

SECTION A
MERIDIAN ASTRONOMY

Time Service

*Observations
with Reversible Transit
and Wireless Time Signals
1951*

TIME SERVICE, 1951.

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INTRODUCTION

The following tables I and II are in continuation of those contained in the 1950 volume. A new table, numbered II(A), contains information relating to the Provisional Uniform Time system of the Time Service Bulletin, which should be carefully distinguished from the Greenwich Mean Time system used in Table II.

Transit B, in the Altazimuth dome at Greenwich, continued in use for the determination of clock corrections throughout the year. The Bamberg Broken Transit at Abinger was also in continuous service throughout the year.

The observations at Greenwich were made by the following members of the staff: Miss Penny (JP), Messrs. C. Harris (CH), Corben (PC) and Lowne (CL).

The observers at Abinger were Messrs. Tucker (RT), Rudd (JR), Cordwell (AC), O'Hara (NH) and Willmoth (PW).

No changes were made in the longitudes adopted for the transit instruments used for time determination, and no corrections for personal equations have been applied to the observations.

The programme of radio time signals received during the year shows only minor changes as compared with the previous year.

The hourly signals to the Post Office and the six-dots signals to the B.B.C. were provided in duplicate throughout the year from Abinger and Greenwich. The international mean time and rhythmic signals were supplied from Abinger, without a reserve.

Table I gives a summary of the time observations secured at Greenwich and Abinger, in a form similar to that adopted in previous years. The quantities tabulated for each observation are: date, U.T., observer, adopted level and azimuth, numbers of south and north stars observed, and the residual clock correction, to the nearest millisecond (0.001), being the amount by which the observed exceeds the adopted clock correction.

Table II, which has the same form as in 1950, contains the reception times of the following radio time signals:

Rugby	GBR	16.00	kc/s	10 00 U.T.
Rugby	GBR	16.00	kc/s	18 00 U.T.
Leafield	GIA	19,640	kc/s	10 00 U.T.
Rugby	GIC	8,640	kc/s	10 00 U.T.
Rugby	GKU3	12,455	kc/s	10 00 U.T.
Rugby	GIC	8,640	kc/s	18 00 U.T.
Rugby	GKU2	17,685	kc/s	18 00 U.T.
Rugby	GKU3	12,455	kc/s	18 00 U.T.
Rugby	GBR	16.00	kc/s	10 06 U.T.
Rugby	GBR	16.00	kc/s	18 06 U.T.

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Leaffield	GIA	19,640	kc/s	10 06 U.T.
Rugby	GIC	8,640	kc/s	10 06 U.T.
Rugby	GKU3	12,455	kc/s	10 06 U.T.
Rugby	GIC	8,640	kc/s	18 06 U.T.
Rugby	GKU2	17,685	kc/s	18 06 U.T.
Rugby	GKU3	12,455	kc/s	18 06 U.T.
Pontoise	FYP	90.70	kc/s	08 06 U.T.
Pontoise	TMA3	10,015	kc/s	08 06 U.T.
Pontoise	FYP	90.70	kc/s	09 36 U.T.
Pontoise	TMA3	10,015	kc/s	09 36 U.T.
Hamburg	Hbg	7,290	kc/s	11 00 U.T.
Norddeich	DAN	17,100	kc/s	12 06 U.T.
Moscow	RWM3	12,260	kc/s	12 06 U.T.
Moscow	RWM3	12,260	kc/s	14 06 U.T.
Moscow	RWM4	7,690	kc/s	16 06 U.T.
Canberra	VHP	12,170	kc/s	15 00 U.T.
Washington	NSS	12,630	kc/s	10 00 U.T.
Washington	NSS	12,630	kc/s	12 00 U.T.
Washington	NSS	12,630	kc/s	14 00 U.T.
Washington	NSS	12,630	kc/s	16 00 U.T.
Beltsville	WWV	10,000	kc/s	
Beltsville	WWV	15,000	kc/s	
Beltsville	WWV	20,000	kc/s	

The figures refer to a mean signal, and are in the usual form of times of reception. A value 052 signifies that the signal was *late* by $0^s.052$, while a value 952 indicates that the signal was *early* by $0^s.048$. The signal errors are small enough to leave no doubt as to whether the signal was early or late. The results are based upon reception at Abinger, and are referred to the Greenwich Mean Time finally adopted from the Greenwich and Abinger time observations.

Table II(A) contains the reception times of the seconds pulses superposed on the standard frequency transmissions radiated on 60 kc/s from Rugby MSF, referred to the Provisional Uniform Time system of the Time Service Bulletin. Greenwich Mean Time departs from uniformity on account of Polar Variation and Annual Fluctuation, and the adopted corrections necessary to free Greenwich Mean Time from these two effects are tabulated at intervals of five days. The table includes the corresponding reception times of the GBR 1000 signals referred to both time systems (G.M.T. and P.U.T.) in order to make clear the sense of the corrections.

TABLE I. - SUMMARY OF OBSERVATIONS MADE AT ABINGER WITH THE BAMBERG BROKEN TRANSIT
FOR THE DETERMINATION OF CLOCK CORRECTIONS

Date	U.T.	Observer	Level	Azimuth	No. of Stars		Residual	Date	U.T.	Observer	Level	Azimuth	No. of Stars		Residual
					South	North							South	North	
1951	h		"	"			s	1951	h		"	"			s
Jan. 3	17	JR	+1.15	-23.70	8	5	-.014	Apr. 4	20	AC	-0.03	-16.45	6	5	-.098
9	23	JR	+1.80	-22.85	6	4	-.044	4	21	AC	-0.07	-16.75	5	5	-.082
10	00	JR	+2.11	-22.20	8	4	-.040	5	20	JR	-0.27	-17.00	7	3	-.063
11	23	NH	+0.94	-22.95	6	4	-.025	5	21	JR	-0.18	-16.00	7	3	-.084
13	20	AC	+1.26	-23.85	4	6	-.032	9	21	RT	+0.90	-16.45	6	4	-.040
13	21	AC	+1.28	-21.70	5	4	-.019	13	20	AC	-0.44	-17.30	4	5	-.052
15	18	RT	+1.08	-22.65	7	4	-.030	13	21	AC	-0.32	-15.90	5	5	-.055
15	19	RT	+1.01	-22.60	5	5	-.023	14	20	JR	-0.58	-16.15	6	6	-.030
18	22	NH	+1.77	-23.60	6	3	-.053	14	21	JR	-0.37	-16.25	7	5	-.020
27	19	RT	-1.16	-22.45	7	4	+0.018	16	21	RT	-0.57	-15.20	6	4	-.041
27	20	RT	-1.10	-22.45	7	4	+0.017	17	20	JR	-0.24	-15.75	5	5	-.073
31	19	JR	-1.68	-22.20	6	5	+0.022	17	20	NH	-0.24	-16.15	5	5	-.044
31	20	JR	-1.49	-23.00	8	3	-.005	17	21	JR	-0.44	-15.70	6	4	-.039
								17	21	NH	-0.44	-15.80	6	4	-.013
Feb. 6	20	JR	-0.67	-22.40	7	3	+0.016	20	20	JR	-0.02	-15.75	6	6	-.032
6	20	NH	-0.67	-21.60	7	3	-.017	20	21	JR	0.00	-16.30	7	5	-.025
6	23	JR	-0.33	-21.10	6	5	-.055	21	21	AC	+0.80	-15.60	5	5	-.018
6	23	NH	-0.33	-21.80	6	5	-.048	21	22	AC	+0.99	-16.65	5	5	-.021
9	20	JR	-0.36	-23.10	6	4	+0.015	23	20	RT	-1.07	-24.65	6	4	-.009
9	21	JR	-0.08	-23.30	6	4	-.005	23	22	RT	-1.19	-24.15	6	4	-.021
9	22	JR	+0.19	-22.40	7	3	-.004	24	20	JR	-0.46	-22.10	5	5	-.024
11	21	AC	+0.82	-21.80	4	5	-.049	24	20	NH	-0.46	-22.75	5	5	-.033
12	00	AC	+0.71	-21.25	5	5	-.055	24	21	JR	-0.60	-22.15	5	4	-.004
12	19	RT	+0.52	-21.85	7	3	-.005	24	21	NH	-0.60	-21.85	5	4	-.009
12	20	RT	+0.75	-20.90	6	4	-.015	25	20	AC	-0.17	-21.00	4	6	-.007
17	23	JR	+0.54	-21.80	7	3	+0.012	25	21	AC	-0.23	-21.10	5	5	-.052
18	00	JR	+1.23	-21.30	6	4	-.043	27	22	JR	-0.54	-18.00	3	3	+0.012
19	22	RT	-0.01	-19.45	6	4	-.079								
21	21	JR	-0.38	-20.00	6	3	-.016	May 2	21	AC	-0.63	-17.15	5	4	-.043
21	21	AC	-0.38	-20.00	6	4	-.010	2	22	AC	-0.65	-16.65	5	4	-.057
21	23	JR	-0.18	-20.00	6	3	-.034	5	23	RT	-0.49	-16.95	6	4	-.010
21	23	AC	-0.18	-20.00	6	3	-.034	10	21	RT	-0.03	-17.00	4	3	-.016
22	20	RT	-0.53	-20.40	6	4	-.016	10	21	AC	-0.03	-17.00	4	4	-.037
22	21	RT	-0.39	-20.55	6	4	-.011	10	22	RT	-0.43	-17.00	6	4	+0.040
23	20	AC	-0.43	-21.35	4	4	-.021	10	22	AC	-0.43	-18.30	6	4	+0.039
23	21	AC	-0.17	-20.00	4	4	-.038	11	21	NH	+0.02	-16.45	6	4	-.001
27	19	JR	-0.66	-23.00	7	3	+0.034	11	23	NH	+0.09	-19.30	6	4	+0.025
27	23	JR	-0.74	-21.95	6	4	+0.016	14	21	NH	+0.42	-17.30	6	3	-.017
28	21	AC	-0.06	-20.60	6	4	-.076	21	21	RT	+0.53	-16.50	7	5	+0.008
28	22	AC	-0.03	-20.00	6	3	-.023	21	21	PW	+0.53	-17.85	7	5	+0.004
								30	21	JR	+2.15	-15.70	7	3	-.043
Mar. 2	22	NH	-0.24	-21.90	8	4	-.017	30	22	JR	+0.74	-15.90	7	5	-.012
3	19	RT	+0.13	-21.30	8	6	+0.009	31	23	RT	+0.31	-15.35	7	4	-.011
15	19	RT	+0.02	-20.25	7	4	-.040								
15	19	NH	+0.02	-20.65	7	4	-.036	June 1	21	AC	+0.95	-15.70	3	6	+0.012
15	21	RT	-0.02	-20.00	7	4	-.040	1	22	AC	+1.32	-29.50	7	2	-.047
15	21	NH	-0.02	-20.55	7	3	-.032	2	21	AC	+1.28	-28.40	4	5	+0.017
20	20	JR	+0.72	-20.45	9	5	-.037	2	22	AC	+1.15	-29.25	5	5	-.028
20	20	NH	+0.72	-21.55	9	5	-.010	4	21	JR	+1.73	-26.20	7	5	-.014
24	20	NH	+0.57	-20.00	7	4	-.060	4	22	JR	+1.53	-26.20	8	3	-.009
24	21	NH	+0.88	-21.15	8	4	-.060	5	21	JR	-0.35	-10.00	5	5	-.001
27	20	NH	+0.99	-21.30	8	4	-.036	5	21	NH	-0.35	-10.00	5	5	-.000
27	21	NH	+1.24	-21.00	8	3	-.062	5	22	JR	-0.11	-10.60	6	4	-.010
28	20	JR	+0.50	-20.70	7	3	-.044	5	22	NH	-0.11	-10.90	6	4	-.017
28	21	JR	+0.80	-21.50	7	5	-.057	6	21	NH	-0.08	-11.90	5	5	+0.034
30	21	RT	-0.08	-21.10	6	4	+0.023	6	22	NH	+0.13	-10.00	6	4	+0.020
31	21	NH	-0.52	-20.90	7	3	-.003	7	21	JR	+0.57	-11.35	6	4	-.019
31	22	NH	-0.34	-21.20	7	4	+0.003	7	21	AC	+0.57	-11.20	6	4	-.062

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FOR THE DETERMINATION OF CLOCK CORRECTIONS

Date	U.T.	Observer	Level	Azimuth	No. of Stars		Residual	Date	U.T.	Observer	Level	Azimuth	No. of Stars		Residual
					South	North							South	North	
1951	h		"	"			s	1951	h		"	"			s
June 7	22	JR	+0.54	-10.40	4	5	-.030	Aug. 23	21	JR	+0.11	-11.10	8	4	-.065
7	22	AC	+0.54	-12.00	5	5	+0.006	31	21	AC	+0.05	-13.50	6	3	-.018
8	21	NH	-0.25	-11.10	5	4	+0.082	31	22	AC	+0.43	-10.50	7	2	-.122
8	22	NH	-0.19	-12.30	5	4	+0.024								
16	22	NH	-0.04	-9.20	5	3	-.022	Sept. 8	20	AC	+0.45	-11.30	6	4	-.090
18	23	RT	-0.04	-10.00	6	4	-.034	8	21	AC	+0.82	-10.00	7	4	-.119
18	23	PW	-0.04	-10.95	5	4	-.058	13	21	NH	+0.89	-11.85	7	3	-.104
19	21	AC	0.00	-10.00	6	4	-.020	13	21	PW	+0.89	-12.00	6	3	-.088
19	21	NH	0.00	-10.00	6	4	-.009	13	23	NH	+1.08	-10.00	8	3	-.107
19	22	AC	+0.22	-10.00	6	4	-.028	13	23	PW	+1.08	-10.00	7	3	-.127
19	22	NH	+0.22	-9.20	6	3	-.021	15	21	JR	-0.16	-10.00	7	3	-.119
20	21	AC	+0.54	-10.65	6	4	+0.015	15	21	NH	-0.16	-10.00	7	3	-.102
20	22	AC	+0.27	-10.30	4	6	-.017	15	22	JR	+0.20	-9.40	6	4	-.151
29	22	RT	+0.59	-10.35	7	3	-.007	15	22	NH	+0.20	-9.35	6	4	-.106
29	22	PW	+0.59	-12.00	7	4	-.011	17	20	RT	+0.17	-7.25	8	4	-.121
29	23	RT	+0.17	-10.00	6	4	+0.006	17	20	PW	+0.17	-8.20	8	4	-.121
29	23	PW	+0.17	-11.45	6	4	-.026	17	21	RT	+0.46	-7.90	8	4	-.118
30	22	AC	+1.05	-10.60	6	6	-.074	17	21	PW	+0.46	-7.95	8	3	-.146
30	23	AC	+1.27	-9.05	6	6	-.063	19	20	AC	+0.34	-9.00	8	3	-.040
								19	21	AC	+0.26	-8.80	7	4	-.001
July 3	21	JR	+1.33	-9.75	5	5	-.061	20	21	JR	+0.19	-8.80	9	3	-.028
3	23	JR	+1.44	-9.80	6	4	-.040	20	21	PW	+0.19	-9.00	9	3	-.005
4	21	AC	+1.90	-11.40	7	4	-.026	21	19	AC	+0.42	-9.10	5	5	-.010
4	23	AC	+1.64	-9.70	7	3	-.053	21	20	AC	+0.82	-8.90	6	4	-.052
6	23	JR	+0.04	-9.25	7	5	-.016	26	19	JR	+0.03	-8.60	8	3	-.029
6	23	PW	+0.04	-10.45	7	5	-.002	26	20	JR	+0.35	-8.35	7	3	-.024
7	21	JR	+0.08	-10.00	8	4	-.032	28	19	RT	+0.44	-8.40	9	3	-.006
7	22	JR	+0.26	-11.30	7	5	-.019	28	19	PW	+0.44	-8.60	9	3	-.029
13	22	JR	+0.32	-11.50	7	5	-.017	28	21	RT	+0.52	-8.30	7	4	-.010
13	22	PW	+0.32	-12.10	7	5	-.035	28	21	PW	+0.52	-8.60	8	4	-.019
16	22	RT	+0.94	-10.00	8	3	-.033	29	19	AC	+0.53	-7.90	7	4	-.040
16	22	PW	+0.94	-10.00	7	3	-.072	29	20	AC	+0.61	-9.25	7	5	-.061
17	22	JR	-1.31	-10.00	5	5	-.070								
17	22	NH	-1.31	-10.00	5	5	-.086	Oct. 6	19	NH	+0.66	-8.05	8	3	-.026
17	23	JR	+0.19	-9.30	5	4	-.044	6	20	NH	+0.60	-8.25	8	4	-.001
17	23	NH	+0.19	-8.85	6	4	-.067	8	19	JR	+0.62	-8.55	8	3	-.056
19	22	JR	+0.66	-7.40	7	4	-.118	8	19	PW	+0.62	-8.30	8	3	-.042
19	22	NH	+0.66	-8.85	7	5	-.072	8	20	JR	+0.74	-9.00	7	2	-.044
24	23	RT	+0.17	-10.00	6	4	-.065	8	20	PW	+0.74	-10.00	7	2	-.002
28	21	RT	+0.62	-10.00	6	4	-.033	9	19	RT	-0.18	-8.40	8	3	-.010
28	22	RT	+0.67	-10.00	6	4	-.072	9	19	NH	-0.18	-9.50	8	3	+0.003
								9	20	RT	-0.07	-8.00	8	4	-.029
Aug. 1	22	JR	+0.61	-11.25	7	5	-.059	9	20	NH	-0.07	-9.00	8	4	-.030
2	21	RT	+0.99	-10.40	5	4	-.074	10	18	JR	+0.19	-9.40	8	2	-.026
2	22	RT	+0.98	-11.10	6	3	-.063	10	18	AC	+0.19	-10.00	8	2	-.009
8	21	JR	+0.67	-11.50	7	3	-.023	10	19	JR	+0.70	-7.90	7	4	-.066
8	22	JR	+0.44	-10.00	6	4	-.035	10	19	AC	+0.70	-9.25	7	4	-.035
10	23	JR	+0.57	-11.60	9	3	-.008	11	19	RT	0.00	-7.70	9	3	-.043
12	21	RT	+0.36	-10.60	7	5	-.015	11	20	RT	-0.12	-8.10	8	4	-.022
13	22	RT	+0.61	-10.00	9	3	-.020	11	20	NH	-0.06	-9.10	8	4	-.020
16	21	RT	+0.84	-10.00	7	5	-.051	11	21	NH	+0.20	-8.00	7	4	-.014
17	22	JR	+0.92	-10.75	9	3	-.058	12	19	AC	+0.29	-9.00	6	3	-.014
17	22	PW	+0.92	-11.00	9	3	-.069	12	19	PW	+0.29	-9.00	6	3	-.044
20	22	RT	-0.29	-9.45	8	3	-.094	15	19	JR	+0.08	-10.00	7	3	-.013
20	22	PW	-0.29	-9.55	8	3	-.116	15	19	PW	+0.08	-10.00	7	3	+0.025
22	22	AC	+0.02	-9.30	9	3	-.088	15	20	JR	+0.36	-9.00	6	4	-.034
22	22	PW	+0.02	-10.00	8	3	-.079	15	20	PW	+0.36	-9.30	6	4	-.004
23	20	JR	+0.13	-11.15	6	6	-.091	16	19	RT	+0.21	-9.25	8	4	+0.017

TABLE I. - SUMMARY OF OBSERVATIONS MADE AT GREENWICH WITH THE BAMBERG BROKEN TRANSIT
FOR THE DETERMINATION OF CLOCK CORRECTIONS

Date	U.T.	Observer	Level	Azimuth	No. of Stars		Residual	Date	U.T.	Observer	Level	Azimuth	No. of Stars		Residual
					South	North							South	North	
1951	h		"	"			s	1951	h		"	"			s
Oct. 16	19	NH	+0.21	- 9.30	7	4	+ .014	Nov. 13	19	NH	+0.20	- 9.10	8	4	-.028
16	20	RT	-0.06	-10.00	8	3	+ .019	14	17	JR	+0.44	-11.15	6	3	-.012
16	20	NH	-0.06	-10.00	8	3	+ .027	14	17	AC	+0.44	-11.55	6	3	-.024
17	19	AC	+0.56	- 8.00	7	3	-.094	14	18	JR	+0.85	- 9.10	7	3	-.067
17	20	AC	+0.57	- 9.50	7	4	-.058	14	18	AC	+0.85	-11.45	7	3	-.031
18	21	RT	+0.24	- 7.75	7	4	-.030	15	20	RT	+0.13	-10.00	8	4	-.026
18	21	NH	+0.24	- 6.40	7	4	-.070	19	19	PW	+0.89	-10.45	7	3	-.020
19	19	AC	+0.26	- 8.10	5	5	-.004	21	19	JR	+0.34	-10.00	10	2	+ .010
19	19	PW	+0.26	- 9.30	5	5	+ .006	21	20	JR	+0.54	-10.75	8	4	+ .035
19	21	AC	+0.24	- 8.20	5	5	-.006	21	21	AC	+1.09	- 8.90	6	4	-.044
19	21	PW	+0.24	- 8.70	5	5	-.009	21	22	AC	+1.39	- 9.55	5	5	-.034
22	19	PW	+0.56	-11.00	8	3	+ .006	26	17	JR	-1.09	- 9.65	8	4	+ .020
22	21	PW	+0.55	-11.30	7	5	-.003	26	17	PW	-1.09	- 9.15	8	4	+ .035
23	18	NH	-0.48	-10.00	9	3	-.009	26	18	JR	-0.84	- 8.85	8	4	+ .026
23	19	RT	-0.57	- 9.50	8	4	-.018	26	18	PW	-0.84	- 8.60	8	4	+ .028
23	20	NH	-0.61	-10.00	8	4	-.024	28	23	JR	-0.69	- 9.00	9	3	-.021
23	20	RT	-0.61	-10.00	7	4	-.007	28	23	AC	-0.69	- 8.55	9	3	-.040
24	21	AC	-0.54	-11.00	6	5	-.029	29	21	RT	-0.58	- 7.50	8	4	-.017
25	17	NH	-0.15	-11.25	9	3	-.021	29	21	AC	-0.58	- 7.90	8	4	-.066
25	19	NH	-0.17	-11.65	8	4	+ .024	Dec. 1	17	NH	-0.61	-10.00	7	5	+ .005
30	22	RT	-0.04	-10.70	4	4	-.035	1	19	NH	-0.68	- 8.95	8	4	+ .038
31	20	AC	+0.49	-11.25	6	3	-.022	6	17	RT	-0.84	- 8.90	8	4	-.003
31	21	AC	+0.67	-10.50	7	3	-.089	6	17	NH	-0.84	- 8.75	8	4	-.019
Nov. 1	17	RT	+0.21	-10.70	9	3	+ .009	6	18	RT	-0.59	- 8.25	8	4	-.003
1	17	NH	+0.21	-10.90	9	3	+ .014	6	18	NH	-0.59	- 8.20	8	4	-.003
1	19	RT	+0.12	-10.00	9	3	-.009	10	19	JR	-0.60	- 8.50	6	4	-.011
1	19	NH	+0.12	-10.00	9	3	-.024	10	19	PW	-0.60	- 9.10	6	4	+ .041
2	20	AC	+0.24	-11.20	6	4	-.019	10	20	JR	-0.54	- 8.95	6	4	+ .007
2	20	PW	+0.24	-10.90	6	4	+ .004	10	20	PW	-0.54	- 9.30	6	4	+ .050
2	21	AC	+0.73	-11.10	5	5	-.020	11	17	RT	-1.05	- 8.50	8	4	+ .015
2	21	PW	+0.73	-10.90	5	5	-.006	11	17	NH	-1.05	- 8.70	8	4	+ .014
3	18	NH	+0.91	-11.00	9	3	-.010	12	19	AC	-1.00	- 8.85	8	4	-.044
3	19	NH	+0.75	-10.75	8	4	-.010	19	22	JR	-1.46	- 9.40	8	4	-.027
7	17	JR	+0.09	-11.35	8	2	-.008	19	22	AC	-1.46	-11.00	8	4	+ .008
7	17	AC	+0.09	-12.20	8	2	+ .012	26	17	RT	-0.21	- 6.70	9	3	-.056
7	18	JR	+0.06	-11.40	6	4	+ .014	27	20	JR	-0.45	- 9.00	8	4	+ .022
7	18	AC	+0.06	-12.80	6	4	+ .012	29	19	JR	-0.03	- 8.60	8	3	+ .018
13	19	RT	+0.20	- 9.00	8	4	-.028	29	20	JR	+0.08	- 8.90	7	5	+ .035

TABLE I. - SUMMARY OF OBSERVATIONS MADE AT GREENWICH WITH THE REVERSIBLE SMALL TRANSIT
FOR THE DETERMINATION OF CLOCK CORRECTIONS

Date	U.T.	Observer	Level		Azimuth	No. of Stars		Residual	Date	U.T.	Observer	Level		Azimuth	No. of Stars		Residual
			From	To		South	North					From	To		South	North	
1951	h		"	"	"			s	1951	h		"	"	"			s
Jan. 3	16.7	JP	+0.02	-0.15	+ 3.40	4	4	+ .036	Mar. 2	18.3	JP	+0.19	-0.36	-10.00	5	5	- .006
3	20.3	JP	+0.03	+0.32	+ 2.69	5	5	+ .016	2	19.4	JP	-0.22	-0.76	-11.23	5	5	+ .037
9	19.0	CH		-1.01	- 0.76	6	6	+ .032	2	21.5	CL	-0.40	-0.71	-10.00	4	4	- .010
13	17.4	JP	-0.44	-0.69	- 0.20	6	6	+ .023	6	21.5	CL	+0.67	+0.78	- 9.31	6	6	- .040
13	20.4	CH		-0.92	- 0.17	6	6	+ .013	7	18.1	CH	+1.43	+0.88	- 9.69	5	5	+ .012
15	17.0	JP	-1.19	-1.37	- 0.42	6	6	+ .044	7	21.0	PC	-0.13	+0.19	-10.62	5	5	+ .052
15	20.0	JP	-0.83	-1.00	- 1.82	5	5	- .002	7	21.9	PC	+0.02	+0.31	- 9.05	5	5	- .006
17	17.2	JP	+0.06	+0.40	+ 2.65	4	5	+ .016	12	18.6	CL	+0.08	-0.20	0.00	5	5	+ .001
18	19.9	CH	+0.26	+0.61	0.00	6	5	+ .013	15	18.3	CH	+0.93	+0.18	+ 0.29	4	4	+ .066
18	20.6	PC	+0.35	+0.93	+ 0.20	6	6	+ .037	15	20.5	PC		-0.35	0.00	2	4	- .004
20	22.1	CH	+0.90	+0.80	+ 1.40	3	4	- .013	20	18.5	CL	-0.80	-1.21	+ 0.87	4	4	- .021
22	20.6	CH		+1.14	+ 0.65	6	6	+ .015	20	20.6	JP	-1.31	-2.08	- 1.10	4	5	+ .029
27	17.9	CL	+1.20	+1.02	+ 2.40	6	6	- .020	24	19.7	CH	-2.17	-2.35	- 2.35	6	4	+ .016
30	16.8	CH	-0.67	-1.17	+ 4.57	6	6	+ .016	27	19.6	CH	+0.32	+0.18	- 2.56	6	6	+ .008
30	17.8	CH	-1.07	-1.42	+ 4.50	6	6	- .006	27	21.2	PC	+0.02	+0.30	- 1.72	6	6	+ .013
31	17.0	JP	-1.34	-1.68	+ 3.21	6	6	+ .013	28	20.9	JP		-0.46	- 1.41	4	3	- .022
31	18.7	CL	+0.87	+1.46	+ 4.44	6	6	- .015	30	18.9	JP	+0.33	-0.53	- 1.40	6	6	- .005
31	19.9	JP		+0.75	+ 2.84	5	5	+ .069	30	21.1	CL		-0.77	- 1.00	6	6	+ .022
Feb. 1	20.3	PC	+1.02	+1.39	+ 4.09	6	6	- .042	31	20.4	PC	-0.98	-0.76	- 0.64	5	5	- .026
5	19.8	CH	+0.25	+0.53	+ 2.75	5	5	+ .035	31	21.5	PC	-0.84	-0.57	- 1.59	5	5	- .021
5	19.9	PC	+0.25	+0.59	+ 2.20	5	5	+ .059	Apr. 2	22.2	PC	-1.69	-1.57	- 2.92	5	5	- .009
5	21.2	PC	+0.54	+0.82	+ 1.70	4	3	+ .091	2	23.1	PC	-1.65	-1.46	- 4.36	5	5	+ .051
5	21.3	CH	+0.54	+0.93	+ 2.22	5	5	+ .065	3	21.8	CL		-1.28	- 1.88	5	5	- .032
6	18.2	JP	+1.21	+0.73	+ 3.15	6	4	+ .006	4	19.5	CH	-0.02	-0.24	- 2.50	6	6	- .023
6	21.3	CL	+0.73	+0.93	+ 2.31	6	6	- .017	4	20.9	PC	-0.22	-0.73	- 2.50	5	5	- .047
9	17.0	CH	+0.17	+1.48	+ 4.10	5	5	+ .012	4	21.7	PC	-0.47	-0.89	- 2.00	5	5	+ .011
9	17.9	CH	+1.46	+1.24	+ 4.00	5	4	+ .001	5	19.6	PC	-0.08	+0.34	- 2.10	6	6	- .042
9	20.4	PC	+1.23	+1.40	+ 1.86	6	6	+ .061	5	21.0	JP	-0.23	-0.48	- 2.70	6	6	- .027
12	17.1	JP	+1.99	+1.69	+ 4.48	6	6	+ .007	11	19.3	JP	-1.00	-2.23	- 0.80	5	5	+ .029
12	18.7	CL		-2.07	+ 3.75	6	6	- .031	11	21.3	CL		-1.88	- 1.42	5	5	- .004
12	20.5	JP		-0.86	+ 3.59	6	6	+ .028	13	22.0	CL	-0.76	-0.43	- 2.56	5	5	- .034
15	17.3	CH	+0.62	-0.04	+ 6.10	6	6	+ .031	14	21.2	CH	-0.61	-0.11	- 2.35	6	6	+ .007
15	18.7	CH	+0.13	-0.34	+ 4.80	5	5	+ .051	16	20.6	CH	-0.51	-0.73	- 1.50	5	5	+ .020
15	21.0	PC	-0.69	-0.83	+ 3.64	5	5	+ .068	16	22.0	PC		-0.49	- 1.45	6	5	- .032
15	22.1	PC	-0.77	-0.92	+ 4.00	5	5	+ .029	16	23.1	PC		-0.49	- 2.08	4	4	.000
16	20.6	JP	-0.90	-1.10	+ 5.26	6	6	+ .014	17	19.3	JP	+0.23	-1.10	0.00	6	6	- .010
16	22.3	CL	-0.81	-0.98	+ 5.60	4	4	- .070	17	21.3	CL	-1.57	-1.20	- 1.85	6	6	- .044
17	19.2	CH	-0.77	-0.18	+ 3.15	5	5	+ .020	19	19.6	JP	-0.47	-1.76	- 2.85	5	5	+ .005
19	17.6	JP		-0.58	+ 5.14	6	6	+ .027	19	21.1	CL		-1.60	- 3.54	5	5	- .004
19	18.6	JP		-0.58	+ 4.97	5	5	.000	20	20.1	CH	+1.24	-0.04	- 2.54	6	6	+ .003
19	20.1	CH		-0.35	+ 3.72	6	6	- .013	20	21.3	PC	+0.35	+0.17	- 2.78	5	5	- .005
19	21.2	CH		-0.35	+ 4.41	5	5	- .024	20	22.3	PC	+0.17	0.00	- 3.05	5	5	+ .002
20	18.4	CL	-0.91	-1.24	+ 3.70	4	4	+ .034	21	19.7	CL	-1.28	-1.82	- 3.81	2	5	- .006
21	18.5	CH	-1.33	-1.46	-16.27	5	5	+ .026	23	19.5	JP	-0.63	-1.38	+ 0.76	6	6	- .012
21	19.4	CH	-1.41	-1.58	-16.23	5	5	+ .045	23	21.0	CL	-1.44	-1.80	- 2.51	6	6	+ .002
21	20.4	PC		-1.68	-16.50	5	5	+ .075	24	19.5	CH	-1.71	-1.83	- 0.50	5	5	- .044
21	21.7	PC		-1.68	-15.95	5	5	+ .042	24	20.1	CH	-1.79	-1.91	- 1.70	5	5	- .037
22	17.4	JP	-0.96	-0.69	-16.00	4	3	+ .009	24	21.5	PC	-1.96	-2.10	- 2.95	6	4	+ .007
22	21.0	CL	-1.48	-0.98	-18.16	6	6	- .029	24	22.3	PC	-2.07	-2.21	- 3.75	4	6	+ .025
23	17.4	CH	-0.47	-0.96	-15.25	5	5	+ .005	25	19.4	JP	+0.38	-0.97	- 4.78	5	5	- .017
23	18.5	CH	-0.62	-1.39	-16.54	5	4	+ .036	25	21.0	CL	-1.64	-1.03	- 7.34	6	6	+ .053
23	20.2	PC	-0.98	-1.44	-17.39	5	5	+ .045	27	19.6	JP	+1.94	+1.33	- 4.12	5	5	- .026
23	21.2	PC	-1.18	-1.69	-17.40	5	5	+ .051	27	20.8	CL	+1.13	+0.70	- 5.22	4	4	- .012
27	18.5	JP	-0.77	-1.24	-16.80	5	5	- .025	May 2	19.5	CH	-0.77	-2.57	- 5.33	6	6	- .046
27	22.6	CH		-1.75	-17.73	6	5	+ .034	2	21.5	PC	-2.18	-2.92	- 8.50	6	6	+ .021
27	23.4	CH		-1.75	-18.21	6	6	+ .019	4	19.6	CH	-0.68	-2.00	- 5.60	5	4	+ .013
28	18.8	JP		+0.53	-15.64	6	6	+ .043									

TABLE I. - SUMMARY OF OBSERVATIONS MADE AT GREENWICH WITH THE REVERSIBLE SMALL TRANSIT
FOR THE DETERMINATION OF CLOCK CORRECTIONS

Date	U.T.	Observer	Level		Azimuth	No. of Stars		Residual	Date	U.T.	Observer	Level		Azimuth	No. of Stars		Residual
			From	To		South	North					From	To		South	North	
1951	h		"	"	"			s	1951	h		"	"	"			s
May 4	23.2	PC	-2.88	-3.22	-7.90	6	6	+0.096	Aug. 23	20.7	JP	+0.56	-0.08	+3.30	6	6	-.013
5	20.2	JP	-1.04	-1.98	-6.67	5	5	-.012	29	19.5	JP	+0.24	-0.37	+5.00	4	4	+0.054
10	19.9	CH	-0.14	-3.06	-3.00	5	5	+0.098	30	20.2	PC	+0.83	+1.53	+3.30	6	6	+0.042
11	20.3	PC	-0.25	-2.45	-0.85	6	6	-.007	31	20.2	CL	+1.51	+1.87	+4.37	6	6	+0.042
17	20.6	JP		-0.61	+1.20	6	5	-.008									
21	20.4	JP	-0.36	-1.43	-1.50	6	6	-.012	Sept. 8	19.7	CL	-1.07	-1.77	+2.35	6	6	-.005
22	20.4	PC		+0.37	0.00	6	6	-.007	12	21.5	CL	-1.59	-1.88	0.00	4	4	+0.040
23	21.2	CL	-1.26	-1.62	-1.00	5	5	+0.069	13	21.3	CH	-0.87	-0.37	+0.66	5	5	-.005
24	20.7	CH	+0.12	-0.11	-2.25	6	6	+0.038	14	19.0	JP	+0.55	+0.23	+3.47	6	6	-.029
25	20.8	JP		+0.41	-1.38	6	6	-.013	15	20.2	PC	+1.27	-0.66	+4.22	5	6	-.015
28	20.8	CH	+0.98	+0.01	0.00	5	5	+0.035	17	19.7	PC	-0.78	+0.13	+5.09	6	6	+0.026
29	21.0	JP	+0.77	-0.12	+1.96	5	4	+0.014	19	22.7	CH	-0.85	-0.69	+3.97	6	6	+0.014
30	22.2	PC		+0.78	-0.60	6	6	+0.057	20	20.2	CL	-0.57	-1.08	+3.66	6	6	+0.005
31	20.4	CL	+1.00	-0.47	+1.80	6	6	+0.029	21	19.2	PC	+0.87	+0.03	+6.30	6	6	-.051
									21	21.2	CH	-1.01	-0.78	+5.30	6	6	+0.017
June 1	20.6	CH	+1.08	-0.17	+1.65	6	6	+0.024	24	20.7	CL	-2.03	-2.22	+4.20	4	3	+0.053
1	22.0	PC	-0.31	-1.11	-0.76	6	6	+0.057	26	18.9	PC	-2.04	-2.32	+3.05	6	6	+0.002
2	20.8	JP	+0.64	-0.43	+1.67	6	6	+0.026	28	20.2	CL		-1.99	+3.10	6	6	+0.025
4	20.9	CL	+1.01	-0.51	+1.96	6	6	+0.043	29	21.6	CH		-1.17	+4.10	6	6	+0.026
5	20.5	CH	+1.28	+0.34	+3.00	6	6	+0.059									
6	20.5	JP	+0.07	-0.30	+1.20	6	6	+0.019	Oct. 6	18.3	JP	-1.08	-2.23	+5.00	7	5	-.024
7	20.5	PC	+3.04	+0.97	+2.13	6	6	+0.031	8	17.8	JP	+0.54	-1.14	+6.88	6	6	-.009
8	20.4	CL	+1.44	+0.33	-0.37	6	6	+0.041	9	17.9	CH	-0.18	-0.77	+6.90	6	6	-.011
9	21.1	CH		+0.25	-1.40	6	6	+0.042	10	20.2	CL		+0.26	+0.95	6	6	+0.071
15	20.8	PC	+2.22	+1.18	+0.86	5	5	+0.062	11	17.6	JP	+0.43	-0.31	+12.33	6	6	-.037
15	22.0	CH	+1.63	+1.86	+1.05	5	5	+0.044	12	18.0	PC	+0.62	0.00	+11.25	5	6	+0.015
16	21.2	CL	+2.12	+1.14	+0.83	6	6	+0.041	16	18.0	JP	-1.94	-2.18	+12.20	6	5	+0.005
18	20.8	JP		+1.31	+1.35	6	6	+0.015	17	18.0	PC	-0.82	-1.04	+13.98	6	3	+0.012
18	22.1	PC		+1.31	+0.50	6	6	+0.037	17	22.0	CH	-1.76	-2.48	+13.16	6	6	-.021
19	20.6	CL	+0.80	+1.12	-0.90	6	6	+0.092	19	20.3	PC	-1.95	-2.41	+12.09	6	6	-.017
20	20.8	CL	+0.76	-0.22	-1.55	6	6	+0.058	19	21.4	CH		-2.21	+13.20	6	6	-.028
29	21.0	PC	+0.37	-0.58	-0.57	6	6	+0.041	22	18.2	JP	-0.61	-0.82	+13.60	5	5	+0.044
30	20.6	JP	+1.38	+0.10	+0.12	6	6	+0.027	22	21.1	CL	-1.17	-0.81	+13.06	6	6	+0.022
									23	18.1	CH	-0.09	+0.23	+15.41	5	5	+0.035
July 3	21.2	PC	-0.04	-0.47	-1.55	5	4	-.029	23	20.8	CL		-1.04	+14.94	6	6	+0.031
4	21.5	CL	+0.42	+0.16	-1.96	6	6	+0.011	24	18.0	JP	-0.28	-0.98	+16.10	6	6	+0.037
6	21.2	CL	+1.00	+0.76	-1.04	6	6	+0.022	25	17.6	CH	+1.75	-0.30	+16.24	6	6	+0.035
13	21.8	PC	+0.05	+1.13	-1.23	5	5	+0.015	25	19.4	PC	-0.32	-1.34	+14.90	6	6	+0.030
16	20.8	JP	-0.08	-0.70	+0.72	6	6	+0.018	31	20.1	PC	-2.22	-1.92	+0.70	5	5	+0.076
17	21.5	PC	-1.40	-1.28	-1.28	6	6	+0.003									
19	20.8	JP	+1.45	+0.44	-0.85	6	6	+0.009	Nov. 1	19.0	PC		-1.19	+3.70	6	6	-.031
21	21.0	CL	+0.89	+0.40	-0.85	6	6	+0.038	1	21.1	CL	-2.00	-2.17	+3.25	6	6	+0.004
28	20.9	CL	-0.90	-1.44	-0.70	4	4	+0.018	2	18.4	JP	-1.21	-1.63	+2.88	5	5	+0.040
29	21.2	CH	+1.24	+0.04	+0.25	5	5	+0.044	2	19.5	CH		-1.19	+2.72	6	6	-.007
29	21.8	CH	+0.74	+0.11	-0.55	5	5	+0.042	3	17.4	CL	-1.02	-1.33	+2.85	6	6	+0.089
30	20.1	CL	+1.76	+0.14	+3.84	3	2	+0.005	6	19.4	CH	-3.47	-3.18	+3.26	6	6	-.009
									7	17.8	JP	-0.22	-1.12	+1.33	6	6	+0.018
Aug. 1	20.9	CL	+1.02	+0.61	+1.74	4	5	+0.057	8	19.5	CH	-1.11	-0.50	+0.54	6	6	+0.031
2	20.5	PC	+2.57	+1.83	-4.25	6	6	+0.065	8	21.2	PC	-0.37	-1.05	+2.22	4	4	-.019
2	21.9	CH	+1.80	+1.93	-4.16	5	5	+0.014	12	17.3	CH		-0.71	+1.17	4	3	+0.053
3	20.7	CL	+0.33	-1.93	-2.06	6	6	+0.021	14	18.2	CH	-0.23	+0.22	+2.18	6	6	+0.009
7	19.8	CL	+0.23	-0.13	+4.55	3	2	+0.081	14	19.8	PC		-0.57	+2.05	6	6	+0.051
8	21.2	PC	-0.94	-1.19	+5.30	7	5	+0.017	15	17.1	JP	-0.70	-0.50	+3.75	6	6	+0.007
9	21.4	JP	-1.50	-1.29	+5.34	3	2	+0.040	15	21.1	CL	-1.26	-0.40	+2.50	6	6	+0.026
10	22.0	PC	-1.05	-1.31	+4.96	6	6	-.008	16	21.3	CH	-1.19	-0.54	+3.05	5	5	+0.037
12	20.5	JP	-0.56	-0.88	+5.50	6	6	+0.006	19	17.3	JP		-0.58	+4.75	6	6	+0.015
13	21.6	JP	+0.65	+1.51	+5.10	6	6	-.017	19	20.9	CL	-0.99	-0.61	+4.47	6	5	+0.024
20	21.1	CH	-0.71	-0.19	+2.30	6	6	+0.008	21	18.1	JP	-1.62	-1.01	+4.65	6	6	-.027

TABLE I. - SUMMARY OF OBSERVATIONS MADE AT GREENWICH WITH THE REVERSIBLE SMALL TRANSIT
FOR THE DETERMINATION OF CLOCK CORRECTIONS

Date	U.T.	Observer	Level		Azimuth	No. of Stars		Residual	Date	U.T.	Observer	Level		Azimuth	No. of Stars		Residual
			From	To		South	North					From	To		South	North	
1951	h		"	"	"			s	1951	h		"	"	"			s
Nov. 21	21.0	CL	-1.47	-1.59	+ 3.60	6	6	-.012	Dec. 11	21.0	CL	-0.14	-0.03	+13.71	6	6	+.013
26	17.4	CH	-1.00	-0.65	+ 4.26	6	6	+.061	12	21.9	PC	-0.11	-0.50	+12.80	6	6	+.044
26	20.0	PC	-0.62	-0.45	+ 6.34	6	5	-.059	13	16.8	JP	+1.88	+0.82	+11.25	6	6	-.006
28	21.4	PC	-1.99	-1.70	+ 3.17	6	6	+.042	14	19.0	CH	+0.20		+12.90	6	5	-.008
29	21.2	CL	-0.78	-0.50	+ 5.20	5	6	+.010	14	20.0	PC	+0.20		+13.20	6	5	-.015
Dec. 1	16.8	CL	-1.90	-1.98	+ 5.00	6	6	+.018	15	19.1	PC	-0.08	-0.66	+11.92	5	6	-.021
6	17.7	CH	+1.15		+ 3.83	6	5	+.018	17	16.5	JP	+0.54		+ 9.20	4	4	+.031
6	19.7	PC	+0.74		+ 3.26	6	6	+.089	19	21.7	CL	+0.49	+0.62	+ 8.84	6	6	+.033
7	17.3	JP	+1.26	+1.00	+13.10	6	5	+.026	21	17.6	JP	+1.49		+11.63	3	3	-.046
10	17.4	CH	+0.57	+0.22	+12.40	6	6	+.005	27	16.9	JP	+0.87	+0.68	+10.55	6	6	-.011
10	20.0	PC	+0.05	+0.51	+12.35	6	6	+.018	27	21.1	CL	+0.48	+0.34	+10.54	6	6	+.027
11	16.5	JP	+1.36	+0.88	+15.23	6	6	+.009	29	17.3	CL	+0.01	+0.51	+10.80	6	6	+.025

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TABLE II. - TIMES OF RECEPTION OF RADIO TIME SIGNALS RUGBY 16.00 kc/s 10 00 U.T.

Day of Month	January	February	March	April	May	June	July	August	September	October	November	December
1	006	998	985	980	009	004	982	950	932	996	001	039
2	003	998	984	982	009	001	981	950	931	996	001	038
3	001	998	977	983	010	000	979	949	930	997	002	039
4	001	998	985	983	009	994	978	950	929	997	004	038
5	000	997	984	985	010	998	977	948	927	996	006	040
6	000	997	984	986	010	996	975	948	926	996	006	040
7	000	998	984	987	011	995	973	949	924	995	007	039
8	000	996	983	988	011	993	972	948	923	995	009	038
9	999	997	982	989	012	992	971	947	922	994	010	038
10	000	996	981	989	013	991	969	-	922	995	011	037
11	999	995	981	991	014	990	968	947	922	-	012	037
12	000	994	979	992	014	988	966	946	921	995	013	036
13	999	994	980	991	015	986	964	946	921	995	014	036
14	999	996	978	995	016	985	963	945	921	995	014	034
15	998	996	978	996	017	983	961	945	920	002	016	033
16	998	994	977	996	017	982	960	944	920	995	017	032
17	998	993	977	998	017	980	959	943	919	995*	018	032
18	997	991	976	998	016	980	958	943	919	995	020	030
19	998	990	977	999	016	980	958	942	998	994	020	031
20	998	990	976	001	016	978	958	941	-	995	023	032
21	999	989	976	001	016	979	956	941*	997*	996	024	031
22	999	988	976	002	015	978	956	940*	996*	997	024	031
23	999	989	978	003	014	975	955	940	995*	998	025	031
24	998	989	977	005	014	976	955	939*	995*	998	029	031
25	998	987	977	005	013	976	954	937	994	999	028	031
26	998	986	978	007	012	975	953	937*	995	999	030	030
27	999	986	979	008	010	975	953	936	995	000	-	031
28	998	986	978	008	010	973	952	934	995	999	033	030
29	998		979	009	008	973	952	935	994	000	034	031
30	998		978	009	006	970	952	934	994	000	036	031
31	999		980		005		951*	932		000		030

* GBZ

TABLE II. - TIMES OF RECEPTION OF RADIO TIME SIGNALS RUGBY GBR 16.00 kc/s 18 00 U.T.

Day of Month	January	February	March	April	May	June	July	August	September	October	November	December
1	005	999	985	981	009	003	981	-	931	995	000	037
2	004	998	985	983	009	001	980	950	931	996	001	038
3	002	998	985	984	010	000	978	949	930	997	002	038
4	000	998	984	984	009	999	977	949	928	996	005	040
5	000	998	984	985	010	998	975	948	927	996	006	039
6	000	997	984	987	010	996	974	948	926	996	007	039
7	999	995	983	987	010	995	973	948	924	996	008	040
8	000	996	983	988	-	993	971	948	923	995	009	038
9	000	996	982	989	013	992	970	947	922	994	011	038
10	000	995	981	990	012	990	969	947	922	995	011	038
11	999	994	981	992	014	989	967	946	921	994	013	036
12	-	994	979	993	014	987	966	946	921	995	013	035
13	999	996	978	994	015	986	964	945	921	995	013	036
14	999	996	979	995	015	984	962	-	921	995	014	034
15	999	996	978	996	016	983	961	944	920	995	017	032
16	998	994	977	996	017	981	959	944	919	995	018	031
17	998	992	976	997	016	981	958	943	919	996	018	030
18	998	992	976	998	016	980	958	942	918	996	021	030
19	998	989	-	000	016	982	959	942	999	995	021	031
20	998	988	976	001	016	978	957	941	998*	995	023	031
21	999	989	975	002	015	977	957	941*	996*	996	023	031
22	997	988	976	003	015	977	956	940	996*	997	024	030
23	999	988	977	004	014	976	955	940	996*	997	027	031
24	998	989	978	005	013	976	955	938	995	998	029	031
25	999	986	978	006	012	976	954	938	993	999	029	031
26	998	986	979	007	011	975	953	937	995	999	031	031
27	998	987	980	008	010	975	953	935	994	999	031	031
28	998	986	979	008	009	973	952	935	995	003	034	031
29	998		978	009	007	972	952	934	994	999	034	031
30	998		979	009	005	970	952	933	993	000	037	031
31	999		979		004		951	932		001		029

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TABLE II. - TIMES OF RECEPTION OF RADIO TIME SIGNALS LEAFIELD GIA 19,640 kc/s 10 00 U.T.

Day of Month	January	February	March	April	May	June	July	August	September	October	November	December
1	989	986	972	968	999	992	968	934	921	985	991	-
2	988	987	961	969	997	988	966	936	921	985	991	034
3	986	986	958	967	997	986	965	935	918	986	994	-
4	-	987	967	967	997	980	962	937	918	984	995	033
5	986	985	971	970	999	984	961	934	915	984	997	037
6	987	985	971	971	002	983	961	934	913	984	997	036
7	987	985	970	-	001	982	960	935	911	984	998	-
8	985	983	969	972	002	979	959	934	911	984	001	033
9	983	987	966	973	001	979	957	934	909	981	002	034
10	986	981	966	974	002	978	955	-	909	983	004	030
11	985	982	987	975	003	976	954	933	909	-	005	033
12	986	979	967	980	004	974	953	933	909	984	006	031
13	985	980	963	979	005	973	949	933	909	982	008	030
14	985	981	970	984	006	971	949	932	908	992	007	028
15	984	984	-	985	005	970	947	932	907	986	006	026
16	985	980	967	985	007	969	946	931	907	985	008	025
17	985	979	970	981	005	966	945	930	906	966	010	026
18	983	977	967	983	004	966	943	930	906	985	016	023
19	984	976	967	983	006	964	945	930	986	984	020	023
20	984	976	966	984	005	964	944	929	-	986	021	025
21	984	975	-	985	003	964	944	909	966	988	023	-
22	985	974	960	987	002	966	942	908	975	987	019	025
23	985	975	963	-	004	963	941	928	963	990	028	026
24	984	974	962	989	003	962	940	905	965	988	-	035
25	984	973	-	993	002	963	940	925	981	989	034	024
26	984	973	964	994	999	961	939	903	982	990	037	030
27	-	972	963	996	998	959	938	922	983	991	-	024
28	985	969	978	996	997	958	938	921	983	990	042	024
29	985		963	997	995	958	940	923	982	991	039	024
30	986		962	997	995	955	938	921	987	990	030	024
31	984		967		991		916	921				023

TABLE II. - TIMES OF RECEPTION OF RADIO TIME SIGNALS RUGBY GIC 8,640 kc/s 10 00 U.T.

Day of Month	January	February	March	April	May	June	July	August	September	October	November	December
1	001	992	978	975	003	999	974	940	926	989	998	036
2	000	993	979	977	002	996	975	943	926	989	998	034
3	995	993	973	977	004	992	974	945	924	991	997	034
4	994	992	982	981	002	987	970	943	924	990	998	038
5	997	993	981	988	004	991	970	941	920	992	006	036
6	998	994	980	983	007	988	969	941	918	989	999	035
7	998	992	980	996	009	990	967	942	918	987	004	-
8	995	991	980	984	005	986	964	941	917	989	003	035
9	995	-	983	984	008	985	965	938	914	992	007	033
10	999	991	978	987	008	990	964	-	915	993	007	031
11	993	988	978	988	011	983	960	939	920	-	006	034
12	994	988	978	988	012	982	960	937	914	989	007	034
13	999	989	979	989	011	979	956	939	915	989	010	034
14	995	991	973	990	011	979	956	938	914	990	010	031
15	994	995	972	993	013	975	954	938	914	996	014	027
16	994	988	970	990	013	974	952	936	915	990	012	026
17	993	989	972	997	011	973	951	936	913	975	013	027
18	992	985	970	991	009	972	950	936	912	990	019	025
19	000	989	974	997	013	971	951	934	991	989	023	026
20	994	984	971	992	011	970	951	935	-	991	027	026
21	994	985	968	996	010	972	957	914	973	991	021	027
22	996	982	973	995	010	969	952	913	979	992	026	025
23	997	983	973	001	012	968	948	933	972	995	024	030
24	996	983	975	996	009	966	945	911	970	995	025	029
25	998	982	-	997	008	967	950	929	988	995	035	029
26	001	981	989	001	005	967	947	909	989	995	030	028
27	998	981	972	012	003	964	946	930	990	000	-	026
28	997	978	974	001	003	963	942	928	988	995	029	025
29	993		977	002	003	962	944	929	987	996	036	024
30	993		971	001	000	961	944	927	990	996	033	024
31	992		974		000		926	926		997		026

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TABLE II. - TIMES OF RECEPTION OF RADIO TIME SIGNALS RUGBY GKU3 12,455 kc/s 10 00 U.T.

Day of Month	April	May	June	July	August	September
1	978	003	999	975	943	926
2	979	-	996	976	946	926
3	982	003	992	-	942	923
4	982	-	987	971	943	925
5	990	005	991	974	941	923
6	989	-	991	973	941	920
7	996	007	990	967	943	918
8	987	008	986	964	940	923
9	-	007	985	959	938	-
10	993	008	995	961	-	917
11	992	010	984	960	941	916
12	997	012	981	959	940	918
13	986	012	981	956	938	916
14	990	015	980	956	937	915
15	991	013	975	954	938	915
16	993	-	-	953	938	915
17	990	014	972	951	937	915
18	991	013	972	949	936	914
19	-	012	971	950	935	993
20	998	013	970	950	935	-
21	995	013	-	949	915	974
22	995	009	970	952	913	976
23	998	009	969	947	934	971
24	002	011	968	945	911	972
25	000	-	-	953	931	989
26	003	006	967	946	909	989
27	001	006	966	945	929	991
28	002	006	965	948	927	990
29	007	003	964	944	930	988
30	003	004	970	944	928	990
31		003		927	927	

TABLE II. - TIMES OF RECEPTION OF RADIO TIME SIGNALS

Day of Month	RUGBY GIC 8,640 kc/s 18 00 U.T.						RUGBY GKU2 17,685 kc/s 18 00 U.T.					
	January	February	March	October	November	December	April	May	June	July	August	September
1	001	-	980	995	998	031	987	-	-	-	-	-
2	000	000	-	991	000	032	977	-	-	980	943	946
3	001	995	991	995	002	035	982	005	002	-	944	944
4	994	997	983	994	000	034	988	-	-	-	942	-
5	998	998	983	998	007	037	991	-	-	-	941	922
6	008	995	-	996	-	041	990	-	-	981	-	939
7	996	992	-	991	015	034	980	-	006	-	944	-
8	997	-	989	991	017	033	990	-	988	965	942	922
9	997	991	988	989	014	035	982	010	-	-	941	938
10	000	993	980	993	011	028	-	-	987	-	940	925
11	001	991	980	996	015	030	998	011	991	-	945	930
12	-	993	981	992	-	033	998	-	-	-	940	918
13	997	992	975	991	010	032	988	-	978	-	-	-
14	997	-	-	996	010	032	987	-	-	-	-	-
15	997	991	-	992	020	028	-	-	-	954	946	916
16	005	989	971	993	015	027	993	021	976	952	948	-
17	-	993	-	995	021	024	989	-	-	952	-	914
18	-	995	-	999	019	024	990	025	-	-	-	913
19	-	990	-	988	021	026	007	-	-	951	-	-
20	006	988	969	000	024	024	-	-	973	-	-	-
21	000	985	972	993	021	027	993	-	982	949	917	978
22	000	985	968	-	015	023	-	020	-	949	935	977
23	999	988	979	994	032	024	996	022	984	960	-	975
24	995	986	984	000	021	029	-	-	-	-	-	-
25	006	983	973	-	033	024	014	-	-	-	932	991
26	003	983	975	002	039	025	000	023	-	947	932	990
27	997	993	979	997	026	025	011	010	972	-	932	989
28	997	979	976	000	031	027	-	-	966	-	-	-
29	998		971	996	028	023	002	001	971	945	-	996
30	998		973	-	035	033	015	006	-	-	-	008
31	994		972	001		023		997		944	-	

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TABLE II. - TIMES OF RECEPTION OF RADIO TIME SIGNALS RUGBY GKU3 12,455 kc/s 18 00 U.T.

Day of Month	January	February	March	April	May	June	July	August	September	October	November	December
1	-	005	994	981	011	999	974	-	927	-	008	032
2	015	005	-	989	007	996	-	944	925	999	010	033
3	001	000	-	992	-	003	968	941	935	000	009	-
4	001	-	-	-	001	994	966	947	928	002	001	034
5	003	005	-	984	003	-	965	944	923	-	012	037
6	-	008	-	987	007	997	966	939	-	001	002	-
7	004	002	-	986	-	998	971	945	-	-	-	-
8	015	002	-	994	-	987	967	948	917	990	013	-
9	010	995	989	989	-	006	967	946	918	997	018	-
10	004	001	984	990	-	984	962	946	917	-	012	044
11	007	994	981	986	-	993	960	945	916	998	016	039
12	-	-	985	992	007	-	959	941	916	998	015	032
13	007	993	987	988	-	984	958	940	-	998	020	-
14	000	003	979	990	008	-	-	-	915	993	-	-
15	008	004	978	-	009	-	964	936	917	-	024	029
16	001	994	974	990	015	-	955	936	914	003	-	025
17	996	997	985	988	-	973	951	942	-	011	032	-
18	-	989	987	992	008	-	948	932	912	001	030	026
19	-	996	-	-	006	-	950	935	995	000	-	031
20	006	998	979	993	-	-	-	-	973	-	023	026
21	-	995	983	000	-	-	956	912	980	003	023	036
22	997	996	-	998	018	-	952	933	973	995	017	026
23	006	993	990	997	021	-	952	934	973	997	-	028
24	005	992	-	-	017	-	942	931	-	005	-	038
25	007	984	-	998	-	-	944	933	987	997	-	030
26	009	-	983	009	002	-	953	930	989	007	038	039
27	007	003	-	003	006	-	956	937	989	010	030	-
28	007	000	992	003	-	-	-	930	990	-	030	-
29	004	-	-	004	007	-	946	934	987	998	-	-
30	007	-	985	008	996	-	953	929	991	-	-	-
31	-	-	986	-	006	-	941	931	-	002	-	-

TABLE II. - TIMES OF RECEPTION OF RADIO TIME SIGNALS RUGBY GBR 16.00 kc/s 10 06 U.T.

Day of Month	January	February	March	April	May	June	July	August	September	October	November	December
1	006	999	985	980	009	004	983	949	932	996	000	039
2	003	998	984	982	010	001	980	950	931	996	000	038
3	999	998	976	983	010	000	979	949	930	997	002	037
4	000	998	984	981	008	994	977	950	929	997	004	037
5	000	998	984	985	010	998	975	948	926	996	006	041
6	000	998	984	987	010	996	975	948	926	996	005	039
7	000	999	984	987	011	995	973	949	924	995	007	039
8	000	996	982	988	011	992	972	949	923	996	009	038
9	999	997	981	989	012	991	971	947	921	994	010	037
10	000	996	980	990	014	991	969	-	921	995	011	036
11	999	996	981	991	015	990	968	947	921	-	012	034
12	000	994	979	992	014	988	967	946	921	996	013	037
13	999	995	980	991	015	986	964	946	921	995	015	035
14	999	996	978	995	016	985	964	945	921	995	014	034
15	998	996	979	996	016	983	962	945	920	995	015	032
16	999	994	977	997	017	982	960	944	919	996	017	031
17	998	994	977	998	017	980	959	943	918	995*	018	030
18	997	991	976	998	016	979	959	943	918	995	021	030
19	998	990	976	999	017	978	958	942	998	994	021	030
20	998	990	976	001	017	977	958	942	-	995	023	032
21	999	989	976	002	016	978	956	941*	998*	996	023	031
22	999	988	977	003	015	978	956	940*	996*	997	024	031
23	999	989	978	003	014	976	955	941	995*	998	025	028
24	998	989	977	005	014	976	955	939*	994*	999	029	031
25	998	987	977	005	013	976	954	937	994	999	027	031
26	998	987	978	007	012	975	953	937*	995	999	029	029
27	999	985	979	008	010	974	953	936	995	001	-	031
28	999	987	978	008	010	973	952	934	995	999	033	030
29	998		978	009	008	972	953	935	994	000	034	031
30	998		978	009	006	970	952	934	994	000	037	031
31	999		980		004		952*	933		000		030

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TABLE II. - TIMES OF RECEPTION OF RADIO TIME SIGNALS RUGBY GBR 16.00 kc/s 18 06 U.T.

Day of Month	January	February	March	April	May	June	July	August	September	October	November	December
1	005	999	985	980	009	003	980	-	931	995	000	035
2	005	997	985	983	009	001	979	950	931	996	000	037
3	003	998	984	983	010	000	978	949	930	996	001	037
4	999	998	984	984	009	999	976	949	927	996	005	038
5	000	998	984	985	010	998	975	948	926	996	006	039
6	000	997	984	987	010	996	974	948	925	996	006	038
7	999	995	983	987	009	995	972	948	924	996	007	038
8	000	995	984	988	-	993	971	948	923	995	009	038
9	999	996	982	989	013	992	970	947	922	994	011	037
10	000	995	981	990	011	990	968	947	922	995	011	035
11	999	994	981	992	014	989	967	946	920	994	013	035
12	-	994	979	993	014	987	966	946	921	995	014	035
13	999	997	977	994	015	985	964	945	921	995	013	035
14	000	997	979	995	015	984	962	-	921	994	014	033
15	999	996	978	996	016	983	961	944	920	994	016	032
16	998	993	977	996	016	980	959	944	918	995	018	031
17	998	992	976	997	016	980	959	943	918	996	017	029
18	998	992	975	998	016	979	958	943	918	996	021	029
19	998	989	977	000	017	980	958	942	997	995	024	031
20	998	988	976	001	016	977	957	941	998*	994	023	030
21	999	989	976	002	015	976	956	941*	996*	996	023	031
22	997	995	975	003	015	977	956	940	996*	998	024	027
23	999	988	977	004	013	975	955	939	996*	997	027	031
24	998	990	978	-	013	976	954	938	995	996	029	031
25	999	986	978	006	012	976	954	938	-	999	028	031
26	998	986	979	006	011	975	954	937	995	999	031	031
27	998	988	980	008	010	975	953	935	994	999	031	031
28	999	986	979	007	009	973	952	935	995	002	034	031
29	998		978	009	007	972	952	934	994	998	033	031
30	998		979	009	005	969	952	933	993	999	036	031
31	998		979		004		951	932		001		029

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TABLE II. - TIMES OF RECEPTION OF RADIO TIME SIGNALS LEAFIELD GIA 19,640 kc/s 10 06 U.T.

Day of Month	January	February	March	April	May	June	July	August	September	October	November	December
1	989	985	972	967	009	992	968	934	921	985	991	039
2	988	985	961	968	997	988	966	936	921	984	991	036
3	986	986	959	967	997	986	965	935	918	986	994	031
4	-	987	967	967	997	980	961	937	918	984	995	031
5	986	985	971	970	999	984	960	934	915	985	997	036
6	987	985	973	971	002	983	960	934	913	984	997	036
7	987	985	971	972	001	982	959	934	911	984	998	032
8	987	983	969	972	-	979	959	934	911	984	000	032
9	984	986	966	973	001	979	957	934	909	981	002	035
10	986	981	-	974	003	979	954	-	909	983	003	031
11	985	981	987	975	003	977	954	933	909	-	000	028
12	986	979	966	979	004	974	953	934	909	984	005	032
13	985	980	963	979	005	973	950	933	909	983	008	028
14	985	981	970	983	006	971	949	931	908	985	007	027
15	984	983	-	985	005	970	948	933	907	985	005	029
16	986	980	967	985	007	969	946	931	907	986	009	024
17	985	979	969	981	005	966	945	930	906	966	010	023
18	983	977	968	981	004	966	943	930	906	985	017	022
19	984	976	967	982	006	964	943	930	985	984	020	022
20	984	976	967	984	005	964	944	929	-	986	019	025
21	984	976	-	985	003	964	944	909	966	989	022	-
22	985	974	960	987	002	966	942	908	966	988	-	026
23	985	975	963	986	004	963	941	928	963	990	023	020
24	984	975	963	989	003	962	940	905	965	989	-	036
25	984	973	963	993	002	962	940	925	981	989	033	023
26	984	973	963	994	999	961	939	903	982	990	037	022
27	-	972	963	996	997	959	938	922	984	991	-	024
28	985	969	978	996	997	958	938	921	983	990	041	024
29	986		962	997	996	958	939	923	982	991	041	024
30	986		963	997	995	955	938	921	980	990	031	024
31	984		968		991		916	920		-		023

TIME SERVICE, 1951.

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TABLE II. - TIMES OF RECEPTION OF RADIO TIME SIGNALS RUGBY GIC 8,640 kc/s 10 06 U.T.

Day of Month	January	February	March	April	May	June	July	August	September	October	November	December
1	002	995	979	975	003	998	974	942	931	990	998	037
2	994	993	980	977	003	994	974	943	925	989	998	034
3	994	992	973	979	004	992	976	946	924	992	997	032
4	994	994	982	979	002	987	969	943	922	991	998	033
5	995	993	981	989	006	991	971	941	920	991	002	036
6	998	994	980	987	006	988	970	941	923	991	999	035
7	997	993	982	-	008	989	967	942	918	988	002	038
8	990	991	979	984	006	987	964	940	916	989	002	035
9	997	993	979	985	008	985	965	938	914	991	005	034
10	999	990	-	988	009	985	962	-	914	990	005	031
11	994	990	978	987	011	985	961	939	915	-	002	036
12	994	989	977	990	014	982	958	937	916	991	008	033
13	998	989	981	988	011	981	957	939	916	990	009	034
14	994	991	973	990	011	980	956	938	914	991	012	030
15	994	994	973	992	013	976	955	940	915	989	015	028
16	995	990	970	991	013	974	952	937	913	992	013	026
17	995	993	973	993	012	972	951	937	913	974	013	025
18	992	985	968	991	011	971	950	936	912	990	019	024
19	999	990	974	990	013	970	950	936	991	990	023	024
20	994	986	970	993	010	970	949	935	-	991	023	026
21	996	985	968	995	011	971	951	914	971	991	022	025
22	996	983	974	995	010	969	950	913	973	993	028	026
23	996	986	975	002	011	967	949	-	968	995	024	021
24	995	983	974	997	010	966	946	910	971	993	025	025
25	997	984	971	998	009	966	953	929	987	995	033	028
26	000	981	996	003	005	968	946	911	994	996	030	029
27	998	981	972	001	004	965	946	928	994	000	-	026
28	997	981	972	000	003	963	942	928	991	993	029	024
29	994		977	003	002	962	943	931	987	997	036	025
30	993		973	001	001	961	944	927	984	995	036	026
31	994		974		999		925	928		998		025

TABLE II. - TIMES OF RECEPTION OF RADIO TIME SIGNALS RUGBY GKU3 12.455 kc/s 10 06 U.T.

Day of Month	April	May	June	July	August	September
1	977	003	000	975	941	933
2	981	-	995	974	943	928
3	981	004	992	-	942	925
4	980	-	987	974	944	925
5	990	007	991	969	941	923
6	996	007	990	969	941	920
7	-	008	989	967	942	918
8	987	007	985	964	941	923
9	-	-	985	968	940	918
10	994	010	986	962	-	917
11	992	011	985	959	940	916
12	994	011	982	958	939	917
13	986	012	980	956	941	916
14	989	012	980	956	938	915
15	995	012	975	954	939	914
16	990	014	-	951	937	915
17	990	014	972	951	936	-
18	990	011	971	950	938	915
19	000	014	970	950	935	993
20	994	014	970	949	935	-
21	992	011	-	949	915	973
22	996	-	970	950	914	972
23	998	012	969	948	934	970
24	001	-	968	953	911	973
25	001	007	-	949	930	989
26	001	009	970	947	910	-
27	001	007	967	946	929	990
28	002	008	965	943	929	990
29	003	006	964	944	930	989
30	004	006	-	944	928	983
31		001		-	928	

TABLE II. - TIMES OF RECEPTION OF RADIO TIME SIGNALS

Day of Month	RUGBY GIC 8,640 kc/s 18 06 U.T.						RUGBY GKU2 17,685 kc/s 18 06 U.T.					
	January	February	March	October	November	December	April	May	June	July	August	September
1	-	-	979	995	997	030	987	-	992	-	-	-
2	001	-	984	991	999	031	977	-	-	978	943	947
3	000	995	982	-	001	035	982	006	001	-	946	946
4	995	998	985	992	000	034	988	-	-	-	944	925
5	999	999	984	999	001	037	989	-	007	-	942	-
6	008	994	-	995	-	039	991	-	-	984	943	-
7	997	991	-	991	005	034	981	-	006	-	942	939
8	997	-	989	989	-	-	989	-	986	967	942	-
9	996	994	987	990	014	035	982	-	-	967	941	938
10	000	993	980	993	012	029	-	-	-	-	940	922
11	002	991	980	996	015	030	996	011	991	-	941	930
12	-	991	978	994	-	033	998	-	985	-	944	917
13	-	992	973	991	009	029	-	-	978	952	-	-
14	997	-	977	994	010	031	987	-	-	-	-	-
15	997	-	-	-	015	026	-	-	-	968	945	916
16	-	989	-	993	017	026	994	019	977	954	950	-
17	-	994	-	994	014	026	-	-	-	953	-	914
18	995	994	970	003	018	024	990	026	-	-	945	913
19	984	986	-	992	025	029	007	-	-	951	-	-
20	007	989	968	999	-	024	992	-	971	-	-	977
21	001	985	972	999	021	026	993	-	982	950	918	978
22	000	996	-	-	014	022	-	018	-	949	934	977
23	998	987	979	994	030	024	996	-	983	-	-	976
24	995	986	986	000	025	029	-	-	970	-	940	-
25	005	982	978	-	034	023	012	-	-	-	932	-
26	003	983	974	002	039	025	999	020	-	947	932	990
27	999	991	-	998	026	025	013	011	977	-	933	989
28	997	979	976	999	031	-	-	-	966	-	-	-
29	996	-	972	995	027	024	-	002	973	947	-	994
30	996	-	973	-	034	032	016	006	-	-	933	-
31	994	-	972	-	-	022	-	998	-	944	-	-

TABLE II. - TIMES OF RECEPTION OF RADIO TIME SIGNALS RUGBY GKU3 12.455 kc/s 18 06 U. T.

Day of Month	January	February	March	April	May	June	July	August	September	October	November	December
1	021	006	995	979	-	999	980	-	-	-	-	032
2	016	-	993	989	008	994	979	944	928	999	-	032
3	004	005	987	991	003	002	978	941	935	000	010	040
4	009	-	-	-	002	993	976	948	923	002	000	-
5	003	005	-	987	003	998	975	-	-	-	012	-
6	-	008	-	987	008	997	974	941	-	999	-	-
7	004	004	-	986	-	998	972	944	-	000	-	-
8	-	003	-	992	-	992	971	949	922	990	014	034
9	-	-	993	-	-	005	970	945	918	998	017	-
10	004	001	986	989	-	984	968	947	916	993	013	042
11	007	000	980	987	-	993	967	940	916	999	016	044
12	-	996	986	992	007	990	966	946	915	993	016	032
13	008	993	-	-	008	990	964	940	-	000	020	-
14	000	003	-	990	008	-	962	-	915	992	-	-
15	008	004	979	-	010	-	961	935	-	-	020	-
16	-	994	-	990	017	-	959	936	914	002	-	025
17	998	998	984	989	-	975	959	942	-	010	032	025
18	-	989	986	991	008	-	958	932	912	002	031	026
19	012	988	-	998	-	-	958	-	-	000	-	031
20	007	998	-	993	-	-	957	-	973	-	025	026
21	008	-	981	999	-	-	956	916	-	006	023	035
22	998	002	971	000	013	-	956	933	972	-	020	025
23	006	992	989	997	020	-	955	937	971	998	-	028
24	005	992	-	996	018	-	954	931	-	005	-	038
25	008	984	985	000	016	-	954	932	-	004	-	031
26	-	-	-	008	002	-	954	930	990	-	038	039
27	009	-	-	003	009	987	953	937	989	005	026	-
28	007	000	-	-	-	-	952	930	990	010	030	-
29	004	-	-	006	007	-	952	934	-	999	-	028
30	005	-	985	-	996	-	952	929	-	-	-	-
31	998	-	986	-	006	-	951	928	-	-	-	-

TABLE II. - TIMES OF RECEPTION OF RADIO TIME SIGNALS

Day of Month	PONTOISE FYP 90.70 kc/s 08 06 U.T.							PONTOISE TMA3 10,015 kc/s 08 06 U.T.				
	April	May	June	July	August	September	October	June	July	August	September	October
1	-	008	981	-	948	937	990	-	-	-	934	993
2	-	004	980	-	947	-	980	-	978	942	-	980
3	-	000	-	-	951	940	982	-	978	946	939	981
4	-	-	977	-	969	940	982	-	-	-	939	978
5	-	008	976	-	-	932	984	-	-	-	931	986
6	-	-	963	-	-	936	975	-	-	-	932	977
7	-	003	972	-	958	955	-	-	-	942	956	-
8	-	008	992	-	958	983	975	-	-	941	982	-
9	-	001	965	967	953	-	977	-	965	940	-	-
10	-	003	-	-	945	-	979	-	-	934	-	979
11	-	004	969	953	938	018	985	-	953	943	-	982
12	-	-	972	966	-	027	983	-	-	-	-	982
13	-	-	969	943	943	032	982	-	-	933	029	981
14	-	-	966	-	946	028	-	-	-	939	-	-
15	-	000	983*	-	946	023	986	-	-	935	027	987
16	-	992	959*	942	944	-	985	951	-	937	-	-
17	-	994	-	956	940	030	984	-	-	934	028	984
18	-	990	-	933	936	-	991	-	-	933	-	989
19	028	991	964*	928	-	037	987	-	927	-	-	984
20	026	-	964*	925	931	-	994	960	-	927	-	989
21	032	989	-	962	938	037	-	959	958	-	-	-
22	-	990	966*	-	937	036	-	965	-	-	034	-
23	-	990	964*	952	949	-	-	957	948	-	-	-
24	030	994	-	956	938	029	-	-	951	931	029	-
25	037	995	968*	958	948	030	-	963	955	945	030	-
26	027	997	972*	960	-	023	-	-	-	-	020	-
27	023	-	967*	956	941	021	-	959	-	945	025	-
28	012	-	-	954	941	016	-	960	-	946	014	-
29	-	994	-	-	944	988	-	956	-	942	-	-
30	003	992	-	960	948	-	-	965	955	941	-	-
31	-	-	-	-	948	-	-	-	-	945	-	-

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TABLE II. - TIMES OF RECEPTION OF RADIO TIME SIGNALS PONTOISE FYP 90.70 kc/s 09 36 U.T.

Day of Month	January	February	March	April	May	June	July	August	September	October	November	December
1	994	995	999	958	013	981	-	947	945	976	010	015
2	996	992	009	958	-	983	-	946	947	980	008	029
3	981	996	978	979	009	987	-	956	940	982	005	042
4	971	000	973	988	004	977	-	978	940	978	006	047
5	969	993	964	989	008	976	-	968	932	971	006	015
6	981	999	913	985	007	968	-	967	936	976	996	016
7	-	997	968	994	003	-	-	957	945	985	991	020
8	992	007	975	997	012	987	-	957	990	977	995	027
9	987	982	971	006	006	969	-	953	002	979	994	030
10	987	971	964	014	015	969	962	949	015	978	992	028
11	-	964	977	013	006	970	953	945	021	985	992	028
12	985	962	978	007	006	973	-	945	030	982	995	026
13	990	966	982	008	003	968	943	945	035	983	995	026
14	983	959	970	013	001	965	-	947	029	984	992	024
15	975	970	974	-	005	-	953	946	026	985	986	014
16	973	972	975	030	990	-	946	945	027	984	994	012
17	973	987	983	-	993	-	937	940	030	984	000	007
18	987	990	982	027	991	968*	937	939	031	991	994	999
19	993	994	972	-	991	963*	928	931	036	988	005	998
20	987	990	986	-	996	962*	925	931	-	994	018	002
21	995	-	982	028	-	966*	962	938	038	998	027	005
22	996	989	980	035	-	964*	956	938	-	001	035	003
23	996	987	982	041	987	968*	956	937	034	005	029	001
24	995	987	988	031	995	-	959	943	027	008	022	996
25	992	987	-	031	996	970*	958	946	030	007	004	988
26	991	979	981	032	998	969*	962	951	024	008	994	983
27	989	998	979	026	998	965*	951	939	021	009	974	987
28	988	016	960	012	-	962*	958	940	014	008	978	994
29	989		976	006	997	965*	947	943	990	011	981	991
30	992		974	003	995	-	948	949	987	011	985	983
31	996		954		-		945	951		009		984

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TABLE II. - TIMES OF RECEPTION OF RADIO TIME SIGNALS PONTOISE TMA3 10,015 kc/s 09 36 U.T.

Day of Month	June	July	August	September	October	November	December
1	-	977	938	942	980	008	-
2	-	978	940	-	-	007	-
3	-	980	-	936	981	009	041
4	-	-	-	938	974	009	046
5	-	980	948	-	-	-	-
6	-	974	949	932	979	995	015
7	-	970	942	940	983	-	-
8	-	967	940	-	975	-	027
9	-	-	935	-	-	-	-
10	-	-	934	-	976	-	028
11	-	-	942	-	978	991	-
12	-	-	935	-	983	990	026
13	-	-	935	-	982	995	-
14	-	-	939	-	983	990	024
15	955	-	936	-	-	985	014
16	956	-	935	023	-	996	011
17	957	-	934	-	-	000	007
18	961	932	929	-	-	993	-
19	956	927	928	-	-	-	-
20	955	918	929	-	993	018	-
21	958	962	934	-	999	025	-
22	959	953	935	-	000	034	998
23	-	953	935	-	005	028	-
24	-	-	936	-	008	019	-
25	962	958	943	-	-	001	-
26	962	962	-	-	006	-	-
27	-	947	943	-	-	-	-
28	954	944	937	-	007	978	-
29	956	940	943	-	012	980	-
30	963	943	-	983	-	982	-
31		944	949		-		-

TABLE II. - TIMES OF RECEPTION OF RADIO TIME SIGNALS HAMBURG 7,290 kc/s 11 00 U.T.

Day of Month	January	February	March	April	May	June	July	August	September	October	November	December
1	-	994	985	-	-	002	-	-	956	010	980	010
2	001	992	980	967	999	003	966	953	-	005	983	-
3	005	993	982	971	-	-	963	955	947	999	984	012
4	998	-	-	-	998	006	968	957	946	996	-	015
5	003	986	974	981	001	004	965	-	945	990	990	016
6	998	985	976	-	-	006	964	-	-	988	992	015
7	-	987	955	992	005	005	967	970	946	-	992	017
8	996	987	972	-	003	004	-	976	946	990	996	014
9	995	994	-	991	003	998	968	976	-	989	001	-
10	993	995	962	953	006	-	-	979	948	992	002	014
11	988	-	-	-	008	982	970	977	-	991	-	018
12	991	992	-	988	-	975	-	-	954	987	006	017
13	994	002	973	988	-	976	975	967	-	987	006	016
14	-	-	980	988	-	975	973	962	-	-	007	016
15	985	-	982	-	015	972	-	958	970	990	005	015
16	985	996	976	985	015	-	971	951	-	986	006	-
17	-	997	977	982	016	-	975	954	977	984	005	016
18	990	-	-	988	-	971	978	954	-	984	-	010
19	986	-	975	-	016	969	971	-	984	987	005	015
20	992	988	975	993	-	974	969	958	993	985	005	015
21	-	991	974	996	-	972	966	956	996	-	-	011
22	992	986	974	-	021	965	-	957	-	980	003	013
23	000	986	-	001	023	969	960	955	-	979	003	-
24	000	986	-	005	014	-	959	956	011	976	002	013
25	999	-	-	002	010	-	956	955	015	978	-	-
26	999	987	-	001	013	-	955	-	016	979	006	-
27	994	987	962	999	-	961	957	956	017	978	002	012
28	-	988	958	000	-	958	954	-	015	-	006	013
29	996	-	-	-	-	959	-	-	012	978	006	008
30	998	-	961	998	005	959	950	953	-	978	006	-
31	000	-	958	-	002	-	-	-	-	981	-	-

TABLE II. - TIMES OF RECEPTION OF RADIO TIME SIGNALS NORDDEICH DAN 17,100 kc/s 12 06 U.T.

Day of Month	January	February	March	April	May	June	July	August	September	October	November	December
1	-	008	998	-	-	-	-	-	-	013	990	-
2	-	-	-	-	-	-	971	-	-	020	-	-
3	-	000	995	-	-	-	-	960	-	010	998	012
4	954	-	-	-	-	-	-	-	969	-	-	-
5	002	994	-	-	-	008	-	-	957	004	-	-
6	-	-	-	-	-	-	-	-	947	-	000	013
7	-	-	-	-	-	-	-	978	-	-	007	027
8	997	997	-	-	-	-	-	-	-	990	999	017
9	-	-	976	-	-	-	-	-	-	995	006	-
10	-	-	-	-	-	-	-	984	-	987	-	023
11	008	-	-	007	-	985	972	-	-	-	-	-
12	-	004	974	-	-	982	-	-	-	988	012	016
13	-	-	-	-	-	982	-	-	-	-	010	021
14	-	015	-	-	-	981	-	967	-	-	-	019
15	-	-	-	-	-	-	-	-	-	994	-	021
16	000	005	-	989	017	-	-	-	-	997	016	-
17	-	-	986	-	-	-	-	-	982	-	006	018
18	-	-	-	-	022	-	-	-	-	-	-	019
19	-	006	-	-	-	-	-	-	-	000	019	027
20	003	991	-	-	-	-	-	-	-	-	-	-
21	-	004	-	-	-	-	-	-	-	-	-	023
22	-	-	-	-	-	-	-	962	-	-	-	017
23	928	-	-	-	-	-	962	961	-	980	016	-
24	-	998	-	-	-	-	-	-	-	-	015	-
25	010	-	-	-	-	-	-	-	-	990	-	-
26	-	-	-	014	-	-	957	-	-	983	012	-
27	008	-	976	016	-	974	-	963	-	988	-	-
28	-	-	975	-	013	965	-	-	-	-	-	010
29	013	-	-	-	-	-	-	-	-	982	-	015
30	013	-	971	-	008	-	-	-	-	-	-	-
31	-	-	-	-	009	-	-	-	-	991	-	020

TABLE II. - TIMES OF RECEPTION OF RADIO TIME SIGNALS MOSCOW RWM3 12,260 kc/s 12 06 U.T.

Day of Month	January	February	March	April	May	June	July	August	September	October	November	December
1	967	-	-	-	019	-	-	-	-	967	006	002
2	956	-	983	-	021	-	990	931	-	964	001	-
3	954	972	976	960	019	-	988	935	954	964	-	007
4	954	-	-	975	018	958	998	-	946	957	-	012
5	953	977	985	-	-	-	998	-	940	950	-	011
6	961	979	979	966	-	-	994	-	939	-	993	016
7	-	990	984	967	008	-	-	948	937	-	988	019
8	975	-	-	-	010	-	-	947	-	950	984	023
9	972	-	992	983	005	-	974	944	-	958	982	-
10	970	-	984	987	009	-	974	938	940	944	-	027
11	971	-	-	994	-	953	979	-	939	943	-	-
12	967	015	996	999	-	951	972	-	937	943	-	021
13	961	-	997	001	-	948	963	-	939	-	-	-
14	-	028	985	001	-	-	-	918	938	-	985	022
15	-	-	-	-	002	-	-	-	-	944	983	015
16	967	016	-	009	001	-	955	922	-	952	983	-
17	-	-	984	018	997	-	955	929	940	953	976	009
18	982	-	-	017	-	959	958	-	-	959	-	009
19	981	-	-	-	-	-	956	-	944	959	972	012
20	982	993	965	020	-	970	955	934	-	-	977	003
21	-	-	966	-	-	967	-	934	956	-	979	007
22	977	-	971	-	-	970	-	941	-	970	988	007
23	-	990	-	017	-	-	953	938	-	979	996	-
24	972	985	-	-	-	-	-	938	975	985	997	-
25	971	-	-	018	-	966	949	-	-	986	-	-
26	962	985	-	022	-	971	943	-	971	986	999	-
27	960	-	-	-	-	968	935	942	972	991	999	-
28	-	989	-	-	972	974	-	937	983	-	997	998
29	954	-	-	-	-	970	-	-	-	991	997	997
30	957	-	-	022	-	-	938	933	-	992	001	-
31	-	-	953	-	-	-	930	942	-	002	-	993

TABLE II. - TIMES OF RECEPTION OF RADIO TIME SIGNALS MOSCOW

Day of Month	RWM3 12,260 kc/s 14 06 U.T.							RWM4 7,690 kc/s 16 06 U.T.		
	April	May	June	July	August	September	October	October	November	December
1	-	018	966	-	922	-	966	-	000	-
2	-	018	-	989	930	-	-	-	997	-
3	-	019	-	989	934	-	-	-	-	004
4	-	010	956	096	-	943	954	-	-	009
5	-	-	955	995	-	942	950	-	992	010
6	-	-	-	990	-	935	-	-	990	-
7	-	010	959	-	945	942	-	-	988	020
8	-	011	951	-	-	-	946	-	982	-
9	-	014	-	972	942	-	946	-	984	-
10	-	008	-	970	935	936	941	-	-	026
11	-	-	957	976	-	939	947	-	-	045
12	-	-	951	976	-	934	944	-	977	018
13	-	-	942	960	935	943	-	-	-	014
14	-	-	-	-	918	941	-	-	983	020
15	-	996	950	-	-	-	946	-	972	-
16	004	998	-	954	926	-	949	-	973	-
17	015	003	-	955	929	939	950	-	-	009
18	015	-	962	958	-	-	955	-	-	005
19	014	-	966	958	-	943	958	-	972	008
20	020	-	970	954	935	955	-	-	979	-
21	-	-	967	-	934	-	-	-	978	003
22	-	990	-	-	939	-	-	-	985	-
23	020	-	-	952	942	-	-	-	992	-
24	018	-	-	965	942	974	-	980	-	-
25	018	-	-	946	-	971	-	985	-	-
26	022	-	965	943	-	974	-	990	997	-
27	028	-	969	936	938	-	-	-	999	-
28	-	972	969	-	944	981	-	-	000	-
29	-	-	968	-	-	-	-	991	998	-
30	023	-	-	928	940	-	-	992	005	-
31		973		932	-		-	999		-

TABLE II. - TIMES OF RECEPTION OF RADIO TIME SIGNALS CANBERRA VHP 12,170 kc/s 15 00 U.T.

Day of Month	January	February	March	April	May	June	July	August	September	October	November	December
1	-	012	-	-	-	-	-	956	-	-	990	-
2	-	973	-	-	-	-	-	-	-	-	-	-
3	-	-	-	-	-	-	-	-	980	-	-	-
4	-	-	-	-	-	-	-	-	979	-	-	944
5	-	-	-	-	-	-	-	-	-	-	986	-
6	-	006	954	-	-	-	-	-	984	-	980	-
7	-	-	-	-	-	-	-	-	-	-	984	949
8	-	-	-	-	-	006	-	-	-	-	980	-
9	027	-	-	-	-	-	-	-	-	-	978	-
10	-	-	-	-	-	-	-	-	-	984	-	-
11	-	-	-	-	-	-	-	-	982	984	-	949
12	-	-	-	-	-	-	-	-	-	989	970	951
13	-	992	-	-	-	-	-	948	-	-	966	951
14	-	995	-	-	-	-	-	-	-	-	-	949
15	-	991	-	-	-	-	-	-	-	994	964	-
16	-	985	-	-	999	-	-	-	-	994	962	-
17	-	-	-	-	-	-	-	-	-	988	-	949
18	-	-	-	-	-	-	-	-	-	989	-	950
19	-	975	-	-	-	-	-	-	-	991	956	950
20	-	-	950	-	-	-	009	-	-	-	954	946
21	-	975	-	-	-	-	-	-	-	-	-	-
22	-	-	-	-	-	025	-	-	-	-	-	-
23	-	968	-	-	-	-	-	-	-	997	948	-
24	-	-	-	-	-	-	-	959	-	997	-	-
25	-	-	-	-	-	-	986	-	956	994	-	-
26	-	962	-	958	-	-	-	-	-	994	950	-
27	-	962	-	-	-	032	-	973	-	-	-	-
28	-	962	-	-	-	033	-	964	-	-	949	938
29	021	-	-	-	-	-	-	-	-	995	949	-
30	016	-	-	-	-	-	-	-	-	993	950	-
31	-	-	-	-	-	-	-	-	-	990	-	-

TIME SERVICE, 1951.

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TABLE II. - TIMES OF RECEPTION OF RADIO TIME SIGN'LS WASHINGTON NSS 12,830 kc/s 10 00 U.T.

Day of Month	January	February	March	April	May	June	July	August	September	October	November	December
1	-	-	-	986	002	016	030	014	003	963	974	-
2	-	-	-	987	-	019	-	014	989	-	-	-
3	966	-	-	-	004	021	029	011	987	976	959	959
4	966	977	-	-	-	021	-	013	985	970	-	965
5	965	975	970	-	-	021	030	012	995	977	972	-
6	962	976	969	-	997	019	027	-	000	986	-	960
7	-	-	-	-	995	018	024	012	000	983	-	965
8	967	974	-	986	-	017	025	006	986	984	-	966
9	969	-	-	988	021	019	009	008	997	-	-	-
10	961	-	-	997	030	022	030	007	995	-	-	-
11	968	-	-	999	028	023	028	009	-	-	973	-
12	-	-	-	981	-	022	026	012	-	977	-	-
13	-	-	-	002	022	022	024	-	994	-	967	-
14	-	-	-	002	019	-	008	014	977	966	-	961
15	-	-	-	999	014	-	010	020	994	-	-	966
16	975	-	-	000	020	-	012	016	989	976	-	962
17	-	976	-	004	017	023	010	015	-	-	953	961
18	-	-	980	003	013	022	007	015	988	-	-	-
19	-	975	979	002	995	-	017	-	-	-	970	-
20	-	-	982	003	994	022	003	-	-	-	-	-
21	-	-	977	999	992	-	021	004	-	981	-	-
22	-	967	980	-	999	022	018	-	-	981	979	968
23	-	-	-	999	005	-	017	008	-	980	974	967
24	-	-	995	000	020	027	016	008	-	979	971	-
25	-	-	-	-	016	-	019	-	-	982	-	966
26	-	-	022	000	-	021	-	-	-	977	963	-
27	974	-	986	000	014	-	018	007	-	964	-	962
28	-	-	988	996	-	021	013	005	-	960	961	962
29	-	-	-	998	017	-	013	002	-	-	-	-
30	970	-	987	998	017	016	013	000	-	-	-	-
31	-	-	989	-	020	-	012	000	-	-	-	957

TABLE II. - TIMES OF RECEPTION OF RADIO TIME SIGNALS WASHINGTON NSS 12,830 kc/s 12 00 U.T.

Day of Month	January	February	March	April	May	June	July	August	September	October	November	December
1	974	974	968	-	999	018	-	013	-	962	975	964
2	970	975	966	987	-	-	032	015	-	962	978	-
3	965	976	968	987	003	-	037	013	991	979	-	959
4	966	-	-	004	995	022	033	-	985	968	-	964
5	965	-	967	979	-	022	031	-	995	970	971	965
6	961	978	968	-	-	021	028	-	999	-	973	960
7	-	975	969	999	-	017	-	012	990	-	971	966
8	965	972	970	-	-	018	-	007	-	985	970	966
9	968	973	976	986	020	-	-	010	-	981	970	-
10	-	976	976	999	029	-	030	999	994	-	-	963
11	967	-	-	000	-	024	027	-	995	980	-	966
12	968	974	979	-	-	023	027	-	994	960	970	963
13	980	977	-	997	-	020	007	011	994	-	964	960
14	-	980	975	999	-	-	-	016	982	-	953	962
15	971	979	974	-	-	-	-	017	-	961	-	966
16	-	972	975	000	021	-	013	014	-	978	965	-
17	-	-	982	000	-	-	010	004	988	976	953	963
18	973	-	-	003	015	-	019	-	987	980	-	962
19	-	974	978	-	-	025	018	-	982	972	970	963
20	970	973	980	002	-	023	003	-	-	-	974	965
21	-	974	974	-	994	024	-	003	-	-	974	963
22	971	-	983	-	009	-	-	994	-	982	975	967
23	974	968	-	003	-	-	019	-	-	982	963	-
24	971	967	-	-	021	-	017	995	990	980	971	-
25	969	-	-	998	008	024	019	-	985	981	-	-
26	989	-	-	998	-	-	016	-	989	980	965	-
27	974	-	985	999	-	024	992	005	982	962	970	-
28	-	967	985	-	-	020	-	004	980	-	969	-
29	-	-	983	-	018	020	-	003	-	958	974	956
30	970	-	987	002	017	-	013	002	-	974	958	-
31	968	-	985	-	018	-	013	001	-	976	-	957

TABLE II. - TIMES OF RECEPTION OF RADIO TIME SIGNALS WASHINGTON

Day of Month	NSS 12,630 kc/s 14 00 U.T.							NSS 12,630 kc/s 16 00 U.T.						
	April	May	June	July	August	September	October	January	February	March	April	October	November	December
1	-	999	000	-	012	-	963	975	974	968	-	-	972	-
2	-	-	-	033	-	-	964	970	-	-	988	-	969	-
3	-	004	-	032	995	988	-	967	-	-	988	-	-	958
4	-	000	-	036	-	000	982	970	-	-	-	-	-	964
5	-	-	025	030	-	997	971	963	977	974	979	-	976	964
6	-	-	022	014	-	000	-	-	975	969	984	-	974	959
7	-	015	018	-	013	991	-	-	973	968	-	-	969	962
8	-	016	-	-	007	-	-	971	973	972	-	-	969	-
9	-	020	-	010	009	-	982	968	967	974	-	-	951	-
10	-	028	-	030	000	-	985	973	-	-	-	-	-	-
11	-	-	024	029	-	993	980	968	-	-	998	-	-	-
12	-	-	-	027	-	-	961	962	974	976	000	-	969	967
13	-	-	-	-	013	986	-	-	976	976	991	-	965	964
14	-	-	022	-	017	980	-	-	977	974	-	-	966	954
15	-	015	008	-	-	-	961	975	972	976	-	-	958	-
16	001	022	-	014	006	-	-	978	959	969	-	-	951	-
17	001	018	-	010	005	987	976	974	-	-	-	-	-	964
18	003	999	-	018	-	987	977	973	-	-	-	-	-	967
19	003	-	-	018	-	984	973	968	975	980	-	-	971	-
20	993	-	025	-	004	986	-	-	969	977	-	-	976	965
21	-	995	024	-	006	-	-	-	-	980	-	-	976	951
22	-	-	015	-	-	-	-	975	966	980	-	983	-	-
23	001	-	-	020	009	-	-	972	973	-	-	-	971	-
24	998	021	-	018	995	992	-	968	-	-	-	979	-	-
25	997	012	-	021	-	-	-	972	-	-	-	981	-	-
26	999	-	-	015	-	983	-	964	-	-	-	964	-	-
27	992	-	023	003	005	986	-	-	970	987	-	-	973	962
28	-	019	022	-	005	970	-	-	968	987	-	-	972	944
29	-	019	002	-	003	-	-	970	-	985	-	-	974	-
30	004	017	-	014	003	-	-	969	-	980	-	978	956	-
31	-	019	-	017	983	-	-	-	-	-	-	976	-	959

TABLE II. - TIMES OF RECEPTION OF WWV SECONDS PULSES ON
10,000 kc/s, 15,000 kc/s and 20,000 kc/s
GREENWICH MEAN TIME

Day of Month	January	February	March	April	May	June
1	991	999	990	-	985	996
2	990	999	988	963	991	995
3	990	998	989	962	992	996
4	991	998	989	965	984	-
5	992	997	986	963	984	998
6	-	998	986	961	984	998
7	-	998	986	963	-	998
8	993	997	986	963	984	998
9	993	999	985	964	986	998
10	994	995	983	965	986	999
11	993	-	-	966	986	000
12	994	996	980	968	987	001
13	996	998	981	966	986	002
14	-	999	-	971	987	004
15	996	994	976	-	988	005
16	996	996	977	973	991	005
17	996	996	973	974	990	006
18	996	993	972	976	989	009
19	997	993	971	977	989	010
20	996	994	969	979	990	009
21	999	991	968	983	991	011
22	998	992	967	-	992	012
23	998	993	-	979	993	009
24	999	-	-	981	994	011
25	998	-	964	982	994	012
26	998	993	964	983	995	014
27	000	992	963	984	994	-
28	002	992	962	983	995	016
29	998		963	984	996	016
30	999		960	985	995	016
31	-		-		995	

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TABLE II. - TIMES OF RECEPTION OF WWV SECONDS PULSES ON
10,000 kc/s, 15,000 kc/s and 20,000 kc/s

GREENWICH MEAN TIME

Day of Month	July	August	September	October	November	December
1	030	031	-	953	943	954
2	031	029	-	952	947	-
3	032	028	988	951	947	953
4	-	029	983	950	948	952
5	033	028	982	948	949	952
6	032	027	981	952	948	952
7	032	025	978	947	948	952
8	034	026	976	948	949	952
9	035	025	975	948	949	952
10	035	024	973	946	949	952
11	036	023	973	947	951	953
12	036	022	972	949	950	952
13	037	021	-	947	951	952
14	036	019	969	949	950	950
15	036	018	968	949	951	950
16	036	-	-	945	950	949
17	037	015	966	946	951	949
18	037	014	966	946	953	947
19	038	013	964	944	951	948
20	039	011	963	945	952	949
21	038	009	-	946	952	948
22	038	009	962	945	952	950
23	038	008	-	946	952	948
24	038	006	958	945	953	950
25	040	-	959	946	952	950
26	035	002	958	946	952	950
27	036	000	957	946	954	951
28	-	998	955	-	953	952
29	034	997	953	946	952	954
30	033	-	953	947	953	-
31	031	992		946		955

TABLE II(A). - TIMES OF RECEPTION OF MSF SECONDS PULSES ON 60 kc/s

PROVISIONAL UNIFORM TIME

Day of Month	July	August	September	October	November	December
1	982	-	-	020	039	059
2	-	955	928	020	040	057
3	981	955	928	022	040	058
4	980	955	-	023	041	059
5	981	-	925	023	042	059
6	978	953	926	024	042	059
7	978	953	923	023	043	061
8	978	952	-	026	043	061
9	977	951	922	026	043	062
10	976	-	922	026	045	062
11	974	951	920	027	046	063
12	976	949	919	027	047	063
13	974	-	-	028	048	064
14	974	948	917	029	-	063
15	972	948	915	029	049	064
16	972	946	915	028	050	064
17	972	943	914	-	050	064
18	971	-	913	031	050	064
19	971	943	912	031	053	066
20	971	941	913	033	050	068
21	969	-	-	033	052	068
22	968	-	-	035	051	069
23	968	938	-	034	052	068
24	-	938	916	035	053	070
25	966	-	917	035	052	071
26	-	-	918	035	054	071
27	963	935	-	036	-	072
28	962	-	920	036	056	-
29	961	933	920	036	056	-
30	960	933	919	037	056	-
31	-	930		038		073

TABLE II(A). - CORRECTIONS FOR POLAR VARIATION AND ANNUAL FLUCTUATION

Date	GBR 1000 G.M.T.	Correction		GBR 1000 P.U.T.	Date	GBR 1000 G.M.T.	Correction		GBR 1000 P.U.T.
		PV	AF				PV	AF	
July 2	981	-002	+004	983	Oct. 5	996	+027	-033	990
7	973	000	000	973	10	995	+028	-034	989
12	966	+002	-003	965	15	002	+029	-034	997
17	959	+004	-006	957	20	995	+030	-034	991
22	956	+006	-010	952	25	999	+032	-034	997
27	953	+008	-013	948	30	000	+032	-034	998
Aug. 1	950	+010	-015	945	Nov. 4	004	+033	-033	004
6	948	+011	-018	941	9	010	+034	-033	011
11	947	+013	-020	940	14	014	+034	-032	016
16	944	+014	-022	936	19	020	+033	-032	022
21 (GBZ)	941	+015	-024	932	24	029	+033	-031	031
26 (GBZ)	937	+016	-025	928	29	034	+033	-030	037
31	932	+017	-027	922	Dec. 4	038	+033	-028	043
Sept. 5	927	+018	-028	917	9	038	+032	-027	043
10	922	+020	-028	914	14	034	+032	-025	041
15	920	+021	-029	912	19	031	+031	-023	039
20	998	+023	-029	992	24	031	+030	-020	041
25	994	+024	-029	989	29	031	+028	-018	041
30	994	+026	-029	991					