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*History and methodology of
"flying saucer" intelligence.*

THE INVESTIGATION OF UFO'S

Hector Quintanilla, Jr.

Unidentified flying objects are not a new phenomenon. In 593 B.C. Ezekiel recorded a whirlwind to the north which appeared as a fiery sphere. In 1254 at Saint Albans Abbey, when the moon was eight days old, there appeared in the sky a ship elegantly shaped, well equipped and of marvelous color. In 1520 in France there were sighted a round-shaped object with rotating lights and two fiery suns. In 1874 in Texas a farmer reported seeing a dark flying object in the shape of a disc cruising in the sky at a wonderful speed. These are a mere sampling of the many such events recorded by historians.

The modern era of UFOs, however, can be dated from 24 June 1947, when a flyer made some strange observations which national news coverage and authors with a poetic license so played up as to excite public entertainment of a notion that our planet had been visited by unknown vehicles from outer space.

Supersonic Saucers

On that 24 June, Kenneth Arnold was out flying in his private plane. He was looking for a Marine transport that was supposed to have crash-landed somewhere on the southwest side of Mt. Ranier. First he flew directly toward the mountain from the west at an altitude of approximately 9,500 feet, searching all of the various ridges for the downed plane. Then he made a sweep back to the west, found nothing, and headed again toward Mt. Ranier. The air was so smooth that it was a real pleasure flying; he trimmed out the aircraft and relaxed, admiring the crystal-clear sky and the terrain. There was a DC-4 to his left and rear at approximately 14,000 feet.

He hadn't flown more than two or three minutes on this course when a bright flash reflected on his airplane. He couldn't find where

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the reflection came from, but to the left, north of Mt. Ranier, he did observe a chain of nine peculiar-looking objects flying from north to south at approximately 9,500 feet. They were approaching Mt. Ranier very rapidly, and he at first assumed them to be jet aircraft. Every few seconds two or three of them would dip or change course slightly, so as to catch the sun at an angle and reflect brightly. They were too far away for him to determine their shape or formation.

As they approached Mt. Ranier, however, he observed their outline quite clearly—except that, oddly, he could not find their tails. He watched them pass the southern edge of Mt. Ranier flying directly south-southeast down the hog's-back of a range. Their elevation seemed to vary by as much as one thousand feet, but they remained very near the horizon, therefore around his own elevation. They flew rather like geese, in a diagonal chain as though they were linked together. They seemed to maintain their orientation while swerving in and out of the high mountain peaks.

Arnold estimated the distance from him to the objects at approximately 25 miles. Using a Zeus fastener and a cowling tool, he estimated their size to be about two-thirds that of the DC-4. Watching them pass a high snow-covered ridge between Mt. Ranier and Mt. Adams, he saw that as the first object was leaving its south crest the last one was entering its northern crest. Later the length of this ridge, and therefore that of the chain of objects, was determined to be about five miles. Arnold timed their flight from Mt. Ranier to Mt. Adams, 47 miles, at 1 min. 42 sec., a speed of 1,659 miles per hour.

In a subsequent interview with newsmen, Arnold described the objects as appearing like saucers skipping on water. This description, shortened to "flying saucers" by newsmen, gave rise to the popular term for UFOs. The sighting, like most, was not reproducible for purposes of investigation; it involved uncontrollable atmospheric conditions. The Air Force was left with one man's subjective interpretation of what he had experienced. Scientists who reviewed Arnold's sighting concluded that the objects were a mirage. The smooth, crystal-clear air that he noted indicated the very stable conditions which are associated with inversions and a high index of refraction of the atmosphere.

Although Arnold's experience could not be reproduced, another phenomenon in some respects similar and observed in the same area

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found a satisfactory explanation. Navy Commander W. J. Young reported in November 1948 that on several occasions he had seen over the Willamette valley and the plains of eastern Washington and Oregon what could easily have been mistaken for flying discs. One striking example occurred over the Willamette valley on a clear sunny day when the ever-present blue haze seemed somewhat thicker than usual. His aircraft was flying at altitudes between 1,000 and 5,000 feet when bright flying objects appeared, some on his beam and others on the bows or dead ahead. From time to time they would disappear and new ones appear.

Young finally determined that what looked to be aircraft at various altitudes were reflections of the sun from the aluminum roofs of farm buildings at great distance from his plane. The perspective of the land converging with the sky on the horizon, with limited ground visibility, made it appear as though the roof reflections were actually airborne at various altitudes in the haze. Thus one UFO sighting was solved by the observer himself. Although there is no uniform pattern among reported UFO phenomena, some characteristics of one may be found in others, as in Young's and Arnold's.

Sign and Grudge

Newspaper publicity for Arnold's flying saucers started an avalanche of other sightings. The Air Force began receiving reports from people in all walks of life. Before December 1947 no specific organization was responsible for investigating and evaluating these. Without any basis in measurable data or controlled experiment, the reported phenomena were variously assessed, even within the military structure, as due to a new aerodynamic configuration, to natural occurrences, to misinterpretation of conventional objects, or to space ships under intelligent control. The military interest touched the fields of air defense, R&D, and intelligence, responsibilities vested in many different organizations.

To end this confusion, the Chief of Staff directed on 30 December 1947 that a project be established to collect, collate, evaluate, and distribute within the government all information concerning sightings which could be construed as of concern to the national security. Responsibility for the project, assigned the code name "Sign," was given to the Air Technical Intelligence Center. In February 1949 Project

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Sign, having completed its evaluation of the 243 UFO cases submitted to it, issued a report:

No definite and conclusive evidence is yet available that would prove or disprove the existence of these unidentified objects as real aircraft of unknown and unconventional configuration. It is unlikely that positive proof of their existence will be obtained without examination of the remains of crashed objects. Proof of non-existence is equally impossible to obtain unless a reasonable and convincing explanation is determined for each incident. . . . Explanations of some of the incidents revealed the existence of simple and easily understandable causes, so that there is the possibility that enough incidents can be solved to eliminate or greatly reduce the mystery associated with these occurrences. . . . Under wartime conditions, rapid and convincing solutions of such occurrences are necessary to maintain morale of military and civilian personnel.

With the backlog of cases disposed of, the project was continued on a reduced scale and under a new code name, "Grudge." Project Grudge completed its evaluation of 244 reports in August 1949, relying heavily on the work of university scientists and other outside consultants, as well as the USAF Air Weather Service and the U.S. Weather Bureau. The Grudge Report concluded that the UFO sightings signified nothing that would constitute a threat to the national security of the United States, that they were chargeable to misinterpretations of conventional objects, a mild form of mass hysteria or war nerves, and fabrications for the sake of hoax or publicity.

Special Report No. 14

The soothing conclusions of Project Grudge caused very little comment, and the project was continued on a reduced scale. Nevertheless, the fringe of people that still believed in extraterrestrial visitation was growing with the popularity of science fiction articles and magazines. In December 1951 a contract was let to an industrial firm for a detailed study, unclassified, of the UFO cases on file. It took three years to complete this study.

Meanwhile, in March 1952, the project was given its present name, "Blue Book." During this period numerous books were written about the UFOs. Some representative titles are *The Coming of the Saucers*, *Space, Gravity, and the Flying Saucer*, *Is Another World Watching*, *The Flying Saucers Are Real*, *Flying Saucers from Outer Space*, and *Flying Saucers Come from a Distant World*. UFO hobby clubs were formed throughout the country. Most professed to be studying the phenomena scientifically, but few, if any, had physical or behavioral

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scientists on their so-called evaluation committees. During the early fifties it became fashionable to accuse the Air Force of censorship or of withholding UFO information from the public.

In January 1953, while the three-year contract study was still in process, a Scientific Advisory Panel was formed to make an authoritative quick evaluation. It was composed of civilian scientists outside the government with well-known and respected names—H. P. Robertson, Luis W. Alvarez, Lloyd V. Berkner, S. A. Goudsmit, Thornton Page. Following is an extract from their report:

The panel . . . has reviewed a selection of the best documented incidents. . . . We firmly believe that there is no residuum of cases which indicates phenomena which are attributable to foreign artifacts capable of hostile acts, and that there is no evidence that the phenomena indicate a need for the revision of current scientific concepts. The panel further concludes that the continued emphasis on the reporting of these phenomena does, in these perilous times, result in a threat to the orderly functioning of the protective organs of the body politic. We cite as examples the clogging of channels of communication by irrelevant reports, the danger of being led by continued false alarms to ignore real indications of hostile action, and the cultivation of a morbid national psychology in which skillful hostile propaganda could induce hysterical behavior and harmful distrust of duly constituted authority.

The panel recommended:

That the national security agencies take immediate steps to strip the unidentified flying objects of the special status they have been given and the aura of mystery they have unfortunately acquired.

One action taken on this recommendation was to establish, within the Office of Information at the Air Force Secretary's level, an office to answer public questions and release information regarding UFOs. Throughout the years, the responsibility for releasing UFO information to the public has remained with the Office of Information, Secretary of the Air Force.

When the unclassified contract study was ready at the end of 1954, it was immediately released to the news media. It was released under ATIC cover, because the competent company which produced it wished to remain anonymous in this field of research. It is commonly referred to as Special Report No. 14, the first 13 having been administrative progress reports.

Special Report No. 14 reduced and evaluated all the UFO data held in the Air Force files. It contains graphs showing the frequency distribution of sightings by time, date, location, shape, color, duration,

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azimuth, and elevation. It records an attempt to build a model of the typical UFO and an ultimate finding that UFOs come in all sizes, shapes, and colors. It concludes as follows:

It can never be absolutely proven that "Flying Saucers" do not exist. . . . Scientifically evaluated and arranged, the data as a whole did not show any marked patterns or trends. . . . A critical examination of the distributions of the important characteristics of sightings, plus an intensive study of the sightings evaluated as unknown, led to the conclusion that a combination of factors . . . resulted in the failure to identify as *Knowns* most of the objects classified as *Unknowns*. An intensive study aimed at finding a verified example of a "Flying Saucer" or at deriving a verified model or models of "Flying Saucers" led to the conclusion that neither goal could be attained using the present data.

It is emphasized that there was a complete lack of any valid evidence consisting of physical matter in any case of a reported unidentified aerial object. Thus, the probability that any of the unknowns considered in this study are "Flying Saucers" is concluded to be extremely small, since the most complete and reliable reports from the present data, when isolated and studied, conclusively failed to reveal even a rough model, and since the data as a whole failed to reveal any marked patterns or trends.

Therefore, on the basis of this evaluation of the information, it is considered to be highly improbable that any of the reports of unidentified aerial objects examined in this study represent observations of technological developments outside the range of present-day scientific knowledge.

Investigation Procedures

The objectives of the UFO program, outlined in 1953 by Air Force Regulation 200-2, remain unchanged:

- (1) To determine if UFO phenomena present a threat to the security of the United States.
- (2) To determine if UFO phenomena exhibit any technological advances which could be channeled into U.S. R&D.
- (3) To explain or identify the stimuli which caused the observer to report a UFO.

Our Project Blue Book office at Wright-Patterson has a complement of only one officer, two sergeants, and one civilian stenographer. The initial investigation of all UFO sightings is therefore undertaken by the commander of the nearest Air Force base. In its subsequent analysis of UFO cases, also, the project office is assisted by many organizations and professional individuals. Project Consultant for the past eighteen years has been Dr. J. Allen Hynek, astrophysicist

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and Chairman of the Dearborn Observatory, Northwestern University. It is Dr. Hynek, obviously, who has maintained continuity on the project, in addition to evaluating all suspected astronomical cases. We have used the services of Dr. Charles P. Olivier, head of the American Meteor Society, in evaluating some suspected meteor cases.

For help on suspected aircraft sightings we have gone to Federal Aviation Agency offices, local airports, the Strategic Air Command, and the Air Defense Command. In suspected balloon sightings we have called upon local airports, local weather stations, the U.S. Weather Bureau, Holloman AFB Balloon Control Center, the National Center for Atmospheric Research, General Mills, Raven Industries, Sea Space Systems, and colleges and universities conducting balloon research. For suspected satellite sightings we use the printed Echo schedules, NASA satellite reports, the Smithsonian North and South Equatorial Crossings, and the professional services of the Space Detection and Tracking System. For suspected missile observations we go directly to Cape Kennedy, Vandenberg AFB, Point Magu, Wallops Island, Eglin AFB, Holloman AFB, and Green River.

For radar analysis we contact one of our internal organizations. For photo analysis we use an internal organization but also Kodak in Rochester, N.Y. On physical specimens we have used the services of the Air Force Materials Laboratory, Battelle Memorial, the Food and Drug Administration, Libby Owens, Corning Glass, Institute of Paper Chemistry, and the Northwestern Geology Department. Numerous other organizations and individuals have helped the project in the past. No individual, government agency, or industrial group has ever refused assistance.

As indicated above, UFO sightings are classified according to the suspected real event that gave rise to each report. The characteristics of these different categories are sketched below.

Propeller Aircraft

Regular scheduled airliners fly in air corridors, are usually controlled by FAA. Lighting will probably be typical red and green wing lights with rotating beacon. They use landing lights on takeoff as well as in landing pattern. Sighting report may include hovering or stationary period if the aircraft is in a turn or approaching the observer. Total duration should be consistent with flight maneuvers, not likely to exceed five minutes unless some series of maneuvers is being performed. Landing light, blotting out the red and green

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flashing lights, is often reported as a single light at night. Experimental and unusual lighting effects can vary with the lighting configuration of each aircraft. Color most often reported as white, can be red. Objects reported in straight flight at certain altitude can be checked against local flight corridors; then FAA can be checked if there remains doubt that an object is an aircraft or if positive identification of a specific flight is required. There may or may not be sound associated with the visual effect reported. If near an airport, this type of object is not classed as a UFO; moving lights in and around airports which could be caused by aircraft are assumed to be aircraft.

Private or non-scheduled flights have the same characteristics in general. Speeds may be slower and duration longer. Altitude usually lower. No sound if the wind is blowing away from the observer. Duration should not exceed seven or eight minutes unless maneuvers can account for additional time. Normally flight is cleared from some local airport and not carried on radar plots through FAA; hardest type to make positive identification of. Evaluation made on reported flight characteristics consistent with aircraft.

Jet Aircraft

Airliner and high-altitude missions are similar to conventional flights in visual characteristics with the following exceptions: (1) The color is most often reported as red. (2) No sound is associated with the object. (3) Flight is usually straight or with one turn. Duration is about three to five minutes, depending upon the length of arc visible. FAA has designated airways for these flights.

Special low-level military missions are flown at 2,000 feet in known air corridors. Sighting is usually brief, one minute or less. May be reported hovering if flight is directly toward the observer. May include a sudden burst of speed. No sound if wind is away from observer. Usually reported as a single light, but may be more than one. Sightings are at night; during the day these aircraft can be seen too well to be misinterpreted.

Special test or training missions, varying from a single plane to multiple flights or major air operations, may give rise to reports. These flights can be determined by contact with local, regional, or major air commands.

A jet with afterburner in operation, viewed from the side, may give the appearance of a short flame. It is usually reported as blue and

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tapering. When the afterburner is cut off, the object may be thought to have either just vanished or zoomed off into space. Duration is usually brief. The sighting is frequently during climb. As viewed from the rear, the jet may be reported red or orange with some yellow and of no distinct shape. Here again the disappearance may be sudden. If at high altitude, only a nondescript light may be reported.

Refueling Missions

Here lights on the tanker and the multiple aircraft engaged add new visual characteristics. Sightings are at night only; daylight operations would be recognized for what they are. They may be at low or high altitude. Multiple lights will be moving around, in formation, going on and off. The basic light formation will fly straight for a set distance, then may make a 180-degree turn. Duration in an area may run as high as 15 minutes, but any single pass should not last more than four or five. Lights may be seen going one way and then appear on their return path later. The 922 Air Refueling Squadron at Wright-Patterson furnishes information on the visual characteristics of night refueling operations, and SAC recently photographed a refueling mission for the benefit of UFO analysts.

Refueling operations are controlled and conducted in specific areas. A "Flight Planning Guide" issued by the Aeronautic Chart and Information Center gives the location of these areas and the agency controlling each. A phone call to the controller will determine whether an area was in use at a particular time and what squadron flew the mission. Then communication with the squadron will give the number and type of aircraft flown and their entry and exit times.

Photo Aircraft

Aircraft using flare drops for photo work are most often reported simply as flares. Similarly, aircraft using strobes to illuminate their target, which may work at either low or high altitudes, are reported as a series of evenly spaced flashes. Duration of these sightings is usually less than two minutes, more frequently 30 seconds.

Infra-red photo planes have turbine generators to drive their equipment. These make a whining noise which can be heard above the noise of the engines. Not many agencies do this work, which is often classified. The planes used are rather slow, less than 125 mph.

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Much of the work is done early in the morning, with landing lights on because of the low altitudes flown.

Advertising Aircraft

Planes towing targets or banners during daylight hours are not usually misinterpreted unless they remain at such a distance that the observer cannot distinguish the tow vehicle and sign. Frequently in such cases the reports are accompanied by drawings picturing the towed banner as part of the UFO. Duration is longer than for other aircraft sightings, and the flight generally includes maneuvers. The frequently used loud speaker would presumably not be heard unless the flight were close enough for correct identification. Local investigators can check for these aircraft, since FAA regulations require a permit for such flights.

Aircraft with electrically lighted signs have the same essential characteristics except that they are normally sighted at night. On occasion the sign lights have been mistaken for windows of a much larger craft. Flights are relatively slow, characteristically maneuvering back and forth in one area. One usually operates over the same area for more than one day and can be viewed on successive nights, weather permitting.

Helicopters

Motion slow, may or may not hover. It needs to be far enough away from the observer to escape daylight identification. It may be reported as a black speck moving back and forth, up and down. During the night weird effects can be caused by the red rotating beacon flashing through the canopy. Motion will be erratic if the flight includes hovering. Positive identification is usually simple to obtain by checking the flight schedules of military and civilian helicopters in the area.

Balloons

Flight characteristics here are affected by meteorological factors. Wind data is obtained from the Weather Bureau. An Air Weather Service liaison officer assists in evaluating the meteorological data. Low-level weather balloons are described in sightings as round or oval, occasionally oblong. The flight may be reported as hovering, rising, zig-zag, or erratic, but the object must be moving with the

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wind. It will be picked up by radar only if a radar reflector is attached. A frequent time for sightings is at dusk, before the balloon disappears into earth's shadow. It is rarely sighted at night: its small white lights are not visible to ground observers from above 10,000 feet without optical aids. The sighting from planes is usually very brief, and on occasion even experienced pilots have attributed unusual motion to balloons.

An upper-air balloon may be described as round or oval, usually silver during the day and orange at dusk. It will appear stationary or in slow motion. Actually, it moves with prevailing winds at the altitude—six months to the east and six to the west. It will probably be picked up on radar and remain in the area long enough to be identified by aircraft scrambled or diverted for this purpose. Sudden disappearance is to be expected at dusk, and may be reported as a zooming off into space. The sun's reflection through folded panels can give unusual flashing effects. Every effort is made to pin to a specific launch any reports attributable to upper-air balloons; this practice has assisted the scientific community in recovering some of them.

Upper air research balloons are launched by military and civilian agencies for cosmic ray and other studies. These are about 100 feet in diameter, usually of polyethylene. They can be programmed to fly at various altitudes between 80,000 and 125,000 feet or higher. Their appearance may vary with the equipment suspended below and other attachments, but what is visible from the ground without optical aids is generally the same for all. The speed will vary with the wind, from hovering in the same area for some days up to 200 mph in jet streams. At night the balloon will descend as the gas cools and the next day go back up to the programmed altitude. It usually carries a radio beacon which is followed by tracking stations, as well as running lights and radar reflectors. Occasionally, multiple balloons are used to carry heavy equipment. Pilots scrambled to check on this kind of balloon cannot reach its altitude but can get close enough to identify it. At dawn the balloon may appear suddenly, as it moves into sunlight, and similarly disappear at dusk.

Earth Satellites

In order for a report to be evaluated as deriving from an artificial satellite, the following criteria must be met: (1) Time of sighting must be at night and at such an hour that the vehicle can reflect the

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sun's rays. (2) Object should resemble a star in visual characteristics. (3) Direction of flight can have a westerly component only in the case of retrograde satellites. (4) Duration (considering the degrees of arc through which the object is observed) must be consistent with satellite orbital velocities.

Satellites are normally reported as star-like moving lights, most frequently white but occasionally yellow, green, blue, orange, and even red. Motion may be steady, hesitating, or zig-zag; portions of the flight may be seen as hovering or stationary. The path may be reported straight or arching, and a turn may be ascribed to it at the beginning or end of the flight. The object may appear or disappear suddenly. The speed should be about 15° of arc per minute, the average duration three to six minutes.

When a known satellite has a flight path over the observer's area at the time of the report (only Echo and Pegasus schedules are screened), and the above considerations are fulfilled, the sighting is evaluated as of that specific vehicle. There are more than 30 satellites in orbit visible to the naked eye. When a reported object does not correspond with Echo or Pegasus passages but displays the required characteristics, it is then evaluated as a probable or possible satellite.

Astronomical Events

The most common UFO reports are of astronomical sightings—bright stars, planets, comets, fireballs, meteors, auroral streamers, and other celestial bodies. When observed through haze, light fog, moving clouds, or other obscurations or unusual conditions, the planets, especially Venus, Jupiter, and Mars, have been reported as UFOs. Stellar mirages are also a source of astronomical reports.

Other Categories

There are three other classifications used for UFO reports. An *Insufficient Data* category takes care of those in which one or more elements of information essential for the evaluation are missing—for example the duration of the sighting, the date, time, location, or position in the sky, weather conditions, and the manner of appearance or disappearance. If there is any indication that such a sighting may be important from the viewpoint of security, scientific or technical value, or public interest, every attempt is made to obtain

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the additional information necessary before placing the report in this category.

Another category is a catch-all labeled *Other*. It includes missiles, reflections, mirages, searchlights, birds, kites, spurious radar indications, hoaxes, fireworks, and flares.

And finally, a sighting is considered *unidentified* when a report apparently contains all the data necessary to suggest a valid hypothesis but its description cannot be correlated with any known object or phenomenon.

Through 1965, 10,147 UFO reports had been disposed of and classified in one or another of the seven categories. In 1964, a fairly average year, the figures were as follows:

Astronomical	123
Aircraft	71
Balloon	20
Insufficient Data	99
Other	88
Satellite	142
Unidentified	19
Total	<u>562</u>

Policeman's Report

One intriguing, classic case of the 19 listed above as unidentified will also illustrate how widely government agencies, industrial firms, and individuals cooperate in the UFO project.

On 24 April 1964 at approximately 1745 hours, a Socorro, New Mexico, police officer, Lonnie Zamora, was headed south chasing a speeding automobile when he suddenly heard a roar and saw a flame in the sky to the southwest. He decided to let the speeder go in favor of investigating the flame, because there was a dynamite shack in that area and it might have blown up. He turned right onto a gravel road that ran by the shack.

As he was driving slowly along the road, Zamora saw above a steep hill just ahead a funnel-shaped flame, bluish and sort of orange. The base of the flame was hidden behind the hill; there was no smoke connected with it. He had trouble getting the car to the top of the hill because of loose gravel; he had to try three times before he made it. As he reached the top of the hill he saw a shiny object to the south, this side of the dynamite shack, about 150-200 yards away. It was off the road to the left in an arroyo, and at first glance it

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looked like a car turned over; but when he drove closer, it appeared to be aluminum color, not chrome, and oval-shaped like a football.

Zamora drove about 50 feet along the hill crest, radioing back to the sheriff's office, "10-44 [accident], I'll be 10-6 [busy out of the car] checking a wreck down in the arroyo." From this point, seated in the car, he could not see the object over the edge of the hill. As he stopped the car, he was still talking on the radio, and while he was getting out he dropped the mike. He picked it up and put it back and started down toward the object.

Just then he heard a very loud roar, not exactly like a blast but not steady like a jet engine. It was of low frequency at first and then became higher. At the same time he saw a light blue flame, sort of orange at the bottom. Zamora believes this flame came from the underside of the object; he could see no smoke but some dust in the vicinity. He panicked; he thought the object was going to blow up. In his own words (with slight rearrangements for the sake of clarity):

As soon as saw flame and heard roar, . . . ran away from object but did turn head towards object. Object was  in shape. It was smooth—no windows or doors. As roar started, it was still on or near ground. Noted red lettering of some type like . Insignia was about 2¼ inches high and about 2 inches wide, guess. Was in middle of object, like . Object still like aluminum white.

[Running], bumped leg on car—back fender area. Car facing southwest. . . . Fell by car and [sun] glasses fell off, kept running to north, with car between me and object. . . . I guess I had run about 25 feet when I glanced back and saw the object . . . rise to about level of car, about 20 to 25 feet, guess. Took, I guess, about six seconds when object started to rise and I glanced back. . . . It appeared about directly over the place where it rose from.

I was still running, . . . [then] about 50 feet from car I ducked down, just over edge of hill. . . . I stopped because I did not hear the roar. I was scared of the roar, and I had planned to continue running down the hill. I turned around toward the object and at the same time put my head toward ground, covering my face with my arms. . . . When the roar stopped, heard a sharp tone whine and the whine lasted maybe a second. Then there was complete silence about the object.

That's when I lifted up my head and saw the object going away from me . . . in a southwest direction . . . It did not come any closer to me. It appeared to go in straight line and at same height—possibly 10 to 15 feet from ground, and it cleared the dynamite shack by about three feet. Shack about eight feet high. Object was traveling very fast. It seemed to rise up, and take off immediately across country.

I ran back to my car and as I ran back, I kept an eye on the object. I picked up my . . . sun glasses, got into the car, and radioed to Nep Lopes, radio operator, to look out the window, to see if you could see an object. He asked, what is it?

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I answered, it looks like a balloon. I don't know if he saw it. If Nep looked out his window, which faces north, he couldn't have seen it. I did not tell him at the moment which window to look out of.

As I was calling Nep, I could still see object. The object seemed to lift up slowly, and to get small in the distance very fast. It seemed to just clear the Box Canyon or Mile Canyon Mountain. It disappeared as it went over the mountain. It had no flame whatsoever as it was traveling over the ground, and no smoke or noise.

Feeling in good health. Last drink—two or three beers—was over a month ago. Noted no odors. Noted no sounds other than described. Gave direction to Nep Lopes at radio and to Sergeant MS Chaves [of New Mexico state police at Socorro] to get there. Went down to where the object had been, and I noted the brush was burning in several places. . . . I got my pen and drew a picture of the insignia on the object. . . .

Then Sgt. Chaves came up, asked me what the trouble was because I was sweating and he told me that I was white, very pale. I asked the Sgt. to see what I saw and that was the burning brush. Then Sgt. Chaves and I went to the spot and Sgt. Chaves pointed out the tracks.

When I first saw the object (when I thought it might be a car) I saw what appeared to be two legs of some type from the object to the ground. At the time, I didn't pay much attention to . . . the two legs. The two legs were at the bottom of the object, slanted outwards to the ground. The object might have been about three and a half feet from the ground at that time. . . .

Diagnosis: Unsolved

There is no doubt that Lonnie Zamora saw an object which left quite an impression on him. There is also no question about Zamora's reliability. He is a serious police officer, a pillar of his church, and a man well versed in recognizing airborne vehicles in his area. He is puzzled by what he saw, and frankly, so are we. This is the best-documented case on record, and still we have been unable, in spite of thorough investigation, to find the vehicle or other stimulus that scared Zamora to the point of panic.

During the course of the investigation and immediately thereafter, everything that was humanly possible to verify was checked. Radiation in the landing area was checked with Geiger counters from Kirtland AFB. The Holloman AFB Balloon Control Center was checked for balloon activity. All local stations and Air Force bases were checked for release of weather balloons. Helicopter activity was checked throughout the state of New Mexico. Government and private aircraft were checked. The reconnaissance division in the Pentagon was checked. The White House Command Post was checked. The Commander at Holloman AFB was interviewed at length about special activities from his base. Down-range controllers

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UFOs

at the White Sands Missile Range were interviewed. Letters were written to industrial companies engaged in lunar vehicle research activity. The companies were extremely cooperative, but to no avail. The Air Force Materials Laboratory analyzed soil samples from the landing area.

The findings were altogether negative. No other witnesses could be located. There were no unidentified helicopters or aircraft in the area. Radar installations at Holloman AFB and at Albuquerque observed no unusual blips; but the down-range Holloman MTI radar, closest to Socorro, had been closed down for the day at 1600 hours. There was no unusual meteorological activity, no thunderstorms; the weather was windy but clear. There were no markings of any sort in the area except the shallow "tracks" Chaves and Zamora found. The soil analysis disclosed no foreign material. Radiation was normal for the "tracks" and surrounding area. Laboratory analysis of the burned brush showed no chemicals that could have been propellant residue.

The object was traveling at approximately 120 miles per hour when it disappeared over the mountain, according to Zamora's best guess of the time it took. Not an interplanetary speed, at any rate; and the findings are also negative for any indication that the Socorro UFO was of extraterrestrial origin or that it presented a threat to the security of the United States.

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