

Millman Fireball Archive data: Sound generating fireball data.
Canadian fireball reports.

This table provides information on the catalog card number and the U.T. time of sound generating fireball events. The type of sound deduced (see key below) is given along with the estimated magnitude, the estimated duration, and the number of bursts or fragments as given on the report card.

Key: A pair of question marks (??) indicates no data available. A single question mark indicates an uncertain result. Simultaneous sounds are indicated with an 'Si', while sonic booms are indicated by an 'So'. An 'S' is used to indicate the presence of associated seismic effects.

Card #	Year	M: day	Time (UT)	Sound	Magnitude	D.(sec.)	Bursts
89/30	1989	Nov. 23	23:00	Si	--	2 - 4	--
88/4/2	1988	Jan. 20	17:29	So	Brilliant	15 - 20	1
88/5/1		Jan. 25	11:20	So	Lightning	~ 5	0
88/10		Feb. 14	01:00	So	--	--	--
88/31/1		Feb. 05	12:10	So	Brilliant	1	--
88/31/2		Feb. 05	12:10	So	--	Several	--
88/31/3		Feb. 05	12:10	Si	--	--	--
88/18/1		Apr. 17	02:03	Si	--	--	--
88/18/6		Apr. 17	02:04	So	V. bright	--	--
88/18/7		Apr. 17	02:10	So	Bright	5	--
88/20		Apr. 17	04:00	Si	--	--	--
87/7/2	1987	Feb. 01	01:01	So	Bright	60 - 90	0
87/29/2		Jun. 18	01:56	??	--	4 - 5	7
87/39		Aug. 03	06:00	So+S	--	~ 2	Flare
87/63		Dec. 13	21:05	So+S	--	--	--
86/8/2	1986	Jan. 19	22:50	So+Si	V. Bright	30 - 40	3
86/8/5		Jan. 19	22:55	So	Bright	30	
86/8/9		Jan. 19	23:00	So	Daylight	--	--
86/8/11		Jan. 19	23:00	So	See notes	1	0
86/8/13		Jan. 19	23:00	So	Daylight	--	--
86/8/15		Jan. 19	23:00	So	Daylight	--	--
86/11		Feb. 06	11:40	So	Daylight	5	--
86/14/1		Feb. 18	05:20	So	> Moon	--	--
86/35/1		Sep. 02	04:30	So	> F. Moon	--	--
86/36		Sep. 08	06:26	Si	- 3	2.5	--
85/12	1985	Mar. 02	19:55	So	--	--	--
85/13		Mar. 16	05:25	Si	--	10	--
85/21		Aug. 13	05:40	So	--	3	> 6
85/38/1		Oct. 24	02:30	So	V. Bright	Short	--

85/38/7		Oct. 24	02:30	So	See notes	2	--
85/38/9		Oct. 24	02:30	So	--	--	--
85/40		Oct. 24	06:30	So+S	Brilliant	2 - 3	1
84/3	1984	Jan. 22	00:30	So	--	--	3
84/8/6		Feb. 23	02:05	Si	V. Bright	6 - 10	--
84/8/7		Feb. 23	02:05	Si	> Moon	10	2
84/8/14		Feb. 23	02:10	So	3 x Moon	5 - 15	1
84/8/15		Feb. 23	02:10	So	10 x Moon	5 - 10	See notes
84/8/20		Feb. 23	02:10	So	V. Bright	10 - 30	2
84/15		Apr. 17	00:30	??	--	1	--
84/17		Jul. 22	05:23	Si	Moon	5 - 10	1
84/19		Aug. 07	04:28	Si	V. Bright	3 - 5	--
84/24		Oct. 01	05:44	Si	Bright	3 - 4	0
84/32/2		Nov. 25	03:30	So	> F. Moon	Several	1
83/16	1983	Feb. 03	02:30	So	--	Few	--
83/46		Oct. 01	00:45	So	F. Moon	--	--
82/9	1982	Apr. 28	06:32	So	V. Bright	15	--
82/16/1		Jun. 02	05:50	So	V. Bright	3	1
82/16/2		Jun. 02	05:50	So	Daylight	1 - 10	--
82/16/5		Jun. 02	05:50	Si	Ext. Bright	60	0
82/16/11		Jun. 02	06:00	So	V. Bright	2 - 5	0
82/19		Jun. 20	00:50	Si	-7 to -8 Mv	3 - 4	See notes
82/28		Sep. 08	03:05	Si	> Jupiter	2	0
81/17/1	1981	Aug. 08	07:07	So	Ext. Bright	~ 5	1
81/29/6		Apr. 04	00:11	Si	Flash	1.5	1
81/29/8		Apr. 04	00:05	Si	V. Bright flash	1.5 - 5	1
81/34		Nov. 14	11:20	So	--	--	--
81/37		Dec. 28	11:20	So	See notes	~ 5	--
80/8/4	1980	Feb. 09	00:20	So	Ext. Bright	10	--
80/22/2		Jul. 24	06:15	So	See notes	1	1
79/11	1979	Jan. 31	14:15	Si ?	= Venus	3 - 4	Many
79/13/2		Jan. 31	01:45	Si ?	= Venus	2 - 4	--
79/66		Feb. 02	04:00	So	Bright flash	--	--
79/16		Mar. 18	00:35	Si	Bright	5	--
79/40		Aug. 12	09:30	Si	V. Bright	Few	0
79/75		Dec. 20	11:30	So+S	--	--	0
78/1	1978	Jan. 03	11:50	So	V. Bright	2	0
78/31		Jan. 28	02:30	So	Sun like	3	0
78/11		Feb. 04	02:30	So	--	--	--
78/13		Feb. 14	05:15	So	Bright	1 - 2	0
78/48		May 01	23:50	Si	--	--	--
78/52		May 13	03:30	Si	Bright	Short	--
78/56		May 24	06:20	So	--	45	--
78/62		Jul. 10	05:00	Si	--	--	--
78/104/1		Sep. 22	04:20	Si+So	See notes	2 - 3	Yes

78/104/3		Sep. 22	04:20	So	See notes	2 - 3	Yes
78/104/4		Sep. 22	04:20	So	Arc welder	1	0
78/104/13		Sep. 22	04:20	So	V. Bright	2 - 3	0
77/13/2	1977	Apr. 02	01:20	Si	> Venus	4	Yes
77/29		Aug. 02	18:30	So	Moon	Several	2
76/38	1976	Oct. 15	22:50	Si	Brilliant	2	0
75/11/3	1975	Feb. 16	04:02	Si	See notes	3	Sparkly
75/17/1		Apr. 23	22:40	So	--	1.5	--
75/17/2		Apr. 23	22:40	So	--	0.5 - 1	--
75/31		Aug. 08	04:28	Si	0.5 x Moon	1.5 - 2	0
75/51		Nov. 06	02:12	So	--	~ 8	--
75/59		Nov. 06	11:30	So	-12 Mv	~ 10	--
74/9	1974	Mar. 03	05:30	So	> Moon	8	--
74/12		Apr. 17	04:00	Si	Venus	3 - 4	--
74/36		Sep. 16	00:07	Si	V. Bright	Several	--
73/33	1973	May 10	04:57	So	--	3 - 4	--
73/43		Jul. 23	04:30	Si ?	-3 Mv	--	--
73/46		Aug. 14	01:50	So	Moon	15	0
72/6	1972	Jan. 17	07:40	Si	Daylight	~ 5	--
72/16		Mar. 19	07:00	Si	--	60	0
72/25		Apr. 23	16:30	Si	See notes	1	--
72/57		Jul. ??	23:30	So+Si	-3.5	5	0
72/55/5		Aug. 10	20:35	So	--	--	--
72/55/18		Aug. 10	20:30	So	Bright	--	0
72/55/19		Aug. 10	20:30	So	Bright	--	0
72/55/21		Aug. 10	20:30	So	V. Bright	--	0
72/55/22		Aug. 10	20:30	So	Mg. Flare	120	0
72/55/32		Aug. 10	20:20	Si	Welding arc	20 - 25	--
72/55/33		Aug. 10	20:30	Si	--	2 - 3	--
72/55/41		Aug. 10	20:30	Si+So	Very	4 - 6	--
72/55/42		Aug. 10	20:30	Si	--	--	--
72/68		Sep. 15	04:03	Si	Star	--	--
72/83/1		Oct. 17	02:00	Si	Moon	1	--
72/90		Nov. 10	03:20	So	--	4	See notes
71/9	1971	Jan. 09	02:15	Si	> Moon	6	--
71/21		Feb. 18	02:20	Si	V. Bright	5	0
71/36		May 29	05:45	Si	> Jupiter	20	1
71/48		Jun. 19	??	Si ?	Ext. Bright	--	1
71/65		Sep. 15	05:50	So	> Moon	2 - 3	--
71/83/11		Oct. 28	03:30	So	V. Bright	3	--
71/83/12		Oct. 28	03:25	So	< Moon	3	1
71/83/20		Oct. 28	03:25	Si	> Moon	2	1
71/83/23		Oct. 28	03:30	So	V. Bright	4 - 5	1
71/83/25		Oct. 28	03:25	So	--	6	1
71/83/27		Oct. 28	03:30	So	V. Bright	2 - 3	--

71/83/28		Oct. 28	03:30	So	Ext. Bright	2 - 3	--
71/83/29		Oct. 28	03:30	So	--	~ 30	--
70/78	1970	Aug. 12	02:12	So	-3 to -4 Mv	1 - 2	1
70/79/2		Aug. 17	08:00	So	¼ Full Moon	10	1
70/83		Aug. 28	04:57	Si	> Planet	2 - 3	0
70/94		Oct. 20	03:00	Si	Full Moon	--	0
70/103		Oct. 20	04:00	Si ?	- 3 Mv	--	--
70/110/1		Dec. 01	06:00	So	See note	30	0
70/110/4		Dec. 01	06:00	So	Daylight	Flash	--
70/110/6		Dec. 01	06:00	So	--	2 - 3	--
69/21	1969	Feb. 16	04:56	So	- 5 Mv	1	1
69/22		Feb. 17	08:30	So	--	15 - 20	--
69/29/2		Mar. 05	05:40	S	Bright	--	--
69/53/1		May 12	23:45	Si	See notes	Brief	0
69/99		Jul. 18	04:41	So	See notes	--	--
69/70		Aug. 12	03:35	Si	> Mars	3	0
69/76		Aug. 21	23:45	So+S	--	Flash	--
68/92	1968	Feb. 15	05:39	??	Brilliant	< 2	0
68/27		Mar. 20	05:15	So+S	--	3 - 4	--
68/48		May 09	04:57	So	Flare	5	0
68/96/1		Sep. 20	00:24	So	-6 Mv	5 - 6	4
68/96/5		Sep. 20	00:24	Si	--	--	--
68/96/33		Sep. 20	00:35	Si	--	120	--
68/113		Oct. 26	13:30	So	--	5	--
67/2	1967	Jan. 10	22:00	So+S	Lightning	30	1
67/18/11		Feb. 05	01:58	??	--	--	--
67/18/12		Feb. 05	01:55	Si	> Sun	2 - 3	~ 4
67/38		Mar. 20	04:15	Si ?	V. Bright	3 - 4	--
67/43/24		Apr. 06	00:00	So	--	--	--
67/116		Sep. 09	10:59	Si	See notes	10	--
67/134/1		Sep. 09	18:48	So	See notes	15	1
67/192/2		Dec. 07	02:00	Si	½ Moon	~ 30	--
67/166/27		Dec. 15	01:00	??	--	--	--
67/174/1		Dec. 26	01:47	So	Flash	4 - 5	2
67/174/15		Dec. 26	01:??	Si	--	--	--
66/8	1966	Jan. 18	09:30	Si	> Moon	~ 60	0
66/52/3		Apr. 23	00:10	Si	-7 Mv	--	Yes
66/52/5		Apr. 23	00:15	Si	--	5	--
66/53/2		Apr. 26	00:??	Si	--	10	--
66/53/3		Apr. 26	00:??	Si ?	--	10 - 12	--
66/53/14		Apr. 26	00:30	Si	--	few	--
66/53/63		Apr. 26	00:15	Si	See notes	--	--
66/53/106		Apr. 26	00:00	Si	> Moon	30	--
66/53/114		Apr. 26	00:45	So	~ Moon	11	--
66/53/169		Apr. 26	??:??	So	V. Bright	--	--

66/53/194		Apr. 26	00:??	So	--	--	--
66/53/200		Apr. 26	00:??	So	--	--	--
66/53/204		Apr. 26	00:??	So	--	--	--
66/53/205		Apr. 26	00:??	So	--	--	--
66/53/225		Apr. 26	00:14	So	V. Bright	Several	Sparks
66/53/226		Apr. 26	00:14	Si	--	--	Yes
66/53/245		Apr. 26	00:15	Si+So	V. Bright	~ 10	?
66/99		Jul. 27	10:40	Si	¼ Moon	3	1
66/164/2		Sep. 18	01:00	So	Daylight	5	1
66/164/9		Sep. 18	00:49	Si	Brilliant	10	--
66/164/12		Sep. 18	?:??	So	--	--	--
66/164/49		Sep. 18	00:43	So	> Full Moon	3	--
66/164/54		Sep. 18	00:48	So	Venus	--	--
66/164/61		Sep. 18	?:??	So+S	--	10	--
66/164/66		Sep. 18	?:??	Si	Blinding	--	--
66/164/67		Sep. 18	00:45	Si	--	15	--
66/164/75		Sep. 18	?:??	Si	Brilliant	--	--
66/164/76		Sep. 18	00:15	So	Daylight	3	--
66/164/78		Sep. 18	00:45	Si+So	See notes	6 - 7	0
66/164/88		Sep. 18	01:00	So	Flash	2	--
66/164/98		Sep. 18	00:45	Si	Daylight	5	0
66/164/102		Sep. 18	00:53	Si ?	--	--	--
66/164/105		Sep. 18	00:45	So	--	6	--
66/164/106		Sep. 18	?:??	Si	See notes	4	--
66/164/108		Sep. 18	00:51	So	--	--	--
66/164/127		Sep. 18	00:48	Si	Great light	3	--
66/164/114		Sep. 18	00:00	So	--	--	--
66/164/119		Sep. 18	?:??	So	--	--	--
65/4	1965	Jan 05	07:16	So	Bright	2	Yes
65/39/3		Mar. 17	02:20	So	--	--	0
65/46/2		Apr. 01	05:47	So	Daylight	3	1
65/46/3		Apr. 01	05:50	So	Very intense	--	0
65/46/12		Apr. 01	?:??	??	--	--	--
65/46/13		Apr. 01	05:50	So	Sky lit up	> 2	0
65/46/16		Apr. 01	05:47	So+Si	Daylight	3 - 4	2
65/46/17		Apr. 01	05:46	So+S	Full Moon	4	--
65/89/1		Jul. 02	04:20	So	--	--	--
65/89/2		Jul. 02	04:20	Si	--	--	--
65/82		Aug. 09	12:26	Si	V. Bright	2 - 3	See notes
65/150/3		Sep. 06	02:13	So	V. Bright	3	2
65/150/5		Sep. 06	02:07	So	> Moon	4 - 5	See notes
65/226/1		Dec. 09	21:45	So	Lightning	Flash	1
65/226/2		Dec. 09	21:45	So	Lightning	Flash	--
64/3	1964	Jan. 12	06:27	So	See notes	3	1
64/5		Jan. 16	14:53	Si	See notes	~ 6	1

64/26/2		Feb. 05	14:15	So	Bright flash	~ 1	--
64/26/3		Feb. 05	14:15	So	> Sirius	~ 2	0
64/26/4		Feb. 05	15:30	So	V. Bright	~ 2	0
64/74		Jun. 28	23:30	So	Incandescent	~ 1	--
64/69/1		Jul. 20	05:06	S ?	--	--	--
64/69/6		Jul. 20	05:40	So	> Moon	4 - 5	0
64/69/13		Jul. 20	05:40	So	> Moon	5 - 6	--
64/69/16		Jul. 20	05:45	So	> Moon	5 - 8	See notes
64/69/18		Jul. 20	05:46	So	See notes	--	3
64/69/19		Jul. 20	05:46	So	$\frac{3}{4}$ Moon	12 - 15	See notes
64/69/21		Jul. 20	?:??	So	--	2	--
64/69/23		Jul. 20	05:40	Si	See notes	--	--
64/69/26		Jul. 20	05:40	So	~ $\frac{1}{2}$ Moon	6	2
64/69/27		Jul. 20	05:40	Si	--	--	Yes
64/69/29		Jul. 20	05:45	So	< $\frac{1}{4}$ Moon	--	--
64/77/3		Jul. 27	00:47	So	--	~ 10	--
64/78		Jul. 07	30:03	?	Venus	3	--
64/187		Nov. 10	05:15	So+S	--	--	--
63/22	1963	Mar. 08	00:15	So ?	--	60	--
63/34		Mar. 31	11:30	So ?	Lightning	~ 10	1
62/1	1962	Jan. 15	15:25	Si ?	--	Flash	--
62/2		Jan. 22	22:55	Si	--	4 - 5	--
62/76		May 23	08:30	So	--	--	--
62/29/140		May 29	05:38	So	--	Slow	3
62/29/46		May 29	05:40	Si	--	Quick	--
62/29/49		May 29	05:40	Si	< Full Moon	Several	1
62/29/53		May 29	05:40	Si	< Full Moon	10	--
62/29/98		May 29	05:40	Si	Venus	--	0
62/29/29		May 29	05:45	Si	V. Bright	--	6
62/29/112		May 29	05:45	Si	V. Bright	2	3
62/29/117		May 29	05:45	Si	--	--	--
62/29/122		May 29	05:45	Si	Flash of light	--	--
62/49		Aug. 11	01:25	So	> Moon	--	1
62/57		Aug. 29	02:12	So	Jupiter	3	--
62/71/1		Nov. 02	10:30	So	--	Fast	--
62/71/2		Nov. 02	?:??	So	Arc welder	--	--
62/71/3		Nov. 02	11:??	So	V. Bright	--	0
62/71/4		Nov. 02	10:40	So	--	3	0
62/90		Nov. 11	02:??	So	See note	2	0
62/89		Dec. 02	04:30	Si	--	3 - 4	0
59/2	1959	Mar. 18	08:06	So	--	5 - 6	2
27/1	1927	Aug. ??	07 - 08	Si	Venus	5	--

Supplementary notes to table entries:

- 89/30: Victoria, BC. “Whistling noise”.
- 88/4/1: Nainaimo, BC. “Several sonic booms”.
- 88/5/1: Almonte, ON. “Like lightning – bright as day ... Double boom” Also “~ 1 min. later acrid smell reported”.
- 88/10: Rivers Inlet, BC. “Heard a loud explosion”. Possible ocean impact of meteorite.
- 88/18/1: Allandville, NB. “Swishing sound before impact”.
- 88/18/3: Nictau, NB. “Loud bang”.
- 88/18/7: Observed 100 miles West of September Isles. “Sonic boom type [sound]”.
Reported by aircraft pilot.
- 88/20: Peace River, AB. “whistling sound”.
- 88/31/1: Haines Junction, YT. “Thud 5 to 7 minutes later”.
- 88/31/2: Destruction Bay. “Loud noise 15 sec. later”.
- 88/31/3: Destruction Bay. “Womp”.
- 87/7/2: Tuktoyaktuk, NWT. “Explosive sound”.
- 87/29/2: St. Pierre Island, NF. “Broke into seven large pieces”. Sound entry is just “yes”.
- 87/39: Deep River, Ottawa, ON. “Bright flash lit up the sky... Heard for 5 – 10 sec. Felt ground rumble – appeared to leave ring in sky”.
- 87/63: Resolute Bay, NWT. “Sky lit up...earthquake of mag. 5.4 accompanied by sound ~ 10 sec, like aircraft landing. Heard in buildings at Resolute.”
- 86/8/2: ??, NFLD. “Very bright – cast shadow...whistling sound – loud bang”
- 86/8/5: Deer Lake, NFLD. “2 booms”.
- 86/8/9: Deer Lake, NFLD. “2 booms”.
- 86/8/11: Bauchans, NFLD. “Lit up area – street lights off...after 1 minute loud, deep rolling rumbling. Sounds lasted for 30 sec. and shook buildings”.
- 86/8/13: On shore of Sandy Lake, NFLD. “Thunder – rumble, after at least 5 min.”
- 86/8/15: St. Anthony, NFLD. “Loud rumbling”
- 86/11: “rumbling”.
- 86/14/1: “boom”.
- 86/35/1: Emma Lake, ?? . “1.5 min. after rumbling [heard]”.
- 86/36: Trail, BC. “Hissing”.
- 85/12: Lanny River, ?? . “Large explosion in sky that shook camp”.
- 85/13: Edmonton, AB. “Crackling sound”.
- 85/21: Champion Lake Provincial Park, BC. “Left a bluish trail... sonic boom”
- 85/38/1: Calabogio Lake, ON. “Roaring noise”
- 85/38/7: Richmond, ON. “Brighter than candle flames...boom 5 sec.”.
- 85/38/9: Ottawa, ON. “Rumbling noise”
- 85/40: Welland, ON. “A bang that shook the house”.
- 84/3: Mackenzie, B.C. “Explosion”.
- 84/8/6: Slave Lake, AB. “Whomp”.
- 84/8/7: Cold Lake, AB. “Very bright > Moon...loud hiss”.
- 84/8/14: Debolt, AB. “5 loud booms”.
- 84/8/15: Six miles south of Valleyview, AB. “Falling particles...one explosion”.
- 84/8/20: Shiningbank, AB. “Dull but loud bang”.
- 84/15: St. Jovite, PQ. “Round with sparks”. Sound entry is “yes”.

- 84/17: Canyon Heights, AB. “Bright as Moon...hissing sound when passing overhead”.
- 84/19: Vancouver, BC. “Whizzing”
- 84/24: Mayo, YT. “Bright, but not enough to light up the ground...swishing sound”.
- 84/32/2: Prelude Lake, NWT. “Brighter than full moon...bang heard”.
- 83/16: Danbury, SK. “Loud explosion”.
- 83/46: Priceville, ON. “As bright as full Moon. Bright enough to cast faint shadows...faint rumbling 1.5 min +/- 20 sec. after sighting. The slightly louder rumbling 20-30 sec. after first one”.
- 82/9: Matagami, PQ. “Gradement (rumble)”.
- 82/16/1: North Battleford, SK. “Very bright, like Moon...thud heard”.
- 82/16/2: Calgary, AB. “Bright daylight...muffled boom”.
- 82/16/5: Edmonton, AB. “Extremely bright...none – perhaps a swish”.
- 82/16/11: Edmonton, AB. “Very bright, like a flare.... heard bang 90 sec. – 120 sec. afterwards”.
- 82/19: Bedford, NS. “... glowing fragments falling from it.. possible whistle (not sure)”.
- 82/28: Etobicoke, ON. “Much brighter than Jupiter... swishing sound”.
- 81/17/1: Campbell Valley Regional Park, BC. “Extremely bright (flare)... distant muffled explosion”.
- 81/29/6: Trenton, ON. “Very bright flash... popping noise”.
- 81/29/8: CFB Trenton Control Tower. “(large flare) very bright... popping”.
- 81/34: Frobisher Bay, NWT. “Sonic boom”.
- 81/37:Winnipeg, MB. “Evidently bright – seen over city lights... lapse of 5 seconds – heard explosion over noise of car engine”.
- 80/08/4: Bracebridge, ON. “Crash”.
- 80/22/2:Gold River, BC. “Visible illumination of surroundings... there was a single pulse of sound several seconds after visible burst”.
- 79/11: Ottawa, ON. “Loud rushing sound like a jet”.
- 79/13/2: High Level, AB. “Bright as Venus... travelling in a horizontal path directly towards the planet Venus.... loud rushing sound like a jet”.
- 79/16: Halifax, NS. “Whooshing sound”.
- 79/40: Toronto, ON. “Like a rocket taking off”.
- 79/66: Castlegar, BC. “5 minutes later noise like a roll of drum”.
- 79/75: St. Paul, AB. “Impact with ground felt by passengers”.
- 78/1: location given as 74°43N, 94°57W. “Distant gunshot”.
- 78/11: Wiltondale, NFLD. “Large explosion”.
- 78/13: Ottawa, ON. “Explosion”.
- 78/31: Bonne Bay, NFLD. “A clap of thunder”.
- 78/48: Dauphin, MB. “Humming and hissing. Loud sound when it broke”.
- 78/52: Busby, AB. “Swishing”.
- 78/56: Vancouver, BC. “Look[ed] like 3 lights in triangular shape... faint low noise”.
- 78/62: Corner Brook, NFLD. “Fell in water off the harbour port... Sizzling”.
- 78/104/1: Rocky Lake, SK. “Brighter than sky at point of sunset... observer reports a swishing sound made her look up in time to see fireball – 2.5 to 3 min. later heard sonic boom”.
- 78/104/3: Belle Plain, SK. “Plainly visible in twilight... Split into not less than 3 pieces, possibly 4...Double sonic boom 3 minutes later”.

- 78/104/4: Mortlach, SK. “Yes – 2 minutes(?) to sonic boom”.
- 78/104/13: Mortlach, SK. “Saw break up, 3 or 4 pieces.... 2 minutes loud sonic boom to the west”.
- 77/13/2: Wasaga Beach, ON. “One single burst occurring at the end of its passage (fragmenting occurred)... Sound comparable to a person swishing a torch through the air – crackling – sound simultaneous with passage – a loud popping sound at burst.”
- 77/29: Lester Beach, MB. “Dull ‘sonic’ boom 2 min. after disappeared”.
- 75/11/3: Badgerville, SK. “Real bright and it was already daylight... sparkly – like fireworks... a s swishing sound”.
- 75/17/1: Jasper Ski Resort, AB. “Number of people – loud boom”.
- 75/17/2: Whistler Ski Area, AB. “explosion”.
- 75/31: North Gower, ON. “slight rushing sound”.
- 75/51: Stittsville, ON. “Passed almost overhead (standing at window in bedroom)...multiple booms ~3 min. later.”
- 75/59: Springhill Observatory, ON. “Sonic Boom”.
- 74/9: Gladstone, MB. “1 loud boom”.
- 74/12: St. Alberta, AB. “High pitch whistle”.
- 74/36: Fredricton, NB. “Faint whistle”.
- 73/33: Fort Chipewyan, AB. “Like small shot gun blast”.
- 73/43: St. Catherines, ON. “Clearly hear[d] the object”.
- 73/46: Stittsville, ON. “Like far away jet”.
- 72/6: Ottawa, ON. “Lit up room brighter than day...like a RRRRRIPP, 2 ~ 3 Sec.”.
- 72/16: Salt Pond, NFLD. “Similar to air being released from pressure tank”.
- 72/25: Nampa, AB. “Lit up whole area... Screeching – like a siren in the distance”.
- 72/55/5: Blairmore, AB. Four observers. “Loud explosion heard after passing overhead, out of sight”.
- 72/55/18: Calgary, AB. “Boom after disappeared”.
- 72/55/19: Wildwood, AB. “Boom after disappeared”.
- 72/55/21: Calgary, AB. “Roar”.
- 72/55/22: Calgary, AB. “Boom 4 min. after disappearance”.
- 72/55/32: Calgary, AB. “Smoke trail lasted 15 min... air rushing, faint.”
- 72/55/33: Cochrane, AB. “Air rushing sound”.
- 72/55/41: Calgary, AB. “Whooshing sound.... Loud boom 4-5 min later”.
- 72/55/42: Calgary, AB. “Air rushing”.
- 72/57: Halifax, NS. “Rumbling and hissing”.
- 72/68: Ottawa, ON. “Like putting a hot pan in cold water”.
- 72/83/1: Ottawa, ON. “Heard a whoosh”.
- 72/90: Qualicum Beach, BC. “It left a clear, sharp trail whilst emitting vivid blue eruptions. Left no halo or glow... 2 explosions like distant thunder [4 min. after]”.
- 71/9: Chibougamau, PQ. “Hissing, crackling (like a power toboggan). TV in the house had a large amount of static as object came down”.
- 71/21: Edmonton, AB. “Faint crackling sound”.
- 71/36: Fitzroy Harbour, BC. “Slight hiss”.
- 71/48: Rimley, AB. Observer in house. “Loud explosion coincident with flash”.
- 71/65: Saskatoon, SK. “The sound caught my attention.... Like a jet almost overhead”

- 71/83/11: Woodruff, ON. "Like firecracker sometimes".
- 71/83/12: Ottawa, ON. "Slight thud".
- 71/83/20: Ottawa, ON. "The sound attracted [observers] attention to the fireball... Sounded like a Roman Candle and when it burst, it went 'puff'".
- 71/83/23: Ottawa, ON. "1 explosion (distant blast) – sound lasted 15 or 20 seconds. 90 sec. between flash and sounds +/- 10 sec."
- 71/83/25: Deep Bay, ON. "Faint explosion some seconds after".
- 71/83/27: Ottawa, ON. "Distant blasting about 1 min – 2 or 3 minutes for sound [after passage?]"
- 71/83/28: Ottawa, ON. "Couple of minutes – noise from explosion rattled windows"
- 71/83/29: Ottawa, ON. "Heard sound like a large explosion".
- 70/78: Toronto, ON. "Thunk heard 5 – 10 secs. After sighting".
- 70/79/2: Montreal, PQ. "Double boom, faint but distinct (approx. 4 min. later)".
- 70/83: Broadview, Sk. "Like that of the whine of a jet".
- 70/94: Grand River, ON. "Wineing [sic]".
- 70/103: Welland, ON. "Faint humming (?)".
- 70/110/1: Haines Junction, NWT. "Brighter than welding torch – lit up half of sky. .. Low rumbling sounds approx. ½ min after sight".
- 70/110/4: Whitehorse, YT. "After a period of less than two minutes [observer] heard two or three explosions".
- 70/110/6: Whitehorse, YT. "Following the disappearance of the light [observer] heard a thunder like explosion.... These explosions [plural ?] followed the disappearance of the light by approximately one minute".
- 69/21: Ottawa, ON. "Explosion before observation".
- 69/22: Sandspit, BC. "2 explosions, 2-3 min. later".
- 69/29/2: Watson Lake, YT. "Building shook and the windows rattled as though there wer and earthquake".
- 69/53/1: Kisbey, SK. "Bright ball of fire – seen in daylight... Swishing, hissing – also heard by husband".
- 69/70: Lorraine, PQ. "Faint crack heard during mid-flight".
- 69/76: Ainsworth, B.C. "Loud explosion that shook neighbourhood, like dynamite".
- 69/99: St. Walbing, SK. "Brighter than a Hg light... Rumbling sounds heard by other people at the same time."
- 68/27: Pagnirtung, NWT. "Rumbling sound and earth tremor 3-4 min after disappeared".
- 68/48: Prince George Airport, BC. "Very bright – like [a] flare... Slight distant roar."
- 68/92: Truro, NS. "Brilliant (Lit up the entire area)". Sound entry: "Yes, but unable to describe sound"
- 68/96/1: Wolfville, NS. "About 7 – 8 mins. Later a low rumble lasting about 8 secs".
- 68/96/5: Cross Roads Harbour, NS. "Screech".
- 68/96/33: Hantsport, NS. "Loud hissing".
- 68/113: Beverlodge, ON. "Loud bang".
- 67/2: Maupstown, NS. "Heavy rumbling like dynamite explosion and earth tremor right after flash".
- 67/18/11: ??, Alberta. "Made noise".
- 67/18/12: Vermilion, AB. "Brighter than Sun.... Whistle".

- 67/38: Calgary, AB. "Popping heard – may have been truck".
- 67/43/24: Oshawa, ON. "Passed over just above hydro poles... [sound] Like a jet".
- 67/116: Prince George Airport, BC. "Brighter than brightest star – showed against aurora – appeared to hiss".
- 67/134/1: CFB Gimli. "Bright compared to phosphorous.... [observer] saw smoke and heard a series of bangs".
- 67/166/27: Rivers, MB. "Heard noise".
- 67/174/1: Humbolt, SK. "Heard a loud bang just before he got car stopped".
- 67/174/15: North Battlefore, SK. "Whoosh simultaneously".
- 67/192/2: ??, NS. "Wooshing [sic] sound".
- 66/8: Whitehorse, YT. "Swooshing – pulsation effect over car motor sound".
- 66/52/3: Montreal, PQ. "Noise immediately after sputtering explosions".
- 66/52/5: Lasalle, PQ. "low whistle like a jet noise caught attention".
- 66/99: Port Hardy Airport, BC. "Hiss, similar to sky rocket. [Observer] was not looking skyward at the time. This hiss caused [him] to look upward."
- 66/53/2: Ottawa, ON. "Load as it broke. Roar first – squishing sound".
- 66/53/3: Ottawa, ON. "Sounded like grinding - plane".
- 66/53/14: Ottawa, ON. "Airplane sound".
- 66/53/63: Ottawa, ON. "Brighter than aircraft light ... Something like jet propulsion – sort of a hissing discharge".
- 66/53/106: Ottawa, ON. "Heard a jet sound".
- 66/53/114: Ottawa, ON. "Explosion".
- 66/53/169: Cornwall, ON. "Dull explosion like A-A fire 5 min. later".
- 66/53/194: Hemmingford, PQ. "Few minutes later muffled explosions – also heard by neighbour".
- 66/53/200: St. Agnes de Dumdee, PQ. "After 2 minutes heard 6 ~ 8 bangs".
- 66/53/204: Kensington, PQ. "Passed directly over head – heard sound a couple of minutes later".
- 66/53/205: Kilbain, PQ. "Heard many 'shots' and saw smoke trail".
- 66/53/225: Ormstown, PQ. "Like dynamite, 8 or 9 blasts".
- 66/53/226: St. John, PQ. "Rustling sound simultaneous with light".
- 66/53/245: Lakefield, PQ. "Clicking while watching – Boom 45 sec. later".
- 66/164/2: CFB Clinton, ON. "Mid day brightness... One large sonic boom 3-5 min after fireball, follwoed by several lesser in rapid succession".
- 66/164/9: Mount Forest, ON. " Brilliant – lit up countryside... Only slightly crackling during pass".
- 66/164/12: Douglas Point, ON. "5 min after sighting sounds heard like distant pow pow of fireworks. Explosions in singles and groups 50 – 100 of them".
- 66/164/49: Ottawa, ON. "Brighter than full Moon... Low rumble 1.5 min after".
- 66/164/54: Hamilton, ON. "It sounded like thunder".
- 66/164/61: Brantford, ON. "One loud noise sounded like thunder and rattled door violently. Numerous smaller noises followed. Heard these 2-5 min after shower of sparks""
- 66/164/66: Forrest, ON. "Light blinding... Loud roar".
- 66/164/67: Downsview, ON. "Like air being released from balloon."
- 66/164/75: Freulton, ON. "Heard loud whizzing noise first".

- 66/164/76: Sarnia, ON. "Heard explosion 10 min. after it fizzled out".
- 66/164/78: Sarnia, ON. "Sky lit up as if a giant spotlight turned on... Roaring of a jet, 7 – 8 min. later rumbling and explosive sounds".
- 66/164/88: Sault Ste. Mary, ON. "Whole sky lit up... About 2 min after heard tremendous sonic boom".
- 66/164/98: Stratford, ON. "First heard sound like a 'dud' firecracker".
- 66/164/102: Toronto, ON. "TV clicked twice and lit up with a blinding light".
- 66/164/105: Sarnia, ON. "Loud explosion seemed to come from north 5 min. after".
- 66/164/106: Guelph, ON. "Lighted up entire sky... Loud hissing"
- 66/164/108: Sarnia, ON. "A boom like a cannon sounded across lake".
- 66/164/114: Sarnia, ON. "5 min. after flash [observer] heard 3 explosions not more than 1 sec apart. 1st like a severe sonic boom, 2nd greatly muffled comp[ared] to First. 3rd like a ca back-firing several blocks away".
- 66/164/119: Toeswater, ON. "Saw it disappear on the horizon and heard a loud explosion several seconds later".
- 66/164/127: Wasaga Beach, ON. "Roaring like a jet".
- 65/4: Calgary, AB, "Heard a thud and saw it explode".
- 65/39/3: Bagotville, PQ. "Truck driver heard loud sound".
- 65/46/2: William Lake, BC. "Area lit up like day approx. 3 sec... Loud bang shook town of Chase, BC."
- 65/46/3: Dawson Creek, BC. "Loud explosion on impact".
- 65/46/12: Calgary, AB. "Heard something". Observer was in a car.
- 65/46/13: Kamloops, BC. "One short loud bang (cannon shot) approx. 4 min. after occurrence of light".
- 65/46/16: Old Glory Mountain Observatory, BC. "Daylight brilliance... Distant rumble. Caused interference on TV".
- 65/46/17: Sicamouse, BC. "Explosions and shaking 2 min. later".
- 65/82: Astry Lake, PQ. "Ball exploded as approached Earth.... Whistling during descent. No sound following explosion".
- 65/89/1: Souris, MB. "Heard what sounded like sonic boom".
- 65/89/2: Brandon, MB. "Made a 'poof' sound". Observers were in a car.
- 65/126/1: Kingsville, ON. "One brilliant flash. First thought it was lightning... 10 - 15 seconds later, crackling, popping sound."
- 65/126/2: Essex, ON. "Lightning flash overhead... Sounds for 15 – 20 seconds... popping explosive noise directly overhead".
- 65/150/3: Stn. Pagwa, ON. "V. bright – lit up sky.... Loud bang".
- 65/150/5: Sault St. Marie, ON. "Welding arc > Moon... Explosion near beginning of path... Distant thunder 4 to 8 min later".
- 64/3: Vancouver, BC. "Approx. intensity of an AC [aircraft] landing light... Mild explosion very short time after observed disintegration".
- 64/5: Cold Lake, AB. "Many times brighter and larger than brightest stars.... Possible sizzling sound few seconds after burst".
- 64/26/2: Powell River, BC. "Deep rumble 2 sec. duration – heard a few seconds after flight".
- 64/26/3: Texada Island, BC. "Rumble 60 – 90 sec. after flash (like sonic boom) ~ 2 sec. duration".

- 64/26/4 Texada Island, BC. “Boom heard”.
- 64/69/1: Mission City, BC. “Exploded high in sky... 6 – 10 min. later a jar or push was felt on SE corner of the house”.
- 64/69/6: Langley, BC. “Brighter than Moon (gibbous)... A few minutes later a sound like a gun shot was heard.”
- 64/69/13: Burnaby, BC. “Brighter than Moon... about two minutes after we saw meteor... heard an explosion...”.
- 64/69/16: Burnaby, BC. “Slightly brighter than 10 day old Moon... 2.5 min after sighting fireball a boom was heard – [observer notes] this could have been an industrial sound.”
- 64/69/18: Richmond, BC. “Lit up block... Continuous popping sound”.
- 64/69/19: Vancouver, BC. “Almost continuous dripping of particles, at least as bright as $\frac{3}{4}$ Moon... Faint muffled crackling approx. 3 – 5 secs. after disappearance”.
- 64/69/21: Hope, BC. “Something like a sonic boom 5 min. after (rumble and bang)”.
- 64/69/23: Vancouver, BC. “Bright white light cast shadows.... Faint noise like fire before obs.”
- 64/69/26: Vancouver, BC. “Cast shadows ~ $\frac{1}{2}$ Moon... Rumble 15 sec. late[r]”.
- 64/69/27: Duffy Lake, BC. “Whishing noise 5 seconds before observation”.
- 64/69/29: Alouette Lake, BC. “Less than $\frac{1}{4}$ Moon, no shadows... Bang, 30 sec later”.
- 64/74: Reed, ON. “Highly incandescent... Boom ~ 45 sec. later”.
- 64/77/3: Labrador, NFLD. “6 minutes after sighting – like a jet engine”.
- 64/78: Sherbrooke, PQ. “3 noises – possibly from noisy street”.
- 64/87: Muncha Lake, BC. “Explosions heard, tremour felt”.
- 63/22: Deep Bay, ON. “Faint roar (like a jet plane)”. Note on card from Halliday, “Springfiled radar should detect anything at meteor heights ... from Deep Bay,” but nothing was apparently detected.
- 63/34: Nampa, AB. “Interior of car li up like a sheet of lightning and CJCA reception interrupted – cut – out, 15 seconds later observed directly west dark object... formed one massive flame before departing”. Card entry also notes “reports on sounds received from residents of Belloy, Wanham [and] Fairview”.
- 62/1: Ottawa, ON. “Flash seen (not conscious of shadows)... Possibly dull explosion”.
- 62/2: Mattawa, ON. “Like a rocket”.
- 62/29/29: Vancouver, BC. “Roaring as a heavy wind”.
- 62/29/46: Osoyous, BC. “A moving sound”.
- 62/29/49: Penticton, BC. “Maybe sizzling sound”.
- 62/29/53: Penticton, BC. “Clicking noise”.
- 62/29/98: Vancouver, BC. “Swish”.
- 62/29/112: Victoria, BC. “Swishing sound”.
- 62/29/117: Vancouver, BC. “Woosh – woosh”.
- 62/29/122: Vancouver, BC. “Roaring and crackling”.
- 62/29/140: Sardis, BC. “Boom like thunder”.
- 62/49: Bathurst, NB. “Heard one burst – sound like a car backfire”.
- 62/57: Camp Valcarties, PQ. “Rumbling sounds – 10 sec. after”.
- 62/71/1: Kamloops, BC. “Followed by a loud explosion”.
- 62/71/2: Chigacut, BC. “A loud boom”.
- 62/71/3: Tatla Lake, BC. “4-5 explosions 3-4 min. later”.

- 62/71/4: Alexis Creek, BC. "Boom, rumble 1 min. later".
- 62/76: Rivellton, NS. "Howling like a jet – no explosions".
- 62/89: Clearwater, BC. "Swish".
- 62/90: Chilanko Forks, BC. "Easily visible against blue sky... Dynamite type explosion 2 sec. after". Note, was a Daylight fireball.
- 58/2: Moose Jaw, SK. "Rumble like thunder 2-2.5 minutes after".
- 27/1: Top of Mount Oscar, BC. "Train lasting 4 minutes... rushing air. Sight and sound simultaneous".