

THE 1991 CANADIAN UFO SURVEY

COMPILED BY
CHRIS A. RUTKOWSKI

CONTRIBUTORS:

ROY BAUER
GRANT CAMERON
LORNE GOLDFADER
GORDON KIJEK
CLIVE NADIN
CHRISTIAN PAGE
MICHAEL STRAINIC
GUY WESTCOTT
BONNIE WHEELER

PUBLISHED BY

UFOLOGY RESEARCH OF MANITOBA
BOX 1918
WINNIPEG, MANITOBA
CANADA R3C 3R2

The 1991 Canadian UFO Survey

After a very positive response from the publication of both the 1989 and 1990 Canadian UFO Survey, it was decided to continue the systematic collection of raw UFO report data in Canada and prepare yearly reports for general circulation. It has always been felt that the dissemination of such data would be of great advantage to researchers, so it is presented here once again as data with some analysis.

As in 1989 and 1990, a letter requesting data for analysis was sent to all Canadian ufologists believed to be actively investigating reports. A notice was also placed in the Swamp Gas Journal. Names and addresses were obtained from UFOROM files, the mailing list of the Swamp Gas Journal and from ufologists in contact with UFOROM. In 1989, twenty-five such letters were sent out. In 1990, with additional names and addresses added to the list, over fifty letters were mailed. About the same number were mailed for the 1991 Survey. As in previous years, the response was poor; it is now suspected that only a small fraction of "active" ufologists actually investigate cases and maintain useable records.

In 1989, 141 UFO reports were obtained for analysis. In 1990, 194 reports were recorded. In 1991, 165 reports were received. These reports came from contributing investigators' files, press clippings and the files of the National Research Council of Canada. The NRC routinely receives UFO reports from private citizens and from RCMP, civic police and military personnel. The number of cases in 1991 represents a 15% decline from the previous year, but if we assume an average of 167 cases per year, the variation is uniform in either direction, and we can suggest that numbers of UFO reports in Canada remain at a constant level.

In 1991, there were apparent significant increases in the number of reports in Alberta, while there was an apparent decrease in reports in Manitoba and Saskatchewan. The rest of the Provinces appear to have had average numbers of reports in 1991.

TABLE 1

	BC	AL	SK	MB	ON	PQ	NB	PEI	NS	NF	YK	NWT
1989	15	16	18	22	34	28	1	-	3	3	-	1
1990	76	9	10	20	21	36	7	3	5	4	1	2
1991	59	22	7	6	30	16	9	1	7	4	1	-

The monthly breakdowns of reports during each year show slightly different patterns from those of previous years. In 1989, there was a significant increase in UFO reports in the late fall, with other months maintaining what appeared to be a fairly constant "normal" level of reports. But 1990 saw two major increases in report numbers in two months: April and August. The "normal" level of monthly report numbers appeared to be constant in other months, with minor fluctuations. In 1991, reports peaked in August, but there was no single obvious trough, and there were an abnormally large number of reports in the winter months.

TABLE 2

	J	F	M	A	M	J	J	A	S	O	N	D
1989	13	9	6	9	5	9	5	5	12	32	27	9
1990	17	7	6	47	10	10	9	47	15	16	10	-
1991	13	7	17	12	7	12	16	25	16	12	11	17

An analysis by report type shows a similar breakdown to that found in previous years. The numbers of cases of a particular type remained roughly constant except for the category of Nocturnal Lights, which exhibited nearly a twofold increase in 1990. However, numbers of NLs were closer to a 1989 level in 1991.

TABLE 3

	NL	ND	DD	CE1	CE2	CE3	CE4	EV	RD	PH
1989	84	20	16	10	7	-	2	2		
1990	141	24	15	2	1	-	4	3		
1991	110	26	13	7	4	1	2		1	1

For those unfamiliar with the categories, a summary follows:

NL (Nocturnal Light) - light source in night sky

ND (Nocturnal Disc) - light source in night sky that appears to have a definite shape

DD (Daylight Disc) - unknown object observed during daytime hours

CE1 (Close Encounter of the First Kind) - ND or DD occurring within 200 metres of a witness

CE2 (Close Encounter of the Second Kind) - CE1 where physical effects left or noted

CE3 (Close Encounter of the Third Kind) - CE1 where figures/entities were encountered

CE4 (Close Encounter of the Fourth Kind) - an alleged "abduction" or "near-death" experience

EV (Evidence) - a case where physical traces left by an object

RD (Radar) - UFOs observed on radar

PH (Photograph) - photographs of a UFO, but no actual sighting

The category of Nocturnal Disc was created by UFOROM for differentiation within its own report files. Similarly, Evidence is also an ad hoc creation, and may not be applicable by other researchers. Normally, Evidence would include such physical traces as "crop circles", "landing rings" and "saucer nests". However, in 1990 there was a great increase in the numbers of such traces discovered in North America, and it was decided to treat these as separate from UFO reports in these Surveys. [For the record, there were 27 "crop circles" and related traces discovered in Canada in 1990, and 39 in 1991. Many of these were investigated by UFO researchers, and a few were reported to the NRC. UFOROM is associated with the North American Institute for Crop Circle Research, which investigates such cases and publishes reports on its findings.]

The breakdown by evaluative conclusions for 1991 cases can be shown to be similar to results from previous years. There were three operative categories: **Insufficient Information**, **Possible or Probable Explanation**, and **Unknown**. Readers are warned that a classification of **Unknown** does not imply that an alien spacecraft was observed; no such interpretation can be made with certainty, based on the given data (though the probability of this scenario is admittedly never zero). In most cases, the evaluations are made subjectively by both the contributing investigators and the compiler of this report. The category of **Unknown** is adopted only if the contributed data or case report contains enough information that a conventional explanation cannot be satisfactorily proposed. This does not mean that the case will never be explained, but only that a viable explanation is not immediately obvious. In 1991, two cases were positively explained by investigators, and not included in the breakdown below.

TABLE 4

	1989		1990		1991	
	#	%	#	%	#	%
Insufficient Information	74	52.5	90	46.4	80	49.1
Possible/Probable Explanation	47	33.3	78	40.2	69	42.3
Unknown	20	14.2	26	13.4	14	8.6

The hourly distribution of cases tended to follow the same pattern for 1991 as in previous years. There appears to be a continuous curve, with a peak near 2200 hours local and a trough around 1000 hours local.

The average number of witnesses per case went down from a value of 2.12/case in 1989 to 1.4/case in 1990, then up again to 1.91/case in 1991. It is not known what this may indicate. It is possible that there might have been a tendency for only one of a pair or group of witnesses to report an incident, and hence this value would wax or wane depending on the social factor. This may have been true in the NRC files, which may not reflect the total number of witnesses sharing a UFO experience. However, these figures show that a typical UFO experience has more than one witness, supporting the contention that UFO sightings represent observations of physical phenomena.

The category of Duration is interesting in that it represents the subjective length of time the UFO experience lasted. Naturally, these times are greatly suspect because it is known that people tend to misjudge the flow of time. However, some people can be good at estimating time, so this value has some meaning. Although an estimate of "one hour" may be in error by several minutes, it is unlikely that the correct value would be, for example, one minute (disregarding the claims of "missing time" during the abduction category of experiences). Furthermore, there have been cases when a UFO was observed and clocked accurately, so that we can be reasonably certain that UFO events can last considerable periods of time. The average duration of a sighting can be calculated as a summation of all given durations then divided by the number of cases with a stated duration. The resulting value for 1991 is about 12 minutes, down from 19 minutes in 1990. This surprisingly long duration is likely due to the large number of sightings lasting only a few seconds contrasted with a few that lasted several hours.

In cases where a colour of an object was reported in 1991, the most common colour was white (61 cases), followed distantly by green (18 cases). Other colours were also represented, although there is a noticeable change from previous years, when red or orange were dominant colours. Since most UFOs are nocturnal starlike objects, the abundance of white objects is not surprising. The green coloured objects were, in general, bolides, which were seen in significant numbers in 1991.

Summary of Results

As with previous annual Surveys, the 1991 Survey does not offer any positive proof of the physical reality of UFOs. However, it does show that some phenomenon which is called a UFO is continually being observed by witnesses. The typical UFO sighting is that of two people observing a moving, distant white or red light for a period of over 15 minutes. In most cases, the UFO is likely to be eventually identified as a conventional object such as an astronomical object. However, in a small percentage of cases, some UFOs do not appear to have an easy explanation and they may be given the label of "unknown".

What are these "unknowns"? An additional classification is useful to try and better understand this kind of report. In the gathering of data for the study, contributors were asked to give a value for their personal Evaluation of the reliability of the report. This value is noted as "E" in the case listing. This value gives the likelihood that the UFO experience "really" occurred as described by the witness. Granted, it is impossible for any investigator to judge this absolute value; often, a subjective value for two categories of "strangeness" and "probability" is assigned. The Evaluation value is another subjective value imposed by the investigator or compiler (or both) with a scale such that the low values represent cases with little information content and observers of limited observing abilities and the higher values represent those cases with excellent witnesses (pilots, police, etc.) and also are well-investigated. Naturally, cases with higher values are preferred.

In addition, as an experiment, 1991 cases were also coded according to the methods proposed by Jacques Vallee. In several of his books, Vallee adapted the Hynek UFO classification system to a wider range of experiences. Vallee created a 5 x 4 array of UFO experiences: ANomalies 1-5; FlyBys 1-5; MAneuvres 1-5; and Close Encounters 1-5. His classification is that distant sightings are better classified according to the behaviour of the UFO(s) rather than conditions such as daytime, nighttime, radar, etc. Each Canadian case was thus given a coding such as FB2, MA1, etc., and this is noted in the case listing.

Furthermore, Vallee suggests another method of weighting or assigning credibility (or, as described above, reliability) to each case. His classification, called the SVP Credibility Rating, or SVP (which some have chosen to call the "S'Il Vous Plait"), uses three categories: Source reliability (where the report comes from; original investigation, newspaper, rumour, etc.); site Visit (on-site investigation by researcher, casual observer, no one, etc.); and Possible explanations (data consistent with natural causes, generally consistent, not at all, etc.).

The inclusion of such parameters was an test to see how they could be adapted for use in the statistical treatment of UFO data. In general, it was observed that the Vallee system is more complex than needed for simple UFO data which are largely NLs. In these cases, it is easier to rely upon the original Hynek classification. However, in cases beyond mere NLs, the more specific and descriptive Vallee system can serve to define a UFO experience according to its extraordinary characteristics, and is more useful than the simpler Hynek system.

Cases were coded and entered into a WATFILE database on a common PC clone environment. The coding key is as follows:

Example: 9910115 1636 BC Fort Nelson FB1 1 0 1 Yellow 0.03 1 NL 8 P Daylight etc.

Field: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

Field 1 is the date, in YYMMDD format (UFOROM is now coding to allow for the next millennium).

Field 2 is the time, according to the 24-hour clock, local time.

Field 3 is the Province.

Field 4 is the Geographical Location, or common map name.

Field 5 is the Vallee classification.

Fields 6, 7 and 8 are the Vallee SVP, as described in the text.

Field 9 is primary colour of the object(s).

Field 10 is the duration of the sighting, in minutes and seconds (i.e. 2 minutes, seconds is 002.15)

Field 11 is the number of witnesses.

Field 12 is the Hynek case type: NL, ND, DD, C1, C2, C3, C4, RD, EV, PH.

Field 13 is the subjective evaluation (reliability) of the case, as described in the text.

Field 14 is the Conclusion given to the case: I = Insufficient information for an assessment; P = Possible or probable explanation, given the facts; E = Explained; or U = Unknown or unexplained at the present time.

Field 15 contains any short comments that distinguish individual cases.

In the 1991 study, only 12 cases (7.3%) were high-reliability unknowns. This agrees well with the 1989 results (4.9%) and with the 1990 results (4.6%), but is slightly higher for reasons that could include sampling techniques and inconsistent subjective evaluations. The 1991 high-reliability cases were the following:

FB1 ND Case 9910319	Powell River, BC
MA1 NL Case 9910329	Cranbrook, BC
MA1 NL Case 9910329	Edmonton, Alberta
FB1 NL Case 9910330	Surrey, BC
MA1 ND Case 9910502	Iron Springs, Alberta
FB1 NL Case 9910506	Lawn, Newfoundland
MA4 C1 Case 9910700	White Rock, BC
MA1 ND Case 9910725	Carleton, Quebec
CE2 C2 Case 9910831	Gratum, Alberta
MA1 ND Case 9910903	Beaverlodge, Alberta
MA1 NL Case 9911030	South Walsingham, ON
AN1 RD Case 9911228	Toronto, ON

The interpretation of this list is that these cases were among the most challenging of all the reports received in 1991. It should be noted that many UFO cases go unreported, and that there may be ten times as many UFO sightings that go unreported as those which get reported to public, private or military agencies. Furthermore, it should be noted that some cases with lower reliability ratings suffer only from incomplete investigations, and that they may well be more mysterious than those on the above list.

We have also learned that UFOs are constantly being reported at a rate of about ten per month across all of Canada, and one or two per month in most provinces. Witnesses range from farmhands to airline pilots and from teachers to police. Witnesses represent all age groups and racial origin. What is being observed? In most cases, only ordinary objects. However, this begs a question. If people are reporting things that can be explained, then the objects they observed were "really" there. Were the objects we can't identify "really" there as well? If so, what were they?

These are questions only continued and rational research can answer, and only if researchers have the support and encouragement of both scientists and the public.

1991 Canadian UFO Reports

DATE	TIME	PROV	LOCATION	TYPE	S	V	P	COLOUR	DUR	WI	CT	E	C	COMMENTS
<=====	<===	<=	<=====	<==	<	<	<	<=====	---	---	<=	<	<	<=====
9910101	2140	BC	KELOWNA	FB1	1	0	1	ORANGE			2.	NL	7	I BOL CHANGED TO BLACK "DIAGONAL" UPON DEPARTURE
9910109	0630	BC	WHITE ROCK	FB1	1	0	1	RED	0.45	1.	DD	5	I RED "TRIPOD" WITH WHITE STRIPE, LIKE "MISSILE"	
9910115	1636	BC	FORT NELSON	FB1	1	0	1	YELLOW	0.03	1.	NL	8	P DAYLIGHT LIGHT; AIRCRAFT?	
9910116	2230	SK	KAMSACK	FB1	1	1	1	WHITE	0.01	4.	NL	7	P BRIGHT FLASH OF LIGHT - PROBABLE BOLIDE	
9910116	2230	SK	LANGENBURG	FB1	2	1	1	WHITE	0.02	5.	NL	8	P BRIGHT FLASH OF LIGHT - "WAR JITTERS"?	
9910120	2115	BC	NORTH VANCOUVER	MA1	3	3	1	GOLD	78.00	5.	NL	9	E WELL-WITNESSED SEARCH-AND-RESCUE OPERATION; IFO	
9910123	0915	BC	RICHMOND	FB1	1	0	2	SILVER	1.00	1.	DD	3	I FLYING SOUP BOWL	
9910125	2240	BC	DELTA	MA1	3	3	3	GREEN	0.20	2.	NL	9	I OBJECT SEEMED TO LAND IN FIELD; EARTHQUAKE LIGHT?	
9910125	2245	BC	BRACKENDALE	FB1	3	3	3	GREEN	0.30	5.	NL	9	P STREAK WITH SPARKS; PROBABLE BOLIDE	
9910125	2250	BC	NORTH VANCOUVER	FB1	3	3	1	WHITE	0.10	3.	NL	9	P BOLIDE?	
9910125	2335	BC	RICHMOND	MA1	3	3	2	GREEN	0.15	7.	NL	8	P "SHOWER OF SPARKS"; WENT BEHIND MOUNTAIN; BOLIDE?	
9910127	0405	BC	FORT NELSON	FB1	1	0	1	GREEN	0.03	1.	NL	8	P BOLIDE?	
9910128	1830	AB	RYLEY	FB1	3	3	1	WHITE	10.00	1.	NL	7	P "NOT FALLING STAR"; HOVERED, MOVED OVER AIRPORT	
9910209	1730	ON	KINGSTON	MA1	1	0	3	BLACK		1.	DD	4	I ROUND BLACK OBJECT ROSE FROM GROUND, WENT NORTH	
9910212	2230	BC	VANCOUVER	MA2	1	0	2	WHITE	30.00	2.	ND	5	I BLINDING FLASHES OF LIGHT	
9910213	0115	BC	VANCOUVER	FB1	1	0	2	WHITE	5.00	1.	ND	5	I THREE STARS "DANCING"	
9910217	1220	BC	WEST VANCOUVER	AN1	1	0	2	WHITE	2.00	1.	NL	2	I "HOLOGRAPHIC LIGHT", "FUZZY"	
9910217	2200	BC	SURREY	FB4	3	3	3	BLUE	0.30	1.	C4	6	I POSSIBLE "ABDUCTION"?	
9910220	2135	NB	FREDERICTON	CE1	1	0	3	GREEN	4.00	4.	C1	7	I INDEPENDENT WITNESSES; OBLONG OBJECT WITH "BEAM"	
9910228	2015	YK	WHITEHORSE	FB1	1	0	1	WHITE	1.30	1.	NL	4	P PROBABLE BOLIDE	
9910303	0300	BC	BURNABY	CE4	1	0	3			1.	C4	7	I "ABDUCTION"? ASSOCIATED POWER OUTAGE IN AREA?	
9910303	0501	NS	SYDNEY	FB1	1	0	1	WHITE	0.01	1.	NL	4	P BRIGHT STARLIKE OBJECT; PROBABLE METEOR	
9910306	0258	ON	KINGSTON	MA1	1	0	3	BLUE		3.	ND	5	I AIRLINE PILOTS WITNESSED CIGAR-SHAPED OBJECT HOVER	
9910311	2345	BC	NANAIMO	FB1	1	0	3	ORANGE	10.00	1.	ND	3	I "ROTATING TUBE"	
9910312	0000	PQ	CANTLEY	FB1	1	0	1	RED	120.00	2.	NL	5	P THRU BINOCs, LOOKED LIKE SAUCERS W/FLASHING LIGHTS	
9910314	2230	NB	BRANDON	MA1	1	0	2	YELLOW		1.	NL	5	P LIGHT FOLLOWED WITNESS; MILITARY EXERCISE?	
9910315	2100	BC	VICTORIA	FB1	1	0	0	RED	0.05	2.	NL	4	I	
9910315	2310	BC	NORTH WESTMINSTER	MA1	1	0	1	ORANGE	5.00	1.	NL	4	I HIGH SPEED MOVEMENTS	
9910319	2200	BC	POWELL RIVER	FB1	1	0	1	WHITE	25.00	2.	ND	8	U RING OF LIGHTS MOVING UP AND DOWN BEHIND TREES	
9910319	2230	NB	BRANDON	MA1	1	0	2	YELLOW		1.	NL	5	P LIGHT FOLLOWED WITNESS; MILITARY EXERCISE?	
9910327	2230	NB	BRANDON	MA1	1	0	2	YELLOW		1.	NL	5	P LIGHT FOLLOWED WITNESS; MILITARY EXERCISE?	
9910329	0956	BC	CRANBROOK	MA1	3	0	3		10.00	4.	NL	8	U AIRLINE CREW WITNESSES; ODD LIGHTS AT 39000 FT.	
9910329		AB	EDMONTON	MA1	4	4	3	WHITE	1.00	1.	NL	8	U VIDEOTAPED SIGHTING; REMAINS UNIDENTIFIED	
9910330	1900	BC	SURREY	FB1	1	0	2	WHITE	15.00	1.	NL	8	U TRIANGLE OF LIGHTS - SIMILAR TO BELGIAN REPORTS	
9910331	1906	PQ	MONTREAL	FB1	4	3	1	YELLOW	3.00	1.	NL	8	P THREE OBJECTS MOVING N/S; SATELLITES?	
9910331	2005	NB	MONCTON	FB1	1	0	1		20.00	11.	NL	5	P MULTIPLE SIGHTINGS BY PILOTS; PROBABLE METEORS	
9910331	2015	NB	BAIE-STE-ANNE	FB1	1	0	1	ORANGE	0.30	1.	NL	4	P ORANGE DOT BECAME LARGE BALL OF FIRE, LEFT TRAIL	
9910403	1945	ON	WIARTON	FB1	1	0	1	WHITE		1.	NL	3	I SMALL POINT OF LIGHT WITH TAIL; NRC 91/34	
9910405	2330	BC	SURREY	FB1	1	0	1	WHITE	2.00	2.	ND	6	I TRIANGULAR OBJECT	
9910407	0102	ON	STERLING	FB1	1	0	1	GREEN		1.	NL	4	P AIRLINE PILOT REPORTED BRIGHT GREEN FLASH	
9910411	2042	SK	LA RONGE	MA1	1	0	2	WHITE		1.	NL	7	I SPEEDING OBJECT FELL THROUGH PILOT'S VIEW	
9910412	2245	PQ	STE-LUCIE-MONTMAGNY	FB1	1	0	1	WHITE	4.00	1.	NL	6	P ROND LUMIERE; SEMBLAIT TOURNER SUR LUI MEME	
9910414	2219	AB	EDMONTON	FB1	1	0	2	WHITE		2.	NL	3	I "SPINNING LIGHTS", SEEMED TO SEPARATE AND MERGE	
9910414	2219	AB	EDMONTON	FB1	1	0	1		40.00	2.	NL	3	I 4 LIGHTS, "SPINNING"; PROBABLE ASTRONOMICAL	
9910415	1930	NS	SYDNEY	FB1	1	0	1				NL	1	I LIGHT MOVING EAST TO WEST; NRC 91/39	
9910420	0205	BC	VANCOUVER	AN1	1	0	0	WHITE	0.30	1.	NL	1	I IMMOBILE LIGHT, FLASHED AND DISAPPEARED	
9910425	2130	NS	TRURO	FB1	1	0	1	GREEN		1.	NL	3	I THRU BINOCs, LOOKED LIKE "LONG SHAPE", MOVING	
9910426	1325	ON	TORONTO	FB1	1	0	1	WHITE		0.	NL	4	P BRIGHT OBJECT FELL, BURNED UP, LEFT "SMOKE"	
9910430	2200	PI	SOUTH KILDARE	FB1	1	0	1			1.	NL	1	I AIRCRAFT OBSERVED AT SAME TIME AS UFO; NRC 91/42	
9910502	0400	AB	IRON SPRINGS	MA1	4	3	3	WHITE	45.00	2.	ND	8	U OBLONG OBJECT HOVERED NEAR HOUSE; BEEPING NOISE	
9910502	1015	NS	WESTOVER	FB1	1	0	2			1.	DD	2	I SINGLE BRIGHT LIGHT IN SKY DURING THUNDERSTORM	

1991 Canadian UFO Reports

DATE	TIME	PROV	LOCATION	TYPE	S	V	P	COLOUR	DUR	WI	CT	E	C	COMMENTS
<=====	<====	<=	<-----	<==	<	<	<	<-----	---	--	<=	<	<	<-----
9910506	0750	BC	BEAR LAKE	FB1	1	0	1	GREEN	0.02	1.	NL	3	P	BRIGHT LIGHT, "BURST" WHILE FALLING
9910506	2245	NF	LAWN	FB1	1	0	1	RED	180.00	3.	NL	7	U	RECTANGLE, STATIONARY; RED, WHITE & BLUE LIGHTS
9910511	2217	MB	NORTH EAGLE LAKE	FB1	1	0	1	YELLOW	0.04	4.	NL	6	P	FIREBALL EXPLODED INTO SEVERAL PIECES
9910526	2230	NS	ELMSDALE	FB1	1	0	2	WHITE	5.00	2.	NO	6	I	ROUND, SURROUNDED BY BRIGHT LIGHTS; MRC N91/47
9910527	1500	AB	BROOKS	FB1	1	0	1	WHITE	0.10	1.	DD	6	P	TWO OBJECTS AT HIGH ALTITUDE FLEW OVER OBSERVER
9910600		BC	VANCOUVER	MA1	1	0	1	BLACK	5.00	1.	C1	4	I	INCOMPLETE REPORTS OF DELTA-WING CRAFT
9910600		BC	YARMOUTH	FB1	1	0	1	WHITE	2.00	5.	NL	5	I	ROUND LIGHT SEEN OVER ISLAND
9910602		ON	LAMBETH	MA1	1	0	2	WHITE	40.00	4.	NO	3	I	"BRIGHT LIGHTS ORIGINATING FROM GROUND"
9910608	0130	BC	WEST VANCOUVER	FB1	1	0	1	RED	45.00	1.	NL	4	P	DOGS REPORTED BARKING DURING SIGHTING
9910611	2050	PQ	ST-SOPHIE	FB1	1	0	1	GRAY		1.	DD	3	I	DESCENDING; WITH 3 ROTATING LIGHTS: B-W-R
9910612	0405	BC	VANCOUVER	FB1	1	0	1	WHITE	3.00	1.	NL	2	I	LIKE "QUARTER-MOON RISING"
9910613	2045	SK	JEDBURG	MA1	1	0	3			1.	DD	6	I	HAT-SHAPED OBJECT MOVED NEAR WITNESS, THEN AWAY
9910616	2235	ON	ST. MARY'S	FB1	1	0	1		60.00	1.	NL	5	P	3 OBJECTS, HIGH IN SKY, MOVING QUICKLY
9910620	2341	AB	EDMONTON	MA1	1	0	3	BLACK		1.	NO	4	I	OBJECT MOVED TOWARDS, THEN AWAY FROM CITY
9910620	2215	PQ	CAMPBELLTON	FB1	1	0	1		0.05	1.	NL	5	I	LUMIERE EBLOUISSANTE; MRC N91/54
9910622	1000	BC	VANCOUVER	AN2	1	0	3	SILVER	2.00	1.	DD	5	I	SECURITY GUARD OBSERVED DISC "MAKING" A CLOUD
9910628	2220	ON	COPPER CLIFF	FB1	1	0	2	RED	0.05	4.	NL	5	I	DIFFUSE LIGHT, MOVING ERRATICALLY
9910700	2200	BC	WHITE ROCK	MA4	3	3	3	GREY	60.00	1.	C1	7	U	BELL-SHAPED METALLIC-LOOKING CRAFT
9910700		BC	YALE	FB1	0	0	1					1	I	RUMOURS OF NL ACTIVITY IN AREA
9910703	2205	BC	VANCOUVER	FB1	1	0	1	GREEN	35.00	3.	NL	6	P	SEVERAL OBJECTS WITH MULTICOLOURED LIGHTS
9910706	1400	BC	VANCOUVER	FB1	1	3	5	WHITE	0.02	1.	DD	5	I	TINY BALL, FLOATING OUTSIDE HIGH APARTMENT WINDOW
9910708	1846	AB	CALGARY	FB1	1	0	1	WHITE	0.10	1.	NL	5	P	HIGH SPEED LIGHT, LIKE "EXECUTIVE JET"
9910709	0146	AB	CALGARY	FB1	1	0	1	WHITE	0.10	1.	NL	3	P	BRIGHT OBJECT, HIGH SPEED, NO SOUND
9910712	0930	ON	TROUT CREEK	MA1	1	0	2	WHITE	150.00	2.	NO	5	I	SIZE OF BASKETBALL; HOVERED NEAR TREES
9910714	0050	BC	WHISTLER	FB1	1	0	1	WHITE	90.00	1.	NL	3	I	SEVEN LIGHTS IN "V" ECHELON FORMATION
9910718	2125	BC	SURREY	CE3	1	0	3		20.00	1.	C3	6	I	CLOSE ENCOUNTER? WITNESS GIVEN PSYCHOLOGICAL EVAL.
9910718	2300	BC	GRAND FORKS	FB1	1	0	1	WHITE	3.00	6.	NL	5	P	MULTICOLOURED LIGHTS; POSSIBLE ASTRONOMICAL
9910719	2300	MB	WINNIPEG	FB1	1	0	0	GREEN	0.05	4.	NL	8	E	BOLIDE
9910724	2245	ON	NORTH BAY	MA1	1	0	2	RED	10.00	3.	NL	4	I	OBJECT MOVED "LIKE A FIREFLY WOULD"
9910725	0400	PQ	CARLETON	MA1	4	3	3	WHITE	60.00	4.	NO	7	U	GLOBE HOVERED OVER FIELD, RELEASED RED SPHERE
9910727	0430	SK	LA RONGE	FB1	1	0	2	WHITE	30.00	4.	NO	4	I	OVAL SHAPE WITH TWO LIGHTS, MOVED BACK AND FORTH
9910728			BRUCE MINES	FB1	1	0	1	BLUE	0.02	1.	NL	2	I	FLASH IN SKY
9910730	1200	ON	TORONTO	MA1	1	0	2	YELLOW	4.00	1.	DD	6	U	HAZY OBJECT, SIZE OF MOON; METEOROLOGIST WITNESS
9910802	2230	BC	VANCOUVER	FB1	1	0	1	WHITE	90.00	3.	NL	7	P	TWO OBJECTS MOVING IN UNISON
9910802	0256	PQ	MONTREAL	FB1	1	0	2	BLUE	0.02	1.	NL	7	P	HIGH SPEED SPHERE; BOLIDE?
9910805			WABUSH	FB1	1	0	1	ORANGE		6.	NL	3	I	BALL OF FLAME, BLACK SMOKE; MRC N91/63
9910805	2100	BC	KAMLOOPS	FB1	1	0	1	WHITE	0.03	2.	NL	5	P	BRIGHT LIGHT TRAVELLING OVER CITY W TO E
9910806		PQ	ILES DE LA MADELAINE	AN1	4	0	2			1.	PH	5	I	SATURN-SHAPED OBJECT DISCOVERED WHEN FILM DEVEL.
9910816	2300	NB	SUSSEX CORNERS	CE1	1	0	3	ORANGE	5.00	2.	C1	5	I	SIZE OF HOT AIR BALLOON, NEARLY COLLIDED WITH CAR?
9910817	0100	BC	VANCOUVER	FB1	1	0	1	ORANGE	10.00	1.	NL	8	I	ONE OF TWO INDEPENDENT REPORTS
9910817	0100	BC	VANCOUVER	FB1	1	0	1	ORANGE	10.00	1.	NL	8	I	ONE OF TWO INDEPENDENT REPORTS
9910817	2300	AB	EDMONTON	FB1	2	0	2	WHITE	0.01	2.	NL	5	P	ANONYMOUS REPORT FROM AIRLINE PILOT; METEOR?
9910819	0212	BC	VANCOUVER	FB1	1	0	2	WHITE	0.20	1.	NO	6	I	DISC-SHAPED OBJECT
9910819	0230	BC	VANCOUVER	FB1	1	0	1	WHITE	2.00	2.	NL	6	I	OBLONG SHAPE
9910819	0240	BC	VANCOUVER	FB1	1	0	1	WHITE	15.00	1.	NL	5	P	"TEARDROP"
9910819	0023	ON	OTTAWA	FB1	1	0	1	RED		1.	NL	2	I	BALL OF FIRE
9910819	0023	ON	OTTAWA	FB1	1	0	1	WHITE		1.	NL	4	P	BRIGHT BALL WITH TAIL; PROBABLE BOLIDE
9910819	0515	NS		FB1	1	0	2	WHITE	0.03	1.	NL	6	P	CIRCULAR, BRIGHTER THAN VENUS, DESCENDING
9910820	2330	AB	CALGARY	FB1	4	3	2	GREEN	30.00	1.	NL	8	P	VIDEOTAPED SIGHTING; ANALYSIS INCONCLUSIVE
9910820	2230	ON	WINDSOR	FB1	1	0	2		30.00	1.	NL	4	I	4 OR 5 "SATELLITES" FLASHING IN SKY
9910822	2105	AB	LETHBRIDGE	FB1	1	3	2	WHITE	20.00	1.	NO	5	P	"BEAUTIFUL LIGHT SHOW" BEHIND CLOUD; AURORAE?

Handwritten text in a cursive script, organized into several columns. The text is extremely faded and illegible, appearing as dark, scribbled lines on a light background. The layout suggests a ledger or a multi-column document.



1991 Canadian UFO Reports

DATE	TIME	PROV	LOCATION	TYPE	S	V	P	COLOUR	DUR	WI	CT	E	C	COMMENTS
9911213	1830	ON	LONDON	FB1	1	0	1	GREEN	0.05	1.	NL	7	P	SHOOTING STAR REPORTED BY PILOT
9911214	0036	ON	STIRLING	FB1	1	0	1	BLUE	0.01	1.	NL	7	P	METEOR OBSERVED BY PILOT
9911214	0055	ON	OSHAWA	FB1	1	0	1	BLUE	0.01	1.	NL	7	P	BRIGHT OBJECT WITH TAIL
9911217	2000	PQ	CARLETON	FB1	4	3	2	WHITE		1.	NL	7	I	THREE BRIGHT LIGHTS MOVING AT HIGH ALTITUDE
9911217	2030	SK	BALCARRES	MA1	1	0	2	GREEN	0.05	2.	NL	7	P	LIGHT APPEARED TO CRASH TO THE GROUND NEARBY
9911221	0635	ON	ELLIOT LAKE	MA1	1	0	2	WHITE	4.00	1.	NL	6	I	2 CIRCULAR OBJ., CHANGING COURSE; NRC N91/108
9911228	1840	ON	TORONTO	AN1	2	0	3			5.	RD	8	U	OBJECTS SEEN ON RADAR; VERIFIED?; NRC N91/109
9911230	0114	PQ	ROUYN-NORANDA	FB1	1	0	1	WHITE	0.02	2.	NL	7	P	PROBABLE METEOR
9911230	0110	ON	BURKS FALLS	AN1	1	0	2	GREEN	0.05	9.	NL	8	P	LIGHT "EXPLODED", RATTLED WINDOWS
9911230	0110	ON	OTTAWA	AN1	1	0	2	GREEN		1.	ND	3	I	GREEN GLOW
9911230	0110		LAC DES ILES	FB1	1	0	1	ORANGE			NL	1	I	
9911230	2045	NB	JOHNBILLE	MA1	1	0	2	WHITE	1.30	2.	ND	5	P	SLOW-MOVING OBJECT, SEVERAL LIGHTS, "LIKE JET"

Further Comments

It is most instructive to compare the UFOROM analyses with those of the National Sighting Research Center of New Jersey, headed by Paul Ferrughelli. The NSRC results have been reported in a series of publications, a recent one being the National Sighting Yearbook 1990. The NSRC collected UFO reports from newspaper clippings and UFO publications, and analyzed the raw UFO data. Because of the difference in data sources, a comparison with the UFOROM results will not be true. However, it is still interesting to compare the two studies.

The NSRC found a total of 195 UFO reports in 1990. This number is nearly identical with that of Canada for the same year. However, because of the larger population, it is likely that the USA had many, many more sightings that were never accessed through the NSRC's sampling technique.

The NSRC study revealed essentially a reversed monthly distribution for UFO reports compared with Canada. Whereas US sightings peaked in the winter and had a noticeable trough in the summer, the Canadian peaks are traditionally in the summer. However, the 1991 Canadian distribution was much more even, with peaks in both winter and summer. Grouping the two studies together yields a monthly distribution with troughs in mid-summer and mid-winter, with slight variations month-to-month. It is possible to speculate that with adequate report sampling, there would be no monthly variation in the number of sightings, except for major flaps which would be more noticeable in an international survey.

Like the Canadian study, the American data was unevenly distributed throughout the country, with most reports coming from just two states, Florida and Indiana. The Florida flap is likely due to the Gulf Breeze reports which receive a great deal of media attention. The distribution of sighting duration was nearly identical to the Canadian study. The average duration of a typical UFO sighting is about 15 minutes.

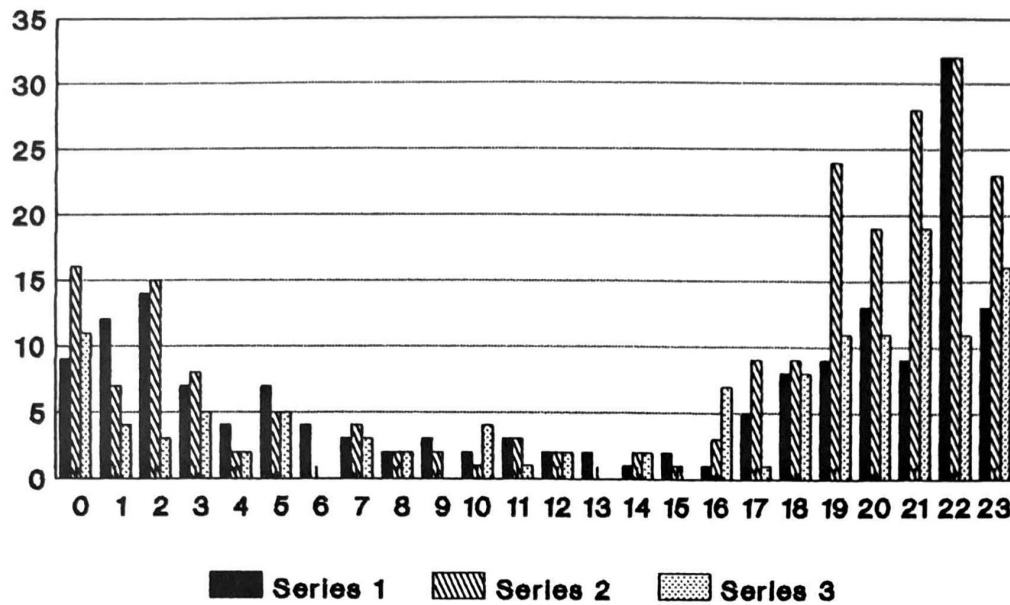
For the hourly distribution of UFO cases, the American study found a symmetrical distribution with a pronounced peak at 9 PM local time and a trough at around 9 AM local time. Canadian distributions are normally about one hour later in each peak, but are otherwise identical in distribution. Breakdown by Hynek classification yields identical distributions within both American and Canadian studies, with NLs being overwhelmingly predominant.

In summary, Ferrughelli's analyses of American UFO data yield results remarkably similar to the UFOROM Canadian studies, despite the differences in collection procedures. The most marked discrepancy between the two studies was in the monthly distribution of UFO reports. This was probably an artefact of the NSRC sampling technique, which did not involve solicitation of UFO reports from investigators but relied upon newspaper accounts for many of its cases. The two studies are complementary, and will aid further research into the UFO phenomenon.

[Reference: Ferrughelli, P. National Sighting Yearbook 1990. National Sighting Research Center, 60 Allen Drive, Wayne, NJ 07470.]

Reports per Hour

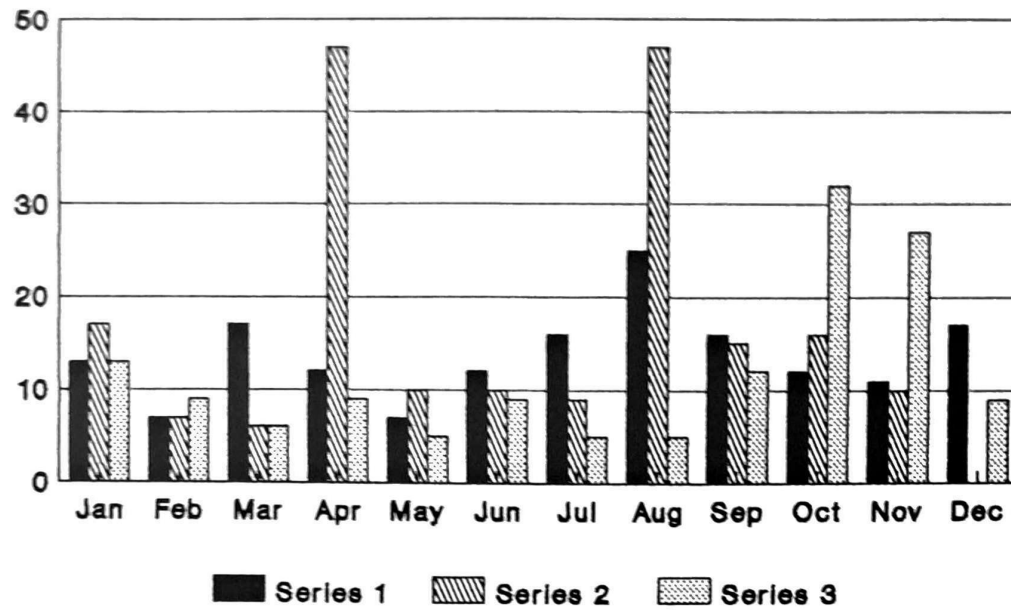
Canadian UFO Reports 1989-1991



1 = 1991; 2 = 1990; 3 = 1989

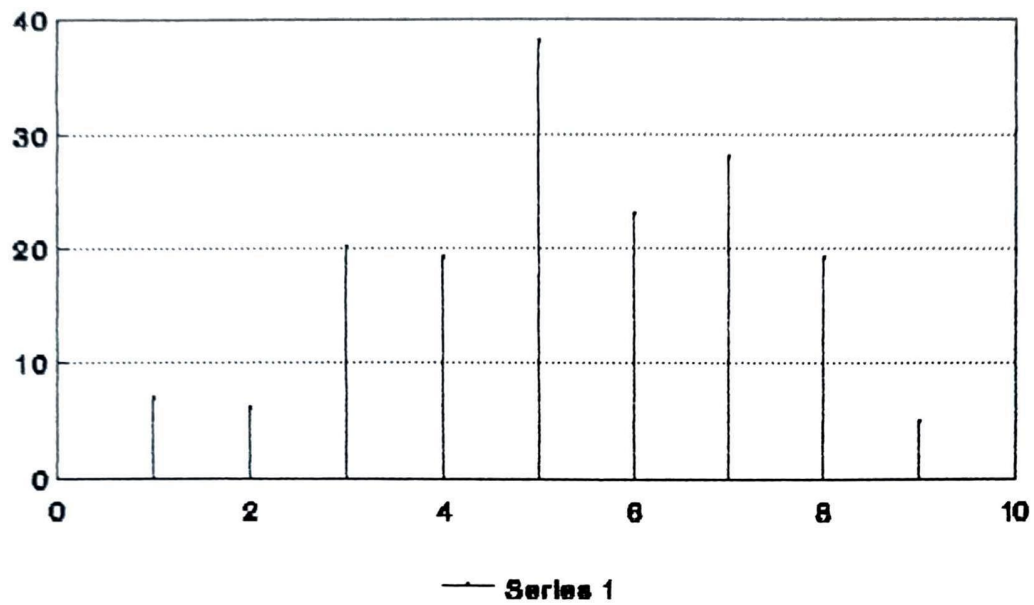
Canadian UFO Reports by Month

1989 to 1991



Series: 1 = 1991; 2 = 1990; 3 = 1989

Investigators' Evaluation 1991 Canadian UFO Reports

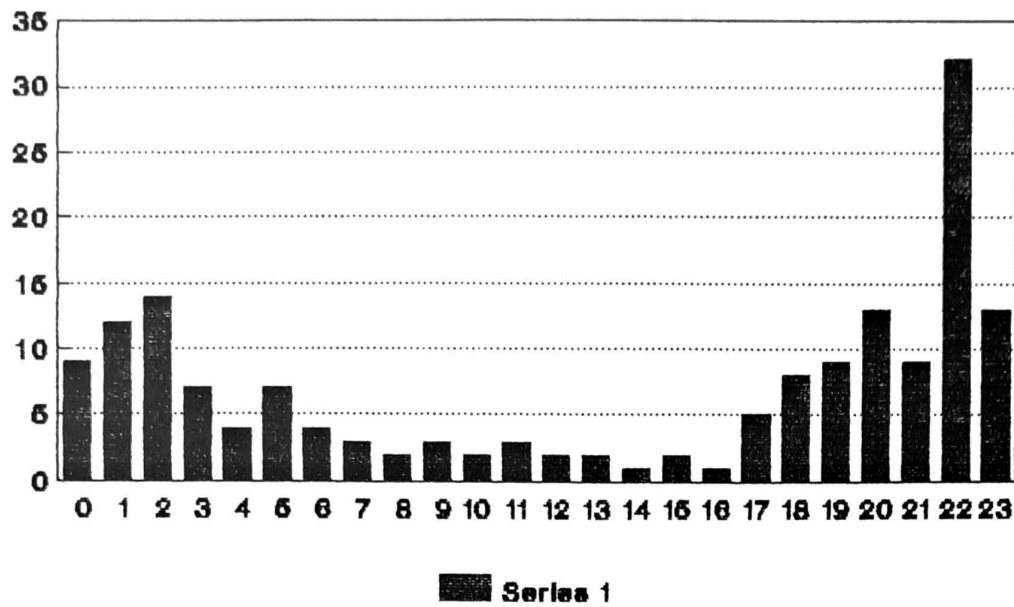


Increasing reliability 0 >> 10



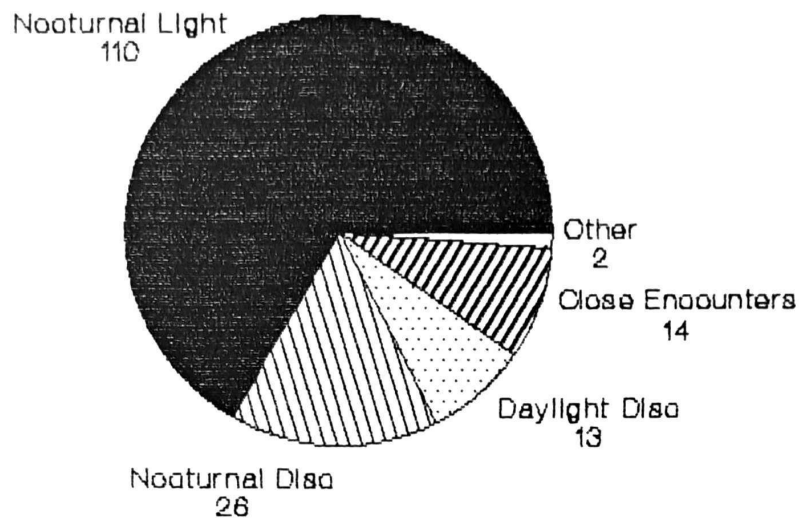
Reports per Hour

1991 Canadian UFO Reports



Hynek Case Type

1991 Canadian UFO Reports



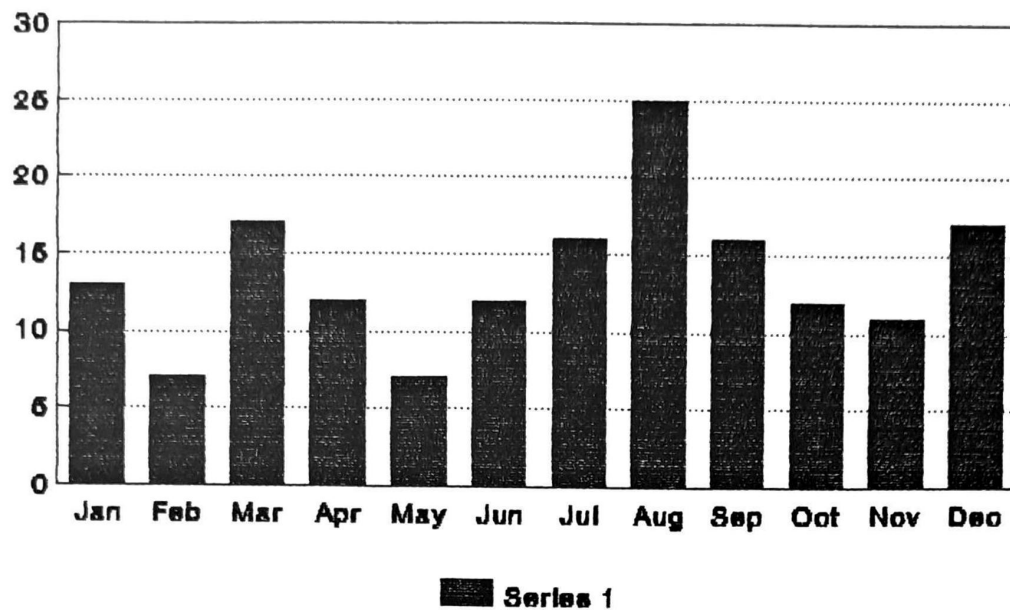
Colour of Observed Object(s)

1991 Canadian UFO Reports

<u>Colour</u>	<u># Cases</u>
Black	4
Blue	11
Gold	1
Green	18
Grey	4
Orange	12
Red	13
Silver	3
White	61
Yellow	11

Canadian UFO Reports by Month

1991



Statistical Breakdown of UFO Reports

1991 Canadian UFO Survey Ufology Research of Manitoba

Province: BC AB SK MB ON PQ NB PI NS NF YK

	59	22	7	6	30	16	9	1	7	4	1
1990	114	9	10	20	21	36	7	3	5	4	1
1989	15	16	18	22	34	28	1	0	3	3	0

Month: Slight variation throughout year. Not as prominent as in other years. Most cases in August, followed by December. Lowest number in February.

Witnesses: Average of 1.91 witnesses/report. Down from 2.33 or higher in previous years.

Duration: Average duration of a sighting was 11.67 minutes.

Colour: Black 4 *
Blue 11
Gold 1 *
Green 18 * connotes daytime cases
Grey 4 *
Orange 12
Red 13
Silver 3 *
White 61
Yellow 11

Time: 00 01 02 03 04 05 06 07 08 09 10 11 12

9 12 14 7 4 7 4 3 2 3 2 3 2

13 14 15 16 17 18 19 20 21 22 23

2 1 2 1 5 8 9 13 9 32 13

Symmetrical peak at 22:00, low at about 10:00.

Conclusions: Explained IFOs 2 1%
Possible/Probable Explanation 69 42%
Insufficient Information 80 48%
Unexplained at This Time 14 8%

Type: NL ND DD C1 C2 C3 C4 RD PH

110 26 13 7 4 1 2 1 1

Close Encounters represented about 8% of the reports.

A total Number of 165 cases were reported in 1991.