UFO ACTIVITY IN RELATION TO DAY-OF-THE-WEEK

Dr. David R. Saunders

AN opinion that was popular among that now extinct species, "Base UFO Officer," held that the peak of UFO activity fell on week-ends. According to its adherents, this was consistent with the fact that Saturday night is most popular for partying and drinking, and with the theory that UFOs are caused by hoaxes and hallucinations.

Quite a different suggestion is made by Keel (Ref. 2, p. 20), who finds "that the greatest number of sightings are reported on Wednesday, and then they slowly taper off through the rest of the week. The lowest number occurs on Tuesday." This conclusion is based on a sample of 730 Type I sightings reported in the press in 1966. Keel calls this "Wednesday phenomenon" "very valid" and "inexplicable," and makes it a cornerstone for building his ultraterrestrial thesis.

My own informal observation had been that the peak day of the most notorious flaps fell on or near Tuesday. However, the timing of official debunking statements and their effect on the press is a possible contributing factor in at least some of these instances.

A common feature of all of the above views is that they predict unequal proportions of reports on various days of the week. Before considering any of them seriously, we would need to establish that the simpler hypothesis of predicted equality is *too* simple. A hypothesis of predicted equality would make sense, for example, if UFOs are primarily a natural phenomenon unrelated to the human calendar.

Neither of the two largest-scale published statistical studies of UFOs[1, 5] pays any attention to day of the week.

In order to shed light on this matter, UFOCAT-70 was sorted into chronological order, according to the dates punched in columns 9-15. (Typically, these are the dates according to local time.) For each date, the reports were grouped according to the political unit and subunit punched in columns 41-44. Reports with incomplete dates, erroneous dates, not - later - than dates, or dates before 1921, were all excluded.

The computer was then instructed to tally the remaining reports into a table, according to year and day of the week. In order to minimise any bias that could be caused by multiple UFOCAT entries for the same sighting, the computer was instructed to tally a maximum of one event per political unit per date. This reduced the total number of tallies to 7025, distributed as shown in Table 1.

Under the simple - minded assumption that all seven days of the week are equally likely, the chi-square statistic was computed for each line of the table and these values were scaled according to their remarkability. An R of zero indicates the expected degree of conformity between the data and the equally likely hypothesis; a negative R indicates even better than chance conformity. A high positive R indicates that the inequalities are so great that an explanation other than "equally likely" must be sought. Since it turns out that the only alternative explanations worth considering are based on essentially the same data that have been tallied, an R of approximately + 10 will be needed.[3] For this discussion, I will regard 9·57 as meeting this requirement.*

The R-value obtained from the total line is greater than for any of the individual years. The largest value for a single year is 8·21 for 1969; since data for only part of 1969 appear in UFOCAT-70, the data on this line are particularly vulnerable to the influence of one or two "flap dates," which could act to raise chi-square and R. The second-largest value for a single year is 7·41 for 1959; the form of the 1959 distribution is similar to that of the overall totals. From 1947 on, the algebraic sum of all the single-year remarkability values is 13·95, which is not enough greater than 9·57 to require further comment. In view of these things, Table 1 may be interpreted as indicating that there *is* a tendency for days of the week to contribute unequal numbers of UFO reports, *and* that this tendency is parallel from year to year.

The mere existence of this unequal tendency tends to weaken the "natural phenomenon" hypothesis (but see below). The nature of the inequalities argues strongly against the USAF view (Saturday should rank first instead of last) and against the Keel view (Tuesday should rank last instead of almost first). It should be noted, though, that Keel's view is based on analysis of Type I (low level) sightings only, whereas this study has employed no such screen.

Actually, the most striking feature of Table 1 is the *low* number of tallies for Saturday, with the next lowest totals recorded for Friday and Sunday. It is possible that these results depend on the action of an editorial filter, rather than on the phenomenon itself. Many papers either don't publish at all on Sunday, or compose all but the front page

* When a parallel run was made allowing one event per political *sub*-unit per date, a total of 8,741 tallies resulted, with chi-square = 27·708 and R = 12·26; the inclusion of these tallies appears to reinforce what is shown in Table 1, but the data are now dominated by a few well-investigated flaps. When a run was made removing the restriction entirely, 12,558 tallies resulted, with chi-square = 23·075 and R = 9·72; the addition of these further tallies evidently does tend to blur the picture.

	TOTAL	SUN.	MON.	TUES.	WED.	THURS.	FRI.	SAT.	X**2	R
1921	0	0	0	0	0	0	0	0	0·	—0·
1922	2	0	0	0	1	0	0	1	5·000	—0·26
1923	0	0	0	0	0	0	0	0	0·	—0·
1924	2	0	0	1	0	0	0	1	5·000	—0·26
1925	0	0	0	0	0	0	0	0	0·	—0·
1926	1	0	0	0	0	1	0	0	6·000	0·43
1927	1	0	0	0	0	0	1	0	6·000	0·43
1928	0	0	0	0	0	0	0	0	0·	—0·
1929	2	0	0	0	1	1	0	0	5·000	—0·26
1930	0	0	0	0	0	0	0	0	0·	—0·
1931	1	0	0	0	0	1	0	0	6·000	0·43
1932	0	0	0	0	0	0	0	0	0·	—0·
1933	4	2	0	1	0	0	1	0	6·500	0·75
1934	5	1	0	1	2	1	0	0	4·800	—0·41
1935	0	0	0	0	0	0	0	0	0·	—0·
1936	3	0	0	0	0	0	2	1	8·667	2·01
1937	2	0	0	0	0	1	1	0	5·000	—0·26
1938	0	0	0	0	0	0	0	0	0·	—0·
1939	0	0	0	0	0	0	0	0	0·	—0·
1940	0	0	0	0	0	0	0	0	0·	—0·
1941	0	0	0	0	0	0	0	0	0·	—0·
1942	3	0	0	0	0	1	0	2	8·667	2·01
1943	3	1	0	1	0	1	0	0	4·000	—1·07
1944	8	1	1	0	2	2	2	0	4·250	—0·85
1945	1	0	0	1	0	0	0	0	6·000	0·43
1946	7	1	2	0	2	1	0	1	4·000	—1·07
1947	467	72	76	79	62	57	55	66	7·786	1·51
1948	71	15	9	7	10	11	14	5	7·577	1·39
1949	43	6	3	10	7	6	6	5	4·372	—0·75
1950	317	40	53	44	57	51	40	32	10·233	2·86
1951	84	7	12	14	15	11	16	9	5·333	—0·02
1952	407	65	52	75	62	50	45	58	10·713	3·11
1953	154	19	17	21	24	22	26	25	2·909	—2·18
1954	486	67	72	59	75	65	78	70	3·539	—1·50
1955	171	29	28	18	28	27	21	20	5·146	—0·16
1956	225	34	32	34	32	36	30	27	1·644	—4·21
1957	447	51	65	88	68	66	58	51	15·204	5·48
1958	254	45	40	33	32	35	36	33	3·622	—1·41
1959	176	24	21	40	34	18	24	15	18·807	7·41
1960	125	19	19	20	17	16	15	19	1·168	—5·48
1961	80	12	14	12	9	10	10	13	1·725	—4·03
1962	122	16	17	23	18	12	20	16	4·115	—0·97
1963	86	5	13	18	14	16	11	9	9·395	2·40
1964	60	7	10	14	5	8	7	9	5·800	0·30
1965	193	26	36	21	25	32	27	26	5·285	—0·06
1966	373	58	53	47	61	45	61	48	5·206	—0·11
1967	1,561	199	238	239	240	236	212	197	10·368	2·93
1968	813	109	120	112	134	106	116	116	4·347	—0·77
1969	264	40	30	34	40	61	31	28	20·295	8·21
1970	0	0	0	0	0	0	0	0	0·	—0·
TOTAL	7,025	971	1,033	1,067	1,077	1,008	966	903	22·806	9·57

Table 1 UFOCAT-70 **results (data for only part of 1969 appear in this listing).**

ahead of time; assuming most papers want to print "news," a sighting that takes place on Saturday would have relatively fewer ways of becoming known.

It is also possible that these results do depend directly on the phenomenon. In this connection, Smith's analysis of possible correlations of UFO activity with unexplained power failures acquires added interest. Smith has already displayed the similarity of the power-failure and UFO activity curves on a year-by-year basis.[4] He also presents the following frequencies for power-failures by day of the week: