PROJECT 10078 RECORD CARD

1. DATE	2. LOCATION	12. CONCLUSIONS
21 Jan 52	MITCHEL AFB, NEW YORK	☐ Was Balloon ☐ Probably Balloon ☒ Possibly balloon
3. DATE-TIME GROUP Local 21/0950 EST GMT 21/1450 Z	4. TYPE OF OBSERVATION ☐ Ground-Visual ☐ Ground Radar ☒ Air-Visual ☐ Airborne Radar	☐ Was Aircraft ☐ Probably Aircraft ☐ Possibly Aircraft
5. PHOTO ☐ Yes ☒ No	6. SOURCE Navy Pilot	☐ Was Astronomical ☐ Probably Astronomical ☐ Possible Astronomical
7. LENGTH OF OBSERVATION 2½ min.	8. NUMBER OF OBJECTS 1	9. COURSE Varied
		☐ Other ☐ Insufficient Data for Evaluation ☐ Unknown

10. BRIEF SUMMARY OF SIGHTING

Circular shaped, light colored object resembling a parachute canopy, traveled at approximately 300 knots when first sighted then speeding up considerably in a climbing course. Object made various turns while on the climbing course.

11. COMMENTS

1. A weather balloon launch was made at 0950 EST from Mitchel AFB.
2. A thorough interrogation was made of the observer and it is believed that he saw the balloon.

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it appeared to be going cross-wind. He deduced this since he knew which way he had taken off from Mitchel. (The Navy has some a/c based at Mitchel.)

The pilot could not add any great amount of detail to his original report except that:

a. He was positive that while he was north of the airfield that he could still see the object.

b. At one time, between 2 and 3 (positions of the a/c) on the chart in the Form 112, he had to "rack up" the TBM to keep the object from going out of sight under the wing.

c. He was not sure of his ground track. He readily admitted that he was concentrating on the object and could only give an approximate track.

d. He did not see the object at Position "6", he established that track by lining his a/c up with the point of land. That was in the line of sight of the object when he last saw it.

e. The size of the object did not change to any great extent meaning that the pilot was always about his same distance from the object.

f. The object did not gradually fade away in the distance, it just disappeared.

APPENDIX II

Mitchel AFB, New York - 21 January 1952

I. DESCRIPTION OF INCIDENT

At approximately 0950 EST on 21 January 1952, a U.S. Navy pilot flying a TBM aircraft sighted an unidentified object southeast of Mitchel AFB. The TBM was on a heading at approximately 45°. When first noticed, the object was low at an angle of about 45° from the aircraft. The location of the aircraft was about three runways lengths from the end of, and lined up with, Runway #30 (300°). The object appeared to be halfway between the aircraft and the end of the runway. The pilot's first impression was that the object was a parachute and he thinks he noticed wedge or pie-shaped segregations on the top, however, he realized that the object was going cross-wind and that it could not be a drifting parachute. He judged the angular size to be the same as the angle subtended by a house on the ground and by watching the object cover the equivalent of a city block. He judged the speed to be 300 knots. He judged the altitude to be 200-300 feet. It appeared to be on a course of about 225°.

The pilot started a left turn (see overlay) in an attempt to identify the object. He states that he kept the airspeed of the TBM at about 160 knots and kept a nearly constant altitude of 6000 ft. all during the turn. He estimated that he was pulling from two to three G's in the turn. At one point near position #3 of the aircraft (see overlay) he had to increase his angle of bank to nearly 90° to keep the object from disappearing under the wing of the aircraft.

The pilot's version of the attempted interception is shown on the inclosed overlay. He stated that the paths shown are not exact due to the fact that he was concentrating on the object and not his position, although he occasionally looked at the airfield to get reference points.

The object stayed below the TBM during most of the time it was in sight. When the aircraft was somewhere near position 4, the object appeared to start a rapid climb, accelerating to an estimated 500 knots, and when it was at an angle of about 10° above the pilot's horizontal line of vision, it disappeared. When the object disappeared, the TBM was near position #5. The object did not diminish in apparent size except possibly near the end of the chase, it just disappeared. The pilot was very positive in his statement that when he was north of Mitchel AFB he could see the object. The course on which the object disappeared was established by lining up the aircraft with the apparent path of object and reading the compass.

The object appeared to be dome-shaped, or similar to the vertical cross-section of a parachute canopy. The top was light colored, "like nylon", and the under-surface was dark. It had a length to depth ratio of about 1:3.

While the object was in level flight it appeared to oscillate with a slow period.

The total time elapsed was estimated to be about two and one half minutes.

II. STATUS OF INVESTIGATION

A field trip was made to Mitchel AFB to reinterrogate the pilot and other personnel having knowledge of facts pertaining to the sighting. The pilot's description of the incident was the same as was stated in his original report. His added details have been incorporated into Section I of this Appendix.

At 0950 EST on 21 January 1952, the weather section of Michel AFB launched a Rawinsonde balloon from the position shown on the overlay. These balloons are about six feet in diameter at time of launch and expand on ascending. The expansion up to 6,000 ft. can be neglected, however, as it is small. The balloons are a light gray color and have white streams of talcum powder which is used in packing the balloons. The balloon carried a tin-foil radar 18 inch square reflector six inches below the balloon. The path of the balloon is shown on the inclosed overlay.

These balloons are tracked by radar. It was hoped that the radar operators might have recalled seeing an aircraft return circling their balloon return. They stated, however, that due to the heavy air traffic in the area, it was not uncommon to pick up aircraft returns and they did not pay any attention to them.

The tower operators on duty at the time of the sighting were interrogated. They had not seen the TBM or the balloon. The tower log showed that the first contact with the TBM was at 0955 EST at which time pilot reported sighting an object east of the field. At 1008 the pilot again called the tower to describe the incident in detail. The pilot's description was a condensed version of that given in Part I of this Appendix except he stated that the object "appeared to be a parachute canopy with a dark colored object underneath". The 0955 contact was made soon after the object was sighted, establishing the time.

III. DISCUSSION OF INCIDENT

An accurate time of the initial sighting is needed to establish the position of the balloon at this time. It is assumed that the tower clock is more accurate than the clock in the TBM, thus the time of the initial sighting was probably closer to 0954 allowing for time to contact the tower than the 0950 which was estimated by the pilot.

At 0954 the balloon would have been at about 4,000 ft. and in the position marked 4,000 ft. on the overlay. The pilot stated that the object appeared low, at an angle of 45° from vertical, and appeared to cover the

same angle of vision as a house. This would make the slant range to the ground 8,500 ft. It can be shown that an object thought to be 30 ft. in diameter (assuming an average home is 30 ft. long) at 8,500 ft. range could also have been a six ft. diameter balloon only 1,700 ft. from the observer or at about 4,800 ft. altitude. Allowing for errors in estimation of the angle, this coincides very closely to the altitude of the balloon at 0954. The position of the balloon in respect to the ground was approximately off the end of Runway #30.

The pilot stated that the object appeared to be on a heading of 225°, the reciprocal of the heading of the TBM, and the speed of the object was about 200 knots. The balloon would appear to be traveling on a reciprocal heading and appear to be traveling at a higher rate of speed than the TBM if the pilot had assumed the balloon to be a large object close to the ground.

In examining the turn as sketched by the pilot (see overlay), it is believed that the radius of turn is too great. He stated that the air speed was kept at 160 knots and he estimated he pulled two to three G's, this would give a radius of turn of about 1,500 ft. instead of the nearly 6,000 ft. radius shown on the overlay. It will also be noted that in positions 0, 1, 2, and 3 on the overlay, the bearing of the object is relatively constant, being of about 10 o'clock from the aircraft heading. A balloon seen from an aircraft making a 360° left turn around the balloon would have a constant bearing at 9 o'clock, however, errors in the sketch of the ground tracks could account for this discrepancy.

After the position of the aircraft given as point 3 on the overlay, it is more difficult to show that the object could have been the balloon. If point 4 (of aircraft) is shifted to near point 1 (aircraft) it is possible that the pilot started another 360° turn around the balloon (see overlay).

Two major discrepancies in the theory that the object was a balloon are that the pilot was very sure that at one time during the attempt to intercept the balloon he was north or northwest of the airfield and could still see the object. In addition, shortly before the object disappeared, the line of sight of the object began to swing toward the nose of the aircraft. If this were true and the object was a balloon, the pilot should have been able to come close enough to the object to identify it as a balloon.

It should be noted that the pilot admits that the sketch could be in error. During the reinterrogation, it was brought out by the Operation's Officer at Mitchel AFB, who conducted the original interrogation, that the first sketch the pilot drew was about half the size (i.e. all radii one half) of the final sketch which has been copied in the inclosed overlay. This is further brought out by the calculations for the radius of turn. The pilot was positive that the airspeed was always 160 knots and that he was pulling about two to three G's. As stated before, this would give a radius of turn of about 1,500 ft. instead of the 6,000 ft. as shown on the overlay. A 6,000 ft. radius turn is not considered likely during any interception tactics in an aircraft as slow as a TBM. Changing the radius of the 360° turn to 1,500 ft. would "shrink" the complete sketch to one-fourth the original size (see overlay).

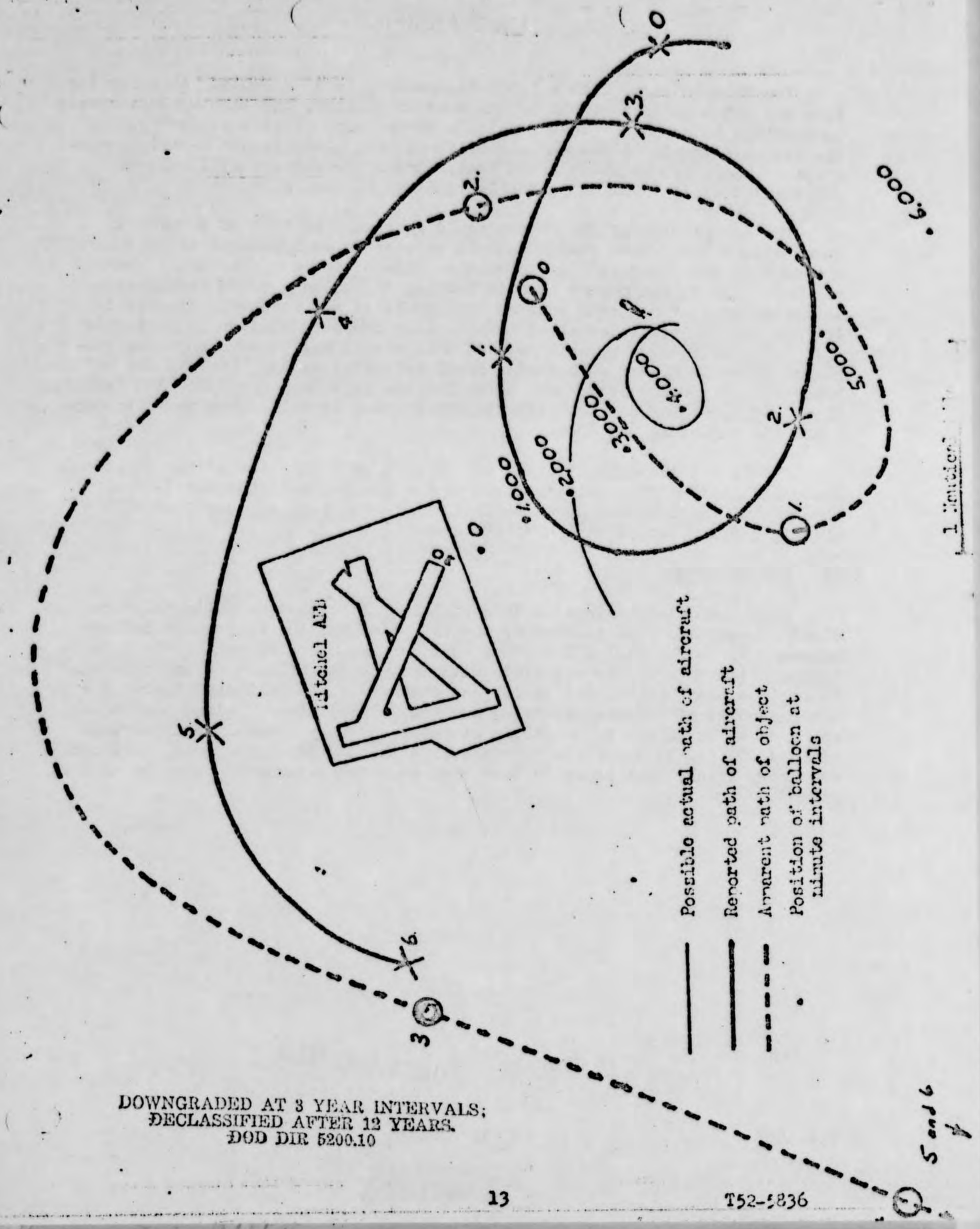
The time to turn, with a 1,500 ft. radius, is 35 seconds. Assuming the turn was not a perfect circle but more of an ellipse, the time would increase to possibly 45 seconds. This is also a discrepancy since the pilot judged the elapsed time to be two and one half minutes. This is not a serious discrepancy, however, as it is known that short intervals are difficult to judge and the pilot did not actually time his maneuvers.

The description of the object could very well be that of a balloon. Observations have shown that a balloon appears to be more oval or dome-shaped than spherical and due to shadows, the bottom appears darker than the top. The talcum powder used in packing the balloon could easily give the appearance of segments such as the panels in a parachute. The oscillations of the object described by the pilot are very similar in period to those of a balloon. The pilot stated that he did not observe anything suspended from the object such as the radar reflector handing beneath the balloon, however, the tower operator was sure that the pilot had mentioned the fact that there was something dark beneath the object when he called the tower to describe the object he had seen.

A T-11 was the only aircraft in the area near the time of the sighting. The possibility of the pilot's first seeing the balloon then the T-11 were checked but the T-11 was on an entirely different heading than that of the object, and was out of the immediate area.

IV. CONCLUSIONS

From the data obtained on this sighting, it cannot be definitely concluded that the object sighted by the TBM pilot was the Rawinsonde balloon released by the Mitchel AFB Weather Station. However, enough of the data on the reported object does correlate with that of the balloon to indicate that there is a possibility that the object observed was a balloon. There were no other reports of persons observing any unusual objects and since the object appeared to be 20 ft. to 30 ft. in diameter and very unusual in appearance at only 200 ft. to 300 ft. altitude over a thickly populated area, it would seem very likely that it would have been seen and reported by someone on the ground.



EXTRACT STATUS REPORT #2

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APPENDIX II

Mitchell Air Force Base - 22 January 1952

I. DISCUSSION OF INCIDENT

At approximately 0950 EST on 22 January 1952, a U. S. Navy pilot flying a TBM type aircraft sighted a disc-shaped object near Mitchell Air Force Base, New York. The object appeared to be light, "like a nylon parachute canopy", with a dark under surface. It was estimated to be 20 feet to 30 feet in diameter with a 3:1 diameter to thickness ratio.

The object appeared to be circling Mitchell Air Force Base and the observer was able to get near the object by cutting inside on turns.

II. STATUS OF THE INVESTIGATION

Additional information has been requested from Mitchell Air Force Base. No conclusions can be made on data contained in preliminary wire message.

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TRIP REPORT

I. General

The first contact at Mitchel AFB was with Lt Col Clark, Director of Intelligence for ConAC and his assistant, Major Wulff. They reviewed what they knew about the sighting, giving no new into, and called Major Dubisher, Operations Officer from Mitchel AFB who had written up the initial Form 112. Major Dubisher then reviewed the incident. Everyone at both ConAC Hq and Mitchel were extremely cooperative.

II. Mitchel Weather Station

These people could give no further info other than the winds aloft in more detail. The balloon had been tracked by radar. It was hoped that the radar crew had picked up the TBM circling the balloon but they said it was common place to pick up a/c along with the balloon and wouldn't have remembered the specific incident. It will be noted that they meant that they picked up a/c at the same azimuth, not necessarily near the balloon. Also they are so intent on the balloon return that they probably wouldn't have noticed an a/c return if it had appeared close.

A balloon, like the one released on 21 January 195[illegible] at 9055 E, was inspected. It is about six ft. in diameter on the ground and increases in size as it ascends. They try to adjust the hydrogen to get a rise of 300 m (984 ft.) per minute. The balloon carried an aluminum foil radar reflector, 18 in. on a side, suspended 6 in. below the balloon. The color of the balloon was a greyish, the color of natural rubber, with talcum powder sprinkled on it. This talcum powder makes streaks in the balloon, due to the way it is packed, the streaks being similar to panels in a parachute canopy.

Balloons are launched from 40° 43' N, 73° 35 1/2' W. Two balloon launchings were observed and it was noted that the balloons could be seen until the slant range was about 8,000 ft., at which time they were lost from sight.

III. Tower Personnel

The personnel who were in the tower at the time of the sighting were interrogated. Their only contact with the pilot is given in the Form 112 and it took place after the incident. They also advised the pilot that a balloon had been launched in the area during the time of the sighting.

The tower did not notice the TBM or the balloon as they were watching field traffic at the time.

The T-11 mentioned in the Form 112 took off NW made a left hand turn, then left on NW course, taking him out of the area.

IV. Interrogation of the Observer

The [redacted] proved to be one of the best sources we have encountered. He realized that there was a balloon in the area and the balloon could do "added" things. He has tried to determine how a balloon could do what the object appeared to do.

Recounting his experience - he was flying on a heading of about 45° true when he sighted this object below at about 10:30 o'clock. He pinpointed himself as being off runway 30, 4 runway lengths out, and the object was about half between him and the end of the runway. At first he thought it was a parachute. He thought, and he wasn't sure, that he could see a 'panel effect' or divisions in the top. (Note: The talcum powder marks on the balloon could cause this effect). The object subtended an angle the same as a house (30 ft. - 40 ft.) on the ground. He first decided that it wasn't a chute when he realized that