

FANTASTIC UNIVERSE

SCIENCE FICTION

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3 EXCITING NOVELETS by

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°Startling UFO Articles by IVAN SANDERSON and MORRIS JESSUP

shapes in the sky

by CIVILIAN SAUCER
INTELLIGENCE

The robots that man has created also see and report UFOs. Time and time again radar sights them.

SOMETIMES, even after ten years of UFOs, you still meet a person who "doesn't believe in flying saucers." What can you say to such a person? Name the eminent authorities who have looked at the evidence and said it can't be explained away? He'll demote them from experts to amateurs. Describe observations by pilots, astronomers, military men, technicians? "They were fooled by ordinary sky objects." (*What ordinary sky objects? Well, he doesn't feel it's incumbent on him to explain each and every natural phenomenon that credulous folks may twist into a "flying saucer."*) In fact, a person like this is completely immune to *any sort of visual testimony at all*. He has to be, or he couldn't hang on so credulously to his incredulity.

And it's no use appealing to the evidence of other senses—*sounds* or *odors* from saucers. (F.U., November and January.) Anyone who isn't impressed by the massed testimony of man's master sense, sight, certainly isn't going to let himself believe the reports of the lesser ones either.

Offer him "*physical evidence*"—angel hair? (F.U.,

The Research Section of CSI turns to the evidence for the existence of UFOs furnished by the senses that man has built for himself, in their latest column on UFO sightings, written specially for FU. CSI, widely known research group, has an extensive file of material on this subject.

July and September.) No, no, that doesn't suit him either—angel hair usually evaporates, so he will take care to demand that any “acceptable” evidence be non-volatile.

But man now has more than the traditional five senses—and we don't mean the “sixth sense” of ESP. We mean the new senses that man has built for himself in the last century: the robots that see and feel on the electromagnetic frequency bands that his own senses cannot detect—ultraviolet and infrared light, radio waves and high-energy ionizing radiation. And of these, radar, probing the sky with its staccato spotlight of microwaves, is the new sense that gives us the most information. It is not limited, as the radio telescope and the Geiger counter are, to detecting only “luminous” bodies—that is, bodies that are themselves giving out signals: it bumps up against anything solid that's there. So, if a UFO is in the sky, radar ought to catch it.

Of course, it *does*; and this is what should be pointed out to the die-hard skeptic who has argued himself into disbelieving his own eyes and ears. He may find it a bit of a puzzle to teach himself to disbelieve in radar, too. It's obvious that an ordinary citizen is simply not competent to scoff at the validity of something as technical as a radar return; he has to rely

on the experts, and unfortunately for our skeptic, the experts don't scoff. They say the returns come from something unknown in the sky.

“Project Blue Book Special Report #14” is the only Air Force report on flying saucers that has ever been made publicly available.¹ What this official report has to say about radar evidence is interesting; it is like Sherlock Holmes' “curious incident of the dog in the nighttime.” On page 77 we read:

“All but twenty of the UNKNOWNNS were classified as such solely because they were reported to have performed maneuvers that could not be ascribed to any known objects... With the exception of some radar sightings, all of these maneuvers were observed visually. The possibilities for inaccuracies (in a visual observation) are great, because of the inability of an observer to estimate visually size, distance, and speed. Reports of sightings by radar usually were of highspeed objects, some at extremely high altitudes. Some were identified as UNKNOWNNS because there was no object to be seen visually at the point indicated by the radar set. It cannot be said with

¹ Thanks to the explicit assistance of Rep. John E. Moss, Jr.'s Subcommittee on Government information and through the persistent efforts of Dr. Leon Davidson of 64 Prospect Street, White Plains, N. Y., who published a photo-offset edition at his own expense. It is available from Dr. Davidson for \$1.50.

any assurance what these radar sightings mean, but the most logical explanation is that they are ground targets reflected by an atmospheric temperature inversion layer. *The validity of this statement cannot be established.* It is felt that radar sightings in this study are of no significance whatsoever unless a visual sighting of the object also is made."

This is the only reference to radar anywhere in the 313-page report. There are 240 tables that seem to present every possible detail about UFOs (including such an absurdity as the number that were "luminous black"). But *there is not a single table giving radar data.* As the report itself says, such data are superior to visual observations in an extremely important respect: *size, distance, and speed,* hard to estimate from a visual observation, are recorded unequivocally by radar. Not only does the report leave out all the interesting cases in which radar saw what the eye did not (dismissing them as "of no significance whatsoever"). Worse, it even omits all cases in which the eye and radar did confirm each other. These cases are never cited at all, not even in the decent anonymity of a statistical table. One can only speculate as to the significance of this very striking omission.

Incidentally, we notice that the fantastic *maneuvers* of

the objects—the very thing that earned them the "UNKNOWN" classification—maneuvers which in some cases were observed by radar—are likewise *never mentioned* in the report's 240 statistical tables.

Because most of our radar installations are military, most of the radar evidence will never come to the knowledge of the public. This is not mere fancy on our part. Here is an example of the gap between what the Air Force sees and what it tells the public. In mid-1957 we received a letter from a correspondent who is now a radar technician in the Air Force. He said:

"I am now stationed at Orlando Air Force Base, Florida. As you know, one of the big AF missiles, 'Matador,' is being developed and tested here. I was very surprised to observe 'blips' or unexplained objects on our radar screens. We are constantly catching these objects just before launching time. Since all aerial bodies are supposed to be out of the immediate area before launching, many times we are held up due to these unidentified objects on the radar. It would seem natural for them to appear once in a while, but believe me, they are so consistent that we always expect them now. These objects travel at incredible speeds, and demonstrate small degree turns, very uncharac-

teristic of natural aerial objects. No one can explain it."

It seems fair to suppose that Orlando is not the only AF base where UFOs are as pestiferous as mosquitoes. But have the official statements of the Air Force told us anything about this state of affairs?

In fact, the Air Force has as yet not released *any* details of *any* flying-saucer observations made since 1953. Blue Book Report #14, though released late in 1955, was written in 1953, and covered only the period from 1947 through 1952; in other words, by the time the public got this information, it was almost three years old at best.

A few 1953 cases investigated by Blue Book are given in Ruppelt's book, which was published with the Air Force's *nihil obstat* in 1956. But since 1953, the only flying-saucer information published has been what civilian investigators could discover for themselves.

Here is another example of important radar evidence uncovered by civilians, with no thanks to the Air Force. This item made headlines from Maine to Hawaii on July 12, 1957, as the front-page story in the first issue of *The UFO Investigator*. The *Investigator* is published by the most important saucer research organization in the United States, the National Investigations Committee on Aerial

Phenomena (NICAP).² The account is as follows.

Just before midnight on March 23, 1957, CAA control-tower radar operators at an airport southeast of Los Angeles suddenly picked up a blip 15 miles northwest of their position and moving away at high speed. When it reached a distance of 40 miles, the "target" abruptly stopped and within three seconds or less completely reversed its direction, proving itself to be no aircraft. Then it about-faced again, and this time continued out of the radar-scope's 50-mile range. About five minutes later, two more targets traveled across the scope. The CAA operators computed their speed: 30 miles in 30 seconds—which is 3600 miles per hour.

At precisely the time that these targets were appearing on CAA radar, visual observations of "a reddish-glowing object darting about" were being made by personnel at Oxnard AFB, the area over which the targets had been tracked; and also by numerous residents in San Gabriel and Pasadena, farther to the east of Oxnard, and in Los Angeles.

The fact that these visual observations were confirmed by radar was not made known at the time. On the contrary: Major Thomas Bowers, Information Services Officer at

² NICAP'S address is 1536 Connecticut Ave., Washington 6, D. C. Membership is \$7.50 per year.

Norton AFB in San Bernardino, queried about the sighting, told the press that "we were not able to pick the object up on radar." Perhaps this was true at Norton; but it certainly was not true elsewhere.

Two 1956 cases are strikingly similar to the Oxnard 1957 case. Both of these 1956 cases, of course, involved civilian radar installations. The first took place in France, at Orly airport outside Paris. At 11 p.m. on February 17, a "blip" twice as large as the blip made by the largest conventional aircraft was picked up by tower radar operators at Orly. It continued to move around on the scope irregularly, sometimes hovering motionless, and showed apparently intelligent behavior. Repeatedly, the blip was seen to follow aircraft taking off or coming in for a landing at Orly and Le Bourget.

The radar men alerted Michael Desavoie, an Air France pilot, as he took off in a DC-3 at 11:55. "A few minutes after take-off," the pilot recounts, "the Orly control tower signaled me that an unidentified object appeared to be heading toward me. We were then about 4,500 feet above Orgival (west of Paris) radio operator and I both saw a little to the right and at about our height, a winking red light, twice the size of a plane's navigation light. Hoping to avoid the ob-

stacle, I changed course. The light disappeared abruptly. I resumed my original course and Orly then announced that the 'machine' was now above me. But this time I saw nothing.

"I cannot explain this phenomenon; I've never seen anything like it. All I can say is that it was not an airplane, and it could not have been a light from the ground, as there was a fog bank beneath us."

The radar target continued to appear on the Orly tower scope until 3 a.m. At one time it was seen to move from Rambouillet to Boissy-St.-Leger, a distance of 19 miles, in 30 seconds—about 2300 miles an hour. The radar apparatus was inspected thoroughly, and was found to be in perfect working order. (N.Y. *Times*, Feb. 20; N.Y. *Herald-Tribune*, Feb 19 & 21; Paris *l'Express*, Feb. 20; *le Figaro* (Paris), Feb. 21.)

At 11:15 a.m. on the morning of November 8, 1956, Pan American radar technician Donald Freestone, at Miami International Airport, was putting a Bendix RDR-1A weather radar through its paces. The antenna was horizontally directed when a strange blip appeared on the scope, 65 miles southwest of Miami (thus approximately over Cape Sable at the southern most tip of Florida) and at an altitude of 7000-8000 feet. It was hourglass-shaped,

and four or five times as large as any airplane. Freestone and six of his PAA colleagues watched the UFO on the radarscope for twenty minutes as it moved rapidly and apparently aimlessly about over the southern Everglades, its distance from the radar station varying between 50 and 70 miles. "It disappeared and reappeared several times," said Freestone, "but I found that by tilting the antenna up, it could be brought back on the screen. The speed was estimated at 550 and 650 miles an hour. One time, though, it was noted that the target moved 20 miles in six sweeps of the antenna, which rotates at 20 rpm. After remaining stationary at 50 miles for two or three minutes, it began going off in the south-southwest direction it had come from. It was last seen about 100 miles from Miami." Freestone added that "it had a definite shape and moved on a definite course, so it is not believed to have been a freak return. I'm convinced that it was something that is out of our experience." (*Miami Herald*, Dec. 13, 1956.)

Twenty miles in eighteen seconds is 4000 miles per hour.

These observations all involved ground-based radar. Radar reports are by no means limited to the ground; many pilots, both commercial and military, have detected

unidentified targets on plane radar and have made visual observations as well. Typical is a recent case reported directly to CSI by a veteran airline pilot.

Piloting Pan American flight #206A from Nassau to New York on March 29, 1957, Captain Ken Brosdal and two of his crew watched a UFO both visually and on radar as it "dogged" them at their own speed, in the same direction, southeast of their plane. At about 7:30 p.m. their position was about 74° West, 30° North; they were flying at 16,000 feet through the tops of cumulus clouds. John Wilbut, the engineer, was in the co-pilot's seat; co-pilot George Jacobson was navigating, and saw the object first. Brosdal wrote us:

"About 50 miles east of Papa 3—a check point between Nassau and Tuna—the co-pilot, engineer and myself saw a very bright white light. It seemed to grow in intensity to the point where it would be about three or four times as bright as Venus rising, and would then subside. This happened three or four times; meanwhile, I 'came to' enough to check the radar screen. Sure enough, a target showed up at 3 o'clock, 45 to 50 miles away, near the edge of the scope. Using the cursor on the face of the radar, I checked with the visual angle.

"The light appeared to be stationary (on the scope), or

moving in a northeast direction, same as us. We watched it visually for about four or five minutes, and on radar for twenty minutes."

Neither the light nor the "blip" had any definite shape. The radar image indicated that the object was larger than conventional aircraft. What impressed Captain Brosdal most was the intensity of the light in its bright phases. After about four cycles of brightening and dimming, the light faded out slowly and completely. Captain Brosdal did not alert the passengers, and apparently no one in the cabin saw it.

In many cases, there has been an agreement between ground and airborne radar, plus visual confirmation as well. The jet pilots who have been scrambled to investigate these objects have "locked on" to an unidentified target while both the plane and the UFO were being tracked by ground radar. A typical case of this kind, described in detail by Ruppelt, occurred near Port Huron, Michigan, on the night of July 29, 1952. That evening Selfridge Air Force Base received more than 75 telephone calls from people who had been watching strange objects overhead. At 9:40 p.m., an Air Defense Command radar post in central Michigan picked up a target coming south across Saginaw Bay at 625 miles an hour. Three F-94s were north-

east of the post making practice runs on a B-25; the ground controller contacted one of them and vectored him in toward the target.

When the F-94 was at 20,000 feet, the ground controller told the pilot to turn to the right. Both the pilot and the radar operator of the F-94 saw that they were turning toward a large bluish-white light, "many times larger than a star." In the next second or two, the light "took on a reddish tinge, and slowly began to get smaller, as if it were moving away." Just then the ground controller called and said that the unidentified target had just made a tight 180-degree turn. At the speed the target was traveling, it would have to be a jet if it were an airplane at all, but the turn had been too tight for a jet.

Now the target was heading back north. The F-94 pilot gave the engine full power and cut in the afterburner to give chase. The radar operator in the back seat got a good radar lock-on—"just as solid a lock-on as you get from a B-36." The object was at 4 miles range, and the F-94 was slowly closing in on it.

For 30 seconds they held the lock-on; then, just as the ground controller was telling the pilot that he was closing in, the light became brighter and the object pulled away to break the lock-on. The ground controller asked if the radar

operator still had the lock-on, because on his scope the distance between the two blips had almost doubled in one sweep of the antenna, indicating that the unknown target had almost doubled its speed in a matter of seconds.

The F-94 continued the chase for ten minutes, until its fuel supply ran low. The ground radar showed that each time it got close, the object pulled away again. Some of these bursts of speed by the unidentified target were clocked at up to 1400 miles an hour—by UFO standards, slow. (Ruppelt, p. 226-7.)

The case that Ruppelt considers the strongest in Project Blue Book's records occurred at Rapid City, South-Dakota, on August 12, 1953, and was very similar to this Port Huron chase. A UFO, appearing as a bright light in the northeast, was confirmed by radar at Ellsworth AFB as it approached Rapid City, flew once around the town, and returned to the northeast. Two F-84 jets in succession chased this object to the north, but could never approach it closer than three miles. One picked it up on his radar gunsight. The first jet chased the light for 120 miles—completely off the radar scope—but the object followed him back; after the second chase, the UFO flew off toward Fargo, North Dakota, where GOC posts re-

ported it as a fast-moving bluish-white light. Details are given on pp. 302-306 of Ruppelt's book.

The highest speed on record was clocked by airborne radar on a B-29 bomber piloted by Capt. John Harter, while the B-29 was flying over the Gulf of Mexico just before dawn on December 6, 1952. At 5:25 a.m. a blip raced across the bomber's three radar scopes at the unprecedented speed of 5200 miles per hour, to be followed immediately by several others all approaching the aircraft from dead ahead on a near-collision course. One of these, appearing as a blue-white light, was actually seen by the flight engineer as it rushed past the plane. After a few minutes' pause, another group appeared and flung itself past the B-29; two of these were visually confirmed. Five of them were then seen by the thunder-struck radar watchers to come up from behind, turn and rush straight at the bomber from a distance of forty-miles—a gap it would take them only thirty seconds to close. Abruptly, they stopped, and for ten seconds followed the plane at its own snail-like pace; then, resuming their original speed, they swerved away, and all five *crashed directly* into an enormous blip—a half-inch crescent—which had just appeared on the scope. The huge object in-

stantly took off, and was out of radar range within a few seconds.

The velocity at which this giant UFO departed was between 9000 and 10,000 miles per hour.

This report was released to Keyhoe in January, 1953—one of the last that the Air Force ever made public—and it is given on pp. 161-165 of his *Flying Saucers From Outer Space*.

These cases illustrate what the Blue Book authors meant by their vague statement that radar observations “usually were of high-speed objects.”

None of these high-speed radar UFOs could have been a *meteor*. Apart from the maneuvers performed, they were all *too slow*. Meteors travel at satellite velocity—18,000 mph—or better.

All of these incidents occurred at night, and when the UFOs causing the radar returns were seen at all, they were seen only as lights, or luminous bodies of indistinct shape. Unfortunately, this is typical of radar sightings. A few cases are known, however (and there are probably others in ATIC files), in which something more concrete than a light showed itself to the eye. For example:

On August 1, 1952, about an hour before dawn, an Air Defense Command radar station outside of Yaak, Montana, on the extreme northern border of the United States,

began to pick up unidentified targets. The three radar men looked outside, and saw two colored lights in the direction indicated. Until dawn, lights were visible in the sky and as blips on the scope. For the first half hour the lights were red, green, and blue; thereafter they remained yellow. No more than two were seen at one time. They moved erratically, sometimes hovering motionless; when they dived, “they appeared to develop long, white vapor trails.” The same movements visible to the eye were observed on the radar screen, which also revealed that the objects were at a great distance—fifty to eighty miles away. Their angular elevation was not given by the radar, but was seen visually to be about 20-40° above the horizon—implying *an altitude of forty or fifty miles*.

But the most unusual feature of this sighting was that it continued until after dawn. One white light “went out” as it changed direction, and was then seen to continue as a *dark, cigar-shaped object*, silhouetted against the brightness of the morning sky. Shortly afterwards, the UFOs disappeared. (Ruppelt, pp. 255-6; J.S. Hynek, *Jour. Optical Soc. of Amer.* 43 (1953), 313.)

On July 11, 1950, occurred one of the few cases in our records in which a definite shape was seen with a radar

confirmation. According to the UP account (*N.Y. Post*, July 12), the object was seen "last night," but the description sounds as though the sun had been shining. Pilots R. E. Moore and J. W. Martin, from Millington Naval Air Station near Memphis, Tennessee, were flying slow training planes about ten miles away on their left. "At first we thought it was a jet, distorted by glare off the aluminum body," said Martin. But as the object crossed in front of them at a distance of only one mile, they got a better look at it. It was domed on top, "like a World War I helmet seen from the side, or a shiny shallow bowl turned upside down. I think it would be about 25-45 feet across and about seven feet high," said Moore. They tried to follow it, but could not keep up with its speed, which they estimat-

ed as 200 miles an hour. It was in view for about three minutes before disappearing in the distance.

With Moore was Electronics Technician G. D. Wehner, operating the radar equipment. "I caught it on the radar scope," said Wehner. "It was helmet-shaped. The outline of the edges was all right, but glare from the center of it prevented getting a better look."

In our next article we shall discuss radar "angels,"; the famous 1952 radar sightings over Washington, D.C. (which created a nation-wide uproar); the Air Force's remarkable "explanation" for these sightings; and radar "explanations" in general, with special reference to the little-known, extremely interesting report on radar sightings issued by the CAA in December, 1952.

A CORRECTION.—In the January issue, we placed the brig VICTORIA at Long. 30°44'56" E., in the Gulf of Adalia. Unfortunately, reconsultation of the original reference (ATHENAEUM, #1086 (1848), p. 833) has shipwrecked this attempt at relocating her. Her position—correctly given by Fort—was northwest of Malta, at Lat. 36°40'56" N.; Long. 13°44'36" E., when she saw three luminous bodies issue from the sea near her. From the original accounts, it appears questionable whether the sky phenomena reported that evening from Adalia and Mt. Lebanon, a thousand miles to the east, can properly be identified with the objects seen by the VICTORIA.

