

THE
UFOCAT 2002
USER'S GUIDE



Concord, New Hampshire, March 3, 1992 based on sketch by Bob Dix, Union Leader, Manchester, NH

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with
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Published by:
Sun River Research Institute, 16 Old Woodhill Rd., Bow, NH 03304-4906
Tel. 603-774-3040 Fax. 603-774-3072

April 2002

TABLE OF CONTENTS

	<u>Page</u>
Introduction	4
Scope of Database	5
Structure of the Database	6
Availability	6
Inputs to UFOCAT 2002	7
Blanks or Errors in the Database	7
Organization of this User's Guide	8
Outline of Typical UFOCAT 2002 Record (Table 1)	9
Source Information	
Primary Record Number	11
Handedness - "X2"	11
Indirect Record Number	11
Relationship between PRN and IRN - "X1"	11
UFOCAT 2002 Record Number	11
Author's or Investigator's Name	11
Level of Entry of Source	12
Name of Direct Source	12
Codes for Level of Entry (Table 2)	13
Within Source ID ("PAGEVOL" Field)	14
Indirect Source	15
Date of Sighting	
Year, Month and Day	16
Time	17
Flag Field for Date/Time	18
Time Zone	19
Weather	20
Location Information	
Local Terrain	21
Special Location of Witness(es)	22
Location Field (City, Town or Village)	22
Special Location of the Phenomenon	23
Region Field	24
State Field	24
County Field	25
Witness Information	
Number of Witnesses	25
Age of Principal Witness	25
Sex of Principal Witness	26
Special Codes for Witnesses (Police, Military, etc.)	26
Names of Witnesses	27

TABLE OF CONTENTS (CONTINUED)

	<u>Page</u>
Absolute Sidereal Time	27
Hynek Classification Code	28
Vallee Classification Code	29
SVP Credibility Code	30
Type of Report	31
Sub-Type of Reports	32
Key to Sub-Type Codes	32
Explainability of Report	36
Explanation Field	37
UFO Characteristics	
Number of Objects	38
Duration of Observation	38
Size of Object(s)	39
Apparent or Angular Size	40
Distance from UFO(s)	41
Color of UFO(s)	42
Shape of UFO(s)	43
Sound from UFO(s)	44
Geographical Coordinates	45
Notes	46
User Defined Field	46
Appendix A	
List of Reference Sources	47
Appendix B	
UFOCAT 2002 Country Codes and Names	63
Appendix C	
UFOCAT 2002 States and World Regions	67

INTRODUCTION

“As a bibliography of raw UFO reports, UFOCAT is without peer.”
– Allan Hendry, *The UFO Handbook*, 1979

UFOCAT 2002 refers to a computer database of over 120,000 UFO reports and related information released in April 2002. It is the result of a 30-year effort that began during the Air Force sponsored Colorado UFO Project, also known as the “Condon Committee.” UFOCAT was begun by Dr. David R. Saunders, who at the time was a co-Principal Investigator on the Colorado UFO study and professor of Psychology at the University of Colorado¹. Dr. Jacques Vallee contributed a large computer catalogue of approximately 6,000 cases at the project's inception.

The UFOCAT database has existed in some form or another since the spring of 1967 but went through an eight-year hiatus from 1982 to 1990 when it was neither updated nor utilized. In 1976 Dr. Saunders gave his version of UFOCAT to the Center for UFO Studies (CUFOS). From then until 1982 it was maintained and updated by Fred Merritt at the Chicago office of CUFOS. In those days the database was kept on a large IBM mainframe computer at a nearby computer facility, with magnetic tape backup. It eventually proved to be too expensive an endeavor for the Center to maintain on a mainframe, and consequently it was removed from active use and stored on tape.

In 1990 I obtained a copy of UFOCAT on ten 3.5" diskettes from Dr. Saunders courtesy of Dr. John Derr of the U.S. Geological Survey. Dr. Derr had created the diskette version from one of the magnetic tape backups for his research use. Unfortunately he was unable to read the first portion of the tape and so we were missing the first 10,000 records. Mark Rodeghier, Director of CUFOS, provided me with an older magnetic tape backup copy of UFOCAT. By merging the two sources of data I was able to recreate the catalogue as it existed in 1982. Since then several tens of thousands of additional records have been added. UFOCAT99 was first released in the Autumn of 1999 with over 111,000 records, and the current UFOCAT 2002 version has over 146,000 records.

With the great strides made in recent years in computer software and hardware technology, and with the substantial reduction in costs of computer RAM memory and disk storage, it made sense to revise the UFOCAT file structure. First using dBase IV and later Microsoft Access 97 the file was converted to a modern relational database. Most of the single-letter codes from the 1970's version were replaced with longer, more understandable names. Several fields were added. A special emphasis was placed on improving the identification of the source for each UFO report, including the full name of the author and a much longer mnemonic code for the reference citation.

¹ As a Condon Committee member, David Saunders was a proponent for taking the UFO phenomenon seriously. Dr. Edward U. Condon dismissed him from the study for releasing the infamous Low memorandum. In the memo project administrator Robert Low wrote “the trick would be to...[convince] the public it would appear a totally objective study...but to the scientific community would present the image of a group of nonbelievers...having an almost zero expectation of finding a saucer.” Saunders wrote his response to the Condon whitewash in his book *UFOs? Yes! Where the Condon Committee Went Wrong*. (Signet, 1968).

In the late 1970s and early 1980s several researchers prominent in the UFO field criticized the use of UFOCAT for conducting research. Perhaps foremost among these critics were Allan Hendry and Dr. Willy Smith. While we agree that many of these criticisms were indeed valid, we disagree with the central premise that it is impossible to use UFOCAT 2002 to conduct meaningful research.

We would first caution potential users not to expect to be able to begin and end their research using only UFOCAT 2002—there are too many gaps in the data and, just like the Internet, not every source of information is as reliable and accurate as the next. The results obtained from UFOCAT 2002 are best thought of as a reference guide to the original sources for the crucial details. Otherwise, the distinction between poorly investigated reports and exhaustively studied sightings will be lost. However, you will substantially improve your search for information by accessing UFOCAT 2002. What was true when Allan Hendry wrote his critique of UFOCAT in 1979 is even truer today: UFOCAT 2002 is without peer as a reference source. Thousands of hours went into creating it, and months have gone into revising it to improve its ease of use. It exists today as the most comprehensive reference tool and bibliographic source on UFO reports in existence.

Scope of the Database

The **UFOCAT 2002** database exists as a set of MS Access97 tables, queries, forms, and reports. The database requires approximately 50 megabytes of disk storage space. In addition to the main table, three smaller tables contain expanded information about country names and region codes (**WORLD**); U.S. county names, U.S. county census data and geographical coordinates (**COUNTIES**); and additional bibliographic information about sources referenced by UFOCAT 2002 (**SOURCES**).

The basic unit of the UFOCAT 2002 is the record. Physically, a record consists of 49 fields. Forty-one of the fields are defined as character strings. Eight fields are numeric fields: PRN, IRN, URN, X2, TZONE, AST, SIZE, and DIST. Dates are defined as character strings in order to include characterizations when the precise date or time is unknown, such as “Night” or “Dawn.”

Most entries in the UFOCAT 2002 describe UFO events, but some non-UFO events have been included. In the past these non-UFO events have included such things as nuclear test explosions, aircraft crashes, major electrical power failures, and the deaths of major UFO figures. Also included are the dates that crop circle markings or other unusual traces were discovered. These non-UFO events are distinguishable by having a first-digit code of zero (0) for TYPE. To the extent that they have potential ufological interest, other non-UFO events may also be eligible for inclusion in the future.

Typically, each record for a UFO event reflects the input of one witness or group of witnesses about one event as reported via one source; in practice, there is unavoidable confounding of both witnesses and events, and sources are not always unambiguous. As a basic principle, UFOCAT 2002 has aimed to include any reasonable class of material deemed to be of interest. A closely related principle established in the earlier versions of UFOCAT was that a given record should accurately reflect the data as given by its source, even when those data are known to be inaccurate. This rule still holds with some exceptions. Some exceptions to this rule in UFOCAT 2002 have been made when the inaccuracy would cause a major misreading of the report. In addition, spelling errors in place names or witness names of only a single letter or two have been corrected because they are inconsequential, and it allows the

user to distinguish mistakes that are flagged as truly erroneous errors. Special codes are used to flag data suspected of inaccuracy or known to be inaccurate.

The existing UFOCAT 2002 fields and codes will undoubtedly be in need of future expansion due to the dynamic nature and complexity of the UFO phenomena. This ***UFOCAT 2002 User's Guide*** is an attempt to describe the structure, content, and coding conventions as they currently exist.

Structure of the Database

With the help of the queries provided with the **UFOCAT 2002** database, a block of records describing the same event can be obtained. The entries within each block all refer to the same event, but are based on different sources. The chronologically earliest report of a given event, *or* the most complete account available, is treated as the primary record for that event.

Availability of the Information Contained in the UFOCAT 2002 Database

UFOCAT 2002 has become a very large database. David Saunders invested the lion's share of the work, even though his contributions ended in 1976. Ted Bloecher, Fred Merritt, Luis Schoenherr, and Paul Ferrughelli have made noteworthy contributions of material specifically coded for UFOCAT 2002, and many others have made data available in diverse forms. All of these contributions have helped greatly, but much more work remains. Some UFO investigators have invested a great deal of their personal time with no monetary compensation, so their personal wishes regarding the confidentiality and availability of their material should be respected.

One particular problem in this area was resolved by allowing contributors to specify "levels of availability" for their material; these specifications lead to codes in the LEVEL field for each record. The codes assigned to published material make them freely available; the codes assigned to unpublished material invoke varying degrees of confidentiality, starting with the witness names. Contributors who fear inappropriate use of their material can effectively "classify" it, and some have elected this option. Of course, we reserve the right not to accept material for UFOCAT 2002 if there are too many strings attached. Currently, less than 10% of the primary records hold back more than witness names and this percentage will be reduced in future releases.

Needless to say, UFOCAT 2002 serves no purpose unless it is used. Those with a scientific interest in the UFO problem and who will, in turn, make their findings freely available are welcome to purchase and use this database. However, it is also possible to misuse the data. The major contributors to the file, including CUFOS, have agreed that two general restrictions are necessary--a qualitative restriction and a publication restriction.

The qualitative restriction is implemented by distinguishing between published and unpublished sources. Records based on unpublished sources remain under the control of those sources, both as to content and availability. Unpublished entries that do not have the author's approval to release the names of witnesses have been reduced to their initial letter. Entries based on published sources have not been censored. The operational meaning of "published" and "unpublished" is contained in the coding of the SOURCE field for each UFOCAT 2002 record and is described in detail in this **Users' Guide**.

The publication restriction applies to every purchaser *and* user of the database. The basic intent is that UFOCAT 2002 should be used to further our common understanding of ufology, but not for "ulterior" purposes. All users are expected to honor this intent when it comes time to publish. UFOCAT 2002 is a creative work and as such is protected by international copyright laws. Permission to reproduce or publish material extracted from UFOCAT 2002 must be obtained in writing from the author or publisher.

Inputs to UFOCAT 2002

All persons interested in the pursuit of ufology as an interdisciplinary science are invited to contribute reports for UFOCAT 2002. Unique, unpublished investigations file data are always welcome. Citations for material published in book form up through the 1970's is already coded for most of the UFO literature. Material published in periodical form or in newspaper sources and many of the books published since 1980 is only partially coded. Before actually encoding anything, an inquiry is in order. Write to: **Donald A. Johnson, Sun River Research, 16 Old Woodhill Road, Bow, NH 03304. Or you may email us at ufocat@aol.com.**

In the case of file material, it is necessary to devise an appropriate numbering system for source identification, so that when UFOCAT 2002 queries are performed the internal structure of each source can be preserved. For source files that are maintained chronologically, this is already automatic (i.e. simply number by year, month, day, and time).

Data entry can be achieved through using the Access97 screen form designed and included in the UFOCAT 2002 database. When using the screen form provided to enter new material it is not necessary that all fields be entered by you. It *is* recommended that the new record include those information items that will help to match the record with possible duplicates, and determine proper primary record number assignment. ***This includes date, time, place, witness name(s), "indirect source", type of report, and the name of the author or investigator of the report.*** Additional coding will be essential for potentially primary entries and for entries based on new investigations.

In order to maintain quality control, all mergers of new data into the primary version of UFOCAT 2002 will continue to be centralized. Edited submissions will be returned electronically to contributors, who may then verify or add to the proposed additions to the UFOCAT 2002 catalogue, and email them back. Such files will include the permanent ID numbers assigned by the system. We expect that material will continue to be prepared for UFOCAT 2002 more or less continuously. We hope that you can expect a short turnaround time for your files of new or revised entries, but please keep in mind that this is a volunteer effort.

Blanks and/or Errors in the Database

A general principle of coding has been followed that a blank indicates data either missing from the report or at least unknown to the person making the entry. Errors of omission can hardly be avoided, but we would like to have any error of commission called to our attention--unless it is already flagged as an error of the source.

Organization of this User's Guide

It is a relatively simple process to create additional tables that include specialized detail coding and free format text. New tables may be relationally linked to UFOCAT 2002 by the record ID or the appropriate key. It is natural, therefore, to order this **User's Guide** in terms of the positions occupied by the fields in the UFOCAT 2002 record. The internal organization therefore parallels the arrangement most often used for generating reports and listings.

As a result of this structure, certain formats are more convenient for data acquisition than other formats. In particular, we recommend that submissions *not already in UFOCAT 2002 format* use character strings for the defined fields with the same length as those used in UFOCAT 2002. It is relatively easy to append records into the Access97 database from Excel 97 spreadsheets *provided* the lengths of those fields do not exceed the length described herein. The use of "exotic" field types is also discouraged. A left-to-right rearrangement of the fields creates only minor inconvenience. However, the data record of specific codes that do not conform to the specifications outlined and detailed on the following pages may present much greater difficulties and confusion. Computer translation of idiosyncratic codes is possible, but even so it will be worthwhile only for large files.

Each page of this **User's Guide** beyond this introduction is labeled according to the position of the described field within a typical event-record. Table 1, below, outlines the whole record and serves as an index. The structure of the UFOCAT table has changed since the last release with the addition of four more fields: Ufonaut, Height, Uniform, and LST. Accommodation of other forms of data will occur by employing additional relational databases, such as an IMAGES table which is currently under construction, so that extra records will be created only for the cases that need them.

Table 1: Outline of Typical UFOCAT 2002 Record

<u>Field</u>	<u>Width</u>	<u>Type of Information</u>
PRN	N	Primary record ID number (indicates first record for that case)
X2	N	Order of primacy for records in a block concerning same incident
IRN	N	Indirect record ID number (blank for primary entries)
X1	1	Flag for order of entries referring to the same report
URN	N	UFOCAT 2002 record ID number (permanent unique reference number)
AUTHOR	30	Author's or Investigator's Name
LEVEL	1	Level of source
SOURCE	12	Code for identification of the direct source (see Appendix A)
PAGEVOL	8	Position within source
ISOURCE	12	Code for identification of the indirect source
IPAGEVOL	8	Position within indirect source
YEAR	4	Year
MO	2	Month
DAY	2	Day
TIME	5	Time (Hour and Minute)
TZ	1	Special flag for reporting accuracy of date and time
TZONE	N	Time Zone
WEA	8	Weather
TER	8	Terrain (e.g. "forest")
VFLG	3	Vehicle Flag (e.g. a period indicates the witness is in a car)
LOCATION	30	Place-name location
LFLG	1	Special flag for reporting accuracy about location
REGION	2	Region of world abbreviation
STATE	3	State (or country) abbreviation (see Appendix B)
COUNTY	8	County (or province)
WITNESSES	8	Number of witnesses
AGE	2	Age of principal witness or age composition of group
SEX	1	Sex of principal witness or gender composition of group
MIS	1	Flag for military or police witnesses
NAMES	30	Witness name(s)
AST	N	Absolute Sidereal Time (computed)
HYNEK	3	Hynek classification code

VALLEE	3	Vallee classification code
SVP	3	Credibility
TYPE	12	Type and subtype of report (as indicated by source)
EXPLN	1	Flag for explainability of the report
EXPLAN	2	Explanation of report (as given by source)
OBJS	8	Number of objects (UFOs) reported
DUR	8	Duration of event
SIZE	N	Size of object estimated by witnesses
ANGLSIZ	3	Apparent size
DIST	N	Distance from UFO at closest approach estimated by witnesses
COLOR	8	Color of UFO
SHAPE	8	Shape of UFO
SOUND	8	Sound (if any) associated with UFO
LONGITUDE	8	Longitude
X3	1	Coordinate flags
LATITUDE	8	Latitude
NOTES	200	Short narrative of UFO incident including key words
Ufonaut	16	Classification of type of UFO humanoid/alien reported
Height	N	Height of Ufonaut reported, in feet
Uniform	16	Description of uniform worn by Ufonaut
LST	N	Local sidereal time
USER DEFINED FIELD	32	Field available for User definitions or labels that can be used for customized searches. Contains Local Sidereal Time (LST) prefixed with "RA"

FIELD NAME: PRN DATA TYPE: Number

This field contains the primary record number ("PRN"). It points to the "URN" or UFOCAT 2002 record number of the record with the most primary source of information about the UFO event. Filtering records by this number will provide all references to the same event.

FIELD NAME: X2 DATA TYPE: Number

Despite its cryptic name, this field is one of the most important within the record, because it provides information on the "handedness" of the record. Primary records are identified with a zero. Filtering records for this value is the most common way to find only the primary entries for a search, and is used to conduct statistical tallies without double counting events. Records coded with a "1" indicate investigations that are based upon an independent investigation of the UFO event, but was not chosen as the primary record. Records coded with a "2" reference the primary source or some other source and is therefore a secondary source of information. Records coded with a "3" clearly reference only a secondary source, and are therefore even further removed from the original report.

FIELD NAME: IRN DATA TYPE: Number

This field contains the indirect record number ("IRN"). It points to the "URN" or UFOCAT 2002 record that is most closely associated with the source. Typically this refers to the source cited by the author when he or she is not the primary source. If the author or investigator is the primary source then this field will be blank.

FIELD NAME: X1 WIDTH: 1 character

This field is left over from an earlier version of UFOCAT, and expresses the degree of confidence the coder had about the strength of the relationship between the URN and the IRN. Primary records will not have an indirect source and this field will be left blank. Clear matches are coded with a "=" and possible matches are coded with a "-".

FIELD NAME: URN DATA TYPE: Number

The UFOCAT 2002 record ID number. This is a permanent, unique reference number assigned to each record in the database. Every record will have an URN regardless of the paucity of other information contained within it.

FIELD NAME: AUTHOR WIDTH: 30 characters

This field contains the name of the first author or UFO investigator who was responsible for writing the report, article, or book from which the record is referenced in the **SOURCE** field. It is possible that the author is unknown or was not recorded at the time the entry was made. This field would then contain the name of the editor of the magazine or journal in which the report appeared the name of the magazine or journal, or the name of the organization responsible for the report. The surname of the first author is listed first, followed by first name and middle initial, up to 30 characters.

FIELD NAME: LEVEL WIDTH: 1 character

This field contains a numeric code (0 – 9) for the level of entry of the source (see Table 2). Primary sources for a given UFO event will tend to be associated with low-numbered codes in this field (source codes of 0 through 3). Type 3 sources (investigation files) are the most preferred for additions to the catalogue because they are the most likely to contain the most information with the fewest inaccuracies.

FIELD NAME: **SOURCE** **WIDTH:** **12 characters**

A 12-character abbreviation describes the source of the report. This field is a unique identifier for the source (i.e. an investigations file, a periodical, a book, or a list of UFO reports). The **SOURCE** field is used to match UFOCAT 2002 table entries with descriptive information about the source (e.g. title, year of publication, etc) in the SOURCES table. Together with the volume number and page citation found in the **PAGEVOL field**, this code should be sufficient to allow the specific source to actually be located in its original form.

It will normally be true that all entries coded from the same direct source will have the same code for level of source. However, there are a few important exceptions. Primary sources for a given UFO event will tend to be associated with low-numbered codes in the level field (source LEVEL codes of 2 or 3).

If the direct source is an individual the following abbreviation scheme applies. Ordinarily, the first column of the field will contain the first letter of the first name (capitalized). The second column will contain the first letter of the last name (capitalized), followed by the remainder of the last name in lower case, followed by a number if the source is published. In the case where an author has written more than one book, the number code ranks the books or published works in order of publication. In the case of a book with two or more authors, the author first mentioned is the one coded.

A periodical is indicated by its name (up to 12 characters). A periodical that is the work of one author is treated as an individual's publication, with the full name appearing in the AUTHOR field.

Table 2: Level of Entry

Specific codes for level of entry of source have the following meanings:

- 9 The direct source is essentially a list, with no narrative information. The list may or may not have been computerized and/or used in a statistical study by the original compiler. Within-source identification numbers are the serial numbers assigned by the original compiler, if given (see **PAGEVOL** Scheme 2).
- 8 The direct source is a (presumably) revised work. (Cf. 7) This will typically include paperback editions and translations. The content of such editions is rarely novel, but the page numbering is often different. See **APPENDIX A: INDEX TO DIRECT SOURCES** to see what specific edition may have been coded as 8 (see **PAGEVOL** Scheme 1).
- 7 The direct source is the first edition of a book or monograph, in the native language of the author. Within-source identification numbers are page numbers in this edition (see **PAGEVOL** Scheme 1).
- 6 The direct source is an author's files. There is no predictable within-source identification (see **PAGEVOL** Scheme 3 or 5).
- 5 The direct source is a periodical devoted primarily or frequently to ufology. Within-source identification codes are based on year and month and page of publication (see **PAGEVOL** Scheme 4).
- 4 The direct source is a periodical of general circulation, including newspapers and most magazines. Within-source identification codes are based on year, month, and day of publication (see **PAGEVOL** Scheme 5). (Except for Project Bluebook).
- 3 The direct source is an investigations file. Within-source identification schemas vary from source to source (see **PAGEVOL** Scheme 3 or 5 or 6).
- 2 The direct source is an investigations file. Witness names are automatically confidential, and some detailed data are confidential.
- 1 The direct source is an investigations file. The entire case is confidential, and may be reported only as a tally in statistical summaries.
- 0 The direct source is an investigations file. Status as type 1 or 2 or 3 has not been determined.

A blank or any alphabetic code The record does not refer to an event.

FIELD NAME: PAGEVOL WIDTH: 8 characters

Identification within Source

The first seven columns of the **PAGEVOL** field provides the page number or other useful identifying information to enable the user to locate the original documentation from which the record has been coded. A supplementary purpose of the code, when this is feasible, is to indicate the date when the coded information became available, so that relative dates may be inferred from listings.

Several types of coding are used, depending on the nature of the overall source. For any one direct source, a consistent scheme of identification will be used, according to the following key:

- Scheme 1 Page number in a published source. (Level 7 or 8) Letters may be used to separate appendices.

- Scheme 2 Sequential number in a published source. (Level 9) 3-4 digits.

- Scheme 3 Acquisition numbers. These are used only in small, unpublished files.

- Scheme 4 Year/Month/Page of publication in a level 5 source. This will be the preferred scheme for any specialized periodicals that have their own specific source codes. The use of issue numbers, although practiced widely, is not recommended. Four digits are used for the year plus two digits for the month and two digits for the page.

- Scheme 5 Year/Month/Day of publication. This will be the preferred scheme for all material derived from chronological files. Four digits are used for year, 2 digits for month plus 2 digits for day. In the past the letters A through L were used as codes for the months, and the letters A through Z were used as codes for the day or page number. These codes have been replaced with numbers.

- Scheme 6 Blank. Used only in small, unpublished files.

FIELD NAME: **ISOURCE** **WIDTH:** **12 characters**

A 12-character abbreviation describes the indirect source of the report. The "indirect source" of any record is the source that is cited or credited by the author. This field serves two purposes. First, it provides the essential information by which records referring to the same event may be grouped into blocks and primary entries recognized as such. Second, in the case of primary entries, it provides a general indication of the quality of the witness's contribution to the original input.

Any code that appears in **SOURCE** may appear in **ISOURCE** when that source is cited as an indirect source. However, the **ISOURCE** won't always to be a unique identifier for the indirect source because sometimes the exact details of the reference are vague. For example, it may only refer to a person as the source without citing the publication.

If the indirect source is an individual the first character in that field will contain the first letter of that person's first name (capitalized). The second column will contain the first letter of the last name (capitalized) followed by the remainder of the last name in lower case. A number will follow the name if the citation is to a book by that person. In the case where an author has written more than one book, these numbers rank the books in order of publication. In the case of a book with two or more authors, the author first mentioned is the one coded. If more than one source is cited, the most recent one should be treated as the indirect source.

A periodical is indicated by its name (up to 12 characters). A periodical that is the work of one author is treated as an individual's publication, with the full name appearing in the AUTHOR field. In addition to the codes borrowed from **SOURCE**, the following miscellaneous codes may be given as the indirect source (listed here in order of priority):

- * (Asterisk). The immediate indirect source for this record is a first-hand written report of an on-the-scene investigation written by the investigator or the equivalent.
- + (Plus sign). The indirect source for this record is a standardized report form completed by or with the witness for inclusion in the file designated by the direct source code.
- ' (Apostrophe). The indirect source for this record is a description of firsthand observations prepared by the witness and reported in a scientific journal.
- . (Period). Either the indirect source for this record is a letter written by the witness(es), or the direct source is based on an unstructured interview with the witnesses (as by a newspaper reporter). The latter interpretation will apply when the **LEVEL** code is 4.
- , (Comma). The indirect source for this record is a published account in a newspaper or other non-scientific periodical. Note that a comma "," is appropriate the **SOURCE** is a wire-service story. If the **SOURCE** is a local news story (published in the same county as the event), the last column of **PAGEVOL** should be coded "." on the assumption that the witnesses were interviewed.

YEAR, MONTH, and DAY

The need for including the chronological date of the UFO event is obvious. Not only is the date of an event a fundamental piece of identifying information, but it is necessary for any analyses of waves, cycles, or evolutionary aspects of the phenomena. The coding is relatively straightforward. These fields are arranged in the sequence year-month-day.

These data appear as given by the source, without elaboration or modification. The TZ field serves as a flag field to contain any necessary comments. Missing data were simply omitted, with character codes provided to represent approximate information. Trailing zeros are included in these fields only when they are significant. For recurrent or prolonged events, date/time is recorded at the time of initial onset.

FIELD NAME: YEAR WIDTH: 4 characters

This 4-character field contains the year of the event. When the precise year is not known, the decade of the event is coded with a period (.) in the last column. For example, an event which occurred in the 1960's for which the exact year is not known would be coded "196." If an event occurred early, in the middle, or late in a decade, but the exact year is uncertain, it can be coded with a "E", "M", or "L" in the last column. For example, "196L" indicates an event that occurred late in the 1960s, possibly 1968 or 1969.

FIELD NAME: MO WIDTH: 2 characters

This 2-character field represents the month of the event, using "01" through "12" to stand for January through December. When the precise month is not known the first column will be blank; the second column will then contain another blank, or one of the following alphabetic codes --

E	Early (approximately January-April)
F	Fall (approximately October-December).
L	Late (approximately September-December)
M	Middle or Summer (approximately May-August)
S	Spring (approximately April-June)
W	Winter (approximately January-March)

FIELD NAME: DAY WIDTH: 2 characters

This field represents the day of the event, using "01" through "31" in the obvious fashion. When the precise day cannot be coded the first column will be blank; the second column may then contain another blank, or one of the following alphabetic codes --

E	Early (approximately the first week)
M	Middle
L	Late (approximately the last week)

FIELD NAME: **TIME** **WIDTH:** **5 characters**

This five-character field represents the hour and minute in which the event occurred. The first two columns of the **TIME** field represent the hour of the event, using "00" through "23" in the obvious fashion; 2400 should be treated as 0000 of the following day. If the precise hour could not be coded the **TIME** field will either be blank or contain one of the following codes --

Day	Daytime
Night	Night
Morn	Morning
After	Afternoon
Even	Evening
Dawn	Sunrise or dawn
Noon	Noon (sun at zenith)
Dusk	Sunset or dusk
MidD	Midday
MidN	Midnight
Pdawn	Predawn (the day listed is about to dawn)

The third and fourth columns of **TIME** represent the minute of the onset of the event, using "00" through "59" in the obvious fashion. "00" is not coded unless this is known to be reasonably accurate. If the precise minute is not known, the fourth column in the field will be left blank, and the third column may then contain ---

-	"early" or "before"
+	"late" or "after"

FIELD NAME: TZ

WIDTH: 2 character

This field is used to flag whether the date is approximate or if the time is coded as standard or daylight time, or GMT. This field is also used to call attention to certain unusual conditions affecting the date/time coding. Any of the following codes may appear in the TZ field, with the indicated meanings:

- * The date/time field is coded in GMT (otherwise known as Greenwich mean time, Universal time or Z-time). Note that the GMT date may not be the same as the local time date.
- + The date/time field is coded in local daylight-savings time (one hour faster than standard time). Again, the date may differ from the standard time date.
- .
- The date is approximate, plus or minus one or two days. If the date is known less precisely than this, an alphabetic code is used in the second column of the **DAY** field.²
- ' The date is definitely a date-of-publication, and may be interpreted as "not later than".
- = The date is as given by the direct source, but is believed (or known) to be in error.

² A code of either "-" or "=" will normally exclude the entire record from consideration in chronological summaries or analysis

FIELD NAME: TZONE

DATA TYPE: Number

This field is used to indicate the Time Zone of the event, for calculating Universal Time or Sidereal Time. Zone times are the Standard Times kept on land and sea compared with 12 hours (noon) Greenwich Mean Time. The codes for the continental United States are 4 (Pacific Standard Time), 5 Mountain Standard Time, 6 (Central Standard Time), and 7 (Eastern Standard Time). Table 3 shows the number codes for TZONE and the frequency of primary entries for each zone.

Table 3: Time Zones of the World and Frequency of Primary UFO Cases

TZONE	States	N
1	American Samoa, Kiribati	12
2	Hawaiian Islands, French Polynesia	183
3	Alaska	362
4	West Coast US & Canada	6767
5	Rocky Mountains	3903
6	Midwest US, Mexico, Central America	10671
7	East Coast US & Canada, Colombia, Peru, & Ecuador	20079
8	Canadian Maritime, Puerto Rico, Venezuela, western Brazil, Bolivia, Paraguay, & Chile	1291
8.5	Newfoundland	137
9	Brazil, Uruguay, Argentina, & Greenland	2938
10	Atlantic Ocean	4
11	Azores, Cape Verde	22
12	Great Britain, Ireland, Iceland, Portugal, & west Africa	6401
13	Western & Central Europe, North Africa, Nigeria, Congo	10157
14	Eastern Europe, Turkey, Greece, Near East, Egypt, Zimbabwe, South Africa, Namibia	1171
15	Western Russia, Saudi Arabia, West Africa	435
15.5	Iran	55
16	Russia (Perm & Volgograd), Georgia, Armenia, Azerbaijan, U.A.E., Oman	53
17	Pakistan, Uzbekistan, western Kazakstan	21
17.5	India, Sri Lanka	77
18	Kazakhstan, Tajikistan	115
18.5	Burma	7
19	Russia (Siberia), Thailand, Vietnam, Indonesia (Sumatra & Java)	114
20	China, Taiwan, Philippines, Malaysia, Borneo, Western Australia	469
21	Japan, Korea, Yakutia, New Guinea	519
21.5	South Australia, Northern Territory	508
22	Papua New Guinea, Eastern Australia, Russian Far East	2130
23	Solomon Islands	1
24	New Zealand, Fiji, Kamchatka Peninsula	937

FIELD NAME: WEA

WIDTH: 8 characters

Field for Weather Conditions

The following 8-character abbreviations are used in the **WEA** field to indicate weather conditions that may be relevant to proper evaluation of a given sighting report. This code is a recent addition to UFOCAT 2002 and typically is not systematically reported except in certain primary sources.

Table 4: Weather Conditions and Frequency of Primary UFO Cases

WEA	Description	N
Calm	No wind, calm	1
Clear	Visibility unrestricted	2309
Clouds	Some clouds present	1
Cloudy	Cloudy	746
Fog	Foggy	123
Ice	Ice on surface	48
Muddy	Muddy (recent rain)	22
Overcast	Overcast	285
Partial	Partially sunny	3
Rain	Raining	159
Snow	Snow on surface	179
Storm	Severe stormy weather	40
Thunder	Thunderstorm	29
Undrcast	Undercast (used for aircraft flying above cloud cover)	28

FIELD NAME: TER

WIDTH: 8 characters

Field for Local Terrain

The following abbreviations are used to indicate features of terrain and local landmarks in the vicinity of the UFO event that may be relevant to proper evaluation of a given sighting report. The pertinent data are not systematically available from all sources, but are commonly provided in the more interesting cases. It should be emphasized that this field applies regardless of whether the terrain as featured figures directly in the scenario of the report.

Table 5: Terrain and Frequency of Unexplained Primary UFO Cases

TER	N	TER	N	TER	N	TER	N
Airfield	437		2	Junkyard	1	Saltflat	1
Airport	288	Dam	60	Kennel	1		1
AptBldg	17	Desert	99	Kitchen	14	School	117
Arsenal	3		2	Lake	751	Sewer	1
Balcony	1		1	Lane	10		
Bar	1	Driveln	1	Lumber	1	Shop	3
Bedroom	124		4	Military	170	Shopyard	1
Bridge	22	Dump	20	Mill	1	Shore	532
Building	347	Electric	477	Mine	130	Smelter	3
		EmptyLot	2	Missile	177		
			1	Mountain	759	SpaceCnt	4
		Factory	64	Mudflat	1		1
		Fairgrou	2	Nuclear	221	Stable	5
		Farm	873	Observat	1	Stadium	10
		Fazenda	1	Ocean	1320	Street	29
		Field	193	Office	4	Studio	2
		FireTowr	108	Oilfield	9	Suburbs	178
				Orchard	6	Swamp	108
		Forest	624	Park	19	Taiga	1
		Garden	32	Parking	5	Town	193
	1	Glacier	1	Pasture	62		
Bushland	2	Golfcour	24	Patio	4	Trailer	4
BusStop	1	Grange	1	Plains	1	TrailrPk	7
Cabin	8	Grotto	1	Plantatn	1	Tundra	2
Camp	15	Grove	1	Plateau	1	Veldt	2
Camper	4	Hedgerow	1	Prairie	3	Village	45
Campsite	26	Highway	1289	Quarry	16		4
Canal	7	Hill	28	RaceTrac	3		1
Canyon	19	Home	36	Railroad	269	Warplane	150
Caravan	4	Hospital	56	Ranch	45	Warship	11
Cemetery	58	Hotel	6	Ravine	2	Waterfal	2
	1	House	180	Refinery	3		3
Church	19	Housing	3	Restaura	7	Zoo	1
City	1395	Hunting	6	River	282	Woods	18
CityHall	7	Ice	106	Road	467	Yard	881
Clearing	11	Indoors	10	Roadside	17		
Cliffs	1	Island	1	Rocky	18		
Clinic	1	Jungle	3	Rural	413		

FIELD NAME: VFLG **WIDTH:** 1 characters

Flag Field for Special Location of the Witness(es) in a Vehicle

The following one-column codes are used in VFLG field to call attention to the special location of the witnesses, specifically whether they were located in a spacecraft, flying aircraft, boat, ship, or moving automobile during at least some portion of the sighting. Some of the conditions flagged are relatively rare, but others are quite common. It is conceivable that more than one of these flags will apply to the same record. In such a case, priority in coding has been given to the flag code closest to the bottom of the list.

- (The witness(es) were located in an orbiting spacecraft.
- ' The witness(es) were located in a flying aircraft.
- , The witness(es) were located in a boat, i.e., on water.
- . The witness(es) were located in a moving automobile (or moving motorcycle) during at least some portion of the sighting.
- # Witness(es) in a flying aircraft were in communication with surface-based witness(es) during at least some portion of the actual sighting. (If two or more groups of witness(es) made independent observations, then theoretically there should be distinct entries for each.)

FIELD NAME: LOCATION **WIDTH:** 30 characters

Geographic Place-Name

Places are specified by sources in many ways and with many degrees of precision. If geodetic coordinates are given, they have been coded directly into the fields **LONGITUDE** and **LATITUDE**. Most typically, the source names a city or town, and the state or country containing that city or town. In such cases, the city or town is entered in the **LOCATION** field, and the state or country is found in the **STATE** field.

UFOCAT 2002 has adopted a standard transliteration for names not normally spelled in the Roman alphabet (*World Atlas*, New York: DK Publishing, 1997). Where alternate Roman spellings or names exist, UFOCAT 2002 regards as correct the spelling used by the people who live there. For example, the names of cities in Ukraine have been changed to their preferred Ukrainian spelling from Russian.

Place-names begin in the first column, with any necessary modifiers placed after. Thus, you will find locations which are described as "10 miles southwest of Louisville" in UFOCAT 2002 as "**LOUISVILLE SW 10M**", not as "**10M SW LOUISVILLE**". "**LOUISVILLE SW10M**" and "**LOUISVILLE, OH RIVER**" are other forms that are acceptable and will usually sort into the proper place without confusion.

Sometimes a place is described as between two namable places. Both will be named, the closer one first, with the two separated by a "=". The first name will be spelled out completely while the second one may be abbreviated, depending upon space limitations.

Some foreign place-names cannot be fully spelled in 30 characters and have been abbreviated. With few exceptions, this will take the form of truncation, so that sorting will still occur as if there had been room for the whole name. The primary exception is that "**SAINT**" is always abbreviated to "**ST**", and "**SAINTE**" to "**STE**" (note absence of any period). Imbedded periods are used, however, to indicate omission of trivial words which frequently occur in foreign place names, e.g., "Paray-le-Monial" is coded as "**PARAY.MONIAL**"; such shortening has been used even when the unshortened name would have been less than 30 characters.

The result of these coding rules is that county codes and coordinates become assigned simply on the basis of the place-name given, ignoring the meaning of any modifiers. Better coordinates may be computed during an analysis. If the county or state is found to be wrong, the place-name has been flagged as an error with the correct county or state code inserted.

FIELD NAME: LFLG
WIDTH: 1 character

Flag Field for Location of the Phenomenon

The following one-column codes are used in the LFLG field to call attention to special factors affecting the proper interpretation of location.

- The location named is only approximate. E.g., the source said near Los Angeles, or referred to the Baltimore area, or the like.
- + The coordinate information in the **LONGITUDE** and **LATITUDE** fields is the specific witness location for this sighting. Otherwise it may be assumed that any coordinates merely refer to the named place, regardless of where the witness was located.
- * The coordinate information in the **LONGITUDE** and **LATITUDE** fields is the specific location of the phenomenon, as determined from traces or other strong evidence.
- = The place-name in the **LOCATION** field is that given by the direct source, but is believed (or known) to be in error. Place-names will not be considered to be in error for purposes of this coding unless they would locate the event in the wrong county (see the **COUNTY** field). Incorrect place-names, which appear to be merely misspellings, have been routinely corrected.

FIELD NAME: REGION WIDTH: 2 characters

Whereas the location information in the **LOCATION** field permits easy recognition of events in the context of source documentation, the location information in the **REGION**, **STATE**, and **COUNTY** fields assigns events to statistically useful geographic areas.

The largest geographic division is the world **REGION** field. This field contains a one or two letter abbreviation for the continent, ocean, or major region of the world in which the UFO event occurred. The **WORLD** table contains these region codes and names for providing headings for geographically indexed lists. The following are the existing abbreviations and counts --

Table 6: World Regions and Frequency of Unexplained UFO Cases

REGION	Description	N
A	Atlantic Ocean, including Iceland	361
AA	Antarctica	44
AF	Africa	972
AS	Asia	1453
AU	Australia and Oceania, including Papua New Guinea	4075
CA	Central America, including Puerto Rico	752
CN	Canada	4566
EU	Europe, including Russia west of the Ural Mountains	20127
I	Indian Ocean	29
M	Mediterranean Sea	36
ME	Middle East	217
NA	North America (unspecified US or CN)	14
P	Pacific Ocean, including Hawaii	428
SA	South America	4452
US	United States, excluding Hawaii and Puerto Rico	40648
W	World	25
XX	Outer Space	106
RE	Roman Empire (historical)	6

FIELD NAME: STATE WIDTH: 3 characters

State (or Country)

The **STATE** field represents a major political unit. We use these for statistics because of the wide variety of data that have already been tabulated and published according to political divisions and subdivisions. The fact that political units differ in area, population, etc., presents no new problem in analysis. Any attempt to create artificial units of equal area, for example, would not create units of equal population, but would destroy the possibility of using existing tabulations of demographic data. In order to make demographic and other data available for computer analysis, the **COUNTY** table includes a "master record" for each geopolitical unit definable by coding in the **STATE** and **COUNTY** fields. They are used, among other things, to provide heading lines for geographically sorted lists.

The **STATE** field code is normally a three-letter code indicating the country wherein an event has occurred or a two-letter code indicating the state or province of the USA, Canada, or Australia. The provinces of Canada and the states of Australia and the USA have been given distinct codes in order to allow even further subdivision into counties; these more specific codes should be used whenever possible. One-letter and two-letter codes have been assigned to the continents, oceans, and seas, which may be used when necessary. A current list of all codes is contained in the **WORLD.DBF** database and is provided in **Appendix B**. The **STATE** codes for the 50 States in the United States, plus the District of Columbia, correspond exactly to the two-letter US Postal Service ZIP code abbreviations. If the code you need is missing, please do not invent a new one; consult the UFOCAT 2002 project director.

FIELD NAME: COUNTY WIDTH: 12 characters

County (Province)

The COUNTY field represents a minor political subdivision where an event has been observed. Experience has shown that the approximately 3150 counties of the USA provide a usable geographic classification. Even when two versions of the same event refer to it by different place-names, they still almost always lead to the same region-state-county coding and thereby associate the two reports. The principle of tallying no more than one similar record per county per date effectively eliminates such duplications from summary statistics. An explicit list of the county codes for the USA can be found in the COUNTIES table, which is too large to publish in this guide.

FIELD NAME: WITNESSES WIDTH: 8 Characters

The first three columns of the WITNESSES field contain the number of witnesses. This will normally be a straightforward numerical code, right justified with leading blanks. "-" may prefix the number with the meaning "about". "+" may prefix the number with the meaning "at least." (A reference in the text to a plural number of witnesses would usually have been coded as "+2".) If the number of witnesses was large, "C" may have been suffixed to mean "hundred," or "K" may have been suffixed to mean "thousand." If the number of witnesses is only vaguely specified, a single letter may appear in the third column, as follows --

- F few
- G group
- M many or multiple
- N numerous
- S several

FIELD NAME: AGE WIDTH: 2 Characters

AGE contains the age of the "principal witness" in years. The principal witness's last name will appear in the NAMES field listed first (see below). He or she may have been the sole witness, or the member of a group whose experience was the most completely recorded. Typically, that person may also have been the first one to observe the UFO, or may have been the spokesperson for a group all sharing the same experience. Creation of this field occurred in 1976, so the coding for entries with record numbers below 81,000 is spotty; this is also an information item not systematically available except in primary sources.

Table 7: HYNEK UFO Report Categories Used in UFOCAT 2002

I. Sightings of distant UFOs

<u>Code</u>	<u>Description</u>
NL	Nocturnal Lights
ND	Nocturnal Discs
NO	Nocturnal Objects
DD	Daylight Discs
DL	Daylight Light
DO	Daylight Objects
RV	Radar-Visual UFO Reports
RR	Radar UFO Reports

II. Close encounter UFO events

<u>Code</u>	<u>Description</u>
CE1	Close Encounters of the First Kind
CE2	Close Encounters of the Second Kind
CE3	Close Encounters of the Third Kind (Entity Reports)
CE4	Close Encounters of the Fourth Kind (Abduction Reports)

III. Miscellaneous events possibly related to the UFO phenomenon

<u>Code</u>	<u>Description</u>
AM	Animal mutilation reports (other than cattle)
BH	"Black" or mystery helicopter sightings
CM	Cattle mutilation reports
CR	Accounts of Crashed Discs and their retrieval
MIB	MIB reports, e.g. military imposters, mystery investigators, or other forms of interference with report investigation
TC	Trace Reports without the presence of a UFO (e.g. crop circles)

FIELD NAME: VALLEE

WIDTH: 3 characters

This field provides for a three character code for the UFO report according to Dr. Jacques Vallee's classification system (see *Confrontations: A Scientist's Search for Alien Contact*, Ballantine, 1990). These codes are shown and described in table 8 below. Reports of anomalous events fall into four broad groups: anomalies (no UFO present), close encounters, maneuvers, and flybys. Vallee's categories of close encounters correspond to Hynek's categories, with the exception that contactee cases are classified as CE4 cases in VALLEE whereas in the HYNEK classification contactee cases remain classified as CE3 cases, with CE4 reserved exclusively for reports of abduction.

Table 8: VALLEE UFO Report Categories Used in UFOCAT 2002

Anomalies (no UFO)		Flybys	
AN1	An anomaly with no lasting physical effects such as amorphous lights or unexplained explosions.	FB1	A simple sighting of a UFO "flying by" in the sky, or remaining stationary in one place.
AN2	Anomalies with lasting physical effects, such as some poltergeist phenomena, apports (materialized objects), and areas of flattened grass.	FB2	A flyby accompanied by physical evidence.
AN3	An anomaly with associated entities, such as reports of ghosts, bigfoot, dwarfs.	FB3	A flyby of an object accompanied by observation of occupants on board.
AN4	Anomalous reports in which witnesses experienced personal interaction with entities in the reality of the entities themselves, including out-of-body experiences.	FB4	A flyby where the witness experienced a transformation of his or her reality.
AN5	Cases of anomalous injuries or deaths, such as spontaneous combustion, unexplained wounds, and permanent healing.	FB5	A flyby in which the witnesses suffered permanent injuries.
Close Encounters		Maneuvers	
CE1	Close encounters with no physical effects.	MA1	A sighting of a UFO that involves an object with a discontinuous trajectory.
CE2	Close encounters with physical effects, such as electromagnetic interference or physical traces left behind.	MA2	Cases of UFOs with discontinuous trajectories that give rise to physical effects.
CE3	Close encounters with associated entities, seen in the vicinity of a UFO.	MA3	A sighting of a maneuvering object or objects accompanied by observation of occupants on board.
CE4	Close encounters in which witnesses experienced personal interaction with entities in the reality of the entities themselves.	MA4	Instances of maneuvers accompanied by a sense of transformation of reality for the percipient.
CE5	Cases of close encounters resulting in permanent injuries or deaths.	MA5	A report involving a maneuvering UFO in which the witnesses suffered permanent injuries.

FIELD NAME: SVP

WIDTH: 3 characters

The SVP Credibility Rating

A classification system developed by Dr. Jacques Vallee as a way of assigning credibility to a report. The system appears to have the advantage that it is simple enough to be applied quickly with enough mnemonic value that it does not require constant reference to a reference manual. It is a three digit code based on 3 components: (1) the reliability of the source, (2) a site visit status, and (3) the plausibility of possible explanations.

First Digit: Source Reliability (S)

- 0 Unknown source or unreliable source
- 1 Report attributed to a known source of uncalibrated reliability
- 2 Reliable source, secondhand
- 3 Reliable source, firsthand
- 4 Firsthand personal interview with the witness of proven reliability, by a source of proven reliability

Second Digit: Site Visit (V)

- 0 No site visit, or answer unknown
- 1 Site visit by a casual person not familiar with such phenomena
- 2 Site visit by persons familiar with such phenomena
- 3 Site visit by a reliable investigator with some experience
- 4 Site visit by a skilled analyst

Third Digit: Possible Explanations (P)

- 0 Data consistent with one or more natural causes
- 1 Natural explanation requires only slight modification of the data
- 2 Natural explanation requires gross alteration of one parameter
- 3 Natural explanation requires gross alteration of several parameters
- 4 No natural explanation possible, given the evidence

Sub-Type(s) of Reports

In prior versions of **UFOCAT 2002** it proved particularly difficult to deal with the more interesting cases, which often presented combinations of apparently codeable sub-types. In view of this situation, the ground rules for coding sub-type were changed, primarily to enlarge the capacity and potential usefulness of this field of data.

In **UFOCAT 2002** the whole field from the second column through the last column is to be interpreted as a unit. The first character--Type of Report--will always be a digit; the definitions of these codes have been tightened, with the effect of down-rating a few reports. The next group of characters will consist of letters, interpretable as one or more sub-type codes; as noted in the key, some letters may have more than one meaning depending on the context of prior type and sub-type codes in the character sequence. (For example, S can refer to still photographs: the position of S in context can indicate whether this is a photo of an object, or of trace marks, or of a radar screen, etc.)

It will be noted that a few sub-type codes are defined as double letters; these codes necessarily include the meaning of the same letter occurring only once. In effect, the first letter in the double is the single-letter code, and the repeat letter is a special example of a code whose meaning depends on the context provided by the first.

Table 9: KEY TO SUB-TYPE CODES

0	Miscellaneous non-UFO reports
0A	Aircraft accidents
0B	Balloon launches (high-altitude, Skyhook, etc.)
0C	Conjunctions (astronomical)
0D	Death (e.g., of an investigator)
0E	Electromagnetic phenomena
0H	Humanoid report (without UFO, normal stature with human features)
0L	Little man report (without UFO, e.g. dwarf, height under 5' tall)
0M	Monster report (without UFO, e.g. Sasquatch, creature over 6'6" tall)
0N	Artificial cloud
0P	Power failures
0Q	Earthquakes
0R	Satellite re-entries
0T	Various traces (without UFO) (# of objects now becomes number of trace marks)
0V	Rocket launches
0W	Weather phenomena
0X	Explosions and skyquakes

KEY TO SUB-TYPE CODES (Continued)

1 Reports of stationary UFOs

- 1A Astronomical anomalies (moon bridges, Martian explosions, etc)
- 1B Balloon-like behavior (high altitudes, "Skyhook", etc.)
- 1C Comets (i.e., in the position of a comet)
- 1E Electromagnetic anomalies (LDES, unknown signals, etc.)
- 1J Jupiter (i.e., in the position of Jupiter)
- 1L Moon (i.e., in the position of the moon)
- 1M Mars (i.e., in the position of mars)
- 1P Sun
- 1S Star (specifically nameable)
- 1V Venus (i.e., in the position of Venus)
- 1X Explosion (in place)

2 Continuously moving UFOs

- 2A Aircraft-like behavior
- 2B Balloon-like behavior (hot-air or weather)
- 2C Cloud-cigar shaped object(s)
- 2D Disc-shaped object(s)
- 2E Echo satellite (=O)
- 2F Fireball
- 2G Green fireball
- 2I Instrumented observation
- 2L "Ghost Lights"
- 2M Meteor-like behavior
- 2P Procession of objects (possibly seen singly)
- 2S Sputnik satellite (=O)
- 2X Bolide
- 2Z Crescent-shaped object

3 UFOs with non-continuous trajectories

- 3C Cloud-cigar shaped object(s)
- 3D Disc-shaped object(s)
- 3H Hovered
- 3L Landed (remotely)
- 3TG "Angel hair"
- 3W Independent witnesses
- 3X Exploded
- 3Z Crescent-shaped object

KEY TO SUB-TYPE CODES (Continued)

4 Trajectories with multiple discontinuities

4^	Vertical ascent
4C	Cloud-cigar with satellite object(s)
4D	Disc-shaped object(s)
4H	Multiple hovering
4L	Falling leaf maneuver
4W	Independent witnesses
4Y	"Angel hair" residue associated with UFO presence
4ZZ	Zigzag maneuver

5 Encounter reports without landing

5^	Vertical ascent
5A	Acrobatics
5B	Buzzing
5C	Chasing-pacing
5D	Disc shape
5E	EM effect
5G	Gravity effect or other strange field--"Mass displacement"
5H	Sketch (this must not accompany an S)
5I	Instrumented observation
5II	Internal comparison
5K	Interference with investigation
5M	Animals present (This M must precede any S)
5N	Noise or sound
5O	Inside occupant (This O must be in second column)
5_O	Ring or circle (This O must not be in second column)
5P	Physiological effects (transient)
5Q	Quantitative analysis
5R	Radar observation without visual confirmation
5RR	Multiple radar
5S	Still picture
5SD	Photo of disc
5SL	Luminous/transparent (photo)
5SM	Movies (This M must follow the S)
5SS	Structured photo
5SZ	Point in motion
5T	Physical trace(s) correlated with object(s)
5TF	Altered field (trace)
5TJ	Remnant (trace)
5TT	Ground marks (trace)
5TU	Chemical change (trace)
5TX	Radioactivity (This X must follow the T)
5V	Radar/visual confirmation
5W	Independent witnesses
5Y	Psychic effects/testimony obtained under hypnosis
5ZZ	Zigzag maneuver

KEY TO SUB-TYPE CODES (Continued)

6 Landing reports without outside occupants

6A through 6Z Same as for Type 5

7 outside occupant reports without contact

7A through 7Z Same as for Type 5 except:

7L Unintelligible language

7M Monster (i.e., non-humanoid or giant, with UFO also seen)

8 Contact reports

8A through 8Z Same as for Type 7 except:

8K "MIB" or "Men in Black" incident, harassment or intimidation

9 Interference; the UFO changes something living

9A Abduction or disappearance

9B Teleportation or abduction and return

9C Contact effects

9D Death

9F Other functional effects

9H Healing effects of any kind

9L Lapse of time experienced by witness(es)

9M Animal mutilations

9O occupants involved

9R Remote (ray) effects

9T Trace-handling effects

9X Explosion(s)

9Y Hypnotic effects

9Z Miscellaneous accidents

FIELD NAME: EXPL

WIDTH: 1 character

Explainability of Report

Explainability (**EXPL**) is a one-character field, which appears following the **TYPE** field. It may be a punctuation mark or a special character. This coding is used to indicate the conventional or unconventional direction of the direct source's explanation for the report, and the degree of certainty that the source attaches to the explanation. Thus:

- = The direct source is sure that this report has a conventional explanation, which is identified in the **EXPLAN** field. (This code is used with a majority of the Project Blue Book entries, and it could likely be assigned to almost all entries of Type 1.)
- The direct source says that this report "probably" or "possibly" has a conventional explanation, which is identified in the **EXPLAN** field.
- (blank) The direct source offers no particular explanation for this report. (This code is used for Blue Book reports that are "explained" as "insufficient information.")
- + The direct source says or implies that this report probably does require an unconventional explanation. This code indicates a "better than average" UFO report, even for this source. This code is used for all Project Bluebook cases listed as "unidentified" or "unknown."
- * The direct source is virtually certain that this report requires an unconventional explanation. This code should be reserved for cases that can "stand on their own." This code is also assigned to certain cases where, in the judgment of the coder, the official explanation is impossible; the code would otherwise be "-". This coding may be found used with Blue Book cases and cases reviewed by noted debunkers such as Dr. Donald Menzel, Philip Klass, and some of the investigators associated with the Colorado UFO Study of 1966-69 (the Condon Project).

FIELD NAME: EXPLAN

WIDTH: 10 characters

Type of Explanation

This is a code or abbreviation for the explanation of a UFO report, according to the key on the following page. The explanation coded is that of the direct source and may or may not be accurate. The examples given in parentheses are not exhaustive and merely help to indicate the range of possibilities covered by each code. In some cases a combination of causes (such as a star and a false radar return) may have been responsible for the report. In those cases the more important cause has been recorded, as judged by the coder.

Table 10: Type of Explanation

EXPLAN	Count	Description
Aircraft	2803	Airplane, helicopter, blimp, aircraft lights, or exhaust trail
Animals	41	Animals or traces left by terrestrial species
AnomProp	29	Anomalous Propagation (radar)
Aurora	2	Aurora borealis/australis borealis
Balloon	1793	Balloon
Birds	49	Birds or traces left by birds
Blimp	8	Blimp or dirigible
Bolide	1	Slow moving meteor
Cloud	84	Cloud(s)
Coincidenc	78	Coincidence (film flaw, combination of other explanations)
Comet	1	Comet
Debris	188	Debris
EM	150	Electromagnetic (ball lightning, aurora borealis)
FalseTarget	3	False Target (radar)
Fireball	1	Fireball, fiery meteor
Flare	130	Flare (flash bomb, gun firing, fire)
Hallucinat	6	Hallucination
Helicopter	1	Helicopter
Hoax	499	Hoax (witness is the perpetrator)
Inversion	3	Temperature inversion
Junk	7	Manufactured by-product or debris
Jupiter	149	Jupiter
Lensflare	6	Lens flare
Light	2	Street light or other terrestrial light
Lights	1	Street lights, car headlights, or other terrestrial lights
Malfunct	77	Equipment malfunction
Mars	126	Mars
Meteor	2768	Meteor (or meteorite for trace cases)
Mirage	167	Mirage
Missile	1	Missile track
Moon	67	Moon
Natural	179	Other natural phenomena (natural minerals, rocks, trees or plants)
Op-error	2	Operator error (radar)
Planet	843	Planet (unspecified)
Prank	81	Prank (witness is the victim of a hoax)
Psych	130	Psychological explanation (psychosis, delusion, etc.)
Quake	7	Earthquake
RadarChaff	3	Radar chaff
Re-entry	202	Re-entry of satellite
Reflection	389	Reflection (of light phenomena, sun dogs)
Rocket	176	Rocket launch, exhaust trail
Rumor	1	Rumor of event that never occurred
Satelite	879	Orbiting satellite of terrestrial origin
Saturn	1	Saturn
SpiderGoss	6	Spider Goss
Star	796	Star
Trawlers	1	Ships at sea, fishing boats, lights of shrimp boats, etc.
Unreliable	1	Unreliable witness (see hoax)
Venus	94	Venus
Weather	76	Weather phenomena
Wind	1	Wind

FIELD NAME: NUMOBJ WIDTH: 3 characters

Number of objects

The NUMOBJ field contains the number of reported objects. This will normally be a straightforward numerical code, right justified in the third column with leading blanks. "-" may be prefixed with the meaning "about". "+" may be prefixed with the meaning "at least." Normally, the number of objects will be coded as the largest number seen at the same time during any phase of the sighting. However, for a procession of UFOs (report type "2P" or "3P"), the maximum possible number of objects has been coded, on the assumption that each object seen was different. For trace cases without a UFO seen (report type "0T") the number of "objects" is the number of trace marks reported. If no object is involved in the report, the third column will be explicitly coded as "0" (zero).

If the number of objects is not precisely given by the source, single letter codes may appear in the third column, as shown below. Note that all of these codes are parallel in meaning with the codes for number of witnesses.

F	few
G	group
M	many
N	numerous
S	several

FIELD NAME: DUR WIDTH: 3 characters

Duration of observation

The DUR field contains the estimated duration of observation. This will normally be given in minutes, right justified with leading blanks: "+" may prefix the quantity with the meaning "at least." All durations are regarded as approximate, so that the "-" prefix is not used. If time is reported in seconds, this will be converted to tenths of minutes (rounding up) and punched with a preceding decimal point. (Thus, ".0" includes reports up to 2 seconds; ".1" includes reports from 3 through 8 seconds; etc.). If time is reported in hours or days, "H" or "D" will appear in the third character as a suffix. However, please note that times reported in hours and minutes, or as hours and fractions of an hour, have usually been converted to the total number of minutes.

A few letter codes also are used, as follows --

B	brief
VB	very brief
.F	a few seconds
.S	several seconds
SH	several hours

FIELD NAME: SIZE

DATA TYPE: Number

Size of Object

Where an estimate of the size of the UFO is reported, the **SIZE** field will contain a quantity. This will be based on the largest possible value. In other words, size will be assessed in terms of the largest dimension of the object as observed at its point of closest approach to the witness(es). The basic purpose of the code is to indicate the importance of the sighting, and to indicate the degree of further detail that should be expected in the report. For report type "OT", the size of the "object" is the size of the trace mark reported.

If both absolute and angular size data were reported, preference has been given to coding the absolute size. Commonly neither is reported and this field is blank.

When absolute size is reported, the code will be a whole number. This number will be the base-2 logarithm of the largest dimension of the object expressed in feet. For example, a disc reported as 25 feet in diameter by 6 feet thick is coded "5". A sphere 3 inches in diameter is coded "-2". A cigar-shaped object 900 feet long is coded "10". Codes of absolute size do not contain any non-numeric characters other than "-". Use the following table to convert base-2 logarithms to size in feet:

Table 11: Size of UFO (Log Base-2)

SIZE	N	Size in Feet	Meters	Miles
-2	25	.3 ft	8 cm	
-1	23	.5 ft	15 cm	
0	134	1 ft	0.3 m	
1	124	2 ft	0.6 m	
2	211	4 ft (3 - 5 ft)	1.2 m	
3	347	8 ft (6 - 11 ft)	2.4 m	
4	654	16 ft (12 - 22 ft)	5 m	
5	726	32 ft (23 - 45 ft)	10 m	
6	462	64 ft (46 - 90 ft)	20 m	
7	307	128 ft (91 - 180 ft)	39 m	
8	200	256 ft (181 - 361 ft)	78 m	
9	93	512 (362 - 724 ft)	156 m	
10	34	1028 ft (725 - 1448 ft)	314 m	1/4
11	8	2048 ft (1449 - 2896 ft)	627 m	1/2
12	4	4096 ft (2897 - 5793 ft)	1248 m	1
13	4	8192 (5794 - 11,585 ft)	2497 m	2
14	0	16384 (11,586 - 23,170 ft)	4994 m	4

FIELD NAME: ANGSZ

WIDTH: 3 characters

Apparent (or angular) Size of Object

When angular size is reported, the code appearing in the ANGSZ field will usually be a number preceded by a decimal point, according to the following key --

- . strictly a point source
- .0 a non-point source smaller than the moon (or sun)
- .1 angular size about equal to the sun or moon
- .2 angular size about twice that of sun or moon
- .3 angular size about three times that of sun or moon, etc.

Angular size is also imprecisely reported by witnesses, in terms of some equivalent object, presumably (but not always explicitly) held at arm's length. Also, qualitative descriptions such as "immense" or "huge" give some very rough method of describing size. Some of these qualitative descriptions of size are coded by a letter preceded by a left parentheses "(" in the second column, based on codes developed by Dr. Claude Poher (C. Poher, *Etudes Statistiques Portant Sur 1000 Temoignages D'Observation D'U.F.O.*). A list of these codes follows –

- (A "immense", "huge", "incredibly large" without an exact estimate
- (B the size of a quarter ("une piece de cinq francs") held at arm's length
- (C the size of an orange ("une orange") held at arm's length
- (D the size of a melon ("un melon" - "un assiette")
- (E "40 cm" ("comme une citrouille)
- (F "1 metre"
- (G "2 metres"
- (H "like an airplane", ("comme un avion"), the size of a typical commercial aircraft

FIELD NAME: DIST

DATA TYPE: Number

Distance from Object

Where an estimate of the distance from the UFO is reported, the DIST field will contain a quantity. This will be based on the closest approach. In other words, distance will be assessed in terms of the shortest distance reported between the observers and the UFO. The basic purpose of the code is to indicate the importance of the sighting, and to indicate the amount of further detail that should be expected in the report.

As is the case with the coding for the estimated size of the UFO, this number is the base-2 logarithm of the shortest distance to the object expressed in feet. For example, a distance of 200 feet is coded as "8". A distance of half a mile (2640 feet) is coded "11". Distances of more than a mile are ordinarily not recorded, and distances where the witness actually touches the UFO can be coded as "-1". This field was first added to the database in 1998 so most cases lack coding for this important attribute. Codes of estimated distance do not contain any non-numeric characters. Use the following table to convert base-2 logarithms of the estimated distance to the UFO to average distances in feet, meters, or miles:

Table 12: Distance from UFO (Log Base-2)

DIST	N	Distance in Feet	Meters	Miles
-1	1	.5 ft	15 cm	
0	3	1 ft	0.3 m	
1	2	2 ft	0.6 m	
2	2	4 ft (3 - 5 ft)	1.2 m	
3	7	8 ft (6 - 11 ft)	2.4 m	
4	18	16 ft (12 - 22 ft)	5 m	
5	20	32 ft (23 - 45 ft)	10 m	
6	26	64 ft (46 - 90 ft)	20 m	
7	31	128 ft (91 - 180 ft)	39 m	
8	48	256 ft (181 - 361 ft)	78 m	
9	19	512 (362 - 724 ft)	156 m	
10	9	1,028 ft (725 - 1,448 ft)	314 m	1/4
11	3	2,048 ft (1,449 - 2,896 ft)	627 m	1/2
12	1	4,096 ft (2,897 - 5,793 ft)	1,248 m	1
13	1	8,192 (5,794 - 11,585 ft)	2,497 m	2
14	1	16,384 (11,586 - 23,170 ft)	4,994 m	4

FIELD NAME: COLOR

WIDTH: 8 characters

The COLOR field contains an 8-character abbreviation for the principal color of the UFO that was reported. If more than one object is reported, the principal color of the largest object is recorded. If 2 or more colors are reported, or if the object has multi-colored lights, it is coded as "Multi." Objects described as "reddish orange" are coded as "Orange". If the object changed colors that fact will be indicated first as "Changed". The abbreviations include the following –

Table 13: Color of UFO

<u>COLOR</u>	<u>N</u>	<u>%</u>	<u>COLOR</u>	<u>N</u>	<u>%</u>
Aluminum	15	1	White	203	9
Amber	13	1	Yellow	68	3
Beige	2		Zinc	2	
Black	40	2			
Blue	111	5			
BluGray	1				
BluGreen	6				
Bluish	2				
Bright	13	1			
Bronze	1				
Brown	8				
Changed	45	2			
Chrome	1				
Clear	1				
Copper	2				
Dark	41	2			
Fire	61	3			
Fluoresc	3				
Glowing	1				
Gold	8				
Gray	98	4			
Green	264	12			
Luminous	47	2			
Metallic	140	6			
Multi	220	10			
Orange	238	11			
Pearl	1				
Phosphor	15	1			
Pink	9				
Red	368	16			
Rust	2				
Shiny	23	1			
Silver	152	7			
Tan	2				
Transpar	6				
Violet	11				

FIELD NAME: SHAPE

WIDTH: 8 characters

The SHAPE field contains an 8-character abbreviation for the principal shape of the UFO that was reported. If more than one object is reported, the shape of the largest object is recorded. Boomerang shaped UFOs are coded as "V-Shape". If a UFO changes shape, that information takes precedence and is coded as "Polymorf". Multi-sided objects (hexagons, pentagons, octagons, etc.) are all classed together under "Polygon". The abbreviations include the following –

Table 14: Shape of UFO

<u>SHAPE</u>	<u>N</u>	<u>%</u>	<u>SHAPE</u>	<u>N</u>	<u>%</u>
Aircraft	7		Hemisphr	1	
Arrow	9		L-Shape	1	
Badge	1		Lampshad	1	
Ball	417	5%	Lens	4	
Banana	5		Light	436	5%
Bat	1		Lights	407	5%
Beam	14		Linear	1	
Beehive	2		Lozenge	1	
Blimp	32		MantaRay	3	
Bottle	1		Missile	1	
Bowl	4		Object	97	1%
BowTie	3		Oblong	25	
Box	50	1%	Odd	6	
Bulb	3		Orb	12	
Bullet	16		Oval	131	2%
Capsule	2		Ovoid	136	2%
Cigar	360	4%	Pear	1	
Circle	4		Polygon	29	
Circular	11		Polymorf	37	
Cloud	5		Pyramid	3	
Cone	52	1%	Rectangl	26	
Copter	17		Ring	13	
Crescent	128	1%	Rocket	1	
Cross	6		Round	121	1%
Crown	6		Saturn	5	
Cube	1		Schliere	3	
Cylinder	61	1%	Sparks	1	
Delta	110	1%	Sphere	26	
Diamond	26		Spindle	1	
Dirigibl	2		Square	1	
Disc	4925	56%	Star	2	
DomeDisc	483	6%	T-Shape	1	
Dumbell	2		Teardrop	2	
Ellipse	58	1%	Top	18	
Elliptic	1		Torpedo	4	
Elongate	7		Triangle	178	2%
FanBlade	1		Tube	1	
Fish	2		V-Shape	88	1%
Flare	2		Walnut	3	
Flash	1		Wedge	1	
Football	22		Wing	5	
Fuselage	5		X-Shape	2	
Globe	18		Y-Shape	3	

FIELD NAME: SOUND

WIDTH: 8 characters

The SOUND field contains an 8-character abbreviation for the principal sound if any reported in the presence of the UFO. If the UFO was completely silent, the field will be coded "NoSound". This field was first added to the database in 1998 so most of the cases lack information about this important attribute. The abbreviations include the following –

Table 15: Sound from UFO

<u>SOUND</u>	<u>N</u>	<u>%</u>	<u>SOUND</u>	<u>N</u>	<u>%</u>
AirCondn	1		Oscillat	1	
Aircraft	4		Popping	1	
Beater	1		Pulsate	4	
Beeping	6		Pulsing	2	
Bloop	2		Purring	2	
Blowing	1		Quake	2	
Boom	8		Rain	3	
Booms	1		Revvng	1	
Buzzing	32	1%	Roar	19	1%
Chirring	7		Roaring	3	
Chorus	2		Rumbling	22	1%
Clack	1		Rustling	1	
Clatter	4		Scraping	3	
Copter	19	1%	SewingMa	3	
Crying	1		Shrill	2	
Diesel	1		Sizzling	5	
Drill	2		Sonar	1	
Droning	11		Sputter	4	
ElecMotr	2		Squeaks	1	
Electric	2		Steady	1	
Engine	5		Steam	2	
Explosn	4		Strange	5	
Faint	6		Swishing	10	
FuseBurn	1		Thrashin	1	
Grinding	2		Throb	3	
Growling	2		Thud	1	
Highpitc	10		Thunder	2	
Hissing	39	1%	Ticktick	3	
Humming	179	5%	Tones	1	
Intense	3		Train	3	
Jet	15		TuneFork	1	
Jets	3		Turbine	5	
Knock	1		Tweeting	1	
Loud	2		Unusual	2	
LoudPop	1		Vacuum	2	
LowHum	10		Whine	17	
Masked	14		Whining	3	
Metallic	2		Whirring	11	
Moaning	2		Whistle	127	4%
Motor	5		Whooping	1	
Noise	860	25%	Whoosh	6	
NoSound	1846	54%	Wind	3	
Odd	1		WoooWooo	2	

