SEISMOLOGICAL BULLETIN

OF

MATSUSHIRO

MARCH , APRIL

1964

Matsushiro Seismological Observatory
Matsushiro-machi, Nagano-shi,
Nagano-ken , Japan

Matsushiro Seismological Observatory , Japan

Seismological Bulletin

Latitude	36° 32′ 30″N.	
Longitude	138° 12′ 32″E.	
Elevation		440 M.

Instrumental Constants

Instruments	Comp.	Period (sec)		Damping ratio		Magnification
Benioff Seismograph (Short Period)	N	T_1= 1.0	T_2= 0.23	h_1= 0.68	h_2= 1.7	103,000 (max)
	E	T_1= 1.0	T_2= 0.22	h_1= 0.70	h_2= 1.6	106,000 (max)
	Z	T_1= 1.0	T_2= 0.21	h_1= 0.72	h_2= 1.2	131,000 (max)
Benioff Seismograph (Long Period)	N	T_1= 1.0	T_2= 70	h_1= 0.68	h_2= 5.9	7,330 (max)
	E	T_1= 1.0	T_2= 62	h_1= 0.70	h_2= 5.6	9,640 (max)
	Z	T_1= 1.0	T_2= 84	h_1= 0.72	h_2= 7.3	7,590 (max)
Short Period Seismograph	Z	T_1= 1.0	T_2= 2.32	h_1= 1.4	h_2= 1.2	32,000 (max)
Galitzin Seismograph	N	T_1= 15	T_2= 100	h_1= 1	h_2= 1.2	1,350 (max)
	E	T_1= 15	T_2= 100	h_1= 1	h_2= 1.1	1,640 (max)
	Z	T_1= 7.5	T_2= 100	h_1= 0.76	h_2= 0.87	860 (max)
Wood-Anderson Seismograph	N	0.8		0.8		1,050
	E	0.8		0.8		1,200
1000 kg Long Period Seismograph	N	33.0		0.60		100
	E	30.0		0.62		100

Date	Phase	Comp.	Time(GMT) h	m	s
1.	P	Z	00	14	39
	i	NEZ			47.1
	S	NEZ		15	09
1.	P	Z	02	48	37
	eL	E	03	01	17
	7.1 S., 155.4 E.				
	Solomon Is.				
	h: 100 km ca.				
	H= 02 40 21.6		USCGS		
1.	eP	Z	03	04	26
	i	Z			27.4
	i	Z			49
	e	NE		05	47
1.	iP	Z	04	07	55.9
	eS	E		09	39
	e	N		10	18
	P:C				
	45.9 N., 142.1 E.				
	Northren Hokkaids, Japan.				
	h: 275 km ca.				
	H= 04 05 39.9		USCGS		
1.	P	Z	05	36	42
	i	Z			49
1,	P	Z	08	07	11
	i	Z			23
	18.8 N., 120.6 E.				
	Luzon, P.I.				
	h: 50 km ca.				
	H= 08 02 03.8		USCGS		
1.	P	Z	11	25	24.4
	e	E		27	24
	eL	E		28	30
	P:D				
	45.3 N., 150.6 E.				
	Kurile Is.				
	h: 33 km ca.				
	H= 11 22 22.9		USCGS		
1.	iP NZ, P E		12	11	32.8
	i	Z			39.5
	S	Ne		12	18.4
	P:N,W,C				
1.	P	Z	16	43	34.4
	eS	E		44	50
	i	Z		45	08
1.	P	Z	22	29	24
	e	N			41
2.	iP	Z	02	01	42.9
	iS	NEZ			45.1

(cont.)

Date	Phase	comp.	Time(GMT) h	m	s
	P:C				
2.	P NZ, eP E		02	30	10
	i	Z			13
2.	iP Z, P N		06	28	49.9
	S	Ne		29	08.5
	P:N,D				
2.	iP	Z	08	19	07.4
	i	NE		20	05.5
	P:C				
2.	eL	E	12	50	37
	23.5 S., 116.6 W.				
	Easter I. region.				
	h: 33 km ca.				
	H= 11 57 17		USCGS		
2.	P	Z	13	49	17
	i	NEZ			22
2.	eP	Z	16	21	51
	55.4 N., 166.6 E.				
	Komandorskie Is. region.				
	h: 33 km ca.				
	H= 16 16 10.7		USCGS		
2.	P	Z	17	30	21.0
	i	NE			37
	P:D				
2.	P	Z	18	40	36.4
	i	NEZ			36.5
	eS	EZ		41	42
	e	N		42	22
	P:C				
	41.1 N., 142.6 E.				
	Off east coast of Honshu, Japan.				
	h: 29 km ca.				
	H= 18 39 12.2		USCGS		
2.	P	Z	19	36	56
	i	Z		37	11
2.	iP Z, P NE		19	43	47.7
	S	E		52	50
	eL	E	20	00	48
	P:C				
	Mag. 5½-5¾ (Mat)				
	18.9 S., 174.8 W.				
	Tonga Is.				
	h: 105 km ca.				
	H= 19 32 41.7		USCGS		
3.	iP	Z	00	32	47.0
	eS	N		33	33

March , 1964

Date	Phase	Comp.	Time(GMT) h m s
3.	iP Z, P NE		04 32 05.0
	iS	N	22.2
	P:N,W,C		
3.	P	Z	09 02 18
	i	NE	20
	eS	NE	03 50
	42.4 N., 142.2 E.		
	Near south coast of Hokkaido, Japan.		
	h: 33 km ca.		
	H= 09 00 41.3		USCGS
3.	P	E	12 20 42
	S	NE	21 07
	i	Z	09
3.	P	NZ	15 03 51.5
	eS	N	04 15
	i	N	18
	i	N	26
3.	eP	Z	16 09 42
	e	E	25.9
	eL	E	32 50
3.	eP	Z	17 07 22
	i	Z	31
	e	E	11 18
	45.3 N., 153.7 E.		
	Kurile Is.		
	h: 33 km ca.		
	H= 17 03 55		USCGS
3.	iP Z, P E		17 28 33.0
	P:N,W,C		
	6.0 S., 154.6 E.		
	Solomon Is. region.		
	h: 422 km ca.		
	H= 17 20 55.5		USCGS
3.	eP	Z	18 44 00
3.	iP	EZ	19 37 42.1
	i	N	46.4
	i	E	49.0
	i	Z	50.0
	S	N	38 17
	P:E,D		
	37.3 N., 140.9 E.		
	Near east coast of Honshu, Japan.		
	h: 80 km ca.		
	H= 19 37 06.7		USCGS
3.	e	E	21 29 41
3.	iP	Z	21 46 07.5
			(cont.)

Date	Phase	Comp.	Time(GMT) h m s
	S	Ne	21 51 15
	ScP	Z	52 11.8
	L	E	53 37
	P:C		
	4.8 N., 125.5 E.		
	Celebes Sea.		
	h: 77 km ca.		
	H= 21 39 31.0		USCGS
4.	iP	EZ	03 03 26.0
	i	N	26.3
	S	N	47
	P:E,D		
4.	P	Z	04 14 25.5
	e	E	21.5
	P:C		
	7.1 S., 129.5 E.		
	Banda Sea.		
	h: 120 km ca.		
	H= 04 06 27.6		USCGS
4.	eP	Z	06 40 21
	i	EZ	34
	S	N	41 21
4.	P	Z	07 23 46.7
	e	NE	48
	4.2 N., 123.1 E.		
	Celebes Sea.		
	h: 588 km ca.		
	H= 07 17 41.2		USCGS
4.	eP	Z	09 36 53
	iS E, S N		37 11.8
4.	P	Z	12 23 08.5
	eS	N	35
	i	N	37
4.	eP	Z	12 56 17
4.	iP	Z	13 15 10.5
	S	NZ	22.0
	P:D		
4.	P	Z	15 31 54.0
	i	NZ	32 38
	P:C		
	6.3 S., 130.2 E.		
	Banda Sea.		
	h: 171 km ca.		
	H= 15 24 07.6		USCGS
4.	iP	Z	21 50 05.7
	S	NEZ	12.4
	P:E,C		
4.	P	Z	22 42 01.9
			(cont.)

Date	Phase	Comp.	Time(GMT) h m s
	i	NE	02.7
	e	E	52.1
	6.3 S., 129.3 E.		
	Banda Sea.		
	h: 108 km ca.		
	H= 22 34 06.3		USCGS
4.	iP	Z	22 52 26.6
	P:D		
4.	iP	Z	23 45 15.3
	i	NE	15.7
	e	E	00 11 43
	L	E	12 49
	P:C		
	Mag. 5¾ (Mat)		
	19.3 S., 175.6 W.		
	Tonga Is. region.		
	h: 222 km ca.		
	H= 23 34 22.5		USCGS
5.	iP Z, P E		00 44 16.4
	P:C		
5.	iP Z, P N		02 23 10.9
	i	NZ	15.2
	P:C		
	50.6 N., 156.5 E.		
	Southern Kamchatka.		
	h: 60 km ca.		
	H= 02 23 40.0		USCGS
5.	eSKS	E	06 24 14
	eL	E	37 25
	Mag. 5¾ (Mat)		
	45.2 S.; 96.4 E.		
	Indian Ocean, east of		
	Kerguelen.		
	h: 40 km ca.		
	H= 06 00 41.3		USCGS
5.	P	Z	07 23 46
	eS	NE	24 26
5.	iP	NEZ	07 43 13.7
	i	NE	23
	eS	NE	33
	e	E	42
	P:S.L,D		
	Mag 4.5 (Mat)		
	36.2 N., 141.0 E.		
	Off coast of Ibargi Pref, Ja		
	japan.		
	h: 20 km ca.		JMA
5.	eP	Z	10 14 48
	eS	E	22 12
	L	E	27 55
	L	Z	33 23
	Mag. 5½ - 5¾ (Mat)		

(cont.)

Date	Phase	Comp.	Time(GMT) h m s
	11.2 S., 162.2 E.		
	Solomon Is. region.		
	h: 38 km ca.		
	H= 10 05 37.2		USCGS
5.	eP	Z	13 21 59
5.	P	Z	15 32 01
	i	N	06
	eS	N	33 43
	L	E	34 26
5.	eP	Z	16 29 11
	S	NE	30 41
5.	iP Z, P NE		18 49 40.2
	eS	N	57
	P:D		
5.	eP	Z	20 43 08
	S	E	52 43
	L	E	21 00 47
	L	E	03 33
	16.4 S., 173.0 W.		
	Tonga Is. region.		
	h: 33 km ca.		
	H= 20 31 57.4		USCGS
5.	eP	Z	21 03 48
5.	P	E	22 46 54.8
	i	Z	55.2
	eS	NE	47 07
	P:W		
6.	iP	Z	02 16 50.8
	iS	NEZ	52.3
6.	iP Z, P NE		02 37 59.3
	i	E	38 26
	S	Z	39 06
	i	E	20
	i	N	43
	i	EZ	45
	P:C		
	Mag. 5.3 (Mat)		
	41.1 N., 142.5 E.		
	Off northeast coast of		
	Honshu, Japan.		
	h: 34 km ca.		
	H= 02 36 36.3		USCGS
6.	eP	Z	12 30 26
	e	N	31 55
6.	P	Z	12 35 39.8
	P:D		
6.	iP	NEZ	13 48 43.9
	S	NE	49 00
	P:S,E,D		

Date	Phase	Comp.	Time(GMT) h m s
6.	iP	EZ	15 41 15.4
	i	N	15.7
	S	NE	38.9
	P:W,C		
6.	iP Z, P E		16 23 06.5
	iS	NEZ	08.3
	P:D		
6.	eP	Z	17 23 43
	e	NE	33 20
6.	P	Z	19 05 22
	i	E	24
	pPP	N	07 39
	epPP	N	08 16
	S	E	11 13
	L	E	15 56
	L	Z	18 43
	Mag. $5\frac{1}{2}$ - $5\frac{3}{4}$ (Mat)		
	6.1 S., 154.4 E.		
	New Britain region.		
	h: 74 km ca.		
	H= 18 57 16.1		USCGS
6.	iPKP	Z	21 25 36.8
	eL	E	22 14 52
	19.7 S., 70.5 W.		
	Northern Chile.		
	h: 50 km ca.		
	H= 21 05 50.2		USCGS
6.	e	E	22 34 32
7.	P	Z	00 02 21
	22.9 S., 173.1 E.		
	Loyalty Is. region.		
	h: 54 km ca.		
	H= 23 51 28.5		USCGS
7.	iP	Z	01 56 36.4
	21.4 S., 179.3 W.		
	Fiji Is. region.		
	h: 593 km ca.		
	H= 01 46 21.1		USCGS
7.	P	Z	07 13 58.7
	P:D		
7.	P	Z	07 35 11
	eL	E	49 20
	L	E	52 16
7.	P	Z	11 24 37
	eL	E	45 49
	eL	E	48 52
7.	P	Z	13 12 43
	26.1 N., 125.5 E.		
	(cont.)		

Date	Phase	Comp.	Time(GMT) h m s
	Ryukyu Is.		
	h: 161 km ca.		
	H= 13 09 17*		USCGS
7.	eP	Z	16 22 03
	S	Z	43
	i	N	44
7.	iP	EZ	17 12 07.4
	S	N	34
	P:W,D		
7.	eL	E	21 25 09
	5.6 S., 152.7 E.		
	New Britain.		
	h: 62 km ca.		
	H= 21 06 06.9		USCGS
7.	eP	Z	21 32 31
	eL	E	38.0
7.	iP Z, P NE		23 23 42.5
	P:S,D		
	19.9 S., 177.9 W.		
	Fiji Is.		
	h: 534 km ca.		
	H= 23 13 25.4		USCGS
8.	eP	Z	01 48 26
	S	E	58 47
	L	E	02 10 46
	L	E	15 40
	Mag. $5\frac{1}{2}$-$5\frac{3}{4}$ (Mat)		
	44.0 S., 163.4 E.		
	South I., New Zealand.		
	h: 33 km ca.		
	H= 01 35 48.1		USCGS
8.	P	Z	10 25 02.8
	i	N	28
	P:C		
8.	iP Z, P NE		10 44 45.6
	P:D		
	6.7 S., 125.9 E.		
	Banda Sea.		
	h: 540 km ca.		
	H= 10 37 20*		USCGS
8.	iP Z, P NE		11 10 04.2
	S	EZ	28.4
8.	P	NZ	11 17 04.2
	S	Z	29
	i	N	30.0
	P:S,D		
8.	iP	NEZ	11 43 09.9
	i	E	10.5
	(cont.)		

March , 1964

Date	Phase	Comp.	Time(GMT) H m s
	S	EZ	11 43 34.5
	P:S,D		
8.	iP	Z	11 44 53.4
	eS	NE	45 18
	P:C		
8.	P	EZ	11 53 21.7
	S	EZ	38
8.	iP NZ, P E		12 03 38.0
	S	N	04 03.5
	P:S,W,D		
8.	iP	Z	13 57 15.0
	i	N	17.3
	S	NZ	52
	P:C		
8.	iP	Z	22 29 14.8
	P:C		
9.	iP	NEZ	00 45 02.0
	S	E	09
9.	P	Z	12 15 16
9.	iP Z, P NE		16 50 56
	i	E	56.5
	e	N	51 42
9.	P	Z	16 56 01.8
	i	N	02.4
	eS	N	57 34
9.	P	Z	23 43 40.0
10.	P	Z	01 06 14.3
	eS	N	07 35
10.	P	Z	01 14 38.4
	i	N	39.3
	S	N	15 02.2
10.	iP	Z	11 55 44.0
	P: C		
10.	eP	Z	12 46 18
	e	Z	50
	8.1 S., 117.8 E.		
	Flores Sea.		
	h: 33 km ca.		
	H= 12 38 11.7		USCGS
10.	iP	NEZ	13 30 29.5
	iS	NZ	42.5
	P:S,W,C		
10.	P	NEZ	14 06 43.5
	i	Z	43.9
	i	N	44.4
			(cont.)

Date	Phase	Comp.	Time(GMT) h m s
	i	Z	14 06 57.0
	PP	N	08 10
	PPP	Z	09 11
	S	NE	12 11
	ScP	Z	44.5
	L	E	14 39
	P:S,W,D		
	Mag. 5½-5½ (Mat)		
	1.9 N., 127.5 E.		
	Molucca Passage.		
	h: 117 km ca.		
	H= 13 59 54.8		USCGS
10.	eP	Z	16 47 43
	i	Z	45.3
10.	P	Z	16 55 04.2
	S	Z	29.5
	P:D		
10.	iP	Z	21 54 06.7
	P:D		
10.	iP	NEZ	22 05 29.5
	iS	NEZ	47.0
	P:S,E,D		
10.	iP NE, P E		22 46 53.5
	P:N,E,D		
10.	P	Z	23 18 18
	6.8 S., 129.4 E.		
	Banda Sea.		
	h: 141 km ca.		
	H= 23 10 24.4		USCGS
11.	iP	NEZ	01 12 57.2
	pP	Z	13 24.5
	i	Z	14 21
	i	E	18 32
	S	N	33
	i	Z	19 02.3
	L	E	20 53
	ScS	E	23 10
	eL	E	25.2
	P:S,W,D		
	Mag. 5½- 5¾ (Mat)		
	1.8 N., 127.1 E.		
	Molucca Passage.		
	h: 58 km ca.		
	H= 01 06 00.4		USCGS
11.	iP	Z	04 38 41.6
	i	E	41.7
11.	eP	E	05 38 37
	e	E	40 04

Date	Phase	Comp.	Time(GMT) h m s
11.	P	Z	06 10 35
	S	NEZ	51
11.	e	E	08 28 51
	i	Z	58
11.	P?	E	09 01 32.6
11.	e	Z	09 58 05
11.	iP	Z	18 24 56.6
	eS	E	26 24
	e	E	27 06
	e	Z	44
	P:D		
	31.9 N., 132.4 E.		
	Near east coast of Kyushu,		
	Japan.		
	h: 33 km ca.		
	H= 18 23 19.6		
12.	iP	Z	01 12 50.8
	eS	N	13 35
12.	i P	NEZ	01 59 09.6
12.	eP	Z	03 59 40
	i	Z	45
	eL	E	04 03 30
	eLr	Z	06.0
	Mag. 5-5¼ (Mat)		
	23.4 N., 121.6 E.		
	Near coast of Taiwan.		
	h: 33 km ca.		
	H= 03 55 14.0		USCGS
12.	P	Z	04 41 02
	22.9 S., 179.2 W.		
	Fuji Is. region.		
	h: 378 km ca.		
	H= 04 30 21.1		USCGS
12.	i	Z	05 43 46
12.	P	Z	11 53 56
	i	Z	54 47
	e	E	55 36
12.	P	Z	14 14 11
	i	NEZ	20.0
12.	P	Z	14 33 02
	S	Z	10.6
12.	P	Z	14 33 50
	S	EZ	59
12.	P	Z	14 34 40
	S	NEZ	49

Date	Phase	Comp.	Time(GMT) h m s
12.	e	Z	16 23 31
	18.2 S., 167.4 E.		
	New Hebrides Is.		
	h: 33 km ca.		
	H= 16 12 15.5		USCGS
12.	P	Z	17 02 53.2
12.	iP	EZ	19 32 50.1
	i	N	50.2
	eS	E	33 30
	i	E	36
	P:E,D		
	Mag. 4.0 (Mat)		
	36.4 N., 140.4 E.		
	Near east coast of Honshu,		
	Japan.		
	h: 85 km ca.		
	H= 19 32 20.2		USCGS
12.	iP	EZ	19 43 48.7
	S	N	44 14
	P:E		
12.	P.	Z	19 53 58
	S	E	54 22
	i	N	23
12.	P	Z	20 27 06
	i	Z	16
	i	NE	28 21
12	P	Z	22 38 32
	eS	E	43 08
	e	E	54
	eLr	Z	45 04
	Mag. 6¼ - 6½ (Mat)		
	13.5 N., 122.9 E.		
	Near south coast of		
	Luzon, P. I.		
	h: 33 km ca.		
	H= 22 32 56.7		USCGS
12.	eP	Z	23 04 32
	5.6 S., 153.0 E.		
	Solomon Is.		
	h: 40 km ca.		
	H= 22 56 22.0		USCGS
13.	iP	Z	01 46 56.4
	P:C		
13.	eP	Z	02 11 33
	i	N	48
	i	E	55
	i	N	56
	i	E	12 08

Date	Phase	Comp.	Time(GMT) h m s
13.	iP	EZ	02 53 51.5
	e	N	54 21
	P:W,C		
13.	P	Z	03 49 48
	e	E	52 14
	eL	E	52
	25.5 N., 142.5 E.		
	Volcano Is.		
	h: 33 km ca.		
	H= 03 46 59*		USCGS
13.	iP	EZ	03 59 54.7
	i	Z	04 00 17
	P:W,C		
13.	eL	E	05 18 45
	Mag. 6 (Mat)		
	4.1 S., 105.1 W.		
	West of Galapagos Is.		
	h: 33 km ca.		
	H= 04 26 23.5		USCGS
13.	P	Z	05 58 58
	eS	E	06 05 00
	eL	E	07 38
	Mag. 5½ (Mat)		
	52.1 N., 170.0 W.		
	Fox Is, Aleutian Is.		
	h: 33 km ca.		
	H= 05 51 31.2		USCGS
13.	iP	Z	06 29 07.7
	17.7 S., 178.7 W.		
	Fiji Is.		
	h: 522 km ca.		
	H= 06 19 02.5		USCGS
13.	P	Z	07 14 24
	i	Z	29
	i	N	31
13.	P	Z	08 49 01
	24.0 S., 179.0 E.		
	South of Fiji Is.		
	h: 512 km ca.		
	H= 08 38 32*		USCGS
13.	iP	Z	08 56 53.2
	iS	NEZ	55.6
	P:D		
13.	ePKP	Z	13 17 19
	37.1 S., 74.9 W.		
	Off coast of southern Chile.		
	h: 54 km ca.		
	H= 12 57 26.0		USCGS
13.	eP	Z	13 43 49
	7.0 S., 155.5 E.		

Date	Phase	Comp.	Time(GMT) h m s
	Solomon Is. region.		
	h: 95 km ca.		
	H= 13 35 33.3		USCGS
13.	iP	Z	18 27 28.7
	i	N	42
	i	NE	52
13.	P	NE	20 08 44
	i	NE	09 10
	i	Z	12
14.	iP	Z	01 02 31.7
	iS	NE	38.2
	i	Z	38.4
	P:C		
14.	P	Z	02 55 16
	e	NE	58 45
	eL	E	03 00 36
	18.7 N., 145.6 E.		
	Mariana Is.		
	h; 136 km ca.		
	H= 02 51 04.1		USCGS
14.	eL	E	03 24 28
14.	P	Z	07 01 04
14.	iP	Z	08 21 40.2
	i	NE	40.4
	S	E	22 01
	P:D		
14.	iP	Z	08 24 46.2
	S	E	57
14.	eP	Z	11 32 36
	51.5 N., 170.1 W.		
	Fox Is, Aleutian Is.		
	h: 33 km ca.		
	H= 11 25 13.3		USCGS
14.	iP	EZ	11 41 17.6
	P:E,D		
14.	P	Z	11 44 03.5
	i	E	33
	i	N	34
14.	iP	Z	11 55 11.0
	i	NE	11.4
	i	Z	56 06
	P:D		
	20.6 S., 178.5 W.		
	Fiji Is.		
	h: 561 km ca.		
	H= 11 44 53.8		USCGS
14.	iP	NEZ	14 29 23.0

(cont.)

(cont.)

Date	Phase	Comp.	Time(GMT) h m s
	e	E	32 28
	P:N,E,D		
14.	iP	Z	15 15 01.3
	i	NE	01.5
	13.7 S., 172.3 E.		
	New Hebrides Is. region.		
	h: 611 km ca.		
	H= 15 05 54.4 USCGS		
14.	P	Z	15 31 21
	15.9 N., 60.5 W.		
	Leeward Is region.		
	h: 31 km ca.		
	H= 15 12 22.4 USCGS		
14.	P	Z	17 23 20
	i	E	22
14.	e	E	17 54.6
14.	iP	NEZ	19 32 10.3
	iS	NE	12.7
	P:S,C		
14.	e	E	20 06 12
14.	iP	NEZ	20 19 10.4
	P:N,E,D		
14.	eL	E	23 38 53
	Mag. 5¼ (Mat)		
	52.1 N., 170.6 W.		
	Andreanof Is, Aleutian Is.		
	h: 33 km ca.		
	H= 23 12 10* USCGS		
15.	P	EZ	03 13 39
15.	P	Z	03 25 17
	e	E	33.7
	e	E	37.9
	1.2 N., 126.2 E.		
	Molucca Passage.		
	h: 43 km ca.		
	H= 03 18 13.6 USCGS		
15.	e	E	07 51.8
15.	P	Z	08 08 12
	49.7 N., 78.0 E.		
	Kaxahk S.S.R.		
	h: 0 km ca.		
	H= 07 59 58.0 USCGS		
15.	iP	NEZ	09 54 21.5
	eS	E	58 02
	e	E	17
	i	N	20
	P:S,W,D		

(cont.)

Date	Phase	Comp.	Time(GMT) h m s
	53.0 N., 157.3 E.		
	Kamchatka.		
	h: 170 km ca.		
	H= 09 49 42.4 USCGS		
15.	P	Z	09 59 40
	S	NZ	54
	i	E	55
15.	P	EZ	14 21 11
	S	N	42
	e	E	45
15.	P	Z	15 30 59
	i	NE	31 23
15.	iP	EZ	15 34 39.8
	iS	NZ	41.8
	P:N,E,C		
15.	eP	Z	15 47 23
	iS	NEZ	26.3
15.	eP	Z	15 47 36
	iS	Z	38.0
	i	NE	38.3
15.	P	Z	17 47 36
15.	P	NZ	18 54 47
	S E, eS N		50
15.	iP	Z	19 14 56.6
	S	NEZ	15 04
	P:C		
15.	eP	Z	21 23 07
	17.9 N., 120.0 E.		
	Near weat coast of Luzon, P.I.		
	h: 33 km ca.		
	H= 21 17 46.1 USCGS		
15.	eP	NZ	22 44 16
	ePP	Z	48 18
	e	E	31
	eSKS	E	54 56
	eS	E	55 41
	eSS	E	23 02 52
	eL	E	15.0
	eLr	Z	17.1
	Mag. 7 - 7½ (Mat)		
	36.2 N., 7.6 W.		
	West of Strait of Gibraltar.		
	h: 27 km ca.		
	H= 22 30 26.0 USCGS		
16.	P	Z	01 11 57
	eL	E	22.5
	36.9 N., 95.5 E.		

(cont.)

March , 1964

Date	Phase	Comp.	Time(GMT) h m s
	Tsinghai Province, China.		
	h: 33 km ca.		
	H= 01 05 17.6		USCGS
16.	P	Z	03 37 02
	38.0 N., 72.9 E.		
	Tadzhik S.S.R.		
	h: 132 km ca.		
	H= 03 28 11.7		USCGS
16.	P	Z	08 30 34
16.	iP Z, P E		08 46 58
	e	E	48 47
	eL	E	51 24
	P:D		
	44.8 N., 146.8 E.		
	Kurile Is.		
	h: 140 km ca.		
	H= 08 44 32.8		USCGS
16.	P	Z	10 58 32
16.	iP	NZ	13 56 54.8
	i	E	55.0
	P:N,D		
16.	eP	Z	15 07 44
	11.5 S., 166.1 E.		
	Santa Cruz Is.		
	h: 69 km ca.		
	H= 14 58 23.4		USCGS
16.	iP	NZ	17 28 55.4
	i	E	55.8
	P:S,C		
	52.6 N., 157.2 E.		
	Southern Kamchatka.		
	h: 171 km ca.		
	H= 17 24 25*		USCGS
16.	iP	EZ	20 38 03.3
	P:C		
16.	eP	Z	20 47 37
	iS	NEZ	40.4
16.	P	Z	21 49 57
	20.6 S., 178.7 W.		
	Fiji Is.		
	h: 578 km ca.		
	H= 21 39 42.5		USCGS
17.	P	Z	00 42 29
17.	P	Z	01 36 45
	45.2 N., 150.4 E.		
	Kurile Is.		
	h: 40 km ca.		
	H= 01 33 46*		USCGS
17.	P	Z	02 10 16
	53.5 N., 163.3 E.		
	Off east coast of Kamchatka.		
	h: 20 km ca.		
	H= 02 04 58.2		USCGS
17.	iP	NEZ	06 25 12.3
	iS	Z	13.9
	P:W,D		
17.	eP	Z	07 15 30
17.	P	Z	10 16 15.2
	i	N	45
17.	P	NEZ	12 26 57
17.	iP	Z	14 01 46.0
	P:D		
17.	iP	EZ	16 02 23.5
	P:E,D		
17.	P	EZ	16 51 55
17.	e	N	18 26 10
	eL	N	37 19
	eL	Z	30
17.	iP	NZ	21 57 47.2
	i	E	48.4
	P:C		
17.	iP	Z	22 02 06.5
	i	N	24
	P:D		
18.	iP	NZ	04 41 22.3
	i	E	24.0
	S	N	44 38
	PcP	E	45 37
	i	E	46 46
	ScP	N	48 02
	ScS	N	51 59
	i	E	52 00
	i	E	02.5
	i	Z	15
	P:S,C		
	Mag. 6.3 (Mat)		
	52.5 N., 153.6 E.		
	Sea of Okhotsk.		
	h: 440 km ca.		
	H= 04 37 26.9		USCGS
18.	P	Z	04 48 19
18.	P	Z	05 27 27
	20.2 S., 178.4 W.		
	Fiji Is.		
	h: 566 km ca.		
	H= 05 17 13.2		USCGS

Date	Phase	Comp.	Time(GMT) h m s
18.	P	E	07 15 54
18.	P	Z	07 24 02
	48.3 N., 155.0 E.		
	Kurile Is.		
	h: 55 km ca.		
	H= 07 20 02*		USCGS
18.	eP	Z	11 25 24
18.	eP	Z	13 16 19
	e	N	54
18.	eP	Z	14 48 26
	i	N	47
18.	eL	E	17 29 15
	45.7 N., 14.1 E.		
	North western Yugoslavia.		
	h: 33 km ca.		
	H= 16 43 24*		USCGS
18.	ePKP	Z	19 17 35
	i	Z	49
	29.9 S., 71.0 W.		
	Northern Chile.		
	h: 50 km ca.		
	H= 18 57 27.3		USCGS
18.	P	Z	20 01 37
	10.5 S., 161.6 E.		
	Solomon Is.		
	h: 85 km ca.		
	H= 19 52 39.3		USCGS
18.	P	Z	20 22 04
	iS?	E	13
	i	N	16
18.	P	NZ	23 37 38.5
	S	E	53
18.	P	Z	23 51 27
	e	N	52 06
19.	PKP	Z	03 48 30
	18.6 S., 69.9 W.		
	Northern Chile.		
	h: 127 km ca.		
	H= 03 28 57.0		USCGS
19.	iP	Z	04 56 03.1
	eS	E	05 04 29
	e	E	08 14
	P:D		
	21.9 S., 179.5 E.		
	Fiji Is.		
	h: 613 km ca.		
	H= 04 45 50.9		USCGS

Date	Phase	Comp.	Time(GMT) h m s
19.	iP Z, P N		08 16 30.5
	iS Z, S N		37.9
	P:S,C		
19.	eP	Z	08 51 17
19.	iP	Z	08 54 01.5
	P:C		
	20.3 S., 178.3 W.		
	Fuji Is.		
	h: 504 km ca.		
	H= 08 43 40.5		USCGS
19.	iP	Z	09 44 07.3
	S	NZ	12.0
	P:D		
19.	P	Z	09 54 13
	S	E	10 03 54
	eSS	E	08 31
	eL	E	19 40
	L	N	20 52
	eLr	Z	22 22
	P:D		
	Mag. 6 (Mat)		
	14.7 N., 56.3 E.		
	Arabian Sea.		
	h: 33 km ca.		
	H= 09 42 34.9		USCGS
	eP	Z	09 56 51
19.	eP	Z	10 28 55
	i	NZ	29 14
19.	iP Z, P N		11 05 58.6
	i	NE	06 05
	P:S,W,D		
	35.3 N., 135.7 E.		
	Honshu, Japan.		
	h: 365 km ca.		
	H= 11 05 04*		USCGS
19.	P	Z	11 52 53
	e	N	54 27
	iS	N	28.3
	i	Z	33
	28.4 N., 139.6 E.		
	Borin Is region.		
	h: 450 km ca.		
	H= 11 50 54.2		USCGS
19.	P	Z	15 13 47
	i	Z	48.1
	S	N	14 13.2
	i	E	14.0
	i	N	21.0

Date	Phase	Comp.	Time(GMT) h m s
19.	iP EZ, P N		16 03 49.2
	P:S,E,D		
19.	P	Z	17 56 49
19.	iP	Z	21 28 53.2
	iS	N	29 11.6
	i	EZ	12
19.	P	N·EZ	21 55 13
	i	E	48
	e	E	22 00 18
	S	E	04 27
	e	Z	05 00
	eL	E	12 20
	eL	N	48
	eLr	Z	18 54
	Mag. 6 (Mat)		
	15.1 S., 172.6 W.		
	Samoa Is. region		
	h: 33 km ca.		
	H= 21 44 03.8		USCGS
19.	PKP Z, ePKP N		22 48 28
	P:C		
	15.3 S., 72.9 W.		
	Southern Peru.		
	h: 115 km ca.		
	H= 22 29 03.2		USCGS
20.	P	Z	04 29 17
	eL	N	42 40
	6.1 S., 150.4 E.		
	New Britain.		
	h: 34 km ca.		
	H= 04 21 08.1		USCGS
20.	e	N	06 18 23
	e	N	21.4
20.	e	N	07 03 56
20.	PKP	Z	07 14 32
	2.0 S., 79.7 W.		
	Ecuador.		
	h: 71 km ca.		
	H= 06 55 28.1		USCGS
20.	eP	Z	07 48 53
20.	iP	Z	07 59 33.6
	i	NZ	34.2
	S	N	08 01 14
	i	E	16
20.	iP Z, P NE		10 05 58.0
	i	E	06 16
	iS	N	19

(cont.)

Date	Phase	Comp.	Time(GMT) h m s
	P:W,C		
20.	eP	Z	19 03 58
	7.0 S., 115.2 E.		
	Bali Sea.		
	h: 121 km ca.		
	H= 18 55 10.8		USCGS
20.	P	Z	19 08 17
	i	Z	41.8
	eL	N	21.1
	23.6 N., 94.4 E.		
	North western Burma.		
	h: 86 km ca.		
	H= 19 00 52.7		USCGS
20.	eP	Z	19 26 41
	19.8 S., 173.6 W.		
	Tonga Is.		
	h: 33 km ca.		
	H= 19 15 16.3		USCGS
20.	iP NZ, P E		19 37 46.6
	iS	NE	53.9
	i	Z	54.2
	P:C		
21.	P	Z	00 20 16
	i	N	19
	S	NZ	42
	i	E	43
21.	iP	Z	01 48 02.8
	i	E	03.1
21.	iP	Z	03 49 51.0
	i	NE	51.4
	PP	Z	51 38
	i	N	39
	iScP	NZ	54 47.6
	iS	N	55 52
	i	E	53
	esS	E	57 57
	e	N	58 06
	ScS	E	59 11
	e	N	12
	isSS	N	04 01 07
	P:D		
	Mag. 7 (Mat)		
	6.4 S., 127.9 E.		
	Banda Sea.		
	h: 367 km ca.		
	H= 03 42 19.6		USCGS
21.	iP	Z	07 51 58.7
	P:C		
	12.1 N., 141.9 E.		
	Mariana Is. region.		

(cont.)

Date	Phase	Comp.	Time(GMT) h m s
	h: 33 km ca.		
	H= 07 46 39*		USCGS
21.	iP EZ, P N		08 17 46.0
	S	EZ	18 01
	P:S,E,D		
21.	iP	NEZ	09 15 04.0
	P:N,W,D		
21.	eP	Z	10 47 47
	22.3 N., 143.7 E.		
	Mariana Is. region.		
	h: 33 km ca.		
	H= 10 44 01*		USCGS
21.	eP	NEZ	13 04 23
21.	eP	Z	13 05 43
	e	EZ	51
21.	iPKP	Z	15 07 26.0
	e	NE	08 23
	i	Z	23.8
	eL	E	55 11
	eL	E	16 09 29
	P:C		
21.	P	Z	15 21 55
	18.7 N., 103.1 W.		
	Near coast of Michoacan,		
	Mexico.		
	h: 83 km ca.		
	H= 15 08 14.3		USCGS
21.	iP	EZ	16 12 19.2
	i	N	19.4
	e	E	49
	P:W,C		
21.	iP	Z	16 38 58.6
	i	NE	59.1
	eL	E	17 02 58
	eL	N	03 21
	P:C		
	Mag. 5½-5¾ (Mat)		
	27.6 S., 177.2 W.		
	Kermadec Is. region.		
	h: 33 km ca.		
	H= 16 27 11.7		USCGS
21.	eP	NE	17 02 21
	S	NE	48
	i	Z	49.7
21.	iP	NZ	18 10 57.6
	iS	EZ	11 19.5
	P:S,D		

Date	Phase	Comp.	Time(GMT) h m s
21.	P	NZ	19 31 09.5
	e	N	52
	e	E	53
21.	P	NEZ	20 06 51
	iS N, S E		[illegible] 07 11
22.	iP	Z	00 57 44.5
	i	NE	[illegible] 45.4
	eL	E	01 05 44
	P:C		
	54.0 N., 160.5 E.		
	Kamchatka.		
	h: 30 km ca.		
	H= 00 52 38.8		USCGS
22.	eP	Z	05 39 44
	i	E	52
	e	N	56
	2.7 S., 126.4 E.		
	Ceram Sea.		
	h: 33 km ca.		
	H= 05 32 07.7		USCGS
22.	ePKP	Z	07 24 41
	5.5 S., 77.1 W.		
	Northern Peru.		
	h: 147 km ca.		
	H= 07 05 39.7		USCGS
22.	ePKP	Z	08 55 01
	eSKKS	E	09 05 45
	e	E	12 09
	eSS	E	18 27
	eL	E	46 42
	eL	N	48 42
	Mag. 6 (Mat)		
	35.7 S., 72.9 W.		
	Near coast of central Chile.		
	h: 33 km ca.		
	H= 08 35 06.4		USCGS
22.	P Z, eP N		10 41 41
	e	N	42 38
22.	iP	NZ	12 20 59.0
	i	E	21 00.0
	P:S,D		
	18.5 N., 145.1 E.		
	Mariana Is. region.		
	h: 533 km ca.		
	H= 12 17 11*		USCGS
22.	eP	Z	12 33 58
22.	iP	NEZ	13 14 39.0
	iS	NE	41.9
	P:N,E		

Date	Phase	Comp.	Time(GMT) h m s
22.	P	Z	13 35 08.0
	S	N	41.5
22.	iP	Z	16 12 32.7
	e	E	14 36
	P:C		
22.	iP	Z	16 42 48.3
	P: C		
	38.7 N., 118.8 W.		
	Walker Lake, Nevada area.		
	h: 21 km ca.		
	H= 16 30 55.9		
22.	iP Z, P E		18 52 59.4
	i	N	53 16
	i	EZ	17
	P: C		
23.	eP	Z	01 11 54
	9.3 S., 103.2 E.		
	Off south coast of Java.		
	h: 50 km ca.		
	H= 01 02 36.1		USCGS
23.	eP	Z	02 35 20
	e	N	29
	S	N	36 01
	e	E	44
23.	iP	NEZ	10 04 20.2
	iS	NEZ	22.5
	P:S,W,D		
23.	eP	Z	11 57 51
	S	N	58 16
	i	E	18.6
	i	Z	20.1
	i	NZ	26
23.	P	NZ	12 30 12
23.	iP	NEZ	13 49 11.6
	pP	EZ	47
	eS	E	56 23
	P:N,W,D		
	33.3 N., 73.7 E.		
	Hindu Kush.		
	h: 126 km ca.		
	H= 13 40 26.3		USCGS
23.	eP	Z	17 46 06
23.	iP	EZ	19 57 28.1
	e	N	58 01
	i	N	05.4
	P:E,C		
23.	e	E	21 00 46
	e	N	01 00
23.	eP	Z	22 33 47

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Date	Phase	Comp.	Time(GMT) h m s
	eS	E	38.0
	19.3 N., 121.0 E.		
	Near north coast of Luzon, P.I.		
	h: 33 km ca.		
	H= 22 28 45.6		USCGS
23.	eP	Z	22 50 52
	i	EZ	51 02
	eS	E	58 45
	eL	E	23 04 30
	17.6 S., 123.2 E.		
	Dampier Land, Western		
	Philippine Is.		
	h: 33 km ca.		
	H= 22 41 15.8		USCGS
24.	P	EZ	02 01 23
	S	N	03 25
	e	E	04 13
	25.2 N., 140.6 E.		
	Volcano Is. region.		
	h: 181 km ca.		
	H= 01 58 42.7		USCGS
24.	eP	Z	06 28 19
	iS	NE	26.1
	i	Z	26.3
24.	iP NZ, P E		06 30 23.0
	eS	N	40
	P:S,D		
24.	iP	Z	13 46 19.7
	e	E	52 34
	P:C		
24.	iP Z, P E		13 37 41.4
	i	N	42.5
	S	NZ	38 05
	i	E	06
	P:C		
24.	eP	Z	14 47 17
	11.7 N., 143.9 E.		
	Mariana Is. region.		
	h: 51 km ca.		
	H= 14 41 [illegible]		USCGS
24.	eP	EZ	16 47 04
	i	N	05.5
24.	PKP	Z	17 58 38.7
	i	Z	45.6
	e	E	58
	27.7 S., 66.7 W.		
	Catamarca Province, Argentina.		
	h: 73 km ca.		
	H= 17 36 08.2		USCGS

Date	Phase	Comp.	Time(GMT) h	m	s
24.	P	Z	20	36	24
	i	NZ			38
	e	E		39	55
	45.2 N., 151.4 E.				
	Kurile Is. region.				
	h: 33 km ca.				
	H= 20 33 16.7 USCGS				
24.	P	Z	21	28	50
24.	iP	E	22	21	08.6
	i	NZ			08.9
	e	Z			48
	e	N			54
	i	E			55
	L	N		22	09
	P:W				
	Mag. 4.1 (Mat)				
	36.1 N., 141.5 E.				
	Near east coast of Honshu, Japan.				
	h: 50 km ca.				
	H= 22 20 26.2 USCGS				
24.	P	Z	23	54	52
	e	Z		55	06
	S	N			14
25.	iP	Z	01	33	02.3
	i	E			03.5
	e	EZ			17
	eS	NE		39	28
	eL	E		40	30
	P:C				
25.	iP	Z	02	43	58.5
	i	E			58.7
	i	N			59.1
	i	E		44	19
	S	N			28
	P:D				
	Mag. 5.5 (Mat)				
	36.3 N., 140.9 E.				
	Near east coast of Honshu, Japan.				
	h: 67 km ca.				
	H= 02 43 23.5 USCGS				
25.	P	EZ	04	52	43.4
	i	NE			43.7
	eS	N		53	14
	i	N			17
	i	Z			24
	Mag. 5.2 (Mat)				
	36.3 N., 141.1 E.				
	Near east coast of Honshu, Japan.				
	h: 60 km ca.				
	H= 04 52 07.8 USCGS				
25.	P	NZ	05	31	34
	e	Z		32	17
	S	N			24
25.	P	Z	07	51	40
	e	Z			43
25.	P	NEZ	10	33	01
	e	N		34	32
25.	eP	Z	10	37	25
	44.9 N., 149.5 E.				
	Kurile Is.				
	h: 33 km ca.				
	H= 10 34 41* USCGS				
25.	iP	Z	11	44	47.2
	19.7 S., 175.9 W.				
	Tonga Is. region.				
	h: 170 km ca.				
	H= 11 33 48.4 USCGS				
25.	P	Z	15	39	49.1
	i	N			49.5
	eS	E		40	32
	i	N			33
25.	eP	Z	15	42	52
	20.1 S., 168.8 E.				
	Loyalty Is. region.				
	h: 33 km ca.				
	H= 15 32 26.0 USCGS				
25.	eP	Z	19	17	44
	i	N			44.8
	i	E			45.5
25.	iP	Z	20	26	39.7
	P:C				
	5.8 S., 104.0 E.				
	Near south coast of Sumatra.				
	h: 33 km ca.				
	H= 20 17 24.7 USCGS				
25.	eP	Z	20	36	03
	i	N			05.2
25.	eP	EZ	22	28	26
	iS	EZ			41.5
	i	N			41.9
25.	eP	EZ	22	37	24
	S	N			53
25.	eP	Z	22	46	40
25.	eP	Z	01	54	33
	21.5 S., 174.6 W.				
	Tonga Is.				
	h: 33 km ca.				
	H= 01 43 04* USCGS				

Date	Phase	Comp.	Time(GMT) h m s
26.	eP	Z	02 09 39
	e	Z	10 14
	iS	N	14 10
	i	EZ	18
	L	N	16 17
	L	E	36
	L	Z	48
	L	N	19 24
	Mag. 6½ (Mat)		
	11.3 N., 142.0 E.		
	Mariana Is.		
	h: 33 km ca.		
	H= 02 04 20.2		USCGS
26.	iP	Z	02 57 58.8
	P:C		
26.	iP	NZ	03 08 29.4
	P:N,D		
26.	P	Z	03 32 38.0
	e	EZ	33 09
26.	i	EZ	03 40 18.4
	i	N	24.6
26.	P	Z	03 43 43.5
26.	eP	Z	05 32 18
	e	E	36 31
26.	iP	Z	06 36 28.1
	e	E	41 45
	eL	N	43 04
	13.7 N., 120.6 E.		
	Near south west coast of		
	Luzon, P.I.		
	h: 118 km ca.		
	H= 06 30 51.1		USCGS
26.	iP	NZ	07 16 05.1
	i	E	05.6
	P:S,C		
	46.4 N., 145.1 E.		
	Sea of Okhotsk.		
	h: 180 km ca.		
	H= 07 13 04.5		USCGS
26.	iP	Z	09 24 56.0
	eL	N	29 00
	eL	E	10
	P:C		
26.	iP	NEZ	12 23 40.0
	i	E	24 12.4
	i	Z	13
	i	N	14
	i	E	20
	e	E	34 34
	P:S,W.D		

(cont.)

Date	Phase	Comp.	Time(GMT) h m s
	6.8 S., 129.3 E.		
	Banda Sea.		
	h: 156 km ca.		
	H= 12 15 47*		USCGS
26.	ePS	E	13 59 [illegible]
	eSS	E	14 04 46
	eLq	N	16 45
	eLq	E	17 32
	eLr	E	21 58
	eLr	N	22 39
	Mag. 6½ (Mat)		
	4.4 S., 104.7 W.		
	1500 km south west of		
	Galapagos Is.		
	h: 33 km ca.		
	H= 13 29 56.2		USCGS
26.	iP	EZ	14 43 15.3
	iS	E	43.3
	i	N	45
	i	Z	54
	i	E	56
	P·W.C		
26.	iP	NEZ	19 38 40.1
	S	N	39 35
	e	E	40
	i	N	45
	i	Z	50
	i	E	52
	i	E	40 58
	P:S,W.C		
	Mag. 5.0 (Mat)		
	39.3 N., 143.3 E.		
	Off east coast of		
	Honshu, Japan.		
	h: 33 km ca.		
	H= 19 37 27.6		USCGS
26.	iP Z, P N		19 50 38.9
	S	NEZ	56
	P:C		
26.	iP	Z	22 01 22.4
	e	Z	02 05
	P:C		
27.	iP	NZ	01 [illegible]
	S	E	4[illegible]
	i	NZ	47
	P:S,C		
27.	P	NEZ	03 2[illegible]
	eS	NZ	24 10
	i	E	1[illegible]
27	P	NEZ	03 3[illegible]
	e	Z	37 3[illegible]
	e	E	40

Date	Phase	Comp.	Time(GMT) h m s
27.	P	EZ	04 37 39
	i	Z	53
	pP	Z	38 00
	eS	E	43 23
	eL	E	49 53
	25.9 N., 95.8 E.		
	Northern Burma.		
	h: 93 km ca.		
	H= 04 30 33.0		USCGS
27.	iP	NEZ	09 53 36.9
	P:N,W,D		
27.	eP	NZ	09 55 28
27.	iP	EZ	11 16 31.7
	i	N	32.4
	iS	N	17 01.9
	i	E	07.2
	P:E,D		
27.	P	EZ	17 38 00.3
	iS	Z	25.8
	i	NE	26.1
27.	iP	NEZ	20 32 41.0
	isPP	Z	33 02.6
	eS	E	41 15
	i	N	21
	e	N	45 04
	e	N	52 00
	e	E	15
	P:N,W,C		
	23.7 S., 179.9 E.		
	South of Fiji Is.		
	h: 520 km ca.		
	H= 20 22 10.6		USCGS
27.	P	Z	20 36 16
27.	eP	EZ	23 11 33
	eL	E	27 49
	eL	N	31 47
	27.2 N., 89.3 E.		
	Bhutan.		
	h: 32 km ca.		
	H= 23 03 41.7		USCGS
28.	P	Z	02 29 28.4
	i	N	28.8
	i	E	29.3
28.	eP	Z	02 36 13
	S	N	59
28.	iP	NZ	03 45 16.2
	i	E	16.6
	i	NE	46 00
	S	N	52 21
	i	E	38

(cont.)

Date	Phase	Comp.	Time(GMT) h m s
	L	E	03 57 27
	L	N	58 52
	P:S,C		
	Mag. 8 (Mat)		
	61.1 N., 147.6 W.		
	Prince William Sound, Alaska.		
	h: 20 km ca.		
	H= 03 36 12.7		USCGS
28.	e	Z	03 58 36
28.	e	Z	04 00 23
28.	eP	NZ	04 01 37
28.	e	Z	04 02 13
28.	eP	Z	04 04 09
28.	P	Z	04 06 38
28.	e	Z	04 10 24
28.	P	NEZ	04 11 36
28.	eP	Z	04 13 25
28.	e	Z	04 17 18
28.	eP	NZ	04 19 35
28.	eP	NEZ	04 20 19
28.	eP	NZ	04 26 33
28.	eP	Z	04 31 26
28.	eP	Z	04 34 11
28.	eP	Z	04 37 07
28.	e	Z	04 38 30
28.	P	Z	04 40 25
28.	e	Z	04 43 36
28.	eP	Z	04 45 08
28.	iP	Z	04 38 30.4
28.	iP	Z	04 49 12.1
	e	Z	50 20
28.	eP	Z	04 52 21
28.	P	EZ	04 55 51
	i	N	52.3
28.	e	Z	04 59 41

Date	Phase	Comp.	Time(GMT) h m s
28.	eP	NZ	05 03 06
	59.8 N., 149.4 W.		
	Aftershock of Alaska Earthq.		
	h: 25 km ca.		
	H= 04 54 07.9		USCGS
28.	P	Z	05 08 54.0
28.	eP	Z	05 11 42
28.	e	Z	05 14 19
28.	P	Z	05 20 45.8
28.	iP	Z	05 26 28.1
	i	NE	28.6
	P:C		
28.	P	Z	05 29 19.6
28..	P	Z	05 32 16.6
28.	eP	Z	05 42 26
28.	P	EZ	05 43 02
	i	N	02.6
	60.2 N., 146.2 E.		
	Aftershock of Alaska Earthq.		
	h: 20 km ca.		
	H= 05 33 52.6		USCGS
28.	P	Z	05 44 24.1
	i	EZ	27.2
	i	N	27.6
	57.2 N., 153.0 W.		
	Aftershock of Alaska Earthquake.		
	h: 33 km ca.		
	H= 05 35 38.4		USCGS
28.	iP	NZ	05 47 24.6
	P:N,D		
28.	iP Z, P N		05 50 58.6
	P:D		
28.	P	Z	05 53 55
	60.1 N., 148.4 W.		
	Aftershock of Alaska Earthq.		
	h: 33 km ca.		
	H= 05 44 54.9		USCGS
28.	iP	Z	05 55 37.6
	P:D		
28.	iP	EZ	05 58 14.2
	i	N	16.1
	P:E,D		

Date	Phase	Comp.	Time(GMT) h m s
28.	iP	Z	06 01 53.3
	i	Z	02 00
	i	N	00.6
	P:C		
28.	P	Z	06 05 41
28.	iP	Z	06 14 59.8
	P:D		
28.	iP	Z	06 15 51.3
	P:D		
28.	iP Z, P N		06 17 46.1
	i	E	46.5
	P:C		
	60.1 N., 148.6 W.		
	Aftershock of Alaska Earthq.		
	h: 20 km ca.		
	H= 06 08 44.2		USCGS
28.	iP	Z	06 19 02.2
	P:C		
28.	P	Z	06 22 39
	i	Z	59
28.	eP	NZ	06 24 14
28.	P	Z	06 30 49
28.	P	Z	06 31 38
28.	eP	Z	06 33 18
	58.6 N., 149.4 W.		
	Aftershock of Alaska Earthq.		
	h: 15 km ca.		
	H= 06 24 10.1		USCGS
28.	P	Z	06 36 51
28.	eP	Z	06 37 36
28.	iP	NZ	06 38 05.6
	P:N,D		
	57.7 N., 150.8 W.		
	Aftershock of Alaska Earthq.		
	h: 20 km ca.		
	H= 06 29 17.4		USCGS
28.	P	NEZ	06 40 02
28.	iP	Z	06 41 40.9
	i	N	41.2
	P:C		
	60.1 N., 147.6 W.		
	Aftershock of Alaska Earthq.		
	h: 33 km ca.		
	H= 06 32 38.6		USCGS

Date Phase Comp. Time(GMT)
h m s

28. iP Z 06 42 55.3
P:D

28. P Z 06 45 38
57.9 N., 151.1 W.
Aftershock of Alaska Earthq.
h: 33 km ca.
H= 06 36 55.2 USCGS

28. eP Z 06 49 03

28. iP NEZ 06 50 32.7
P:N,E,D
59.9 N., 147.8 W.
Aftershock of Alaska Earthq.
h: 15 km ca.
H= 06 41 28.0 USCGS

28. iP Z 06 51 47.0
P:D

28. iP NEZ 06 52 48.7
e Z 54 44
P:N,E,D
58.3 N., 151.3 W.
Aftershock of Alaska Earthq.
h: 25 km ca.
H= 06 43 57.4 USCGS

28. iP Z 06 56 17.0
P:C

28. iP Z 06 59 37.1
i NE 37.6
P:D
57.1 N., 152.3 W.
Aftershock of Alaska Earthq.
h: 33 km ca.
H= 06 50 48.9 USCGS

28. iP Z 07 02 34.6
i E 34.8
i N 35.2
P:D
58.8 N., 149.5 W.
Aftershock of Alaska Earthq.
h: 20 km ca.
H= 06 53 35.6 USCGS

28. iP NZ 07 03 36.2
P:S,C

28. P Z 07 11 25

28. P Z 07 12 45

28. eP Z 07 18 12
60.0 N., 147.5 W.
(cont.)

Date Phase Comp. Time(GMT)
h m s

Aftershock of Alaska Earthq.
h: 33km ca.
H= 07 09 12.0 USCGS

28. iP Z 07 19 20.4
i NE 20.6
pP EZ 20 37
P:D
Mag. 6.6 (Mat)
58.8 N., 149.5 W.
Aftershock of Alaska Earthq.
h: 20 km ca.
H= 07 10 21.4 USCGS

28. e Z 07 25 13

28. P Z 07 29 43

28. P Z 07 33 26
i Z 34 42.6
59.3 N., 149.3 W.
Aftershock of Alaska Earthq.
h: 20 km ca.
H= 07 24 21.7 USCGS

28. iP Z 07 37 11.1
i N 11.6
P:C
57.9 N., 150.4 W.
Aftershock of Alaska Earthq.
h: 20 km ca.
H= 07 28 20.5 USCGS

28. eP Z 07 39 20
i Z 21.6
i N 22.1
57.4 N., 151.7 W.
Aftershock of Alaska Earthq.
h: 15 km ca.
H= 07 30 29.6 USCGS

28. iP Z 07 53 13.8
P:D

28. eP Z 07 56 39
58.3 N., 150.2 W.
Aftershock of Alaska Earthq.
h: 33km ca.
H= 07 47 47.1 USCGS

28. iP Z 07 57 33.[illegible]
P:C
57.0 N., 153.3 W.
Aftershock of Alaska Earthq.
h: 15 km ca.
H= 07 48 47.8 USCGS

28. P Z 07 59 03

Date	Phase	Comp.	Time(GMT) h m s
28.	iP	Z	08 00 50.4
	57.1 N., 154.0 W.		
	Aftershock of Alaska Earthq.		
	h: 33 km ca.		
	H= 07 52 00.8		USCGS
28.	eP	Z	08 01 00
	S	NE	10
	i	Z	11
28.	eP	Z	08 04 03
	58.4 N., 150.1 W.		
	Aftershock of Alaska Earthq.		
	h: 25 km ca.		
	H= 07 55 08.4		USCGS
28.	eP	Z	08 17 43
28.	eP	Z	08 39 17
	60.5 N., 147.0 W.		
	Aftershock of Alaska Earthq.		
	h: 33 km ca.		
	H= 08 30 11.7		USCGS
28.	P	Z	08 41 53
	61.0 N., 143.1 W.		
	Aftershock of Alaska Earthq.		
	h: 15 km ca.		
	H= 08 32 33.7		USCGS
28.	iP	Z	08 42 39.6
	i	E	39.9
	P:D		
	58.1 N., 151.1 W.		
	Aftershock of Alaska Earthq.		
	h: 25 km ca.		
	H= 08 33 47.0		USCGS
28.	eP	Z	08 45 49
28.	iP	Z	08 48 41.2
	P:D		
28.	iP	NEZ	08 48 47.5
	P:N,E,D		
	57.5 N., 151.6 W.		
	Aftershock of Alaska Earthq.		
	h: 20 km ca,		
	H= 08 39 54.9		USCGS
28.	iP	Z	08 51 39.0
	60.3 N., 147.2 W.		
	Aftershock of Alaska Earthq.		
	h: 33 km ca.		
	H= 08 42 31.3		USCGS
28.	eP	Z	08 54 49

Date	Phase	Comp.	Time(GMT) h m s
28.	eP	Z	08 55 35
28.	eP	Z	09 03 18
	57.0 N., 154.5 W.		
	Aftershock of Alaska Earthq.		
	h: 33 km ca.		
	H= 08 54 25*		USCGS
28.	P	NEZ	09 04 14
	P:D		
	56.7 N., 151.9 W.		
	Aftershock of Alaska Earthq.		
	h: 25 km ca.		
	H= 08 55 22.8		USCGS
28.	eP	Z	09 07 49
	i	Z	56
	57.4 N., 151.8 W.		
	Aftershock of Alaska Earthq.		
	h: 33 km ca.		
	H= 08 59 03.7		USCGS
28.	iP	Z	09 09 51.6
	i	NE	52.1
	P:C		
	56.5 N., 152.0 W.		
	Aftershock of Alaska Earthq.		
	h: 20 km ca.		
	H= 09 01 00.5		USCGS
28.	iP Z, P NE		09 14 42.1
	i	Z	49.8
	i	N	51.0
	P:C		
	56.6 N., 153.2 W.		
	Aftershock of Alaska Earthq.		
	h: 25 km ca.		
	H= 09 05 56.4		USCGS
28.	iP	Z	09 22 44.0
	P:C		
	59.4 N., 151.2 W.		
	Aftershock of Alasks Earthq.		
	h: 35 km ca.		
	H= 09 13 56.6		USCGS
28.	eP	Z	09 26 40
	57.4 N., 151.6 W.		
	Aftershock of Alaska Earthq.		
	h: 25 km ca.		
	H= 09 17 52.6		USCGS
28.	eP	Z	09 27 43
28.	iP	Z	09 29 11.2
	P:D		
	59.8 N., 149.9 W.		
	Aftershock of Alaska Earthq.		

(cont.)

Date	Phase	Comp.	Time(GMT) h m s
	h: 33 km ca.		
	H= 09 20 28.6 USCGS		
28.	eP	Z	09 35 11
	61.3 N., 148.8 W.		
	Aftershock of Alaska Earthq.		
	h: 33 km ca.		
	H= 09 26 16.5 USCGS		
28.	iP	Z	09 42 47.3
	i	Z	54.4
	i	Z	43 41.1
	P:C		
	56.8 N., 152.3 W.		
	Aftershock of Alaska Earthq.		
	h: 20 km ca.		
	H= 09 34 01.5 USCGS		
28.	P	Z	09 53 59
	59.1 N., 151.1 W.		
	Aftershock of Alaska Earthq.		
	h: 33 km ca.		
	H= 09 45 07.8 USCGS		
28.	iP	NZ	10 02 03.6
	S	N	09 37
	eL	N	19 23
	eL	E	41
	P:S,C		
	Mag. 6.2 (Mat)		
	59.7 N., 146.6 W.		
	Aftershock of Alaska Earthq.		
	h: 30 km ca.		
	H= 09 52 55.7 USCGS		
28.	eP	Z	10 07 10
	i	Z	35.6
	57.0 N., 153.3 W.		
	Aftershock of Alaska Earthq.		
	h: 33 km ca.		
	H= 09 58 24* USCGS		
28.	P	Z	10 16 12
28.	eP	Z	10 20 48
28.	P	NZ	10 26 39
	56.6 N., 152.2 W.		
	Aftershock of Alaska Earthq.		
	h: 15 km ca.		
	H= 10 17 48.5 USCGS		
28.	iP	Z	10 34 32.7
	i	Z	38.2
	P:C		
	58.8 N., 149.8 W.		
	Aftershock of Alaska Earthquake.		
	h: 33 km ca.		
	H= 10 25 34* USCGS		
28.	P	Z	10 35 19
	e	Z	36 03
28.	iP	Z	10 41 47.4
	i	NE	47.7
	P:D		
	57.7 N., 152.2 W.		
	Aftershock of Alaska Earthq.		
	h: 35 km ca.		
	H= 10 33 00.2 USCGS		
28.	iP	NEZ	10 44 25.8
	i	Z	34.1
	PP	Z	46 24
	S	NZ	51 33
	eSS	E	55 21
	eSS	N	42
	P:N, E,D		
	57.2 N., 152.4 W.		
	Aftershock of Alaska Earthq.		
	h: 33 km ca.		
	H= 10 35 38.9 USCGS		
28.	P	Z	10 52 47.2
	e	Z	53
28.	P	Z	10 58 30
	i	Z	35.7
	59.1 N., 148.3 W.		
	Aftershock of Alaska Earthq.		
	h: 15 km ca.		
	H= 10 49 23.2 USCGS		
28.	e	Z	11 02 29
	i	Z	45
28.	iP	Z	11 06 28.6
	P:C		
	60.6 N., 144.7 W.		
	Aftershock of Alaska Earthq.		
	h: 33 km ca.		
	H= 10 57 18.1 USCGS		
28.	eP	Z	11 08 06
	i	Z	10.6
	57.4 N., 151.6 W.		
	Aftershock of Alaska Earthq.		
	h: 30 km ca.		
	H= 10 59 16.3 USCGS		
28.	eP	Z	11 11 19
	58.2 N., 149.9 W.		
	Aftershock of Alaska Earthq.		
	h: 30 km ca.		
	H= 11 02 22.7 USCGS		

(cont.)

Date	Phase	Comp.	Time(GMT) h m s
28.	P	Z	11 15 28
28.	P	NZ	11 16 08
	58.3 N., 150.7 W.		
	Aftershock of Alaska Earthq.		
	h: 33 km ca.		
	H= 11 07 13.2		
28.	iP	Z	11 17 28.2
	i	NEZ	29.1
	i	NZ	34.4
	P:D		
	60.1 N., 148.4 W.		
	Aftershock of Alaska Earthq.		
	h: 15 km ca.		
	H= 11 08 26.0 USCGS		
28.	iP	NZ	11 19 15.1
	i	E	15.6
	e	E	57
	i	N	58
	P:N,C		
28.	P	Z	11 33 39
	56.4 N., 149.7 W.		
	Aftershock of Alaska Earthq.		
	h: 25 km ca.		
	H= 11 24 57.5 USCGS		
28.	P	Z	11 36 05
28.	iP	NEZ	11 37 21.0
	i	Z	50
	ePP	Z	38 50
	PP	N	54
	PcP	Z	39 31
	S	EZ	43 06
	S	N	08
	L	N	46 02
	L	EZ	16
	ScS	N	47 18
	ScS	E	19
	P:S,W,D		
	Mag. 6.7 (Mat)		
	0.5 N., 122.3 E.		
	Northern Celebes.		
	h: 140 km ca.		
	H= 11 30 09.8 USCGS		
28.	P	NZ	11 41 18
	59.0 N., 149.5 W.		
	Aftershock of Alaska Earthq.		
	h: 20 km ca.		
	H= 11 32 19.0 USCGS		
28.	e	Z	11 52 09
28.	iP	Z	11 58 59.1
			(cont.)
	i	NEZ	11 59 06
	iPcP	Z	12 00 16.8
	P:D		
	58.2 N., 149.8 W.		
	Aftershock of Alaska Earthq.		
	h: 25 km ca.		
	H= 11 50 01.9 USCGS		
28.	eP	Z	12 05 47
	e	Z	54
	57.6 N., 151.8 W.		
	Aftershock of Alaska Earthq.		
	h: 33 km ca.		
	H= 11 56 48.3 USCGS		
28.	iP	NZ	12 12 26.6
	P:S,C		
	60.3 N., 146.6 W.		
	Aftershock of Alaska Earthq.		
	h: 15 km ca.		
	H= 12 03 16.5 USCGS		
28.	e	Z	12 15 45
28.	P	Z	12 19 04.6
	i	NZ	14.1
28.	P	EZ	12 29 31
	i	NEZ	32.0
	i	Z	42.1
	PcP	Z	30 58
	S	NEZ	36 33
	SS	E	39 58
	SS	N	40 07
	L	Z	45 08
	L	E	47 44
	Mag. 6.3 (Mat)		
	56.5 N., 154.0 W.		
	Aftershock of Alaska Earthq.		
	h: 25 km ca.		
	H= 12 20 49.8 USCGS		
28.	iP	Z	12 34 45.7
	~~P:D~~		
28.	iP Z, P N		12 40 32.8
	P: D		
	59.1N., 149.6W.		
	Aftershock of Alaska E.		
	h: 20 km ca.		
	H= 12 31 29.8 USCGS		
28.	P	Z	12 43 46.6
28.	e	Z	12 45 05
28.	eP	Z	12 47 35

Date	Phase	Comp.	Time(GMT) h m s
28.	iP	Z	12 57 38.0
	i	N	38.4
	i	Z	42.5
	P: C		
	60.5N., 145.9W.		
	Aftershock of Alaska E.		
	h: 33 km ca.		
	H= 12 48 34*		USCGS
28.	eP	Z	13 00 43
28.	eP	Z	13 03 13
28.	iP	Z	13 10 21.6
	P: C		
	60.1N., 147.0W.		
	Aftershock of Alaska E.		
	h: 20 km ca.		
	H= 13 01 14.2		USCGS
28.	eP	Z	13 15 12
28.	P	Z	13 21 13
28.	P	Z	13 22 26
28.	eP	Z	13 25 01
28.	iP	Z	13 36 46.3
	i	NE	46.7
	i	Z	52.0
	P: C		
	60.3N., 147.1W.		
	Aftershock of Alaska E.		
	h: 15 km ca.		
	H= 13 27 38.5		USCGS
28.	eP	Z	13 52 59
	57.5N., 152.3W.		
	Aftershock of Alaska E.		
	h: 25 km ca.		
	H=13 44 11.0		USCGS
28.	P	Z	13 54 43
28.	eP	Z	13 56 22
	57.0N., 152.8W.		
	Aftershock of Alaska E.		
	h : 15 km ca.		
	H= 13 47 37.0		USCGS
28.	P	Z	14 01 45.4
28.	P	Z	14 03 37.3
	62.1N., 147.1W.		
	Aftershock of Alaska E.		
	h: 15 km ca.		
	H= 13 54 19.9		USCGS

Date	Phase	Comp.	Time(GMT) h m s
28.	iP	NEZ	14 10 38.2
	P: S, W, C		
	56.5N., 154.4W.		
	Aftershock of Alaska E.		
	h: 25 km ca.		
	H= 14 01 57.6		USCGS
28.	P	Z	14 23 24
28.	eP	Z	14 27 15
	58.0N., 149.7W.		
	Aftershock of Alaska E.		
	h: 20 km ca.		
	H= 14 18 16.1		USCGS
28.	eP	Z	14 30 00
28.	iP	Z	14 34 27.6
28.	iP	NEZ	14 42 03.5
	P: S, W, C		
	57.8N., 152.1W.		
	Aftershock of Alaska E.		
	h: 25 km ca.		
	H= 14 33 13.6		USCGS
28.	e	Z	14 44 52
28.	eP	Z	14 47 48
28.	eP	Z	14 51 01
28.	P	Z	14 54 50
28.	iP Z, P E		14 55 11.7
	P: C		
	57.8N., 151.3W.		
	Aftershock of Alaska E.		
	h: 33 km ca.		
	H= 14 46 19.2		USCGS
28.	iP	NZ	14 56 45.8
	i	EZ	48.1
	eS	N	15 04 01
	i	E	14
	eSS	N	08.0
	e	Z	08 28
	P: S, C		
	Mag. 6.4(Mat)		
	60.4N., 146.5W.		
	Aftershock of Alaska E.		
	h: 10 km ca.		
	H= 14 47 37.1		USCGS
28.	iP	NZ	14 58 22.1
	i	E	23.6
	i	Z	29.0
	eS	E	15 05 41

(cont.)

~~April~~ March, 1964

Date	Phase	Comp.	Time(GMT) h m s
	i	Z	15 05 54
	i	E	06 38
	eL	E	11 17
	eL	N	22
	L	E	16 09
	L	Z	19 03
	eL	N	17
	P: N, D		
	Mag. 6.5 (Mat)		
	60.4 N., 147.1 W.		
	Aftershock of Alaska E.		
	h: 10 km ca.		
	H= 14 49 13.7 USCGS		
28.	iP	Z	15 09 19.3
	P: D		
28.	P	Z	15 12 42.2
28.	P	Z	15 18 38
	i	Z	45.8
	i	Z	59.6
28.	eP	Z	15 28 01
28.	iP	Z	15 29 07.6
	P: D		
	57.4 N., 151.3 W.		
	Aftershock of Alaska E.		
	h: 20 km ca.		
	H= 15 20 28.6 USCGS		
28.	iP	NZ	15 31 46
	P: N, D		
	60.4 N., 146.8 W.		
	Aftershock of Alaska E.		
	h: 15 km ca.		
	H= 15 22 36.4 USCGS		
28.	iP	Z	15 36 37.8
	61.0 N., 149.0 W.		
	Aftershock of Alaska E.		
	h: 33 km ca.		
	H= 15 27 30.1 USCGS		
28.	e	Z	15 40 16
28.	iP	Z	15 42 42.3
	P: C		
28.	P	Z	15 44 51.9
	58.3 N., 150.9 W.		
	Aftershock of Alaska E.		
	h: 25 km ca.		
	H= 15 36 22.3 USCGS		
28.	eP	Z	15 45 26
28.	eP	Z	15 49 06
	e	Z	28

Date	Phase	Comp.	Time(GMT) h m s
28.	P	Z	15 52 29
	57.6 N., 151.6 W.		
	Aftershock of Alaska E.		
	h: 33 km ca.		
	H= 15 43 45.3 USCGS		
28.	P	Z	15 51 58.6
	e	Z	52 29
	60.6 N., 147.1 W.		
	Aftershock of Alaska E.		
	h: 33 km ca.		
	H= 15 42 53.5 USCGS		
28.	iP	Z	16 00 49.9
	i	NE	50.3
	P: D		
	58.8 N., 149.9 W.		
	Aftershock of Alaska E.		
	h: 20 km ca.		
	H= 15 51 50.7 USCGS		
28.	P	Z	16 04 40
	i	Z	48
	59.7 N., 146.3 W.		
	Aftershock of Alaska E.		
	h: 10 km ca.		
	H= 15 55 25.8 USCGS		
28.	P	Z	16 10 24.0
	S	N	43
	i	EZ	45
28.	eP	Z	16 19 01
	i	Z	50
28.	e	Z	16 30 51
	e	Z	57
28.	P?	NZ	16 35 23.1
	i	Z	37 15.9
	57.5 N., 150.9 W.		
	Aftershock of Alaska E.		
	h: 30 km ca.		
	H= 16 26 16.9		
28.	iP	Z	16 53 41.2
	i	N	41.6
	i	Z	47.6
	i	Z	54 54.6
	P: C		
	59.3 N., 147.8 W.		
	Aftershock of Alaska E.		
	h: 25 km ca.		
	H= 16 44 35.9 USCGS		
28.	P	Z	16 56 51
28.	P	Z	17 02 10
28.	P	Z	17 24 16

(cont.)

Date	Phase	Comp.	Time(GMT) h m s
	59.5N., 148.6W.		
	Aftershock of Alaska E.		
	h:33 km ca.		
	H= 17 14 59.0		USCGS
28.	P	Z	17 35 42.1
28.	P	Z	17 36 37
28.	eP	Z	17 44 58
	e	Z	45 26
28.	iP	Z	17 48 27.0
	P: C		
28.	P	Z	17 56 28
	60.4N., 145.7W.		
	Aftershock of Alaska E.		
	h: 15 km ca.		
	H= 17 47 17.0		USCGS
28	P	Z	17 58 50
	57.7N., 150.2W.		
	Aftershock of Alaska E.		
	h: 15 km ca.		
	H= 17 49 49.7		USCGS
28.	P	Z	18 05 50
28.	eP	Z	18 12 16
	i	Z	23.5
28.	eP	Z	18 15 00
28.	eP	Z	18 35 05
28.	eP	Z	18 56 14
28.	P	NZ	19 10 59
	60.1N., 146.9W.		
	Aftershock of Alaska E.		
	h: 15 km ca.		
	H= 19 01 51.5		USCGS
28.	P	Z	19 17 12
28.	eP	Z	19 30 43
	i	Z	52.3
	61.6N., 146.7W.		
	Aftershock of Alaska E.		
	h: 45 km ca.		
	H= 19 21 38.8		USCGS
28.	iP	EZ	19 31 15.6
	i	N	16.1
	S	N	43
	i	E	46.6
	P: E, D		

Date	Phase	Comp.	Time(GMT) h m s
28.	eP	Z	19 38 07
	58.1N., 150.4W.		
	Aftershock of Alaska E.		
	h: 20 km ca.		
	H= 19 29 02.4		USCGS
28.	P	Z	19 50 18
28.	eP	Z	19 54 13
	56.4N., 152.6W.		
	Aftershock of Alaska E.		
	h: 20 km ca.		
	H= 19 45 21.4		USCGS
28.	P	Z	19 59 42.6
	S	N	20 00 04
28.	eP	Z	20 17 43
28.	eP	Z	20 28 00
28.	iP Z, P N		20 38 06.4
	iPcP	Z	39 26.1
	S	NE	45 23
	i	Z	31
	i	E	46 52
	i	Z	47 19
	ScS	NE	48 00
	L	E	51 07
	L	N	17
	L	E	55 23
	eL	Z	57 10
	P: N, D		
	Mag. 6.4(Mat)		
	59.3N., 148.7W.		
	Aftershock of Alaska E.		
	h: 40 km ca.		
	H= 20 29 08.6		USCGS
28.	eP	Z	20 42 05
	S	N	40
28.	eP	Z	20 48 03
28.	P	NZ	20 48 40
28.	iP	NEZ	21 01 55.5
	iS	NEZ	57.8
	P: S, W, D		
28.	eP	Z	21 08 38
28.	eP	Z	21 24 15
	58.2N., 150.1W.		
	Aftershock of Alaska E.		
	h: 25 km ca.		
	H= 21 15 17.4		USCGS

March, 1964

Date	Phase	Comp.	Time(GMT) h m s
28.	iP	NEZ	21 44 32.6
	iS	Z	34.7
	P: S, W, D		
28.	eP	Z	22 06 43
	56.4 N., 152.6 W.		
	Aftershock of Alaska E.		
	h: 33 km ca.		
	H= 21 57 54.3		USCGS
28.	P	Z	22 18 58
	e	Z	19 39
	ePcP	Z	20 13
	58.0 N., 153.2 W.		
	Aftershock of Alaska E.		
	h: 33 km ca.		
	H= 22 09 43.2		USCGS
28.	eP	Z	22 25 22
	59.8 N., 148.8 W.		
	Aftershock of Alaska E.		
	h: 33 km ca.		
	H= 22 16 20.8		USCGS
28.	P	Z	22 31 18
	60.3 N., 145.3 W.		
	Aftershock of Alaska E.		
	h: 15 km ca.		
	H= 22 22 03.1		USCGS
28.	iP	NZ	22 37 41.7
	P: N, D		
	58.2 N., 150.4 W.		
	Aftershock of Alaska E.		
	h: 20 km ca.		
	H= 22 28 47.0		USCGS
28.	iP	Z	22 56 11.7
	61.2 N., 145.2 W.		
	Aftershock of Alaska E.		
	h: 33 km ca.		
	H= 22 47 00.1		USCGS
28.	iP	Z	23 00 20.2
	S	Z	39
	i	NE	43
	P: C		
28.	P	Z	23 25 54.4
28.	iP	EZ	23 50 48.3
	iS	NZ	50.4
	P: W, D		
28.	iP	Z	23 55 13.5
	i	N	14.0
	i	Z	20
	iPcP	Z	56 33.0
	e	Z	57 07
			(cont.)
	e	E	00 05 34
	e	N	06 09
	P: C		
	57.5 N., 151.1 W.		
	Aftershock of Alaska E.		
	h: 33 km ca.		
	H= 23 46 22.0		USCGS
29.	P	Z	00 24 16
	59.9 N., 146.3 W.		
	Aftershock of Alaska E.		
	h: 33 km ca.		
	H= 00 15 11.0		USCGS
29.	iP	Z	00 29 56.8
	e	Z	30 04
	P: D		
	58.4 N., 150.4 W.		
	Aftershock of Alaska E.		
	h: 33 km ca.		
	H= 00 21 03.8		USCGS
29.	P	Z	00 35 19
29.	eP	Z	00 45 35
29.	P	Z	01 00 20
	60.4 N., 145.1 W.		
	Aftershock of Alaska E.		
	h: 15 km ca.		
	H= 00 51 05.7		
29.	eP	Z	01 01 57
	57.4 N., 151.5 W.		
	Aftershock of Alaska E.		
	h: 25 km ca.		
	H= 00 53 05.8		USCGS
29.	P	Z	01 04 38
29.	P	Z	01 05 26.6
	S	Z	28.5
29.	eP	Z	01 16 37
29.	iP	Z	01 18 35.9
	i	NE	36.1
	i	N	42.6
	eS	E	25 53
	eL	E	33 00ca.
	eL	Z	37 19
	P: D		
	Mag. 5½ (Mat)		
	59.8 N., 149.2 W.		
	Aftershock of Alaska E.		
	h: 20 km ca.		
	H= 01 09 36.4		USCGS
29.	iP	NZ	01 38 26.9
			(cont.)

March , 1964

Date	Phase	Comp.	Time(GMT) h m s
	i	NEZ	01 38 33.6
	iPcP	Z	39 53.9
	ePP	Z	40 20
	eL	Z	58 19
	P: N, D		
	57.5 N., 151.3 W.		
	Aftershock of Alaska E.		
	h: 20 km ca.		
	H= 01 29 33.7		USCGS
29.	iP Z, P N		01 57 03.8
	P: C		
	56.3 N., 153.7 W.		
	Aftershock of Alaska E.		
	h: 20 km ca.		
	H= 01 48 18.5		USCGS
29.	eP	Z	02 02 04
29.	eP	Z	02 16 30
	e	Z	37
	56.5 N., 152.6 W.		
	Aftershock of Alaska E.		
	h: 20 km ca.		
	H= 02 07 41.6		USCGS
29.	P	Z	02 25 25
	58.3 N., 149.7 W.		
	Aftershock of Alaska E.		
	h: 25 km ca.		
	H= 02 16 29.8		USCGS
29.	iP	Z	02 28 13.8
	e	Z	20
	P: C		
	59.0 N., 149.2 W.		
	Aftershock of Alaska E.		
	h: 20 km ca.		
	H= 02 19 13.2		USCGS
29.	iP	Z	02 34 16.9
	e	E	41 02
	eSS	E	44 52
	eL	Z	50 20
	P: D		
	Mag. 5½ (Mat)		
	57.0 N., 151.7 W.		
	Aftershock of Alaska E.		
	h: 20 km ca.		
	H= 02 25 25.1		USCGS
29.	iP	Z	03 16 19.0
	i	Z	24.9
	iPcP	Z	17 41.8
	eL	E	33.4
	eL	E	39 51
	P: C		
	59.7 N., 148.8 W.		
	Aftershock of Alaska E.		
	(cont.)		

Date	Phase	Comp.	Time(GMT) h m s
	h: 30 km ca.		
	H= 03 07 19.5		USCGS
29.	P	Z	03 34 37
	60.4 N., 144.7 W.		
	Aftershock of Alaska E.		
	h: 15 km ca.		
	H= 03 25 24.7		USCGS
29.	iP	Z	03 47 34.5
	i	Z	44.8
	60.7 N., 149.1 W.		
	Aftershock of Alaska E.		
	h: 40 km ca.		
	H= 03 38 38.1		USCGS
29.	P	Z	04 01 29.8
	59.7 N., 148.8 W.		
	Aftershock of Alaska E.		
	h: 15 km ca.		
	H= 03 52 26.5		USCGS
29.	P	NZ	04 21 30
	i	NE	33
	ePcP	Z	22 44
	PP	Z	23 32
	S	E	29 03
	eL	E	33 11
	eL	N	18
	eL	Z	40 00
	Mag. 5½-5¾ (Mat)		
	60.2 N., 145.5 W.		
	Aftershock of Alaska E.		
	h: 15 km ca.		
	H= 04 12 15.7		USCGS
29.	P	Z	04 44 22
29.	P	Z	05 00 40
	i	NZ	45.4
	eL	N	16 31
	eL	E	22 23
	56.8 N., 152.4 W.		
	Aftershock of Alaska E.		
	h: 40 km ca.		
	H= 04 51 53.3		USCGS
29.	eP	Z	05 17 13
	56.7 N., 152.7 W.		
	Aftershock of Alaska E.		
	h: 20 km ca.		
	H= 05 08 25.8		USCGS
29.	eP	Z	05 30 01
	i	NEZ	09
	eL	E	42 40
	eL	N	43 07
	eL	Z	48 09
	57.1 N., 150.4 W.		
	(cont.)		

Date	Phase	Comp.	Time(GMT) h m s
	Aftershock of Alaska E.		
	h: 20 km ca.		
	H= 05 21 09.8		USCGS
29.	iP	Z	05 46 32.7
	P: D		
	56.9N., 153.3W.		
	Aftershock of Alaska E.		
	h: 25 km ca.		
	H= 05 37 47.4		USCGS
29.	P	Z	06 00 56
	e	Z	01 36
	58.3N., 150.5W.		
	Aftershock of Alaska E.		
	h: 15 km ca.		
	H= 05 51 58.0		USCGS
29.	iP	NZ	06 13 25.1
	i	N	14 55
	S	NE	20 25
	SS	N	24 11
	eSS	E	30
	eL	Z	52
	P: S, C		
	Mag. 6.2(Mat)		
	56.1N., 154.3W.		
	Aftershock of Alaska E.		
	h: 30 km ca.		
	H= 06 04 44.5		USCGS
29.	P	Z	06 38 36.5
	i	Z	43.1
	i	N	43.3
	59.1N., 149.8W.		
	Aftershock of Alaska E.		
	h: 33 km ca.		
	H=06 29 39.4		USCGS
29.	P	Z	07 02 01.5
	56.1N., 154.5W.		
	Aftershock of Alaska E.		
	h: 25 km ca.		
	H= 06 53 19.5		USCGS
29.	P	Z	07 14 13
	59.0N., 150.2W.		
	Aftershock of Alaska E.		
	h: 25 km ca.		
	H= 07 05 17.1		USCGS
29.	P	Z	07 26 56
	57.0N., 151.8W.		
	Aftershock of Alaska E.		
	h: 25 km ca.		
	H= 07 18 08.0		USCGS
29.	eP	Z	07 48 32
	57.1N., 152.0W. (cont.)		

Date	Phase	Comp.	Time(GMT) h m s
	Aftershock of Alaska E.		
	h: 20 km ca.		
	H= 07 39 40.7		USCGS
29.	iP	NEZ	08 01 28.1
	e	Z	02 33
	S	E	08 28
	e	E	11 22
	L	N	15 23
	eL	Z	17 29
	P: S, W, C		
	Mag. $5\frac{3}{4}$(Mat)		
	56.1N., 154.2W.		
	Aftershock of Alaska E.		
	h: 25 km ca.		
	H= 07 52 46.4		USCGS
29.	P	Z	08 16 40
	e	Z	49
	56.5N., 152.6W.		
	Aftershock of Alaska E.		
	h: 20 km ca.		
	H= 08 07 52.3		USCGS
29.	iP	Z	09 15 35.9
	P: C		
	56.6N., 152.2W.		
	Aftershock of Alaska E.		
	h: 15 km ca.		
	H= 09 06 44.8		USCGS
29.	eP	Z	09 24 52
	eL	N	38 42
	58.4N., 150.5W.		
	Aftershock of Alaska E.		
	h: 15 km ca.		
	H= 09 15 55.4		USCGS
29.	P	Z	09 50 34
29.	P	Z	09 53 24
29.	iP	Z	10 17 03.4
	i	N	04.0
	i	E	05.4
	ePcP	Z	18 22
	S	NE	24 21
	eL	E	28 30
	L	N	37
	eL	Z	37 51
	P: C		
	Mag. $5\frac{1}{4}$-$5\frac{1}{2}$(Mat)		
	60.0N., 148.6W.		
	Aftershock of Alaska E.		
	h: 20 km ca.		
	H= 10 08 02.4		USCGS
29.	P	Z	10 22 56
			(cont.)

March , 1964

Date	Phase	Comp.	Time(GMT) h m s
	i	Z	10 22 58,1
	i	N	59.0
	e	Z	24 07
	60.6 N., 146.3 W.		
	Aftershock of Alaska E.		
	h: 15 km ca.		
	H= 10 13 48.0	USCGS	
29.	iP	Z	10 58 35.9
	i	Z	42.4
	i	N	42.6
	eS?	N	11 06 15
	eL	N	11 23
	P: C		
	58.2 N., 150.4 W.		
	Aftershock of Alaska E.		
	h: 25 km ca.		
	H= 10 49 40.3	USCGS	
29.	iP	Z	11 53 02.5
	i	N	03.0
	P: C		
	60.0 N., 149.1 W.		
	Aftershock of Alaska E.		
	h: 25 km ca.		
	H= 11 44 04.3	USCGS	
29.	eP	Z	12 03 34
	eS	N	10 41
	e	E	51
	e	N	14 04
	58.8 N., 151.1 W.		
	Aftershock of Alaska E.		
	h: 25 km ca.		
	H= 11 54 41.0	USCGS	
29.	iP	NEZ	12 05 25.0
	i	NZ	31.9
	i	Z	49
	eL	E	18 27
	P: N, D		
	Mag. 5½ (Mat)		
	58.0 N., 151.6 W.		
	Aftershock of Alaska E.		
	h: 20 km ca.		
	H= 11 56 33.0	USCGS	
29.	iP	Z	12 12 24.6
	e	Z	14 09
	P: D		
	60.9 N., 143.2 W.		
	Aftershock of Alaska E.		
	h: 20 km ca.		
	H= 12 03 03.6	USCGS	
29.	P	Z	12 21 07
	57.2 N., 152.0 W.		
	Aftershock of Alaska E.		
	h: 25 km ca.		
	H= 12 12 09.7	USCGS	

Date	Phase	Comp.	Time(GMT) h m s
29.	iP	Z	12 41 52.4
	P: D		
	59.2 N., 153.0 W.		
	Aftershock of Alaska E.		
	h: 20 km ca.		
	H= 12 33 10.1	USCGS	
29.	eP	Z	12 44 01
	e	Z	45 13
29.	iP	Z	12 57 18.2
	i	N	18.6
	ePcP	Z	58 29
	P: C		
	59.9 N., 145.6 W.		
	Aftershock of Alaska E.		
	h: 25 km ca.		
	H= 12 48 05.9	USCGS	
29.	eP	Z	13 16 59
	60.3 N., 147.1 W.		
	Aftershock of Alaska E.		
	h: 33 km ca.		
	H= 13 07 48*	USCGS	
29.	P	NEZ	13 52 41
	S	NEZ	53
29.	iP	Z	14 33 06.1
	P: C		
	57.5 N., 152.4 W.		
	Aftershock of Alaska E.		
	h: 25 km ca.		
	H= 14 24 15.7	USCGS	
29.	P	Z	15 00 31.4
	e	Z	01 07
	ePcP	Z	48
	60.0 N., 148.9 W.		
	Aftershock of Alaska E.		
	h: 20 km ca.		
	H= 14 51 30.2	USCGS	
29.	iP NZ, P E		15 08 57.9
	P: N, D		
29.	iP	Z	15 15 44.6
	i	NE	45.0
	eL	E	29 40ca
	P: D		
	54.3 N., 157.0 W.		
	Aftershock of Alaska E.		
	h: 20 km ca.		
	H= 15 07 13.1	USCGS	
29.	P	Z	15 39 22
	i	NZ	40 01
	57.2 N., 152.0 W.		
	Aftershock of Alaska E.		
	h: 33 km ca.		

(cont.)

Date	Phase	Comp.	Time(GMT) h m s
	H= 15 30 33.9		USCGS
29.	iP Z, P N		16 00 51.1
	P: S, C		
	60.4N., 146.9W.		
	Aftershock of Alaska E.		
	h: 25 km ca.		
	H= 15 51 43.6		USCGS
29.	iP	Z	16 18 25.1
	i	NE	25.6
	ePcP	Z	19 33
	e	Z	20 26
	P: C		
	60.3N., 146.6W.		
	Aftershock of Alaska E.		
	h: 15 km ca.		
	H= 16 09 15.3		USCGS
29.	P	Z	16 25 19.5
	58.8N., 150.5W.		
	Aftershock of Alaska E.		
	h: 25 km ca.		
	H= 16 16 22.4		USCGS
29.	P	Z	16 27 41
	e	Z	47
	eS	E	35 13
	eL	N	41.5
	eL	E	41 55
	60.4N., 146.0W.		
	Aftershock of Alaska E.		
	h: 15 km ca.		
	H= 16 18 29.3		USCGS
29.	iP	NZ	16 50 07.0
	i	E	18.0
	S	E	57 36
	i	N	50
	SS	N	17 00 56
	e	E	01 14
	eL	Z	48
	eL	NE	03 25
	Lr	E	09 39
	Lr	Z	44
	P: S, C		
	Mag. 6.1(Mat)		
	59.7N., 147.0W.		
	Aftershock of Alaska E.		
	h: 15 km ca.		
	H= 16 40 57.9		USCGS
29.	iP Z, P E		16 54 41.7
	i	Z	45.5
	P: W, C		
	59.8N., 146.9W.		
	Aftershock of Alaska E.		
	h: 20 km ca.		
	H= 16 45 33.6		USCGS

Date	Phase	Comp.	Time(GMT) h m s
29.	iP Z, P NE		17 02 38.6
	P: S, W, C		
	60.3N., 146.1W.		
	Aftershock of Alaska E.		
	h: 15 km ca.		
	H= 16 53 26.6		USCGS
29.	P	NZ	17 47 22
	59.9N., 147.0W.		
	Aftershock of Alaska E.		
	h: 15 km ca.		
	H= 17 33 12.5		USCGS
29.	iP NE, P E		18 02 14.3
	P: N. D		
	59.9N., 146.1W.		
	Aftershock of Alaska E.		
	h: 15 km ca.		
	H= 17 53 02.2		USCGS
29.	iP	Z	18 04 42.5
	i	E	43.8
	eL	E	20.1
	P: C		
	60.9N., 146.1W.		
	Aftershock of Alaska E.		
	h: 15 km ca.		
	H= 17 55 30.2		USCGS
29.	iP	Z	18 07 01.5
	P: C		
	60.0N., 147.0W.		
	Aftershock of Alaska E.		
	h: 33 km ca.		
	H= 17 57 56.8		USCGS
29.	ePKP	Z	19 07 08
	e	N	45
	e	NE	19 15
	eL	E	49 23
	eL	N	55 42
29.	eP?	Z	19 18 16
	i	Z	20
	60.1N., 146.0W.		
	Aftershock of Alaska E.		
	h:15 km ca.		
	H= 19 09 03.3		USCGS
29.	eP	Z	21 08 07
	59.2N., 153.0W.		
	Aftershock of Alaska E.		
	h: 20 km ca.		
	H= 20 59 25.6		USCGS
29.	P	Z	21 08 59.4
	iS	NZ	09 01.5

March , 1964

Date	Phase	Comp.	Time(GMT) h m s
29.	P	Z	21 48 48.4
	i	N	54.1
	i	E	49 35
	iPcP	Z	50 29.7
	eS	E	55 23
	e	N	51
	eL	E	59 14
	eL	N	22 02 38
	eL	Z	03 20
	P: C		
	Mag.5½(Mat)		
	6.7 S., 155.1 E.		
	Solomon Is.		
	h: 68 km ca.		
	H= 21 40 32.7		USCGS
29.	eP	Z	22 29 17
	e	Z	27
	iS	N	38.3
	e	Z	40
29.	iP	Z	22 44 48.8
	i	Z	53.5
	P: D		
	60.3 N., 146.5 W.		
	Aftershock of Alaska E.		
	h: 15 km ca.		
	H= 22 35 38.5		USCGS
29.	P	Z	22 56 34
	60.3 N., 145.4 W.		
	Aftershock of Alaska 'E.		
	h: 15 km ca.		
	H= 22 47 19.0		USCGS
29.	P	Z	23 08 53
29.	eP	Z	23 17 24
	56.1 N., 153.5 W.		
	Aftershock of Alaska E.		
	h: 15 km ca.		
	H= 23 08 28.6		USCGS
29.	P	Z	23 34 58
	59.2 N., 152.6 W.		
	Aftershock of Alaska E.		
	h: 33 km ca.		
	H= 23 25 35.1		USCGS
29.	P	Z	23 36 58
	i	N	58.5
	59.7 N., 148.2 W.		
	Aftershock of Alaska E.		
	h: 30 km ca.		
	H= 23 27 55.3		USCGS
29.	eP	Z	23 49 50
	61.1 N., 151.0 W.		
	Aftershock of Alaska E.		
	h: 25 km ca.		

(cont.)

Date	Phase	Comp.	Time(GMT) h m s
	H= 23 40 54.8		USCGS
29.	P Z, eP NE		23 58 37
	ePcP	Z	59 50
	eL	E	00 18 14
	59.9 N., 147.1 W.		
	Aftershock of Alaska E.		
	h: 20 km ca.		
	H= 23 49 28.6		USCGS
30.	eP	Z	00 04 51
	58.9 N., 150.0 W.		
	Aftershock of Alaska E.		
	h: 20 km ca.		
	H= 23 55 51.9		USCGS
30.	eP	Z	00 35 15
	58.9 N., 150.2 W.		
	Aftershock of Alaska E.		
	h: 20 km ca.		
	H= 00 26 15.7		USCGS
30.	eP	Z	01 03 06
	60.0 N., 146.3 W.		
	Aftershock of Alaska E.		
	h: 15 km ca.		
	H= 00 53 55.8		USCGS
30.	iP NZ, P E		01 40 01.5
	eS	NEZ	19
	P: N, D		
30.	P	NZ	01 41 23
	59.8 N., 146.6 W.		
	Aftershock of Alaska E.		
	h: 15 km ca.		
	H= 01 32 09.5		USCGS
30.	eP	Z	01 50 53
	60.6 N., 144.3 W.		
	Aftershock of Alaska E.		
	h: 33 km ca.		
	H= 01 41 38.6		USCGS
30.	P	Z	02 12 09.5
	i	NZ	15.1
	e	Z	13 29
30.	iP	EZ	02 19 54.6
	iS	NEZ	57.0
	P: W, C		
30.	iP Z, P NE		02 26 52.7
	i	Z	27 13.0
	i	Z	28 43
	S	E	34 00
	i	NZ	11
	SS	E	37 43
	eSS	N	38 02
	eL	E	40 45

(cont.)

March, 1964

Date	Phase	Comp.	Time(GMT) h m s
	eL	Z	43 17
	P: C		
	Mag. 6.5(Mat)		
	56.6N., 152.9W.		
	Aftershock of Alaska E.		
	h: 25 km ca.		
	H= 02 18 06.3 USCGS		
30	iP	Z	02 50 45.8
	i	Z	53.5
	P: C		
	56.5N., 153.0W.		
	Aftershock of Alaska E.		
	h: 30 km ca.		
	H= 02 41 59.6 USCGS		
30.	eP	Z	03 39 51
30.	iP	NEZ	03 45 10.7
	e	N	54
	e	E	46 11
	P: S, E, D		
30.	eP	Z	04 31 56
	59.5N., 146.3W.		
	Aftershock of Alaska E.		
	h: 15 km ca.		
	H= 04 22 43.1 USCGS		
30.	eP	Z	04 50 58
	e	Z	51 14
	e	N	35
30	P	Z	05 23 02.5
	56.2N., 154.4W.		
	Aftershock of Alaska E.		
	h: 33 km ca.		
	H= 05 14 21.5 USCGS		
30.	iP	EZ	06 48 45.2
	iS	NEZ	47.6
	P: W, D		
30.	P	Z	07 18 46.5
	i	N	48.9
	S	E	26 16
	i	N	21
	i	Z	24
	i	N	29 46
	eSS	E	30 05
	eL	N	32 30
	eL	E	33 47
	eL	Z	36 17
	Mag.6.1(Mat)		
	59.9N., 145.7W.		
	Aftershock of Alaska E.		
	h: 15 km ca.		
	H= 07 09 34.0 USCGS		
30.	eP	Z	08 05 12
	56.3N., 154.4W.		
	Aftershock of Alaska E.		
	h: 20 km ca.		
	H= 07 56 29.1 USCGS		
30.	iP	Z	09 32 15.7
	P: D		
	59.9N., 145.6W.		
	Aftershock of Alaska E.		
	h: 33 km ca.		
	H= 09 23 05.5 USCGS		
30.	eP	Z	10 06 50
	60.9N., 145.1W.		
	Aftershock of Alaska E.		
	h: 15 km ca.		
	H= 09 57 32.5 USCGS		
30.	eP	Z	10 24 58
	eL	E	41.7
	60.4N., 146.6W.		
	Aftershock of Alaska E.		
	h: 15 km ca.		
	H= 10 15 51.7 USCGS		
30.	eP	Z	10 25 04
	e	Z	42
	i	N	51
30.	eP	Z	11 08 22
	i	Z	29
	eL	E	23.6
	58.4N., 149.2W.		
	Aftershock of Alaska E.		
	h: 25 km ca.		
	H= 10 59 27.6 USCGS		
30.	iP	Z	11 14 55.9
	i	N	56.4
	ePcP	Z	16 09
	P: C		
	60.4N., 146.8W.		
	Aftershock of Alaska E.		
	h: 15 km ca.		
	H= 11 05 47.4 USCGS		
30.	P	Z	11 44 23
	61.5N., 147.9W.		
	Aftershock of Alaska E.		
	h: 25 km ca.		
	H= 11 35 18.8 USCGS		
30.	P	NZ	11 57 29
	i	E	41
	i	Z	58 28.4
	eS	N	12 04 35
	i	E	44

(cont.)

Date	Phase	Comp.	Time(GMT) h m s
	eL	E	12 11 31
	Mag. 5½-5¾ (Mat)		
	56.4 N., 152.2 W.		
	Aftershock of Alaska E.		
	h: 20 km ca.		
	H= 11 48 40.4 USCGS		
30.	iP	NEZ	12 14 50.4
	i	Z	55.1
	i	N	15 21
	i	NZ	42
	i	N	16 02.1
	e	Z	17 10
	P: S, W, C		
	60.1 N., 147.0 W.		
	Aftershock of Alaska E.		
	h: 25 km ca.		
	H= 12 05 43.5 USCGS		
30.	iP	Z	12 23 19.1
	i	N	19.4
	i	Z	26.9
	i	Z	35.4
	i	Z	24 40.5
	P: D		
	58.0 N., 151.6 W.		
	Aftershock of Alaska E.		
	h: 25 km ca.		
	H= 12 14 28.4 USCGS		
30.	P	Z	12 47 23.4
	eL	E	13 06 54
	59.7 N., 146.9 W.		
	Aftershock of Alaska E.		
	h: 30 km ca.		
	H= 12 38 16.0 USCGS		
30.	P	EZ	13 02 07.7
	iS	NEZ	19.4
30.	P	Z	13 04 25
	e	Z	05 48
	59.7 N., 147.0 W.		
	Aftershock of Alaska E.		
	h: 30 km ca.		
	H= 12 55 12.5 USCGS		
30.	P	Z	13 07 27
30.	iP	Z	13 12 23.9
	i	NE	24.3
	S	NEZ	19 35
	e	Z	22 41
	e	E	23 13
	eL	E	26 16
	eL	N	18
	P: C		
	Mag. 6-6¼ (Mat)		
	56.5 N., 152.7 W.		
	Aftershock of Alaska E.		
	(cont.)		

Date	Phase	Comp.	Time(GMT) h m s
	h: 20 km ca.		
	H= 13 03 34.9 USCGS		
30.	iP	Z	13 41 07.3
	i	E	09.5
	i	NZ	09.9
	e	E	47 57
	eL	E	51 41
	eL	N	52.1
	56.4 N., 152.6 W.		
	Aftershock of Alaska E.		
	h: 15 km ca.		
	H= 13 32 18.5 USCGS		
30.	P	NZ	14 17 54
30.	P	Z	14 19 36
	57.4 N., 152.3 W.		
	Aftershock of Alaska E.		
	h: 30 km ca.		
	H= 14 10 48.6 USCGS		
30.	P	Z	15 02 23
	i	Z	28.1
	60.0 N., 146.8 W.		
	Aftershock of Alaska E.		
	h: 25 km ca.		
	H= 14 53 17* USCGS		
30.	iP	NEZ	15 16 47.9
	iPcP	Z	18 05.2
	eL	N	32 51
	eL	E	36 25
	P: N, E, D		
	58.7 N., 149.6 W.		
	Aftershock of Alaska E.		
	h: 25 km ca.		
	H= 15 07 49.3 USCGS		
30.	eP	Z	15 31 05
	S	NEZ	27
30.	iP	NEZ	16 18 18.5
	i	N	31.6
	ScP	Z	23 35
	S	NE	25 28
	eSS	E	29 15
	eL	E	31 30
	eL	N	32 24
	eL	Z	34 28
	P: S, W, C		
	Mag. 6.2 (Mat)		
	56.6 N., 152.1 W.		
	Aftershock of Alaska E.		
	h: 25 km ca.		
	H= 16 09 20.4 USCGS		
30.	iP	NZ	16 47 26.6
	60.1 N., 150.7 W.		
	Aftershock of Alaska E.		
	(cont,)		

Date	Phase	Comp.	Time(GMT) h m s
	h: 15 km ca.		
	H= 16 38 26.5		USCGS
30.	iP	Z	17 01 59.5
	56.6N., 152.2W.		
	Aftershock of Alaska E.		
	h: 15 km ca.		
	H= 16 53 07.7		USCGS
30.	eP	Z	17 13 10
	56.7N., 152.5W.		
	Aftershock of Alaska E.		
	h: 33 km ca.		
	H= 17 04 21*		USCGS
30.	P	Z	17 31 19.6
	i	N	19.7
	60.7N., 145.5W.		
	Aftershock of Alaska E.		
	h: 15 km ca.		
	H=17 22 06.2		USCGS
30.	iP	Z	17 50 09.2
	i	N	09.6
	P: C		
	61.5N., 150.0W.		
	Aftershock of Alaska E.		
	h: 40 km ca.		
	H= 17 41 13.4		USCGS
30.	eP	Z	18 53 39
	e	N	19 04 34
	e	E	42
	eLq	N	11 31
	eLq	E	12 09
	eLr	N	16 47
	eLr	E	17 24
	24.2S., 176.4W.		
	Tonga Is. region		
	h: 33 km ca.		
	H= 18 42 03.4		USCGS
30.	P	Z	19 27 39.9
	P: D		
	60.5N., 143.8W.		
	Aftershock of Alaska E.		
	h: 15 km ca.		
	H= 19 18 20*		USCGS
30.	P	EZ	19 28 30.4
	iS	NZ	32.3
30.	iP	NEZ	19 32 13.3
	iS	NEZ	14.4
30.	P	NZ	20 04 10
	57.9N., 151.1W.		
	Aftershock of Alaska E.		
	h: 30 km ca.		
	H= 19 55 18.2		USCGS

Date	Phase	Comp.	Time(GNT) h m s
30.	eP	Z	20 38 11
30.	eP	Z	20 42 05
	eS	E	49 43
	eScS	E	51 45
	eL	E	21 00 42
	59.4N., 145.1W.		
	Aftershock of Alaska E.		
	h: 15 km ca.		
	H= 20 32 46.8		USCGS
30.	eP	Z	22 14 15
	e	Z	28
	60.2N., 145.5W.		
	Aftershock of Alaska E.		
	h: 15 km ca.		
	H= 22 05 03.9		USCGS
30.	iP	Z	22 17 22.9
	i	E	24.8
	i	N	26.4
	i	E	47
	eS?	N	55
	e	E	57
	i	N	18 03
	i	Z	05
	i	Z	26
	P: C		
30.	eP	Z	22 30 34
	60.3N., 146.9W.		
	Aftershock of Alaska E.		
	h: 15 km ca.		
	H= 22 21 25.2		USCGS
30.	iP	Z	23 12 20.9
	P: C		
	57.3N., 152.7W.		
	Aftershock of Alaska E.		
	h: 20 km ca.		
	H= 23 03 34.5		USCGS
31.	iP	Z	00 00 51
	i	N	55.8
	i	Z	56.2
	i	Z	01 12.3
	eS	E	08 09
	eL	E	15 00ca
	P: C		
	59.6N., 147.4W.		
	Aftershock of Alaska E.		
	h: 33 km ca.		
	H= 23 51 46.0		USCGS
31.	iP	Z	00 17 10.5
	i	N	11.1
	i	EZ	11.7
	i	Z	24

(cont.)

March , 1964

Date	Phase	Comp.	Time(GMT) h m s
	i	E	00 17 27.3
	eS	E	19 26
	e	N	53
	L	N	20 14
	i	Z	18
	L	E	22
	P: C		
	Mag. 5.6 (Mat)		
	45.3 N., 151.0 E.		
	Kurile Is.		
	h: 60 km ca.		
	H= 00 14 11.7		USCGS
31.	P	Z	00 53 35
	59.5 N., 146.3 W.		
	Aftershock of Alaska E.		
	h: 15 km ca.		
	H= 00 44 53*		USCGS
31.	eP	Z	00 59 57.2
	i	N	58.1
	i	N	01 00 05.3
	S?	N	02 41
31.	P	Z	01 15 10
	iS	NZ	17.3
31.	eP	Z	02 06 53
	57.6 N., 150.1 W.		
	Aftershock of Alaska E.		
	h: 20 km ca.		
	H= 01 57 54.3		USCGS
31.	P	Z	02 52 17
	eL	E	03 07.0
	56.7 N., 154.0 W.		
	Aftershock of Alaska E.		
	h: 20 km ca.		
	H= 02 43 35.6		USCGS
31.	P	Z	02 54 32
	59.7 N., 149.8 W.		
	Aftershock of Alaska E.		
	h: 10 km ca.		
	H= 02 45 26.9		USCGS
31.	P	Z	04 23 43
	iS	N	24 08.4
	i	E	08.9
	i	N	16
31.	iP	Z	04 29 28.0
	i	N	29.1
	e	Z	31 12
	eL	N	47 11
	eL	E	12
	P: C		
	60.3 N., 146.3 W.		
	Aftershock of Alaska E.		
	h: 5 km ca.		
	H= 04 20 16.3		USCGS
31.	iP	Z	04 47 51.9
	i	E	56.3
	i	N	49 32
	i	N	50 09.1
	P: D		
31.	eP	Z	04 54 58
	i	N	55 11.8
	eL	N	05 08 34
	eL	E	45
	57.6 N., 151.2 W.		
	Aftershock of Alaska E.		
	h: 33 km ca.		
	H= 04 46 06.1		USCGS
31.	eP	Z	07 17 55
	e	Z	18 02
	eS	E	25 20
	eL	E	31.4
	eL	N	31.9
	58.3 N., 149.3 W.		
	Aftershock of Alaska E.		
	h: 20 km ca.		
	H= 07 08 54.5		USCGS
31.	iP	NEZ	07 36 30.7
	S	NEZ	37 02
	P: N, E, C		
31.	eP	Z	08 49 53
	59.8 N., 148.6 W.		
	Aftershock of Alaska E.		
	h: 36 km ca.		
	H= 08 40 52.2		USCGS
31.	P	Z	09 12 01
	i	Z	16
	ePP	Z	14 18
	eS	N	20 30
	i	E	33
	eLq	N	27 36
	eLq	E	53
	eLr	Z	31 00
	eLr	E	15
	Mag. 6-6½ (Mat)		
	50.8 N., 130.2 W.		
	Vancouver I. region.		
	h: 15 km ca.		
	H= 09 01 30.2		USCGS
31.	eP	Z	10 01 26
	57.8 N., 152.2 W.		
	Aftershock of Alaska E.		
	h: 15 km ca.		
	H= 09 52 32.8		USCGS
31.	P	Z	11 12 33
	58.9 N., 149.9 W.		

(cont.)

Date	Phase	Comp.	Time(GMT) h m s
	Aftershock of Alaska E.		
	h: 20 km ca.		
	H= 11 03 35.4		USCGS
31.	eP	Z	11 27 03
	e	Z	16
31.	P	Z	11 28 29.3
	60.0N., 146.5W.		
	Aftershock of Alaska E.		
	h: 15 km ca.		
	H= 11 19 18		USCGS
31.	eP	Z	12 01 24
	eS	E	08 48
	e	N	52
	60.1N., 146.4W.		
	Aftershock of Alaska E.		
	h: 15 km ca.		
	H= 11 52 13.9		USCGS
31.	iP	Z	12 02 02.5
	i	Z	12 02 10.9
	e	Z	33
	eS	N	09 14
	i	E	18
	e	E	13 00
	eL	N	16 18
	L	E	36
	eL	Z	18 05
	P: C		
31.	eP	Z	12 59 37
31.	P	Z	13 02 32
	56.7N., 152.2W.		
	Aftershock of Alaska E.		
	h: 33 km ca.		
	H= 12 53 43.6		USCGS
31.	eP	Z	15 14 05
31.	eP	NZ	15 42 13
	i	Z	14.4
	i	E	15.0
	eS	N	43 40
31.	iP	Z	16 40 57.5
	57.3N., 152.0W.		
	Aftershock of Alaska E.		
	h: 33 km ca.		
	H= 16 32 07.2		USCGS
31.	e	E	17 13 33
31.	iP	NEZ	17 14 41.9
	eS	E	22 57
	P: N, W, C		
	17.7S., 178.8W.		
	Fiji Is.		

(cont.)

Date	Phase	Comp.	Time(GMT) h m s
	h: 540 km ca.		
	H= 17 04 39.0		USCGS
31.	eP?	Z	18 44 16
	S	Z	45 28
	i	N	30.3
31.	P Z, eP N		18 46 45
	60.4N., 146.0W.		
	Aftershock of Alaska E.		
	h: 33 km ca.		
	H= 18 37 36.8		USCGS
31.	eP	Z	20 12 39
	i	NEZ	44.4
	i	E	53
	i	NZ	56
	eS	E	13 54
	i	N	56.3
	eL	E	14 27
	eL	N	35
31.	iP	Z	21 12 57.8
	i	E	58.3
	eL	N	25 41
	eL	E	48
	P: C		
	58.2N., 150.3W.		
	Aftershock of Alaska E.		
	h: 20 km ca.		
	H= 21 04 01.1		USCGS
31.	eP	Z	21 21 24
	58.5N., 150.6W.		
	Aftershock of Alaska E.		
	h: 33 km ca.		
	H= 21 12 32.5		USCGS
31.	eP	Z	21 29 30
	e	N	35
	56.3N., 152.7W.		
	Aftershock of Alaska E.		
	h: 15 km ca.		
	H= 21 20 38.2		USCGS
31.	P	Z	21 50 21
	S	NEZ	51 34
31.	iP	NEZ	21 55 50.7
	iS EZ, S N		53.2
	P: S, W, D		
31.	P	Z	23 46 05
	i	E	07.1
	i	Z	11.7
	eL	N	00 04 17ca
	eL	E	43ca
	59.9N., 145.9W.		
	Aftershock of Alaska E.		
	h: 30 km ca.		
	H= 23 36 56.0		USCGS

Date	Phase	Comp.	Time(GMT) h m s	
1.	iP	Z	00 10 20.8	
	i	Z	21.4	
	ePcP	Z	11 33	
	eL	NE	22.0	
	P:C			
	60.4 N., 146.4 W.			
	Aftershock of Alaska Earthq.			
	h: 10 km ca.			
	H= 00 01 10.6			USCGS
1.	eP	Z	00 45 35	
	58.3 N., 150.4 W.			
	Aftershock of Alaska Earthq.			
	h: 10 km ca.			
	H= 00 36 32			USCGS
1.	P	Z	03 14 59	
	60.1 N., 146.1 W.			
	Aftershock of Alaska Earthq.			
	h: 15 km ca.			
	H= 03 05 49.9			USCGS
1.	iP	Z	03 16 40.2	
	i	E	40.4	
	i	NE	17 00	
	P:D			
1.	iP	Z	03 32 10.6	
	i	Z	18.8	
	eS	E	39 26	
	eL	E	43 31	
	P:C			
	Mag. 5¾- 6 (Mat)			
	57.2 N., 151.3 W.			
	Aftershock of Alaska Earthq.			
	h: 25 km ca.			
	H= 03 23 17.2			USCGS
1.	P	Z	04 41 43	
	58.7 N., 150.1 W.			
	Aftershock of Alaska Earthq.			
	h: 20 km ca.			
	H= 04 32 40.7			USCGS
1.	P	Z	04 58 15	
	57.2 N., 151.4 W.			
	Aftershock of Alaska Earthq.			
	h: 20 km ca.			
	H= 04 49 26			USCGS
1.	P	Z	05 42 17	
	eS	E	49 58	
	eL	E	53 51	
	59.9 N., 146.0 W.			
	Aftershock of Alaska Earthq.			
	h: 15 km ca.			
	H= 05 33 02.9			USCGS
1.	eP	Z	06 03 35	
1.	P	Z	06 25 26	
	60.2 N., 147.1 W.			
	Aftershock of Alaska Earthq.			
	h: 15 km ca.			
	H= 06 16 21			USCGS
1.	iP	Z	06 48 59.4	
	i	NE	49 00	
	P:C			
	60.4 N., 146.7 W.			
	Aftershock of Alaska Earthq.			
	h: 10 km ca.			
	H= 06 39 48.5			USCGS
1.	iP	Z	06 56 31.3	
	i	Z	40	
	P:C			
1.	iP	NEZ	08 14 49.2	
	i	NE	15 39.3	
	P:N,W,D			
	37.8 N., 135.8 E.			
	Sea of Japan.			
	h: 386 km ca.			
	H= 08 13 51.9			USCGS
1.	eP	Z	08 42 31	
	e	E	58 48	
	59.9 N., 146.6 W.			
	Aftershock of Alaska Earthq.			
	h: 10 km ca.			
	H= 08 33 22.0			USCGS
1.	eP	Z	08 54 57	
	i	Z	55 09.3	
1.	iP	NZ	09 01 13.0	
	i	E	15.1	
	S	NE	02 53	
	P:N,C			
1.	P	Z	10 01 21	
1.	iP	Z	11 10 34.9	
	P:C			
	60.4 N., 146.5 W.			
	Aftershock of Alaska Earthq.			
	h: 10 km ca.			
	H= 11 01 25.5			USCGS
1.	iP	EZ	12 18 47.5	
	i	N	47.9	
	S	EZ	19 02.4	
	P:E,D			
1.	iP	Z	14 03 24.1	
	P:D			
	57.5 N., 151.3 W.			
	Aftershock of Alaska Earthq.			

(cont.)

Date	Phase	Comp.	Time(GMT) h m s
	h: 20 km ca.		
	H= 13 54 31.9		USCGS
1.	P	Z	15 31 29
	57.3 N., 152.9 W.		
	Aftershock of Alaska E.		
	h: 15 km ca.		
	H= 15 22 38.3		USCGS
1.	iP	Z	16 38 19.6
	i	Z	37
	eS	E	55 44
	P: D		
	59.7 N., 146.5 W.		
	Aftershock of Alaska E.		
	h: 15 km ca.		
	H= 16 29 09.0		USCGS
1.	P	Z	17 31 57.6
	56.1 N., 155.4 W.		
	Aftershock of Alaska E.		
	h: 20 km ca.		
	H= 17 23 12.1		USCGS
1.	iP	NEZ	19 03 43.9
	i	E	49.9
	S	NE	04 14.9
	P: N, W, C		
1.	eP	Z	20 22 12
	eS	E	29 34
	eSS	E	33 19
	eL	E	37 00
	Mag. 5½ (Mat)		
	58.3 N., 149.6 W.		
	Aftershock of Alaska E.		
	h: 20 km ca.		
	H= 20 13 08.3		USCGS
1.	iP	Z	20 38 17.2
	iS	NEZ	20.9
	P: C		
1.	eP	Z	22 09 56
	58.9 N., 150.0 W.		
	Aftershock of Alaska E.		
	h: 20 km ca.		
	H= 22 00 58.7		USCGS
1.	eL	E	22 59 10
1.	P	Z	23 41 38.4
	i	Z	39.3
	51.0 N., 157.1 E.		
	Southern Kamchatka.		
	h: 33 km ca.		
	H= 23 37 08		USCGS
2.	eP	Z	00 35 03

Date	Phase	Comp.	Time(GMT) h m s
2.	P	Z	01 20 35.4
	i	EZ	38.0
	i	N	39
	PP?	N	21 52
	S	NE	27 53
	SS	E	31 40
	Lq	NE	33 37
	Lr	E	36 00
	Mag. 6.5 (Mat)		
	5.9 N., 95.7 E.		
	Near coast of norhtern Sumatra.		
	h: 132 km ca.		
	H= 01 11 55		USCGS
2.	P	Z	03 18 31
	5.5 N., 95.7 E.		
	Near coast of northern Sumatra.		
	h: 108 km ca.		
	H= 03 09 45		USCGS
2.	ePKP	Z	05 03 19
	25.8 S., 13.8 W.		
	South Atlantic Ocean.		
	h: 33 km ca.		
	H= 04 43 17.2		USCGS
2.	eL	E	06 07 43
2.	iP	NZ	07 01 03.1
	i	E	03.4
	i	Z	02 34
	P: C, D		
	6.9 S., 125.5 E.		
	Banda Sea.		
	h: 485 km ca.		
	H= 06 53 31.5		USCGS
2.	iP	Z	07 45 28.5
	i	NE	29
	PcP	Z	47 52
	eL	E	53 38
	P: D		
	2.0 N., 125.6 E.		
	Northern Celebes.		
	h: 82 km ca.		
	H= 07 38 31		USCGS
2.	eP	Z	09 13 38
	i	Z	43.2
	57.9 N., 151.1 W.		
	Aftershock of Alaska E.		
	h: 33 km ca.		
	H= 09 04 51.9		USCGS
2.	iP	Z	10 06 42.5
	i	NE	43
	i	Z	51.9
	eS	NE	13 50
	eSS	NE	17 40

April , 1964

Date	Phase	Comp.	Time(GMT) h m s
	eL	NE	20.5
	P: C		
	Mag. 5½(Mat)		
	56.5N., 152.8W.		
	Aftershock of Alaska E.		
	h: 20 km ca.		
	H= 09 57 54.5	USCGS	
2.	eP	Z	11 07 12
	59.3N., 150.0 W.		
	Aftershock of Alaska E.		
	h: 25 km ca.		
	H= 10 58 09.1	USCGS	
2.	iP	Z	11 50 11.2
	i	Z	17.7
	i	NE	18
	PcP	Z	51 35
	eS	E	57 27
	eL	E	12 01 21
	P: C		
	58.8N., 149.5 W.		
	Aftershock of Alaska E.		
	h: 20 km ca.		
	H= 11 41 10.7	USCGS	
2.	eP	Z	14 19 22
	i	Z	34
2.	iP Z, P NE		16 03 07.4
	PP	NE	04 46
	iS	NE	08 13.2
	PcS	Z	09 29.0
	eG	E	10 17
	eG	N	20
	ScS	NE	13 28
	P: C		
	Mag. 5½(Mat)		
	5.8N., 125.8E.		
	Mindanao P. I.		
	h: 179 km ca.		
	H= 15 56 52.6	USCGS	
2.	P	Z	16 34 33.4
2.	iP	NZ	16 49 07.3
	S	NEZ	14
	P: S, C		
2.	iP	Z	17 53 07.4
	P: C		
2.	iP	Z	18 34 24.5
	e	N	25
	i	Z	38
	eL	E	51 15
	P: D		
	60.0N., 147.8W.		
	Aftershock of Alaska E.		
			(cont.)

Date	Phase	Comp.	Time(GMT) h m s
	h: 40 km ca.		
	H= 18 25 21.0	USCGS	
2.	eP	Z	19 33 43
	12.4N., 143.5E.		
	Mariana Is.		
	h: 33 km ca.		
	H= 19 28 22	USCGS	
2.	eP	Z	19 47 37
	60.7N., 145.8W.		
	Aftershock of Alaska E.		
	h: 15 km ca.		
	H= 19 38 24.7	USCGS	
2.	P	Z	19 49 36
	eL?	E	20 07 30
	59.6N., 144.5W.		
	Aftershock of Alaska E.		
	h: 20 km ca.		
	H= 19 40 19.9	USCGS	
2.	iP	Z	20 18 51.7
	i	Z	59
	eL	E	32 17
	P: D		
	59.8N., 147.0W.		
	Aftershock of Alaska E.		
	h: 10 km ca.		
	H= 20 09 42.0	USCGS	
2.	P	NZ	21 22 53
2.	P	Z	22 16 33
	60.4N., 147.2W.		
	Aftershock of Alaska E.		
	h: 10 km ca.		
	H= 22 07 20.6	USCGS	
2.	iP	Z	22 43 50.1
	eS	E	51 24
	eL	E	55 24
	eL	N	42
	P: D		
	Mag. 5½(Mat)		
	59.8N., 144.3W.		
	Aftershock of Alaska E.		
	h: 20 km ca.		
	H= 22 34 31.7	USCGS	
2.	P	Z	23 39 13
	60.5N., 146.3W.		
	Aftershock of Alaska E.		
	h: 15 km ca.		
	H= 23 29 59.3	USCGS	
3.	iP	Z	00 46 38.9
	i	N	40
	eS?	N	01 04 18
			(cont.)

Date	Phase	Comp.	Time(GMT) h m s
	P: C		
	58.2 N., 146.9 W.		
	Aftershock of Alaska E.		
	h: 33 km ca.		
	H= 00 37 38.5		USCGS
3.	P	NEZ	01 38 14
	i	E	39 38
3.	iP	Z	02 35 01.5
	P: C		
3.	P	NZ	04 21 32
	i	E	33
	PcP	Z	22 51
	ePP	E	23 42
	S	E	28 41
	L	NE	34 36
	Mag. 6½ (Mat)		
	4.0 N., 96.6 E.		
	Near west coast of Sumatra.		
	h: 70 km ca.		
	H= 04 12 41.9		USCGS
3.	iP	Z	04 26 40.6
	i	Z	27 16
	P: C		
3.	P	Z	04 56 48.3
	i	NEZ	48.8
	S?	E	58 15
	e	N	33
	43.8 N., 143.3 E.		
	Hokkaido, Japan.		
	h: 33 km ca.		
	H= 04 54 49.2		USCGS
3.	P	Z	06 32 07
	60.0 N., 149.5 W.		
	Aftershock of Alaska E.		
	h: 33 km ca.		
	H= 06 23 11.3		USCGS
3.	iP	EZ	08 41 44.8
	i	EZ	53
	S	NEZ	42 21
	P: E, C		
3.	P	NEZ	08 48 01
	i	Z	49 10
	S	N	55 34
	e	E	37
	eL	NE	09 00 16
	Mag. 5½-5¾ (Mat)		
	59.6 N., 144.7 W.		
	Aftershock of Alaska E.		
	h: 10 km ca.		
	H= 08 33 42.8		USCGS

Date	Phase	Comp.	Time(GMT) h m s
3.	P	Z	08 55 14
	i	Z	56
	57.9 N., 150.5 W.		
	Aftershock of Alaska E.		
	h: 15 km ca.		
	H= 08 46 27		USCGS
3.	eP	Z	08 59 22
	27.9 S., 178.1 W.		
	Kermades Is.		
	h: 33 km ca.		
	H= 08 47 34.8		USCGS
3.	eP	Z	09 51 12
	i	Z	24
3.	iP	Z	09 57 09.6
	i	Z	17
	P: D		
	57.1 N., 150.5 W.		
	Aftershock of Alaska E.		
	h: 33 km ca.		
	H= 09 48 16		USCGS
3.	P	Z	11 57 48
3.	P	Z	13 24 00
3.	eP	Z	16 39 52
	i	Z	40 04
3.	iP N, P EZ		16 41 23.9
	i	E	37.4
	i	Z	38.9
3.	eP	NEZ	17 10 16
3.	P	Z	17 10 33.4
	i	NZ	37
	i	E	38
3.	eL	E	18 13 00
	1.9 N., 102.2 W.		
	1300 km. northwest of Galapagos Is.		
	h: 33 km ca.		
	H= 17 21 10		
3.	P	Z	18 43 40.4
3.	iP	EZ	19 06 05.0
	i	N	05.9
	i	E	22
	S	N	27
	P: W, C		
3.	eP	EZ	19 09 39
	S?	N	10 02
3.	iP	Z	19 17 58.5

(cont.)

Date	Phase	Comp.	Time(GMT) h m s
	i	NE	19 17 59
	pP	Z	18 24
	P: D		
	14.9S., 167.1E.		
	New Hebrides Is.		
	h: 95 km ca.		
	H= 19 08 15.2		USCGS
3.	P	Z	20 06 57
	60.1N., 148.0W.		
	Aftershock of Alaska E.		
	h: 20 km ca.		
	H= 19 57 53.3		USCGS
3.	eP	Z	20 32 43
	57.0N., 146.1W.		
	Aftershock of Alaska E.		
	h: 25 km ca.		
	H= 20 23 25		USCGS
3.	P	Z	21 53 31
3.	P	Z	22 24 40
	57.1N., 151.9W.		
	Aftershock of Alaska E.		
	h: 15 km ca.		
	H=22 15 43.3		USCGS
3.	iP Z, P NE		22 42 43.1
	i	N	56
	S	NE	50 00
	ScS	NE	52 54
	L	E	53 52
	P: C		
	Mag. $6\frac{3}{4}$ (Mat)		
	61.6N., 147.6W.		
	Aftershock of Alaska E.		
	h: 40 km ca.		
	H= 22 33 42.2		USCGS
3.	P	Z	23 52 14.3
3.	eP	EZ	23 52 36
	i	E	41.5
4.	iP	NZ	02 37 23.9
	i	E	24.1
	eS	NE	39 08
	P: S, C		
	44.2N., 146.0E.		
	Kurile Is.		
	h: 62 km ca.		
	H= 02 35 06.1		USCGS
4.	iP	Z	04 44 08.0
	i	NE	08.5
	i	Z	45 21
	e	E	05 02 16
			(cont.)

Date	Phase	Comp.	Time(GMT) h m s
	P: C		
	60.3N., 146.5W.		
	Aftershock of Alaska E.		
	h: 5 km ca.		
	H= 04 34 56.9		USCGS
4.	iP	Z	05 03 06.7
	i	NE	07
	S	E	10 32
	eL	E	14 27
	Lr	N	21 34
	Lr	E	54
	P: C		
	Mag. $6\frac{1}{4}-6\frac{1}{2}$ (Mat)		
	60.1N., 146.7W.		
	Aftershock of Alaska E.		
	h: 40 km ca.		
	H= 04 54 01.7		USCGS
4.	eP	Z	05 05 18
	i	N	06 03
4.	P	Z	05 19 36
	57.3N., 149.4W.		
	Aftershock of Alaska E.		
	h: 20 km ca.		
	H= 05 10 34.4		USCGS
4.	PKP	Z	07 02 38
	i	Z	43
	12.5N., 87.7W.		
	Off west coast of Nicaragua		
	h: 41 km ca.		
	H= 06 43 20.2		USCGS
4.	P	Z	08 32 20
4.	iP	Z	08 49 17.8
	i	NE	18.5
	S	NEZ	56 30
	eScS?	NE	59 23
	eSS	NE	09 00 16
	L	NE	03 00
	P: D		
	Mag. $6\frac{1}{2}-6\frac{1}{2}$(Mat)		
	56.5N., 152.6W.		
	Aftershock of Alaska E.		
	h: 15 km ca.		
	H= 08 40 29.8		USCGS
4.	P	Z	08 57 24
4.	iP Z, P NE		09 19 43.6
	S	NZ	26 58
	i	E	27 00
	L	E	32 46
	P: C		
	Mag. $6\frac{1}{4}-6\frac{1}{2}$(Mat)		(cont.)

April , 1964

Date	Phase	Comp.	Time(GMT) h m s
	56.9 N., 152.7 W.		
	Aftershock of Alaska E.		
	h: 15 km ca.		
	H= 09 10 55.1		USCGS
4.	iP	Z	10 04 47.3
	S	EZ	05 01.5
	P: C		
4.	eP	Z	11 02 06
	eS	N	41
4.	eP	Z	14 53 03
	i	Z	11
4.	iP	Z	15 17 22.5
	e	E	31 55
	P: D		
	59.6 N., 146.9 W.		
	Aftershock of Alaska E.		
	h: 15 km ca.		
	H= 15 08 12.3		USCGS
4.	iP	NEZ	17 54 49.1
	S	NE	18 01 50
	L	E	05 06
	L	N	36
	Lr	E	07 50
	Lr	N	08 05
	P: S, W, C		
	Mag. 7-7¼ (Mat)		
	56.3 N., 154.4 W.		
	Aftershock of Alaska E.		
	h: 25 km ca.		
	H= 17 46 08.6		USCGS
4.	eP	EZ	18 02 45
4.	iP	EZ	18 08 23.5
	i	N	24.3
	P: W, C		
	Mag. 6½ (Pal)		
	56.4 N., 154.5 W.		
	Aftershock of Alaska E.		
	h: 25 km ca.		
	H= 17 59 43.3		USCGS
4.	iP	NZ	18 24 53.4
	P: S, C		
	56.2 N., 154.5 W.		
	Aftershock of Alaska E.		
	h: 25 km ca.		
	H= 18 15 52.4		USCGS
4.	iP	Z	18 29 15.6
	P: D		
	19.7 S., 175.3 W.		
	Tonga Is.		
	h: 57 km ca.		
	H= 18 18 02		USCGS

Date	Phase	Comp.	Time(GMT) h m s
4.	iP	Z	18 33 38.5
	P: C		
4.	eP	Z	19 10 48
4.	eP	Z	20 10 48
	59.5 N., 147.6 W.		
	Aftershock of Alaska E.		
	h: 33 km ca.		
	H= 20 01 44.8		USCGS
4.	P	Z	21 44 18
	L	E	50 40
	L	N	51 06
	Mag. 5¾-6 (Mat)		
	10.5 N., 122.1 E.		
	Off west coast of Negros, P. I.		
	h: 33 km ca.		
	H= 21 38 14.0		USCGS
4.	P	Z	22 26 12
	S	NE	33 45
	eL	E	37 48
	Mag. 5½-5¾ (Mat)		
	59.4 N., 145.2 W.		
	Aftershock of Alaska E.		
	h: 10 km ca.		
	H= 22 16 54.5		USCGS
4.	P	Z	23 53 52
5.	P	Z	01 24 12
	i	Z	35
5.	P	Z	01 29 21.6
	i	Z	35
	i	N	50
5.	P	Z	01 30 58.0
	i	NE	59.0
	S	NE	38 08
	eScS	NE	40 50
	L	NE	41 02
	Mag. 6½-6¾ (Mat)		
	56.2 N., 153.5 W.		
	Aftershock of Alaska E.		
	h: 25 km ca.		
	H= 01 22 13.3		USCGS
5.	iP	NEZ	01 45 14.0
	S	N	34
	P: S, E, D		
	Mag. 5.0 (Mat)		
	36.4 N., 139.9 E.		
	Central Honshu, Japan.		
	h: 67 km ca.		
	H= 01 44 50.3		USCGS
5.	iP	Z	01 50 27.6
	i	NE	28.6

(cont.)

Date	Phase	Comp.	Time(GMT) h m s
	eL	E	02 02 50
	P: C		
	Mag. 6½ (Mat.)		
	56.2 N., 153.3 W.		
	Aftershock of Alaska E.		
	h: 35 km ca.		
	H= 01 41 45.0 USCGS		
5.	P	Z	02 45 21
	i	Z	25
	60.1 N., 145.8 W.		
	Aftershock of Alaska E.		
	h: 15 km ca.		
	H= 02 36 10.3 USCGS		
5.	iP	NEZ	03 01 31.6
	i	Z	44
	S	N	57
	P:S,E,D		
	35.7N.,140.4E.		
	Central Honshu, Japan.		
	h:70km ca. J.M.A.		
5	P	Z	03 09 03
	i	Z	37
5	eP	Z	03 56 47
	56.7N, 151.3W.		
	Aftershock of Alaska E.		
	h: 25 km ca.		
	H=03 47 57 USCGS		
5	eP	Z	05 06 27
	60.1N., 147.7W.		
	Aftershock of Alaska E.		
	h:10km ca.		
	H=04 57 15.4 USCGS		
5	P	Z	07 22 04
	56.5N., 154.7W.		
	Aftershock of Alaska E.		
	h:25km ca.		
	H=07 13 24.4 USCGS		
5	P	Z	07 38 13
	60.4N., 146.7W.		
	Aftershock of Alaska E.		
	h:15 km ca.		
	H=07 29 03.5 USCGS		
5	eP	Z	08 03 47
	e	E	12 56
	e	E	18 49
5	eP	Z	08 21 46
	56.9N., 152.0W.		
	Aftershock of Alaska E.		
	h:15 km ca.		
	H=08 13 12.4 USCGS		
5	P	Z	08 24 36

..(cont.)

Date	Phase	Comp.	Time(GMT) h m s
5	P	Z	09 07 46
	56.2N., 154.5W.		
	Aftershock of Alaska E.		
	h:15 km ca.		
	H=08 59 02 USCGS		
5	iPKP	Z	11 38 18.7
	ePP?	E	12 02 04
	eL	E	26 37
	PKP: C		
	Mag. 5½-5¾ (Mat.)		
	41.9S., 83.7W.		
	Off coast of southern Chile.		
	h:33 km ca.		
	H=11 18 38.9 USCGS		
5	iP	Z	13 58 03.7
	P: C		
	60.2N., 145.6W.		
	Aftershock of Alaska E.		
	h:15 km ca.		
	H=13 48 47.3 USCGS		
5	eP	Z	15 30 15
	i	Z	45
	60.7N., 149.1W.		
	Aftershock of Alaska E.		
	h:33 km ca.		
	H=15 21 47 USCGS		
5	eP	Z	16 58 02
	58.7N., 151.7W.		
	Aftershock of Alaska E.		
	h:20 km ca.		
	H=16 49 04 USCGS		
5	P	Z	17 49 32
	56.3N., 152.9W.		
	Aftershock of Alaska E.		
	h:10 km ca.		
	H=17 40 43.1 USCGS		
5	iP	NZ	17 51 25.1
	eS	E	59 00
	eL	E	18 04 10
	P:S,C		
	Mag. 5-5¼ (Mat.)		
	59.6N., 144.9W.		
	Aftershock of Alaska E.		
	h:15 km ca.		
	H=17 42 07.4 USCGS		
5	iP	NZ	19 27 30.9
	i	Z	28 34
	i	N	29 23
	P:N,D		
5	iP	NEZ	19 37 27.2
	S	E	44 53
	L	N	49 12
	L	E	37

(cont.)

Date	Phase	Comp.	Time(GMT) h m s
	P:S,W.C		
	Mag. 5½-5¾ (Mat.)		
	60.2N., 146.7W.		
	Aftershock of Alaska E.		
	h: 15 km ca.		
	H= 19 28 18.1		USCGS
5	iP	Z	19 59 31.8
	P:C		
	57.0N., 152.3W.		
	Aftershock of Alaska E.		
	h: 20 km ca.		
	H= 19 50 41.3		USCGS
5	eP	Z	20 55 08
	i	Z	08.8
5	eP	Z	21 35 48
	i	Z	55.1
	60.6N., 145.6W.		
	Aftershock of Alaska E.		
	h: 20 km ca.		
	H= 21 26 32.1		USCGS
5	iP	Z	21 46 20.0
	i	EZ	21.4
	S	E	35.0
	P:C		
5	iP	Z	22 28 58.9
	P:D		
5	eP	Z	22 34 29
	28.1S., 178.2W.		
	Kermadec Is.		
	h: 31 km ca.		
	H= 22 22 45.0		USCGS
5	iP	Z	22 35 33.7
	i	N	59
	P:C		
5	iP	Z	23 17 44.6
	i	E	18 00
	P:D		
6	eL	E	03 15 42
	46.5N., 10.1E.		
	Northern Italy.		
	h: 33 km ca.		
	H= 02 37 57		USCGS
6	iP	Z	03 18 00.7
	S	NE	47
6	iPNZ, PE		07 0[illegible] 24.1
	P: D		
6	iPNZ, PE		07 [illegible]7 13.9
	P: S, C		
6	iP	EZ	07 32 59.1
	i	N	59.7
	S	NE	33 24
	P:E,C		

Date	Phase	Comp.	Time(GMT) h m s
6	P	Z	08 05 40
6	iP	Z	08 30 15.7
	57.4N., 152.3W.		
	Aftershock of Alaska E		
	h: 5 km ca.		
	H= 08 21 25		USCGS
6	iP	Z	09 19 52.2
	i	NEZ	20 10.7
	P:D		
6	P	Z	10 34 40
6	iP	EZ	10 51 46.9
	i	NE	52 08
	eS	E	59 26
	eL	E	11 03 50
	P:E		
	Mag. 5¼ (Mat.)		
	59.9N., 145.6W.		
	Aftershock of Alaska E.		
	h: 15 km ca.		
	H= 10 42 36.3		USCGS
6	P	Z	11 07 45
	56.3N., 154.4W.		
	Aftershock of Alaska E.		
	h: 33 km ca.		
	H= 10 59 05.9		USCGS
6	iP	Z	13 22 32.2
	P:C		
6	iP	NEZ	13 52 09.9
	PP	Z	32.7
	PCP	Z	54 28.2
	i	Z	55.7
	P:N,E,D		
	52.5N., 173.9W.		
	Andreanof Is.		
	h: 115 km ca.		
	H= 13 45 10.5		USCGS
6	P	Z	14 41 08
	i	NEZ	28.7
6	eSPKP	Z	15 32 45
	21.8S., 68.8W.		
	Northern Chile.		
	h: 114 km ca.		
	H= 15 12 28.7		USCGS
6	iP	NEZ	16 13 55.2
	eS	N	15 50
	eL	E	17 00
	P:N,E,D		
	45.2N., 150.9E.		
	Kurile Is.		
	h: 33 km ca.		
	H= 16 10 52.2		USCGS

April, 1964

Date	Phase	Comp.	Time(GMT) h m s
6	iP	Z	17 44 57.2
	eL	E	18 00 44
	P:S,C		
	59.9N., 147.8W.		
	Aftershock of Alaska E.		
	h: 15 km ca.		
	H= 17 35 50.6 USCGS		
6	P	Z	18 12 47
	eS	E	20 05
	eL	E	24 22
	56.4N., 151.8W.		
	Aftershock of Alaska E.		
	h: 20 km ca.		
	H= 18 03 56.4 USCGS		
6	e	E	20 05 06
	eL	E	09 12
6	e	E	23 04 58
6	P	Z	23 08 10
6	P	NZ	23 10 15
	i	N	42
	i	NEZ	50
6	iP	Z	23 50 57.9
	PP	NZ	51 25
	e	E	00 02 49
	P:C		
	5.1S, ,154.0E.		
	New Ireland region		
	h: 116 km ca.		
	H= 23 43 01.7 USCGS		
7	P	Z	00 18 44
	i	N	45
	i	E	19 15
7	P	Z	01 52 05
	i	Z	06.6
	eS	E	58 56
	e	E	02 02 40
	eL	F	06 00
	Mag. 5½ (Mat.)		
	58.5N., 154.5W.		
	Aftershock of Alaska E.		
	h: 30 km ca.		
	H= 01 43 23.7 USCGS		
7	P	Z	04 40 47
7	eP	Z	04 44 16
	58.3N., 149.7W.		
	Aftershock of Alaska E.		
	h: 15 km ca.		
	H= 04 35 18.6 USCGS		

Date	Phase	Comp.	Time(GMT) h m s
7	iP	Z	05 03 17.1
	i	N	17.9
	P:C		
	58.1N., 157.4W.		
	Aftershock of Alaska E.		
	h: 33 km ca.		
	H= 04 54 42 USCGS		
7	P	Z	05 44 00
	60.0N., 146.7W.		
	Aftershock of Alaska E.		
	h: 20 km ca.		
	H= 05 34 56 USCGS		
7	P	Z	06 11 11
	60.0N., 145.7W.		
	Aftershock of Alaska E.		
	h: 33 km ca.		
	H= 06 02 00 USCGS		
7	iP	NEZ	08 51 21.8
	S	NEZ	40
	P:S,E,C		
7	ePKP?	Z	11 00 00
	17.9N., 68.0W.		
	Mona Passage.		
	h: 98 km ca.		
	H= 10 41 29.3 USCGS		
7	iP	Z	13 21 58.1
	i	NE	59
	S	NE	22 20
	P:D		
7	iP	NEZ	13 25 30.6
	PP	Z	26 09
	PcP	Z	27 39.5
	eS	E	31 13
	sS	N	32 13
	sS	E	16
	e	E	34 10
	e	N	19
	e	E	36 16
	P:N, E,C		
	Mag. 5¼-5½ (Mat.)		
	0. N., 123.2E.		
	Northern Celebes.		
	h: 150 km ca.		
	H= 3 18 18.9 USCGS		
7	iP	NZ	14 33 36.0
	P:S, C		
7	P	Z	15 16 31
	i	NEZ	33.6
7	P	Z	17 26 01
	iS	NEZ	03.6

April, 1964

Date	Phase	Comp.	Time(GMT) h m s
7	P	EZ	17 35 11.5
	S	N	46
7	iP	Z	18 11 17.8
	i	Z	49
	eS	E	18 40
	eL	E	22 19
	P:C		
	Mag; 5¼-5½ (Mat.)		
	57.3N., 151.1W.		
	Aftershock of Alaska E.		
	h: 20 km ca.		
	H= 18 02 24.7		USCGS
7	iP	Z	18 25 52.1
	P:C		
	57.0N., 153.4W.		
	Aftershock of Alaska E.		
	h: 33 km ca.		
	H= 18 17 09		USCGS
7	iP	EZ	18 56 41.2
	S	NEZ	53
	P:W,C		
7	iP	Z	19 37 16.8
	i	NEZ	26
	eS	E	44 29
	eL	E	48 16
	P:C		
	Mag; 5¼ (Mat.)		
	55.7N., 151.9W.		
	Aftershock of Alaska E.		
	h: 20 km ca.		
	H= 19 28 24.7		USCGS
7	iP	EZ	21 05 52.1
	S	NEZ	06 04
	P:W, C		
7	iP	Z	23 03 34.2
	i	N	38
	P:C		
7	eP	Z	23 06 59
8	iPEZ	PN	02 07 29.5
	i	Z	40
	eS	E	10 18
	L	E	13 14
	P:W, D		
	46.1N., 152.3E.		
	Kurile Is.		
	h: 40 km ca.		
	H= 02 04 06.5		USCGS
8	P	Z	02 13 59
	46.1N., 152.3E.		
	Kurile Is.		
	h: 40 km ca.		
	H= 02 10 36.1		USCGS
8	P	Z	04 44 22
	59.4N., 147.6W.		
	Aftershock of Alaska E.		
	h: 33 km ca.		
	H= 04 35 18		USCGS
8	iPEZ	PN	06 46 25.2
	i	EZ	33.7
	i	N	47 08
	e	N	13
	i	E	31
	P:S,E,C		
	Mag; 4.0 (Mat.)		
	38.4N., 141.2E.		
	Northern Honshu Japan.		
	h: 33 km ca.		
	H= 06 45 38		USCGS
8	P	Z	08 20 05
	eS	E	29 43
	eSS	E	35 09
	eL	E	42 54
	Mag; 5¾-6 (Mat.)		
	6.8S., 68.9E.		
	Chagos Archipelago region		
	h: 33 km ca.		
	H= 08 08 11.8		USCGS
8	iP	Z	08 23 20.9
	i	NE	21
	S	NEZ	59
	P:C		
8	eP	Z	10 28 45
	i	NZ	29 14.7
8	iP	NZ	11 01 13.9
	i	E	14.7
	i	NEZ	26
	e	E	03 14
	S	E	45
	i	N	03 52
	L	NEZ	04 29
	P:N,D		
	Mag; 5.7 (Mat.)		
	45.8N., 15[illegible]E.		
	Kurile Is.		
	h: 40 km ca.		
	H= 10 58 09.1		USCGS
8	iP	EZ	13 05 56.7
	S	EZ	06 15.7
	P:E,C		
8	P	Z	13 19 02
	i	N	03
	eS?	N	52
8	e	E	13 58 05
	e	E	14 06 22

April, 1964

Date	Phase	Comp.	Time(GMT) h m s
8	iP	Z	14 25 02.9
	i	NE	04
	P:C		
	35.1N., 24.3E.		
	Near Crete.		
	h: 71 km ca.		
	H= 14 12 29.5		USCGS
8	eP	Z	16 49 40
	i	Z	53
	e	E	53 13
	e	E	55 18
8	P	Z	16 55 58
	60.3N., 147.3W.		
	Aftershock of Alaska Earthquake.		
	h: 33 km ca.		
	H= 16 46 38		USCGS
8	P	Z	17 01 32
	S	NEZ	34.7
8	eP	Z	19 07 52
	eL	E	19 17
	eL	E	22 25
	56.9N., 149.9W.		
	Aftershock of Alaska E.		
	h: 35 km ca.		
	H= 18 53 50.5		USCGS
8	P	Z	19 42 29
	eS	E	49 50
	eSS	E	52 29
	eL	E	54 00
	Mag; $5\frac{1}{2}$ (Mat.)		
	59.6N., 147.0W.		
	Aftershock of Alaska E.		
	h: 15 km ca.		
	H= 19 33 19.0		USCGS
8	P	Z	19 50 32
8	eP	Z	19 51 12
	i	Z	15
8	iP	Z	19 59 29.2
	i	NE	29.7
	P: C		
	60.4N., 145.9W.		
	Aftershock of Alaska E.		
	h: 10 km ca.		
	H= 19 50 16.8		USCGS
8	iP	NZ	21 29 29.5
	P: S, C		
8	iP	NZ	23 14 59.6
	P: N, D		
9	P	Z	00 01 22
	21.9S., 178.2W.		
	Fiji Is. region		
	h: 323 km ca.		
	H= 23 50 37		USCGS
9	P	Z	00 43 37
	i	NE	39
	S	NE	44 03
9	eP	Z	01 02 28
	eS	E	07 43
	eL	E	09 30
	Mag; 5 (Mat)		
	6.3N., 125.1E.		
	Mindanao, P.I.		
	h: 33 km ca.		
	H= 00 55 56		USCGS
9	iPZ	PE	01 39 48.8
	i	N	40 35
	P: C		
9	iP	NEZ	03 12 09.3
	P: N, D		
9	P	Z	03 45 20
	S?	N	39
9	eL	E	05 14 47
	eL	E	22 38
	Mag; $5\frac{1}{2}$-$5\frac{3}{4}$ (Mat)		
	13.5N., 89.9W.		
	El Salvador.		
	h: 89 km ca.		
	H= 04 15 23.0		USCGS
9	eP	Z	09 27 31
	eS	N	53
9	P	Z	10 21 16.6
	i	Z	21
9	P	Z	10 46 21
	59.1N., 148.4W.		
	Aftershock of Alaska E.		
	h: 20 km ca.		
	H= 10 37 15		USCGS
9	iP	Z	12 42 26.7
	PcP	Z	43 42
	P: C		
	59.5N., 148.9W.		
	Aftershock of Alaska E.		
	h: 20 km ca.		
	H= 12 33 23.9		USCGS
9	P	Z	12 52 25
	i	Z	48
	i	N	53 27

Date	Phase	Comp.	Time(GMT) h m s
9	eP	Z	13 15 12
	i	Z	33.6
	i	E	58
	S	NE	23 04
	eSS	E	13 25 10
	eL	N	27 11
	eL	E	26
	Mag; 5½-5¾ (Mat)		
	59.6N., 146.1W.		
	Aftershock of Alaska E.		
	h: 15 km ca.		
	H= 13 06 15.2		USCGS
9	iPZ	PNE	13 21 05.6
	i	E	16.9
	S	E	20.4
	P: C		
9	P	Z	13 31 16.4
	i	Z	23
	i	N	32 42
	56.8N., 152.0W		
	Aftershock of Alaska E.		
	h: 33 km ca.		
	H= 13 22 29.6		USCGS
9	iPZ	PNE	13 41 33.7
	S?	N	42 00
	P: D		
9	eP	Z	14 35 38
	eL	E	45 13
9	eP	Z	14 43 58
9	eP	NE	14 44 17
	S?	NE	48
9	iP	PN	16 44 17.6
	S	NZ	50
	P: C		
9	P	NEZ	17 30 27
	S	N	31 03
	i	E	05
9	eP	Z	18 57 24
9	iP	PNE	19 55 12.4
	P: C		
9	iPKP	Z	20 03 01.7
	i	Z	14
	i	Z	39
	PKP: C		
	22.1S., 69.8W.		
	Northern Chile.		
	h: 54 km ca.		
	H= 19 43 16		USCGS
9	iP	Z	20 23 13.6
	iS	NEZ	15.8
	P: D		
9	eP	Z	21 29 09
	60.8N., 146.8W.		
	Aftershock of Alaska E.		
	h: 33 km ca.		
	H= 21 20 03		USCGS
9	iPKP1	Z	22 14 26.7
	iPKP2	Z	50
	PKP1: C		
	18.5S., 71.5W.		
	Southern Peru.		
	h: 39 km ca.		
	H= 21 54 42.1		USCGS
9	e	E	23 04 12
9	P	Z	23 19 01
	i	Z	06
	i	Z	20
	46.3N., 149.6E.		
	Kurile Is.		
	h: 45 km ca.		
	H= 23 16 04		USCGS
9	eP	Z	23 43 27
10	iP	Z	00 00 15.8
	i	N	16.1
	i	E	24
	i	NZ	25
	P: C		
10	iP	NEZ	01 16 56.4
	i	Z	17 03.1
	i	Z	18 15
	eS	E	24 06
	eSS	E	27 50
	eSS	N	28 07
	eL	E	29 34
	eL	N	30 20
	P: N,E,D		
	Mag; 5¼-5½ (Mat)		
	58.4N., 150.6W		
	Aftershock of Alaska E.		
	h: 15 km ca.		
	H= 01 08 00.2		USCGS
10	eP	Z	04 08 59
10	P	Z	04 46 47
10	eP	Z	06 04 28
	S	NEZ	32.6
10	P	Z	06 19 50

April , 1964

Date	Phase	Comp.	Time(GMT) h m s
10	P	Z	13 14 00
	59.6N., 152.2W.		
	Aftershock of Alaska E.		
	h: 25 km ca.		
	H= 12 06 25		USCGS
10	iP	Z	13 15 07.0
	i	E	08
	i	N	09
	eS	N	19 22
	eL	E	20 42
	P: C		
	Mag; $4\frac{3}{4}$-5 (Mat)		
	13.5N., 144.9E.		
	Mariana Is.		
	h: 101 km ca.		
	H= 13 10 05.4		USCGS
10	P	Z	14 04 20
	S	NEZ	25
10	eP	Z	14 42 55
10	iP	Z	14 46 03.5
	P: D		
10	iP	NEZ	15 47 51.1
	S	NEZ	52
10	iP	NEZ	17 39 23.6
	i	E	25.6
	S	NEZ	56
	P: N,E,D		
10	eP	Z	17 54 46
10	e	E	18 23 25
10	P	Z	18 45 50
	i	N	46 29
10	iPNZ	PE	19 14 58.4
	eS	E	22 21
	eSS	E	25 49
	eL	E	29 07
	eL	N	38
	P: S,C		
	Mag; $5\frac{1}{4}$-$5\frac{1}{2}$ (Mat)		
	59.7N., 148.2W.		
	Aftershock of Alaska E.		
	h: 15 km ca.		
	H= 19 05 52.6		USCGS
10	eP	Z	20 26 12
	eS	NE	27
10	iP	Z	21 52 51.0
	i	NZ	56.0
	S	E	59 53
	eSS	E	22 03 29
	eSS	N	36
	eL	N	04 50
			(cont.)

Date	Phase	Comp.	Time(GMT) h m s
	eL	N	22 05 12
	P: C		
	Mag; $5\frac{3}{4}$-6 (Mat)		
	60.1N., 153.7W.		
	Aftershock of Alaska E.		
	h: 10 km ca.		
	H= 21 44 06.7		USCGS
10	eP?	Z	23 37 45
	i	Z	38 24
10	eP	Z	23 43 46
	i	Z	44 33
11	iP	NEZ	01 15 48.4
	S	E	25 06
	L	E	36 16
	P: S,E,D		
	29.0S., 178.9W.		
	Kermadec Is.		
	h: 302 km ca.		
	H= 01 04 30.2		USCGS
11	P	Z	06 14 49
	25.2N., 124.4E.		
	Ryukyu Is. region.		
	h: 74 km ca.		
	H= 06 11 02.1		USCGS
11	e	E	08 01.4
	e	N	06.6
11	P	Z	09 32 40
	eL	E	43.7
	L	N	47 26
	56.4N., 152.2W.		
	Aftershock of Alaska E.		
	h: 33 km ca.		
	H= 19 23 51.5		USCGS
11	iP	NZ	10 57 40.9
	i	Z	46.0
	P: N, D		
11	iP	NZ	11 45 10.7
	e	EZ	46 11
	P: S,C		
	60.4N., 146.4W.		
	Aftershock of Alaska E.		
	h: 15 km ca.		
	H= 11 36 00.5		USCGS
11	eP	Z	12 25 37
	ePP	E	28 00
	eS	E	32 44
	L	N	40 48
	L	E	41 00
	56.6N., 151.0W.		
	Aftershock of Alaska E.		
	h: 20 km ca.		
	H= 12 16 41.1		USCGS

April , 1964

Date	Phase	Comp.	Time(GMT) h m s
11	P	EZ	14 34 41
	i	N	42.4
	S	NZ	35 10
11	P	Z	16 13 01
	e	Z	03
	e	E	26 17
	e	E	33 17
	eLq	E	34 35
	e	N	40 50
	Lq	E	45 00
	e	E	47 42
	L	N	52 30
	Mag; $5\frac{1}{4}$ (Mat)		
	40.5N., 25.0E		
	Aegean Sea.		
	h: 33 km ca.		
	H= 16 00 42.8		USCGS
11	P	EZ	19 50 48.6
	S	E	51 08.2
	i	NE	12
	P: W, C		
11	iP	Z	22 11 45.5
	i	N	46.0
	P: C		
	60.2N., 146.9W.		
	Aftershock of Alaska E.		
	h: 20 km ca.		
	H= 22 02 38.2		USCGS
11	iP	N	23 20 31.7
	i	EZ	31.8
	i	Z	36.0
	P: N		
	60.1N., 146.5W.		
	Aftershock of Alaska E.		
	h: 20 km ca.		
	H= 23 11 22.8		USCGS
12	P	NZ	01 16 56.4
	i	EZ	57.0
	P: N, C		
	53.0N., 160.4E.		
	Near east coast of Kamchatka		
	h: 33 km ca.		
	H= 01 11 58		USCGS
12	P	EZ	01 33 20
	i	NE	22.3
	i	N	35 13
	S	E	40 29
	SS	N	43 55
	e	E	44 13
	L	E	47 20
	L	N	40
	Mag; $6\frac{1}{2}$-$6\frac{3}{4}$ (Mat)		
	56.6N., 152.2W.		
	Aftershock of Alaska E.		
	h: 22 km ca.		
	H= 01 24 31.2		USCGS

Date	Phase	Comp.	Time(GMT) h m s
12	iP	Z	01 50 02.5
	P: C		
12	P	Z	03 33 15.0
	e	Z	24
12	iP	NEZ	05 13 18.9
	S	E	29.4
	i	NEZ	30
	P: N, E, C		
12	iP	EZ	06 10 24.9
	i	N	25.3
	eS	N	18 12
	eSS?	E	21.7
	eL	N	27 13
	P: E, D		
	13.6S., 166.0E.		
	New Hebrides Is.		
	h: 33 km ca.		
	H= 06 00 46.4		USCGS
12	P	Z	06 32 57
	eS	NE	33 16
12	P	Z	08 10 11.4
	S	N	11 00
	P: C		
12	iP EZ, PN		09 43 34.4
	eS	E	50 38
	L	NE	54 32
	L	E	57 07
	P: E, D		
	Mag; $5\frac{1}{4}$-$5\frac{1}{2}$ (Mat)		
	56.6N., 152.1W.		
	Aftershock of Alaska E.		
	h: 20 km ca.		
	H= 09 34 44.1		USCGS
12	iPZ, PNE		11 22 54.6
	S	E	32 46
	SS	E	38 00
	L	NE	44 08
	P: C		
	33.9S., 179.8W.		
	Kermadec Is.		
	h: 89 km ca.		
	H= 11 10 54.8		USCGS
12	iP	NEZ	12 16 19.4
	eS	EZ	17 23
	L	NE	54
	P: N, E, C		
	34.0N., 131.9E.		
	Near south coast of Honshu, Japan		
	h: 70 km ca.		
	H= 12 14 55		USCGS
12	eP	Z	12 28 43

April , 1964

Date	Phase	Comp.	Time(GMT) h m s
12	eP	Z	12 44 55
	e	Z	45 13
	eS	E	52 39
	L	E	56 30
	e	N	58 42
	e	E	13 03 29
	Mag; 5¼-5½ (Mat)		
	56.4N., 151.4W.		
	Aftershock of Alaska E.		
	h: 30 km ca.		
	H= 12 36 23		USCGS
12	P	Z	12 56 53
	eS	N	13 04 33
	eL	E	11 16
	Mag; 5¾-6 (Mat)		
	56.6N., 151.3W .		
	Aftershock of Alaska E.		
	h: 33 km ca.		
	H= 12 48 02.2		USCGS
12	P	Z	13 24 22.9
	P: C		
12	eP	Z	14 44 29
	i	Z	38.7
	e	Z	46 06
	61.2N., 151.1W.		
	Aftershock of Alaska E.		
	h: 28 km ca.		
	H= 14 35 39.2		USCGS
12	P	Z	15 17 16
	61.2N., 147.4W.		
	Aftershock of Alaska E.		
	h: 20 km ca.		
	H= 15 08 09.5		USCGS
12	P	NZ	17 31 13.9
	i	Z	29.4
	eS	E	33 35
	L	N	46 30
	P: C		
	Mag; 5¼-5½ (Mat)		
	60.2N., 145.6W.		
	Aftershock of Alaska E.		
	h: 20 km ca.		
	H= 17 22 02.2		USCGS
13	P	Z	01 05 01
	e	Z	07 11
	0.1N., 123.0E.		
	Northern Celebes.		
	h: 97 km ca.		
	H= 00 57 43.5		USCGS
13	P	Z	01 20 38.4
	e	N	21 09
13	e	Z	01 58 05
	i	Z	30.9
			(cont)
	i	Z	01 58 36.9
	e	EZ	45
13	eP	Z	03 13 30
	23.7S., 179.0W.		
	South of Fiji Is.		
	h: 360 km ca.		
	H= 03 02 46.3		USCGS
13	P	Z	03 27 46
	i	Z	28 06.5
	27.6N., 90.2E.		
	Bhutan.		
	h: 52 km ca.		
	H= 03 20 04.5		USCGS
13	P	N	06 33 47
	19.5S., 177.7W.		
	Tonga Is. region		
	h: 574 km ca.		
	H= 06 23 34.1		USCGS
13	P	E	07 22 49
13	P	Z	08 42 23
	PP	Z	45 34
	eS	E	52 16
	eSS	N	58 24
	eL	E	09 03 26
	eL	N	09.5
	eL	E	09.6
	L	N	11.9
	P: C		
	Mag; 6½-6¾ (Mat)		
	45.3N., 18.1E.		
	Northern Yugoslavia.		
	h: 33 km ca.		
	H= 08 30 03.6		USCGS
13	P	Z	08 48 38
	i	N	38.8
	i	EZ	39.6
	S	NEZ	51 15
	22.3N., 142.1E.		
	Bonin Is. region.		
	h: 309 km ca.		
	H= 08 45 24.6		USCGS
13	e	Z	08 56 32
13	P	EZ	11 05 20.4
	S	E	36.5
13	iP	NEZ	11 33 02.3
	eL	E	40 22
	e	N	41 26
	P: S, W, D		
	6.9N., 126.6E.		
	Near east coast of Mindanao, P.I.		
	h: 110 km ca.		
	H= 11 26 52.1		USCGS

Date	Phase	Comp.	Time(GMT) h m s
13	cP	N	12 34 53
	eS	N	42 36
	e	NE	50
	L	NE	49.0
13	iP	NZ	13 39 50
	S	NE	40 12
	P: S, E, C		
13	P	EZ	14 13 51.3
	i	NE	58.8
	eS	E	21 03
	L	E	24 50
	L	E	27 30
	P: D		
	Mag; 5¼ (Mat)		
	57.6N., 151.2W.		
	Aftershock of Alaska E.		
	h: 25 km ca.		
	H= 14 05 00.0		USCGS
13	P	EZ	16 22 55
	S	N	30 05
	L	E	33 42
	L	N	37 04
	Mag; 5½-5¾ (Mat)		
	56.6N., 152.1W.		
	Aftershock of Alaska E.		
	h: 33 km ca.		
	H= 16 14 06.3		USCGS
13	P	Z	17 52 27
	61.1N., 147.4W.		
	Aftershock of Alaska E.		
	h: 35 km ca.		
	H= 17 43 26		USCGS
13	P	Z	18 23 28.9
	P: C		
	59.2N., 147.1W.		
	Aftershock of Alaska E.		
	h: 20 km ca.		
	H= 18 14 21.4		USCGS
13	P	NEZ	19 25 34.4
	e	Z	26 58
	P: N, E, D		
	57.3N., 153.2W.		
	Aftershock of Alaska E		
	h: 23 km ca.		
	H= 19 16 48.6		USCGS
13	P	NEZ	21 [illegible] 14
	i	EZ	25.0
	eS	E	40 58
	eL	NE	45.0
	e	N	49 57
	e	N	53 46
	e	N	57 24
	e	E	[illegible]2 13 20

(cont.)

Date	Phase	Comp.	Time(GMT) h m s
	Mag; 5¼-5¼ (Mat)		
	57.5N., 153.9W.		
	Aftershock of Alaska E.		
	h: 30 km ca.		
	H= 21 25 33.0		USCGS
13	P	Z	21 52 38
	59.4N., 143.1W.		
	Aftershock of Alaska E.		
	h: 33 km ca.		
	H= 21 43 16.5		USCGS
14	P	Z	00 15 53
	S	N	16 22.6
14	P	N	01 08 32.6
	S	NE	12 00ca
	L	E	14 30
	Mag; 5-5¼ (Mat)		
	49.4N., 155.5E.		
	Kurile Is.		
	h: 60 km ca.		
	H= 01 04 28.6		USCGS
14	P	NE	04 22 33
14	eL	E	05 41 34
	eL	N	56 20
	eL	N	06 06 00
	eL	E	08 58
	41.0S., 80.[illegible]E.		
	Kerguelen Is. region		
	h: 33 km ca.		
	H= 05 01 59.1		USCGS
14	e	Z	06 28 42
	60.2N., 146.5W.		
	Aftershock of Alaska E.		
	h: 33 km ca.		
	H= 06 19 33		USCGS
14	P	NZ	07 24 17
	i	Z	22.7
	S	NE	30
14	iP	Z	07 29 02.2
	i	Z	07.6
	S	EZ	15
14	eP	Z	08 08 19
	61.4N., 147.0W.		
	Aftershock of Alaska E.		
	h: 33 km ca.		
	H= 07 59 25.4		USCGS
14	P	Z	09 08 50
	S	E	17 04
	eScS	E	18 46
	I	E	23 58
	Mag; 5¼-5½ (Mat)		
	17.5S., 167.[illegible]E.		

(cont.)

Date	Phase	Comp.	Time(GMT) h m s
	New Hebrides Is.		
	h: 33 km ca.		
	H= 08 58 41.9		USCGS
14	P	N	09 30 03
	eS	N	30
14	iPZ, PN		12 42 10.9
	S	NE	41.7
	P: C		
14	P	NZ	15 11 53
	i	NZ	12 17.6
14	eP	EZ	15 47 12
	S?	NE	38.7
	e	NZ	45
14	iP	Z	15 49 41.0
	i	EZ	50 02.7
	P: C		
14	P	NZ	16 04 14.2
	i	NZ	24.1
	eS	E	11 25
	e	N	31
	e	E	14 01
	L	N	21 05
	L	Z	22 00
	P: D		
	Mag; 5¼-5½ (Mat)		
	61.3N., 147.3W.		
	After shock of Alaska E.		
	h: 30 km ca.		
	H= 15 55 10.9		USCGS
14	iP	NZ	16 14 56.0
	P: N, D		
	59.9N., 146.0W.		
	Aftershock of Alaska E.		
	h: 33 km ca.		
	H= 16 05 46		USCGS
14	iP	Z	16 27 37.1
	P: C		
	8.6S., 117.3E;		
	Sumbawa I. regio 1		
	h: 58 km ca.		
	H= 16 18 54		USCGS
14	iP	Z	17 03 22.0
	i	NZ	40.2
	P: D		
	61.4N., 150.[illegible]		
	Aftershock of . laska E.		
	h: 35 km ca.		
	H= 16 59 30.1		USCGS
14	iPZ, PNE		18 32 08.2
	S	NZ	54
	P: D		

Date	Phase	Comp.	Time(GMT) h m s
14	e	E	21 10 35
14	P	Z	21 42 42
	61.0N., 147.3W.		
	Aftershock of Alaska E.		
	h: 40 km ca.		
	H= 21 33 37.3		USCGS
14	iP	Z	22 38 43.4
	i	Z	45.8
	P: C		
	59.9N., 145.5W.		
	Aftershock of Alaska E.		
	h: 23 km ca.		
	H= 22 29 31.1		USCGS
14	iP	Z	22 57 10.6
	P: C		
	19.8S., 176.7W.		
	Tonga Is.		
	h: 235 km ca.		
	H= 22 46 25		USCGS
14	P	Z	23 00 17.6
14	eP	Z	23 04 04
14	iP	Z	23 04 17.5
	i	NE	17.6
	e	Z	09 35
	S	NE	11 23
	SS	E	15 08
	L	NE	16 30
	P: D		
	Mag; 6-6¼ (Mat)		
	58.0N., 152.6W.		
	Aftershock of Alaska E.		
	h: 30 km ca.		
	H= 22 55 31.3		USCGS
15	P	Z	01 45 37
15	P	Z	02 58 36
	S	EZ	45
15	P	Z	03 47 27
15	P	NEZ	05 25 52
15	iP	Z	06 39 32.5
	P: D		
15	P	NZ	08 32 28.4
	eL	E	43 41
	e	E	46 37
	57.4N., 149.5W.		
	Aftershock of Alaska E.		
	h: 15 km ca.		
	H= 08 23 27.4		USCGS

April , 1964

Date	Phase	Comp.	Time(GMT) h m s
15	iP	NEZ	15 14 36.5
	S	NEZ	55
	P: N, E, D		
15	iP	Z	15 39 25.6
	i	NE	26.0
	S	NE	46 28
	ScS	E	49 18
	L	N	50 00
	eL	E	52 28
	L	N	42
	P: C		
	Mag: 6¼-6½ (Mat)		
	56.5N., 154.4W.		
	Aftershock of Alaska E.		
	h: 35 km ca.		
	H= 15 30 47.1 USCGS		
15	eP	Z	16 33 17
15	iP	Z	16 44 16.8
	i	NE	17.1
	e	Z	45 52
	P: C		
	21.7N., 88.0E.		
	India-east Pakistan border region		
	h: 36 km ca.		
	H= 16 35 57.5 USCGS		
15	iP	EZ	20 15 15.0
	i	N	15.2
	i	EZ	48.1
	i	N	50
	P: E, D		
15	iP	Z	20 39 17.6
	P: D		
	56.8N., 154.2W.		
	Aftershock of Alaska E.		
	h: 20 km ca.		
	H= 20 30 35.9 USCGS		
15	e	E	21 40 55
15	P	Z	23 52 49.6
	S	NEZ	53 24.6
16	iP	NEZ	01 05 30.2
	i	E	48
	iS	E	06 15
	e	NE	33
	P: N, W, C		
	Mag: 5.9 (Mat)		
	37.0N., 142.7E.		
	Off east coast of Honshu, Japan		
	h: 38 km ca.		
	H= 01 04 34.5 USCGS		
16	e	Z	0[illegible] 55 29

Date	Phase	Comp.	Time(GMT) h m s
16	iP	NZ	02 46 20.5
	i	E	21.0
	P: N, C		
	21.5S., 170.5E.		
	Loyalty Is. region		
	h: 110 km ca.		
	H= 02 35 48.9 USCGS		
16	P	Z	03 23 27.6
	S	NEZ	24 09
16	iP	Z	03 28 30.5
	P: D		
	57.2N., 151.4W.		
	Aftershock of Alaska E.		
	h: 10 km ca.		
	H= 03 19 34.8 USCGS		
16	P	NZ	06 24 37
	i	NEZ	49.6
	L	E	27 17
	45.1N., 151.3E.		
	Kurile Is.		
	h: 33 km ca.		
	H= 06 21 32.3 USCGS		
16	eP	Z	07 10 25
	e	N	11 03
16	eP	Z	08 29 54
16	iP	NEZ	09 20 31.4
	i	E	43.6
	S	N	49
	P: S, E, D		
16	iP	Z	12 04 58.1
	P: D		
	58.3N., 150.7 W.		
	Aftershock of Alaska E.		
	h: 33 km ca.		
	H= 11 56 04.5 USCGS		
16	P	Z	12 20 01.6
	58.2N., 152.5W.		
	Aftershock of Alaska E.		
	h: 33 km ca.		
	H= 12 11 15.7 USCGS		
16	iPZ, PNE		12 49 09.1
	i	Z	19.3
	eS	N	51 24
	P: N, E, D		
	45.3N., 150.4E.		
	Kurile Is.		
	h: 33 km ca.		
	H= 12 45 09.9 USCGS		
16	iP	Z	13 50 39.0
	i	Z	52 59.6
	S	E	56 40

(cont.)

Date	Phase	Comp.	Time(GMT) h m s
	L	E	13 59 36
	L	E	14 04 48.
	P: C		
	Mag; 5½ (Mat)		
	52.1N., 169.4W.		
	Fox Is.		
	h: 33 km ca.		
	H= 13 34 08.9		USCGS
16	iPZ, PE		14 13 34.5
	i	Z	45.3
	iPcP	Z	15 21.3
	P: D		
	7.0S., 155.7E.		
	Solomon Is.		
	h: 78 km ca.		
	H= 14 05 14.9		USCGS
16	P	Z	14 20 09
	52.3N., 169.9W.		
	Fox Is.		
	h: 40 km ca.		
	H= 14 12 37.6		USCGS
16	P	Z	14 30 30
	57.6N., 150.9W.		
	Aftershock of Alaska E.		
	h: 33 km ca.		
	H= 14 21 36.2		USCGS
16	P	Z	14 40 12
	61.4N., 149.2W.		
	Aftershock of Alaska E.		
	h: 33 km ca.		
	H= 14 31 16.3		USCGS
16	eP	Z	17 17 22
	59.5N., 147.8W.		
	Aftershock of Alaska E.		
	h: 33 km ca.		
	H= 17 08 27		USCGS
16	iP	NZ	19 35 43.2
	i	E	43.3
	i	Z	37 07.0
	S	E	42 38
	e	N	44
	i	NE	49
	eScS	N	45 31
	e	E	42
	L	E	46 15
	eL	N	50 43
	P: S, C		
	Mag; 6¾-7 (Mat)		
	56.4N., 152.9W		
	Aftershock of Alaska E.		
	h: 30 km ca.		
	H= 19 26 57.4		USCGS
16	P	NZ	22 45 27
16	e	E	22 49 31
	e	N	32
17	P	Z	01 22 02.1
	P: D		
	3.7N., 127.7E.		
	Talaud Is.		
	h: 34 km ca.		
	H= 01 15 01		USCGS
17	iP	EZ	02 58 57.5
	i	NZ	58.4
	i	E	59 12
	eS	N	20
	e	E	26
	P: E, D		
	Mag; 5.1 (Mat)		
	36.7N., 140.5E.		
	Honshu, Japan		
	h: 68 km ca.		
	H= 02 58 27.0		USCGS
17	P	Z	04 13 12
	59.6N., 144.7W.		
	Aftershock of Alaska E.		
	h: 20 km ca.		
	H= 04 03 55.9		USCGS
17	P	NZ	04 26 14
	59.6N., 144.7W.		
	Aftershock of Alaska E.		
	h: 33 km ca.		
	H= 04 16 59.4		USCGS
17	P	EZ	04 58 16
	S	NE	05 05 22
	e	E	09 03
	L	E	11 42
	Mag; 6¼-6½ (Mat)		
	56.4N., 152.9W.		
	Aftershock of Alaska E.		
	h: 25 km ca.		
	H= 04 49 30.5		USCGS
17	iPKP	Z	05 04 24.5
	22.5S., 10.8W.		
	South Atlantic Ocean		
	h: 33 km ca.		
	H= 04 44 37		USCGS
17	eP	NZ	06 08 12
	i	NZ	15.5
	iPcP	Z	09 54.6
	eL	E	13 58
	eL	NZ	22 50
	Mag; 5½ (Mat)		
	6.6S., 154.9E.		
	Solomon Is.		
	h: 35 km ca.		
	H= 06 00 00.2		USCGS

Date	Phase	Comp.	Time(GMT) h m s
17	P	E	08 09 12.5
	e	Z	14
	i	Z	48.6
17	eP	Z	08 22 38
17	iP	Z	09 18 00.0
	i	Z	19 20.6
	S	NE	25 10
	L	E	28 46
	L	N	53
	P: D		
	Mag; 5¼-5½ (Mat)		
	57.7N., 151.4W.		
	Aftershock of Alaska E.		
	h: 20 km ca.		
	H= 09 09 07.3		USCGS
17	ePKP	Z	09 48 40
	i	Z	49 09.4
	20.7S., 69.6W.		
	Near coast of northern Chile.		
	h: 33 km ca.		
	H= 09 28 46.6		USCGS
17	P	Z	10 09 02.6
	i	Z	03.8
	60.4N., 145.9W.		
	Aftershock of Alaska E.		
	h: 20 km ca.		
	H= 09 59 52.4		USCGS
17	P	Z	11 39 26
	i	Z	40 17.5
17	P	Z	11 57 55.1
	60.0N., 145.5W.		
	Aftershock of Alaska E.		
	h: 33 km a.		
	H= 11 48 44.7		USCGS
17	iPZ, PN		14 54 14.7
	P: N, C		
	16.2S., 167.7E.		
	New Hebrides Is.		
	h: 55 km ca.		
	H= 14 44 20.3		USCGS
17	e	E	18 59 40
17	iPZ, PN		19 06 54.7
	i	E	55.2
	S	N	07 20
	i	E	21
	P: S, D		
17	iP	EZ	19 13 01.4
	i	N	01.9
	P: a, C		
17	eP	EZ	19 56 26
	e	Z	32
17	P	Z	20 50 08.7
	S	NEZ	47
17	P	Z	23 20 10.6
	eS	NE	21 07
17	P	N	23 55 57
	e	N	57 24
18	eP	NZ	00 14 26
	e	NE	47
18	eP	Z	01 41 03
	56.4N., 152.8W.		
	Aftershock of Alaska E.		
	h: 33 km ca.		
	H= 01 32 18.4		USCGS
18	eP	Z	02 51 02
18	P	EZ	03 49 12
	e	Z	29
18	iPZ, PNE		05 30 51.0
	i	Z	53.8
	e	Z	31 04
	e	E	33 21
	S	NEZ	29
	L	NE	34 00
	P: D		
	Mag; 5.6 (Mat)		
	45.5N., 151.1E.		
	Kurile Is.		
	h: 33 km ca.		
	H= 05 27 44.6		USCGS
18	iP	Z	05 58 48.3
	P: D		
	45.4N., 151.5E.		
	Kurile Is.		
	h: 33 km ca.		
	H= 05 55 40.5		USCGS
18	eP	Z	06 30 12
	45.6N., 151.3E.		
	Kurile Is.		
	h: 50 km ca.		
	H= 06 27 02.2		USCGS
18	iP	Z	07 04 29.7
	i	N	29.8
	P: C		
18	iP	NEZ	07 06 32.5
	P: N, W, D		

April , 1964

Date	Phase	Comp.	Time(GMT) h m s
18	iP	Z	07 25 41.0
	P: D		
	59.1N., 147.7W.		
	Aftershock of Alaska E.		
	h: 33 km ca.		
	H=07 16 36.4 USCGS		
18	P	Z	07 56 01
	57.4N., 149.8W.		
	Aftershock of Alaska E.		
	h: 30 km ca.		
	H= 07 47 03.3 USCGS		
18	iPEZ, PN		08 00 47.9
	i	N	01 11
	e	E	02 34
	e	N	38
	i	Z	03 08
	S	E	36
	e	NEZ	40
	i	N	48
	P: E, D		
	29.0N., 129.3E.		
	Ryukyu Is.		
	h: 33 km ca.		
	H= 07 58 26.9 USCGS		
18	iPEZ, PN		10 25 16.2
	i	E	26 16.7
	i	Z	18.3
	P: W, D		
18	P	NEZ	11 17 30
	S	E	18 14
	e	N	15
18	eP	Z	12 00 59
	i	Z	01 07.6
	45.4N., 151.5E.		
	Kurile Is.		
	h: 33 km ca.		
	H= 11 57 47 USCGS		
18	iP	Z	15 23 28.6
	P: C		
	57.4N., 152.3E.		
	Aftershock of Alaska E.		
	h: 33 km ca.		
	H= 15 14 42.9 USCGS		
18	P	NEZ	16 22 36.8
	P: C		
	20.7N., 141.3E.		
	Mariana Is. region		
	h: 300 km ca.		
	H= 16 19 06 USCGS		
18	eP	Z	16 25 00
	e	NEZ	20

Date	Phase	Comp.	Time(GMT) h m s
18	iP	NEZ	19 49 14.0
	i	NEZ	49 25.0
	i	Z	29
	S	NEZ	50 10
	P: N, E, C		
	Mag; 4.7 (Mat)		
	34.1N., 134.8E.		
	Honshu, Japan		
	h: 60 km ca. JMA		
18	P	NZ	20 17 04
	eS	E	24 02
	eL	E	26 50
	eL	NE	31 40
	Mag; 5½-6 (Mat)		
	56.1N., 153.7W.		
	Aftershock of Alaska E.		
	h: 15 km ca.		
	H= 20 08 19.7 USCGS		
18	P	Z	20 24 59
	eS	NE	32 05
	i	Z	14
	eL	E	38 09
	Mag; 6 (Mat)		
	56.1N., 153.7W.		
	Aftershock of Alaska E.		
	h: 30 km ca.		
	H= 20 16 16.3 USCGS		
18	P	Z	22 04 06
	S	NEZ	48
18	P	Z	22 17 16
	S	EZ	18 00
	i	N	06.0
18	P	Z	23 47 10
	59.3N., 147.5W.		
	Aftershock of Alaska E.		
	h: 20 km ca.		
	H= 23 38 03.4 USCGS		
19	eP	Z	01 41 06
	i	E	42 05.1
19	P	Z	04 07 15.5
	S	E	16 12
	i	E	21 48
	i	E	28 19
	e	N	34 13
	P: D		
	15.4S., 173.7W.		
	Tonga Is.		
	h: 51 km ca.		
	H= 03 56 13.7 USCGS		
19	PKP	Z	05 32 39
	e	E	45 56
	PPS	E	49 05

(cont.)

April , 1964

Date	Phase	Comp.	Time(GMT) h m s
	PSPS	E	05 55 48
	eL	N	06 14 16
	eL	E	20 12
	Mag; 6 (Mat)		
	41.7S., 83.9W.		
	Off coast of southern Chile.		
	h: 33 km ca.		
	H= 05 13 01.6		USCGS
19	iP	Z	08 02 55.1
	P: D		
19	P	Z	08 45 43.1
	P: C		
	17.7S., 167.3E.		
	New Hebrides Is.		
	h: 15 km ca.		
	H= 08 35 31.6		USCGS
19	eP	NEZ	09 44 17
	i	Z	18.0
	S	E	45 18
	i	N	18.5
19	ePKP	Z	14 32 12
	e	Z	28
	e	Z	39
	e	N	33 19
	e	Z	36 39
	e	Z	38 56
	SKS	N	39 17
	e	N	44 26
	eSS	E	55 40
	eSSS	E	15 01 25
	eLq	E	12 38
	eL	E	15 47
	eL	E	36 54
	Mag; 6½ (Mat)		
	60.5S., 58.3W.		
	Near South Shetland Is.		
	h: 33 km ca.		
	H= 14 12 21.9		USCGS
19	iP	Z	16 52 23.3
	P: C		
19	eP	Z	19 00 10
	i	Z	00 18
	i	Z	24
	60.2N., 148.6W.		
	Aftershock of Alaska E.		
	h: 33 km ca.		
	H= 18 51 10.9		USCGS
19	eP	Z	20 00 50
19	iPKP	Z	20 01 24.5
	13.8S., 75.3W.		
	Southern Peru.		
	h: 96 km ca.		
	H= 19 41 31.3		USCGS

Date	Phase	Comp.	Time(GMT) h m s
19	iP	EZ	21 42 16.0
	P: C		
	7.3S., 128.3E.		
	Banda Sea.		
	h: 130 km ca.		
	H= 21 34 16.5		USCGS
20	eP	Z	03 17 32
20	P	Z	03 44 00
	i	Z	45 08.2
	eS	E	51 33
	eL	E	56 14
	59.7N., 144.6W.		
	Aftershock of Alaska E.		
	h: 30 km ca.		
	H= 03 34 45.1		USCGS
20	iP	NEZ	05 36 40.0
	S	NEZ	41.8
	P: S, E, D		
20	iP	Z	08 07 46.5
	S	E	08 01
20	eP	Z	08 17 00
	60.2N., 147.0W.		
	Aftershock of Alaska E.		
	h: 15 km ca.		
	H= 08 07 54.8		USCGS
20	iPKP	Z	11 11 02.1
	i	Z	14.5
	i	Z	29.9
	e	Z	42
	PKP: D		
	22.9S., 69.2W.		
	Northern Chile.		
	h: 78 km ca.		
	H= 10 51 13		USCGS
20	eP	Z	11 17 23
	e	E	35
	e	E	21 13
20	eP	Z	12 00 30
	i	Z	44.0
20	iPZ, PE		12 05 44.5
	S	E	13 00
	ScS	N	15 33
	ScS	E	34
	SS	E	16 47
	L	E	17 47
	eL	NE	20.5
	P: D		
	Mag; 6½-6 (Mat)		
	61.4N., 147.3W.		
	Aftershock of Alaska E.		
	h: 30 km ca.		
	H= 11 56 4[illegible].6		USCGS

April, 1964

Date	Phase	Comp.	Time(GMT) h m s	
20	iP	Z	13 51 41.2	
	e	Z	52 24	
	P: C			
	7.3S., 128.1E.			
	Banda Sea.			
	h: 128 km ca.			
	H= 13 43 40.5			USCGS
20	P	Z	15 49 30	
	e	Z	39	
	61.5N., 147.3W.			
	Aftershock of Alaska E.			
	h: 3.0km ca.			
	H= 15 40 28.0			USCGS
20	iP	Z	16 27 39.1	
	S	E	35 07	
	eScS?	E	37 30	
	L	N	39 16	
	eL	E	41 48	
	L	E	47 35	
	P: C			
	Mag; 5-5½ (Mat)			
	60.7N., 145.3W.			
	Aftershock of Alaska E.			
	h: 15 km ca.			
	H= 16 18 26.4			USCGS
20	iP	EZ	17 43 19.7	
	i	N	43 19.9	
	S	N	37	
	e	E	39	
	P: E, D			
20	P	Z	20 35 36.5	
	S	NEZ	42.8	
20	P	NEZ	21 19 31.5	
	S	NEZ	57	
20	iP	Z	21 23 18.6	
	6.9S., 129.3E.			
	Banda Sea.			
	h: 91 km ca.			
	H= 21 15 19.4			USCGS
20	eP	Z	22 39 48	
	4.2S., 102.1E.			
	Southern Sumatra.			
	h: 33 km ca.			
	H= 22 30 38.0			USCGS
20	iP	Z	23 10 51.3	
	P: D			
20	P	Z	23 29 15.5	
	eS	NE	42	
21	iP	Z	04 28 34.3	
	S	E	29 07	
	i	N	07.5	
	P: C			

Date	Phase	Comp.	Time(GMT) h m s	
21	iPZ, PN		05 10 37.0	
	S	N	17 52	
	ScS	N	20 43	
	SS	E	21 33	
	L	N	58	
	eL_2	N	23 33	
	L_2	E	51	
	eL_2	Z	25 20	
	P: D			
21	iP	NZ	06 06 06.5	
	i	Z	07.5	
	i	NE	07.9	
	S	E	28	
	i	N	30	
	i	Z	32	
	i	NE	33	
	i	NZ	41	
	P: S, D			
21	iP	Z	07 40 05.5	
	i	NE	05.8	
	i	Z	07.9	
	P: D			
21	PKP	Z	15 45 31	
	17.5S., 70.6W.			
	Southern Peru.			
	h: 125 km ca.			
	H= 15 25 55			USCGS
21	iP	Z	17 08 36.9	
	i	NZ	40	
	i	EZ	40.9	
	i	Z	45.5	
	i	Z	09 18	
	S	NEZ	21	
	i	N	30	
	P: C			
21	P	Z	19 05 53	
	e	E	14 18	
	53.0N., 160.5E.			
	Near east coast of Kamchatka.			
	h: 33 km ca.			
	H= 19 00 53.7			USCGS
21	P	Z	20 41 56	
22	iP	NEZ	04 54 57.0	
	iS	NE	55 06.9	
	P: N, E, C			
22	P	NEZ	08 40 20	
	S	NE	41 04	
22	P	Z	09 20 03	
22	e	Z	10 00 07ca.	
	56.1N., 34.9W.			
	North Atlantic Ocean.			
	h: 33 km ca.			
	H= 09 46 54.2			USCGS

Date	Phase	Comp.	Time(GMT) h m s
22	eP?	Z	10 17 45
	e	E	36.0
22	iP	NEZ	10 52 57.6
	S	EZ	53 11
	P: C, E, D		
22	iP	NEZ	14 05 42.6
	e	E	07 35
	P: N, E, D		
22	e	E	15 25 02
22	iPNZ, PE		20 10 08.5
	S	NE	18 03
	i	E	23 04
	Lq	E	24 32
	eLq	E	40
	LR	E	28 00
	P: N, C		
	15.5S., 167.5E.		
	New Hebrides Is.		
	h: 123 km ca.		
	H= 20 00 22.8		USCGS
22	iP	Z	20 38 12.0
	i	NZ	18
	P: C		
	58.6N., 150.0W.		
	Prince William Sound, Alaska		
	Aftershocks.		
	h: 33 km ca.		
	H= 20 29 20.3		USCGS
22	P	Z	23 13 34
	13.2S., 167.1E.		
	New Hebrides Is.		
	h: 218km ca.		
	H= 23 04 13.6		USCGS
23	iPNZ, PE		01 52 15.0
	i	E	15.9
	S	E	53 06
	P: C, E, D		
	Mag; 5.4 (Mat)		
	32.1N., 138.7E.		
	South of Honshu, Japan		
	h: 33 km ca.		
	H= 01 51 16.6		USCGS
23	P	Z	03 23 11
	60.9N., 144.3W.		
	Prince William Sound, Alaska		
	Aftershocks.		
	h: 35 km ca.		
	H= 03 13 55.7		USCGS
23	iP	NZ	03 40 38.0
	i	E	40.5
	i	NZ	52
	PP	Z	42 35
	S	NE	46 53
			(cont.)
	iLq	E	03 49 48
	i	E	51 12
	LR	Z	53 11
	iLR	N	16
	P: S, D		
	Mag; 7½ (Mat)		
	5.3S., 134.0E.		
	Aru Is. region		
	h: 33 km ca.		
	H= 03 32 50.3		USCGS
23	eP	Z	04 07 48
	S	N	08 26
23	iPZ, PN		05 30 29.8
	i	E	32.0
	S	N	31 54
	S	E	55
	P: C		
23	e	NE	06 17.0
	e	Z	29.7
23	ePKP	Z	07 23 22
	60.8S., 19.8W.		
	Sandwich Is. region		
	h: 33 km ca.		
	H= 07 03 21.6		USCGS
23	P	Z	10 41 04
	eL	E	51 28
	6.6S., 155.1E.		
	Solomon Is. region		
	h: 60 km ca.		
	H= 10 32 47.9		USCGS
23	eP	Z	14 04 02ca.
	S	NZ	23
23	eP	NZ	14 11 57
	i	NZ	58.9
	S	NEZ	12 00
23	P	Z	14 35 27
	eLq	E	55.4
	eLR	E	15 00.1
	LR	N	01 32
	Mag; 5½-5¾ (Mat)		
	36.9N., 37.9E.		
	Turkey		
	h: 57 km ca.		
	H= 14 23 43.3		USCGS
23	P	Z	15 05 20
	i	Z	05 28.6
	57.3N., 151.9W.		
	Prince William Sound, Alaska,		
	Aftershocks.		
	h: 25 km ca.		
	H= 14 56 30.9		USCGS

Date	Phase	Comp.	Time(GMT) h m s
23	iPZ, PN		20 41 23.1
	P: C		
23	eP	Z	20 50 52
	eL	E	56 30
	14.0N., 124.4E.		
	Near east coast of Luzon P.I.		
	h: 45 km ca.		
	H= 20 45 20.7		USCGS
23	P	Z	21 13 42
	i	NEZ	44.2
	i	EZ	55
	S	E	17 50
	i	N	18 00
	Lq	E	19 41
	Lz	N	20 46
	Lz	Z	21 00
	Mag; 5¼ (Mat)		
	52.7N., 160.9E.		
	Near east coast of Kamchatka.		
	h: 33 km ca.		
	H= 21 08 42.0		USCGS
24	iP	Z	00 47 34.2
	i	NE	35
	S	NE	51 44
	Lq	NE	53 34
	Lz	N	54 38
	P: C		
	Mag; 5-5¼ (Mat)		
	52.7N., 160.9E.		
	Near east coast of Kamchatka.		
	h: 33 km ca.		
	H= 00 42 33.9		USCGS
24	iP	NZ	01 20 32.0
	i	E	32.7
	i	Z	39
	i	NE	40
	iS	NE	59.0
	P: S, D		
24	P	Z	04 00 20
	S	NE	07 50
	Mag; 5½ (Mat)		
	59.5N., 144.5W.		
	Prince William Sound, Alaska,		
	Aftershocks.		
	h: 33 km ca.		
	H= 03 51 05.0		USCGS
24	P	Z	04 31 56
	56.6N., 151.7W.		
	Prince William Sound, Alaska		
	Aftershocks.		
	h: 20 km ca.		
	H= 04 23 05.1		USCGS
24	iP	NZ	06 03 49.0
	i	E	49.5
			(cont.)

Date	Phase	Comp.	Time(GMT) h m s
	pP	Z	06 04 14.0
	SP	Z	25
	iScP	Z	09 27.5
	iS	NEZ	56
	Lq	N	13 04
	Lq	E	12
	iScS	E	44
	Lz	Z	15 18
	eWz	E	07 37.8
	Wz	E	08 10.3
	P: S, D		
	Mag; 6¾ (Mat)		
	5.1S., 144.2E.		
	Northeast New Guinea.		
	h: 106 km ca.		
	H= 05 56 10.1		USCGS
24	iP	Z	06 22 30
	P: C		
24	eP	Z	06 35 25
24	iP	Z	06 37 50.3
	S	EZ	38 06
	i	N	06.7
	P: D		
24	P	Z	07 32 01
24	eP	Z	09 06 02ca.
	58.7N., 149.5W.		
	Prince William Sound, Alaska		
	Aftershocks.		
	h: 33 km ca.		
	H= 08 57 09.8		USCGS
24	eP	Z	09 10 12
	i	Z	10 14
	i	Z	27
24	iP	NZ	12 04 13.6
	i	EZ	15
	P: S, W, D		
24	P	Z	14 09 08
24.	P	Z	14 32 31.7
	e	NE	50
	eS?	E	34 25
	i	NE	35 37
	P: C		
	29.3N., 130.1E.		
	Ryukyu Is. region		
	h. 31 km ca.		
	H: 14 30 07.2		USCGS
24	eP	Z	14 59 32
	ePPP	Z	15 07 00ca.
	e	E	13
	sSPorsPS	E	15 28
	Mag; 6.0 (Pal)		
			(cont.)

Date	Phase	Comp.	Time(GMT) h m s
	13.3N., 88.8W.		
	Near coast of El Salvador.		
	h: 158 km ca.		
	H= 14 40 28.3		USCGS
24	i	Z	15 09 38.6
24	eP	Z	17 31 20
	i	NE	22
	iS	NE	47.6
24	iP	NEZ	17 56 31.7
	iS	NEZ	33.6
	P: N, E, D		
24	P	EZ	19 57 12
	P: C		
	51.7N., 176.9W.		
	Andreanof Is.		
	h: 50 km ca.		
	H= 19 50 22.3		USCGS
24	P	Z	20 22 07
	i	Z	09
	e	Z	23 21
24	P	EZ	21 21 23
	i	E	40
25	iP	EZ	04 53 54.2
	i	N	54.6
	i	N	54 32
	i	N	39
	P: E, D		
	36.6N., 141.4E.		
	Near east coast of Honshu, Japan		
	h: 33 km ca.		
	H= 04 53 15		USCGS
25	eP	Z	05 44 56
	6.7S., 155.0E.		
	Solomon Is.		
	h: 72 km ca.		
	H= 05 36 42.2		USCGS
25	P	Z	05 59 35
	P: C		
	45.6N., 149.1E.		
	Kurile Is.		
	h: 33 km ca.		
	H= 05 56 40.3		USCGS
25	e	E	07 10.0
25	P	EZ	09 52 43
	i	E	46
	S	NE	10 00 14
	eScS	E	02 34
	eL	E	04 53
			(cont.)
	P: D		
	Mag: 5¼-5½ (Mat)		
	59.9N., 144.9W.,		
	Prince William Sound, Alaska Aftershocks.		
	h: 30 km ca.		
	H= 09 43 30.7		USCGS
25	P	Z	11 12 02
	49.8N., 155.6E.		
	Kurile Is. region		
	h: 80 km ca.		
	H= 11 07 52		USCGS
25	iPKP	Z	12 05 34.2
	PKP: C		
	15.6S., 70.4W.		
	Southern Peru.		
	h: 215 km ca.		
	H= 11 46 14.0		USCGS
25	PKP	Z	13 55 23
	15.6S., 69.4W.		
	Bolivia		
	h: 265 km ca.		
	H= 13 36 06.8		USCGS
25	P	Z	16 19 10
	59.9N., 146.1W.		
	Prince William Sound, Alaska Aftershocks.		
	h: 33 km ca.		
	H= 16 10 01.3		USCGS
25	P	Z	18 41 45
	i	NZ	48
	i	Z	51.5
	iPP	Z	42 03.5
	S	NE	45 00
	i	Z	07
	eLq	E	33
	L_1	N	46 30
	L_2	Z	40
	Mag; 5½-5¾ (Mat)		
	24.4N., 125.3E.		
	Ryukyu Is.		
	h: 33 km ca.		
	H= 18 37 58.1		USCGS
25	iP	Z	21 10 33.5
	i	N	34.1
	S	NE	51
	P: C		
26	iP	NEZ	01 02 01.7
	S	NE	17
	i	Z	18
	P: S, E, D		
26	eP	Z	01 50 43
	e	Z	49

April, 1964

Date	Phase	Comp.	Time(GMT) h m s
26	P	Z	03 52 47
26	iPZ, PE		03 58 37.8
	i	N	38.3
	iS	NEZ	58.1
	P: D		
26	P?	Z	08 44 41
	i	EZ	42.1
	i	N	42.3
	i	Z	50.6
	S	N	45 44
	i	E	46
26	iP	Z	08 51 05.6
	i	NE	05.9
	i	NE	26
	P: C		
26	iP	NEZ	14 08 33.1
	iPcP	Z	09 43.6
	e	E	16 44
	eL	E	26 50
	P: N, E, C		
	Mag; 5-5¼ (Mat)		
	5.8S., 105.0E.		
	Southern Sumatra.		
	h: 90 km ca.		
	H= 13 59 27.7		USCGS
26	iP	NEZ	15 02 32.3
	pP	Z	04 17
	eS	NE	11 04
	e	E	14 17
	esSS	E	18 33
	P: S, E, D		
	20.6S., 178.0W.		
	Fiji Is. region		
	h: 490 km ca.		
	H= 14 52 07.6		USCGS
26	eP?	Z	20 54 45
	i	Z	50
	e	N	55 16
	e	E	20
26	iPZ, PE		21 40 10.3
	P: C		
27	e	E	00 06.2
27	P	Z	01 46 20
	i	Z	33
	i	Z	52
	eS	E	53 58
	eSSS	E	57 23
	eL	E	02 03 23
	eL	Z	05 23
	P: D		
	Mag; 5½-5¾ (Mat)		
	0.3N., 98.1E.		

(cont.)

Date	Phase	Comp.	Time(GMT) h m s
	Off west coast of Sumatra.		
	h: 33 km ca.		
	H= 01 37 12.1		USCGS
27	iP	NZ	02 24 18.9
	iS	NEZ	24 25.6
	P: N		
27	eP	Z	04 29 27
	8.6S., 148.1E.		
	Eastern Papua.		
	h: 110 km ca.		
	H= 04 21 15.9		USCGS
27	P	Z	05 12 20.6
	i	NEZ	24.4
27	eP	Z	06 58 17ca.
	ePPP	E	07 01 50
	ePPP	Z	55
	i	E	09 24
	SS	E	15 19
	L	E	22 36
	GE, eGN		25 54
	eLZ	N	31 38
	LZ	E	42
	Mag; 6½ (Mat)		
	60.1S., 151.0E.		
	Balleny		
	h: 33 km ca.		
	H= 06 44 25.1		USCGS
27	P	Z	14 46 22
	19.8S., 170.1E.		
	New Hebrides Is.		
	h: 274 km ca.		
	H= 14 36 18		USCGS
27	P	Z	15 08 37
	e	N	09 26
27	iPZ, PN		18 36 28.4
	i	E	55
	S	E	56
	i	Z	57
	P: C		
27	P	Z	19 18 45
	60.5N., 146.5W.		
	Prince William Sound,		
	Alaska Aftershocks.		
	h: 33 km ca.		
	H= 19 09 39.0		USCGS
27	P	Z	23 07 00
	i	NE	01
	i	Z	01.7
	S?	NE	23 07 23.5
	i	EZ	26.5

Date	Phase	Comp.	Time(GMT) h m s
28	iP	NEZ	07 21 27.6
	S	NE	49
	P: N, W, C		
28	eP?	Z	08 04 06
	e	Z	11
	eS	E	06 57
28	iPZ, PN		09 23 58.1
	i	E	59.1
	P: C		
28	eP	Z	12 31 06
	e	Z	40
	e	E	46 10
	eL	E	50 31
	Mag; 5-5½ (Mat)		
	59.0N., 138.7W.		
	Near coast of Southeastern Alaska.		
	h: 33 km ca.		
	H= 12 21 25.6		USCGS
28	eP?	Z	13 43 05
	e	E	56 03
	eL	E	58 18
	57.6N., 150.0W.		
	Prince William Sound, Alaska Aftershocks.		
	h: 33 km ca.		
	H= 13 34 10.4		USCGS
28	P	EZ	15 04 54
	e	E	23.1
	11.9S., 166.2E.		
	Santa Cruz Is.		
	h: 42 km ca.		
	H= 14 55 25.5		USCGS
29	i	EZ	00 45 20.0
	i	N	20.3
29	P	Z	02 13 42
	i	EZ	45
	i	N	48
	i	E	15 39
	i	E	56
	i	N	16 03
	i	N	05
	i	Z	08
	i	E	02 15 13
	32.4N., 129.0E.		
	Near west coast of Kyushu, Japan		
	h: 33 km ca.		
	H= 02 11 36.6		USCGS
29	P	Z	04 33 32
	eS	E	43 50
	e	E	55 33
	eLq	E	05 00 19
	eLz	E	04 14

(cont.)

Date	Phase	Comp.	Time(GMT) h m s
	L2	E	05 05 15
	L2	N	07 10
	Mag; 6 (Mat)		
	39.3N., 23.7E.		
	Aegean Sea.		
	h: 33 km ca.		
	H= 04 21 06.7		USCGS
29	P	Z	06 59 04.[illegible]
	e	N	42
	P: C		
29	P	Z	07 29 49
	i	N	51
	7.2S., 155.7E.		
	Solomon Is.		
	h: 78 km ca.		
	H= 07 21 30.2		USCGS
29	iPZ, PE		08 53 20.4
	i	N	45.4
	S	N	49
	i	N	52
	P: C		
29	iPZ, PNE		10 44 14.6
	P: C		
29	iPZ, PE		15 00 24.1
	S	N	43
	S	E	44.7
	P: W, C		
29	iP	Z	16 11 31.2
	i	Z	39
	S	N	58
	P: W, C		
29	eP?	Z	17 18 55
	eL	E	45 11
29	PKP	Z	17 57 36
	i	Z	40
	i	Z	46
	i	Z	52
	i	Z	54
	58.2S., 15.[illegible]		
	East of Sandwich Is.		
	h: 33 km ca.		
	H= 17 37 43.[illegible]		USCGS
29	P	Z	18 19 20.5
	P: C		
	17.1S., 72.1W.		
	Near coast of Southern Peru.		
	h: 44 km ca.		
	H= 17 59 39.5		USCGS
29	[illegible]	EZ	18 20 50.4
	[illegible]	E	21 25
	[illegible]	N	42

April, 1964

Date	Phase	Comp.	Time(GMT) h m s
29	P?	Z	18 24 38
	i	NEZ	39
	i	Z	42
	i	Z	25 09
	i	Z	13
	i	Z	22
29	iP	NEZ	18 25 53.6
	i	Z	26 17
	i	Z	24
	P: S, W, D		
29	P	Z	18 35 31
	i	NEZ	44.2
	i	Z	36 10
	e	Z	37 09
29	iPEZ, PN		18 38 00.1
	i	Z	06
	P: E, C		
29	P	Z	19 01 39
	i	Z	39.4
	e	Z	44
	i	Z	47.6
	S	Z	02 12.6
	i	N	14.1
29	P	Z	20 30 04
	i	Z	15
	i	Z	29
29	P	Z	21 21 15
	i	EZ	56
29	iPEZ, PN		21 22 38.5
	i	Z	52
	i	Z	23 07
	i	Z	29
	P: W, C		
29	iP	EZ	21 25 11.3
	i	Z	16.7
	i	E	17.0
	S	E	46.2
	P: W, C		
30	e	E	04 20 17
30	P	Z	05 40 36
	56.8N., 152.7W. Prince William Sound, Alaska Aftershocks. h: 33 km ca. H= 05 31 51.		USCGS
30	P	Z	11 09 03.7
	i	Z	14.7
30	P	Z	11 59 52
	61.3N., 14[illegible] 0W.		

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Date	Phase	Comp.	Time(GMT) h m s
	Prince William Sound, Alaska Aftershocks. h: 33 km ca. H= 11 50 47.4		USCGS
30	P	Z	14 58 55
	i	Z	59 15
	i	N	16
	i	E	19
30	iPZ, PN		16 11 25.5
	i	E	26.7
	iPP	Z	13 14.7
	i	Z	17 04.7
	e	NZ	10
	S	NZ	55
	i	E	57.2
	iLq	E	21 14
	L2	NZ	23 42
	P: C		
	Mag; 6¼ (Mat) 4.6S., 153.2E. New Ireland region h: 78 km ca. H= 16 03 31.4		USCGS
30	eP	Z	16 34 25
	59.0N., 148.6W. Prince William Sound, Alaska Aftershocks. h: 33 km ca. H= 16 25 31		USCGS
30	eP	Z	17 35 55
	eL	E	50 24
30	iP	NEZ	20 50 04.7
	i	Z	12.2
	e	N	47
	i	N	54
	P: S, D		
30	iP	Z	22 02 54.9
	P: C		

Mineo Takeh[illegible]

Director.