque, with applications to a helicopter descending with the engine off and to the design of windmills, by C. N. H. Lock and H. Bateman. London, H. M. Stat. off., 1923. 9 p. tables. (A.R.C. R. & M. no. 885)
- Helicopter flying machine. Discovery, London, Jan. 1922, v. 3, no. 25, p. 5-8. diagrs.
- Les Hélicoptères. Recherches expérimentales sur le fonctionnement le plus général des hélices. Études sur la mécanique de l'hélicoptère, par W. Margoulis. Paris, Gauthier-Villars et cie., 1922. 90 p. plates. (Review L'Aéronautique, Paris, Mar. 1922, v. 4, no. 34, p. 1-16)
- Neuere schraubenfliegerprojekte, von Theodore von Kármán. Z.F.M., München, Dec. 31, 1921, v. 12, no. 24, p. 360-61. illus.
- Technical discussion of helicopter progress, by W. F. Gerhardt. U. S. Air service, Washington, Dec. 1921, v. 6, no. 5, p. 17-20.

HELICOPTERS - DESIGN AND CONSTRUCTION

- Les Hélicoptères. Communication faite le 12 avril 1921 à la Commission scientifique de l'Aéro-club de France par L. Huguet. L'Aérophile, Paris, July 1-15, 1921, v. 29, no. 13-14, p. 209-13. illus.
- A New helicopter, by M. J. B. Passat. Aeronautics, London, Apr. 14, 1921, n.s., v. 20, no. 391, p. 253. illus.
- Propellers of high efficiency feature new helicopter, by P. A. Jenkins. Popular mechanics, Chicago, Mar. 1921, v. 35, no. 3, p. 355-56. illus.
- The Problem of the helicopter. Technical review, London, Jan. 4, 1921, v. 48, no. 1, p. 16-17.
- Étude générale sur l'hélicoptère, par Raymond Saladin. La Vie aérienne, Paris, Dec. 18-25, 1920, v. 5, no. 20-21, p. 306-309, 331-32. illus.
- The Helicopter flying machine, by M. A. S. Riach. Aircraft engineering, London, June-Aug., Oct. 1920, v. 1, no. 6-8, 10, p. 157-59, 196-98, 218-21, 248-52. diagrs., tables.
- Les Hélicoptères modernes, par Jean-Abel Lefranc. La Nature, Paris, July 10, 1920, no. 2414, p. 21-30. illus.
- Man-sized helicopter that leaves the ground with full load, by G. Gaulois. Scientific american, New York, Mar. 27, 1920, v. 122, no. 13, p. 331. illus. (Berliner-experiment stage)
- Note sull'elicottero, di Goffredo Di Palma. L'Aeronautica, Roma, Mar. 1920, v. 3, no. 1, p. 52-54. illus.
- Flying without wings, by Robert G. Skerrett. Rudder, New York, Jan. 19, 1920, v. 36, no. 1, p. 17-20, 40-44. illus.
- Again the helicopter? by Robert G. Skerrett. Scientific american, New York, Dec. 13, 1919, v. 121, no. 24, p. 576-77. illus.
- Un Nouvel hélicoptère. L'Aérophile, Paris, June 15, 1914, v. 22, no. 12, p. 276. illus.
- Helicopters. Aero, London, Jan. 11, 1911, v. 4, no. 86, p. 34; June 1912, v. 6, no. 111, p. 175.
- Helicopters and insect flight, by T. A. Dring. Flight, London, Apr. 13, May 18, 1912, v. 4, no. 15, 20, p. 337, 458.
- Mechanical principles of the helicopter, by Herbert Chatley. Journal of the R.A.S., London, July 1911, v. 15, no. 59, p. 108-14. illus.
- Helicopter, by F. H. Stirling. Flight, London, Feb. 18, 1911, v. 3, no. 7, p. 152. diagrs.

- The Helicopter, by Rankin Kennedy. (In his The Principles of aeroplane construction. London, J. and A. Churchill, 1911. p. 107-17. diags.)
- Vertical flight. Engineering, London, Nov. 25, 1910, v. 90, p. 732.
- Le Problème de l'hélicoptère-aperçu théorique et pratique, par Mathieu Varille. L'Aérostation, Paris, Apr. 1, 1910, v. 7, no. 23, p. 2-4.
- A Swiss combination - aeroplane and helicopter, by Frank C. Perkins. Fly magazine, Philadelphia, Mar. 1909, v. 1, no. 5, p. 12. illus.
- Nouvel hélicoptère. L'Aérophile, Paris, Feb. 15, 1909, v. 17, no. 44, p. 88.
- The Helicopter, by C. H. Chalmers. Aeronautics, New York, May 1908, v. 2, no. 5, p. 15-16, Feb. 1909, v. 4, no. 2, p. 58-61. illus.
- Die Richtigste luftschraubenform in ihrer anwendung als trag- und treibschraube bei luftschiffen (schraubenfliegern), von Adolf Wagner. Rhoda bei Hatzfeld, Selbstverlag, 1909. 25 p. illus.
- New french helicopter. Popular mechanics, Chicago, Dec. 1908, v. 10, no. 12, p. 851. illus.
- Experiments with a helicopter, by Otto G. Luyties. Scientific american, New York, July 11, 1908, v. 99, no. 2, p. 26-27.
- L'Hélicoptère Paul Cornu. Construction et essais. L'Aérophile, Paris, Apr. 15, 1908, v. 16, no. 8, p. 138-41. diags., illus.
- Tekniska foreningens i Finland, fon J. Sohlman. Förhandlingar, Helsingfors, Nov. 1907, v. 27, p. 185-90. diags., tables.
- The Vertical screw or helicopter, by William H. Pickering. (In his Navigating the air. New York, Doubleday, Page and company, 1907. p. 112-16. illus.)
- Les Appareils d'aviation expérimentés en 1905 en Europe, par P. Lucas-Girardville. Revue d'artillerie, Paris, Mar. 1906, v. 67, p. 369-81.
- Hélicoptère Léger. Monaco, Imprimerie de Monaco, 1903. 5 p.
- Note sur les propulseurs hélicoïdaux, par Paul Valer. L'Aéronaute, Paris, Oct. 1885, v. 18, no. 10, p. 188-92.

HELICOPTERS - DEVELOPMENT

- Helicopter problems, by H. G. Küssner. Washington, 1937.
41 p. (N.A.C.A. Technical memorandums no. 827) (From
Luftfahrtforschung, Munich, Jan. 20, June 20, 1937,
v. 14, no. 1, 6, p. 1-13, 313)
- Die Entwicklung des Hubschraubers seit 1900, von G. Schoppe.
Luftwissen, Berlin, May 1936, 8 p. illus., tables.
- Über Fortschritte und Möglichkeiten des Hubschraubers. Inter-
avia, Geneva, 1936, no. 360, 361, 363, p. 1-2; 1-2; 1-3.
illus.
- Un Dirigeable hélicoptère vient à Toussus - Paris d'enlever
ses deux premiers passagers, par Raymond Saladin. La
Nature, Paris, July 1, 1935, v. 63, no. 2956, p. 13-15.
illus.
- More about helicopters, by A. E. Moore. Popular aviation,
Chicago, Feb. 1934, v. 4, no. 2, p. 103-04.
- Will the helicopter become the future flying machine? by A. E.
Moore. Popular aviation, Chicago, Jan. 1934, no. 1,
p. 8-9.
- Le Vol vertical. Théorie générale des hélicoptères. Les
appareils à voilures tournantes de leurs origines à
1934, par Maurice Luc Valère Lamé. Paris, E. Blondel la
Rougery, 1934. 242 p. illus.
- Les Progrès récents de l'hélicoptère, par N. Florine. La
Conquête de l'air, Bruxelles, Dec. 1, 1933, v. 29, no. 12,
p. 517-23. illus.
- What's the matter with the helicopter? While this is one of
the earliest flying machines proposed for conquest of
the air, yet the helicopter has shown little progress
during all these years, by T. N. de Bobrovsky. Popular
aviation, Chicago, Oct. 1932, v. 11, no. 4, p. 231-32,
268. illus.
- Modern development in the helicopter, by R. N. Liptrot.
Journal of the R.A.S., London, July 1931, v. 35, no. 247,
p. 624-32.
- The Problem of vertical flight, by Frederick Alexander Magoun
and Eric Hodgins. (In their A History of aircraft. New
York, McGraw-Hill book company, 1931. p. 223-46)
- Possible lines of aeronautical development, by R. F. Hall.
Aviation, New York, Feb. 15, 1926, v. 20, p. 218-29.
diags.
- Aeronautics in 1925. Engineer, London, Jan. 8, 1926, v. 141,
no. 3654, p. 35.

- Progress in helicopters. Aviation, New York, Feb. 19, 1923, June 9, 1924, v. 14, 16, p. 209, 615.
- Evolution of the helicopter, by Karl Balaban. Washington, 1923. 35 p. diags., tables. (N.A.C.A. Technical memorandums no. 196) (From Z.F.M., Berlin, Nov. 15, 30, 1922)
- At last the helicopter. Scientific american, New York, Sep. 1922, v. 127, p. 158. illus.
- Helicopter progress. Scientific american, New York, Feb. 1922, v. 126, p. 134. illus.
- Helicopter flying machine. Discovery, London, Jan. 1922, v. 3, no. 25, p. 5-8. diags.
- Technical discussion of helicopter progress. An important forward step in aerial transportation may soon be made, by W. F. Gerhardt. U. S. Air service, Washington, Jan. 1922, v. 6, no. 6, p. 22-26, 35. illus.
- Is the practical helicopter in sight? by G. Gaulois. Scientific american, New York, June 4, 1921, v. 124, p. 447. illus.
- Concerning helicopters. Aeronautics, London, June 2, 1921, n.s., v. 20, no. 398, p. 385. (Also Aeroplane, London, Mar. 9, Apr. 13, 1921, v. 20, no. 10, 15, p. 232, 358)
- Le Premier vol en hélicoptère. L'hélicoptère Berliner. La Nature, Paris, May 7, 1921, no. 2457, p. 303-04. illus.
- European developments in helicopters. Aviation, New York, Apr. 18, 1921, v. 10, no. 16, p. 492-95. diags., illus.
- Le Premier vol en hélicoptère libre monté. La Nature, Paris, Feb. 5, 1921, v. 49, no. 2444, p. 93.
- Helicopter, by Douglas Shaw. S.A.E. journal, New York, Feb. 1921, v. 8, no. 2, p. 126.
- Recent european developments in the helicopter. Washington, 1921. 14 p. diags., illus. (N.A.C.A. Technical notes no. 47)
- The Coming of the helicopter, by Douglas Shaw. Aeronautics, London, Dec. 2, 1920, v. 19, no. 372. p. 396. diagr.
- L'Hélicoptère serait-il l'appareil aérien de l'avenir? par E. H. Lemonon. La Suisse aérienne, Berne, June 10, 1920, v. 2, no. 11, p. 157-64. illus.
- A Wingless flying machine, by Wilbur R. Kimball. Air travel, New York, Feb. 1918, v. 1, no. 6, p. 262, 288. illus.

HELICOPTERS - DEVELOPMENT

- The Helicopter flying-machine; an account of previous experiments, including an analysis of the author's turbine machine, by James Robertson Porter. London, Offices of Aeronautics, 1911. 80 p., New York, Van Nostrand, 1912. 88 p. illus. (Reviews Aero and hydro, Chicago, Jan. 4, 1913, v. 5, no. 14, p. 255 and Aeronautics, London, Sep.-Dec. 1911, v. 4, no. 43-46, p. 147, 189-192, 229-235, 253-257)
- Aviacao - ornithopteros, helicopteros e aeroplanos, por Pedro Fava Ribeiro d'Almeida. Lisbon, 1911. 62 p. illus.
- Passé et avenir de la navigation aérienne. L'hélicoptère futur, par Eugène Caslant. Paris, R. Chapelot et cie., 1911. 359 p. diags.
- Perfecting the helicopter, by Paul Cornu. Aeronautics, New York, Dec. 1909, v. 5, no. 6, p. 208-09. (Also La Revue de l'aviation, Paris, July 15, 1908, v. 3, no. 20, p. 5-6)
- The Future of the helicopter, by Paul Cornu. Aeronautics, New York, July 1909, v. 3, no. 1, p. 18, 20. illus.
- Aéronef dirigeable plus lourd que l'air (hélicoptère), par Alfred Micciollo. Paris, Peyriller, Rouchen et Gamon, 1908. 42 p.
- Das Flugproblem und die erfindung der flugmaschine, von Eugen Kreiss. Hamburg, Hanseatische druck- und verlags-anstalt, 1908. 57 p. diags.
- Das Luftschiff ohne ballon, von Emil Neyen. Berlin, Universitäts-buchdruckeri von G. Schade (O. Francke), 1908. 33 p. plates.
- Quelques considérations sur les hélicoptères, par Paul Cornu. La Revue de l'aviation, Paris, Apr. 15, 1907, v. 2, no. 5, p. 15.
- The Conquest of the air, by Bernard Meiklejohn. World's work, New York, Dec. 1906, v. 13, no. 2, p. 8283-96. illus.
- Compendio d'aviazione, di Achille Bertelli. Brescia, Unione tipo-litografica bresciana, 1905. 42 p. illus.
- Leonardo da Vinci. Aeronautical annual, Boston, 1895, no. 1, p. 7-12. plates.
- Les Hélicoptères en Autriche, par Anton Jarolimek. L'Aéronaute, Paris, Nov. 1893, v. 26, no. 11, p. 249-53.
- Neue erfahrungen in der luftschiffahrt, von August Platte. Neueste erfahrungen und erfahrungen, Wien, 1893, v. 20, p. 535-38.

- Hélicoptère à vapeur, par Robert Guérien. La France aérienne, Paris, Jan. 1, 1891, v. 7, p. 3. illus.
- Hélicoptère et aéroplane électriques. La Revue de l'aéronautique, Paris, Apr. 1888, v. 1, no. 2, p. 76.
- Gustave de Ponton d'Amécourt, par Abel Hureau de Villeneuve. L'Aéronaute, Paris, Mar. 4, 1888, v. 21, no. 3, p. 47-51.
- Étude d'un hélicoptère monté pour l'aéronautique militaire, par Charles Du Hauvel. L'Aéronaute, Paris, June 1886, v. 19, no. 6, p. 106-11.
- Gabriel de la Landelle, par Abel Hureau de Villeneuve. L'Aéronaute, Paris, Feb. 1886, v. 19, no. 2, p. 23-36.
- Dans les airs. Histoire élémentaire de l'aéronautique, par Gabriel de la Landelle. Paris, René Haton, 1884. 288 p.
- Projet d'un hélicoptère à vapeur d'éther, par J. Melikoff. L'Aéronaute, Paris, Jan., Apr. 1879, v. 12, no. 1, 4, p. 24-30, 103-10.
- Un Hélicoptère à air comprimé, par P. Castel. L'Aéronaute, Paris, June 1878, v. 11, no. 6, p. 190-99. illus.
- Bienvenu et Launoy, par Félix Caron. L'Aéronaute, Paris, Sep. 1877, v. 10, no. 9, p. 246-49.
- Manuscrits du XVI^e siècle relatifs à l'aviation, à l'hélicoptère et au parachute, par Leonardo Da Vinci. Réédités par le Prince Boncompagni, 1874.
- Expériences exécutées avec une hélice à collerettes, par Renoir. L'Aéronaute, Paris, Apr. 1873, v. 6, no. 4, p. 73-78. illus.
- Experiments in South America with model helicopter in 1843, by John Frederick Bourne. Engineering, London, Aug. 2, 1867, v. 4, p. 84.
- Exposé de divers systèmes de navigation aérienne et réfutation de l'hélicoptère Nadar, par Jeune Duchesne. Paris, É. Dentu, 1864. 72 p.
- La Conquête de l'air par l'hélice; exposé d'un nouveau système d'aviation, par Gustave de Ponton d'Amécourt. Paris, E. Sausset, 1863. 40 p.

PERFORMANCE AND TESTING

- The Focke helicopter, by H. Focke. Washington, 1938. 14 p. diagrs., illus., tables. (N.A.C.A. Technical memorandums no. 858) (From Luftwissen, Berlin, Feb. 1938, v. 5, no. 2)

HELICOPTERS - PERFORMANCE AND TESTING

- Un Hélicoptère monte à 2,500 mètres. Les Ailes, Paris, July 8, 1937, v. 17, no. 838, p. 4.
- About rotating-winged aircraft. Aeroplane, London, Apr. 14, 1937, v. 52, no. 1351, p. 435-38. diags., illus. (Also Luftwissen, Berlin, Aug. 1936, Jan. 1937, p. 204-08; 12-21)
- 30 heures de vol hélicoptère! Les Ailes, Paris, Feb. 20, 1936, v. 16, no. 766, p. 5.
- Un Groupe moto-sustentateur effectuée à Chalais-Meudon des essais officiels d'endurance. L'Aérophile, Paris, Oct. 1935, v. 43, no. 10, p. 304.
- Case for the helicopter, by N. Comper. Flight, London, Mar. 21, 1935, v. 27, no. 369, p. 303-04.
- The Flight of a helicopter, by H. B. Squire. London, H. M. Stat. off., 1935. 24 p. diags., illus. (A.R.C. R. & M. no. 1730)
- Rotating wing aircraft compared to conventional airplanes, by John Brooks Wheatley. S.A.E. journal, New York, Apr., Aug. 1934, v. 34-35, p. 114-18, 131, 287.
- Belgian helicopter sets world's record. Popular science monthly, New York, Feb. 1934, v. 124, no. 2, p. 32.
- Perfectionnements comparés de l'avion et de l'hélicoptère, par R. Dorand. La Science aérienne, Paris, Nov.-Dec. 1932. 16 p. diags., illus., table.
- La Salita verticale degli elicotteri, di Ugo de Caria. L'Aeronautica, Milano, June 1932, v. 6, no. 4, p. 349-53. diags.
- Il Collaudo statico degli elicotteri, di Amedeo Fiore. Rivista aeronautica, Roma, Jan. 1932, v. 8, no. 1, p. 41-51. illus.
- New helicopter rises in vertical flight. Popular science monthly, New York, Mar. 1931, v. 118, no. 3, p. 70. illus.
- Note sull'elicottero ed i suoi recenti risultati, di Amedeo Fiore. L'Ingegnere, Roma, Mar. 1931, v. 5, no. 3, p. 169-73. diags.
- An Italian helicopter. Scientific american, New York, Feb. 1931, v. 144, no. 2, p. 124. illus.
- Helicopter models perform well but full size craft present greater difficulties. Science news letter, Washington, July 1930, v. 18, p. 43. illus.
- On the horizontal flight of a helicopter, by Hermann Glauert. London, H. M. Stat. off., 1928. 12 p. (A.R.C. R. & M. no. 1159)

- On the vertical ascent of a helicopter, by Hermann Glauert.
London, H. M. Stat. off., 1928. 14 p. diags., tables.
(A.R.C. R. & M. no. 1132)
- Les Records de l'hélicoptère. L'Aéronautique, Paris,
Nov. 1924, v. 6, no. 66, p. 149.
- Risultati di prove a punto fisso condotti sopra modelli di
elica sostentatrice per elicottero. Rendiconti tecnici
della Direzione superiore del genio e delle costruzioni
aeronautiche, Roma, Aug. 15, 1924, v. 12, no. 6, p. 4-40.
diags.
- L'Hélicoptère du premier kilomètre, par Étienne Oehmichen.
L'Aéronautique, Paris, June 1924, v. 6, no. 61, p. 137-
38. diags.
- Elicotteri, di Étienne Oehmichen. L'Ala d'Italia, Milano,
Mar. 1924, v. 3, no. 3, p. 66-69. illus.
- Les Essais de l'hélicoptère Pescara. L'Aéronautique, Paris,
Dec. 1923, Feb. 1924, v. 5-6, no. 55, 57, p. 541, 542.
- Pescara vole 10 minutes. L'Aérophile, Paris, Jan. 1-15, 1924,
v. 32, no. 1-2, p. 18.
- Pescara détenteur du record de durée hélicoptère. L'Aérophile,
Paris, Dec. 1-15, 1923, v. 31, no. 23-24, p. 359.
- Les Derniers vols en hélicoptère et le prix de l'Air ministry.
L'Aérophile, Paris, Aug. 1-15, 1923, v. 31, no. 15-16,
p. 253.
- Les Vols de l'hélicoptère Oehmichen-Peugeot no. 2. Le Génie
civil, Paris, June 30, 1923, v. 82, p. 627-28.
- Les Hélicoptères. L'Aéronautique, Paris, May 1923, v. 5,
no. 48, p. 183.
- Pioneer helicopter flies with two passengers. Current opinion,
New York, Apr. 1923, v. 74, p. 475-76. illus.
- Les Essais de l'hélicoptère Oehmichen-Peugeot No. 2. L'Aéro-
nautique, Paris, Feb. 1923, v. 5, no. 45, p. 84-85.
- Captive helicopters may displace observation balloons.
Aerial age, New York, Nov. 1922, v. 15, p. 556.
- Helicopters, by John Case. Journal of the R.A.S., London,
Oct.-Nov. 1922, v. 26, no. 142-43, p. 390-407, 435-47.
diags., tables.
- Helicopter flight, by C. C. Turner. Aerial age, New York,
Nov. 28, 1921, v. 14, no. 12, p. 280.

HELICOPTERS - PERFORMANCE AND TESTING

- 312 miles an hour claimed for helicopter. *Aerial age*, New York, July 18, 1921, v. 13, p. 438.
- Helicopter hovers with full load, by W. H. Hunt. *Popular mechanics*, Chicago, June 1921, v. 35, p. 828-30. *diagrs.*,
- Test made with captive helicopters, by Theodore von Kármán. *Flight*, London, May 5, 1921, v. 13, no. 18, p. 307-09. *illus.*
- The Helicopter, by M.A.S. Rjach. *Times engineering supplement*, London, May 1921, p. 154. (Also *Aeronautics*, London, Mar. 31, Apr. 21, 1921, v. 20, no. 389, 392, p. 223-24, 280-82)
- Les Résultats des essais récents de l'hélicoptère, système Pescara. *Le Génie civil*, Paris, Apr. 16, 1921, v. 78, p. 339-40. *illus.* (Also *C. R. Acad. sci.*, Paris, Apr. 4, 1921, v. 172, no. 14, p. 845-48)
- Helicopter for military purposes. *Scientific american*, New York, Feb. 26, 1921, v. 124, no. 9, p. 173. *illus.*
- Une Série de vols en hélicoptère libre monté effectués les 15, 28 et 29, janvier 1921. *C. R. Acad. sci.*, Paris, Feb. 14, 1921, v. 172, no. 7, p. 366-68.
- Helicopter, by Douglas Shaw. *S.A.E. journal*, New York, Feb. 1921, v. 8, no. 2, p. 126.
- The Problem of the helicopter. *Technical review*, London, Jan. 4, 1921, v. 8, no. 1, p. 16-17.
- Vers la sécurité; hélicoptères et avions-hélicoptères, par Maurice Luc Valère Lamé. *L'Aéronautique*, Paris, Jan. 1921, v. 3, no. 19-20, p. 277-81. *illus.*
- Notes on helicopters, by M. de Pésha. *Aerial age*, New York, Nov. 8, 1920, v. 12, no. 9, p. 254.
- Les Hélicoptères et les laboratoires d'essais, par Louis Damblanc. *L'Aérophile*, Paris, Oct. 1-15, 1920, v. 28, no. 19-20, p. 314-15.
- Die Möglichkeit des schraubenflugzeuges, von Hermann Borck. *Z.F.M.*, Berlin, July 31, 1920, v. 11, no. 14, p. 207-09. *illus.*
- Helicopter experiments. *Aeronautics*, London, Feb. 5, 1920, v. 18, no. 329, p. 122. *illus.*
- Flying without wings, by Robert G. Skerrett. *Rudder*, New York, Jan. 19, 1920, v. 36, no. 1, p. 17-20, 40-44. *illus.*

- The Problem of the helicopter, by Edward Pearson Warner. Washington, 1920. 18 p. (N.A.C.A. Technical notes no. 4) (Also U. S. Air services, Washington, Feb. - Mar. 1921, p. 27-29, 30-31 and Aeronautics, London, July 15, 1920, v. 19, no. 352, p. 60)
- The Helicopter. Scientific american, New York, Dec. 20, 1919, v. 121, no. 25, p. 626.
- Les Problèmes actuels de l'aéronautique. Les hélicoptères et la sécurité, par Maurice Luc Valère Lamé. L'Aéronautique, Paris, Dec. 1919, v. 1, no. 7, p. 308-10. illus.
- The Helicopter as a possible type of flying machine. Aircraft journal, New York, May 31, 1919, v. 4, no. 22, p. 6. illus.
- The Helicopter, by F. J. Camm and J. R. Porter. Aeronautics, London, Nov. 7, 1917, v. 13, no. 212, p. 357.
- L'Envol sur place et l'hélicoptère, par C. de Rougé. L'Aérophile, Paris, Apr. 1-15, 1916, v. 24, no. 7-8, p. 106-07.
- Die Möglichkeiten der schraubenflieger, von Anton Jarolimek. Oestreichische flug-zeitschrift, Wien, Mar. 15, 1914, v. 8, no. 5-6, p. 54-88.
- Hélicoptères ou aéroplanes? par Paul James. L'Aérophile, Paris, Oct. 15, 1913, v. 21, no. 20, p. 467.
- Expériences d'hélicoptère. La Technique aéronautique, Paris, July 15, 1913, no. 86, p. 61-62.
- Essais de propulsion, par Gustave Plaisant. L'Aérophile, Paris, June 15, 1913, v. 21, no. 12, p. 268-71. illus.
- A Direct-lift machine, by Achille Rochon. Aircraft, New York, May 1911, v. 2, no. 1, p. 86-87.
- Helicopter, by G. P. Broom. Flight, London, Dec. 31, 1910, v. 2, no. 53, p. 1084. diagr.
- Helicopter vs. aeroplane. Flight, London, July 16, 1910, v. 2, no. 29, p. 562.
- Versuche mit hubschrauben, von G. Klingenberg. Zeitschrift des V.D.I., Berlin, June 18, 1910, v. 54, no. 25, p. 1009-1017. illus.
- Test of an american helicopter. Scientific american, New York, Nov. 27, 1909, v. 101, no. 22, p. 403.
- Advantages of the helicopter over the aeroplane, by Otto G. Luyties. Aeronautics, New York, Apr. 1908, v. 2, no. 4, p. 7-11.

HELICOPTERS - PERFORMANCE AND TESTING

- Some considerations of the helicopter, by Paul Cornu. American magazine of aeronautics, New York, Oct. 1907, v. 1, no. 4, p. 17.
- Étude comparative des aéroplanes et des hélicoptères, par P. D. Tsoucalas et Jean G. Vlahavas. C. R. Acad. sci., Paris, Jan.-June 1907, v. 144, p. 257-59.
- Les Appareils d'aviation expérimentés en 1905 en Europe, par P. Lucas-Girardville. Revue d'artillerie, Paris, Mar. 1906, v. 67, p. 369-81.
- Un Nouvel essai de navigation aérienne, par M. Léger. Revue générale des sciences, Paris, Nov. 15, 1905, v. 16, p. 939-47. illus.
- Gli Elicopteri e le recenti esperienze sulle eliche di sostentamento, di Guido Castagneris. Bollettino della Società aeronautica italiana, Roma, July-Sep. 1905, v. 2, no. 7-9, p. 126-28.
- Expériences d'enlèvement d'un hélicoptère, par Prince Albert de Monaco. C. R. Acad. sci., Paris, May 15, 1905, v. 140, p. 1311-12. tables.
- The Helicopters. Journal of the R.A.S., London, 1905, v. 9, no. 35, p. 53.
- Das Kreiselprincip und der universal-flugapparat, von Willibald Karos. Zeitschrift für luftschiffahrt, Berlin, Feb.-Mar. 1900, v. 19, no. 2, p. 39-46, 63-67. illus.

THEORY

- The Focke helicopter, by H. Focke. Washington, 1938. 14 p. diags., illus., tables. (N.A.C.A. Technical memorandums no. 858) (From Luftwissen, Berlin, Feb. 1938, v. 5, no. 2)
- Die Hubschraube in bodennähe, von A. Betz. Z.A.M.M., Berlin, Apr. 1937, v. 17, no. 2, p. 68-72. diags., tables.
- Influence du nombre fini de pales des hélices sustentatrices, par Svetopolk Pivko. C. R. Acad. sci., Paris, Mar. 31, 1937, v. 204, no. 13, p. 1033-37. diags., tables.
- Fragen des drehflüglers, von T. Mohring. Luftwissen, Berlin, Jan. 1937, v. 4, no. 1, p. 12-21. diags., tables.
- Helicopter problems, by H. G. Küssner. Washington, 1937. 41 p. (N.A.C.A. Technical memorandums no. 827) (From Luftfahrtforschung, Munich, Jan. 20, June 20, 1937, v. 14, no. 1, 6, p. 1-13, 313)

- Modern helicopter theory, by Vittorio Isacco. Aircraft engineering, London, Oct.-Nov. 1936, v. 8, no. 92-93, p. 274-83, 303-08. illus.
- Direct lift in theory. Aircraft engineering, London, Oct. 1936, v. 8, no. 92, p. 269-70.
- The Helicopter: propulsion and torque, by Haviland H. Platt. Journal of the aeronautical sciences, New York, Sep. 1936, v. 3, no. 11, p. 398-405.
- Comment et pourquoi l'hélicoptère Asboth peut réaliser la descente parachutale, par M. Victor. Les Ailes, Paris, Mar. 26, 1936, v. 16, no. 771, p. 5. illus.
- Hubschrauber-problem, von Friedrich Beuke. Flugsport, Frankfurt am Main, Oct. 2, 1935, v. 27, no. 20, p. 440-46. diagrs.
- The Flight of a helicopter, by H. B. Squire. London, H. M. Stat. off., 1935. 24 p. diagrs., illus. (A.R.C. R. & M. no. 1730)
- Problem of vertical flight, by J. H. Crowe. Aircraft engineering, London, Nov.-Dec. 1934, v. 6, no. 69-70, p. 292-96, 315-18. diagrs., illus.
- Recherches sur l'hélicoptère, par N. Florine. La Science aérienne, Paris, Sep.-Oct. 1934, v. 3, no. 5, p. 375-83. illus.
- Sur le minimum de puissance dépensée par les machines volantes, par W. Margoulis. C. R. Acad. sci., Paris, Apr. 23, 1934, v. 198, no. 17, p. 1474-76.
- Choice of airfoils for rotating-wing aircraft, by John Brooks Wheatley. Journal of the aeronautical sciences, New York, Apr. 1934, v. 1, no. 2, p. 88-90. diagrs.
- Le Vol vertical - théorie générale des hélicoptères - les appareils à voilures tournantes de leurs origines à 1934, par Maurice Luc Valère Lamé. Paris, E. Blondel la Rougery, 1934. 242 p. illus.
- L'Hélicostat résout le problème de l'ascension verticale, par L. Laboureur. La Science et la vie, Paris, Dec. 1933, v. 44, no. 198, p. 489-96. illus.
- Roues sustentatrices et propulsives, par C. B. Strandgren. L'Aéronautique, Paris, Sep. 1933, v. 15, no. 172, p. 81-88.
- Orientation nouvelle du problème de l'hélicoptère, par Louis Bréguet et René Dorand. Bulletin de l'Association technique, maritime et aéronautique, Paris, 1933, no. 37, p. 597. diagrs., tables.

HELICOPTERS - THEORY

- La Salita verticale degli elicotteri, di Ugo de Caria.
L'Aeronautica, Milano, June 1932, v. 6, no. 4, p. 349-53. diags.
- Les Voilures tournantes - autogires et hélicoptères, par Jean Lacaine. La Nature, Paris, Jan. 1, 1932, v. 60, p. 14-21. diags., illus.
- Avion-hélicoptère à hélices orientables, par L. Marmonier.
Lyon, Bosc frères, M. et L. Riou, 1932. 15 p. illus.
(Also Rivista aeronautica, Roma, July 1931, v. 7, no. 7, p. 120-29)
- Note sur les hélices sustentatrices au point fixe et en mouvement de translation uniforme, par Étienne Oehmichen.
Bulletin de l'Association technique, maritime et aéronautique, Paris, 1932, no. 36, p. 331-57. diags., illus., tables.
- La Stabilità degli elicotteri, di Ugo de Caria. L'Aeronautica, Milano, July 1931, v. 45, no. 7, p. 471-76. diags.
- Le Eliche sustentatrici. L'Aeronautica, Milano, Apr. 1931, v. 9, no. 4, p. 257-62. tables.
- La Soluzione di un problema classico, di Filippo Philipson.
Rivista aeronautica, Roma, Feb. 1931, v. 7, no. 2, p. 272-81. illus.
- Sistemas aeronáuticos de sustentación rotativa, por P. M. Cardona. Revista general de marina, Madrid, Jan. 1931, v. 54, p. 137-63. diags.
- The Problem of vertical flight, by Parlee Clyde Grose. McComb, Ohio, General publishing company, 1931. 128 p. plates.
- Dispositivi nuovi per elicotteri con volo verticale od obliquo e per volo orizzontale. L'Ala d'Italia, Milano, Aug. 1930, v. 9, no. 8, p. 671-72. diags.
- A Helikopter probléma, von Rotter Lajos. Aviatika, Budapest, Apr.-June 1930, v. 6, no. 4-6, p. 86-90, 126-28. diags.
- Linee fondamentali per un nuovo tipo di elicottero, di L. S. da Rios. Notiziario tecnico di aeronautica, Roma, June 1930, v. 6, no. 6, p. 251-57. diags.
- Eléments de calcul de stabilité d'un hélicoptère, par N. Florine.
Bulletin du Service technique de l'aéronautique, belge, Bruxelles, May 1930, no. 10, p. 1-55. diags., illus.
- L'Avion, l'hélicoptère, l'autogire, par C. Martinot-Lagarde.
La Technique moderne, Paris, May 1, 1929, v. 21, no. 9, p. 257-66.

- On the horizontal flight of a helicopter, by Hermann Glauert.
London, H. M. Stat. off., 1928. 12 p. (A.R.C. R. & M. no. 1159)
- On the vertical ascent of a helicopter, by Hermann Glauert.
London, H. M. Stat. off., 1928. 14 p. diags., tables.
(A.R.C. R. & M. no. 1132)
- Studio sperimentale delle velature rotanti, di A. Lapresle.
L'Aerotecnica, Roma, July 1927, v. 7, no. 7, p. 444.
- Nouvelles recherches expérimentales sur les hélices d'hélicoptères, par W. Margoulis. L'Aéronautique, Paris, May 1927, v. 9, no. 96, p. 143-44. illus. (Also C. R. Acad. sci., Paris, Mar. 21, 1927, v. 184, no. 12, p. 735-37)
- Discussion sur les hélicoptères, par Maurice Luc Valère Lamé.
L'Aérophile, Paris, Feb. 1-15, -Mar. 1-15, 1927, v. 35, no. 3-6, p. 50-53, 83-86. illus.
- Avion à voilure tournante. La Technique moderne, Paris, July 15, 1926, v. 18, no. 14, p. 443.
- M. Sabatier, ingénieur en chef du Service technique, nous dit ce qu'il pense de la question de l'hélicoptère. L'Aérophile, Paris, July 1-15, 1926, v. 34, no. 13-14, p. 210. illus.
- The Relationship of physics to aeronautical research, by H. E. Wimperis. Engineer, London, June 11, 1926, v. 141, no. 3674, p. 613-14. (Theory and design of the helicopter)
- Avion à voilure tournante, par R. Moineau. C. R. Acad. sci., Paris, May 3, 1926, v. 182, no. 18, p. 1079-82. tables.
- Le Vol vertical et la sustentation indépendante; hélicoptères, gyroptères, avions-hélicoptères, par Maurice Luc Valère Lamé. Paris, Librairie de la Vie technique et industrielle, 1926. 192 p. illus.
- La Sostentazione sulla verticale, di G. De Santis. L'Ala d'Italia, Milano, Sep. 1925, v. 4, no. 9, p. 313-17. diags., tables.
- Studio di un tipo speciale di elicottero, di E. Garuffa. L'Ala d'Italia, Milano, May-June 1925, v. 4, no. 5-6, p. 168-171, 203-06. diags., tables.
- An Introduction to the helicopter, by Alexander Klemin. Washington, 1925. 57 p. diags., illus., tables. (N.A.C.A. Technical memorandums no. 340) (From Mechanical engineering, New York, Nov. 15, 1924, v. 46, no. 11a, p. 734-51)

HELICOPTERS - THEORY

- Model tests on the economy and effectiveness of helicopter propellers, by Max Michael Munk. Washington, 1925. 26 p. diags., illus., tables. (N.A.C.A. Technical notes no. 221)
- Some notes on helicopters, by A. G. von Baumhauer. Proceedings of the first International congress for applied mechanics, 1924-1925, p. 449-54. diags.
- Verso la stabilizzazione dell'elicottero, di Flamino Piana-Canova. L'Ala d'Italia, Milano, Nov. 1924, v. 3, no. 11, p. 261-62. diags.
- Risultati di prove a punto fisso condotti sopra modelli di elica sustentatrice per elicottero. Rendiconti tecnici della Direzione superiore del genio e delle costruzioni aeronautiche, Roma, Aug. 15, 1924, v. 12, no. 6, p. 5-40. diags.
- Some experiments on air screws at zero torque, with applications to a helicopter descending with the engine off, and to the design of windmills, by C. N. H. Lock and H. Bateman. London, H. M. Stat. off., 1924. 9 p. tables. (A.R.C. R. & M. no. 885)
- Les Machines à ailes rotatives et les hélicoptères, par T. Vuia. La Technique aéronautique, Paris, Oct. 15, 1923, n.s., v. 14, no. 24, p. 766-79. illus., tables.
- Les Hélicoptères, par W. Margoulis. Paris, Gauthiers-Villars et cie., 1923. 91 p. diags., tables. (Also L'Aéronautique, Paris, Mar. 1922, v. 4, no. 34, p. 1-16)
- Inherent stability of helicopters, by Gaetano Arturo Crocco. Washington, 1923. 9 p. tables. (N.A.C.A. Technical memorandums no. 234) (From Rendiconti della Reale accademia nazionale dei Lincei, Aug. 1923)
- Helicopters, by John Case. Journal of the R.A.S., London, Oct.-Nov. 1922, v. 26, no. 142-43, p. 390-407, 435-447. diags., illus.
- Zur stabilitätsfrage des hubschraubers, von Karl Balaban. Z.F.M., Berlin, Aug. 14, 1922, v. 13, no. 15, p. 223.
- Some power requirements of aircraft with special reference to the helicopter, by Daniel Roesch. Armour engineering, Chicago, May 1922, v. 13, no. 4, p. 223-34. diags., illus.
- Some notes on the helicopter - elements of the problem - some experimental results - difficulties yet awaiting solution, by M. B. Sellers. Aviation, New York, Feb. 20, 1922, v. 12, no. 8, p. 228-30. illus.

- Theoretische bemerkungen zur frage des schraubenfliegers, von Theodore von Kármán. Technische hochschule, Aix-la-Chapelle, 1922, pt. 2, p. 33-56. diags., tables. (Also Z.F.M., München, Dec. 31, 1921, v. 12, no. 24, p. 345-54)
- Technical discussion of helicopter progress, by W. F. Gerhardt. U.S. Air service, Washington, Dec. 1921, v. 6, no. 5, p. 17-20.
- Helicopters, by A. R. Low. Nature, London, July 14, 1921, v. 107, no. 2698, p. 622-23.
- Helicopters, by A. Mallock. Nature, London, June 30, 1921, v. 107, no. 2696, p. 553.
- The Actual state of the helicopter problem, by Georges de Bothezat. Aerial age, New York, May 23, 1921, v. 13, no. 11, p. 247-49. diags.
- The Helicopter, by M.A.S. Riach. Times engineering supplement, London, May 1921, p. 154. (Also Aeronautics, London, Mar. 31, Apr. 21, 1921, v. 20, no. 389, 392, p. 223-24, 280-82)
- The Helicopter. S.A.E. journal, New York, Feb. 1921, v. 8, no. 2, p. 126. (Also Scientific american, New York, Dec. 20, 1919, v. 121, p. 626)
- The Problem of the helicopter, by Louis Damblanc. Journal of the R.A.S., London, Jan. 1921, v. 25, no. 121, p. 3-19. diags. (Also Aeronautics, London, Nov. 25-Dec. 2, 1920, v. 19, no. 371-72, p. 379-81, 392-94; Engineering, London, Nov. 26, 1920, v. 110, p. 710 and Flight, London, Nov. 25, 1920, v. 12, no. 48, p. 1219-23)
- Étude générale sur l'hélicoptère, par Raymond Saladin. La Vie aérienne, Paris, Dec. 18-25, 1920, v. 5, no. 20-21, p. 306-09, 331-32. illus.
- M. Damblanc on the helicopter. Aeroplane, London, Nov. 24, 1920, v. 19, no. 21, p. 822, 824.
- The Helicopter flying machine, by M. A. S. Riach. Aircraft engineering, London, June-Aug., Oct. 1920, v. 1, no. 6-8, 10, p. 157-59, 196-98, 218-21, 248-52. diags., tables.
- Note sur les hélices sustentatrices, par Maurice Luc Valère Lamé. L'Aérophile, Paris, Sep. 1-15, 1920, v. 28, no. 17-18, p. 269-70. diags.
- Le Grand problème du vol sans vitesse, par Ernest Archdeacon. L'Aérophile, Paris, June 1-15, 1920, v. 28, no. 11-12, p. 168-72. diags., illus., table.
- Alcune considerazioni sugli elicotteri, di Giovanni Pegna. L'Aeronauta, Roma, Mar. 1920, v. 3, no. 1, p. 88-92. tables.

HELICOPTERS - THEORY

- Flying without wings, by Robert G. Skerrett. Rudder, New York, Jan. 19, 1920, v. 36, no. 1, p. 17-20, 40-44. illus.
- Drag or negative traction of geared-down supporting propellers in the downward vertical glide of a helicopter, by A. Toussaint. Washington, 1920. 5 p. tables. (N.A.C.A. Technical notes no. 21) (From L'Aérophile, Paris, Feb. 1-15, 1920, v. 28, no. 3-4, p. 50-53)
- The Problem of the helicopter, by Edward Pearson Warner. Washington, 1920. 18 p. (N.A.C.A. Technical notes no. 4) (Also U. S. Air services, Washington, Feb.-Mar. 1921, p. 27-29, 30-31 and Aeronautics, London, July 15, 1920, v. 19, no. 352, p. 60)
- Stability of the parachute and helicopter, by Harry Bateman. Washington, U. S. Govt. print. off., 1920. 11 p. diags. (N.A.C.A. Report no. 80)
- The Helicopter, by M.A.S. Riach. Aeronautics, London, Jan. 1, 1919, v. 16, no. 272, p. 23-25.
- An Early helicopter, by Charles A. Parsons. Aeronautics, London, Jan. 2, 1918, v. 14, no. 220, p. 38-39. illus.
- Some experiments on helicopters, by Arthur Fage and H. E. Collins. London, H. M. Stat. off., 1917. diags., tables. (A.R.C. R. & M. no. 331. p. 520-29)
- Au sujet de l'équilibre des hélicoptères, par Gustave Plaisant. L'Aérophile, Paris, July 1, 1913, v. 21, no. 13, p. 301-02.
- Quelques travaux du commandant Mathieu, du génie belge, sur les théories du colonel Renard relatives aux hélices sustentatrices. La Technique aéronautique, Paris, Feb. 15, 1912, v. 5, no. 52, p. 122-23.
- Mechanical principles of the helicopter, by Herbert Chatley. Journal of the R.A.S., London, July 1911, v. 15, no. 59, p. 108-14. illus.
- Is the helicopter possible? by William A. Weaver. Flight, London, Dec. 24, 1910, v. 2, no. 52, p. 1063; May 20, 1911, v. 3, no. 20, p. 450-51. illus.
- Helicopters, by Arthur Wood, B.F.S. Baden-Powell and Stanley A. Cooke. Aero, London, Jan. 11, 1911, v. 4, no. 86, p. 34-35.
- The Problem of the helicopter. Flight, London, Nov. 26, Dec. 3, 17, 1910, v. 2, no. 48-49, 51, p. 976-78, 999-1000, 1040. illus.
- The Helicopter problem again, by C. Lorenzen. Aero, London, Dec. 14, 1910, v. 3, no. 82, p. 477. illus.

- The Helicopter problem, by E. V. Hammond. Aero, London, Dec. 7, 1910, v. 3, no. 81, p. 454. illus.
- Les Hélices de sustentation, par Louis Bréguet. Revue de l'aviation, Paris, Aug. 1 - Oct. 1, 1910, v. 5, no. 45-47, p. 187-88, 198-202, 232-33. diags.
- Le Problème de l'hélicoptère, par Mathieu Varille. L'Aéronaute, Paris, Sep. 17, 1910, v. 43, no. 553, p. 327-28. (Also L'Aérostation, Paris, Apr. 1, 1910, v. 7, no. 23, p. 2-4)
- The Stability of flying machines; principle of the helicopter, by Herbert Chatley. Engineering, London, July 1, 1910, v. 90, p. 37-38.
- Versuche mit hubschrauben, von G. Klingenberg. Zeitschrift des V.D.I., Berlin, June 18, 1910, v. 54, no. 25, p. 1009-1017. illus.
- Dimostrazione utile agl'inventori di elicotteri, turbine ed altri sostentatori a reazione, di S. Drzewiecki. Rivista tecnica di aeronautica e Bollettino della Società aeronautica, italiana, Roma, Sep. 1909, v. 6, no. 9, p. 354-55. diags.
- La Question des hélicoptères. Réponse à M. Lecornu, par S. Drzewiecki. L'Aérophile, Paris, July 15, 1909, v. 17, no. 14, p. 315-16.
- La Querelle des hélicoptères. Réponse à M. Alexandre Sée, par S. Drzewiecki. L'Aérophile, Paris, June 1, 1909, v. 17, no. 11, p. 255.
- La Question des hélicoptères, par L. Lecornu. L'Aérophile, Paris, May 15, 1909, v. 17, no. 10, p. 219-20. diags.
- La Querelle des hélicoptères. Un dernier mot sur l'article de S. Drzewiecki, par Alexandre Sée. L'Aérophile, Paris, May 1909, v. 17, no. 9, p. 203.
- Les Hélices, pourvoir sustentateur des hélicoptères, par Paul Cornu. L'Aviation, Paris, Apr. 1, 1909, v. 4, no. 29, p. 47-48.
- Contre les hélicoptères. Réponse de M. Drzewiecki aux diverses critiques de son article "Fausse route." L'Aérophile, Paris, Apr. 1909, v. 17, no. 7, p. 154-55. illus.
- La Querelle des hélicoptères pour les hélicoptères. La route n'est pas fausse. Réponse à M. Drzewiecki, par Alexandre Sée. L'Aérophile, Paris, Apr. 1909, v. 17, no. 7, p. 153-54.
- Rectification à propos de l'article; "Fausse route," par S. Drzewiecki. L'Aérophile, Paris, Mar. 15, 1909, v. 17, no. 6, p. 122-23.

HELICOPTERS - THEORY

- Fausse route. Simple démonstration à l'usage des inventeurs d'hélicoptères, turbines et autres sustentateurs à réaction, par S. Drzewiecki. L'Aérophile, Paris, Mar. 1909, v. 17, no. 5, p. 98-99. (Also L'Aéro, Paris, Mar. 1909, v. 1, no. 27)
- Causeries sur l'aviation. Qualités que devront posséder les aéroplanes et les hélicoptères de l'avenir; étude sur l'hélice, par Alfred Micciollo. Paris, F.L. Vivien, 1909. 196 p.
- Die Richtigste luftschraubenform in ihrer anwendung als trag- und treibschraube bei luftschiffen (schraubenfliegern), von Adolf Wagner. Rhoda bei Hatzfeld, selbstverlag, 1909. 25 p. illus.
- Sur les hélices de sustentation, par Louis Bréguet. Bulletin des séances de la Société française de physique, Paris, 1909, no. 4, p. 34-35.
- Value of inclined propellers for helicopters, by H. T. Keating. Scientific american, New York, Oct. 3, 1908, v. 99, p. 223.
- Macchine volanti ed elicotteri. Bollettino della Società aeronautica italiana, Roma, June 1908, v. 5, no. 6, p. 172-74. diags., tables.
- Un Nouvel essai de navigation aérienne, par M. Léger. La Revue générale des sciences, Paris, Nov. 15, 1905, v. 16, p. 939-47. illus.
- Notes sur la dynamique de l'aéroplane, par Emmanuel Vallier. Paris, C. Dunod, 1905. 98 p. diags.
- Sur les hélices sustentatrices, par Edgar Taffoureau. C. R. Acad. sci., Paris, Aug. 1, 1904, v. 139, p. 356-58.
- Sur la qualité des hélices sustentatrices, par Charles Renard. C. R. Acad. sci., Paris, Dec. 7, 1903, v. 137, p. 970-72. tables.
- Sur la possibilité de soutenir en l'air un appareil volant du genre hélicoptère en employant les moteurs à explosion dans leur état actuel de légèreté, par Charles Renard. L'Aérophile, Paris, Dec. 1903, v. 11, no. 12, p. 275-79. illus. (Also C. R. Acad. sci., Paris, Nov. 23, 1903, v. 137, p. 843-46)
- Das Kreiselpincip und der universal-flugapparat, von Willibald Karos. Zeitschrift für luftschiffahrt, Berlin, Feb.-Mar. 1900, v. 19, no. 2-3, p. 39-46, 63-67. illus.
- Notiz über die hubkraft von schiffsschrauben mit senkrechter axe, von E. Gerlach. Zeitschrift für luftschiffahrt, Berlin, 1887, v. 6, no. 1, p. 12-15.

HELICOPTERS - THEORY

Note sur les propulseurs hélicoïdaux, par Paul Valer. L'Aéronaute, Paris, Oct. 1885, v. 18, no. 10, p. 188-92.

Hélicoptère avec transmission de mouvement sans engrenage, et inclinaison variable de l'axe des hélices pendant la marche, par Renoir. L'Aéronaute, Paris, Feb. 1872, v. 5, no. 2, p. 17-24. diags.

HELICOPTERS - TYPES

ALÉRION

Vers la sécurité; la sustentation indépendante. Quelques hélicoptères actuels: Crocker-Hewitt, Alérion, Pescara, Oehmichen, par Maurice Luc Valère Lamé. L'Aérophile, Paris, Feb. 1-15, 1921, v. 29, no. 2-3, p. 46-49. illus.

ANDRIEU

L'Hélicoptère Andrieu. Bulletin de l'Aéro-club suisse, Berne, Feb. 1919, v. 13, no. 2, p. 28-29.

ASBOTH

Comment et pourquoi l'hélicoptère Asboth peut réaliser la descente parachutale, par M. Victor. Les Ailes, Paris, Mar. 26, 1936, v. 16, no. 771, p. 5. illus.

Il Volo verticale, di Franco Cristofori. Rivista aeronautica, Roma, June 1935, v. 11, no. 6, p. 493-520.

Case for the helicopter, by Nicholas Comper. Flight, London, Mar. 21, 1935, v. 27, no. 369, p. 303-04.

Asboth helicopter. Flight, London, Dec. 20, 1934, v. 26, p. 1358.

BALLÉ

Rapport sur l'hélicoptère Ballé. L'Aéronaute, Paris, Feb. 1902, v. 35, no. 2, p. 57-62. illus.

BEACH

The Beach helicopter. U. S. Air service, Washington, Mar. 1920, v. 3, no. 2, p. 20.

HELICOPTERS - BERLINER

- Flight on rotating wings, by Wynn L. Le Page. Journal of the Franklin institute, Philadelphia, Pa., Sep.-Oct. 1936, v. 222, no. 3-4, p. 255-88, 461-74. illus.
- The Story of vertical flight, by Ernest W. Fair. Popular aviation, Chicago, Sep. 1929, v. 5, p. 15-16, 67-68.
- L'Hélicoptère Berliner. L'Aéronautique, Paris, Aug. 1925, v. 7, no. 75, p. 291. diags., illus. (Also L'Ala d'Italia, Milano, Aug. 1925, v. 4, no. 8, p. 259)
- An Introduction to the helicopter. A review of the aerodynamic and construction data thus far available, together with descriptions of a number of modern helicopters, by Alexander Klemin. Mechanical engineering, New York, Nov. 15, 1924, v. 46, no. 11a, p. 739-51. diags., illus., tables.
- Elicottero Berliner-tipo 1924 modificato. L'Ala d'Italia, Milano, June 1924, v. 3, no. 6, p. 147. diags., illus.
- The Berliner helicopter in flight. Aviation, New York, Sep. 18, 1922, v. 13, no. 12, p. 356.
- Helicopter that flies; the Berliner machine. Scientific american, New York, Sep. 1922, v. 127, p. 160. illus.
- The Berliner helicopter. Aerial age, New York, Aug. 1922, v. 15, no. 17, p. 395-96. illus. (Also Aviation, New York, June 26, 1922, v. 12, no. 26, p. 745; Aug. 28, 1922, v. 13, no. 9, p. 256)
- Man-carrying helicopter makes short flight. Popular mechanics, Chicago, Aug. 1922, v. 38, no. 2, p. 181. illus.
- Neuere schraubenfliegernprojekte. Z.F.M., München, Dec. 31, 1921, v. 12, no. 24, p. 360-61. illus.
- Le Premier vol en hélicoptère Berliner. La Nature, Paris, May 7, 1921, no. 2457, p. 303-04. illus.
- The New Berliner helicopter. Aviation, New York, Mar. 28, 1921, v. 10, no. 13, p. 393. illus.
- Man-sized helicopter that leaves the ground with full load, by G. Gaulois. Scientific american, New York, Mar. 27, 1920, v. 122, no. 13, p. 331. illus. (Berliner-experiment stage)
- Test of an american helicopter. Scientific american, New York, Nov. 27, 1909, v. 101, no. 22, p. 403.
- The Berliner helicopter. Aeronautics, New York, Oct. 1908, v. 3, no. 4, p. 19, 47. illus.

- Cornu helicoplane, Bertin's helicopter, etc. *Aeronautics*, New York, Apr. 1909, v. 4, no. 4, p. 150-60. illus.
- L'Hélicoptère Bertin, par A. Cléry. *L'Aérophile*, Paris, Apr. 1908, v. 16, no. 7, p. 128. illus.
- Jean Bertin helicopter. *Aeronautics*, New York, Mar. 1908, v. 2, no. 3, p. 21. illus.

BRASSEUR

- La Résolution du problème du plus lourd que l'air par l'hélicoptère. Projet du major Brasseur. *La Conquête de l'air*, Bruxelles, Jan. 1930, v. 26, no. 1, p. 41-51. diags., tables.

BRÉGUET - DORAND

- Gyroplane, by Louis Bréguet. *Journal of the R.A.S.*, London, Sep. 1937, v. 41, p. 791-826. (Also *Mechanical engineering*, New York, June 1937, v. 59, p. 447) (Bréguet - Dorand helicopter)
- Les Gyroplanes, par Louis Bréguet. *Mémoires de la Société des ingénieurs civils de France*, Paris, May-June 1937, v. 90, no. 23, p. 306-36. (Bréguet - Dorand helicopter)
- Le Gyroplane-laboratoire Bréguet-Dorand, par A. Frachet. *Les Ailes*, Paris, Mar. 4, 1937, v. 17, no. 820, p. 6. illus. (Bréguet-Dorand helicopter)
- Un Vol du gyroplane à Villacoublay, par M. Victor. *Les Ailes*, Paris, Dec. 17, 1936, p. 14-15. illus. (Bréguet - Dorand helicopter)
- Il Giroplano "Bréguet." *Rivista aeronautica*, Roma, Dec. 1936, v. 12, no. 12, p. 433-34. illus. (Bréguet - Dorand helicopter)
- Les Gyroplanes, leurs possibilités de vitesse et de rayon d'action, par Louis Bréguet. *La Science aérienne*, Paris, Nov.-Dec. 1936. 23 p. diags., illus. (Bréguet - Dorand helicopter)
- Le Gyroplane Bréguet-Dorand. *L'Aéronautique*, Paris, Nov. 1936, v. 18, no. 210, p. 229. illus. (Bréguet - Dorand helicopter)
- Bréguet gyroplane. *Quarterly of the R.A.F.*, London, Oct. 1936, p. 505. (Bréguet - Dorand helicopter)

- Bréguet gyroplane. Mechanical engineering, New York, July 1936, v. 58, p. 449. (Bréguet - Dorand helicopter)
- Le Gyroplane Bréguet. Technique moderne, Paris, Mar. 1, 1936, v. 28, no. 5, p. 149-51. (Bréguet - Dorand helicopter)
- Il Giroplano "Bréguet-Dorand," di Raymond Saladin. Rivista aeronautica, Roma, Mar. 1936, v. 12, no. 3, p. 371-74. (From La Nature, Paris, Jan. 1, 1936, v. 64, pt. 1, p. 8-12) (Bréguet - Dorand helicopter)
- Bréguet - hubschrauber. Flugsport, Frankfurt am Main, Feb. 5, 1936, v. 28, no. 3, p. 47-49. illus. (Bréguet - Dorand helicopter)
- Des groupes "moto-sustento-propulseurs" pour les avions sûrs, rapides et économiques de demain, par Maurice Luc Valère Lamé. L'Aéronautique, Paris, Feb. 1936, v. 18, no. 201, p. 28-32. illus., tables. (Bréguet - Dorand helicopter)
- Le Gyroplane Bréguet. Quelques détails de construction. L'Aérophile, Paris, Feb. 1936, v. 44, no. 2, p. 42. illus. (Bréguet - Dorand helicopter)
- Reference to the recently tested Bréguet-Dorand helicopter. Aero digest, New York, Feb. 1936, p. 78.
- The Gyroplane - its principles and its possibilities, by Louis Bréguet. Washington, D. C., 1936. 54 p. diagrs., illus., tables. (N.A.C.A. Technical memorandums no. 816) (From Journées techniques internationales de l'aéronautique, Paris, Nov. 23-27, 1936. Paris, Chambre syndicale des industries aéronautiques, 1937. p. 571-620) (Bréguet - Dorand helicopter)
- Notice descriptive du gyroplane laboratoire Bréguet. Chronique des avions Bréguet, 1936. 4 p. illus. (Bréguet-Dorand helicopter)
- The Bréguet gyroplane, by R. C. Wood. Flight, London, Dec. 19, 1935, v. 29, no. 1408, p. 650c. (Bréguet - Dorand helicopter)
- Les Essais du gyroplane Bréguet. L'Aéronautique, Paris, Aug. 1935, v. 17, no. 195, p. 313. illus. (Bréguet-Dorand helicopter)
- Le Gyroplane, par Louis Bréguet. L'Aérophile, Paris, Aug. 1935, v. 43, no. 8, p. 233-37. illus. (Bréguet - Dorand helicopter)
- The Bréguet - Dorand helicopter. Aeroplane, London, July 24, 1935, p. 120.
- Les Appareils à voilures tournantes. Le gyroplane Bréguet, par Louis Bréguet. Chronique des avions Bréguet, 1935, 5 p. illus. (Bréguet - Dorand helicopter)

- Il Giroplano Luigi Bréguet. *L'Ala d'Italia*, Milano, July 1931, v. 10, no. 7, p. 535. illus. (Bréguet - Dorand helicopter)
- Classification of helicopter system. *Scientific american*, New York, Jan. 1930, v. 142, no. 1, p. 72. diagsr.
- Discussion sur les hélicoptères, par Maurice Luc Valère Lamé. *L'Aérophile*, Paris, Feb. 1-15 - Mar. 1-15, 1927, v. 35, no. 3-6, p. 50-53, 83-86. illus. (Bréguet - Richet)
- Direct lift machine, by Sidney Camm. *Aviation*, New York, Apr. 15, 1919, v. 6, p. 333-34.
- La Question des hélicoptères, par Maurice Luc Valère Lamé. *L'Aérophile*, Paris, Nov. 15, 1913, v. 21, no. 22, p. 511-12, Apr. 15, 1914, v. 22, no. 8, p. 181-82.
- Bréguet gyroplane. *Aeronautics*, New York, Sep. 1908, v. 3, no. 3, p. 17, 23. (Bréguet helicopter)
- Giroplano Bréguet-Richet. *Bollettino della Società aeronautica italiana*, Roma, Sep. 1908, v. 5, no. 9, p. 299-301. illus. (Bréguet-Richet helicopter)
- Le Gyroplane Bréguet-Richet No. 2, par Louis Bréguet. *L'Aérophile*, Paris, Aug. 15, 1908, v. 16, no. 16, p. 310-11. diagsr., illus. (Bréguet - Richet no. 2, helicopter)
- Discussione intorno al giroplano Bréguet e gli elicotteri. *Bollettino della Società aeronautica*, Roma, Apr. 1908, v. 5, no. 4, p. 114-17. illus. (Bréguet helicopter)
- Le Gyroplane Bréguet-Richet, par Maurice Volumard. *Bulletin technologique*, Paris, Mar. 1908, p. 215-30. (Bréguet-Richet helicopter)
- L'Elicottero Bréguet, di Louis Bréguet. *Bollettino della Società aeronautica italiana*, Roma, Oct.-Dec. 1907, v. 4, no. 10-12, p. 348, 370-72, 405. illus.
- Le Giroplane Bréguet-Richet, par Louis Bréguet. *La Conquête de l'air*, Bruxelles, Oct.-Nov. 1907, v. 4, no. 19-21. (Also *L'Aérophile*, Paris, Sep. 1907, v. 15, no. 9, p. 258-60) (Bréguet-Richet helicopter)

BRENNAN

- Le Prove dell'elicottero inglese Brennan. *L'Aerotecnica*, Roma, Sep.-Oct. 1925, v. 5, no. 5, p. 320.
- Brennan helicopter. *Aviation*, New York, June 12, 1922, v. 12, no. 24, p. 687, Apr. 9, 1923, v. 14, no. 15, p. 400.

HELICOPTERS - BRENNAN

Neuere schraubenfliegerprojekte. Z.F.M., München, Dec. 31, 1921, v. 12, no. 24, p. 360-61. illus.

The Brennan helicopter, by Louis Brennan. Aerial age, New York, May 30, 1921, v. 13, no. 12, p. 280. (Also Flight, London, Apr. 28, 1921, v. 13, no. 17, p. 299)

CORNU

Some notes on helicopters, by A. G. von Baumhauer. Proceedings of the first International congress for applied mechanics, 1924-1925, p. 449-54. diagrs.

Direct lift machine, by Sidney Camm. Aviation, New York, Apr. 15, 1919, v. 6, p. 333-34.

Cornu helicopter, Bertin's helicopter, etc. Aeronautics, New York, Apr. 1909, v. 4, no. 4, p. 150-60. illus.

Hélicoptère Paul Cornu, par Lucien Fournier. Cosmos, Paris, Feb. 20, 1909, n.s., v. 60, no. 1256, p. 200-02. illus.

Successful test of the Cornu helicopter. Scientific american, New York, Apr. 18, 1908, v. 98, p. 276. illus.

L'Hélicoptère Paul Cornu - construction et essais. L'Aérophile, Paris, Apr. 15, 1908, v. 16, no. 8, p. 138-41. diagrs., illus.

L'Hélicoptère Cornu, par Paul Ancelle. L'Aérophile, Paris, Apr. 1, 1908, v. 16, no. 7, p. 128.

Hélicoptère Paul Cornu. La Conquête de l'air, Bruxelles, Apr. 1908, v. 5, no. 8, p. 2. illus.

The Cornu helicopter - how this novel type of flying machine was developed. Scientific american supplement, New York, 1908, v. 65, no. 1689, p. 316-17. illus.

Les Hélicoptères Paul Cornu, par Albert Bracke. Paris, F. L. Vivien, 1908. 16 p. illus.

The Cornu helicopter. Ballooning and aeronautics, London, Mar. 1907, v. 1, no. 3, p. 97-98. illus.

L'Hélicoptère Cornu. La Revue de l'aviation, Paris, Jan. 15, 1907, v. 2, no. 2, p. 10-12. illus.

Elicoptero Cornu. Bollettino della Società aeronautica italiana, Roma, Jan.-Feb., July-Dec. 1906, v. 3, no. 1-2, 7-12, p. 38, 248, 327. illus.

L'Hélicoptère Cornu et fils à propulseur spécial, par L. Lagrange. L'Aérophile, Paris, Oct. 1906, v. 14, no. 10, p. 250. illus.

Hélicoptère Cornu et fils à propulseur spécial. L'Aérophile, Paris, June 1906, v. 14, no. 6, p. 145-47. illus.

CROCKER-HEWITT

Neuere schraubenfliegerprojekte. Z.F.M., München, Dec. 31, 1921, v. 12, no. 24, p. 360-61. illus.

Les Hélicoptères. Communication faite le 12 avril 1921 à la Commission scientifique de l'Aéro-club de France, par L. Huguet. L'Aérophile, Paris, July 1-15, 1921, v. 29, no. 13-14, p. 209-13. illus.

Vers la sécurité; la sustentation indépendante. Quelques hélicoptères actuels: Crocker-Hewitt, Alérion, Pescara, Oehmichen, par Maurice Luc Valère Lamé. L'Aérophile, Paris, Feb. 1-15, 1921, v. 29, no. 2-3, p. 46-49. illus.

The Hewitt-Crocker helicopter, by F. B. Crocker. Aeronautics, London, Dec. 16-23, 1920, v. 19, no. 374-75, p. 441-42, 457-59. illus. (Also Aerial age, New York, Nov. 22-29, 1920, v. 12, no. 11-12, p. 295-97, 323-25)

The Helicopter flying machine, by M.A.S. Riach. Aircraft engineering, London, June-Aug., Oct. 1920, v. 1, no. 6-8, 10, p. 157-59, 196-98, 218-21, 248-52. diagrs., tables.

Les Hélicoptères modernes, par Jean-Abel Lefranc. La Nature, Paris, July 10, 1920, no. 2414, p. 21-30. illus.

Helicopter experiments. Aeronautics, London, Feb. 5, 1920, v. 18, no. 329, p. 122. illus.

Again the helicopter? by Robert G. Skerrett. Scientific american, New York, Dec. 13, 1919, v. 121, no. 24, p. 576-77. illus.

CURTISS-BLEECKER

Les Voilures tournantes. Autogyres et hélicoptères, par Jean Lacaine. La Nature, Paris, Jan. 1, 1932, v. 60, p. 14-21. diagrs., illus.

L'Hélicoptère Curtiss-Bleecker, moteur Pratt et Whitney "Wasp." Les Ailes, Paris, Oct. 2, 1930. 1 p. illus.

Tres aspectos del helicóptero de Curtiss-Bleecker. Boletín de aero club Argentino, Buenos Aires, Oct. 1930, v. 1, no. 1, p. 21. diagrs., illus.

The Curtiss-Bleecker helicopter. Aeroplane, London, Sep. 24, 1930, v. 36, no. 13, p. 723.

HELICOPTERS - CURTISS-BLEECKER

- Curtiss-Bleecker helicopter. Scientific american, New York, Sep. 1930, v. 143, p. 214-15. illus.
- Curtiss-Bleecker helicopter. Aero digest, New York, July 1930, v. 17, no. 1, p. 110-12. diagrs., illus.
- Curtiss-Bleecker helicopter. Curtiss-Wright review, New York, July 1930, v. 1, no. 4, p. 1-3. illus.
- View Curtiss-Bleecker helicopter at New York City. Aviation, New York, June 28, 1930, v. 28, no. 26, p. 1274. illus.
- The Curtiss helicopter. Scientific american, New York, Feb. 1928, v. 138, p. 161.

DALMOTE

- Elicoptero Dalmote. Bollettino della Società aeronautica italiana, Roma, Jan.-Feb. 1906, v. 3, no. 1-2, p. 39. illus.

DAMBLANC - LACOIN

- The Story of vertical flight, by Ernest W. Fair. Popular aviation, Chicago, Sep. 1929, v. 5, p. 15-16, 67-68.
- An Introduction to the helicopter. A review of the aerodynamic and construction data thus far available, together with descriptions of a number of modern helicopters, by Alexander Klemin. Mechanical engineering, New York, Nov. 15, 1924, v. 46, no. 11a, p. 739-51. diagrs., illus., tables.
- Neuere schraubenfliegerprojekte, von Theodore von Kármán. Z.F.M., München, Dec. 31, 1921, v. 12, no. 24, p. 360-61. illus.
- Lacoin-Damblanc helicopter. Aviation, New York, Oct. 1, 1921, v. 9, p. 166.
- Les Hélicoptères. Communication faite le 12 avril 1921 à la Commission scientifique de l'Aéro-club de France, par L. Huguet. L'Aérophile, Paris, July 1-15, 1921, v. 29, no. 13-14, p. 209-13. illus.
- Le Parachute-hélicoptère de M. Damblanc. L'Aérophile, Paris, Jan. 1-15, 1921, v. 29, no. 1-2, p. 29.
- Les Hélicoptères modernes, par Jean-Abel Lefranc. La Nature, Paris, July 10, 1920, no. 2414, p. 21-30. illus.

Le Grand problème du vol sans vitesse, par Ernest Archdeacon.
L'Aérophile, Paris, June 1-15, 1920, v. 28, no. 11-12,
p. 168-72. diagrs., illus., table.

The Damblanc helicopter. Aeronautics, London, Jan. 15, 1920,
v. 18, no. 326, p. 66. illus.

D'ASCANIO

Flight on rotating wings, by Wynn L. Le Page. Journal of the
Franklin institute, Philadelphia, Pa., Sep.-Oct. 1936,
v. 222, no. 3-4, p. 255-88, 461-74. illus.

Il Volo verticale, di Franco Cristofori. Rivista aeronautica,
Roma, June 1935, v. 11, no. 6, p. 493-520.

Planes that go straight up open new fields for aviation, by
E. Teale. Popular science, Chicago, Mar. 1935, v. 126,
p. 13-15. illus.

D'Ascanio helicopter. Aviation engineering, East Stroudsburg,
Pa., May 1931, v. 4, no. 5, p. 28-29. diagrs.

Revolutionary aviation, by Daniel C. Sayre. Technology review,
Concord, N.H., Mar. 1931, v. 33, p. 282-83, 307. illus.

An Italian helicopter. Scientific american, New York, Feb. 1931,
v. 144, no. 2, p. 124. illus.

New italian helicopter. Airway age, New York, Feb. 1931, v. 12,
p. 173. illus.

The D'Ascanio helicopter. Aviation, New York, Jan. 1931, v. 30,
no. 1, p. 61. illus. (Also Flight, London, Nov. 14, 1930,
v. 22, no. 45, p. 1249)

L'Elicottero D'Ascanio, di R. Giacomelli. L'Aerotecnica, Roma,
Nov.-Dec. 1930, v. 10, no. 11-12, p. 980-82.

Italian helicopter. Aero digest, New York, Dec. 1930, v. 17,
no. 6, p. 62. illus.

L'Hélicoptère D'Ascanio, par G. P. Majo. L'Air, Paris, Nov. 15,
1930, v. 12, no. 265. 1 p. diagrs.

The D'Ascanio helicopter. Flight, London, Nov. 14, 1930, v. 22,
no. 46, p. 1249. illus.

DE BOTHEZAT

Flight on rotating wings, by Wynn L. Le Page. Journal of the
Franklin institute, Philadelphia, Pa., Sep-Oct. 1936,
v. 222, no. 3-4, p. 255-88, 461-74. illus.

HELICOPTERS - DE BOTHEZAT

- Planes that go straight up open new fields for aviation, by E. Teale. Popular science, New York, Mar. 1935, v. 126, p. 13-15. illus.
- Georges de Bothezat. Aero news and mechanics, New York, Feb. 1930, p. 53.
- Classification of helicopter system. Scientific american, New York, Jan. 1930, v. 142, no. 1, p. 72. diagsr.
- The Story of vertical flight, by Ernest W. Fair. Popular aviation, Chicago, Sep. 1929, v. 5, p. 15-16, 67-68.
- Discussion sur les hélicoptères, par Maurice Luc Valère Lamé. L'Aérophile, Paris, Feb. 1-15 - Mar. 1-15, 1927, v. 35, no. 3-6, p. 50-53, 83-86. illus.
- An Introduction to the helicopter. A review of the aerodynamic and construction data thus far available, together with descriptions of a number of modern helicopters, by Alexander Klemin. Mechanical engineering, New York, Nov. 15, 1924, v. 46, no. 11a, p. 739-51. diagsr., illus., tables.
- The Helicopter, by Georges de Bothezat. Aeronautical digest, New York, July 1923, v. 3, no. 1, p. 23. illus.
- Les Hélicoptères. L'Aérophile, Paris, Jan. 1-15 - Mar. 1-15, June 1-15, 1923, v. 31, no. 1-6, p. 17-19, 47-48; 47, 169. illus.
- New trials of the De Bothezat helicopter. Aviation, New York, May 21, 1923, v. 14, no. 21, p. 562. illus.
- Les Hélicoptères. L'Aéronautique, Paris, May 1923, v. 5, no. 48, p. 183.
- Our army's helicopter. Scientific american, New York, Apr. 1923, v. 128, no. 4, p. 243. illus.
- Pioneer helicopter flies with two passengers. Current opinion, New York, Apr. 1923, v. 74, p. 475-76. illus.
- Latest helicopter makes flight. Popular mechanics, Chicago, Mar. 1923, v. 39, no. 3, p. 331. illus.
- D.B. helicopter lifts two persons. Aviation, New York, Jan. 29, 1923, v. 14, p. 135.
- Successful helicopter trials at McCook field. The De Bothezat helicopter lifts 3,600 pounds with 170 horsepower. Aviation, New York, Jan. 22, 1923, v. 14, no. 4, p. 97. illus.

The De Bothezat helicopter, by T. H. Bane. (In Report of the International air congress. London, 1923. p. 396-99. illus.) (Also Aviation, New York, June 11, 1923, v. 14, no. 24, p. 645 and Flight, London, Mar. 1, 1923, v. 15, no. 9, p. 125)

DECAZES

L'Hélicoptane Decazes. Résultats pratiques. L'Aérophile, Paris, Aug. 1, 1914, v. 22, no. 15, p. 340-42.

L'Hélicoptane Decazes. L'Aviation industrielle et commerciale, Casteau, Feb. 1913, v. 2, no. 14, p. 107. illus.

L'Hélicoptane du Vicomte Decazes, par L. Lagrange. L'Aérophile, Paris, Jan. 15, 1913, v. 21, no. 2, p. 38-39. illus.

Expériences d'allégement au moyen d'une hélice à axe vertical, par Vicomte Decazes. L'Aérophile, Paris, 1903, v. 11, p. 8-11. illus.

DE ROUGE

Un Nouvel hélicoptère. L'Aérophile, Paris, June 15, 1914, v. 22, no. 12, p. 276. illus.

DIAZ

Elicoptero del capitano Diaz. Bollettino della Società aeronautica italiana, Roma, Jan.-Feb. 1906, v. 3, no. 1-2, p. 37.

DOUHÉRET

L'Hélicoptère Douhéret. L'Aérophile, Paris, May 1-15, 1922, v. 30, no. 9-10, p. 140.

L'Hélicoptane de M. Douhéret. La Conquête de l'air, Bruxelles, Dec. 15, 1919, v. 12, no. 24, p. 295-96.

DUFAUX

L'Hélicoptère Dufaux. La Technique aéronautique, Paris, Mar. 15, 1912, v. 5, no. 54, p. 192.

HELICOPTERS - DUFAUX

- A Swiss combination - aeroplane and helicopter, by Frank C. Perkins. Fly magazine, Philadelphia, Mar. 1909, v. 1, no. 5, p. 12. illus.
- L'Hélicoptère Dufaux. La Revue de l'aviation, Paris, Dec. 15, 1906, v. 1, no. 1, p. 9.
- Les Appareils d'aviation expérimentés en 1905 en Europe, par P. Lucas-Girardville. Revue d'artillerie, Paris, Mar. 1906, v. 67, p. 369-81.
- Nouvelles expériences des frères Dufaux, par Auguste Nicolleau. L'Aérophile, Paris, Nov. 1905, v. 13, no. 11, p. 260-61. diags.
- Dufaux flying machine. Scientific american, New York, Oct. 21, 1905, v. 93, p. 316. illus.
- L'Elicoptero Dufaux e l'elicoptero Léger. Bollettino della Società aeronautica italiana, Roma, July-Sep. 1905, v. 2, no. 7-9, p. 149, 152. illus.
- L'Hélicoptère des frères Dufaux, par A. de Masfrand. L'Aérophile, Paris, May 1905, v. 13, no. 5, p. 97-104. illus.

ENGLISH

- English's helicopter. Aeronautics, New York, Feb. 1910, v. 8, no. 2, p. 56. illus.
- English helicopter-monoplane, by George H. Loose. Aeronautics, New York, July 1909, v. 5, no. 1, p. 29.

FÉLIPE

- L'Hélicoptère Julian Félipe. L'Aérophile, Paris, Oct. 1907, v. 15, no. 10, p. 284-85. illus.

FLORINE

- L'Hélicoptère Florine, par J. L. de Hauss. L'Air, Paris, Jan. 20, 1937, no. 413, p. 9-10. illus.
- Florine helicopter, by Jean Lacaine. Mechanical engineering, New York, Aug. 1934, v. 56, p. 489.
- El Accidente del helicóptero "Florine." Revista de aeronáutica, Madrid, June 1934, v. 3, no. 27, p. 332.

HELICOPTERS - FLORINE

Latest in helicopters; Florine helicopter, by Alexander Klemin. Scientific american, New York, June 1934, v. 150, p. 312-13. diagsr.

Nouvel appareil à voilure tournante, l'hélicoptère Florine, par Jean Lacaine. La Nature, Paris, Mar. 15, 1934, no. 2925, p. 254-58.

Belgian helicopter sets world's record. Popular science monthly, New York, Feb. 1934, v. 124, no. 2, p. 32.

L'Hélicoptère Florine. La Nature, Paris, Jan. 1, 1934, v. 62, no. 2920, p. 41.

FOCKE - WULF

The Focke helicopter, by H. Focke. Washington, 1938. 14 p. diagsr., illus., tables. (N.A.C.A. Technical memorandum no. 858) (From Luftwissen, Berlin, Feb. 1938, v. 5, no. 2)

Le Pilotage de l'Hélicoptère FW-61. Les Ailes, Paris, Dec. 23, 1937, v. 17, no. 862, p. 5. illus.

Le FW-61 Focke, est-il vraiment un hélicoptère? Les Ailes, Paris, July 15, 1937, v. 17, no. 839, p. 7-8.

Hubschrauber Focke FW-61. Interavia, Geneva, July 13, 1937, no. 450, p. 4-5. illus.

FORLANINI

Le Vol vertical. Conférence de l'ingénieur Gerard à l'Aéroclub royal de Belgique, par A. de la Hault. La Conquête de l'air, Bruxelles, July 1929, v. 25, no. 7, p. 525-26. diagsr., illus.

L'Elicottero Forlanini nella sua genesi scientifica, di A. Jotti da Bodia Polesine. L'Aeronautica, Milano, May 1927, v. 1, p. 78-79. illus.

L'Ingénieur Forlanini, par G. L. Pesce. L'Aérophile, Paris, Jan. 1902, v. 10, no. 1, p. 1-4. illus.

La Distribution des prix de l'Institut Lombard de Milan en 1879. L'Aéronaute, Paris, Feb. 1880, v. 13, no. 2, p. 33-40.

Tentatives infructueuses avant le succès. L'Aéronaute, Paris, May 1879, v. 12, no. 5, p. 123-26.

HELICOPTERS - FORLANINI

Le Premier appareil d'aviation à vapeur qui ait quitté le sol, par Abel Hureau de Villeneuve. L'Aéronaute, Paris, Feb. 1879, v. 12, no. 2, p. 39-47. illus.

GARIN

L'Elicottero "Garin." L'Aerotecnica, numero straordinario, Roma, 1926, p. 447.

HELLESEN - KAHN

Le Vol vertical. Conférence de l'ingénieur Gerard à L'Aéro club royal de Belgique, par A. de la Hault. La Conquête de l'air, Bruxelles, July 1929, v. 25, no. 7, p. 525-56. diags., illus.

L'Hélicoptère Hellesen-Kahn H-K-1. L'Aéronautique, Paris, Oct. 1925, v. 7, no. 77, p. 382-83. illus.

HOLBROOK

The Holbrook helicopter. Aircraft, New York, Aug. 1910, v. 1, no. 6, p. 225. illus.

ISACCO

The Problem of vertical flight, by J. H. Crowe. Aircraft engineering, London, Nov.-Dec. 1934, v. 6, no. 69-70, p. 292-296, 315-18. diags., illus.

The Helicogyre, by V. Isacco. Journal of the R.A.S., London, July 1929, v. 33, no. 223, p. 573-614. diags., illus.

L'Hélicogyre Isacco, L'Aérophile, Paris, Mar. 1-15, 1929, v. 37, no. 5-6, p. 73. illus.

JOHNSON

Test Johnson helicopter. Aviation, New York, Nov. 16, 1929, v. 27, no. 20, p. 994.

KIMBALL

The Kimball helicopter. Popular mechanics, Chicago, Dec. 1908, v. 10, no. 12, p. 802-03. illus.

HELICOPTERS - KIMBALL

L'Hélicoptère de M. Kimball, par V. Forbin. La Nature, Paris, Nov. 1908, v. 36, no. 1851, p. 369-70. illus.

The Outlook on aviation. The Phillips flying machine. The Kimball helicopter. Bulletin of the Aerial experiment association, Beinn Bhreagh, Nova Scotia, Oct. 26, 1908, no. 16, p. 47-48.

Kimball helicopter. Aeronautics, New York, Sep. 1908, v. 3, no. 3, p. 18-19. illus.

The Kimball helicopter, by D. C. Teck. American aeronaut, St. Louis, June 1908, v. 1, no. 6, p. 235-36. diagrs.

LÉGER

Der Helicopter Léger. Wiener luftschiffer-zeitung, Wien, Apr. 1906, v. 5, no. 4, p. 71-74. illus.

Les Appareils d'aviation expérimentés en 1905 en Europe, par P. Lucas-Girardville. Revue d'artillerie, Paris, Mar. 1906, v. 67, p. 369-81.

L'Elicoptero Dufaux e l'elicoptero Léger. Bollettino della Società aeronautica italiana, Roma, July-Sep. 1905, v. 2, no. 7-9, p. 149, 152. illus.

L'Hélicoptère M. Léger. L'Aérophile, Paris, Aug. 1905, v. 13, no. 8, p. 175-78. illus.

Nouvelles expériences d'enlèvement de l'hélicoptère "M. Léger," au Musée océanographique de Monaco. C. R. Acad. sci., Paris, June 5, 1905, v. 140, p. 1529-1532. tables.

LEINWEBER

Neuere schraubenfliegerprojekte. Z.F.M., München, Dec. 31, 1921, v. 12, no. 24, p. 360-61. illus.

The Leinweber improved helicopter equipped with two Gnome motors and four special Leinweber airscrews. Aerial age, New York, Feb. 21, 1921, v. 12, no. 24, p. 604. illus.

LORENZEN

The Problem of the helicopter. Flight, London, Mar. 11, 1911, v. 3, no. 10, p. 208-09. illus.

Elicoptero Lorenzen. Rivista tecnica di aeronautica e Bollettino della Società aeronautica italiana, Roma, Sep. 1909, v. 6, no. 9, 1909, p. 337. illus.

LUYTIES

L'Hélicoptère Otto Luyties, par Georges Blanchet. L'Aéro-phile, Paris, Sep. 15, 1908, v. 16, no. 18, p. 361. illus.

Elicoptero americano "Luyties." Bollettino della Società aeronautica italiana, Roma, Aug. 1908, v. 5, no. 8, p. 237-39. illus.

Experiments with a helicopter, by Otto G. Luyties. Scientific american, New York, July 11, 1908, v. 99, no. 2, p. 26-27.

MALLET - LEVAVASSEUR

L'Hélicoptane Mallet-Levavasseur. L'Air, Paris, Sep. 1, 1929, v. 11, no. 236, p. 17. diags.

MARMONIER

Apparecchio elicottero ad eliche orientabili, di L. Marmonier. L'Aeronautica, Milano, Mar. 1932, v. 6, no. 3, p. 180-83.

MONIN

Nouvel hélicoptère. L'Aérophile, Paris, Feb. 15, 1909, v. 17, no. 44, p. 88.

OEHMICHEN

Flight on rotating wings, by Wynn L. Le Page. Journal of the Franklin institute, Philadelphia, Pa., Sep.-Oct. 1936, v. 222, no. 3-4, p. 255-88, 461-74. illus.

L'Hélicoptère Oehmichen. Le Problème de la stabilité résolu, par E. Weiss. La Nature, Paris, June 1, 1935, v. 63, pt. 1, p. 499-502. diags., illus.

The Oehmichen helicopter. Scientific american, New York, Feb. 1932, v. 119, p. 47. diags.

- Les Voilures tournantes. Autogyres et hélicoptères, par Jean Lacaine. La Nature, Paris, Jan. 1, 1932, v. 60, p. 14-21. diags., illus.
- L'Hélicostat Oehmichen, moteur Salmson 40 CV. L'Aérophile, Paris, Oct. 15, 1931, v. 39, no. 10, p. 308-11. diags., illus.
- De Oehmichen helicostat. Het Vliegveld, Amsterdam, June 1931, v. 15, no. 6, p. 213-14. illus.
- L'Hélicostat Oehmichen. Les Ailes, Paris, May 14, 1931. diags., illus.
- L'Hélicoptère Oehmichen avec hélice auto-régulatrice, par E. Weiss. La Nature, Paris, June 15, 1930, v. 58, pt. 1, p. 552-56. diags., illus.
- Classification of helicopter system. Scientific american, New York, Jan. 1930, v. 142, no. 1, p. 72. diags.
- Discussion sur les hélicoptères, par Maurice Luc Valère Lamé. L'Aérophile, Paris, Feb. 1-15 - Mar. 1-15, 1927, v. 35, no. 3-6, p. 50-53, 83-86. illus.
- An Introduction to the helicopter. A review of the aerodynamic and construction data thus far available, together with descriptions of a number of modern helicopters, by Alexander Klemin. Mechanical engineering, New York, Nov. 15, 1924, v. 46, no. 11a, p. 739-51. diags., illus., tables.
- De nouvelles performances de l'hélicoptère Oehmichen. L'Aérophile, Paris, Sep. 1-15, 1924, v. 32, no. 17-18, p. 274.
- First helicopter to fly a circular kilometer. Aviation, New York, Aug. 18, 1924, v. 17, p. 888-89. illus.
- L'Hélicoptère du premier kilomètre. L'Aéronautique, Paris, June 1924, v. 6, no. 61, p. 137-38. diags.
- Le Premier circuit fermé d'un kilomètre par Oehmichen. L'Aérophile, Paris, May 1-15, 1924, v. 32, no. 9-10, p. 161-62. illus.
- Elicotteri. L'Ala d'Italia, Milano, Mar. 1924, v. 3, no. 3, p. 66-69. illus.
- Note sur l'hélicoptère Oehmichen. Recherches et inventions, Paris, June 30, 1923, v. 4, p. 601-08. illus.
- Les Vols de l'hélicoptère Oehmichen-Peugeot no. 2. Le Génie civil, Paris, June 30, 1923, v. 82, p. 627-28.

HELICOPTERS - OEHMICHEN

- Les Hélicoptères. L'Aérophile, Paris, Jan. 1-15 - Mar. 1-15, June 1-15, 1923, v. 31, no. 1-6, p. 17-19, 47-48, 47, 169. illus.
- Les Hélicoptères. L'Aéronautique, Paris, May 1923, v. 5, no. 48, p. 183.
- The Oehmichen-Peugeot helicopter. Aviation, New York, Apr. 9, 1923, v. 14, no. 15, p. 399.
- Les Essais de l'hélicoptère Oehmichen-Peugeot no. 2. L'Aéronautique, Paris, Feb. 1923, v. 5, no. 45, p. 84-85.
- Succès des essais de l'hélicoptère Oehmichen. L'Aérophile, Paris, Jan. 1-15, 1923, v. 31, no. 1-2, p. 4. illus.
- Neuere schraubenfliegerprojekte, von Theodore von Kármán. Z.F.M., München, Dec. 31, 1921, v. 12, no. 24, p. 360-61. illus.
- The Oehmichen helicopter. Aviation, New York, Sep. 12, 1921, v. 11, p. 319.
- Les Hélicoptères. Communication faite le 12 avril 1921, à la Commission scientifique de l'Aéro-club de France, par L. Huguet. L'Aérophile, Paris, July 1-15, 1921, v. 29, no. 13-14, p. 209-13. illus.
- L'Hélicoptère Oehmichen. L'Aéronautique, Paris, May 1921, v. 3, no. 24, p. 213-14. illus.
- Oehmichen-Peugeot helicopter. Engineer, London, Apr. 15, 1921, v. 131, p. 411-12. illus. (Also Le Génie civil, Paris, Mar. 12, 1921, v. 78, p. 237-38)
- Vers la sécurité; la sustentation indépendante. Quelques hélicoptères actuels: Crocker-Hewitt, Alérion, Pescara, Oehmichen, par Marice Luc Valère Lamé. L'Aérophile, Paris, Feb. 1-15, 1921, v. 29, no. 2-3, p. 46-49. illus.
- Une Série de vols en hélicoptère. C. R. Acad. sci., Paris, Feb. 14, 1921, v. 172, no. 7, p. 366-68.

PESCARA

- Flight on rotating wings, by Wynn L. Le Page. Journal of the Franklin institute, Philadelphia, Pa., Sep.-Oct. 1936, v. 222, no. 3-4, p. 255-88, 461-74. illus.
- Planes that go straight up open new fields for aviation, by E. Teale. Popular science monthly, New York, Mar. 1935, v. 126, p. 13-15. illus.

- The Problem of vertical flight, by J. H. Crowe. Aircraft engineering, London, Nov.-Dec. 1934, v. 6, no. 69-70, p. 292-96, 315-18. diags., illus.
- Les Voilures tournantes. Autogyres et hélicoptères, par Jean Lacaine. La Nature, Paris, Jan. 1, 1932, v. 60, p. 14-21. diags., illus. (Pescara 4S)
- Un Hélicoptère de 40 h.p. - le Pescara 4S, par R. Pouit. L'Aéronautique, Paris, Apr. 1931, v. 13, no. 143, p. 122-23. diags., illus.
- New helicopter rises in vertical flight. Popular science monthly, New York, Mar. 1931, v. 118, no. 3, p. 70. illus.
- Ensayos del helicóptero Pescara en Barcelona, por M. de Torres. Ibérica, Barcelona, Jan. 24, 1931, v. 18, no. 862, p. 49-54. illus.
- The Story of vertical flight, by Ernest W. Fair. Popular aviation, Chicago, Sep. 1929, v. 5, p. 15-16, 67-68.
- Discussion sur les hélicoptères, par Maurice Luc Valère Lamé. L'Aérophile, Paris, Feb. 1-15 - Mar. 1-15, 1927, v. 35, no. 3-6, p. 50-53, 83-86. illus.
- Some notes on helicopters, by A. G. von Baumhauer. Proceedings of the first International congress for applied mechanics, 1924-1925, p. 449-54. diags.
- An Introduction to the helicopter. A review of the aerodynamic and construction data thus far available, together with descriptions of a number of modern helicopters, by Alexander Klemin. Mechanical engineering, New York, Nov. 15, 1924, v. 46, no. 11a, p. 739-51. diags., illus., tables.
- Les Essais de l'hélicoptère Pescara. L'Aéronautique, Paris, Dec. 1923, Feb. 1924, v. 5-6, no. 55, 57, p. 541, 542.
- Les Hélicoptères. L'Aérophile, Paris, Jan. 1-15 - Mar. 1-15, June 1-15, 1923, v. 31, no. 1-6, p. 17-19, 47-48, 47, 169. illus. (Also L'Aéronautique, Paris, May 1923, v. 5, no. 48, p. 183)
- New aircraft at the Paris aero exposition. Aviation, New York, Feb. 12, 1923, v. 14, no. 7, p. 190-91.
- Pescara helicopter ascends. Aerial age weekly, New York, Apr. 10, 1922, v. 15, no. 5, p. 100.
- Les Derniers essais de l'hélicoptère Pescara. Quel nouvel appareil perfectionné d'aviation en naîtra-t-il? L'Aérophile, Paris, Mar. 1-15, 1922, v. 30, no. 5-6, p. 77-79. illus.

HELICOPTERS - PESCARA

- Neuere schraubenfliegerprojekte, von Theodore von Kármán. Z.F.M., München, Dec. 31, 1921, v. 12, no. 24, p. 360-61. illus.
- Les Hélicoptères. Communication faite le 12 avril 1921 à la commission scientifique de l'Aéro-club de France, par L. Huguet. L'Aérophile, Paris, July 1-15, 1921, v. 29, no. 13-14, p. 209-13. illus.
- Pescara helicopter. Aviation, New York, Apr. 25, 1921, v. 10, p. 531. illus. (Also Aerial age, New York, Apr. 18, 1921, v. 13, no. 6, p. 134)
- Les Résultats des essais récents de l'hélicoptère, système Pescara. Le Génie civil, Paris, Apr. 16, 1921, v. 78, p. 339-40. illus. (Also C.R. Acad. sci., Paris, Apr. 4, 1921, v. 172, no. 14, p. 845-48)
- Helicopter for military purposes. Scientific american, New York, Feb. 26, 1921, v. 124, no. 9, p. 173. illus.
- The Pescara helicopter, by E. H. Lemonon. Aeronautics, London, Feb. 24, 1921, n.s., v. 20, no. 384, p. 127.
- El Helicóptero Pescara, por Joaquín Pericas. Ibérica, Barcelona, Feb. 21, 1921, v. 15, no. 367, p. 136-38.
- Vers la sécurité; la sustentation indépendante. Quelques hélicoptères actuels: Crocker-Hewitt, Alérion, Pescara, Oehmichen, par Maurice Luc Valère Lamé. L'Aérophile, Paris, Feb. 1-15, 1921, v. 29, no. 2-3, p. 46-49. illus.
- PETRÓCZY - KÁRMÁN
- Flight on rotating wings, by Wynn L. Le Page. Journal of the Franklin institute, Philadelphia, Pa., Sep.-Oct. 1936, v. 222, no. 3-4, p. 255-88, 461-74. illus.
- The Story of vertical flight, by Ernest W. Fair. Popular aviation, Chicago, Sep. 1929, v. 5, p. 15-16, 67-68.
- Le Vol vertical. Conférence de l'ingénieur Gerard à l'aéro club royal de Belgique, par A. de la Hault. La Conquête de l'Air, Bruxelles, July 1929, v. 25, no. 7, p. 525-26. diagrs., illus.
- Will captive helicopters replace the observation balloon? (Petróczy-Kármán-Zurovec). Aerial age, New York, Jan. 1923, v. 16, no. 1, p. 9-11. illus.
- Der Schraubenfesselflieger Petróczy-Kármán-Zurovec. Z.F.M., München, Dec. 31, 1921, v. 12, no. 24, p. 357-60. illus.

HELICOPTERS - PETRÓCZY - KÁRMÁN

Captive helicopter. Scientific american, New York, Aug. 13, 1921, v. 125, no. 7, p. 117.

Les Hélicoptères. Communication faite le 12 avril 1921 à la Commission scientifique de l'Aéro-club de France, par L. Huguët. L'Aérophile, Paris, July 1-15, 1921, v. 29, no. 13-14, p. 209-13. illus.

The Kármán-Petróczy helicopter. Aeronautics, London, May 12, 1921, v. 20, no. 395, p. 342. illus.

The Petróczy helicopter. Aeroplane, London, Apr. 27, 1921, v. 20, no. 17, p. 398. diags., illus.

VARNI

Description of helicopter built by Alfredo Varni, by C. de Rysky. Canadian air review, Toronto, Aug. 1931, p. 18-19.

VILLARD

Une Expérience d'hélicoptère, par H. Villard. L'Aérophile, Paris, Aug. 1, 1913, v. 21, no. 15, p. 343.

L'Ornis Villard. La Conquête de l'air, Bruxelles, Feb. 1, 1913, v. 10, no. 3, p. 40.

Elicoptero Villard. Bollettino della Società aeronautica italiana, Roma, Jan.-Feb. 1906, v. 3, no. 1-2, p. 38-39. illus.

The Villard flying machine. Scientific american, New York, Mar. 8, 1902, v. 86, no. 10, p. 173. illus.

VUITTON - HUBER

L'Hélicoptère Vuitton-Huber. L'Aérophile, Paris, Feb. 1, 1909, v. 17, no. 3, p. 56.

WILLIAMS

Williams helicopter success. Aeronautics, New York, Aug. 1909, v. 5, no. 2, p. 62-63.

Williams' "helicopter." Collier's weekly, New York, June 13, 1908, v. 41, p. 19. illus.

The Williams helicopter. Aeronautics, New York, June 1908,
v. 2, no. 6, p. 35.

The Williams helicopter. Aeronautics, New York, Mar. 1908,
v. 2, no. 3, p. 11.

ZANNI

Gli Elicotteri: L'apparato Zanni. L'Ala d'Italia, Milano,
May 15, 1928, v. 7, no. 5, p. 491. diags.

GENERAL

The Ideas of Mr. Nagler. Aeroplane, London, Apr. 7, 1937,
v. 52, no. 1350, p. 406. illus.

Le Paradoxe de l'hélicoptère, par G. C. Richards. Les Ailes,
Paris, Jan. 7, 1937, v. 17, no. 812, p. 8. illus.

Use of the helicopter in aviation. Science, New York, Apr. 10,
1936, n.s., v. 83, supp. 9.

Drehflügelflugzeuge, trag - und hubschrauber, von E. Zschka.
Berlin, Verlag Volckmann, 1936. 80 p. illus., tables.

Rotative wing aircraft possibilities, by Wynn L. Le Page.
Journal of the aeronautical sciences, New York, Mar. 1935,
v. 2, no. 2, p. 67.

Edison on the flying machine. U. S. Air services, Washington,
Nov. 1931, v. 16, no. 11, p. 15.

Flying freaks, by L. Malcolm. Airways, London, Feb. 1931,
v. 7, no. 11, p. 614-16. diags.

Les Hélices de sustentation, par Louis Bréguet. Paris,
Imprimerie "Labor," 1930. 21 p. diags., plates.

Apuntes sobre aeroplanos, por Octavio Quesnel. Ingenieria,
Mexico, D.F., Nov. 1928, v. 2, no. 11, p. 505-08, 531.
tables.

Gli Apparecchi a superfici di sostentamento ruotanti, gli
elicotteri, l'autogiro, di E. Garuffa. L'Ala d'Italia,
Milano, Oct. 1928, v. 7, no. 10, p. 1027-28. tables.

Le Vol vertical et la sustentation indépendante; hélicoptères,
gyrocoptères, avions hélicoptères, par Maurice Luc Valère
Lamé. Paris, Librairie de la Vie technique et industrielle,
1926. 170 p.

- Helicopter myth, by W. L. Marsh. English review, London, Nov. 1925, v. 41, p. 647-50.
- On helicopters and such things. Aeroplane, London, Oct. 21, 1925, v. 29, no. 17, p. 465-67. illus.
- Aerial surveying equipment - helicopters. Mechanical engineering, New York, Apr. 1925, v. 47, no. 4, p. 266-70.
- Will the \$250,000 prizes for vertical flying be won? by Henry Woodhouse. Scientific age, New York, Aug. 23, 1924, May 1925, v. 7-8, p. 101-04, 445-48.
- The Air ministry helicopter prizes. Journal of the R.A.S., London, Dec. 1923, v. 27, no. 156, p. 568.
- Helicopter; is it worth a prize? by L. Bairstow. Nature, London, Aug. 18, 1923, v. 112, p. 229-31.
- Air travel with special reference to the helicopter, by F. M. Green. Journal of the R.A.S., London, July 1923, v. 27, no. 151, p. 332-37. diags. (Also Aerial age, New York, June 1923, v. 16, no. 6, p. 268-70)
- The British air minister's helicopter competition, by Charles E. Lee. Aeronautical digest, New York, July 1923, v. 3, no. 1, p. 24.
- Official regulations governing british helicopter competition. Aerial age, New York, June 1923, v. 16, no. 6, p. 278-79.
- British air ministry's helicopter competition. Aviation, New York, May 28, 1923, v. 14, no. 22, p. 582-83.
- The Air ministry's helicopter competition. Aeroplane, London, May 23, 1923, v. 24, no. 21, p. 388.
- Helicopter competition. Engineer, London, May 18, 1923, v. 135, p. 527-28.
- The British helicopter competition. Prizes of £50,000 offered. Flight, London, May 17, 1923, v. 15, no. 20, p. 263-64.
- En hélicoptères. L'Aérophile, Paris, May 1-15, 1923, v. 31, no. 9-10, p. 143.
- Helicopter and its uses. Engineering, London, Mar. 9, 1923, v. 115, p. 306.
- Helicopter and the variable pitch propeller. Mechanical engineering, New York, Sep. 1922, v. 44, p. 575-78. diags., illus.
- The Helicopter craze. Aeroplane, London, June 7, 1922, v. 22, no. 23, p. 402.

HELICOPTERS - GENERAL

- The Helicopter in England. Aerial age, New York, July 4, 1921, v. 13, no. 17, p. 400.
- Helicopters and aeroplane helicopters, by Maurice Luc Valère Lamé. Aerial age, New York, June 27, 1921, v. 13, no. 16, p. 374. (Also The Technical review, London, May 24, 1921, v. 9, p. 123)
- Helicopter machine, May 24, 1921. Aeronautics, London, June 2, 1921, v. 20, no. 398, p. 399.
- Helicopters and parachutes. Aircraft engineering, London, May 11, 1921, v. 20, no. 19, p. 446.
- Airplanes that rise like elevators. Illustrated world, Chicago, May 1921, v. 35, no. 3, p. 415. illus.
- The Helicopter in Europe. Aerial age, New York, Jan. 3, 1921, v. 12, no. 17, p. 435.
- Considérations sur les hélicoptères, par A. de Pishoff. L'Aérophile, Paris, June 1-15, 1920, v. 28, no. 13-14, p. 179-80. diags.
- Helicopter, by S. N. Malterner. Scientific american, New York, Mar. 6, 1920, v. 122, no. 10, p. 245.
- Wingless machines that promise to revolutionize aerial navigation. Current opinion, New York, Mar. 1920, v. 68, p. 407-09. illus.
- Beating the bird in its own realm; the helicopter, by H. P. Williams. Illustrated world, Chicago, Feb. 1920, v. 32, p. 909-11. illus.
- The "Helicopter," a vertical airplane, by Robert G. Skerrett. Electrical experimenter, New York, Jan. 1920, v. 7, no. 81, p. 868-69. diags., illus.
- The Helicopter, by J. R. Porter. Aeronautics, London, Oct. 3, 1917, v. 13, no. 207, p. 259.
- Flapping flight - with a note on helicopters, by Maurice F. Fitzgerald. Aeronautical journal, London, Jan. 1915, v. 19, no. 73, p. 13-21. diags.
- Mur ou impasse? plaidoyer pour l'hélicoptère, par Gustave Plaisant. L'Aérophile, Paris, Aug. 15, 1913, v. 21, no. 16, p. 364-66. illus.
- Is the direct lifter possible or desirable? by E. Ernest Green. Aero, London, May 1912, v. 6, no. 110, p. 140.
- Is the direct lifter possible or desirable? A correction, by R. Sharpe. Aero, London, Feb.-Mar. 1912, v. 6, no. 107-108, p. 38-42, 78. illus.

- Is the helicopter possible? Flight, London, June 17, 1911, v. 3, no. 24, p. 536.
- Is the helicopter possible? by C. J. Reynolds. Flight, London, Dec. 10, 1910, v. 2, no. 50, p. 109, Jan. 7, May 6, 1911, v. 3, no. 1, 18, p. 18, 408-09.
- Do we want the helicopter? by D. Greig. Aero, London, Feb. 8, 1911, v. 4, no. 90, p. 118.
- What is the use of a helicopter? by Noel M. H. Vernham. Aero, London, Dec. 28, 1910, v. 3, no. 84, p. 516.
- Helicopter v. aeroplane, by Octavius. Flight, London, Sep. 24, 1910, v. 2, no. 39, p. 786.
- Flying machines, by Horatio Philipps. Aero, London, Feb. 15, 1910, v. 2, no. 39, p. 123.
- L'Aérostation dirigeable européenne en janvier 1910, suivie de commentaires: (1) sur les hélicoptères et centres d'études officiels; (2) sur la destruction de la galerie des machines, par Jules Leloup. Paris, P. Rosier, 1910. 44 p. illus.
- Helicopters for aerial research, by Cleveland Abbe. Aeronautics, New York, Feb. 1909, v. 4, no. 2, p. 61-62.
- L'Aviation à la portée de tous, par Estienne et Gallie. Paris, Librairie aéronautique, 1909. 30 p. illus.
- L'Idée aérienne, aviation. Les oiseaux artificiels; avec une préface de Santos-Dumont, par François Peyrey. Paris, H. Dunod et E. Pinet, 1909. 667 p. diagrs., illus., tables.
- Motorflugapparate-drachenflieger, schraubenflieger und schwingenflieger, von Ansbert Vorreiter. Berlin, Richard Carl Schmidt und co., New York, E. Steiger and company, 1909. 134 p. illus.
- Elicoptero ed aeroplano. Bollettino della Società aeronautica italiana, Roma, Nov. 1908, v. 5, no. 11, p. 382-83.
- Helicopter v. aeroplane, by Herbert Chatley. Aeronautical journal, London, Oct. 1908, v. 12, no. 48, p. 102-07.
- The Problem of flight, by George L. O. Davidson. Engineering, London, Aug. 14, 1908, v. 86, p. 206-07.
- Helicopter and aeroplane, by Otto G. Luyties. Scientific american supplement, New York, July 11, 1908, v. 66, p. 30-32.
- Discussione intorno al giroplano Bréguet e gli elicotteri. Bollettino della Società aeronautica italiana, Roma, Apr. 1908, v. 5, no. 4, p. 114-17. illus.

Part III

BIBLIOGRAPHY ON CYCLOGIROS AND GYROPLANES

CYCLOGIROS

- Rotative wing aircraft possibilities, by Wynn L. Le Page.
Journal of the aeronautical sciences, New York, Mar. 1935,
v. 2, no. 2, p. 67.
- Wind tunnel tests of a cyclogiro rotor, by John Brooks Wheatley
and Ray Windler. Washington, D. C., 1935. 11 p. diags.,
illus. (N.A.C.A. Technical notes no. 528)
- The Problem of vertical flight, by J. H. Crowe. Aircraft
engineering, London, Nov.-Dec. 1934, v. 6, no. 69-70,
p. 292-96, 315-18. diags., illus. (Standgren cyclogiro)
- Strandgren cyclogiro. Mechanical engineering, New York,
Sep. 1934, v. 56, no. 9, p. 535-37, 567.
- Rotating wing aircraft compared to conventional airplanes, by
John Brooks Wheatley. S.A.E. journal, New York, Apr.,
Aug. 1934, v. 34-35, p. 114-18, 131, 287.
- La Machine à voilure tournante de l'ingénieur Rohrbach. Les
Ailes, Paris, July 26, 1934. 1 p. illus.
- The Case for vertical flight, by Haviland H. Platt. Journal
of the R.A.S., London, June 1934, v. 38, no. 282, p. 507-
14. diags.
- Choice of airfoils for rotating-wing aircraft, by John Brooks
Wheatley. Journal of the aeronautical sciences, New York,
Apr. 1934, v. 1, no. 2, p. 88-90. diags.
- Paddle-wheel plane to fly backwards. Popular mechanics, Chicago,
Apr. 1934, v. 61, p. 481-82. diags., illus.
- Le Vol vertical. Théorie générale des hélicoptères. Les
appareils à voilures tournantes de leurs origines à
1934, par Maurice Luc Valère Lamé. Paris, E. Blondel
La Rougery, 1934. 242 p. illus.
- Rohrbach rotating wing aeroplane, by W. S. Schackleton.
Flight, London, Nov. 2-9, 1933, v. 25, no. 1297-98,
p. 1087-90, 1122-24.
- Strandgren rotors, by C. B. Strandgren. Mechanical engineer-
ing, New York, Nov. 1933, v. 55, p. 694.
- Paddle-wheel aeroplanes. Aeroplane, London, Oct. 25, 1933,
v. 45, no. 17, p. 744-46.

CYCLOGIROS

- Umlaufschwingerflieg piskorsch. Flugsport, Frankfurt am Main, Aug. 30, Sep. 13, 1933, v. 25, no. 18-19, p. 397-98, 409-10.
- Les Essais de la roue Strandgren. Les Ailes, Paris, May 11, 1933. 2 p. illus.
- The Rohrbach "Paddle plane," by Edwin P. A. Heinze. Flight, London, Feb. 2, 1933, v. 25, no. 5, p. 107.
- Simplified aerodynamic analysis of the cyclogiro rotating-wing system, by John Brooks Wheatley. Washington, D. C., 1933. 13 p. (N.A.C.A. Technical notes no. 467)
- The Theory of the Strandgren cyclogiro, by C. B. Strandgren. Washington, D. C., 1933. 17 p. tables. (N.A.C.A. Technical memorandums no. 727) (From L'Aérophile, Paris, July 1933)
- Le Cyclo-voilier Borghese-Parizza. L'Air, Paris, Mar. 1, 1932, v. 14. 2 p. diags.
- Cycloplane C-1. Aero digest, New York, Nov. 1931, v. 19, no. 5, p. 62. illus.
- Fliegende fahräder. Fachzeitung für automobilismus und flugtechnik, Berlin, Oct. 27, 1912, v. 6, no. 44, p. 17-18.
- European doings. Fly magazine, Philadelphia, May 1909, v. 1, no. 7, p. 8-10. illus.

GYROPLANES

- Hafner gyroplane, by R. Hafner. Journal of the R.A.S., London, Feb. 1938, v. 42, p. 109-58. diags., illus.
- Principles of the Wilford gyroplane as applied to a thoroughly modern design for a conventional airplane, by Elliot Daland. Aviation, New York, Jan. 1938, v. 37, p. 42. diags., illus.
- Hafner and Cierva gyroplanes (Cierva C-30, A.R. III), by R. Hafner. Flight, London, Nov. 11, 1937, p. 471-72. illus.
- Gyroplane and autogiro, by J. A. J. Bennett. Flight, London, Oct. 28, 1937, v. 15, no. 4, p. 25-26. illus.
- On rotary aspirations, by R. Hafner. Flight, London, Oct. 21, 1937, p. 407-08. illus. (Also Aeroplane, London, Oct. 20, 1937, p. 478-80)
- Studio aerodinamico del gyroplano, di L. Poggi. L'Aerotecnica, Roma, Oct. 1937, v. 17, no. 10, p. 840-49. diags., illus.
- Les Trois inventions de M. Hafner. Les Ailes, Paris, June 17, 1937, v. 17, no. 835, p. 7.

GYROPLANES

- Hafner gyroplane A. R. III. Engineering, London, May 28, 1937, v. 143, p. 600-02. diags., illus. (Also Engineer, London, May 14, 1937, v. 143, p. 555)
- Wilford gyroplane on floats, by Alexander Klemin. Scientific american, New York, May 1937, v. 156, p. 317-18. illus.
- About rotating-winged aircraft. Aeroplane, London, Apr. 14, 1937, v. 52, no. 1351, p. 435-38. diags., illus. (Also Luftwissen, Berlin, Aug. 1936, Jan. 1937, p. 204-08; 12-21)
- Rotating-wing aircraft. Flight, London, Mar. 18, 1937, v. 31, no. 1473, p. 266. illus.
- Le Nouvel autogire Hafner, à commande d'incidence des pales. Les Ailes, Paris, Mar. 11, 1937. 1 p. illus.
- Hafner gyroplane. Aeroplane, London, Mar. 10, 1937, v. 52, no. 1346, p. 283.
- Pennsylvania gyroplane XOZ-1. Aero digest, New York, Apr. 1936, v. 28, no. 4, p. 86; Mar. 1937, v. 30, no. 3, p. 84. diags., illus.
- New rotor control. Flight, London, Feb. 18, 1937, v. 31, no. 1469, p. 160-62.
- The Hafner gyroplane, by A. R. Hafner. Aeroplane, London, Feb. 17, 1937, v. 52, no. 1343, p. 197-98. diags., illus.
- Branching out. Flight, London, Feb. 11, 1937, v. 31, no. 1468, p. 135-37. illus. (Hafner A.R. III. flight tests)
- Le Pilot Claisse vole pendant soixante-trois minutes en gyroplane, par Roger Lallier. L'Aéronautique, Paris, Dec. 1936, v. 18, no. 211, p. 322. illus.
- XOZ-1 gyroplane. Aviation, New York, Dec. 1936, v. 35, no. 12, p. 34-35. illus.
- Flight on rotating wings, by Wynn L. Le Page. Journal of the Franklin institute, Philadelphia, Pa., Sep.-Oct. 1936, v. 222, no. 3-4, p. 255-88, 461-74. illus.
- Gyroplanes. Aircraft engineering, London, May 1936, v. 8, no. 37, p. 146. illus.
- AR-III gyroplane. Pobjoy 90 hp engine. Flight, London, Sep. 19, 1935, p. 318.
- Gyroplane sailboat, by Alexander Klemin. Scientific american, New York, Sep. 1935, v. 153, p. 147. diags., illus.
- Small gyroplane may bring flying for all. Popular mechanics, Chicago, June 1935, v. 63, p. 807. illus.

- Gyroplanes, par Maurice Luc Valère Lamé. L'Aérophile, Paris, Apr. 1935, v. 43, no. 4, p. 99-101. diagrs., tables.
- Kay gyroplane. Mechanical engineering, New York, Apr. 1935, v. 57, p. 244-45.
- Rotative wing aircraft possibilities, by Wynn L. Le Page. Journal of the aeronautical sciences, New York, Mar. 1935, v. 2, no. 2, p. 67.
- Notes on the problems and progress of gyroplanes, by Alexander Klemin. Aero digest, New York, Feb. 1935, v. 26, no. 2, p. 40-42. illus.
- Wind-tunnel tests of a 10-foot diameter gyroplane rotor, by John Brooks Wheatley and Carlton Bioletti. Washington, U. S. Govt. print. off., 1935. 10 p. diagrs., illus. (N.A.C.A. Report no. 536)
- Kay gyroplane-type 331. Flight, London, Dec. 27, 1934, v. 26, no. 1357, p. 1377-78. (Also Aeroplane, London, Dec. 26, 1934, v. 47, no. 1231, p. 772-75)
- Novel use for the Wilford gyroplane. Scientific american, New York, Nov. 1934, v. 151, p. 261. illus.
- Caractères généraux aérodynamiques des appareils d'aviation à voilure tournante, par A. Lapresle. La Science aérienne, Paris, July-Aug. 1934, v. 3, no. 4, p. 336-39. diagrs., illus.
- Rotating wing aircraft compared to conventional airplanes, by John Brooks Wheatley. S.A.E. journal, New York, Apr., Aug. 1934, v. 34-35, p. 114-18, 131, 287. diagrs., illus., tables.
- L'Aéroglyre de Chappedelaine à autorotation des surfaces portantes. Les Ailes, Paris, Apr. 19, 1934. 1 p. diagrs., illus., tables.
- Whirling wings, by L. B. Barringer. Sportsman pilot, New York, Apr. 15, 1934, p. 12. (Wilford gyroplane)
- Aerodynamic analysis of gyroplane rotating-wing system, by John Brooks Wheatley. Washington, 1934. 22 p. (N.A.C.A. Technical notes no. 492)
- Le Vol vertical. Théorie générale des hélicoptères. Les appareils à voilures tournantes de leurs origines à 1934, par Maurice Luc Valère Lamé. Paris, E. Blondel La Rougery, 1934. 242 p. illus.
- Safety - with performance, by P. E. Hovgard. Aviation engineering, East Stroudsburg, Pa., Sep. 1932, v. 7, p. 12-13. diagrs., illus.

- New Wilford gyroplane, by G. E. Hale. Aircraft age, Kansas City, Mo., Apr. 1932, p. 8-9.
- Wilford gyroplane. Aviation, New York, Apr. 1932, v. 31, p. 195-96. (Also Aero digest, New York, Feb. 1932, v. 20, p. 56-57)
- The Wilford gyroplane, by E. Burke Wilford. Western flying, Los Angeles, Mar. 1932, v. 11, no. 3, p. 56. illus.
- City air taxis of the future? Aircraft, Melbourne, Jan. 1932, p. 20-22 (Wilford gyroplane)
- A New type of gyroplane. Wind tunnel researches and full scale tests with a gyroplane with rigidly connected feathering rotor blades, by Alexander Klemin and B. P. Ruffner. Aircraft engineering, London, Dec. 1931, v. 3, no. 34, p. 305-06, 320. illus., tables.
- The Rival of the autogiro, by Alexander Klemin. Scientific american, New York, Nov. 1931, v. 145, no. 5, p. 336. illus.
- Aerodynamics of the Wilford gyroplane, by Alexander Klemin and B. P. Ruffner. Aviation engineering, East Stroudsburg, Pa., Aug. 1931, v. 6, no. 2, p. 7-10. illus.
- Il Giroplano A.L.A., dell'ing. Alfredo Varini. L'Ala d'Italia, Milano, June 1930, v. 9, no. 6, p. 529-30. illus.
- Les Prodiges de la voiture volante, par Jacques Mortane. Les Annales politiques et littéraires, Paris, Aug. 1, 1928, v. 91, no. 2315, p. 125. illus.
- Une Nouvelle machine volante: le gyroptère Chappedelaine. L'Aérophile, Paris, July 15, 1928, v. 36, no. 13-14, p. 211. illus.
- Gyroplanes, par A. Goupil. L'Aérophile, Paris, May 15, 1909, v. 17, no. 10, p. 220-21. diags.

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