

TERRITORY OF PAPUA AND NEW GUINEA.  
VULCANOLOGICAL OBSERVATORY RABAU.

SEISMOLOGICAL BULLETIN. 1956.

The Observatory is on the rim of Blanche Bay caldera, which is composed of beds of pumice dust and ash with occasional interspersed basalt lava flow. The instrument vault (3 metres deep) is concrete lined and the roof forms part of the floor of the Observatory. The seismometers are mounted on a concrete pier set on basalt  $1\frac{1}{2}$  metres below the vault floor. The pier is separated from the floor by a gap (8cm) loosely filled with pumice dust.

Latitude -  $04^{\circ}11'33''S$ . Longitude -  $152^{\circ}10'16''E$ .

Height above mean sea level = 183 metres (600 feet)

<u>Instrument</u>	<u>Components</u>	<u>Symbol</u>	<u>Tg. sec</u>	<u>Tp sec.</u>
Benioff	Z	Z	0.35	1.26
	NS	N	0.26	1.44
	EW	E	0.29	1.45

Rapindik Station. Supplementary information from seismograms recorded at Rapindik is included in this bulletin.

Latitude -  $04^{\circ}13.7'S$ . Longitude  $152^{\circ}11.8'E$ .

Height above mean sea level - about 3 metres.

Foundation - unconsolidated volcanic ash.

<u>Instrument</u>	<u>Components</u>	<u>Symbol</u>	<u>M(kg)</u>	<u>V</u>	<u>To</u>	<u>Damping</u>
Omori	NS	N	15	11.9	3.6	Air,
	EW	E	15	10.2	3.8	critical

References. Tables - Jeffreys & Bullen, 1940.

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The station is maintained by the Administration of the Territory of Papua and New Guinea for vulcanological and seismological observations.

Communications should be addressed to:-

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TERRITORY OF PAPUA AND NEW GUINEA.

VULCANOLOGICAL OBSERVATORY RABAU.

SEISMOLOGICAL BULLETIN.

JANUARY, 1956.

1st.	iP	Z	23	13	31	U.S.C.G.S. 7°S, 129°E.
	i	Z		14	03	Tiniar Is.
	e(S)	N		17	13	H = 23 08 28
	iPcS	Z		20	34	h = 150 kms.
	iScS	NE		24	21	
2nd.	Nil					
3rd.	eP	Z	15	51	21	U.S.C.G.S. 48½°N, 155°E.
	i	Z			23	Kurile Is.
	eP	Z	16	18	25	H = 15 40 55 Mag. = 6
	i	Z			27	
	i	NE			32	
	i	NE			49	
4th.	eP	Z	12	02	(47)	U.S.C.G.S. 9½°N, 126°E.
						Mindanao
						H = 11 56 38
	iP	Z	14	16	24	U.S.C.G.S. 6½°S, 153°E.
	i(S)	NE			54	New Britain
						H = 14 15 39
						S-P (Omori) = (21) secs.
5th.	iP	Z	14	05	34	
	i	Z			39	
	i	Z			46	
	i	E		06	30	
	i	NE			39	
	i	N			51	
	i	N		07	09	
	i	Z			15	
	eP	Z	19	05	20	
6th.	i(P)	Z	11	59	56	
	iP	Z	13	28	50	
	iP!	Z	19	15	36	Felt: Warangoi Int. 2-3 (MM)
						04°30'S, 152°20'E.
	eP	Z	22	33	05	B.C.I.S. 38°4' N, 142°5'E
						Honshu
						H = 22 25 01
7th	iP!	Z	10	25	49	U.S.C.G.S. 5°S, 148°E.
						Bismarck Sea
						H = 10 25 08
						Felt: Wau Int. 2 (MM)
						07°20'S, 146°45'E.
	iP	Z	19	34	19	U.S.C.G.S. 1½°N, 122½°E.
						N. Celebes
						H = 19 29 00
8th	iP!	Z	18	46	58	U.S.C.G.S. 4½°S, 153°E.
						New Britain
						H = 18 46 29
						Felt: Rabaul Int. 3 (MM)
						4°11'S, 152°10'E.
						S-P (Omori) 16 secs.

(cont.)

2.

8th.	e(P)	Z	21	13	30	U.S.C.G.S. 19°S, 70°W.
cont.	i	Z			34	N.Chile
	i	Z			56	H = 20 54 13
						Mag. = 7 $\frac{1}{4}$ (Pas) (aftershock)
9th.	iP	Z	12	11	31	U.S.C.G.S. 23°S, 179°E.
	i	Z		14	09	Fiji Is.
						H = 12 05 53
						Mag. = 6 $\frac{1}{2}$ (Pas)
						h = 650 kms.
	i(P)	Z	15	02	16	S-P (Omori) = 18 secs.
	i	Z		03	10	
10th.	iP	Z	08	57	22	U.S.C.G.S. 24.8°S, 176°W.
						Tonga Is.
						H = 08 52 43
						Mag. = 7 $\frac{3}{4}$ (Pas)
11th	iP!	Z	11	55	43	U.S.C.G.S.
						Solomon Is.
						H = 11 54 59
						h = 100 kms.
						Felt: Aropa 06°25'S, 155°50'E.
						Int.1-2(MM)
						S-P (Omori) = 31 secs.
12th.	Nil					
13th.	iP	Z	06	20	22	B.C.I.S. 29 $\frac{1}{2}$ °S, 167 $\frac{3}{4}$ °E.
						Norfolk Is. Region
						H = 06 16 18
14th.	No record					
15th	Nil					
16th	e	Z	23	56	46	U.S.C.G.S. 1°S, 80 $\frac{1}{2}$ °W.
	i	Z			55.2	Nr. Coast of Ecuador
						H = 23 37 37
						Mag. = 7 $\frac{1}{4}$ -7 $\frac{1}{2}$ (Pas)
						(New Ireland shock - H = 02 00 17 (U.S.C.G.S.) lost during record change)
17th)	Nil					
18th)						
19th	iP	Z	18	08	10	U.S.C.G.S. 6°S, 155°E.
						Solomon Is.
						H = 18 07 05
						h approx. = 500 kms.
20th	iP	Z	23	25	29	U.S.C.G.S. 5°S, 155°E.
						Solomon Is.
						H = 23 23 40
						h approx. = 150 kms.
21st)						
22nd)	No record					
23rd)						
24th	Nil					
25th	iP	Z	10	06	46	
26th)						
27th)	No record					

3.

28th.	iP!	Z	07	43	03	U.S.C.G.S. $4\frac{1}{2}^{\circ}$ S, $151\frac{1}{2}^{\circ}$ E. New Britain H = 07 42 52 Mag. = $6\frac{1}{2}$ (Pas) h approx. = 100 kms. Felt: Rabaul Int. = 4(MM) $4^{\circ}11'S$ , $152^{\circ}10'E$ .
29th.	eP	Z	18	51	01	U.S.C.G.S. N.E. New Guinea H = 18 49 12
30th.	i eP i i (i)	N Z ZN Z	08	49	37 40 41 43 59	U.S.C.G.S. $38\frac{1}{2}^{\circ}$ S, $177\frac{1}{2}^{\circ}$ E. North Is. New Zealand H = 08 43 01 h approx. = 600 kms. Mag. = $6\frac{1}{2}$ (Pas).
31st.	iP	Z	09	18	06	U.S.C.G.S. $4^{\circ}$ S, $152^{\circ}$ E. New Ireland H = 09 17 11 h approx. = 400 kms. Mag. = $7-7\frac{1}{2}$ (Pas) Felt: Rabaul Int. = 3(MM) $4^{\circ}11'S$ , $152^{\circ}10'E$ . S-P (Omori) = 36 secs.

Tremors felt in the Territory, January, 1956.

Date	Time G.M.T.	Intensity Mercalli Modified	Latitude		Longitude		Locality
			South		East		
			o	'	o	'	
Jan. 1st	0230	2	06	15	155	40	Kieta
	1030	2	08	45	148	15	Popondetta
3rd	0310	2	03	35	143	40	Wewak
	0433	1	03	35	143	40	Wewak
5th	0230	3	03	40	143	20	Yangoru
6th	1315	4	03	40	143	20	Yangoru
	1910	2 - 3	04	30	152	20	Warangoi
7th	1018	1	05	40	147	50	Awelkon
	1020	2	05	40	147	50	"
8th	1847	3	04	11	152	10	Rabaul
	1855	4 - 5	04	30	152	20	Warangoi
11th	0135	1	02	40	141	20	Vanimo
	1155	1 - 2	06	25	155	50	Aropa
	1200	2 - 3	05	50	154	45	Kunua
13th	0222	4	06	25	155	50	Aropa
14th	2230	1	05	40	147	50	Awelkon
16th	0200	2 - 3	04	11	152	10	Rabaul
	0200	3 - 4	04	30	152	20	Warangoi
	0210	1 - 2	05	50	154	45	Kunua
	0715	2	04	30	152	20	Warangoi
19th	1830	3	09	35	152	30	Tokona Is.

4.

Date	Time G.M.T.	Intensity Mercalli Modified	Latitude		Longitude		Locality	
			South	East	East	East		
			o	'	o	'		
20th.	1830	3	06	15	155	40	Kieta	
21st.	1430	2 - 3	04	30	152	20	Warangoi	
24th.	0825	2	04	30	152	20	Warangoi	
	1340	4	05	15	147	10	Malala	
	2120	3 - 4	04	30	152	20	Warangoi	
26th.	0140	2	04	30	152	20	Warangoi	
28th.	0320	2 - 3	04	30	152	20	Warangoi	
	0330	3 - 4	04	30	152	20	Warangoi	
	0340	2 - 3	04	30	152	20	Warangoi	
	0605	2	05	40	147	50	Awelkon	
	0630	1	05	40	147	50	Awelkon	
	0743	4	04	11	152	10	Rabaul	
	0745	5	04	55	151	10	Lolobau	
	1657	1	04	11	152	10	Rabaul	
31st.	0918	3	04	11	152	10	Rabaul	

TERRITORY OF PAPUA AND NEW GUINEA.

VULCANOLOGICAL OBSERVATORY RABAU.

SEISMOLOGICAL BULLETIN.

February, 1956.

1st	eP iP iPP i i i S i i i	E Z Z E Z N  N E E	13    47  50 51	46    13 34 50 51	30 33.5 41 44 13 34 04.5 23 11 52	U.S.C.G.S. 19°N, 145½°E. Marianas Is. H = 13 41 44 h approx. = 350 kms. Mag. = 6½-7 (Pas)
2nd	iP	Z	23	56	13½	
3rd	Nil					
4th	iP	Z	18	38	58½	U.S.C.G.S. New Ireland H = 18 38 22 Felt: Rabaul Int. = 1-2(MM) 04°11'S, 152°10'E. Felt: Warangi Int. = 2-3(MM) 04°30'S, 152°20'E.
5th	eP	Z	20	41	25	U.S.C.G.S. 3½°N, 128°E. Molucca Strait H = 20 35 55
6th	iP	Z	18	57	34	
7th	Nil					
8th	iP i i	Z	11	59	30 35 43	
9th) 10th) 11th)	Nil					
12th	iP i i i iP! i i i i i	Z Z Z E Z E E Z E Z	11   12 12	56 58  02 05 06 08	54 24 46 53 55 56 16 19 41 50	U.S.C.G.S. 19°N, 119½°E. N.W. Coast of Luzon H = 11 49 20 Mag. = 6½-6½ (Pas)
13th) 14th) 15th) 16th) 17th)	Nil					
18th	iP i! iPP i i iS (PcS) e	Z Z Z  E N  Z	07   45 47	40  42 45 47 49.3	49 51 12 49 48 54 39	U.S.C.G.S. 30°N, 137½°E. Honshu H = 07 34 16 h approx. = 470 kms. Mag. = 7½-7½ (Pas) i ScS N 50 09

19th)						
20th)						
21st)	Nil					
22nd)						
23rd)						
24th	eP e(S) e(S) e(S)	Z  N E	09	26 32 32.3 32.7	25 $\frac{1}{2}$ 02 - -	U.S.C.G.S. 32°S, 179 $\frac{1}{2}$ °E. Kermadec Is. H = 09 19 01
25th)						
26th)	Nil					
27th	iP	Z	14	49	16 $\frac{1}{2}$	Felt: Rabaul Int. 1 (MM) 04°11'S, 152°10'E. Felt: Kokopo Int. 2 (MM) 04°20'S, 152°15'E.
28th	Nil					
29th	iP i	Z Z	21	01	36 43	U.S.C.G.S. 23 $\frac{1}{2}$ °N, 94 $\frac{1}{2}$ °E. Burma-India border H = 20 51 18 h approx. = 60 kms.

Tremors felt in the Territory, February, 1960.

Date	Time G.M.T.	Intensity Mercalli Modified	Latitude South	Longitude East	Locality
Feb. 1st	1241	1	04 11	152 10	Rabaul
4th	1838 1840	1 - 2 2 - 3	04.11 04 30	152.10 152 20	Rabaul Warangoi
6th	1855 1855 1857	1 1	04 20 04 11 05 00	152 15 152 10 151 15	Kokopo Rabaul Ulamona
13th	1026	2	06 15	150 35	Lindenhafen
16th	0230 1050 1330 1345	1 1 1 1	04 20 03 35 " "	152 15 143 40 " "	Kokopo Wewak " "
21st	0230 0755	2 - 3 2	03 55 04 30	141 10 152 20	Green River Warangoi
27th	1450 1500	1 2	04 11 04 20	152 10 152 15	Rabaul Kokopo

TERRITORY OF PAPUA AND NEW GUINEA.
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SEISMOLOGICAL BULLETIN.
MARCH, 1956.

1st	Nil					
2nd	i	Z	12	08	34 $\frac{1}{2}$	U.S.C.G.S. 63 $\frac{1}{2}$ <sup>o</sup> N, 149 $\frac{1}{2}$ <sup>o</sup> W. H = 11 56 20. Alaska
	Confused by microseisms.					
3rd	eP	Z	07	24	15	
	i			25	16	
4th)						
5th)	Nil					
6th)						
7th)						
8th	iP	Z	08	11	18	B.C.I.S. 17 <sup>o</sup> S, 168 <sup>o</sup> E. New Hebrides. H = 08 06 32
	iP	Z	12	24	54	
	(S)			26	04	
9th	iP	Z	11	43	22 $\frac{1}{2}$	U.S.C.G.S.
	i	Z		47	44	Banda Sea.
	i	Z		48	05 $\frac{1}{2}$	H = 11 37 56.
10th)						
11th)	Nil					
12th	eP	Z	19	56	17	U.S.C.G.S. 15 <sup>o</sup> S, 175 <sup>o</sup> W.
	i	Z			21	Samoa Is. H = 19 50 37.
						B.C.I.S. H = 19 50 39
13th	iP!	Z	23	33	10	U.S.C.G.S. 4 <sup>o</sup> S, 153 <sup>o</sup> E.
	i	N		39	29	New Ireland.
	i	E			31	H = 23 31 50
	i	Z			32	Felt: Rabaul Int. 4(MM)
	i	Z			51	04 <sup>o</sup> 11'S, 152 <sup>o</sup> 10'E.
	i	E		40	57	Felt: Warangoi Int. 4(MM)
						04 <sup>o</sup> 30'S, 152 <sup>o</sup> 20'E. S-P (Omori) = 10 secs.
14th)						
15th)	Nil					
16th)						
17th	iP	ZE	19	56	23 $\frac{1}{2}$	U.S.C.G.S. 10 <sup>o</sup> S, 154 <sup>o</sup> E.
	iPP	ZE			27 $\frac{1}{2}$	Solomon Sea. Foreshock.
	S			57	27	H = 19 54 56.
	iS	E			29	
	iSS	Z			40	
	iSS	E			41	
	SSS	Z			49	
	eP	ZN	23	42	10	U.S.C.G.S. 10 <sup>o</sup> S, 154 <sup>o</sup> E.
	i	ZN			11 $\frac{1}{2}$	Solomon Sea.
	i	ZN			28	H = 23 41 42
	S	N		43	19	
	iSS	ZN			23	
	i	E			25	
	SSS	E			51	
	i	N		45	35	
	i	N		46	34	
	i	N			48	



18th	Nil					
19th	eP i!	Z Z	17	36	43.9 44.3	U.S.C.G.S. 6°S, 150°E. New Britain. H = 17 35 57 Mag. 6-4 (Uppsala) Felt: 1735 Kandrian Int. 5-7 (MM) 06°15'S, 149°35'E. Felt: 1738 Walindi. Int. 5 (MM) 05°25'S, 150°05'E. Felt: 1738 Talasea. Int. 3-4 (MM) 05°20'S, 150°05'E. Felt: 1740 Popondetta Int. 4 (MM) 08°45'S, 148°15'E. Felt: Rabaul Int. 2 (MM) 04°11'S, 152°10'E.
20th	iP	Z	09	42	01	U.S.C.G.S. 5°S, 152½°E. New Britain. H = 09 41 36. h approx. = 60 kms. Felt: Warangoi. Int. 4-5 (MM) 04°30'S, 152°20'E. Felt: Pomio. Int. 4+ (MM) 05°30'S, 151°30'E. Felt: Rabaul Int. 3 (MM) 04°11'S, 152°10'E. S-P (Omori) = 23 secs.
21st	iP	Z	15	12	08½	
22nd	eP i i i	Z Z Z Z	18	44	13 17 24 45 14	
23rd	iP!	ZNE	05	11	15.1	U.S.C.G.S. 5°S, 151°E. H = 05 10 48 New Britain
	eP i i!	Z Z Z	20	01	43½ 44.9 48.5	U.S.C.G.S. 6°S, 155°E. Solomon Is. H = 20 00 44
24th	iP	Z	11	55.2	-	
25th	Nil					
26th	iP!	Z	20	16	56	Felt: 2018 Namatanai. Int. 3-4 (MM) 03°40'S, 152°25'E. Felt: Kokopo Int. 2 (MM) 04°20'S, 152°15'E.
27th	Nil					
28th	(eP) iP	Z Z	11 12	17 18	33 25½	

3.

29th	iP	13	40	03 $\frac{1}{2}$	Felt: Rabaul 1341 Int. 2 (MM) 04°11'S, 152°10'E.	
30th	iP i i	Z E	08	03 04 05	06 36 $\frac{1}{2}$ 05 $\frac{1}{2}$	
31st	iP!	Z	12	17	17	Felt: Kokopo Int. 3 (MM) 04°20'S, 152°15'E.

Tremors felt in the Territory, March 1956.

Date	Time G.M.T.	Intensity Mercalli Modified	Latitude		Longitude		Locality
			°	'	°	'	
Mar. 5th	0201	2 - 3	05	25	150	05	Walindi
6th	0540	2	04	45	145	20	Atitau
	0900	2	04	30	152	20	Warangoi
	1330	3	08	10	143	40	Mendi
8th	0225	3	05	40	147	50	Awelkon
13th	2330	4	04	30	152	20	Warangoi
	2331	2	05	00	152	05	Tol. Ptn.
	2332	4	04	11	152	10	Rabaul
	2333	1	05	00	151	15	Ulamona
14th	0020	2	04	20	152	15	Kokopo
16th	0230	2	05	30	148	25	Kilenge
17th	(approx) 0230	2	05	40	147	50	Awelkon
18th	1830	3	05	40	147	50	Awelkon
		1	05	00	152	05	Tol. Ptn.
19th	1730	4	05	10	144	45	Aiome
	1735	7	06	15	149	35	Kandrian
	1737	2	04	11	152	10	Rabaul
	1738	5	05	25	150	05	Walindi
	1738	3 - 4	05	20	150	05	Talasea
	1740	4	08	45	148	15	Popondetta
	1740	3 - 4	08	50	148	05	Awala
	1740	1 - 2	08	50	147	45	Kokoda
	1740	4?	05	15	147	10	Malala
	1800	2	09	40	150	45	Salamo
20th	0921	4	05	30	151	30	Pomio
	0940	3	05	00	152	05	Tol. Ptn.
	0942	3	04	11	152	10	Rabaul
	0942	2	05	00	151	15	Ulamona
	0945	4 - 5	04	30	152	20	Warangoi
	0948	3	04	20	152	15	Kokopo
	1750	3	05	40	147	50	Awelkon
21st	0100	3	05	10	144	45	Aiome
	0245	1	06	15	149	35	Kandrian
	0315	1	"	"	"	"	"
	0400	1	05	40	147	50	Awelkon

Date	Time G.M.T.	Intensity Mercalli Modified	Latitude South		Longitude East		Locality
			o	'	o	'	
Mar. 23rd	0510	3	05	00	152	05	Tol. Ptn.
	0511	3	04	11	152	10	Rabaul
	0511	4	05	30	151	30	Pomio
	0515	4	04	30	152	20	Warangoi
	2350	2	"		"	"	"
24th	1150	2	04	30	152	20	Warangoi
	1155	2	04	11	152	10	Rabaul
	1205	1	06	25	155	50	Aropa
25th	0517	3	04	20	152	15	Kokopo
26th	2015	2	04	20	152	15	Kokopo
	2018	3 - 4	03	40	152	25	Namatanai
	2017	2	04	11	152	10	Rabaul
27th	1300	2	03	40	143	20	Yangoru
29th	1341	2	04	11	152	10	Rabaul
31st	1218	3	04	11	152	10	Rabaul
	1222	3	04	20	152	15	Kokopo
	1240	3 - 4	04	30	152	20	Warangoi

TERRITORY OF PAPUA AND NEW GUINEA.

VULCANOLOGICAL OBSERVATORY RABAU.

SEISMOLOGICAL BULLETIN.

APRIL, 1956.

1st	Nil								
2nd	eP	E	10	59	25 $\frac{1}{2}$	U.S.C.G.S. 2°N, 97°E. W. Sumatra Coast H = 10 49 56			
	eP	Z			29 $\frac{1}{2}$				
	i	Z			34 $\frac{1}{2}$				
	i	E			35 $\frac{1}{2}$				
	i	E			(11) 01 40 $\frac{1}{2}$				
	iP!	Z	15	03	44 $\frac{1}{2}$				
3rd)									
4th)	Nil								
5th	iP	Z	07	48	56.3	U.S.C.G.S. 6°S, 146 $\frac{1}{2}$ °E. Nr. N.E. Coast of New Guinea. H = 07 47 39 h approx. = 100 kms. Felt: Saidor. Int. 3 (MM) 05°35'S, 146°30'E. Felt: Awelkon, Umboi Is. Int. 1 (MM) 05°40'S, 147°50'E.			
6th	Nil								
7th	iP	Z	11	01	35				
8th	Nil								
9th	eP	Z	22	19	12	U.S.C.G.S. 10°S, 162 $\frac{1}{2}$ °E. Solomon Is. H = 22 16 23			
	i	Z			14				
	i	Z			21 32 $\frac{1}{2}$				
10th	eP	Z	13	24	45	U.S.C.G.S. 3°S, 102°E. S. Coast of Sumatra H = 13 16 04 h approx. = 150 kms.			
	i	Z			48				
	i	E			53				
11th	Nil								
12th	iP!	Z	05	00	29	U.S.C.G.S. Central New Guinea. H = 04 59 37 Felt: Awelkon, Umboi Is. Int. 2 (MM) 05°40'S, 147°50'E.			
13th, 14th, ) 15th, 16th, ) 17th, 18th ) 19th )			Nil	No record 1200 hrs. 16/4 to 0000hrs. 17/4					
20th	iP	Z	09	56	10				
	eP	N			15	20	54	U.S.C.G.S. 7 $\frac{1}{2}$ °S, 129°E. Banda Sea. H = 15 15 56 h approx. = 150 kms.	
	iP	Z					57		
	iPP	Z				22	02		
	PcP	Z				24	42		
	S	Z					49		
	e	N				26	17		
	i	N				27	07		
	iSS	Z				28	06		
	i	N				30	52		
	ScS	Z				31	53		

2.

21st	eP i i!	ZN Z Z	00	04	29	U.S.C.G.S. 6°S, 155°E. Solomon Is. H = 00 03 23
22nd	iP	Z	04	41	32	U.S.C.G.S. 6°S, 151½°E. New Britain H = 04 40 53 <u>Felt:</u> Lolobau Int. 2-3 (MM) 04°55'S, 151°10'E. <u>Felt:</u> Rabaul Int. 3 (MM) 04°11'S, 152°10'E. <u>Felt:</u> Warangoi Int. 3-4 (MM) 04°30'S, 152°20'E. S-P (Omori) = 27 secs.
23rd)						
24th)	Nil					
25th)						
26th	iP	Z	15	21	31½	
27th)						
28th)	Nil					
29th)						
30th)						

Tremors felt in the Territory, April 1956.

Date	Time G.M.T.	Intensity Mercalli Modified	Locality	Latitude		Longitude	
				South	East	East	East
				°	'	°	'
Apr. 1st	0645	1	Losuia	08	30	151	05
	2100	1	Umboi (Awelkon)	05	40	147	50
5th	0748	3	Saidor	05	35	146	30
	0752	1	Umboi (Awelkon)	05	40	147	50
6th	1640	2	Esa'ala	09	45	150	50
7th	0520	2	Esa'ala	09	45	150	50
	0720	1	"	"	"	"	"
	1102	2	Boku	06	35	155	20
	1103	3	Aropa	06	25	155	50
9th	0330	1	Aropa	06	25	155	50
	0227	2	Boku	06	35	155	20
12th	0455	2	Umboi (Awelkon)	05	40	147	50
	0502	2	"	"	"	"	"
	0510	1 - 2	Kandrian	06	15	149	35
	0541	1 - 2	Numundo Ptn.	05	30	150	05
	0541	2	Walindi	05	25	150	05
14th	0732	1	Kokopo	04	20	152	15
15th	1125	2	Aropa	06	25	155	50
19th	0425	1	Umboi (Awelkon)	05	40	147	50

cont.

3.

Date	Time G.M.T.	Intensity Mercalli Modified	Locality	Latitude		Longitude	
				o	'	o	'
Apr. 20th	0338	4	Lindenhafen	06	15	150	35
	0954	1 - 2	Numundo Ptn.	05	30	150	05
	0955	2	Walindi	05	25	150	05
21st	0000	1	Kieta	06	15	155	40
	0005?	4	Boku	06	35	155	20
	0000	2	Aropa	06	25	155	50
	0000	1	Buin	06	50	155	45
	0945	1 - 2	Lindenhafen	06	15	150	35
22nd	0338	1 - 2	Numundo Ptn.	05	30	150	05
	0440	2	Lindenhafen	06	15	150	35
	0440	2 - 3	Lolobau	04	55	151	10
	0441	3	Rabaul	04	10	152	10
	0442	3 - 4	Warangoi	04	30	152	20
	0445	2	Malala	05	15	147	10
	0530	4	Kokopo	04	20	152	15
27th	0229	1	Numundo Ptn.	05	30	150	05
28th	2350	4 - 5	Yangoru	03	40	143	20
30th	1850	2	Esa'ala	09	45	150	50
	1955	4	Boku	06	35	155	20

TERRITORY OF PAPUA AND NEW GUINEA.

VULCANOLOGICAL OBSERVATORY RABAU.

SEISMOLOGICAL BULLETIN.

MAY, 1956.

1st	iP i!	Z ZNE	21	51	02 04	
2nd	iP iS	Z ZNE	07	04	10 53	Compression from N.W.
	iP i(S)	ZNE E	10	47	31 37	
	iP i(S)	ZNE	11	46	10 20	Compression from N.E.
3rd	Nil					
4th	iP i(S)	ZNE N	13	18	21 48	
	e(P)	Z	18	52	25	U.S.C.G.S. 16°N, 122°E. Nr. E Coast of Luzon P.I. H = 18 45 21
5th	e(PKP) i	Z Z	12	58	11 12	U.S.C.G.S. 28½°S, 69°W. Argentine/Chile Border H = 12 39 15 h approx. = 150 kms.
6th	Nil					
7th	eP e e i	Z Z E Z	11	08 09 10.7 15	50 47 - 00	U.S.C.G.S. 46½°S, 96°E. South Indian Ocean H = 10 58 12 Mag. = 6¼ (Pas)
	iP	ZNE	18	42	49.5	U.S.C.G.S. 10°N, 141½°E. Caroline Is. H = 18 38 47
8th	Nil					
9th	iP iS	ZNE ZNE	00	51 52	43 02	
	eP	Z	12	28	55	
10th	Nil					
11th	iP!	Z	10	14	57	
12th	iP!	Z	20	15	42	S-P (Omori) = 12 secs. Felt: Rabaul Int. 2 (MM) 04°11'S, 152°10'E. Felt: Warangoi Int. 1-2 (MM) 04°30'S, 152°20'E.
13th	iP!	ZNE	02	42	49	
14th)						
15th)						
16th)	Nil					
17th)						
18th)						

2.

19th	eP	Z	00	25	00	U.S.C.G.S. 11 $\frac{1}{2}$ <sup>o</sup> S, 166 $\frac{1}{2}$ <sup>o</sup> E. Santa Cruz Is. H = 00 21 12
	eP	Z	01	31	56	U.S.C.G.S. 7 <sup>o</sup> S, 156 <sup>o</sup> E. Solomon Is.
	i	Z			59	
	i!	Z		32	01	H = 01 30 36
	i!	NE			04	<u>Felt:</u> Tabago Int. 5 (MM) 06 <sup>o</sup> 40'S, 155 <sup>o</sup> 45'E. <u>Felt:</u> Aropa Int. 4 (MM) 06 <sup>o</sup> 25'S, 155 <sup>o</sup> 50'E. <u>Felt:</u> Buin Int. 4 (MM) 06 <sup>o</sup> 50'S, 155 <sup>o</sup> 45'E. <u>Felt:</u> Boku Int. 4 (MM) 06 <sup>o</sup> 35'S, 155 <sup>o</sup> 20'E. <u>Felt:</u> Karoola Int. 2 (MM) 05 <sup>o</sup> 10'S, 154 <sup>o</sup> 35'E.
20th	e	Z	07	23	35	
	eP	Z	17	55	02	U.S.C.G.S.
	e	Z			20	Marshall Is.
	i	Z			23.5	H = 17 50 37
21st	e(P)	Z	11	58	25	
22nd	e(P)	Z	03	08	04	U.S.C.G.S. 15 $\frac{1}{2}$ <sup>o</sup> S, 173 <sup>o</sup> W. Samoa Is.
	e	Z		09	32	
	e(PcP)	Z		10	36	H = 03 01 03 Mag. = 6 $\frac{1}{2}$ (Pas)
	iP!	ZNE	13	37	16	U.S.C.G.S. 4 <sup>o</sup> S, 152 $\frac{1}{2}$ <sup>o</sup> E. New Ireland H = 13 36 12 Mag. 7 (Moscow) <u>Felt:</u> Aropa Int. 2 (MM) 06 <sup>o</sup> 25'S, 155 <sup>o</sup> 50'E. <u>Felt:</u> Kokopo Int. 2 (MM) 04 <sup>o</sup> 20'S, 152 <sup>o</sup> 15'E. <u>Felt:</u> Rabaul Int. 1-2 (MM) 04 <sup>o</sup> 11'S, 152 <sup>o</sup> 10'E.
23rd	iP!	ZNE	06	02	40	S-P (Omori) = 16 secs.
	eP	ZNE	20	54	08	U.S.C.G.S. 15 $\frac{1}{2}$ <sup>o</sup> S, 179 <sup>o</sup> W. Fiji Is.
	i	Z			09	
	ipP	Z		55	28	H = 20 48 30
	iS	ZNE		58	40	h approx. = 450 kms.
	i(PcS)		21	00	01	Mag. = 7 $\frac{1}{2}$ (Pas)
	eScS	N		03	57	
	e	ZE			59	
24th	iP!	ZNE	11	00	48	<u>Felt:</u> Kokopo Int. 2 (MM) 04 <sup>o</sup> 20'S, 152 <sup>o</sup> 15'E. <u>Felt:</u> Warangoi Int. 1 (MM) 04 <sup>o</sup> 30'S, 152 <sup>o</sup> 20'E.
eP	Z	20	04	27		U.S.C.G.S. 5 <sup>o</sup> S, 131 <sup>o</sup> E. Banda Sea
i	Z			34		H = 19 59 42



25th	Nil								
26th	eP	Z	08	35	51	U.S.C.G.S. 4°S, 126½°E. Buru Is. Banda Sea H = 08 30 18			
	i	Z			58				
	i	Z		36	08.5				
	eP	Z	20	27	02	U.S.C.G.S. 19°S, 178½°W. Fiji Is. H = 20 21 14 h approx. = 550 kms. Mag. = 6½ (Pas).			
	i	Z			07				
	iPcP	Z			29		37		
	iS	N			31		38		
	i	E					40		
	i	Z					45		
	iPcS	Z			32		19		
	i!	Z					24		
	i	NE					24		
	iScS	NE			36		24		
	i	Z					27		
	27th	e		Z	13		19	33	U.S.C.G.S. Nr. the N. Coast of Sumatra H = 13 09 42 B.C.I.S. 4°N, 95½°E. H = 13 09 39
eP		Z	17	01		43	U.S.C.G.S. 6½°S, 129½°E. Banda Sea H = 16 56 49 h approx. = 200 kms.		
i		Z				02		09	
iPcP		ZN			05	17			
i		ZE			08	15			
eScS		ZNE			12.4	-			
eP		Z	18	00	38	U.S.C.G.S. Marshall Is. H = 17 55 56			
i		Z					43		
eiP		Z	19	24	14	<u>Felt:</u> Buin Int. 4 (MM) 06°50'S, 155°45'E.			
i(S)		E			25		07		
28th		iP!	Z	01	15	36	<u>Felt:</u> Rabaul Int. 2-3 (MM) 04°11'S, 152°10'E. <u>Felt:</u> Kokopo Int. 2 (MM) 04°20'S, 152°15'E. S-P (Omori) = 14 secs.		
		iP	Z		09	21		34.5	U.S.C.G.S. 13°N, 124½°E. Nr. Coast of Samar Is. P.1 H = 09 14 59
		iP!	Z						
		i	NE	13	29	32.5	U.S.C.G.S. 1°N, 122°E. N. of Celebes H = 13 23 17 h approx. = 100 kms.		
		i	Z					50	
					57				
	29th	Nil							
30th	Times unreliable: fault in clock circuit.								
31st	eP	Z	21	07	26	U.S.C.G.S. 22°S, 180° Fiji Is. H = 21 01 40 h approx. = 60 kms.			
	i(PcS)	Z			12		44		
	e	NE					45		
	eScS	NE			16		47		

TREMORS FELT IN THE TERRITORY, MAY 1956.

Date	Time G.M.T.	Intensity Mercalli Modified	Locality	Latitude		Longitude	
				South	East	°	'
May 4th	1215	1	Awelkon	05	40	147	50
	2337	2	Esa'ala	09	45	150	50
5th	1940	1	Awelkon	05	40	147	50
11th	0210	2	Esa'ala	09	45	150	50
12th	1115	6	Telefomin	05	10	141	35
	2015	2	Rabaul	04	11	152	10
	2015	1 - 2	Warangoi	04	30	152	20
	2018	1 - 2	"	"	"	"	"
	2045	1	Kokopo	04	20	152	15
13th	0315	1	Kokopo	04	20	152	15
	0820	1	"	"	"	"	"
15th	0315	2	Awelkon	05	40	147	50
	2130	2	Ihu	07	55	145	25
16th	2155	1	Mendi	06	10	143	40
19th	0130	5	Tabago	06	40	155	45
	0130	4	Buin	06	50	155	45
	0130	4	Mivo River	06	51	155	30
	0130	4	Aropa	06	25	155	50
	0130 (?)	4	Kieta	06	15	155	40
	0132	2	Karoola	05	10	154	35
	0132	4	Boku	06	35	155	20
	21st	1645	1	Awelkon	05	40	147
22nd	1330	2	Aropa	06	25	155	50
	1335	1 - 2	Rabaul	04	11	152	10
	1340	2	Kokopo	04	20	152	15
	(1425) (?)	4	Karoola	05	10	154	35
23rd	1535	1	Wau	07	40	146	45
24th	0849	1	Aropa	06	25	155	50
	1055	1	Warangoi	04	30	152	20
	1103	2	Kokopo	04	20	152	15
27th	1925	4	Buin	06	50	155	45
28th	0114	2	Kokopo	04	20	152	15
	0116	2 - 3	Rabaul	04	11	152	10
30th	2115	2	Awelkon	05	40	147	50

TERRITORY OF PAPUA AND NEW GUINEA.
VULCANOLOGICAL OBSERVATORY RABAU.
SEISMOLOGICAL BULLETIN.
JUNE, 1956.

1st	iP	Z	01	30	59	<u>Felt:</u> Ulamona Int.1(MM) 05°00'S, 151°15'E.
	i!	Z		31	01	
	eP	Z	21	13	57	<u>Felt:</u> Rabaul Int.1(MM) 04°11'S, 152°10'E.
	i!			14	00	
	i				50	
2nd	Nil					
3rd	e	Z	03	06	47	
	iP!	Z	17	51	25	
	eP	Z	18	59	46	U.S.C.G.S. 31°S, 178½°W. Kermadec Is. H = 18 52 20
	iP!	Z	19	11	08	
4th	iP!	Z	04	20	43	<u>Felt:</u> Rabaul Int.2(MM) 04°11'S, 152°10'E.
						<u>Felt:</u> Kilenge Int.2(MM) 05°30'S, 148°25'E.
						<u>Felt:</u> Numundo Int.1-2(MM) 05°30'S, 150°05'E.
	iP	Z	04	43	06	
	eP	Z	12	13	22	U.S.C.G.S. 31°S, 178°W.
	i	Z			28	Kermadec Is.
	e(PcS)	Z	19	21	H = 12 05 55	
	eP	Z	18	44	48	U.S.C.G.S. 32°4'S, 177°3'W.
	i	Z			53.5	Kermadec Is. H = 18 37 19 h approx. = 70 kms.
5th	i(P)	Z	05	37	29	U.S.C.G.S. 8°S, 112°E. Java H = 05 29 47
	e	Z	06	12	46	U.S.C.G.S. 51°S, 112½°W. Pacific Ocean H = 05 59 41 Mag. = 6¼-6½ (Pas)
6th	eP	Z	08	26	45	
	i	NE			50	
	i	NE		27	14	
	e	N			35	
	i	ZE			39	
7th	e(P)	Z	09	13	21	
	i	NE			27	
	e(S)	E		14	04	
8th	iP	Z	01	58	18	U.S.C.G.S. 12°S, 167½°E.
	e(S)	N	02	01	23	Santa Cruz Is.
	i	E			25	H = 01 54 35
	i	Z			27	h approx. = 300 kms.

(cont. over)

2.

8th cont.	eP	Z	04	20	20	U.S.C.G.S. 35°N, 67½°E. Afghanistan H = 04 07 26
	eP	Z	12	30	47	U.S.C.G.S. 6°S, 154½°E.
	i	Z			49	Solomon Is.
	i!	Z			51	H = 12 29 47
	i!	NE			53.5	<u>Felt</u> : Kieta Int.2(MM) 06°15'S, 155°40'E. <u>Felt</u> : Aropa Int.2(MM) 06°25'S, 155°50'E. <u>Felt</u> : Buin Int.2(MM) 06°50'S, 155°45'E. <u>Felt</u> : Rabaul Int.2(MM) 04°11'S, 152°10'E. <u>Felt</u> : Karoola Int.2(MM) 05°10'S, 154°35'E.
	e	Z	14	12	07	U.S.C.G.S. 30°S, 70°W. Argentine-Chile Border H = 13 53 09 h approx. = 150 kms.
	eP	Z	21	06	04	U.S.C.G.S.
	i				09	Kermadec Is. H = 20 58 30
9th	iP!	Z	05	37	30.5	B.C.I.S. 5°S, 152°E. New Britain H = 05 36 58 <u>Felt</u> : Ulamona Int.2(MM) 05°00'S, 151°15'E. <u>Felt</u> : Rabaul Int.3(MM) 04°11'S, 152°10'E. <u>Felt</u> : Kokopo Int.3(MM) 04°11'S, 152°10'E. <u>Felt</u> : Kokopo Int.3(MM) 04°20'S, 152°15'E.
	ePKP	Z	10	27	37	U.S.C.G.S. 30½°S, 70½°W.
	eS			28	44	Central Chile
	e(SKKS) E			36.5	-	H = 10 08 32
	e(ScSPKP) Z			44.5	-	h approx. = 150 kms. Mag. = 6¼ (Pas)
	eP	Z	14	22	55	
	i	Z		23	28	
	i	N		24	18	
	ei	N		24.8	-	
	e	E		26.3	-	
	e	Z	23	04	45	
	e(P)	Z	23	26	52	U.S.C.G.S. 35½°N, 67½°E.
	e	N		30	28	Afghanistan
	e(S)	NE		37.3	-	H = 23 13 51
	e	Z		44	39	Mag. 7¼-7½ (Pas)
	( e	Z		52.5	-	
	( eL	Z	00	02.5	-	
10th	e	Z		06	41	

(cont. over)

3.

10th cont.	iP e(PcS)	Z Z	04	28 34	12 47	U.S.C.G.S. $1^{\circ}\text{N}, 123^{\circ}\text{E}$ . Celebes H = 04 22 08
11th	iP!	Z	08	46	27	<u>Felt</u> : Kokopo Int. 2(MM) $04^{\circ}20'\text{S}, 152^{\circ}15'\text{E}$ .
	ePKP	Z	10	15	23	U.S.C.G.S. $27^{\circ}\text{S}, 69^{\circ}\text{W}$ . Chile-Argentine Border H = 09 56 10 Mag. = $5\frac{3}{4}$ -6 (Pas)
	e	Z	11	31	32	
	e	Z	13	17	44	
12th	e(P)	Z	19	35	28	
	i	N		36	38	
	i	N		37	37	
	i	Z		38	17	
	e	Z		39	27	
13th	iP!	Z	02	10	58	<u>Felt</u> : Rabaul Int. 1(MM) $04^{\circ}11'\text{S}, 152^{\circ}10'\text{E}$ . S-P (Omori) = 13 secs.
	iP	Z	12	13	18.5	U.S.C.G.S. $1^{\circ}\text{S}, 124^{\circ}\text{E}$ . Nr. the Celebes Coast H = 12 07 41 h approx. = 200 kms.
	i!	Z			22	
	i	ZE		14	15	
	e	Z		17	55	
	e	E		18.0	-	
	e	Z		20	10	
	e	Z		23.9	-	
	e	NE		24.0		
	iP!	Z	17	11	53.D.	U.S.C.G.S. $6^{\circ}\text{S}, 147^{\circ}\text{E}$ . Nr. Coast of New Guinea H = 17 10 34 h approx. = 300 kms. <u>Felt</u> : Lae Int. 4(MM) $06^{\circ}51'\text{S}, 147^{\circ}00'\text{E}$ . <u>Felt</u> : Wau Int. 2(MM) $07^{\circ}20'\text{S}, 146^{\circ}45'\text{E}$ . <u>Felt</u> : Kokoda Int. 2(MM) $08^{\circ}50'\text{S}, 147^{\circ}45'\text{E}$ .
	iP!	Z	20	47	40.5D.	U.S.C.G.S. New Britain Region H = 20 47 16
	ei(P)	Z	22	06	35	
	i	Z		07	02	
	i(S)	E			06	
14th	e(P)	Z	12	21	08	U.S.C.G.S. $45^{\circ}\text{N}, 150^{\circ}\text{E}$ . Kurile Is. H = 12 12 19
	i	Z			29	
15th	Nil					



5.

24th	e	Z	16	23.4	-	
	iP	Z	20	59	40.5	U.S.C.G.S. 7°S, 155°E.
	i!	Z			45	Solomon Is.
						H = 20 58 36
						Mag. = 6 $\frac{1}{4}$ (Pas)
	eP	Z	21	26	19	
	eP	Z	21	32	10	?Felt: Aropa
						Int. 1 (MM)
						06°25'S, 155°50'E.
	e(P)	Z	23	38	03	
25th	eP	Z	18	10	40	
	i				49	
	e(P)	Z	18	38	13	
	eP	Z	18	48	57	
	i			49	07	
	i				52	
	e	-		50	26	
	eP	Z	20	51	50	
	i				51	
	i			52	13	
	i(S)			53	13	
26th	eP	Z	00	05	15	U.S.C.G.S. 17°S, 169 $\frac{1}{2}$ °E.
	i				18	New Hebrides Is.
	i				48.5	H = 00 00 13
	e			06	01	h approx. = 60 kms. (BCIS)
	eP	Z	07	15	08	
	i!				11	
	iP	Z	13	54	36	(Wellington 34°S, 179°7'W
						S. of Kermadec Is.
						H = 13 47 31
						h = 150 kms).
27th	eP	Z	08	52	02	
	i				12	
	eS				55	
	i			53	04	
	i				09	
	i				26	
	eP	Z	09	00	57	
	i			01	06	
	eS				50	
	i				59	
	i			02	20	
	eP	Z	19	05	09	(U.S.C.G.S. 23°N, 121°E.
	i!	Z			11	S. of Formosa
	i!	Z			16	H = 18 57 30).
	iP	Z	20	41	14.5	U.S.C.G.S. 3 $\frac{1}{2}$ °S, 151 $\frac{1}{2}$ °E.
						Nr. New Britain
						H = 20 40 56
						Felt: Rabaul
						Int. 1 (MM)
						04°11'S, 152°10'E.

6.

28th	iP i!	Z	06	04	54 56	
	eP iS i	Z	11	54 55	29 25 29	
	e	Z	23	11	28	U.S.C.G.S. 48 $\frac{3}{4}$ <sup>o</sup> N, 129 $\frac{1}{2}$ <sup>o</sup> W. Vancouver Is. H = 22 58 50 Mag. = 6 $\frac{1}{4}$ -6 $\frac{1}{2}$ (Pas).
29th	eP e	Z	02	29 35	35 51	U.S.C.G.S. 26 <sup>o</sup> N, 122 <sup>o</sup> E. Coast of Formosa. H = 02 22 00
	e	Z	04	17	52	U.S.C.G.S. 37 <sup>o</sup> N, 139 $\frac{1}{2}$ <sup>o</sup> E. Hondo, Japan H = 04 09 54
	e e	Z	17	50	32 42	U.S.C.G.S. 14 <sup>o</sup> N, 121 <sup>o</sup> E. Nr. S.W. Coast of Luzon, P.I. H = 17 43 26
	ei(P) i iS i i i! i!	Z	23	38 39	49 06 39 47 49 54 56	
30th	i	Z	03	26	37	
	eP e	Z	09	03	00 15	
	e e e e	Z	14	35 36 38.9 40.2	52 39 -	U.S.C.G.S. 22 $\frac{1}{2}$ <sup>o</sup> S, 69 <sup>o</sup> W. N. of Chile H = 14 17 09 h approx = 200 kms.

Tremors felt in the Territory, June 1956.

Date	Time G.T.M.	Intensity Mercalli Modified	Locality	Latitude		Longitude	
				South		East	
				o	'	o	'
Jun. 1st	0130	1	Ulamona	05	00	151	15
	0132	1	Rabaul	04	11	152	10
2nd	0144	1	Esa'ala	09	45	150	50
3rd	?0406	1	Karoola	05	10	154	35
4th	0420	2	Rabaul	04	11	152	10
	0435	2	Kilenge	05	30	148	25
	0442	1 - 2	Numundo	05	30	150	05
6th	0520	2	Umboi (Awelkon)	05	40	147	50
8th	1230	2	Kieta	06	15	155	40
	1230	2	Aropa	06	25	155	50
	1230	2	Buin	06	50	155	45
	1233	2	Rabaul	04	11	152	10
	1233	2	Karoola	05	10	154	35



7.

Date	Time G.M.T.	Intensity Mercalli Modified	Locality	Latitude		Longitude	
				South		East	
				o	'	o	'
9th	0538	2	Ulamona	05	00	151	15
	0540	3	Rabaul	04	11	152	10
	0550	3	Kokopo	04	20	152	15
11th	0847	2	Kokopo	04	20	152	15
13th	0210	1	Rabaul	04	11	152	10
	1710	2	Wau	07	20	146	45
	1712	4	Lae	06	45	147	00
	1715	2	Kokoda	08	50	147	45
24th	2105	2	Aropa	06	25	155	50
	2115	1	"	"	"	"	"
	2130	1	"	"	"	"	"
27th	2042	1	Rabaul	04	11	152	10
29th	2246	4 - 5	Salamo	09	40	150	45
	2246	2	Esa'ala	09	45	150	50
30th	0130	3	Aiome	05	10	144	45
	0352	2	Salamo	09	40	150	45

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1st	eP	Z	20	04	51 $\frac{1}{2}$				
	iP	Z			52 $\frac{1}{2}$				
	eS	Z			05 46 $\frac{1}{2}$				
2nd	eP	Z	14	32	30	U.S.C.G.S. 8°S, 124°E. Sawoe Sea H = 14 26 35			
	iPPP	Z			33 32				
	e	Z			34 39				
	ePcP	Z			35 38				
	eScS	Z			43 08				
	iP	Z			17 31		19 $\frac{1}{2}$	Wellington 33 $\frac{1}{2}$ °S, 179°W. Kermadec Is. H = 17 24 00	
3rd	iP	ZNE	23	47	03				
	i!	ZNE			08 $\frac{1}{2}$				
	iS	E			24				
4th	eP	-	00	45	47	U.S.C.G.S. 18°S, 178 $\frac{1}{2}$ °W. Fiji Is. H = 00 39 55 h approx. = 450 kms.			
	iP	Z			03		05	35 $\frac{1}{2}$ C.	U.S.C.G.S. 7°S, 155 $\frac{1}{2}$ °E. Solomon Is. H = 03 04 14
	i	Z						39	
	i	Z						42	
	i!	Z			06		06	47 $\frac{1}{2}$	<u>Felt:</u> Aropa, Int. 4(MM) 6°25'S, 155°50'E. <u>Felt:</u> Buin Int. 2(MM) 6°50'S, 155°45'E.
	iS	Z						33	
	i!	Z						37 $\frac{1}{2}$	
	e	Z			03		25	29	<u>Felt:</u> Aropa Int. 2(MM) 6°25'S, 155°50'E. <u>Felt:</u> Buin Int. 2(MM) 6°50'S, 155°45'E.
	i	Z						38	
	i	Z						26 32	
	eP	Z			03		44	02	U.S.C.G.S. 7°S, 155 $\frac{1}{2}$ °E. Solomon Is. Aftershock. H = 03 42 50
	i	Z						13	
	i!	Z						16	
	eS	Z						59	
	i	Z						45 07	
i!	Z	12 $\frac{1}{2}$							
eP	Z	05	04	56					
i	Z			05 50					
eS	Z			06 03					
eP	Z	05	14	12					
i	Z			22 $\frac{1}{2}$					
i	Z			15 05					
i	Z			12					
iS	Z			17 $\frac{1}{2}$					
eP	Z			05		40	48		
iPP	Z	56 $\frac{1}{2}$							
iS	Z	41 38							
i	Z	45 $\frac{1}{2}$							
iSS	Z	50							
i	Z	59 $\frac{1}{2}$							

(cont. over)

4.

17th	iP	Z	00	35	46	
	i	Z			52	
	iS	Z		36	30 $\frac{1}{2}$	
	i				34	
	iP	Z	04	40	40 $\frac{1}{2}$	U.S.C.G.S. Mariana Is. about 300 kms. N.E. of Guam H = 04 36 02
	iP	Z	07	39	07 $\frac{1}{2}$	U.S.C.G.S. 7°S, 126 $\frac{1}{2}$ °E.
	i!	Z			09	Banda Sea
	i!	Z			22 $\frac{1}{2}$	H = 07 34 07
	ePP	Z		40	18	h approx. 450 kms.
	i	Z			23	Mag. 6 $\frac{3}{4}$ (Pas)
	iPcP	Z		42	12 $\frac{1}{2}$	
	i	Z			22	
	iS	N			59	
	iSS	N		45	20	
	eScS	E		49	09	
	eP	Z	13	17	02	
	eP	Z	17	09	40	U.S.C.G.S. Mariana Is.
	i	Z			45	Aftershock. H = 17 05 07
18th	i!P	Z	00	27	57	U.S.C.G.S. 5°S, 151°E. New Britain H = 00 27 27 S-P (Omori) = 14 secs. <u>Felt:</u> Toriu Int. 5(MM) 4°43'S, 151°41'E. <u>Felt:</u> Warangoi Int. 4-5(MM) 4°30'S, 152°20'E. <u>Felt:</u> Pomio Int. 4(MM) 5°30'S, 151°30'E. <u>Felt:</u> Rabaul Int. 3(MM) 4°11'S, 152°10'E. <u>Felt:</u> Kokopo Int. 3(MM) 4°20'S, 152°15'E. <u>Felt:</u> Kandrian Int. 1(MM) 6°15'S, 149°35'E.
	iP	Z	06	24	15.D.	U.S.C.G.S. 5°S, 130°E.
	i!	Z			21 $\frac{1}{2}$	Banda Sea
	i!	Z			34	H = 06 19 15
	i!PPP	Z		25	19	Mag. 7 $\frac{1}{4}$ -7 $\frac{1}{2}$ (Pas)
	iPcP,S	Z		28	17 $\frac{1}{2}$	
	iSS	N		29	13	
	iSSS	N			25 $\frac{1}{2}$	
	e	Z		30	47	
	iScP	Z		31	42	
	iScS	Z		35	26	
	iP	Z	14	06	53	
	i!P	Z	16	37	24 $\frac{1}{2}$	

						5.
19th	eP	Z	07	36	05	
	i!P				06	
	iP	Z	13	03	54	
	iP	Z	13	14	23	
	eP	Z	20	48	08	U.S.C.G.S. 15°N, 120½°E.
	i	Z			24	Luzon P.I.
						H = 20 40 54
20th	iP	Z	11	26	26	
	e	Z	13	22	06	B.C.I.S. Foreshock
	i	Z			20½	Halmahera region.
						H = 13 16 50
	e	Z	13	37	46	
	i	Z	17	38	08½	B.C.I.S. 2°N, 129½°E.
	i	Z			20	Halmahera region
						H = 17 32 52
	eP	Z	17	50	39½	U.S.C.G.S.
	i	Z			44	Marshall Is.
						H = 17 45 59
21st	iP	Z	06	38	59	
	i!	Z		39	02½	
	eP	Z	12	59	57	
	i!P	Z	14	59	41.C.	U.S.C.G.S. 50½°N, 147½°E.
						Sea of Okhotsk
						H = 14 51 06
						h approx. = 600 kms.
	e	Z	15	27	08	U.S.C.G.S. 22½°S, 172½°E.
	i				53	Loyalty Is.
						H = 15 21 20
	eP	Z	15	45	00	U.S.C.G.S. 23°N, 70°E.
	i	Z			02	W. India
						H = 15 32 25
						Mag. = 6½ (Pas)
	i	Z	18	54	30	
	i	N		55	03	
22nd	eP	Z	06	03	51	
		Z			58	
	ePKP	Z	09	44	17	U.S.C.G.S. 10°S, 69°W.
e	Z			45	Chile	
e	Z		45	18	H = 09 25 08	
					h approx. = 100 kms.	
23rd	i!P	Z	14	26	16½	U.S.C.G.S. 4½°S, 154°E.
						Solomon Is. region
						H = 14 25 46
						<u>Felt:</u> Rabaul, Kokopo
						Int. 3 (MM)
						<u>Felt:</u> Namatanai
					Int. 3-4 (MM)	
					3°40'S, 152°25'E.	
					<u>Felt:</u> Warangoi	
					Int. 3-4 (MM)	
					4°30'S, 152°20'E.	

23rd. cont.	iP Z	21	58	21½	U.S.C.G.S. 6°S, 148°E. Nr. N. Coast of New Guinea. H = 21 56 56 <u>Felt:</u> Finschhafen Int. 5(MM) 6°35'S, 147°50'E. <u>Felt:</u> Awelkon Int. 4(MM) 5°40'S, 147°50'E. <u>Felt:</u> Saidor Int. 3 (MM) 5°35'S, 146°30'E. <u>Felt:</u> Wau Int. 2(MM) 7°20'S, 146°45'E. <u>Felt:</u> Numundo Int. 1-2(MM) 5°30'S, 150°05'E.	
24th	iP i iS	Z	08	27 28	45½ 00 14 18	
	i!P i!	Z E	12	41	10½ 25	
	i!P	Z	16	26	26	
	eP i iPP ePcS	Z Z Z Z	19	02 03 09	14 17 14 18	U.S.C.G.S. 1°N, 126½°E. Molucca St. H = 18 56 32
25th	eP i! i	Z Z Z	07	37 38	46 50½ 23	
26th	eP i! eS e(SS, ScS)	Z Z Z Z	17 18	55 00 04.4	05 07 20 -	U.S.C.G.S. 27°S, 178°E. Kermadec Is. H = 17 49 12 h approx. = 650 kms.
	eP i e	Z Z Z	18	10 15	05 06½ 20	B.C.I.S. 27°S, 178°E. Aftershock Kermadec Is. H = 18 04 12 h approx. = 650 kms.
	eP e	Z Z	19	43 45	47 07	
27th	e eP	Z Z	18 21	02 41	46 29	U.S.C.G.S. 15°N, 147½°E. Mariana Is. H = 21 36 52
28th	iP i!	Z	02	02	41½ 45½	U.S.C.G.S. 6°S, 154°E. New Britain H = 02 01 58 h approx. = 150 kms. <u>Felt:</u> Karoola Int. 4(MM) 5°10'S, 154°35'E. <u>Felt:</u> Namatanai Int. 3-4(MM) 3°40'S, 152°25'E. <u>Felt:</u> Rabaul Int. 3(MM) 4°11'S, 152°10'E.

(cont. over

7.

28th.	eP	Z	11	13	34	U.S.C.G.S. 15 $\frac{1}{2}$ <sup>0</sup> N, 147 $\frac{1}{2}$ <sup>0</sup> E.
cont.	i	Z			39 $\frac{1}{2}$	Mariana Is. Aftershock
	i				52	H = 11 09 05
	e	Z	17	33	25	( Felt: Namatanai ( Int. 4(MM) ( 3 <sup>0</sup> 40'S, 152 <sup>0</sup> 25'E. ( Felt: Warangoi ( Int. 3(MM) ( 4 <sup>0</sup> 30'S, 152 <sup>0</sup> 20'E. ( Felt: Rabaul ( Int. 2(MM) ( 4 <sup>0</sup> 11'S, 152 <sup>0</sup> 10'E. ( Felt: Kokopo ( Int. 2(MM) ( 4 <sup>0</sup> 20'S, 152 <sup>0</sup> 15'E.
	i!P	Z	19	43	46 $\frac{1}{2}$	
	iP	Z	19	54	44 $\frac{1}{2}$	Aftershock; S-P (Omori) 11 secs.
	iP	Z	21	44	19	Aftershock; S-P (Omori) 11 secs.
29th	i!P	Z	04	42	07	Felt: Rabaul Int. 1 (MM) S-P (Omori) 14 secs. 4 <sup>0</sup> 11'S, 152 <sup>0</sup> 10'E.
30th	i!P	Z	15	55	30	Felt: Warangoi Int. 2(MM) S-P (Omori) 20 secs. 4 <sup>0</sup> 30'S, 152 <sup>0</sup> 20'E.
31st	eP	Z	16	43	50	U.S.C.G.S. 2 $\frac{1}{2}$ <sup>0</sup> N, 128 $\frac{1}{2}$ <sup>0</sup> E. Halmahera H = 16 38 24.

Tremors felt in the Territory, July, 1956.

Date	Time G.M.T.	Intensity Mercalli Modified	Latitude South	Longitude East	Locality
Jul. 4th	0305	4	06 25	155 50	Aropa
		2	06 50	155 45	Buin
	0307	1	06 50	155 45	Buin
	0325	2	06 50	155 45	Buin
		2	06 25	155 50	Aropa
	0338	2	06 25	155 50	Aropa
	0630	1	06 50	155 45	Buin
0725	1	06 50	155 45	Buin	
1930	1	06 50	155 45	Buin	
11th	1745	1 - 2	05 30	150 05	Numundo
	2304	2 - 3	06 15	149 35	Kandrian
16th	1213	2	06 50	155 45	Buin
	1845	2 - 3	09 45	150 50	Esa'ala

cont.

Date	Time G.M.T.	Intensity Mercalli Modified	Latitude South		Longitude East		Locality
			°	'	°	'	
Jul 18th	c:0028	5	04	43	151	41	Toriu
		4 - 5	04	30	152	20	Warangoi
		4	05	30	151	30	Pomio
		3	04	20	152	15	Kokopo
		3	04	11	152	10	Rabaul
		2 - 3	05	00	151	15	Ulamona
		2	05	25	150	05	Walindi
		1 - 2	05	30	150	05	Numundo
		1	06	15	149	35	Kandrian
23rd	1426	3 - 4	03	40	152	25	Namatanai
		3 - 4	04	30	152	20	Warangoi
		3	04	11	152	10	Rabaul
		3	04	20	152	15	Kokopo
		3	04	05	153	35	Waramung
	2200	5	06	35	147	50	Finschhafen
	2155	4	05	40	147	50	Awelkon
	(2145?)	3	05	35	146	30	Saidor
	2159	2	07	20	146	45	Wau
		1 - 2	05	30	150	05	Numundo
26th	1930	3	06	45	147	00	Lae
28th	c:0203	4	05	10	154	35	Karoola
		3 - 4	03	40	152	25	Namatanai
		3	04	11	152	10	Rabaul
		2	04	20	152	15	Kokopo
		2	04	30	152	20	Warangoi
	1	05	00	151	15	Ulamona	
	c:1944	4	03	40	152	25	Namatanai
		3	04	30	152	20	Warangoi
		2	04	11	152	10	Rabaul
		2	04	20	152	15	Kokopo
29th	0442	1	04	11	152	10	Rabaul
	1134	1	03	05	152	40	Londolovit
30th	1555	2	04	30	152	20	Warangoi

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1st	eP	Z	20	04	51 $\frac{1}{2}$		
	iP	Z			52 $\frac{3}{4}$		
	eS	Z			46 $\frac{1}{2}$		
2nd	eP	Z	14	32	30	U.S.C.G.S. 8°S, 124°E. Sawoe Sea H = 14 26 35	
	iPPP	Z			33		32
	e	Z			34		39
	ePcP	Z			35		38
	eScS	Z			43		08
	iP	Z			17		31
3rd	iP	ZNE	23	47	03		
	i!	ZNE			08 $\frac{1}{2}$		
	iS	E			24		
4th	eP	-	00	45	47	U.S.C.G.S. 18°S, 178 $\frac{1}{2}$ °W. Fiji Is. H = 00 39 55 h approx. = 450 kms.	
	iP	Z			03		05
i	Z	39					
i	Z	42					
i!	Z	47 $\frac{1}{2}$					
iS	Z	06	33				
i!	Z	37 $\frac{1}{2}$					
e	Z	03	25	29	Felt: Aropa Int. 2(MM) 6°25'S, 155°50'E. Felt: Buin Int. 2(MM) 6°50'S, 155°45'E.		
i	Z			38			
i	Z			26		32	
eP	Z	03	44	02	U.S.C.G.S. 7°S, 155 $\frac{1}{2}$ °E. Solomon Is. Aftershock. H = 03 42 50		
i	Z			13			
i!	Z			16			
eS	Z			59			
i	Z			45		07	
i!	Z			12 $\frac{1}{2}$			
eP	Z	05	04	56			
i	Z			05		50	
eS	Z			06		03	
eP	Z	05	14	12			
i	Z			22 $\frac{1}{2}$			
i	Z			15		05	
i	Z			12			
iS	Z			17 $\frac{1}{2}$			
eP	Z			05		40	48
iPP	Z	56 $\frac{1}{2}$					
iS	Z	41	38				
i	Z	45 $\frac{1}{2}$					
iSS	Z	50					
i	Z	59 $\frac{1}{2}$					

(cont. over)



						2.
4th cont.	eiP	Z	07	20	25	U.S.C.G.S. 7°S, 155½°E.
	i	Z			33	Solomon Is. Aftershock.
	i	Z			37	H = 07 19 09
	iS	Z		21	16½	
	i!	Z			26	
	i!	Z			30	
	iPKP	Z	11	27	28	U.S.C.G.S. 31°S, 71°W. Central Chile H = 11 08 28
	e		16	18	11	U.S.C.G.S. 23½°S, 180°. Fiji Is. H = 16 10 48 h approx. = 450 kms.
5th)						
6th)	Nil					
7th	eP	Z	17	36	51	
8th	iP	Z	06	07	32.5	U.S.C.G.S. 0°, 126½°E.
	i	Z			47	Molucca St.
	i	Z			58	H = 06 01 56 h approx. = 60 kms.
	e	Z	18	10	19	B.C.I.S. 11¾°N, 163°E. Marshall Is. H = 18 06 01
9th	ePKP	Z	03	30	33	U.S.C.G.S. 37°N, 26°E.
	ePP	Z		32	04	Aegean Sea
	e	Z		40	45	H = 03 11 39
	e	Z		44	32	Mag. = 7½ (Pas)
	eSS	Z		48.1	-	
	i!PKP	Z	10	15	19	U.S.C.G.S. 20°N, 73°W.
	e	Z			26	Haiti
	e	Z		16	19	H = 09 56 13
	ePKS	Z		18	49	h approx. = 100 kms.
	iPPP	Z		20	23	Mag. = 6½-6¾ (Pas)
10th	e	Z	15	30	49	B.C.I.S. S. of Tonga Is. H = 15 09 01
	eP	Z	18	00	40	U.S.C.G.S.
	i				52.5	Marshall Is. H = 17 56 03
11th	i!	Z	08	28	47	
	eP	Z	16	22	11	
	i	Z			15½	
	iS	N			53	
	i	E			58½	
	i	NE		23	02	
	eP	ZN	18	37	03½	
	i	Z			08	
	i	N			45½	
	i!	N			51	
	eP	Z	23	03	27	<u>Felt:</u> Kandrian Int. 2-3 (MM) 06°15'S, 149°35'E.

3.

12th	eP	Z	15	11	45	U.S.C.G.S. 23°N, 99°E. Burma H = 15 01 26 h approx. = 100 kms.
	e	Z	17	07	03	B.C.I.S. near 58°S, 143°W. S. Pacific H = 16h 55.9m.
13th	ePKP	Z	13	55	03	U.S.C.G.S. 27°S, 70°W. N. Chile H = 13 36 03 h approx. = 100 kms.
	e	Z	14	11	57	
14th	eP	Z	10	33	53	
	e	Z		34	39	
	e	Z	17	35	53	
	e	Z	18	14	03	
	e(P)		22	13	07	U.S.C.G.S. 20°N, 121½°E. N. coast of Luzon P.I. H = 22 05 41
15th	e	Z	02	09	08	(U.S.C.G.S. 44°N, 127½°W. Oregon Coast H = 01 55 09)
	eP	Z	04	22	02	
	i	Z			12	
	i	Z			20½	
	i	E			43	
	iS	Z			54	
	iS	E			55	
	i!	Z		23	01	
	i!P	Z	06	29	10	
	eP	Z	16	39	55	
	e	Z		40	05	
	i	Z			36½	
	iS	Z			47½	
	iS	Z			48½	
	i	Z			54	
16th	iP	Z	12	12	55½	<u>Felt</u> : Buin
	i	Z		13	01½	Int. 2(MM)
	iS	Z			52	6°50'S, 155°45'E.
	i	Z			56½	
	i!	Z		14	06½	
	eP	Z	15	17	21	U.S.C.G.S. 23½°N, 96°E.
	iPcP	Z		18	03	Burma
	ePPP	Z		20	46	H = 15 07 10 h approx. = 100 kms. Mag. = 7 (Pas)
	e	Z	15	47	51	
	e	Z	19	06	36	
	eP	Z	21	44	18	U.S.C.G.S. 52°N, 178½°W.
	e	Z			32	Andreanof Is. H = 21 34 03

4.

17th	iP	Z	00	35	46	
	i	Z			52	
	iS	Z		36	30 $\frac{1}{2}$	
	i				34	
	iP	Z	04	40	40 $\frac{1}{2}$	U.S.C.G.S. Mariana Is. about 300 kms. N.E. of Guam H = 04 36 02
	iP	Z	07	39	07 $\frac{1}{2}$	U.S.C.G.S. 7°S, 126 $\frac{1}{2}$ °E.
	i!	Z			09	Banda Sea
	i!	Z			22 $\frac{1}{2}$	H = 07 34 07
	ePP	Z		40	18	h approx. 450 kms.
	i	Z			23	Mag. 6 $\frac{3}{4}$ (Pas)
	iPcP	Z		42	12 $\frac{1}{2}$	
	i	Z			22	
	iS	N			59	
	iSS	N		45	20	
	eScS	E		49	09	
	eP	Z	13	17	02	
	eP	Z	17	09	40	U.S.C.G.S. Mariana Is.
	i	Z			45	Aftershock. H = 17 05 07
18th	i!P	Z	00	27	57	U.S.C.G.S. 5°S, 151°E. New Britain H = 00 27 27 S-P (Omori) = 14 secs. <u>Felt:</u> Toriu Int. 5(MM) 4°43'S, 151°41'E. <u>Felt:</u> Warangoi Int. 4-5(MM) 4°30'S, 152°20'E. <u>Felt:</u> Pomio Int. 4(MM) 5°30'S, 151°30'E. <u>Felt:</u> Rabaul Int. 3(MM) 4°11'S, 152°10'E. <u>Felt:</u> Kokopo Int. 3(MM) 4°20'S, 152°15'E. <u>Felt:</u> Kandrian Int. 1 (MM) 6°15'S, 149°35'E.
	iP	Z	06	24	15.D.	U.S.C.G.S. 5°S, 130°E.
	i!	Z			21 $\frac{1}{2}$	Banda Sea
	i!	Z			34	H = 06 19 15
	i!PPP	Z		25	19	Mag. 7 $\frac{1}{4}$ -7 $\frac{1}{2}$ (Pas)
	iPcP,S	Z		28	17 $\frac{1}{2}$	
	iSS	N		29	13	
	iSSS	N			25 $\frac{1}{2}$	
	e	Z		30	47	
	iScP	Z		31	42	
	iScS	Z		35	26	
	iP	Z	14	06	53	
	i!P	Z	16	37	24 $\frac{1}{2}$	

5.

19th	eP	Z	07	36	05	
	i!P				06	
	iP	Z	13	03	54	
	iP	Z	13	14	23	
	eP	Z	20	48	08	U.S.C.G.S. 15°N, 120½°E.
	i	Z			24	Luzon P.I.
						H = 20 40 54
20th	iP	Z	11	26	26	
	e	Z	13	22	06	B.C.I.S. Foreshock
	i	Z			20½	Halmahera region.
						H = 13 16 50
	e	Z	13	37	46	
	i	Z	17	38	08½	B.C.I.S. 2°N, 129½°E.
	i	Z			20	Halmahera region
						H = 17 32 52
	eP	Z	17	50	39½	U.S.C.G.S.
	i	Z			44	Marshall Is.
						H = 17 45 59
21st	iP	Z	06	38	59	
	i!	Z		39	02½	
	eP	Z	12	59	57	
	i!P	Z	14	59	41.C.	U.S.C.G.S. 50½°N, 147½°E.
						Sea of Okhotsk
						H = 14 51 06
						h approx. = 600 kms.
	e	Z	15	27	08	U.S.C.G.S. 22½°S, 172½°E.
	i				53	Loyalty Is.
						H = 15 21 20
	eP	Z	15	45	00	U.S.C.G.S. 23°N, 70°E.
	i	Z			02	W. India
						H = 15 32 25
						Mag. = 6½ (Pas)
	i	Z	18	54	30	
	i	N		55	03	
22nd	eP	Z	06	03	51	
		Z			58	
	ePKP	Z	09	44	17	U.S.C.G.S. 1°S, 69°W.
e	Z			45	Chile	
e	Z		45	18	H = 09 25 08	
						h approx. = 100 kms.
23rd	i!P	Z	14	26	16½	U.S.C.G.S. 4½°S, 154°E.
						Solomon Is. region
						H = 14 25 46
						Felt: Rabaul, Kokopo
						Int. 3(MM)
					Felt: Namatanai	
					Int. 3-4(MM)	
					3°40'S, 152°25'E.	
					Felt: Warangoi	
					Int. 3-4(MM)	
					4°30'S, 152°20'E.	

(cont. over)

6.

23rd. cont.	iP Z	21	58	21 $\frac{1}{2}$	U.S.C.G.S. 6°S, 148°E. Nr. N. Coast of New Guinea. H = 21 56 56 <u>Felt:</u> Finschhafen Int. 5(MM) 6°35'S, 147°50'E. <u>Felt:</u> Awelkon Int. 4(MM) 5°40'S, 147°50'E. <u>Felt:</u> Saidor Int. 3 (MM) 5°35'S, 146°30'E. <u>Felt:</u> Wau Int. 2(MM) 7°20'S, 146°45'E. <u>Felt:</u> Numundo Int. 1-2(MM) 5°30'S, 150°05'E.	
24th	iP i iS	Z	08	27 28	45 $\frac{1}{2}$ 00 14 18	
	i!P i!	Z E	12	41	10 $\frac{1}{2}$ 25	
	i!P	Z	16	26	26	
	eP i iPP ePcS	Z Z Z Z	19	02 03 09	14 17 14 18	U.S.C.G.S. 1°N, 126 $\frac{1}{2}$ °E. Molucca St. H = 18 56 32
25th	eP i! i	Z Z Z	07	37	46 50 $\frac{1}{2}$ 23	
26th	eP i! eS e(SS, ScS)	Z Z Z Z	17 18	55 00 04.4	05 07 20 -	U.S.C.G.S. 27°S, 178°E. Kermadec Is. H = 17 49 12 h approx. = 650 kms.
	eP i e	Z Z Z	18	10 15	05 06 $\frac{1}{2}$ 20	B.C.I.S. 27°S, 178°E. Aftershock Kermadec Is. H = 18 04 12 h approx. = 650 kms.
	eP e	Z Z	19	43 45	47 07	
27th	e eP	Z Z	18 21	02 41	46 29	U.S.C.G.S. 15°N, 147 $\frac{1}{2}$ °E. Mariana Is. H = 21 36 52
28th	iP i!	Z	02	02	41 $\frac{1}{2}$ 45 $\frac{1}{2}$	U.S.C.G.S. 6°S, 154°E. New Britain H = 02 01 58 h approx. = 150 kms. <u>Felt:</u> Karoola Int. 4(MM) 5°10'S, 154°35'E. <u>Felt:</u> Namatanai Int. 3-4(MM) 3°40'S, 152°25'E. <u>Felt:</u> Rabaul Int.3(MM) 4°11'S, 152°10'E.

(cont. over

7.

28th.	eP	Z	11	13	34	U.S.C.G.S. 151°N, 147½°E.
cont.	i	Z			39½	Mariana Is. Aftershock
	i				52	H = 11 09 05
	e	Z	17	33	25	( Felt: Namatanai ( Int. 4(MM) ( 3°40'S, 152°25'E. ( Felt: Warangoi ( Int. 3(MM) ( 4°30'S, 152°20'E.
	i!P	Z	19	43	46½	( Felt: Rabaul ( Int. 2(MM) ( 4°11'S, 152°10'E. ( Felt: Kokopo ( Int. 2(MM) ( 4°20'S, 152°15'E.
	iP	Z	19	54	44½	Aftershock; S-P (Omori) 11 secs.
	iP	Z	21	44	19	Aftershock; S-P (Omori) 11 secs.
29th	i!P	Z	04	42	07	Felt: Rabaul Int. 1 (MM) S-P (Omori) 14 secs. 4°11'S, 152°10'E.
30th	i!P	Z	15	55	30	Felt: Warangoi Int. 2(MM) S-P (Omori) 20 secs. 4°30'S, 152°20'E.
31st	eP	Z	16	43	50	U.S.C.G.S. 2½°N, 128½°E. Halmahera H = 16 38 24.

Tremors felt in the Territory, July, 1956.

Date	Time G.M.T.	Intensity Mercalli Modified	Latitude South	Longitude East	Locality
Jul. 4th	0305	4	06 25	155 50	Aropa
		2	06 50	155 45	Buin
	0307	1	06 50	155 45	Buin
	0325	2	06 50	155 45	Buin
		2	06 25	155 50	Aropa
	0338	2	06 25	155 50	Aropa
	0630	1	06 50	155 45	Buin
0725	1	06 50	155 45	Buin	
1930	1	06 50	155 45	Buin	
11th	1745	1 - 2	05 30	150 05	Numundo
	2304	2 - 3	06 15	149 35	Kandrian
16th	1213	2	06 50	155 45	Buin
	1845	2 - 3	09 45	150 50	Esa'ala

cont.

Date	Time G.M.T.	Intensity Mercalli Modified	Latitude South		Longitude East		Locality	
			°	'	°	'		
Jul 18th	c:0028	5	04	43	151	41	Toriu	
		4 - 5	04	30	152	20	Warangoi	
		4	05	30	151	30	Pomio	
		3	04	20	152	15	Kokopo	
		3	04	11	152	10	Rabaul	
		2 - 3	05	00	151	15	Ulamona	
		2	05	25	150	05	Walindi	
		1 - 2	05	30	150	05	Numundo	
		1	06	15	149	35	Kandrian	
		23rd	1426	3 - 4	03	40	152	25
3 - 4	04			30	152	20	Warangoi	
3	04			11	152	10	Rabaul	
3	04			20	152	15	Kokopo	
3	04			05	153	35	Waramung	
2200	5		06	35	147	50	Finschhafen	
2155	4		05	40	147	50	Awelkon	
(2145?)	3		05	35	146	30	Saidor	
2159	2		07	20	146	45	Wau	
	1 - 2		05	30	150	05	Numundo	
26th	1930	3	06	45	147	00	Lae	
28th	c:0203	4	05	10	154	35	Karoola	
		3 - 4	03	40	152	25	Namatanai	
		3	04	11	152	10	Rabaul	
		2	04	20	152	15	Kokopo	
		2	04	30	152	20	Warangoi	
		1	05	00	151	15	Ulamona	
		c:1944	4	03	40	152	25	Namatanai
			3	04	30	152	20	Warangoi
			2	04	11	152	10	Rabaul
			2	04	20	152	15	Kokopo
29th	0442	1	04	11	152	10	Rabaul	
	1134	1	03	05	152	40	Londolovit	
30th	1555	2	04	30	152	20	Warangoi	

TERRITORY OF PAPUA AND NEW GUINEA.

VULCANOLOGICAL OBSERVATORY RABAU.

SEISMOLOGICAL BULLETIN.

AUGUST, 1956.

1st	e	Z	20	29	13	
	e	Z		35	18	
	i!	Z	22	37	42	
	i!	Z			46	
	i!	E		38	03½	
2nd	eP	Z	02	42	27	<u>Felt:</u> Awelkon
	i	Z			30	Int. 1(MM)
	iS	Z		43	30	5°40'S, 147°50'E.
	i	Z			33½	
	iP	Z	07	26	50	U.S.C.G.S. 43½°N, 146°E.
	i	Z		27	07	Hokkaido
						H = 07 18 15
	e	Z	19	10	15	
	e	Z			20	
3rd	No record					
4th	i!P	Z	07	44	49½	
	i!S	Z		45	24	
	i!P	Z	09	49	08.D.	U.S.C.G.S. 5°S, 153°E.
						New Britain
						H = 09 48 45
						h approx. = 60 kms.
						Mag. 6¼-6½ (Pas)
						<u>Felt:</u> Rabaul
						Int. 3(MM)
						4°11'S, 152°10'E.
						<u>Felt:</u> Warangoi
						Int. 2-3(MM)
						4°30'S, 152°20'E.
						<u>Felt:</u> Ulamona
						Int. 2(MM)
						5°S, 151°15'E.
						<u>Felt:</u> Kokopo
						Int. 2(MM)
						4°20'S, 152°15'E.
	i!P	Z	10	00	49½	U.S.C.G.S. 5°S, 152°E.
						New Britain
						H = 10 00 25
						<u>Felt:</u> Rabaul
						Int. 1-2(MM)
						4°11'S, 152°10'E.
						<u>Felt:</u> Warangoi
						Int. 1 - 2(MM)
						4°30'S, 152°20'E.
						<u>Felt:</u> Ulamona
						Int. 1(MM)
						5°S, 151°15'E.
	iP	Z	12	40	08½	
	i!	Z			13	
	iS	Z			46½	
	i!	Z			47	
	iP	Z	14	47	54½	
	i!P	Z	18	44	11	<u>Felt:</u> Warangoi
						Int. 1(MM)
						4°30'S, 152°20'E. (over



2.

4th	iP	Z	23	21	15 $\frac{1}{2}$	
cont.	iS	Z			58	
5th	i!P	Z	00	29	09 $\frac{1}{2}$	
	i!P	Z	05	58	33 $\frac{1}{2}$	
	e	Z	13	08	39	
6th	iP	Z	19	44	45	
	i				53	
	iS		45		25 $\frac{1}{2}$	
7th)						
8th)	Nil					
9th	i(P)	Z	(09	40	38 $\frac{1}{2}$ )	U.S.C.G.S. 20°S, 168°E. Loyalty Is. H = 09 35 38
	e	Z	21	07	29	
	eP	Z	21	53	08	U.S.C.G.S. 31 $\frac{1}{2}$ °S, 178°W.
	i	Z			15 $\frac{1}{2}$	Kermadec Is. H = 21 45 42
	iP	Z	23	07	08.C.	U.S.C.G.S. 15°S, 176°W.
	i	E			13	Samoa Is.
	i	Z		08	09	H = 23 00 42
	i	Z			37	h approx. = 250 kms.
	epp	N		09	01	Mag. = 6 $\frac{3}{4}$ (Pas)
	eS	Z		12	12	
	e	Z			58	
	e	E		13	29	
	eScS	E		17	07	
10th	Nil					
11th	eP	Z	16	41	37	
	i	Z			54	
12th	i!	Z	00	24	28 $\frac{1}{2}$	
	i!	E			47 $\frac{1}{2}$	
	eP	Z	00	32	16	U.S.C.G.S. 19°S, 176°W.
	ePcP	Z		34	46	Tonga Is.
	ePcS)	Z		38	13	H = 00 25 42
	ScP)					h approx. = 200 kms.
	i!P	Z	05	40	34 $\frac{1}{2}$ .C.	U.S.C.G.S. Northern New Britain H = 05 40 07 h approx. = 150 kms. <u>Felt</u> : Rabaul Int. 1 (MM) 4°11'S, 152°10'E.
	iP	Z	06	44	21 $\frac{1}{2}$	
	iP	Z			47	
	eP	Z	17	07	06	U.S.C.G.S. 34°N, 138°E.
	i	Z			13	Honohu H = 16 59 33 Mag. = 6 $\frac{1}{2}$ -6 $\frac{3}{4}$ (Pas)
	i!		21	14	28	B.C.I.S. South Pacific Inconsistent data.

3.

13th	Nil					
14th	iP	Z	11	55	27	B.C.I.S. $32\frac{1}{2}^{\circ}\text{S}$ , $179\frac{1}{4}^{\circ}\text{W}$ . Kermadec Is. H = 11 48 57
	eP	Z	23	40	25	U.S.C.G.S. $19\frac{1}{2}^{\circ}\text{S}$ , $179^{\circ}\text{W}$ . Fiji Is. H = 23 34 33 h approx. = 550 kms.
	i	Z			27	
15th	iP	Z	05	29	12	U.S.C.G.S. $0^{\circ}$ , $101\frac{1}{2}^{\circ}\text{E}$ . Sumatra H = 05 20 37 h approx. = 300 kms.
	i	E			27 $\frac{1}{2}$	
	ePcP	Z		30	32	
	e	Z		31	12	
	e	Z	07	24	39	
	i	E		25	35 $\frac{1}{2}$	
	i	Z			45	
	iP	Z	10	57	14 $\frac{1}{2}$	U.S.C.G.S. $\frac{1}{2}^{\circ}\text{S}$ , $124^{\circ}\text{E}$ Celebes H = 10 51 19 h approx. = 150 kms.
	i!	Z			31 $\frac{1}{2}$	
	ePcP	N		59	57	
	eS	Z		02	04	
	ePcS)	Z		03	48	
	ScP)					
	eScS	NE		07.8		
	e	Z	13	20	50	U.S.C.G.S. $46^{\circ}\text{N}$ , $151^{\circ}\text{E}$ . Kurile Is. H = 13 12 10 Mag. = $6\frac{1}{4}$ (Pas)
	i	Z		21	05	
	i!P	Z	21	51	07	<u>Felt</u> : Rabaul Int. 2(MM) $4^{\circ}11'\text{S}$ , $152^{\circ}10'\text{E}$ . S-P (Omori) = 13 secs.
16th	Nil					
17th	i	Z	04	25	08	
	i!	Z			13	
	i	E		26	02 $\frac{1}{2}$	
	e	Z	11	45	25	B.C.I.S. $3\frac{1}{4}^{\circ}\text{S}$ , $135\frac{3}{4}^{\circ}\text{E}$ . N.W. New Guinea H = 11 41 31
	i	Z			27 $\frac{1}{2}$	
	e	Z			32 $\frac{1}{2}$	
	e	Z		48	52	
	ePg	Z	14	16	07 $\frac{1}{2}$	U.S.C.G.S. $4^{\circ}\text{S}$ , $151\frac{1}{2}^{\circ}\text{E}$ . New Britain H = 14 15 53 S-P (Omori) = 12 secs. <u>Felt</u> : Rabaul Int. 2(MM) $4^{\circ}11'\text{S}$ , $152^{\circ}10'\text{E}$ .
	i!	Z			09	
	iPg	Z	15	10	27 $\frac{1}{2}$	U.S.C.G.S. $4^{\circ}\text{S}$ , $151\frac{1}{2}^{\circ}\text{E}$ . New Britain - aftershock H = 15 10 13
	i!				28	
18th	iP	Z	10	57	08	<u>Felt</u> : Awelkon Int. 2(MM)
	i!	Z			24	
	i!S	E		58	13	$5^{\circ}40'\text{S}$ , $147^{\circ}50'\text{E}$ .
19th	Nil					
20th	iP	Z	05	58	13 $\frac{1}{2}$	

4.										
21st	e	Z	11	35	25	U.S.C.G.S. $49\frac{1}{2}^{\circ}\text{N}$ , $156^{\circ}\text{E}$ . Kurile Is. H = 11 26 01				
22nd	eP	Z	11	31	05	U.S.C.G.S.				
	i	Z			09	New Hebrides				
	ipp	Z			30	H = 11 26 06				
	i	Z			32	23				
	iS,PcP	E			35	01	B.C.I.S. near $18^{\circ}\text{S}$ , $169^{\circ}\text{E}$ .			
	eScS	E			42	00	H = 11 26.2m.			
	e	E			42	04	Inconsistent data			
	iP	Z			17	18	$41\frac{1}{2}$	B.C.I.S. $1^{\circ}\text{N}$ , $125\frac{1}{4}^{\circ}\text{E}$ . Molucca St. H = 17 12 54		
	e	Z				25	35			
	e(P)	e				19	50	48	B.C.I.S. $28^{\circ}\text{N}$ , $95^{\circ}\text{E}$ . N. Assam H = 19 40 13	
51			47							
23rd	i!P	Z	09	05	$11\frac{1}{2}$					
	i!	Z			15					
	i	N			06		00			
	ePKP	Z			14		07	47	U.S.C.G.S. $15^{\circ}\text{S}$ , $68^{\circ}\text{W}$ . Bolivia H = 13 48 30 h approx. = 100 kms. Mag. = $6\frac{1}{4}$ (Pas)	
	ePKS	Z					11	15		
	i!P	Z			22		11	$33\frac{1}{2}$		
	i!	E					12	00		
	i!	E						19		
	24th	i(P)			Z		04	37	40	U.S.C.G.S. $53^{\circ}\text{N}$ , $172\frac{1}{2}^{\circ}\text{E}$ . Aleutian Is. H = 04 27 33 Mag. $6\frac{1}{2}$ (Pas)
		eP			Z				08	
25th	iP	Z	00	28	$04\frac{1}{2}$	U.S.C.G.S. $2^{\circ}\text{N}$ , $129^{\circ}\text{E}$ . Halmahera H = 00 22 44				
	i				$17\frac{1}{2}$					
	e!	Z			22		07	17	U.S.C.G.S. $12^{\circ}\text{S}$ , $166\frac{1}{2}^{\circ}\text{E}$ . Santa Cruz Is. H = 22 03 28 h approx. = 200 kms.	
	i!	Z			08		09	23		
e	Z	10	37	09						
26th	eP	Z	11	18	57					
	i	Z		19	04					
	eS	E			46					
27th	i!P	Z	02	50	29	Felt: Kokopo Int. 1(MM) $4^{\circ}20'\text{S}$ , $152^{\circ}15'\text{E}$ . Felt: Warangoi Int. 1(MM) $4^{\circ}30'\text{S}$ , $152^{\circ}20'\text{E}$ . S-P (Omori) = 14 secs.				
28th	i	Z	01	03	23	Felt: Awelkon Int. 2(MM) $5^{\circ}40'\text{S}$ , $147^{\circ}50'\text{E}$ .				

(cont. over)

5.

28th cont.	e	Z	02	50	11	U.S.C.G.S. $23\frac{1}{2}^{\circ}\text{S}$ , $180^{\circ}$ Tonga Is. H = 09 49 13 h approx. = 600 kms.
	i	Z			17	
	i	Z			55	
	i!	Z		51	00	
eP	Z	09	55	03		
e	Z	10	00	27		
i	Z			29		
29th	i!P	Z	17	05	15	
30th	i	Z	03	35	00	
	i	Z		37	04	
	i	Z	12	54	$07\frac{1}{2}$	
	e	Z	17	04	33	
	e	Z	20	11	42	
	i	Z		13	03	
	i	Z			07	
	i	Z	20	33	$52\frac{1}{2}$	
	e	Z		35	50	
	e	Z	22	43	49	
i	Z			51		
31st	iP	Z	00	12	$56\frac{1}{2}$	U.S.C.G.S. Solomon Is. H = 00 11 46 h approx. = 100 kms. <u>Felt:</u> Boku Int. 4 (MM) $6^{\circ}35'\text{S}$ , $155^{\circ}20'\text{E}$ . <u>Felt:</u> Buin Int. 3 (MM) $6^{\circ}50'\text{S}$ , $155^{\circ}45'\text{E}$ . <u>Felt:</u> Aropa Int. 3 (MM) $6^{\circ}25'\text{S}$ , $155^{\circ}50'\text{E}$ .
	i!	E		13	$08\frac{1}{2}$	
	i!	Z			54	
e	Z	06	58	13		
eP	Z	22	07	59	U.S.C.G.S. $15\frac{1}{2}^{\circ}\text{N}$ , $147\frac{1}{2}^{\circ}\text{E}$ . Mariana Is. - foreshock H = 22 03 23	
i	Z		08	05		
eP	Z	23	11	11	U.S.C.G.S. $15\frac{1}{2}^{\circ}\text{N}$ , $147\frac{1}{2}^{\circ}\text{E}$ . Mariana Is. H = 23 06 38	
eS	Z		15	10		

Tremors felt in the Territory, August, 1956.

Date	Time G.M.T.	Intensity Mercalli Modified	Latitude South	Longitude East	Locality
Aug. 1st	0150	2	05 40	147 50	Awelkon
2nd	0237	1	05 40	147 50	Awelkon
3rd	1107	1	05 40	147 50	Awelkon
4th	0949	3	04 11	152 10	Rabaul
		2 - 3	04 30	152 20	Warangoi
		2	05 00	151 15	Ulamona
		2	04 20	152 15	Kokopo
		1 - 2	04 11	152 10	Rabaul
		1 - 2	04 30	152 20	Warangoi
		1	05 00	151 15	Ulamona
	c:1840	1	04 30	152 20	Warangoi
5th	0157	1	06 50	155 45	Buin
6th	0926	3	02 40	141 20	Vanimo
12th	0541	1	04 11	152 10	Rabaul
15th	2151	2	04 11	152 10	Rabaul
17th	1416	2	04 11	152 10	Rabaul
18th	1055	2	05 40	147 50	Awelkon
19th	1919	1	06 50	155 45	Buin
21st	1405	2	09 45	150 50	Esa'ala
	1530	1	"	"	"
24th	0500	3	06 25	155 50	Aropa
27th	0250	1	04 20	152 15	Kokopo
		1	04 11	152 10	Rabaul
		1	04 30	152 20	Warangoi
28th	0102	2	05 40	147 50	Awelkon
31st	c:0013	4	06 35	155 20	Boku
		3	06 25	155 50	Aropa
		3	06 50	155 45	Buin

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1st	iP	Z	00	26	11 $\frac{1}{2}$	U.S.C.G.S. 15 $\frac{1}{2}$ <sup>o</sup> N, 147 $\frac{1}{2}$ <sup>o</sup> E. Mariana Is. - aftershock H = 00 21 36
2nd	Nil					
3rd	eP	Z	15	04	37	U.S.C.G.S. S. of Formosa H = 14 56 52
	eP	Z	18	09	59	B.C.I.S. 17 $\frac{3}{4}$ <sup>o</sup> S, 168 <sup>o</sup> E. New Hebrides Is.
	i	Z		10	05	H = 18 05 13
4th	eP	Z	12	01	55	U.S.C.G.S. Fiji Is. H = 11 55 31 h approx. = 100 kms.
	e	Z	14	39	09	
5th)	Nil					
6th)						
7th	iP	Z	00	56	23	<u>Felt:</u> Awelkon
	i	Z			29	Int. 3(MM)
	i!	E			31	5 <sup>o</sup> 40'S, 147 <sup>o</sup> 50'E.
	iS	Z		57	21	<u>Felt:</u> Kilenge
	i!	N			31 $\frac{1}{2}$	Int. 2(MM)
	i	Z			50	5 <sup>o</sup> 30'S, 148 <sup>o</sup> 20'E.
8th	eP	Z	02	59	25	
	i	Z			29	
9th	iP	Z	15	25	36	U.S.C.G.S.
	iS	Z		30	57 $\frac{1}{2}$	Fiji Is. region H = 15 19 44 h approx. = 550 kms.
	eP	Z	17	40	23	U.S.C.G.S. 3 <sup>o</sup> N, 129 <sup>o</sup> E.
	i	Z			32	Halmahera
	i	Z			38	H = 17 35 13
	ePcP	Z		43	05	h approx. = 150 kms.
	eS	Z		44	35	
	e	Z	18	09	40	
10th	e	Z	02	18	31	
	eP	Z	12	40	34	U.S.C.G.S. 0 <sup>o</sup> , 101 $\frac{1}{2}$ <sup>o</sup> E.
	e	Z		41	02	Sumatra H = 12 31 54
11th	e(P)	Z	02	38	31	U.S.C.G.S. 16 $\frac{1}{2}$ <sup>o</sup> S, 178 <sup>o</sup> E.
	e			40	02	Fiji Is. H = 02 32 28 Mag. = 6 (Pas)
	eP	Z	15	48	56	U.S.C.G.S. 17 <sup>o</sup> S, 169 <sup>o</sup> E.
	ipp	Z		49	15	New Hebrides Is.
	iPPP	Z			38 $\frac{1}{2}$	H = 15 44 04
	e	Z		50	10	Mag. = 6 (Pas)
	e	Z			58	
	i	Z		51	29 $\frac{1}{2}$	
	ePcP	Z		53	10	

(cont. over)

11th cont.	e(P) e	Z	21	13 14	21 00	U.S.C.G.S. 49½°N, 155°E. Kurile Is. H = 21 03 56 Mag. 6¼ (Pas)
12th	e	Z	16	18	09	
	iP e ePPP ePcS	Z Z Z Z	20	09 12 14	20 47 42 18	U.S.C.G.S. 49½°N, 156°E. Kurile Is. - aftershock H = 19 59 54
13th	eP i i	Z Z Z	13	58 59	47 50 41	U.S.C.G.S. 3°N, 128½°E. Halmahera H = 13 53 49 h approx. = 300 kms.
	iP	Z	14	38	54	U.S.C.G.S. 800 kms. S. of Tasmania H = 14 30 20
	eP ePP ePcP	Z Z Z	18	48 49 52	35 04 50	B.C.I.S. 17½°S, 169°E. New Hebrides Is. H = 18 43 46
14th	e i	Z Z	09	10	43 48½	
15th	iPKP e ePKS ePPP	Z Z E Z	07 08	58 01 02	12 30 47 18	U.S.C.G.S. 20°S, 69°W. Chile H = 07 39 04 h approx. = 100 kms. Mag. 6¾ (Pas)
	i!)P e )	Z NE	10	34	06	U.S.C.G.S. 4°S, 151°E. New Britain H = 10 33 09 h approx. = 400 kms.
	eP i	Z Z	16	31	19 37	B.C.I.S. 17¼°S, 169½°E. H = 16 26 30 New Hebrides Is.
16th	e e i	Z Z NE Z	18 01	32 04 05.5 05	12 43	Long period waves
	eP e e e eS	Z Z Z E E	08 09	50 51 53 00.5	03 06 02 56	U.S.C.G.S. 34°N, 69½°E. Afghanistan H = 08 37 22 Mag. = 6¼-6½ (Pas)
	iP e eS iScP	Z Z E Z	13	33 34 38 39	10½ 46 26 06	U.S.C.G.S. 19°S, 174½°W. Tonga Is. H = 13 26 30 h approx. = 200 kms.
17th	eP i! iS	Z Z E	19	15 16	51 54 21½	
	iP iPP	Z Z	20	28 31	39 21	U.S.C.G.S. 5½°N, 95°E. Sumatra H = 20 19 07 h approx. = 150 kms.

						3.
18th	i!	Z	02	28	52	
	i	Z		32	24 $\frac{1}{2}$	
	i	Z	03	00	08 $\frac{1}{2}$	<u>Felt:</u> Talasea Int. 1(MM) 5°20'S, 150°05'E.
	i!	Z	15	38	28	
19th	Nil					
20th	e	Z	10	54	22	
	i	Z			25 $\frac{1}{2}$	
	eP	Z	20	15	49	U.S.C.G.S. 51°N, 159°E. Kamchatka - foreshock H = 20 06 09
	eP	Z	22	01	39	U.S.C.G.S. 51 $\frac{1}{2}$ °N, 159 $\frac{1}{2}$ °E. Kamchatka H = 21 52 01 Mag. = 6 $\frac{1}{4}$ (Pas)
	iPcP	Z		03	06	
21st	ePKP	Z	19	30	10	U.S.C.G.S. 26 $\frac{1}{2}$ °S, 63°W. Argentina H = 19 11 59 h approx. = 600 kms.
	i	Z	19	32	26	
22nd	i!	Z	23	15	18 $\frac{1}{2}$	<u>Felt:</u> Rabaul Int. 1(MM) 4°11'S, 152°10'E.
23rd	iP	Z	11	31	00	
	i	Z			05	
24th	eP	Z	07	08	07	U.S.C.G.S. 22°S, 175°E. Fiji Is. H = 07 02 13
25th	Nil					
26th	e	Z	19	17	51	
27th)						
28th)	Nil					
29th	iP	Z	04	01	09 $\frac{1}{2}$	U.S.C.G.S. 0°, 123°E. Celebes H = 03 55 27 h approx. = 300 kms.
	eP	Z	09	13	48	U.S.C.G.S. 7 $\frac{1}{2}$ °N, 94 $\frac{1}{2}$ °E. Nicobar Is. H = 09 03 37
	e	Z	11	55	09	
	i	Z			16	
	e	Z		56	56	
	eP	Z	21	28	53	U.S.C.G.S. 37 $\frac{1}{2}$ °N, 141°E. Honshu H = 21 20 52
	e	Z		29	18	
	eP	Z	22	28	10	U.S.C.G.S. 3°N, 128°E. Halmahera H = 22 22 48 h approx. = 60 kms.
	i	Z			23	
	e	N		30	25	
	e	Z			55 $\frac{1}{2}$	
	ePcS	Z		35	18	
ScP						

(cont. over



4.

29th	iP	Z	23	28	33	U.S.C.G.S. 35 $\frac{1}{2}$ <sup>o</sup> N, 140 <sup>o</sup> E. Honshu H = 23 20 52 h approx. = 60 kms. Mag. = 6 $\frac{3}{4}$ -7 (Pas)
cont.	i	Z		29	07	
30th	i!P	Z	14	46	09 $\frac{1}{4}$	U.S.C.G.S. 14 <sup>o</sup> N, 144 <sup>o</sup> E. Mariana Is. H = 14 41 44 h approx. = 100 kms.
	i	E			15 $\frac{3}{4}$	
	i	N			28 $\frac{1}{2}$	
	i	Z		47	10	
	e	Z			53	
	e	N		50	54	

Tremors felt in the Territory, September, 1956.

Date	Time G.M.T.	Intensity Mercalli Modified	Latitude		Longitude		Locality	
			South	East	East	East		
			o	'	o	'		
Sep. 7th	0055	3	05	40	147	50	Awelkon	
		2	05	30	148	20	Kilenge	
10th	1915	2	05	20	151	05	Bialla	
14th	0855	1	06	25	155	50	Aropa	
	1545	2	06	25	155	50	Aropa	
17th	1415	2	05	20	150	05	Talasea	
18th	0300	1	05	20	150	05	Talasea	
	0605	1 - 2	05	35	150	10	Numundo	
20th	0500	1 - 2	05	35	150	10	Numundo	
22nd	2315	1	04	11	152	10	Rabaul	
		?	04	30	152	20	Warangoi	

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1st	Nil				
2nd	iP	15	06	11	U.S.C.G.S. 53°N, 159°E.
	i			22	Kamchatka
	i		07	48	H = 14 56 26
	e		14	07	h approx. = 60 kms.
3rd	eP	08	37	51	U.S.C.G.S. 20°S, 69½°W.
	(e			52½	Chile
	(e		38	20	H = 08 18 49
	e		41	10	h approx. = 150 kms.
	e			27	Mag. = 6½ (Pas)
	e			59	
	iP!	13	10	05	Deep. Compression from just south of West.
	e	13	52	17	
4th	i(P)	02	24	41	
	i		25	27½	
	i			41	
	i!			42	
	i	02	55	10	
5th	Times uncertain				
6th	iP!	03	13	20	Dilatation to North-East possibly deep
	i!			27	
	iS			35	<u>Felt:</u> Londolovit
	i!			40	Int. 4(MM)
					3°05'S, 152°40'E.
	eP	06	21	37	U.S.C.G.S. 2½°N, 126½°E.
					Molucca St.
					H = 06 15 57
	eP	17	06	38	U.S.C.G.S. 16°S, 179°W.
	i			46	Fiji Is.
	e		11	09	H = 17 00 14
	e		12	01	h = 100 kms.
	e		16	03	
7th	iP	21	31	44½	U.S.C.G.S. 13°S, 167°E.
	i		32	12	New Hebrides Is.
	i			57	H = 21 27 50
	i		39	58½	h approx. = 100 kms.
	e		43	41	
8th	iP	00	21	47	U.S.C.G.S. 4°S, 144½°E.
	eP			47½	Nr. N. Coast of New Guinea
	i		22	00	H = 00 19 47
					h approx. = 100 kms.
					(Rabaul) Compression from West.
					<u>Felt:</u> Angoram
					Int. 3(MM)
					4°05'S, 144°05'E.
	i(P)	04	33	31	U.S.C.G.S. 12°N, 141°E.
	i			32	Mariana Is.
					H = 04 29 04

(Cont. over

				2.	
8th	eP	14	52	25	
cont.	or P'				
	i			32	
	e		53	56	
	e?		56.6	-	
	e	(15)	03.2	-	
	e		04.7		
	iP	17	21	09	
	iP!	17	41	14	Compression from South-East <u>Felt:</u> Rabaul Int. 2(MM) $4^{\circ}11'S, 152^{\circ}10'E.$ S-P (Omori) = 11 secs.
9th	eP	16	55	$30\frac{1}{2}$	U.S.C.G.S. $15\frac{1}{2}^{\circ}N, 147\frac{1}{2}^{\circ}E.$
	i			32	Mariana Is.
	i			$46\frac{1}{2}$	H = 16 50 56
	e		56	45	
	e		59.3	-	
10th	eP	02	02	30	B.C.I.S. Nr. N. Coast of
	i			36	New Guinea
	e		03	08	H = 02 00.6 m.
	eP	15	43	41	U.S.C.G.S. $28\frac{1}{2}^{\circ}N, 78^{\circ}E.$
					N. India
					H = 15 31 34
	iP	21	13	22	? Small local tremor
11th	iP	02	33	21	U.S.C.G.S. $46^{\circ}N, 150\frac{1}{2}^{\circ}E.$
	i!			23	Kurile Is.
	i			48	H = 02 24 33
	i			54	h approx. = 100 kms.
	i		34	04	Mag. = $7\frac{1}{4}-7\frac{1}{2}$ (Pas)
	i		35	40	
	i		36	59	
	e		39	11	
	e			43	
	e		40.4	-	
	e		41.2		
	e		46.2		
	i		53	56	
	e	(03)	04.0		
	e		04.8		
	eP	05	56	39	? Small local tremor
	eP	17	01	34	U.S.C.G.S. $40\frac{1}{2}^{\circ}N, 126\frac{1}{2}^{\circ}W.$
	e		05	00	California
	e		07	22	H = 16 48 46
					Mag. = 6 (Pas)
	eP	17	22	06	U.S.C.G.S. $41^{\circ}N, 126^{\circ}W.$
	i			$07\frac{1}{2}$	California - Aftershock
	i			16	H = 17 18 17
	i			25	
	i			33	
	i			53	
	e		23.8	-	
	e		24.7	-	

					3.
12th	ePKP e	02 (03)	56 00	53 13	U.S.C.G.S. 15 $\frac{1}{2}$ <sup>o</sup> S, 75 <sup>o</sup> W. Coast of Peru H = 02 37 45 h approx. = 60 kms. Mag. = 6 $\frac{1}{2}$ (Pas)
	eP i e	12	31 38.1	17 28 $\frac{1}{2}$ -	U.S.C.G.S. 42 $\frac{19}{2}$ <sup>o</sup> N, 144 $\frac{1}{2}$ <sup>o</sup> E. Hokkaido H = 12 22 46 Mag. = 6 $\frac{1}{4}$ -6 $\frac{1}{2}$ (Pas)
	iP e e	18	45 52	29 49 23	B.C.I.S. 17 $\frac{1}{4}$ <sup>o</sup> S, 170 <sup>o</sup> E. New Hebrides Is. H = 18 40 34 h = 200 kms.
13th	e i e e	15	10 11 21	49 05 46 58	B.C.I.S. Insufficient data
	eP i i!	18	54	49 $\frac{1}{2}$ 51 53	U.S.C.G.S. 5 <sup>o</sup> S, 149 $\frac{1}{2}$ <sup>o</sup> E. New Britain H = 18 54 06 h = 150 kms. <u>Felt:</u> Numundo Pl. Int. 3-4(MM) 5 <sup>o</sup> 35'S, 150 <sup>o</sup> 10'E. <u>Felt:</u> Popondetta Int. 3(MM) 8 <sup>o</sup> 45'S, 148 <sup>o</sup> 15'E. <u>Felt:</u> Awelkon Int. 3(MM) 5 <sup>o</sup> 40'S, 147 <sup>o</sup> 50'E. <u>Felt:</u> Kandrian Int. 3(MM) 6 <sup>o</sup> 15'S, 149 <sup>o</sup> 35'E.
14th	eP	00	36	27	J.M.A. 36 <sup>o</sup> 8N, 140 <sup>o</sup> 9E. Honshu H = 00 31 02
	eP i i i!	04	01	00 01 07 $\frac{1}{2}$ 11	U.S.C.G.S. 4 <sup>o</sup> S, 146 <sup>o</sup> E. Nr. N. Coast of New Guinea H = 03 59 27
15th	iP	11	32	39 $\frac{1}{2}$	B.C.I.S. Insufficient data
16th	iP i iS i!	17	10 11	24 $\frac{1}{2}$ 25 01 $\frac{1}{2}$ 07	Compression from just South of West. <u>Felt:</u> Numundo Pl. Int. 3(MM) 5 <sup>o</sup> 35'S, 150 <sup>o</sup> 10'E.
17th	e(P) i i	17	10 11	58 09 34	
18th	Times uncertain.				

4.

19th	iP!	10	51	27 27 $\frac{1}{2}$	U.S.C.G.S. 5°S, 154 $\frac{1}{2}$ °E. Solomon Is. H = 10 52 42 h approx. = 150 kms. <u>Felt:</u> Karoola Int. 4(MM) 5°10'S, 154°35'E. <u>Felt:</u> Fead Is. Int. 2(MM) 3°25'S, 154°45'E. <u>Felt:</u> Warangoi Int. 1-2(MM) 4°30'S, 152°20'E. <u>Felt:</u> Rabaul Int. 1(MM) 4°11'S, 152°10'E.
	eP i i i e e e i e	12	06	25 41 05 53 27 $\frac{1}{2}$ 50 05 42 46 38	U.S.C.G.S. 21°S, 179°W. Fiji Is. H = 12 00 38 h approx. = 550 kms.
	eP or P' i e e e e e	14	18	07 14 24 28 05 19 28.7 -	U.S.C.G.S. 56 $\frac{1}{2}$ °S, 122°W. S. Pacific Ocean H = 14 05 34 Mag. = 6 $\frac{1}{2}$ (Pas)
	eP or P' e e e e	20	57	42 03 51 00 32 06.0 -	U.S.C.G.S. 52°N, 177°E. Aleutian Is. H = 20 47 33 Mag. = 6 $\frac{3}{4}$ (Pas)
20th)					
21st)	Nil				
22nd	iP i i! i i IS?N i i!	12	36	35 $\frac{1}{2}$ 38 $\frac{1}{2}$ 42 55 $\frac{1}{2}$ 24 34 37 $\frac{1}{2}$ 44	U.S.C.G.S. 9 $\frac{1}{2}$ °S, 150°E. Nr. S.E. Coast of New Guinea H = 12 35 10 <u>Felt:</u> Mukawa Int. 3-4 (MM) 9°40'S, 150°0'E. <u>Felt:</u> Baniara Int. 3(MM) 9°45'S, 149°55'E. <u>Felt:</u> Esa'ala Int. 3(MM) 9°45'S, 150°50'E. <u>Felt:</u> Losuia Int. 3(MM) 8°30'S, 151°05'E. <u>Felt:</u> Sagari River Int. 3(MM) 10°25'S, 150°15'E. <u>Felt:</u> Salamo Int. 3 (?) (MM) 9°40'S, 150°45'E.

(cont. over

22nd cont.					
(iP	12	42	38		Aftershock. <u>Felt</u> : Esa'ala, Salamo.
(					
(iS N		43	33 $\frac{1}{2}$		
i!			42 $\frac{1}{2}$		
eP	12	53	08		B.C.I.S. Nr. the S.E. Coast of
eS N		54	05 $\frac{1}{2}$		New Guinea. Aftershock. <u>Felt</u> :
i!			20		Esa'ala, Salamo.
eP	15	19	32		U.S.C.G.S. 9 $\frac{1}{2}$ <sup>10</sup> S, 150 <sup>0</sup> E.
i			33 $\frac{1}{2}$		Nr. S.E. Coast of New Guinea
i!			41		H = 15 18 13
iS		20	29		h approx. = 100 kms.
ei			35		<u>Felt</u> : Esa'ala
i!			39		Int. 3(MM)
					9 <sup>0</sup> 45'S, 150 <sup>0</sup> 50'E.
					<u>Felt</u> : Salamo
					Int. 3(?) (MM)
					9 <sup>0</sup> 40'S, 150 <sup>0</sup> 45'E.
eP	15	28	37		B.C.I.S. Nr. N.E. Coast of
i(S)		29	40		New Guinea. Aftershock.
i!			43		<u>Felt</u> : Esa'ala, Salamo.
					Several other small aftershocks
					felt in the Esa'ala area.
23rd	iP	08	48	17	U.S.C.G.S. 13 $\frac{1}{2}$ <sup>10</sup> N, 120 $\frac{1}{2}$ <sup>10</sup> E.
	e			30	Mindoro. Philippine Is.
	ipP			39 $\frac{1}{2}$	H = 08 41 22
	i			58	h approx. = 100 kms.
	ePP		49	54	
	i		50	15	
	e			36	
24th	eP	03	18.0	-	
	ei		18	0.5	
	e		19	25	
	e		20	10	
	e		21	08	
	iP!	05	17	29 $\frac{1}{2}$	Compression from East (?)
	i(S)!			51	
	ePKP	15	01	06	U.S.C.G.S. 12 <sup>0</sup> N, 87 <sup>0</sup> W.
	i			12	Nicaragua
	e		02	31	H = 14 42 10
	eSKS		08.3	-	Mag. 7 $\frac{1}{4}$ (Pas)
	eP	17	24	08	Compression. B.C.I.S.
	i!			10	6 $\frac{1}{2}$ <sup>10</sup> S, 156 $\frac{3}{4}$ <sup>0</sup> E.
	iS			58 $\frac{1}{2}$	Solomon Is.
	i		25	06	H = 17 22 49
	i!			08 $\frac{1}{2}$	<u>Felt</u> : Karoola
					Int. 4(MM)
					5 <sup>0</sup> 10'S, 154 <sup>0</sup> 35'E.
					<u>Felt</u> : Aropa
					Int. 3(MM)
					6 <sup>0</sup> 25'S, 155 <sup>0</sup> 50'E.
25th	Nil				
26th	e	02	52	40	U.S.C.G.S. 17 $\frac{1}{2}$ <sup>10</sup> S, 176 <sup>0</sup> E.
					Fiji Is.
					H = 02 47 00
	iP	08	59	30	U.S.C.G.S. 6 $\frac{1}{2}$ <sup>10</sup> S, 130 <sup>0</sup> E.
	i	(09)	00	00	Banda Sea
	i			03	H = 08 54 46
	e			22	h approx. = 200 kms.

(cont. over

6.

26th cont.	iP!	21	40	54	B.C.I.S. New Britain H = 21 40 5m. Dilatation to South-south-east <u>Felt</u> : Pomio Int. 2-3 (MM) 5°30'S, 151°30'E.
	eiP	22	54	42	U.S.C.G.S. 14°S, 167°E.
	i			59	New Hebrides Is.
	i		55	10½	H = 22 50 24
	e		58	42	Mag. = 6½ (Pas)
	Confused by small local shocks.				
27th	e	17	22	44	B.C.I.S. Mariana Is. region H = 17 18.6m.
28th	e(P)	03	01	41	B.C.I.S. 25°S, 179½°W. Fiji Is. H = 02 55 34 h = 400 kms.
	e	03	07	06	
	iP!	03	07	39	Dilatation to South-south-east <u>Felt</u> : Rabaul Int. 1-2 (MM) 4°11'S, 152°10'E.
	eP	03	36	11	U.S.C.G.S. 32°S, 179°W.
	i			13	Kermadec Is.
	e		46.4	-	H = 03 28 41 Mag. = 6¾-7 (Pas)
	Part of this shock was lost during record change.				
	eP	10	51	53	U.S.C.G.S. 14°N, 123½°E.
	e			56	Luzon, Philippine Is.
	i		52	24	H = 10 45 06
	e			31	
	e		53	12	
	e		55	07	
	e	11	21	17	
	iP!	18	19	15½	U.S.C.G.S. N r. E. Coast of New Britain H = 18 18 50 <u>Felt</u> : Pomio Int. 2 (MM) 5°30'S, 151°30'E.
	Dilatation to south-south-east				
29th	iP!	02	21	20	<u>Felt</u> : Warangoi Int. 2 (MM) 4°30'S, 152°20'E. S-P (Omori) = 11 secs.
	Dilatation to south-south-east				
	e	08	50	17	
	e(P)	12	13	19	
	i			24	
	iPKP	16	01	13½	U.S.C.G.S. 8½°S, 77°W.
	e			38	Peru H = 15 42 08 h approx. = 60 kms.
30th	eP	19	14	30	
	i			35½	

7.

31st	iP!	03	20	55	
	i		21	05 <sup>1</sup> / <sub>2</sub>	
	i!			09 <sup>1</sup> / <sub>2</sub>	
	iS?			43	
	i			48	
	e	14	17	32	B.C.I.S. 27 <sup>1</sup> / <sub>4</sub> °N, 54 <sup>1</sup> / <sub>2</sub> °E.
	e		21	29	S. of Iran
	e		40	06	H = 14 03 14
					Mag. = 6 <sup>3</sup> / <sub>4</sub> (Pas)
	iP	17	37	07	B.C.I.S. Discordant data.

Tremors felt in the Territory, October, 1956.

Date	Time G.M.T.	Intensity Mercalli Modified	Latitude South	Longitude East	Locality
Oct. 3rd	0130	2	07 55	145 25	Ihu
6th	c:0313	4	03 05	152 40	Londolovit
7th	1800	2	06 50	155 45	Buin
8th	c:0022	3	04 05	144 05	Angoram
		2	04 15	144 55	Bogia
		1	03:35	143 40	Wewak
	1741	2	04 11	152 10	Rabaul
		2	04 20	152 15	Kokopo
		(2	04 30	152 20	Warangoi)?
11th	0140	2	06 25	143 20	Lake Kutubu
	1800	2	06 10	150 35	Lindenhafen
13th	1855	3 - 4	05 35	150 10	Numundo Pl.
		3	08 45	148 15	Popondetta
		3	05 40	147 50	Awelkon
		3	06 15	149 35	Kandrian
		2 - 3	08 20	147 50	Ioma
		2	05 30	148 20	Kilenge
		2	09 30	147 10	Port Moresby
14th	0000	2	05 30	148 20	Kilenge
	2122	3	05 40	147 50	Awelkon
15th	0322	3	05 40	147 50	Awelkon
	0330	2	05 30	148 20	Kilenge
	1905	1	06 15	149 35	Kandrian
16th	1710	3	05 35	150 10	Numundo Pl.
19th	1051	4	05 10	154 35	Karoola
		2	03 25	154 45	Fead Is.
		1 - 2	04 30	152 20	Warangoi
		1	04 11	152 10	Rabaul
22nd	1233	3 - 4	09 40	150 00	Mukawa
		3	09 45	149 55	Baniara
		3	09 45	150 50	Esa'ala
		3	08 30	151 05	Losuia
		3	10 25	150 15	Sagari R.
	1240	3?	09 40	150 45	Salamo
	1630	3	09 45	150 50	Esa'ala

(cont. over)



Tremors felt - cont.

Date	Time G.M.T.	Intensity Mercalli Modified	Latitude South	Longitude East	Locality
<u>22nd.</u>					
Small shocks felt at Esa'ala at 0715, 1115, 1131, 1239, 1243, 1250, 1252, 1253, 1255, 1310, 1313, 1315, 1330, 1340, 1430, 1500, 1520, 1525, 1530, 1535, 1730, and 1900.					
Small shocks felt at Salamo at 1253, 1255, 1310, 1313, 1315, 1330, 1340, 1430, 1500, 1520, 1525, 1530, 1535, 1630, 1730 and 1900.					
23rd.	0115 0118	2 4	09 40 09 45	150 45 150 50	Salamo Esa'ala
24th	0545? 1130 1730 1818	3 1 3 4 4	05 10 06 50 06 25 06 50 05 10	154 35 155 45 155 50 155 45 154 35	Karoola Buin Aropa Buin Karoola
25th	1115-20	2	03 05	152 40	Londolovit
26th	2140 2150(?)	2 - 3 1	05 30 05 00	151 30 151 15	Pomio Ulamona
28th	0307     1819	1 - 2 1 - 2 1 1 1 2	04 11 04 30 05 00 04 20 05 00 05 30	152 10 152 20 151 15 152 15 152 05 151 30	Rabaul Warangoi Ulamona Kokopo Tol Pomio
29th	0221   1020 1858 2108	2 1 2 2 2 4 2	04 30 05 00 04 20 05 00 05 30 09 45 "	152 20 151 15 152 15 152 05 151 30 150 50 "	Warangoi Ulamona Kokopo Tol Pomio Esa'ala "
30th	1845	2	05 40	147 50	Awelkon
31st	0916 1645 1700 1708	1 1 - 2 1 - 2 1 - 2	04 15 09 45 " "	151 35 150 50 " "	Rangarere Esa'ala " "

TERRITORY OF PAPUA AND NEW GUINEA.

VULCANOLOGICAL OBSERVATORY RABAU.

SEISMOLOGICAL BULLETIN.

NOVEMBER, 1956

1st	Nil					
2nd	Nil					
3rd	iP	Z	05	25	03 $\frac{1}{2}$	<u>Felt: Rabaul</u> Int. 1(MM) 4°11'S, 152°10'E.
	eP	Z	18	08	03	U.S.C.G.S. 24°S, 180°
	e	Z			22	Fiji Is.
	iPcP	Z		10	32	H = 18 02 04
	eS	E		12	34	h approx. = 500 kms.
	eScP	Z		13	31	
	e	E		14	26	
	eScS	N		17	34	
4th	i	Z	03	26	58	
	eP	Z	05	44	56	U.S.C.G.S. 35 $\frac{1}{2}$ N, 140 $\frac{1}{2}$ E.
	ePP	Z		47	14	Honshu H = 05 37 15 h approx. = 100 kms.
	i	Z	06	19	26	B.C.I.S. 8 $\frac{3}{4}$ S, 160 $\frac{1}{4}$ E.
	i	Z			30	Solomon Is.
	i!	Z		20	31	H = 06 17 49
	i	Z	06	41	18	
	eP	Z	07	12	44	U.S.C.G.S. 22°S, 175°W.
	i	E		13	01 $\frac{1}{2}$	Tonga Is.
	i	NE			18	H = 07 05 43
	iPcP	Z		15	22	h approx. = 60 kms.
	eS	Z		18	29	Mag. = 6 $\frac{1}{2}$ -6 $\frac{3}{4}$ (Pas)
	eScP	Z			55	
	ePcS	N		19	03	
	e	N		20	34	
	eScS	Z		23	04	
	iP	Z	20	08	11	<u>Felt: Rabaul</u>
	i!	Z			35	Int. 1(MM) 4°11'S, 152°10'E. S-P (Omori)=10 secs.
5th	iP	Z	12	28	03 $\frac{1}{2}$	<u>Felt: Warangoi</u> Int. 2-3(MM) 4°30'S, 152°20'E.
						<u>Felt: Rabaul</u> Int. 1-2(MM) 4°11'S, 152°10'E. S-P (Omori) = 13 secs.
	i!P	Z	12	30	33	<u>Felt: Warangoi</u> Int. 1-2(MM) 4°30'S, 152°20'E. S-P (Omori) = 13 secs.
6th	eP	Z	14	16	51.C.	U.S.C.G.S. 5 $\frac{1}{2}$ S, 134°E.
	i	Z			55	Aru Is.
	i	E		17	17	H = 14 12 35
	eS	E		20	26	
7th	Nil					

2.

8th	iP	Z	06	56	16	U.S.C.G.S. 18°S, 178°W. Fiji Is. H = 06 50 24 h approx. = 500 kms.
	i	Z			29	
	iPcP	Z		58	49	
	eS	Z	07	00	54	
	eP	Z	15	51	03	U.S.C.G.S. 9°N, 126°E. Mindanao H = 15 44 50
9th	e		02	46	15	
	ePKP	Z	06	21	38	U.S.C.G.S. 36°N, 34½°W. Atlantic Ocean H = 06 01 51
	i	Z	07	36	20	
	e	Z	09	50	18	
	i	Z			22½	
	iPKP	Z	13	24	39	U.S.C.G.S. 17°N, 94°W. Mexico H = 13 06 10 h approx. = 150 kms. Mag. = 6¼-6½ (Pas)
	ePP	Z		25	26	
	e	Z	16	32	33	
	iP	Z	18	02	59	U.S.C.G.S. 27½°S, 178°W. Kermadec Is. H = 17 56 26 h approx. = 350 kms.
	ePcS	Z		09	09	
10th	iP	Z	07	36	14	
	i	Z			17	
	eP	Z	14	47	10	U.S.C.G.S. 16°N, 121°E. Luzon H = 14 39 56
	i	Z			13	
	i	Z			48½	
	i	Z	21	22	17	
	i	Z			23	
	e	Z			28	
					33	
		iP	Z	23	38	40
11th	iP	Z	03	19	26	U.S.C.G.S. 16½°S, 179°W. Fiji Is. H = 03 13 48 h approx. = 650 kms.
	eS	Z		23	55	
	iScP	Z		24	42	
	eScS	Z		28	43	
	e	Z	14	45	38	
	eP	Z	19	24	08	U.S.C.G.S. 44°N, 149°E. Kurile Is. H = 19 15 20
i	Z			23½		
12th	eP	Z	08	39	06	U.S.C.G.S. 1°N, 126°E. Molucca St. H = 08 33 20
	e	Z	12	00	46	
	e	Z	15	16	11	
	i	Z			28	
	i	Z			17	
	e	Z			15	
	e	N		18	18	

(cont. over)

3.

12th	iP	Z	16	13	41	
cont.	i	Z			43	
	i	Z		14	16 $\frac{1}{2}$	
	i	Z			29	
13th	eP	Z	07	46	51	U.S.C.G.S. 21 $\frac{1}{2}$ <sup>o</sup> S, 174 <sup>o</sup> E. Loyalty Is. H = 07 40 58
	eP	Z	08	42	01	U.S.C.G.S.
	i	Z			32	Loyalty Is. Region H = 08 36 17
	eP	Z	10	04	30	U.S.C.G.S. 48 $\frac{1}{2}$ <sup>o</sup> S, 124 <sup>o</sup> E.
	i	Z			44 $\frac{1}{2}$	Indian Ocean H = 09 55 29
	iP	Z	14	45	46	U.S.C.G.S. 15 <sup>o</sup> N, 123 <sup>o</sup> E. Luzon H = 14 38 51
14th	eS		05	10	53	<u>Felt:</u> Karoola Int. 3 (MM) 5 <sup>o</sup> 10'S, 154 <sup>o</sup> 35'E. <u>Felt:</u> Aropa Int. 2 (MM) 6 <sup>o</sup> 25'S, 155 <sup>o</sup> 50'E. U.S.C.G.S. 6 <sup>o</sup> S, 153 $\frac{1}{2}$ <sup>o</sup> E. New Britain H = 05 10 24 h approx. = 100 kms.
						Recorded on Omori, Benioff out of order.
15th	Nil					
16th	iP	Z	08	51	15	U.S.C.G.S. 4 <sup>o</sup> S, 139 <sup>o</sup> E.
	iPP	Z			25	New Guinea
	iPPP	Z			37	H = 08 48 14 h approx. = 150 kms.
	eP	Z	11	50	34	U.S.C.G.S. 14 <sup>o</sup> N, 123 <sup>o</sup> E. Luzon H = 11 43 35
17th	i	NE	22	51	15	No record for Z
	i	NE		52	02	
18th	eP	Z	09	54	11	U.S.C.G.S. 27 <sup>o</sup> S, 176 <sup>o</sup> W. Kermadec Is. - foreshock H = 09 46 49
	eP	Z	18	23	40	U.S.C.G.S. 27 <sup>o</sup> S, 176 <sup>o</sup> W.
	e	Z		25	33	Kermadec Is.
	e	Z		26	59	H = 18 16 25
	iP	Z	21	30	12	U.S.C.G.S. 28 $\frac{1}{2}$ <sup>o</sup> N, 129 $\frac{1}{2}$ <sup>o</sup> E.
	i	Z			21	Ryuku Is. H = 21 22 38
19th	eP	Z	02	53	46	U.S.C.G.S. 3 <sup>o</sup> S, 139 $\frac{1}{2}$ <sup>o</sup> E.
	i	Z			55 $\frac{1}{2}$	New Guinea H = 02 50 31
	eP	Z	12	06	21	U.S.C.G.S. 14 <sup>o</sup> N, 144 <sup>o</sup> E.
	i	Z			23	Mariana Is.
	i	N			29	H = 12 02 26
	iPP	Z			37	h approx. = 150 kms.
	e	E	07		05	

4.

20th	eP	Z	11	09	10	U.S.C.G.S. 7°S, 129°E. Banda Sea H = 11 03 30
	iP!	Z	12	04	41	U.S.C.G.S. 1½°S, 123½°E.
	i	Z		05	12	Celebes
	e	E		06	44	H = 11 58 55
	eS	E		09	16	h approx. = 200 kms.
	ePcS-	Z		11	21	
	ScP					
21st	i		07	50	-	<u>Felt:</u> Namatanai Int. 5(MM) 3°40'S, 152°25'E. <u>Felt:</u> Rabaul Int. 2(MM) 4°11'S, 152°10'E. U.S.C.G.S. 4°S, 152½°E. New Britain H = 07 49 47 h approx. 100 kms. S-P = 8 secs.
			Recorded on Omori, Benioff out of order.			
	i!	Z	13	00	21	
22nd	i	Z	07	25	51	
	i!	Z		28	20	
	eP	Z	08	23	28	Wellington 45°S, 167°E.
	e	Z			36	South Island
	e	Z		24	20	New Zealand H = 08 15 35
	iP	Z	09	19	31½	
	iS	Z			53	
	eP	Z	15	44	16	U.S.C.G.S. 15°S, 178°W. Fiji Is. H = 15 37 49
	e	Z	21	15	30	
	eP	Z	23	33	54	U.S.C.G.S. 3°S, 132°E.
	i	Z			55	W. of New Guinea
	i	Z		34	44	H = 23 29 07
	e	Z			53	
23rd	i	Z	00	15	29	
	i	Z			30½	
	i!	Z	02	52	31	<u>Felt:</u> Ulamona Int. 1-2(MM) 5°0'S, 151°15'E.
	e	Z	17	57	51	
24th	i	Z	03	19	35	
	i	Z			41	
	i	Z		20	28	
25th	ePKP	Z	14	34	16	U.S.C.G.S. 17°S, 71½°W.
	ePKS	Z		37	38	Peru
	eSS	Z		53		H = 14 15 10 h approx. = 100 kms.
	eP	Z	18	11	55	U.S.C.G.S. 15°S, 168°E.
	i	Z		12	07	New Hebrides Is.
	iPP	Z			30	H = 18 07 40
	e	Z		13	20	h approx. = 100 kms.
	eS	N		15	46	

5.

26th	iP i	Z Z	05	14	12 34	U.S.C.G.S. $1\frac{1}{2}^{\circ}$ N, $122\frac{1}{2}^{\circ}$ E. Celebes H = 05 07 55
	iPKP i ePKS	Z Z Z	19	08 09 12	56 12 12	U.S.C.G.S. $26^{\circ}$ S, $70\frac{1}{2}^{\circ}$ W. Chile H = 18 49 56 h approx. = 100 kms.
	eP i i	Z Z Z	23	34 35	59 01 $\frac{1}{2}$ 06	U.S.C.G.S. $22^{\circ}$ S, $169^{\circ}$ E. Loyalty Is. H = 23 29 41 Mag. = $6\frac{3}{4}$ (Pas)
27th	iP	Z	00	57	04	U.S.C.G.S. $21^{\circ}$ S, $168\frac{1}{2}^{\circ}$ E. Loyalty Is. - aftershock H = 00 51 46
	eP e	Z Z	02	24	53 58	U.S.C.G.S. Loyalty Is. - aftershock H = 02 19 34
	eP	Z	06	22	56	U.S.C.G.S. Loyalty Is. - aftershock H = 06 17 29
	eP i!	Z Z	07	00	11 16	U.S.C.G.S. $5^{\circ}$ S, $154^{\circ}$ E. Solomon Is. H = 06 59 34
	eP	Z	07	28	30	B.C.I.S. Loyalty Is. - aftershock H = 07 23.2m.
	eP i!	Z Z	08	39	07 $\frac{1}{2}$ 13	
	eP	Z	09	49	21	U.S.C.G.S. Loyalty Is. - aftershock H = 09 44 06
	eP i	Z Z	13	24	23 30	U.S.C.G.S. $21^{\circ}$ S, $169^{\circ}$ E. Loyalty Is. - aftershock H = 13 19 05
	eP	Z	15	57	36	U.S.C.G.S. Loyalty Is. - aftershock H = 15 52 20
28th	eP	Z	03	48	32	B.C.I.S. Loyalty Is. - aftershock H = 03 43 14
	eP i	Z Z	07	04	33 39	U.S.C.G.S. Loyalty Is. - aftershock H = 06 59 18
	eP ePP	Z Z	15	19 20	05 44	U.S.C.G.S. $30^{\circ}$ S, $176^{\circ}$ W. Kermadec Is. H = 15 11 33
	iP i ePPP eS	Z Z Z Z	19	36 39 44	32.C. 45 45 02	U.S.C.G.S. $49\frac{1}{2}^{\circ}$ N, $155^{\circ}$ E. Kurile Is. H = 19 27 11 Mag. = $6\frac{3}{4}$ -7 (Pas)

6.

29th	eP	Z	09	21	57	U.S.C.G.S. 27°N, 141°E. Bonin Is. H = 09 15 20 Mag. = 7 (Pas)	
	i	Z		22	39		
	eS	Z		27.1			
	eP	Z	14	42	54		U.S.C.G.S. 27 $\frac{1}{2}$ °N, 141 $\frac{1}{2}$ °E. Bonin Is. - aftershock H = 14 36 20
	e	Z	17	30	36		
	eP	Z	23	34	39		
	i!	Z			41 $\frac{1}{2}$		
30th	eP	Z	16	58	31	U.S.C.G.S. 20 $\frac{1}{2}$ °S, 174 $\frac{1}{2}$ °W. Tonga Is. H = 16 51 28	
	i	Z			38		

Tremors felt in the Territory, November, 1956.

Date	Time G.M.T.	Intensity Mercalli Modified	Latitude South	Longitude East	Locality
Nov. 2nd	0200	1	05 40	147 50	Awelkon
	1524	1 - 2	06 15	149 35	Kandrian
3rd	0525	1	04 11	152 10	Rabaul
	c:0600	2 - 3	09 05	149 20	Tufi
4th	0630	"Severe"	09 23	150 25	Nuatutu
	2008	2	04 11	152 10	(Goodenough Is.) Rabaul
5th	1228	2 - 3	04 30	152 20	Warangoi
		1 - 2	04 11	152 10	Rabaul
	1230	1 - 2	04 30	152 20	Warangoi
13th	0550	3	06 35	155 20	Boku
14th	0510	3	05 10	154 35	Karoola
		2	06 25	155 50	Aropa
18th	c:0400	2	06 35	155 20	Boku
21st	0750	5	03 40	152 25	Namatanai
		2	04 11	152 10	Rabaul
		1 - 2	04 30	152 20	Warangoi
22nd	0740	2	05 30	148 20	Kilenge
23rd	0242	1 - 2	05 00	151 15	Ulamona
27th	1205	1	05 00	152 05	Tol Ptn.

TERRITORY OF PAPUA AND NEW GUINEA.

VULCANOLOGICAL OBSERVATORY RABAU.

SEISMOLOGICAL BULLETIN.

DECEMBER, 1956.

1st	eP	Z	07	49	07	U.S.C.G.S. 22°S, 169°E. Loyalty Is. H = 07 43 51
2nd	iP	Z	00	55	36	Felt: Namatanai Int. 3-4(MM) 3°40'S, 152°25'E. Felt: Warangoi Int. 2(MM) 4°30'S, 152°20'E. Felt: Rangarere Int. 1(MM) 4°15'S, 151°35'E.
	eP	Z	16	40	44	U.S.C.G.S. 17°S, 173½°W. Tonga Is. H = 16 33 36
3rd	i!P	Z	16	56	21	
4th	eP	Z	10	21	16	U.S.C.G.S. 45½°S, 106°W. South Pacific H = 10 07 54 Mag. = 6¼ (Pas)
	eP	Z	21	07	(06)	U.S.C.G.S. 26°N, 127°E. Ryuku Is. H = 20 59 52 h approx. = 100 kms.
5th	eP	Z	06	27	19	
6th	iP	Z	12	42	39	Deep
7th	i!P	Z	11	21	03.C.	Deep
	i	Z		22	05	
	i	Z		28	37	
	iP	Z	20	05	17	Deep
	e	Z	20	40	20	
8th	eP	Z	16	20	35	U.S.C.G.S. 51°N, 179½°W. Andreanof Is. H = 16 10 27 Mag. = 6½ (Pas)
	e	Z		21	40	
9th	iP	Z	00	16	36	U.S.C.G.S. 0°; 125½°E. Molucca St. H = 00 10 45
	i!P	Z	02	36	12½.C.	Deep
	i	Z			21	
	i	Z			59	
	i!P	Z	11	28	57.C.	U.S.C.G.S. 6°S, 152°E. New Britain H = 11 28 29 h approx. = 100 kms. Compression from South-east



10th	i!P	Z	16	48	37	U.S.C.G.S. 5°S, 152°E. New Britain H = 16 48 21 h approx. = 60 kms. S-P (Omori) = 12 secs. Felt: Rangarere Int. 4-5(MM) 4°15'S, 151°35'E. Felt: Rabaul Int. 3(MM) 4°11'S, 152°10'E. Felt: Warangoi Int. 3(MM) 4°30'S, 152°20'E.
						Dilatation to East-south-east.
11th	eP	Z	06	40	23	U.S.C.G.S. 50°N, 156°E. N. of Kurile Is. H = 06 30 58
	iP	Z	08	46	56	B.C.I.S.
	e	Z		47	39	Philippine Is. Rather discordant data.
	i!P	Z	23	51	46.D.	Deep?
	i!	Z			58	
	i!	E		52	27½	
12th	i!P	Z	10	24	38.D.	U.S.C.G.S. 13½°N, 144½°E. Mariana Is. H = 10 20 26 h approx. = 200 kms.
					Deep	
	eP	Z	12	29	36	
	i	Z			40	
	iP	Z	21	00	49	U.S.C.G.S. Formosa H = 20 53 15 h approx. = 150 kms.
13th	iP	Z	14	57	40	U.S.C.G.S. 2°N, 126½°E. Molucca St. H = 14 52 02
	i	Z		58	18	
	ePcS	Z	15	04	40	
	eP	Z	19	38	37	U.S.C.G.S. 12°N, 143°E. Mariana Is. H = 19 34 24
	i	Z			45	
	e	N		40	04	
	eS	N		42	17	
14th	eP	Z	19	49	51	B.C.I.S. Solomon Is. region H = 19 47.7m. h approx. = 100 kms.
	i	Z			57	
15th	iP	Z	06	51	28	
	iP	Z	13	56	09	U.S.C.G.S. 2½°N, 128½°E. Halmahera H = 13 50 56 h approx. = 150 kms.
	e	N			47	
	i	Z			58	
	e	N		58	53	
	eScP	Z	14	02	58	
	eP	Z	17	28	18	U.S.C.G.S. 13°S, 167½°E. New Hebrides Is. H = 17 24 24 h approx. = 150 kms. Mag. = 6-6¼ (Pas).
	i!PP	Z			46	
	ePPP	N		29	17	
	i	Z			58	
	eS	Z		31	40	
	iScP	Z		36	17	
	eScS	NE		40	00	
	e	Z	21	51	28	

3.

16th	iPKP ePKS	Z Z	02	01 04	07 55	U.S.C.G.S. 6 $\frac{1}{2}$ <sup>o</sup> N, 78 <sup>o</sup> W. Colombia H = 01 41 52 Mag. = 6 $\frac{1}{2}$ (Pas)
17th	Nil					
18th	iPKP i iPKS	Z Z Z	02	50 53	16 30 32	U.S.C.G.S. 25 $\frac{1}{2}$ <sup>o</sup> S, 68 $\frac{1}{2}$ <sup>o</sup> W. Chile H = 02 31 00 Mag. = 7-7 $\frac{1}{2}$ (Pas)
	eP	Z	19	31	53	U.S.C.G.S. 36 <sup>o</sup> S, 77 <sup>o</sup> E. S. Indian Ocean H = 19 20 06
19th	iP	Z	01	27	42	U.S.C.G.S. 51 $\frac{1}{2}$ <sup>o</sup> N, 157 <sup>o</sup> E. Kamchatka H = 01 18 10
20th	Nil					
21st	eP	Z	09	11	33	U.S.C.G.S. 51 <sup>o</sup> N, 131 <sup>o</sup> W. Queen Charlotte Is. H = 08 58 53 Mag. 6 $\frac{3}{4}$ (Pas)
	i!P	Z	14	16	35.C.	<u>Felt</u> : Tol Int. 3(MM) 5 <sup>o</sup> 00'S, 152 <sup>o</sup> 05'E. <u>Felt</u> : Biialla Int. 2(MM) 5 <sup>o</sup> 20'S, 151 <sup>o</sup> 05'E. S-P (Omori) = 10 secs.
	eP i	Z Z	20	17	39 47	U.S.C.G.S. 34 <sup>o</sup> N, 139 <sup>o</sup> E. Honshu H = 20 10 06
	i!P i!(S)	Z Z	22	42	21 $\frac{1}{2}$ . 38	D. B.C.I.S. Discordant data. <u>Felt</u> : Pomio Int. 2(MM) 5 <sup>o</sup> 30'S, 151 <sup>o</sup> 30'E.
	Dilatation to West-south-west					
22nd	i!P	Z	08	43	32	<u>Felt</u> : Rabaul Int. 1(MM) 4 <sup>o</sup> 11'S, 152 <sup>o</sup> 10'E.
	Dilatation to north-west					
	eP i i	Z Z Z	22	45 47 48	33 50 $\frac{1}{2}$ 05 $\frac{1}{2}$	U.S.C.G.S. 29 $\frac{1}{2}$ <sup>o</sup> S, 177 <sup>o</sup> W. Kermadec Is. H = 22 38 12
	eP ePP	Z Z	23	20 21	06 53	U.S.C.G.S. 33 $\frac{1}{2}$ <sup>o</sup> N, 139 <sup>o</sup> E. Honshu - aftershock H = 23 12 35
23rd	iP	Z	08	43	05	U.S.C.G.S. 22 <sup>o</sup> N, 144 $\frac{1}{2}$ <sup>o</sup> E. Mariana Is. H = 08 37 26 h approx. = 100 kms. Mag. = 6 $\frac{1}{2}$ (Pas)
	i!P	Z	23	36	46	<u>Felt</u> : Warangoi Int. 2(MM) 4 <sup>o</sup> 30'S, 152 <sup>o</sup> 20'E. <u>Felt</u> : Rabaul Int. 1(MM) 4 <sup>o</sup> 11'S, 152 <sup>o</sup> 10'E. S-P (Omori) = 20 secs.
	Dilatation to south?					

4.

24th	i!P	Z	06	17	44	
	Dilatation to south-east					
	iP	Z	18	08	21	
	Dilatation to north?					
	i!P	Z	20	29	39	
	i!S				57	
	Dilatation to east?					
	iP	Z	21	23	27	
	iS	Z			47	
	Deep? S-P (Omori) = 19 sec.					
25th	iP	Z	02	53	59	
	S-P (Omori) = 22 secs.					
	? Deep					
	i!P	Z	07	47	57½	
26th	eP	Z	07	50	02	
	i	Z			21	
	U.S.C.G.S. 10°S, 166°E.					
	Santa Cruz Is.					
	H = 07 46 24					
	Mag. = 6 (Pas)					
27th	iP	Z	00	20	45.C.	
	i!	Z		21	00	
	iPcP	Z		23	15	
	iS	Z		26	34	
	iPcS	Z		27	04½	
	eScS	Z		30	46	
	U.S.C.G.S. 24°S, 177°W.					
	Tonga Is.					
	H = 00 14 15					
	h approx. = 300 kms.					
	Mag. 7-7½ (Pas)					
	e	N	09	29	12	
	eP	Z	14	16	30	
	i	Z			36	
	Apia. Tonga Is. region					
	H = 14 09.3m.					
	eP	Z	21	37	32	
	iPP	Z		38	17	
	U.S.C.G.S. 7½°N, 126°E.					
	Mindanao					
	H = 21 31 28					
28th	i!P	Z	01	52	21.C.	
	Felt: Warangoi					
	Compression from south					
	? deep					
	Int. 2-3 (MM)					
	4°30'S, 152°20'E.					
	i!P	Z	14	25	04.C.	
	i!S	Z			22	
	Deep					
	i	Z	14	32	15	
	i!	Z			55	
	U.S.C.G.S. 39°S, 177½°E.					
	New Zealand					
	e	E		37	31	
	e	Z		38	17	
	i	Z		39	04	
	e	Z			39	
	h approx. = 150 kms.					
	Mag. 6½ (Pas)					
	e	Z	15	05	19	
29th	i!P	Z	03	40	48.C.	
	U.S.C.G.S. 5½°S, 151½°E.					
	New Britain					
	H = 03 40 21					
	h approx. = 60 kms.					
	Felt: Rabaul					
	Int. 3 (MM)					
	4°11'S, 152°10'E.					
	Felt: Biialla					
	Int. 3 (MM)					
	5°20'S, 151°05'E.					
	S-P (Omori) = 18 secs.					
	i!P	Z	03	52	49.C.	
	i!(S)			53	18½	
	Compression from west					

(cont. over

5.

29th i!P Z 06 51 44.C. U.S.C.G.S. 5 $\frac{1}{2}$ °S, 151 $\frac{1}{2}$ °E.  
 cont. Compression from New Britain  
 south-west H = 06 51 08  
 Felt: Rabaul  
 Int. 3(MM)  
 4°11'S, 152°10'E.  
 Felt: Rangarere  
 Int. 1-2(MM)  
 4°15', 151°35'E.  
 S-P (Omori) = 18 secs.

i!P Z 07 06 11.C. Felt: Rabaul  
 Compression from Int. 1(MM)  
 south-west 4°11'S, 152°10'E.  
 ? deeper than the S-P (Omori) = 18 secs.  
 previous shock.

i!P Z 09 33 42 $\frac{1}{2}$ .D. Deep  
 Dilatation to  
 north-west

eP Z 20 29 17 U.S.C.G.S. 21°S, 175 $\frac{1}{2}$ °W.  
 i Z 23 W. Tonga Is.  
 ePcP Z 31 43 H = 20 22 12  
 ePcS Z 35 42 Mag. = 6 $\frac{1}{4}$ -6 $\frac{1}{2}$  (Pas)

30th Nil

31st eP Z 15 38 25  
 i Z 28  
 i Z 39 45  
 i E 57

Tremors felt in the Territory, December, 1956.

Date	Time G.M.T.	Intensity Mercalli Modified	Latitude South	Longitude East	Locality
Dec. 1st	1918	3	04 15	151 35	Rangarere
2nd	0055	3 - 4	03 40	152 25	Namatanai
		2	04 30	152 20	Warangoi
		1	04 15	151 35	Rangarere
	1332	4	05 20	151 05	Bialla
	1347	2	"	"	"
	1435	1	05 00	151 15	Ulamona
4th	2255	2	06 10	150 35	Linden- hafen
7th	1010	2	09 45	150 50	Esa'ala
9th	0950	1	09 45	150 50	Esa'ala
	1330	3	06 50	155 45	Buin
	1332?	3	06 25	155 50	Aropa
	2345	4	06 10	150 35	Linden- hafen

(cont. over)

Date	Time G.M.T.	Intensity Mercalli Modified	Latitude South	Longitude East	Locality		
10th	1648	4 - 5	04 15	151 35	Rangarere		
		3	04 11	152 10	Rabaul		
		3	04 30	152 20	Warangoi		
		2	05 00	151 15	Ulamona		
		1 - 2	05 30	151 30	Pomio		
14th	1637	2	06 10	150 35	Linden- hafen		
16th	2108	2	09 45	150 50	Esa'ala		
17th	0653	1	03 30	142 05	Lumi		
21st	1416	3	05 00	152 05	Tol		
		2	05 20	151 05	Biialla		
		1	05 30	151 30	Pomio		
	1619	2	04 15	151 35	Rangarere		
	2242	2	05 30	151 30	Pomio		
22nd	0843	1	04 11	152 10	Rabaul		
23rd	2336	2	04 30	152 20	Warangoi		
		1	04 11	152 10	Rabaul		
24th	2029	2	05 00	151 15	Ulamona		
28th	0152	2 - 3	04 30	152 20	Warangoi		
29th	0340	3	04 11	152 10	Rabaul		
		3	05 20	151 05	Biialla		
		2 - 3	04 30	152 20	Warangoi		
		2	05 00	152 05	Tol		
		1	04 15	151 35	Rangarere		
			0651	3	04 11	152 10	Rabaul
				1 - 2	04 15	151 35	Rangarere
		1	05 00	152 05	Tol		
		1	05 00	151 15	Ulamona		
	0706	1	04 11	152 10	Rabaul		

TERRITORY OF PAPUA AND NEW GUINEA.

VULCANOLOGICAL OBSERVATORY RABAU.

SEISMOLOGICAL BULLETIN.

JULY, 1956.

1st	eP	Z	20	04	51 $\frac{1}{2}$		
	iP	Z			52 $\frac{1}{2}$		
	eS	Z			46 $\frac{1}{2}$		
2nd	eP	Z	14	32	30	U.S.C.G.S. 8°S, 124°E. Sawoe Sea H = 14 26 35	
	iPPP	Z			33		32
	e	Z			34		39
	ePcP	Z			35		38
	eScS	Z			43		08
	iP	Z	17	31	19 $\frac{1}{2}$	Wellington 33 $\frac{1}{2}$ °S, 179°W. Kermadec Is. H = 17 24 00	
	3rd	iP	ZNE	23	47	03	
		i!	ZNE			08 $\frac{1}{2}$	
		iS	E			24	
	4th	eP	-	00	45	47	U.S.C.G.S. 18°S, 178 $\frac{1}{2}$ °W. Fiji Is. H = 00 39 55 h approx. = 450 kms.
iP		Z	03			05	
i		Z			39	Solomon Is.	
i		Z			42	H = 03 04 14	
i!		Z			47 $\frac{1}{2}$	<u>Felt:</u> Aropa,	
iS		Z		06	33	Int. 4(MM)	
i!		Z			37 $\frac{1}{2}$	6°25'S, 155°50'E.	
						<u>Felt:</u> Buin	
						Int. 2(MM)	
						6°50'S, 155°45'E.	
e		Z	03	25	29	<u>Felt:</u> Aropa	
i		Z			38	Int. 2(MM)	
i		Z		26	32	6°25'S, 155°50'E.	
						<u>Felt:</u> Buin	
						Int. 2(MM)	
					6°50'S, 155°45'E.		
✓	eP	Z	03	44	02	U.S.C.G.S. 7°S, 155 $\frac{1}{2}$ °E. Solomon Is. Aftershock. H = 03 42 50	
	i	Z			13		
	i!	Z			16		
	eS	Z			59		
	i	Z			45		07
	i!	Z					12 $\frac{1}{2}$
✓	eP	Z	05	04	56		
	i	Z			05		50
	eS	Z			06		03
✓	eP	Z	05	14	12		
	i	Z					22 $\frac{1}{2}$
	i	Z			15		05
	i	Z					12
	iS	Z					17 $\frac{1}{2}$
✓	eP	Z	05	40	48		
	iPP	Z					56 $\frac{1}{2}$
	iS	Z			41		38
	i	Z					45 $\frac{1}{2}$
	iSS	Z					50
	i	Z					59 $\frac{1}{2}$

(cont. over)

2.

4th cont.	eiP	Z	07	20	25	U.S.C.G.S. 7°S, 155½°E.
	i	Z			33	Solomon Is. Aftershock.
	i	Z			37	H = 07 19 09
	iS	Z		21	16½	
	i!	Z			25	
	i!	Z			30	
✓	iPKP	Z	11	27	23	U.S.C.G.S. 31°S, 71°W.
						Central Chile
						H = 11 08 28
	e		16	18	11	U.S.C.G.S. 23½°S, 180°.
						Fiji Is.
						H = 16 10 48
						h approx. - 450 kms.
X 5th)						
X 6th)	Nil					
✓ 7th	eP	Z	17	36	51	
✓ 8th	iP	Z	06	07	32.5	U.S.C.G.S. 0°, 126½°E.
	i	Z			47	Molucca St.
	i	Z			58	H = 06 01 56
						h approx. = 60 kms.
	e	Z	18	10	19	B.C.I.S. 11¾°N, 163°E.
						Marshall Is.
						H = 18 06 01
✓ 9th	ePKP	Z	03	30	33	U.S.C.G.S. 37°N, 26°E.
	ePP	Z		32	04	Aegean Sea
	e	Z		40	45	H = 03 11 39
	e	Z		44	32	Mag. = 7½ (Pas)
	eSS	Z		48.1	-	
✓	i!PKP	Z	10	15	19	U.S.C.G.S. 20°N, 73°W.
	e	Z			26	Haiti
	e	Z		16	19	H = 09 56 13
	ePKS	Z		18	49	h approx. = 100 kms.
	iPPP	Z		20	23	Mag. = 6½-6¾ (Pas)
✓ 10th	e	Z	15	30	49	B.C.I.S.
						S. of Tonga Is.
						H = 15 09 01
	eP	Z	18	00	40	U.S.C.G.S.
	i				52.5	Marshall Is.
						H = 17 56 03
✓ 11th	i!	Z	08	28	47	
	eP	Z	16	22	11	
	i	Z			15½	
	iS	N			53	
	i	E			58½	
	i	NE		23	02	
	eP	ZN	18	37	03½	
	i	Z			03	
	i	N			45½	
	i!	N			51	
	eP	Z	23	03	27	Felt: Kandrian
						Int. 2-3 (MM)
						06°15'S, 149°35'E.

3.

✓ 12th eP Z 15 11 45 U.S.C.G.S. 23°N, 99°E.  
 Burma  
 H = 15 01 26  
 h approx. = 100 kms.

e Z 17 07 03 B.C.I.S. near 58°S, 143°W.  
 S. Pacific  
 H = 16h 55.9m.

✓ 13th ePKP Z 13 55 03 U.S.C.G.S. 27°S, 70°W.  
 N. Chile  
 H = 13 36 03  
 h approx. = 100 kms.

e Z 14 11 57

✓ 14th eP Z 10 33 53  
 e Z 34 39

e Z 17 35 53

e Z 18 14 03

e(P) 22 13 07 U.S.C.G.S. 20°N, 121½°E.  
 N. coast of Luzon P.I.  
 H = 22 05 41

✓ 15th e Z 02 09 08 (U.S.C.G.S. 44°N, 127½°W.  
 Oregon Coast  
 H = 01 55 09)

eP Z 04 22 02  
 i Z 12  
 i Z 20½  
 i E 43  
 iS Z 54  
 iS E 55  
 i! Z 23 01

i!P Z 06 29 10

eP Z 16 39 55  
 e Z 40 05  
 i Z 36½  
 iS Z 47½  
 iS Z 48½  
 i Z 54

✓ 16th iP Z 12 12 55½ Felt: Buin  
 i Z 13 01½ Int. 2(MM)  
 iS Z 52 6°50'S, 155°45'E.  
 i Z 56½  
 i! Z 14 06½

✓ eP Z 15 17 21 U.S.C.G.S. 23½°N, 96°E.  
 iPcP Z 18 03 Burma  
 ePPP Z 20 46 H = 15 07 10  
 h approx. = 100 kms.  
 Mag. = 7 (Pas)

e Z 15 47 51

e Z 19 06 36

eP Z 21 44 18 U.S.C.G.S. 52°N, 178½°W.  
 e Z 32 Andreanof Is.  
 H = 21 34 03



4.

17th	iP	Z	00	35	46	
	i	Z			52	
	iS	Z		36	30 $\frac{1}{2}$	
	i				34	
	iP	Z	04	40	40 $\frac{1}{2}$	U.S.C.G.S. Mariana Is. about 300 kms. N.E. of Guam H = 04 36 02
	iP	Z	07	39	07 $\frac{1}{2}$	U.S.C.G.S. 7°S, 126 $\frac{1}{2}$ °E.
	i!	Z			09	Banda Sea
	i!	Z			22 $\frac{1}{2}$	H = 07 34 07
	ePP	Z		40	18	h approx. 450 kms.
	i	Z			23	Mag. 6 $\frac{3}{4}$ (Pas)
	iPcP	Z		42	12 $\frac{1}{2}$	
	i	Z			22	
	iS	N			59	
	iSS	N		45	20	
	eScS	E		49	09	
	eP	Z	13	17	02	
	eP	Z	17	09	40	U.S.C.G.S. Mariana Is.
	i	Z			45	Aftershock. H = 17 05 07
18th	i!P	Z	00	27	57	U.S.C.G.S. 5°S, 151°E. New Britain H = 00 27 27 S-P (Omori) = 14 secs. <u>Felt:</u> Toriu Int. 5 (MM) 4°43'S, 151°41'E. <u>Felt:</u> Warangoi Int. 4-5 (MM) 4°30'S, 152°20'E. <u>Felt:</u> Pomio Int. 4 (MM) 5°30'S, 151°30'E. <u>Felt:</u> Rabaul Int. 3 (MM) 4°11'S, 152°10'E. <u>Felt:</u> Kokopo Int. 3 (MM) 4°20'S, 152°15'E. <u>Felt:</u> Kandrian Int. 1 (MM) 6°15'S, 149°35'E.
	iP	Z	06	24	15.D.	U.S.C.G.S. 5°S, 130°E.
	i!	Z			21 $\frac{1}{2}$	Banda Sea
	i!	Z			34	H = 06 19 15
	i!PPP	Z		25	19	Mag. 7 $\frac{1}{4}$ -7 $\frac{1}{2}$ (Pas)
	iPcP,S	Z		28	17 $\frac{1}{2}$	
	iSS	N		29	13	
	iSSS	N			25 $\frac{1}{2}$	
	e	Z		30	47	
	iScP	Z		31	42	
	iScS	Z		35	26	
	iP	Z	14	06	53	
	i!P	Z	16	37	24 $\frac{1}{2}$	

						5.
19th	eP	Z	07	36	05	
	i!P				06	
	iP	Z	13	03	54	
19th	iP	Z	13	14	23	
	eP	Z	20	48	08	U.S.C.G.S. 15°N, 120½°E.
	i	Z			24	Luzon P.I. H = 20 40 54
20th	iP	Z	11	26	26	
	e	Z	13	22	06	B.C.I.S. Foreshock
	i	Z			20½	Halmahera region. H = 13 16 50
	e	Z	13	37	46	
	i	Z	17	38	08½	B.C.I.S. 2°N, 129½°E.
20th	i	Z			20	Halmahera region H = 17 32 52
	eP	Z	17	50	39½	U.S.C.G.S.
	i	Z			44	Marshall Is. H = 17 45 59
21st	iP	Z	06	38	59	
	i!	Z		39	02½	
	eP	Z	12	59	57	
21st	i!P	Z	14	59	41.C.	U.S.C.G.S. 50½°N, 147½°E.
						Sea of Okhotsk H = 14 51 06
						h approx. = 600 kms.
21st	e	Z	15	27	08	U.S.C.G.S. 22½°S, 172½°E.
	i				53	Loyalty Is. H = 15 21 20
	eP	Z	15	45	00	U.S.C.G.S. 23°N, 70°E.
21st	i	Z			02	W. India H = 15 32 25
						Mag. = 6½ (Pas)
	i	Z	18	54	30	
22nd	i	N		55	03	
	eP	Z	06	03	51	
		Z			58	
22nd	ePKP	Z	09	44	17	U.S.C.G.S. 19°S, 69°W.
	e	Z			45	Chile
	e	Z		45	18	H = 09 25 08 h approx. = 100 kms.
23rd	i!P	Z	14	26	16½	U.S.C.G.S. 4½°S, 154°E.
						Solomon Is. region H = 14 25 46
						<u>Felt:</u> Rabaul, Kokopo Int. 3(MM)
					<u>Felt:</u> Namatanai Int. 3-4(MM)	
					3°40'S, 152°25'E.	
					<u>Felt:</u> Warangoi Int. 3-4(MM)	
					4°30'S, 152°20'E.	

6.

23rd. cont.	iP	Z	21	58	21½	U.S.C.G.S. 6°S, 148°E. Nr. N. Coast of New Guinea. H = 21 56 56 Felt: Finschhafen Int. 5 (MM) 6°35'S, 147°50'E. Felt: Awelkon Int. 4 (MM) 5°40'S, 147°50'E. Felt: Saidor Int. 3 (MM) 5°35'S, 146°30'E. Felt: Wau Int. 2 (MM) 7°20'S, 146°45'E. Felt: Numundo Int. 1-2 (MM) 5°30'S, 150°05'E.
24th	iP i iS	Z	08	27 28	45½ 00 14 18	
	i!P i!	Z E	12	41	10½ 25	
	i!P	Z	16	26	26	
	eP i iPP ePcS	Z Z Z Z	19	02 03 09	14 17 14 18	U.S.C.G.S. 1°N, 126½°E. Molucca St. H = 18 56 32
25th	eP i! i	Z Z Z	07	37	46 50½ 23	
26th	eP i! eS e(SS, ScS)	Z Z Z Z	17 18	55 00 04.4	05 07 20 -	U.S.C.G.S. 27°S, 178°E. Kermadec Is. H = 17 49 12 h approx. = 650 kms.
	eP i e	Z Z Z	18	10 15	05 06½ 20	B.C.I.S. 27°S, 178°E. Aftershock Kermadec Is. H = 18 04 12 h approx. = 650 kms.
	eP e	Z Z	19	43 45	47 07	
27th	e eP	Z Z	18 21	02 41	46 29	U.S.C.G.S. 15°N, 147½°E. Mariana Is. H = 21 36 52
28th	iP i!	Z	02	02	41½ 45½	J.S.C.G.S. 6°S, 154°E. New Britain H = 02 01 58 h approx. = 150 kms. Felt: Karoola Int. 4 (MM) 5°10'S, 154°35'E. Felt: Namatanai Int. 3-4 (MM) 3°40'S, 152°25'E. Felt: Rabaul Int. 3 (MM) 1°11'S, 152°10'E.

(cont. over

28th.	eP	Z	11	13	34	U.S.C.G.S. 15 $\frac{1}{2}$ <sup>o</sup> N, 147 $\frac{1}{2}$ <sup>o</sup> E.
cont.	i	Z			39 $\frac{1}{2}$	Mariana Is. Aftershock
	i				52	H = 11 09 05
	e	Z	17	33	25	( Felt: Namatanai ( Int. 4(MM) ( 3 <sup>o</sup> 40'S, 152 <sup>o</sup> 25'E. ( Felt: Warangoi ( Int. 3(MM) ( 4 <sup>o</sup> 30'S, 152 <sup>o</sup> 20'E. ( Felt: Rabaul ( Int. 2(MM) ( 4 <sup>o</sup> 11'S, 152 <sup>o</sup> 10'E. ( Felt: Kokopo ( Int. 2(MM) ( 4 <sup>o</sup> 20'S, 152 <sup>o</sup> 15'E.
	i!P	Z	19	43	46 $\frac{1}{2}$	
	iP	Z	19	54	44 $\frac{1}{2}$	Aftershock; S-P (Omori) 11 secs.
	iP	Z	21	44	19	Aftershock; S-P (Omori) 11 secs.
29th	i!P	Z	04	42	07	Felt: Rabaul Int. 1 (MM) S-P (Omori) 14 secs. 4 <sup>o</sup> 11'S, 152 <sup>o</sup> 10'E.
30th	i!P	Z	15	55	30	Felt: Warangoi Int. 2(MM) S-P (Omori) 20 secs. 4 <sup>o</sup> 30'S, 152 <sup>o</sup> 20'E.
31st	eP	Z	16	43	50	U.S.C.G.S. 2 $\frac{1}{2}$ <sup>o</sup> N, 128 $\frac{1}{2}$ <sup>o</sup> E. Halmahera H = 16 38 24.

Tremors felt in the Territory, July, 1956.

Date	Time G.M.T.	Intensity Mercalli Modified	Latitude South	Longitude East	Locality
Jul. 4th	0305	4	06 25	155 50	Aropa
		2	06 50	155 45	Buin
	0307	1	06 50	155 45	Buin
	0325	2	06 50	155 45	Buin
		2	06 25	155 50	Aropa
	0338	2	06 25	155 50	Aropa
	0630	1	06 50	155 45	Buin
	0725	1	06 50	155 45	Buin
	1930	1	06 50	155 45	Buin
	11th	1745	1 - 2	05 30	150 05
2304		2 - 3	06 15	149 35	Xandrian
16th	1213	2	06 50	155 45	Buin
	1845	2 - 3	09 45	150 50	Esa'ala

8.

cont.

Date	Time G.M.T.	Intensity Mercalli Modified	Latitude South		Longitude East		Locality
			°	'	°	'	
Jul 18th	c:0028	5	04	43	151	41	Torju
		4 - 5	04	30	152	20	Warangoi
		4	05	30	151	30	Pomio
		3	04	20	152	15	Kokopo
		3	04	11	152	10	Rabaul
		2 - 3	05	00	151	15	Ulamona
		2	05	25	150	05	Walindi
		1 - 2	05	30	150	05	Numundo
		1	06	15	149	35	Kandrian
23rd	1426	3 - 4	03	40	152	25	Namatanai
		3 - 4	04	30	152	20	Warangoi
		3	04	11	152	10	Rabaul
		3	04	20	152	15	Kokopo
		3	04	05	153	35	Waramung
	2200	5	06	35	147	50	Finschhafen
	2155	4	05	40	147	50	Awelkon
	(2145?)	3	05	35	146	30	Saidor
	2159	2	07	20	146	45	Wau
		1 - 2	05	30	150	05	Numundo
26th	1930	3	06	45	147	00	Lae
28th	c:0203	4	05	10	154	35	Karoola
		3 - 4	03	40	152	25	Namatanai
		3	04	11	152	10	Rabaul
		2	04	20	152	15	Kokopo
		2	04	30	152	20	Warangoi
	1	05	00	151	15	Ulamona	
	c:1944	4	03	40	152	25	Namatanai
		3	04	30	152	20	Warangoi
		2	04	11	152	10	Rabaul
		2	04	20	152	15	Kokopo
29th	0442	1	04	11	152	10	Rabaul
	1134	1	03	05	152	40	Londolovit
30th	1555	2	04	30	152	20	Warangoi

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/	1st	e	Z	20	29	13	
		e	Z			35	18
		i!	Z	22	37		42
		i!	Z				46
		i!	E		38		03½
/	2nd	eP	Z	02	42	27	<u>Felt:</u> Awelkon
		i	Z			30	Int. 1(MM)
		iS	Z		43	30	5°40'S, 147°50'E.
		i	Z			33½	
✓		iP	Z	07	26	50	U.S.C.G.S. 43½°N, 146°E.
		i	Z		27	07	Hokkaido H = 07 18 15
		e	Z	19	10	15	
		e	Z			20	
✗	3rd	No record					
/	4th	i!P	Z	07	44	49½	
		i!S	Z		45	24	
✓		i!P	Z	09	49	08.D.	U.S.C.G.S. 5°S, 153°E. New Britain H = 09 48 45 h approx. = 60 kms. Mag. 6¼-6½ (Pas) <u>Felt:</u> Rabaul Int. 3(MM) 4°11'S, 152°10'E. <u>Felt:</u> Warangoi Int. 2-3(MM) 4°30'S, 152°20'E. <u>Felt:</u> Ulamona Int. 2(MM) 5°S, 151°15'E. <u>Felt:</u> Kokopo Int. 2(MM) 4°20'S, 152°15'E.
		i!P	Z	10	00	49½	U.S.C.G.S. 5°S, 152°E. New Britain H = 10 00 25 <u>Felt:</u> Rabaul Int. 1-2(MM) 4°11'S, 152°10'E. <u>Felt:</u> Warangoi Int. 1-2(MM) 4°30'S, 152°20'E. <u>Felt:</u> Ulamona Int. 1(MM) 5°S, 151°15'E.
		iP	Z	12	40	08½	
		i!	Z			13	
		iS	Z			46½	
		i!	Z			47	
		iP	Z	14	47	54½	
		i!P	Z	18	44	11	<u>Felt:</u> Warangoi Int. 1(MM) 4°30'S, 152°20'E. (over

2.

/ 4th cont.	iP	Z	23	21	15 $\frac{1}{2}$	
	iS	Z			58	
/ 5th	i!P	Z	00	29	09 $\frac{1}{2}$	
	i!P	Z	05	58	33 $\frac{1}{2}$	
	e	Z	13	08	39	
/ 6th	iP	Z	19	44	45	
	i				53	
	iS			45	25 $\frac{1}{2}$	
X 7th)						
X 8th)	Nil					
/ 9th	i(P)	Z	(09	40	38 $\frac{1}{2}$ )	U.S.C.G.S. 20°S, 168°E. Loyalty Is. H = 09 35 38
	e	Z	21	07	29	
	eP	Z	21	53	08	U.S.C.G.S. 31 $\frac{1}{2}$ °S, 178°W.
	i	Z			15 $\frac{1}{2}$	Kermadec Is. H = 21 45 42
✓	iP	Z	23	07	08.C.	U.S.C.G.S. 15°S, 176°W.
	i	E			13	Samoa Is.
	i	Z		08	09	H = 23 00 42
	i	Z			37	h approx. = 250 kms.
	epp	N		09	01	Mag. = 6 $\frac{3}{4}$ (Pas)
	eS	Z		12	12	
	e	Z			58	
	e	E		13	29	
	eScS	E	17	07		
/ 10th	Nil					
/ 11th	eP	Z	16	41	37	
	i	Z			54	
/ 12th	i!	Z	00	24	28 $\frac{1}{2}$	
	i!	E			47 $\frac{1}{2}$	
12th	eP	Z	00	32	16	U.S.C.G.S. 19°S, 176°W.
	ePcP	Z		34	46	Tonga Is.
	ePcS)	Z		38	13	H = 00 25 42
	ScP)					h approx. = 200 kms.
	i!P	Z	05	40	34 $\frac{1}{2}$ .C.	U.S.C.G.S. Northern New Britain H = 05 40 07 h approx. = 150 kms. <u>Felt</u> : Rabaul Int. 1 (MM) 4°11'S, 152°10'E.
✓	iP	Z	06	44	21 $\frac{1}{2}$	
	iP	Z			47	
	eP	Z	17	07	06	U.S.C.G.S. 34°N, 138°E.
	i	Z			13	Honshu H = 16 59 33 Mag. = 6 $\frac{1}{2}$ -6 $\frac{3}{4}$ (Pas)
	i!		21	14	28	B.C.I.S. South Pacific Inconsistent data.

3.

13th	Nil					
14th	iP	Z	11	55	27	B.C.I.S. $32\frac{1}{2}^{\circ}\text{S}$ , $179\frac{1}{4}^{\circ}\text{W}$ . Kermadec Is. H = 11 48 57
	eP	Z	23	40	25	U.S.C.G.S. $19\frac{1}{2}^{\circ}\text{S}$ , $179^{\circ}\text{W}$ . Fiji Is. H = 23 34 33 h approx. = 550 kms.
	i	Z			27	
15th	iP	Z	05	29	12	U.S.C.G.S. $0^{\circ}$ , $101\frac{1}{2}^{\circ}\text{E}$ . Sumatra H = 05 20 37 h approx. = 300 kms.
	i	E			27 $\frac{1}{2}$	
	ePcP	Z		30	32	
	e	Z		31	12	
	e	Z	07	24	39	
	i	E		25	35 $\frac{1}{2}$	
	i	Z			45	
	iP	Z	10	57	14 $\frac{1}{2}$	U.S.C.G.S. $\frac{1}{2}^{\circ}\text{S}$ , $124^{\circ}\text{E}$ . Celebes H = 10 51 19 h approx. = 150 kms.
	i!	Z			31 $\frac{1}{2}$	
	ePcP	N		59	57	
	eS	Z		02	04	
	ePcS)	Z		03	48	
	ScP)					
	eScS	NE		07.8		
	e	Z	13	20	50	U.S.C.G.S. $46^{\circ}\text{N}$ , $151^{\circ}\text{E}$ . Kurile Is. H = 13 12 10 Mag. = $6\frac{1}{4}$ (Pas)
	i	Z		21	05	
	i!P	Z	21	51	07	<u>Felt</u> : Rabaul Int. 2(MM) $4^{\circ}11'\text{S}$ , $152^{\circ}10'\text{E}$ . S-P (Omori) = 13 secs.
16th	Nil					
17th	i	Z	04	25	08	
	i!	Z			13	
	i	E		26	02 $\frac{1}{2}$	
	e	Z	11	45	25	B.C.I.S. $3\frac{1}{4}^{\circ}\text{S}$ , $135\frac{3}{4}^{\circ}\text{E}$ . N.W. New Guinea H = 11 41 31
	i	Z			27 $\frac{1}{2}$	
	e	Z			32 $\frac{1}{2}$	
	e	Z		48	52	
	ePg	Z	14	16	07 $\frac{1}{2}$	U.S.C.G.S. $4^{\circ}\text{S}$ , $151\frac{1}{2}^{\circ}\text{E}$ . New Britain H = 14 15 53 S-P (Omori) = 12 secs. <u>Felt</u> : Rabaul Int. 2(MM) $4^{\circ}11'\text{S}$ , $152^{\circ}10'\text{E}$ .
	i!	Z			09	
	iPg	Z	15	10	27 $\frac{1}{2}$	U.S.C.G.S. $4^{\circ}\text{S}$ , $151\frac{1}{2}^{\circ}\text{E}$ . New Britain - aftershock H = 15 10 13
	i!				28	
18th	iP	Z	10	57	08	<u>Felt</u> : Awelkon Int. 2(MM) $5^{\circ}40'\text{S}$ , $147^{\circ}50'\text{E}$ .
	i!	Z			24	
	i!S	E		58	13	
19th	Nil					
20th	iP	Z	05	58	13 $\frac{1}{2}$	



						4.
21st	e	Z	11	35	25	U.S.C.G.S. 49 $\frac{1}{2}$ <sup>o</sup> N, 156 <sup>o</sup> E. Kurile Is. H = 11 26 01
22nd	eP	Z	11	31	05	U.S.C.G.S.
	i	Z			09	New Hebrides
	ipp	Z			30	H = 11 26 06
	i	Z		32	23	
	iS, PcP	E		35	01	B.C.I.S. near 18 <sup>o</sup> S, 169 <sup>o</sup> E.
	eScS	E		42	00	H = 11 26.2m.
	e	E		42	04	Inconsistent data
	iP	Z	17	18	41 $\frac{1}{2}$	B.C.I.S. 1 $\frac{1}{2}$ <sup>o</sup> N, 125 $\frac{1}{4}$ <sup>o</sup> E.
	e	Z		25	35	Molucca St. H = 17 12 54
	e(P)		19	50	48	B.C.I.S. 28 <sup>o</sup> N, 95 <sup>o</sup> E.
	e			51	47	N. Assam H = 19 40 13
23rd	i!P	Z	09	05	11 $\frac{1}{2}$	
	i!	Z			15	
	i	N		06	00	
	ePKP	Z	14	07	47	U.S.C.G.S. 15 <sup>o</sup> S, 68 <sup>o</sup> W.
	ePKS	Z		11	15	Bolivia H = 13 48 30 h approx. = 100 kms. Mag. = 6 $\frac{1}{4}$ (Pas)
24th	i!P	Z	22	11	33 $\frac{1}{2}$	
	i!	E		12	00	
	i!	E			19	
	i(P)	Z	04	37	40	U.S.C.G.S. 53 <sup>o</sup> N, 172 $\frac{1}{2}$ <sup>o</sup> E. Aleutian Is. H = 04 27 33 Mag. 6 $\frac{1}{2}$ (Pas)
	eP	Z	08	32	51	U.S.C.G.S. 21 <sup>o</sup> S, 169 <sup>o</sup> E. Loyalty Is. H = 08 27 42
25th	iP	Z	00	28	04 $\frac{1}{2}$	U.S.C.G.S. 2 <sup>o</sup> N, 129 <sup>o</sup> E.
	i				17 $\frac{1}{2}$	Halmahera H = 00 22 44
	e	Z	22	07	17	U.S.C.G.S. 12 <sup>o</sup> S, 166 $\frac{1}{2}$ <sup>o</sup> E.
	i!	Z			23	Santa Cruz Is.
	i	Z		08	09	H = 22 03 28
	e	Z		10	37	h approx. = 200 kms.
26th	eP	Z	11	18	57	
	i	Z		19	04	
	eS	E			46	
27th	i!P	Z	02	50	29	<u>Felt:</u> Kokopo Int. 1(MM) 4 <sup>o</sup> 20'S, 152 <sup>o</sup> 15'E. <u>Felt:</u> Warangoi Int. 1(MM) 4 <sup>o</sup> 30'S, 152 <sup>o</sup> 20'E. S-P (Omori) = 14 secs.
28th	i	Z	01	03	23	<u>Felt:</u> Awelkon Int. 2(MM) 5 <sup>o</sup> 40'S, 147 <sup>o</sup> 50'E.

(cont. over)

5.

28th cont.	e	Z	02	50	11
	i	Z			17
	i	Z			55
	i!	Z		51	00

eP	Z	09	55	03
e	Z	10	00	27
i	Z			29.

U.S.C.G.S.  $23\frac{1}{2}^{\circ}\text{S}$ ,  $180^{\circ}$   
 Tonga Is.  
 H = 09 49 13  
 h approx. = 600 kms.

29th	i!P	Z	17	05	15
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30th	i	Z	03	35	00
	i	Z		37	04

i	Z	12	54	$07\frac{1}{2}$
---	---	----	----	-----------------

e	Z	17	04	33
---	---	----	----	----

e	Z	20	11	42
i	Z		13	03
i	Z			07

i	Z	20	33	$52\frac{1}{2}$
e	Z		35	50

e	Z	22	43	49
i	Z			51

31st	iP	Z	00	12	$56\frac{1}{2}$
	i!	E		13	$08\frac{1}{2}$
	i!	Z			54

U.S.C.G.S.  
 Solomon Is.  
 H = 00 11 46  
 h approx. = 100 kms.

Felt: Boku  
 Int. 4(MM)  
 $6^{\circ}35'\text{S}$ ,  $155^{\circ}20'\text{E}$ .

Felt: Buin  
 Int. 3(MM)  
 $6^{\circ}50'\text{S}$ ,  $155^{\circ}45'\text{E}$ .

Felt: Aropa  
 Int. 3(MM)  
 $6^{\circ}25'\text{S}$ ,  $155^{\circ}50'\text{E}$ .

e	Z	06	58	13
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eP	Z	22	07	59
i	Z		08	05

U.S.C.G.S.  $15\frac{1}{2}^{\circ}\text{N}$ ,  $147\frac{1}{2}^{\circ}\text{E}$ .  
 Mariana Is. - foreshock  
 H = 22 03 23

eP	Z	23	11	11
eS	Z		15	10

U.S.C.G.S.  $15\frac{1}{2}^{\circ}\text{N}$ ,  $147\frac{1}{2}^{\circ}\text{E}$ .  
 Mariana Is.  
 H = 23 06 38

Tremors felt in the Territory, August, 1956.

Date	Time G.M.T.	Intensity Mercalli Modified	Latitude South	Longitude East	Locality
Aug. 1st	0150	2	05 40	147 50	Awelkon
2nd	0237	1	05 40	147 50	Awelkon
3rd	1107	1	05 40	147 50	Awelkon
4th	0949	3	04 11	152 10	Rabaul
		2 - 3	04 30	152 20	Warangoi
		2	05 00	151 15	Ulamona
		2	04 20	152 15	Kokopo
	1001	1 - 2	04 11	152 10	Rabaul
		1 - 2	04 30	152 20	Warangoi
		1	05 00	151 15	Ulamona
	c:1840	1	04 30	152 20	Warangoi
5th	0157	1	06 50	155 45	Buin
6th	0926	3	02 40	141 20	Vanimu
12th	0541	1	04 11	152 10	Rabaul
15th	2151	2	04 11	152 10	Rabaul
17th	1416	2	04 11	152 10	Rabaul
18th	1055	2	05 40	147 50	Awelkon
19th	1919	1	06 50	155 45	Buin
21st	1405	2	09 45	150 50	Esa'ala
	1530	1	"	"	"
24th	0500	3	06 25	155 50	Aropa
27th	0250	1	04 20	152 15	Kokopo
		1	04 11	152 10	Rabaul
		1	04 30	152 20	Warangoi
28th	0102	2	05 40	147 50	Awelkon
31st	c:0013	4	06 35	155 20	Boku
		3	06 25	155 50	Aropa
		3	06 50	155 45	Buin

TERRITORY OF PAPUA AND NEW GUINEA.

VULCANOLOGICAL OBSERVATORY RABAUL.

SEISMOLOGICAL BULLETIN.

SEPTEMBER, 1956.

/	1st	iP	Z	00	26	11½	U.S.C.G.S. 15½°N, 147½°E. Mariana Is. - aftershock H = 00 21 36
	X 2nd	Nil					
/	3rd	eP	Z	15	04	37	U.S.C.G.S. S. of Formosa H = 14 56 52
		eP	Z	18	09	59	B.C.I.S. 17¾°S, 168°E. New Hebrides Is. H = 18 05 13
		i	Z		10	05	
/	4th	eP	Z	12	01	55	U.S.C.G.S. Fiji Is. H = 11 55 31 h approx. = 100 kms.
		e	Z	14	39	09	
	X 5th)	Nil					
	X 6th)	Nil					
/	7th	iP	Z	00	56	23	<u>Felt:</u> Awelkon Int. 3(MM)
		i	Z			29	
		i!	E			31	5°40'S, 147°50'E.
		iS	Z		57	21	<u>Felt:</u> Kilenge
		i!	N			31½	Int. 2(MM)
		i	Z			50	5°30'S, 148°20'E.
/	8th	eP	Z	02	59	25	
		i	Z			29	
/	9th	iP	Z	15	25	36	U.S.C.G.S. Fiji Is. region H = 15 19 44 h approx. = 550 kms.
		iS	Z		30	57½	
		eP	Z	17	40	23	U.S.C.G.S. 3°N, 129°E.
		i	Z			32	Halmahera
		i	Z			38	H = 17 35 13
		ePcP	Z		43	05	h approx. = 150 kms.
		eS	Z		44	35	
		e	Z	18	09	40	
/	10th	e	Z	02	18	31	
		eP	Z	12	40	34	U.S.C.G.S. 0°, 101½°E.
		e	Z		41	02	Sumatra H = 12 31 54
/	11th	e(P)	Z	02	38	31 ✓	U.S.C.G.S. 16½°S, 178°E.
		e			40	02 ✓	Fiji Is. H = 02 32 28 Mag. = 6 (Pas)
		eP	Z	15	48	56	U.S.C.G.S. 17°S, 169°E.
		ipp	Z		49	15	New Hebrides Is.
		iPPP	Z			38½	H = 15 44 04
		e	Z		50	10	Mag. = 6 (Pas)
		e	Z			58	
		i	Z		51	29½	
		ePcP	Z		53	10	

(cont. over

11th cont.	e(P) e	Z	21	13 14	21 00	U.S.C.G.S. 49 $\frac{1}{2}$ <sup>o</sup> N, 155 <sup>o</sup> E. Kurile Is. H = 21 03 56 Mag. 6 $\frac{1}{4}$ (Pas)
12th	e	Z	16	18	09	
	iP e ePPP ePcS	Z Z Z Z	20	09 12 14	20 47 42 18	U.S.C.G.S. 49 $\frac{1}{2}$ <sup>o</sup> N, 156 <sup>o</sup> E. Kurile Is. - aftershock H = 19 59 54
13th	eP i i	Z Z Z	13	58 59	47 50 41	U.S.C.G.S. 3 <sup>o</sup> N, 128 $\frac{1}{2}$ <sup>o</sup> E. Halmahera H = 13 53 49 h approx. = 300 kms.
	iP	Z	14	38	54	U.S.C.G.S. 800 kms. S. of Tasmania H = 14 30 20
	eP ePP ePcP	Z Z Z	18	48 49 52	35 04 50	B.C.I.S. 17 $\frac{1}{2}$ <sup>o</sup> S, 169 <sup>o</sup> E. New Hebrides Is. H = 18 43 46
14th	e i	Z Z	09	10	43 48 $\frac{1}{2}$	
15th	iPKP e ePKS ePPP	Z Z E Z	07 08	58 01	12 30 47 18	U.S.C.G.S. 20 <sup>o</sup> S, 69 <sup>o</sup> W. Chile H = 07 39 04 h approx. = 100 kms. Mag. 6 $\frac{3}{4}$ (Pas)
	i!)P e )	Z NE	10	34	06	U.S.C.G.S. 4 <sup>o</sup> S, 151 <sup>o</sup> E. New Britain H = 10 33 09 h approx. = 400 kms.
	eP i	Z Z	16	31	19 37	B.C.I.S. 17 $\frac{1}{4}$ <sup>o</sup> S, 169 $\frac{1}{2}$ <sup>o</sup> E. H = 16 26 30 New Hebrides Is.
16th	e e i	Z Z NE Z	18	32	12	
	e e e eS	Z Z Z E E	08	50 51 53	03 06 02 56	U.S.C.G.S. 34 <sup>o</sup> N, 69 $\frac{1}{2}$ <sup>o</sup> E. Afghanistan H = 08 37 22 Mag. = 6 $\frac{1}{4}$ -6 $\frac{1}{2}$ (Pas)
	iP e eS iScP	Z Z E Z	13	33 34 38 39	10 $\frac{1}{2}$ 46 26 06	U.S.C.G.S. 19 <sup>o</sup> S, 174 $\frac{1}{2}$ <sup>o</sup> W. Tonga Is. H = 13 26 30 h approx. = 200 kms.
17th	eP i! iS	Z Z E	19	15 16	51 54 21 $\frac{1}{2}$	
	iP iPP	Z Z	20	28 31	39 21	U.S.C.G.S. 5 $\frac{1}{2}$ <sup>o</sup> N, 95 <sup>o</sup> E. Sumatra H = 20 19 07 h approx. = 150 kms.

								3.
✓	18th	i!	Z	02	28	52		
		i	Z		32	24½		
		i	Z	03	00	08½	Felt: Talasea Int. 1(MM) 5°20'S, 150°05' E.	
		i!	Z	15	38	28		
✗	19th	Nil						
✓	20th	e	Z	10	54	22		
		i	Z			25½		
→		eP	Z	20	15	49	✓ U.S.C.G.S. 51°N, 159°E. Kamchatka - foreshock H = 20 06 09	
		eP	Z	22	01	39	✓ U.S.C.G.S. 51½°N, 159½°E. Kamchatka H = 21 52 01 Mag. = 6¼ (Pas)	
		iPcP	Z		03	06	✓	
✓	21st	ePKP	Z	19	30	10	✓ U.S.C.G.S. 26½°S, 63°W. Argentina H = 19 11 59 h approx. = 600 kms.	
		i	Z	19	32	26	✓	
✓	22nd	i!	Z	23	15	18½	Felt: Rabaul Int. 1(MM) 4°11'S, 152°10'E.	
✓	23rd	iP	Z	11	31	00		
		i	Z			05		
✓	24th	eP	Z	07	08	07	U.S.C.G.S. 22°S, 175°E. Fiji Is. H = 07 02 13	
✗	25th	Nil						
✓	26th	e	Z	19	17	51		
✗	27th) 28th)	Nil						
✓	29th	iP	Z	04	01	09½	U.S.C.G.S. 0°, 123°E. Celebes H = 03 55 27 h approx. = 300 kms.	
		eP	Z	09	13	48	✓ U.S.C.G.S. 7½°N, 94½°E. Nicobar Is. H = 09 03 37	
		e	Z	11	55	09		
		i	Z			16		
		e	Z		56	56		
		eP	Z	21	28	53	✓ U.S.C.G.S. 37½°N, 141°E. Honshu H = 21 20 52	
		e	Z		29	18		
		eP	Z	22	28	10	U.S.C.G.S. 3°N, 128°E. Halmahera H = 22 22 48 h approx. = 60 kms.	
		i	Z			23		
		e	N		30	25		
		e	Z			55½		
		ePcS	Z		35	18		
		ScP						

(cont. over

4.

29th	iP	Z	23	28	33	U.S.C.G.S. 35 $\frac{1}{2}$ <sup>o</sup> N, 140 <sup>o</sup> E. Honshu H = 23 20 52 h approx. = 60 kms. Mag. = 6 $\frac{3}{4}$ -7 (Pas)
cont.	i	Z		29	07	
30th	i:P	Z	14	46	09 $\frac{1}{2}$	U.S.C.G.S. 14 <sup>o</sup> N, 144 <sup>o</sup> E. Mariana Is. H = 14 41 44 h approx. = 100 kms.
	i	E			15 $\frac{3}{4}$	
	i	N			28 $\frac{3}{4}$	
	i	Z		47	10	
	e	Z			53	
	e	N		50	54	

Tremors felt in the Territory, September, 1956.

Date	Time G.M.T.	Intensity Mercalli Modified	Latitude South	Longitude East	Locality
			o	'	
Sep. 7th	0055	3	05	40	147 50 Awelkon
		2	05	30	148 20 Kilenge
10th	1915	2	05	20	151 05 Bialla
14th	0855	1	06	25	155 50 Aropa
	1545	2	06	25	155 50 Aropa
17th	1415	2	05	20	150 05 Talasea
18th	0300	1	05	20	150 05 Talasea
	0605	1 - 2	05	35	150 10 Numundo
20th	0500	1 - 2	05	35	150 10 Numundo
22nd	2315	1	04	11	152 10 Rabaul
		?	04	30	152 20 Warangoi

TERRITORY OF PAPUA AND NEW GUINEA.
VULCANOLOGICAL OBSERVATORY RABAU.
SEISMOLOGICAL BULLETIN.
OCTOBER, 1956.

✓ 1st	Nil				
✓ 2nd	iP	15	06	11	U.S.C.G.S. 53°N, 159°E.
	i			22	Kamchatka
	i		07	48	H = 14 56 26
	e		14	07	h approx. = 60 kms.
✓ 3rd	eP	08	37	51	U.S.C.G.S. 20°S, 69½°W.
	(e			52½	Chile
	(e		38	20	H = 08 18 49
	e		41	10	h approx. = 150 kms.
	e			27	Mag. = 6½ (Pas)
	e			59	
	iP!	13	10	05	Deep. Compression from just south of West.
	e	13	52	17	
✓ 4th	i(P)	02	24	41	
	i		25	27½	
	i			41	
	i!			42	
	i	02	55	10	
✓ 5th	Times uncertain				
✓ 6th	iP!	03	13	20	Dilatation to North-East possibly deep
	i!			27	
	iS			35	Felt: Londolovit
	i!			40	Int. 4(MM)
					3°05'S, 152°40'E.
	eP	06	21	37	U.S.C.G.S. 2½°N, 126½°E.
					Molucca St.
					H = 06 15 57
	eP	17	06	38	U.S.C.G.S. 16°S, 179°W.
	i			46	Fiji Is.
	e		11	09	H = 17 00 14
	e		12	01	h = 100 kms.
	e		16	03	
✓ 7th	iP	21	31	44½	U.S.C.G.S. 13°S, 167°E.
	i		32	12	New Hebrides Is.
	i			57	H = 21 27 50
	i		39	58½	h approx. = 100 kms.
	e		43	41	
✓ 8th	iP	00	21	47	U.S.C.G.S. 4°S, 144½°E.
	eP			47½	Nr. N. Coast of New Guinea
	i		22	00	H = 00 19 47
					h approx. = 100 kms.
					(Rabaul) Compression from West.
					Felt: Angoram
					Int. 3(MM)
					4°05'S, 144°05'E.
	i(P)	04	33	31	U.S.C.G.S. 12°N, 141°E.
	i			32	Mariana Is.
					H = 04 29 04

(Cont. over)



					2.
8th cont.	eP	14	52	25	
	or P!				
	i			32	
	e		53	56	
	e?		56.6	-	
	e	(15)	03.2	-	
	e		04.7		
	iP	17	21	09	
	iP!	17	41	14	
					Compression from South-East Felt: Rabaul Int. 2(MM) 4°11'S, 152°10'E. S-P (Omori) = 11 secs.
9th	eP	16	55	30½	U.S.C.G.S. 15½°N, 147½°E.
	i			32	Mariana Is.
	i			46½	H = 16 50 5 6
	e		56	45	
	e		59.3	-	
10th	eP	02	02	30	B.C.I.S. Nr. N. Coast of
	i			36	New Guinea
	e		03	08	H = 02 00.6 m.
	eP	15	43	41	U.S.C.G.S. 28½°N, 78°E.
					N. India
					H = 15 31 34
	iP	21	13	22	? Small local tremor
11th	iP	02	33	21	U.S.C.G.S. 46°N, 150½°E.
	i!			23	Kurile Is.
	i			48	H = 02 24 33
	i			54	h approx. = 100 kms.
	i		34	04	Mag. = 7¼-7½ (Pas)
	i		35	40	
	i		36	59	
	e		39	11	
	e			43	
	e		40.4	-	
	e		41.2		
	e		46.2		
	i		53	56	
	e	(03)	04.0		
	e		04.8		
	eP	05	56	39	? Small local tremor
	eP	17	01	34	U.S.C.G.S. 40½°N, 126½°W.
	e		05	00	California
	e		07	22	H = 16 48 46
					Mag. = 6 (Pas)
	eP	17	22	06	U.S.C.G.S. 41°N, 126°W.
	i			07½	California - Aftershock
	i			16	H = 17 18 17
	i			25	
	i			33	
	i			53	
	e		23.8	-	
	e		24.7	-	

3.

✓ 12th	ePKP e	02 (03)	56 00	53 13	U.S.C.G.S. 15 $\frac{1}{2}$ °S, 75°W. Coast of Peru H = 02 37 45 h approx. = 60 kms. Mag. = 6 $\frac{1}{2}$ (Pas)
✓	eP i e	12	31	17 28 $\frac{1}{2}$ 38.1 -	U.S.C.G.S. 42 $\frac{19}{2}$ °N, 144 $\frac{1}{2}$ °E. Hokkaido H = 12 22 46 Mag. = 6 $\frac{1}{4}$ -6 $\frac{1}{2}$ (Pas)
	iP e e	18	45 52	29 49 23	B.C.I.S. 17 $\frac{1}{4}$ °S, 170°E. New Hebrides Is. H = 18 40 34 h = 200 kms.
✓ 13th	e i e e	15	10 11 21	49 05 46 58.	B.C.I.S. Insufficient data
✓	eP i i!	18	54	49 $\frac{1}{2}$ 51 53	U.S.C.G.S. 5°S, 149 $\frac{1}{2}$ °E. New Britain H = 18 54 06 h = 150 kms. <u>Felt:</u> Numundo Pl. Int. 3-4 (MM) 5°35'S, 150°10'E. <u>Felt:</u> Popondetta Int. 3 (MM) 8°45'S, 148°15'E. <u>Felt:</u> Awelkon Int. 3 (MM) 5°40'S, 147°50'E. <u>Felt:</u> Kandrian Int. 3 (MM) 6°15'S, 149°35'E.
✓ 14th	eP	00	36	27	J.M.A. 36°8N, 140°9E. Honshu H = 00 31 02
	eP i i i!	04	01	00 01 07 $\frac{1}{2}$ 11	U.S.C.G.S. 4°S, 146°E. Nr. N. Coast of New Guinea H = 03 59 27
✓ 15th	iP	11	32	39 $\frac{1}{2}$	B.C.I.S. Insufficient data
✓ 16th	iP i iS i!	17	10 11	24 $\frac{1}{2}$ 25 01 $\frac{1}{2}$ 07	Compression from just South of West. <u>Felt:</u> Numundo Pl. Int. 3 (MM) 5°35'S, 150°10'E.
✓ 17th	e(P) i i	17	10 11	58 09 34	
✗ 18th	Times uncertain.				

4.

19th	iP!	10	51	27 27½	U.S.C.G.S. 5°S, 154½°E. Solomon Is. H = 10 52 42 h approx. = 150 kms. <u>Felt:</u> Karoola Int. 4(MM) 5°10'S, 154°35'E. <u>Felt:</u> Fead Is. Int. 2(MM) 3°25'S, 154°45'E. <u>Felt:</u> Warangoi Int. 1-2(MM) 4°30'S, 152°20'E. <u>Felt:</u> Rabaul Int. 1(MM) 4°11'S, 152°10'E.
	eP	12	06	25	U.S.C.G.S. 21°S, 179°W.
	i			21	Fiji Is.
	i		08	05	H = 12 00 38
	i			53	h approx. = 550 kms.
	i		09	27½	
	e		10	50	
	e		11	05	
	e			42	
	i		12	46	
	e		15	38	
	eP	14	18	07	U.S.C.G.S. 56½°S, 122°W.
	or P'			14	S. Pacific Ocean
	i			19	H = 14 05 34
	e		19	24	Mag. = 6½ (Pas)
	e			28	
	e		20	05	
	e		21	19	
	e		28.7	-	
	eP	20	57	42	U.S.C.G.S. 52°N, 177°E.
	or P'			59	Aleutian Is.
	e			03	H = 20 47 33
	e			51	Mag. = 6¾ (Pas)
	e	(21)	00	32	
	e		06.0	-	
20th)					
21st)	Nil				
22nd	iP	12	36	35½	U.S.C.G.S. 9½°S, 150°E.
	i			38½	Nr. S.E. Coast of New Guinea
	i!			42	H = 12 35 10
	i			55½	<u>Felt:</u> Mukawa
	i		37	24	Int. 3-4 (MM)
	IS?N			34	9°40'S, 150°0'E.
	i			37½	<u>Felt:</u> Baniara
	i!			44	Int. 3(MM)
					9°45'S, 149°55'E.
					<u>Felt:</u> Esa'ala
					Int. 3(MM)
					9°45'S, 150°50'E.
					<u>Felt:</u> Losuia
					Int. 3(MM)
					8°30'S, 151°05'E.
					<u>Felt:</u> Sagari River
					Int. 3(MM)
					10°25'S, 150°15'E.
					<u>Felt:</u> Salamo
					Int. 3 (?) (MM)
					9°40'S, 150°45'E.

(cont. over)

5.

22nd cont.					
(iP	12	42	38		Aftershock. <u>Felt</u> : Esa'ala, Salamo.
(iS N		43	33 $\frac{1}{2}$		
i!			42 $\frac{1}{2}$		
eP	12	53	08		B.C.I.S. Nr. the S.E. Coast of
eS N		54	05 $\frac{1}{2}$		New Guinea. Aftershock. <u>Felt</u> :
i!			20		Esa'ala, Salamo.
eP	15	19	32		U.S.C.G.S. 9 $\frac{1}{2}$ 'S, 150°E.
i			33 $\frac{1}{2}$		Nr. S.E. Coast of New Guinea
i!			41		H = 15 18 13
iS		20	29		h approx. = 100 kms.
ei			35		<u>Felt</u> : Esa'ala
i!			39		Int. 3(MM)
					9°45'S, 150°50'E.
					<u>Felt</u> : Salamo
					Int. 3(?) (MM)
					9°40'S, 150°45'E.
eP	15	28	37		B.C.I.S. Nr. N.E. Coast of
i(S)		29	40		New Guinea. Aftershock.
i!			43		<u>Felt</u> : Esa'ala, Salamo.
					Several other small aftershocks
					felt in the Esa'ala area.
23rd	iP	08	48	17	U.S.C.G.S. 13 $\frac{1}{2}$ 'N, 120 $\frac{1}{2}$ 'E.
	e			30	Mindoro. Philippine Is.
	ipP			39 $\frac{1}{2}$	H = 08 41 22
	i			58	h approx. = 100 kms.
	ePP		49	54	
	i		50	15	
	e			36	
24th	eP	03	18.0	-	
	ei		18	0.5	
	e		19	25	
	e		20	10	
	e		21	08	
	iP!	05	17	29 $\frac{1}{2}$	Compression from East (?)
	i(S)!			51	
	ePP	15	01	06	U.S.C.G.S. 12°N, 87°W.
	i			12	Nicaragua
	e		02	31	H = 14 42 10
	eSKS		08.3	-	Mag. 7 $\frac{1}{4}$ (Pas)
	eP	17	24	08	Compression. B.C.I.S.
	i!			10	6 $\frac{1}{2}$ 'S, 156 $\frac{3}{4}$ 'E.
	iS			58 $\frac{1}{2}$	Solomon Is.
	i		25	06	H = 17 22 49
	i!			08 $\frac{1}{2}$	<u>Felt</u> : Karoola
					Int. 4(MM)
					5°10'S, 154°35'E.
					<u>Felt</u> : Aropa
					Int. 3(MM)
					6°25'S, 155°50'E.
25th	Nil				
26th	e	02	52	40	U.S.C.G.S. 17 $\frac{1}{2}$ 'S, 176°E.
					Fiji Is.
					H = 02 47 00
	iP	08	59	30	U.S.C.G.S. 6 $\frac{1}{2}$ 'S, 130°E.
	i (09)		00	00	Banda Sea
	i			03	H = 08 54 46
	e			22	h approx. = 200 kms.

(cont. over

6.

✓ 26th cont.	iP!	21	40	54	B.C.I.S. New Britain H = 21 40.5m. Dilatation to South-south-east <u>Felt:</u> Pomio Int. 2-3 (MM) 5°30'S, 151°30'E.
	eiP	22	54	42	U.S.C.G.S. 14°S, 167°E.
	i			59	New Hebrides Is.
	i		55	10½	H = 22 50 24
	e		58	42	Mag. = 6½ (Pas)
	Confused by small local shocks.				
✓ 27th	e	17	22	44	B.C.I.S. Mariana Is. region H = 17 18.6m.
✓ 28th	e(P)	03	01	41	B.C.I.S. 25°S, 179½°W. Fiji Is. H = 02 55 34 h = 400 kms.
	e	03	07	06	
	iP!	03	07	39	Dilatation to South-south-east <u>Felt:</u> Rabaul Int. 1-2 (MM) 4°11'S, 152°10'E.
	eP	03	36	11	U.S.C.G.S. 32°S, 179°W.
	i			13	Kermadec Is.
	e		46.4	-	H = 03 28 41 Mag. = 6¾-7 (Pas)
	Part of this shock was lost during record change.				
	eP	10	51	53	U.S.C.G.S. 14°N, 123½°E.
	e			56	Luzon, Philippine Is.
	i		52	24	H = 10 45 06
	e			31	
	e		53	12	
	e		55	07	
	e	11	21	17	
	iP!	18	19	15½	U.S.C.G.S. N r. E. Coast of New Britain H = 18 18 50 <u>Felt:</u> Pomio Int. 2 (MM) 5°30'S, 151°30'E.
	Dilatation to south-south-east				
✓ 29th	iP!	02	21	20	<u>Felt:</u> Warangoi Int. 2 (MM) 4°30'S, 152°20'E. S-P (Omori) = 11 secs.
	Dilatation to south-south-east				
	e	08	50	17	
	e(P)	12	13	19	
	i			24	
	iPKP	16	01	13½	U.S.C.G.S. 8½°S, 77°W.
	e			38	Peru H = 15 42 08 h approx. = 60 kms.
✓ 30th	eP	19	14	30	
	i			35½	

7.

31st	iP!	03	20	55	
	i		21	05 <sup>1</sup> / <sub>2</sub>	
	i!			09 <sup>1</sup> / <sub>2</sub>	
	iS?			43	
	i			48	
	e	14	17	32	B.C.I.S. 27 <sup>1</sup> / <sub>4</sub> °N, 54 <sup>1</sup> / <sub>2</sub> °E.
	e		21	29	S. of Iran
	e		40	06	H = 14 03 14
					Mag. = 6 <sup>3</sup> / <sub>2</sub> (Pas)
	iP	17	37	07	B.C.I.S. Discordant data.

Tremors felt in the Territory, October, 1956.

Date	Time G.M.T.	Intensity Mercalli Modified	Latitude South	Longitude East	Locality
Oct. 3rd	0130	2	07 55	145 25	Ihu
6th	c:0313	4	03 05	152 40	Londolovit
7th	1800	2	06 50	155 45	Buin
8th	c:0022	3	04 05	144 05	Angoram
		2	04 15	144 55	Bogia
		1	03:35	143 40	Wewak
	1741	2	04 11	152 10	Rabaul
		2	04 20	152 15	Kokopo
		(2	04 30	152 20	Warangoi)?
11th	0140	2	06 25	143 20	Lake Kutubu
	1800	2	06 10	150 35	Lindenhafen
13th	1855	3 - 4	05 35	150 10	Numundo Pl.
		3	08 45	148 15	Popondetta
		3	05 40	147 50	Awelkon
		3	06 15	149 35	Kandrian
		2 - 3	08 20	147 50	Ioma
		2	05 30	148 20	Kilenge
		2	09 30	147 10	Port Moresby
14th	0000	2	05 30	148 20	Kilenge
	2122	3	05 40	147 50	Awelkon
15th	0322	3	05 40	147 50	Awelkon
	0330	2	05 30	148 20	Kilenge
	1905	1	06 15	149 35	Kandrian
16th	1710	3	05 35	150 10	Numundo Pl.
19th	1051	4	05 10	154 35	Karoola
		2	03 25	154 45	Fead Is.
		1 - 2	04 30	152 20	Warangoi
		1	04 11	152 10	Rabaul
22nd	1233	3 - 4	09 40	150 00	Mukawa
		3	09 45	149 55	Baniara
		3	09 45	150 50	Esa'ala
		3	08 30	151 05	Losuia
		3	10 25	150 15	Sagari R.
	1240	3?	09 40	150 45	Salamo
	1630	3	09 45	150 50	Esa'ala

(cont. over)

Tremors felt - cont.

Date	Time G.M.T.	Intensity Mercalli Modified	Latitude South	Longitude East	Locality
<u>22nd.</u>					
Small shocks felt at Esa'ala at 0715, 1115, 1131, 1239, 1243, 1250, 1252, 1253, 1255, 1310, 1313, 1315, 1330, 1340, 1430, 1500, 1520, 1525, 1530, 1535, 1730, and 1900.					
Small shocks felt at Salamo at 1253, 1255, 1310, 1313, 1315, 1330, 1340, 1430, 1500, 1520, 1525, 1530, 1535, 1630, 1730 and 1900.					
23rd.	0115 0118	2 4	09 40 09 45	150 45 150 50	Salamo Esa'ala
24th	0545? 1130 1730 1818	3 1 3 4 4	05 10 06 50 06 25 06 50 05 10	154 35 155 45 155 50 155 45 154 35	Karoola Buin Aropa Buin Karoola
25th	1115-20	2	03 05	152 40	Londolovit
26th	2140 2150(?)	2 - 3 1	05 30 05 00	151 30 151 15	Pomio Ulamona
28th	0307     1819	1 - 2 1 - 2 1 1 1 2	04 11 04 30 05 00 04 20 05 00 05 30	152 10 152 20 151 15 152 15 152 05 151 30	Rabaul Warangoi Ulamona Kokopo Tol Pomio
29th	0221  1020 1858 2108	2 1 2 2 2 4 2	04 30 05 00 04 20 05 00 05 30 09 45 "	152 20 151 15 152 15 152 05 151 30 150 50 "	Warangoi Ulamona Kokopo Tol Pomio Esa'ala "
30th	1845	2	05 40	147 50	Awelkon
31st	0916 1645 1700 1708	1 1 - 2 1 - 2 1 - 2	04 15 09 45 " "	151 35 150 50 " "	Rangarere Esa'ala " "

TERRITORY OF PAPUA AND NEW GUINEA.

VULCANOLOGICAL OBSERVATORY RABAU.

SEISMOLOGICAL BULLETIN.

NOVEMBER, 1956

X	1st	Nil				
X	2nd	Nil				
/	3rd	iP	Z	05	25	03½ Felt: Rabaul Int. 1(MM) 4°11'S, 152°10'E.
✓		eP	Z	18	08	03 U.S.C.G.S. 24°S, 180°
		e	Z			22 Fiji Is.
		iPcP	Z		10	32 H = 18 02 04
		eS	E		12	34 h approx. = 500 kms.
		eScP	Z		13	31
		e	E		14	26
		eScS	N		17	34
/	4th	i	Z	03	26	58
✓		eP	Z	05	44	56 U.S.C.G.S. 35½N, 140½E.
		ePP	Z		47	14 Honshu H = 05 37 15 h approx. = 100 kms.
		i	Z	06	19	26 B.C.I.S. 8¾°S, 160¼°E.
		i	Z			30 Solomon Is.
		i!	Z		20	31 H = 06 17 49
		i	Z	06	41	18
✓		eP	Z	07	12	44 U.S.C.G.S. 22°S, 175°W.
		i	E		13	01½ Tonga Is.
		i	NE			18 H = 07 05 43
		iPcP	Z		15	22 h approx. = 60 kms.
		eS	Z		18	29 Mag. = 6½-6¾ (Pas)
		eScP	Z			55
		ePcS	N		19	03
		e	N		20	34
		eScS	Z		23	04
		iP	Z	20	08	11 Felt: Rabaul
		i!	Z			35 Int. 1(MM) 4°11'S, 152°10'E. S-P (Omori)=10 secs.
/	5th	iP	Z	12	28	03½ Felt: Warangoi Int. 2-3(MM) 4°30'S, 152°20'E.
						Felt: Rabaul Int. 1-2(MM) 4°11'S, 152°10'E. S-P (Omori) = 13 secs.
		i!P	Z	12	30	33 Felt: Warangoi Int. 1-2(MM) 4°30'S, 152°20'E. S-P (Omori) = 13 secs.
✓	6th	eP	Z	14	16	51.C. U.S.C.G.S. 5½°S, 134°E.
		i	Z			55 Aru Is.
		i	E		17	17 H = 14 12 35
		eS	E		20	26
X	7th	Nil				



2.

✓ 8th	iP	Z	06	56	16	U.S.C.G.S. 18°S, 178°W.
	i	Z			29	Fiji Is.
	iPcP	Z		58	49	H = 06 50 24
	eS	Z	07	00	54	h approx. = 500 kms.
	eP	Z	15	51	03	U.S.C.G.S. 9°N, 126°E.
						Mindanao
						H = 15 44 50
✓ 9th	e		02	46	15	
	ePKP	Z	06	21	38	U.S.C.G.S. 36°N, 34½°W.
						Atlantic Ocean
						H = 06 01 51
	i	Z	07	36	20	
	e	Z	09	50	18	
	i	Z			22½	
✓	iPKP	Z	13	24	39	U.S.C.G.S. 17°N, 94°W.
	ePP	Z		25	26	Mexico
						H = 13 06 10
						h approx. = 150 kms.
						Mag. = 6¼-6½ (Pas)
	e	Z	16	32	33	
	iP	Z	18	02	59	U.S.C.G.S. 27½°S, 178°W.
	ePcS	Z		09	09	Kermadec Is.
						H = 17 56 26
						h approx. = 350 kms.
✓ 10th	iP	Z	07	36	14	
	i	Z			17	
✓	eP	Z	14	47	10	U.S.C.G.S. 16°N, 121°E.
	i	Z			13	Luzon
	i	Z			48½	H = 14 39 56
	i	Z	21	22	17	
	i	Z		23	41	
	e	Z		28	33	
	iP	Z	23	38	40	
✓ 11th	iP	Z	03	19	26	U.S.C.G.S. 16½°S, 179°W.
	eS	Z		23	55	Fiji Is.
	iScP	Z		24	42	H = 03 13 48
	eScS	Z		28	43	h approx. = 650 kms.
	e	Z	14	45	38	
✓	eP	Z	19	24	08	U.S.C.G.S. 44°N, 149°E.
	i	Z			23½	Kurile Is.
						H = 19 15 20
✓ 12th	eP	Z	08	39	06	U.S.C.G.S. 1°N, 126°E.
						Molucca St.
						H = 08 33 20
	e	Z	12	00	46	
	e	Z	15	16	11	
	i	Z			28	
	i	Z		17	10	
	e	Z			15	
	e	N		18	18	

(cont. over

3.

12th	iP	Z	16	13	41	
cont.	i	Z			43	
	i	Z		14	16 $\frac{1}{2}$	
	i	Z			29	
13th	eP	Z	07	46	51	U.S.C.G.S. 21 $\frac{1}{2}$ <sup>o</sup> S, 174 <sup>o</sup> E. Loyalty Is. H = 07 40 58
	eP	Z	08	42	01	U.S.C.G.S.
	i	Z			32	Loyalty Is. Region H = 08 36 17
	eP	Z	10	04	30	U.S.C.G.S. 48 $\frac{1}{2}$ <sup>o</sup> S, 124 <sup>o</sup> E.
	i	Z			44 $\frac{1}{2}$	Indian Ocean H = 09 55 29
	iP	Z	14	45	46	U.S.C.G.S. 15 <sup>o</sup> N, 123 <sup>o</sup> E. Luzon H = 14 38 51
14th	eS		05	10	53	Felt: Karoola Int. 3 (MM) 5 <sup>o</sup> 10'S, 154 <sup>o</sup> 35'E. Felt: Aropa Int. 2 (MM) 6 <sup>o</sup> 25'S, 155 <sup>o</sup> 50'E. U.S.C.G.S. 6 <sup>o</sup> S, 153 $\frac{1}{2}$ <sup>o</sup> E. New Britain H = 05 10 24 h approx. = 100 kms.
						Recorded on Omori, Benioff out of order.
X 15th	Nil					
16th	iP	Z	08	51	15	U.S.C.G.S. 4 <sup>o</sup> S, 139 <sup>o</sup> E.
	iPP	Z			25	New Guinea
	iPPP	Z			37	H = 08 48 14 h approx. = 150 kms.
	eP	Z	11	50	34	U.S.C.G.S. 14 <sup>o</sup> N, 123 <sup>o</sup> E. Luzon H = 11 43 35
17th	i	NE	22	51	15	No record for Z
	i	NE		52	02	
18th	eP	Z	09	54	11	U.S.C.G.S. 27 <sup>o</sup> S, 176 <sup>o</sup> W. Kermadec Is. - foreshock H = 09 46 49
	eP	Z	18	23	40	U.S.C.G.S. 27 <sup>o</sup> S, 176 <sup>o</sup> W.
	e	Z		25	33	Kermadec Is.
	e	Z		26	59	H = 18 16 25
	iP	Z	21	30	12	U.S.C.G.S. 28 $\frac{1}{2}$ <sup>o</sup> N, 129 $\frac{1}{2}$ <sup>o</sup> E.
	i	Z			21	Ryuku Is. H = 21 22 38
19th	eP	Z	02	53	46	U.S.C.G.S. 3 <sup>o</sup> S, 139 $\frac{1}{2}$ <sup>o</sup> E.
	i	Z			55 $\frac{1}{2}$	New Guinea H = 02 50 31
	eP	Z	12	06	21	U.S.C.G.S. 14 <sup>o</sup> N, 144 <sup>o</sup> E.
	i	Z			23	Mariana Is.
	i	N			29	H = 12 02 26
	iPP	Z			37	h approx. = 150 kms.
	e	E		07	05	

4.

20th eP Z 11 09 10 U.S.C.G.S. 7°S, 129°E.  
Banda Sea  
H = 11 03 30

iP! Z 12 04 41 U.S.C.G.S. 1/2°S, 123 1/2°E.  
i Z 05 12 Celebes  
e E 06 44 H = 11 58 55  
eS E 09 16 h approx. = 200 kms.  
ePcS- Z 11 21  
ScP

21st i 07 50 - Felt: Namatanai  
Int. 5(MM)  
Recorded on Omori, Benioff 3°40'S, 152°25'E.  
out of order. Felt: Rabaul  
Int. 2(MM)  
4°11'S, 152°10'E.  
U.S.C.G.S. 4°S, 152 1/2°E.  
New Britain  
H = 07 49 47  
h approx. 100 kms.  
S-P = 8 secs.

i! Z 13 00 21

22nd i Z 07 25 51  
i! Z 28 20

eP Z 08 23 28 Wellington 45°S, 167°E.  
e Z 36 South Island  
e Z 24 20 New Zealand  
H = 08 15 35

iP Z 09 19 31 1/2  
iS Z 53

eP Z 15 44 16 U.S.C.G.S. 15°S, 178°W.  
Fiji Is.  
H = 15 37 49

e Z 21 15 30

eP Z 23 33 54 U.S.C.G.S. 3°S, 132°E.  
i Z 55 W. of New Guinea  
i Z 34 44 H = 23 29 07  
e Z 53

23rd i Z 00 15 29  
i Z 30 1/2

i! Z 02 52 31 Felt: Ulamona  
Int. 1-2(MM)  
5°0'S, 151°15'E.

e Z 17 57 51

24th i Z 03 19 35  
i Z 41  
i Z 20 28

25th ePKP Z 14 34 16 U.S.C.G.S. 17°S, 71 1/2°W.  
ePKS Z 37 38 Peru  
eSS Z 53 H = 14 15 10  
h approx. = 100 kms.

eP Z 18 11 55 U.S.C.G.S. 15°S, 168°E.  
i Z 12 07 New Hebrides Is.  
iPP Z 30 H = 18 07 40  
e Z 13 20 h approx. = 100 kms.  
eS N 15 46

✓ 26th	iP i	Z Z	05	14	12 34	U.S.C.G.S. $1\frac{1}{2}^{\circ}$ N, $122\frac{1}{2}^{\circ}$ E. Celebes H = 05 07 55
✓	iPKP i ePKS	Z Z Z	19	08 09 12	56 12 12	U.S.C.G.S. $26^{\circ}$ S, $70\frac{1}{2}^{\circ}$ W. Chile H = 18 49 56 h approx. = 100 kms.
✓	eP i i	Z Z Z	23	34 35	59 01 $\frac{1}{2}$ 06	U.S.C.G.S. $22^{\circ}$ S, $169^{\circ}$ E. Loyalty Is. H = 23 29 41 Mag. = $6\frac{3}{4}$ (Pas)
✓ 27th	iP	Z	00	57	04	U.S.C.G.S. $21^{\circ}$ S, $168\frac{1}{2}^{\circ}$ E. Loyalty Is. - aftershock H = 00 51 46
	eP e	Z Z	02	24	53 58	U.S.C.G.S. Loyalty Is. - aftershock H = 02 19 34
	eP	Z	06	22	56	U.S.C.G.S. Loyalty Is. - aftershock H = 06 17 29
	eP i!	Z Z	07	00	11 16	U.S.C.G.S. $5^{\circ}$ S, $154^{\circ}$ E. Solomon Is. H = 06 59 34
	eP	Z	07	28	30	B.C.I.S. Loyalty Is. - aftershock H = 07 23.2m.
	eP i!	Z Z	08	39	07 $\frac{1}{2}$ 13	
	eP	Z	09	49	21	U.S.C.G.S. Loyalty Is. - aftershock H = 09 44 06
	eP i	Z Z	13	24	23 30	U.S.C.G.S. $21^{\circ}$ S, $169^{\circ}$ E. Loyalty Is. - aftershock H = 13 19 05
	eP	Z	15	57	36	U.S.C.G.S. Loyalty Is. - aftershock H = 15 52 20
✓ 28th	eP	Z	03	48	32	B.C.I.S. Loyalty Is. - aftershock H = 03 43 14
	eP i	Z Z	07	04	33 39	U.S.C.G.S. Loyalty Is. - aftershock H = 06 59 18
✓	eP ePP	Z Z	15	19 20	05 44	U.S.C.G.S. $30^{\circ}$ S, $176^{\circ}$ W. Kermadec Is. H = 15 11 33
✓	iP i ePPP eS	Z Z Z Z	19	36 39 44	32.C. 45 45 02	U.S.C.G.S. $49\frac{1}{2}^{\circ}$ N, $155^{\circ}$ E. Kurile Is. H = 19 27 11 Mag. = $6\frac{3}{4}$ -7 (Pas)

29th	eP	Z	09	21	57	U.S.C.G.S. 27°N, 141°E.
	i	Z		22	39	Bonin Is.
	eS	Z		27.1		H = 09 15 20
						Mag. = 7 (Pas)
	eP	Z	14	42	54	U.S.C.G.S. 27½°N, 141½°E.
						Bonin Is. - aftershock
						H = 14 36 20
	e	Z	17	30	36	
	eP	Z	23	34	39	
	i!	Z		.	41½	
30th	eP	Z	16	58	31	U.S.C.G.S. 20½°S, 174½°W.
	i	Z			38	Tonga Is.
						H = 16 51 28

Tremors felt in the Territory, November, 1956.

Date	Time G.M.T.	Intensity Mercalli Modified	Latitude South	Longitude East	Locality
Nov. 2nd	0200	1	05 40	147 50	Awelkon
	1524	1 - 2	06 15	149 35	Kandrian
3rd	0525	1	04 11	152 10	Rabaul
	c:0600	2 - 3	09 05	149 20	Tufi
4th	0630	"Severe"	09 23	150 25	Nuatutu (Goodenough Is.)
	2008	2	04 11	152 10	Rabaul
5th	1228	2 - 3	04 30	152 20	Warangoi
		1 - 2	04 11	152 10	Rabaul
	1230	1 - 2	04 30	152 20	Warangoi
13th	0550	3	06 35	155 20	Boku
14th	0510	3	05 10	154 35	Karoola
		2	06 25	155 50	Aropa
18th	c:0400	2	06 35	155 20	Boku
21st	0750	5	03 40	152 25	Namatani
		2	04 11	152 10	Rabaul
		1 - 2	04 30	152 20	Warangoi
22nd	0740	2	05 30	148 20	Kilenge
23rd	0242	1 - 2	05 00	151 15	Ulamona
27th	1205	1	05 00	152 05	Tol Ptn.

TERRITORY OF PAPUA AND NEW GUINEA.

VULCANOLOGICAL OBSERVATORY RABAU.

SEISMOLOGICAL BULLETIN.

DECEMBER, 1956.

✓ 1st	eP	Z	07	49	07	U.S.C.G.S. 22°S, 169°E. Loyalty Is. H = 07 43 51
✓ 2nd	iP	Z	00	55	36	<u>Felt:</u> Namatanai Int. 3-4(MM) 3°40'S, 152°25'E. <u>Felt:</u> Warangoi Int. 2(MM) 4°30'S, 152°20'E. <u>Felt:</u> Rangarere Int. 1(MM) 4°15'S, 151°35'E.
	eP	Z	16	40	44	U.S.C.G.S. 17°S, 173½°W. Tonga Is. H = 16 33 36
✓ 3rd	i!P	Z	16	56	21	
✓ 4th	eP	Z	10	21	16	U.S.C.G.S. 45½°S, 106°W. South Pacific H = 10 07 54 Mag. = 6¾ (Pas)
	eP	Z	21	07	(06)	U.S.C.G.S. 26°N, 127°E. Ryuku Is. H = 20 59 52 h approx. = 100 kms.
✓ 5th	eP	Z	06	27	19	
✓ 6th	iP	Z	12	42	39	Deep
✓ 7th	i!P	Z	11	21	03.C.	Deep
	i	Z		22	05	
	i	Z		28	37	
	iP	Z	20	05	17	Deep
	e	Z	20	40	20	
✓ 8th	eP	Z	16	20	35	U.S.C.G.S. 51°N, 179½°W. Andreanof Is. H = 16 10 27 Mag. = 6½ (Pas)
	e	Z		21	40	
✓ 9th	iP	Z	00	16	36	U.S.C.G.S. 0°; 125½°E. Molucca St. H = 00 10 45
	i!P	Z	02	36	12½.C.	Deep
	i	Z			21	
	i	Z			59	
	i!P	Z	11	28	57.C.	U.S.C.G.S. 6°S, 152°E. New Britain H = 11 28 29 h approx. = 100 kms. Compression from South-east

10th	i!P	Z	16	48	37	U.S.C.G.S. 5°S, 152°E. New Britain H = 16 48 21 h approx. = 60 kms. S-P (Omori) = 12 secs. Felt: Rangarere Int. 4-5 (MM) 4°15'S, 151°35'E. Felt: Rabaul Int. 3 (MM) 4°11'S, 152°10'E. Felt: Warangoi Int. 3 (MM) 4°30'S, 152°20'E.
Dilatation to East-south-east.						
11th	eP	Z	06	40	23	U.S.C.G.S. 50°N, 156°E. N. of Kurile Is. H = 06 30 58
	iP	Z	08	46	56	B.C.I.S.
	e	Z		47	39	Philippine Is. Rather discordant data.
	i!P	Z	23	51	46.D.	Deep?
	i!	Z			58	
	i!	E		52	27½	
12th	i!P	Z	10	24	38.D.	U.S.C.G.S. 13½°N, 144½°E. Mariana Is. H = 10 20 26 h approx. = 200 kms.
					Deep	
	eP	Z	12	29	36	
	i	Z			40	
	iP	Z	21	00	49	U.S.C.G.S. Formosa H = 20 53 15 h approx. = 150 kms.
13th	iP	Z	14	57	40	U.S.C.G.S. 2°N, 126½°E.
	i	Z		58	18	Molucca St.
	ePcS	Z	15	04	40	H = 14 52 02
	eP	Z	19	38	37	U.S.C.G.S. 12°N, 143°E.
	i	Z			45	Mariana Is.
	e	N		40	04	H = 19 34 24
	eS	N		42	17	
14th	eP	Z	19	49	51	B.C.I.S.
	i	Z			57	Solomon Is. region H = 19 47.7m. h approx. = 100 kms.
15th	iP	Z	06	51	28	
	iP	Z	13	56	09	U.S.C.G.S. 2½°N, 128½°E.
	e	N			47	Halmahera
	i	Z			58	H = 13 50 56
	e	N		58	53	h approx. = 150 kms.
	eScP	Z	14	02	58	
	eP	Z	17	28	18	U.S.C.G.S. 13°S, 167½°E.
	i!PP	Z			46	New Hebrides Is.
	ePPP	N		29	17	H = 17 24 24
	i	Z			58	h approx. = 150 kms.
	eS	Z		31	40	Mag. = 6-6¼ (Pas).
	iScP	Z		36	17	
	eScS	NE		40	00	
	e	Z	21	51	28	

3.

✓ 16th	iPKP ePKS	Z Z	02	01 04	07 55	U.S.C.G.S. 6½°N, 78°W. Colombia H = 01 41 52 Mag. = 6½ (Pas)
✗ 17th	Nil					
✓ 18th	iPKP i iPKS	Z Z Z	02	50 30 53	16 30 32	U.S.C.G.S. 25½°S, 68½°W. Chile H = 02 31 00 Mag. = 7-7¼ (Pas)
✓	eP	Z	19	31	53	U.S.C.G.S. 36°S, 77°E. S. Indian Ocean H = 19 20 06
✓ 19th	iP	Z	01	27	42	U.S.C.G.S. 51½°N, 157°E. Kamchatka H = 01 18 10
✗ 20th	Nil					
✓ 21st	eP	Z	09	11	33	U.S.C.G.S. 51°N, 131°W. Queen Charlotte Is. H = 08 58 53 Mag. 6¾ (Pas)
	i!P	Z	14	16	35.C.	<u>Felt: Tol</u> Int. 3 (MM) 5°00'S, 152°05'E. <u>Felt: Bialla</u> Int. 2 (MM) 5°20'S, 151°05'E. S-P (Omori) = 10 secs.
	Compression from south-east. Deep.					
✓	eP i	Z Z	20	17	39 47	U.S.C.G.S. 34°N, 139°E. Honshu H = 20 10 06
	i!P i!(S)	Z Z	22	42	21½ 38	D. B.C.I.S. Discordant data. <u>Felt: Pomio</u> Int. 2 (MM) 5°30'S, 151°30'E.
	Dilatation to West-south-west					
✓ 22nd	i!P	Z	08	43	32	<u>Felt: Rabaul</u> Int. 1 (MM) 4°11'S, 152°10'E.
	Dilatation to north-west					
✓	eP i i	Z Z Z	22	45 47 48	33 50½ 05½	U.S.C.G.S. 29½°S, 177°W. Kermadec Is. H = 22 38 12
✓	eP ePP	Z Z	23	20 21	06 53	U.S.C.G.S. 33½°N, 139°E. Honshu - aftershock H = 23 12 35
✓ 23rd	iP	Z	08	43	05	U.S.C.G.S. 22°N, 144½°E. Mariana Is. H = 08 37 26 h approx. = 100 kms. Mag. = 6½ (Pas)
	i!P	Z	23	36	46	<u>Felt: Warangoi</u> Int. 2 (MM) 4°30'S, 152°20'E. <u>Felt: Rabaul</u> Int. 1 (MM) 4°11'S, 152°10'E. S-P (Omori) = 20 secs.
	Dilatation to south?					



24th	i!P	Z	06	17	44	
	Dilatation to south-east					
	iP	Z	18	08	21	
	Dilatation to north?					
	i!P	Z	20	29	39	<u>Felt:</u> Ulamona
	i!S				57	Int. 2(MM)
	Dilatation to east?					
						5°00'S, 151°15'E.
	iP	Z	21	23	27	Deep? S-P (Omori) = 19 sec.
	iS	Z			47	
25th	iP	Z	02	53	59	S-P (Omori) = 22 secs.
						? Deep
	i!P	Z	07	47	57½	
26th	eP	Z	07	50	02	U.S.C.G.S. 10°S, 166°E.
	i	Z			21	Santa Cruz Is.
						H = 07 46 24
						Mag. = 6 (Pas)
27th	iP	Z	00	20	45.C.	U.S.C.G.S. 24°S, 177°W.
	i!	Z		21	00	Tonga Is.
	iPcP	Z		23	15	H = 00 14 15
	iS	Z		26	34	h approx. = 300 kms.
	iPcS	Z		27	04½	Mag. 7-7½ (Pas)
	eScS	Z		30	46	
	e	N	09	29	12	
	eP	Z	14	16	30	Apia. Tonga Is. region
	i	Z			36	H = 14 09.3m.
	eP	Z	21	37	32	U.S.C.G.S. 7½°N, 126°E.
	iPP	Z		38	17	Mindanao
						H = 21 31 28
28th	i!P	Z	01	52	21.C.	<u>Felt:</u> Warangoi
	Compression from south					
						Int. 2-3(MM)
						? deep
						4°30'S, 152°20'E.
	i!P	Z	14	25	04.C.	Deep
	i!S	Z			22	
	i	Z	14	32	15✓	U.S.C.G.S. 39°S, 177½°E.
	i!	Z			55✓	New Zealand
	e	E		37	31✓	H = 14 24 40
	e	Z		38	17✓	h approx. = 150 kms.
	i	Z		39	04	Mag. 6½ (Pas)
	e	Z			39	
	e	Z	15	05	19	
29th	i!P	Z	03	40	48.C.	U.S.C.G.S. 5½°S, 151½°E.
	Compression from south-west					
						New Britain
						H = 03 40 21
						h approx. = 60 kms.
						<u>Felt:</u> Rabaul
						Int. 3(MM)
						4°11'S, 152°10'E.
						<u>Felt:</u> Bialla
						Int. 3(MM)
						5°20'S, 151°05'E.
						S-P (Omori) = 18 secs.
	i!P	Z	03	52	49.C.	Compression from
	i!(S)			53	18½	west

5.

✓ 29th i!P Z 06 51 44.C. U.S.C.G.S. 51°S, 151½°E.  
cont. Compression from New Britain  
south-west H = 06 51 08  
Felt: Rabaul  
Int. 3 (MM)  
4°11'S, 152°10'E.  
Felt: Rangarere  
Int. 1-2 (MM)  
4°15', 151°35'E.  
S-P (Omori) = 18 secs.

i!P Z 07 06 11.C. Felt: Rabaul  
Compression from Int. 1 (MM)  
south-west 4°11'S, 152°10'E.  
? deeper than the S-P (Omori) = 18 secs.  
previous shock.

i!P Z 09 33 42½.D. Deep  
Dilatation to  
north-west

✓ eP Z 20 29 17 U.S.C.G.S. 21°S, 175½°W.  
i Z 23 W. Tonga Is.  
ePcP Z 31 43 H = 20 22 12  
ePcS Z 35 42 Mag. = 6¼-6½ (Pas)

✓ 30th Nil

✓ 31st eP Z 15 38 25  
i Z 28  
i Z 39 45  
i E 57

Tremors felt in the Territory, December, 1956.

Date	Time G.M.T.	Intensity Mercalli Modified	Latitude South	Longitude East	Locality
Dec. 1st	1918	3	04 15	151 35	Rangarere
2nd	0055	3 - 4	03 40	152 25	Namatanai
		2	04 30	152 20	Warangoi
		1	04 15	151 35	Rangarere
	1332	4	05 20	151 05	Bialla
	1347	2	"	"	"
	1435	1	05 00	151 15	Ulamona
4th	2255	2	06 10	150 35	Linden- hafen
7th	1010	2	09 45	150 50	Esa'ala
9th	0950	1	09 45	150 50	Esa'ala
		3	06 50	155 45	Buin
	1332?	3	06 25	155 50	Aropa
	2345	4	06 10	150 35	Linden- hafen

(cont. over

Date	Time G.M.T.	Intensity Mercalli Modified	Latitude South	Longitude East	Locality
10th	1648	4 - 5	04 15	151 35	Rangarere
		3	04 11	152 10	Rabaul
		3	04 30	152 20	Warangoi
		2	05 00	151 15	Ulamona
		1 - 2	05 30	151 30	Pomio
14th	1637	2	06 10	150 35	Linden- hafen
16th	2108	2	09 45	150 50	Esa'ala
17th	0653	1	03 30	142 05	Lumi
21st	1416	3	05 00	152 05	Tol
		2	05 20	151 05	Bialla
		1	05 30	151 30	Pomio
	1619	2	04 15	151 35	Rangarere
	2242	2	05 30	151 30	Pomio
22nd	0843	1	04 11	152 10	Rabaul
23rd	2336	2	04 30	152 20	Warangoi
		1	04 11	152 10	Rabaul
24th	2029	2	05 00	151 15	Ulamona
28th	0152	2 - 3	04 30	152 20	Warangoi
29th	0340	3	04 11	152 10	Rabaul
		3	05 20	151 05	Bialla
		2 - 3	04 30	152 20	Warangoi
		2	05 00	152 05	Tol
		1	04 15	151 35	Rangarere
		3	04 11	152 10	Rabaul
		1 - 2	04 15	151 35	Rangarere
	0651	1	05 00	152 05	Tol
		1	05 00	151 15	Ulamona
	0706	1	04 11	152 10	Rabaul