

# WORLD'S RECORDS IN AVIATION

WE give below a list of the world's aviation records, as standing on January 1, 1931, in so far as aeroplanes and seaplanes are concerned. Those in respect to light 'planes and to Balloons, Airships and Gliders will be published on a future occasion. It is of interest to note the terrific number of records standing to the credit of Great Britain!

## CLASS C (POWER-DRIVEN AEROPLANES)

### (a) Records without refuelling during Flight

*Distance (Non-Stop) Cross Country.*—7,905.140 km. (4,912.4 miles), France, Costes and Bellonte on Breguet "Superbidon," 600-h.p. Hispano-Suiza, Le Bourget-Moulart, China, September 27-29, 1929.

*Distance (Non-Stop) Closed Circuit.*—8,188.800 km. (5,088.5 miles), Italy, U. Maddalena and F. Ceccoli (on Savoia-Marchetti "S-64 bis," Fiat A.22 T. May 30-June 2, 1930.

*Duration.*—67 hr. 13 min., Italy, as above.  
*Altitude.*—13,157 m. (43,168 ft.), U.S.A., Lt. A. Soucek, on Wright "Apache" 450-h.p. Pratt and Whitney "Wasp," at Washington, June 4, 1930.

*Speed (Ground Level, 3 km.).*—448.171 k.p.h. (278.4 m.p.h.), France, Adjt. Bonnet, on Bernard-Hubert V.2, 500-h.p. Hispano-Suiza, at Istres, December 11, 1924.

100 km. (62.14 miles).—401.279 k.p.h. (249.3 m.p.h.), U.S.A., Lt. Bettis on Curtiss R. 3-C I, 600-h.p. Curtiss Mitchell Field, October 12, 1925.

500 km. (310.7 miles).—306.696 k.p.h. (190.6 m.p.h.), France, Sadi Lecoq on Nieuport Delage, 500 h.p. Hispano-Suiza, at Istres, June 23, 1924.

1,000 km. (621.4 miles).—275.269 k.p.h. (171 m.p.h.), Czechoslovakia, Comdt. J. Kalla, on Letov S 516, 800-h.p. Asso, at Prague, October 13, 1930.

2,000 km. (1,242.8 miles).—220.428 k.p.h. (136.9 m.p.h.), Spain, Carlos de Haya Gonzales and C. R. Diaz, on Breguet "Superbidon," 600-h.p. Hispano Suiza, at Tablada, October 11, 1930.

5,000 km. (3,107 miles).—208.152 k.p.h. (129.3 m.p.h.), Spain, as above.

### Records with 500-kg. (1,102 lb.) Useful Load

*Duration.*—23 hr. 22 min., France, Costes and Codos, on Breguet 19, 600-h.p. Hispano Suiza, at Istres, January 17-18, 1930.

*Distance.*—4,361.980 km. (2,710.5 miles), France, as above.

*Altitude.*—9,374 m. (30,756 ft.), France, J. Burtin, on Breguet 19, 500-h.p. Farman, at Toussus-le-Noble, August 23, 1929.

*Speed.*—100 km. (62.14 miles).—298.510 k.p.h. (185.5 m.p.h.), U.S.A., Lee Schoenhair, on Lockheed Vega mono., 425-h.p., Pratt and Whitney "Wasp," at Jacksonville, February 18, 1930.

500 km. (310.7 miles).—276.375 k.p.h. (171.7 m.p.h.), Czechoslovakia, Comdt. J. Kalla, on Letov S 516, 800-h.p. Asso, at Prague-Nové-Benatky-Prague, October 13, 1930.

1,000 km. (621.4 miles).—275.269 k.p.h. (171 m.p.h.), Czechoslovakia, as above.

2,000 km. (1,242.8 miles).—220.428 k.p.h. (136.9 m.p.h.), Spain, C. de H. Gonzales and C. R. Diaz on Breguet "Superbidon," at Tablada, October 11, 1930.

### Records with 1,000 kg. (2,205 lb.) Useful Load

*Duration.*—18 hr. 1 min., France, Costes and Codos, on Breguet 19, 600-h.p. Hispano Suiza, at Istres, February 15-16, 1930.

*Distance.*—3,309.9 km. (2,056.7 miles), France, as above.

*Altitude.*—8,089 m. (26,540 ft.), France, J. Burtin on Breguet 19, 500-h.p. Farman, at Toussus-le-Noble, September 26, 1929.

*Speed.*—100 km. (62.14 miles).—283.25 k.p.h. (175.9 m.p.h.), U.S.A., Lee Schoenhair, on Lockheed Vega mono., 425-h.p. Pratt and Whitney "Wasp," at Jacksonville, February 20, 1930.

500 km. (310.7 miles).—270.8 k.p.h. (168.2 m.p.h.), U.S.A., as above.

1,000 km. (621.4 miles).—252.38 k.p.h. (156.8 m.p.h.), Czechoslovakia, Adjt. Vojtech Svozil, on Aero A. 42, 800-h.p. Asso, at Prague, September 20, 1930.

2,000 km. (1,242.8 miles).—205.407 k.p.h. (127.7 m.p.h.), Germany, Hermann Steindorff on Rohrbach-Roland, three 230-h.p. B.M.W., at Staaken, July 31, 1927.

### Records with 2,000 kg. (4,410 lb.) Useful Load

*Duration.*—13 hr. 1 min. 12 sec., Germany, J. Risetics, on Junkers G.24, three 280-h.p. Junkers, at Dessau, June 29, 1927.

*Distance.*—1,750.469 km. (1,087.7 miles), Germany, Hermann Steindorff, on Rohrbach Roland, three 230-h.p. B.M.W., at Staaken, July 31, 1927.

*Altitude.*—6,262 m. (20,545.6 ft.), Italy, Domenico Antonini, on Caproni "Ca 73," two 500-h.p. Isotta Fraschini Asso, at Cascina Malpensa, May 26, 1927.

*Speed.*—100 km. (62.14 miles).—264.628 k.p.h. (164.4 m.p.h.), U.S.A., Leroy Manning and Carl Wenzel on Ford Transport, three 420-h.p. Pratt and Whitney "Wasp," at Dearborn, September 29, 1930.

500 km. (310.7 miles).—215.378 k.p.h. (133.8 m.p.h.) Germany, Hermann Steindorff, on Rohrbach Roland, three 230-h.p. B.M.W., at Staaken, July 28, 1927.

1,000 km. (621.4 miles).—214.855 k.p.h. (133.5 miles), Germany, as above.

### Records with 5,000 kg. (11,025 lb.) Useful Load

*Duration.*—3 hr. 2 m., Germany, Wilhelm Zimmermann, on Junkers J. 38, two 400-h.p. Junkers L8, and two 600-h.p. L 55, at Dessau-Leipzig, April 10, 1930.

*Distance.*—501.59 km. (311.6 miles), Germany, as above.

*Altitude.*—3,586 m. (11,765.6 ft.), France, L. Bossoutrot on Super Goliath, four 500-h.p. Farman, at Le Bourget, November 16, 1925.

*Speed.*—100 km. (62.14 miles).—184.464 k.p.h. (114.6 m.p.h.), Germany, as for Duration.

500 km. (310.7 miles).—172.95 k.p.h. (107.4 m.p.h.), Germany, as above.

### Records with 7,500 kg. (16,537.5 lb.) Useful Load

*Duration.*—1 hr. 31 min., Italy, Domenico Antonini, on Caproni "Ca 90," six 1,000-h.p. Isotta Fraschini Asso, at Cascina Malpensa, February 22, 1930.

*Altitude.*—3,231 m. (10,601 ft.), Italy, as above.

### Records with 10,000 kg. (22,050 lb.) Useful Load

*Duration.*—1 hr. 31 min., Italy, as above.

*Altitude.*—3,231 m. (10,601 ft.), Italy, as above.

### Greatest Load to Ceiling of 2,000 m. (6,560 ft.)

10,000 kg. (22,050 lb.), Italy, as above.

### (b) Records with re-fuelling during Flight

*Distance (Closed Circuit).*—5,300 km. (3,293.4 miles), U.S.A., Lts. Lowell H. Smith and J. P. Richter, on de Havilland 4B, 400-h.p. Liberty, at Rockwell Field, August 27-28, 1923.

*Duration (Closed Circuit).*—553 hr. 41 min., U.S.A., John and Kenneth Hunter, on Stinson-Detroit mono. 300-h.p. Wright "Whirlwind," June 11-July 4, 1930.

## CLASS C bis (SEAPLANES)

*Duration.*—36 hr. 1 min., U.S.A., Lts. A. Gavin and Z. Soucek, on P.N.12, two 525-h.p. Wright, at Philadelphia, May 3-5, 1928.

*Distance (Closed Circuit).*—4,308.34 km. (2,677.2 miles), France, Mermoz, on Latécoère 28, 600-h.p. Hispano Suiza, at Marignane, April 11-12, 1930.

*Distance (Cross-Country).*—3,173.2 km. (1,971.8 miles), France, Mermoz, Dabry and Gimie, on Latécoère, 600-h.p. Hispano Suiza, St. Louis, Senegal-Natal, Brazil, May 12-13, 1930.

*Altitude.*—11,753 m. (38,561.6 ft.), U.S.A., Lt. Soucek, on Wright "Apache," 425-h.p. Pratt and Whitney "Wasp," at Washington, June 4, 1929.

*Speed (Ground Level).*—575.7 k.p.h. (357.7 m.p.h.), Great Britain, Sq.-Ldr. Orlebar, on Supermarine S-6, Rolls-Royce "R," at Calshot, September 12, 1929.

*Speed.*—100 km. (62.14 miles).—533.8 k.p.h. (332.49 m.p.h.), Great Britain, F.O. Atcherley, on Supermarine S-6, Rolls-Royce "R," at Spithead, September 7, 1930.

500 km. (310.7 miles).—259.328 k.p.h. (161.1 m.p.h.), U.S.A., Lt. R. A. Oistie, on Curtiss Navy C.R., 450-h.p. Curtiss D-12, at Baltimore, October 25, 1926.

1,000 km. (621.4 miles).—222.277 k.p.h. (137.9 m.p.h.), Germany, Rolf Starke, on Heinkel H.E.9, 600-h.p. B.M.W. VI at Warnemünde, June 10, 1929.

2,000 km. (1,242.8 miles).—185.931 k.p.h. (115.5 m.p.h.), France, Lts. Paris and Hébert, on Latécoère 28, 650-h.p. Hispano Suiza, at St. Laurent de Salanque, June 21, 1930.

### Records with 500 kg. (1,102 lb.) Useful Load

*Duration.*—31 hr. 1 min., France, Lts. Paris and Hébert, on Latécoère 28, 650-h.p. Hispano Suiza, at St. Laurent de Salanque, July 16-17, 1930.

*Distance.*—4,202.496 km. (2,611.4 miles), France, as above.

*Altitude.*—8,208 m. (26,930.4 ft.), U.S.A., Boris Sergievsky, on Sikorsky S-38, two 575 Pratt and Whitney "Hornet," at Bridgeport, July 21, 1930.

*Speed.*—100 km. (62.14 miles).—259.927 k.p.h. (161.5 m.p.h.), Germany, Rolf Starke, on Heinkel H.D. 38, 600-h.p. B.M.W. VI, at Warnemünde, May 7, 1929.

500 km. (310.7 miles).—235.941 k.p.h. (146.6 m.p.h.), Germany, on Heinkel H.E.9A, 600-h.p. B.M.W. VI.

1,000 km. (621.4 miles).—222.277 k.p.h. (137.9 m.p.h.), Germany, as above, May 10, 1929.

2,000 km. (1,242.8 miles).—185.931 k.p.h. (115.5 m.p.h.), France, Lts. Paris and Hébert, on Latécoère 28, 650-h.p. Hispano-Suiza, at St. Laurent de Salanque, June 21, 1930.

### Records with 1,000 kg. (2,205 lb.) Useful Load

*Duration.*—20 hr. 2 min., France, as above.

*Distance.*—2,854.344 km. (1,773.7 miles), France, as above.

*Altitude.*—8,208 m. (26,930.4 ft.), U.S.A., Boris Sergievsky, on Sikorsky S-38, two 575-h.p. Pratt and Whitney "Hornet," at Bridgeport, July 21, 1930.

*Speed.*—100 km. (62.14 miles).—235.294 k.p.h. (146.2 m.p.h.), Germany, Rolf Starke, on Heinkel, 600-h.p. B.M.W. VI, at Warnemünde, May 21, 1929.

500 km. (310.7 miles).—235.941 k.p.h. (146.6 m.p.h.), Germany, as above.

1,000 km. (621.4 miles).—190.004 k.p.h. (118.06 m.p.h.), France, Lts. Paris and Hébert, on Latécoère 28, 650-h.p. Hispano Suiza, at St. Laurent de Salanque, June 22, 1930.

2,000 km. (1,242.8 miles).—185.931 k.p.h. (115.5 m.p.h.), France, as above.

### Records with 2,000 kg. (4,410 lb.) Useful Load

*Duration.*—16 hr. 39 min., U.S.A., Lts. A. W. Corton and E. E. Reber, on P.N. 12, two 525-h.p. Pratt and Whitney "Hornet," at Philadelphia, July 11-12, 1928.

*Distance.*—2,150 km. (1,336 miles), U.S.A., as above.

*Altitude.*—6,074 m. (19,928.8 ft.), U.S.A., Boris Sergievsky, on Sikorsky S-38, two 425-h.p. Pratt and Whitney "Wasp," at Stratford, August 11, 1930.

*Speed.*—100 km. (62.14 miles).—220.026 k.p.h. (136.7 m.p.h.), France, Prevot, on Latécoère 28, 650-h.p. Hispano Suiza, at St. Laurent de Salanque, Mar. 5, 1930. 500 km. (310.7 miles).—202.092 k.p.h. (125.5 m.p.h.), France, as above.

1,000 km. (621.4 miles).—177.279 k.p.h. (110.1 m.p.h.), Germany, Richard Wagner, on Dornier Superwal, four 480-h.p. Gnome-Rhone "Jupiter at Friedrichshafen, February 5, 1928.

2,000 km. (1,242.8 miles).—130.427 k.p.h. (81.04 m.p.h.), U.S.A., Lts. A. W. Corton and E. E. Reber, on P.N.12, two 525-h.p. Pratt and Whitney "Hornet," at Philadelphia, June 11-12, 1928.

### Records with 5,000 kg. (11,025 lb.) Useful Load

*Altitude.*—2,000 m. (6,562 ft.), Germany, Steindorff, on Rohrbach Roma, three 500-h.p. B.M.W., at Travernunde, April 17, 1929.

### Greatest Load to Ceiling of 2,000 m. (6,560 ft.)

6,450 kg. (14,222.25 lb.), Germany, as above.

## A Junkers' Diesel Engine

IN FLIGHT, for February 27, we made mention of the fact that the Junkers' Diesel engine had recently passed its type test at 500 b.h.p., and that it was going to be put through a series of tests at a higher rate. We are now able to announce that it has passed the second official type test

at 720 b.h.p. The consumption during this test was only 0.370 lb. per b.h.p., and as one would expect, the engine was in perfect condition when dismantled for inspection after the test. The very low weight is, perhaps, rather interesting, as at this new rating it works out at a shade over 2.5 lb. per b.h.p.