

RICARD OBSERVATORY  
UNIVERSITY OF SANTA CLARA  
SANTA CLARA, CALIF.

January 1950.

1.	GW	e(P)EZ	02:45:35		USCGS 26N 110W.
		eSE	02:59:30		
		eLEZ	03:01:50		
2.	GW	iPZ	15:27:04	C	USCGS 11 $\frac{1}{2}$ S 165E
		iPE	15:27:11	E	
		i E	15:37:28		
		eLEZ	15:58:01		
3.	GW	e Z	03:09:46		USCGS 18N 121E
		e E	03:16:44		
		eLEZ	03:42:23		
3.	GW	MEZ	12:53:12		
5.	GW	MEZ	04:49:00		
10.	GW	eLEZ	03:20:22		USCGS 11N 103W
12.	GW	iPEZ	12:19:00	VD	USCGS 17S 178 $\frac{1}{2}$ W 500km
		iSE	12:22:40		
		MEZ	12:26:00		
14.	GW	ME	00:33:52		USCGS 4 $\frac{1}{2}$ S 152 $\frac{1}{2}$ E
14.	GW	i EZ	19:54:14	ED	USCGS 40N 125 $\frac{1}{2}$ W
24.	GW	iPEZ	16:59:33	VD	USCGS 14 $\frac{1}{2}$ S 167E 150km
		iSE	17:10:42		
		eLE	17:23:19		
27.	GW	eLE	10:50:50		
27.	GW	ME	19:48:18		
30.	GW	iPN	01:22:09		
		eSE	01:39:15		
		eLEN	01:47:19		
31.	GW	eLEN	07:51:10		

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February 1950.

2.	GW	ePE e EZ eSE eLEZ	23:57:51 00:02:06 00:08:26 00:26:16	USCGS 22N 100 $\frac{1}{2}$ E
3.	GW	e E ePPPE eSE eLE	03:26:12 05:29:12 05:33:56 03:50:30	USCGS 22N 100 $\frac{1}{2}$ E
3.	GW	e E eLE	16:53:54 16:59:44	
4.	GW	eLE	02:25:01	USCGS 54N 162 $\frac{1}{2}$ W
5.	GW	e E e E eLEZ	02:11:56 02:15:48 02:22:17	USCGS 50S 164E
8.	GW	<sup>SR</sup> e N eLEN	18:43:52 18:53:26	USCGS 48N 27 $\frac{1}{2}$ W
9.	GW	e N i N	01:38:59 01:43:58	
12.	GW	ePZ ePSE eLEZ	22:27:19 22:38:17 22:52:16	Dil.
17.	GW	ePZ eLEN	03:54:24 04:08:17	Dil.
18.	GW	eLEN	05:38:05	USCGS 33S 112 $\frac{1}{2}$ W
26.	GW, VA, G.	ePEN e EN e EN eSEN	00:07:42 00:08:18 00:08:22 00:08:34	
28.	GW, VA, G.	iPENZ iSENZ eLZ	10:31:20 10:39:49 10:52:30	SEDil.

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March 1950.

3.	GW	ePZ ME	10:56:04 11:28:30	Comp	USCGS 23S 175 $\frac{1}{2}$ W
7.	GW	e E eLEN	02:36:18 02:57:38		USCGS 10N 124E
8.	GW, NA, W	eP*N ePnN eS*N	03:24:05 03:24:07 03:24:12		Felt East Oakland.
11.	GW	I EN	00:58:11		USCGS 20N 99W
20.	GW, NA, W	iPENZ i ENZ i ENZ iSEnz	15:23:08 15:23:16 15:23:28 15:23:48	NECOM	USCGS 40 $\frac{1}{2}$ N 121 $\frac{1}{2}$ W
27.	GW	iPENZ eSEN eLEN	13:13:03 13:19:23 13:25:01	STDil	USCGS 53 $\frac{1}{2}$ N 173E
29.	GW	ePPE ePSE eLE	18:05:52 18:13:37 18:33:12		
30.	GW, NA, W	iP*EN iS*N i N	09:02:51 09:02:59 09:02:44	NW	Central Calif.

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Date	Station	Component	Time	Location
April 1950. 4.	GV	eSEN	19:07:10	USCGS 52N 101E
		eLEN	19:30:16	
5.	GV	ePEN	01:25:08	USCGS 52N 177W
		ePcSEN	01:31:21	
		eLN	01:34:46	
14.	VA, W.	iP*EN	01:31:57.2	
		iS*EN	01:31:59.6	
14.	GV	eLEZ	20:35:52	USCGS 36S 103W
15.	VA	ePEN	11:57:31	
		iSEN	11:57:59	
15.	GV	eLE	15:11:38	USCGS 14N 91W. 100km
16.	VA	eP*N	18:46:55.8	
		eS*N	18:47:07	
16.	GV	ePE	21:51:52	USCGS 49N 129W
		eSE	21:55:39	
		NE	21:55:35	
18.	GV	eLEZ	14:52:50	
20.	GV	ePENZ	10:01:32	USCGS 45N 150E
		eSEN	10:09:50	
		eLEN	10:13:13	
20.	GV	e N	10:13:36	
		eSN	10:16:11	
		eLEN	10:19:58	
25.	GV	eLEN	22:48:07	
26.	GV	eLEN	07:26:48	
30.	GV	ePN	11:39:55	
		ePSEN	11:48:06	
		eLEN	11:57:47	

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Date	Station	Code	Time	Location
May 1950. 9.	GV	ePEN ePPPSEN eLEN	11:49:29 12:00:16 12:15:09	Turkmen. USCGS 41N 58E
11.	GV	e E e EN eLN	00:50:25 01:00:04 01:04:20	
11.	VA	iSN	08:48:38.5	
17.	GV	iPE iPNZ	12:06:59 12:07:10	Sea of Japan. USCGS 59N 130 $\frac{1}{2}$ E 600km
17.	GV	iPENZ eSISEN ePPPSEN eLENZ	18:25:59 18:36:35 18:37:46 18:53:20	New Hebrides. USCGS 20S 169E.
19.	GV	ePEZ eSE ePPPSE eLE	02:11:01 03:01:28 03:02:50 03:18:35	New Hebrides. USCGS 20 $\frac{1}{2}$ S 169E
19.	GV	eSE eLE	07:30:25 07:52:45	New Hebrides. USCGS 20 $\frac{1}{2}$ S 169E.
22.	GV	ME	00:07:17	USCGS 19 $\frac{1}{2}$ S 168E
25.	GV	ePEN eSE eLE	08:46:48 08:51:25 08:53:50	NW of Fairbanks, Alaska. USCGS 65 $\frac{1}{2}$ N 151 $\frac{1}{2}$ W
25.	GV	ePENZ eSENZ eLEN	17:47:41 17:58:05 18:28:04	West of Guan. USCGS 13N 142 $\frac{1}{2}$ E
26.	GV	ePENZ epPENZ eSENZ esSENZ eLE	01:29:56 01:30:06 01:40:58 01:42:48 01:56:43	New Hebrides. USCGS 20S 169E.
26.	GV	ME	18:25:35	USCGS 20S 169E
27.	GV	ePN eSISEN eLE	04:53:44 05:04:04 05:24:36	
28.	GV	eSEN eLEN	02:01:27 02:18:04	New Hebrides. USCGS 20S 169E
30.	GV	i LN	01:54:20	

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Date	Station	Code	Time	Location
June 1950, 2.	WA	iPEN	17:25:21	Gilroy.
		iSEN	17:25:27	
5.	GW	eLEZ	11:47:55	NORTH Polar Region. USCGS 87N 45E.
7.	GW	iPZ	17:02:28	Northern Peru. USCGS 4S 76 $\frac{1}{2}$ W 100km
		ipPZ	17:02:57	
		eSE	17:10:28	
		esSE	17:11:22	
		eLEZ	17:24:25	
8.	GW	ePEZ	16:28:25	USCGS 45 $\frac{1}{2}$ S 15W.
		eSIKSE	16:40:13	
		ePSE	17:17:32	
9.	GW	ePN	13:09:56	USCGS 41N 125 $\frac{1}{2}$ W
		eSE	13:10:18	
		eLE	13:11:05	
11.	GW	ME	21:00:00	USCGS 28 $\frac{1}{2}$ S 73W.
11.	GW	eSE	22:48:13	USCGS 1200 mi.SW of N.Zeal
		eLE	23:04:40	
12.	GW	ME	23:36:12	
14.	GW	e E	04:17:43	USCGS 18 $\frac{1}{2}$ S 174 $\frac{1}{2}$ W
		eLEZ	04:22:45	
17.	GW	eSE	11:54:10	USEGS Off No. Calif.
		eLE	11:56:24	
17.	GW	eLE	23:12:10	USCGS 25S 67W 200km
19.	GW	e E	13:09:10	USCGS 8S 112E
		o E	13:12:42	
		e E	13:14:53	
		eLE	13:53:55	
19.	GW	eLEZ	18:54:20	USCGS 44N 127W.
21.	GW	ePZ	07:08:30	USCGS 21S 169E
		epPZ	07:08:49	
		eSEZ	07:18:43	
		esSEZ	07:20:18	
		eLE	07:35:40	
21.	GW	eLEZ	09:55:14	
21.	GW	eLEZ	10:59:04	USCGS 3 $\frac{1}{2}$ S 147E
23.	GW	MEZ	04:12:00	USCGS 13N 93E



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June 1950, contd.

24.	G'	iPENZ	22:58:20	USCGS 19 $\frac{1}{2}$ S 168 $\frac{1}{2}$ E
		eSEN	22:48:56	
		ePPSEN	22:50:04	
		eLENZ	23:05:44	
25.	GU	eSE	11:30:30	USCGS 5N 127E.
		eLEZ	11:53:07	
27.	GU	ePE	15:53:24	USCGS 45 $\frac{1}{2}$ N 140E.
		ePSE	16:02:22	
		eLE	16:12:58	

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July 1950.

3.	GW	e E eSE eLE	10:28:01 10:39:03 10:46:45	Caroline ISLS. USCGS 8N 141 $\frac{1}{2}$ E
5.	GW	MEZ	04:28:12	USCGS 19S 168E
7.	GW	ePZ ePR <sub>3</sub> EZ eSE ePKKPE eLEZ	16:59:27 17:06:52 17:10:02 17:17:19 17:28:58	Solomon Isls. USCGS 11S 163 $\frac{1}{2}$ E
9.	GW	iPZ eSE MEZ	01:50:49 02:00:48 02:11:42	USCGS 33S 112W
9.	GW	iPENZ iSENZ ME	04:49:55 04:57:56 05:11:46	USCGS 8 $\frac{1}{2}$ S 71W
9.	GW	iPEN ipPE	10:02:52 10:05:45	USCGS 8 $\frac{1}{2}$ S 71W
9.	GW	eLE	16:58:42	USCGS 36N 72E.
10.	GW	MEZ	07:10:59	
12.	GW	MEZ	05:59:54	
12.	GW	ePENZ eSENZ eLENZ	11:16:52 11:21:56 11:26:03	USCGS 53N 166W
13.	GW	ePENZ epPENZ ePPEZ iSEE esSEZ ME	04:15:14 04:15:52 04:18:45 04:24:54 04:25:35 04:40:46	USCGS 27 $\frac{1}{2}$ N 139 $\frac{1}{2}$ E 500km
14.	GW	ME	12:24:44	USCGS 52N 171W
19.	GW	eLEZ	11:15:35	USCGS Aletutians.
20.	GW	ePEZ eSE ePSE e E eLEZ	09:43:20 09:53:20 09:53:50 09:54:12 10:08:01	USCGS 17S 174E
20.	GWA	ePEN e EN i IN	20:57:47 20:57:53 20:57:57	Felt. Hollister, Calif.



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July 1950, contd.

21.	GT	iPENZ iSKSLN MEZ	20:44:41 20:55:18 21:26:05	USCGS 15 $\frac{1}{2}$ S 168 $\frac{1}{2}$ E
21.	WA	cPEN e EN	17:37:39 17:38:00	Felt. Port Chicago, Calif.
21.	WA	e EN	18:44:39	
22.	GT	ePZ ePSE eLEZ	23:21:04 23:31:50 23:46:46	USCGS New Hebrides.
25.	GT	MEZ	16:29:45	USCGS 16S 165E
25.	GT	MEZ	18:31:34	USCGS 31N 42W
27.	GT	ME	07:58:48	So. Calif.
27.	GT	ePN iSN MEN	11:51:55 11:51:15 11:54:44	So. Calif.
27.	GT	i EN i E	22:54:39 22:55:15	So. Calif.
28.	GT	i EN i E	03:29:20 03:29:54	So. Calif.
28.	GT	ePENZ eSE ePPPSE eLEZ	05:07:57 05:18:04 05:19:14 05:33:35	USCGS 13S 167E.
28.	GT	ME	13:08:38	
28.	GT	ePN iSEN eLE	17:29:40 17:30:37 17:30:54	So. Calif.
28.	GT	iPENZ iSEN ME	17:53:00 17:54:16 17:54:50	So. Calif.
28.	GT	iSENZ	17:59:18	So. Calif.
28.	GT	iSN	18:02:00	
28.	GT	ePE eLE	21:16:11 <del>00:20:09</del> 21:17:15	So. Calif.

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July 1950, Contd.

29.	GW	e L	00:20:39	So. Calif.
		e E	00:21:12	
29.	GW	iPENZ	14:38:43	
		iSENZ	14:39:51	
29.	GW	e NZ	17:04:18	USCGS 2 $\frac{1}{2}$ N 127 $\frac{1}{2}$ E
		e E	17:10:52	
		eLE	17:12:29	
29.	GW	iSE	18:46:24	So. Calif.
		eLE	18:46:48	
29				
30.	GW	iPENZ	00:01:46	USCGS 6S 155E
		ePRLEZ	00:05:23	
		eSE	00:12:36	
		eLEZ	00:29:31	

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August 1950.

1.	GW	eLE	00:56:10	
1.	GW	ePE iSE	08:39:34 08:41:03	So. Calif.
1.	GW	ePENZ i ENZ i ENZ	20:25:02 20:25:08 20:25:11	
2.	GW	ePEZ e EN eLEZ	11:02:56 11:13:38 11:48:20	USCGS 12N 143E
3.	GW	ePENZ eSE esSE eLE	06:20:43 06:25:08 06:25:57 06:29:37	USCGS 18N 100W 150km
3.	GW	ME	16:28:09	USCGS Mariana Isls.
3.	GW	iPENZ iSN MENZ	22:27:49 22:55:31 22:50:15	USCGS 10N 69 $\frac{1}{2}$ W
5.	GW	ePENZ eSENZ ePPPSENZ ME	09:35:48 09:45:22 09:46:19 10:05:17	USCGS 50S 164E
7.	GW	ePZ i E i Z e E eLE	05:02:48 03:09:23 05:11:54 05:17:47 03:56:24	USCGS 6N 126E
7.	GW	ME	16:59:45	USCGS 1N 126E
8.	GW	ePZ e E ME	05:16:33 05:20:27 05:24:25	USCGS 55N 134-W
10.	GW	ME	20:07:25	USCGS Solomon Isls. Reef.
13.	GW	e E e E eLE	16:48:31 16:58:45 17:12:20	USCGS 19 $\frac{1}{2}$ N 70 $\frac{1}{2}$ W
14.	GW, NA, V	iPENZ ipPN iSE isSN	23:03:01 23:03:35 23:12:25 23:12:42	USCGS 27S 62 $\frac{1}{2}$ W 700km
15.	GW	ME	06:11:50	
15.	GW, NA, V	e ENZ i ENZ i ENZ e N eLE	14:23:43 14:27:47 14:37:03 15:00:34 15:05:28	USCGS 28 $\frac{1}{2}$ N 97E

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August 1950m contd.

17.	GV	iPZ iSEZ	16:26:32 16:35:58	USCGS 21S 180E 600km
18.	GV	ePENZ iSEZ eLEZ	01:26:28 01:32:48 02:05:40	
18.	GV	ME	15:55:57	
18.	GV	ME	17:44:10	USCGS China-Burma border.
20.	GV	ME	01:03:05	
20.	GV	eLE	01:55:00	USCGS $47\frac{1}{2}$ N $113\frac{1}{2}$ W
21.	GV	ME	00:20:43	
21.	GV	ePIN iSEN	06:34:31 06:34:36	
24.	GV	ePTZ e I e EN eLN	17:47:00 17:48:09 17:48:32 17:49:22	USCGS $42\frac{1}{2}$ N 126W
25.	GV	ME	02:23:18	USCGS $49\frac{1}{2}$ N 129W
26.	GV	ePZ eSE eLE	04:46:42 04:41:55 05:01:34	USCGS 65N 162W
26.	GV	ePZ eSE	04:48:14 04:54:59	
26.	GV	ME	07:31:49	
30.	GV	e I eLEZ	07:16:12 07:52:26	USCGS $3\frac{1}{2}$ S $130\frac{1}{2}$ E
31.	GV	ePE iPR2E eSKSE ePcSScPE eLEZ	07:24:45 07:30:19 07:34:55 07:39:14 07:54:17	USCGS 6N 126E
31.	GV	ME	17:51:13	

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September 1950.

2.	G <sup>U</sup>	ePZ eSE eLENZ	02:54:33 03:00:06 03:04:24	USCGS 52 $\frac{1}{2}$ N 169 <sup>W</sup> 100km
2.	VA	iSE	09:03:23	Felt in Bay Area.
2.	G <sup>U</sup>	e E eLENZ	14:09:22 04:21:28	
9.	G <sup>U</sup>	ePZ e E eLENZ	10:35:16 10:47:06 11:03:24	USCGS 4S 153E
10.	G <sup>U</sup>	ePEN eSE eLE	03:53:38 03:42:47 03:56:19	USCGS 35N 140E
10.	G <sup>U</sup>	iPENZ i Z iLENZ eLENZ	15:28:46 15:31:55 15:38:46 15:56:14	USCGS 14S 167E.
10.	VA	iPEN i EN iSTN	19:35:50 19:35:55 19:36:01	
11.	VA	ePEN iSTN	19:01:24 19:01:29	
12.	VA	iPEN iSTN	04:04:38 04:04:46	
13.	UA	iPEN i E iSTN	10:56:45 10:56:49 10:56:53	
15.	G <sup>U</sup>	ME	21:25:15	USCGS New Hebrides.
14.	G <sup>U</sup>	e E eLE	09:31:35 10:08:20	USCGS Halmahera I. 1.200km
14.	VA	iPEN iSTN	08:37:33 08:58:10	
16.	G <sup>U</sup>	ePENZ eSTN eLENZ	01:03:51 01:10:30 01:17:57	USCGS 4S 104 $\frac{1}{2}$ <sup>W</sup>
16.	G <sup>U</sup>	ePEZ epPEZ eSE esSE eLE	22:06:20 22:06:44 22:12:50 22:15:40 22:19:00	USCGS 52 $\frac{1}{2}$ N 178E 100km



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September 1950, contd.

18.	G <sup>1</sup>	ME	06:53:15	
19.	G <sup>1</sup>	ePINZ	20:43:35	USCGS 28 138 <sup>1</sup> / <sub>2</sub> E
		e LNZ	20:47:38	
		i E	20:54:11	
		e E	21:01:55	
		e E	21:04:23	
		eLNZ	21:16:52	
21.	VA	e E	22:04:00	
	G <sup>1</sup> , VA	iSE	22:04:22	
22.	G <sup>1</sup>	iPZ	08:02:39	
		eSE	08:12:26	
		eLNZ	08:22:40	
25.	G <sup>1</sup>	ePINZ	00:04:40	
		e LNZ	00:06:06	
		iSEN	00:13:46	
		i E	00:14:18	
25.	VA	iPEN	13:13:46	
		iSEN	13:13:58	
25.	VA	iPEN	13:14:13	
		iSEN	13:14:22	
25.	VA	ePE	19:58:41	
		i EN	19:58:45	
27.	G <sup>1</sup>	ePEN	03:42:03	USCGS 20N 109 <sup>1</sup> / <sub>2</sub> W
		iSEN	03:45:49	
		eLNZ	03:48:19	
28.	VA	ePEN	11:04:29	
	G <sup>1</sup>	iSEN	11:04:55	
29.	G <sup>1</sup> , VA, V	ePEN	06:33:15	
		iSE	06:41:42	
		iLIN	06:44:02	
30.	G <sup>1</sup> , VA, V	iPEN	21:26:48	
		iSEN	21:27:05	

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2.	GV	eSE eLE	11:52:12 11:55:02	USCGS 21N 109W
4.	GV	e E eLE	18:21:24 18:44:28	USCGS 19S 169E
5.	GV	ePEZ eSE eLEZ	00:53:43 01:03:53 01:20:24	USCGS 18½S 170E
5.	GV, VA, V	iPENZ iSEN eLENZ	16:17:50 16:24:09 16:30:09	USCGS 10½N 85W 100km
8.	GV, VA, V	iPEZ iPR1E iSKSE iPSE e E e E	03:37:47 03:42:18 03:48:19 03:51:32 04:12:32 04:19:48	USCGS 4S 128E
8.	VA GV	ePEN iSE	12:25:37 12:26:31	
8.	GV	eLEZ	15:31:40	
9.	VA	ePIN iSEN	20:26:44 20:26:53	
15.	GV	ePE eSE eLE	16:13:47 16:23:34 16:41:42	USCGS 10S 160E
17.	GV	iSEN	03:56:41	
17.	GV	ME	22:37:33	USCGS 9½N 85W
19.	GV	ePN e E e E eLE	10:04:21 10:15:02 10:28:30 10:39:01	USCGS 32S 178W
21.	GV	ePNZ eSE eSSE eLE	04:24:32 04:34:00 04:38:40 04:45:35	USCGS 18½S 174W 100km
21.	GV	e E ME	09:07:20 09:11:53	USCGS 17½N 106W
21.	GV, V	iPENZ iSEN eLEN	09:18:23 09:22:50 09:26:05	USCGS 17½N 106W

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October 1950, contd.

23.	GU, VA	ePN iSEN	08P13:18 08:14:01	
23.	GU, VA, V	iPENZ iSEN eLENZ	16:20:10 16:26:04 16:30:32	USCGS 14 $\frac{1}{2}$ N 92W 100km
23.	GU	eLE	21:24:47	
23.	GU	e E eLE	23:56:11 23:58:19	USCGS 14 $\frac{1}{2}$ N 92W
24.	GU	e E eLE	00:34:40 00:44:30	
24.	GU	e E ME	06:09:08 06:14:07	USCGS 14 $\frac{1}{2}$ N 92W
24.	GU	ME	09:52:12	
25.	GU	ME	05:28:55	
26.	GU	eSE eLE eLEZ	04:15:27 04:26:00 04:41:20	
26.	GU	eLE	16:15:42	
31.	GU	eLE	19:45:58	
31.	GU	ePE iSE eLE	20:27:29 20:30:20 20:31:43	

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2.	GW, W <sub>2</sub>	ePZ i EZ i E i LN eLENZ	15:42:24 15:47:41 15:52:41 15:56:46 16:20:42	USCGS 6S 129 $\frac{1}{2}$ E
5.	GW	ePEZ e E e E eLE	16:42:21 16:47:57 16:48:43 16:54:06	USCGS 14 $\frac{1}{2}$ N 92W
5.	GW	iSE eLE	17:59:42 18:15:37	USCGS 53N 134 $\frac{1}{2}$ E
6.	GW	ePZ eSKSE eLE	22:35:17 22:46:02 23:11:44	USCGS 7 $\frac{1}{2}$ S 155 $\frac{1}{2}$ E
8.	GW, W	iPNZ iSKSTNZ eLENZ	02:31:03 02:41:29 02:58:52	USCGS 9 $\frac{1}{2}$ S 159 $\frac{1}{2}$ E
10.	GW	ePE iSENZ eLE	02:19:19 02:23:01 02:24:55	USCGS 19 $\frac{1}{2}$ N 110W
11.	GW	e E eLE	04:24:13 04:35:00	USCGS 6S 148E
11.	GW	ePENZ iSENZ	09:33:14 09:37:07	USCGS 19 $\frac{1}{2}$ N 110W
11.	GW	ePE eeE eLE	13:59:39 14:06:05 14:15:42	USCGS 10N 85W
16.	WA	ePEN i EN i EN	02:15:15 02:15:18 02:15:31	
16.	WA	ePEN i EN i EN	06:38:27 06:38:32 06:38:41	
17.	GW	ePENZ iSEN eLE	19:34:01 19:38:53 19:43:25	USCGS 17N 100 $\frac{1}{2}$ W
19.	GW, WA, W	iPEN iSENZ	07:55:27 07:55:29	Felt San Jose.
19.	GW, WA	iPE iSEN	23:44:49 23:45:00	
22.	GW	ePE eSE eLE	10:24:40 10:30:28 10:35:30	USCGS 51N 176W

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24.	GW	e L eLE	20:39:27 20:48:30	USCGS 15S 173W
25.	GW	ME	05:52:44	USCGS Samoa Isls.
23.	GW, VA, W	iPENZ i INZ iSENZ	13:58:39 13:58:42 13:58:46	Felt in Santa Clara.
24.	GW	e L e L eLE	13:24:16 13:28:53 13:35:44	USCGS 15S 173W

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1.	WA	i E i E iSE	20:00:52 20:00:58 20:01:07	
2.	GU, W	ePIN iSINZ eLENZ	15:01:54 15:11:24 15:27:56	
2.	GU, WA	iPENZ ipPEN eSE	15:29:10 15:29:45 15:37:55	USCGS 8S 71 $\frac{1}{2}$ W 650km
2.	GU, WA, W	iPENZ iSINZ eLENZ	20:04:34 20:14:58 20:29:10	USCGS 18S 167E
3.	GU	eLE	08:37:40	USCGS New Hebrides.
4.	GU	iPENZ i LENZ iSE eLEZ	16:40:51 16:44:34 16:42:01 17:08:09	USCGS <del>18N 63W</del> 5S 153 $\frac{1}{2}$ E
9.	GU, WA, W	iPENZ ipPNZ iSENZ eLEN	21:50:52 21:51:16 22:00:06 22:12:36	USCGS 24S 67 $\frac{1}{2}$ W 200km
10.	GU, WA, W	iPENZ ipPN iSE isSEZ eLE	13:35:16 13:35:28 13:45:14 13:45:29 13:57:26	USCGS 28 $\frac{1}{2}$ S 179W 500km
11.	GU, WA	ePN iSN	15:56:22 15:56:42	
11.	GU, WA	ePN iSN	18:29:38 18:29:58	
14.	GU, WA, W	iPENZ ipPN iSENZ eLENZ	02:04:19 02:04:28 02:13:46 02:31:13	USCGS 19 $\frac{1}{2}$ S 176W 200km
14.	GU, WA	ePENZ iSENZ	09:00 09:01:05	USCGS 40.1N 120.2W
14.	GU, WA	ePENZ iSENZ	09:30:00 09:30:27	USCGS 40.1N 120.2W
14.	GU, WA	ePLN iSN	13:12:05 13:12:32	USCGS 40.1N 120.2W



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December 1950, contd.

14.	GU, WA, V	iPHNZ iSHNZ	13:25:12 13:25:50	USCGS 40.1N 120.2W
14.	GU, WA, V	iPHNZ iSHNZ eLIN	14:21:54 14:26:53 14:29:12	USCGS 17N 98W
14.	GU, WA	iSHNZ	14:31:51	
14.	GU, WA	iPEN iSEN	16:42:25 16:43:05	
15.	GU, WA	iPEN iSEN	18:02:19 18:02:51	USCGS 40.1N 120.2W
16.	GU	iPN eSE eLEZ	10:51:03 10:53:19 10:54:15	USCGS 43 $\frac{1}{2}$ N 127W
17.	GU, WA	iPEN iSEN	01:19:20 01:19:35	
18.	GU	eLEZ	16:55:30	
25.	GU, WA	iPEN iSN	15:19:31 15:19:39	
26.	GU	ePZ eSE eLE	14:08:41 14:10:10 14:10:57	

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