ASTRONOMICAL INFORMATION SHEET No. 8



Prepared by

HM Nautical Almanac Office

THE UNITED KINGDOM HYDROGRAPHIC OFFICE



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Time-scales used in the United Kingdom from 1880 onwards

The time-scale used for general purposes in the United Kingdom is Greenwich Mean Time (GMT), except during those periods of Summer Time when the clocks are advanced by one or two hours. Prior to 1916 October 1, the standard time for the whole of Ireland was Dublin mean time (GMT-25 minutes), however, during the period 1916 May 21 to 1916 October 1 Irish clocks were advanced by one hour on Dublin mean time. Thereafter, time in Ireland was synchronised with that of Great Britain.

Before 1981, the change from GMT to GMT+1^h and the reversion occurred at 2 am GMT on the dates given overleaf; the change from GMT to GMT+1^h and the reversion in 1981-1992, and all changes from GMT+1^h to GMT+2^h and the subsequent reversions occur at 1 am GMT on the dates given. All changes occur on Sundays, except for the reversion to GMT in 1917-1921 inclusive, and the change to GMT+2^h in 1945, which occurred on Mondays.

Care must be taken with dates before 1925 since the astronomical day began at noon on the civil day of the same date. The dates in the table overleaf refer to the civil calendar.

GMT+1^h was kept continuously from 1968 February 18 to 1971 October 31. In 1968 Summer Time ended at 2 am GMT on October 27 and was immediately followed by British Standard Time, also equal to GMT+1^h, which was the time system in use between 1968 October 27 and 1971 October 31.

In 1972-1980 the following rule, from Section 1 of the Summer Time Act 1972, applied: Summer Time (GMT+1^h) is the period from the day following the third Saturday in March or, if that day is Easter Day (which will not occur in this century) the day following the second Saturday in March to the day following the fourth Saturday in October. The change occurs at 2 am GMT.

In 1981-1994 the following rule applies: Summer Time (GMT+1^h) is the period from the last Sunday in March to the day following the fourth Saturday in October. The change occurs at 1 am GMT.

For 1995-1997 the dates are given on the reverse of this sheet.

For the years 1998 - 2001 the dates are given by the EU 8th Directive on Summer Time, which operate from the last Sunday in March to the last Sunday in October, and the changes occur at 1 am GMT, and the changes occur at 1 am GMT.

For the years 2002 - 2007, and beyond, the EU 9th Directive on Summer Time rules apply. These rules are the same as those of the 8th Directive.

Since 1972 January 1 the Greenwich time signals have been based on an internationally-adopted time-scale known as "Coordinated Universal Time" (UTC). This scale is derived from "International Atomic Time" (TAI) by the occasional insertion of a "leap second" to keep the scale close to Universal Time (UT1). Such leap seconds were inserted after the sixtieth second of the last minute of 1972 June 30, of December 31 in 1972-1979 inclusive, of June 30 1981-1983, 1985 June 30, 1987 December 31, of 1989 December 31 1989-1990, of June 30 1992-1994, 1995 December 31, 1997 June 30, 1998 December 31, 2005 December 31, 2008 December 31, 2012 June 30, 2015 June 30 and 2016 December 31.

Such occasions are marked in the BBC broadcasts by the emission of seven, instead of six, time pips; the beginning of the last (lengthened) pip marks the commencement of the first second of the next minute, as usual.

GAW/GRB/GAG/JPH/CYH/BDY/SAB/PSP

1992 May Updated 2017 April

| 1880 | 1939 Apr. 16 | 1961 Oct. 29 | 1988 Mar. 27 2011 Oct. 30 |
|---|---|---|--|
| 1916 May 21 GMT + 1h | 1939 Nov. 19 GMT + 1^{h} | 1962 Mar. 25 | 1988 Oct. 23 GMT + 1h 2011 Oct. 36 GMT 1988 Oct. 23 GMT 2012 Mar. 25 GMT |
| 1916 Oct. 1 GMT + 1^{h} | 1940 Feb. 25 GMT | 1962 Mar. 25 GMT + 1 ^h 1962 Oct. 28 GMT | 1988 Oct. 23 2012 Mar. 25 $\frac{1}{1}$ 1989 Mar. 26 $\frac{1}{1}$ 2012 Oct. 28 $\frac{1}{1}$ GMT $\frac{1}{1}$ |
| 1917 Apr. 8 GMT + 1h | 1941 May 4 GMT + 1^h | 1063 Mar 31 | 1080 Oct 20 2013 Mar 31 |
| 1917 Apr. 6 GMT + 1 ^h 1917 Sept. 17 | | | |
| 1918 Mar. 24 | 1941 Aug. 10° GMT + 1^{h} | | 1990 Oct. 28 GMT + 1h Compared to the control of t |
| 1918 Sept. 30 GMT + 1^{h} | 1942 Aug. 9 GMT + 2h | 1964 ()cf 25 | 1001 Mar 31 201/L Oct 26 |
| 1919 Mar. 30 | 1943 Apr. 4 GMT + 1^h | | 1991 Oct. 27 GMT + 1h 2015 Mar. 29 GMT + 1h |
| 1919 Sept. 29 GMT + 1^{h} | 1943 Allo 15 | 1905 UCI 24 | 1991 Oct. 27 GMT 1992 Mar. 29 2015 Mar. 29 GMT + 1 ^h 2015 Oct. 25 GMT + 1 ^h 2016 Mar. 27 2017 Mar. 27 |
| 1920 Mar. 28 GMT + 1h | 1944 Apr. 2 GMT + 1^h | 1966 Mar. 20 GMT + 1h | 1000 0 4 05 |
| 1920 Mar. 28 GMT + 1 ^h 1920 Oct. 25 GMT | 1944 Sept. 17 GMT + 1^h | 1900 UCL 25 | 1993 Mar. 28 GMT + 1h 2016 Oct. 30 GMT + 1 |
| 1921 Apr. 3 GMT + 1 ^h | 1045 Apr 2 | 10/5) / 10 | 1002 0 4 24 2017 14 26 |
| 1921 Oct. 3 $\frac{GMT + 1}{GMT}$ | 1945 IIIIV IS | | 1994 Mar. 27 GMT + 1h GMT + 1h GMT + 1h GMT + 1h |
| 1922 Mar. 26 GMT + 1 ^h | 1945 Oct. 7 GMT + 1^{h} | 1968 Feb. 18 $GMT + 1^h$ | 1004 0 22 2010 14 27 |
| 1922 Oct. 8 GMT + 1 | 1946 Apr. 14 GMT + 1 ^h | 1971 Oct. 31 | 1995 Mar. 26 2018 Oct. 28 GMT $+ 1^h$ |
| 1923 Apr. 22 GMT + 1 ^h | 1946 Oct. 6 GMT + 1 | $GMT + 1^h$ | 1995 Oct. 22 2019 Mar. 31 $GMT + 1^h$ |
| 1923 Sept. 16 GMT | 1947 Mar. 16 GMT + 1 ^h | 1972 Oct. 29 | |
| 1924 Apr. 13 GMT + 1 ^h | 1947 Apr. 13 GMT + 1 | $\frac{1773 \text{ Wal. } 16}{\text{GMT} + 1^{\text{h}}}$ | 1996 Oct. 27 GMT + 1 ^h 2020 Mar. 29 GMT + 1 ^h |
| 1924 Sent 71 | 1947 Aug. $10^{\text{GMT} + 2}$ | 1973 Oct. 28 | 1997 Mar. 30 2020 Oct. 25 |
| 1925 Apr. 19 GMT + 1h | 1047 Nov. 2 | 1974 Mar. 17 GMT + 1 ^h | 1997 Oct. 26 GMT |
| 1925 Oct. 4 GMT + 1 | 1948 Mar. 14 GMT + 1 ^h | 1974 Oct. 27 | 1998 Mar. 29 $GMT + 1^h$ |
| 1926 Apr. 18 GMT + 1 ^h | 1948 Oct. 31 GMT | 1975 Mar. 16 GMT + 1^{h} | 1998 Oct. 25 GMT |
| 1926 Oct. 3 GMT | 1949 Apr. 3 $GMT + 1^h$ | 1975 Oct. 26 GMT | 1999 Mar. 28 GMT + 1 ^h |
| 1927 Apr. 10 GMT + 1 ^h | 1949 Oct. 30 GMT | $GMT + 1^h$ | 1999 Oct. 31 GMT |
| 1927 Oct. 2 GMT | 1950 Apr. 16 GMT + 1 ^h | 1976 Oct. 24 GMT | 2000 Mar. 26 $GMT + 1^h$ |
| 1928 Apr. 22 GMT $+ 1^h$ | 1950 Oct. 22 GMT | $GMT + 1^h$ | 711111 (1ct 70 |
| 1928 Oct. 7 GMT | 1951 Apr. 15 GMT + 1^{h} | 1977 Oct. 23 GMT | 2001 Mar. 23 $GMT + 1^h$ |
| 1929 Apr. 21 GMT $+ 1^h$ | 1951 Oct. 21 GMT | 1978 Mar. 19 1978 Oct. 29 GMT | 2001 Oct. 28 GMT |
| 1929 Oct. 6 GMT | 1952 Apr. 20 GMT + 1^{h} | 1978 Oct. 29 GMT | |
| 1930 Apr. 13 $GMT + 1^h$ | 1952 Oct. 20 GMT | $GMT + 1^h$ | 2002 Oct. 27 |
| 1930 Oct. 5 GMT | 1953 Apr. 19 $GMT + 1^h$ | 1979 Oct. 28 GMT | 2003 Mar. 30 GMT + 1h |
| 1931 Apr. 19 GMT $+ 1^h$ | 1953 Oct. 4 GMT | $GMT + 1^h$ | 2003 Oct. 26 GMT |
| 1931 Oct. 4 GMT | 1954 Apr. 11 $GMT + 1^h$ | 1980 Oct. 26 GMT | 2004 Mar. 28 GMT + 1 ^h 2004 Oct. 31 |
| 1932 Apr. 17 $GMT + 1^h$ | 1954 Oct. 3 GMT | 1981 Mar. 29 1981 Oct. 25 1981 Oct. 25 | 2004 Oct. 31 GMT 2005 Mar. 27 |
| 1932 Oct. 2 GMT | 1955 Apr. 17 $GMT + 1^h$ | 1982 Mar. 28 th | 2005 Oct. 30 $^{\text{GMT}} + 1^{\text{h}}$ |
| 1933 Apr. 9 GMT $+ 1^h$ | 1955 Oct. 2 GMT | 1982 Wai. 28 GMT + 1 ^h 1982 Oct. 24 | 2006 M 26 GMT |
| 1933 Oct. 8 | 1956 Apr. 22 $GMT + 1^h$ | | 2006 Oct. 20 $GMT + 1^{11}$ |
| 1934 Apr. 22 GMT + 1 ^h | 1956 Oct. / | 1983 Oct. 23 GMT + 1^{h} | |
| 1934 Oct. / GMT | 1957 Apr. 14 GMT + 1 ^h | 1004 M 25 GMT | |
| 1935 Apr. 14 $GMT + 1^h$ | 1957 Oct. 6 | 1984 Mar. 25 GMT + 1 ^h 1984 Oct. 28 GMT | 2008 Mar. 30 |
| 1935 Oct. 6 GMT | 1958 Apr. 20 GMT + 1^{h} | 10 25 Mar 31 | 2008 Oct 26 |
| 1936 Apr. 19 $GMT + 1^h$ | 1958 Oct. 5 GMT | 1985 Oct. 27 | 2000 M 20 GMT |
| 1936 Oct. 4 GMT | 1959 Apr. 19 $GMT + 1^h$ | 1986 Mar 30 | 2000 Oct. $25^{\text{GMT} + 1^{\text{II}}}$ |
| 1937 Apr. 18 $GMT + 1^h$ | 1959 Oct. 4 GMT | 1986 Oct. 26 | 2010 Mar 28 |
| 1937 Oct. 3 GMT | 1960 Apr. 10 GMT + 1^h | 1007 M 20 GMT | |
| 1938 Apr. 10 GMT + 1 ^h | 1960 Oct. 2 GMT | 1987 Oct. 25 $^{\text{GMT} + 1^{\text{n}}}$ | 2011 Mar 27 |
| 1938 Oct. 2 GMT | 1961 Mar. 26 GMT + 1h | 1988 Mar. 27 | 2011 Oct. 30 $^{\text{GMT}} + 1^{\text{h}}$ |
| 1939 Apr. 16 | 1961 Oct. 29 | | |