



SEISMOLOGICAL SERIES

of the

DOMINION OBSERVATORY

Seismological Bulletin

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1960



Seismological Service
of Canada

OTTAWA, CANADA

Department of Mines and Technical Surveys

DOMINION OBSERVATORIES

SEISMOLOGICAL BULLETIN - 1960

This report lists the instrumental results obtained at the seismological stations maintained by the Seismological Service of Canada. These are divided into two divisions.

Eastern Division

Ottawa, Ontario -

Dominion Observatory, Department of Mines and Technical Surveys.

Halifax, Nova Scotia -

Operated by Dalhousie University for the Dominion Observatory.

Seven Falls, Quebec -

Owned by the Quebec Power Company; operated by the Company for the Dominion Observatory.

Shawinigan Falls, Quebec -

Owned by the Shawinigan Water and Power Co.; operated by the Company for the Dominion Observatory.

Resolute, Northwest Territories -

Owned and operated by the Dominion Observatory.
R. Bourgoin in charge.

Local earthquakes are interpreted by means of travel-time curves based on rockburst studies. (See J. H. Hodgson, Publications of the Dominion Observatory, XVI, Nos. 5 and 6.)

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Western Division

Victoria, British Columbia -

Dominion Astrophysical Observatory, Department of Mines and Technical Surveys, Royal Oak, B.C.

Saskatoon, Saskatchewan -

Operated by the University of Saskatchewan for the Dominion Observatory.

Banff, Alberta -

Operated by the Banff School of Fine Arts for the Dominion Observatory.

Horseshoe Bay, British Columbia -

Owned and operated by the Dominion Observatory.
W. S. Blacklock in charge.

Alberni, British Columbia -

Owned and operated by the Dominion Observatory.
W. N. Burgess in charge.

Lillooet, British Columbia -

Owned and operated by the Dominion Observatory.
R. Roschard in charge.

Penticton -

Owned and operated by the Dominion Observatory.

Local earthquakes are interpreted by means of travel-time curves based on blast studies. (See W. G. Milne and W. R. H. White, Publications of the Dominion Observatories, XXIV, No. 7.) Records for all stations of the Seismological Service of Canada are stored on microfilm in Ottawa. Positive microfilm copies, or full-scale prints, will be sent on request. Beginning in 1960 records of the station at Brebeuf College, Montreal, are included in the microfilm file through the courtesy of M. Buist, S.J., Director.

Magnification curves for the various instruments operated at the above stations will be found on the following pages.

John H. Hodgson,
Chief, Division of Seismology.

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SEISMOLOGICAL BULLETIN - 1960

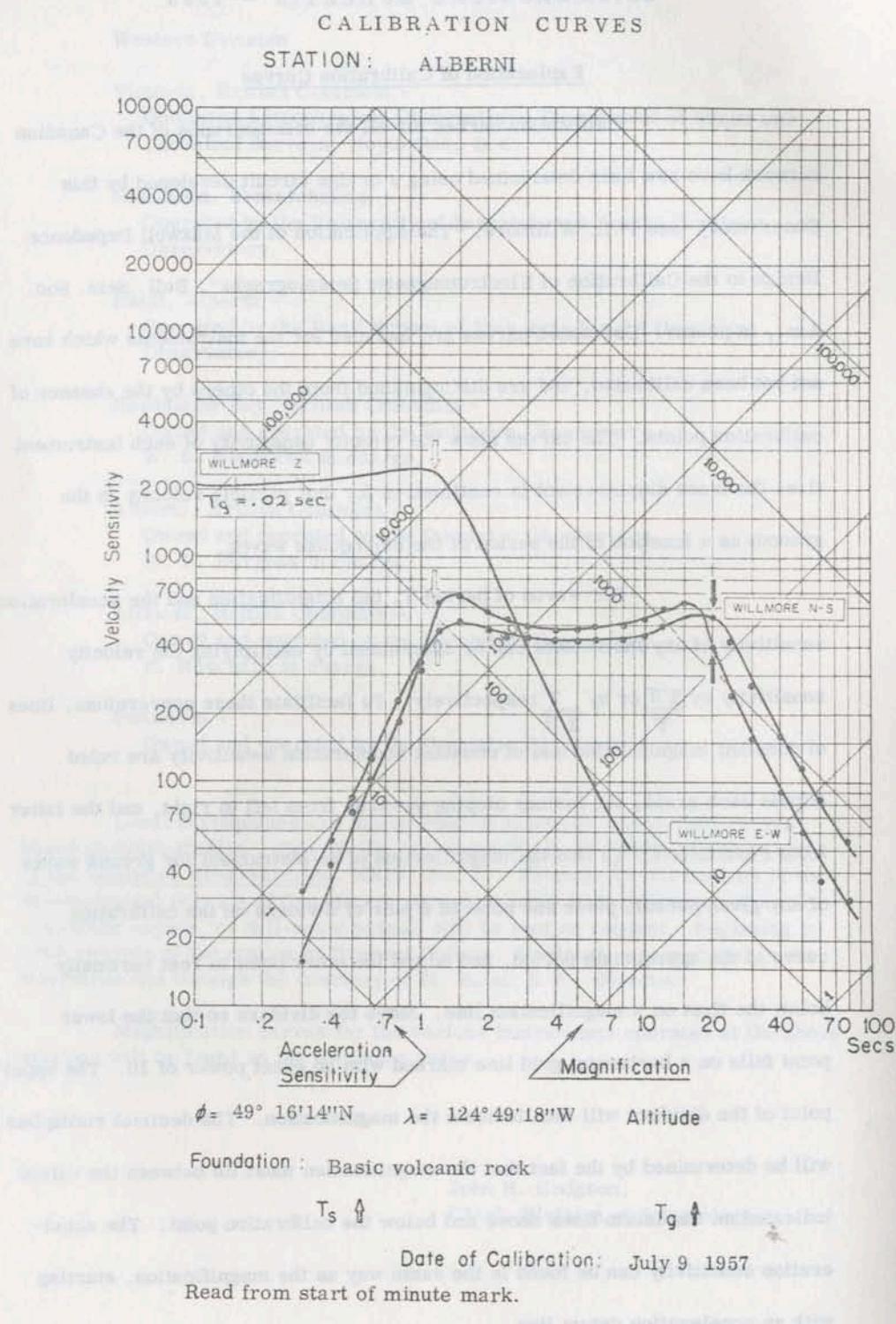
Explanation of Calibration Curves

Calibration curves for all the seismographs of the Canadian

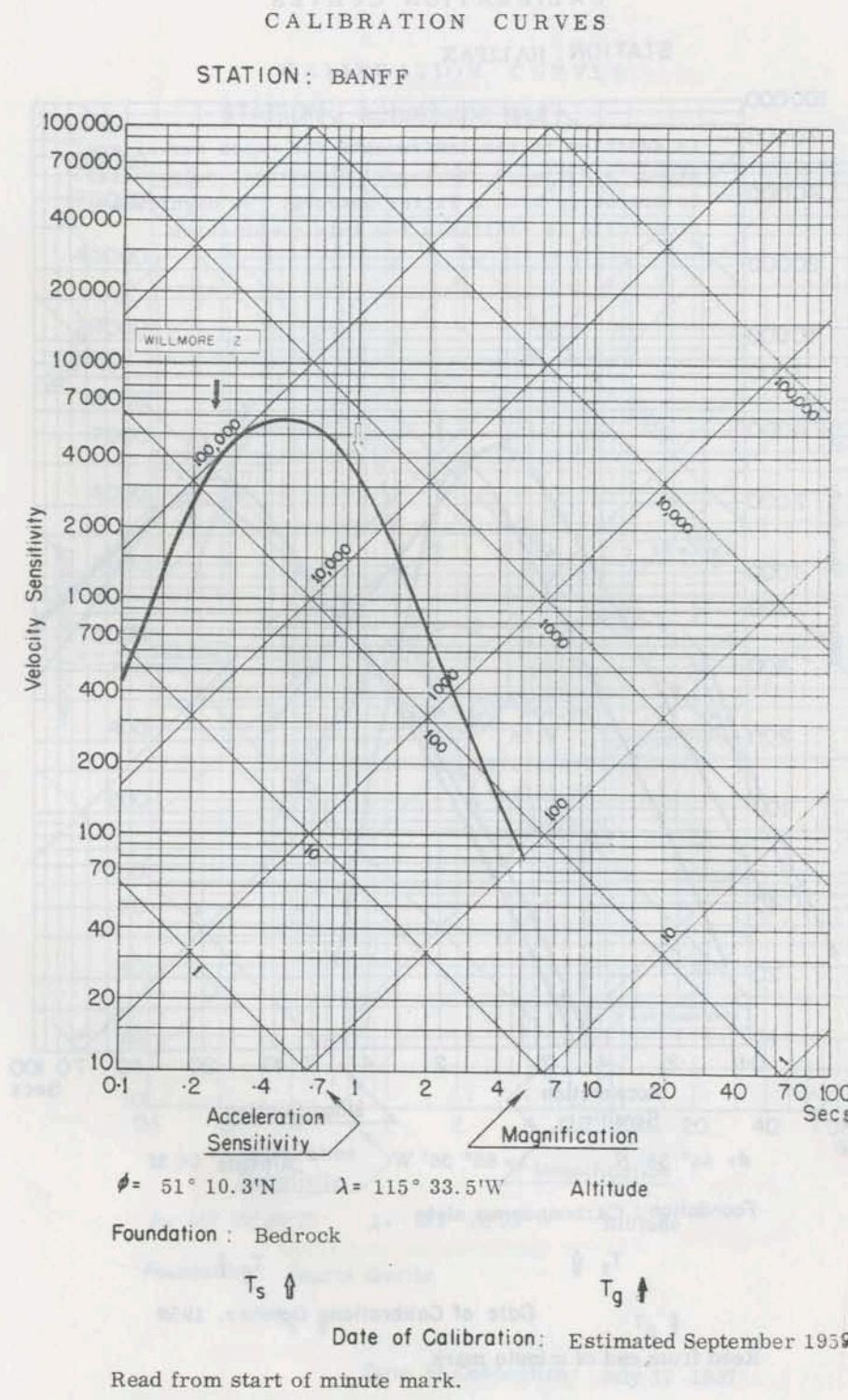
network have now been determined using a bridge circuit developed by this Observatory (see P. L. Willmore, "The Application of the Maxwell Impedance Bridge to the Calibration of Electromagnetic Seismographs", Bull. Seis. Soc. Am., in press). Estimated curves are included for the instruments which have not yet been calibrated, and are distinguished from the others by the absence of calibration points. The curves show the velocity sensitivity of each instrument (i.e. the trace displacement in centimetres for unit particle velocity in the ground) as a function of the period of the earthquake waves.

For waves of period T, the magnification and the acceleration sensitivity of any instrument can be determined by multiplying the velocity sensitivity by $\frac{2\pi}{T}$ or by $\frac{T}{2\pi}$ respectively. To facilitate these conversions, lines of constant magnification and of constant acceleration sensitivity are ruled across each graph, the former sloping upwards from left to right, and the latter from right to left. To find the magnification of an instrument for ground waves of any given period, place one point of a pair of dividers on the calibration curve at the appropriate period, and adjust the other point to rest vertically below the first on a magnification line. Move the dividers so that the lower point falls on a horizontal grid line marked with an exact power of 10. The upper point of the dividers will then indicate the magnification. The decimal multiplier will be determined by the fact that the magnification must lie between the values indicated on the datum lines above and below the calibration point. The acceleration sensitivity can be found in the same way as the magnification, starting with an acceleration datum line.

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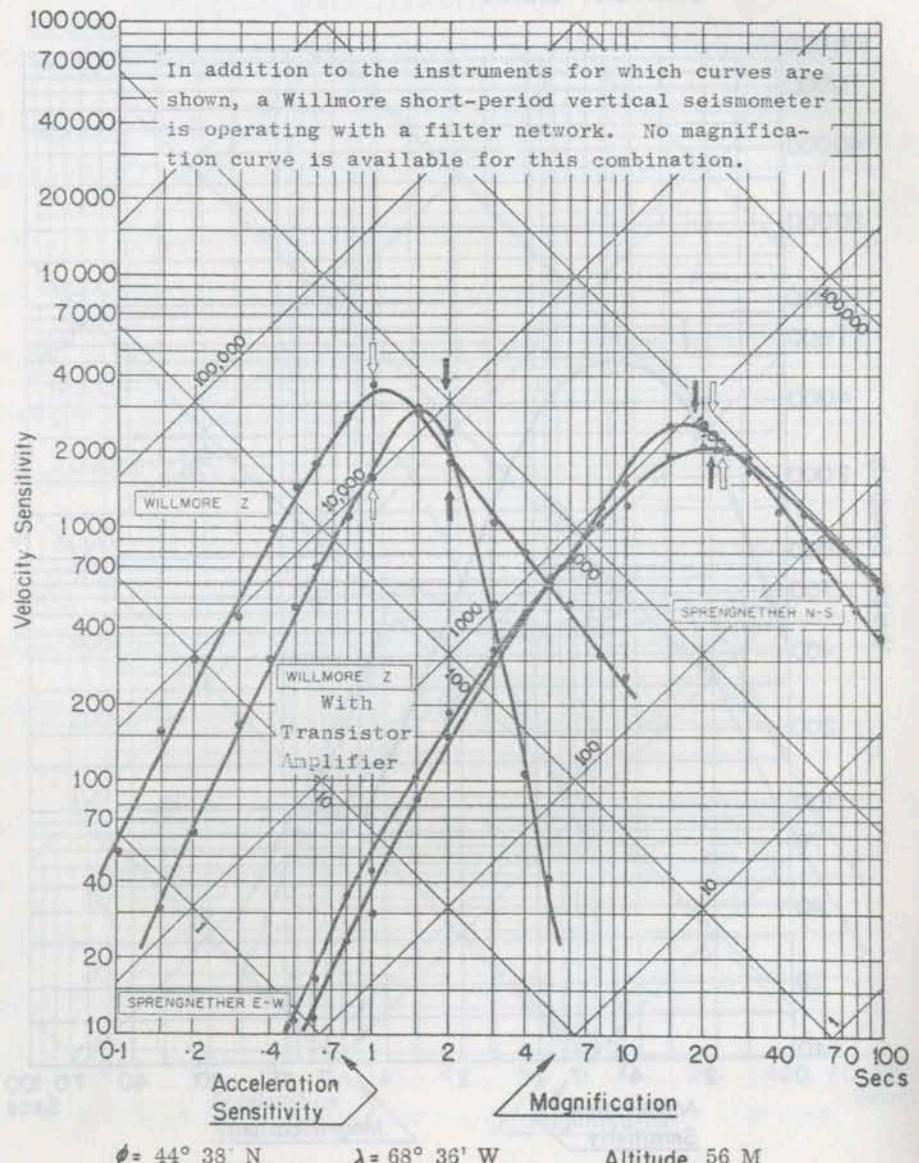
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CALIBRATION CURVES

STATION: HALIFAX



Foundation : Carbonaceous slate

$T_s \uparrow$

$T_g \uparrow$

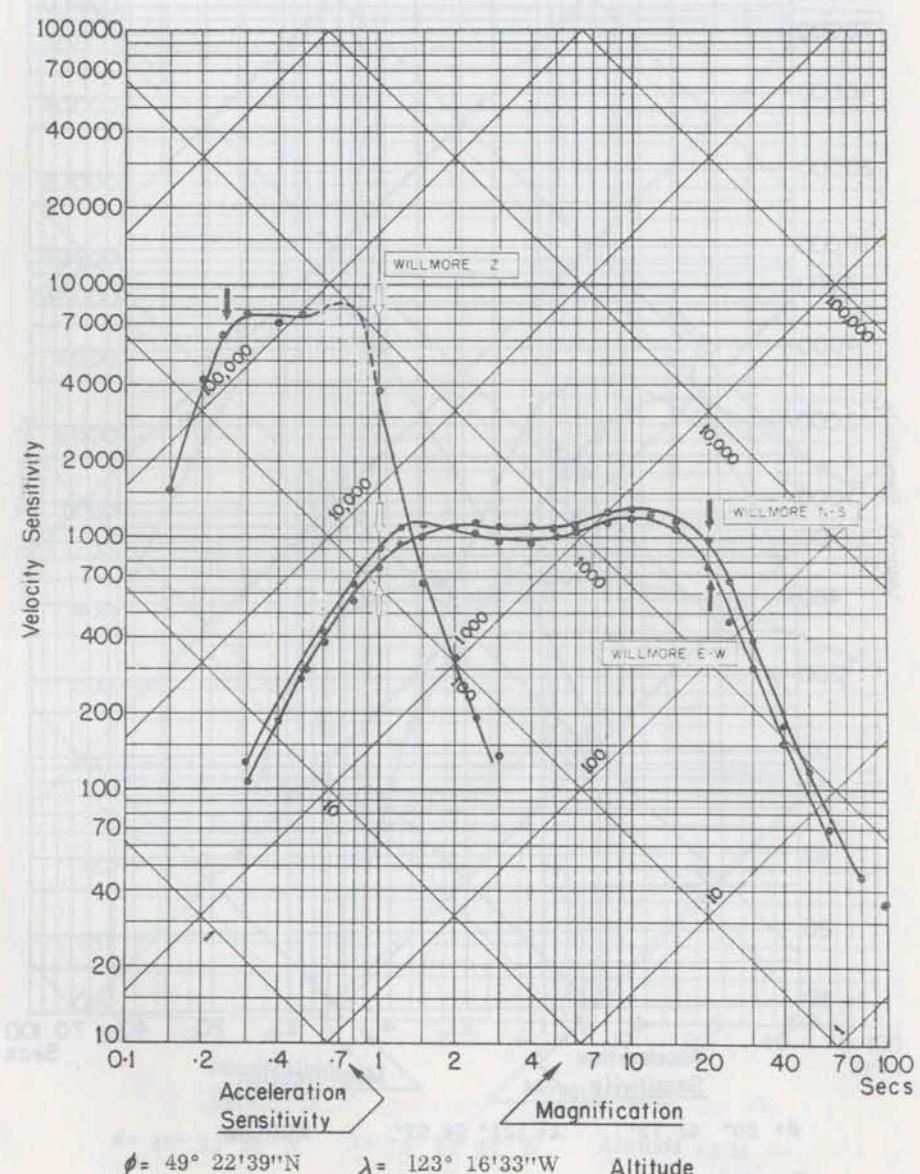
Date of Calibration: October, 1959

Read from end of minute mark.

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SAYANO SHOTANGUAG CALIBRATION CURVES

STATION: HORSESHOE BAY



Foundation : Quartz diorite

$T_s \uparrow$

$T_g \uparrow$

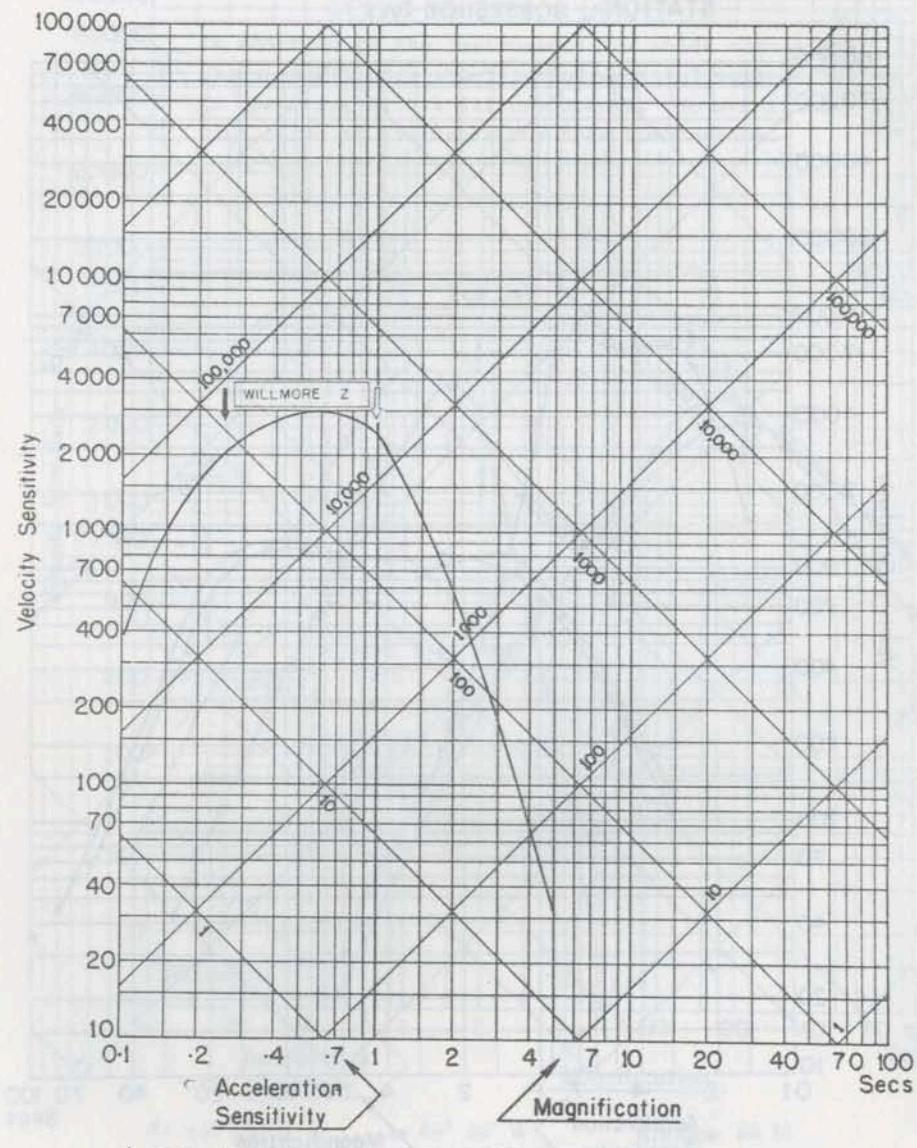
Date of Calibration: July 17 1957

Read from start of minute mark.

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CALIBRATION CURVES

STATION: LILLOOET


 $\phi = 50^\circ 41.73'$ $\lambda = 121^\circ 54.97'$ Altitude

Foundation: Shallow overburden on acid intrusives

 $T_s \uparrow$ $T_g \uparrow$

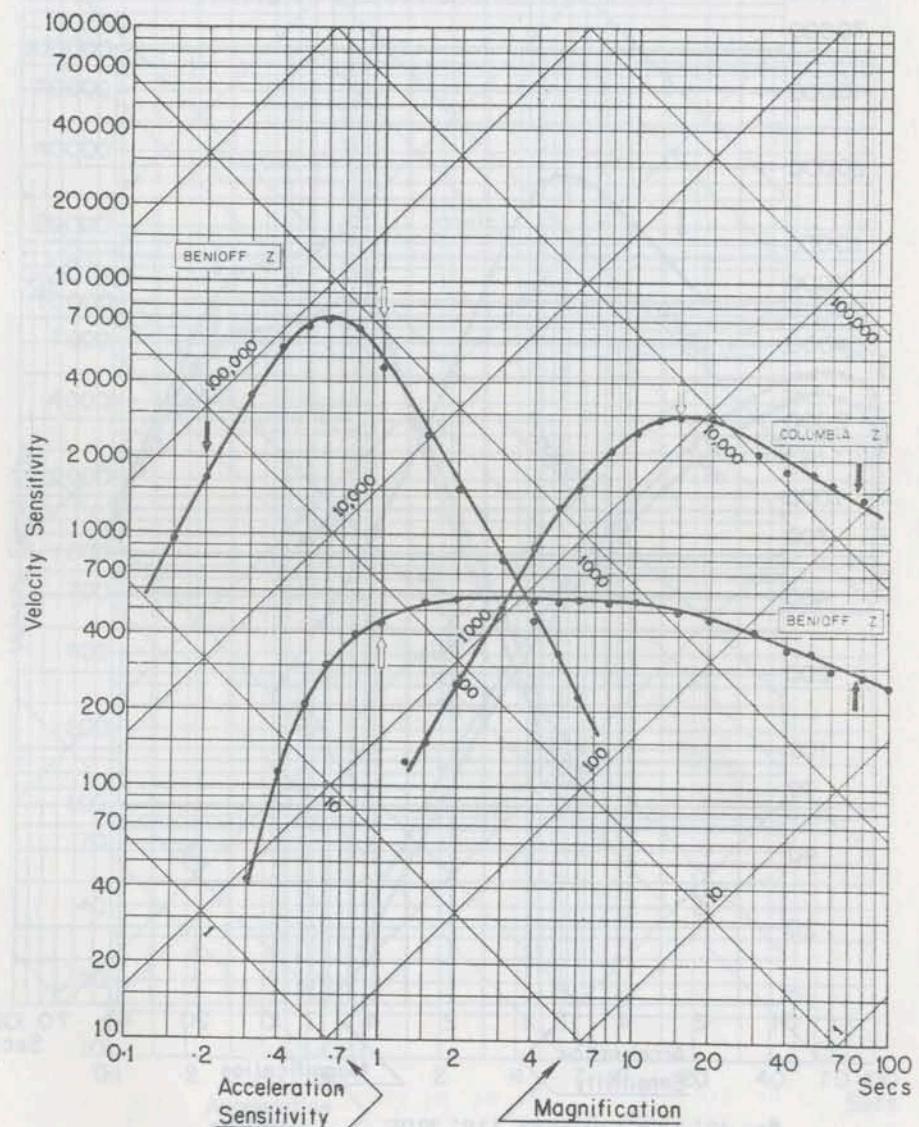
Date of Calibration: Estimated

Read from start of minute mark.

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CALIBRATION CURVES

STATION: OTTAWA


 $\phi = 45^\circ 23' 38'' N$ $\lambda = 75^\circ 42' 57'' W$ Altitude 83 M

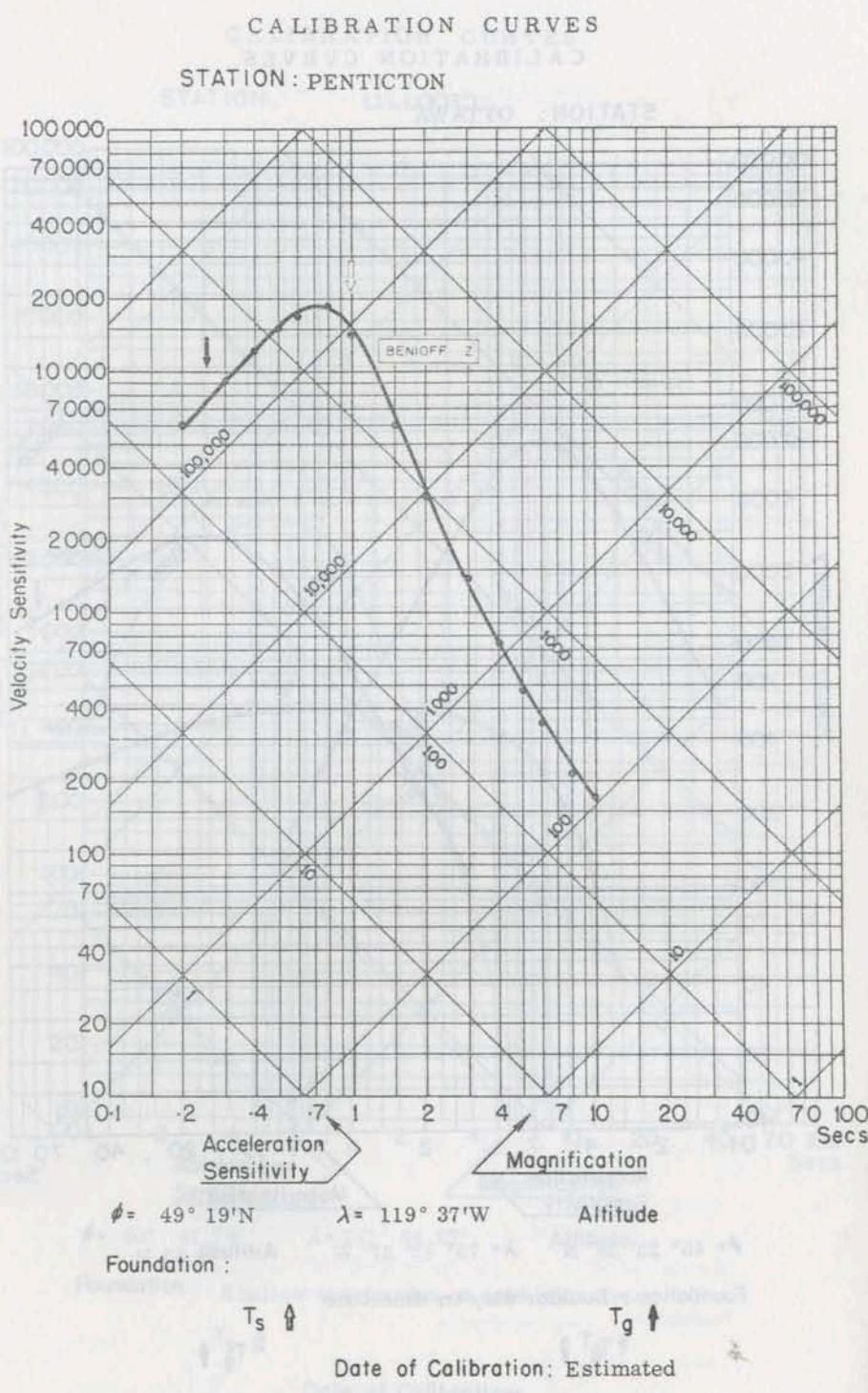
Foundation: Boulder clay on limestone

 $T_s \uparrow$ $T_g \uparrow$

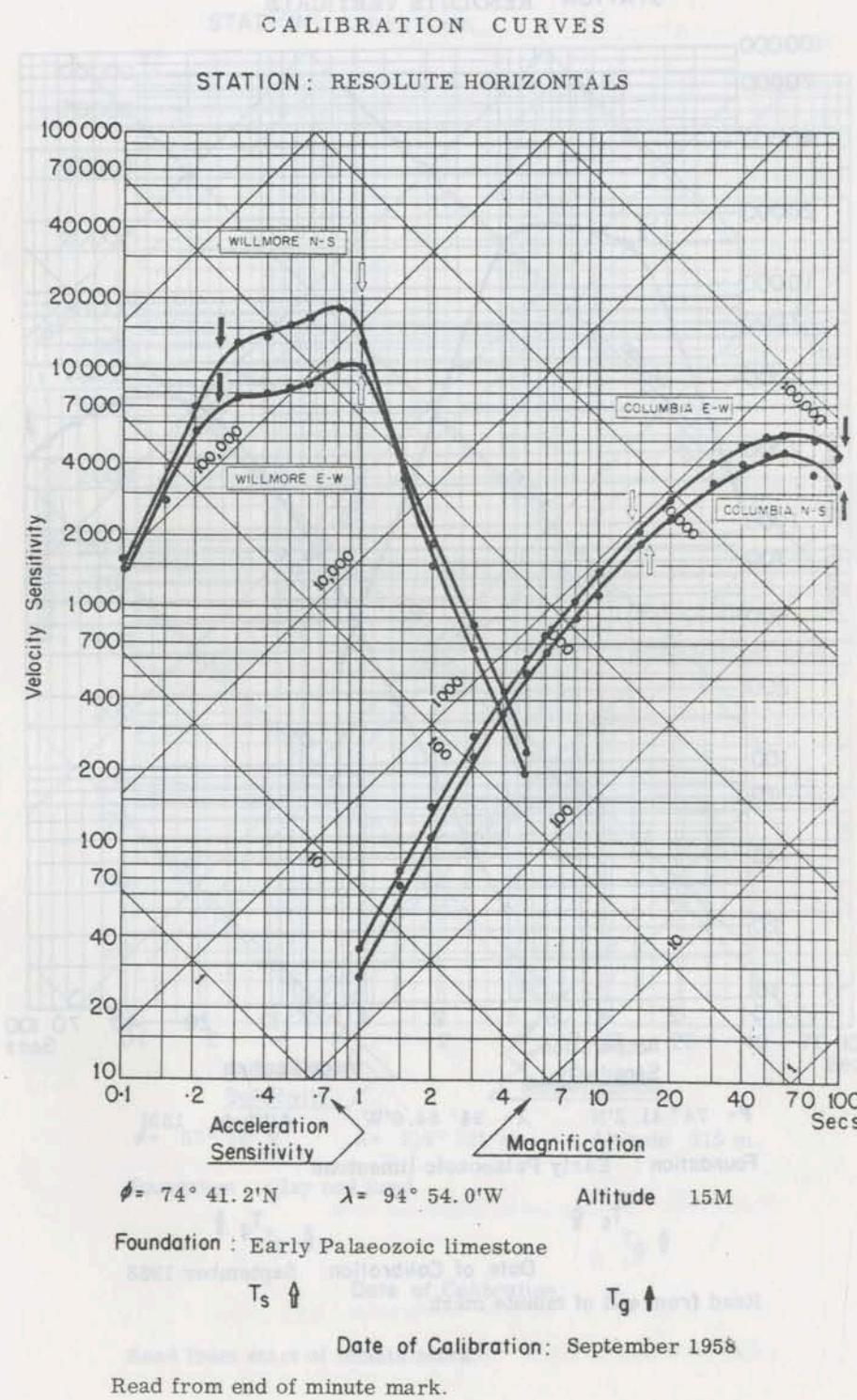
Date of Calibration: May 28, 1958

Read from end of minute mark.

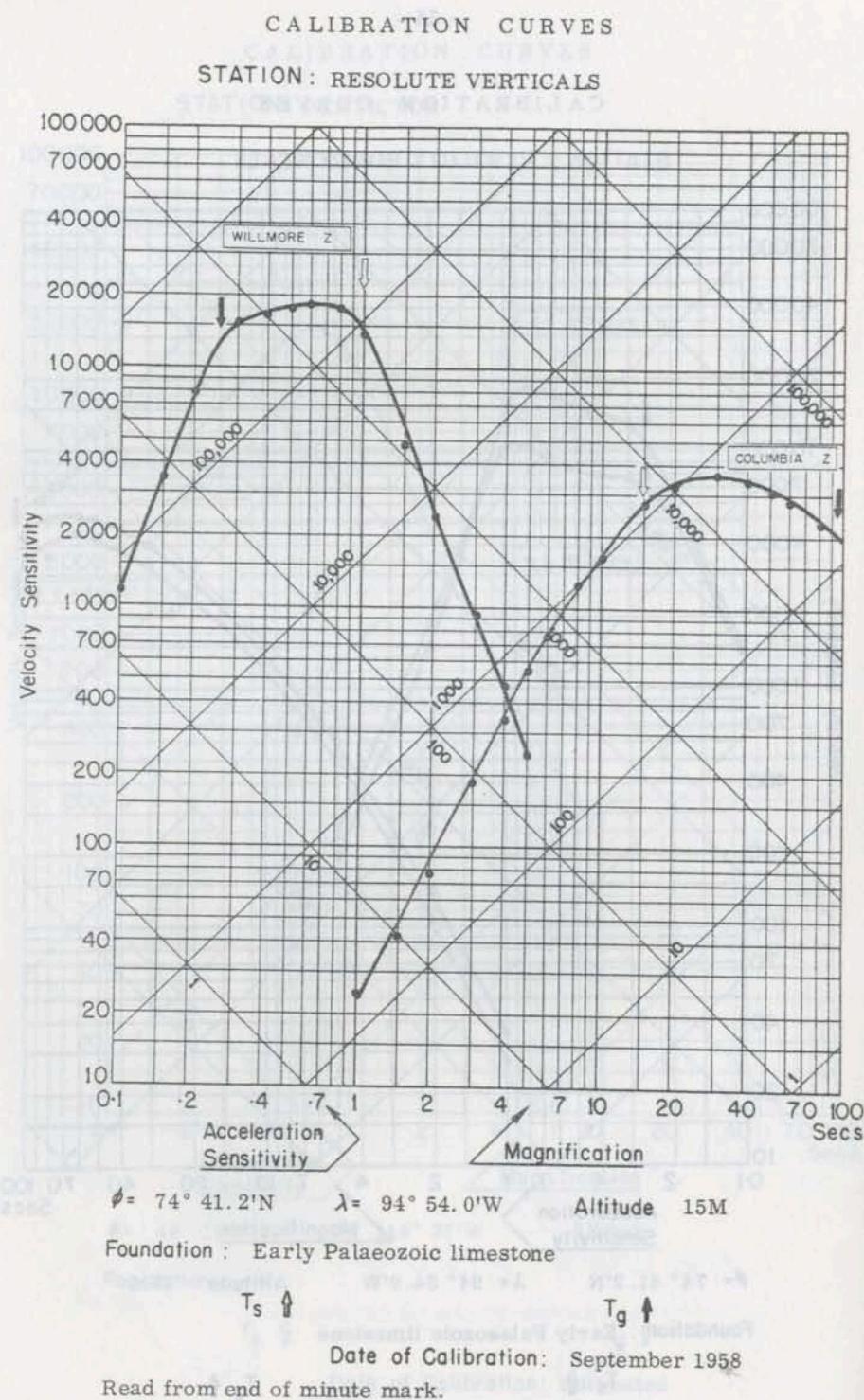
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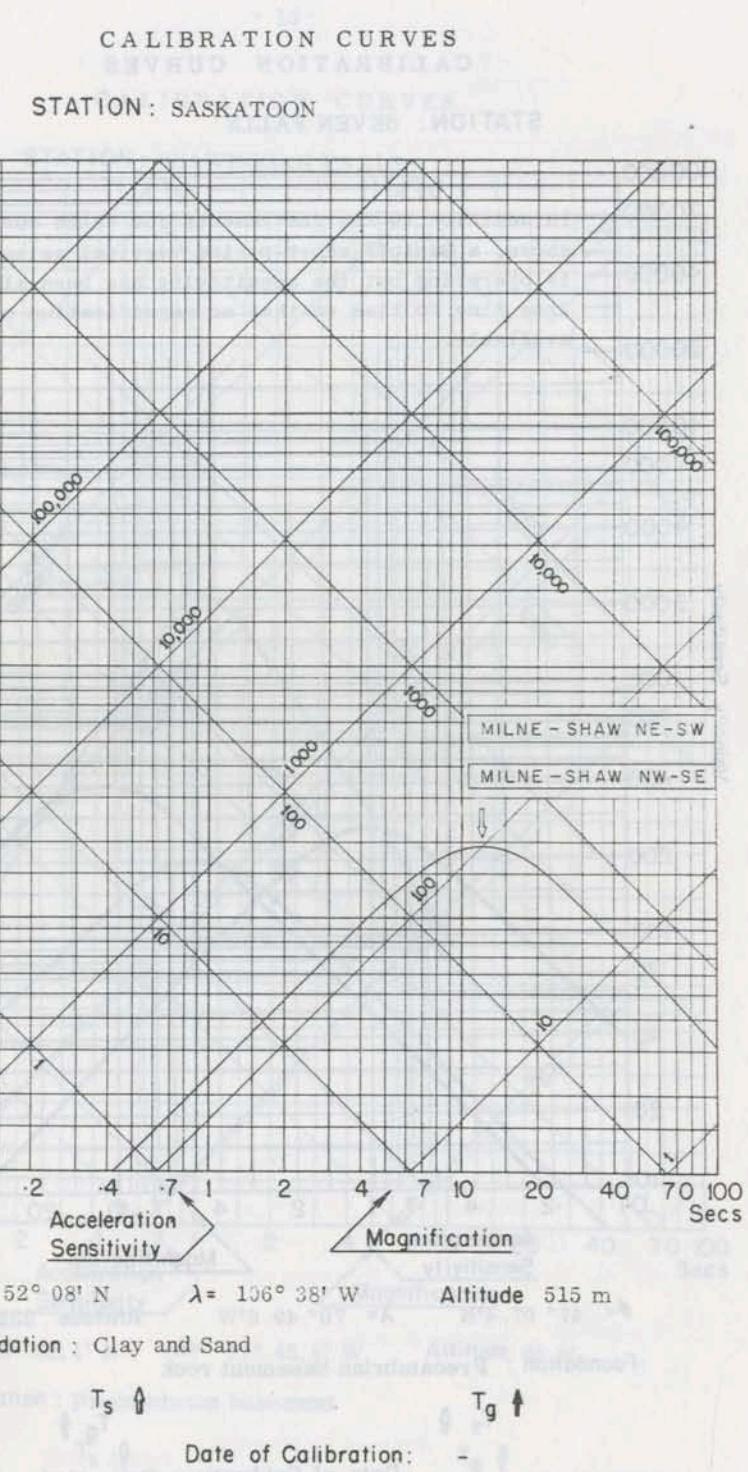
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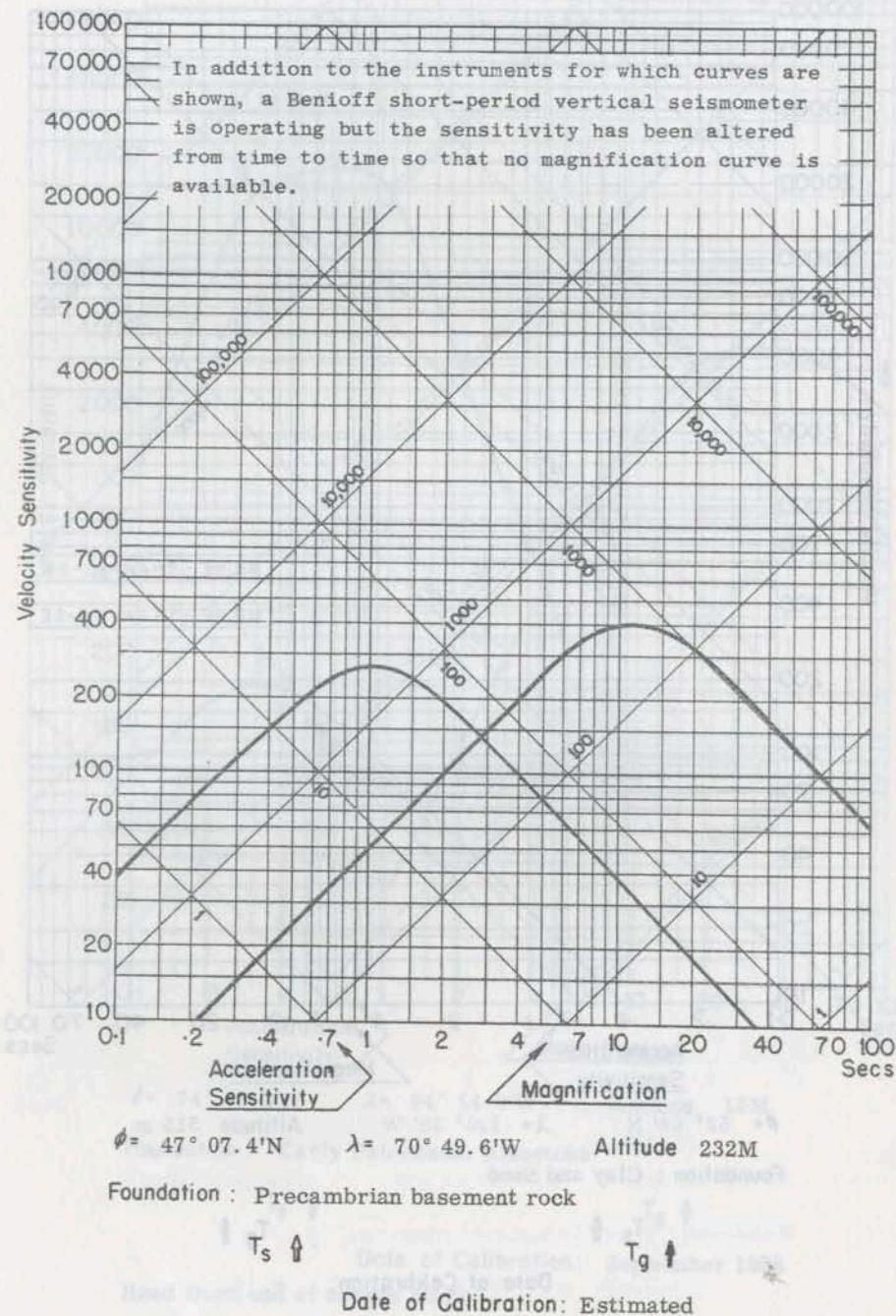
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CALIBRATION CURVES

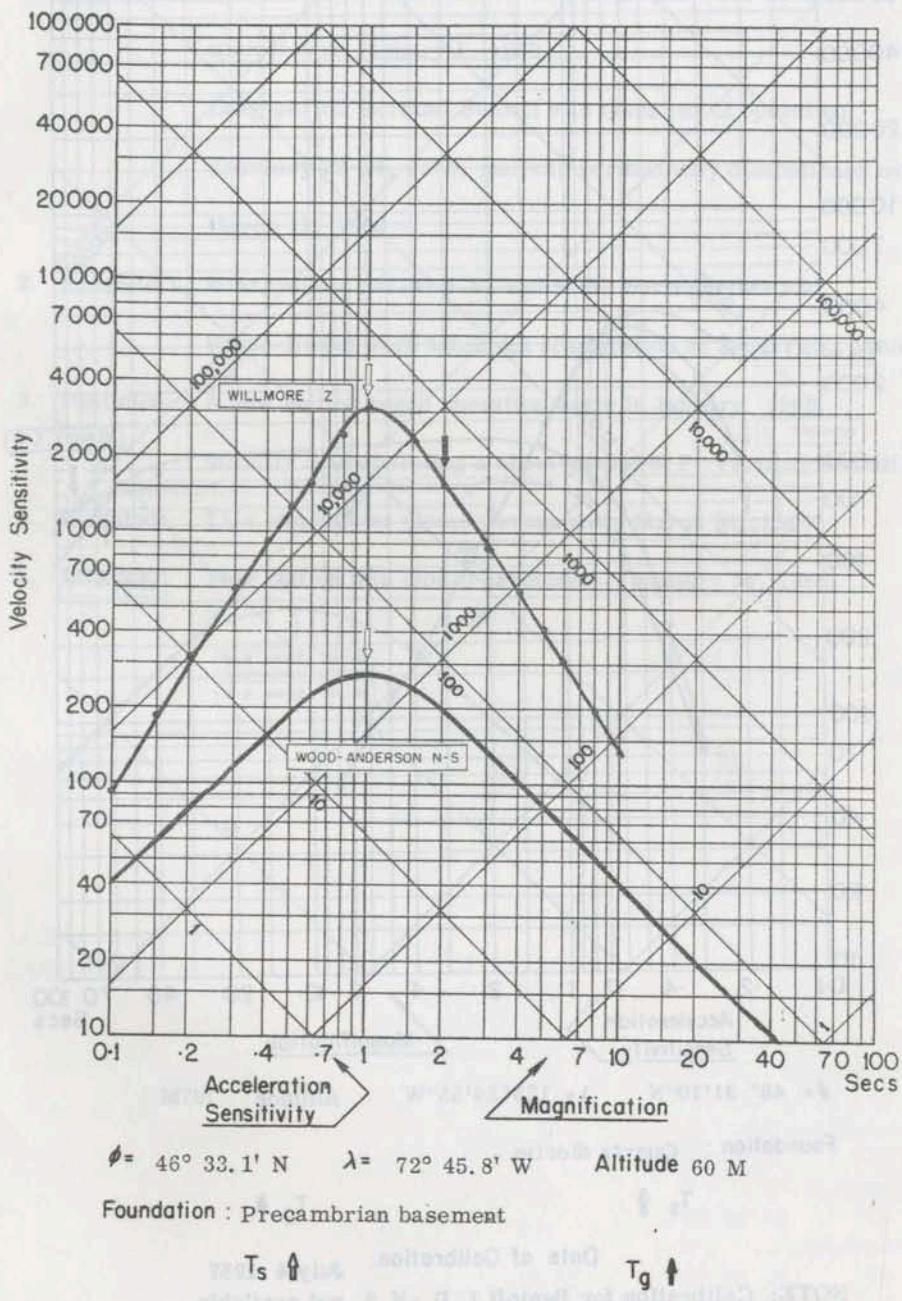
STATION: SEVEN FALLS



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CALIBRATION CURVES

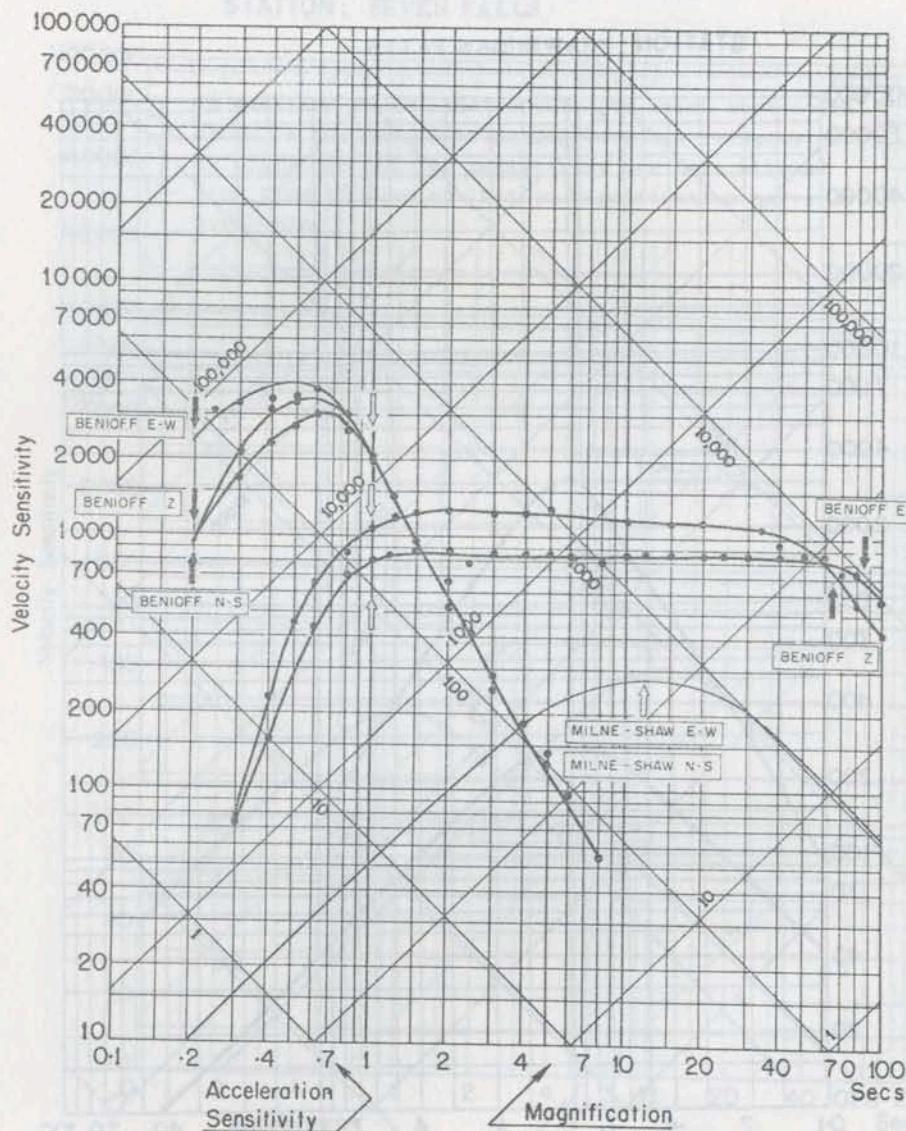
STATION: SHAWINIGAN FALLS



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CALIBRATION CURVES

STATION: VICTORIA


 $\phi = 48^\circ 31' 10'' \text{N}$ $\lambda = 123^\circ 24' 55'' \text{W}$ Altitude 197M

Foundation: Quartz diorite

 T_s T_g

Date of Calibration: July 4 1957

NOTE: Calibration for Benioff L.P.-N.S. not available.
Use mean of Benioff L.P.Z. and E.W.

Read from start of minute mark.

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DOMINION OBSERVATORIES

NOTES

1. Ottawa N.S. and E.W. Milne-Shaw seismographs were taken out of operation on January 1, 1960. Long-period Vertical Benioff was taken out of operation February 22-24, 1960, and was permanently discontinued on March 11, 1960.
2. Resolute Intermediate period N.S. and E.W. Sprengnether and Press-Ewing were taken out of operation on January 1, 1960.
3. Penticton A new station began operation early in January 1960. Initially it is operating a short-period S.P. Vertical Benioff.
4. Saskatoon This station was closed permanently March 31, 1960.
5. Lillooet This station was closed permanently January 31, 1960.

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DOMINION OBSERVATORIES

JANUARY 1	Victoria	JANUARY 2	JANUARY 2
Resolute	eP 23 20 35	U.S.C.G.S.	Sandwich Islands
eP 02 44 48		H = 08 27 14	
		Resolute	
JANUARY 1	Resolute	P' 08 46 32	
U.S.C.G.S.	P 01 51 11		
49N, 153 1/2E			
Kurile Islands,			
H = 04 11 40			
Ottawa			
iP 04 23 28 d			
Resolute			
iP 04 20 24 d			
JANUARY 1	Horseshoe Bay	JANUARY 2	JANUARY 2
U.S.C.G.S.	i 03 33 38	Resolute	Off coast of Washington
27 1/2N, 142E			H = 12 08 02
Bonin Islands,	Ottawa		Mag 3.5
H = 04 17 32	eP 03 31 59		Alberni
Resolute	Resolute		
P 04 28 58	P 03 34 46		
	Victoria		
JANUARY 1	iP 03 33 49		
U.S.C.G.S.	i 34 27		
13 1/2N, 147E			
Mariana Islands,			
H = 05 57 26			
Resolute			
P 06 09 37			
JANUARY 1	JANUARY 2	JANUARY 2	JANUARY 2
Resolute	U.S.C.G.S.	Resolute	Resolute
P 11 09 06	2 1/2N, 96E	iP 12 42 09.8	P 23 03 11
	Off coast of Sumatra	iS 19.6	
	H = 05 06 54		
	Resolute		
	P 05 21 02		
JANUARY 1	JANUARY 2	JANUARY 2	JANUARY 3
U.S.C.G.S.	U.S.C.G.S.	U.S.C.G.S.	U.S.C.G.S.
56N, 162 1/2E	56 1/2 N, 163E	South Atlantic ocean,	48° 45'N, 123° 16'W
Near east coast of	Near east coast of	west of Bouvet Island	South Pender Island
Kamchatka	Kamchatka	H = 12 21 51	H = 18 34 09.4
H = 23 12 31	H = 06 59 36	Alberni	Mag 2.2
Horseshoe Bay	Resolute		
eP 23 20 22	P 07 07 13		
Ottawa	Ottawa		
eP 23 23 29 c	eP 07 10 36		
Resolute			
eP 23 20 09 c			
i 23 22 13			
eS 23 26 16			

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JANUARY 2	JANUARY 3	Ottawa
48° 45'N, 123° 16'W	U.S.C.G.S.	eP 21 32 21
South Pender Island	44N, 84 1/2E	Resolute
H = 18 34 09.4	Sinkiang Province,	P 21 29 21
Mag 2.2	China	Victoria
Alberni	H = 11 24 00	eP 21 29 50
iP ₁ 18 35 30.0	Resolute	
P _n 30.5		
IS 47.3		
Horseshoe Bay	JANUARY 3	Halifax
iP 18 35 29.0		iP 23 09 47 c
IS 38.8		
Victoria	JANUARY 3	
iP 18 34 13.4	U.S.C.G.S.	
IS 17.1	61N, 152W	JANUARY 3
	South Central Alaska	Resolute
	H = 11 38 30	P 23 33 24
	Ottawa	
	eP 11 46 47	
	Resolute	JANUARY 4
	P 11 43 45	U.S.C.G.S.
		26N, 90E
		India-Pakistan border
		H = 03 57 03
		Resolute
		eP 04 09 11
JANUARY 2	JANUARY 3	JANUARY 4
U.S.C.G.S.	39 1/2N, 15 1/2E	U.S.C.G.S.
55, 152 1/2E	Tyrrhenian Sea	4 1/2S, 153 1/2E
New Britain	H = 20 19 30	New Britain
H = 21 22 51	h = 250 km	H = 06 19 49
Ottawa	Alberni	Ottawa
P 21 41 51		eP 06 33 42
		Resolute
		i 06 33 11
		i 06 37 52
		i 06 41 38
		i 06 46 31
JANUARY 2	JANUARY 3	JANUARY 4
Resolute	Horseshoe Bay	U.S.C.G.S.
P 23 03 11	iP 20 28 51 d	45N, 148E
	Horseshoe Bay	Kurile Islands
	iP 20 31 42	Romania
	Ottawa	H = 21 20 13
	eP 20 29 40 d	h = 150 km
	Resolute	Resolute
	P 07 05 25	eP 13 01 22 d
JANUARY 3	JANUARY 3	
Ottawa	Horseshoe Bay	
eP 07 02 30	ep 10 16 36	
Resolute	Resolute	
P 07 05 25	iP 20 28 55 d	
	S 20 36 32	
	Victoria	
	iP 20 31 41	
JANUARY 3	JANUARY 3	JANUARY 4
Resolute	Horseshoe Bay	U.S.C.G.S.
P 10 13 38	ep 10 16 36	45N, 27E
	Resolute	Romania
		H = 12 51 52
		Resolute
		eP 21 29 43

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JANUARY 4	JANUARY 6	JANUARY 7
U.S.C.G.S. 18N, 120 1/2E Luzon Island, Philippine Islands, H = 13 34 20	Resolute P 09 48 16	46° 56'N, 122° 30'W Southern Puget Sound, near Olympia, Wash. H = 09 16 04.4
Resolute P 13 46 56	JANUARY 6	Mag 3.6
U.S.C.G.S. 10 1/2 S, 167E Santa Cruz Islands H = 13 11 00	U.S.C.G.S. eP 09 16 50.1	Alberni
Northern Peru, H = 15 05 39	S 17 23.0	eP 09 16 50.1
Ottawa iP 15 14 43 d	Resolute iSS 13 44 04	Santa Cruz Islands H = 13 11 00
Resolute eP 15 17 55 (c)	Resolute H = 18 45 08	Horseshoe Bay iP 09 16 49.1
i 15 28 06	Resolute P 18 57 29	iS 17 25.7
Shawinigan Falls P 15 15 07	JANUARY 6	Victoria iP 09 16 34.3
JANUARY 4	U.S.C.G.S. 6 1/2S, 133E	S 58.0
H = 21 02 57.2 Mag 2.0	Burma H = 20 16 29	JANUARY 7
Ottawa iP 21 03 15.0	Resolute P 20 34 56	Resolute P 13 15 42
iS 21 03 28.5 D = 111 km	JANUARY 6	JANUARY 7
U.S.C.G.S. 19S, 69 1/2 W	U.S.C.G.S. Sandwich Islands	U.S.C.G.S. Sandwich Islands
Northern Chile H = 05 13 48	6 1/2S, 133E	H = 13 28 16
Shawinigan Falls P 05 24 36	Banda Sea H = 20 16 29	Mag 6 1/4 - 6 1/2
JANUARY 5	Resolute P 23 08 45	Horseshoe Bay eP 13 47 31
Resolute P 23 08 45	JANUARY 6	Resolute P 13 47 28
U.S.C.G.S. 6 1/2S, 133E	eP 13 47 27	Victoria eP 13 47 27
Northern Chile H = 05 13 48	JANUARY 7	JANUARY 7
Shawinigan Falls P 05 24 36	Resolute P 14 55 24	Resolute P 14 55 24
JANUARY 5	JANUARY 7	JANUARY 7
Resolute P 10 40 01	U.S.C.G.S. 6 1/2N, 94E	U.S.C.G.S. 6 1/2N, 94 1/2E
P 08 29 04	Nicobar Islands H = 08 15 21	Nicobar Islands H = 23 17 18
Resolute P 08 29 04	Resolute P 23 31 03	Resolute P 23 31 03

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JANUARY 8	JANUARY 8	JANUARY 8	JANUARY 8
Resolute eP 02 18 53 c	Resolute P 15 47 56	Resolute P 22 01 38	Shawinigan Falls iP 07 36 44 c
JANUARY 8	JANUARY 8	JANUARY 8	JANUARY 9
U.S.C.G.S. 58 1/2S, 26W	U.S.C.G.S. 58 1/2S, 26W	Resolute P 02 54 24	U.S.C.G.S. 1S, 124E
Sandwich Islands H = 02 35 00	Sandwich Islands H = 02 35 00	Resolute P 01 40 35	Celebes H = 07 41 57
JANUARY 8	JANUARY 8	JANUARY 9	JANUARY 9
Resolute P 10 23 53	Resolute P 03 13 22	Resolute (P) 10 23 40	Resolute (P) 13 24 04
JANUARY 8	JANUARY 8	JANUARY 9	JANUARY 9
U.S.C.G.S. 55S, 27 1/2W	U.S.C.G.S. 55 1/2S, 27 1/2W	Resolute P 03 58 19	Resolute eP 17 23 54 c
Sandwich Islands H = 11 23 18	Sandwich Islands H = 14 45 53	Southwestern Turkey H = 03 58 45	Southwestern Turkey H = 04 09 12 d
Resolute P' 11 48 34	Horseshoe Bay (ePP) 15 08 20	Resolute eP 04 10 07	Shawinigan Falls eP 04 10 07
JANUARY 8	JANUARY 8	JANUARY 9	JANUARY 9
U.S.C.G.S. 55 1/2S, 27 1/2W	U.S.C.G.S. 55 1/2S, 27 1/2W	U.S.C.G.S. 36N, 69E	U.S.C.G.S. 55 1/2N, 165W
Sandwich Islands H = 14 45 53	Horseshoe Bay (ePP) 15 08 20	Resolute P' 15 05 05	Unimak Island region H = 17 49 07
Horseshoe Bay (ePP) 15 08 20	Resolute P' 15 05 05	Victoria (iPP) 15 08 29	Resolute P 17 55 40
JANUARY 8	JANUARY 8	Hindu Kush H = 07 23 50	Hindu Kush H = about 150 km
Resolute eP 15 16 45 c	Resolute eP 15 16 45 c	Alberni eP 07 36 56	JANUARY 10
JANUARY 8	JANUARY 8	Halifax iP 07 36 34 c	Resolute P 05 39 47
Resolute P 15 24 15	Resolute P 15 24 15	Ottawa iP 07 36 51 c	JANUARY 10
JANUARY 8	JANUARY 8	Resolute iP 07 34 43	Resolute P 05 39 47

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JANUARY 10 U.S.C.G.S. 12N, 145E Mariana Island region H = 06 26 00 h = 100 km Resolute eP 06 33 37 d	JANUARY 11 Resolute (P) 03 22 11	JANUARY 12 U.S.C.G.S. 23 1/2N, 122 E Near east coast of Formosa H = 01 52 37
	JANUARY 11 U.S.C.G.S. 16N, 96 1/2E Resolute eP 02 04 43 c	Near south coast of Burma H = 03 10 14
JANUARY 10 Resolute P 07 43 01	eP 03 23 13	JANUARY 12 U.S.C.G.S. 55 1/2S, 27W Sandwich Islands region H = 03 09 10
JANUARY 10 Resolute eP 23 01 13 c	JANUARY 11 Resolute (P) 12 14 00	Resolute P' 03 28 24
JANUARY 10 Resolute P 23 33 18	JANUARY 11 U.S.C.G.S. 29S, 176W Kermadec Islands H = 17 49 58	JANUARY 12 Resolute (P) 06 50 04
JANUARY 11 Resolute (P) 00 07 38	Resolute iSS 18 25 44	JANUARY 12 Resolute (P) 07 47 12
JANUARY 11 U.S.C.G.S. 28 1/2N, 131E Ryukyu Islands H = 02 27 38	JANUARY 11 Resolute P 22 44 29	JANUARY 12 48.2N, 124.9W Off coast of Washington H = 07 52 55 Mag 2.3
Resolute iP 02 39 11 d	JANUARY 11 U.S.C.G.S. 2S, 140 1/2E Near north coast of New Guinea H = 22 54 03	Alberni eP 07 53 10.6 Horseshoe Bay iP 08 53 22.0 42.2 Victoria iP 07 53 09.5 S 20.6
JANUARY 11 U.S.C.G.S. 13 1/2N, 120 1/2E Off coast of Luzon, Philippine Islands H = 02 51 07	P 23 07 54	JANUARY 12 Resolute (P) 15 14 24
Resolute P 03 04 05		

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JANUARY 13 Resolute P 01 34 46	Ottawa iP 16 40 13 c Resolute iP 16 37 20 c Shawinigan Falls eP 16 40 18	JANUARY 14 U.S.C.G.S. 57N, 162 1/2E Near east coast of Kamchatka H = 12 49 07 Ottawa eP 13 00 06
JANUARY 13 Resolute (P) 07 34 58	JANUARY 13 Resolute (P) 18 55 33	Resolute eP 12 56 45 c Shawinigan Falls eP 13 00 07
JANUARY 13 U.S.C.G.S. 16S, 72W Southern Peru H = 15 40 34 h = 200 km Mag 7 1/2 - 7 3/4	JANUARY 13 Resolute (P) 21 27 38	JANUARY 14 Resolute P 13 12 10
Alberni eP 15 52 29	JANUARY 14 U.S.C.G.S. Near coast of northern Sumatra iP 15 50 31 d Horseshoe Bay iP 15 52 22 Ottawa iP 15 50 31 d Resolute eP 02 55 14	JANUARY 14 Ottawa eP 14 45 06 Resolute P 14 46 37
Saskatoon iP 15 51 59 iS 16 01 11 Seven Falls P 15 50 44 S 15 59 11	JANUARY 14 Resolute e (P) 07 50 36	JANUARY 14 Resolute P 18 55 32 Shawinigan Falls iP 18 50 21 c
Shawinigan Falls iP 15 50 41 d Victoria eP 15 52 18 eS 16 02 14	JANUARY 14 Resolute P 08 42 33	JANUARY 14 Resolute P 19 16 23
JANUARY 13 U.S.C.G.S. 51 1/2N, 180 Andreanof Islands, Aleutian Islands, H = 16 29 41 Horseshoe Bay eP 16 37 43	JANUARY 14 U.S.C.G.S. 37N, 140E Honshu, Japan H = 10 25 52 Resolute eP 10 36 22 c	JANUARY 14 Kurile Islands H = 20 55 10 Resolute eP 21 04 38 c

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JANUARY 14	Saskatoon	JANUARY 16
U.S.C.G.S.	iP 09 50 58	46° 45' N, 121° 47' W
11N, 43W		Southern Puget Sound
Atlantic Ocean	P 09 40 35	Area, southwest corner
H = 21 25 15	S 09 48 56	of Mt. Rainier National
Ottawa	Shawinigan Falls	Park, Washington
eP 21 33 28	iP 09 40 29 c	H = 07 31 01
Resolute	Victoria	Mag 3.5
P 21 36 29	iP 09 42 02	Horseshoe Bay
S 21 45 40	JANUARY 15	iP 07 31 45.4
ISS 21 50 10	Resolute	IS 32 20.1
Shawinigan Falls	P 10 51 13	Victoria
eP 21 33 23 d		eP 07 31 32.6
		31 52.4

JANUARY 15	JANUARY 15
Resolute	Resolute
P 03 13 33	P 16 46 32
JANUARY 15	JANUARY 15
Resolute	Resolute
P 04 51 27	P 17 22 10

JANUARY 15	JANUARY 15
U.S.C.G.S.	Resolute
15S, 75W	P 21 40 18
Near coast of	Shawinigan Falls
Southern Peru	iP 21 37 11 c
H = 09 30 24	
h = 150 km	
Mag 6 1/2 - 7	
Alberni	JANUARY 16
eP 09 42 11	U.S.C.G.S.
Halifax	59 1/2S, 149 1/2E
iP 09 40 21 c	About 500 miles
Ottawa	southwest of Macquarie Islands
iP 09 40 20 c	H = 06 59 00
Resolute	(P) 17 28 12
iP 09 43 14 c	Ottawa
i 09 46 48	iP 07 19 57 d
i 09 53 43	Resolute
is 09 54 04	P' 07 18 56

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JANUARY 16	JANUARY 17	JANUARY 18
U.S.C.G.S.	Resolute	Resolute
63N, 151W	P 03 24 06	(P) 14 50 16
Alaska		
H = 20 49 31		JANUARY 18
h = 150 km		U.S.C.G.S.
Alberni	iP 20 53 53	9N, 77W
Halifax	iP 20 58 10	Off coast of Panama
Horseshoe Bay	iP 20 54 00	H = 19 30 18
Victoria	i 58 07	h = 100 km
Ottawa	iP 20 57 28 c	Halifax
Resolute	iP 20 54 14 d	ip 19 37 33 d
Shawinigan Falls	S 20 58 04	Ottawa
Victoria	iP 20 57 31 d	iP 19 37 22 d
	iP 20 54 05	Resolute
	i 58 09	eP 19 41 05 d
JANUARY 18	JANUARY 17	S 19 49 50
U.S.C.G.S.	Resolute	Shawinigan Falls
About 650 miles	P 05 26 40	iP 19 37 35 d
southwest of Prince Edward Islands		Victoria
H = 01 04 11		eP 19 39 50
Resolute		
eP 01 13 01 c	P ₁ ' 01 23 51	JANUARY 19
	P ₂ ' 01 23 58	U.S.C.G.S.
JANUARY 17		52N, 158E
U.S.C.G.S.		Near southeast coast
14 1/2S, 74 1/2W		of Kamchatka
Near coast of Southern Peru		H = 02 16 52
H = 02 57 58		Mag 6 1/4 - 6 1/2
h = 150 km		Halifax
Mag 6 1/4		ip 02 28 50 c
Horseshoe Bay	D = 49.2 km	Alberni
eP 03 09 39		eP 02 25 26
Ottawa		Ottawa
eP 03 07 52 c		eP 02 28 21 c
Resolute		Resolute
eP 03 10 45 c		iP 02 25 12 c
i 03 21 36		i 02 27 00
Shawinigan Falls		S 02 31 42
iP 03 08 01 c		Shawinigan Falls
Victoria		iP 02 28 23 c
eP 03 09 35		Victoria
	P 09 18 17	iP 02 25 35
	es 09 29 34	

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DOMINION OBSERVATORIES

JANUARY 19	JANUARY 19	JANUARY 20
Resolute P 06 17 10	Resolute P 12 10 35	U.S.C.G.S. 17 1/2S, 178W
JANUARY 19 U.S.C.G.S. 17N, 98W Near coast of Oaxaca Mexico H = 08 50 24	JANUARY 19 Resolute P 16 18 08	Fiji Islands H = 02 50 02 h = 500 km
Halifax eP 08 57 21	JANUARY 19 U.S.C.G.S. 24N, 142E	Resolute e 03 09 40
Ottawa eP 08 57 11	Volcano Islands H = 16 10 36	JANUARY 20 Victoria eP 03 26 59
Resolute P 09 00 17	h = 100 km	e 03 33 24
S 09 08 14	Resolute eP 16 22 10 c	e 34 17
Shawinigan Falls eP 08 57 31	JANUARY 19 Resolute (P) 19 51 08	JANUARY 20 U.S.C.G.S. 36 1/2N, 122W
JANUARY 19 51°06'N, 124°29'W Southwest of Chilko Lake, B.C. H = 09 00 54 Mag 3.3	JANUARY 19 Resolute (P) 20 48 29	Near coast of Central California H = 03 25 50 Mag 5
Alberni eP 09 01 25.1	JANUARY 19 Resolute P 03 33 29	Resolute eP 06 21 08
Pn 25.9	U.S.C.G.S.	Canadian Arctic H = 06 20 58.8 Mag 1.3
S 50.3	Southwestern Turkey H = 21 26 39	Resolute iP 06 21 15
Horseshoe Bay S-P = 25.7 sec.	Resolute P 21 37 06	D = 54.4 km
No time correction		
Victoria eP 09 01 36.7	JANUARY 20 U.S.C.G.S. 3 1/2N, 31W	JANUARY 20 46°58'N, 75°40'W
iS 02 13.1	Mid-Atlantic Ocean H = 01 03 25	About 5 miles east of the northern arm of Lake Baskatong, Quebec H = 20 07 40.0 h = 15 km ?
JANUARY 19 U.S.C.G.S. 23S, 180	Resolute eP 01 15 35 d	Mag 3.7
South of Fiji Islands H = 09 15 04 h = 600 km		
Resolute P 09 32 34		
S 09 40 14		

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SEISMOLOGICAL BULLETIN - 1960

JANUARY 22	Resolute e 11 10 06	JANUARY 22 41 1/2N, 75 1/2W North of Scranton, Pennsylvania H = 20 53 22 Mag 3.4
Montreal e 20 08 15.6	JANUARY 21 Resolute (P) 11 16 25	Montreal eP 20 08 16.3
iP ₁ 20 08 18.7	JANUARY 21 Resolute (P) 11 47 31	i 20 08 18.7
i 20 08 21.7	JANUARY 21 Resolute (P) 11 47 31	iS ₁ 20 08 44
D = 224 km	JANUARY 21 Resolute (P) 11 47 31	D = 175 km
Ottawa e(P _n) 20 08 07.1	JANUARY 21 Resolute (P) 11 47 31	Seven Falls eS ₁ 20 09 24.6
iP ₁ 20 08 07.9	JANUARY 21 Resolute (P) 11 47 31	D = 369 km
i 20 08 14.8	JANUARY 21 Resolute (P) 11 47 31	Shawinigan Falls eP 21 34 48 c
iS ₁ 20 08 29	JANUARY 21 Resolute (P) 01 48 34	i 20 08 18.8
D = 175 km	JANUARY 22 Resolute P 01 48 34	i 20 08 21.7
Seven Falls eS ₁ 20 09 24.6	JANUARY 22 Resolute P 01 48 34	iS ₁ 20 08 44
D = 369 km	JANUARY 22 Resolute P 01 48 34	D = 226 km
Shawinigan Falls eP 21 34 48 c	JANUARY 22 Resolute P 01 48 34	JANUARY 20 Canadian Arctic H = 23 18 22.7 Mag 2.0
iP ₁ 20 08 16.3	JANUARY 22 Resolute P 01 48 34	Canadian Arctic H = 23 18 30.2
i 20 08 18.8	JANUARY 22 Resolute P 01 48 34	iS ₁ 23 18 35.9
i 20 08 21.7	JANUARY 22 Resolute P 01 48 34	D = 46.7 km
iS ₁ 20 08 44	JANUARY 22 Resolute P 01 48 34	JANUARY 21 Resolute P 04 14 18
D = 226 km	JANUARY 22 Resolute P 01 48 34	JANUARY 21 Resolute P 04 14 18
JANUARY 20 Canadian Arctic H = 23 18 22.7 Mag 2.0	JANUARY 22 Resolute P 01 48 34	JANUARY 22 U.S.C.G.S. 0, 125E
Resolute iP 23 18 30.2	JANUARY 22 Resolute P 01 48 34	Molucca Passage H = 13 35 54
iS ₁ 23 18 35.9	JANUARY 22 Resolute P 01 48 34	Resolute P 13 49 51
D = 46.7 km	JANUARY 22 Resolute P 01 48 34	JANUARY 21 U.S.C.G.S. 13S, 179 1/2E
JANUARY 21 Resolute P 04 43 15	JANUARY 22 Resolute P 01 48 34	Fiji Islands H = 10 43 33
JANUARY 21 Resolute P 04 43 15	JANUARY 22 Resolute P 01 48 34	h = 600 km
JANUARY 21 U.S.C.G.S. 13S, 179 1/2E	JANUARY 22 Ottawa iP 13 58 31 d	JANUARY 22 Ceram Island region H = 04 40 56 Mag 6 1/2
Fiji Islands H = 10 43 33	JANUARY 22 Ottawa iP 13 58 31 d	Halifax iP 05 00 17 c
h = 600 km	JANUARY 22 Ottawa iP 13 58 31 d	Ottawa eP 05 00 19 c

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DOMINION OBSERVATORIES

Resolute	JANUARY 23	JANUARY 24
eP 04 55 09 c	U.S.C.G.S.	U.S.C.G.S.
iPP 04 59 34	5 1/2S, 152 E	52 1/2N, 160 E
iSKS 05 05 50	New Britain	Near east coast of
Shawinigan Falls	H = 21 57 03	Kamchatka
P' 05 00 17	Resolute	H = 18 33 45
	P 22 11 01	Resolute
		eP 18 41 55 c
JANUARY 23		
U.S.C.G.S.	JANUARY 24	
4S, 127 1/2E	U.S.C.G.S.	JANUARY 24
Ceram Island region	43 1/2N, 127 1/2W	Resolute
H = 07 31 14	Off coast of Oregon	P 21 25 40
Mag 6 3/4	H = 00 39 33	
Halifax	Mag 4 1/2	
eP' 07 50 45	Ottawa	JANUARY 25
Ottawa	P 00 46 39	Resolute
eP' 07 50 39	Resolute	P 00 25 34
Resolute	eP 00 46 24 d	
P 07 45 27	Shawinigan Falls	
i 07 49 52	P 00 46 54	JANUARY 25
i 07 56 10		U.S.C.G.S.
Shawinigan Falls		52 1/2N, 160E
P' 07 50 38	JANUARY 24	Near east coast of
	U.S.C.G.S.	Kamchatka
	15 1/2S, 179W	H = 08 46 25
JANUARY 23	Fiji Islands	Resolute
Resolute	H = 04 21 42	eP 08 54 35 c
(P) 13 32 01	Mag 6 - 6 1/2	S 09 01 04
	Resolute	i 09 04 32
	P 04 35 46	
JANUARY 23	iSKS 04 46 26	
U.S.C.G.S.	iS 04 47 32	JANUARY 25
4S, 127 1/2E	iPS 04 49 10	U.S.C.G.S.
Ceram Island region	Victoria	52 1/2N, 160E
H = 17 56 30	iP 04 34 03	Near east coast of
Mag 6 1/2 - 6 3/4	IS 44 26	Kamchatka
Halifax		H = 11 26 31
iP' 18 15 53		Resolute
e 18 16 08	JANUARY 24	P 11 34 40
Ottawa	Resolute	
P' 18 15 55	P 15 01 19	
Resolute		JANUARY 25
P 18 10 44	U.S.C.G.S.	
iPP 18 15 08	16S, 179W	Turkey
iSKS 18 21 26	Resolute	H = 13 05 40
iPS 18 24 23	P 15 56 55	Resolute
Shawinigan Falls		eP 13 16 00 d
P' 18 15 57		

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SEISMOLOGICAL BULLETIN - 1960

Resolute	JANUARY 26	JANUARY 27
iSKS 16 54 14	U.S.C.G.S.	Resolute
S 16 55.4	13N, 87 1/2W	(P) 13 14 39
iPS 16 56 50	Near coast of	
	Nicaragua	
	H = 18 19 55	JANUARY 28
	h = 60 km	Resolute
	Horseshoe Bay	(P) 00 03 39
	P 03 20 23	
JANUARY 26		
Resolute		
P 03 29 30 d		
JANUARY 26		
Ottawa		
eP 03 29 30 d		
JANUARY 26		
U.S.C.G.S.	JANUARY 26	
44 1/2N, 149 1/2E	U.S.C.G.S.	
Kurile Islands	30S, 178W	
H = 09 37 00	Kermadec Islands	JANUARY 29
Resolute	H = 22 21 19	Resolute
P 09 46 27	Halifax	P 07 44 27
	eP' 22 40 23	
JANUARY 26	Ottawa	
U.S.C.G.S.	P' 22 40 10	JANUARY 29
39 1/2N, 39 1/2E	Resolute	Resolute
Turkey	P' 22 40 03	P 08 05 49
H = 09 52 00	Seven Falls	Victoria
Resolute	eP' 22 40 17	eP 08 06 11
ep 10 02 27	Shawinigan Falls	
	P' 22 40 13	
JANUARY 26		
Resolute		
P 10 43 03		
JANUARY 26		
U.S.C.G.S.	JANUARY 27	
38N, 29E	Victoria	(P) 03 40 19
Turkey	eP 00 12 17	
H = 13 05 40	eS 16 25	
Resolute		
eP 13 16 00 d		
JANUARY 26		
U.S.C.G.S.	JANUARY 27	
38N, 29E	Resolute	
Turkey	P 01 50 55	JANUARY 29
H = 13 05 40	Resolute	U.S.C.G.S.
Resolute		Mariana Islands
eP 13 16 00 d		region
		H = 22 47 20
JANUARY 27		Resolute
Resolute	P 10 33 17	P 22 59 13
P 10 33 17		

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DOMINION OBSERVATORIES

JANUARY 30	JANUARY 30	JANUARY 30
Resolute	Resolute	Resolute
P 00 21 15	eP 15 09 19 c	P 19 04 34
JANUARY 30	JANUARY 30	JANUARY 30
Resolute	Resolute	Resolute
P 01 16 39	P 15 39 18	P 20 02 39
JANUARY 30	JANUARY 30	JANUARY 30
Resolute	Resolute	Resolute
P 03 54 52	P 15 58 44	P 21 42 58
JANUARY 30	JANUARY 30	JANUARY 30
Resolute	Resolute	Resolute
P 04 00 38	P 17 12 04	P 22 07 14 c
JANUARY 30	JANUARY 30	JANUARY 30
Resolute	Resolute	Resolute
P 04 57 06	P 17 47 26	P 22 14 32
JANUARY 30	JANUARY 30	JANUARY 31
Resolute	Resolute	U.S.C.G.S.
P 09 09 46	P 17 53 54	21 1/2N, 143 1/2E
		Mariana Islands region
JANUARY 30	JANUARY 30	H = 03 34 42
Resolute	U.S.C.G.S.	Resolute
P 11 21 52	21 1/2N, 142 1/2E	eP 03 46 38 d
	Mariana Islands region	
JANUARY 30	U.S.C.G.S.	
Resolute	21 1/2N, 142 1/2E	
P 12 30 30	Near east coast of	
	Shikoku, Japan	
JANUARY 30	H = 17 56 05	
Resolute	Resolute	
P 12 42 25 c	P 18 08 02 c	
	U.S.C.G.S.	
JANUARY 30	33 1/2N, 134 1/2E	
Resolute	Resolute	
P 14 33 25	Mariana Islands region	
	H = 18 38 10	
JANUARY 30	Resolute	
Resolute	P 18 50 07	
P 14 33 25		

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SEISMOLOGICAL BULLETIN - 1960

JANUARY 31	FEBRUARY 1	FEBRUARY 1
U.S.C.G.S.	U.S.C.G.S.	U.S.C.G.S.
21 1/2N, 143 1/2E	43N, 132W	50 1/2N, 160E
Mariana Islands region	Pacific Ocean	Off east coast of
H = 08 19 50	H = 02 08 37	Kamchatka
Resolute	Ottawa	H = 13 56 08
P 08 31 47	eP 02 16 14	Resolute
	Resolute	iP 14 04 33 d
	eP 02 15 41 c	Victoria
	S 02 21 22	iP 14 04 50
JANUARY 31	Seven Falls	
Resolute	eP 02 16 37	
P 12 21 03	Shawinigan Falls	FEBRUARY 1
	eP 02 16 28	Resolute
	Victoria	eP 21 46 45 d
	iP 02 09 46	
JANUARY 31	FEBRUARY 1	FEBRUARY 2
Resolute	U.S.C.G.S.	U.S.C.G.S.
eP 15 16 31 d	33 1/2S, 179W	33 1/2S, 179W
	Mariana Islands region	Kermadec Islands
	H = 16 12 29	region
Resolute	H = 02 41 37	H = 06 29 52
P 16 24 26	Resolute	Resolute
	P 02 52 14	P' 06 48 45
JANUARY 31	Seven Falls	Seven Falls
U.S.C.G.S.	eP' 06 48 57	eP' 06 48 57
Near east coast of		
Kamchatka,		
H = 17 26 38		
Resolute	P 17 34 17	FEBRUARY 1
P 17 34 17	U.S.C.G.S.	U.S.C.G.S.
	35N, 23 1/2E	39N, 140E
	Near west coast of	Near west coast of
Crete	H = 11 59 34	Honshu, Japan
H = 11 59 34	Halifax	H = 08 10 15
Resolute	ip 12 10 13	Resolute
P 20 40 11 q	Resolute	eP 08 21 02 c
	P 12 10 09	
Ottawa	Ottawa	
eP 12 11 02	Seven Falls	
	iP 12 10 39	
	Shawinigan Falls	
eP 12 10 50	eP 09 24 32	
	Seven Falls	
	eP 09 24 42	

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DOMINION OBSERVATORIES

FEBRUARY 2	FEBRUARY 3	Resolute
45° 03'N, 128° 00'W	44° 31'N, 126° 28'W	P 04 00 15
Off coast of Oregon	Off coast of Oregon	i 04 10 48
H = 09 51 59.5	H = 04 18 36.5	Seven Falls
Mag 4.3	Mag 4.0	eP' 04 05 28
Alberni	Alberni	Shawinigan Falls
iP 09 53 13.6	eP 04 19 51.4	eP' 04 05 26
iS 09 54 18.6	eS 04 20 55.7	i 04 05 39
Victoria	Resolute	Victoria
iP 09 53 10.5	P 04 25 08	eP 03 59 35
iS 09 54 17.1	Victoria	iP 04 19 44.7
		iS 04 20 46.3
FEBRUARY 2		FEBRUARY 4
U.S.C.G.S.		Resolute
2N, 126E		P 04 16 58
Molucca Passage	FEBRUARY 3	
H = 23 40 01	U.S.C.G.S.	
Resolute	24N, 108 1/2W	
eP 23 53 51 d	Gulf of California	FEBRUARY 4
	H = 11 29 55	Resolute
	Resolute	eP 07 04 07 c
FEBRUARY 2		
U.S.C.G.S.		FEBRUARY 4
34 1/2N, 104 1/2E		U.S.C.G.S.
Kansu Province China	FEBRUARY 3	Southern Iran
H = 23 51 57	U.S.C.G.S.	H = 07 07 20
Resolute	43N, 138 1/2E	Resolute
eP 24 03 15 c	Off west coast of	eP 07 19 06 c
	Hokkaido Japan	
	H = 12 48 53	
FEBRUARY 3		FEBRUARY 4
U.S.C.G.S.		U.S.C.G.S.
37S, 179E		35 1/2N, 78E
Off coast of North Island	FEBRUARY 3	Northern India
New Zealand	Resolute	H = 10 20 39
H = 02 20 55	P 13 22 33	h = about 100 km
Ottawa		Resolute
eP' 02 40 01		P 10 31 45
Resolute	FEBRUARY 4	
P' 02 39 55	U.S.C.G.S.	
Seven Falls	4 1/2S, 153 1/2E	FEBRUARY 4
eP' 02 40 08	New Ireland Region	U.S.C.G.S.
e 02 43 24	H = 03 46 30	4 1/2S, 153 1/2E
Shawinigan Falls	Halifax	New Britain region
eP' 02 40 04	eP' 04 05 55	H = 11 01 18
	Ottawa	Victoria
	eP' 04 05 23	IP' 11 18 28
	e 04 15 27	

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SEISMOLOGICAL BULLETIN - 1960

FEBRUARY 4	Resolute	FEBRUARY 4	Resolute	FEBRUARY 6
	eP 15 16 41 d		P 23 03 08	48° 44'N, 121° 32'W
				Southeast of Mt. Baker
				Washington
				H = 01 10 35.4
				Mag 2.4
				Alberni
				iP 01 11 12.0
				iS 01 11 34.2
				Victoria
				iP 01 10 58.0
				iS 01 11 08.1
				FEBRUARY 6
				Resolute
				P 01 18 24
				FEBRUARY 6
				Resolute
				P 14 05 14
				FEBRUARY 6
				U.S.C.G.S.
				31 1/2N, 91E
				Tibet
				H = 17 01 18
				About 15 miles up Riviere
				Resolute
				Malboie, Quebec
				P 17 12 55
				H = 00 44 02.0
				Mag 3.3
				Montreal
				iP ₁ 00 44 59.0
				iS ₁ 00 45 42.5
				D = 357 km
				Ottawa
				S ₁ 00 46 18
				D = 490 km
				Seven Falls
				iP ₁ 00 44 15.8
				iS ₁ 00 44 26.1
				D = 83 km
				Shawinigan Falls
				iP ₁ 00 44 38.8
				iS ₁ 00 45 06.8
				D = 230 km
				FEBRUARY 7
				U.S.C.G.S.
				7 1/2N, 71 1/2W
				Venezuela
				H = 04 24 50
				Resolute
				P 04 35 56

DOMINION OBSERVATORIES

FEBRUARY 7		FEBRUARY 8		FEBRUARY 9
U.S.C.G.S.		U.S.C.G.S.		U.S.C.G.S.
17N, 145E		36 1/2N, 70 1/2E		4S, 128E
Mariana Islands		Afghanistan		Ceram
H = 10 00 34		H = 18 54 23		H = 23 55 49
Resolute		h = about 150 km		Mag 6 1/2 - 6 3/4
P 10 12 53		Resolute	eP 19 05 16 c	Banff
				eP' 24 14 13
FEBRUARY 7				Halifax
U.S.C.G.S.				iP' 24 15 09 c
5N, 123E				Ottawa
Celebes Sea				eP' 24 15 00
H = 10 07 50				Resolute
h = about 600 km				P 24 10 00
Resolute				i 24 14 24
P 10 20 26				i 24 20 38
Seven Falls				Seven Falls
eP' 10 25 54				eP' 24 14 56
FEBRUARY 7				Shawinigan Falls
U.S.C.G.S.				eP' 24 15 02
15 1/2S, 173 1/2W				
Samoa Islands region				
H = 11 16 54				
Resolute				
P 11 30 51				
FEBRUARY 7				
Resolute				
P 16 54 32				
FEBRUARY 8				
Resolute				
P 02 29 14				
FEBRUARY 8				
U.S.C.G.S.				
58 1/2N, 152W				
Kodiak Islands,				
Alaska				
H = 03 37 20				
Resolute				
eP 03 42 58 d				
Shawinigan Falls				
eP 03 45 49				
FEBRUARY 8				
U.S.C.G.S.				
FEBRUARY 9				
U.S.C.G.S.				
8 1/2S, 74 1/2W				
Peru				
H = 19 06 16				
h = about 200 km				
Ottawa				
iP 19 15 20 c				
Resolute				
eP 19 18 26 d				
Seven Falls				
eP 19 15 32				
Shawinigan Falls				
iP 19 15 27 c				
FEBRUARY 9				
Resolute				
iP 11 18 43 c				
FEBRUARY 9				
U.S.C.G.S.				
4S, 128E				
Banda Sea				
H = 11 56 12				
Ottawa				
eP' 12 15 33 d				
Resolute				
P 12 10 22				
Shawinigan Falls				
eP' 12 15 32 c				
FEBRUARY 9				
Shawinigan Falls				
eP 20 38 43				
FEBRUARY 10				
Banff				
eP 00 32 20				
FEBRUARY 10				
48°51'N, 123°00'W				
Strait of Georgia				
H = 16 48 15.0				
Mag 1.9				
Alberni				
iP 16 48 38.1				
iS 16 48 53.5				
Victoria				
iP 16 48 22.7				
S 16 48 27.8				
compression				
FEBRUARY 10				
U.S.C.G.S.				
15 1/2S, 173W				
Samoa Islands region				
H = 23 19 55				
Victoria				
eP 23 31 53				

SEISMOLOGICAL BULLETIN - 1960

FEBRUARY 11		FEBRUARY 13		Shawinigan Falls
49°49'N, 123°46'W		48°20'N, 123°41'W		eP 20 50 24
Near entrance to Jervis		Strait of Juan da		Victoria
Inlet		Fuca		iP 20 52 09
H = 12 35 08.6		H = 11 33 49.5		
Mag 2.5		Mag 1.2		
Alberni		Alberni		FEBRUARY 14
eP 12 35 18.8		eP 11 34 11.1		U.S.C.G.S.
Victoria		eS 11 34 27.2		La Rioja Province
eP 12 35 34.0		Victoria		Argentina
eS 12 35 49.5		iP 11 33 53.5		Halifax
		iS 11 33 57.0		ip 05 32 53 d
				i 05 33 28
FEBRUARY 11				Shawinigan Falls
U.S.C.G.S.				iP 05 33 05 d
34S, 70 1/2W				
Chile		FEBRUARY 13		
H = 12 53 59		U.S.C.G.S.		
h = about 100 km		1 1/2N, 127 1/2E		
Halifax		Halmahera		FEBRUARY 14
ip 13 05 54 (d)		H = 15 41 04		U.S.C.G.S.
Ottawa		Resolute		29S, 177W
eP 13 05 57 d		P 15 54 53		Kermadec Islands
Seven Falls		i 16 05 10		H = 15 39 43
eP 13 06 06 d				Resolute
Shawinigan Falls				P' 15 58 28
eP 13 06 03 d		FEBRUARY 13		
FEBRUARY 11		Ottawa		
Canadian Arctic		eP 17 20 23		FEBRUARY 14
H = 21 07 05.3		Resolute		U.S.C.G.S.
Mag 0.9		P 17 23 31		6S, 75 1/2W
Resolute		Shawinigan Falls		Northern Peru
iP ₁ 21 07 11.0		eP 17 20 41		H = 18 20 46
iS ₁ 21 07 15.3				h = 150 km
D = 35.3 km		FEBRUARY 13		Resolute
		U.S.C.G.S.		P 18 32 51
		17 1/2S, 70W		Seven Falls
		Peru		eP 18 29 56
		H = 20 40 06		Shawinigan Falls
		h = 150 km		eP 18 29 50
FEBRUARY 13		Banff		
U.S.C.G.S.		eP 20 51 55		FEBRUARY 14
52 1/2N, 169W		Halifax		U.S.C.G.S.
Fox Islands		iP 20 50 11 c		Indian Ocean about
H = 09 36 46		Ottawa		800 miles southeast
Resolute		eP 20 50 17		of Mascarene Islands
P 09 43 49		Resolute		Ottawa
		P 20 53 06		iP' 19 48 40 c
		i 21 03 59		

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DOMINION OBSERVATORIES

FEBRUARY 14	Resolute	FEBRUARY 17	U.S.C.G.S.
U.S.C.G.S.	eP _n 06 47 13.5	U.S.C.G.S.	30S, 112 1/2W
18 1/2N, 145 1/2E	eP ₁ 06 47 22.8	Easter Islands region	H = 21 32 10
Mariana Islands	eS _n 06 47 55.0		Mag 6 1/2
H = 21 04 36	iS ₁ 06 47 12.9	Seven Falls	D = 410 km
h = about 200 km			
Resolute		eP 12 44 51	
P 21 16 25		S 12 55 24	
FEBRUARY 14		Shawinigan Falls	
U.S.C.G.S.		eP 12 44 45	
52N, 171 1/2W		Kermadec Islands region	Victoria
Fox Islands		Resolute	eP 12 44 18
H = 22 17 54			P' 05 40 36
Resolute			Seven Falls
P 22 25 04			eP' 05 40 50 d
Seven Falls			Shawinigan Falls
eP 22 23 02			eP' 05 40 46
FEBRUARY 15		FEBRUARY 17	U.S.C.G.S.
Resolute			43 1/2N, 145 1/2E
P 04 04 58			Near east coast of
			Hokkaido Japan
			H = 16 27 40
			Ottawa
			eP 16 40 12
			Atlantic Ocean
			Resolute
			P 16 37 15
			Seven Falls
			Shawinigan Falls
			eP 16 40 12
FEBRUARY 15		FEBRUARY 18	U.S.C.G.S.
U.S.C.G.S.			48.7N, 123.7W
12N, 87W			Southern Vancouver
Near coast of Nicaragua			Island
H = 07 36 08			H = 00 05 55.5
Ottawa			Mag 2.1
iP 07 43 04 c			Horseshoe Bay
Resolute			S - P = 10.1Sec.
eP 07 46 36 c			Victoria
Seven Falls			iP 00 06 00.5
eP 07 43 28			iS 00 06 04.5
Shawinigan Falls			
eP 07 43 10			
FEBRUARY 16		FEBRUARY 18	U.S.C.G.S.
Canadian Arctic			60 1/2N, 151 W
H = 06 46 17.0			Kenai Peninsula
h = 11 km ?			H = 05 09 23
Mag 2.7			Halifax
			ip 05 18 25 c
			Ottawa
			ip 05 17 37
			Resolute
			P 05 14 38
			Seven Falls
			eP 05 17 46
			Shawinigan Falls
			eP 05 17 40
			Victoria
			iP 05 13 56
FEBRUARY 16		FEBRUARY 16	U.S.C.G.S.
197 km from			52 1/2N, 160E
Victoria			Near east coast of
H = 16 26 48			Kamchatka
Victoria			H = 21 35 11
eP 16 27 06.8			Halifax
iS 16 27 30.9			ip 21 46 59 d
			Ottawa
			eP 21 46 31

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Resolute	FEBRUARY 19	FEBRUARY 20
iP 21 43 18 c	Canadian Arctic	U.S.C.G.S.
S 21 49 46	H = 06 04 29.7	52N, 159E
Shawinigan Falls	Mag 1.9	Near east coast of
eP 21 46 32	Resolute	Kamchatka
	eP 06 05 03.5	H = 14 27 10
	eS 06 05 28.5	Resolute
	D = 205 km	P 14 35 25
FEBRUARY 18	FEBRUARY 19	FEBRUARY 21
U.S.C.G.S.	U.S.C.G.S.	U.S.C.G.S.
52N, 170W	36 N, 70 1/2E	42S, 173E
Fox Islands	Hindu Kush	South Island, New Zealand
H = 22 26 10	H = 10 36 46	H = 00 46 56
Halifax	h = 200 km	h = about 60 km
ep 22 37 03	Alberni	Ottawa
Resolute	iP 10 49 54	eP' 01 06 04 c
P 22 33 19	ipP 50 46	i 01 09 25
Shawinigan Falls	Halifax	Seven Falls
eP 22 36 10	ep 10 49 27	eP' 01 03 13 c
	i 50 22	ePKS 01 09 37
	Ottawa	Shawinigan Falls
	ip 10 49 44	eP' 01 06 09 c
	Resolute	PKS 01 09 33
	iP 10 47 34 c	
	i 10 48 24	
	S 10 56 10	
	Seven Falls	FEBRUARY 21
	eP 10 49 30	Ottawa
	Shawinigan Falls	eP 02 22 06
	ep 10 49 34 c	Resolute
	Victoria	P 02 25 31
	ip 10 49 50	Seven Falls
	ipP 50 43	eP 02 22 34
		Shawinigan Falls
		eP 02 22 25
FEBRUARY 19	FEBRUARY 19	FEBRUARY 21
U.S.C.G.S.	U.S.C.G.S.	U.S.C.G.S.
60 1/2N, 151 W	36N, 4 1/2E	36N, 4 1/2E
Kenai Peninsula	Northern Algeria	H = 08 13 31
H = 05 09 23	H = 08 13 31	Ottawa
Halifax	ip 23 13 37.3	eP 08 23 35
ip 05 18 25 c	iP 23 14 06	Resolute
Ottawa		P 08 23 28
ip 05 17 37		Seven Falls
Resolute		eP 08 23 09
P 05 14 38		
Seven Falls		
eP 05 17 46		
Shawinigan Falls		
eP 05 17 40		
Victoria		
iP 05 13 56		

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DOMINION OBSERVATORIES

Shawinigan Falls	Resolute	FEBRUARY 23
eP 08 23 19	P 02 20 31	U.S.C.G.S.
Victoria	i 02 21 20	34 1/2N, 139 1/2E
eP 08 26 08	Shawinigan Falls	Near south coast of
	eP 02 22 32	Honshu, Japan
		H = 09 23 37
		h = about 100 km
FEBRUARY 21		
U.S.C.G.S.	FEBRUARY 23	Resolute
52N, 175W	U.S.C.G.S.	eP 09 34 14 c
Aleutian Islands	39N, 20E	
H = 17 21 59	Greece	
Ottawa	H = 07 34 30	FEBRUARY 24
eP 17 32 15	Halifax	U.S.C.G.S.
Resolute	ip 07 44 43 c	21 1/2N, 142E
P 17 29 23	Ottawa	Mariana Islands region
	eP 07 45 29	H = 00 03 00
FEBRUARY 21	Seven Falls	h = about 300 km
U.S.C.G.S.	eP 07 45 03	Resolute
2 1/2N, 128 1/2E	Shawinigan Falls	P 00 14 26
Halmahera	eP 07 45 14	
H = 22 43 11		
Resolute	FEBRUARY 23	FEBRUARY 24
P 22 56 49	U.S.C.G.S.	Canadian Arctic
	39N, 20 1/2E	H = 08 31 38
	Greece	h = 15 km
	H = 07 47 51	Mag 3.6 ?
	Halifax	Resolute
	ep 07 58 05	ip 08 32 17 d
	Ottawa	S ₁ 08 32 54 ?
		D = 270 km ?
FEBRUARY 22		
U.S.C.G.S.		
20S, 178 1/2W		
Fiji Islands		
H = 09 39 26		
h = about 600 km		
Resolute		
P 01 11 51		
FEBRUARY 22		
Ottawa	FEBRUARY 23	FEBRUARY 24
eP 01 39 43	U.S.C.G.S.	U.S.C.G.S.
Resolute	23 1/2N, 121 1/2E	7 1/2S, 156E
P 01 42 24	Formosa	Solomon Islands
	H = 08 10 28	H = 21 37 04
	Resolute	Mag 6 1/2 - 6 3/4
	eP 08 22 33	Halifax
	Victoria	ip' 21 56 16
	eP 08 23 22	Ottawa
FEBRUARY 23		eP' 21 55 59 c
U.S.C.G.S.		Resolute
36N, 70E		P 21 50 59
Afghanistan		i 22 04 18
H = 02 09 42		Seven Falls
		eP' 21 56 04
		Shawinigan Falls
		eP' 21 56 02
		Victoria
		eP 21 50 02

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FEBRUARY 25	FEBRUARY 26	Seven Falls
198 km from	U.S.C.G.S.	eP 00 17 43
Alberni	Chiapas Mexico	Shawinigan Falls
H = 11 29 58.3	H = 21 29 05	eP 00 17 41
Alberni	Resolute	Victoria
eP 11 30 29.2	P 21 38 58	iP 00 14 02
S 11 30 53.5	Seven Falls	
	eP 21 35 39	
	Shawinigan Falls	FEBRUARY 27
	eP 21 36 28	U.S.C.G.S.
FEBRUARY 25	FEBRUARY 26	51 1/2N, 178W
U.S.C.G.S.	U.S.C.G.S.	Aleutian Islands
11N, 124E	H = 08 10 03	Banff
Cebu, Philippine	51 1/2N, 178W	eP 08 17 23
Islands	Aleutian Islands	Halifax
H = 12 45 44	H = 23 29 25	ip 08 21 12
Resolute	Alberni	Ottawa
P 12 58 46	iP 23 36 10	P 08 20 30
	iS 41 21	Resolute
FEBRUARY 26	Banff	
U.S.C.G.S.	eP 23 37 02 d	P 08 17 38
2 1/2S, 128E	Halifax	i 08 19 45
Ceram Sea	iP 23 40 33 d	Seven Falls
H = 01 06 23	Ottawa	eP 08 20 36
Resolute	P 23 39 52	Shawinigan Falls
P 01 20 49	P 23 36 58	eP 08 20 36 d
	i 23 38 34	
	S 23 43 00	FEBRUARY 28
FEBRUARY 26	Seven Falls	Victoria
U.S.C.G.S.	eP 23 39 59	iP 08 16 55
1S, 138E	Shawinigan Falls	
New Guinea	eP 23 39 54	
H = 02 08 31	Victoria	FEBRUARY 28
Resolute	iP 23 36 18	U.S.C.G.S.
P 02 22 24	i 02 33 01	44 1/2N, 147 1/2E
		Kurile Islands
FEBRUARY 27		H = 09 34 12
U.S.C.G.S.		Resolute
48.8N, 123.6W	eP 09 43 41	
Southern Vancouver		
Island		
H = 05 43 46.6		
Mag 1.5		
Victoria		
iP 05 48 51.5 d		
iS 05 48 55.2		
FEBRUARY 26		
U.S.C.G.S.		
51 1/2N, 178W		
Aleutian Islands		
H = 00 07 10		
Alberni		
H = 05 43 46.6		
Mag 1.5		
Victoria		
iP 05 48 51.5 d		
iS 05 48 55.2		
FEBRUARY 28		
U.S.C.G.S.		
3S, 142E		
New Guinea		
H = 23 05 39		
Ottawa		
P' 23 24 48		

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DOMINION OBSERVATORIES

Resolute		FEBRUARY 29
P	23 19 35	48.8N, 123.6W
Seven Falls		Southern Vancouver
eP'	23 24 50	Island
Shawinigan Falls		H = 18 53 49
eP'	23 24 50	Mag 1.5
		Victoria
		iP 18 53 52.6
FEBRUARY 29		iS 18 53 55.4
U.S.C.G.S.		
7 1/2N, 80W		
Near south coast of		FEBRUARY 29
Panama		U.S.C.G.S.
H = 02 12 04		30N, 9W
Ottawa		Morocco
P 02 19 30		H = 23 40 12
Seven Falls		Alberni
eP 02 19 51		eP 23 52 43
		Halifax
		eP 23 48 27
FEBRUARY 29		Ottawa
U.S.C.G.S.		eP 23 49 33
14N, 120E		Resolute
Near southwest coast		P 23 50 21
of Luzon P.I.		Seven Falls
H = 05 22 53		eP 23 49 06
h = about 150 km		Shawinigan Falls
Resolute		eP 23 49 20
iP 05 35 35 c		Victoria
		eP 23 52 40
FEBRUARY 29		
U.S.C.G.S.		MARCH 2
23 1/2N, 94 1/2E		U.S.C.G.S.
Western Burma		19N, 101 1/2W
H = 08 34 30		Michoacan, Mexico
Resolute		H = 90 10 26
P 08 46 51		Alberni
		eP 00 17 30
		Ottawa
		eP 00 17 10
FEBRUARY 29		Resolute
Canadian Arctic		P 00 20 04
H = 17 49 29.1		S 00 28 08
Mag 2.0		Seven Falls
Resolute		eP 00 17 45
iP ₁ 17 50 03		Shawinigan Falls
eS ₁ 17 50 28		eP 00 17 32
D = 205 km		Victoria
		iP 00 17 19

MARCH 2	
U.S.C.G.S.	
17N, 93W	
Chiapas, Mexico	
H = 04 34 46	
Resolute	
P	04 44 42
MARCH 2	
U.S.C.G.S.	
52N, 39W	
North Atlantic Ocean	
H = 21 56 25	
Ottawa	
eP	22 02 39
Resolute	
P	22 03 13
S	22 08 32
Seven Falls	
eP	22 02 05
Shawinigan Falls	
eP	22 02 18
MARCH 3	
U.S.C.G.S.	
7S, 156E	
Solomon Islands	
H = 01 02 20	
Ottawa	
eP'	01 21 15
Shawinigan Falls	
eP'	01 21 17
MARCH 3	
U.S.C.G.S.	
11N, 62 1/2W	
Near coast of	
Venezuela	
H = 01 42 46	
h = 100 km	
Resolute	
P	01 53 27
Seven Falls	
eP	01 49 50
Shawinigan Falls	
eP	01 49 49

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MARCH 3	Ottawa	MARCH 5
U.S.C.G.S.	iP 02 26 25 d	Canadian Arctic
64 1/2N, 150W	Resolute P 02 23 35	H = 10 42 41.6
Central Alaska	Seven Falls eP 02 26 32	h = 16
H = 04 59 20	Shawinigan Falls eP 02 26 29 d	Mag 4.5
Ottawa	Victoria eP 02 22 53	Resolute
eP 05 07 23	MARCH 4	eP _n 10 44 18.0
Resolute	U.S.C.G.S.	iP ₁ 10 44 40.2
P 05 03 58	31N, 129E	iS _n 10 45 25.5
Shawinigan Falls	Near south coast	eS ₁ 10 46 00
eP 05 07 27	of Kyushu, Japan	
MARCH 3	H = 03 53 00	MARCH 5
Resolute	h = about 100 km	U.S.C.G.S.
P 11 46 12	Mag 6 1/2	23N, 81E
MARCH 3	Alberni	Nepal
U.S.C.G.S.	eP 04 04 44	H = 11 25 00
40N, 70E	Banff	Resolute
Sinkiang Province China	iP 04 05 03	iP 11 36 52 c
H = 14 15 02	dilatation	
Resolute	Resolute	MARCH 5
P 14 25 44	P 04 04 09	U.S.C.G.S.
MARCH 4	i- 04 04 42	1N, 129E
Seven Falls	S 04 13 10	Halmahera Island
eP 01 16 52	Seven Falls	H = 13 49 16
i 01 23 36	eP 04 06 40	Mag 6 3/4
MARCH 4	Victoria	Resolute
Resolute	iP 04 04 50	P 14 03 06
P 01 20 32	MARCH 4	Seven Falls
MARCH 4	U.S.C.G.S.	eP' 14 08 29
Resolute	Hokkaido, Japan	Shawinigan Falls
P 01 20 32	H = 11 55 12	eP' 14 08 34
MARCH 4	Resolute	
U.S.C.G.S.	P 12 05 04	MARCH 5
50 1/2N, 177W	MARCH 4	Resolute
Andreano Islands	U.S.C.G.S.	P 14 47 56
H = 02 15 56	7 1/2N, 94E	
Alberni	Nicobar Islands	MARCH 5
eP 02 22 39	H = 21 05 45	U.S.C.G.S.
Banff	Resolute	1N, 129E
iP 02 23 16	P 21 19 24	Halmahera aftershock
Halifax		H = 15 49 53
iP 02 27 05 d		Resolute
		P 16 03 42

DOMINION OBSERVATORIES

MARCH 5	MARCH 6	Halifax
U.S.C.G.S.	U.S.C.G.S.	ip 06 23 31.0 c
29N, 81E	Kurile Islands	ip 06 23 31.2 d
Nepal	H = 07 56 28	Ottawa
H = 23 50 38	Resolute	iP 06 23 06 d
Resolute	P 08 05 55	Resolute
P 24 02 28	MARCH 6	iP 06 19 57 d
	Resolute	Seven Falls
MARCH 6	P 10 32 52	eP 06 23 07 d
U.S.C.G.S.	MARCH 6	Shawinigan Falls
1N, 129E	Canadian Arctic	eP 06 23 07
Halmahera aftershock	H = 10 50 56.3	
H = 02 22 06	Mag 2.3 ?	MARCH 7
Resolute	Resolute	U.S.C.G.S.
P 02 35 55	iP ₁ 10 51 09.5 c	23 1/2N, 123 1/2E
Seven Falls	S ₁ 10 51 19.5 ?	Ryukyu Islands
eP' 02 41 21	D = 32 km ?	H = 11 34 23
Shawinigan Falls		Resolute
eP' 02 41 21	MARCH 6	P 11 46 27
	Resolute	
MARCH 6	P 11 46 11	MARCH 7
U.S.C.G.S.		U.S.C.G.S.
24N, 108W	MARCH 7	24 1/2N, 125E
Gulf of California	Resolute	Ryukyu Islands
H = 04 11 54	P 02 36 34	H = 15 47 50
Mag 5 - 5 1/4	MARCH 7	Resolute
Ottawa	U.S.C.G.S.	P 15 59 46
eP 04 18 39	1 1/2N, 125 1/2E	
Resolute	Celebes	
P 04 20 59	H = 05 13 10	MARCH 8
S 04 28 20	Halifax	U.S.C.G.S.
Seven Falls	ep' 05 32 28	65S, 179 1/2E
eP 04 19 15	Ottawa	Antarctic Ocean
Shawinigan Falls	eP' 05 32 21	H = 11 51 10
eP 04 19 06	Resolute	Resolute
Victoria	iP 05 26 58 c	P' 12 10 58
eP 04 17 41	Seven Falls	
	eP' 05 32 20	
MARCH 6	Shawinigan Falls	MARCH 8
Resolute	eP' 05 32 21	Banff
P 06 31 10		eP 14 15 23
	MARCH 7	
MARCH 6	U.S.C.G.S.	
Resolute	52N, 153E	
P 07 04 20	Off southwest coast	
	of Kamchatka	
	H = 96 11 38	
	h = 100km	

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MARCH 8	MARCH 9	MARCH 10
U.S.C.G.S.	U.S.C.G.S.	Alberni
16 1/2S, 168 1/2E	16S, 72W	iP 02 06 49
New Hebrides Islands	Southern Peru	iS 07 15
H = 16 33 38	H = 23 54 20	Banff
Alberni	h = 150 km	eP 02 08 09
iP 16 46 06	Banff	Resolute
Banff	eP 24 06 07	P 02 11 46
iP 16 46 33 c	Halifax	Victoria
Halifax	iP 24 04 28	iP 02 07 06
ip' 16 52 18 d	Ottawa	e 44
i 16 55 37	eP 24 04 30	e 08 39
Ottawa	Resolute	
eP 16 48 34	P 24 07 21	MARCH 10
i 16 51 55	i 24 18 12	U.S.C.G.S.
i 17 02 10	Seven Falls	7 1/2N, 126E
Resolute	eP 24 04 43 d	Mindanao, P.I.
iP 16 47 33 d	Shawinigan Falls	H = 99 10 47
i 16 51 38	ip 24 04 38 d	Resolute
i 16 53 24	Victoria	P 09 24 11
i 16 57 50	iP 24 06 20	
i 16 58 42	Seven Falls	MARCH 10
eP 16 48 47	iP 16 52 27 d	Alberni
i 16 52 27 d	i 17 02 01	eP 00 15 25
i 17 02 01	Shawinigan Falls	Solomon Islands
Shawinigan Falls	ip' 16 52 04 d	H = 99 44 57
ip' 16 53 37	i 16 53 37	Ottawa
Victoria	MARCH 10	eP' 10 03 52
iP 16 46 09	U.S.C.G.S.	
ePP 16 49 30	64N, 149W	MARCH 10
is 16 56 34	Central Alaska	U.S.C.G.S.
	H = 00 24 20	15S, 174W
	Banff	Samoa Islands region
	eP 00 29 13	H = 13 44 25
Ottawa	eP 00 32 24	Alberni
eP 00 32 24	Resolute	eP 13 56 21
P 00 29 02	P 00 29 02	Banff
Shawinigan Falls	eP 00 32 26	iP 13 56 52 d
eP 00 32 26	Resolute	Resolute
	eP 13 58 18 c	eP 13 58 18 c
MARCH 8	MARCH 10	Victoria
Victoria	Resolute	iP 13 56 23
eP 17 11 52	P 01 00 22	
MARCH 9		
Ottawa		
eP 22 26 14		

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DOMINION OBSERVATORIES			MARCH 12	MARCH 13	MARCH 14
MARCH 10 U.S.C.G.S. 47N, 152E Kurile Islands H = 14 32 39 h = 100 km Alberni eP 14 41 49 Banff iP 14 42 17 Ottawa eP 14 44 35 Resolute P 14 41 33 Seven Falls eP 14 44 36 Victoria eP 14 41 59	MARCH 11 U.S.C.G.S. 18 1/2N, 145E Mariana Islands H = 13 11 10 h about 200 km Resolute P 13 23 00	MARCH 12 U.S.C.G.S. South Carolina, U.S.A. H = 12 47 40 Ottawa iP 12 50 42 d Seven Falls eP 12 51 30	U.S.C.G.S. 6S, 152E New Britain H = 20 30 39 Mag 6 1/2 Alberni iP 20 43 45 Banff iP 20 44 12 Halifax P' 20 49 57 Horseshoe Bay eP 20 43 48 Ottawa eP' 20 49 40 Resolute P 20 44 36 i 20 48 40 i 20 55 12 Seven Falls eP' 20 49 44 Shawinigan Falls eP 24 00 59	Resolute P 19 04 04 MARCH 13 U.S.C.G.S. 7 1/2N, 77W Panama-Columbia border H = 23 53 32 h about 60 km Mag 6 - 6 1/4 Ottawa eP 24 00 48 Resolute P 24 04 27 Seven Falls eP 24 01 05 Shawinigan Falls eP 24 00 59	U.S.C.G.S. 44 1/2N, 129 1/2W Off coast of Oregon H = 19 17 45 19 17 27 USCGS Mag 4.1 Alberni eP 19 18 57.1 e 19 02.8 Horseshoe Bay iP 19 19 06.8 S 20 22.0 Resolute P 19 24 14 Seven Falls eP 19 25 05
MARCH 10 U.S.C.G.S. 14 1/2N, 91 1/2W Guatemala H = 18 55 55 h = 100 km Ottawa eP 19 02 31 Resolute P 19 05 56 Victoria eP 19 03 45	MARCH 12 U.S.C.G.S. 52 km from Alberni H = 07 22 44 Mag 2.0 Alberni iP 07 22 52.0 iS 58.3	MARCH 12 U.S.C.G.S. 36 1/2S, 71W Chile-Argentina border H = 13 47 52 h about 150 km Shawinigan Falls ep 14 00 02	Nova Scotia H = 16 17 35.6 Halifax iP ₁ 16 17 58.8 iS ₁ 16 18 16.3 D = 144 km	MARCH 12 U.S.C.G.S. 42N, 143E Near south coast of Hokkaido Japan H = 02 23 37 Resolute P 02 33 19	MARCH 14 U.S.C.G.S. 42 1/2N, 143E Hokkaido Japan H = 00 52 57 Ottawa eP 01 05 39 Resolute P 01 02 44
MARCH 11 Resolute P 04 52 38 Victoria iP 04 52 05	MARCH 12 U.S.C.G.S. 42N, 21E Southern Yugoslavia H = 11 54 00 Banff eP 12 06 08 Ottawa iP 12 04 49 c Resolute P 12 03 42 Seven Falls eP 12 04 23 Shawinigan Falls ep 12 04 30 Victoria eP 12 06 37	MARCH 12 Canadian Arctic H = 18 49 50.5 Mag 1.6 Resolute iP ₁ 18 50 03.5 iS ₁ 18 50 13.4 D = 81.2 km	MARCH 13 U.S.C.G.S. 42N, 143E Near south coast of Hokkaido Japan H = 02 23 37 Resolute P 02 33 19	MARCH 14 U.S.C.G.S. 41 1/2N, 142E Near coast of Northern Honshu Japan H = 19 01 35 Resolute P 19 11 33	MARCH 14 U.S.C.G.S. 51N, 174 1/2W Andreanof Islands H = 09 20 56 Halifax ip 09 31 58 Ottawa iP 09 31 15 d Resolute P 09 28 27 i 09 30 35
MARCH 11 Resolute P 12 05 33	MARCH 12 Resolute P 19 55 32				

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DOMINION OBSERVATORIES

Seven Falls	MARCH 17	MARCH 18
eP 09 31 22	Resolute	Horseshoe Bay
Shawinigan Falls	P 01 17 55	eP 14 21 23
ip 09 31 19 (c)		Victoria
		eP 14 21 20
MARCH 15	MARCH 17	
Nova Scotia	47.6N, 122.1W	
H = 16 07 43.2	East of Seattle	
Halifax	Washington	MARCH 19
iP ₁ 16 07 49.5	H = 18 08 10	Resolute
IS ₁ 16 07 54.3	Mag 2.1	P 00 01 25
D = 39.4 km	Horseshoe Bay	
	iP 18 08 42.5	MARCH 19
	S 09 08.2	Resolute
MARCH 15	Victoria	P 01 37 21
Resolute	eP 18 08 32.5	
	S 49.9	
		MARCH 19
MARCH 16	U.S.C.G.S.	U.S.C.G.S.
U.S.C.G.S.	51N, 180	2 1/2N, 127E
59 1/2S, 26W	Andeanof Islands	Molucca Passage
Sandwich Islands	H = 20 13 58	H = 09 20 51
H = 00 33 05	Resolute	
Resolute	P 20 21 38	P 09 34 40
MARCH 16	MARCH 18	MARCH 19
U.S.C.G.S.	U.S.C.G.S.	U.S.C.G.S.
15 1/2S, 173 1/2W	15N, 90W	3S, 138E
Samoa Islands region	Guatemala	New Guinea
H = 17 39 16	H = 01 14 53	H = 19 15 37
Resolute	h = 150 km	Resolute
P 17 53 12		P 19 29 35
i 18 04 54	Horseshoe Bay	S 19 43 10
i 18 11 44	iP 01 22 47	
	dilatation	
MARCH 16	Ottawa	MARCH 20
Horseshoe Bay	eP 01 21 17	Resolute
eP 18 51 12		P 13 29 04
	Resolute	
P 01 24 45		
Seven Falls	MARCH 20	
eP 01 21 45	Resolute	
Shawinigan Falls	eP 01 21 34	
ep 01 21 34		eP 13 44 29 c
MARCH 16	Victoria	
Resolute	eP 01 22 43	
P 21 09 40		

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MARCH 20	Victoria	MARCH 20
U.S.C.G.S.	eP 17 18 00	Resolute
40N, 143 1/2E	es 26 23	P 23 46 01
Off northeast coast	i 27 50	
of Honshu Japan	eL 34.6	
H = 13 36 54		
h about 60 km		
Resolute	MARCH 20	MARCH 21
eP 13 46 56 c	Resolute	Resolute
	P 18 56 55	P 00 01 07
MARCH 20		
U.S.C.G.S.		MARCH 21
Near east coast		U.S.C.G.S.
of Honshu Japan		39 1/2N, 143E
H = 13 44 25		Near east coast of
Resolute		Honshu Japan
P 13 54 40		H = 00 34 50
MARCH 20		Mag 6 1/2
U.S.C.G.S.		Ottawa
40N, 143E		eP 00 47 45
Near east coast of		Resolute
Honshu Japan		iP 00 44 56 c
H = 21 36 38		S 00 53 08
Resolute		Seven Falls
P 21 46 42		eP 00 47 47
MARCH 20		
U.S.C.G.S.		MARCH 21
40N, 143 1/2E		U.S.C.G.S.
Off northeast coast		40N, 142 1/2E
of Honshu, Japan		Near east coast of
H = 17 07 30		Honshu Japan
h about 60 km		H = 04 43 22
Mag 7		Resolute
Alberni		P 04 53 24
eP 17 17 53		
Banff		
eP 17 17 23		
Horseshoe Bay		
eP 17 18 01		
Ottawa		
eP 17 20 21		
Resolute		
eP 17 17 32 c		
is 17 25 40		
Seven Falls		
eP 17 20 22		
Shawinigan Falls		
ep 17 20 20		
MARCH 20		
U.S.C.G.S.		
17N, 46 1/2W		
North Atlantic Ocean		
H = 23 28 28		
Resolute		
P 23 39 01		
Seven Falls		
eP 23 35 37		
Shawinigan Falls		
ep 23 35 41		
MARCH 21		
U.S.C.G.S.		
40N, 143 1/2E		
Near east coast of		
Honshu Japan		
H = 05 54 16		
Resolute		
P 06 04 21		

DOMINION OBSERVATORIES

MARCH 21		Halifax	Resolute
U.S.C.G.S.	P 19 59 40	P 01 01 59	
40N, 143 1/2E			
Near east coast of	Seven Falls		
Honshu Japan	eP 19 59 54		
H = 06 51 29	Shawinigan Falls	MARCH 22	
Resolute	ep 19 59 50	49°03'N, 122°14'W	
P 07 01 32		Sumas Region	
		H = 01 13 48	
MARCH 21		Mag 1.8	
Resolute	Horseshoe Bay	Alberni	
P 03 32 08	iP 20 07 23	eP 01 14 18.4	
		eS 40.9	
MARCH 21		Horseshoe Bay	
Resolute	iP 22 09 47	iP 01 14 02	
P 03 22 58		S 29	
		Victoria	
MARCH 21		eP 01 14 04.4	
U.S.C.G.S.	U.S.C.G.S.	eS 16.8	
40N, 143E	39 1/2N, 143 1/2E		
Near east coast of	Near east coast of	MARCH 22	
Honshu, Japan	Honshu, Japan	U.S.C.G.S.	
H = 22 56 58	16N, 97 1/2W	16N, 97 1/2W	
Resolute	Near coast of Oaxaca	Near coast of Oaxaca	
P 23 07 05	Mexico	Mexico	
	H = 01 48 24	H = 01 48 24	
Horseshoe Bay	Banff	Banff	
eP 09 28 47	eP 01 55 45	eP 01 55 45	
Ottawa	MARCH 21	Halifax	
eP 09 31 16	U.S.C.G.S.	P 01 56 11	
Resolute	39 1/2N, 143E	Ottawa	
eP 09 28 27 c	Near east coast of	eP 01 55 19	
S 09 36 36	Honshu, Japan	Penticton	
Seven Falls	H = 23 21 43	eP 01 55 45	
eP 09 31 16	Penticton	Resolute	
Shawinigan Falls	eP 23 32 29	eP 01 58 26 c	
ep 09 31 18	Resolute	Seven Falls	
Victoria	P 23 31 50 c	eP 01 55 52	
eP 09 28 56	MARCH 22	Shawinigan Falls	
	Resolute	ep 01 55 40	
MARCH 21	P 00 31 05	MARCH 22	
Resolute		U.S.C.G.S.	
P 11 15 20		61 1/2S, 154E	
MARCH 21 40	MARCH 22	About 400 miles north	
U.S.C.G.S.	U.S.C.G.S.	west of Balleny Islands	
21S, 70 1/2W 54	39 1/2N, 143E	H = 02 31 17	
Near coast of	Near east coast of		
Chile 50	Honshu, Japan		
H = 19 48 56			

SEISMOLOGICAL BULLETIN - 1960

Ottawa	MARCH 22	Alberni
eP ₁ ' 02 51 02	Banff	iP 01 17 43
Resolute	eP 20 15 00	Banff
P ₁ ' 02 51 08	MARCH 22	eP 01 18 07
Seven Falls	Shawinigan Falls	Halifax
eP ₁ ' 02 51 12	eP 20 32 33	ep 01 20 35
Shawinigan Falls		Horseshoe Bay
eP ₁ ' 02 51 08		eP 01 17 47
	MARCH 22	Ottawa
	U.S.C.G.S.	eP 01 20 10
	Near coast of	Penticton
	Western Java	eP 01 18 00
	H = 21 12 42	Resolute
	h = about 150 km	P 01 17 21
	Mag 1.9	Seven Falls
	Penticton	eP 01 20 12
	eP' 21 31 27	Victoria
		iP 01 17 50
	MARCH 23	MARCH 23
	U.S.C.G.S.	Resolute
	39 1/2N, 143E	P 01 36 20
	Near east coast of	
	Honshu, Japan	
	H = 00 23 22	MARCH 23
	Alberni	Banff
	eP 00 33 55	eP 01 47 07
	Banff	Halifax
	eP 00 34 17	ip 01 50 37
	Halifax	Horseshoe Bay
	ep 00 36 38	eP 01 46 42
	Jalisco Mexico	Ottawa
	H = 13 19 52	eP 01 50 19
	Mag 5 1/2 - 5 3/4	Resolute
	Banff	P 01 47 44
	eP 13 26 15	Seven Falls
	Penticton	eP 01 50 27
	eP 13 26 09	Resolute
	Resolute	P 00 33 27
	P 13 29 14	S 00 41 40
	S 13 37 07	Seven Falls
		eP 00 36 21
	MARCH 22	Shawinigan Falls
	Resolute	ep 00 36 17
	P 20 03 57	ip 00 36 24
		Victoria
		eP 00 33 58
	MARCH 22	
	Penticton	
	eP 20 14 52	
		Near east coast of
		Honshu, Japan
		H = 01 51 37
		Horseshoe Bay
		eP 02 02 10
		Penticton
		eP 02 02 23

DOMINION OBSERVATORIES
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DOMINION OBSERVATORIES

Resolute	MARCH 23	MARCH 23
P 02 01 44	U.S.C.G.S.	Resolute
Victoria	40N, 142 1/2E	P 17 02 51
eP 02 02 13	Near east coast of	
	Honshu, Japan	
	H = 08 46 44	MARCH 23
MARCH 23	Horseshoe Bay	U.S.C.G.S.
Resolute	eP 08 57 14	32 1/2N, 103 1/2E
eP 02 19 15 c	Penticton	Szechwan Province
	eP 08 57 27	China
MARCH 23	Resolute	H = 20 03 47
Banff	eP 08 56 48 c	Penticton
eP 03 17 03	Victoria	eP 20 16 45
Horseshoe Bay	eP 08 57 26	Resolute
eP 03 17 34		eP 20 15 12 c
Penticton	MARCH 23	
eP 03 17 02	U.S.C.G.S	MARCH 23
e 18 39	39 1/2N, 143E	U.S.C.G.S.
i 19 05	Near east coast of	39 1/2N, 143 1/2E
Victoria	Honshu, Japan	Near east coast of
eP 03 17 30	H = 10 29 01	Honshu, Japan
	Resolute	H = 21 34 19
MARCH 23		Penticton
Resolute	P 10 39 00	eP 21 45 04
P 05 15 33	S 10 47 15	Resolute
		eP 21 44 27 c
MARCH 23		MARCH 23
Resolute	U.S.C.G.S	U.S.C.G.S
P 06 48 45	39 1/2N, 143E	39 1/2N, 143E
	Near east coast of	Near east coast of
	Honshu, Japan	Honshu, Japan
	H = 11 51 00	Near east coast of
MARCH 23	Resolute	Honshu, Japan
Resolute	P 12 01 07	H = 22 22 36
P 07 00 44		Mag 6
		Ottawa
MARCH 23	MARCH 23	eP 22 35 36
Resolute	U.S.C.G.S.	Penticton
P 07 29 41	39N, 144E	eP 22 33 24
	Near east coast of	Resolute
	Honshu, Japan	P 22 32 44
	H = 16 01 13	S 22 40 58
MARCH 23	Penticton	Victoria
Resolute	eP 16 11 50	eP 22 33 09
P 08 00 51	Resolute	P 16 11 14

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MARCH 23	MARCH 24	MARCH 24
U.S.C.G.S.	U.S.C.G.S.	Banff
40N, 143E	47N, 152 1/2E	eP 14 13 03
Near east coast of	Kurile Islands	Horseshoe Bay
Honshu, Japan	H = 95 54 28	iP 14 13 23
H = 22 51 41	Horseshoe Bay	Penticton
Resolute	iP 06 03 51 d	eP 14 13 09
P 23 01 46	Penticton	Resolute
	iP 06 04 05	P 14 15 08
MARCH 23	Resolute	MARCH 24
Resolute	eP 06 03 30 d	U.S.C.G.S.
P 23 29 58	Victoria	40N, 142 1/2W
	iP 06 03 54	Near east coast of
MARCH 23	MARCH 24	Honshu, Japan
U.S.C.G.S.	U.S.C.G.S.	H = 20 02 44
39N, 143E	50 1/2N, 173W	Resolute
Near east coast of	Andreanof Islands	eP 20 12 49c
Honshu, Japan	H = 99 56 00	
H = 23 26 15	Horseshoe Bay	
Resolute	eP 10 02 25	MARCH 25
P 23 35 25	Ottawa	U.S.C.G.S.
	eP 10 06 14	19S, 177 1/2W
MARCH 24	Penticton	Fiji Islands
Resolute	eP 10 02 43	H = 02 28 56
P 02 36 07	Seven Falls	Banff
	eP 10 06 20	eP 02 41 03
MARCH 24		Horseshoe Bay
U.S.C.G.S.		iP 02 40 45
50N, 175 1/2W		Penticton
Andreanof Islands	Resolute	eP 02 40 53
H = 92 57 01	P 10 08 47	Victoria
Halifax		iP 02 40 42
ip 03 08 07	MARCH 24	MARCH 25
Horseshoe Bay	Horseshoe Bay	41 km from Victoria
iP 03 03 43	iP 10 40 46	H = 07 01 51.2
Ottawa		Mag 1.3
eP 03 07 25 d		Victoria
Penticton	MARCH 24	iP 07 01 57.8
eP 03 04 01	Resolute	iS 02 02 8
	P 12 31 35	MARCH 25
		Resolute
		eP 11 13 56 c

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DOMINION OBSERVATORIES

MARCH 25	MARCH 27	MARCH 27
Resolute	U.S.C.G.S.	U.S.C.G.S.
eP 11 26 21 c	13 1/2S, 166 1/2E	20N, 104 1/2W
	New Hebrides	Jalisco Mexico
	H = 98 57 53	H = 20 15 46
MARCH 26	Mag 6 1/2	Mag 6
Resolute	Alberni	Banff
P 12 02 18	iP 09 10 43	eP 20 22 14
	Banff	Halifax
	eP 09 11 13	ip 20 23 39.5 d
MARCH 27	Halifax	Horseshoe Bay
48°54'N, 123°18'W	iP' 09 17 02	iP 20 22 24
Strait of Georgia	Ottawa	Ottawa
H = 01 39 21.3	ep' 09 16 45.5	ip 20 22 41 d
Mag 2.5	i 09 28 06	e 20 35 18
Alberni	Penticton	Penticton
iP ₁ 01 39 37.4	eP 09 10 59	eP 20 22 15
iP _n 40.3	Resolute	Resolute
iS 52.6	P 09 12 06	P 20 25 17
Victoria	S 09 24 04	S 20 33 10
iP 01 39 25.0	Seven Falls	Seven Falls
iS 31.4	eP' 09 16 51	eP 20 23 13
	Shawinigan Falls	Shawinigan Falls
	ep' 09 16 46	ip 20 23 01 d
MARCH 27	Victoria	Victoria
U.S.C.G.S.	iP 09 10 47	eP 20 22 15
13 1/2S, 166E		
New Hebrides		
H = 03 48 27		
Mag 6 1/4		
Alberni	MARCH 27	MARCH 27
iP 04 01 15	U.S.C.G.S.	Ottawa
Banff	30 1/2S, 178W	ip 21 25 33
iP 04 01 46	Kermadec Islands	Seven Falls
Halifax	H = 17 24 41	eP 21 26 04
iP' 04 07 35	Resolute	
Ottawa	P' 17 43 26	
ip' 04 07 19 c		MARCH 27
Penticton	MARCH 27	37 1/2S, 177E
eP 04 01 31	U.S.C.G.S.	Off coast of north
Resolute	13S, 166E	island N.Z.
P 04 02 38	New Hebrides	H = 23 28 04
i 04 13 18	H = 19 35 25	Ottawa
S 04 14 32	Penticton	ip' 23 47 06 c
Seven Falls		Seven Falls
eP' 04 07 25		eP' 23 46 56
Shawinigan Falls		e 23 47 13
ip' 04 07 19 c	eP 19 48 27	Shawinigan Falls
Victoria		ep' 23 47 09
iP 04 01 20		i 23 49 30
		i 23 50 09

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SEISMOLOGICAL BULLETIN - 1960

MARCH 28	MARCH 28	MARCH 28
Resolute	U.S.C.G.S.	U.S.C.G.S.
P 00 17 45	13 1/2S, 166E	23S, 176W
	New Hebrides Islands	Tonga Islands region
	H = 06 39 32	H = 12 37 50
MARCH 28	Alberni	Penticton
U.S.C.G.S.	eP 06 52 28	eP 12 50 43
7 1/2N, 82W	Horseshoe Bay	
Off south coast of	iP 06 52 26	
Panama	Ottawa	MARCH 23
H = 00 13 38	eP' 06 58 24	U.S.C.G.S.
Mag 6 1/4 - 6 1/2	Seven Falls	58N, 32 1/2W
Banff	eP' 06 58 32	North Atlantic Ocean
eP 00 22 44	Shawinigan Falls	H = 20 48 45
Halifax	eP' 06 58 27	Halifax
ip 00 21 19 c		ip 20 54 03
Horseshoe Bay		Ottawa
eP 00 23 10		ip 20 54 51 c
Ottawa		Penticton
ip 00 21 00 c		eP 20 57 35
i 00 22 34		Resolute
Penticton		H = 20 54 39
eP 00 22 52		Alberni
Resolute		Seven Falls
eP 00 24 35 c		eP 20 54 17
S 00 33 32		Shawinigan Falls
Seven Falls		ep 20 54 30 c
eP 00 21 21		
Shawinigan Falls		MARCH 23
ip 00 21 13 c		U.S.C.G.S.
Victoria		33 1/2S, 177 1/2W
eP 00 23 08		Kermadec Island region
MARCH 28		H = 00 10 45
U.S.C.G.S.		Resolute
13 1/2S, 165E		P' 00 29 36
New Hebrides Islands		
H = 06 36 27		MARCH 29
h = 300 km		Resolute
Horseshoe Bay		P 05 22 47
iP 06 48 54		
Ottawa		48°44'N, 123°12'W
eP' 06 54 50 c		South Pender Island
Penticton		H = 07 25 44.6
eP 06 49 04		Mag 1.2
Seven Falls		Horseshoe Bay
eP' 06 54 56		iP 07 25 56.0
Shawinigan Falls		iS 26 04.6
ep' 06 54 56		New Hebrides Islands
Shawinigan Falls		H = 06 30 54
eP' 06 54 52 c		Mag 6 3/4
		Halifax
		iP' 06 50 (07)

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DOMINION OBSERVATORY			
Horseshoe Bay	MARCH 30	MARCH 30	
eP 06 44 05	U.S.C.G.S.	U.S.C.G.S.	
Ottawa	51N, 178 1/2W	69N, 17W	
ip' 06 49 50 (c)	Andreaonof Islands	Off east coast of	
e 06 51.2	H = 06 58 36	Greenland	
Resolute	Penticton	H = 12 58 57	
P 06 45 25	ep 07 05 47	Resolute	
e 06 49 26		P 13 04 05	
e 06 56 02			
eS 06 57 30	MARCH 30		
Seven Falls	U.S.C.G.S.	MARCH 30	
eP' 06 49 57 c	17S, 167 1/2E	U.S.C.G.S.	
Shawinigan Falls	New Hebrides Islands	3 1/2S, 102E	
ep' 06 49 56 c	H = 09 38 08	Near coast of	
Victoria	Resolute	Sumatra	
eP 06 43 44	e 09 58 42	H = 14 11 40	
	Shawinigan Falls	Penticton	
	ep' 09 57 07	ep' 14 30 37	
MARCH 29			
Resolute			
P 16 13 01	MARCH 30	MARCH 30	
	U.S.C.G.S.	U.S.C.G.S.	
	13 1/2S, 166E	22 1/2S, 174E	
MARCH 29	New Hebrides Islands	Loyalty Islands region	
Resolute	H = 10 49 47	H = 15 19 30	
P 20 44 26	Mag 6	Halifax	
	Alberni	ip' 15 38 39	
	eP 11 02 38	Horseshoe Bay	
MARCH 29	Banff	ep 15 33 37	
Resolute	eP 11 03 09	Penticton	
P 21 18 57	Halifax	ep 15 32 46	
	ip' 11 08 57	Resolute	
MARCH 29	Horseshoe Bay	P' 15 38 05	
U.S.C.G.S.	iP 11 02 43	Shawinigan Falls	
6S, 147E	Ottawa	ep' 15 38 27 d	
East coast of	ip' 11 08 39 d	Victoria	
New Guinea	Penticton	ip 15 33 36	
H = 22 10 20			
Ottawa	eP 11 02 52		
e(P') 22 29 (26)	Seven Falls		
e 22 43.1	eP' 11 08 44	MARCH 31	
Shawinigan Falls	Shawinigan Falls	Penticton	
e(P') 22 29 (26)	ep' 11 08 42	ep 00 51 41	
	Victoria	Resolute	
	ep 11 02 41	P 00 51 42	
MARCH 30			
Resolute	MARCH 30		
P 00 44 50	Resolute		
	P 12 52 10		

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MARCH 31	MARCH 31	Seven Falls
Resolute	U.S.C.G.S.	eP 20 03 33
P 01 58 02	Pacific Ocean about	Shawinigan Falls
Shawinigan Falls	900 miles southwest of	ep 20 03 23
ep 01 55 37	Galapagos Islands	Victoria
	H = 15 04 36	iP 20 02 40
	Resolute	
	P 15 16 39	MARCH 31
	U.S.C.G.S.	U.S.C.G.S.
	39 1/2N, 143E	41 1/2N, 142E
	Off northeast coast of	Near north coast of
	Honshu, Japan	Honshu, Japan
	H = 93 02 03	H = 21 32 44
	Resolute	Resolute
	ep 03 12 10 c	ip 21 42 37 c
	MARCH 31	
	U.S.C.G.S.	
	40N, 143 1/2E	
	Off northeast coast	
	Honshu, Japan	
	H = 96 13 35	
	Resolute	
	P 06 23 39	
	MARCH 31	MARCH 31
	U.S.C.G.S.	U.S.C.G.S.
	40N, 143E	40N, 143E
	Off northeast coast of	Off northeast coast of
	Honshu, Japan	Honshu, Japan
	H = 17 23 40	H = 17 23 40
	Resolute	Resolute
	ep 17 39 45 c	
	MARCH 31	MARCH 31
	U.S.C.G.S.	U.S.C.G.S.
	26N, 110W	26N, 110W
	Gulf of California	Gulf of California
	ip 11 42 29.6	H = 19 56 14
	eS 43 03.0	Mag 5 1/2 - 5 3/4
	Horseshoe Bay	Alberni
	ip 11 42 45.2	ep 20 01 14
	Ottawa	Banff
	P 11 48 47.5	ep 20 01 33
	Resolute	Horseshoe Bay
	P 11 47 52	ip 20 01 21
	Seven Falls	Ottawa
	ep 11 49 08	ip 20 03 02 c
	Shawinigan Falls	i 20 08 35.5
	ep 11 49 01	Penticton
	Victoria	ep 20 01 35
	ip 11 42 43.8	Resolute
	eS 43 40	P 20 05 04
		eS 20 12 09

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DOMINION OBSERVATORY

EARTHQUAKES IN THE CANADIAN ARCTIC

The following disturbances were recorded during the first quarter of 1960. The times of observed phases are given at their respective chronological positions in the text of this bulletin. Some of these events, such as those of February 16 and March 5, are, almost certainly, small earthquakes. Many minor disturbances are well recorded because of the great sensitivity of the short period vertical seismograph (see calibration curves near the front). Most or all of these minor events may be caused by ice cracking etc. However, they will be included in these lists unless further research shows them to be unimportant.

JANUARY 18 at 05 20 59 U.T. Magnitude 1.4. Originated 49.2 km from Resolute, N.W.T.

JANUARY 20 at 06 20 59 U.T. Magnitude 1.3. Originated 54.4 km from Resolute, N.W.T.

JANUARY 20 at 23 18 23 U.T. Magnitude 2.0. Originated 46.7 km from Resolute, N.W.T.

FEBRUARY 11 at 21 07 05 U.T. Magnitude 0.9. Originated 35.3 km from Resolute, N.W.T.

FEBRUARY 16 at 06 46 17 U.T. Magnitude 2.7. Originated 410 km from Resolute, N.W.T. at a depth of about 11 km.

FEBRUARY 19 at 06 04 30 U.T. Magnitude 1.9. Originated 205 km from Resolute, N.W.T.

FEBRUARY 24 at 08 31 38 U.T. Magnitude 3.6. Originated 270 km from Resolute, N.W.T.

FEBRUARY 29 at 17 49 29 U.T. Magnitude 2.0. Originated 205 km from Resolute, N.W.T.

MARCH 5 at 10 42 42 U.T. Magnitude 4.5. Originated 720 km from Resolute, N.W.T. at a depth of about 16 km.

MARCH 6 at 10 50 56 U.T. Magnitude 2.3. Originated 82 km from Resolute, N.W.T.

MARCH 12 at 18 49 51 U.T. Magnitude 1.6. Originated 81 km from Resolute, N.W.T.

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SEISMOLOGICAL BULLETIN - 1960

EARTHQUAKES IN EASTERN CANADA AND ADJACENT AREAS

The following disturbances were recorded during the first quarter of 1960. The times of observed phases are given at their respective chronological positions in the text of this bulletin. Some of these events, such as those of January 20 and February 6, are almost certainly small earthquakes. Others, such as that on January 4, are almost certainly blasts. During 1960 an intensive effort is being made to identify blast sources with a view to eliminating such data from these lists and assisting in the re-evaluation of past records. Ottawa records ($S_1 - P_1 = 17.2$ sec.) of blasts from a single mine in neighbouring New York State have accounted for up to twenty entries herein each year. Such data can greatly distort the earthquake statistics for the area. Accordingly, suspected blasts will be so designated, and when their source has been satisfactorily established, future occurrences will not be listed.

JANUARY 4 at 21 02 57 U.T. Magnitude 2.0. Originated 111 km from Ottawa, Ontario. May be a blast.

JANUARY 20 at 20 07 40 U.T. Magnitude 3.7. Epicentre at $46^{\circ}58'N$; $75^{\circ}40'W$. About five miles east of the northern arm of Baskatong Lake, Quebec. There is some evidence to suggest that the focus may have been at a depth of about 15 km.

JANUARY 22 at 20 53 22 U.T. Magnitude 3.4. Epicentre at $41\frac{1}{2}^{\circ}N$; $75\frac{1}{2}^{\circ}W$. North of Scranton, Pennsylvania. May be a large blast.

FEBRUARY 6 at 00 44 02 U.T. Magnitude 3.3. Epicentre at $47^{\circ}48'N$; $70^{\circ}23'W$. This position is about 15 miles up Riviere Malbaie, Quebec. However because of uncertainties in the location it may actually be in the Saint Lawrence at the mouth of Riviere Malbaie.

MARCH 12 at 16 17 36 U.T. Small. Originated 144 km from Halifax, N.S. Probably a blast. The distance corresponds to that of one quarry and several salt mines.

MARCH 16 at 16 07 43 U.T. Very small. Originated 39 km from Halifax, N.S. Probably a blast.



SEISMOLOGICAL SERIES

of the

DOMINION OBSERVATORY

Seismological Bulletin

April - June

1960

**Seismological Service
of Canada**

OTTAWA, CANADA

Department of Mines and Technical Surveys

DOMINION OBSERVATORIES

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SEISMOLOGICAL BULLETIN - 1960

APRIL - JUNE - 1960

NOTES

1. Halifax
Nova Scotia

The Sprengnethers N. S. and E. W. seismographs were taken out of operation in June 1960 and a three component system was installed. This system consisted of three long period Columbia seismographs with calibration curves shown on page 60.
2. Horseshoe Bay
British Columbia

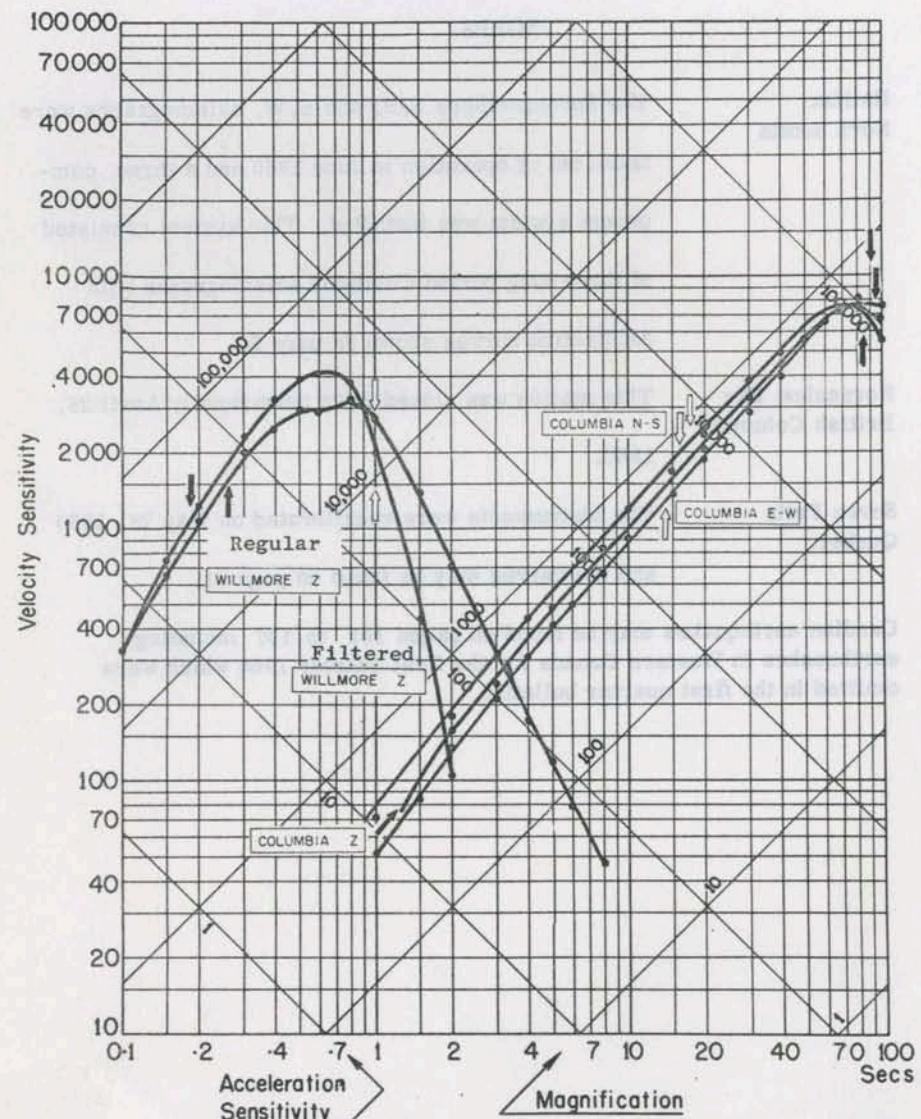
This station was closed down permanently April 28, 1960.
3. Seven Falls
Quebec

The instruments were recalibrated on May 28, 1960 and the curves may be found on page 61.
4. Canadian earthquakes may be found on pages 101 to 107 including earthquakes in Western Canada for the first quarter 1960 which were omitted in the first quarter bulletin.

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CALIBRATION CURVES

STATION: HALIFAX

 $\phi = 44^\circ 38' N$ $\lambda = 68^\circ 36' W$

Altitude 56 M

Foundation: Carbonaceous slate

 $T_s \uparrow$ $T_g \uparrow$

Date of Calibration: June 1960

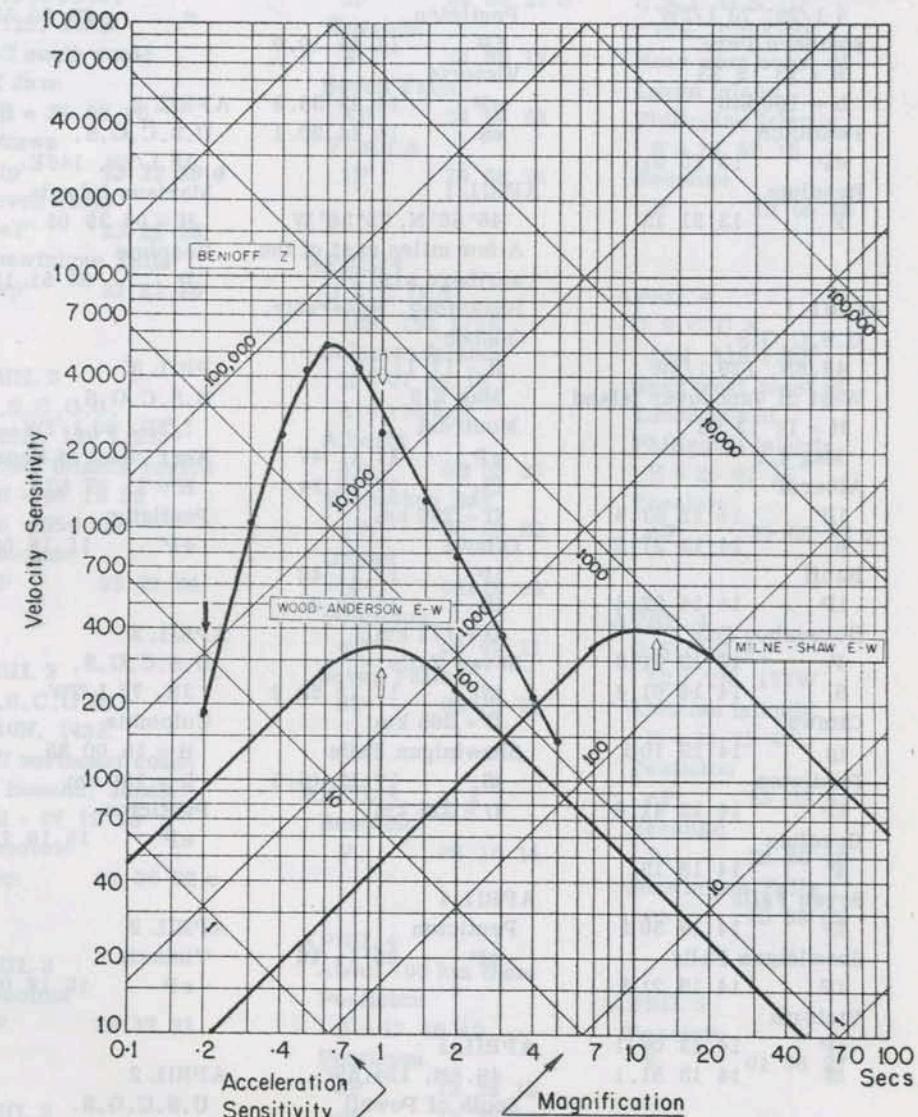
Columbia LP-EW June 10/60
 Columbia LP-NS June 10/60
 Columbia LP Z June 17/60

Regular Willmore SPZ - June 3/60
 Filtered Willmore SPZ - June 6/60

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CALIBRATION CURVES

STATION: SEVEN FALLS

 $\phi = 47^\circ 07.4' N$ $\lambda = 70^\circ 49.6' W$

Altitude 232 M

Foundation: Precambrian basement rock

 $T_s \uparrow$ $T_g \uparrow$

Date of Calibration: May 28, 1960

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DOMINION OBSERVATORIES

APRIL 1		Horseshoe Bay	Victoria
U.S.C.G.S.		iP 14 43 36.7	eP 23 20 32.5
4 1/2S, 73 1/2W		Penticton	e 23 20 52.1
Southern Peru		iP 14 44 10.0	
H = 13 18 23		Victoria	
h = 100 km		eP 14 43 35.8	APRIL 2
Penticton		es 14 44 20.1	U.S.C.G.S.
eP 13 30 01			18 1/2N, 146E
Resolute	APRIL 1		Mariana Islands
P 13 31 13		46°56'N, 75°38'W	H = 06 39 08
		A few miles east of the	Resolute
		northern arm of	P 06 51 15
APRIL 1		Baskatong, Reservoir,	
U.S.C.G.S.		Quebec	
48.8N, 129 1/2W		H = 17 11 12	APRIL 2
West of Vancouver Island		Mag 2.5	U.S.C.G.S.
H = 14 12 05		Montreal	1/2N, 80 1/2W
Mag 4.2		eP 17 11 47	Near coast of Ecuador
Alberni		is ₁ 17 12 14	H = 11 07 57
iP 14 12 53.5		D = 220 km	Penticton
e 14 13 27.8	Ottawa	eP 11 18 00	
Banff		iP ₁ 17 11 40	
iP 14 14 22.4		is ₁ 17 12 01	
Horseshoe Bay		D = 172 km	APRIL 2
P 14 13 11.3		Seven Falls	U.S.C.G.S.
S 14 14 01.4		is ₁ 17 12 59.2	3N, 76 1/2W
Ottawa		D = 365 km	Colombia
ip 14 19 10d		Shawinigan Falls	H = 15 00 36
Penticton		is ₁ 17 12 15.5	h = 150 km
iP 14 13 41.6		D = 225 km	Penticton
Resolute		eP 15 10 21	
P 14 18 15			
Seven Falls	APRIL 1		
IP 14 19 30d	Penticton		
Shawinigan Falls		eP 23 14 16	APRIL 2
IP 14 19 21d			Victoria
Victoria			eP 15 18 09
IP 14 13 06.1	APRIL 1		
is 14 13 51.1	49.8N, 124.5W		
	South of Powell	APRIL 2	
	River	U.S.C.G.S.	
	H = 23 20 06	36N, 50E	
APRIL 1		Western Iran	
48.9N, 128.8W		Mag 1.8	
Off west coast of		H = 22 36 08	
Vancouver Island		Alberni	Shawinigan Falls
H = 14 42 44		iP 23 20 16.5	eP 22 48 29
Mag 3.1		is 23 20 24.5	
Alberni		Horseshoe Bay	
IP 14 43 23.1		eP 23 20 29.8	
eS 14 43 55.6		is 23 20 41.8	

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APRIL 2	Ottawa	APRIL 4
U.S.C.G.S.	iP 24 04 27 c	U.S.C.G.S.
11S, 113E	Resolute	15N, 119 1/2E
Off south coast	P 24 08 15	Near west coast of
of Java	Seven Falls	Luzon Island,
H = 23 02 50	eP 24 04 29	Philippine Islands
Ottawa	Victoria	H = 18 52 15
ip' 23 22 29 d	iP 24 08 25	Resolute
Seven Falls	eP' 23 22 26	P 19 05 06
ep' 23 22 26		
Shawinigan Falls		APRIL 4
ep' 23 22 26	U.S.C.G.S.	U.S.C.G.S.
	10S, 161 1/2E	15N, 119 1/2E
	Solomon Islands	Near west coast of
	H = 07 56 15	Luzon Island,
	h = 100 km	Philippine Islands,
	Alberni	H = 20 52 15
	eP 08 08 58	Resolute
	Horseshoe Bay	eP 21 05 07 c
	eP 08 09 02	
	Ottawa	
	ip' 08 15 00	
	Penticton	APRIL 4
	eP 08 09 11	U.S.C.G.S.
	Seven Falls	50 1/2N, 177W
	eP' 08 15 03	Aleutian Islands,
		H = 23 22 47
		Penticton
		eP 23 29 53
		Resolute
		P 23 30 25
		Shawinigan Falls
		ep 23 33 33
APRIL 3		
U.S.C.G.S.		APRIL 4
28N, 139 1/2E		About 700 km from
Bonin Islands region		Penticton
H = 05 10 32		H = 13 26 40
h = 550 km		Penticton
Resolute		eP 13 28 13
P 05 21 04		eS 13 29 39
APRIL 3		APRIL 5
U.S.C.G.S.		Resolute
40N, 143E		P 01 56 27
Off northeast coast		
of Honshu, Japan		
H = 07 19 58		
Resolute		
P 09 18 14		
ep 07 30 02 c		
APRIL 3		APRIL 5
Resolute		U.S.C.G.S.
P 22 32 21		61S, 26W
		Sandwich Islands
		H = 07 17 45
		Resolute
		ep' 07 37 13 d
		eS 07 50 38
APRIL 3		
Resolute		
ep 23 55 13 d		
APRIL 4		
Horseshoe Bay		
iP' 17 10 02		
APRIL 3		
U.S.C.G.S.		
15 1/2N, 60 1/2W		
Lesser Antilles		
H = 23 57 50		
APRIL 4		
Resolute		
P 17 19 32		

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APRIL 5	Horseshoe Bay	APRIL 7
About 90 km from Penticton	iP 02 17 43	U.S.C.G.S.
H = 10 46 25	Ottawa	40N, 143E
Penticton	iP 02 15 56 d	Off east coast of Honshu, Japan
iP 10 46 39.5 c	Penticton	H = 08 36 54
iS 10 46 50.3	iP 02 17 33 c	Resolute
D = 90 km	Resolute	P 08 46 55
APRIL 5	P 02 18 38	
U.S.C.G.S.	Seven Falls	
60 1/2S, 25W	eP 02 16 05	
Sandwich Islands	Shawinigan Falls	APRIL 7
H = 12 36 15	ip 02 16 01 d	U.S.C.G.S.
Penticton	Victoria	24S, 179 1/2E
ePKS 12 59 04	iP 02 17 39	Fiji Islands Region
Resolute		H = 13 47 28
ep' 12 55 44 D		h = 500 km
APRIL 5		Mag 6
U.S.C.G.S.		Horseshoe Bay
65N, 2W		eP 13 59 32
North Atlantic Ocean		Penticton
H = 17 25 19		eP 13 59 41
Penticton		Resolute
eP 17 36 58		P' 14 05 07
Resolute		i 14 12 56
P 17 31 29		Victoria
APRIL 5		eP 13 59 29
250 km from Penticton		
H = 23 29 29		
Penticton		APRIL 7
eP 23 30 10.7 c		About 200 km from
eS 23 30 46.3		Penticton
D = 290 km		H = 16 06 31
APRIL 6		Alberni
U.S.C.G.S.		eP 16 07 33.
20S, 68 1/2W		eS(?) 16 07 39.
Chile-Bolivia border		Penticton
H = 02 05 06		eP 16 06 59.
Banff		eS 16 07 21.
eP 02 17 - c		
Time uncertain		
APRIL 6	APRIL 6	APRIL 7
Resolute	Resolute	U.S.C.G.S.
P 10 33 56	P 17 15 13	12N, 143 1/2E
APRIL 6		Mariana Islands
Resolute		H = 20 03 37
P 17 15 13		Horseshoe Bay
APRIL 6		ip 20 16 04
Resolute		Penticton
P 06 16 10		eP 20 16 17
APRIL 7		Resolute
Resolute		ep 20 16 21
P 06 16 10		

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APRIL 7		APRIL 9	Horseshoe Bay
178 km from Penticton		U.S.C.G.S.	eP 20 59 55.2
H = 20 56 02		40N, 143E	eS 21 00 09.0
Penticton		Near east coast	Victoria
eP 20 56 26.4		of Honshu, Japan	eP 20 59 46.1
eS 20 56 47.8		H = 02 43 51	
D = 178 km		Resolute	
	ep 02 53 55 c		APRIL 10
APRIL 7			U.S.C.G.S.
22 km from Victoria			36N, 142E
H = 21 45 09.4			Near east coast of
Victoria		APRIL 9	Honshu, Japan
iP 21 45 13.2		Resolute	H = 00 04 43
S 21 45 16.1		P 09 08 55	Resolute
D = 22 km			P 00 15 37
APRIL 8		APRIL 9	APRIL 10
Alberni		Resolute	Canadian Arctic
iP 00 08 06		P 11 24 15	H = 01 59 10
Horseshoe Bay			h = 5 km ?
iP 00 08 12		APRIL 9	Mag 1.9
Victoria		48.6N, 122.7W	Resolute
iP 00 08 10		Gulf Islands	iP _n 01 59 45
		H = 14 33 05.5	iP ₁ 01 59 47.2
		Horseshoe Bay	iS _n 02 00 11.7
		iP 14 33 21.3	iS ₁ 02 00 15
		eS 14 33 33.2	D = 230 km
APRIL 8		Victoria	
Resolute		iP 14 33 14.5	APRIL 10
i 00 22 48		iS 14 33 21.4	U.S.C.G.S.
			12 1/2N, 143 1/2E
APRIL 8		APRIL 9	Mariana Islands
U.S.C.G.S.		Resolute	H = 04 49 41
21S, 177W		P 19 00 12	h = 100 km
Tonga Islands			Resolute
H = 23 55 54			P 05 02 15
h = 200 km		APRIL 9	
Mag 6		Resolute	APRIL 10
Banff		P 19 48 21	Resolute
eP 24 08 - c			P 11 00 47
Time uncertain		APRIL 9	
Penticton		48.4N, 122.6W	APRIL 10
iP 24 08 21		Whitby Islands	U.S.C.G.S.
		H = 20 59 36.4	Bonin Islands
		Alberni	H = 13 07 30
		S(?) 21 00 26	Resolute
			P 13 18 55

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APRIL 10	APRIL 12	APRIL 12
U.S.C.G.S.	U.S.C.G.S.	Penticton
53N, 167 1/2W	58N, 155W	eP 17 18 51.7
Fox Islands	Alaska Peninsula	eS 17 19 11.0
H = 20 26 12	H = 01 16 40	
Resolute	Resolute	APRIL 12
P 20 33 08	P 01 22 26	U.S.C.G.S.
		46 1/2N, 96E
		Outer Mongolia
APRIL 10	APRIL 12	H = 20 41 10
U.S.C.G.S.	U.S.C.G.S.	Resolute
Western Turkey	Western Turkey	P 20 51 10
H = 22 05 29	H = 04 22 35	
Resolute	Resolute	APRIL 13
P 22 15 45	P 04 32 58	U.S.C.G.S.
		52N, 175W
APRIL 11	APRIL 12	Andreanof Islands
H = 05 55 16	Resolute	H = 04 50 28
Penticton	P 07 21 59	Resolute
eP 05 56 34.2		P 04 57 52
eS 05 57 46.7		i 05 00 04
D = 500 km	APRIL 12	
	Resolute	
	P 09 55 16	APRIL 13
		Resolute
APRIL 11	APRIL 12	P 05 54 10
47.6N, 122.2 W	Seattle aftershock	
Southwest of		
Seattle Washington	H = 13 37 13.2	
H = 06 47 34.5	Penticton	APRIL 13
Mag 3.3	eP 13 38 06.1	U.S.C.G.S.
Alberni	e 13 38 13.0	52N, 175W
iP 06 48 13.9	eS 13 38 52.5	Fox Islands
e 06 48 44.2	D = 380 km	H = 13 14 28
eS 06 48 45.8		Resolute
Banff		P 13 21 31
(S-P) = 95.2 seconds	APRIL 12	
Horseshoe Bay	H = 15 18 26.5	APRIL 14
iP 06 48 07.5	Penticton	48.5N, 130.4W
iS 06 48 32.5	S-P = 19.3 sec.	Off west coast of
Penticton	D = 158 km	Vancouver Island
eP 06 48 15.8		H = 00 37 51.8
e 06 48 19.2	APRIL 13	Horseshoe Bay
eS 06 48 51.8	Resolute	eP 00 39 16.6
Victoria	H = 15 50 13.2	eS 00 40 27.0
iP 06 47 55.2 d	Penticton	Victoria
	iP 15 50 37.5	iP 00 39 01.3 d
	iS 15 50 54.3	eS 00 40 04.2
	D = 138 km	

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APRIL 13	APRIL 14	APRIL 15
U.S.C.G.S.	Penticton	U.S.C.G.S.
15 1/2N, 92 1/2W	eP 03 37 31	40 1/2N, 142E
Guatemala, Mexico		Near north coast of
border		Honshu, Japan
H = 12 37 38	APRIL 14	H = 11 39 01
Mag 6	Resolute	h = 150 km
Alberni	P 21 42 18	Alberni
iP 12 45 42		iP 11 49 14
Halifax		Ottawa
ip 12 44 59 d	APRIL 15	ip 11 51 39 c
Horseshoe Bay	U.S.C.G.S.	Penticton
iP 12 45 35	13 1/2S, 166E	iP 11 49 34
Ottawa	New Hebrides	Resolute
ip 12 44 15 c	H = 04 13 25	P 11 48 49
e 12 49 39	Penticton	S 11 56 44
Resolute	eP 04 26 28	Shawinigan Falls
ep 12 47 41 c		iP 11 51 38 c
eS 12 55 50		Victoria
Seven Falls	APRIL 15	iP 11 49 23
iP 12 44 45 d	H = 08 10 51.8	Penticton
Shawinigan Falls		eP 08 11 18.1
iP 12 44 32 c		eS 08 11 38.2
Victoria	APRIL 15	Resolute
iP 12 45 32	D = 164 km	P 13 21 00
APRIL 13	APRIL 15	APRIL 15
U.S.C.G.S.	U.S.C.G.S.	Resolute
52N, 175W	42 1/2N, 143 1/2E	P 13 49 26
Fox Islands	Near south coast of	
H = 13 14 28	Hokkaido, Japan	
Resolute	H = 10 06 20	APRIL 15
P 13 21 31	Resolute	Resolute
	eP 10 16 08 c	P 17 04 31
APRIL 14	APRIL 15	APRIL 15
48.5N, 130.4W	Resolute	U.S.C.G.S.
Off west coast of	P 10 36 27	13 1/2S, 166E
Vancouver Island		New Hebrides
H = 00 37 51.8		H = 22 05 06
Horseshoe Bay	APRIL 15	Mag 6 1/2
eP 00 39 16.6	U.S.C.G.S.	Alberni
eS 00 40 27.0	42N, 144E	
Victoria	Near south coast of	
iP 00 39 01.3 d	Hokkaido, Japan	
eS 00 40 04.2	H = 11 03 45	
	Resolute	
	ep 11 13 35 c	
	eP 22 18 03	

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Ottawa		APRIL 16	APRIL 18
iP'	22 24 01	Resolute	U.S.C.G.S.
Penticton		P 19 43 05	28N, 139 1/2E
eP	22 18 14		Bonin Islands region
Resolute			H = 08 07 07
P	22 19 22	APRIL 16	h = 450 km
S	22 31 16	U.S.C.G.S.	Alberni
Seven Falls		45N, 150E	eP 08 17 52
eP'	22 24 06	Kurile Islands	Penticton
Shawinigan Falls		H = 20 38 25	eP 08 17 11
eP'	22 24 00	Resolute	Resolute
Victoria		P 20 47 44	ip 08 17 45 d
eP	22 18 01		Victoria
			iP 08 18 00
APRIL 16		APRIL 17	
H = 00 27 20.8		U.S.C.G.S.	APRIL 18
Penticton		54N, 164W	U.S.C.G.S.
iP	00 27 49.5	Unimak Island region	13 1/2S, 166E
iS	00 28 11.6	H = 01 12 44	New Hebrides
D = 180 km		Resolute	H = 09 01 20
		P 01 19 24	Penticton
APRIL 16		APRIL 17	eP 09 14 26
Victoria		Resolute	
eP	04 00 24	P 07 56 43	APRIL 18
i	01 45		Resolute
APRIL 16		P 11 25 33	
Resolute			
P	11 38 06	APRIL 17	
		Canadian Arctic	APRIL 18
		H = 12 41 35	Resolute
		h = 29 km	ep 14 55 11 c
		Mag 1.8	
		Resolute	
		eP _n 12 42 08.9	APRIL 19
		eP ₁ 12 42 12.5	H = 00 08 16.4
		iS _n 12 42 30.4	Penticton
		iS ₁ 12 42 37.2	iP 00 08 44.5
		D = 208 km	iS 00 09 06.0
			D = 176 km
APRIL 16		APRIL 17	
48.4N, 122.5W		Resolute	
Northeast of Whidbey		P 18 39 29	APRIL 19
Island			U.S.C.G.S.
H = 13 09 36.2			46N, 151E
Alberni			Kurile Islands
eP	13 10 08.7		H = 01 13 27
eS	13 10 29.2		Resolute
Horseshoe Bay			ep 01 22 40 c
iP	13 09 55.6		
iS	13 10 10.3		
Victoria			
iP	13 09 47.2		
iS	13 09 55.8		

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APRIL 19	U.S.C.G.S. 51 1/2N, 174W Andreaof Islands H = 19 26 00 Resolute P 19 33 25	APRIL 20	U.S.C.G.S. 37N, 71E Hindu Kush H = 19 23 04 h = 200 km Resolute ep 19 33 52 c	APRIL 21	H = 05 22 47.3 Penticton iP 05 23 18.2 i 05 23 20.2 iS 05 23 42.5 D = 199 km
APRIL 19	U.S.C.G.S. 51 1/2N, 172 1/2W Fox Islands H = 20 32 51 Resolute P 20 40 17	APRIL 20	48.5N, 123.8W H = 22 23 53 Alberni eP 22 24 11.0 eS 22 24 24.7 Victoria iP 22 23 57.9 iS 22 24 01.6	APRIL 21	Resolute P 11 48 38
APRIL 20	Resolute P 02 52 30	APRIL 21	U.S.C.G.S. 2 1/2S, 110W Pacific Ocean H = 02 16 29 Mag 5 3/4 Alberni eP 02 25 56 Halifax ip 02 27 00 (d) Horseshoe Bay eP 02 25 56	APRIL 21	Resolute P 12 17 04
APRIL 20	Resolute eP 06 25 31 d	APRIL 21	Ottawa ip 02 26 16(d) iS 02 34 12 Penticton eP 02 25 47	APRIL 21	U.S.C.G.S. 20 1/2S, 174W Tonga Islands H = 16 21 57 Penticton eP 16 34 36
APRIL 20	Resolute P 07 14 50	APRIL 21	Resolute P 02 28 29 eS 02 38 17 Seven Falls eP 02 26 41 Shawinigan Falls eP 02 26 29 Victoria eP 02 25 47.	APRIL 21	H = 17 48 44 Penticton eP 17 51 20.3 eS 17 53 20. D = 1300 km
APRIL 20	H = 17 02 05.6 Penticton iP 17 02 35.7 iS 17 02 59.2 D = 192 km	APRIL 21	Resolute P 21 09 54	APRIL 21	

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APRIL 22		APRIL 23		APRIL 23	
Resolute		H = 00 53 46.2	U.S.C.G.S.		Seven Falls
P 05 52 35		Penticton	45N, 98E		eP' 03 40 40
		eP 00 54 12.3	Outer Mongolia		Shawinigan Falls
		eS 00 54 32.2	H = 13 08 35		iP' 03 40 37
APRIL 22		D = 164 km	Resolute		Victoria
Resolute			P 13 18 46		iP' 03 40 06
P 08 55 26		APRIL 23			
		U.S.C.G.S.		APRIL 24	
		31 1/2N, 50 1/2E		U.S.C.G.S.	
APRIL 22		Iran		28N, 54 1/2E	
U.S.C.G.S.		H = 06 26 16	Resolute	Southern Iran	
12 1/2N, 123 1/2E			P 13 35 30	H = 12 14 26	
Philippine Islands		Resolute		Halifax	
H = 18 47 17		P 06 37 37		ip 12 27 20	
Resolute		APRIL 23		Ottawa	
P 19 00 16		Resolute		iP 12 27 50 d	
		P 07 35 04		Resolute	
APRIL 22		APRIL 23		P 12 26 17 c	
U.S.C.G.S.		Resolute		S 12 36 00	
17 1/2S, 174 1/2W		P 20 09 39		Seven Falls	
Tonga Islands		APRIL 23		eP 12 27 33	
H = 20 26 28		47°32'N, 70°18'W		Shawinigan Falls	
h = 200 km		Nine miles southwest		iP 12 27 37 d	
Alberni		of Malbaie, Que.			
eP 20 38 19		H = 11 47 52	APRIL 23	APRIL 25	
Horseshoe Bay		h = 17 km	U.S.C.G.S.	U.S.C.G.S.	
eP 20 38 23		53N, 172 1/2E		56N, 155W	
Penticton		Mag 4.0	Near Islands	Kodiak Island region	
eP 20 38 32		Halifax	H = 23 58 23	H = 14 53 53	
Resolute		iP _n 11 49 11	Resolute	Alberni	
P 20 40 12		iS _n 11 50 11.5	P 24 06 03	eP 14 58 22	
i 20 50 35		Lg 11 50 44		Resolute	
Victoria		D = 610 km		P 15 00 00	
eP 20 38 20		Montreal	APRIL 24	Victoria	
		i 11 48 43.2	U.S.C.G.S.	eP 14 58 23	
		i 11 48 47.2	6S, 113 1/2E	P 06 59 45	
		i 11 49 16	Java Sea		
		i 11 49 22.8	H = 03 22 23	APRIL 25	
APRIL 22		D = 341 km	h = 600 km	U.S.C.G.S.	
Resolute		Seven Falls	Alberni	38 1/2N, 25E	
P 21 09 30		P ₁ 11 48 01.8 d	iP' 03 40 04	42N, 142E	
		i 11 48 03.3	Halifax	Near south coast	
		i 11 48 06.0	iP' 03 40 50 d	of Hokkaido, Japan	
APRIL 22		S ₁ 11 48 09.3	Ottawa	H = 00 14 17	
H = 22 58 38.6		D = 60 km	iP' 03 40 42	Resolute	
Penticton			Pentiction	eP 00 24 10 c	
eP 22 59 26.6					
eS 23 00 08.0		P ₁ 11 48 26 d	iP' 03 40 10	APRIL 25	
D = 339 km		i 11 48 29	Resolute	U.S.C.G.S.	
		i 11 48 31	P 03 35 52 d	13 1/2N, 88 1/2W	
		i 11 48 46	P' 03 39 51	Near coast of	
		S ₁ 11 48 52.3	i 03 40 35	El Salvador	
		D = 217 km	i 03 43 34	H = 18 53 17	

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APRIL 25		Halifax
U.S.C.G.S.		ip 19 00 28.5
46N, 144E		Resolute
Off north coast		iP 19 03 21 c
of Hokkaido, Japan		Seven Falls
H = 04 01 10		eP 19 00 20
h = 400 km		Shawinigan Falls
Resolute		eP 19 00 12
iP 04 09 54 c		Victoria
		eP 19 01 33
APRIL 24		APRIL 26
U.S.C.G.S.		H = 03 49 30.6
28N, 54 1/2E		Penticton
Southern Iran		iP 03 49 33.8
H = 12 14 26		iS 03 49 36.4
Halifax		D = 20 km
ip 12 27 20		APRIL 26
Ottawa		U.S.C.G.S.
iP 12 27 50 d		11N, 84 1/2W
Resolute		Nicaragua-Coata Rica border
P 12 26 17 c		H = 04 34 06
S 12 36 00		Resolute
Seven Falls		P 04 44 43
eP 12 27 33		APRIL 25
Shawinigan Falls		U.S.C.G.S.
iP 12 27 37 d		56N, 155W
		Kodiak Island region
APRIL 24		H = 14 53 53
U.S.C.G.S.		Alberni
32 1/2S, 72W		eP 14 58 22
Near coast of		Resolute
Central Chile		P 15 00 00
H = 14 50 45		APRIL 26
Penticton		Victoria
iP 15 03 55		Resolute
		P 06 59 45
APRIL 25		APRIL 26
U.S.C.G.S.		U.S.C.G.S.
38 1/2N, 25E		44 1/2N, 111W
Aegean Sea		Hebgen Lake Montana
H = 16 28 32		H = 16 23 01
Resolute		Alberni
P 16 38 47		eP 16 25 34
		Victoria
eP 16 25 19		eP 16 25 19
APRIL 25		APRIL 26
U.S.C.G.S.		Resolute
13 1/2N, 88 1/2W		P 20 06 25
Near coast of		
El Salvador		
H = 18 53 17		
h = 100 km		

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APRIL 26	APRIL 27	APRIL 28
U.S.C.G.S. 24 1/2N, 122E Off coast of Formosa H = 20 19 10 Resolute P 20 31 12	U.S.C.G.S. 40N, 142E Near north coast of Honshu, Japan H = 21 05 51 Resolute P 21 15 54	Nova Scotia H = 09 28 33 Probably a blast Halifax iP ₁ 09 28 56.5 IS ₁ 09 29 14.5 D = 148 km
APRIL 26	APRIL 27	APRIL 28
U.S.C.G.S. 39N, 101E Kansu Province China H = 21 27 12 Resolute P 21 38 04	U.S.C.G.S. 18N, 120E Off coast of Luzon Philippine Islands H = 22 43 49 Resolute eP 22 56 28 c	U.S.C.G.S. 35 1/2N, 77E Dodecanese Islands H = 16 33 25 Halifax ip 16 44 14 Resolute P 16 43 58
APRIL 27	APRIL 28	APRIL 28
H = 00 59 46.9 Penticton iP 00 59 50.5 iS 00 59 53.2 D = 21 km	U.S.C.G.S. 53 1/2N, 168W Fox Islands H = 00 49 16 Halifax ip 00 59 43 Resolute eP 00 56 10 d	Resolute P 23 59 43 Alberni H = 02 06 19.2 Seven Falls iP 00 59 07 Shawinigan Falls eP 00 59 00
APRIL 27	APRIL 29	APRIL 29
44 1/2N, 111W Hebgen Lake Montana H = 04 32 30 Penticton eP 04 34 29	48.5N, 123.8W H = 02 06 38.0 Alberni H = 04 01 32	48.5N, 123.8W H = 02 06 38.0 Alberni H = 13 38 31 Halifax ip' 13 57 35 Resolute eP 02 07 07.0
APRIL 27	APRIL 28	APRIL 29
171 km from Horseshoe Bay Horseshoe Bay S-P = 20.9 sec. Penticton eP 04 44 06	Resolute P 01 02 21	iP 02 06 24.2 iS 02 06 27.8 Victoria U.S.C.G.S. 56 1/2S, 25W Sandwich Islands H = 02 15 35 Resolute P' 02 34 51 i 02 38 22 i 02 56 06
APRIL 28	APRIL 29	APRIL 29
eP 04 43 50.0 04 44 02.5 04 44 11.0 04 44 16.2	U.S.C.G.S. 59 1/2S, 26W Sandwich Islands H = 02 10 14 Resolute P' 02 29 36 i 02 33 17	U.S.C.G.S. 55 1/2S, 25W Sandwich Islands H = 03 43 04 Resolute P' 04 02 17

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APRIL 29	APRIL 29	APRIL 30
U.S.C.G.S. 55 1/2S, 25W Sandwich Islands H = 03 43 04 Resolute P' 04 02 17	U.S.C.G.S. 0, 122E Celebes H = 19 32 12 Halifax ip' 19 51 34 Ottawa eP' 19 51 29 Resolute eP 19 46 10 c	166 km from Alberni H = 11 38 04.2 Alberni eP 11 38 24.1 eS 11 38 44.4 e 11 38 45.0 Victoria eP 11 38 05.4 ± 0.5 sec.
APRIL 29	APRIL 29	APRIL 30
Resolute P 04 50 04	Resolute P 09 13 23	Seven Falls eP' 19 51 29 Shawinigan Falls eP' 19 51 27
APRIL 29	APRIL 29	APRIL 30
Resolute P 09 42 37	Resolute eP 10 37 37	Resolute P 20 58 25 Shawinigan Falls eP' 21 03 42
APRIL 29	APRIL 30	APRIL 30
Resolute eP 10 37 37	U.S.C.G.S. 0, 121 1/2E Celebes H = 20 44 27 Resolute P 20 58 25	Resolute P 21 01 14
APRIL 29	APRIL 30	U.S.C.G.S. 6S, 124 1/2E Banda Sea H = 22 10 07 Halifax iP' 22 28 28
Resolute eP 13 57 13 c	U.S.C.G.S. 0, 122E Celebes H = 04 01 32 Halifax iP' 04 20 57 Ottawa eP' 04 20 50 Resolute P 04 15 30	Resolute P 22 23 26 i 22 27 29 i 22 42 30 Shawinigan Falls eP' 22 28 23 i 22 31 00
APRIL 29	APRIL 30	MAY 1
U.S.C.G.S. 30S, 178 1/2W Kermadec Islands H = 13 38 31 Halifax ip' 13 57 35 Resolute eP' 13 57 13 c	U.S.C.G.S. 52 1/2N, 166W Fox Islands H = 02 55 10 Resolute P 03 02 09	Seven Falls eP' 04 20 50 Shawinigan Falls eP' 04 20 50
APRIL 29	APRIL 30	MAY 2
U.S.C.G.S. Kermadec Islands region H = 14 45 42 Resolute P' 15 04 16	Alberni eP 00 30 51 Victoria eP 00 31 15	Shawinigan Falls eP' 16 56 30

DOMINION OBSERVATORIES

MAY 2		Resolute		MAY 3
U.S.C.G.S.		P	18 20 52	Resolute
44N, 84 1/2W				P 15 12 11 d
Sinkiang Province				
China				
H = 01 00 00				
Resolute				MAY 3
P 01 10 22				U.S.C.G.S.
				29 1/2N, 55E
				Iran
				H = 06 59 04
				Resolute
		eP	07 10 45 c	
MAY 2				
Halifax				Alberni
iP 08 53 23				iP 22 33 39
Resolute				Penticton
P 08 55 40				iP 22 33 58
				Resolute
				P 22 33 25
MAY 2				
Resolute				MAY 4
P 10 12 10				Resolute
		P	08 06 55	P 06 36 43
MAY 2				
Resolute				MAY 4
P 10 52 53				H = 08 27 25.8
				Penticton
				eP 08 28 03.6
				eS 08 28 34.8
MAY 2				D = 255 km
U.S.C.G.S.				
0, 121 1/2E				
Celebes				
H = 12 10 11				
Halifax				
iP' 12 29 35				
Resolute				MAY 4
P 12 24 07				Penticton
i 12 34 38				eP 18 42 51
MAY 2				
Resolute				MAY 4
P 14 53 46				H = 20 35 25.4
				Penticton
				eP 20 35 53.3
				eS 20 36 14.7
				D = 175 km
MAY 2				
U.S.C.G.S.				
40N, 143E				
Near east coast				
of Honshu, Japan				
H = 18 10 49				

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MAY 5	MAY 6	MAY 6
Near Hebgen Lake	Resolute	Penticton
Montana ?	P	eP
H = 03 39 35.9	05 34 43	19 05 02
Penticton		
eP? 03 41 38	MAY 6	MAY 6
eP? 03 41 48	Alberni	Resolute
	eP	P
	05 44 04	19 06 20
	Victoria	
	eP	
	05 44 00	
MAY 5		
U.S.C.G.S.		MAY 7
52 1/2N, 158 1/2E		U.S.C.G.S.
Near east coast of	MAY 6	42N, 143E
Kamchatka	U.S.C.G.S.	Hokkaido Japan
H = 11 26 00	21 1/2S, 71W	H = 14 11 21
Alberni	Near coast of Chile	Resolute
eP 11 34 30 d	H = 06 19 20	P 14 21 08
Halifax	Halifax	
ip 11 37 55	iP 06 30 26	
Penticton	Penticton	MAY 7
eP 11 34 51	eP 06 31 43	Alberni
Resolute	Resolute	iP 22 52 19
eP 11 34 14 c	P 06 33 12	Penticton
S 11 40 48	Shawinigan Falls	eP 22 53 05
Shawinigan Falls	eP 06 30 36	Victoria
eP 11 37 27		eP 22 52 38
Victoria	MAY 6	
eP 11 34 39	Resolute	MAY 8
	eP 12 23 04 d	Resolute
MAY 5		P 00 12 43
Resolute		
SKP 16 20 16	MAY 6	
	Resolute	
	P 14 11 22	MAY 8
MAY 5		U.S.C.G.S.
U.S.C.G.S.		Pacific Ocean, about
42N, 144E		900 miles southwest
Near east coast	MAY 6	of Galapagos Islands
of Hokkaido, Japan	U.S.C.G.S.	H = 03 22 41
H = 17 13 30	54N, 161E	Resolute
Resolute	Near east coast of	P 03 35 00
P 17 23 17	Kamchatka	
Victoria	H = 18 47 26	
eP 17 23 51	Halifax	MAY 8
	iP 18 59 08	U.S.C.G.S.
	Penticton	31S, 178W
	eP 18 56 02	Kermadec Islands
MAY 6	Resolute	H = 05 29 32
Resolute	eP 18 55 22 c	Halifax
P 05 13 58	Shawinigan Falls	eP' 05 48 40
	eP 18 58 38	

DOMINION OBSERVATORIES

Resolute	MAY 9	MAY 10	
P' 05 48 18	U.S.C.G.S.	H = 17 41 37.5	
	25 1/2N, 89 1/2E		
	East Pakistan-India	Victoria	
MAY 8		iP 17 41 43.9	
Victoria		eS 17 41 48.8	
eP 11 23 52	border	D = 40 km	
	H = 14 36 27		
	Resolute		
	P 14 48 37		
MAY 8	MAY 9	MAY 10	
U.S.C.G.S.	U.S.C.G.S.	U.S.C.G.S.	
45 1/2N, 151E	51 1/2N, 159 1/2E	51 1/2N, 159 1/2E	
Kurile Islands	Off southeast	Off southeast	
H = 14 29 14	Kamchatka	Kamchatka	
Penticton	Atlantic Ocean	H = 17 36 03	
eP 14 38 03	H = 16 27 26	Resolute	
Resolute	Resolute	P 17 44 19	
iP 14 38 28 c	eP 16 39 19 c		
i 14 39 39			
MAY 9	MAY 9	MAY 10	
U.S.C.G.S.	U.S.C.G.S.	U.S.C.G.S.	
30 1/2N, 129 1/2E	Pacific Ocean about	15 1/2N, 92 1/2W	
Ryukyu Islands	900 miles southwest of	Near coast of Chiapas	
H = 00 11 10	Galapagos Islands	Mexico	
Resolute	H = 20 13 25	H = 23 16 17	
iP 00 22 32 c	Resolute	Resolute	
	P 20 25 29	eP 23 26 23 c	
	S 20 35 32	e 23 28 45	
Victoria	i 20 40 40	Victoria	
eP 00 23 05		eP 23 24 07	
		i 29 48	
MAY 9	MAY 10	MAY 11	
U.S.C.G.S.	Resolute	Alberni	
12N, 144E	P 06 29 17	eP 18 17 20	
Mariana Islands	i 06 29 35		
region			
H = 06 53 11			
Resolute	MAY 10	MAY 11	
P 07 05 48	U.S.C.G.S.	U.S.C.G.S.	
	55 1/2S, 26W	3S, 131E	
	Sandwich Islands	Ceram Sea	
	H = 10 56 02	H = 18 36 00	
MAY 9	Resolute	Resolute	
Resolute	P' 11 15 26	P 18 50 05	
P 10 23 27	Victoria	S 19 00 39	
	ePKP ? 11 18 34		

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MAY 12	MAY 12	Resolute	P 10 10 14	
44.7N, 127W	Off west coast of	P 23 05 39	S 10 18 03	
Oregon	Alberni			
H = 16 08 44.2	eP 16 09 55.5	MAY 12	MAY 13	
	iS 16 11 00.2	U.S.C.G.S.	U.S.C.G.S.	
	Resolute	7 1/2N, 80W	55N, 161 1/2W	
	P 16 15 13	Near south coast of	Alaska Peninsula	
	Victoria	Panama	H = 16 07 12	
	eP 16 09 52	H = 23 00 36	Banff	
		Ottawa	eP 16 13 01	
		eP 23 07 55	Halifax	
MAY 12	Resolute	Resolute	iP 16 17 13 c	
	P 16 54 35	eP 23 11 32 c	Ottawa	
			iP 16 16 26 c	
MAY 13	Resolute	P 00 23 52	Penticton	
		eP 16 13 40 c	eP 16 12 48	
		S 16 18 48	Resolute	
			eP 16 16 37	
			S 16 24 06	
			Seven Falls	
			eP 16 16 30	
			Shawinigan Falls	
			eP 16 16 35	
			Victoria	
			eP 16 12 31	
			iP 12 41	
			ePP 13 35	
			S 16 48	
			G 18 10	
			Pentiction	
			eP 01 11 44.9	MAY 13
			Victoria	U.S.C.G.S.
			eP 01 12 04.4	32 1/2S, 179W
				Kermadec Islands
				region
				H = 20 46 35
				Resolute
			P' 21 05 23	
			S 21 16 41	
MAY 12	MAY 13	U.S.C.G.S.	MAY 14	
	Resolute	20N, 109W	Resolute	
	P 22 58 36	Revilla Gigedo Islands	P 11 36 39	
		region		
		H = 10 00 40		

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DOMINION OBSERVATORIES

Resolute		MAY 15	MAY 17
P 11 52 35	Resolute	P 19 07 16	U.S.C.G.S.
MAY 14			78N, 8E
48.4N, 125.4W			Svalbard region
Off west coast of			H = 09 19 32
Virgin Islands	MAY 15		Resolute
H = 12 56 22.1			U.S.C.G.S.
Alberni		P 09 24 19	54 1/2N, 164 1/2W
iP 12 56 37.0			Alaska Peninsula
iS 12 56 49.7			H = 21 37 08
Penticton	eP 21 46 35	MAY 17	Resolute
e 12 56 37.7			P 11 22 54
Victoria	Resolute		
eP 12 56 48.2			eP 21 43 48 c
i 12 56 53.6	Victoria	MAY 17	Canadian Arctic
S 12 57 06.9	eP 21 42 42		H = 19 15 04
MAY 14			h = 11 km ?
U.S.C.G.S.	MAY 16		Mag 4.8
42 1/2N, 142E			Resolute
Near south coast of			eP _n 19 16 54
Hokkaido Japan	36N, 136E		i 19 17 11.6
H = 17 43 10	Honshu, Japan		i 19 17 20.9
Resolute	Resolute		iS _n 19 18 13.5
P 17 52 58	P 05 01 54		i 19 18 29.0
MAY 14			iS ₁ 19 18 53
U.S.C.G.S.	MAY 16		D = 850 km
53 1/2N, 159 1/2E	Resolute		
Kamchatka	P 07 53 41	MAY 18	
H = 22 19 55			H = 02 01 02.3
Ottawa			Penticton
eP 22 31 12	MAY 16		iP 02 01 22.8
Resolute	Resolute		iS 02 01 38.4
iP 22 27 58 c	P 14 54 07		D = 128 km
S 22 34 26			
Shawinigan Falls		MAY 18	
iP 22 31 09	MAY 17		H = 04 31 07.4
	Resolute		Alberni
	P 01 50 11		iP 04 31 09.5
MAY 15			eS 04 31 11.1
U.S.C.G.S.	MAY 17		D = 13 km
24N, 121 1/2E	Resolute		
Near east coast of		MAY 18	
Formosa	P 04 07 26		U.S.C.G.S.
H = 13 30 20			29N, 130E
Resolute			Ryukyu Islands
eP 13 42 24 c			H = 06 35 09

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Penticton	MAY 19	MAY 20
eP 06 47 16	Resolute	U.S.C.G.S.
Resolute	P 08 54 06	3 1/2S, 147 1/2E
iP 06 46 30 c		Near north coast of
iS 06 55 50		New Guinea
Shawinigan Falls	MAY 19	H = 00 23 22
eP 06 48 59 d	U.S.C.G.S.	Ottawa
Victoria	17S, 66E	eP' 00 42 28
iP 06 47 07	Mascarene Islands	Resolute
	region	P 00 37 14
	H = 10 11 51	Shawinigan Falls
	Halifax	eP' 00 42 32
	P' 10 31 23	MAY 20
	Ottawa	U.S.C.G.S.
	Persian Gulf	Persian Gulf
	H = 08 40 57	H = 04 14 18
Resolute	P' 10 30 48	Resolve
P 08 52 52	Shawinigan Falls	P 04 26 13
	eP' 10 31 47	
	MAY 18	
	Resolute	
P 13 06 44	MAY 19	MAY 20
	Resolute	Resolute
eP 11 04 27 d		iP 08 05 24 c
	MAY 19	
	U.S.C.G.S.	
	36N, 71E	
	Hindu Kush	
	H = 02 07 00	
	h = 200 km	
Resolute	MAY 19	
eP 02 17 50 c	U.S.C.G.S.	
S 02 26 48	53N, 166W	
Shawinigan Falls	Fox Islands	
eP 02 19 50	H = 16 46 10	
	Resolute	
P 16 53 05	P' 11 31 22	
	i 11 32 44	
	Seven Falls	
	eP' 11 31 49	
	PP 11 34 08	
	PKS 11 35 14	
	Shawinigan Falls	
	eP' 11 31 47 c	
	MAY 20	
	Resolute	
P 12 28 09		

DOMINION OBSERVATORIES

MAY 20		Alberni	MAY 21	
U.S.C.G.S.	eP	10 16 51	U.S.C.G.S.	37 1/2S, 72 1/2W
45N, 111W	Banff		Chile	H = 12 59 58
Hebgen Lake	eP	10 15 48	Halifax	
H = 17 54 02	Halifax		iP	13 12 23 c
Ottawa	iP	10 15 17 c	Ottawa	
eP 17 59 23 c	Ottawa		iP	13 12 23 c
Shawinigan Falls	iP	10 15 17 c	Seven Falls	
eP 18 00 04	Resolute		eP	13 12 32
Victoria	P	10 17 38	Seven Falls	
eP 17 58 20		10 30 00	Shawinigan Falls	
			eP	13 12 29
MAY 21		Seven Falls		
U.S.C.G.S.	SKS	10 15 24		
37 1/2N, 21E	SS	10 25 54		
Near west coast of	G	10 31 07	MAY 21	
Greece	Shawinigan Falls		U.S.C.G.S.	37 1/2S, 73 1/2W
H = 06 41 10	Resolute		Chile	
Halifax	P	10 15 23 c	H = 15 08 45	
P 06 51 31	Victoria		Ottawa	
Ottawa	eP	10 16 32	eP	15 21 09
			Shawinigan Falls	
			eP	15 21 17
MAY 21			MAY 21	
U.S.C.G.S.	MAY 21		U.S.C.G.S.	38S, 73 1/2W
37 1/2N, 121 1/2E	U.S.C.G.S.		Chile	
Luzon Island	37 1/2S, 72 1/2W		H = 06 01 36	
H = 08 17 01	Chile		Halifax	
Resolute	H = 10 53 51		P 06 14 03	
P 08 29 32	Seven Falls		Shawinigan Falls	
	eP 11 06 28		eP 06 14 11	
MAY 21	Shawinigan Falls		Resolute	
U.S.C.G.S.	eP 11 06 25		eP 14 11 43	
15 1/2N, 121 1/2E			Ottawa	
Luzon Island	MAY 21		eP 14 11 43	
H = 08 17 01	U.S.C.G.S.		Resolute	
Resolute	37 1/2S, 73W		eP 14 14 17 c	
P 08 29 32	Chile		Seven Falls	
	H = 12 21 16		P 14 11 53	
MAY 21	Halifax		Shawinigan Falls	
Resolute	iP 12 33 40 c		eP 14 11 50	
P 08 29 48	Ottawa			
	eP 12 33 40 c			
MAY 21	Seven Falls			
U.S.C.G.S.	eP 12 33 49		MAY 21	
37 1/2S, 73 1/2W	Shawinigan Falls		U.S.C.G.S.	37 1/2S, 72 1/2W
Near coast of	eP 12 33 47		Chile	
Chile			H = 14 31 55	
H = 10 02 50			Halifax	

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Ottawa	MAY 22	Ottawa
eP 14 44 21	Resolute	iP 10 43 05 c
Shawinigan Falls	P 03 44 56	Resolute
eP 14 44 29		eP 10 45 24 c
		i 10 50 08
		S 10 57 48
MAY 22	U.S.C.G.S.	Seven Falls
U.S.C.G.S.	37 1/2S, 73 1/2W	eP 10 43 15
Chile	Chile	Shawinigan Falls
H = 03 46 22	H = 15 08 45	iP 10 43 14 c
Halifax	Ottawa	
P 03 58 45	eP 15 21 09	MAY 22
	Shawinigan Falls	U.S.C.G.S.
	eP 15 21 17	37 1/2S, 73W
MAY 22	Resolute	Near coast of Chile
U.S.C.G.S.	P 17 39 53	H = 10 32 43
38S, 73 1/2W		Halifax
Chile	P 06 14 03	iP 10 45 08 d
H = 06 01 36	Shawinigan Falls	Ottawa
Halifax	eP 06 14 11	eP 10 45 09
P 07 48 27	Resolute	Resolute
	eP 10 47 27 c	eP 10 47 27 c
	i 10 52 13	i 10 52 13
	S 10 59 50	S 10 59 50
MAY 22	Halifax	Seven Falls
Halifax	P 07 48 27	eP 10 45 19
		Shawinigan Falls
		iP 10 45 17 c
		Victoria
		eP 10 46 15
MAY 22	U.S.C.G.S.	
37 1/2S, 73W	Chile	MAY 22
Chile	H = 08 10 53	U.S.C.G.S.
H = 08 10 53	Halifax	38S, 73W
Halifax	P 08 23 20	Chile
P 08 23 20	Ottawa	H = 12 16 43
eP 08 23 20	eP 08 23 20	Halifax
Shawinigan Falls	Shawinigan Falls	iP 12 29 11.5
eP 08 23 29	eP 08 23 29	Ottawa
		eP 12 29 11
		Seven Falls
		eP 12 29 22
MAY 22	U.S.C.G.S.	Shawinigan Falls
38S, 73 1/2W	Near coast of Chile	iP 12 29 20 c
Near coast of	H = 10 30 39	
Chile	Halifax	
H = 10 02 50	iP 10 43 04 c	

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DOMINION OBSERVATORIES

MAY 22	Shawinigan Falls eP 17 25 09	MAY 22	Shawinigan Falls eP 21 26 33	MAY 22	Halifax P 22 27 54 Ottawa eP 22 27 55
MAY 22	U.S.C.G.S. 38S, 73 1/2W Near coast of Chile H = 18 55 57	MAY 22	Shawinigan Falls eP 21 27 55	MAY 22	Shawinigan Falls eP 22 41 58 c
Alberni	eP 19 09 45	MAY 22	Shawinigan Falls IP 22 00 38 d	MAY 22	Shawinigan Falls eP 22 45 23
Halifax	P 19 08 24				
Ottawa	eP 19 08 25	MAY 22	Shawinigan Falls IP 22 05 16 c	MAY 22	Halifax P 23 09 21 Shawinigan Falls eP 23 08 49
Resolute	eP 19 10 46 c				
i	19 14 36	MAY 22	Shawinigan Falls eP 22 09 24	MAY 22	Halifax IP 23 17 15
i	19 15 30				
S	19 23 08				
Seven Falls	eP 19 08 35	MAY 22	Shawinigan Falls IP 22 17 17 c	MAY 22	Shawinigan Falls eP 23 38 15
Shawinigan Falls	eP 19 08 28				
Victoria	eP 19 09 31				
MAY 22	U.S.C.G.S. 38S, 73 1/2W Near coast of Chile H = 19 11 20	MAY 22	Halifax P 22 20 32	MAY 22	U.S.C.G.S. 39 1/2S, 72W Chile H = 00 25 44
Halifax	P 19 23 04		Ottawa eP 22 20 34		
Ottawa	eP 19 23 05	MAY 22	Halifax P 22 26 31		
Seven Falls	eP 19 23 12				
Shawinigan Falls	eP 19 23 09		Ottawa eP 22 26 32		
Victoria	eP 19 24 12				
MAY 22	Shawinigan Falls eP 21 20 39				

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MAY 22	Halifax iP 23 51 44.5 d Ottawa eP 23 51 45	MAY 23	Halifax iP 00 54 13.5 d Ottawa eP 00 54 14 d Seven Falls eP 00 54 23	MAY 23	Shawinigan Falls eP 01 38 19
MAY 22	Shawinigan Falls eP 24 03 41	MAY 23	Shawinigan Falls eP 00 56 28 c	MAY 23	U.S.C.G.S. 39 1/2S, 74W Near coast of Chile H = 01 34 53
MAY 22	Shawinigan Falls eP 24 06 33	MAY 23	Shawinigan Falls eP 01 03 37.5 d	MAY 23	Halifax iP 01 47 26.5 d Ottawa eP 01 47 27 d Seven Falls eP 01 47 36
MAY 23	Shawinigan Falls eP 00 14 15	MAY 23	Shawinigan Falls eP 01 03 38	MAY 23	Halifax iP 01 56 24 Ottawa eP 01 56 25 Seven Falls eP 01 56 34
MAY 23	Shawinigan Falls eP 00 36 19	MAY 23	Shawinigan Falls eP 01 03 48	MAY 23	Shawinigan Falls eP 01 59 19
MAY 23	U.S.C.G.S. 38 1/2S, 75W Chile H = 00 25 44	MAY 23	Halifax iP 01 06 31 c	MAY 23	Shawinigan Falls eP 02 08 18
Halifax	iP 00 38 14 d		Ottawa eP 00 38 13		
Ottawa	eP 00 38 13	MAY 23	Seven Falls eP 01 08 21	MAY 23	Shawinigan Falls iP 02 09 12 c
Seven Falls	eP 00 38 22				
Victoria	eP 00 39 20	MAY 23	Victoria eP 01 14 12	MAY 23	Halifax P 02 17 18.5
MAY 23	Shawinigan Falls iP 00 47 30 d	MAY 23	Shawinigan Falls iP 01 17 22 d	MAY 23	Ottawa eP 02 17 19

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DOMINION OBSERVATORIES

MAY 23		MAY 23		MAY 23	
U.S.C.G.S.		Shawinigan Falls		U.S.C.G.S.	
41 1/2S, 73 1/2W	eP	04 26 07		48S, 77W	
Chile				Off coast of Chile	
H = 02 46 30				H = 07 09 17	
Halifax		MAY 23		Halifax	
iP	02 59 15.5 c	Halifax		P	07 22 33.5
Ottawa		eP	04 39 23	Ottawa	
eP	02 59 16 c	Ottawa		eP	07 22 33
Seven Falls		eP	04 39 24		
eP	02 59 23	Seven Falls			
		eP	04 39 32	MAY 23	
MAY 23				Shawinigan Falls	
H = 02 47 22.6 ?				eP	07 25 58
Victoria		MAY 23			
		U.S.C.G.S.			
eP	02 47 51.2	38S, 73 1/2W			
S	02 48 13.1	Chile			
D = 180 km		H = 05 13 35		Resolute	
		Halifax		P	07 28 14
		eP	05 26 01		
MAY 23		Ottawa		MAY 23	
U.S.C.G.S.		eP	05 26 03	U.S.C.G.S.	
43S, 75 1/2W		Seven Falls		40 1/2S, 75 1/2W	
Near coast of Chile		eP	05 26 12	Near coast of Chile	
H = 02 56 17				H = 08 13 15	
Halifax				Halifax	
P	03 09 09	MAY 23		iP	08 25 53 d
Ottawa		Shawinigan Falls		Ottawa	
eP	03 09 09	eP	05 30 18	eP	08 25 54 c
Seven Falls					
eP	03 09 17				
		MAY 23		MAY 23	
		Halifax		Shawinigan Falls	
		iP	06 21 38 d	iP	09 04 51 d
MAY 23		Ottawa			
Halifax		eP	06 21 38		
iP	03 12 31 (c)				
Ottawa					
eP	03 12 32				
		MAY 23		MAY 23	
		Halifax		Shawinigan Falls	
		eP	06 30 14	eP	09 51 00
MAY 23		Ottawa			
Ottawa		eP	06 30 15		
eP	03 16 06				
MAY 23				MAY 23	
Shawinigan Falls				Halifax	
eP	03 39 28			eP	10 04 43.5

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Ottawa		MAY 23		MAY 23	
eP	10 04 45	Halifax		Halifax	
Seven Falls		iP	18 35 03 d	Shawinigan Falls	
eP	10 04 54	Ottawa		eP	03 36 31
				Shawinigan Falls	
				eP	18 35 11
MAY 23		U.S.C.G.S.		MAY 23	
		43 1/2S, 73 1/2W		Shawinigan Falls	
Chile		eP	19 21 49	Halifax	
H = 10 37 59				iP	04 01 49 c
Halifax		MAY 23		MAY 23	
eP	10 50 53.5	Halifax		Halifax	
Ottawa		P	20 12 29	Halifax	
eP	10 50 54	eP	04 06 46 d		
MAY 23		Shawinigan Falls		MAY 23	
		iP	22 55 04 d	Halifax	
		iP	13 14 30 c	Halifax	
				eP	07 15 23
MAY 23		MAY 23		MAY 23	
		Halifax		Halifax	
		iP	23 25 57 d	U.S.C.G.S.	
Ottawa		eP	14 13 30	44 1/2S, 167 1/2E	
				South Island	
				New Zealand	
MAY 24		Halifax		H = 14 46 34	
		iP	00 56 39 c	Mag 6 1/2	
		Near coast of Chile		Alberni	
		H = 14 01 50		eP'	15 05 09
		Halifax		Halifax	
		iP	14 14 26 c	iP'	15 06 13
Ottawa		iP	01 50 26.5	Ottawa	
iP	14 14 27 c	Ottawa		eP'	15 05 56
		iP	01 50 28 c	Shawinigan Falls	
				eP'	15 06 11
MAY 23		MAY 23		Victoria	
		Halifax		eP'	15 05 25
		iP	15 57 44 c		
		Halifax			
		iP	01 53 39 d		
MAY 23		MAY 23		MAY 24	
		Halifax		Halifax	
		iP	02 59 54 d	iP	15 28 50
Ottawa		Ottawa		Shawinigan Falls	
eP	16 08 53 c	eP	02 59 57	eP	15 37 55

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DOMINION OBSERVATORIES

MAY 24	MAY 25	Seven Falls
Shawinigan Falls iP 18 35 53 c	U.S.C.G.S. 1N, 129 1/2E	eP 05 20 39 d
	Halmahera H = 13 38 28	Shawinigan Falls IP 05 20 42 d
MAY 24	Resolute	Victoria IP 05 22 53
48.3N, 124.3W	P 13 52 15	
Entrance to Juan de Fuca Strait H = 23 15 17.4		MAY 25
Alberni iP 23 15 33.5 d	U.S.C.G.S. 1N, 128 1/2E	48.7N, 123.2W
iS 23 15 46.1	Halmahera H = 14 27 38	North of San Juan Island H = 07 32 20.2
Victoria iP 23 15 28.0	Resolute P 14 41 34	Alberni iP 07 32 42.4
iS 23 15 35.7		iS 07 32 58.0
MAY 25	MAY 25	Victoria iP 07 32 24.7
U.S.C.G.S. 45S, 76W	U.S.C.G.S. 40S, 75 1/2W	iS 07 32 28.5
Off coast of Chile H = 08 34 33	Chile H = 19 21 48	MAY 26
Mag 6 1/2	Shawinigan Falls iP 19 34 29 c	Halifax
Halifax iP 08 47 40		iP 15 19 19.5 c ?
Ottawa iP 08 47 35	MAY 25	MAY 26
Seven Falls eP 08 47 49	H = 22 03 50	Halifax iP 15 21 18 d ?
Shawinigan Falls eP 08 47 51	Alberni eP 22 03 58.9	Shawinigan Falls eP 15 21 23
Victoria eP 08 48 29	D = 56 km	MAY 26
		Ottawa P 19 46 25
MAY 25	MAY 26	Shawinigan Falls eP 19 46 33 c
Resolute P 08 53 31	Resolute P 02 22 39	MAY 26
i 08 54 51		U.S.C.G.S. 27N, 93E
i 09 04 50	MAY 26	Eastern India H = 20 05 07
MAY 25	U.S.C.G.S. 40N, 20E	Resolute P 20 17 11
Shawinigan Falls eP 10 12 15	Albania - Greece border H = 05 10 05	
	Halifax iP 05 20 17	
	Resolute iP 05 20 03c	

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MAY 26	MAY 27	MAY 28
Ottawa eP 23 11 30	U.S.C.G.S. 45S, 77W	Seven Falls eP 11 18 16
Seven Falls eP 23 11 39	Off coast of Chile H = 23 06 55	
	Halifax iP 23 19 57	MAY 28
MAY 27	Ottawa eP 23 19 55 d	Resolute P 11 24 21
Resolute P 01 35 13		S 11 32 40
MAY 27	MAY 27	MAY 28
U.S.C.G.S. 41S, 76W	Resolute P 23 25 46	Canadian Arctic H = 12 32 52
Chile H = 03 17 21		h = 31 km Mag 3.6
Halifax iP 03 30 05 d	Halifax iP 23 33 30	Resolute ePn 12 33 59
Ottawa eP 03 30 04	Ottawa eP 23 33 30	iP1 12 34 14.5
Shawinigan Falls eP 03 30 17		iSn 12 34 47.3
MAY 28	MAY 28	IS1 12 35 15.5
U.S.C.G.S. 39 1/2S, 74 1/2W	Resolute P 14 26 39	D = 516 km
Chile H = 03 05 53		
Halifax eP 03 18 27 c	Ottawa eP 03 18 30	MAY 28
MAY 27	Seven Falls eP 03 18 38	Resolute P 18 52 08
Resolute P 06 35 15		
MAY 27	MAY 27	MAY 29
Resolute P 17 39 11	Alberni IP 05 27 03	U.S.C.G.S. 38S, 72 1/2W
		Chile H = 07 39 29
MAY 27	U.S.C.G.S. 5 1/2S, 153E	Mag 6 1/2
Resolute P 17 42 28	New Britain region H = 20 10 00	Halifax iP 07 51 55 c
	Ottawa eP 20 28 43	Ottawa eP 07 51 55
MAY 28	U.S.C.G.S. 38S, 73W	Seven Falls eP 07 52 05 c
Alberni IP 05 27 03	Chile H = 11 05 40	Victoria eP 07 53 01
	Halifax iP 11 18 05.5 c	
MAY 28	Ottawa eP 11 18 07	

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DOMINION OBSERVATORIES

MAY 29	MAY 29	MAY 30
Resolute	Near coast of Southern Chile	U.S.C.G.S.
P 07 58 06	H = 21 23 54	32S, 177 1/2W
i 07 58 54	Halifax	Kermadek Islands
S 08 06 35	iP 21 36 48.5 c	region
	Ottawa	H = 08 29 27
	eP 21 36 48	Resolute
MAY 29	Seven Falls	P' 08 48 15
Resolute	eP 21 36 57	
P 08 16 05		
MAY 29	MAY 29	MAY 30
U.S.C.G.S.	Resolute	U.S.C.G.S.
25 1/2N, 124 1/2E	P 21 42 42	Near southwest coast of Luzon, Philippine Islands
Ryukyu Islands		H = 16 05 59
H = 08 20 01		Resolute
Resolute	MAY 29	P 16 18 48
P 08 31 55	Resolute	
	P 21 53 01	MAY 30
		Seven Falls
MAY 29	MAY 30	eP 17 59 21
U.S.C.G.S.	H = 02 05 25.2	
37 1/2S, 73W	Victoria	MAY 31
Southern Chile	iP 02 05 59.7 c	U.S.C.G.S.
H = 08 34 20	iS 02 06 27.7	39 1/2S, 75W
Halifax	D = 230 km	Chile
iP 08 46 47 c ?		H = 02 40 00
Ottawa		Mag 6
eP 08 46 47		Halifax
Seven Falls	MAY 30	iP 02 52 38 d
eP 08 46 58	U.S.C.G.S.	Ottawa
	53 1/2N, 164W	iP 02 52 36 d
	Unimak Island region	Seven Falls
MAY 29	H = 07 01 15	eP 02 52 48
Resolute	Resolute	
P 12 06 58	P 07 07 50	
	i 07 10 25	
MAY 29	MAY 31	
U.S.C.G.S.	Resolute	
37 1/2S, 73W	P 02 58 41	
Near coast of Chile	Ottawa	S 03 07 20
H = 14 05 25	eP 07 13 12	
Halifax	Seven Falls	
iP 14 17 48	eP 07 13 23	MAY 31
Ottawa		H = 03 45 56.4
eP 14 17 49 d		Penticton
Seven Falls		eP 03 46 27
eP 14 17 59		eS 03 46 51
		D = 196 km

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SEISMOLOGICAL BULLETIN - 1960

MAY 31	JUNE 1	JUNE 2
U.S.C.G.S.	Resolute	Resolute
18N, 62W	P 05 13 47	P 07 20 45
Leeward Islands	i 05 30 04	
H = 11 02 20		JUNE 2
Mag 6 1/2		U.S.C.G.S.
Alberni	JUNE 1	19S, 175W
eP 11 12 19	U.S.C.G.S.	Tonga Islands
Halifax	38S, 73W	H = 07 19 10
iP 11 08 03 c	Chile	h = 150 km
Ottawa	H = 05 02 56	Penticton
iP 11 08 29 c	Halifax time correct	eP 07 31 39
Penticton	to about + 2 seconds	Resolute
iP 11 11 57 d	June 1st to June 21st	P 07 33 47
Resolute	Halifax	Victoria
P 11 12 22	iP 05 15 23 c	eP 07 31 16 d
S 11 20 26	Ottawa	
i 11 22 12	eP 05 15 23	Seven Falls
Seven Falls	eP 05 15 32	JUNE 2
eP 11 08 33	Seven Falls	Penticton
Victoria	eP 05 15 32	eP 07 33 44
iP 11 12 12		
MAY 31	JUNE 1	JUNE 2
Alberni	Resolute	U.S.C.G.S.
eP 11 15 51	P 17 51 07	5 1/2S, 151 1/2E
	JUNE 1	New Britain
	Ottawa	H = 07 47 11
	eP 22 52 46	Mag 6 1/2
MAY 31	Halifax	iP 08 06 - d
Resolute	P 11 41 30	Ottawa
		iP 08 06 12 d
MAY 31	JUNE 2	Penticton
Resolute	U.S.C.G.S.	eP 08 00 32
P 11 52 19	46 1/2S, 74W	Resolute
	Southern Chile	P 08 01 04
	H = 05 58 03	i 08 11 58
	Halifax	Seven Falls
	iP 06 11 - d	iP 08 06 17 d
MAY 31	Ottawa	Victoria
U.S.C.G.S.	eP 06 11 10 d	iP 08 00 22
5 1/2S, 109 1/2E	Seven Falls	
Java Sea	eP 06 11 20	
H = 21 00 40		
h = 600 km		
Resolute	JUNE 2	
P' 21 18 08	Resolute	
	eP 06 16 56 D	
	S 06 28 18	

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DOMINION OBSERVATORIES

JUNE 2	Penticton	JUNE 2	U.S.C.G.S.	JUNE 3	U.S.C.G.S.
	iP 08 25 28 d		20 1/2S, 178 1/2W		41 1/2N, 141 1/2E
Victoria	eP 08 25 17 d	Fiji Islands		Near south coast of	
		H = 18 59 05		Hokkaido, Japan	
		h = 550 km		H = 16 18 04	
		Penticton		h = 100 km	
JUNE 2	U.S.C.G.S.	eP 19 10 56	Resolute	Ottawa	
40S, 74W		P' 19 16 32		eP 16 30 45	
Near coast of Chile		Victoria		Resolute	
H = 08 36 10		eP 19 10 45		P 16 27 51	
Halifax				S 16 35 44	
iP 08 48 - d				i 16 36 22	
Ottawa		JUNE 3	U.S.C.G.S.	Victoria	
eP 08 48 47 d			17 1/2S, 179 1/2W		eP 16 28 26
Seven Falls			Fiji Islands	JUNE 3	
eP 08 48 57			H = 13 14 38		Resolute
			h = 600 km		P 17 23 12
JUNE 2	Resolute				
	P 11 31 59				
JUNE 2	U.S.C.G.S.				
33 1/2N, 49E					
Iran		JUNE 3	U.S.C.G.S.		
H = 12 42 38			17 1/2S, 179W	JUNE 4	
Resolute			Fiji Islands		Resolute
P 12 53 50			H = 13 23 37		P 01 18 03
			h = 600 km		
JUNE 2	U.S.C.G.S.	Penticton	JUNE 4	U.S.C.G.S.	
18 1/2N, 61W		iP 13 35 17 d		20N, 95 1/2W	
Leeward Islands		Resolute		Near coast of Mexico	
region		P 13 36 48		H = 02 27 06	
H = 18 07 51		i 13 41 17			
Resolute		i 13 46 30			
P 18 17 57		Seven Falls			
		eP 13 41 17			
		Victoria			
		eP 13 35 04			
JUNE 3	Resolute				
	P 13 52 05				

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SEISMOLOGICAL BULLETIN - 1960

JUNE 4	Victoria	iP 02 33 36	JUNE 4	Resolute	P 15 20 25	JUNE 6	U.S.C.G.S.
							45 1/2S, 73 1/2W
							Near coast of Chile
							H = 05 55 44
							Mag 6 3/4
JUNE 4	U.S.C.G.S.	39S, 73 1/2W	JUNE 5	U.S.C.G.S.	65S, 178E	JUNE 6	Halifax
		Near coast of Chile			Ottawa		eP 06 08 8
		H = 03 02 49			H = 05 29 37		eP 06 08 48
		Ottawa			Resolute		Resolute
		iP 03 15 21 d			P' 05 49 30		P 06 11 08
		Seven Falls			eP 03 15 32		i 06 14 39
							i 06 16 06
JUNE 5	Resolute	P 09 44 51	JUNE 5	Resolute	P 09 42 45	JUNE 6	Seven Falls
		Victoria					eP 06 08 59
		eP 09 42 45					Victoria
							e 06 09 49
JUNE 4	Resolute	P 08 18 07	JUNE 6	U.S.C.G.S.	41N, 125W	JUNE 6	Penticton
					Off coast of Northern		eP 06 13 52
					California		
					H = 01 17 48	JUNE 6	Resolute
					Mag 5 1/2		P 09 53 31
JUNE 4	U.S.C.G.S.	24N, 143E			Volcano Islands region		
					H = 10 14 11		
					Alberni		
					eP 01 19 48		
					Banff		JUNE 7
					iP 01 20 13.7 c		U.S.C.G.S.
					Victoria		40 1/2S, 70W
					eP 01 20 48.3		
					eP 10 25 54		Southern Chile
							H = 05 22 34
							Halifax
							eP 01 26 - d
							Halifax
JUNE 4	U.S.C.G.S.	39 1/2N, 30 1/2W	JUNE 4	Ottawa	eP 01 24 47	JUNE 7	Ottawa
		Azores Islands region			Pentiction		eP 05 35 16
		H = 11 05 10			eP 01 20 02		Seven Falls
		Resolute			P 01 24 55		eP 05 35 26
		P 11 13 32			S 01 30 40		
							Seven Falls
							eP 01 25 13
							U.S.C.G.S.
JUNE 4	Resolute	P 12 03 22	JUNE 4	Victoria	17S, 98E	JUNE 7	
					Indian Ocean		
					H = 05 25 11		
					Halifax		
					eP' 05 45 02 ? c		

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DOMINION OBSERVATORIES

	JUNE 8	JUNE 9
Ottawa		
eP' 05 45 08	Halifax	Resolute
Resolute	eP 02 57 33 ?	P 02 39 58
P' 05 44 08		
Seven Falls		
iP' 05 45 02 c	JUNE 8	JUNE 9
	Resolute	U.S.C.G.S.
	P 03 01 25	39 1/2N, 39 1/2E
JUNE 7		Eastern Turkey
Resolute		H = 02 44 08
P 07 06 33	JUNE 8	Resolute
	48.8N, 123.1W	P 02 54 32
	Strait of Georgia near	Seven Falls
JUNE 7	Saturna Island	eP 02 55 46
Resolute	H = 05 09 56	
P 11 13 53	Alberni	
	eP 05 10 18.9	JUNE 9
	Victoria	Resolute
JUNE 7	iP 05 10 02.3	P 04 31 21
U.S.C.G.S.	eS 05 10 07.1	
53N, 158 1/2E		
Near east coast of		JUNE 9
Kamchatka	JUNE 8	Resolute
H = 12 57 15	U.S.C.G.S.	P 05 04 12
Ottawa	35N, 35W	
eP 13 08 32	North Atlantic Ocean	
Resolute	H = 16 19 48	JUNE 9
iP 13 05 24 c	Banff	U.S.C.G.S.
S 13 11 41	eP 16 29 43	9S, 112 1/2E
i 13 15 03	Ottawa	Near south coast of
Seven Falls	eP 16 26 19 c	Java
eP 13 08 39 c	Resolute	H = 05 05 01
	eP 16 28 33 c	h = 350 km
	S 16 35 36	Halifax
JUNE 7	Seven Falls	eP' 05 24 (07) c
Resolute	eP 16 25 52 c	Resolute
P 13 49 15		P' 05 23 05
	JUNE 8	
JUNE 7	Resolute	JUNE 9
Canadian Arctic	P 21 59 00	U.S.C.G.S.
H = 13 57 39		Strait of Otranto
h = 10 km		H = 08 24 00
Mag 2	JUNE 9	Resolute
Resolute	Resolute	P 08 33 53
eP _n 13 58 14.7	P 00 28 05	
iP ₁ 13 58 17.5		
iS _n 13 58 40.3		
i 13 58 44		
S ₁ 13 58 45		
D = 225 km		

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JUNE 9	Halifax	JUNE 11
Resolute	iP 00 45 08 ? d	U.S.C.G.S.
P 11 25 23	Ottawa	9 1/2S, 152 1/2E
Victoria	iP 00 45 14 d	D'entrecasteaux Islands
eP 11 21 15	Penticton	H = 16 37 40
	eP 00 46 55	Ottawa
	Resolute	eP' 16 56 43
	iP 00 47 53 d	Seven Falls
	i 00 58 04	eP' 16 56 49
	S 00 58 52	
JUNE 9	New Hebrides	
U.S.C.G.S.	H = 11 23 51	
18S, 169E	Seven Falls	
	IP 00 45 23 d	JUNE 11
	Victoria	Resolute
eP 11 36 59	eP 00 47 03	i 17 02 30
		i 17 05 20
		i 17 11 18
JUNE 9	JUNE 11	Victoria
Resolute	Resolute	e 17 03 12
P 12 55 33	P 11 58 19	
JUNE 9	JUNE 11	JUNE 12
Resolute	Resolute	U.S.C.G.S.
P 15 07 29	P 15 07 29	9S, 152 1/2E
		D'entrecasteaux Islands
		South of Fiji Islands
		H = 15 14 07
	Banff	H = 03 56 44
	eP 15 27 51	h = 600 km
	Halifax	
	eP' 15 33 16 ?	Penticton
	Ottawa	eP 04 08 42 c?
	eP' 15 33 11	Resolute
	Penticton	P' 04 14 11
	eP 17 54 53	
Resolute	eP 15 27 33	JUNE 12
eP 17 56 22 d	Resolute	Victoria
S 18 03 20	P 15 28 19	e 07 03 48
Seven Falls	i 15 32 38	
eP 17 54 23	i 15 39 00	
	i 15 41 48	
	i 15 47 44	
Seven Falls	U.S.C.G.S.	JUNE 12
eP' 15 33 15	29 1/2S, 179W	
Victoria	Kermadec Islands	
eP 15 27 25	H = 06 58 12	
	h = 250 km	
	Resolute	
	P' 07 16 29	
	i 07 46 28	

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DOMINION OBSERVATORIES

JUNE 12	JUNE 13	JUNE 14
U.S.C.G.S. 36S, 98W	H = 12 31 47.6 Penticton	Resolute P 07 01 40
South Pacific Ocean	iP 12 32 13.9 eS 12 32 34.0	
H = 07 19 43		
Mag 6 1/2	D = 164 km	JUNE 14
Ottawa		Resolute
eP 07 32 17		P 08 06 30
Penticton	JUNE 13	
eP 07 32 33	H = 13 44 18.4 Penticton	JUNE 14
Seven Falls	eP 13 46 21 eS 13 48 17	Resolute P 10 02 56
eP 07 32 34	D = 930 km	
JUNE 12		JUNE 14
Resolute		Resolute
P 09 08 08	JUNE 13	P 11 16 19
	Penticton	
	eP 15 01 33	
JUNE 12	JUNE 14	JUNE 14
Resolute	U.S.C.G.S. 43S, 73W	H = 15 10 52.3 Alberni
eP 15 56 22 d	Near coast of southern Chile	iP 15 10 02.6 iS 15 10 10.5
	H = 02 54 13	D = 65 km
JUNE 12	Halifax	
Resolute	eP 03 07 06 ?	
P 16 00 20	Ottawa	JUNE 14
	eP 03 07 05	Resolute
		P 22 13 30
JUNE 12	JUNE 14	JUNE 14
Resolute	Resolute	Resolute
P 16 03 33	eP 04 22 24 c	P 23 34 04
JUNE 13		
U.S.C.G.S. 44 1/2S, 76 1/2W		
Off coast of southern Chile	JUNE 14	
H = 05 47 05	Resolute	JUNE 15
Halifax	P 04 32 02	Resolute
eP 06 00 09 ? d		P 04 34 52
Ottawa	JUNE 14	
iP 06 00 11 d	U.S.C.G.S. 44 1/2N, 149E	JUNE 15
Seven Falls	Kurile Islands	Resolute
iP 06 00 15 c	H = 04 27 00	P 04 43 16
Resolute	Resolute	
P' 06 05 56	P 04 36 24	

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JUNE 15	JUNE 15	JUNE 16
Resolute	P 05 33 51	Penticton
		iP 20 06 47.0
		i 20 06 49.9
JUNE 15	Penticton	Near coast of Samar, Philippine Islands
	eP 06 07 52	H = 06 37 48
JUNE 15	Resolute	Resolute
	P 08 28 39	P 06 51 10
JUNE 15	Resolute	JUNE 16
	P 11 30 38	U.S.C.G.S.
JUNE 15	Resolute	1/2S, 133E
	eP 13 58 22 c	Western New Guinea
JUNE 15	Resolute	Mariana Islands
	eP 14 29 32	H = 23 27 40
JUNE 15	Resolute	Ottawa
	eP 17 35 31	iP' 23 46 51 d
JUNE 15	Seven Falls	Resolute
	eP' 23 46 53	eP 10 08 13 c
JUNE 15	Resolute	JUNE 16
	P 16 19 54	Resolute
JUNE 15	U.S.C.G.S.	P 16 19 54
	26S, 178 1/2E	JUNE 16
JUNE 15	South of Fiji Islands	Penticton
	H = 23 32 35	eP 17 35 16
JUNE 15	h = 600 km	Resolute
	Halifax	P 17 35 31
JUNE 15	U.S.C.G.S.	
	41N, 142 1/2E	
JUNE 15	Near north coast of Honshu, Japan	
	H = 15 36 51	
JUNE 15	Penticton	
	eP 15 47 34	
JUNE 15	Resolute	
	iP 15 46 52 c	JUNE 16
JUNE 15	S 15 54 58	Resolute
	Seven Falls	P 03 24 05
JUNE 15	eP 15 49 42	P 10 39 49
JUNE 15	Victoria	JUNE 17
	eP 15 47 24 c	Resolute
JUNE 15	U.S.C.G.S.	eP 14 03 06 c
	12N, 143 1/2E	JUNE 17
JUNE 15	Mariana Islands	Resolute
	H = 03 24 42	P 14 15 56
JUNE 15	h = 150 km	
	Resolute	
JUNE 15	P 03 37 17	

DOMINION OBSERVATORIES

JUNE 17 U.S.C.G.S. 52 1/2N, 173 1/2W Andreanof Islands H = 16 35 32 Mag 6	JUNE 17 Resolute P 20 45 47	JUNE 19 Ottawa eP 08 02 12 d
Ottawa iP 16 45 35 i 16 45 44	JUNE 18 Ottawa eP 02 15 48 c	JUNE 19 Resolute P 09 25 20
Resolute P 16 42 53 i 16 45 10	JUNE 18 Resolute P 02 51 15	JUNE 19 Halifax P 10 30 09 ?
Seven Falls eP 16 45 43 i 16 45 52		Ottawa eP 10 30 10
Victoria eP 16 42 02 c ?	JUNE 18 U.S.C.G.S. 9 1/2S, 152 1/2E	JUNE 19 U.S.C.G.S.
JUNE 17 Resolute P 16 48 57	D'entrecasteaux Islands H = 03 19 04 Ottawa eP 03 38 10 c	U.S.C.G.S. 15S, 178 1/2W Fiji Islands region H = 12 21 53 h = 500 km Banff
JUNE 17 Resolute P 17 23 43	JUNE 19 Canadian Arctic H = 00 45 15 h = 32 km Mag 3.2	Victoria iP 12 33 47 d eP 12 34 17
JUNE 17 Ottawa eP 17 26 33	Resolute eP _n 00 45 49.5 i 00 45 51.2 IP ₁ 00 45 55.7	JUNE 19 U.S.C.G.S. 44 1/2N, 149E Kurile Islands
JUNE 17 Resolute P 18 10 17	S _n 00 46 16.2 S ₁ 00 46 24.2 D = 250 km	H = 12 34 34 Resolute P 12 44 00
JUNE 17 Resolute P 18 15 15	JUNE 19 Halifax P 02 52 35	JUNE 19 U.S.C.G.S. 38N, 142 1/2E Bonin Islands H = 17 17 25 Resolute
JUNE 17 Ottawa iP 20 46 25 d	Halifax IP 05 37 54 ? c	P 17 28 46 i 17 38 00

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JUNE 20 U.S.C.G.S. 38S, 73 1/2W Near coast of Chile H = 02 01 08 Mag 7 Halifax eP 02 13 36 ? c	JUNE 20 Ottawa eP 13 36 40 Seven Falls eP 13 36 50	JUNE 20 U.S.C.G.S. 36 1/2N, 139 1/2E Honshu, Japan H = 22 56 49 Resolute P 23 07 22
	JUNE 20 Ottawa eP 02 13 36 Seven Falls eP 02 13 46	JUNE 21 Ottawa eP 06 45 25
JUNE 20 Victoria eP 02 29 17 d	JUNE 20 Seven Falls eP 14 36 21	JUNE 21 U.S.C.G.S. 4 1/2S, 105W Pacific Ocean H = 08 34 39 Ottawa eP 08 44 22
JUNE 20 Resolute P 08 12 23	JUNE 20 Resolute P 15 43 20	Resolute P 08 46 45 i 08 56 47
JUNE 20 U.S.C.G.S. 39 1/2S, 73W Chile H = 12 59 40 Mag 6 3/4 Banff eP 13 13 14	JUNE 20 Kodiak Island, Alaska H = 16 56 25 Ottawa eP 17 05 03 Resolute P 17 02 19	JUNE 21 U.S.C.G.S. 2S, 80 1/2W Near coast of Ecuador H = 14 05 57 Resolute P 14 17 49
Resolute P 13 12 14 c	JUNE 20 U.S.C.G.S. 38 1/2S, 74W Off coast of Chile H = 16 59 35 Ottawa eP 17 12 04 Seven Falls eP 13 12 22 c	JUNE 21 Victoria eP 21 27 42.8 d ? iS 21 27 57.7 D = 122 km
JUNE 20 P 13 14 34 i 13 18 22 i 13 19 14 iS 13 27 00 i 13 29 03	Seven Falls eP 17 12 13	
JUNE 20 Resolute P 13 13 18 d	JUNE 20 Resolute IP 17 58 13 c	

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DOMINION OBSERVATORIES

JUNE 21	JUNE 22	JUNE 25
U.S.C.G.S. 61 1/2S, 21W	Halifax eP 09 09 42 d	Victoria eP 01 32 11 c
Sandwich Islands region	Ottawa eP 09 09 39 d	
H = 21 33 45		JUNE 25
Ottawa eP' 21 53 28	JUNE 22 U.S.C.G.S. 12N, 57 1/2E	U.S.C.G.S. 30 1/2S, 177W
i 21 54 21		Kermadec Islands
Resolute P' 21 53 19	Arabian Sea H = 16 12 00	H = 02 02 35
Seven Falls eP' 21 53 33	Resolute P 16 25 12	Resolute P' 02 21 22
	JUNE 22	JUNE 25
JUNE 22	U.S.C.G.S. 52N, 173W	U.S.C.G.S. 6 1/2N, 72 1/2W
U.S.C.G.S. 62S, 156 1/2E	Andeanof Islands H = 23 28 50	Colombia H = 13 53 37
Antarctic Ocean H = 02 58 24	Halifax	Alberni
Ottawa eP' 03 18 13	eP 23 39 40.5 d ?	eP 14 03 54
Resolute P' 03 18 25	Ottawa eP 23 38 58	Halifax iP 14 01 07 c
	Resolute P 23 36 08	Ottawa iP 14 01 07 c
	i 23 38 24	Resolute iP 14 04 46 c
JUNE 22	Seven Falls eP 23 39 07	iP 14 13 34
Ottawa eP 04 33 11	Victoria iP 23 35 16 d	i 14 14 31
		Seven Falls iP 14 01 21 c
JUNE 22	JUNE 23	Victoria iP 14 03 45 c
U.S.C.G.S. Near coast of Chile	Victoria eP 00 34 28 d ?	
H = 06 40 10		JUNE 25
Halifax eP 06 52 45 c ?	JUNE 23 Resolute P 23 39 00	Resolute P 15 01 34
Ottawa iP 06 52 45 d		i 15 08 44
JUNE 22	JUNE 24	JUNE 25
U.S.C.G.S. Near coast of southern Chile H = 08 11 50	H = 11 51 09.6 ? Not located Alberni iP 11 51 48.8	U.S.C.G.S. 28S, 68W Catamarca Province, Argentina H = 19 35 27
Ottawa iP 08 24 52 c	Victoria iP 11 51 14.2 IS 11 51 17.7	h = 100 km

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JUNE 27	July 1	Seven Falls
Halifax iP 19 46 49	Resolute P 19 59 19	eP 02 10 15
Ottawa iP 19 46 53 d		Shawinigan Falls eP 02 10 12
Seven Falls eP 19 47 02	JUNE 28	
i 19 47 27	Resolute P 08 32 20	JUNE 29
Shawinigan Falls iP 19 46 59 d		Resolute P 02 16 02
Victoria eP 19 48 22	JUNE 28	i 02 25 04
	Resolute P 14 34 43	JUNE 29
JUNE 26		U.S.C.G.S. 30S, 177 1/2W
Resolute P 00 10 34	JUNE 28	Kermadec Islands H = 04 29 12
	Resolute P 15 49 48	Halifax eP 04 48 19
JUNE 26		Resolute P 04 47 58
48.9N, 122.4W Northeast of Bellingham, Washington H = 06 33 17.8	JUNE 28	i 04 57 02
	Resolute P 21 13 04	
Alberni iP 06 33 46.2	JUNE 29	JUNE 29
Penticton eP 06 33 51	Ottawa	30N, 139E
Victoria iP 06 33 30.9 d	eP 01 29 34	South of Honshu, Japan
	i 01 30 36	H = 05 14 56
Shawinigan Falls eP 01 29 33		h = 500 km
JUNE 26	Resolute i 01 30 42	Resolute iP 05 25 23 c
U.S.C.G.S. 26S, 71E	i 01 30 50	Victoria eP 05 25 42 c
Indian Ocean H = 16 48 40	JUNE 29	
Ottawa eP' 17 08 26	Resolute P 01 54 55	JUNE 29
Resolute P' 17 07 55		Ottawa eP 09 57 22
Shawinigan Falls iP' 17 08 19 c	JUNE 29	Shawinigan Falls eP 09 57 30
	U.S.C.G.S. Southern Chile H = 01 57 14	JUNE 29
JUNE 27	Resolute P 17 09 13	Resolute i 10 11 40
Resolute i 17 18 32	Ottawa eP 02 10 07	

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DOMINION OBSERVATORIES

JUNE 29

U.S.C.G.S.
47 1/2N, 27W
Atlantic Ocean
H = 10 23 02
Halifax
eP 10 28 30
Ottawa
eP 10 29 40
Resolute
P 10 30 31
Seven Falls
eP 10 29 05
Shawinigan Falls
eP 10 29 18

Ottawa
iP 20 06 50 d
Resolute
iP 20 03 53 d
S 20 08 10
Seven Falls
iP 20 06 58
Shawinigan Falls
iP 20 06 54 d
Victoria
eP 20 03 06 d ?

JUNE 29

U.S.C.G.S.
53N, 168 1/2W
Fox Islands
H = 17 07 00
Ottawa
eP 17 16 45
Resolute
P 17 13 58
S 17 19 34
Seven Falls
eP 17 16 52
Shawinigan Falls
eP 17 16 49 c

JUNE 29

Resolute
P 17 50 22

JUNE 29

Shawinigan Falls
eP 21 05 43

JUNE 30

U.S.C.G.S.
60N, 151W
Kenai Peninsula,
Alaska
H = 19 58 33
Halifax
iP 20 07 38 d

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SEISMOLOGICAL BULLETIN - 1960

EARTHQUAKES IN THE CANADIAN ARCTIC

The following disturbances were recorded during the second quarter of 1960. The times of observed phases are given at their respective chronological positions in the text of this bulletin.

APRIL 10 at 01 59 10 U.T. Magnitude 1.9. Originated 230 km from Resolute, N.W.T. at a depth of about 5 km.

APRIL 17 at 12 41 35 U.T. Magnitude 1.8. Originated 208 km from Resolute, N.W.T. at a depth of about 29 km.

MAY 17 at 19 15 04 U.T. Magnitude 4.8. Originated 850 km from Resolute, N.W.T. at a depth of about 11 km.

MAY 19 at 07 44 37 U.T. Magnitude 2.8. Originated 198 km from Resolute, N.W.T. at a depth of about 24 km.

MAY 28 at 11 32 52 U.T. Magnitude 3.6. Originated 516 km from Resolute, N.W.T. at a depth of about 31 km.

JUNE 7 at 13 57 39 U.T. Magnitude 2.0. Originated 225 km from Resolute, N.W.T. at a depth of about 10 km.

JUNE 19 at 00 45 15 U.T. Magnitude 3.2. Originated 250 km from Resolute, N.W.T. at a depth of about 32 km.

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DOMINION OBSERVATORIES

EARTHQUAKES IN EASTERN CANADA AND ADJACENT AREAS

The following disturbances were recorded during the second quarter of 1960. The times of observed phases are given at their respective chronological positions in the text of this bulletin.

APRIL 1 at 17 11 12 U.T. Magnitude 2.5. Epicentre at 46°56'N, 75°38'W. A few miles east of the northern arm of Baskatong Reservoir, Quebec. This is similar to a disturbance recorded in the same area, on January 20, 1960 at 20 07 40 U.T.

APRIL 23 at 11 47 52 U.T. Magnitude 4.0. Epicentre at 47°32'N, 70°18'W. About nine miles southwest of La Malbaie, Que. Felt at La Malbaie, Quebec.

APRIL 28 at 09 28 33 U.T. Originated 148 km from Halifax, N.S. Possibly a blast.

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SEISMOLOGICAL BULLETIN - 1960

EARTHQUAKES IN WESTERN CANADA AND ADJACENT AREAS

The following disturbances were recorded during the first quarter of 1960. The times of observed phases are given at their respective chronological positions in the text of this bulletin.

JANUARY 2 at 12 08 02 U.T. Magnitude 3.5 Off coast of Washington.

JANUARY 2 at 18 34 09.4 U.T. Magnitude 2.2 Epicentre at 48°45'N, 123°16'W. South Pender Island.

JANUARY 7 at 09 16 04.4 U.T. Magnitude 3.6 Epicentre at 46°56'N, 122°30'W. Southern Puget Sound, near Olympia, Wash.

JANUARY 12 at 07 52 55 U.T. Magnitude 2.3 Epicentre at 48.2N, 124.9W. Off coast of Washington.

JANUARY 16 at 07 31 01 U.T. Magnitude 3.5 Epicentre at 46°45'N, 121°47'W. Southern Puget Sound Area, southwest corner of Mt. Rainier National Park, Washington.

JANUARY 19 at 09 00 54 U.T. Magnitude 3.3 Epicentre at 51°06'N, 124°29'W. Southwest of Chilko Lake, B.C.

FEBRUARY 2 at 09 51 59.5 U.T. Magnitude 4.3 Epicentre at 45°03'N, 128°00'W. Off coast of Oregon.

FEBRUARY 3 at 04 18 36.5 U.T. Magnitude 4.0 Epicentre at 44°31'N, 126°28'W. Off coast of Oregon.

FEBRUARY 6 at 01 10 35.4 U.T. Magnitude 2.4 Epicentre 48°44'N, 121°32'W. Southeast of Mt. Baker, Washington.

FEBRUARY 10 at 16 48 15.0 U.T. Magnitude 1.9 Epicentre 48°51'N, 123°00'W. Strait of Georgia.

FEBRUARY 11 at 12 35 08.6 U.T. Magnitude 2.5 Epicentre 49°49'N, 123°46'W. Near entrance to Jervis Inlet.

FEBRUARY 13 at 11 33 49.5 U.T. Magnitude 1.2 Epicentre 48°20'N, 123°41'W. Strait of Juan de Fuca.

FEBRUARY 16 at 16 26 48 U.T. 197 km from Victoria.

FEBRUARY 19 at 00 05 55.5 U.T. Magnitude 2.1 Epicentre at 48.7N, 123.7W. Southern Vancouver Island.

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- FEBRUARY 19 at 23 13 02 U.T. Magnitude 2.4 238 km from Victoria.
- FEBRUARY 25 at 11 29 58.3 U.T. 198 km from Alberni.
- FEBRUARY 26 at 05 48 46.6 U.T. Magnitude 1.5 Epicentre at 48.8N, 123.6W. Southern Vancouver Island.
- FEBRUARY 29 at 18 53 49 U.T. Magnitude 1.5 Epicentre at 48.8N, 123.6W. Southern Vancouver Island.
- MARCH 12 at 07 22 44 U.T. Magnitude 2.0 52 km from Alberni.
- MARCH 14 at 19 17 45 U.T. Magnitude 4.1 Epicentre at 44 1/2N, 129 1/2W. Off coast of Oregon.
- MARCH 14 at 20 57 23 U.T. Magnitude 4.4 Epicentre at 45N, 128W. Off coast of Oregon.
- MARCH 17 at 18 08 10 U.T. Magnitude 2.1 Epicentre at 47.6N, 122.1W. East of Seattle Washington.
- MARCH 22 at 01 13 48 U.T. Magnitude 1.8 Epicentre at 49°03'N, 122°14'W. Sumas Region.
- MARCH 22 at 10 31 51.9 U.T. Magnitude 1.9 Epicentre at 48°44'N, 123°15'W. South Pender Island.
- MARCH 25 at 07 01 51.2 U.T. Magnitude 1.3 41 km from Victoria.
- MARCH 27 at 01 39 21.3 U.T. Magnitude 2.5 Epicentre at 48°51'N, 123°18'W. Strait of Georgia.
- MARCH 28 at 07 25 44.6 U.T. Magnitude 1.2 Epicentre at 48°44'N, 123°12'W. South Pender Island.
- MARCH 31 at 11 41 49 U.T. Magnitude 3.9 Epicentre at 49.2N, 128.6W. Off west coast of Vancouver Island.

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SEISMOLOGICAL BULLETIN - 1960

EARTHQUAKES IN WESTERN CANADA AND ADJACENT AREAS

The following disturbances were recorded during the second quarter of 1960. The times of observed phases are given at their respective chronological positions in the text of this bulletin.

- APRIL 1 at 14 12 05 U.T. Magnitude 4.2. Epicentre at 48.8N, 129.5 W. West of Vancouver Island.
- APRIL 1 at 14 42 44 U.T. Magnitude 3.1. Epicentre at 48.9N, 128.8W. Off west of Vancouver Island.
- APRIL 1 at 23 20 06 U.T. Magnitude 1.8. Epicentre at 49.8N, 124.5W. South of Powell River.
- APRIL 4 at 13 26 40 U.T. About 700 km from Penticton.
- APRIL 5 at 10 46 25 U.T. About 90 km from Penticton.
- APRIL 5 at 23 29 29 U.T. 290 km from Penticton.
- APRIL 6 at 09 14 16 U.T.
- APRIL 7 at 16 06 31 U.T. About 200 km from Penticton.
- APRIL 7 at 20 56 02 U.T. 178 km from Penticton.
- APRIL 7 at 21 45 09.4 U.T. 22 km from Victoria.
- APRIL 9 at 14 33 05.5 U.T. Epicentre at 48.6N, 122.7W. Gulf Islands.
- APRIL 9 at 20 59 36.4 U.T. Epicentre at 48.4N, 122.6W. Whidbey Islands.
- APRIL 11 at 05 55 16 U.T. 500 km from Penticton.
- APRIL 11 at 06 47 34.5 U.T. Magnitude 3.3. Epicentre at 47.6N, 122.2W. Southwest of Seattle, Washington.
- APRIL 12 at 13 37 13.2 U.T. Seattle aftershock, 380 km from Penticton.
- APRIL 12 at 15 18 26.5 U.T. 138 km from Penticton.
- APRIL 12 at 15 50 13.2 U.T. 138 km from Penticton.
- APRIL 14 at 00 37 51.8 U.T. Epicentre at 48.5 N, 130.4W. Off west coast of Vancouver Island.

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APRIL 15 at 08 10 51.8 U.T. 164 km from Penticton.
APRIL 16 at 00 27 20.8 U.T. 180 km from Penticton.
APRIL 16 at 13 09 36.2 U.T. Epicentre at 48.4N, 122.5W.
Northeast of Whidbey Island.
APRIL 19 at 00 08 16.4 U.T. 176 km from Penticton.
APRIL 20 at 17 02 05.6 U.T. 192 km from Penticton.
APRIL 20 at 22 23 53 U.T. Epicentre at 48.5N, 123.8W.
APRIL 21 at 05 22 47.3 U.T. 199 km from Penticton.
APRIL 21 at 17 48 44 U.T. 1300 km from Penticton.
APRIL 22 at 22 58 38.6 U.T. 339 km from Penticton.
APRIL 23 at 00 53 46.2 U.T. 164 km from Penticton.
APRIL 26 at 03 49 30.6 U.T. 20 km from Penticton.
APRIL 27 at 00 59 46.9 U.T. 21 km from Penticton.
APRIL 27 at 04 32 30 U.T. Epicentre at 44 1/2N, 111W. Hebgen
Lake, Montana.
APRIL 27 at 04 44 02.2 U.T. 171 km from Horseshoe Bay.
APRIL 29 at 02 06 19.2 U.T. Epicentre at 48.5N, 123.8W.
APRIL 30 at 11 38 04.2 U.T. 166 km from Alberni.
MAY 4 at 08 27 25.8 U.T. 255 km from Penticton.
MAY 4 at 20 35 25.4 U.T. 175 km from Penticton.
MAY 5 at 03 39 35.9 U.T. Near Hebgen Lake, Montana (?).
MAY 10 at 17 41 37.5 U.T. 40 km from Victoria.
MAY 12 at 16 08 44.2 U.T. Epicentre at 44.7N, 127W. Off west
coast Oregon.
MAY 13 at 01 11 12.0 (?) U.T. Not located.
MAY 14 at 12 56 22.1 U.T. Epicentre at 48.4N, 125.4W. Off
west coast of Vancouver Island.

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MAY 18 at 02 01 02.3 U.T. 128 km from Penticton.
MAY 18 at 04 31 07.4 U.T. 13 km from Alberni.
MAY 23 at 02 47 22.6 (?) 180 km from Victoria.
MAY 24 at 23 15 17.4 U.T. Epicentre at 48.3N, 124.3W. Entrance
to Juan de Fuca Strait.
MAY 25 at 22 03 50.0 U.T. 56 km from Alberni.
MAY 26 at 07 32 20.2 U.T. Epicentre at 48.7N, 123.2W. North of
San Juan Island.
MAY 30 at 02 05 25.2 U.T. 230 km from Victoria.
MAY 31 at 03 45 56.4 U.T. 196 km from Penticton.
JUNE 6 at 01 17 48 U.T. Magnitude 5 1/2. Epicentre at 41N, 125W.
Off coast northern California.
JUNE 8 at 05 09 56 U.T. Epicentre at 48.8N, 123.1W. Strait of
Georgia near Saturna Island.
JUNE 13 at 12 31 47.6 U.T. 164 km from Penticton.
JUNE 13 at 13 44 18.4 U.T. 930 km from Penticton.
JUNE 13 at 15 01 33. Recorded at Penticton.
JUNE 14 at 15 10 52.3 U.T. 65 km from Alberni.
JUNE 15 at 20 06 14.4 U.T. 213 km from Penticton.
JUNE 21 at 21 27 23.3 U.T. 122 km from Victoria.
JUNE 24 at 11 51 09.6 (?) U.T. Not located.
JUNE 26 at 06 33 17.8 U.T. Epicentre at 48.9N, 122.4W.
Northeast of Bellingham, Washington.

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Department of Mines and Technical Surveys

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NOTES

Halifax
Nova Scotia

The Willmore short period vertical seismograph working with a transistor amplifier was shut down on August 25, 1960. The previous published calibration curves for the Willmore Transistor Amplifier combination and the short period vertical were interchanged. The corrected calibration curves and the other existing instrument curves may be found on page 110.

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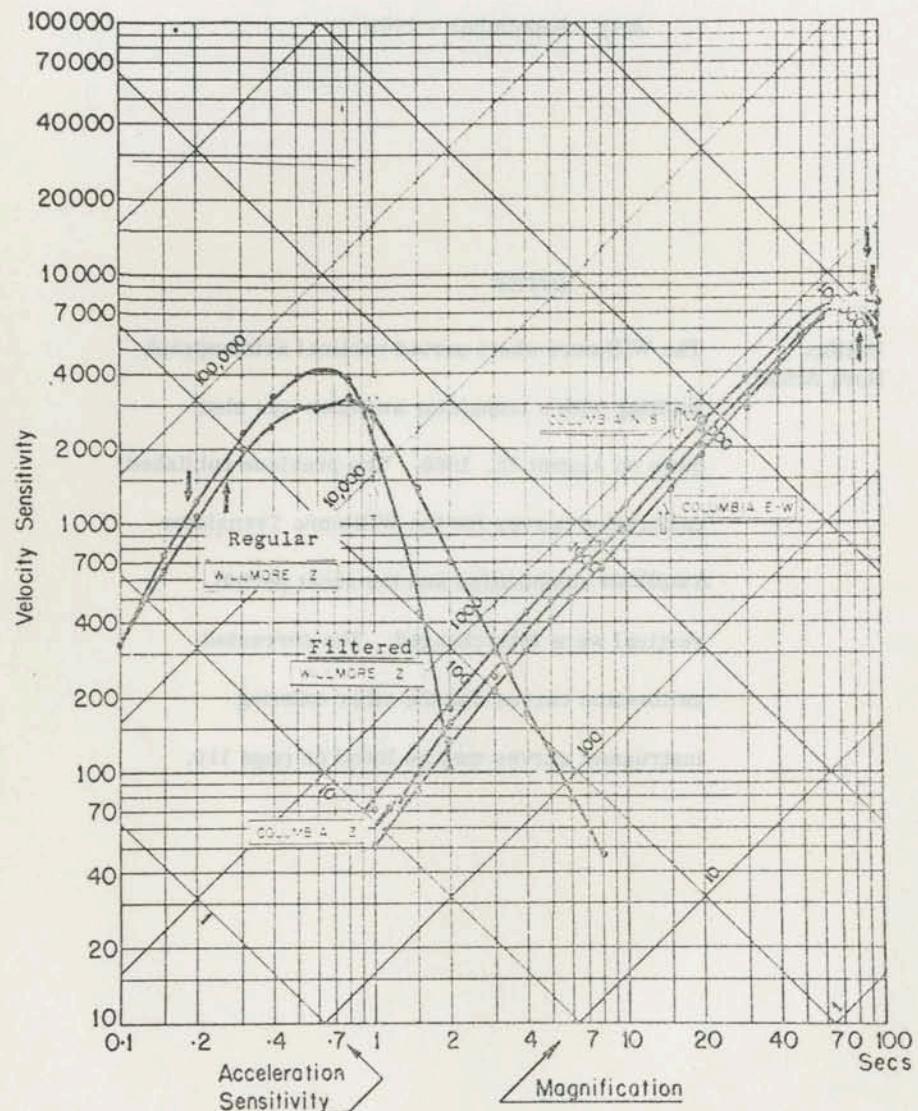
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JULY 1	Seven Falls	Shawinigan Falls
Resolute	eP 04 39 48	eP 03 29 33
P 05 05 17	Shawinigan Falls	
	eP 04 39 45 d	
 JULY 1	 JULY 2	 JULY 3
U.S.C.G.S.	U.S.C.G.S.	U.S.C.G.S.
56N, 165E	56S, 27W	52N, 173W
Komandorskie Islands	Sandwich Islands	Andreanof Islands
H = 07 58 58	H = 11 55 41	H = 05 16 08
Ottawa	Halifax	Shawinigan Falls
eP 08 09 58	P' 12 14 11	eP 05 26 22
Resolute	Ottawa	 JULY 3
P 08 06 29	eP' 12 14 41	U.S.C.G.S.
S 08 12 28	Resolute	52N, 173 1/2W
Seven Falls	P' 12 14 52	Andreanof Islands
eP 08 10 00 c	i 12 17 51	H = 07 16 14
Shawinigan Falls	Seven Falls	Halifax
eP 08 10 00	eP' 12 14 41	P 07 27 06.5
Victoria	Shawinigan Falls	Ottawa
eP 08 06 54	eP' 12 14 42 d	eP 07 26 25
 JULY 1	 Victoria	Shawinigan Falls
Resolute	eSKP 12 18 06	eP 07 26 29 d
P 12 33 17 d	 JULY 2	 JULY 3
 JULY 1	U.S.C.G.S.	48.7N, 123.2W
U.S.C.G.S.	41N, 131 1/2E	North San Juan Island
11 1/2N, 142 1/2E	Sea of Japan	H = 11 02 31.5
Mariana Islands	H = 12 44 21	Alberni
H = 17 40 38	h = 550 km	iP 11 02 55.7
h = 60 km	Alberni	iS 11 03 12.7
Resolute	eP 12 54 28	Victoria
P 17 53 21	Resolute	iP 11 02 34.0
 JULY 2	eP 12 53 40 c	iS 11 02 37.3
U.S.C.G.S.	Victoria	
51 1/2N, 173 1/2W	eP 12 54 31	 JULY 3
Andreanof Islands	 JULY 3	Alberni
H = 04 29 30	U.S.C.G.S.	iP 19 51 54
Halifax	52N, 174W	
eP 04 40 23	Andreanof Islands	 JULY 3
Ottawa	H = 03 19 19	U.S.C.G.S.
eP 04 39 40	Halifax	50 1/2N, 177W
Resolute	P 03 30 11	Andreanof Islands
P 04 36 58	Ottawa	H = 20 20 46
	eP 03 29 29	Banff
		iP 20 28 20 d

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CALIBRATION CURVES

STATION: HALIFAX



Columbia LP-EW June 10/60
 Columbia LP-NS June 10/60
 Columbia LP Z June 17/60

Regular Willmore SPZ - June 3/60
 Filtered Willmore SPZ - June 6/60

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DOMINION OBSERVATORIES

	STATION	JULY 4	JULY 4
Halifax	iP 20 31 55.5	U.S.C.G.S.	U.S.C.G.S.
Ottawa	iP 20 31 15 d	52N, 131 1/2W	52N, 131W
Seven Falls	eP 20 31 21 d	Queen Charlotte Islands	Queen Charlotte Islands
		H = 04 28 33	H = 08 51 20
		Mag 6 1/2	Alberni
Shawinigan Falls		Alberni	iP 08 52 29.2
		IP 04 29 46.6	Banff
		P 04 36 46	IP 08 54 00
		Resolute	eS 08 56 30
JULY 3		Ottawa	
Ottawa	eP 21 00 15	eP 04 35 42	P 08 57 05
Seven Falls	eP 21 00 10	P 04 34 19	S 09 01 48
Shawinigan Falls	eP 21 00 14	iS 04 39 00	Victoria
		eP 04 35 58	eP 08 52 52
		Shawinigan Falls	eS 08 54 26
		eP 04 35 54	JULY 4
JULY 3		Victoria	Ottawa
U.S.C.G.S.		IP 04 30 02.6	eP 09 10 23
50 1/2N, 177W			
Andreanof Islands			
H = 22 52 24			
Resolute		JULY 4	JULY 4
P 23 00 04		Resolute	U.S.C.G.S.
		P 07 46 45	52N, 130 1/2W
			Queen Charlotte Islands
			H = 11 13 17
JULY 3		JULY 4	
Banff		52N, 131W	h = 600 km
iP 23 30 00 c		Queen Charlotte Islands	Victoria
		H = 08 11 50.4	eP 11 15 04
			eS 11 16 31
JULY 3		Alberni	
Resolute		iP 08 12 47.9	
P 23 57 32		Victoria	JULY 4
		eP 08 13 21	52N, 131W
			Queen Charlotte Islands
			H = 12 51 47
JULY 4		Alberni	
Resolute		U.S.C.G.S.	
eP 04 19 56 c		8S, 71W	
		Western Brazil	Banff
		H = 08 02 07	eP 12 54 30
		Resolute	eS 12 57 10
		P 08 13 39	Victoria
			eP 12 53 20
			eS 12 54 46

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JULY 4	JULY 5	JULY 5
U.S.C.G.S.	Resolute	U.S.C.G.S.
52N, 171W	P 01 42 10	8S, 71 1/2W
Queen Charlotte Islands		Western Brazil
H = 13 10 05		H = 21 15 09
Mag 6	JULY 5	h = 600 km
Alberni	U.S.C.G.S.	Halifax
	IP 13 11 17.2	iP 21 23 35 (c)
	Banff	Ottawa
	IP 13 12 50	eP 21 23 38 c
	eS 13 15 30 d	Resolute
Resolute	IP 05 15 06 d	P 21 26 42
	Resolute	Seven Falls
	P 13 15 53	eP 21 23 49
	S 13 20 32	
Seven Falls		
eP 13 17 30		
Shawinigan Falls		
eP 13 17 25		
Victoria		JULY 6
eP 13 11 37		U.S.C.G.S.
eS 13 13 03		36 1/2N, 70 1/2E
JULY 5	Resolute	Hindu Kush region
	eP 05 21 21 c	H = 05 16 44
		h = 200 km
		Ottawa
		eP 05 29 39
		Penticton
		iP 05 29 44 d
		Resolute
		iP 05 27 30 c
		i 05 28 40
		S 05 36 16
		Victoria
		eP 05 29 46
JULY 4		JULY 6
Victoria		San Juan Island or
eP 18 15 07		Race Rocks area
		H = 07 03 51.2
		Victoria
		iP 07 03 56.4
		iS 07 04 00.4
		D = 32 km
JULY 4	JULY 5	
Resolute	Resolute	
eP 18 23 51	P 17 18 20	
eS 18 25 36		
Victoria		
eP 18 23 27		
eS 18 24 40		
Victoria		
eP 18 24 55		
JULY 4	JULY 5	
Ottawa	Victoria	
eP 21 42 13		
Shawinigan Falls		
eP 21 42 20		

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JULY 7	Resolute	JULY 9
Shawinigan Falls	P 10 16 32	Resolute
eP 16 00 05	Shawinigan Falls	P 02 18 21
	eP 10 19 27 c	Shawinigan Falls
		eP 02 15 35
JULY 7		JULY 8
Halifax	U.S.C.G.S.	JULY 9
P 17 50 14	31N, 130 1/2E	46°18'N, 73°02'W
Ottawa	Near south coast of	About 18 miles east
iP 17 50 15 d	Kyushu, Japan	of St. Gabriel, Que.
Shawinigan Falls	H = 12 51 21	H = 07 39 59.1
eP 17 50 21	Resolute	Mag 2.6
	iP 13 02 36 c	Montreal
JULY 7	Victoria	P 07 40 14.8
San Juan Island area ?	iP 13 03 17 c	S 07 40 27.0
Race Rocks area ?		D = 100 km
H = 20 59 10	Ottawa	
Victoria	JULY 8	P 07 40 36.5
iP 20 59 19.2 c	Resolute	S 07 41 04.8
iS 20 59 22.4	P 13 44 34	D = 232 km
D = 26 km		Seven Falls
		P 07 40 28.1
JULY 7	U.S.C.G.S.	S 07 40 51.6
U.S.C.G.S.	7S, 129E	D = 193 km
39S, 73W	Banda Sea	Shawinigan Falls
Near coast of Chile	H = 14 44 40	P 07 40 07.0
H = 21 40 57	Resolute	S 07 40 11.3
Ottawa	P 14 59 04	D = 35.3 km
IP 21 53 31		
Seven Falls	JULY 9	
eP 21 53 41	Resolute	
Shawinigan Falls	P 08 23 15	
eP 21 53 35		
JULY 7	JULY 9	
Victoria	U.S.C.G.S.	Resolute
iP 23 35 34 c	25 1/2N, 125 1/2E	P 18 06 55
	Ryukyu Islands	
	H = 00 42 29	
JULY 8	Resolute	JULY 9
U.S.C.G.S.	Canadian Arctic	
52N, 174 1/2W	H = 19 23 08.6	
Andreanof Islands	Mag 2.2	
H = 10 09 11	Resolute	
Ottawa	iP 19 23 27	
IP 10 19 24 c	i 19 23 32.5	
	IS 19 23 41	
	D = 115 km	

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JULY 9	41N, 21E	JULY 10	Resolute	JULY 11
Southern Yugoslavia	H = 22 42 50	P 20 00 10	U.S.C.G.S.	54S, 140 1/2E
Resolute	P 22 52 40	JULY 10	South of Australia	South of Australia
		U.S.C.G.S.	H = 07 33 32	H = 07 33 32
		53 1/2S, 134E	Resolute	Resolute
JULY 9	Resolute	South of Australia	P' 07 53 25	
P 23 33 00	H = 20 22 51	JULY 11	U.S.C.G.S.	
Resolute	P' 20 42 55	Off west coast of	51 1/2N, 173W	Andreanof Islands
		Sumatra	H = 11 54 16	H = 11 54 16
JULY 10	U.S.C.G.S.	H = 00 05 18	Halifax	Halifax
0, 93E	Resolute	P 00 19 28	San Juan Island area ?	P 12 05 10
Off west coast of	i 00 30 04	eP 23 27 48.3 d ?	Race Rocks area ?	Ottawa
Sumatra		eS 23 27 51.6	H = 23 27 44.0	iP 12 04 29 d
H = 00 05 18	Seven Falls	D = 27 km	Victoria	Seven Falls
Resolute	eP' 00 24 36		eP 12 04 36 d	
	Shawinigan Falls		eS 12 04 33 d	Shawinigan Falls
eP' 00 24 40		JULY 11	JULY 11	
		H = 01 31 34.8	U.S.C.G.S.	
JULY 10	U.S.C.G.S.	Victoria	16S, 172W	
12 1/2N, 86W	iP 01 31 48.0		Tonga Islands region	
Near coast of	iS 01 31 58.1	D = 83 km	H = 11 55 10	H = 11 55 10
Nicaragua			Mag 6 1/4	Mag 6 1/4
H = 13 39 55	Resolute	Ottawa	Banff	Banff
h = 150 km	P 13 46 33	iP 12 07 54		
Ottawa		Resolute	Resolute	
eP 13 46 33	P 13 50 06	P 12 09 06	P 12 09 06	
	S 13 58 24	Victoria		
Seven Falls		iP 12 07 09 d		
eP 13 46 57	Seven Falls	JULY 11	JULY 11	
Shawinigan Falls	eP 07 11 06	U.S.C.G.S.	Penticton	
eP 13 46 49 c	Shawinigan Falls	38S, 75W	eP 19 45 12	
	eP 07 11 03	Off coast of Chile		
JULY 11		H = 06 58 28		
		Ottawa		
		iP 07 10 57 c	JULY 11	
		Seven Falls	Penticton	
		eP 07 11 06	eP 19 45 12	
		Shawinigan Falls		
		eP 07 11 03		
JULY 11		H = 21 59 43	JULY 11	
		Pentiction	Pentiction	
		P 22 00 08.4	P 22 00 08.4	
		S 22 00 27.7	S 22 00 27.7	
		D = 158 km	D = 158 km	

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JULY 12	JULY 13	JULY 13
H = 05 24 03.6	Banff	U.S.C.G.S.
Penticton	iP 07 29 56	17N, 94 1/2W
1P 05 24 17.5 c	Penticton	Oaxaca, Mexico
eS 05 24 28.1	eP 07 29 24	H = 16 23 56
D = 87 km		h = 150 km
		Banff
		eP 16 31 20
JULY 12		iS 16 31 48
48.4N, 125.0W		Halifax
Off west coast		P 16 31 35.5
H = 13 22 11.4		Ottawa
Alberni		iP 16 30 15 c
iP 13 22 27.6		Penticton
Penticton		eP 16 30 59
eP(?) 13 22 57.6		i 16 31 33
Victoria		Resolute
iP 13 22 30.7		P' 08 15 34
iS 13 22 45.4		P 16 33 36
		i 16 34 05
		S 16 41 22
JULY 12		Seven Falls
U.S.C.G.S.		eP 16 31 15
41N, 142E		Shawinigan Falls
Off coast of northern		eP 16 30 34
Honshu, Japan		Victoria
H = 17 00 25		eP 16 31 12
Resolute		
eP 17 10 25 c		JULY 13
		Shawinigan Falls
		eP 21 01 35
JULY 12		
Resolute		JULY 13
P 18 09 18		U.S.C.G.S.
		41N, 23 1/2E
		Greece
		H = 13 01 00
JULY 13		Central Peru
U.S.C.G.S.		H = 21 45 09
42 1/2N, 143E		h = 150 km
Near south coast of		Shawinigan Falls
Hokkaido, Japan		eP 21 54 32
H = 02 30 18		iP _c P 21 55 07
Banff		P 13 10 56
iP 02 41 14 d		Seven Falls
Resolute		eP 13 11 39
iP 02 40 05 c		Shawinigan Falls
		eP 13 11 48

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JULY 14	JULY 15	JULY 16
U.S.C.G.S.	H = 21 07 09.7	U.S.C.G.S.
5N, 127 1/2E	Mag 2 3/4	65 1/2N, 167 1/2W
Molucca Passage	Victoria	Seeward Peninsula
H = 10 26 58	eP 21 07 51.8	Alaska
Halifax	iS 21 08 27.3	H = 21 19 37
P' 10 46 12	D = 290 km	Ottawa
Ottawa	iP' 10 46 05 c	Resolute
Resolute	P 10 40 31	eP 21 24 58 d
Seven Falls	Halifax	S 21 29 16
eP' 10 46 04 c	P 23 48 17	Shawinigan Falls
Shawinigan Falls	eP 23 48 59	eP 21 28 40
eP' 10 46 04		
JULY 14	JULY 15	JULY 16
Penticton	Halifax	U.S.C.G.S.
iP 11 26 46	P 23 48 17	65 1/2N, 167 1/2W
	Shawinigan Falls	Seeward Peninsula
	eP 23 48 59	Alaska
		H = 22 02 53
		Ottawa
		eP 22 11 53
JULY 14	JULY 14	Resolute
Resolute	iP 04 55 23 c	P 22 08 15
i 19 04 06	Seven Falls	S 22 12 32
	iP 04 55 27 c	Shawinigan Falls
	Shawinigan Falls	eP 22 11 58
	eP 04 55 25	
JULY 14	JULY 16	JULY 17
U.S.C.G.S.	49.7N, 124.5W	Resolute
36N, 70E	Texada Island	P 02 06 45
Hindu Kush	Mine Blast	
H = 22 11 06	H = 05 16 30.2	
h = 100 km	Alberni	JULY 17
Resolute	iP 05 16 38.2	U.S.C.G.S.
P 22 22 06	iS 05 16 44.3	12N, 125 1/2E
		Samar Philippine
		Islands
JULY 15		H = 02 15 07
Penticton		Resolute
eP 12 01 03		P 02 28 07
JULY 15	JULY 16	
Penticton	U.S.C.G.S.	
iP 12 07 22 c	21 1/2N, 143E	
	Mariana Island region	
	H = 17 17 44	
	h = 300 km	
	Resolute	JULY 17
	iP 17 29 10 c	Resolute
		P 04 58 28

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JULY 17	U.S.C.G.S. 36N, 69E Hindu Kush H = 05 14 56 h = 200 km Resolute P 05 25 44 S 05 34 46	JULY 18	U.S.C.G.S. 56N, 111E Lake Baikal U.S.S.R. H = 04 40 54 Resolute P 04 49 38	JULY 19	U.S.C.G.S. 78, 80W Near coast of Peru H = 04 19 14 Banff eP 04 29 58
JULY 17	H = 07 11 50.8 Mag 1 1/2 Banff iP 07 11 55.8 c iS 07 11 59.6 D = 31 km	JULY 18	H = 09 46 29.8 Victoria eP 09 47 07.2 d ? eS 09 47 38.1 D = 253 km	JULY 19	Ottawa eP 04 28 26 Penticton eP 04 30 01 Resolute P 04 31 34 Seven Falls eP 04 28 43
JULY 18	U.S.C.G.S. Nicobar Islands H = 00 53 54 Resolute P 01 07 33	JULY 18	Penticton eP 23 21 48	JULY 19	Shawinigan Falls 1P 04 28 38 d Victoria eP 04 30 08 c
JULY 18	U.S.C.G.S. 4 1/2S, 151E New Britain region H = 01 43 29 h = 200 km Banff eP 01 56 38 d ?	JULY 18	H = 23 23 09.1 Mag 2 Penticton iP 23 23 17.5 d iS 23 23 23.0 D = 52 km	JULY 19	U.S.C.G.S. 16 1/2N, 92 1/2W Chiapas Mexico H = 16 03 18 Banff eP 16 10 34 e 16 11 17
JULY 19	Halifax P' 02 02 22 Ottawa eP' 02 02 08 Resolute P 01 57 01 Seven Falls eP' 02 02 12 Shawinigan Falls eP' 02 02 10 d Victoria eP 01 56 13 c	JULY 19	U.S.C.G.S. 1N, 87 1/2W Galapagos, Islands region H = 02 42 30 Ottawa eP 02 50 52 Resolute P 02 54 11 Seven Falls eP 02 51 13 Shawinigan Falls eP 02 51 06	JULY 19	Ottawa eP 16 09 33 Penticton iP 16 10 36 e 16 11 20 Resolute P 16 13 44 i 16 20 41 i 16 22 06 Shawinigan Falls eP 16 10 25 i 16 10 39 Victoria eP 16 10 40 c

JULY 19		Shawinigan Falls	JULY 21
U.S.C.G.S.	iP	09 42 24 d	H = 00 20 49.7
13 1/2N, 146E	Victoria		Mag 2 1/2
Mariana Islands	iP	09 39 35 c	Penticton
H = 18 29 31			iP 00 21 19.1 d
h = 100 km			e 00 21 20.6
Penticton			iS 00 21 41.9
eP 18 41 49			D = 186 km
Resolute		JULY 20	
P 18 41 59		U.S.C.G.S.	
		20 1/2S, 169E	
		New Hebrides Islands	JULY 21
		H = 20 59 25	Penticton
		h = 200 km	iP 05 16 54 d ?
JULY 20		Halifax	
H = 02 12 13.0	iP'	21 18 18 c	
Mag 1 1/2	Ottawa		
Penticton	iP'	21 18 01 c	JULY 21
iP 02 12 41.1 d	Penticton		Resolute
iS 02 12 55.2	eP	21 12 24 d	P 05 17 59
D = 178 km	Resolute		
	P'	21 17 40	
	Seven Falls		JULY 21
	iP'	21 18 07 c	Penticton
JULY 20		Shawinigan Falls	eP 08 08 46
H = 06 54 13.4	eP'	21 18 05	
Mag 1 1/2			
Alberni		JULY 20	JULY 21
iP 06 54 18.2		H = 21 38 17.5	Penticton
iS 06 54 21.9		Mag 2 1/2	eP 08 35 47 c ?
D = 30 km		Penticton	
		eP 21 38 45	JULY 21
		iS 21 39 06	Resolute
JULY 20		D = 172 km	P 08 41 38
U.S.C.G.S.			
49N, 157E		JULY 20	JULY 21
Kurile Islands region		U.S.C.G.S.	H = 19 09 55.5
H = 09 30 38		Southern Chile	Mag 3
Banff		H = 21 38 20	Penticton
iP 09 39 54 c		Ottawa	iP 19 10 28.1
Halifax		eP 21 50 51 d	iS 19 10 54.1
iP 09 42 51 c		Shawinigan Falls	D = 213 km
Ottawa		eP 21 50 55	
iP 09 42 22 d			
Penticton			
iP 09 39 47 c			
Resolute			
iP 09 39 19 d			
S 09 46 12			
Seven Falls			
eP 09 42 24			

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JULY 21		JULY 23		JULY 23	
Resolute	P 20 05 05	Penticton	eP 04 14 44	H = 17 54 19.0	
				Mag 2	
		Victoria			
		eP 17 54 39.3			
JULY 21		JULY 23		eS 17 54 54.8	
U.S.C.G.S.		45°43'N, 73°40'W		D = 127 km	
27N, 142 1/2E		About 15 miles north			
Bonin Islands		of Montreal, Quebec			
H = 20 51 20		H = 05 49 06.5			
Resolute	P 21 02 43	Montreal			
		P ₁ 05 49 10.6			
		S ₁ 05 49 13.4			
JULY 22		Ottawa			
H = 07 18 05.4		P ₁ 05 49 32.3			
Mag 4 1/4		S ₁ 05 49 52.3			
Penticton	iP 07 18 56.8 c	D = 164 km			
iS 07 19 41.6		Seven Falls			
D = 367 km		P	10 00 39		
		Penticton			
		P ₁ 09 58 09 c			
		Resolute			
		P 09 56 28			
JULY 22		Shawinigan Falls			
Penticton	P ₁ 05 49 25	S 10 02 06			
iP 11 20 08 c	S ₁ 05 49 39	Seven Falls			
		eP 09 59 51			
		Shawinigan Falls			
		eP 09 59 51			
		Victoria			
		eP 09 56 58 d			
JULY 22		JULY 23			
H = 14 22 44		Penticton			
Mag 2 3/4		eP 07 31 25			
Penticton		JULY 25			
iP 14 23 11.3 c		U.S.C.G.S.			
iS 14 23 32.3		55N, 163E			
D = 172 km		Near coast of			
		Kamchatka			
		H = 03 41 05			
JULY 22		Mag 6 1/2			
Penticton	H = 07 31 38	Halifax			
eP 21 28 53	h = 600 km	eP 03 52 47			
e 21 29 29	Penticton	Ottawa			
	eP 07 43 30	eP 03 52 06			
		Penticton			
JULY 22		eP 03 50 24			
H = 23 45 45.9		Resolute			
Mag 1 1/2		P 03 48 44			
Victoria		S 03 54 54			
eP 23 46 03.0					
eS 23 46 16.1					
D = 108 km					

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Seven Falls	JULY 25	JULY 26
eP 03 52 09	U.S.C.G.S.	H = 18 46 31.4
Shawinigan Falls	53.4N, 159.4E	Mag 1
eP 03 52 08	Near coast of	Banff
	Kamchatka	iP 18 46 35.8 d
	H = 15 30 36.6	iS 18 46 39.2
	h = 152 km	D = 28 km
JULY 25	Victoria	JULY 27
eP 04 04 15	Resolute	U.S.C.G.S.
	eP 15 42 11	44.7S, 75.1W
	Resolute	Near coast of
	eP 15 38 27 d	Southern Chile
		H = 10 04 53.0
JULY 25	U.S.C.G.S.	h = 25 km
	17 1/2S, 178W	Mag 6 1/4
Fiji Islands	Penticton	Halifax
H = 10 27 00	eP 20 06 55	P 10 17 56
h = 500 km	eS 20 07 13	Ottawa
Penticton	D = 150 km	iP 10 17 52 c
iP 10 39 43 d		Seven Falls
		eP 10 18 01
JULY 25	U.S.C.G.S.	Shawinigan Falls
	54N, 159E	eP 10 18 00
Kamchatka	Off east coast of	JULY 27
H = 11 12 00	Hokkaido Japan	H = 15 36 33
h = 100 km	H = 03 55 54	Mag 1 1/2
Mag 6 3/4	Resolute	Banff
Alberni	eP 04 05 52 d	iP 15 36 37
iP 11 20 16		iS 15 36 40
Banff	JULY 26	D = 25 km
iP 11 20 43 d	U.S.C.G.S.	JULY 27
eS 11 25 47	40 1/2N, 37E	H = 16 08 56
Halifax	Turkey	Mag 1 1/4
iP 11 23 38	Ottawa	Penticton
	eP 11 23 09 c	iP 16 09 00.2
Penticton	Pentiction	iS 16 09 03.4
iP 11 21 35 d	iP 12 48 59	D = 26 km
Resolute	Halifax	
iP 11 19 55 c	P 12 47 28	
S 11 26 11	Pentiction	
Seven Falls	eP 12 49 10	
eP 11 23 10 c	Resolute	
Shawinigan Falls	P 12 46 35	
iP 11 23 10 c		
Victoria		
iP 11 20 24		

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JULY 27	JULY 29	Seven Falls
H = 16 44 36.8	U.S.C.G.S.	eP 17 44 31
Alberni	19 1/2S, 170 1/2E	Shawinigan Falls
eP 16 44 47	Loyalty Islands	eP 17 44 27 c
Penticton	H = 00 24 06	Victoria
iP 16 44 45.0	Mag 6 1/2	eP 17 42 10 d
IS 16 44 51.3	Halifax	
D = 52 km	P' 00 43 21	
	Ottawa	JULY 30
	iP' 00 43 05 d	U.S.C.G.S.
JULY 28	Penticton	1.4S, 79.1W
47.8N, 121.8W	eP 00 37 28	Ecuador
40 km northeast of	Resolute	H = 02 04 49.4
Seattle	i 00 38 44	h = 21 km
H = 07 21 54.3	i 00 43 16	Penticton
Mag 2 1/4	Seven Falls	iP 02 15 08 d ?
Alberni	eP' 00 43 11 d	
eP 07 22 36.1	Shawinigan Falls	JULY 30
Penticton	eP' 00 43 09	H = 06 06 46.6
S - P = 28.7"	Victoria	Penticton
Victoria	eP 00 37 13 d	iP 06 06 52.8
eP 07 22 17.2 c		IS 06 06 57.5
IS 07 22 34.7	JULY 29	D = 39 km
		H = 00 53 11.8
JULY 28	Penticton	
48 1/2N, 122W	iP 00 53 41.0	JULY 30
40 km southeast of	IS 00 54 03.7	Penticton
Bellingham	D = 185 km	iP 07 25 29
H = 09 10 14.0		
Alberni	JULY 29	JULY 30
iP 09 10 53.2	U.S.C.G.S.	U.S.C.G.S.
eS 09 11 23.2	40.1N, 142.3 E	56.3N, 163.9E
Penticton	Honshu, Japan	Near coast of Kamchatka
S - P = 27.4"	H = 17 31 39.5	H = 14 12 35.5
Victoria	h = 50 km	h = 21 km
iP 09 10 33.2	Mag 6 3/4	Penticton
IS 09 10 49.8	Alberni	iP 14 20 46
	eP 17 42 04	
JULY 28	Banff	JULY 30
H = 20 40 53.5 ± 1 sec.	eP 17 42 28	H = 20 24 48.4
Penticton	Halifax	Penticton
iP 20 41 19.0	P 17 44 48	iP 20 25 06.7
IS 20 41 38.5	eP 17 44 27 c	IS 20 25 20.7
D = 160 km	Penticton	D = 115 km
	iP 17 42 19	
	Resolute	
	P 17 41 38	
	S 17 49 44	

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JULY 31	AUGUST 1	Resolute
5.6S, 150.0E	H = 02 00 42.7	P 06 22 20
New Britain	Penticton	i 06 24 25
H = 02 55 46.2		Victoria iP 06 21 38.8 c
h = 25 km		
Mag 6 3/4		
Banff	D = 10 km	
eP 03 09 17		AUGUST 2
Halifax	P' 03 14 56	H = 06 51 14.9
	PKS 03 18 24	Mag 2
Ottawa	iP' 03 14 43 d	Penticton
Penticton	eP 03 09 06	iP 06 51 26.6 c
Resolute	P 03 09 40	eS 06 51 35
	S 03 20 36	D = 73 km
i 03 23 00		AUGUST 2
Shawinigan Falls	U.S.C.G.S.	U.S.C.G.S.
eP' 03 14 46 d	22.2S, 176.6W	28.2S, 176.6W
Victoria		Kermadec Islands
eP 03 09 01 c ?	Loyalty Islands	H = 09 30 26
	H = 05 07 22	h = 61 km
	h = 108 km	Victoria
	Mag 6 1/2	eP 09 43 20
Penticton		
eP 05 20 32 c ?		AUGUST 2
Resolute	P' 05 26 33	U.S.C.G.S.
	i 05 27 04	4.5S, 104.7W
Shawinigan Falls	eP' 05 26 09	Southwest of Galapagos
Halifax	i 05 27 50	Islands
iP 15 07 59 c		H = 13 42 28
Shawinigan Falls	Victoria	h = 93 km
eP 15 07 57	eP 05 20 20	Penticton
		eP 13 51 53
		Resolute
	P 13 54 27	
	S 14 04 28	
AUGUST 1	AUGUST 2	
48.9N, 121.7W	U.S.C.G.S.	
51.5N, 178.3W		
Northeast of Mt. Baker	Andreanof Islands	
U.S.A.	H = 06 14 47	
H = 01 45 44	h = 34 km	
Mag 2	Alberni	
Penticton	iP 06 21 30	
iP 01 46 07.5 c	Halifax	
IS 01 46 25.7	eP 06 25 51	
Victoria	Penticton	
eP 01 46 06.4	eP 06 21 55	
e? 01 46 30.1		

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AUGUST 2		Halifax	AUGUST 4	Penticton
U.S.C.G.S.		P 07 46 01		eP 16 49 09
84.2N, 2.3E		Ottawa		
North Polar region		eP 07 45 23		
H = 20 51 03.8		Resolute		
h = 40 km		P 07 42 28	AUGUST 4	
Resolute		i 07 44 10		Resolute
eP 20 54 55 d		S 07 48 04		P 21 31 16
		Seven Falls		
		eP 07 45 32		
AUGUST 2		Victoria	AUGUST 5	
Resolute		iP 07 41 50.4 d		U.S.C.G.S.
P 21 01 18		iP 07 41 54.4		50.5N, 130.3W
				Queen Charlotte Islands region
AUGUST 2		AUGUST 4		H = 08 45 31
Alberni		U.S.C.G.S.		h = 25 km
iP 22 47 15		51N, 179.4E		Alberni
		Rat Islands		iP 08 46 29
		H = 09 08 36		Resolute
		h = 100 km		S 08 56 20
AUGUST 3		Penticton		Victoria
Shawinigan Falls		eP 09 15 52		iP 08 46 47.3 c
eP 01 26 18		Victoria		
		iP 09 15 37 c		
AUGUST 3		AUGUST 4	AUGUST 5	
Penticton		Penticton	Victoria	
eP 02 31 20		eP 13 09 13	eP 08 56 27	
AUGUST 4		AUGUST 4	AUGUST 5	
H = 01 37 53.8		Penticton	U.S.C.G.S.	
Mag 2 3/4		eP 13 32 29 c?	50.1N, 156.8E	
Penticton		iP 01 38 33.8 c?	Off south coast of	
iP 01 39 07		eP 01 39 07	Kamchatka	
D = 270 km			H = 16 06 33	
			h = 42 km	
		AUGUST 4	Halifax	
		U.S.C.G.S.	P 16 18 37	
AUGUST 4		51.3N, 178.8E	Penticton	
U.S.C.G.S.		Rat Islands	iP 16 15 36 d	
51.4N, 179.1E		H = 14 05 28	Resolute	
Rat Islands		h = 59 km	P 16 15 02	
H = 07 34 53.8		Penticton	S 16 41 23	
Mag 6		eP 14 12 48	Victoria	
h = 83 km		Resolute	iP 16 15 23.0 c	
Alberni		P 14 13 04		
eP 07 41 27				
Banff				
eP 07 42 22				

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AUGUST 5		AUGUST 6	AUGUST 8
U.S.C.G.S.		Alberni	H = 03 24 32.3
9.5S, 118.8E		iP 08 32 31	Mag 2 3/4
Sumba Island			Victoria
H = 16 26 23.5			iP 03 24 51.0 c
h = 64 km		AUGUST 6	IS 03 25 05.3
Halifax		Victoria	D = 117 km
P' 16 45 58		eP 08 39 28	
			AUGUST 8
			Halifax
			P 07 17 02
AUGUST 5		AUGUST 6	
Victoria		Resolute	
eP 22 19 36		P 12 55 37	
		Victoria	
		eP 12 55 26	AUGUST 8
			Resolute
			i 09 25 20
AUGUST 5		AUGUST 6	
U.S.C.G.S.		U.S.C.G.S.	
51.0N, 178.7E		42.4S, 74.8W	AUGUST 8
Rat Islands		Near coast of Chile	Resolute
H = 22 27 34		H = 14 49 44.9	i 12 53 17
h = 15 km		h = 35 km	
Halifax		Ottawa	
eP 22 38 49		eP 22 38 16	AUGUST 8
		Resolute	U.S.C.G.S.
		P 22 35 16	36N, 27.3E
		i 22 37 17	Dodecanese Islands
		Shawinigan Falls	H = 20 36 28.4
		eP 22 38 12	h = 87 km
		i 22 39 15	Shawinigan Falls
		Victoria	eP 20 47 38
		iP 22 34 43.4	
AUGUST 6		AUGUST 6	AUGUST 9
Victoria		Victoria	U.S.C.G.S.
eP 15 55 38		eP 15 55 38	21.2S, 71.6W
			Off coast of Chile
			H = 06 10 11
			h = 104 km
		Penticton	Penticton
		eP 10 09 45	eP 06 22 24 c?
			Shawinigan Falls
			eP 06 21 00
AUGUST 6		AUGUST 7	
Canadian Arctic		Penticton	
H = 06 22 --		eP 10 09 45	
Mag 2.5 - 3.5			Shawinigan Falls
Resolute			eP 06 21 00
iP 06 23 10.0		AUGUST 7	
D = 100 - 200 km		Halifax	
		P 16 29 57	
		Ottawa	
		eP 16 30 04	
		Shawinigan Falls	
		eP 16 30 04	

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AUGUST 9	Seven Falls	Victoria
U.S.C.G.S.	eP 07 47 04	eP 16 59 08 d
51.1N, 156.8E	Shawinigan Falls	iS ? 17 09 52
Off south coast of Kamchatka	eP 07 46 51	
H = 06 21 46.9	Victoria	
h = 10 km		
Penticton	iP 07 41 24 c	AUGUST 10
eP 06 30 00	Resolute	
Resolute	AUGUST 9	i 00 02 32
P 06 29 26	48 3/4N, 121 3/4W	
Near Mt. Baker	AUGUST 10	
Victoria	H = 10 47 18.7	U.S.C.G.S.
eP 06 29 58	Mag 2 3/4	8.9N, 83.5W
Alberni	eP 10 47 49.2	Near coast of Costa Rica
	eS 10 48 12.9	H = 12 38 48.3
AUGUST 9	Penticton	h = 25 km
U.S.C.G.S.	eP 10 47 45	Halifax
56.1N, 164.2E	eS 10 48 05	iP 12 46 20
Off east coast of Kamchatka	Victoria	Ottawa
H = 06 58 05.5	eP 10 47 36 d	iP 12 45 56 d
h = 37 km		Resolute
Penticton		P 12 49 31
eP 07 06 16	AUGUST 9	Shawinigan Falls
Resolute	U.S.C.G.S.	iP 12 46 10 d
P 07 05 52	47.5N, 142.7E	
Victoria	Sakhalin Island	
eP 07 06 05	H = 14 02 39.3	AUGUST 11
	h = 35 km	U.S.C.G.S.
	Halifax	52.2N, 176.2W
AUGUST 9	eP 14 15 09	Andreanof Islands
U.S.C.G.S.	Penticton	H = 02 36 56.5
40N, 126.6W	eP 14 12 45 d ?	h = 97 km
Off coast of Northern California	Resolute	Alberni
H = 07 39 22.6	P 14 11 50	iP 02 43 21 c
Mag 6	Victoria	Halifax
Alberni	eP 14 12 35	P 02 47 44
eP 07 41 33		Ottawa
Halifax	AUGUST 9	iP 02 47 03 c
P 07 47 (47)	U.S.C.G.S.	Penticton
P 07 48 00	24.5S, 177.1W	iP 02 43 44 d
Ottawa	Tonga Islands region	Shawinigan Falls
eP 07 46 33	H = 16 46 37.7	eP 02 47 06 c
Penticton	h = 186 km	Victoria
eP 07 41 49.7 c	Penticton	iP 02 43 30 c
Resolute	iP 16 59 20 d	
P 07 46 34	Resolute	
iS 07 52 28	i 17 05 31	
	S 17 13 18	

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AUGUST 11	AUGUST 12	AUGUST 13
U.S.C.G.S.	H = 03 38 17.2	Canadian Arctic
0.0, 121.6E	Mag 2 1/2	H = 06 40 31.4
Celebes	Penticton	Mag 1.8
H = 02 53 16.3	eP 03 38 48.4c?	Resolute
h = 46 km	eS 03 39 14	P ₁ 06 40 47.0
Halifax	D = 200 km	S ₁ 06 40 58.9
P' 03 12 36		D = 97.4
Ottawa	AUGUST 12	AUGUST 13
iP' 03 12 30 c	Resolute	U.S.C.G.S.
Shawinigan Falls	eP' 03 12 29	40.6N, 142E
	i 10 43 07	Near east coast of Honshu, Japan
AUGUST 11	AUGUST 12	AUGUST 13
U.S.C.G.S.	U.S.C.G.S.	H = 07 11 05.5
8.8N, 126.1E	36.1N, 141.4E	h = 60 km
Mindanao, Philippine Islands	Near east coast of Honshu, Japan	Halifax
H = 04 50 33.9	H = 13 12 34.3	eP 07 24 11.5 c
h = 79 km	h = 95 km	i 07 24 27
Alberni	Penticton	Resolute
i 05 06 40 d	eP 13 23 32 c ?	iP 07 21 02 c
Halifax	Resolute	S 07 29 08
eP' 05 09 29.5 c	iP 13 22 55 c	Shawinigan Falls
iP 05 09 29.9 d	Victoria	iP 07 23 51 c
Ottawa	eP' 05 09 22 c	Victoria
Pentiction	Pentiction	iP 07 21 34 c
iP 05 04 06 d	AUGUST 12	AUGUST 13
Resolute	49°30'N, 124°W	U.S.C.G.S.
P 05 03 39	Near Sechelt	39.7S, 74.8W
i 05 07 22	H = 16 01 34.9	Near coast of southern Chile
Shawinigan Falls	Mag 1 3/4	
iP' 05 09 22 c	Alberni	
Victoria	iP 16 01 47.5	H = 14 14 57.7
iP 05 03 58 d	iS 16 01 51.7	h = 61 km
Victoria	Victoria	Halifax
eP 16 01 51.1	eP 16 02 04.9	eP 14 27 29.5 d
eS 16 02 04.9	iP 14 27 30 c	Ottawa
AUGUST 11	AUGUST 12	Resolute
Alberni	Alberni	P 14 27 29 d
iP 16 06 42	iP 16 26 12	i 14 40 20
	Pentiction	S 14 42 13
	eP 16 26 58	i 14 44 12
	Victoria	Seven Falls
	iP 16 26 30 d	eP 14 27 41

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Shawinigan Falls	AUGUST 14	AUGUST 16
eP 14 27 35 d	U.S.C.G.S.	U.S.C.G.S.
Victoria	23.5S, 66.4W	16.5S, 71.5W
iP 14 28 31 c	Jujuy Province	Southern Peru
	Argentina	H = 02 47 18.8
	H = 22 46 07.6	h = 113 km
AUGUST 14		Banff
U.S.C.G.S.		eP 02 59 04
45.4N, 151.1E		Halifax
Ryukyu Islands		eP 02 57 23 c
H = 04 00 52.3		iP 02 57 23.5 d
h = 54 km		Shawinigan Falls
Halifax		Ottawa
P 04 13 25		eP 02 57 26 c
Ottawa		Shawinigan Falls
eP 04 13 00		eP 02 57 34 c
Shawinigan Falls		Victoria
eP 04 13 02		eP 02 59 14 c
AUGUST 14	AUGUST 15	
48.7°N, 124.8°W	U.S.C.G.S.	
Near Clo-oose	45.3N, 148.6E	AUGUST 16
Vancouver Island	Kurile Islands	47.7°N, 116.3°W
H = 07 37 28.8	H = 05 55 48.2	Montana, U.S.A.
Mag 2	h = 35 km	H = 13 27 55.8
Alberni	Victoria	Banff
iP 07 37 39.4 c ?	AUGUST 15	iP 13 28 52.3
Victoria	U.S.C.G.S.	e 13 29 28.3
eP 07 37 46.1	13.4S, 65.8E	Victoria
es 07 37 59.3	Indian Ocean	eP 13 29 06.3
	H = 06 58 56.4	eS 13 30 12.5
AUGUST 14		AUGUST 16
U.S.C.G.S.		Banff
7.2S, 146.2E		e 15 57 15
Near north coast of		
New Guinea	AUGUST 15	AUGUST 17
H = 14 41 04.2	U.S.C.G.S.	H = 06 39 17.6
h = 200 km	13.5S, 67E	Alberni
Shawinigan Falls	Indian Ocean	iP 06 39 27.8
eP' 14 59 51	H = 14 33 38.4	iS 06 39 35.6
	h = 25 km	D = 64 km
	Victoria	
	eP' 14 53 15	

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AUGUST 17	AUGUST 18	AUGUST 19
U.S.C.G.S.	H = 22 59 45.7	U.S.C.G.S.
20.1S, 11.4W	Mag 2.4	27N, 140.1E
South Atlantic Ocean	Penticton	Bonin Islands region
H = 09 33 49.1	eP 23 00 12	H = 12 41 31.4
h = 87 km	eS 23 00 32	h = 283 km
Ottawa	D = 164 km	Penticton
eP 09 46 26		eP 12 52 52 c ?
AUGUST 19		Victoria
U.S.C.G.S.		iP 12 52 42 c
40.7N, 127.2W		
Off coast of Northern		AUGUST 19
South Atlantic Ocean		U.S.C.G.S.
H = 11 24 07.2		54.1N, 160.6E
h = 25 km		Near east coast of
Ottawa		Kamchatka
eP 11 36 51		H = 17 03 39
Penticton		h = 25 km
eP 04 10 14		Halifax
eP 04 09 31		eP 17 15 22
Victoria		eP 17 15 29
eP 04 09 06		Ottawa
AUGUST 18		eP 17 14 51
H = 18 30 31.8		Penticton
Mag 2.4		eP 17 12 13
Penticton		Shawinigan Falls
eP 18 31 07.9		eP 17 15 03
eS 18 31 35.4		
D = 225 km		
Ottawa		
eP 09 28 21		
AUGUST 18		AUGUST 20
U.S.C.G.S.		U.S.C.G.S.
44.5N, 147.6E		14.3N, 91.4W
Kurile Islands		Guatemala
H = 20 47 02.5		H = 00 19 34.4
h = 32 km		Mag 6
Halifax		h = 158 km
P 20 59 48		Banff
Ottawa		eP 00 27 10 ?
eP 20 59 24		Ottawa
Penticton		iP 00 26 05 c
iP 20 57 05 d		Penticton
Shawinigan Falls		eP 00 27 14
eP 20 59 24		Shawinigan Falls
AUGUST 19		eP 00 26 24
Banff		Victoria
iP 12 52 00.7		iP 00 27 25 d
Penticton		
AUGUST 18		
H = 21 10 54.7		
Mag 2.0		
Penticton		
eP 21 11 17		
e 21 11 34		
D = 139 km		

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AUGUST 20	Ottawa	AUGUST 23	Penticton
H = 18 00 22.0	eP' 13 08 20 d		eP 17 13 42
Alberni	Resolute		
iP 18 00 30.4	P 13 02 42		
IS 18 00 36.8	i 13 13 04		
D = 50 km	Shawinigan Falls	AUGUST 23	
	eP' 13 08 19 d	H = 21 45 55	
		Banff	
AUGUST 20		eP 21 46 01	
H = 21 34 57.5		eS 21 46 06	
Alberni		D = 37 km	
iP 21 35 06.0	iP 13 11 32.5 c		
IS 21 35 12.5			
D = 52 km			
AUGUST 21		AUGUST 23	
U.S.C.G.S.		U.S.C.G.S.	
4.3S, 143.3E		14.5S, 176.4W	
New Guinea		Fiji Islands region	
H = 00 18 01.5		H = 22 44 51.5	
h = 39 km		h = 56 km	
Halifax		Mag 6	
iP 00 37 19 c	Penticton	Penticton	
Ottawa	eP 06 20 12	eP 22 57 03	
eP' 00 37 04			
Shawinigan Falls			
eP' 00 37 05			
i 00 37 30			
AUGUST 21		AUGUST 22	
Ottawa		Penticton	
eP 04 02 44	iP 18 46 10	U.S.C.G.S.	
		56.3N, 163.8E	
		Near east coast of	
		Kamchatka	
AUGUST 21		H = 01 44 09.9	
Penticton		h = 25 km	
eP 05 33 15	iP 08 02 26 c	Halifax	
		P 01 55 48	
		Ottawa	
		iP 01 55 03 c	
AUGUST 21		Penticton	
U.S.C.G.S.		eP 01 52 19	
4.9N, 125.1E		Resolute	
Near south coast of		P 01 51 43	
Mindanao, Philippine		i 01 53 14	
Islands		S 01 57 14	
H = 12 49 37.6	iP 14 17 48 d	Shawinigan Falls	
h = 211 km		eP 01 55 12	
Halifax	eP 14 18 41	Victoria	
iP' 13 08 28.5 d		eP 01 52 08	

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AUGUST 24	U.S.C.G.S.	AUGUST 25	U.S.C.G.S.	AUGUST 27	U.S.C.G.S.
	19S, 174.1W		52.7N, 169.6W		34.4N, 26.3E
Tonga Islands		Fox Islands		Crete	
H = 05 49 01.1		H = 17 41 58.8		H = 10 17 18.1	
h = 42 km		h = 38 km		h = 40 km	
Penticton	eP 06 01 29	Halifax	eP 17 52 37	Ottawa	eP 10 28 52
		Ottawa	eP 17 51 48	Shawinigan Falls	eP 10 28 38
AUGUST 24		Penticton			
H = 18 27 31		eP 17 48 15		AUGUST 27	
Mag 2.4		Shawinigan Falls		U.S.C.G.S.	
Penticton	eP 18 27 58.7	eP 17 51 53		49.9N, 153.7E	
	eS 18 28 19.8	Victoria	eP 17 48 00	Kurile Islands	
D = 172 km				H = 18 16 15.7	
AUGUST 24				h = 220 km	
Alberni	eP ₁ 19 00 42.9	Halifax	iP 18 28 06 c		
U.S.C.G.S.	24.4N, 95E	Ottawa	eP 18 27 40		
Burma-India Border	eP ₁ 19 00 45.9	Penticton	iP 18 25 12 d		
H = 19 27 53.2		Resolute	Resolute		
h = 145 km		iP 19 39 56	iP 18 24 34		
AUGUST 24			S 18 31 16		
47.7N, 122.3W			i 18 32 20		
Near Seattle, U.S.A.			Shawinigan Falls		
H = 20 10 29.4			eP 18 27 40 d		
Mag 2			Victoria		
Alberni	eP' 18 46 03		iP 18 25 01 d		
	IP 20 11 08.8		AUGUST 27		
	iS ? 20 11 17.7		H = 19 07 41.9		
Victoria	iP 20 10 53.3 c		Mag 1		
	iS 20 11 11.6		Victoria		
AUGUST 25			eP 19 07 46.1		
H = 00 31 43			iS 19 07 49.3		
Mag 2.3			D = 26.2 km		
Penticton					
eP 00 32 08					
eS 00 32 27					
D = 156 km					

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AUGUST 28	Shawinigan Falls	SEPTEMBER 2
U.S.C.G.S.	eP 15 45 59	U.S.C.G.S.
3.7N, 82.8W	Victoria	52.0N, 171.4W
South of Panama	eP 15 41 47d,N,W	Fox Islands
H = 06 05 22.6		H = 22 02 48.9
h = 108 km		h = 49 km
Ottawa	SEPTEMBER 1	Mag 5 3/4
iP 06 13 03 c	Victoria	Halifax
Seven Falls	iP 17 09 42	iP 22 13 30
eP 06 13 26		iS 22 22 08
Shawinigan Falls		Ottawa
eP 06 13 17	SEPTEMBER 1	eP 22 12 46 c
	U.S.C.G.S.	Resolute
	15.8S, 179.2E	iP 22 09 59
AUGUST 30	Fiji Islands	S 22 15 40
H = 16 33 03	H = 18 41 16.2	Seven Falls
Victoria	h = 33 km	eP 22 12 55
iP 16 33 23.1 c	Victoria	Shawinigan Falls
es 16 33 38.5	eP 18 53 28	eP 22 12 51
D = 126 km		Victoria
	SEPTEMBER 1	eP 22 09 01
	U.S.C.G.S.	e 22 12 06
AUGUST 31	16.1S, 179.6W	
U.S.C.G.S.	Fiji Islands	SEPTEMBER 3
39.1N, 36.3E	H = 20 02 12.8	Halifax
Turkey	h = 183 km	P 00 11 50
H = 22 11 53.9	Victoria	
h = 44 km	eP 20 14 14	SEPTEMBER 3
Halifax		U.S.C.G.S.
P 22 23 01		43.2N, 144.4E
	SEPTEMBER 2	Near north coast of
SEPTEMBER 1	U.S.C.G.S.	Hokkaido Japan
U.S.C.G.S.	28.7N, 98.3E	H = 00 19 57.3
56.1N, 153.7W	Tibet	h = 14 km
Kodiak Island	H = 13 46 10.0	Resolute
H = 15 37 14.4	h = 48 km	iP 00 28 59 c
h = 24 km	Resolute	
Mag 6	P 13 57 57	SEPTEMBER 3
Halifax	S 14 07 44	U.S.C.G.S.
iP 15 46 44	Victoria	6.1S, 154.5E
is 15 54 17	eP 13 58 10	Solomon Islands
Ottawa		H = 12 41 34.9
iP 15 45 54 d		h = 457 km
Resolute		Mag 6 1/2
iP 15 43 14 c		Halifax
is 15 48 03		P' 12 59 56
Seven Falls		
eP 15 46 05		

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Ottawa	Seven Falls	SEPTEMBER 5
eP' 12 59 39	eP 23 58 39	47.7N, 121.6E
Resolute	Shawinigan Falls	East of Seattle
iP 12 54 40	eP 23 58 44	Washington
S 13 04 38	Victoria	H = 14 31 55
Seven Falls	eP 23 56 10	Mag 3.0
eP' 12 59 44		Alberni
Shawinigan Falls		iPn 14 32 32.
iP' 12 59 41 d	SEPTEMBER 4	iSn 14 33 03.
Victoria	U.S.C.G.S.	D = 290 km
iP 12 53 45 c	56.3N, 153.1W	Penticton
	Kodiak Island	ePn 14 32 (36.8)
	H = 05 21 22.1	eSn 14 33 (05.5)
	h = 48 km	D = 235 km
SEPTEMBER 3	Victoria	Victoria
U.S.C.G.S.	eP 05 29 56	eP1 14 32 15.6
40.9N, 142.5E	Penticton	es1 14 32 30.4
Near north coast of	eP 05 26 08	D = 158 km
Honshu, Japan	Resolute	
H = 13 22 53.7	iP 05 27 16 c	SEPTEMBER 6
h = 112 km	S 05 32 06	Resolute
Resolute	P 13 32 43	Shawinigan Falls
		eP 05 30 08
		P 07 21 34
		P 07 24 17
Victoria	Victoria	
eP 05 25 49		
SEPTEMBER 6		
U.S.C.G.S.		H = 13 05 30
48.5S, 126.3E		Mag 2.0
South of Australia	Canadian Arctic	Victoria
H = 20 41 08.6	H = 10 34 04.2	eP1 13 05 47.4
h = 30 km	Mag 2.6	es1 13 06 00.5
Resolute	P' 21 00 55	D = 107 km
		eP1 10 34 31.9
		i 10 34 35.0
SEPTEMBER 3	SEPTEMBER 6	SEPTEMBER 6
U.S.C.G.S.	i 10 34 40.3	U.S.C.G.S.
44.6N, 149.1E	iS1 10 34 53.0	20.4S, 169.4E
Kurile Islands	D = 173 km	Loyalty Islands
H = 23 46 23.9		H = 14 03 01.8
h = 27 km		h = 35 km
Mag 6 1/4		
Halifax	SEPTEMBER 5	Mag 6 1/4
P 23 59 08	H = 10 48 00	Halifax
Ottawa	Mag 3.0	ip' 14 22 07 d
eP 23 58 44	Penticton	Ottawa
Pentiction	iP1 10 48 29.6	ip' 14 21 49 c
eP 23 56 21	iS1 10 48 52.3	Seven Falls
Resolute	D = 186 km	ep' 14 21 55
iP 23 55 46 c		Shawinigan Falls
S 24 03 17		ip' 14 21 03 c
Victoria		Victoria
		ip' 14 16 01 c

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SEPTEMBER 6	U.S.C.G.S.	SEPTEMBER 7	U.S.C.G.S.	SEPTEMBER 8	U.S.C.G.S.
41.9N, 142.5E		37.2S, 16.1W		6.2N, 126.2E	
Near south coast		Tristan da Cunha		Near east coast of	
of Hokkaido Japan		region		Mindanao, Philippine	
H = 15 24 40.5		H = 01 17 39.1		Islands	
h = 109 km		h = 35 km		H = 11 07 40.8	
Halifax		Halifax		h = 47 km	
eP 15 37 37 d		eP 01 30 51		Halifax	
Ottawa				eP' 11 26 47 c	
eP 15 37 16				e 11 30 00	
Resolute	P 15 34 23	SEPTEMBER 7	U.S.C.G.S.	Ottawa	eP' 11 26 39
Seven Falls			44.3N, 149.1E	Seven Falls	eP' 11 26 38
eP 15 37 16			Kurile Islands	Shawinigan Falls	eP' 11 26 38 c
Shawinigan Falls			H = 11 44 56.6		
eP 15 37 15			h = 89 km		
Victoria	iP 15 34 56 c		Ottawa		
			eP 11 57 11		
			Penticton	SEPTEMBER 8	
			eP 11 54 50	U.S.C.G.S.	
SEPTEMBER 6	U.S.C.G.S.	Resolute	P 11 54 16	52.5N, 158.8E	
64.7N, 86.4W			Shawinigan Falls	Kamchatka	
Southampton Island			eP 11 57 12	H = 14 32 00.3	
Region				h = 29 km	
H = 21 24 26.4				Alberni	
h = 25 km				eP 14 40 25	
Mag 5.5 (Dom. Obs.)		SEPTEMBER 7	Victoria	Halifax	
Montreal			iP 14 40 34 c	iP 14 43 50 c	
e 21 29 10				Ottawa	
Halifax	P 21 29 50	SEPTEMBER 7		eP 14 43 21 c	
S 21 34 40				Penticton	
Ottawa				iP 14 40 46	
eP 21 29 07				Resolute	
Resolute	iP _n 21 26 53			iP 14 40 09 c	
S _n 21 28 38				Seven Falls	
Lg 21 29 37				iP 14 43 23 c	
D = 1160 km				Shawinigan Falls	
Seven Falls				iP 14 43 22 c	
eP 21 29 04					
Shawinigan Falls					
eP 21 29 13					
i 21 31 28					
e 21 33 04					
e 21 34 51					

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SEPTEMBER 9	U.S.C.G.S.	SEPTEMBER 10	Canadian Arctic	Victoria
	71.5N, 2.4W	H = 07 53 00.5	eP ₁ 17 52 49.9	eS ₁ 17 53 09.9
		Mag 2.2	D = 157 km	
	Jan Mayen Island	Resolute		
	region	H = 16 19 15.9	P ₁ 07 53 32	SEPTEMBER 10
		h = 23 km	S ₁ 07 53 56	H = 19 21 04
		Shawinigan Falls	D = 197 km	Mag 2.5
		eP 16 27 03		Alberni
				eP 19 21 40.5
SEPTEMBER 9	Halifax	SEPTEMBER 10	U.S.C.G.S.	Victoria
	4.0N, 122.6E	H = 10 44 51.2	iP ₁ 19 21 19.3	iS ₁ 19 21 34.7
	Ottawa	h = 629 km	D = 99 km	
		Shawinigan Falls		
	eP 18 00 10 d	eP' 11 03 00	Halifax	
		i 11 05 30	Ottawa	SEPTEMBER 10
				Ottawa
SEPTEMBER 9	U.S.C.G.S.	eP' 11 02 49	iP 20 56 55 c	
	71.7N, 1.3W	i 11 05 18		
	Jan Mayen Island	Shawinigan Falls		
	region	eP' 11 02 53 c	SEPTEMBER 11	
	H = 20 04 32.7	H = 04 29 13.6	H = 04 29 13.6	
	h = 23 km	Mag 2.5	Mag 2.5	
	Ottawa	Alberni		
	eP 20 12 30 d	iP _n 04 29 41.3		
		iS _n 04 30 02.3		
Seven Falls		D = 172 km		
eP 20 12 10		Near Seattle		
Shawinigan Falls		Washington, U.S.A.		
eP 20 12 19		H = 15 06 32.5	iP ₁ 04 29 23.3	
		h = 25 km	iS ₁ 04 29 30.9	
		Mag 5	D = 62 km	
		Alberni		
SEPTEMBER 10	iP ₂ 15 07 05.2 c			
	Victoria	SEPTEMBER 12		
	iP ₁ 15 06 49.0 c	U.S.C.G.S.		
	D = 126 km	60.8N, 151.9W		
		Southern Alaska		
		H = 02 44 48.1		
		h = 230 km		
Crete		Alberni		
H = 00 19 08.4		eP 02 49 00		
h = 10 km		Halifax		
Ottawa		eP 02 53 37		
eP 00 30 48		Ottawa		
Seven Falls		iP 02 52 5		
eP 00 30 27		Resolute		
Shawinigan Falls		P 02 49 51		
eP 00 30 34				

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SEPTEMBER 12	Resolute	SEPTEMBER 14	U.S.C.G.S.
Seven Falls	iP 03 19 54d	35.1S, 106.0W	
iP 02 52 58c	Victoria	South Pacific Ocean	
Shawinigan Falls	eP 03 20 05	H = 04 57 12.5	
eP 02 52 55		h = 40 km	
Victoria	SEPTEMBER 13	Ottawa	
iP 02 49 13d	U.S.C.G.S.	iP 05 09 46	
	13.8N, 90.3W	Shawinigan Falls	
Alberni	Guatemala	eP 05 09 55	
eP 06 03 32	H = 17 51 10.8		
Victoria	Ottawa	SEPTEMBER 14	
eP 06 03 41d	eP 17 57 45	U.S.C.G.S.	
	Shawinigan Falls	20.9S, 174.1W	
SEPTEMBER 12	eP 17 58 03	Tonga Islands	
U.S.C.G.S.		H = 23 18 35.1	
27.3N, 128.4E	SEPTEMBER 14	h = 25 km	
Ryukyu Islands	U.S.C.G.S.	Victoria	
H = 12 17 08.1	16.9N, 122.3E	iP 23 31 03c	
h = 48 km	Luzon, Philippine	SEPTEMBER 15	
Mag 6 1/2	Islands	Victoria	
Alberni	H = 00 34 25.3	eP 07 15 12	
eP 12 29 16	h = 50 km	SEPTEMBER 15	
Resolute	Victoria	U.S.C.G.S.	
iP 12 28 45c	eP 00 47 37	21.4N, 142.9E	
S 12 38 13		Volcano Islands region	
Victoria	SEPTEMBER 14	H = 17 57 42.7	
iP 12 29 22c	U.S.C.G.S.	h = 361 km	
	19.6N, 70.3W	Alberni	
SEPTEMBER 12	Dominican Republic	iP 18 08 52	
U.S.C.G.S.	H = 01 53 32.1	Victoria	
7.0S, 117.0E	h = 103 km	iP 18 08 59c,s,e	
Java Sea	Halifax	SEPTEMBER 17	
H = 16 02 05.8	P 01 58 51	U.S.C.G.S.	
h = 611 km	Ottawa	49.3N, 155.4E	
Halifax	eP 01 58 58	Kurile Islands	
iP' 16 20 33c	iT 02 04 00	H = 07 52 50.8	
i 16 23 18	Shawinigan Falls	h = 35 km	
Seven Falls	eP 01 59 05	Alberni	
eP' 16 20 22	Victoria	eP 08 01 43	
i 16 23 10	eP 02 02 25	Halifax	
SEPTEMBER 13	SEPTEMBER 14	P 08 05 02	
U.S.C.G.S.	Halifax	Ottawa	
27.0N, 140.2E	P 02 22 09	eP 08 04 34c	
Bonin Islands Region	Shawinigan Falls	Resolute	
H = 03 09 09.7	eP 02 21 32	iP 08 01 29	
h = 439 km		iP 08 08 23	

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Shawinigan Falls	Seven Falls	SEPTEMBER 21
iP 08 04 35c	eP' 09 59 46	U.S.C.G.S.
Victoria	i 10 03 00	10.7N, 88.9W
eP 08 01 50	Shawinigan Falls	Off Coast of
	eP' 09 59 44	El Salvador
SEPTEMBER 17		H = 03 44 25.0
U.S.C.G.S.	SEPTEMBER 19	h = 60 km
49.4N, 155.2E	U.S.C.G.S.	Ottawa
Kurile Islands	20.5S, 65.4W	eP 03 51 29
H = 08 05 29.5	Southern Bolivia	Shawinigan Falls
h = 28 km	H = 02 01 53.0	eP 03 51 46
Mag 6	h = 118 km	
Alberni	Seven Falls	SEPTEMBER 21
eP 08 14 23	iP 02 12 44c	U.S.C.G.S.
Halifax	i 02 12 52	53.4N, 166.1W
eP 08 17 40c	Ottawa	Fox Islands
iP 08 17 14c	SEPTEMBER 19	H = 10 38 31.0
Resolute	U.S.C.G.S.	h = 38 km
P 08 14 08	15.6N, 120.0E	Banff
i 08 21 03	Luzon Island	eP 10 44 44
Shawinigan Falls	H = 03 39 40.9	Ottawa
iP 08 17 16c	h = 97 km	eP 10 48 04
Victoria	Resolute	Shawinigan Falls
iP 08 14 30c	eP 03 52 20	eP 10 48 10
	eS 04 03 00	Victoria
SEPTEMBER 17		eP 10 44 20
U.S.C.G.S.	SEPTEMBER 19	SEPTEMBER 21
20.9S, 174.5W	U.S.C.G.S.	U.S.C.G.S.
Tonga Islands	6.9N, 77.5W	26.5N, 124.8E
H = 19 56 11.1	Columbia-Panama	East China Sea
h = 28 km	Border	H = 16 08 14.7
Mag 6	H = 19 01 25.4	h = 207 km
Alberni	h = 66 km	Victoria
eP 20 08 40	Mag 6	iP 16 20 24d
Victoria	Ottawa	
eP 20 08 36	iP 19 08 45c	SEPTEMBER 22
	Resolute	Victoria
eP 19 12 25	eP 19 12 25	eP 02 16 11
eS 19 21 23	eS 19 21 23	
Seven Falls	Seven Falls	SEPTEMBER 22
eP 19 09 03	eP 19 09 03	Victoria
Shawinigan Falls	Shawinigan Falls	eP 02 22 42
eP 19 08 56	eP 19 08 56	
Victoria	Victoria	
eP 19 11 07	eP 19 11 07	

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SEPTEMBER 22	SEPTEMBER 24	Shawinigan Falls
U.S.C.G.S.	U.S.C.G.S.	iP 00 43 44
3.3S, 29.3E	41.6N, 179.3W	i 00 44 13
Belgian Congo	New Zealand region	Victoria
H = 09 05 36.8	H = 11 06 39.2	eP 00 45 06
h = 28 km	h = 43 km	
Mag 6 1/4	Ottawa	SEPTEMBER 26
Banff	iP 11 25 29d	U.S.C.G.S.
eP 09 24 36	Shawinigan Falls	32.4N, 131.7E
Victoria	eP' 11 25 33d	Near Coast of
eP 09 24 47		Kyushu, Japan
SEPTEMBER 22	SEPTEMBER 24	H = 11 36 21.7
U.S.C.G.S.	U.S.C.G.S.	h = 15 km
2.8S, 29.8E	2.3S, 73.3W	Victoria
Congo	Northern Peru	iP 11 48 06c
H = 09 14 58.0	H = 13 58 23.1	
h = 20 km	h = 122 km	SEPTEMBER 26
Banff	Ottawa	U.S.C.G.S.
eP 09 33 57	iP 14 07 01d	51.6N, 172.2W
Victoria	Shawinigan Falls	Fox Islands
eP 09 34 07	eP 14 07 11d	H = 15 13 25.8
SEPTEMBER 22	SEPTEMBER 25	h = 44 km
U.S.C.G.S.	U.S.C.G.S.	Ottawa
51.5N, 168.8W	19.5N, 145.6E	eP 15 23 29
Fox Islands	Mariana Islands	Resolute Bay
H = 22 47 00.6	H = 17 30 18.4	eP 15 20 39?
h = 33 km	h = 95 km	Seven Falls
Ottawa	Resolute Bay	eP 15 23 39
eP 22 56 53	iP 17 42 15c?	Shawinigan Falls
Shawinigan Falls		eP 15 23 35
eP 22 56 58c	Shawinigan Falls	Victoria
SEPTEMBER 23	iP 18 51 24	eP 15 19 44
Halifax		SEPTEMBER 26
iP 20 21 50.2c	SEPTEMBER 26	U.S.C.G.S.
	U.S.C.G.S.	15.9S, 72.9W
SEPTEMBER 23	27.4S, 68.2W	Southern Peru
U.S.C.G.S.	Argentina	H = 16 58 13.9
3.5S, 67.2W	H = 00 32 05.0	h = 115 km
Argentina	h = 25 km	Ottawa
H = 23 17 11.5	Ottawa	eP 17 08 19
h = 298 km	eP 00 43 37	Seven Falls
Halifax	i 00 44 07	eP 17 08 31c
iP 23 28 01d	Seven Falls	Shawinigan Falls
	eP 00 43 47	eP 17 08 27
		Victoria
		eP 17 10 06

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SEPTEMBER 27	Victoria	SEPTEMBER 29
Shawinigan Falls	eP 06 40 06	U.S.C.G.S.
eP 03 59 31c		32.5S, 70.2W
SEPTEMBER 27	Alberni	Central Chile
Victoria	eP 10 14 57	H = 22 12 18.8
iP 05 20 06c		h = 25 km
SEPTEMBER 27	Shawinigan Falls	Shawinigan Falls
U.S.C.G.S.	eP 22 24 21	
14.4N, 145.8E		SEPTEMBER 30
Mariana Islands	U.S.C.G.S.	U.S.C.G.S.
H = 11 18 52.9	18.9N, 144.7E	26.9N, 127.6E
h = 469 km	Mariana Islands	Ryukyu Islands
h = 109 km	H = 18 35 52.2	H = 02 20 47.9
Resolute Bay	Mag 6 1/4	h = 100 km
iP 18 48 12c	Banff	Resolute Bay
Victoria	eP 11 30 26	iP 02 32 22c?
eP 18 47 53	Halifax	
	eP' 11 36 46.5d	SEPTEMBER 30
SEPTEMBER 28	Resolute Bay	U.S.C.G.S.
U.S.C.G.S.	iP 11 30 13d	49.3N, 129.3W
18.0S, 178.8W	eS 11 39 32?	Seven Falls
Fiji Islands	eP' 11 36 32	Off Coast of
H = 17 34 58.8	Shawinigan Falls	Vancouver Island
h = 705 km	eP' 11 36 33	H = 03 20 20.3
Victoria	Victoria	h = 79 km
eP 17 46 16	eP 11 30 01	Alberni
SEPTEMBER 29	Resolute Bay	eP 03 21 15
Resolute	iP 12 43 44	Victoria
eP 00 47 41?		eP 03 21 15
SEPTEMBER 29	Resolute Bay	SEPTEMBER 30
U.S.C.G.S.	U.S.C.G.S.	U.S.C.G.S.
17.3S, 68.5W	14.9N, 90.3W	49.2N, 129.7W
Peru-Bolivia Border	Guatemala	Vancouver Island
H = 06 27 56.3	H = 18 54 23.0	region
h = 115 km	h = 56 km	H = 06 35 08.9
Halifax	Banff	h = 55 km
iP 06 38 15.5c	eP 19 02 09	Alberni
Ottawa	Ottawa	eP 06 35 59
iP 06 38 15c	eP 19 00 59	Resolute Bay
Resolute Bay	Resolute Bay	eP 06 41 20?
iP 06 41 04c?	iP 19 04 27	eS 06 46 10?
eS? 06 51 58	eS? 19 12 32?	Victoria
Seven Falls	Shawinigan Falls	eP 06 36 11
iP 06 38 25c	eP 19 01 11	Victoria
Shawinigan Falls	Victoria	eP 19 02 22
iP 06 38 22c		

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DOMINION OBSERVATORIES

EARTHQUAKES IN EASTERN CANADA
AND ADJACENT AREAS

The following disturbances were recorded during the third quarter of 1960. The times of observed phases are given at their respective chronological positions in the text of this bulletin.

JULY 9 at 07 34 59 U.T. Magnitude 2.6. Epicentre at $46^{\circ} 18'N$; $73^{\circ} 02'W$. About 18 miles east of St. Gabriel, Que.

JULY 23 at 05 49 07 U.T. Magnitude 2.9. Epicentre at $45^{\circ} 43'N$; $73^{\circ} 40'W$. About 15 miles north of Montreal, Que.

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SEISMOLOGICAL BULLETIN - 1960

EARTHQUAKES IN THE CANADIAN ARCTIC

The following disturbances were recorded during the third quarter of 1960. The times of observed phases are given at their respective chronological positions in the text of this bulletin.

JULY 9 at 19 23 09 U.T. Magnitude 2.2. Originated 115 km from Resolute, N.W.T.

AUGUST 6 at 06 22 -- U.T. Magnitude 2.5 - 3.5. Originated 100 - 200 km from Resolute, N.W.T.

AUGUST 13 at 06 40 31 U.T. Magnitude 1.8. Originated 97.4 km from Resolute, N.W.T.

SEPTEMBER 4 at 10 34 04 U.T. Magnitude 2.6. Originated 173 km from Resolute, N.W.T. The seismic trace is abnormal and may have been the result of more than one disturbance. The above interpretation is therefore doubtful.

SEPTEMBER 6 at 21 24 26.4 U.T. Magnitude 5.5. Epicentre at $64.7N$ $86.4W$. Depth 25 km. In the Southampton Island region.

SEPTEMBER 10 at 07 53 01. Magnitude 2.2. Originated 197 km from Resolute, N.W.T.

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DOMINION OBSERVATORIES

EARTHQUAKES IN WESTERN CANADA
AND ADJACENT AREAS

The following disturbances were recorded during the third quarter of 1960. The times of observed phases are given at their respective chronological positions in the text of this bulletin. The quality (Q) of the epicentre is indicated by a letter from "a" meaning an excellent fit of the observed data to "d" meaning a very poor solution.

JULY 3 at 11 02 31.5 U.T. Epicentre at 48.3N, 123.6W, St. of Juan de Fuca; or at 48.7N, 123.2W, North San Juan Island. Q=c.

JULY 4 at 04 28 33 U.T. Magnitude 6 1/2 - 6 3/4. Epicentre at 52N, 131 1/2W. Queen Charlotte Islands. Q=b.

JULY 4 at 08 11 50.4 U.T. Epicentre at 52N, 131W. Queen Charlotte Islands. Q=c.

JULY 4 at 08 51 20 U.T. Epicentre at 52N, 131W. Queen Charlotte Islands. Q=d.

JULY 4 at 11 13 17 U.T. Epicentre at 52N, 130 1/2W. Queen Charlotte Islands. Q=d.

JULY 4 at 12 51 47 U.T. Epicentre at 52N, 131W. Queen Charlotte Islands. Q=d.

JULY 4 at 13 10 05 U.T. Magnitude 6. Epicentre at 52N, 131W. Queen Charlotte Islands. Q=d.

JULY 4 at 18 21 53.4 U.T. Epicentre at 52N, 132W. Queen Charlotte Islands? Q=d.

JULY 6 at 07 03 51.2 U.T. 32 km. from Victoria.

JULY 7 at 20 59 15.0 U.T. 26 km. from Victoria.

JULY 10 at 23 27 44.0 U.T. 27 km. from Victoria.

JULY 11 at 01 31 34.8 U.T. 83 km. from Victoria.

JULY 11 at 21 59 43 U.T. 158 km. from Penticton.

JULY 12 at 05 24 03.6 U.T. 87 km. from Penticton.

JULY 12 at 13 22 11.4 U.T. Epicentre at 48.4N, 125W. Off west coast. Q=c.

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JULY 15 at 21 07 09.7 U.T. Magnitude 2 3/4. 290 km. from Victoria.

JULY 17 at 07 11 50.8 U.T. 31 km. from Banff.

JULY 18 at 09 46 29.8 U.T. 253 km. from Victoria.

JULY 18 at 23 23 09.1 U.T. Magnitude 1.6. 52 km. from Penticton.

JULY 20 at 02 12 13.0 U.T. Magnitude 1 1/2. 178 km. from Penticton.

JULY 20 at 06 54 13.4 U.T. 30 km. from Alberni.

JULY 20 at 21 38 17.5 U.T. Magnitude 2 1/2. 172 km. from Penticton.

JULY 21 at 00 20 49.7 U.T. Magnitude 2 1/2. 186 km. from Penticton.

JULY 21 at 19 09 55.5 U.T. Magnitude 3? 213 km. from Penticton.

JULY 22 at 07 18 05.4 U.T. Magnitude 4 1/4. 367 km. from Penticton.

JULY 22 at 14 22 43.8 U.T. Magnitude 2 3/4. 172 km. from Penticton.

JULY 22 at 23 45 45.9 U.T. Magnitude 1 1/2. 108 km. from Victoria.

JULY 23 at 17 54 19.0 U.T. Magnitude 2. 127 km. from Victoria.

JULY 25 at 20 06 31.5 U.T. 148 km. from Penticton.

JULY 26 at 18 46 31.4 U.T. Magnitude 1. 28 km. from Banff.

JULY 27 at 15 36 33 U.T. Magnitude 1 1/2. 25 km. from Banff.

JULY 27 at 16 08 56 U.T. Magnitude 1 1/4. 26 km. from Penticton.

JULY 27 at 16 44 36.8 U.T. 68 km. from Alberni and 52 km. from Penticton.

JULY 28 at 07 21 54.3 U.T. Magnitude 2 1/4. Epicentre at 47.8N, 121.8W. 40 km. northeast of Seattle, Washington, U.S.A. Q=b.

JULY 28 at 09 10 14.0 U.T. Epicentre at 48 1/2N, 122W. 40 km. southeast of Bellingham, Washington, U.S.A. Q=c.

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JULY 28 at 20 40 53.5 U.T. 160 km. from Penticton.

JULY 29 at 20 53 11.8 U.T. 185 km. from Penticton.

JULY 30 at 06 06 46.6 U.T. 39 km. from Penticton.

JULY 30 at 20 24 48.4 U.T. 113 km. from Penticton.

AUGUST 1 at 01 45 43.7 U.T. Magnitude 2. Epicentre at 48.9N, 121.7W. Northeast of Mount Baker. Q=c.

AUGUST 1 at 02 00 42.7 U.T. 10 km. from Penticton.

AUGUST 2 at 03 46 30 U.T. 85.3 km. from Penticton.

AUGUST 2 at 06 51 14.9 U.T. Magnitude 2. 73 km. from Penticton.

AUGUST 2 at 16 51 16.2 U.T. Magnitude 2. 66 km. from Penticton.

AUGUST 4 at 01 37 53.8 U.T. Magnitude 2 3/4. 270 km. from Penticton.

AUGUST 5 at 03 24 32.3 U.T. Magnitude 2 3/4? 117 km. from Victoria.

AUGUST 9 at 10 47 18.9 U.T. Magnitude 2 3/4. Epicentre at 48 3/4N, 121 3/4W. Near Mount Baker. Q=b.

AUGUST 12 at 03 38 17.2 U.T. Magnitude 2 1/2. 200 km. from Penticton.

AUGUST 12 at 16 01 33.1 U.T. Magnitude 1 3/4. 113 km. from Victoria and 67 km. from Alberni.

AUGUST 14 at 07 37 28.8 U.T. Magnitude 2. Epicentre at 48.7N, 124.8W. Near Cloo-oose. Q=c.

AUGUST 16 at 13 27 53.5 U.T. Magnitude 4. Epicentre at 47.7N, 116.3W. North of Kellogg, Montana, U.S.A. Q=c.

AUGUST 17 at 06 39 17.6 U.T. 64 km. from Alberni.

AUGUST 18 at 18 30 31.8 U.T. Magnitude 2.4. 225 km. from Penticton.

AUGUST 18 at 21 10 54.7 U.T. Magnitude 2.0. 139 km. from Penticton.

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AUGUST 18 at 22 59 45.7 U.T. Magnitude 2.4. 164 km. from Penticton.

AUGUST 20 at 18 00 22.0 U.T. 50 km. from Alberni.

AUGUST 20 at 21 34 57.5 U.T. 53 km. from Alberni.

AUGUST 22 at 06 19 19.2 U.T. 380 km. from Penticton.

AUGUST 23 at 21 45 55.1 U.T. 37 km. from Banff.

AUGUST 24 at 18 27 31 U.T. Magnitude 2.4. 172 km. from Penticton.

AUGUST 24 at 20 10 29.4 U.T. Magnitude 2. Epicentre at 47.7N, 122.3W. Near Seattle, Washington, U.S.A. Q=c.

AUGUST 25 at 00 31 43 U.T. Magnitude 2.3. 156 km. from Penticton.

AUGUST 25 recorded at 19 00.6 at Alberni and Victoria.

AUGUST 27 at 19 07 42.4 U.T. 23 km. from Victoria.

AUGUST 30 at 16 33 02.9 U.T. 126 km. from Victoria.

SEPTEMBER 5 at 10 48 00 U.T. Magnitude 2.7. 186 km. from Penticton. Q=d.

SEPTEMBER 5 at 14 31 55 U.T. Magnitude 3.0. Epicentre at 47.7N, 121.6W. East of Seattle, Washington, U.S.A. Q=b.

SEPTEMBER 6 at 13 05 30 U.T. Magnitude 2. 107 km. from Victoria.

SEPTEMBER 7 at 21 52 30 U.T. Magnitude 2.1. 115 km. from Penticton.

SEPTEMBER 10 at 15 06 32.5 U.T. Magnitude 5. Epicentre at 47.5N, 122.7W. Near Seattle, Washington, U.S.A. Felt: Western Washington, U.S.A.

SEPTEMBER 10 at 17 52 26 U.T. Magnitude 2.1. 157 km. from Victoria, 60 km. from Alberni.

SEPTEMBER 10 at 19 21 04 U.T. Magnitude 2.5. Probably aftershock of Seattle, Washington, U.S.A. tremor.

SEPTEMBER 11 at 04 29 13.6 U.T. Magnitude 2.5. 62 km. from Victoria, 172 km. from Alberni.

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SEPTEMBER 30 at 03 20 20.3 U.T. Epicentre at 49.3N, 129.3W.
Off coast of Vancouver Island, B.C.

SEPTEMBER 30 at 06 35 08.9 U.T. Epicentre at 49.2N, 129.7W.
Vancouver Island region, B.C.



SEISMOLOGICAL SERIES

of the

DOMINION OBSERVATORY

Seismological Bulletin
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1960

Seismological Service
of Canada

OTTAWA, CANADA

Department of Mines and Technical Surveys
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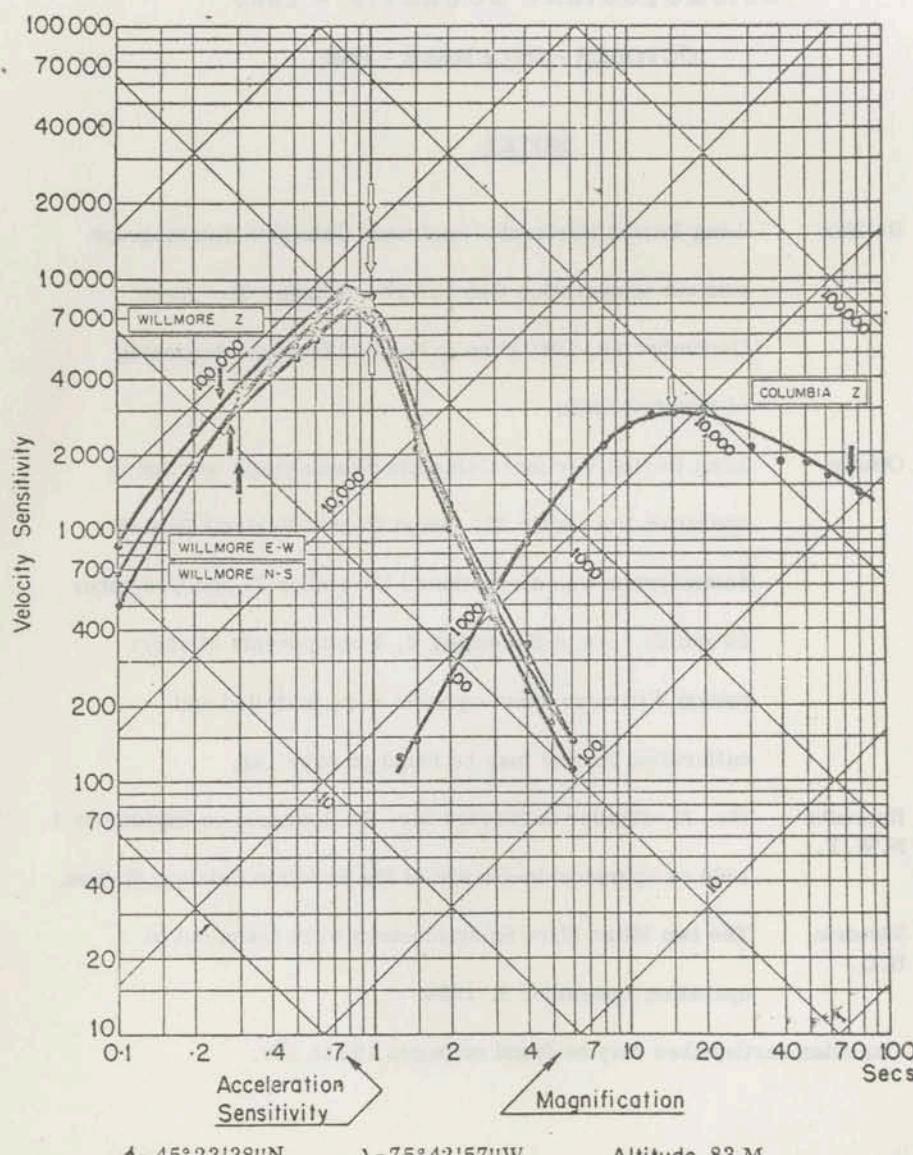
NOTES

1. Halifax Long Period Horizontal east west Columbia Seismograph was out of operation October 17 - October 31. As of December 28, 1960 time to be read from the beginning of minute breaks.
2. Ottawa Long Period Vertical Columbia Seismograph was out of operation November 24. Short Period Vertical Benioff Seismograph was discontinued November 24 and December 24 and 25. As of December 2, 3 components of short period Willmore seismographs were installed and calibration curves may be found on page 148.
3. Resolute Mr. M. Strader succeeded Mr. R. Bourgoin on September 1, N.W.T. 1960 as operator-in-charge of the Resolute Seismic Station.
4. Victoria The two Milne Shaw Seismometers were taken out of B.C. operation December 8, 1960.
5. Canadian earthquakes may be found on pages 193 to 200.

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CALIBRATION CURVES

STATION: OTTAWA



$T_s \uparrow$

$T_g \uparrow$

Date of Calibration: Columbia Dec-12-1956
 Willmore Dec-2-1960
 Willmore N-S-Dec-9-1960
 Willmore E-W-Dec-9-1960

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OCTOBER 1	Halifax	OCTOBER 3
U.S.C.G.S.	P 16 21 44 c (?)	U.S.C.G.S.
23.3N, 94.6E	Ottawa	29.8N, 68.2E
Burma	iP 16 21 00	West Pakistan
H = 03 00 50.2	Resolute	H = 00 49 11.8
h = 67 km	eP 16 18 08 ?	h = 36 km
Resolute	eS 16 24 09 ?	Resolute
iP 03 13 07 c	Seven Falls	eP 01 00 54 ?
	eP 16 21 09	
	Shawinigan Falls	
	eP 16 21 04	OCTOBER 3
OCTOBER 1	Victoria	U.S.C.G.S.
U.S.C.G.S.	iP 16 17 15 d,S,W	36.8N, 140.1E
34.4N, 26.2E	Near Crete	Honshu, Japan
	H = 05 30 38.1	H = 02 33 28.3
	h = 36 km	h = 60 km
	Halifax	Resolute
	P 05 41 26	eP 02 43 53
	Ottawa	
	eP 05 42 08	
	Resolute	
	iP 05 41 07 c ?	OCTOBER 2
	Seven Falls	Resolute
	eP 05 41 45	eP 04 57 09
	Shawinigan Falls	
	eP 05 41 53	OCTOBER 2
OCTOBER 1	Resolute	Resolute
Resolute	eP 05 57 54	eP 05 57 54
eP 07 02 09	OCTOBER 2	OCTOBER 3
iS? 07 04 59	Resolute	U.S.C.G.S.
	eP 06 32 30	38.7S, 75.3W
		Near coast of
		southern Chile
		H = 05 10 37.3
		h = 43 km
		Ottawa
		eP 05 23 05
		Seven Falls
		eP 05 23 14
		Shawinigan Falls
		eP 05 23 11
OCTOBER 1	Victoria	OCTOBER 4
	eP 16 08 44	Canadian Arctic
		H = 02 27 50.3
		Mag 1.9
		Resolute
		P ₁ 02 28 31
		S ₁ 02 29 02
		D = 254 km
OCTOBER 1	U.S.C.G.S.	
	52.2N, 172.6W	
	Fox Islands	
	H = 16 10 56.9	
	h = 41 km	
	Mag 6	
	Alberni	
	eP 16 17 06	

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OCTOBER 4	OCTOBER 6	OCTOBER 7
Canadian Arctic H = 04 04 29.7 Mag 1.9	U.S.C.G.S. 38.3S, 74.9W Near coast of southern Chile H = 16 16 37.6 h = 53 km D = 217 km	U.S.C.G.S. 7.4S, 130.7E Banda Sea H = 15 18 30.8 h = 45 km Mag 6 1/2 Ottawa eP 16 29 03 Seven Falls eP 16 29 13 Shawinigan Falls eP 16 29 10 d
Resolute P ₁ 04 05 04.5 S ₁ 04 05 31		Resolute iP 15 32 51 S 15 43 24 e 15 48 12
		Halifax P' 15 37 56 Ottawa eP' 15 37 39
OCTOBER 5 48°36'N, 123°52'W		Seven Falls eP' 15 37 45
Southwestern Vancouver Island H = 02 59 47 Mag 2.4		Victoria eP 15 32 42 H = 19 55 42.2 h = 63 km
Alberni iP ₁ 02 59 59.3 iS ₁ 03 00 09.5 D = 80 km	U.S.C.G.S. 58.2N, 31.6W North Atlantic Ocean H = 19 55 42.2	Seven Falls eP 20 00 50 c
Victoria iP ₁ 02 59 58.2 iS ₁ 03 00 08.8 D = 72 km	Halifax iP 20 00 50 c Ottawa eP 20 01 44 Resolute eP 20 01 31 c ?	OCTOBER 8 H = 00 37 23 Mag 2.0 Alberni iP ₁ 00 37 32.3 iS ₁ 00 37 39.1
OCTOBER 5 H = 08 24 58 Mag 1.9		Seven Falls D = 56 km
Victoria eP ₁ 08 25 14.0 eS ₁ 08 25 27.1 D = 108 km		
OCTOBER 6	OCTOBER 7	OCTOBER 8
U.S.C.G.S. 52.2N, 107.2E	U.S.C.G.S. 58.1N, 31.9W North Atlantic Ocean H = 03 15 34.9	U.S.C.G.S. 16.7N, 97.9W Oaxaca Mexico H = 01 51 51.2
Lake Baikal region H = 16 19 15.4 h = 46 km		h = 74 km Mag 4 3/4 Ottawa eP 01 58 32 c
Resolute eP 16 28 29 d ? eS? 16 35 56 ?	Resolute eP 03 21 24 eS? 03 26 11 Seven Falls eP 03 21 03 Shawinigan Falls eP 03 21 14	Resolute iP 02 01 38 Seven Falls eP 01 59 03 Shawinigan Falls iP 01 58 50 ? c

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OCTOBER 8	OCTOBER 8	OCTOBER 9
U.S.C.G.S. 40.0N, 129.7E	U.S.C.G.S. 7.9N, 92.9E	Penticton eP 20 36 44
Sea of Japan H = 05 53 01.1	Nicobar Islands H = 20 40 06.6	
h = 608 km Mag 6 1/2	h = 84 km	OCTOBER 10 H = 15 06 38 Mag 2.5
Resolute iP 06 05 10 c	Resolute eP 20 53 36	Penticton eP ₁ 15 07 04.7 eS ₁ 15 07 25.0
iP 06 02 26 c	OCTOBER 9 U.S.C.G.S. 40.8N, 141.2E	D = 166 km
iS 06 10 02	Near coast of northern Honshu, Japan H = 09 00 42.0	OCTOBER 10 U.S.C.G.S. 47.0N, 153.5E
Seven Falls eP 06 05 06	Shawinigan Falls iP 06 05 07 ? c	Ryukyu Islands Mag 6 1/4 Halifax eP 09 13 39.5 c (?)
		H = 16 15 58.9 h = 22 km
	OCTOBER 8 Canadian Arctic H = 06 49 20.4	Penticton iP 09 13 20 d
	h = 15 km Mag 3.2	Victoria eP 16 24 30
Resolute P _n 06 50 20	Resolute eP 09 11 15	eP 16 25 16
P ₁ 06 50 31	iP 09 10 29 d ?	OCTOBER 10 H = 23 24 25
S ₁ 06 51 03.5	iS 09 18 28	Mag 2.5
S ₁ 06 51 24.5	Seven Falls eP 09 13 19	Alberni eP ₁ 23 24 42.2 eS ₁ 23 24 55.0
D = 440 km		D = 105 km
OCTOBER 8	OCTOBER 9	OCTOBER 10 53°N, 133°W
H = 10 54 24.7	U.S.C.G.S. 15.1S, 174.0W	Off southern
Mag 2	Samoa Islands region H = 09 51 19.1	Queen Charlotte Islands H = 23 54 32
Alberni eP ₁ 10 54 49.4	h = 129 km	Mag 4.5
iS ₁ 10 55 01.1	Penticton eP 10 03 20	Alberni iP _n 23 55 57.2
Victoria iP ₁ 10 54 32.9	iS ₁ 10 54 49.4	iS _n 23 56 20.3
	Victoria eP 10 03 06	D = 640 km
OCTOBER 9		OCTOBER 9 Ottawa eP 10 11 35

DOMINION OBSERVATORIES

Penticton	OCTOBER 11	OCTOBER 12
eP _n 23 56 43.7	46.0N, 122.2W	15.1S, 173.2W
D = 1050 km	Northeast of Portland	Samoa Islands region
Victoria	Oregon, U.S.A.	H = 09 11 16.4
iP _n 23 56 14.3	H = 11 54 48	h = 25 km
eS _n 23 56 41.9	Mag 3.5	Penticton
D = 780 km	Alberni	eP 09 23 26
	eP _n 11 55 45.8	
	eS _n 11 56 31.5	
OCTOBER 11	D = 418 km	OCTOBER 13
U.S.C.G.S.	Penticton	U.S.C.G.S.
38.1N, 107.6W	eP _n 11 55 45.5	54.8N, 161.2E
Western Colorado	eS _n 11 56 40.2	Kamchatka
H = 08 05 30.5	D = 418 km	H = 14 52 34.7
h = 49 km	Victoria	h = 35 km
Mag 4 3/4	eP _n 11 55 30.0	Mag 6 3/4
Alberni	eS _n 11 56 04.4	Alberni
eP 08 09 24	D = 290 km	iP 15 00 40
Halifax		Halifax
eP 08 11 56		eP 15 04 08 c
Ottawa	OCTOBER 11	Ottawa
eP 08 10 51 c	H = 12 48 15	eP 15 03 38
Penticton	Mag 3.1	Penticton
eP 08 08 47	Penticton	eP 15 01 01
Resolute	iP _n 12 49 12.8	Resolute
eP 08 12 38	iS _n 12 50 05.3	eP 15 00 21 c
Shawinigan Falls	D = 418 km	eS 15 06 33
eP 08 11 11		Seven Falls
OCTOBER 11		eP 15 03 40
North of Portland		Shawinigan Falls
Oregon, U.S.A.	48.0N, 123.6W	eP 15 03 40 c
H = 10 41 51	Southwest of Port Angeles	
Mag 3.1	Washington, U.S.A.	
Penticton	H = 05 17 14	OCTOBER 13
eP _n 10 42 51.9	Mag 2.3	U.S.C.G.S.
eS _n 10 43 42.0	Alberni	20.7N, 144.8E
D = 440 km	iP ₁ 05 17 41.3	Mariana Islands
Victoria	iS ₁ 05 18 05.3	region
eP _n 10 42 31.8	D = 168 km	H = 16 45 56.2
eS _n 10 43 09.7	Victoria	h = 25 km
D = 275 km	iP ₁ 05 17 22.7	Resolute
	iS ₁ 05 17 29.8	eP 16 57 53 c?
	D = 58 km	

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OCTOBER 13	Resolute	OCTOBER 14	Seven Falls
	eP 20 26 26	U.S.C.G.S.	eP 21 29 22
		37.9S, 74.7W	Shawinigan Falls
		Off coast of Chile	eP 21 29 18 d
OCTOBER 14	U.S.C.G.S.	H = 17 48 28.5	Victoria
	10.1N, 125.3E	h = 25 km	eP 21 25 28
	Near coast of Leyte	Mag 5 1/4	
	Philippine Islands	Halifax	OCTOBER 14
	H = 00 58 05.0	eP 18 00 54	U.S.C.G.S.
	h = 17 km	Ottawa	55.5N, 35.2W
	Resolute	eP 18 00 55	North Atlantic Ocean
	eP 01 11 14	Seven Falls	H = 22 55 41.7
OCTOBER 14	Canadian Arctic	eP 18 01 05	h = 40 km
	H = 08 11 50.8	Shawinigan Falls	Halifax
	Mag 2.5	eP 18 01 02	eP 23 00 23
	Resolute	Ottawa	Ottawa
	P ₁ 08 12 00	eP 23 01 27	eP 23 01 46
	S ₁ 08 12 07	Resolute	eP 23 01 05
	D = 57.4 km	P _n 20 47 21.8	OCTOBER 15
OCTOBER 14		P ₁ 20 47 24.0	U.S.C.G.S.
	U.S.C.G.S.	i 20 47 27.2	55.6N, 35.6 W
	59.8N, 136.4W	S _n 20 47 44.5	North Atlantic Ocean
	Southeastern Alaska	S ₁ 20 47 49.4	H = 01 54 09.2
	H = 13 12 07.9	D = 210 km	h = 37 km
	h = 32 km	Ottawa	Ottawa
	Alberni	eP 01 59 53	eP 01 59 53
	e 13 18 33	Resolute	Resolute
	Ottawa	eP 02 00 12	eP 02 00 12
	eP 13 19 27	Fox Islands	Seven Falls
	Penticton	H = 21 19 11.4	eP 01 59 17
	e 13 18 31	h = 50 km	Shawinigan Falls
	Resolute	Mag 6 1/2	eP 01 59 31
	iP 13 16 53 d	Alberni	OCTOBER 15
	Seven Falls	eP 21 25 21	Canadian Arctic
	eP 13 19 38	Halifax	H = 02 48 47.2
	Shawinigan Falls	iP 21 29 56 c	h = 24 km
	eP 13 19 32	Ottawa	Mag 1.5
	Victoria	iP 21 29 13 d	Resolute
	eP 13 15 23	Penticton	eP 02 49 12.3
		eP 21 25 46	P _n 02 49 13.8
		Resolute	P ₁ 02 49 30.9
		iP 21 26 24	S _n 02 49 34
		PP? 21 27 54	S ₁ 02 49 34
		eS 21 32 10	D = 164 km

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OCTOBER 15	OCTOBER 16	OCTOBER 17
U.S.C.G.S. 23.1N, 123.4E	U.S.C.G.S. 63.0N, 151.7W	U.S.C.G.S. 5.1N, 78.1W
Off coast of Formosa H = 11 30 02.1	Central Alaska H = 17 53 26.6	Near coast of Columbia H = 15 56 08.6
h = 60 km	h = 100 km	h = 25 km
Resolute eP 11 42 05 c?	Resolute eP 17 58 18	Shawinigan Falls eP 16 04 00
	Shawinigan Falls eP 18 01 34	
OCTOBER 16	OCTOBER 16	OCTOBER 17
U.S.C.G.S. 9.4N, 90.6W	U.S.C.G.S. 52.4N, 153.4E	U.S.C.G.S. 30.7N, 40.4W
Off coast of Nicaragua H = 09 34 00.9	Kurile Islands H = 19 20 39.6	Atlantic Ocean H = 18 05 32.7
h = 25 km Mag 5	h = 324 km	h = 65 km
Ottawa iP 09 41 21 c	Resolute IP 19 28 31 d	Resolute eP 18 14 33 d?
Penticton eP 09 42 51	Shawinigan Falls eP 19 31 41	Shawinigan Falls eP 18 11 43
Resolute eP 09 44 47		OCTOBER 17
Seven Falls eP 09 41 49	OCTOBER 17	Resolute iP 19 05 59
Shawinigan Falls eP 09 41 39	U.S.C.G.S. 4.8N, 78.4W	
Victoria eP 09 42 41	Off coast of Columbia H = 15 45 36.9	OCTOBER 17
	h = 83 km Mag 4 3/4	U.S.C.G.S. 31.7N, 40.7W
OCTOBER 16	Halifax P 15 53 22	Atlantic Ocean H = 19 02 20.9
Alberni iP 10 17 01	S 15 59 38	h = 47 km
Penticton eP 10 17 48	Ottawa IP 15 53 12 d	Halifax Halifax
Victoria eP 10 17 13	Resolute eP 15 55 14 c	eP 19 07 16 S 19 11 20
	Resolute eP 15 56 44 d?	Resolute eP 19 11 17
	eS 16 05 56	Shawinigan Falls eP 19 08 18
	Seven Falls eP 15 53 29 d	OCTOBER 17
	Shawinigan Falls IP 15 53 23 d	Resolute eP 20 39 06
	Victoria IP 15 55 25 d,S,E	

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OCTOBER 17	OCTOBER 18	OCTOBER 20
U.S.C.G.S. 14.6N 92.8W	U.S.C.G.S. 14.5N, 92.6W	U.S.C.G.S. 11.0S, 164.9E
Mexico - Guatemala border H = 22 15 32.0	Mexico-Guatemala border H = 06 34 11.0	Santa Cruz Islands H = 11 05 38.3
h = 128 km Mag 5 3/4	h = 112 km Resolute eP 06 44 12	Mag 6 1/4 Halifax iP' 11 25 01
Halifax S 22 29 07	Ottawa eP 22 22 08	Penticton eP 11 18 51
Ottawa eP 22 22 08	Penticton eP 22 23 09	Seven Falls iP' 11 24 50 c
Penticton eP 22 24 43	i 22 24 43	Shawinigan Falls eP' 11 24 48
Resolute eP 22 25 30	Resolute P ₁ 00 23 11.5	Victoria eP 11 18 39
Seven Falls eP 22 22 38	S ₁ 00 23 17.5	OCTOBER 20
Shawinigan Falls eP 22 22 28 d	D = 49.2 km	Resolute eP 12 50 24
Victoria IP 22 23 29 d	OCTOBER 19	OCTOBER 20
OCTOBER 17	Resolute eP 05 16 50	Resolute eP 12 57 08 d?
Victoria IP 22 24 52 d	OCTOBER 19	OCTOBER 20
OCTOBER 17	Resolute IP 06 37 41	U.S.C.G.S. 45.3N, 147.0E
Resolute IP 22 27 06 c	OCTOBER 19	Kurile Islands region H = 23 40 08.2
OCTOBER 18	Resolute eP 09 16 19 ?	h = 25 km Resolute IP 23 49 29 d?
U.S.C.G.S. 52.5N, 170.2W	OCTOBER 19	OCTOBER 21
Fox Islands H = 00 21 47.2	Resolute eP 11 38 39 ?	Resolute eP 00 01 15
h = 33 km Mag 4 3/4	OCTOBER 20	OCTOBER 20
Halifax eP 00 32 24	Victoria eP 06 37 34 d	Victoria eP 00 01 15
Ottawa eP 00 31 41	OCTOBER 20	OCTOBER 20
Shawinigan Falls eP 00 31 46 d	Resolute eP ? 08 53 14 ?	Resolute eP ? 08 53 14 ?

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OCTOBER 22	Penticton	OCTOBER 26	Penticton
U.S.C.G.S.	eP 06 42 27	U.S.C.G.S.	eP 17 45 08
10.3S, 161.2E	Resolute		
Solomon Islands	eP 06 41 22		
region	Seven Falls		
H = 08 22 00.9	eP 06 38 14 d	OCTOBER 27	Penticton
h = 93 km	Shawinigan Falls	U.S.C.G.S.	eP 05 33 26
Mag 6 1/4	eP 06 38 23	1.4N, 90.9W	
Halifax		Galapagos Islands	
eP' 08 40 59		region	
Ottawa	OCTOBER 23	H = 05 25 03.6	
eP' 08 40 45	Resolute	h = 46 km	
Resolute	eP 15 52 20	Mag 4 3/4	
eP 08 36 18?		Ottawa	
PP 08 39 32?		eP 05 33 24 d	
eS 08 46 28?	OCTOBER 23		
Seven Falls	Resolute		
eP' 08 40 47	eP 21 58 51		
Shawinigan Falls			
eP' 08 40 48			
Victoria	OCTOBER 24		
eP 08 34 45	U.S.C.G.S.		
	15.0N, 167.4E		
OCTOBER 22	New Hebrides Islands	OCTOBER 27	
Canadian Arctic	region	H = 07 34 59.5	
H = 15 27 36.5		Mag 1.7	
h = 14 km	Penticton	Penticton	
Mag 4.1	iP 07 35 13.7	iP 07 39 59 d	
Resolute	iS ₁ 07 35 34.4	Pentiction	
P _n 15 29 12.5	D = 88 km	iP 22 39 43	
i 15 29 34		Victoria	
S _n 15 30 21	OCTOBER 26	iP 22 39 31 d	
S ₁ 15 30 57	U.S.C.G.S.		
D = 730 km	16.3N, 121.3E		
OCTOBER 23	Luzon Philippine Islands		
U.S.C.G.S.	52.4N, 160.1E		
31.2N, 40.7W	Near coast of Kamchatka		
Atlantic Ocean	H = 10 51 35.8		
H = 06 32 24.9	h = 54 km		
h = 61 km	Resolute		
Halifax	H = 01 48 04.1	eP? 11 04 14?	
eP 06 37 20 d	h = 53 km		
iS 06 41 26	Resolute		
	eP? 01 56 13?		
OCTOBER 26	OCTOBER 27		
Resolute	U.S.C.G.S.		
eP? 12 04 20	71.6N, 8.3W		
	Jan Mayen Island		
	region		
	H = 12 45 40.1		
	h = 70 km		
	Resolute		
	eP 12 50 45		

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OCTOBER 27	Resolute	Seven Falls	Ottawa
eP? 14 43 05?		eP 04 25 54	eP 13 29 36 d
OCTOBER 27		Shawinigan Falls	Penticton
U.S.C.G.S.		eP 04 26 04	eP 13 27 01
71.3N, 8.6W		Victoria	Resolute
Jan Mayen Island	OCTOBER 28	eP 04 27 48	iP 13 26 24
region	U.S.C.G.S.	eS 13 32 54	S _c S? 13 36 08
H = 15 39 20.3	71.5N, 7.7W	Jan Mayen Island	Seven Falls
h = 43 km	region	region	eP 13 29 37 d
Resolute	OCTOBER 28	H = 05 27 16.1	Shawinigan Falls
eP 15 44 30	U.S.C.G.S.	h = 77 km	eP 13 29 36 d
OCTOBER 27	15.2S, 175.0W	Resolute	Victoria
U.S.C.G.S.	Samoa Islands region	eP 05 32 23	iP 13 26 49 c
15.2S, 175.0W	H = 22 27 55.1	OCTOBER 28	Alberni
Samoa Islands region	h = 253 km	U.S.C.G.S.	iP ₁ 19 55 32.9
Banff	Banff	71.3N, 8.4W	iS ₁ 19 55 40.3
iP 22 39 59 d	iP 22 39 38.5	Jan Mayen Island	D = 60 km
Pentiction	h = 61 km	Ottawa	OCTOBER 28
iP 22 39 43	Ottawa	eP 07 54 21	U.S.C.G.S.
Victoria	iP 22 39 31 d	Pentiction	34.4N, 141.1E
		eP 07 55 31	Near coast of Honshu
		Resolute	Japan
		eP 07 51 43	H = 22 29 26.6
OCTOBER 28		Seven Falls	h = 96 km
U.S.C.G.S.		eP 07 53 44	Pentiction
71.3N, 8.6W		Shawinigan Falls	eP 22 40 34
Jan Mayen Island		eP 07 53 54	
H = 04 18 41.9		OCTOBER 29	
h = 48 km		H = 01 47 33.6	
Mag 5 1/2		Mag 2.7	
Banff		Pentiction	
eP 04 27 14		iP ₁ 01 47 57.3	
Halifax		iS ₁ 01 48 15.6	
eP 04 25 54		D = 150 km	
Ottawa			
eP 04 26 21			
Pentiction			
eP 04 27 36			
Resolute			
eP 04 23 48			
Halifax			
eP 04 28 01			
		eP 13 30 03 d	

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OCTOBER 29	OCTOBER 29	OCTOBER 30
U.S.C.G.S. 15.4N, 46.4W	Halifax eP 13 31 34	U.S.C.G.S. 47.5N, 28.7W
North Atlantic Ocean H = 04 17 02.1 h = 38 km	Resolute eP 13 33 38	North Atlantic Ocean H = 08 32 39.1 h = 25 km
Halifax eP 04 23 34	OCTOBER 29	Resolute eP 08 40 04
Ottawa eP 04 24 26	U.S.C.G.S. 12.3N, 121.0E	OCTOBER 30
Penticton eP 04 27 57	Philippine Islands H = 17 11 59.3 h = 65 km	Resolute eP 08 41 32
Resolute eP? 04 27 41 ?	Resolute eP? 17 24 57	OCTOBER 30
Seven Falls eP 04 24 17		Penticton eP 10 41 59
Shawinigan Falls eP 04 24 21	OCTOBER 29	
	U.S.C.G.S. 12.0N, 140.9E	
OCTOBER 29	Mariana Islands region H = 21 44 37.2 h = 25 km	OCTOBER 30
U.S.C.G.S. 15.8S, 172.9W	Resolute eP 21 57 22	U.S.C.G.S. 23.3S, 70.3W
Samoa Islands region H = 09 37 41.6 h = 99 km Mag 5 1/2		Near coast of Chile H = 12 14 36.1 h = 76 km Mag 6 3/4
Penticton eP 09 49 44	OCTOBER 29	Alberni eP 12 27 22
Victoria eP 09 49 32	Penticton eP 23 26 09	Banff eP 12 27 03
	OCTOBER 29	Halifax iP 12 25 32 c?
	H = 23 40 56.9 Mag 2.2	Ottawa eP 12 25 35
OCTOBER 29	Alberni iP 23 41 05.4 iS ₁ 23 41 11.9 D = 53 km	Penticton eP 12 27 06
U.S.C.G.S. 47.4N, 27.6W North Atlantic Ocean H = 11 54 17.4 h = 25 km		Seven Falls eP 12 25 46
Halifax eP 11 59 42	OCTOBER 29	Shawinigan Falls eP 12 25 42 d
Resolute eP 12 01 45	U.S.C.G.S. 49.8N, 156.0E	Victoria eP 12 27 14 c
	Kamchatka H = 23 42 16.4 h = 25 km	
	Resolute eP 23 50 47	

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OCTOBER 30	OCTOBER 30	NOVEMBER 1
U.S.C.G.S. 51.2N, 157.0E	Resolute eP 22 02 51	U.S.C.G.S. 11.1S, 12.7W
Near south coast of Kamchatka H = 16 16 22.9 h = 42 km		Ascension Island region H = 06 15 29.4
Penticton eP 16 25 19	OCTOBER 31	h = 35 km Mag 5
Resolute eP? 16 24 42	U.S.C.G.S. 30.3N, 113.5W	Halifax P 06 26 56
	Gulf of California H = 07 03 43.7 h = 25 km	Ottawa eP 06 27 37
	Resolute eP? 07 11 42	Seven Falls eP 06 27 26
OCTOBER 30	e 07 13 49	Shawinigan Falls eP 06 27 30
Penticton eP 20 04 04	OCTOBER 31	NOVEMBER 1 48°42'N, 123°12'W
	Penticton eP 07 11 17	Gulf Islands, British Columbia H = 06 34 02
OCTOBER 30		Mag 1.7
U.S.C.G.S. 22.8S, 68.0W	OCTOBER 31	Alberni eP ₁ 06 34 23.7
Chile-Bolivia border H = 21 32 47.7 h = 60 km Mag 6 3/4	Banff eP 07 17 21	eS ₁ 06 34 40.0
Alberni eP 21 45 33	Penticton eP 07 17 18	D = 136 km
Banff iP 21 45 16 d i 21 45 43 d	OCTOBER 2	Victoria iP ₁ 06 34 05.6
Halifax iP 21 43 41 d	U.S.C.G.S. 25.3N, 141.3E	iS ₁ 06 34 08.4
Ottawa iP 21 43 17 d	South of Bonin Islands H = 20 50 29.9	D = 23 km
Penticton eP 21 45 21 d i 21 45 47	Resolute eP 21 02 05 c	NOVEMBER 1 47.1N, 126.4W
Resolute eP 21 46 25	OCTOBER 31	Off coast of Washington, U.S.A.
Seven Falls iP 21 43 56 d	U.S.C.G.S. 54.7N, 161.8E	H = 08 37 23
Shawinigan Falls eP 21 43 54 d	Near coast of Kamchatka H = 23 44 18.9	Mag 3.0
Victoria iP 21 45 27 d	Resolute eP 23 52 03	Penticton eP _n 08 38 37.7
		eS _n 08 38 43.7
		D = 561 km
		Victoria eP _n 08 38 05.2
		eS _n 08 38 41.1
		D = 294 km

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NOVEMBER 1	NOVEMBER 1	NOVEMBER 2
Victoria	H = 16 12 41	U.S.C.G.S.
eP 08 53 06	Mag 1.0	57.6N, 153.8W
	Penticton	Kodiak Island Alaska
	iP ₁ 16 12 45.4	H = 15 29 48.8
NOVEMBER 1	iS ₁ 16 12 49.0	h = 96 km
U.S.C.G.S.	D = 30 km	Banff
38.4S, 74.4W		eP 15 34 46
Near coast of Chile		Penticton
H = 08 46 01.9	NOVEMBER 1	eP 15 34 36
h = 97 km	U.S.C.G.S.	Resolute
Mag 6 3/4	50.1N, 153.9E	eP 15 35 30
Banff	Near coast of	Victoria
eP 08 59 21	Kamchatka	eP 15 34 14
Halifax	H = 19 06 22.7	
iP 08 58 23.5 d	h = 162 km	
iS 09 08 42	Halifax	NOVEMBER 2
Ottawa	P 19 18 20	U.S.C.G.S.
iP 08 58 25 d	Resolute	23.1N, 93.8E
Resolute	eP 19 14 46 d	Burma - east
eP' 09 04 35		Pakistan border
Seven Falls		H = 16 31 53.5
iP 08 58 34 d	NOVEMBER 1	h = 126 km
Shawinigan Falls	U.S.C.G.S.	Resolute
iP 08 58 31 d	45.1N, 111.2W	iP 16 44 05 d ?
Penticton	Hebgen Lake Montana	
eP 08 59 44	H = 22 26 52.7	NOVEMBER 2
e 09 03 16	h = 38 km	U.S.C.G.S.
Victoria	Banff	10.9S, 164.9E
eP 08 59 27	e 22 30 20	Santa Cruz Islands
	Penticton	H = 17 14 49.3
NOVEMBER 1	eP 22 28 35	h = 25 km
U.S.C.G.S.	iL 22 30 00	Alberni
5.5S, 102.4E	Resolute	eP 17 27 29.4
Near coast of	e 22 42 43 ?	Banff
Sumatra	Victoria	eP 17 27 58 d
H = 10 23 57.2	e 22 31 29	Halifax
h = 43 km		eP' 17 33 52 d
Resolute	NOVEMBER 2	Ottawa
eP' 10 42 33	H = 00 01 40	iP' 17 33 37 d
	Mag 0.6	Resolute
	Victoria	eP 17 28 50
	eP ₁ 00 01 43.1	eS 17 39 29 ?
	eS ₁ 00 01 45.5	Seven Falls
	D = 20 km	eP' 17 33 42 d
		Shawinigan Falls
		eP' 17 33 40

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SEISMOLOGICAL BULLETIN - 1960

NOVEMBER 5	Ottawa	NOVEMBER 5
	i 04 12 46.7	49°41'N, 124°30'W
	S ₁ 04 13 11	Texada Island
	D = 297.5 km	H = 02 08 21
	Seven Falls	Mag 2
	S ₁ 04 13 17.5	Alberni
	D = 318.8 km	eP ₁ 02 08 29.4
	Shawinigan Falls	eS ₁ 02 08 35.7
	S ₁ 04 12 51.7	D = 52 km
	D = 229 km	Victoria
	NOVEMBER 3	eP 02 08 45.7
	Alberni	D = 154 km
	iP 16 01 23.9	NOVEMBER 5
	Penticton	Victoria
	eP 16 02 12	eP 02 09 05
	Victoria	
	eP 16 01 38	
	NOVEMBER 2	NOVEMBER 5
	Victoria	H = 03 07 31
	eP 20 19 11 c	Mag 1.8
	NOVEMBER 2	Penticton
	Victoria	eP ₁ 03 07 53.1
	48°28'N, 123°52'W	eS ₁ 03 08 09.6
	Southern Vancouver	D = 135 km
	Island	
	H = 22 25 29	NOVEMBER 5
	Mag 2.0	U.S.C.G.S.
	Alberni	39.2N, 20.5E
	eP ₁ 22 25 47.6	Near coast of Greece
	eS ₁ 22 26 00.5	H = 20 20 53.7
	D = 113 km	h = 49 km
	Victoria	Mag 5
	iP ₁ 22 25 34.7	Halifax
	iS ₁ 22 25 38.6	iP 20 31 02 d
	D = 32 km	Ottawa
	NOVEMBER 4	eP 20 31 47
	Victoria	Resolute
	iP 01 37 27 c	eP 20 30 50
	NOVEMBER 3	Seven Falls
	48°00'N, 74°52'W	eP 20 31 21
	About 15 miles west of	Shawinigan Falls
	Parent Quebec,	eP 20 31 32 c
	Felt at Parent	Penticton
	H = 04 11 46.9	eP 20 33 28
	Mag 2.7	Victoria
	Montreal	eP 20 33 37
	P ₁ 04 12 34.1	
	S ₁ 04 13 10.0	
	D = 294 km	

DOMINION OBSERVATORIES

NOVEMBER 6		NOVEMBER 6
U.S.C.G.S.		U.S.C.G.S.
50.0N, 159.8E		18.6N, 119.9E
Near east coast		Philippine Islands
of Kamchatka		H = 06 40 12.3
H = 04 38 16.7		h = 98 km
h = 32 km		Resolute
Mag 6	eP?	06 52 57 ?
Alberni		
eP	04 46 35.6	
Banff		NOVEMBER 6
eP	04 47 05	Penticton
Halifax		eP 09 01 29
iP	04 50 02.5 c	
Ottawa		NOVEMBER 6
iP	04 49 34 c	U.S.C.G.S.
Penticton		52.7N, 168.0W
eP	04 46 56 c	Fox Islands
Resolute		H = 22 10 06.4
iP	04 46 21 c	h = 42 km
PP	04 48 06 ?	Mag 5
eS	04 52 44 ?	Alberni
Seven Falls		eP 22 15 54.8
eP	04 49 36 c	Banff
Shawinigan Falls		eP 22 16 30
eP	04 49 35 c	Halifax
		P 22 20 34
NOVEMBER 6		Ottawa
U.S.C.G.S.		iP 22 19 50 c
31.0S, 177.7W		Penticton
Kermadec Islands		eP 22 16 17
region		Resolute
H = 06 15 05.7		eP 22 17 03 c
h = 184 km		eS 22 22 39
Mag 5 3/4		Seven Falls
Penticton		eP 22 19 59 c
eP	06 28 13	Shawinigan Falls
eP'	06 33 33 d ?	eP 22 19 55 c

NOVEMBER 7
 H = 00 57 08
 Mag 1.7
 Penticton
 eP₁ 00 57 30.6
 eS₁ 00 57 47.6
 D = 140 km

NOVEMBER 7
 U.S.C.G.S.
 32.2N, 131.5E
 Kyushu Japan
 H = 13 23 05.1
 h = 25 km
 Banff
 eP 13 35 05
 Penticton
 eP 13 34 59
 Resolute
 eP 13 34 13
 Victoria
 eP 13 34 51 d

NOVEMBER 8
 U.S.C.G.S.
 29.8S, 176.9W
 Kermadec Islands
 region
 H = 02 43 38.1
 h = 25 km
 Resolute
 eP? 02 55 51

NOVEMBER 8
 U.S.C.G.S.
 27.8N, 44.3W
 North Atlantic Ocean
 H = 04 28 11.4
 h = 25 km
 Resolute
 eP? 04 37 35

SEISMOLOGICAL BULLETIN - 1960

NOVEMBER 8	U.S.C.G.S.	NOVEMBER 8	U.S.C.G.S.
45.2N, 149.8E		44.9°N, 125.2°W	56.0N, 158.8W
Kurile Islands		Near coast of Oregon,	Alaska Peninsula
H = 05 22 09.4		U.S.A.	H = 13 36 12.9
h = 25 km		H = 11 36 27.2	h = 29 km
Alberni		h = 44 km	Penticton
eP 05 31 44		Mag 4.9	eP 13 41 31
Banff		Alberni	Resolute
eP 05 32 13		iP 11 37 29.5	eP 13 42 24
Penticton		iS 11 38 14.2	
eP 05 32 04		Banff	NOVEMBER 8
Resolute		eP 11 38 38.4	Resolute
eP 05 31 28 c		Halifax	eP 16 52 26
Victoria		P 11 44 24.5	
eP 05 31 53		Ottawa	NOVEMBER 8
		iP 11 43 15 d	Resolute
NOVEMBER 8	U.S.C.G.S.	Penticton	eP 23 09 48
45.2N, 149.7E		eP 11 37 51.5 c	
Kurile Islands		eS 11 38 47	
H = 05 27 21.7		Resolute	NOVEMBER 8
h = 25 km		eP 11 42 58	Alberni
Banff		Seven Falls	iP 23 18 45.7
eP 05 37 25		iP 11 43 38 d	Penticton
Penticton		Shawinigan Falls	iP 23 19 08.7
eP 05 37 16		eP 11 43 28	Victoria
Resolute		Victoria	iP 23 18 38.9
iP 05 36 41 c ?		iP 11 37 22.7	
Victoria		NOVEMBER 8	NOVEMBER 9
eP 05 37 06		U.S.C.G.S.	H = 00 41 44
		28.2N, 139.5E	Mag 1.9
NOVEMBER 8		Bonin Islands region	Penticton
H = 11 00 15		H = 12 33 58.0	iP ₁ 00 42 07.5
Mag 0.7		h = 23 km	iS ₁ 00 42 25.0
Banff		Penticton	D = 144 km
iP ₁ 11 00 17.8		eP 12 45 42	
iS ₁ 11 00 20.2		Resolute	NOVEMBER 9
D = 18 km		eP? 12 45 13	Resolute
NOVEMBER 8		Victoria	eP? 01 17 39
Penticton		iP 12 45 33	
eP 11 05 54.3			

DOMINION OBSERVATORIES

NOVEMBER 9 U.S.C.G.S. 21.5S, 67.5W Near Chile - Bolivia border H = 01 17 36.8 h = 131 km	NOVEMBER 9 U.S.C.G.S. 32.7N, 103.4E China H = 10 43 43.1 h = 47 km Mag 6 1/4	NOVEMBER 10 U.S.C.G.S. 26.2N, 87.5W Gulf of Mexico H = 01 33 43.8 h = 21 km
Banff eP 01 29 54	Alberni eP 10 56 32	Ottawa eP 01 38 35 d
Halifax P 01 28 16	Banff eP 10 56 40	Resolute iP 01 42 29
Ottawa eP 01 28 21	Penticton eP 10 56 40	NOVEMBER 10 U.S.C.G.S. 36.6N, 71.1E
Penticton eP 01 29 59	Resolute eP 10 55 05	Hindu Kush region H = 01 54 46.8 h = 64 km
Seven Falls iP 01 28 32 c	Victoria eP 10 56 37	Penticton eP 02 08 01
Shawinigan Falls eP 01 28 28	NOVEMBER 9 Resolute eP 12 40 32	NOVEMBER 10 U.S.C.G.S. 30.2N, 40.4W
Victoria iP 01 30 05 d		North Atlantic Ocean H = 05 31 30.1 h = 28 km Mag 5
NOVEMBER 9 U.S.C.G.S. 60.7S, 24.8W Sandwich Islands H = 03 17 58.5 h = 37 km Mag 6 1/4	NOVEMBER 9 U.S.C.G.S. 23.2S, 70.6W Near coast of Chile H = 20 06 16.2 h = 52 km Mag 5 1/2	Halifax eP 05 36 36
Banff eP' 03 37 09	Banff eP 20 18 34	Resolute eP 05 40 36
Penticton eP' 03 37 51	Halifax iP 20 17 15 c	Seven Falls eP 05 37 28
Resolute eP' 03 37 25	Ottawa eP 20 17 18 c	NOVEMBER 10 U.S.C.G.S. 2.6S, 139.4E
PP 03 40 48	Penticton eP 20 18 49	Near coast of New Guinea H = 14 44 47.3 h = 25 km Mag 6 3/4
eS 03 47 30	Resolute eP 20 20 ??	Penticton eP 14 58 29
Victoria eP' 03 37 02	eS? 20 31 23?	Resolute e 15 14 56
NOVEMBER 9 Resolute eP? 04 31 36	SS 20 38 12?	Seven Falls eP 14 58 39
	Seven Falls eP 20 17 28	Resolute eP 14 58 39
	Shawinigan Falls eP 20 17 25	Seven Falls eP' 15 03 55 d
		Shawinigan Falls iP' 15 03 54 d

SEISMOLOGICAL BULLETIN - 1960

NOVEMBER 10 H = 19 38 55 Mag 0.9 Penticton iP ₁ 19 39 00.7 iS ₁ 19 39 04.6 D = 32 km	NOVEMBER 11 U.S.C.G.S. 54.8N, 161.7E Kamchatka H = 13 45 14.3 h = 28 km Resolute eP 13 53 02	NOVEMBER 13 U.S.C.G.S. 51.1N, 168.8W Fox Islands H = 09 20 36.8 h = 65 km Mag 7 Alberni eP 09 26 27
NOVEMBER 10 Victoria iP 20 43 29 c	NOVEMBER 11 Victoria eP 19 30 11	Banff eP 09 27 07
NOVEMBER 10 Canadian Arctic H = 22 32 24 Mag 3.3 Resolute P _n 22 33 38 i 22 33 52 i 22 34 33 S ₁ 22 34 57 D = 550 km	NOVEMBER 12 U.S.C.G.S. 47.1N, 148.8E Kurile Islands H = 18 37 14.5 h = 174 km Resolute iP 18 46 07	Penticton eP 09 26 53 d e 09 29 53 d Resolute eP 09 27 44 d eS 09 33 28 Seven Falls eP 09 30 36 d Shawinigan Falls iP 09 30 31 d Victoria eP 09 26 35 d,W e 09 29 42 iS 09 31 29 W
NOVEMBER 11 U.S.C.G.S. 39.5N, 21.1E Greece - Albania region H = 05 31 34.1 h = 39 km Halifax iP 05 41 42 c	NOVEMBER 13 U.S.C.G.S. 1.4N, 127.2E Molucca Passage H = 06 37 05.7 h = 59 km Halifax P' 06 56 21	NOVEMBER 13 Resolute eP 10 03 12
Ottawa eP 05 42 27	Ottawa eP' 06 56 11	Penticton eP 06 51 04
Penticton eP 05 44 10	Penticton eP 06 50 47	Resolute eP 10 40 11
Resolute eP 05 41 29	Seven Falls eP' 06 56 10 c	Seven Falls eP' 06 56 11
Seven Falls eP 05 41 59 c	Shawinigan Falls eP' 06 56 11	Shawinigan Falls eP 12 32 47
Shawinigan Falls eP 05 42 15		
NOVEMBER 11 Resolute eP 10 52 01		

DOMINION OBSERVATORIES

NOVEMBER 13 U.S.C.G.S. 51.1N, 168.6W Fox Islands H = 13 24 25.6 h = 25 km Resolute eP 13 31 39	NOVEMBER 13 U.S.C.G.S. 51.8N, 167.2W Fox Islands H = 17 19 24.6 h = 78 km Resolute eP 17 26 23	NOVEMBER 14 H = 08 03 07 Mag 2.5 Penticton iP ₁ 08 03 37.1 iS ₁ 08 04 00.6 D = 192 km
NOVEMBER 13 U.S.C.G.S. 51.6N, 168.1W Fox Islands H = 13 28 11.5 h = 50 km Resolute eP 13 35 18	NOVEMBER 13 U.S.C.G.S. 39.5N, 30.4W Azores H = 20 45 09.1 h = 25 km Halifax P 20 50 39	NOVEMBER 14 H = 10 25 04 Mag 1.9 Penticton iP ₁ 10 25 27.8 iS ₁ 10 25 51.8 D = 150 km
NOVEMBER 13 U.S.C.G.S. 51.3N, 168.6W Fox Islands H = 13 52 28.9 h = 46 km Resolute eP 13 59 39	NOVEMBER 13 U.S.C.G.S. 53.5S, 140.7E Antarctic Ocean H = 02 08 05.5 h = 21 km Resolute eP' 02 27 53	NOVEMBER 14 Resolute eP 14 43 38 ?
NOVEMBER 13 U.S.C.G.S. 51.9N, 167.8W Fox Islands H = 14 29 21.1 h = 46 km Resolute eP 14 36 25	NOVEMBER 14 Penticton eP 03 53 52 Resolute eP 03 54 17	NOVEMBER 14 U.S.C.G.S. 24.3N, 96.2E Burma H = 15 55 57.2 h = 58 km Resolute eP 16 08 09
NOVEMBER 13 U.S.C.G.S. 51.7N, 167.9W Fox Islands H = 15 28 02.7 h = 75 km Resolute eP 15 35 04	NOVEMBER 14 U.S.C.G.S. 53.5S, 140.3E Antarctic Ocean H = 04 17 12.7 h = 100 km Penticton e 04 57 36 Resolute eP' 04 36 55 e 04 57 49	NOVEMBER 14 Banff eP 20 07 09 Ottawa iP 20 06 09 d Penticton eP 20 07 10 Resolute iP 20 09 33

SEISMOLOGICAL BULLETIN - 1960

Seven Falls eP 20 06 37 Shawinigan Falls eP 20 06 27	NOVEMBER 15 H = 23 25 07 Mag 1.7 Penticton eP ₁ 23 25 30.9 eS ₁ 23 25 49.4 D = 152 km	NOVEMBER 16 U.S.C.G.S. 38.0N, 89.5E Sinkiang Province China H = 22 59 47.6 h = 24 km Penticton eP 23 12 46 c
NOVEMBER 15 Resolute eP? 04 57 19	NOVEMBER 15 U.S.C.G.S. 62.5S, 161.7W Antarctic Ocean southeast of New Zealand H = 06 23 27.5 h = 46 km Mag 5 1/2 Resolute eP' 06 42 55	NOVEMBER 16 Canadian Arctic H = 08 48 58.1 Mag 1.7 Resolute P ₁ 08 49 06 S ₁ 08 49 12 D = 49.2 km
NOVEMBER 15 U.S.C.G.S. 23.2N, 94.3E Burma - India border H = 09 05 59.1 h = 103 km Resolute eP 09 18 13	NOVEMBER 16 U.S.C.G.S. 10.4N, 74.2W Near coast of Columbia H = 15 38 26.5 h = 83 km Resolute eP 15 47 47	NOVEMBER 17 49.0°N, 121.5°W South of Hope, British Columbia H = 00 48 46 Mag 1.9 Penticton iP ₁ 00 49 09.2 iS ₁ 00 49 26.9 D = 145 km
NOVEMBER 15 H = 20 28 25 Mag 2.0 Penticton eP ₁ 20 28 59.4 eS ₁ 20 29 27.4 D = 229 km	NOVEMBER 16 Penticton eP 20 57 32	NOVEMBER 17 U.S.C.G.S. 38.5S, 73.6W Near coast of Chile H = 01 28 39.6 h = 25 km Shawinigan Falls eP 01 41 13
NOVEMBER 15 H = 22 32 41 Mag 1.8 Penticton eP ₁ 22 33 02.6 eS ₁ 22 33 23.8 D = 132 km		

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DOMINION OBSERVATORIES

NOVEMBER 17	NOVEMBER 18	NOVEMBER 19
Penticton iP 09 00 20 c	Resolute eP 07 02 59	H = 06 38 30 Mag 2.1 Alberni iP ₁ 06 38 42.1
NOVEMBER 17 H = 12 41 20 Mag 1.4 Penticton eP ₁ 12 41 38.9 eS ₁ 12 41 53.5 D = 118 km	NOVEMBER 18 Resolute eP 09 43 16	iS ₁ 06 38 51.4 D = 76 km
NOVEMBER 17 U.S.C.G.S. 52.3N, 170.3W Fox Islands H = 19 46 46.2 h = 16 km Halifax eP 19 57 26 d	NOVEMBER 18 U.S.C.G.S. 22.5S, 69.4W Northern Chile H = 12 42 46.9 h = 163 km Penticton eP 12 55 04	NOVEMBER 19 Resolute eP 08 15 21 U.S.C.G.S. 8.6N, 137.6E Caroline Islands region H = 12 16 44.5 h = 27 km
Ottawa eP 19 56 42 Penticton eP 19 53 12 Resolute eP 19 53 54 Shawinigan Falls eP 19 56 47	NOVEMBER 18 Penticton iP 16 22 36 c	Resolute eP 12 29 49 NOVEMBER 19 H = 15 00 56 Mag 1.3 Penticton eP ₁ 15 01 16.9 eS ₁ 15 01 32.9 D = 131 km
NOVEMBER 17 Resolute eP 19 59 45	NOVEMBER 19 Penticton eP 00 13 39.9	NOVEMBER 19 Resolute eP 19 26 03?
NOVEMBER 18 U.S.C.G.S. 35.0N, 28.6E East of Crete H = 06 03 37.5 h = 43 km Resolute eP 06 14 11 Shawinigan Falls eP 06 15 02	NOVEMBER 19 H = 00 45 30 Mag 1.9 Penticton iP ₁ 00 45 51.4 iS ₁ 00 46 08.6 D = 140 km	NOVEMBER 19 Resolute eP 19 29 53? Penticton eP ₁ 19 52 02 eS ₁ 19 53 16.3 D = 276 km

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SEISMOLOGICAL BULLETIN - 1960

NOVEMBER 20	NOVEMBER 20	NOVEMBER 21
H = 00 23 16 Mag 2.0 Penticton iP 00 23 43.1 iS ₁ 00 24 03.6 D = 168 km	U.S.C.G.S. 6.8S, 80.7W Near coast of Peru H = 22 01 59.9 h = 93 km Mag 6 1/2 Banff eP 22 12 38	Penticton eP 12 51 43.0
NOVEMBER 20 U.S.C.G.S. 26.8N, 128.2E Ryukyu Islands H = 03 52 49.0 h = 25 km Resolute eP 04 04 32	Halifax eP 22 11 15 e 22 11 26 i 22 11 38 iS 22 18 50 Ottawa eP 22 11 03	NOVEMBER 21 U.S.C.G.S. 54.8N, 159.7E Kamchatka H = 18 44 04.9 h = 64 km Penticton eP 18 52 33
NOVEMBER 20 Penticton eP 04 41 34	Resolute eP 22 12 34 eP 22 14 14 eS 22 24 23 Seven Falls eP 22 11 23	NOVEMBER 22 U.S.C.G.S. 7.0S, 80.8W Near coast of Peru H = 02 32 15.2 h = 19 km Penticton eP 02 43 03
NOVEMBER 20 Penticton eP 04 45 09 Resolute eP 04 45 57 ?	Shawinigan Falls eP 22 11 19 Victoria eP 22 12 46	Resolute eP 02 44 36
NOVEMBER 20 U.S.C.G.S. 8.3S, 77.6W Northern Peru H = 10 49 13.4 h = 55 km Penticton eP 11 00 11	NOVEMBER 21 H = 00 55 05 Mag 1.8 Penticton eP ₁ 00 55 27.7 eS ₁ 00 55 45.1 D = 142 km	NOVEMBER 22 U.S.C.G.S. 8.2N, 38.4W Atlantic Ocean H = 03 03 02.7 Penticton eP 03 15 04 Resolute eP 03 14 37
NOVEMBER 20 Resolute eP 20 42 02	Shawinigan Falls eP 03 11 45	Shawinigan Falls eP 03 11 45
NOVEMBER 21 U.S.C.G.S. 3.4S, 152.3E New Ireland Region H = 04 29 04.7 h = 371 km Banff iP 04 41 46		
Resolute eP 04 42 09		
e 04 46 36		

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DOMINION OBSERVATORIES

NOVEMBER 22	NOVEMBER 22	NOVEMBER 23
U.S.C.G.S. 19.2S, 173.1W Tonga Islands region H = 03 31 54.3 h = 25 km Penticton eP 03 44 23	U.S.C.G.C. 40.0S, 74.3W Near coast of southern Chile H = 12 28 58.4 h = 107 km Mag 6 1/2 Banff eP 12 42 27	H = 00 51 32 Mag 1.8 Penticton eP ₁ 00 51 57.0 eS ₁ 00 52 15.9 D = 155 km
NOVEMBER 22	Halifax	NOVEMBER 23
U.S.C.G.S. 35.9S, 52.3E Indian Ocean H = 06 21 45.0 h = 21 km Mag 6 3/4 Banff eP ₁ 06 41 50	eP 12 41 26 iS 12 52 00 Ottawa eP 12 41 27 d	U.S.C.G.S. 4.9S, 153.8E New Britain region H = 04 11 34.7 h = 516 km
Ottawa eP' 06 41 10 c	Penticton eP 12 42 28 Resolute eP 12 47 34 PP 12 51 06?	Banff eP 04 24 01 Penticton eP 04 23 48 Resolute eP? 04 24 28
Penticton eP ₁ ' 06 41 51	Seven Falls eP 12 41 37 Shawinigan Falls eP 12 41 34	NOVEMBER 23
Resolute eP' 06 41 14 i 07 02 28	Penticton eP 09 33 24	U.S.C.G.S. 24.2S, 176.1W South of Tonga Islands H = 14 12 21.1 h = 28 km
Shawinigan Falls eP' 06 41 15	NOVEMBER 22	Mag 6 3/4 Alberni eP 14 25 14
NOVEMBER 22	Resolute eP? 14 05 29	NOVEMBER 23
U.S.C.G.S. 53.0N, 159.4E Kamchatka H = 07 09 14.8 h = 28 km Ottawa eP 07 20 33	U.S.C.G.S. 24.2S, 176.1W South of Tonga Islands H = 17 51 36.5 h = 25 km	U.S.C.G.S. 24.5S, 176.4W South of Tonga Islands H = 17 29 08.5 h = 171 km
Penticton eP 07 17 57	Nicobar Islands region eP? 18 05 22?	Penticton eP 17 41 49
Resolute eP 07 17 20	Resolute eP' 14 31 19 c	NOVEMBER 23
Shawinigan Falls eP 07 20 34	Penticton eP 14 25 16 e 14 36 15	U.S.C.G.S. 24.0S, 176.3W South of Tonga Islands H = 17 56 38.0 h = 51 km
NOVEMBER 22	Resolute H = 23 54 21 Mag 2.1 Penticton eP ₁ 23 54 49.5 eS ₁ 23 55 11.4 D = 178 km	Banff eP 18 09 47 Penticton eP 18 09 32 d

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NOVEMBER 23	NOVEMBER 23	NOVEMBER 24
Seven Falls eP' 14 31 14 Shawinigan Falls eP' 14 31 09 Victoria eP 14 25 03	Penticton eP 18 46 36 Resolute eP? 20 18 00	U.S.C.G.S. 24.2S, 176.1W South of Tonga Islands H = 06 52 41.1 h = 23 km Mag 7 Alberni eP 07 05 30
NOVEMBER 23	NOVEMBER 23	Banff eP 07 05 54
U.S.C.G.S. 4.6N, 125.8E Philippine Islands H = 16 52 12.9 h = 143 km Resolute eP 17 05 35 Shawinigan Falls eP' 17 11 05 i 17 11 48	U.S.C.G.S. 24.1S, 175.7W South of Tonga Islands H = 20 11 03.2 h = 25 km Penticton eP 20 24 00 Resolute eP 07 07 22 e 07 11 16 e 07 22 18 ?	Halifax eP' 07 11 38 Ottawa eP' 07 11 22 Penticton iP 07 05 38 c Resolute eP 07 07 22 e 07 11 16 e 07 22 18 ?
NOVEMBER 23	NOVEMBER 23	Seven Falls eP' 07 11 31 Shawinigan Falls eP' 07 11 29 Victoria eP 07 05 29
U.S.C.G.S. 22.1S, 179.5W South of Fiji Islands H = 21 14 29.2 h = 631 km Penticton eP 21 26 21 c Shawinigan Falls eP' 21 31 21	U.S.C.G.S. 24.5S, 176.4W South of Tonga Islands H = 17 29 08.5 h = 171 km Penticton eP 17 41 49	NOVEMBER 24 Penticton iP 07 35 27
NOVEMBER 23	NOVEMBER 24	NOVEMBER 24 Penticton eP 07 43 22
U.S.C.G.S. 4.6S, 153.0E New Britain region H = 04 50 15.8 h = 87 km Mag 6 1/4 Banff eP 05 03 28 Ottawa eP' 05 09 03 Penticton eP 05 03 14 e 05 20 38	U.S.C.G.S. 4.6S, 153.0E New Britain region H = 04 50 15.8 h = 87 km Mag 6 1/4 Banff eP 05 03 28 Ottawa eP' 05 09 03 Penticton eP 05 03 14 e 05 20 38	NOVEMBER 24 Penticton eP 07 45 44
NOVEMBER 23	NOVEMBER 24	NOVEMBER 24 Penticton eP 08 03 42
U.S.C.G.S. 24.0S, 176.3W South of Tonga Islands H = 17 56 38.0 h = 51 km Resolute eP 05 03 55 Shawinigan Falls eP' 05 09 05	Resolute eP 05 03 55 Shawinigan Falls eP' 05 09 05	NOVEMBER 24 Penticton eP 08 03 42

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DOMINION OBSERVATORIES

NOVEMBER 24	NOVEMBER 24	NOVEMBER 26
U.S.C.G.S.	U.S.C.G.S.	U.S.C.G.S.
24.4S, 176.3W	57.8N, 155.9W	36.6N, 141.0E
South of Tonga Islands	Alaska Peninsula	Near coast of Honshu Japan
H = 08 16 43.7	H = 18 25 46.4	H = 07 37 02.2
h = 25 km	h = 46 km	h = 100 km
Penticton	Resolute	Penticton
eP 08 29 42	eP 18 31 34	eP 07 48 00
NOVEMBER 24	NOVEMBER 24	NOVEMBER 26
U.S.C.G.S.	Penticton	Resolute
24.5S, 175.9W	eP 19 30 49	eP 07 47 23
South of Tonga Islands		
H = 08 26 14.4		
h = 25 km		
Penticton		
eP 08 39 10		
NOVEMBER 24	NOVEMBER 25	NOVEMBER 26
Penticton	Penticton	U.S.C.G.S.
eP 08 50 22	eP 00 54 09	51.8N, 168.1W
	Mag 1.9	Fox Islands
	eP ₁ 00 54 32.8	H = 16 45 45.1
	eS ₁ 00 54 51.2	h = 85 km
	D = 151 km	Resolute
NOVEMBER 24	NOVEMBER 25	eP 15 52 05?
Penticton	Resolute	eP 16 52 46
eP 08 50 22	eP? 02 47 49 ?	
NOVEMBER 24	NOVEMBER 25	NOVEMBER 26
Penticton	U.S.C.G.S.	U.S.C.G.S.
eP 09 29 23	38.0N, 140.5E	53.9S, 141.5E
	Honshu Japan	Antarctic Ocean
	H = 21 54 13.8	H = 18 20 22.9
	h = 157 km	h = 25 km
	Penticton	Resolute
	eP 22 04 59	eP ₁ 18 40 12
	Resolute	
	iP 22 04 19 c	NOVEMBER 26
	eS 22 12 33	U.S.C.G.S.
	Shawinigan Falls	24.3S, 175.5W
NOVEMBER 24	eP 22 07 04	South of Tonga Islands
Resolute	Victoria	H = 21 35 36.6
eP 14 19 42	eP 22 04 49 d,S,W	h = 20 km
		Penticton
		eP 21 48 33
NOVEMBER 26	Penticton	
	eP 06 44 26	

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NOVEMBER 27	Victoria	NOVEMBER 28
Resolute	iP 15 27 24 c,N,E	H = 11 24 51
eP 00 45 55		Mag 1.5
		Penticton
		eP ₁ 11 25 08.0
		eS ₁ 11 25 20.7
NOVEMBER 27		D = 104 km
Alberni		
eP 09 49 16		
Penticton		
eP 09 50 02		
Victoria	eP 21 54 34.1	NOVEMBER 28
eP 09 49 25 d	eS ₁ 21 54 53.0	Penticton
	D = 155 km	eP 15 49 41
NOVEMBER 27	Penticton	NOVEMBER 28
	eP 22 19 21	47.4N, 27.6W
		Azores
		H = 19 47 16.9
		h = 17 km
		Halifax
		P 19 52 42
		Resolute
		eP 19 54 45
NOVEMBER 27		NOVEMBER 28
Penticton		Penticton
eP 05 23 18		eP 21 16 38
NOVEMBER 28		
Halifax		
eP 12 05 01		
NOVEMBER 27		
U.S.C.G.S.		
42.8N, 143.3E		
Near coast of		
Hokkaido Japan		
H = 15 17 15.2		
h = 122 km		
Alberni		
eP 15 27 17		
Banff		
iP 15 27 41 c		
Penticton		
iP 15 27 34 c		
Resolute		
iP 15 26 50 c		
Shawinigan Falls		
iP 15 29 44 c		

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DOMINION OBSERVATORIES

NOVEMBER 29	DECEMBER 1	DECEMBER 1
U.S.C.G.S. 26.5N, 126.1E	U.S.C.G.S. 5.7S, 145.9E	48.5°N, 129.1°W Off coast of
Ryukyu Islands H = 14 07 02.2	Near coast of New Guinea H = 10 11 44.6	Vancouver Island H = 20 49 45 h = 15 km
Alberni eP 14 19 09	h = 45 km Penticton	Mag 6 Alberni
Banff eP 14 19 25	eP 10 25 14 e 10 53 22	eP _n 20 50 31.7 D = 330 km
Penticton iP 14 19 22 d	Resolute	Banff eP _n 20 51 59
Resolute iP 14 18 34 d	eP 10 25 40	Ottawa iP 20 56 48
Victoria eP 14 19 14d,SE	DECEMBER 1 Resolute eP 11 57 04	Penticton eP _n 20 51 19.7 D = 710 km
NOVEMBER 29		Resolute eP 20 55 52
U.S.C.G.S. 15.8S, 73.3W	DECEMBER 1 Resolute	eS 21 00 48
Near coast of Peru H = 19 17 07.3	eP? 16 34 36	Seven Falls eP 20 57 09
h = 100 km		Shawinigan Falls eP 20 57 05
Penticton eP 19 28 53	DECEMBER 1 49.4°N, 129.3°W Off west coast of	Victoria eP _n 20 50 44.1 D = 425 km
	Vancouver Island	
NOVEMBER 29	H = 20 45 03	
Penticton eP 20 20 04	Mag 3.6	DECEMBER 1 Resolute
		eP 20 51 09?
NOVEMBER 30		
Resolute eP 14 00 19	Banff eP _n 20 47 19	DECEMBER 1 48°11'N, 124°53'W
	Penticton eP _n 20 46 36.8	Off coast of
	D = 710 km	Washington, U.S.A.
DECEMBER 1	Victoria eP _n 20 46 04.3	H = 21 05 21
U.S.C.G.S. 32.3S, 113.1W	D = 425 km	Mag 2.3
Easter Island region H = 08 42 26.5		Alberni eP ₁ 21 05 40.6
h = 25 km		eS ₁ 21 05 54.9
Penticton eP 08 54 47		D = 120 km
		Victoria eP ₁ 21 05 40.1
		eS ₁ 21 05 54.7
		D = 117 km

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SEISMOLOGICAL BULLETIN - 1960

DECEMBER 1	DECEMBER 1	DECEMBER 1
48.5°N, 129.2°W Off coast of	48.9°N, 129.2W Off coast of	48.6°N, 129.2°W Off coast of
Vancouver Island H = 21 18 49	Vancouver Island H = 21 57 43	Vancouver Island H = 22 54 55
Mag 3.3	Mag 3.4	Mag 3.5
Alberni eP _n 21 19 35.7	Alberni eP _n 21 58 29.2	Alberni eP _n 22 55 42.2
D = 327 km	D = 324 km	D = 329 km
Penticton eP _n 21 20 23.2	Victoria eP _n 21 58 42.4	Victoria eP _n 22 55 54.3
D = 716 km	D = 432 km	D = 429 km
Victoria eP _n 21 19 47.6	DECEMBER 1	DECEMBER 2
D = 424 km	48.5°N, 129.2°W	U.S.C.G.S.
Resolute eP 04 51 24	Off coast of	6.6S, 152.5E
Alberni eP _n 22 06 16.5	Vancouver Island H = 22 05 30	New Britain region
D = 329 km	Mag 3.7	H = 04 37 28.2
Banff eP _n 22 07 41	Alberni eP _n 21 50 21.1	h = 33 km
Ottawa eP 22 12 30	D = 326 km	Resolute eP 04 51 24
Resolute eP 22 11 35	Banff eP _n 21 51 48	DECEMBER 2
Seven Falls eP 22 12 52	Ottawa eP 21 56 36	U.S.C.G.S.
Penticton eP _n 21 51 18.3	Penticton eP _n 21 51 18.3	24.5S, 69.9W
D = 712 km	D = 712 km	Near coast of Chile
Victoria eP _n 22 06 28.5	Seven Falls eP 22 11 35	H = 09 10 41.0
D = 427 km	Ottawa eP 21 56 36	h = 37 km
Resolute eP 21 55 39	Penticton eP _n 21 56 57	Mag 7
eS 22 00 36	Shawinigan Falls eP 21 56 53	Alberni eP 09 23 40
DECEMBER 1	Victoria eP _n 21 50 33.5	Banff eP 09 23 18
49N, 129W	D = 427 km	Halifax iP 09 21 49 c
Off coast of	Alberni eP _n 22 34 38.4	Ottawa eP 09 21 51
Vancouver Island H = 22 33 53	D = 330 km	Penticton eP 09 23 19
Mag 3.2	i 09 36 02	Resolute eP 09 24 28
Alberni eP _n 22 34 38.4	i 09 42 58	Seven Falls eP 09 22 02
D = 444 km	Victoria eP _n 22 34 51.0	Shawinigan Falls eP 09 21 58

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DOMINION OBSERVATORIES

Victoria		DECEMBER 2	Seven Falls
eP	09 23 26	U.S.C.G.S.	iP 04 37 18 d
es	09 33 31.2	25.7N, 129.2E	Shawinigan Falls
		Ryukyu Islands	eP 04 37 20
		H = 17 43 18.2	Victoria
DECEMBER 2		h = 81 km	eP 04 36 24 c,SE
U.S.C.G.S.		Resolute	
24.3S, 69.8W		eP 17 54 57	
Near coast of Chile			DECEMBER 3
H = 09 37 38.6			U.S.C.G.S.
h = 64 km			15.8N, 101.0W
Mag 6 3/4			Off coast of
Alberni			Guerrero Mexico
eP 09 50 28			H = 04 55 17.0
Banff			h = 60 km
eP 09 50 01			Resolute
Halifax			eP 05 05 15
iP 09 48 44 c			
Ottawa			DECEMBER 3
iP 09 48 46 c			U.S.C.G.S.
Penticton			52.5N, 177.3W
eP 09 50 15 c			Andeanof Islands
Resolute			H = 07 07 42.7
eP 09 51 22			h = 79 km
Seven Falls			Alberni
iP 09 48 57 c		P1 22 54 42.5	eP 07 14 13
Shawinigan Falls		S1 22 55 03.7	Banff
iP 09 48 53 c		D = 174 km	eP 07 14 48
Victoria			Halifax
eP 09 50 14			e 07 19 14
DECEMBER 2			Ottawa
Resolute			eP 07 17 52
eP? 15 35 43			i 07 18 39
DECEMBER 2			Penticton
Resolute			eP 07 14 37 c
eP? 16 25 09			Resolute
			eP 07 15 00
			Shawinigan Falls
			eP 07 17 56
			i 07 18 42
			Victoria
			eP 07 14 22 c
			DECEMBER 3
			Ottawa
			eP 07 47 04

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SEISMOLOGICAL BULLETIN - 1960

DECEMBER 3	DECEMBER 3	DECEMBER 4
Resolute	Resolute	Resolute
eP 08 03 11?	eP 21 22 36	eP 16 10 30
DECEMBER 3	DECEMBER 3	DECEMBER 4
U.S.C.G.S.	U.S.C.G.S.	U.S.C.G.S.
21.1N, 121.1E	21.1N, 121.1E	32.5N, 141.6E
Off coast of Formosa		Off coast of
H = 09 12 19.0		Honshu Japan
h = 35 km		H = 16 20 36.1
Resolute		h = 106 km
iP 09 24 35		Resolute
		eP 16 31 20
DECEMBER 3	DECEMBER 3	DECEMBER 4
45.8N, 125.0W	45.8N, 125.0W	U.S.C.G.S.
Off coast of		12.8N, 88.6W
Oregon U.S.A.		Near coast of
H = 22 26 08		El Salvador
Mag 3.8		H = 18 30 20.4
Alberni		h = 56 km
eP _n 22 27 01.9		Resolute
eS _n 22 27 46.8		eP 18 40 36
D = 381 km		
Penticton		DECEMBER 4
eP _n 22 27 23.1		Ottawa
D = 556 km		eP 21 51 08
Victoria		Resolute
eP _n 22 26 54.6		eP 21 54 18?
eS _n 22 27 35.9		Shawinigan Falls
D = 326 km		eP 21 50 58
DECEMBER 3	DECEMBER 4	DECEMBER 4
U.S.C.G.S.	U.S.C.G.S.	U.S.C.G.S.
43.1N, 104.3E	43.1N, 104.0E	43.1N, 104.0E
Outer Mongolia		Outer Mongolia
H = 17 56 28.0		H = 22 14 33.6
h = 25 km		h = 39 km
Resolute		Resolute
iP 18 06 47		eP 22 24 51
DECEMBER 3	DECEMBER 4	DECEMBER 4
U.S.C.G.S.	U.S.C.G.S.	U.S.C.G.S.
76.7N, 131.1E	76.7N, 131.1E	76.7N, 131.1E
Laptev Sea		
H = 20 21 01.3		
h = 28 km		
Ottawa		
eP 20 30 47 d		
Resolute		
iP 20 26 40		
Shawinigan Falls		
eP 20 30 41		
DECEMBER 4	DECEMBER 4	DECEMBER 4
Resolute	Resolute	Resolute
iP 14 27 22 c?		

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DOMINION OBSERVATORIES

DECEMBER 4	DECEMBER 5	Shawinigan Falls
Resolute	U.S.C.G.S.	eP 21 30 38 c
eP 22 40 01	54.8N, 161.2E	Near east coast of Kamchatka
	H = 17 49 42.6	H = 17 49 42.6
DECEMBER 4	Resolute	h = 25 km
U.S.C.G.S.	eP 17 57 30 c	
21.2S, 179.0W		
Fiji Islands region	DECEMBER 5	
H = 23 55 39.3	U.S.C.G.S.	
h = 633 km	43.2N, 103.8E	Outer Mongolia
Ottawa	U.S.C.G.S.	H = 23 46 29.8
eP 24 13 12	54.3N, 161.2E	h = 61 km
Resolute	Near east coast of Kamchatka	Resolute
eP 24 13 01	H = 18 07 26.7	eP 23 56 44
Shawinigan Falls		
eP 24 13 16	h = 25 km	
Victoria	Banff	
eP 24 07 17	eP 18 16 04	DECEMBER 6
	Penticton	U.S.C.G.S.
	eP 18 15 56	42.9N, 104.5E
DECEMBER 5	Resolute	Outer Mongolia
U.S.C.G.S.	eP 18 15 16 c	H = 03 35 30.6
43.0N, 104.3E	Shawinigan Falls	h = 55 km
Outer Mongolia	eP 18 18 35 c	Resolute
H = 08 38 49.5		eP 03 45 46
h = 59 km		
Resolute	DECEMBER 5	
eP 08 49 04	H = 20 37 15	DECEMBER 6
	Mag 1.8	U.S.C.G.S.
	Penticton	8.5N, 82.7W
DECEMBER 5	iP ₁ 20 37 32.2	Near coast of Panama
H = 13 33 50	IS ₁ 20 37 45.2	H = 08 56 16.5
Mag 2.0	D = 106 km	h = 116 km
Alberni		Mag 5 1/2
iP ₁ 13 33 58.0		Halifax
IS ₁ 13 34 02.6		eP 09 03 46
D = 47 km		Ottawa
DECEMBER 5	DECEMBER 5	eP 09 03 22
H = 15 38 46	U.S.C.G.S.	Penticton
Mag 1.5	35.7N, 6.5W	eP 09 05 12
Victoria	Straits of Gibraltar	Resolute
iP ₁ 15 38 52.6	H = 21 21 51.7	eP 09 06 58 d
IS ₁ 15 38 57.9	h = 66 km	i 09 07 03
D = 43 km	Ottawa	PP? 09 09 44?
	eP 21 30 55	eS 09 15 47
	Resolute	SS 09 20 20?
	eP 21 31 21	
	Seven Falls	
	iP 21 30 27	

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Seven Falls	DECEMBER 6	Victoria
iP 09 03 45	U.S.C.G.S.	eP 07 47 20
Shawinigan Falls	11.5N, 125.5E	
eP 09 03 37	Samar, Philippine Islands	
Victoria	H = 18 19 33.6	DECEMBER 7
eP 09 05 24	h = 25 km	Resolute
	Resolute	eP 22 59 52
	eP 18 32 36	
DECEMBER 6	U.S.C.G.S.	DECEMBER 8
21.4S, 69.0W	Northern Chile	49°44'N, 123°28'W
H = 08 56 07.6	H = 08 56 07.6	Texada Island ?
h = 25 km	h = 25 km	H = 02 30 10
Mag 6	Mag 6	Mag 2.6
Alberni	Alberni	Alberni
eP 09 08 50	eP ₁ 00 42 28.4	iP ₁ 02 30 15.6
Halifax	eS ₁ 00 42 48.0	iS ₁ 02 30 23.0
iP 09 06 57 c	D = 160 km	D = 60 km
Ottawa		Victoria
eP 09 07 01	iP ₁ 02 30 31.0	
Penticton	Resolute	D = 157 km
iP 09 08 37 c	eP? 01 41 38	
Seven Falls		DECEMBER 8
iP 09 07 12 c		Alberni
Shawinigan Falls	eP 04 04 56.2	
eP 09 07 09	Resolute	
Victoria	eP 03 16 33 c ?	DECEMBER 8
iP 09 08 43 c,N,W		U.S.C.G.S.
DECEMBER 6	Penticton	31.6S, 68.9W
U.S.C.G.S.	eP 07 44 21.5	San Juan Province
20.5S, 178.8W	Victoria	Argentina
Fiji Islands region	eP 07 44 22.9	H = 11 20 07.8
H = 12 17 38.7		h = 140 km
h = 616 km		Halifax
Penticton	iP 11 31 48.5 d	
eP 12 29 26	Ottawa	
Victoria	eP 11 31 52 d	
eP 12 29 15	Seven Falls	
	eP 11 32 01	
	Alaska	Shawinigan Falls
	H = 07 42 42.5	eP 11 31 58 d
	h = 64 km	
Penticton		
eP 07 47 31		
Resolute		
eP 07 47 33		
Shawinigan Falls		
eP 07 50 50		

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DOMINION OBSERVATORIES

DECEMBER 8	U.S.C.G.S. 9.8N, 125.5E Philippine Islands H = 19 12 11.0 h = 77 km Resolute eP 19 25 14 c	DECEMBER 10 Canadian Arctic H = 13 02 46.6 Mag 2.2 Resolute P ₁ 13 03 08.4 S ₁ 13 03 25.0 D = 136 km	DECEMBER 11 U.S.C.G.S. 22.1S, 171.4E Loyalty Islands region H = 00 01 10.4 h = 144 km Resolute eP' 00 19 31
DECEMBER 9	Alberni eP 04 27 40.5	DECEMBER 10 U.S.C.G.S. 15.0S, 172.3W Samoa Islands region H = 13 32 18.3 h = 25 km Penticton eP 13 44 27	DECEMBER 11 Resolute eP 00 28 53
DECEMBER 9	Resolute iP 07 15 36		DECEMBER 11 U.S.C.G.S. 1.6N, 126.4E Molucca Passage H = 03 18 10.9 h = 52 km Resolute eP 03 31 53
DECEMBER 9	Penticton iP ₁ 11 24 29.4 very near Penticton station	DECEMBER 10 U.S.C.G.S. 1.5N, 124.3E Celebes Sea H = 13 55 16.5 h = 292 km Resolute eP 14 08 35	DECEMBER 11 U.S.C.G.S. 48.9°N, 129.7°W Vancouver Island region H = 18 58 40.5 h = 93 km Alberni Mag 1.8 eP _n 18 59 22.5 D = 360 km Alberni iP ₁ 23 49 09.7 iS ₁ 23 49 15.0 D = 44 km Victoria eP ₁ 23 49 25.9
DECEMBER 10	U.S.C.G.S. 19.0N, 119.5E Near north coast of Luzon, Philippine Islands H = 06 29 33.1 h = 60 km Resolute eP 06 42 00	DECEMBER 10 49°36'N, 124°30'W Texada Island H = 23 49 03 Mag 3.8 Alberni eP _n 18 59 22.5 D = 360 km Penticton eP _n 19 00 10.2 D = 743 km Banff eP 19 03 13	DECEMBER 11 Resolute eP? 20 46 25? Shawinigan Falls eP' 19 11 55

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DECEMBER 11	U.S.C.G.S. 15.7S, 166.9E New Hebrides Islands region H = 18 53 09.2 h = 133 km Mag 6 1/4 Ottawa eP' 19 11 50	DECEMBER 12 Resolute eP 02 01 13	DECEMBER 13 21.8S, 175.5W Tonga Islands H = 09 03 09.2 h = 84 km Banff eP 09 16 01
	DECEMBER 12 Resolute eP? 06 07 53?		Penticton eP 09 15 47
	DECEMBER 12 Resolute eP 19 06 05	DECEMBER 13 Resolute eP 04 30 58	DECEMBER 13 U.S.C.G.S. 27.7N, 142.4E Bonin Islands region H = 10 05 24.3 h = 28 km Banff eP 10 17 11
	Resolute eP' 19 11 24		Penticton eP 10 17 02
	Seven Falls eP' 19 11 56	DECEMBER 13 Resolute eP 04 30 58	Resolute eP 10 16 43
	Shawinigan Falls eP' 19 11 55		DECEMBER 13 Resolute eP? 19 21 31?
DECEMBER 11	48.9°N, 129.7°W Off coast of Vancouver Island H = 19 07 55 Mag 3.7 Alberni eP _n 19 08 37.3 D = 360 km	DECEMBER 13 U.S.C.G.S. 52.1S, 160.9E Macquarie Islands H = 07 36 13.8 h = 29 km Mag 7 1/4 Banff eP' 07 55 37	DECEMBER 14 U.S.C.G.S. 10.8S, 165.4E Santa Cruz Islands H = 00 57 25.0 h = 65 km Penticton eP 01 10 13
	Penticton eP _n 19 09 25.5 D = 743 km	Halifax P ₁ ' 07 56 23.5	Victoria e 01 39 03
DECEMBER 11	Resolute eP? 20 46 25?	Penticton eP' 07 56 03	Resolute eP' 07 55 44
		Penticton eP' 07 55 09	Resolute eP 01 10 13
DECEMBER 11	H = 21 44 15 Mag 2.0 Penticton eP ₁ 21 44 38.1 eS ₁ 21 44 55.5 D = 142 km	Shawinigan Falls eP' 07 56 01	Victoria e 01 39 03
		eP' 07 55 53	Resolute eP 03 46 43?
		Victoria eP' 07 56 03 c	
		eS 08 06 14	

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DOMINION OBSERVATORIES

DECEMBER 14	DECEMBER 14	DECEMBER 15
U.S.C.G.S.	U.S.C.G.S.	12.2N, 87.8W
26.6N, 130.3E	2.9N, 126.5E	Near coast of
Ryukyu Islands	Molucca Passage	Nicaragua
region	H = 23 51 28.6	H = 23 24 35.8
H = 04 02 02.1	h = 77 km	h = 39 km
h = 25 km	Mag 6 3/4	Ottawa
Resolute	Banff	eP 23 31 24
iP 04 13 40	eP 24 05 30	Penticton
	Halifax	eP 23 32 52
	p' 24 10 40	Resolute
DECEMBER 14	Ottawa	eP 23 34 57
U.S.C.G.S.	eP' 24 10 29	Seven Falls
32.8S, 179.6W	Resolute	eP 23 31 49
Kermadec Islands	eP 24 05 01	Shawinigan Falls
region	PP? 24 09 06	eP 23 31 40
H = 08 13 21.2	eS 24 15 30	DECEMBER 16
h = 25 km	Seven Falls	H = 00 22 37
Resolute	eP' 24 10 27	Mag 1.9
eP' 08 32 09	Shawinigan Falls	Penticton
	eP' 24 10 29	
DECEMBER 14	Victoria	
Penticton	iP 24 05 14 c	eP ₁ 00 23 04.4
eP 12 15 23	ePP 24 08 40	eS ₁ 00 23 25.0
	eS 24 15 44 c	D = 168 km
	eL 24 37 47 c	
DECEMBER 14		DECEMBER 16
U.S.C.G.S.	DECEMBER 15	H = 00 44 34
51.9S, 160.7E	U.S.C.G.S.	Mag 1.8
Macquarie Islands	13.6N, 120.7E	Penticton
region	Luzon, Philippine	eP ₁ 00 44 59.5
H = 14 23 25.7	Islands	eS ₁ 00 45 18.9
h = 77 km	H = 12 09 54.9	D = 159 km
Ottawa	h = 149 km	
eP' 14 42 59	Resolute	
Resolute	eP 12 22 39	DECEMBER 16
eP' 14 42 49		U.S.C.G.S.
Shawinigan Falls		51.1N, 170.6W
eP' 14 42 58	DECEMBER 15	Fox Islands
	Resolute	H = 01 20 02.2
	eP 19 07 21	h = 32 km
DECEMBER 14		Banff
Alberni		eP 01 26 45
eP 20 01 06		Ottawa
		eP 01 30 03
		Penticton
		eP 01 26 31
		Resolute
		eP 01 27 19

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DECEMBER 16	Seven Falls
eP 01 30 08	iP 07 48 54 c
H = 23 56 40	Victoria
Mag 3.0	iP 07 50 32 c
Penticton	
eP _n 23 57 31.3	DECEMBER 17
eS _n 23 58 16.2	Resolute
D = 368 km	eP? 08 26 39?
DECEMBER 16	
U.S.C.G.S.	
16.3S, 178.0E	
Fiji Islands region	
H = 08 52 17.3	
h = 44 km	
Penticton	
eP 09 04 54	
DECEMBER 16	
Resolute	
eP? 13 12 41?	
DECEMBER 16	
U.S.C.G.S.	
43.8N, 28.9W	
North Atlantic Ocean	
H = 18 21 31.7	
h = 21 km	
Halifax	
iP 18 26 56 c	
Penticton	
eP 18 31 31	
Resolute	
eP 18 29 24	
eS 18 35 43	
i 18 38 52	
Seven Falls	
eP 18 27 36	
DECEMBER 17	
H = 07 34 15	
Mag 2.7	
Penticton	
eP _n 07 34 53.2	
eS _n 07 35 25.2	
D = 262 km	
DECEMBER 17	
U.S.C.G.S.	
6.4S, 109.3E	
Java Sea	
H = 10 37 14.1	
h = 295 km	
Banff	
iP' 10 55 38	
Halifax	
iP' 10 56 11 d	
Ottawa	
eP 07 48 42	
Penticton	
eP 07 50 20	
Resolute	
eP 07 51 34	

DOMINION OBSERVATORIES

Resolute	DECEMBER 17	DECEMBER 17
eP 10 51 18	Penticton	Victoria
eP' 10 55 16	eP 16 14 32	eP 23 27 33
Seven Falls	Resolute	
eP' 10 56 03	eP 16 15 53	
Shawinigan Falls		DECEMBER 17
eP' 10 56 10		48.9°N, 122.0°W
Victoria	DECEMBER 17	Near Mount Baker,
iP' 10 55 34 d	U.S.C.G.S.	Washington, U.S.A.
	47.3N, 153.6E	H = 23 32 53
	Kurile Islands	Mag 2.0
DECEMBER 17		Penticton
Victoria		h = 15 km
eP 12 27 52	Penticton	eP ₁ 23 33 21.8
	eP 16 54 15	eS ₁ 23 33 46.5
DECEMBER 17	Resolute	D = 170 km
Penticton	iP 16 53 44 c?	Victoria
eP 12 31 37	Shawinigan Falls	eP ₁ 23 33 10.6
	eP 16 56 45	eS ₁ 23 33 23.8
DECEMBER 17	Victoria	D = 100 km
U.S.C.G.S.	eP 16 54 06	
43.2N, 28.9W	DECEMBER 17	DECEMBER 18
North of Azores	U.S.C.G.S.	Victoria
H = 13 14 16.8	39.5N, 29.6W	eP 00 31 44
h = 25 km	Azores	
Resolute	H = 18 05 37.0	DECEMBER 18
eP 13 22 12	h = 33km	U.S.C.G.S.
DECEMBER 17	Resolute	37.3N, 143.4E
U.S.C.G.S.	eP 18 14 00	Off east coast of
11.1N, 141.3E		Honshu Japan
Mariana Islands	DECEMBER 17	H = 07 35 59.8
region	Resolute	Resolute
H = 13 25 09.1	iP 07 46 09 d?	iP 09 11 08
h = 25 km		
Penticton	DECEMBER 17	
eP 13 37 59	Resolute	
Resolute	eP? 19 44 50?	DECEMBER 18
iP 13 37 59 d?		Shawinigan Falls
DECEMBER 17	Penticton	eP 10 09 19
H = 14 06 34	eP 21 01 09	
Mag 1.5		
Penticton		
eP ₁ 14 06 51.8		
eS ₁ 14 07 05.5		
D = 112 km		

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DECEMBER 18	DECEMBER 19	DECEMBER 21
U.S.C.G.S.	45°45'N, 75°13'W	U.S.C.G.S.
8.5N, 125.9E	About 10 miles west	61.6N, 152.3W
Mindanao,	of Ripon, Quebec	Alaska
Philippine Islands	H = 19 27 56.5	H = 14 40 01.6
H = 18 20 43.3	Mag 2.9	h = 169 km
Resolute	Montreal	Mag 5 3/4
iP 18 33 58	P ₁ 19 28 16.9	Alberni
	S ₁ 19 28 32.4	Banff
	D = 127 km	iP 14 44 23
DECEMBER 19	Ottawa	iP 14 44 54 d
U.S.C.G.S.	P ₁ 19 28 05.3	Halifax
8.3N, 38.3W	S ₁ 19 28 11.9	iP 14 48 54 d
Atlantic Ocean	D = 54 km	Ottawa
H = 10 00 33.9	Seven Falls	eP 14 48 08 d
h = 25 km	S ₁ 19 29 42.2	Penticton
Ottawa	D = 372 km	iP 14 44 48 d
eP 10 09 25	Shawinigan Falls	Resolute
Resolute	S ₁ 19 28 54.4	iP 14 45 02
eP 10 12 09	D = 210 km	S? 14 49 06?
Seven Falls		SS? 14 49 49
iP 10 09 13	DECEMBER 20	Seven Falls
	U.S.C.G.S.	iP 14 48 15 d
	25.1N, 122.9E	Shawinigan Falls
	Near north coast of	eP 14 48 12
	Formosa	Victoria
	H = 06 04 33.6	iP 14 44 36 d,N,W
	h = 60 km	
Resolute	Resolute	DECEMBER 21
iP 06 16 26	iP 13 37 01 d?	U.S.C.G.S.
	Shawinigan Falls	11.2N, 141.3E
eP 13 33 22	eP 13 33 22	Mariana Islands region
DECEMBER 21		H = 20 53 51.8
H = 11 22 21		h = 72 km
Mag 2.4		Resolute
Penticton	eP _n 11 22 59.5	eP 21 06 37
	eS _n 11 23 31.5	
	D = 262 km	DECEMBER 21
		Resolute
		eP 21 35 40
DECEMBER 19		
U.S.C.G.S.		
11.3N, 141.2E		
Mariana Islands		
H = 18 59 40.8		
h = 77 km		
Resolute		
iP 19 12 25		

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DECEMBER 21	Seven Falls	DECEMBER 22
62.5S, 167.1E	eP 03 57 38	U.S.C.G.S.
North of Balleny Islands	Victoria	30.5S, 71.5W
H = 22 29 54.9	eP 03 59 11	Near coast of Chile
h = 29 km		H = 12 21 33.0
Resolute	DECEMBER 22	h = 110 km
eP' 22 49 45	Resolute	Penticton
	eP 04 29 41?	eP 12 34 25
DECEMBER 22		DECEMBER 22
Resolute	DECEMBER 22	Resolute
eP 01 24 35?	U.S.C.G.S.	eP? 13 25 36?
DECEMBER 22	Kermadec Islands	DECEMBER 22
U.S.C.G.S.	region	U.S.C.G.S.
29.8S, 179.6W	H = 06 31 21.5	53.7N, 168.1W
Kermadec Islands	h = 46 km	Fox Islands
region	Ottawa	H = 14 27 40.3
H = 02 25 29.3	eP' 06 50 07	h = 57 km
h = 379 km	Penticton	Ottawa
Resolute	Resolute	eP 14 37 21
iP' 02 43 32	eP' 06 50 03 c	Penticton
	Victoria	eP 14 33 51
DECEMBER 22		Resolute
U.S.C.G.S.	eP 06 44 30	eP 14 34 31 d
9.8N, 94.2E		i 14 37 03
Nicobar Islands	DECEMBER 22	Seven Falls
H = 03 02 29.2	U.S.C.G.S.	eP 14 37 29
h = 60 km	43.1N, 126.2W	Shawinigan Falls
Resolute	Off coast of northern	eP 14 37 25
eP 03 15 48	California	DECEMBER 22
i 03 15 56	H = 11 41 06.0	Resolute
	h = 51 km	eP 14 40 38 c?
	Mag 3.8 (Vic.)	
DECEMBER 22	Alberni	
U.S.C.G.S.	eP _n 11 42 37.0	
16.1S, 72.9W	D = 565 km	
Near coast of southern Peru	Penticton	DECEMBER 22
H = 03 47 21.7	eP _n 11 42 55.2	U.S.C.G.S.
h = 147 km	D = 715 km	6.8S, 155.3E
Penticton	Resolute	Solomon Islands
eP 03 59 05	eP 11 47 54	H = 21 02 41.1
Resolute	Victoria	h = 469 km
eP 04 00 17	eP _n 11 42 28.1	Mag 5 1/2
	D = 492 km	Ottawa

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Penticton	DECEMBER 23	DECEMBER 23
iP 21 15 03 c	H = 02 07 43	U.S.C.G.S.
e 21 30 11	Mag 2.5	8.2N, 125.7E
e 21 32 19	Penticton	Mindanao, Philippine Islands
Resolute	eP _n 02 08 23.3	H = 10 47 57.9
eP 21 15 47	eS _n 02 08 57.3	h = 67 km
i 21 25 44	D = 278 km	Resolute
i 21 31 50		eP 11 01 10
Seven Falls	DECEMBER 23	
eP' 21 20 50	U.S.C.G.S.	
e 21 28 42	14.3N, 92.2W	DECEMBER 23
Shawinigan Falls	Guatemala-Mexico border region	Resolute
eP' 21 20 49	H = 06 07 01.1	eP 13 20 42?
DECEMBER 22	h = 48 km	
Penticton	Ottawa	DECEMBER 23
eP 23 32 15.3	eP 06 13 43	U.S.C.G.S.
DECEMBER 22	Penticton	8.8N, 125.7E
H = 23 59 17	eP 06 14 47	Mindanao, Philippine Islands
Mag 2.0	Resolute	H = 15 47 04.9
Penticton	eP 06 17 08	h = 120 km
iP ₁ 23 59 44.8	Resolute	Resolute
iS ₁ 24 00 05.8		eP 16 00 09
D = 172 km	DECEMBER 23	
DECEMBER 23	U.S.C.G.S.	
H = 00 34 35	3.3S, 101.9E	
Mag 0.8	Near coast of Sumatra	
Penticton	H = 09 41 48.4	
eP ₁ 00 34 39.3	Mag 2.5	
eS ₁ 00 34 42.4	Penticton	
D = 26 km	eP _n 16 30 24.6	
DECEMBER 23	eS _n 16 30 59.5	
H = 00 48 25	D = 285 km	
Mag 0.6	Resolute	
Penticton	eP' 10 00 04	
eP ₁ 00 48 29.6	Seven Falls	
eS ₁ 00 48 32.8	eP' 10 00 51	
D = 26 km	Shawinigan Falls	
DECEMBER 23	eP' 10 01 01	
H = 00 48 25	Victoria	
Mag 0.6	eP' 10 00 29	
Penticton		
eP ₁ 00 48 29.6		
eS ₁ 00 48 32.8		
D = 26 km		

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DECEMBER 23	Resolute	DECEMBER 24
U.S.C.G.S.	eP? 09 03 36?	U.S.C.G.S.
15.6N, 121.7E		3.6S, 77.8W
Near east coast of		Peru-Ecuador border
Luzon, Philippine		region
Islands		H = 23 18 29.2
H = 19 30 41.6		h = 25 km
h = 49 km		Banff
Resolute		eP 23 28 58
eP 19 43 23		Ottawa
DECEMBER 23	DECEMBER 24	eP 23 27 17
Seven Falls	U.S.C.G.S.	Penticton
eP 20 59 23	38.4S, 143.6E	eP 23 29 05
DECEMBER 24	Victoria Australia	Resolute
H = 03 22 18	H = 16 42 14.7	eP 23 30 33
Mag 2.3	h = 77 km	Seven Falls
Penticton	Resolute	eP 23 27 33
eP _n 03 22 56.7	eP' 17 01 29	Shawinigan Falls
eS _n 03 23 28.3	Seven Falls	eP 23 27 28
D = 259 km	eP' 17 02 10 d	Shawinigan Falls
DECEMBER 24	Shawinigan Falls	eP' 17 02 07 d
U.S.C.G.S.	iP' 17 02 07 d	DECEMBER 25
17.6S, 66.6E	DECEMBER 24	Resolute
Indian Ocean	48°31'N, 123°58'W	eP 01 23 28
H = 03 55 33.7	Lower Vancouver	DECEMBER 25
h = 100 km	Island	H = 04 23 01
Penticton	H = 17 47 58	Mag 2.1
eP ₁ ' 04 15 11	Mag 1.6	Penticton
DECEMBER 24	Alberni	eP _n 04 23 39.1
H = 08 09 50	eP ₁ 17 48 14.8	eS _n 04 24 10.6
Mag 2.1	D = 106 km	D = 258 km
Penticton	Victoria	DECEMBER 25
eP _n 08 10 21.5	iP ₁ 17 48 04.4	U.S.C.G.S.
eS _n 08 10 46.1	iS ₁ 17 48 09.3	29.0N, 142.8E
D = 201 km	D = 40 km	Bonin Islands
DECEMBER 24	DECEMBER 24	H = 05 21 03.1
Penticton	48°47'N, 122°32'W	h = 25 km
eP _n 09 02 23	Whidbey Island	Resolute
eP 09 02 23	H = 18 50 16	eP 05 32 16
	Mag 2.1	
	Penticton	
	eP _n 18 50 52.6	
	D = 244 km	
	Victoria	
	iP ₁ 18 50 27.2	
	iS ₁ 18 50 35.6	
	D = 69 km	

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DECEMBER 25		DECEMBER 26		DECEMBER 26
H = 06 37 51		U.S.C.G.S.		Resolute
Mag 2.4		33.8N, 136.2E		eP? 06 26 57
Penticton		Near south coast		
eP _n 06 38 29.9		of Honshu Japan		
eS _n 06 39 01.8		H = 01 44 48.7		
D = 261 km		h = 109 km		
DECEMBER 25		Penticton		DECEMBER 26
Resolute		eP 01 56 14		Canadian Arctic
eP? 11 22 41?		Resolute		H = 13 45 35.0
DECEMBER 25		iP 01 55 31d?		h = 22 km
Resolute				Mag 2.1
eP? 11 35 10				Resolute
DECEMBER 25				P _n 13 46 00.5
Ottawa				P ₁ 13 46 02.0
eP 12 55 09				S _n 13 46 19.5
DECEMBER 25				S ₁ 13 46 22.3
Ottawa				D = 166 km
eP 17 23 13				
DECEMBER 25		DECEMBER 26		DECEMBER 26
54.6N, 161.6E		U.S.C.G.S.		H = 14 49 06
Near east coast of		57.4S, 26.2W		Mag 1.7
Kamchatka		Sandwich Islands		Penticton
H = 20 27 34.1		H = 04 32 30.1		eP ₁ 14 49 25.0
h = 37 km		h = 25 km		eS ₁ 14 49 39.3
Resolute		Mag 5 1/4		D = 117 km
eP 20 35 21		Alberni		
DECEMBER 26		e 04 55 03		
U.S.C.G.S.		Banff		
23.7S, 176.9W		eP' 04 51 40		
Tonga Islands region		Penticton		
H = 00 56 16.6		eP' 04 51 42		
h = 59 km		e 04 54 53		
Penticton		Resolute		
eP 01 09 09		iP' 04 51 46		
Resolute		e 04 55 20		
e 01 12 05		e 05 13 08		
DECEMBER 26		Victoria		
		e 04 54 58		
		DECEMBER 26		DECEMBER 26
		U.S.C.G.S.		Resolute
		8.3N, 83.2W		eP? 20 07 57?
		Costa Rica - Panama		
		border region		
		H = 05 36 43.8		
		h = 104 km		
		Penticton		
		eP 05 45 40		
		Resolute		
		eP 05 47 27		

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DECEMBER 27	Banff	DECEMBER 28	Shawinigan Falls
U.S.C.G.S.	eP 11 11 46.4	Canadian Arctic	eP 10 49 48
41.3N, 124.9W	Penticton	H = 19 45 39.5	Resolute
Off coast of	eP 11 10 50.0	Mag 4.3	eP? 21 23 27?
northern California	Resolute	Resolute	DECEMBER 29
H = 10 35 28.0	eP 11 15 46	P _n 19 48 04.5	U.S.C.G.S.
h = 30 km	i 11 16 00	S _n 19 49 51	10.1S, 76.0W
Mag 5	Victoria	L _g 19 51 05	Peru
Alberni	eP 11 10 41.1	D = 1125 km	H = 11 04 19.0
	eP 10 37 20.0		h = 19 km
Banff			Resolute
eP 10 38 14.5	DECEMBER 27	DECEMBER 28	eP 11 16 57
Halifax	U.S.C.G.S.	Resolute	Resolute
eP(?) 10 43 37 d	13.7S, 74.3W	eP? 20 58 44	eP 22 37 13?
Ottawa	Near coast of Peru	e 21 00 35	DECEMBER 29
eP 10 42 26	H = 18 09 41.6	DECEMBER 28	U.S.C.G.S.
Penticton	h = 82 km	Resolute	35.3N, 22.6E
eP _n 10 37 31.4	Banff	eP 18 21 11	Near Crete
Résolute	eP	Resolute	H = 18 19 41.6
iP 10 42 28 d?	Halifax	eP 23 21 58	h = 54 km
eS 10 48 09	P 18 19 36.5c(?)	DECEMBER 29	Ottawa
Seven Falls	Ottawa	Resolute	eP 18 30 56
eP 10 42 50	eP 18 19 36	eP? 00 50 01?	Resolute
Shawinigan Falls	Penticton	DECEMBER 29	eP 01 53 22?
iP 10 42 40 d	eP 18 21 16	Resolute	Seven Falls
Victoria	Resolute	eP? 00 50 01?	iP 18 30 31 d
eP _n 10 37 07.3	iP 18 22 33 d	DECEMBER 29	DECEMBER 30
	Seven Falls	Resolute	U.S.C.G.S.
	eP 18 19 49	eP 09 50 18?	18.8S, 69.4W
DECEMBER 27	Shawinigan Falls		Northern Chile
Penticton	eP 18 19 44		H = 19 01 38.1
eP 10 58 43	Victoria	DECEMBER 29	h = 39 km
Resolute	eP 18 21 23	U.S.C.G.S.	Banff
eP 11 03 38		44.8S, 75.6W	eP 19 13 46
Victoria		Near coast of	Halifax
eP 10 58 21	DECEMBER 28	southern Chile	iP 19 12 08.5 c
	U.S.C.G.S.	H = 10 36 40.0	Ottawa
	34.9N, 22.5E	h = 30 km	iP 19 12 14 d
DECEMBER 27	Near coast of	Mag 6 1/2	Resolute
U.S.C.G.S.	Greece	Halifax	eP 19 14 59 d
41.4N, 125.2W	H = 05 39 43.7	eP 10 49 41 c	Penticton
Off coast of	h = 67 km	Ottawa	iP 19 13 54 d
northern California	Resolute	eP 10 49 39	Seven Falls
H = 11 08 46.0	eP 05 50 09	Resolute	eP 19 12 24 d
h = 61 km	Seven Falls	eP' 10 55 29	Shawinigan Falls
Mag 4 1/4	eP 05 50 36	Resolute	iP 19 12 21 d
Alberni	Shawinigan Falls	e 11 05 36	Victoria
eP 11 10 53.2	eP 05 50 46	Seven Falls	iP 11 14 08 c
		eP 10 49 51	

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DECEMBER 29	Shawinigan Falls	DECEMBER 30	H = 17 30 10
eP 10 49 48	Resolute	Mag 0.5	Penticton
	eP? 21 23 27?		iP ₁ 17 30 13.4
DECEMBER 29	DECEMBER 29	iS ₁ 17 30 16.0	D = 22 km
U.S.C.G.S.	Resolute		
10.1S, 76.0W	eP? 22 24 21?	DECEMBER 30	
Peru	Resolute	Resolute	eP? 19 20 26
H = 11 04 19.0	eP 11 16 57	DECEMBER 29	
h = 19 km	Resolute	Resolute	
DECEMBER 29	eP 22 37 13?	DECEMBER 30	
U.S.C.G.S.	DECEMBER 29	Resolute	
35.3N, 22.6E	Resolute	DECEMBER 30	H = 22 08 19
Near Crete	eP 23 21 30?	Penticton	Mag 0.6
H = 18 19 41.6	Resolute	iP ₁ 22 08 22.3	iP ₁
h = 54 km	eP 18 30 06	iS ₁ 22 08 24.7	iS ₁
Ottawa	Seven Falls	D = 20 km	
eP 18 30 56	iP 18 30 31 d	DECEMBER 30	H = 22 54 30
Resolute	DECEMBER 30	Mag 2.0	
eP 01 53 22?	Resolute	Penticton	
Seven Falls	eP? 06 12 55?	iP ₁ 22 54 56.3	
iP 18 30 31 d	Resolute	iS ₁ 22 55 16.0	
DECEMBER 29	DECEMBER 30	D = 161 km	
U.S.C.G.S.	Resolute	DECEMBER 31	
18.8S, 69.4W	eP? 08 38 55	Resolute	
Northern Chile	DECEMBER 30	eP? 09 03 48	
H = 19 01 38.1	Resolute		
h = 39 km	eP 19 13 46	DECEMBER 30	
Banff	U.S.C.G.S.	U.S.C.G.S.	
eP 19 13 46	16.9S, 70.0W	16.9S, 70.0W	
Halifax	Ottawa	Southern Peru	
iP 19 12 08.5 c	iP 19 12 14 d	H = 11 03 36.8	
Ottawa	Resolute	h = 47 km	
iP 19 12 14 d	eP 19 14 59 d	Ottawa	
Resolute	Penticton	eP 11 13 58	
eP 19 14 59 d	iP 19 13 54 d	Penticton	
Penticton	Seven Falls	eP 11 14 40	
iP 19 13 54 d	eP' 10 55 29	Resolute	
Seven Falls	Resolute	eP? 11 16 48?	
eP 19 12 24 d	e 11 05 36	Seven Falls	
Shawinigan Falls	Seven Falls	iP 11 14 08 c	
iP 19 12 21 d	eP 10 49 51		
Victoria			
iP 11 14 08 c			

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DECEMBER 31

U.S.C.G.S.

43.9S, 75.0W

Near coast of
southern Chile

H = 18 08 12.3

h = 92 km

Mag 6 1/2

Ottawa

eP 18 21 02

Resolute

eP' 18 26 55?

Seven Falls

eP 18 21 11

DECEMBER 31

H = 21 06 25

Mag 2.0

Penticton

iP₁ 21 06 53.6

iS₁ 21 07 15.4

D = 179 km

DECEMBER 31

H = 21 46 31

Mag 2.2

Penticton

iP_n 21 47 04.0

iS_n 21 47 29.8

D = 211 km

DECEMBER 31

H = 22 23 03

Mag 2.2

Penticton

iP_n 22 23 35.8

eS_n 22 24 02.1

D = 215 km

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EARTHQUAKES IN THE CANADIAN ARCTIC

The following disturbances were recorded during the last quarter of 1960. The times of observed phases are given at their respective chronological positions in the text of this bulletin.

OCTOBER 4 at 02 27 50 U.T. Magnitude 1.9. Originated 254 km from Resolute, N.W.T.

OCTOBER 4 at 04 04 30 U.T. Magnitude 1.9. Originated 217 km from Resolute, N.W.T.

OCTOBER 8 at 06 49 20 U.T. Magnitude 3.2. Originated 440 km from Resolute, N.W.T., at a depth of about 15 km.

OCTOBER 14 at 08 11 51 U.T. Magnitude 2.5. Originated 57 km from Resolute, N.W.T.

OCTOBER 14 at 20 46 50 U.T. Magnitude 2.7. Originated 210 km from Resolute, N.W.T., at a depth of about 20 km.

OCTOBER 15 at 02 48 47 U.T. Magnitude 1.5. Originated 164 km from Resolute, N.W.T., at a depth of about 24 km.

OCTOBER 19 at 00 23 04 U.T. Magnitude 1.6. Originated 49 km from Resolute, N.W.T.

OCTOBER 22 at 15 27 37 U.T. Magnitude 4.1. Originated 730 km from Resolute, N.W.T., at a depth of about 14 km.

NOVEMBER 4 at 09 54 35 U.T. Magnitude 1.7. Originated 49 km from Resolute, N.W.T.

NOVEMBER 10 at 22 32 24 U.T. Magnitude 3.3. Originated 550 km from Resolute, N.W.T.

NOVEMBER 16 at 08 48 58 U.T. Magnitude 1.7. Originated 49 km from Resolute, N.W.T.

DECEMBER 2 at 22 54 15 U.T. Magnitude 2.4. Originated 174 km from Resolute, N.W.T.

DECEMBER 10 at 13 02 47 U.T. Magnitude 2.2. Originated 136 km from Resolute, N.W.T.

DECEMBER 26 at 13 45 35 U.T. Magnitude 2.1. Originated 166 km from Resolute, N.W.T., at a depth of about 22 km.

DECEMBER 28 at 19 45 40 U.T. Magnitude 4.3. Originated 1125 km from Resolute, N.W.T.

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DOMINION OBSERVATORIES

EARTHQUAKES IN EASTERN CANADA AND ADJACENT AREAS

The following disturbances were recorded during the last quarter of 1960. The times of observed phases are given at their respective chronological positions in the text of this bulletin.

NOVEMBER 3 at 04 11 47 U.T. Magnitude 2.7. Epicentre at 48°00'N, 74°52'W. About 15 miles west of Parent, Quebec, where it was felt by a few persons.

DECEMBER 19 at 19 27 57 U.T. Magnitude 2.9. Epicentre at 45°45'N, 75°13'W. About 10 miles west of Ripon, Quebec.

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SEISMOLOGICAL BULLETIN - 1960

EARTHQUAKES IN WESTERN CANADA AND ADJACENT AREAS

The following disturbances were recorded during the fourth quarter of 1960. The times of observed phases are given at their respective chronological positions in the text of this bulletin. The quality (Q) of the epicentre is indicated by a letter from "a" meaning an excellent fit of the observed data to "d" meaning a very poor solution.

OCTOBER 5 at 02 59 47 U.T. Magnitude 2.4. Epicentre at 48°36'N, 123°52'W. Southern Vancouver Island. Q:b.

OCTOBER 5 at 08 24 58 U.T. Magnitude 1.9. 108 km from Victoria.

OCTOBER 8 at 00 37 23 U.T. 56 km from Alberni. Texada?

OCTOBER 8 at 10 54 24.7 ? U.T. Magnitude approximately 2.

OCTOBER 10 at 15 06 38 U.T. Magnitude 2.5. 166 km from Penticton

OCTOBER 10 at 23 54 32 U.T. Magnitude 4.5. Epicentre at 53N, 133W. Off the southern Queen Charlottes. Q:d.

OCTOBER 10 at 23 24 25 U.T. Magnitude 2.5. 105 km from Alberni.

OCTOBER 11 at 10 41 51 U.T. Magnitude 3.1. 275 km from Victoria and 440 km from Penticton. North of Portland, Oregon, U.S.A.

OCTOBER 11 at 11 54 48 U.T. Magnitude 3.5. Epicentre at 46.0N, 122.2W. Northeast of Portland, Oregon, U.S.A. Q:b.

OCTOBER 11 at 12 48 15 U.T. Magnitude 3.1. 418 km from Penticton. Aftershock of previous Portland, Oregon tremor?

OCTOBER 12 at 05 17 14 U.T. Magnitude 2.3. Epicentre at 48.0N, 123.6W. Southwest of Port Angeles, Washington, U.S.A. Q:b.

OCTOBER 27 at 07 34 59.5 U.T. Magnitude 1.7. 88 km from Penticton.

OCTOBER 28 at 19 55 23.2 U.T. Magnitude 2.2. 60 km from Alberni.

OCTOBER 29 at 01 47 33.6 U.T. Magnitude 2.7. 150 km from Penticton.

OCTOBER 29 at 23 40 56.9 U.T. Magnitude 2.2. 53 km from Alberni.

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DOMINION OBSERVATORIES

NOVEMBER 1 at 06 34 02 U.T. Magnitude 1.7. Epicentre at 48°42'N, 123°12'W. Gulf Islands. Q:b.

NOVEMBER 1 at 08 37 23 U.T. Magnitude 3.0. Epicentre at 47.1N, 126.4W. Off coast of Washington, U.S.A. Q:c.

NOVEMBER 1 at 16 12 41 U.T. Magnitude 1.0. 30 km from Penticton.

NOVEMBER 2 at 00 01 40 U.T. Magnitude 0.6. 20 km from Victoria.

NOVEMBER 2 at 22 25 29 U.T. Magnitude 2.0. Epicentre at 48°28'N, 123°52'W. Southern Vancouver Island. Q:c.

NOVEMBER 4 at 00 29 14 U.T. Magnitude 1.5. Epicentre at 49.1N, 120.6W. Near Copper Mountain? Q:c.

NOVEMBER 5 at 02 08 21 U.T. Magnitude 2. Epicentre at 49°41'N, 124°30'W. Texada Island blast? Q:b.

NOVEMBER 5 at 03 07 31 U.T. Magnitude 1.8. 135 km from Penticton.

NOVEMBER 7 at 00 57 08 U.T. Magnitude 1.7. 140 km from Penticton.

NOVEMBER 8 at 11 00 15 U.T. Magnitude 0.7. 18 km from Banff.

NOVEMBER 8 at 11 36 27.2 U.T. Magnitude 4.9. Near coast of Oregon, U.S.A.

NOVEMBER 9 at 00 41 44 U.T. Magnitude 1.9. 144 km from Penticton.

NOVEMBER 10 at 19 38 55 U.T. Magnitude 0.9. 30 km from Penticton.

NOVEMBER 14 at 08 03 07 U.T. Magnitude 2.5. 192 km from Penticton.

NOVEMBER 14 at 10 25 04 U.T. Magnitude 1.9. 150 km from Penticton.

NOVEMBER 15 at 20 28 25 U.T. Magnitude 2.0. 229 km from Penticton.

NOVEMBER 15 at 22 32 41 U.T. Magnitude 1.8. 132 km from Penticton.

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NOVEMBER 15 at 23 25 07 U.T. Magnitude 1.7. 152 km from Penticton.

NOVEMBER 16 at 23 55 53 U.T. Magnitude 1.7. 174 km from Penticton.

NOVEMBER 17 at 00 48 46 U.T. Magnitude 1.9. Epicentre at 49.0N, 121.5W. South of Hope, B.C. Q:c.

NOVEMBER 17 at 12 41 20 U.T. Magnitude 1.4. 118 km from Penticton.

NOVEMBER 19 at 00 45 30 U.T. Magnitude 1.9. 140 km from Penticton.

NOVEMBER 19 at 06 38 30 U.T. Magnitude 2.1. 76 km from Alberni.

NOVEMBER 19 at 15 00 56 U.T. Magnitude 1.3. 131 km from Penticton.

NOVEMBER 19 at 19 52 02 U.T. Magnitude 2.5. 276 km from Penticton.

NOVEMBER 20 at 00 23 16 U.T. Magnitude 2.0. 168 km from Penticton.

NOVEMBER 21 at 00 55 05 U.T. Magnitude 1.8. 142 km from Penticton.

NOVEMBER 22 at 23 54 21 U.T. Magnitude 2.1. 178 km from Penticton.

NOVEMBER 23 at 00 51 32 U.T. Magnitude 1.8. 155 km from Penticton.

NOVEMBER 23 at 17 09 09 U.T. Magnitude 2.0. 168 km from Penticton.

NOVEMBER 25 at 00 54 09 U.T. Magnitude 1.9. 151 km from Penticton.

NOVEMBER 27 at 21 54 09 U.T. Magnitude 1.8. 155 km from Penticton.

NOVEMBER 28 at 11 24 51 U.T. Magnitude 1.5. 104 km from Penticton.

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DOMINION OBSERVATORIES

DECEMBER 1 at 20 45 03 U.T. Magnitude 3.6. Epicentre at 49.4N, 129.3W. Off west coast of Vancouver Island. Q:b.

DECEMBER 1 at 20 49 45.5 U.T. Magnitude 6. Epicentre at 48.5N, 129.1W. Off coast of Vancouver Island. Q:b.

DECEMBER 1 at 21 05 21 U.T. Magnitude 2.3. Epicentre at 48°11'N, 124°53'W. Off coast of Washington, Q:b.

DECEMBER 1 at 21 18 49 U.T. Magnitude 3.3. Epicentre at 48.5N, 129.2W. Off west coast of Vancouver Island. Q:c.

DECEMBER 1 at 21 49 37.2 U.T. Magnitude 3.8. Epicentre at 48.7N, 129.2W. Near coast of Vancouver Island. Q:b.

DECEMBER 1 at 21 57 43 U.T. Magnitude 3.4. Epicentre at 48.9N, 129.2W. 432 km from Victoria and 324 km from Alberni. Q:c.

DECEMBER 1 at 22 05 30 U.T. Magnitude 3.7. Epicentre at 48.5N, 129.2W. 427 km from Victoria and 329 km from Alberni. Q:c.

DECEMBER 1 at 22 33 53 U.T. Magnitude 3.2. Epicentre at 49N, 129W. 444 km from Victoria and 330 km from Alberni. Q:c-.

DECEMBER 1 at 22 54 55 U.T. Magnitude 3.5. 429 km from Victoria and 329 km from Alberni. Off the coast of Vancouver Island. Q:c.

DECEMBER 3 at 15 51 31 U.T. Magnitude 2.5. 88 km from Alberni.

DECEMBER 3 at 22 26 08 U.T. Magnitude 3.8. Epicentre at 45.8N, 125.0W. Off coast of Oregon, Washington, U.S.A. Q:c.

DECEMBER 5 at 13 33 50 U.T. Magnitude 2.0. 47 km from Alberni.

DECEMBER 5 at 15 38 46 U.T. Magnitude 1.5. 43 km from Victoria.

DECEMBER 5 at 20 37 15 U.T. Magnitude 1.8. 106 km from Penticton.

DECEMBER 7 at 00 42 03 U.T. Magnitude 1.9. 160 km from Penticton.

DECEMBER 8 at 02 30 10 U.T. Magnitude 2.6. Epicentre at 49°44'N, 123°28'W. Texada Island? Q:c.

DECEMBER 9 at 11 24 29 Very near Penticton station.

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SEISMOLOGICAL BULLETIN - 1960

DECEMBER 10 at 23 49 03 U.T. Magnitude 1.8. Epicentre at 49°36'N, 124°30'W. Texada Island. Q:c.

DECEMBER 11 at 18 58 40.5 U.T. Magnitude 3.8. Epicentre at 48.9N, 129.7W. Vancouver Island region.

DECEMBER 11 at 19 07 55 U.T. Magnitude 3.7. Epicentre at 48.9N, 129.7W. 360 km from Alberni and 743 km from Penticton. Q:c.

DECEMBER 11 at 21 44 15 U.T. Magnitude 2.0. 142 km from Penticton.

DECEMBER 16 at 00 22 37 U.T. Magnitude 1.9. 168 km from Penticton.

DECEMBER 16 at 00 44 34 U.T. Magnitude 1.8. 159 km from Penticton.

DECEMBER 16 at 21 05 21 U.T. Magnitude less than 1. 58 km from Victoria.

DECEMBER 16 at 23 56 40 U.T. Magnitude 3.0. 368 km from Penticton.

DECEMBER 17 at 07 34 15 U.T. Magnitude 2.7. 262 km from Penticton.

DECEMBER 17 at 09 48 19 U.T. Magnitude 2.4. 263 km from Penticton.

DECEMBER 17 at 14 06 34 U.T. Magnitude 1.5. 112 km from Penticton.

DECEMBER 17 at 23 32 53 U.T. Magnitude 2.0. Epicentre at 48.9N, 122W. Near Mount Baker.

DECEMBER 21 at 11 22 21 U.T. Magnitude 2.4. 262 km from Penticton.

DECEMBER 22 at 11 41 21 U.T. Magnitude 3.8. Epicentre at 44N, 125W. Off coast of Oregon, U.S.A. Q:c-.

DECEMBER 22 at 23 59 17 U.T. Magnitude 2.0. 172 km from Penticton.

DECEMBER 23 at 00 34 35 U.T. Magnitude 0.8. 26 km from Penticton.

DECEMBER 23 at 00 48 25 U.T. Magnitude 0.6. 26 km from Penticton.

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DOMINION OBSERVATORIES

DECEMBER 23 at 02 07 43 U.T. Magnitude 2.5. 278 km from Penticton.

DECEMBER 23 at 16 29 43 U.T. Magnitude 2.5. 285 km from Penticton.

DECEMBER 24 at 03 22 18 U.T. Magnitude 2.3. 259 km from Penticton.

DECEMBER 24 at 08 09 50 U.T. Magnitude 2.1. 201 km from Penticton.

DECEMBER 24 at 17 47 58 U.T. Magnitude 1.6. Epicentre at 48° 31'N, 123°58'W. Lower Vancouver Island. Q:b.

DECEMBER 24 at 18 50 16 U.T. Magnitude 2.1. Epicentre at 48° 47'N, 122°32'W. Widbey Island. Q:b-.

DECEMBER 25 at 04 23 01 U.T. Magnitude 2.1. 258 km from Penticton.

DECEMBER 25 at 06 37 51 U.T. Magnitude 2.4. 261 km from Penticton.

DECEMBER 26 at 14 49 06 U.T. Magnitude 1.7. 117 km from Penticton.

DECEMBER 30 at 17 30 10 U.T. Magnitude 0.5. 22 km from Penticton.

DECEMBER 30 at 22 08 19 U.T. Magnitude 0.6. 20 km from Penticton.

DECEMBER 30 at 22 54 30 U.T. Magnitude 2.0. 161 km from Penticton.

DECEMBER 31 at 21 06 25 U.T. Magnitude 2.0. 179 km from Penticton.

DECEMBER 31 at 21 46 31 U.T. Magnitude 2.2. 211 km from Penticton.

DECEMBER 31 at 22 23 03 U.T. Magnitude 2.2. 215 km from Penticton.