

JULY/SEPTEMBER • 1973

**UFO  
QUARTERLY  
REVIEW**

A NICAP PUBLICATION

# UFO QUARTERLY REVIEW

Vol. I, No. 3  
July-September 1973

## THIS ISSUE

•LOST PATROL  
Michael McDonell / 2

•UFO BASE ON  
THE MOON:  
FACT OR FICTION?  
Stuart Nixon / 13

•PROPOSAL FOR  
UFO DESIGN  
Kiril Terziev / 21

•LETTERS  
Readers / 24

Editorial Review Board:  
John Acuff, Charles Miller,  
Stuart Nixon

## UFO QUARTERLY REVIEW

Copyright © 1973 by the National Investigations Committee on Aerial Phenomena, Inc. (NICAP). All rights reserved except 200 words or less with credit. Published quarterly at Kensington, Md. Subscription rate: \$5 per year. Address all correspondence to NICAP, Suite 23, 3535 University Blvd. West, Kensington, Md. 20795.

“ Perhaps the most remarkable aspect of the polywater puzzle is that it has been resolved so quickly—almost 10 years to the day after it was discovered and after 4½ years of research.

‘Comparable scientific disputes have required decades to unravel,’ commented Princeton University chemist Dr. Leland Allen in an article in the British journal *New Scientist* called ‘The Rise and Fall of Polywater.’

Moreover, Allen wrote, ‘The polywater phenomenon has further verified the efficacy of the scientific method and the always difficult requirement of seeing a problem through to completion in the face of overwhelming bias from one’s peers.’

Allen said that most scientists rejected polywater out of hand for the wrong reasons—because it was different. They lacked the hard data to prove that polywater was a non-discovery.

On the other hand, he wrote, ‘Almost all the researchers who made a prolonged effort on the problem were original believers who subsequently changed their stand.’”

—Washington Post  
September 2, 1973

At 1410 on December 5, 1945, five TBM *Avengers* comprising Flight 19 rose into the sunny sky above NAS Fort Lauderdale, Fla. Turning east the formation headed out over the Atlantic on the first leg of a routine exercise from which neither the 14 men of Flight 19 nor the 13-man crew of a PBM *Mariner* sent out to search for them were ever to return.

The disappearance of the five *Avengers* and the PBM sparked one of the largest air and sea searches in history as hundreds of ships and aircraft combed over 200,000 square miles of the Atlantic Ocean and Gulf of Mexico, while, on land, search parties scoured the interior of Florida on the outside chance that the aircraft might have gone down there undetected.

But nothing was ever found. No wreckage, no bodies, nothing. All that remained were the elements of mystery and a mystery it quickly and easily became. Flight 19—"The Lost Patrol"—is now the central element of the legend of the infamous "Bermuda Triangle." Much has been written and speculated about the Triangle, a stretch of ocean credited by some as being "the graveyard of the Atlantic," home of the forbidding Sargasso Sea. In actuality, the Triangle is no such geometric entity; it is an area whose northern boundaries stretch roughly from the southern Virginia coast to the Bermuda Islands, southward to the Bahamas and west to the Florida Keys. And within this area, it has been reported since 1840 that men, ships and even aircraft have disappeared with frequent regularity. Why? It depends on whom you talk to. Some claim that this Hoodoo Sea is a maritime Molech, that supernatural forces are at work there. Others assert that strange magnetic and natural forces unique to the area and unknown to modern science are responsible for the bizarre disappearances. Still more believe that with the heavy sea and air traffic moving through the area it is inevitable that some unexplained "incidents" are bound to happen. But no matter what the argument and rationale, there is something oddly provoking about these occurrences, particularly the "normal" circumstances which existed prior to each disaster. It is the writer's view that many a good tale would lie a-dying if all the facts were included.

Take the Lost Patrol, for example. The popular version inevitably goes something like this:

Five *Avengers* are airborne at 2:00 p.m. on a bright sunny day. The mission is a routine two-hour patrol from Fort Lauderdale, Fla.—due east for 150 miles, north for 40 miles and then return to base. All five pilots are highly experienced aviators and all of the aircraft have been carefully checked prior to takeoff. The weather over the route is reported to be excellent, a typical sunny Florida day. The flight proceeds. At 3:45 Fort Lauderdale tower receives a call from the flight but, instead of requesting landing instructions, the flight leader sounds confused and worried. "Cannot see land," he blurts. "We seem to be off course."

"What is your position?" the tower asks.

There are a few moments of silence. The tower personnel squint into the sunlight of the clear Florida afternoon. No sign of the flight.

Michael McDonell is a former associate editor of *Naval Aviation News* and presently a speechwriter with the U.S. Environmental Protection Agency. This article is reprinted with permission of *Naval Aviation News*. Pictured at left are five Avenger aircraft similar to ones that disappeared on Flight 19. Photos courtesy U.S. Navy.

# LOST PATROL

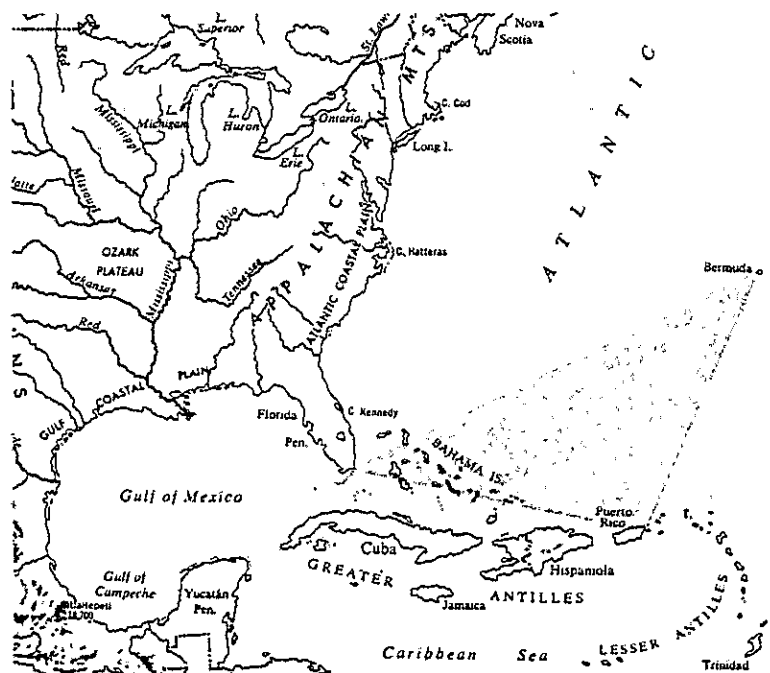
by Michael McDonell

"We cannot be sure where we are," the flight leader announces. "Repeat: Cannot see land."

Contact is lost with the flight for about ten minutes and then it is resumed. But it is not the voice of the flight leader. Instead, voices of the crews are heard, sounding confused and disoriented, "more like a bunch of boy scouts lost in the woods than experienced airmen flying in clear weather." "We can't find west. Everything is wrong. We can't be sure of any direction. Everything looks strange, even the ocean." Another delay and the tower operator learns to his surprise that the leader has handed over his command to another pilot, for no apparent reason.

Twenty minutes later, the new leader calls the tower, his voice trembling and bordering on hysteria. "We can't tell where we are... everything is...can't make out anything. We think we may be about 225 miles northeast of base...." For a few moments the pilot rambles incoherently before uttering the last words ever heard from Flight 19: "It looks like we are entering white water...We're completely lost."

Within minutes a *Mariner* flying boat, carrying rescue equipment, is on its way to Flight 19's last estimated position. Ten minutes after takeoff, the PBM checks in with the tower...and is never heard from again. Coast Guard and Navy ships and aircraft comb the area for the six aircraft. They find a calm sea, clear skies, middling winds of up to 40 miles per hour—and nothing else. For five days almost



Bermuda Triangle is not actually triangular since many famous disappearances of ships and planes have occurred between Bermuda and Cape Hatteras and at other sites outside area shown. During winter months, seas in Triangle can be especially treacherous, according to Navy statistics.

250,000 square miles of the Atlantic and Gulf are searched. Yet, not a flare is seen, not an oil slick, life raft or telltale piece of wreckage is ever found.

Finally, after an extensive Navy Board of Inquiry investigation is completed, the riddle remains intact. The Board's report is summed up in one terse statement: "We are not able to even make a good guess as to what happened."

## Official Record Reveals New Details

Maybe not, but let's try. Popular versions of the story of the Lost Patrol such as the preceding tale bear striking resemblances to one another, so much so that, because of re-occurring passages in all of them, one is led to believe that a certain amount of borrowing and embellishing from a single source has been performed over the 28 years since the incident occurred. And let us say now that this article is not a debunking piece, but simply a perusal of an incident that has grown to the stature of a myth—a legend that begs to be more expertly examined.

The following account is based on the official Board of Inquiry report concerning the disappearance of Flight 19 and PBM-5, Buno 59225. The record consists of testimony of individuals, expert opinions and logs of the numerous radio transmissions.

To begin with, the Lost Patrol was not a patrol at all. It was an overwater navigation training hop composed of an instructor, 4 Naval Aviators undergoing VTB-type advanced training and nine enlisted aircrewmen who, with the exception of one, were all undergoing advanced combat aircrew training in VTB-type aircraft. The instructor was a combat veteran with 2509.3 hours of flying time, most of it in type, while his students had approximately 300 hours each, about 60 in the TBM/TBF. With the exception of the instructor, hardly a "highly experienced" lot.

The flight was entitled Navigation Problem No. 1 which ran as follows: (1) depart NAS Fort Lauderdale 26 degrees 03 minutes north and 80 degrees 07 minutes west and fly 091 degrees distance 56 miles to Hens and Chickens Shoals to conduct low level bombing and, after bombing, continue on course 091 for 67 miles, (2) fly course 346 degrees for 73 miles and (3) fly course 241 degrees for a distance of 120 miles, returning to NAS Fort Lauderdale. In short, a triangular route with a brief stop for some glide bombing practice on the first leg out.

Prior to the hop, the five *Avengers* were thoroughly preflighted. All survival gear was intact, fuel tanks were full, instruments were checked—but one mechanic commented that none of the aircraft had a clock. Of the 24-hour variety, clocks normally installed aboard aircraft were highly prized by souvenir hunters. Besides, everyone had his own personal wristwatch—or did he?

Inside the training office, the students of Flight 19 waited for their briefing; they were going to be late—takeoff time was set for 1345 and the instructor hadn't shown up. At 1315 he arrived and asked the aviation training duty officer to find another instructor to take his place. Giving no reason, he stated simply that he did not want to take this one out. His request was denied; he was told that no relief was available.

It was the instructor's first time on this particular syllabus hop. He had only recently arrived from NAS Miami (where he had also been a VTB-type instructor). But to the anxiously waiting students, it was the third and final navigational problem. The previous two had been in the same general area and now they were anxious to complete the phase.

At last the briefing began. The weather for the area of the problem was described as "favorable." In the words of the training duty officer who attended the briefing, "The aerologist sends us a report in the morning. If weather conditions are unfavorable, he will inform us...and tell us about the condition. In the absence of any further information, I considered the weather favorable." The estimate was later confirmed by another TBM training flight performing the same problem an hour earlier than Flight 19: weather favorable, sea state moderate to rough.

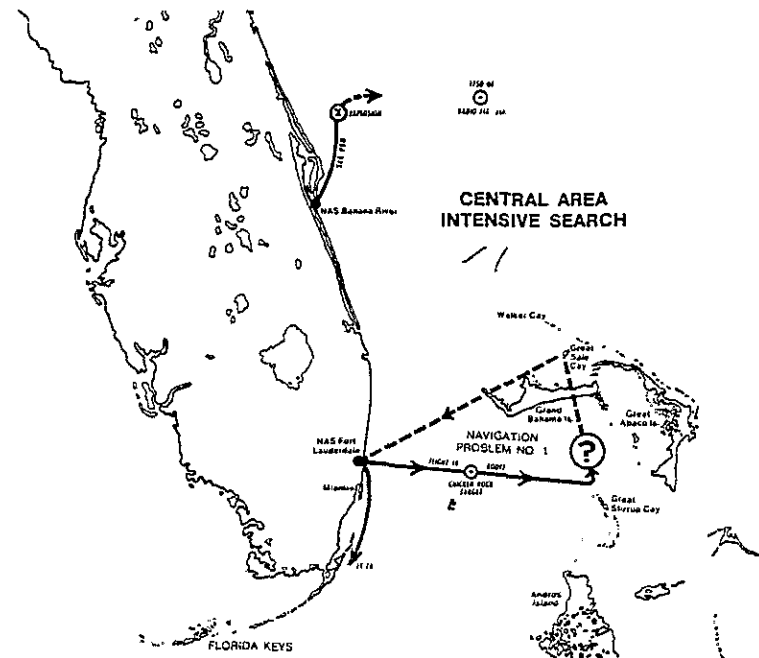
At 1410 the flight was in the air, led by one of the students. The instructor, whose call sign was Fox Tare Two Eight (FT-28), flew the rear, in a tracking position. ETA was 1723 and the TBMs had enough fuel to remain aloft for five to five-and-a-half hours. Hens and Chickens Shoals, commonly called Chicken Rocks, the point at which they would conduct low level bombing, was only 56 miles away. If they cruised at 150 mph, they would arrive at the Rocks in about 20 minutes or so. Thirty minutes for bombing and then continue on the final 67 miles of the first leg.

At Fort Lauderdale, the tower picked up conversation from Flight 19: "I've got one more bomb." "Go ahead and drop it" was the response. A fishing boat captain working near the target area remembers seeing three or four airplanes flying east at approximately 1500.

Assuming that the flight flew the rest of the first leg and then changed to course 346, they would have been near Great Sale Cay by 1540. But at about that time FT-74, the senior flight instructor at Fort Lauderdale, was joining up his squadron around the field when he heard what he assumed were either some boats or aircraft in distress. "One man was transmitting on 4805 to 'Powers' [the name of one of the students]." The voice asked Powers what his compass read a number of times and finally Powers said, "I don't know where we are. We must have got lost after that last turn."

Upon hearing this, the senior flight instructor informed Fort Lauderdale that either a boat or some planes were lost. He then called, "This is FT-74, plane or boat calling 'Powers' please identify yourself so someone can help you." No response but, a few moments later, the voice came on again asking the others if there were any "suggestions." FT-74 tried again and the voice was identified as FT-28. "FT-28, this is FT-74, what is your trouble?" "Both my compasses are out and I am trying to find Fort Lauderdale, Fla. I am over land but it's broken. I am sure I'm in the Keys but I don't know how far down and I don't know how to get to Fort Lauderdale."

The Keys? Both compasses out? FT-74 paused and then told FT-28 to "...put the sun on your port wing if you are in the Keys and fly up the coast until you get to Miami. Fort Lauderdale is 20 miles further, your first port after Miami. The air station is directly on your left from the port." But FT-28 should have known if he was actually over the Keys; he had flown in that area for six months while



Flight 19 was scheduled to fly routine navigation problem whose course, ironically enough, was triangular. Question mark indicates area where flight apparently developed confusion over its position. PBM rescue plane disappeared north of this area, as shown.

stationed at Miami. He sounded rattled, confused.

"What is your present altitude? I will fly south and meet you." FT-28 replied, "I know where I am now. I'm at 2300 feet. Don't come after me."

But FT-74 was not convinced. "Roger, you're at 2300. I'm coming to meet you anyhow." Minutes later, FT-28 called again: "We have just passed over a small island. We have no other land in sight." How could he have run out of islands? How could he have missed the Florida peninsula if he was in the Keys? FT-74 was beginning to have serious doubts.

FT-28 came back on the air. "Can you have Miami or someone turn on their radar gear and pick us up? We don't seem to be getting far. We were out on a navigation hop and on the second leg I thought they were going wrong, so I took over and was flying them back to the right position. But I'm sure now that neither one of my compasses is working." FT-74 replied: "You can't expect to get here in ten minutes. You have a 30 to 35-knot head or crosswind. Turn on your emergency IFF gear, or do you have it on?" FT-28 replied that he did not.

At 1626 Air-Sea Rescue Task Unit Four at Fort Everglades heard FT-28: "I am at angels 3.5. Have on emergency IFF. Does anyone in the area have a radar screen that could pick us up?" ASRTU-4 Rogered and, not having direction-finding gear, contacted Fort Lauderdale, who replied that they would notify NAS Miami and ask

the other stations to attempt to pick up the lost flight on radar or with direction finders. In all, more than 20 land facilities were contacted to assist in the location of Flight 19. Merchant ships in the area were asked to be on the alert and several Coast Guard vessels were told to prepare to put to sea. But there were delays. Teletype communication with several locations was out and radio fixes were hampered by static and interference from Cuban broadcast stations.

At 1628, ASRTU-4 called FT-28 and suggested that another plane in the flight with a good compass take over the lead. FT-28 Rogered but, from fragmentary messages between the flight leader and the students concerning their estimated position and headings, it appears that no other plane took the lead at this time.

Meanwhile, FT-74 was having his own problems maintaining contact with the lost flight. "Your transmissions are fading. Something is wrong. What is your altitude?" From far away, FT-28 called, "I'm at 4500 feet." At this point FT-74's transmitter went out and he had no power to continue on the common frequency with the lost *Avengers*.

According to the senior instructor's later testimony, "...as his transmissions were fading, he must have been going away north as I headed south....I believe at the time of his first transmissions, he was either over the Biminies or Bahamas. I was about 40 miles south of Fort Lauderdale and couldn't hear him any longer."

Did he remember any more? Yes, he recalled that at 1600, FT-28 had reported that he had a visibility of 10 to 12 miles. FT-74 further stated that while flying offshore at the time, he had observed a very rough sea covered with white caps and streamers. (The surface winds were westerly, about 22 knots, and visibility was very good in all directions except directly west.)

Upon returning to Fort Lauderdale, FT-74 went to operations and related as much as he could remember of the conversations with FT-28 to the duty officer and requested permission to take the duty aircraft out to search for the flight. Receiving no answer, the pilot then made the same request to the flight officer who replied, "Very definitely, no."

The flight officer had been notified of Flight 19's difficulty at 1630 by the duty officer. "I immediately went into operations and learned that the flight leader thought he was along the Florida Keys. I then learned that his first transmission revealing that he was lost had occurred around 1600. I knew by this that the leader could not possibly have gone on more than one leg of his navigation problem and still gotten back to the Keys by 1600...I notified ASRTU-4 to instruct FT-28 to fly 270 degrees and also to fly towards the sun." (This was standard procedure for lost planes in the area and was drummed in to all students.)

At 1631, ASRTU-4 picked up FT-28. "One of the planes in the flight thinks if we went 270 degrees we could hit land."

At 1639, the Fort Lauderdale operations officer contacted ASTRU-4 by telephone. He concurred with FT-74 and felt that the flight must be lost over the Bahama Bank. His plan was to dispatch the Lauderdale ready plane, guarding 4805 kc, on a course 075 degrees to try to contact FT-28. If communications improved during the flight, the theory would be proved and relay could be established.

Operations requested that ASRTU-4 ask FT-28 if he had a standard YG (homing transmitter card) to home in on the tower's direction

finder. The message was sent but was not Rogered by FT-28. Instead, at 1645, FT-28 announced: "We are heading 030 degrees for 45 minutes, then we will fly north to make sure we are not over the Gulf of Mexico."

Meanwhile no bearings had been made on the flight. IFF could not be picked up. The lost flight was asked to broadcast continuously on 4805 kc. The message was not Rogered. Later, when asked to switch to 3000 kc, the search and rescue frequency, FT-28 called: "I cannot switch frequencies. I must keep my planes intact."

At 1656, FT-28 did not acknowledge a request to turn on his ZBX (the receiver for the YG) but, seven minutes later, he called to his flight, "Change course to 090 degrees for ten minutes." At approximately the same time, two different students were heard: "Dammit, if we would just fly west we would get home; head west, dammit."

By 1700, the operations officer was about to send the duty plane out to the east when he was informed that a radio fix was forthcoming—the aircraft was held on the ground pending the fix. At 1716, FT-28 called out that they would fly 270 degrees "until we hit the beach or run out of gas."

### Bad Weather Moves In

In the meantime, Palm Beach was reporting foul weather and, at Fort Lauderdale, they waited for it to move in. At 1724, FT-28 called for the weather at Fort Lauderdale: clear at Lauderdale; over the Bahamas, cloudy, rather low ceiling and poor visibility.

By 1736, it was decided that the ready plane at Fort Lauderdale would not go out. According to the operations officer, the prospect of bad weather and the encouraging information that FT-28 was going to "fly west until they hit the beach" prompted his decision. It was for this reason that the senior instructor's request was turned down.

The decision was logically correct; but, with hindsight, it was ironic and lamentable. To this day, FT-74 is convinced he *knew* where the lost flight *had to be*. He was denied the opportunity to prove his point. For reasons of safety and perhaps, hopeful confidence, it was determined that the single-engine, single-piloted ready plane would not be risked on an arbitrary flight into the gathering darkness over winter seas.

At 1804, FT-28 called to his flight, "Holding course 270 degrees—we didn't go far enough east...turn around again...we may just as well turn around and go east again." The flight leader was apparently still vacillating between his idea that they were over the Gulf and the student's belief that they were over the Atlantic.

The Gulf and Eastern Sea Frontier HF/DF nets had now completed triangulation of bearings on FT-28 from six different radio stations, which produced a reliable fix: he was within an electronic 100-mile radius of 29 degrees north, 79 degrees west; Flight 19 was north of the Bahamas, east of the Florida coast. All stations were alerted and instructed to turn on field lights, beacons and searchlights. Unfortunately, *no one* thought to advise the activities assisting in the attempted recovery of Flight 19 to make open, or "blind," transmissions of the 1750 evaluated fix to any aircraft of the distressed flight!

At 1820 a PBY was airborne out of CGAS Dinner Key to try to contact the flight. No luck. Transmitter antenna trouble. But garbled messages were still coming in from FT-28. "All planes close up tight...will have to ditch unless landfall...when the first plane drops to ten gallons, we all go down together."

At about the same time, the master of the British tanker *Viscount Empire*, passing through the area northeast of the Bahamas en route to Fort Lauderdale, reported to ASRTU-4 that she encountered tremendous seas and winds of high velocity in that area.

More multi-engine aircraft were dispatched by air stations up and down the Florida coast.

At NAS Banana River, two PBM-5s were being prepared to join the search, after being diverted from a regularly scheduled night navigation training flight. A flight mech checked out one of the planes, PBM-5 Buno 59225, filled it with enough fuel for a 12-hour flight and, as he later testified before the Board, "I found it to be A-1. I spent about an hour in the aircraft...and there was no indication of any gas fumes. There was no discrepancy in any of the equipment and, when we started up the engines, they operated normally."

According to the pilot of the other PBM, "About 1830, operations called the operations duty officer in regard to the five TBMs whose last position was reported as approximately 130 miles east of New Smyrna with about 20 minutes of fuel remaining. We received this position and were told to conduct a square search. We were instructed to conduct radar and visual search and to stand by on 4805 kc, the reported frequency on which the TBMs were operating. At the time we were briefed, Ltjg. Jeffrey, in Training 49, was to make the second plane in the search. No other planes were included."

Were any plans made for a joint conduct of the search mission? "Yes, I was to proceed to the last reported position of the TBMs and conduct a square search. Lt. Jeffrey was to proceed to New Smyrna and track eastward to intercept the presumed track of the TBMs and then was to conduct an expanding square search at the last reported position of the TBMs."

What were the weather and sea conditions when you arrived in the vicinity of 29 degrees north, 79 degrees west? "...the ceiling was approximately eight to twelve hundred feet overcast, occasional showers, estimated wind, west southwest about 25-30 knots. The air was very turbulent. The sea was very rough."

### Rescue Plane Meets Bizarre Fate

At 1927, PBM-5, Buno 59225, was airborne from Banana River with three aviators aboard and a crew of ten. At 1940, the aircraft radioed an "out" report to its home base and was not heard from again.

Cruising off the coast of Florida, the tanker S.S. *Gaines Mills* was sailing through the dark night when it sent the following message, "At 1950, observed a burst of flames, apparently an explosion, leaping flames 100 feet high and burning for ten minutes. Position 28 degrees 59 minutes north, 80 degrees 25 minutes west. At present, passing through a big pool of oil. Stopped, circled area using searchlights, looking for survivors. None found." Her captain later confirmed that he saw a plane catch fire and immediately crash, exploding upon the sea.

A message from USS *Solomons* (CVE-67), which was participating in the search, later confirmed both the merchantman's report and the fears of many at Banana River. "Our air search radar showed a plane after takeoff from Banana River last night joining with another plane, \* than separating and proceeding on course 045 degrees at exact time S.S. *Gaines Mills* sighted flames and in exact spot the above plane disappeared from the radar screen and never reappeared." No wreckage was sighted and according to witnesses there was little likelihood that any could have been recovered due to a very rough sea. The next day, water samples, taken in the area, developed an oily film. The area was not buoyed due to the heavy seas nor were diving or salvage operations ever conducted. The depth of the water was 78 feet and the site was close to the Gulf Stream.

During the Board's examination of the disappearance of the PBM, several witnesses were questioned concerning gas fumes and smoking regulations, which were reportedly well posted and rigidly enforced aboard all PBMs. Although the Board's report is not a verbatim record and no accusations were made, there seems to be enough inference present to cause one to suspect that the Board was aware of the PBM's nickname, "the flying gas tank."

What followed is essentially what has been reported by so many others: five days of fruitless searching which revealed numerous older wrecks but not so much as a scrap from either the TBMs or the PBM. The fate of the latter seems confirmed—an inflight fire of unknown origin and subsequent crash/explosion. The former's disappearance still has the aura of mystery, however.

Why did FT-28 not want to go on the flight; what was his state of mind? How could both his compasses have gone out? Did he have a watch? One suspects he did not, as he repeatedly asked the other flight members *how long* certain headings had been flown. These are only some of the questions which can never be fully answered.

But some have been.

We now know that FT-28 took the lead sometime after the turn north on the second leg, thinking that his students were on a wrong heading. We know that FT-28 would not switch to the emergency radio frequency for fear of losing contact with his flight. We also know that there were strong differences of opinion between the instructor and the students about where they were. The instructor, familiar with the Florida Keys, with both compasses out and with evidently no concept of time, could very well have mistaken the cays of the northern Bahamas for the Keys and the water beyond for the Gulf of Mexico.

But the students, having flown the area before, appeared to know exactly where they were—and it was *not* the Keys or the Gulf. The lead passed back and forth between FT-28 and a student, and land was never reached as the flight zigzagged through the area north of the Bahamas.

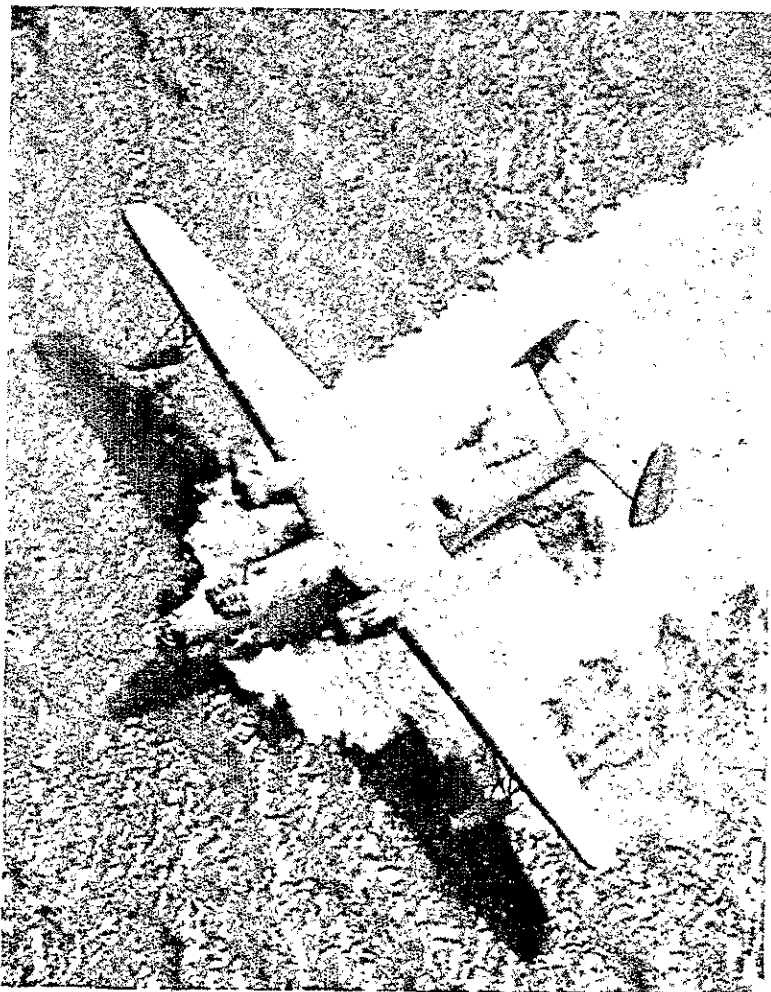
Toward the end, the low ceiling and daytime ten-mile visibility were replaced by rain squalls, turbulence and the darkness of winter night. Terrific winds were encountered and the once tranquil sea ran rough. They would "fly towards shore," the better to be rescued. Whether it was the Atlantic or Gulf Coast that they thought they were flying toward can never be known.

Valiantly trying to keep his flight in the face of most difficult flying

\*the second PBM

conditions, the leader made his plan: When any aircraft got down to ten gallons of fuel, they would all ditch together. When that fateful point was reached, we can only imagine the feelings of the 14 men of Flight 19 as they descended through the dark toward a foaming, raging sea and oblivion.

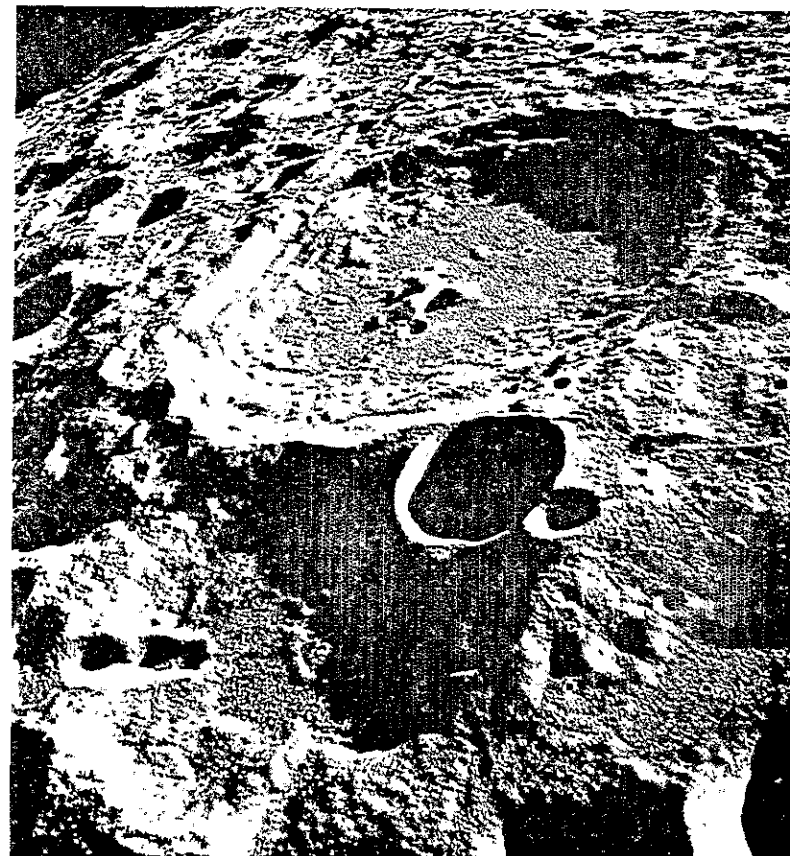
Former TBM pilots that we questioned express the opinion that an Avenger attempting to ditch at night in a heavy sea would almost certainly not survive the crash. And this, we feel, was the case with Flight 19, the Lost Patrol. The aircraft most probably broke up on impact and those crewmen who might have survived the crash would not have lasted long in cool water where the comfort index was lowered by the strong winds. This last element, while only an educated guess, seems to satisfy this strange and famous "disappearance."



PBM Mariner of type used to search for lost Avengers.

# UFO BASE ON THE MOON: FACT OR FICTION?

by Stuart Nixon



NASA Photo



For many people who follow the UFO subject, tabloid newspapers hold a peculiar fascination. While other publications may ignore the subject or provide only sporadic coverage, the tabloids consistently accord it front-page treatment. Most readers recognize the sensational nature of these stories and are quick to question their reliability, but this has done little to lessen their grip on the imagination of the UFO market.

NICAP is sometimes asked why it does not show an interest in this material or report on it in NICAP publications. Since the tabloids profess to offer dramatic evidence that UFOs are

extraterrestrial craft, it is a puzzle to some members why NICAP seems unwilling to consider what could be extremely important data.

To help answer this question, NICAP recently tried an unusual experiment. An article was chosen from one of the popular tabloids distributed in the United States and put through an extensive checking, point by point. Care was taken to look at all possible factors that might relate to the article's authenticity, and people named in the article were contacted. In the following discussion, NICAP reporter Stuart Nixon explains what this investigation disclosed.

The article we selected first appeared in September 1969 in the *National Bulletin*, a tabloid published in Canada by the Globe Newspaper Group, which also publishes a tabloid called *Midnight*. Both publications are typical of their genre: graphics that lean heavily on oversized headlines, a writing style that can make even drab events sound provocative, and stories that emphasize the baser themes of human eccentricity and misfortune.

The article concerns an alleged encounter with UFOs on the lunar surface by Neil Armstrong and Edwin Aldrin, the two Apollo 11 astronauts who were the first men to step foot on the moon. According to the article, the unidentified objects were seen deployed along the edge of a crater in the vicinity of strange "installations." News of the discovery was kept secret, the article said, to prevent public panic.

In the four years since this story was published, it has been described in magazines and newspapers and swept into the general stream of speculation that circulates in the UFO field. NICAP members have written to find out if it is true, including one man who wanted to know why it "did not get comment from you in the *UFO Investigator*."

The article is based on a short conversation that supposedly took place between the astronauts and NASA's Mission Control Center in Houston, Texas, during the Apollo 11 flight. According to the writer of the story, Sam Pepper, "I was able to lay hands on a top secret tape transcript" of the conversation, which "was received back on Earth as the words were uttered." This transcript is reprinted in its entirety on the opposite page.

Before looking at specific elements of the story, consider for a moment the enormity of this claim. If in fact the Apollo astronauts encountered unknown objects and installations on the moon's surface, it is news that would almost certainly electrify the civilized world. In fact, it is difficult to overestimate the profound scientific and pub-

## THE TRANSCRIPT

This is the complete text of the alleged conversation between NASA and the Apollo 11 astronauts concerning UFOs on the moon. Those passages attributable to Mission Control in Houston are shown in italics. The numbers are for reference purposes only and were not included in the original article.

[1] "What was it, what the hell was it? That's all I want to know..."

[2] "These...(garbled) babies were huge, Sir, they were enormous..."

[3] "No, no that's just field distortion...Oh, God, you wouldn't believe it..."

[4] "What...what...what the hell's going on? Whatsa matter with you guys, wha..."

[5] "They're there, under the surface..."

[6] "What's there? (garbled) ...malfunction...ion Control calling Apollo 11..."

[7] "Roger, we're here, all three of us, but we've found some visitors..."

[8] "Yeah, they've been here for quite a while judging by the installations..."

[9] "Mission Control, repeat last message..."

[10] "I'm telling you, there are other spacecraft out there! They're lined up in ranks on the far side of the crater edge."

[11] "Repeat, repeat..."

[12] "Let's get that orbit scanned and head home..."

[13] "In 625 to the fifth, auto-relays set...my hands are shaking so bad I can't..."

[14] "Film...hell, yes, the damned cameras were clicking away from up here, did you fellows get anything?"

[15] "Had no film left by the time...(garbled)...three shots of the saucers, or whatever they were...may have fogged the film..."

[16] "Mission Control, this is Mission Control...are you under way, repeat, are you under way? What's this uproar about UFOs? Over."

[17] "They're set up down there...they're on the moon watching us..."

[18] "The mirrors, the mirrors, you set them up, didn't you?"

[19] "Yes, the mirrors are all in place. But whatever built those spacecraft will probably come over and pull 'em all out by the roots tomorrow."

lic reaction that might follow such an announcement. In all probability, the Apollo program would be immediately revived to explore the area where the objects or structures were seen, and to deploy instruments that might yield evidence of these objects or their activities. NASA's budget would probably be increased, and a high-priority program of technical studies, astronomical observations, and world-wide scientific discussion would rapidly develop. Arthur Clarke, in his short story "The Sentinel," which was used as the basis for the film *2001*, speculates on such an event and suggests that it would have dramatic and long-range repercussions. In a 1968 article in *Playboy*, he repeats this point, saying, "Almost every field of scientific inquiry...would be profoundly affected."

Since none of these things happened following the flight of Apollo 11 in July 1969, it is almost inconceivable that the *Bulletin* article could be true without some independent piece of evidence turning up in the four intervening years. It would be necessary, for example, to explain why all subsequent Apollo missions had as their primary objectives various geologic, mapping, and soil-sampling activities that bore no apparent relation to the possible presence of intelligent life. These were straightforward scientific experiments developed largely by universities and research companies outside the government. Furthermore, no landing site was visited twice during the Apollo program, and no mission was classified or characterized by unusual restrictions on the news media.

Despite these objections, let us assume the article could still be true, and that by some well-managed feat of security, the news has been kept secret all this time. What can we say about the alleged transcript and other elements of the story?

For the record, NICAP queried the three astronauts who flew Apollo 11: Armstrong, the commander; Aldrin, the Lunar Module pilot; and Michael Collins, the Command Module pilot. If the story is true, asking these men to verify it was like asking them if they beat their wives. Nevertheless, two of them—Collins and Armstrong—told NICAP the story is not true, even partially. (The third, Aldrin, was on a travel tour to promote his new book and not available for comment.) In a personal interview, Collins read the article and commented simply, "What can I say; it's crazy." Armstrong, by letter, replied the same way: "Unfortunately, we saw no signs of life on the surface of the moon."

Also for the record, NICAP contacted the Globe Newspaper Group to seek an interview with Sam Pepper and determine who presently has possession of the alleged transcript. This exercise proved to be as productive as present efforts of federal prosecutors to obtain the Watergate tapes. Two letters to the Globe's editorial office in Montreal went unanswered. A telephone call to the same office produced no results. A third letter, sent by registered mail, was ignored. Finally, a person-to-person call to Globe editor John Vader produced a promise to "check into the matter and call or write you." Nothing has been heard since. Vader said he did not know anyone named Sam Pepper.

The story itself presents multiple problems in logic, consistency, and factual detail. Although the average reader has no way of checking many of the article's claims, NICAP was able to piece together a comprehensive analysis from conversations with NASA officials, the interview with Mike Collins, and examination of flight summaries and transcripts.

Study of the alleged conversation immediately reveals two peculiarities. First, none of the statements in the transcript is identified as to who made it. This would not be true if Pepper actually obtained an official transcript, which would show all speakers by name or code. To argue that Pepper knew the names but chose to omit them is to raise additional questions, since the absence of names makes the transcript harder to read and immediately suspect.

A second peculiarity is the way in which the conversation has been taken out of context, with no indication of what was said before or after the quoted portion. This makes it difficult to check out, since

it cannot be related to official NASA transcripts of Apollo air-to-ground communications. If these transcripts have been edited to remove this section of dialogue, there should be telltale breaks in the continuity of the official record, since a dramatic incident of this kind would certainly produce prolonged discussion between Mission Control and the astronauts. It is unlikely that official transcripts could be so smoothly altered as to cover up all evidence of discontinuity and all allusions or later conversations concerning the alleged observation. The transcripts are prepared by clerical personnel at Houston within a few hours from the time the transmissions are received.

This raises the critical question of when the supposed incident took place and how it was shielded from the eyes and ears of news media covering the flight. Pepper offers no information on the first point, and only a fragmentary explanation of the second. Toward the beginning of the story, he says the conversation (not the sighting) took place as Armstrong and Aldrin "returned to the spacecraft." The spacecraft he refers to is the Command Module—nicknamed Columbia—which orbited the moon while the two astronauts descended to the lunar surface in the LM (nicknamed Eagle). Eagle returned to lunar orbit on the afternoon of July 21, approximately 13 hours after Armstrong and Aldrin had completed their moon walk and reentered the lander. Once in orbit, Eagle redocked with Columbia at 5:35 p.m. EDT while completing a pass behind the moon and out of communication with Earth. Since Pepper tells us the UFO conversation was monitored by Houston in real time, it could only have happened after radio signals from Eagle and Columbia had been reacquired following the back-side pass. This is confirmed by the remark in passage 7 that "we're here, all three of us," which would not make sense unless Eagle had reunited with Columbia and the three astronauts were again traveling together.

The official NASA transcript shows that LM AOS (acquisition of signal with Lunar Module) occurred at 5:22 p.m. EDT. The first words recorded, according to the transcript, were those of Armstrong, who advises Collins that "I'll try to get in position here, then you got [sic] it. How does the roll attitude look? I'll stop. Matter of fact, I can stop right here if you like that." This does not sound like a man who just has seen alien spacecraft.

The next voice to speak is that of the Capsule Communicator at Houston (identified as CAPCOM in the official transcript). This man is an astronaut himself and normally the only person on the ground to speak with the astronauts during a flight.\* At the time he speaks, Houston is still trying to achieve AOS with the Command Module: "Eagle, Houston. Middle gimbal. And you might put out to Columbia we don't have him yet."

This is a critical moment in the flight if the *National Bulletin* article is true. Eagle and Houston are now in communication for the first time in approximately 44 minutes (the time it took for Columbia and Eagle, flying in tandem, to pass behind the moon prior to docking). Inside Eagle are Armstrong and Aldrin, who, according to Pepper, "returned to the spacecraft orbiting above them with

\*The voice of Apollo Control, whose commentary is fed to radio and TV networks for live broadcast, is that of a NASA public affairs officer, identified in the official transcripts as PAO. PAO and CAPCOM are not the same person.

ashen faces and trembling limbs." Both men, if we accept Pepper's scenario, have only minutes previously witnessed what until that moment was a highly speculative scene in a science fiction movie: an aerospace facility constructed on the moon by an extraterrestrial civilization. By any test of human psychology, the natural impulse on experiencing such a sight would be to advise Houston of the discovery and seek instructions on what action, if any, should be taken while the astronauts were still in lunar orbit. Columbia was not scheduled to fire its motors and depart for Earth until approximately 1 a.m. EDT the following day, July 22. During the eight and a half hours until that moment, four more passes behind the moon would be made. There would be ample opportunity to make additional observations of the UFO base, but it would first be necessary to alert Houston and request permission to deviate from the mission flight plan. Before Columbia could break away from its path around the moon, the LM had to be jettisoned, various on-board systems had to be checked out, and other tasks had to be performed to assure the spacecraft was ready for transEarth injection. A unilateral decision by the Apollo astronauts to defer these procedures or substantially alter the flight plan would have been unusual and potentially irresponsible.

No clue that such a decision was made or requested is evident in the official transcript. Following LM AOS at 5:22 p.m., the three-way conversation between Eagle, Columbia, and Houston concerns the docking operation and various technical problems. The only sign of an emotional reaction comes at about 5:35 p.m. when Collins and Armstrong have a brief exchange about an accidental firing of a thruster on the LM during rendezvous. After that, the conversation turns to a biomedical problem and other housekeeping chores.

Someone might wish to argue that the sighting did not take place during the pass behind the moon when docking was initiated, and that discussion of the sighting occurred at some other point in the mission. This is inconsistent with Pepper's statement that the conversation he quotes was monitored as it happened when Armstrong and Aldrin returned to the Command Module. It also belies the transcript itself, which, as we have already noted, refers to the "three of us" and makes other references that are only logical in the context of post-docking activities. If the sighting had occurred while the astronauts were on the lunar surface or returning to lunar orbit, they would have been able to notify Houston directly and the conversation described by Pepper would never have occurred.

Keep in mind that Collins, who remained in lunar orbit while the moon landing was made and who could not talk with Armstrong or Aldrin while they were on the lunar surface, is a participant in the conversation; only Collins could have spoken passage 14. If the sighting had occurred before the final predocking pass behind the moon, Collins would most likely have found out about it at the same time Houston did, since he normally monitored the Houston-Eagle radio link. If he did not happen to be listening to the conversation at that particular moment, Houston could have easily advised him within a matter of seconds (unless he was behind the moon). Passage 14 implies one of these two possibilities did in fact happen, prompting Collins to start taking pictures. However, the entire content of the conversation—especially passages 4, 6, 7, and 16—indicates Houston had no knowledge of the purported UFO observation prior to the time of the

conversation. If Houston didn't know before Collins knew, how could Collins have been alerted to take pictures? The only way around this problem is to assume that Collins somehow made his own independent discovery of the UFOs or was told by Armstrong and Aldrin as soon as LM-CM voice communications were restored once the two spacecraft were sufficiently close in orbit for the system to function. Unfortunately, Pepper says nothing about Collins being a witness to the UFOs and in fact states that "we have the unavoidable truth from the mouths of two human beings who confronted these alien space-navigators" (emphasis added).

Yet another argument against Pepper's claim is the curious phrasing of certain passages in the transcript. It is unlikely, for example, that Houston would use the familiar language of passage 4 to address the astronauts. NASA flight controllers have their own operational terminology, based partly on terms used by pilots and partly on other technical language. It is possible, but not probable, that CAPCOM would lapse into ordinary slang when querying the spacecraft for clarification of a transmission.

Mike Collins pointed out another incongruity: use of the word "repeat." "We didn't usually say this," he commented; "we preferred 'say again.' It was a holdover from our flying days."

Collins also questioned the phrases "orbit scanned" (passage 12) and "625 to the fifth" (passage 13). He said these phrases were unintelligible to him. The same reaction was reported by NICAP adviser Alan Holt, who works at the Manned Spacecraft Center in Houston as part of the program to train astronaut crews in the operation of scientific experiments. Holt said he talked with a "CM procedures expert in Guidance and Control," who said he was "not at all familiar with any operational terminology" used in Pepper's transcript. Holt concluded: "Based on my experience at NASA... I would be very surprised to find out that such a sighting as indicated by the *National Bulletin* ever took place."

Perhaps the most damaging piece of evidence against the transcript's authenticity is the odd use of the phrase "Mission Control." Anyone who has listened closely to conversations between Houston and the astronauts will recall that CAPCOM identifies himself as "Houston," not as "Mission Control." The PAO, whose voice is heard by the public over radio and television, may say "Mission Control" or "Apollo Control," but CAPCOM does not.

An equally curious statement is passage 18, which could only have been spoken by Houston. The term "mirror" refers to the Laser Reflector Cube that was deployed on the moon by Aldrin as one of two scientific experiments carried on Apollo 11. Aside from the fact that the astronauts never used the word "mirror" to identify the Cube, it was standard NASA procedure to verbally confirm all lunar activities, including deployment of experiments, before the astronauts completed their stay on the surface. On Apollo 11, this was done at approximately 12:50 a.m. EDT, July 21, just a few minutes before Aldrin climbed up the LM ladder and reentered the landing craft (followed 15 minutes later by Armstrong). In view of this, it would have been meaningless for Houston to arbitrarily seek reconfirmation of the Cube's placement some 13 hours after that action had already been verified. It is particularly improbable when you consider that Houston, and an estimated 530 million TV viewers

around the world, watched the experiments being set up.

To account for why news reporters covering Apollo 11 did not find out about the purported UFO encounter, Pepper says NASA censored audio transmissions through use of a time-delay device such as that used on radio talk shows. NASA Public Affairs office told NICAP that such a device is only employed in the NASA communications system to assure synchronization between audio and color video signals. Even then, the delay is no more than seven or eight seconds, not the "two or three minutes" claimed by Pepper. Since no color TV camera was used on Apollo 11 while the astronauts were on the lunar surface or in lunar orbit, all audio transmissions from Eagle and Columbia during that period were received at Houston in real time, with only the normal 1.5-second delay caused by the distance between Earth and moon. Since the news media monitor the same audio loop as NASA engineers at the Houston center, any interruption in communications is immediately obvious to both reporters and engineers, and censorship would be difficult to impose without depriving the press of its audio feed. This might be done for a temporary period, but a plausible pretext for the deprivation would have to be issued, since loss of communications is in itself a critical development and potentially newsworthy. The longer this unusual situation continued, the more difficult it would be to maintain the appearance that no communications were being received from the spacecraft. Keep in mind that NASA could not censor the air-to-ground link by simply *delaying* it; all audio communications heard by the press would have to be shut off while flight controllers continued to maintain active contact. Normally, such a private conversation is conducted only when NASA personnel or the astronauts request it. The request is heard by the press, and the reason is stated. *In actual practice, this has rarely happened.*

Examination of the official transcript reveals only one conversation that could have been misinterpreted by Pepper or his sources as describing a UFO observation. This passage occurred at 12:40 p.m. EDT, July 21, 12 hours after Armstrong and Aldrin had completed their moon walk. In the conversation, Aldrin notes that the Eagle has landed in a boulder field where "some of the boulders are lying on top of the surface, some are partially exposed, and some are just barely exposed." He adds, "In our traverse around the surface and particularly working with the scoop, we can run into boulders below the surface, probably buried under several inches of the ground mass." This comment is somewhat suggestive of passage 5 in the Pepper transcript.

Aldrin also describes the craters at the landing site, reporting, "Some are 10 feet or so and perhaps bigger, and they are very thickly populated out to about one crater diameter beyond the crater rim. Beyond that, there is some diminishing, and even out in this area the blocks seem to run in rows and irregular patterns...." This discussion is suggestive of passage 10.

Except for these passages, it is difficult to imagine how any of the experiences reported by the Apollo 11 astronauts could have been mistaken for the events described in the *Bulletin* article. Even the last item in the transcript (passage 19) is not true. The LR Cube remained in place and worked successfully, long after Eagle had departed its landing site at Tranquility Base.

## PROPOSAL FOR UFO DESIGN

by Kiril Terziev

*Kiril Terziev, a physicist who lives in Yugoslavia, has studied UFOs since the mid-1960s and developed various aerodynamic designs that might be suitable for extraterrestrial craft. Since much of his material is technical in nature and difficult to translate into English, it has not been possible to make a complete analysis of these designs or Terziev's theories of propulsion. In the following article, a brief summary of his work is offered, based on personal correspondence and related material. Terziev emphasizes that his proposals are speculative and need to be evaluated by engineers and other specialists before the practicality of the designs can be established.*

The principle of my flying machine is shown in Figure 1. The reaction force acts upon the machine in a vertical direction. This force enables the machine to fly. Other forces inherent in the design nullify each other.

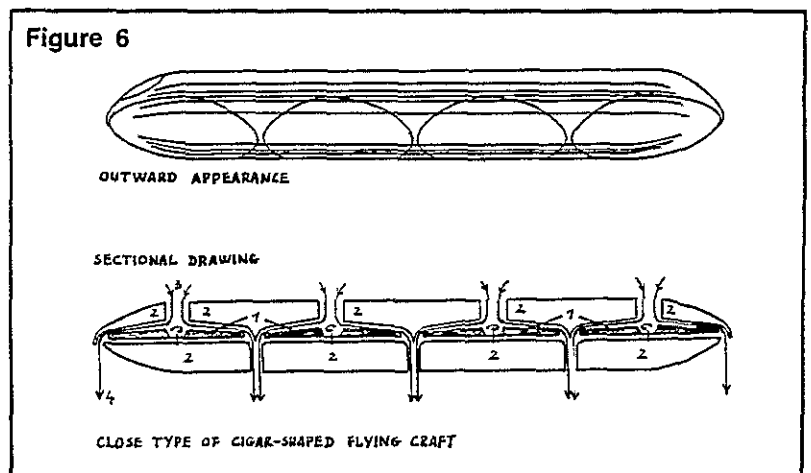
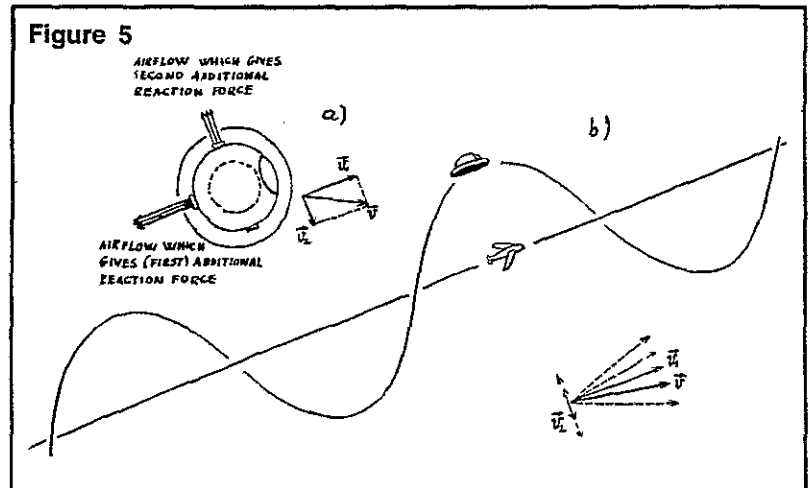
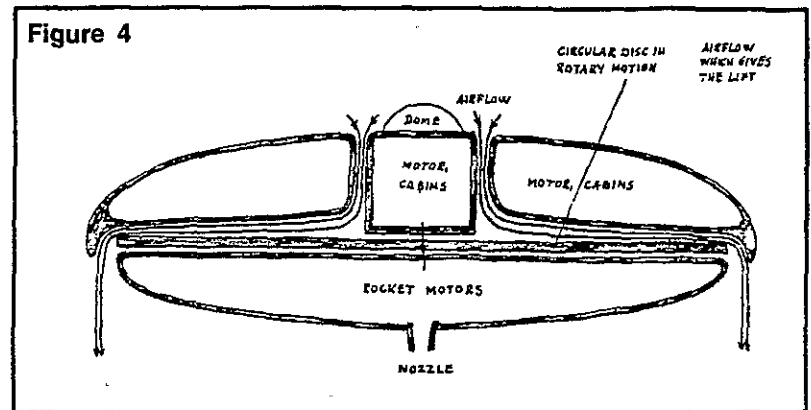
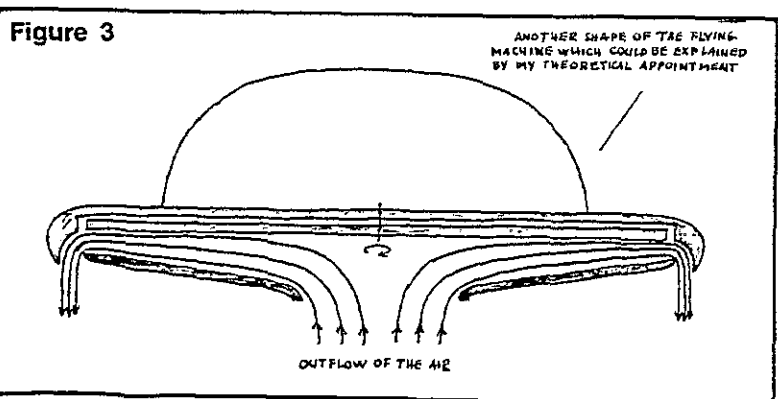
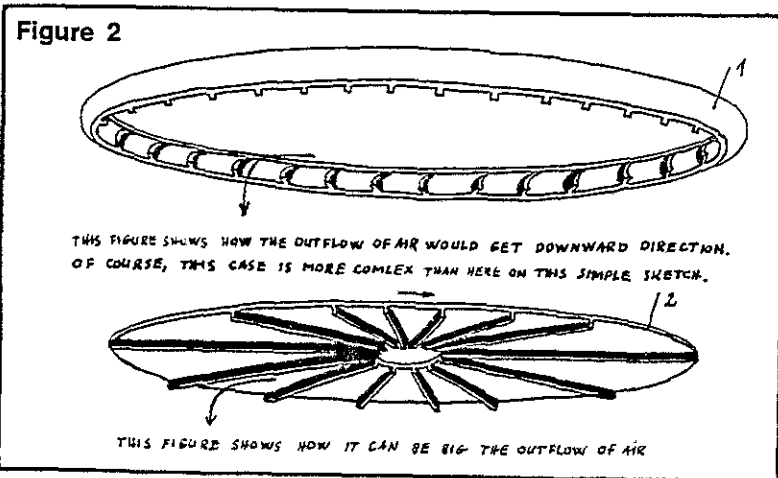
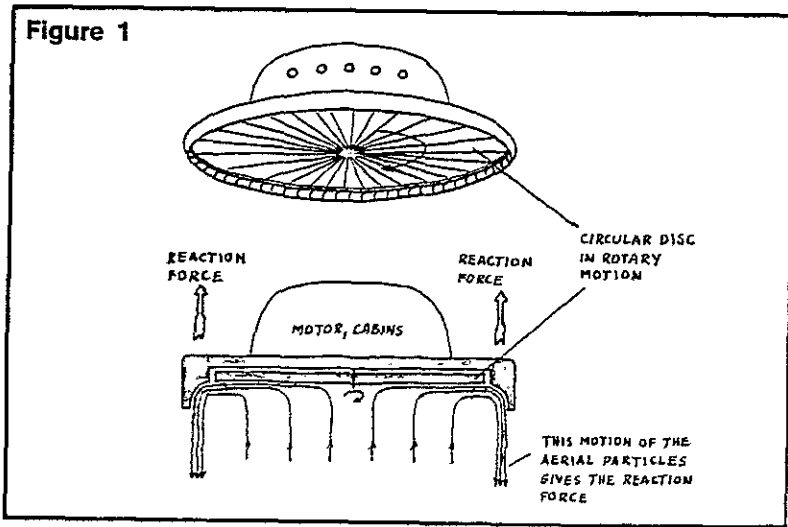
On the basis of my theory, all general shapes reported for UFOs can be developed: saucer, disc, inverted top, double-convex, egg-shaped, cigar, etc. Among these shapes, one of the primary characteristics is a flat bottom or the circular part of a flat bottom. This is consistent with many well known pictures and reports.

The circular disc in my design rotates clockwise (when viewed from the bottom), drawing air into the center and expelling it at the sides. Blades on the disc help control the air flow, which is directed downward by vents at the edge of the wall around the disc (Fig. 2). Different configurations for the underside of the machine are possible, depending on how the air is drawn in and distributed (Fig. 3). It is also possible to pull in the air from above (Fig. 4).

The reaction force (U) can be computed from the formula  $U = Kn^2R^4$ , where K is a constant, n is the number of cycles per second completed by the disc, and R is the radius of the disc. Other forces can be computed, such as the rate of air flow, pressure on the disc, and efficiency (input versus output).

To provide lateral movement and control, secondary air flows can be utilized, with outlets placed 90 degrees apart at three locations around the structure of the machine (Fig. 5). Other gases besides air can be used for this purpose. To insure proper lift, the main downward thrust must be maintained in a vertical direction, relative to the ground, possibly through employment of a gyroscopic control system or variable vents.

For cigar-shaped objects, a series of motors and air-flow systems could be designed (Fig. 6). For other kinds of objects, the same principle could be adapted. Compartments for passengers, equipment, and supplies could be constructed in various ways, based on the design of the propulsion system.



# LETTERS

Dear Editor:

I was very much interested in the three articles in the [April-June] *UFO Quarterly Review*, particularly the one on the [UFO] detectors. It is indeed unfortunate that out of two years' worth of work there is such a large percentage of results that are unreliable.

There is one item with which I disagree: the Reliability Index [RI]. I see no reason why the RI [should equal] sensitivity times total alarms divided by days of operation. [Why] should [the product of sensitivity and total alarms] not be divided by the hours of operation instead of the days of operation? [Doing this produces the following results:]

## RELIABILITY INDEX FOR DETECTOR ALARMS

(Based on Table A in  
original article)

### RI Based on Days

Site	RI	Relative Efficiency
1	8.8	100%
5	6.4	73
3	5.0	57
13	4.7	53
8	2.8	32
9	2.1	24
10	2.1	24
2	2.0	23
7	2.0	23
6	1.5	17
11	.7	8
12	.4	5
4	.3	3

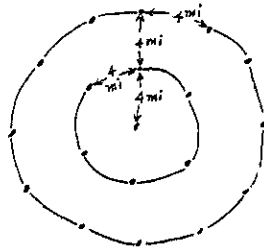
### RI Based on Hours

Site	RI	Relative Efficiency
1	1.1	100%
13	.78	71
5	.27	25

10	.23	21
3	.21	19
6	.21	19
8	.17	15
9	.17	15
2	.08	7
7	.08	7
4	.03	3
12	.005	.5
11	.003	.3

[As these tables show,] correcting for this discrepancy does not seriously affect the *order* [of the sites] but it does show a very low percentage efficiency for the bottom half of stations.

Since Table B [in the original article] shows that out of 18 (20 including the two at the bottom of page 14) sightings, about 2/3 are within 5.5 miles, it seems that the odds of detection would be greatly increased if the detectors were spaced no farther apart than 5 miles, and closer if possible (say 4 miles, meaning one station would always be within a maximum of 2 miles of a UFO). This would mean 4 more units but would give far greater and more uniform coverage [as follows]:



It would be most desirable to have *all* detectors as near alike as possible, and likewise to be operated 24 hours a day. (The average time of operation in Table A is only 66%.) I am sure there are insurmountable problems involved in finding suitable locations that could be attended 24 hours a day. But with Mr. Oswald's ingenuity in building 15 magnetometers, I suggest 110-volt operation, with an electric clock movement so altered to show the date and 24 hours/revolution of the 12 hour hand.

S.B. Besse  
Newport News, Virginia