

Another interesting aspect of these new test, is that there are only two large discrepancies in all of the groups. These are for the 11 or more groups in the classification by number of objects per sighting and for the over-400-mph and meteor-like group for the classification by speed. The first was relatively unchanged by deletion of the astronomical sightings principally because of the concentration of sightings in the single-object category. The second was slightly increased by the removal of the astronomical sightings from the meteor-like classification. However, the main discrepancy, that of the excess of UNKNOWNNS in the over-400-mph class, was little changed.

The results of these tests are inconclusive since they neither confirm nor deny that the UNKNOWNNS are primarily unidentified KNOWNNS, although they do indicate that relatively few of the UNKNOWNNS are actually astronomical phenomena.

It was decided that this process would not be carried to its logical conclusion (that is, the determination of a linear combination of KNOWNNS that would give a negligible chi square when compared with the UNKNOWNNS), since it was felt that the inaccuracies in the reports would give a distorted and meaningless result.

TABLE IV CHI SQUARE TEST OF KNOWNNS VERSUS UNKNOWNNS ON THE BASIS OF SHAPE

Shape	Number of KNOWNNS	Adjusted Number of KNOWNNS (K)	Number of UNKNOWNNS (n)	$\chi^2, \frac{(K-n)^2}{K}$
Elliptical	838	206	195	0.59
Rocket and aircraft	80	20	33	8.45
Meteor or comet	55	14	4	7.14
Teardrop, lenticular, or conical	103	25	22	0.36
Flame	96	24	10	8.17
Other	193	47	54	1.04
Not stated	400	98	116	3.30
Total	1765	434	434	29.05

Degrees of freedom

6

5%

12.6

1%

16.8

TABLE V CHI SQUARE TEST OF KNOWNNS VERSUS UNKNOWNNS ON THE BASIS OF DURATION OF OBSERVATION

Duration of Observation	Number of KNOWNNS	Adjusted Number of KNOWNNS (K)	Number of UNKNOWNNS (n)	$\chi^2, \frac{(K-n)^2}{K}$
5 sec or less	259	64	27	21.39
6-10 sec	92	23	21	0.17
11-30 sec	153	38	33	0.66
31-60 sec	108	26	42	9.85
61 sec-5 min	269	66	99	16.50
6-30 min	305	75	71	0.21
Over 30 min	135	33	37	0.48
Not stated	444	109	104	0.23
Total	1765	434	434	49.49

Degrees of freedom

7

5%

14.1

1%

18.5