

from 'Pilot' Nov '88

# When pilots see

# UFOs

*People have been seeing unidentified flying objects in the skies for years.*

*But when the eyewitness is up there with the UFO, is the sighting more difficult to explain?*

by Dennis Stacy

Illustrations by Pierre Mion

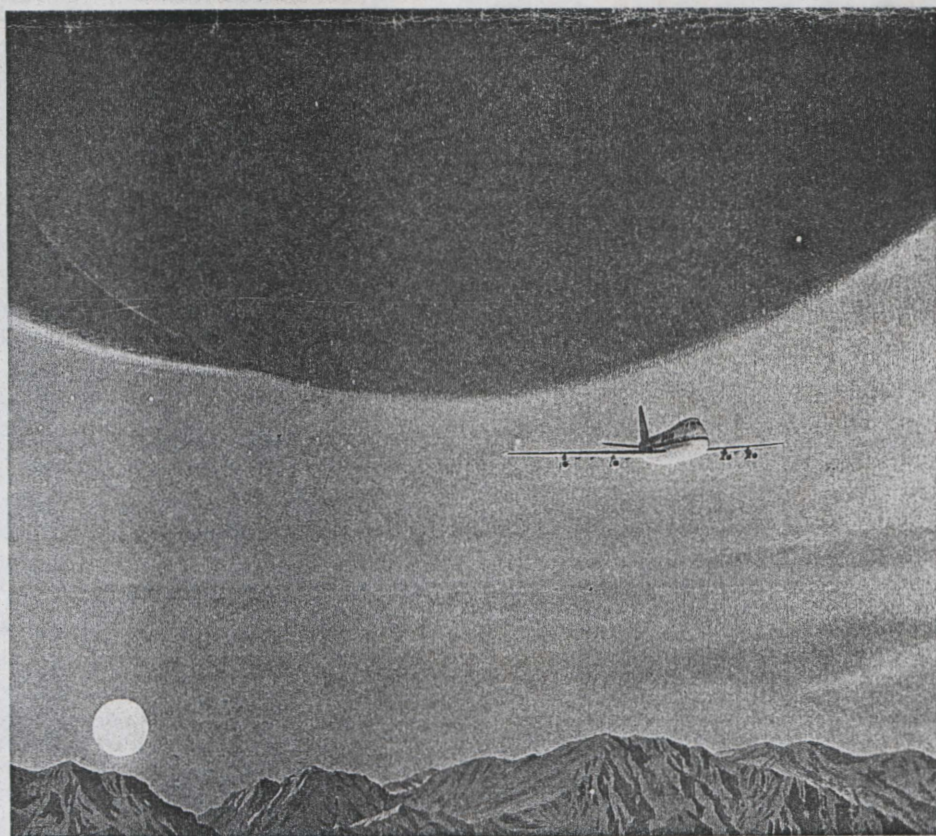
*(Reprinted with permission from the Smithsonian Institution's Air & Space magazine.)*

In the late afternoon of November 17, 1986, Japan Air Lines flight 1628, a Boeing 747 with a crew of three, was nearing the end of a trip from Iceland to Anchorage, Alaska. The jet, carrying a cargo of French wine, was flying at 35,000 feet through darkening skies, a red glow from the setting sun lighting one horizon and a full moon rising above the other.

A little after six p.m., pilot Kenju Terauchi noticed white and yellow lights ahead, below, and to the left of his airplane. He could see no details in the darkness and assumed the lights were those of military aircraft. But they continued to pace the 747, prompting first officer Takanori Tamefuji to radio Anchorage air traffic control and ask if there were other aircraft nearby. Both Anchorage and a nearby military radar station announced that they were picking up weak signals from the 747's vicinity. Terauchi switched on the digital colour cockpit weather radar, which is designed to detect weather systems, not other aircraft. His radar screen displayed a green target, a colour usually associated with light rain, not the red he would have expected from a reflective solid object.

Because he was sitting in the left-hand seat, Terauchi had the only unobstructed view when the lights, still in front of and below the airplane, began moving erratically, "like two bear cubs playing with each other," as the pilot later wrote in a statement for the Federal Aviation Administration. After several minutes, the lights suddenly darted in front of the 747, "shooting off lights" that lit the cockpit with a warm glow.

As the airplane passed over Eielson Air Force Base, near Fairbanks, the captain said



he noticed, looming behind his airplane, the dark silhouette of a gigantic "mothership" larger than two aircraft carriers. He asked air traffic control for permission to take his airplane around in a complete circle and then descend to 31,000 feet. Terauchi said his shadower followed him through both manoeuvres.

A United Airlines flight and a military C-130 were both in the area and Anchorage asked the airplanes to change course, intercept the Japanese 747, and confirm the sighting. Both airplanes flew close enough to see JAL 1628's navigation lights, alone in the night sky, before Terauchi reported that the unidentified flying objects had disappeared. The encounter had lasted nearly fifty minutes.

Because it involved an airline pilot and an unidentified flying object that had apparently been captured on radar, the JAL 1628 encounter attracted a great deal of public attention. But UFO reports from pilots — private, military, and airline — are not new to the subject of 'ufology.' One of the best

**Above: June 24, 1947: private pilot Kenneth Arnold's report of an encounter gives birth to the term 'flying saucers'.**

**Left: November 17, 1986: Kenju Terauchi and the crew of Japan Air Lines flight 1628 claim a UFO sighting over Alaska.**

known cases was a sighting by Idaho businessman and private pilot Kenneth Arnold. Flying his single-engined airplane over Washington's Cascade Mountains on June 24, 1947, Arnold spotted nine silvery, crescent-shaped objects skimming along at high speed near Mt. Rainier. They dipped as they flew, "like a saucer would if you skipped it across the water," Arnold told reporters — and thus "flying saucers" entered the popular vocabulary.

Pilots had reported similar unexplained aerial phenomena before, mainly in the form of the Foo Fighters noted by American bomber crews over Europe in World War II. But Arnold's sighting, with its accompanying front-page publicity, struck a jittery, post-Hiroshima nerve in American society and set off a barrage of similar reports. Skeptics believed that every sighting had a prosaic explanation, such as misidentification of stars, planets, or natural atmospheric phenomena. Others thought that there was more to UFOs, that they could even be visitors from other planets.

Following the Arnold incident, the U.S. Air Force was given the responsibility of investigating UFO reports from the United States, first as Project Sign (also called Saucer), then Grudge, and finally Blue Book. Usually understaffed and underfunded, the Air Force programme functioned more like a public relations office than a scientific investigation, according to the late astronomer J. Allen Hynek himself, who served as a consultant to Project Blue Book from 1948 until it was dissolved in December 1969, gradually changed from a skeptic into a believer.

Not even sceptics can deny the subject's popular appeal. A Gallup poll found that 88 percent of its respondents had heard of UFOs. Nearly half of those polled believed UFOs were real, not figments of the imagination or misperceived natural phenomena. Nine percent of the adult population of the United States claimed to have seen one.

Of these claims, pilot reports are the ones that interest Richard F. Haines, a perceptual psychologist who compiles AIRCAT, a computerized catalogue that lists more than 3,000 UFO sightings by aviators over the past forty years. Chief of the Space Human Factors Office at NASA's Ames Research Center in California, Haines is the author of *Observing UFOs*, a handbook of methodology for accurate observation, and the editor of *UFO Phenomena and the Behavioral Scientist*, a collection of psychologically oriented essays on the subject.

AIRCAT's cases include Blue Book's declassified files as well as some Haines collected and researched personally. Before joining the Space Human Factors Office, his research included interviewing pilots about what they had seen peripherally during takeoffs and landings, data that may one day lead to redesign of airplane cockpits. "I was interviewing pilots anyway," he says, "and they'd ever seen anything strange."

Haines concentrated on pilot reports for reasons other than convenience. "They have

a unique vantage point simply by being in the air," he says, "if for no other reason than if the phenomenon is between your eyes and the ground, you can calculate the slant range, and you're establishing an absolute maximum distance the object could be away. You can't do that with the object against the sky background.

"Pilots also have available to them a variety of electromagnetic sensors of various kinds onboard the aircraft itself, which can possibly record some manifestations of the phenomenon, such as electromagnetic frequency and even energy content," he says. "They can control the location of their plane so that they can manoeuvre to gain the best vantage point, under some conditions.

"Finally," says Haines, "they represent a very stable personality type with a high degree of training, motivation, and selection. If a pilot comes forward with a strange tale, I give him a lot of careful concentration because he's putting his reputation on the line and maybe his job. He's had to have thought the details out in his mind already, and perhaps eliminated a number of explanations before going public."

He's also likely to request anonymity. Kenneth Arnold, tired of the publicity following his sighting, later commented, "If I ever see again a phenomenon of that sort, even if it's a ten-storey building, I won't say a word about it." The feeling was echoed even in the Air Force. When Blue Book's predecessor, Project Grudge, conducted an informal survey of Air Force pilots in the late 1940s, one respondent said, "If a spaceship was flying wingtip-to-wingtip formation with me, I would not report it."

The UFO phenomenon got its tabloid reputation at least in part because of the saucer-busting of active UFO sceptics. Foremost is the UFO panel of CSICOP, the Committee for the Scientific Investigation of Claims of the Paranormal (see "Sceptics R Us"). Led by Philip J. Klass, contributing avionics editor of *Aviation Week and Space Technology*, James Oberg, an aerospace writer and a manned space operations specialist, and Robert Sheaffer, a Silicone Valley computer systems analyst, CSICOP exposes hoaxes and uncovers explanations of UFO sightings.

Sheaffer doesn't agree that pilots are

**January 7, 1948: Captain Thomas Mantell crashes after chasing a UFO later identified as a Skyhook balloon.**



superior UFO observers. "The idea of pilots as super witnesses just doesn't hold," he says. "The last I heard they were human like the rest of us, and still subject to all the concerns and errors of human psychology and perception. In fact, they're apt to be less worried about how bright an object is, or its angular elevation, than in keeping their plane in the air. Anyone surprised by a very brief and unexpected event is not likely to report it accurately."

Haines agrees that normal perception isn't infallible. Very bright objects, for example, can appear to be much nearer than they actually are. Autokinetic, or self-generated, movement of the eyeball can make distant objects like stars and planets appear to move. "Also, when you're flying in a sunny, clear blue atmosphere," Haines says, "sometimes the eye can focus inaccurately, so that you're not focusing at infinity anymore, but maybe only one or two meters in front of the cockpit."

Because the way we see external events depends on the body's perception of itself in space, acceleration and inertial forces that disrupt the inner ear's delicate sense of balance can also lead to optical illusions. Still, Haines contends that many induced illusions are short-lived and cannot account for the majority of AIRCAT's cases. "If a pilot describes a disk-shaped airform with no visible means of propulsion pacing his right wing for thirty minutes, doing everything he's doing — and I have plenty of cases like that — then that's not an optical illusion, it's not a bird or balloon or meteor, it's not any of those prosaic explanations," Haines says. "We don't know what it is necessarily, but we know quite clearly what it isn't".

One sensational pilot-and-UFO case almost certainly had a prosaic explanation. On the afternoon of January 7, 1948, people near Godman Air Force Base at Fort Knox,

**July 4, 1981: an L-1011 pilot is surprised by a UFO during a six-second encounter over Lake Michigan.**

Kentucky, reported an object in the sky that looked like "an ice cream cone topped with red." Captain Thomas F. Mantell, flying in command of a ferry flight of four National Guard F-51 Mustangs (P-51s the previous year), was asked to investigate. None of the fighters was equipped with oxygen, and after three dropped out of the chase Mantell continued alone. "It's directly ahead and above and still moving at about half my speed," he radioed. "The thing looks metallic and of tremendous size. I'm going up to 20,000 feet, and if I'm no closer I'll abandon the chase." A few minutes later Mantell's airplane crashed, earning him dubious distinction as the world's first "UFO martyr."

Project Blue Book proposed that Mantell succumbed to hypoxia, or oxygen starvation, and crashed while chasing the planet Venus, but later evidence indicates he was pursuing a top-secret, high atmosphere Skyhook balloon. The balloons, designed for upper-atmosphere research, were later used by the CIA for surveillance. At altitudes of 70,000 feet or more, the translucent plastic

In his book *Above Top Secret* (Sidgwick & Jackson, 1987) UFOlogist Timothy Good recounts several instances of pilots reporting sightings of UFOs over Britain. During a NATO exercise code-named *Mainbrace* on 19 September 1952 RAF officers and aircrew at RAF Topcliffe reported seeing a "silver and circular object about the size of a Vampire jet" following a Meteor landing at nearby RAF Dishforth. The UFO is said to have performed a kind of falling-leaf manoeuvre, hovered and then accelerated away at "incredible speed". Several other sightings are reported to have been made during this exercise, allegedly spurring the Royal Air Force to officially recognise the existence of UFOs.

A year later the crew of a night-fighter flying at 20,000 feet over RAF West Malling in Kent reported seeing a spherical object emitting a very bright light at a much higher altitude, again moving at tremendous speed. An Army radar station tracked a strong return at the same time, reporting the signal "three or four times larger than the largest airliner". The War Office concluded that the object seen by the fighter crew was a radio-sonde balloon of some 75 feet diameter. The Army radar technician claimed the object he tracked would have been 350–450 feet across.

On 14 October 1954 a pilot from No 640 Squadron, Royal Auxiliary Force operating in CAVU weather from RAF North Weald encountered contrails above his Meteor F.8 at an estimated altitude of 30–40,000 feet. "Through the middle of the trails I saw three objects which I thought were aeroplanes,

but they weren't trailing. They came down through the middle of that towards Southend and then headed towards me. When they got to within a certain distance two of them went off to my port side — one gold and one silver — and the third object came straight towards me and closed to within a few hundred yards, almost filling the windscreen . . . it was saucer-shaped with a bun on top and a bun underneath, and was silvery and metallic. There were no portholes, flames or anything." That same month, and in November, the War Office disclosed that defence radars had tracked strange 'blip formations' made up of forty or fifty returns covering an area of six miles long and several miles wide. These incidents were reportedly treated with the utmost secrecy, with no trace to be found in the Public Records Office.

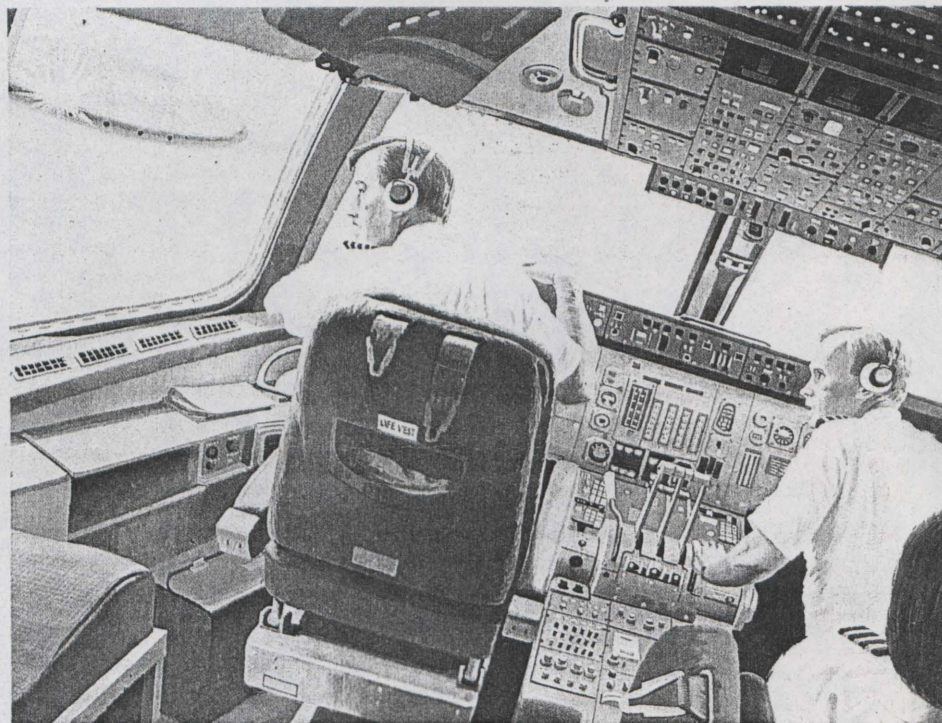
One night in August 1956 ground radars at RAFs Bentwaters and Lakenheath in Suffolk tracked a UFO which is said to have 'buzzed' the Lakenheath circuit. A RAF fighter controller vectored a Venom night fighter on to the target, which the jet's navigator acquired on his own radar, but contact was lost. Papers relating to this incident and gun camera film from the Venom have also disappeared.

Author Good alleges a worldwide official cover-up on UFO sightings, claiming that the MoD maintain a clandestine UFO tracking and research unit within Flying Complaints Flight at RAF Provost & Security Service headquarters at Rudlow Manor, Wiltshire.

balloons would often be swept rapidly along by the jet stream.

Mantell wasn't the last pilot to die while pursuing, or being pursued by, an alleged UFO. At 6.19 p.m. on Saturday, October 21, 1978, Frederick Valentich of Melbourne, Australia, took off from Moorabbin Airport aboard a rented Cessna 182, bound for

nearby King Island. He planned to pick up a load of crayfish for his fellow officers at the Air Training Corps, where he was a flight instructor. An experienced daytime pilot with an unrestricted licence and instrument rating, Valentich, twenty, was relatively inexperienced at night flying. He was also a UFO enthusiast who, his father said later, had



claimed a UFO sighting ten months before his disappearance.

Out of Melbourne, Valentich paralleled Cape Otway before heading over open water for King Island, where he was scheduled to land at 7.28. At 7.06 he radioed Melbourne Flight Service, asking, "Is there any known traffic in my area below 5,000 feet? Seems to be a large aircraft." Ground control asked what kind. "I cannot confirm," Valentich replied. "It has four bright lights that appear to be landing lights . . . (and) has just passed over me about 1,000 feet above . . . at the speed it's travelling are there any RAAF (Royal Australian Air Force) aircraft in the vicinity?"

"Negative," answered Melbourne. "Confirm you cannot identify aircraft?" Valentich replied in the affirmative, adding three minutes later, "It's not an aircraft, it's . . ." At that point there was a brief break in the recorded transmission that was later released to the Australian press.

"It is flying past," Valentich continued. "It has a long shape. Cannot identify more than that . . . coming for me now. It seems to be stationary. I'm orbiting and the thing is orbiting on top of me. It has a green light and sort of metallic light on the outside." The pilot then informed air traffic controllers that the object had vanished. At 7.12 he was back on the air, reporting his "engine is rough-idling and coughing." Ground control asked what his intentions were; Valentich said, "Proceeding King Island. Unknown aircraft now hovering on top of me." His radio transmission ended in a jarring, seventeen-second metallic noise. Neither pilot nor airplane has been seen or heard of since. Some have attempted to explain away the incident as a hoax or a suicide, while others have suggested that the inexperienced night pilot, overcome by vertigo, may have turned upside down and seen the reflections of his own lights before the engine of his Cessna failed.

Haines has published a book about the Valentich incident, *Melbourne Episode: Case Study of a Missing Pilot*, and he is in the

midst of another compiling all of AIRCAT's cases. Most are variations on ufology's two major themes: daylight disks and nocturnal lights. The first involves what appear to be objects in the shape of disks, spheres, or elliptical forms. Nocturnal lights normally appear as single, continuously visible white light sources. Sometimes the lights are also detected by ground or airborne radar and, less frequently, accompanied by radio static and brief engine interruption, such as that experienced by Valentich. Most sightings involve two or more witnesses and last slightly more than five minutes, long enough in most cases, says Haines, to eliminate a number of explanations, such as meteors and balloons.

According to Haines, UFO reports made by aircrew and pilots closely parallel those of observers on the ground. "When I started," he says, "the idea was to see whether or not pilots were reporting the same phenomenon. I think AIRCAT pretty well establishes they are."

One case from the AIRCAT files involved a pilot — call him Captain Gray — who had logged more than 21,000 hours in a 31-year career. On July 4, 1981, he was piloting a passenger flight in a Lockheed L-1011 Tri-star, cruising on automatic pilot at 37,000 feet. The flight was bound from San Francisco to New York's Kennedy Airport, approaching the eastern shore of Lake Michigan. The lake below was obscured by clouds, but ahead and above the sky was clear.

Suddenly, from ahead and to the left of the aircraft, a silvery disk "splashed into view full size . . . like the atmosphere opened up," Gray said later. He leaned forward, blurting out, "What's that?"

Appearing at first like a sombrero viewed from the top, the object rolled as it approached the airplane along an arc that carried it toward and then abruptly away from the L-1011. From the side, the disk appeared ten times wider than it was thick, with six evenly spaced, jet black portholes along its edge. A bright splash of sunlight

flared off the top left end of the object. As it disappeared, seemingly in a shallow climb, Gray noticed what looked like the dark smudge of a contrail.

"Did you just see anything?" Gray asked his first officer. "Yes," he replied, "a very bright light flash." The flight engineer, his view blocked, had seen nothing.

The overriding question for ufologists is whether a sighting like Captain Gray's is a natural phenomenon or an object that displays evidence of intelligence. "As a scientist I have to be cautious," says Haines. "But when AIRCAT is made public, I think the technical-minded can read between the lines."

Sceptics would disagree. "I think there are more than enough ordinary stimuli floating around to create the UFO phenomena, the UFO social event, of the past forty years," says CSICOP's James Oberg. "Because of imperfections in human memory and perception, coincidences, and so on, there'll always be a small residue of unsolved sightings. A small percent of airplane crashes, murders, and missing-person cases don't get solved either. But you don't have to invoke alien airplane saboteurs, murderers, or kidnapers to explain them."

Haines reports that Captain Gray was a sceptic before his own UFO confrontation. But afterwards, "there was no doubt in his mind whatsoever" that what he had seen was an extra-terrestrial spacecraft.

Captain Terauchi of JAL flight 1628 was equally convinced that he had encountered an extraterrestrial craft in the skies above Alaska. Sceptics are not so sure, citing the fact that Terauchi had reported seeing UFOs on two previous occasions — and would report yet another sighting the following January, again over Alaska. (He would later explain his second Alaskan encounter as city lights reflecting off ice crystals in clouds.) CSICOP's Philip Klass thinks that ice crystals in clouds played a significant role in the November encounter. He theorizes that moonlight reflecting off the clouds accounts for the initial sighting, and that when the crew later saw Mars and Jupiter, bright in the autumn sky, they assumed the planets were lights from the original UFO. The signal on the onboard radar, Klass believes, could have been reflected by the same ice crystals (although ice crystals, unlike rain droplets, are very poor reflectors of radar energy). The FAA analyzed the ground radar images and concluded that they had been uncorrelated radar signals, a common phenomenon that occurs when a radar beam bounced back from an airplane to a ground station doesn't match up with a separate signal sent by the airplane's transponder.

That pilots, as well as ground observers, have seen something in the skies is undeniable. The question of what they have seen has yet to be satisfactorily resolved. Maybe it never will be. It may even be irrelevant. As Jacques Vallée, who has written several books on the subject, once said, "It no longer matters whether UFOs are real or not, because people behave as if they were, anyway."

### **Sceptics R Us**

The Committee for the Scientific Investigation of Claims of the Paranormal (CSICOP) was founded in the spring of 1976, during a meeting of the American Humanist Association in Buffalo, New York. The impetus for the group's formation had been provided a year earlier by the publication of *Objections to Astrology* by Paul Kurtz, professor of philosophy at the State University of New York at Buffalo. The manifesto had been signed by 186 scientists, including 18 Nobel prizewinners, who feared that the public was confusing astronomy with astrology.

Today Kurtz is chairman of the loosely knit international organization, which holds annual meetings and publishes a 25,000-circulation quarterly, *The Sceptical Inquirer*. The journal is devoted to articles debunking psychokinesis, telepathy, clairvoyance, and other psychic claims, the Loch Ness Monster, astrology, and UFOs. CSICOP Fellows include science writer Isaac Asimov,

astronomer Carl Sagan, Nobel physicist Murray Gell-Mann, and magician James Randi, recent recipient of a genius grant awarded by the MacArthur Foundation.

The UFO subcommittee is led by Philip J. Klass (*UFOs — Identified, UFOs Explained, and UFOs, the Public Deceived*), James Oberg (*UFOs & Outer Space Mysteries*), and Robert Sheaffer (*The UFO Verdict*). The subcommittee consists of about two dozen members who operate as an informal network, exchanging articles about UFOs for information and comment. Some members make themselves available for local media appearances to counteract what Klass calls "the popular view of UFOs as extraterrestrial spaceships."

"We prefer to have sceptics, of course," says Klass, "but we don't require anyone to take an oath of allegiance saying they don't believe in flying saucers. Basically, we're a mutual education circuit."

— Dennis Stacy