

**INVESTIGATION OF NOCTURNAL LIGHT PHENOMENA  
1973 SIGHTING REPORTS FROM TOPPENISH, WASHINGTON**

Originally Submitted April 8, 1974  
to Dr. J. Allen Hynek  
by  
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## INTRODUCTION

The following report is intended to update this investigator's first paper, Report on the Investigation of Nocturnal Light Phenomena at Toppenish, Washington: August, 1972. It contains a compilation and breakdown of reports of UFO sightings from the area during the calendar year of 1973.

Investigation of the unusual activity in the vicinity of the Yakima Indian Reservation began in April of 1972 and continues to the present time. The goal of the study is to discover the source or sources of the sightings and accumulate a data base suitable for scientific appraisal of the problem.

The section which follows summarizes sighting reports received for 1973. The reports compiled here appear to describe activity which, based on this investigator's experience with UFO phenomena in the Toppenish area and elsewhere, is not readily explained by known causes. They have been coarsely "filtered" from other reports which either do not contain sufficient information to classify them as unknown or those which contain strong suggestions of a known cause. The practice of omitting names of reporters, followed in the previous report, has been continued in this paper. The report concludes with analysis and comment on the 1973 reports and a discussion of the on-going project.

## SUMMARY OF REPORTS FOR 1973

### 1. Date: February 19, 1973 -- 1900 PST

Activity Location: Hembre Mountain, near Toppenish Ridge

Observer Location: Campbell Rd., north of Yost Rd.

#### Summary:

Bright white lights, on or above Hembre Mountain, near Toppenish Ridge which later turned bright red and flashed. Position of the lights did not change, but moved in a pattern which a circling airplane might make. (Note: It is unlikely that an airplane was the stimulus for this report, because of the darkness and rough terrain involved in the sighting area.)

### 2. Date: February 20, 1973 -- 1820 PST

*APDF: 19730221001*

Activity Location: Lower third of slope of Toppenish Ridge, south  
of the intersection of Yost and Shaker Church Roads.

Observer Location: Branch Rd., between Brownstone and Harrah.

#### Summary:

Observer reported three or four flashing, bright red lights in the above location. He assumed they were emitted by fire vehicles operating in the area. A thorough check however indicated that no vehicles from any of the fire control agencies in the valley were in service at the time. A further check confirmed that no law enforcement emergency existed in the vicinity of the sighting.

The lights moved back and forth in straight lines, as if traversing back and forth on a winding road. There is only one meandering dirt road in the area. At approximately 1845, an Indian Police mobile unit was dispatched to the sighting location and no activity of any kind was found. The lights were also no longer visible to the original observer.

The lights observed the previous night (see Report 1.) were approximately 14 miles to the east of the above observation.

3. Date: March 13, 1973 -- 0711 PST

APDF: 19730313001

Activity Location: Above Satus Fire lookout

Observer Location: One mile east of White Swan on US 220

Summary:

The observer was proceeding east in a car along US 220 from the town of White Swan. As she neared the Tribal Community Center and White Swan Ranger Station, she noticed an object hovering over the Satus fire lookout. (From the observer's position, Satus lookout was eight miles away and just a few degrees west of south.) There were no clouds in the sky, visibility was excellent and the lookout was clearly visible in its position at Satus Peak on Toppenish Ridge.

The observer stopped the car and continued to watch the object. Her first impression was that the object was a reflection from the microwave relay antenna dish near the lookout building, but soon determined that it was not. The object hovered quite low over the lookout for an estimated five to ten minutes. It then began to move slowly northward in jerks, much as an automobile will move when the clutch is released too quickly. The series of jerking movements lasted approximately 15 to 20 seconds and the object then accelerated into a very high speed departure to due north, passing just west of the observer and moving out of sight just west of the city of Yakima.

The object was described as being almost identical to an old dinner bell with the handle on the top (See Slide #1.). The object was oriented as shown in the sketch, with the "handle" at the top. The observer estimated the object to be larger than a small aircraft (such as a Piper Cub), but smaller than an airliner. The object was a metallic grey color, except for the bottom, or what could be called the mouth of the bell. The latter portion of the object gave-off a strange, fluorescent orange glow. The colors did not change as the object departed.



Slide #1.

The observer reported the sighting to Bill Vogel on March 16 – three days after the sighting. Mr. Vogel took a detailed report at this time. This investigator verified details given in Mr. Vogel's report with the observer several weeks later. This investigator and Mr. Vogel know the observer personally and know her to be reliable. She is familiar with many of the manifestations of UFO activity on the Yakima Reservation and is also aware of mundane conditions prevailing in the area. In short, she qualifies as a "trained observer" for the purposes of this study project.

Satus Fire Lookout, as well as the whole of the north side of Toppenish Ridge, has been a focal point of reports of UFO activity for some time (See the 1972 report). This is, however, the most detailed daylight observation reported in the vicinity of the lookout.

4. Date: April 2, 1973 -- 2043 PST  
Activity Location: Toppenish, Wash.  
Observer Location: Same

APDF: 19730403002

Summary:

While lying in his room in bed, the observer, a ten year old boy, reported that he saw a yellow ball of light, about the size of a soccer ball or basketball, descend noiselessly from a NNW direction in front of his bedroom window and then shoot straight up into the air and disappear from view. The object was very bright and hurt his eyes. He was also frightened, but noted time of the incident from the electric clock next to his bed. The observation was estimated to last about ten seconds. The boy reported the incident to his father the following day and also drew the picture reproduced in Slide #2.- The window through which the object was observed is on the northwest corner of the house, facing north.



Slide #2.

This investigator followed-up on the report about a week after the incident and determined that the boy appeared to be objective about details of the report and was not inclined to embellish his account.

5. Date: April 3, 1973 -- 2345 PST  
Activity Location: In sky, south of Toppenish, Washington  
Observer Locations: Toppenish (two independent observers)

APDF: 19730404001

Summary:

A tan colored, luminous object at an estimated altitude of 4000 to 6000 ft. was observed moving from west to east, parallel to and slightly north of Toppenish Ridge. First impression of one observer was that the object was an aircraft. However, the tan color, absence of flashing running lights and lack of any sound appeared to rule-out the possibility of a conventional aircraft. Speed of the object was estimated to be under 200 mph.

6. Date: April 4, 1973 -- 0115 PST  
Activity Location: East of US 97, on LaRue Rd.  
Observer Location: Same

APDF: 19730404002

Summary:

The observer was in bed when he heard a high-pitched, whining sound. He looked out of the window and observed an object about 80 ft. long and 30 to 40 ft. wide passing directly over the house. The object was fluorescent or a slightly glowing, whitish-blue color, with darker blue-colored spots scattered over the surface. Altitude was estimated at 150 ft. The object moved from east to west and was observed until it disappeared over White Swan.

Flight path of the object reported in (5.) above was only slightly north of the above location. This investigator was unsuccessful in contacting the witness directly for further details of the sighting.

7. Date: Week prior to April 4, 1973 -- evening hours

Activity Location: Vicinity of White Swan, Wash.

Observer Location: Unknown

Summary:

During a series of night time brush fires in the area, small white balls of light, about the size of tennis balls, or larger had been observed coming out of the dark, circling the fires several times and then moving back into the darkness.

8. Date: Jun 22, 1973 -- late afternoon

APDF: 19730623001

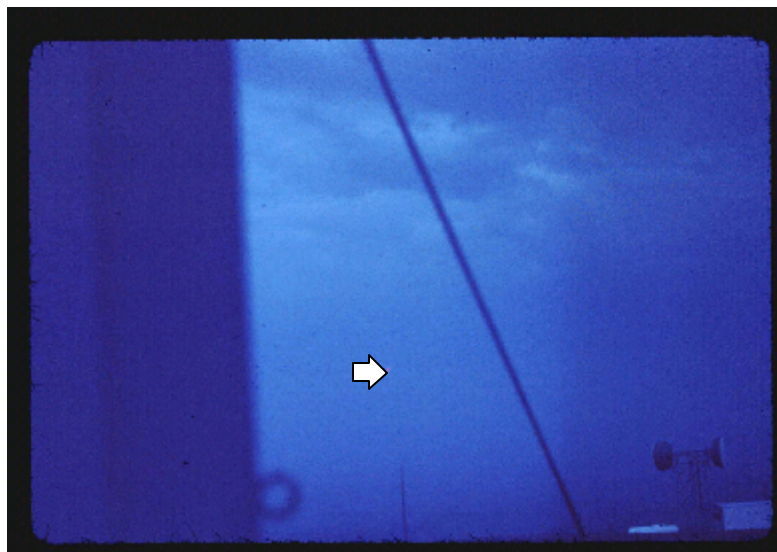
Activity Location: Over Logy Creek

Observer Location: Satus Fire Lookout

Summary:

Slide nos. 3 and 4 are full frame and magnified copies of one slide taken by an observer located at Satus Fire Lookout. Exact time of the exposure was not logged and the time was given only as "late afternoon". The witness reported that it was cloudy with complete coverage at the time of the sighting. A thunderstorm had been in the area earlier.

Quoting from the observer: "I was looking out the window in the door, when I saw this "thing" come from behind a cloud. The bright red color was what caught my eye. My first thought was "what on earth is that?" At almost the same instant, I ran, got my camera, opened the door and quick-like took a picture. As I took the camera away from my eye, it, the object was heading behind another cloud. It was headed from SW to NE. It was kind of this (elliptical) shape as I remember, with this extra bright red glow or light or whatever. I can't exactly say, except it was brilliant red and large. Maybe I should have looked better, rather than thinking "I must get a picture". It was moving quite rapidly."



Slide #3.



Slide #4. *Enlargement of object*

It was moving quite rapidly."

Additional questioning revealed that the object was positioned SSE of the lookout, over Logy Creek at the time of the photograph. The distance from the camera would then have been approximately 9½ miles. The lookout structure has two doors, co-located at the SE corner of the south side of the building. The inside door opens inward and is covered with glass panes. The outside door is a standard screen door which opens outward. The line in the upper right-hand quadrant of the picture is a guy wire used to hold the lookout on its foundations during high winds. The photograph was taken through the screen door.

The camera used by the observer was a Kodak 35. This is a simple range-finder camera with an adjustable f3.5, 50mm lens. At the time of the exposure, the lens was set at f3.5 and the shutter speed was 1/25 second. High-speed Ektachrome, daylight film was used and development was for the standard ASA rating of 160.

The photographer was an experienced fire lookout who has had a number of UFO sightings. The need for "hard" photographic data had been impressed upon her and other lookouts in the Reservation network during the field study made by this investigator in the summer of 1972. She therefore had the camera ready for the occasion of the above observation. It is probable that, if such preparations had not been made, the photograph would never have been taken. It is to her credit that she had the presence of mind to take the picture in the very short period of time in which the object was visible.

9. Date: July 20, 1973 -- evening hours

*APDF: 19730721001*

Activity Location: between Sopelia and Satus Fire Lookouts

Observer Locations: Sopelia and Satus Fire Lookouts

Summary:

Both fire lookouts observed a very fast moving light, travelling from southeast to northwest. The sighting was of very short duration. Lightning had been observed to the north of Satus Lookout earlier in the evening.

10. Date: July 22-23 -- 2245 to 0100 PST

*APDF: 19730723001*

Activity Location: Horse Heaven Hills

Observer Location: Satus Fire Lookout (two observers)

Summary:

Three orange lights below the ridges of Horse Heaven Hills were observed at intervals during a two hour period. The lights would disappear at about the same time and re-appear 15 or 20 minutes later at nearly the same time. While visible, they would flicker and move slightly. With the naked eye, the lights were separated by about 5° of azimuth. No roads are in the area of the sighting.

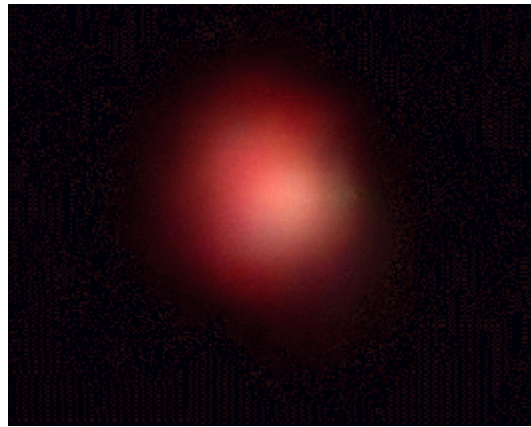
Distance from the observers was 18 miles. Given a 5° separation angle, the objects would have to have been about a mile apart. It would be difficult to attribute the nearly synchronous "on" and "off" characteristics of the lights to automobiles or motorcycles operating at such distances apart.

11. Date: July 24, 1973 -- 2245 to 2400 PST  
Activity Location: Below and between Satus Fire  
Lookout and Mill  
Creek Rd.  
Observer Location: Satus Fire Lookout  
APDF: 19730725001

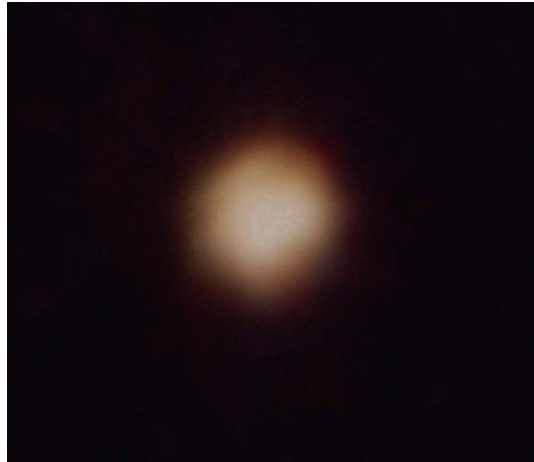
Summary:

A bright red object was seen moving in an area where there are no roads, below the lookout and between the lookout and Mill Creek Canyon. Photographs were attempted, but nothing was found on the film after development. It is possible that the object was too far away to photograph.

*The uncut roll of film from the observer's camera was recently reexamined. Two images, at the beginning of the roll and in consecutive frames were found. Both are reproduced here. It cannot be said with certainty whether both pictures were taken at the same time or not. If only one picture was taken at the time of the above observation, it is uncertain which photo is the one referenced. However, it seems more likely the first frame image is the referenced frame.*



Frame 1A.



Frame 2A.

12. Date: July 27, 1973 -- 0300 PST  
Activity Location: Granger, Washington  
Observer Location: 4 miles east of Granger

APDF: 19730727001

Summary:

Two observers were outside feeding cows at the Dolson Dairy (locally called the "Cow Palace"), located at the intersection of East Zillah and North Liberty Roads, 4 miles east of Zillah, Washington. At approximately 0300, both observers spotted an object in the sky to the west, in front of the hills which lie behind the town of Granger. The object generally followed the line of hills, moving SE slowly and silently towards the town of Mabton.

After watching the object for 15 to 20 minutes, one observer went inside to report the sighting. He dialed the telephone company operator and was referred to the Toppenish Police dispatcher. After describing the circumstances of the sighting to the police dispatcher, he again joined the other observer and continued to watch the object. Time was 0320 (verified by the police dispatcher).

The Toppenish dispatcher called the Yakima County Sheriff's dispatcher. The sheriff's dispatcher said that the Yakima Firing Center had two helicopters somewhere on maneuvers at that time and that these craft might account for the sighting. The Toppenish dispatcher received a second report at 0338 (See 13. below). The dispatcher noted information concerning the second report and called the first observer back to ask if the object he was seeing was still visible. It was. The

observer again went outside just in time to see the object disappear over the highest point, Snipes Mountain, SE of Granger. Co-workers at the dairy were not called until the object had disappeared from view. Estimated total observation time was ½ hour.

Physical characteristics of the object were such that they could not have been those of a conventional aircraft: Movement was very slow and steady -- approximately 3-4 mph. No noise was heard and any kind of powered aircraft would have been clearly audible at that distance and time of morning.

The object appeared as a pair of lights moving in a definite, periodic pattern. The color of the light emitted by the object was reddish-orange. Because of the repetitive nature of the light pattern and the fixed relationship of the lights to one another, the observers felt that the lights must have been attached to a body or fuselage of some sort and spinning around this body. The structure would have been about the size of an F-27 airliner, according to the estimate of one observer. Figure 1. shows schematically the pattern traced by the lights. The object was at an elevation of about 0° relative to the observers, since the observation point is on a hill overlooking Granger. The lights of Granger were also clearly visible under the object.

13. Date: July 27, 1973 -- 0338 PST

*APDF: 19730727002*

Activity Location: Zillah Cemetery, Zillah, Washington

Observer Location: Same

Summary:

A deputy marshal was driving 1/4 mile east of the Zillah cemetery on the Zillah-Toppenish Road when he observed two side-by-side orange balls of light straight ahead of his patrol car, to the west. The lights were above and behind trees located in the cemetery, over the Yakima River which runs behind the cemetery. His attention was diverted momentarily from the lights while he shined the spotlight of his patrol car into the yard of a house on his right. He again looked back to the cemetery and saw that the lights were moving in his general direction.

The marshal drove to the entrance of the Zillah cemetery, opened the gate and drove into the cemetery grounds. The entrance road heads in a SW direction and the observer watched the lights through the trees as he drove approximately 600 ft. to a point where the drive is closest to the river. He stopped the car and called the Toppenish police dispatcher on the radio, telling her that he was observing a UFO. She informed him that the Yakima Firing Center had helicopters on maneuvers somewhere in the area.

The deputy next turned-off the car engine and walked approximately 100 ft. to a point where the cemetery ends in a bluff overlooking the Yakima River. The lights continued very slowly, appearing to move directly towards him.

The lights, estimated at about 2 ft. in diameter, moved smoothly and maintained a very rigid spacing, as if attached to each other, throughout the sighting. They remained oriented side-by-side and had sharp, well defined outlines.

At a distance of about ¼ mile from the deputy, the lights turned, still maintaining their rigid spacing, and headed south. After travelling approximately another ¼ mile, the lights executed another turn and headed southeast. At this time, the deputy returned to his patrol car and called the Toppenish dispatcher again, saying in no uncertain terms that what he was observing was not a helicopter. The car engine had been off and he had heard absolutely no noise.



During the entire observation, the lights seemed to generally follow the path of the river bed. Altitude was just over the trees along the river and nearly the same as the observer. The lights were observed until they disappeared from view behind hills southeast of the cemetery, towards the town of Granger.

As in (12.) above, the deputy had the impression that some mass was in between the two lights, because of their rigid spacing. It was too dark to see anything other the lights, however.

14. Date: August 25, 1973 -- 1930 and 1945 PST

*APDF: 19730826001*

Activity Location: Mt. Adams Lake, west of Signal Peak

Observer Location: Same

**Summary:**

Several members of a camping party observed a rapidly moving, fairly large white ball of light coming from the northwest and passing overhead at 1930. No sound was heard and altitude was estimated at 30,000 to 40,000 ft. At 1945, two smaller lights were seen coming over the top of Mt. Adams and moving to the northeast. The lights were staggered in position, with the front one an orange color and the rear one white. Altitude was estimated to be the same as for the light seen at 1930. No noise was heard. Observers were familiar with the appearance of meteors and insisted that the lights were not meteors.

Before proceeding further, some general comments should be made regarding apparent relationships between several of the above reports. Report Nos. 1. and 2. are typical of one type of nocturnal light report which has been common since the study began in 1972. In this class, steady or flashing lights; usually red, orange or white in color, are observed to be present on or near the ground in areas where there is normally no vehicular traffic. Observations frequently last a ½ hour or more, but when police or fire units are dispatched to the area (assuming the area can be reached), nothing unusual is found. This type of incident has occurred too frequently to be coincidental. Over the last two years, nocturnal lights of the type described above have been seen repeatedly in areas along the north slope of Toppenish Ridge, between the towns of Toppenish and White Swan. This portion of Toppenish Ridge is easily observed from many points in the valley and one might conclude that this visual accessibility accounts for some of the concentration of sighting reports in this area. Report No. 3., the "dinner bell", also came from this area.

Report Nos. 4, 5, 6 and 7, dated between April 1 and 4, appear to reflect a peak of activity which was followed by a complete absence of reports until the fire lookout's photograph of June 22 (Report No. 8.). Activity appeared to hold at a steady, though low level until the end of July. Except for the report of August 25 (No. 14), no other observations were reported in 1973. Report No. 14 appears to be a maverick, because it occurred after the July peak and at a very remote point on the Reservation. It is not, however, unlike other nocturnal light reports of the type where large, high altitude lights; in tan, orange or white colors, with unusual flight patterns that have been seen in the area.

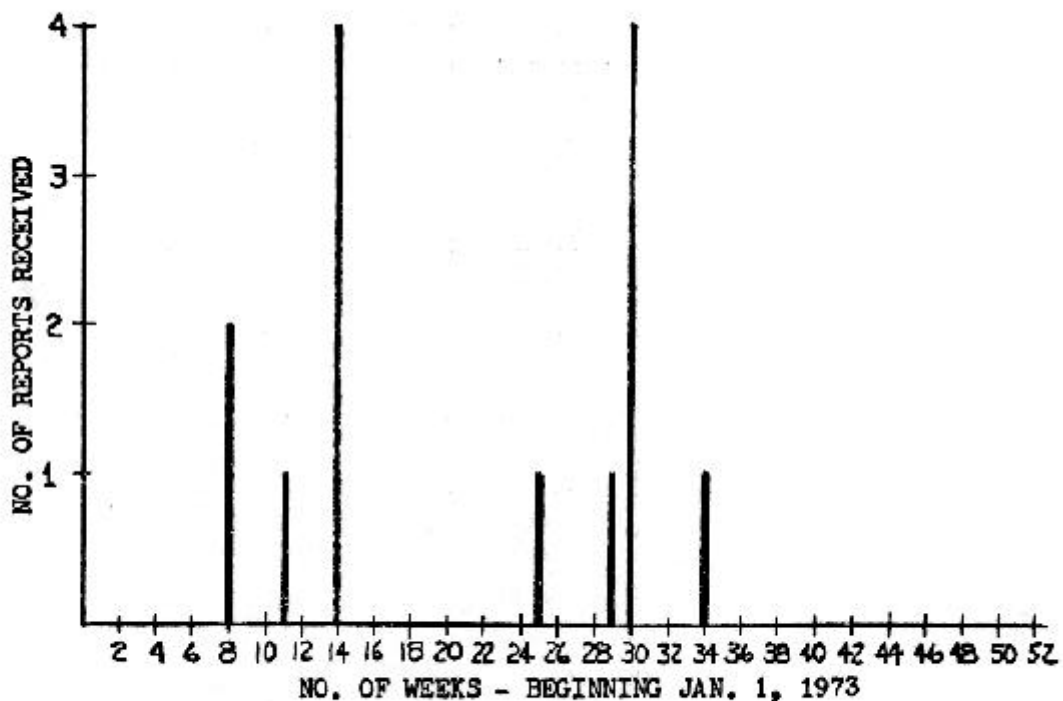
Finally, Report Nos. 12 and 13 appear to have been separate, but coincident observations. This conclusion is based on the time sequence supported by the Toppenish Police dispatcher's log and witness testimony. Despite the similarities between both reports, it appears unlikely that the same object was involved in both sightings.

## ANALYSIS OF REPORTS FOR 1973

A total of fourteen credible reports were received during the calendar year 1973. Eight of these reports were followed-up for additional information by this investigator. The observations ranged from distant nocturnal lights and night time close encounters of the type I (i.e. no interaction between the observer and object) to a couple of daylight sightings, one supported by a photograph. The following table summarizes the reports by type:

| Type of Report     | No. of Type | Report Numbers        |
|--------------------|-------------|-----------------------|
| Nocturnal lights   | 9           | 1,2,5,7,9,10,11,12,14 |
| Close Encounters I | 3           | 4,6,13                |
| Daylight Objects   | 2           | 3,8                   |

All of the reports, except No. 7, were encoded for computer analysis using the recently developed APDF format. Under the APDF encoding rules, Report Nos. 3,8 and 13 were given Strangeness Indexes of 5, the highest value assignable. Of these four, Report Nos. 3, 8 and 13 were given average or above average credibility Indexes. The number of sighting reports from the Yakima Reservation area is still too small to pursue an in-depth statistical analysis, but an initial attempt has been made to identify some of the more gross behavior patterns of the UFO activity in the area.



**FIGURE 1. 1973 OBSERVATIONS VS. WEEK IN YEAR**

A bar graph representation of the number of reports versus the week of incidence in the year has been plotted for the fourteen reports. The result is shown in Figure 1. Notice the tendency for the reports to "clump" into groups. (For reference, it should be noted that activity, as indicated by sighting reports, following the 1972 field study, continued on a diminished level through the end of 1972.)

A majority of the reports from the area have resulted from observations made after dark. The sample is still too small to quantify the trends, but data collected over the last two years suggests that most observations tend to occur between the hours of 1800 and 0100 local time.

Concise weather data (Table I.) was available for the sighting area after June 1 of 1973. There was no particular correlation discernable between weather conditions and the occurrence of UFO activity. Past experience in the area also tends to discount such a connection. What previously appeared to be a peaking of activity during the summer months is possibly the result of the fact that more observers are present during the summer months to report the phenomena. This contention is supported by the fact that winter sightings have been more common since active report collection efforts have been made.

The reports were analyzed in order to find some pattern in line of direction. A linear grid 40X70 miles, centered over the Yakima Indian Reservation, was constructed and observation locations were plotted. Arrows representing direction of travel (where available from reports, were next drawn on the plot. The resulting graph is shown in Figure 2. No consistent pattern appeared which related to direction of travel. However, there was a marked grouping of sighting locations over the grid. Sightings for 1973 tend to line up into two north-south corridors on the grid. The grouping to the right of the plot is centered near the towns of Toppenish, Zillah and Granger. The cluster near the center of the plot is on a rough line with Satus fire lookout and the town of White Swan. Figure 2 does not appear to reveal any relationship between the chronology of the reports and their locations.

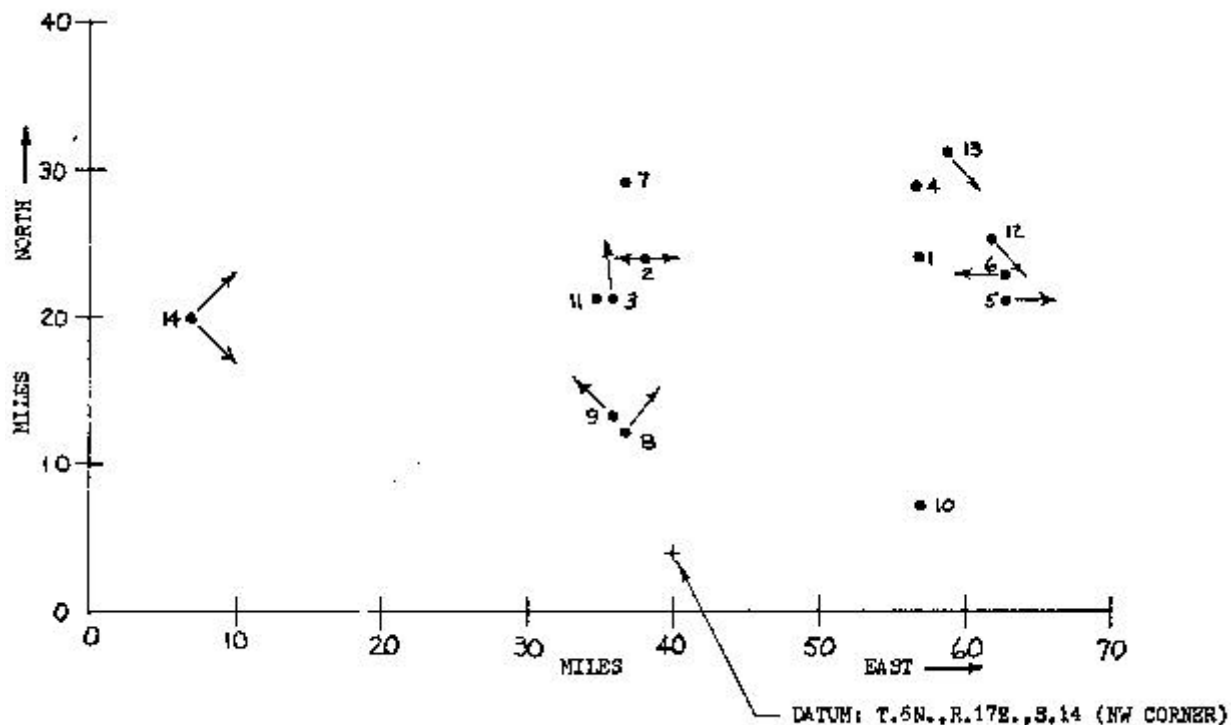


FIGURE 2. LOCATION AND DIRECTION OF TRAVEL -- 1973 OBSERVATIONS

## CONCLUSION

As mentioned earlier, data concerning long term trends for the UFO activity in the Yakima Reservation area has not been accumulated in sufficient quantity or depth to permit a thorough analysis. However, several consistent patterns of behavior, valid at least for the short term, have begun to emerge. These patterns include:

1. A tendency for activity to occur in groups or "waves".
2. Type of activity that is not limited to nocturnal lights, but includes other type of UFO phenomena.
3. Activity that is characterized by an evasiveness which exceeds normal expectations of chance.

Two lines of endeavor are being pursued in the continuing study. The first involves increased reliance on competent residents of the study area as sources of sighting reports. Trained local observers, familiar with the area appear to be a viable source of data and efforts will continue to be directed towards developing this resource.

The second part of the approach to acquisition of data continues to be firsthand field work of the type done in 1972. In order to accomplish results with the limited time and resources available, emphasis has been placed on rapid communication of activity reports from observers in the study area and identification of periods of peak activity.

One frustrating aspect of working with the study to date has been the lack of first-hand reports involving close encounters with UFO. There have been consistent rumors of such cases, but actual witnesses have not yet materialized. The reason is most likely a fear of ridicule on the part of such observers and steps have been taken to alleviate these fears. Close encounter observations; especially those involving physical interaction of the object with the observer. Physical residue or photographs are frequently the ones which yield the most information. Accordingly, they are given the greatest attention in investigation of UFO phenomena.

This investigator is very much indebted to the many people who have given their cooperation in this project. These people include:

Mr. Bill Vogel and Branch of Forestry personnel  
The Yakima Nation Tribal Council  
The Bureau of Indian Affairs  
Toppenish Area Law Enforcement Agencies

Many thanks to them for their support and valuable assistance.

**TABLE I.**  
**SUMMARY OF WEATHER CONDITIONS FOR SIGHTING DATES**

| Date    | Dry Bulb | Wet Bulb | Dew Point | Rel. hum. | Wind from/ at MPH | Visibility Miles | Cumulus Index | Cloud Cover |
|---------|----------|----------|-----------|-----------|-------------------|------------------|---------------|-------------|
| 6/22/73 | 87°      | 65       | 53°       | 31        | N/4               | 14               | Fair WX       | Overcast    |
| 7/20/73 | 77       | 61       | 51        | 41        | NE/3              | 14               | Towering      | Broken      |
| 7/22/73 | 65       | 53       | 44        | 46        | SW/11             | 18               | Fair WX       | Scattered   |
| 7/24/73 | 75       | 58       | 46        | 36        | NE/3              | 16               | None          | Broken      |
| 7/27/73 | 91       | 68       | 57        | 33        | SW/7              | 16               | Fair WX       | Scattered   |
| 8/25/73 | 68       | 54       | 43        | 53        | E/5               | 17               | Fair WX       | Scattered   |

**NOTES:**

1. All weather readings were taken at an elevation of 3019 ft. (Mill Creek Guard Station) at 1300 PST.
2. "Overcast" means greater than 9/10 of sky covered.  
 "Broken" means 6/10 to 9/10 of sky covered.  
 "Scattered" means 1/10 to 5/10 of sky covered.
3. A Cumulus Index of "None" means only that no cumulus cloud formations were present.  
 "Towering" means great vertical development with dark horizontal base and rounded, cauliflower form top. "Fair WX" means little vertical development.