

DATA-NET CONTROL

WB6RPL

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The "Data-Net Report" is the official newsletter of Data-Net; a group of radio amateurs seriously interested in the UFO problem. Membership is \$4.00 a year. The "Report" is published monthly by the control station, WB6RPL, Michel M. Jaffe. All rights reserved. No portion may be reproduced by anyone without prior written permission. Copyright © 1968.

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DATA-NET REPORT NO. 22

NOVEMBER 1968

The witness to the following sighting has requested anonymity.

On Tuesday, September 17, 1968 the "Bundes Bahn" train was traveling thru East Germany between Goelitz and the West German border around twilight. Sunlight still reflecting off two clouds colored them a rozy-orange glow. Between the two clouds hung a silver-colored oblong, or cigar-shaped object. The object was not exhibiting the same rozy-orange glow as the clouds, but had a silvery color of its own, yet appeared almost gaseous in formation.

The object was estimated to be about a mile away from the train, and about the size of the moon. It appeared to follow the train for a few minutes, but was gone when the train emerged from a dip.

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Could the gaseous appearance be camouflage? Many UFOs have been described as creating a surrounding cloud-like screen, and some have been seen emerging from a cloud moving contrary to the prevailing winds.

Could we be dealing with an unknown natural phenomenon?

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DATA-NET recently met Dr. Freeman, Prof. of Metaphysics, Sunnyvale, California. He conducts weekly classes in metaphysics, and we were impressed with his methods, character, and manners.

In discussing UFOs in general, Dr. Freeman stated that Della Larson had not committed suicide, but was being held against her will in a mental institution in Texas.

A little DATA-NET research revealed the following:

Oakland Tribune, Oct. 26, 1965. FLYING SAUCERS 'EXPERT' DIES. Walnut Creek, Della Larson, 70, an avowed expert on flying saucers and the people of Venus she claimed fly in them, was found dead in a convalescent hospital here yesterday.

Sheriff's deputies labeled her death an apparent suicide.

Marie Ford, a nurse at the hospital at 2640 Walnut Blvd., told officers she found Mrs. Larson in her room, hanging by a nylon stocking noose attached to the door.

Deputies said Mrs. Larson, of 3246 Sylvan Ave., Oakland, had been admitted to the hospital for a rest.

She told a Northern California Space Craft Convention at the Claremont Hotel in 1963 that flying saucers were piloted by residents of the planet Venus and that some of these space travelers were living, unrecognized, on Earth.

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So, it seems she wasn't in an asylum, but a convalescent hospital; and she did commit suicide. Surely the suicide records could be verified, if anyone felt it worth the trouble.

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DATA-NET quoted an article in September regarding a UFO in Spain. The following articles provide more background information:

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SPANISH JETS CHASE UFO - Madrid, Sept. 6, 1968. (UPI) - The Spanish Air Force Friday reported that one of its planes chased an Unidentified Flying Object northeast of Madrid Thursday.

Hours later thousands of persons in Madrid said they had seen a mysterious triangular object.

An official spokesman said the pilot of an F-104 jet climbed to more than 50,000 feet in an attempt to approach the object. But at this height, it was reported still high above him and he had to return to base for lack of fuel.

The object was first picked up on radar screens at Barahona, northeast of Madrid, and the pilot was sent to intercept it, the spokesman said.

The pilot of another Air Force plane flying at 36,000 feet also reported seeing the object. He described it as pyramid shaped with three bright blobs of light on its underside.

Later in the day, the object was again picked up on Air Force radar screens, flying at an estimated 90,000 feet and moving slowly.

A bright object glittered in the sky for more than an hour in Madrid Thursday evening, causing traffic jams as thousands of people spilled into the streets to look at it.

A photograph of the phenomenon taken through a telescope showed a triangular object, apparently solid on one side and translucent in parts.

'THING' IN THE SKY DEFIES EXPLANATION - Madrid (CNS) - Madrid's "flying saucer" is still a mystery. Thousands of people saw it cross the sky above the Spanish capital. Even the Spanish Air Ministry admits that it has no positive knowledge about the nature of the unidentified flying object.

What's more, the Air Ministry refused to comment about another sighting reported later by scientists at a weather station in Cuenca in east central Spain.

Spanish air force F-104 jet fighters attempted to intercept the thing seen by thousands of Madrilenians.

The mysterious UFO, which appeared above the Spanish capital Sept. 5 during an evening rush hour, when the sky was still light, cruised above the center of the city for more than one hour. So many people stopped to stare at the strange gleaming object that traffic in the Gran Via, Madrid's main street, became completely jammed.

At half past seven that evening I was at the Plaza de Colon in central Madrid, waiting for the arrival of the Olympic Games torch-bearer. The crowd was not looking up the broad avenue leading to the ceremonial platform. All heads were turned skyward.

First with skepticism, then with growing astonishment, I saw a brilliant apparition in the western sky.

As it moved slowly to the southwest, the entire crowd's attention was completely distracted from the ceremony. Photographers turned their cameras skyward and took numerous photographs, some through telescopic lenses.

The photos clearly showed whatever the thing was, it was something very unusual, conical in shape and emitting a blinding light.

The Spanish air force, which picked up the unidentified object on their sophisticated American-designed radar network, dispatched F-104 jets to investigate.

One pilot attempted to approach the object at an altitude of 50,000 feet but was forced to give up the chase with the device still a great distance above him, when his fuel ran low. Another pilot came close enough to give a graphic description of the device.

"It was pyramid shaped," he said, "and there were three globes of bright light at its base."

The many photos, and telescopic information from the Madrid Observatory, bore out his description.

Amid the flurry of imaginative rumors, at least a few facts emerged to establish what the thing was not.

The first reaction from the Madrid Observatory was, "We don't know what the thing is but we assume it must be a satellite."

However, a spokesman for the U.S. space tracking facility at nearby Robledo stated, "It is definitely not an American satellite." When asked if it could be a flying saucer he

answered, "Who knows?"

The Spanish Weather Bureau announced that there was no reason to suppose it was one of their meteorological balloons.

While tens of thousands of Spaniards gaped at the moving object in the heavens, and Spanish radar briefly tracked it, strangely the vast U.S. military air base at Torrejon on the outskirts of the capital claimed it did not show up on their radar screens.

The Spanish Air Ministry, while admitting that it had no positive knowledge of the nature of the thing, offered a soothing suggestion - with considerable reservations - that it might be a commonplace thing. "Although trustworthy data is lacking," the statement said, "it would seem that we might possibly be dealing with a weather balloon."

It was not a very convincing explanation, nor one which tallied with eye-witness descriptions and photos. For one thing its shape did not suggest a balloon; for another the pilot quoted in an Air Ministry statement described something quite different from a balloon; and finally, there were credible reports that the thing was moving counter to winds at its estimated altitude.

One theory advanced by a respectable government source was that it was a meteorological balloon that drifted over Spain from France - a balloon used by researchers in the Concorde jet liner project. But that theory collapsed the following day when French technicians found their balloons in northern Spain and said they had tracked it constantly and it had not drifted over Madrid. -by H. August Debelius.

WA5RON reports: My immediate reaction to the photograph was "triangular balloon." The unnamed government agency agrees with me. Although these triangular weather balloons are rare, they should be a familiar phenomenon to at least some people. (A triangular balloon in flight was used in an episode of "The Girl From U.N.C.L.E." a few years back, which used the UFO theme.)

The balloons are very large, shiny on the outside (late afternoon sun made this one appear to "glow"). It would present a good radar cross-section, and would move slowly with the wind (I doubt that anyone was sure of wind direction at the "object's" altitude - or even had any idea of what that altitude was)."

Nothing further regarding the above incident has appeared in the news. However information has reached DATA-NET that a triangular-shaped balloon belonging to the French was shot down by the Spanish Air Force. Imagine their surprise to read "Made in France" - Please return, etc.!

The embarrassment was shared by all parties concerned. French balloons have no business over Spanish soil simulating UFOs.

The sky over Madrid was not illuminated by a flying saucer. A mis-interpretation of a conventional object occurred. It is regrettable that all news isn't made public, but it serves as a reminder that we must be careful not to be misled.

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DATA-NET has learned from one of Understanding Inc.'s valuable researchers that Adamski requested a \$1,000.00 guarantee before he would lecture. Understanding couldn't provide that guarantee.

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The San Jose Mercury published an article July 15, 1965 regarding "a mysterious light blinking on and off on the moon."

Foothill Observatory (Los Altos, Calif.) & 11 others under "Project Moon Blink" were to keep the moon under surveillance hoping to photograph the red light. Foothill College had the extra advantage of a closed circuit television system to hook up to their telescopic lens.

The Foothill Observatory Manager brings us up to date as follows:

"Project Moon Blink went on the blink some time ago. Financing of the project from an administrative level ceased and interest in general was lost due to lack of guidance.

"Our equipment, then on loan, was called back in and we have made no effort to duplicate it because of our already heavy schedule. It is all really too bad, because this was an extremely interesting project.

"To my knowledge, no photos have ever been secured, as you know it was our hope to

record this on video-tape."

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In the January 1969 issue of ELECTRONICS ILLUSTRATED Wayne Green mentions visiting Aricebo, Puerto Rico. In talking to the hams there, he discovered, contrary to the news releases, that the Aricebo crew takes seriously the LGM (Little Green Men) theory regarding the mysterious pulsars from space.

The main reason being the fact that the sources of the mysterious signals are on a great circle route in the galaxy, and do not originate at random throughout the universe. The signals appear to be in a coded pattern, not merely noises from space. In other words, they feel there is a high probability that the pulses are intelligently produced. They may be beacons in space, or relay stations attempting contact with neighboring inhabitants of the universe.

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From WA5RON: "I ran the UFO NET last Wednesday, as Wayne Green did not show up. I was the strongest station on. The net is not doing well lately. Very few stations checked in. There will have to be more interested persons present before anything useful can be done with the net."

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From WA5RON: "One of the best books on the UFO situation is available from Honorable George P. Miller, Chairman of the Committee on Science and Astronautics, U.S. House of Representatives, Washington, D.C. It is the Proceedings of the Symposium on unidentified flying objects (7-29-68), and should be brought to the attention of DATA-NET members through the report. It is free of charge, as long as the supply lasts.

Philip Klass ("UFOs - IDENTIFIED") may have unknowingly provided clues about the power and propulsion systems of some flying saucers. He tries to "prove" UFOs are "natural plasma" by pointing out instances where they have appeared as a plasma cloud or an object with a fuzzy, glowing cloud surrounding it. Is it not possible that the craft generate a plasma on the outside for power or propulsion?

Our own science labs are working on methods which will ultimately release unlimited fusion power from nuclear reactions in a plasma chamber. I was able to witness some of these experiments being conducted by the Texas Atomic Energy Research Foundation. Despite the money and scientific effort put into these experiments, the result is usually a pink flash and a loud pop. But when the problems are solved, one may be able to release considerable energy from water. Please recall observations of UFOs taking in water from lakes or landing on the ocean surface. A self-contained plasma, like ball lightning, generates enough current to produce magnetic fields which hold the plasma together. If one could create a plasma around the outside of a disk or donut shaped aircraft, it might produce strong, controllable magnetic fields, and also electric power to run the ship. Sound like any reported UFOs?

Consider next the absence of sound from UFOs, the absence of any shock waves during supersonic flight, and the absence of friction damage at very high speeds. These observations can be explained by a theory first presented by a Frenchman named Plantier. He imagined some force field holding the air molecules immobilized near the sides of the UFO. At increasing distances from the craft, the field decreases in strength, and the molecules move more freely.

The effects of such a system are obvious. Sounds from the UFO would be blocked by the air molecules being held motionless near the craft. Shock waves would be cushioned by the succeeding layers of slower moving air near the craft (no "sonic-booms"). Heat, generated by friction, would be dissipated in the mass of air being dragged along by the craft.

This theory originally relied on a "gravity field," something totally beyond present day technology, to hold the air molecules in place. However, if one ionized the air, the molecules can then be controlled by magnetic fields. Thus, it would be very advantageous for a UFO type craft to create a plasma (ionized air) around itself.

We no longer need to stretch UFO speculation into outright science fiction (as long as right-angle turns at 1000 mph are reserved for unmanned UFOs only!) to explain puzzling aspects of UFO behavior. Altho "invisible" UFOs and the report of headlight beams being

bent still bother me, I feel it is possible to understand the machines' operation in terms of our present knowledge. Magnetic fields, generated by magnetohydrodynamic plasmas, fueled by the inexhaustible power of the atom, could be the propulsion secret of high performance aircraft. With the ability to stop clocks and disorient compasses at distances of several milos, and lift trucks off of highways at closer range, these magnetic fields would certainly be powerful enough to float a UFO without need of "antigravity."

Large "cigar-shaped" UFOs, possibly designed for outer space work, are often described as having jets of flame coming from the rear. This propulsion system could be based also on fusion reactions in a plasma. Energy thus created could expell gas molecules from a nozzle at very high speeds, being much more efficient than chemical rockets, and using much cheaper fuel!

Vehicles operating in space would also do well to have an ionized plasma sheath around the outside. This layer of gas would prevent particles in space from eroding the skin of a ship moving at high speeds. The plasma would be kept in place in the vacuum by magnetic fields, with lost material replaced from tanks inside the space ship.

With the severe conditions on other planets in our system, most "UFOlogists" feel that the intolligent life forms responsible for UFO activity must travel here from other planetary systems. (I choose to ignore theories about a very old technological civilization surviving on Mars; or one originating on, or inside, the Earth; and beings from another dimension, for lack of proof in the first two theories, and "science-fiction-thinking" in the latter). Most who contemplate interstellar distances feel the UFOs must use faster than light travel. Hoping to give the subject some scientific respectability, I steer clear of theories that lead to science-fiction conclusions. Therefore, I would like to point out that the UFOs would not need to exceed the speed of light to cross space.

At one gravity (G) acceleration (comfortable for passengers) it would take 267 days to reach 3/4 of the speed of light (C). This is a reasonable speed for an efficient reaction (rocket) engine. If the space-ship could push against magnetic fields in space, it might be able to reach 99% of the speed of light in 1 year of 1G acceleration. (It would also take that long to slow down at the end of a trip.) At such speeds, time slows down for people on board the space ship. At .97C, a 10 light year journey would take only a little over 2 years. If .99C could be achieved, a 50 light year trip would take only 7 years for those traveling. At much slower speeds, trips to our nearest neighboring stars would be reasonable. This does take a long time, but such trips are well within reason. Explorers of the 16th. century made similar journeys. And a being with a life span of several hundred years (biological possibility - not science fiction) would think even less about a two year crossing. The perfection of suspended animation would reduce transit time to zero!

Please understand I have nothing against science-fiction. I am just trying to point out that UFOs from outer space are possible with sciences based upon reasonable extensions of present day Earth technology. Maybe that will make you feel better!!

I think Klass was right, people are seeing plasmas - with saucers inside! A plasma on the outside would explain why night photographs of UFOs show only bright, fuzzy blobs."

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From WA5RON: Wayne Green reported on the UFO NET (9:00 pm, 9-4-68) in QSO with W4BJ1 a farmer in N.H. saw odd lights playing in his field, near power lines and microwave relay - for what that's worth. Later, the farmer noticed large circles in the area where plants would not grow. Wayne investigated personally, taking photos and soil samples which he forwarded to NICAP. The town was Frankestown, N. H.

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WA5RON is usually on the UFO net 10:00 pm to midnight EDT on Wednesdays.

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From WA5RON:

The Dallas Morning News - Tuesday, October 1, 1968 - PHYSICIST BELIEVES IN SAUCERS - For most people, flying saucers are a laughing matter.

Not for Stanton T. Friedman, a nuclear physicist who has worked for the big ones in the nuclear aircraft industry.

After 12 years of sifting through data on unidentified flying objects, he is convinced the Earth is being visited by "intelligently controlled vehicles whose origin is extraterrestrial."

He also is pretty sure space creatures, "humanoids," have accompanied space vehicles on their Earth trips.

Friedman, who has worked for Westinghouse, General Motors, Aerojet General Nucleonics and General Electric, said the evidence is substantial enough to receive a wide hearing.

He said public apathy and an official closed mouth policy by the federal government have tended to relegate discussion of UFOs to "the kooks, the extremists on either side who substitute emotion for reason."

Friedman said in an interview he eliminated the UFO sightings that were ultimately identifiable. He also eliminated the sightings with fragmental information.

Of the 9.7 per cent "excellent" sightings - those viewed for some length of time by competent observers - one out of three are still "unknowns," he said.

The "unknowns" all were reported to have certain similarities - hovering patterns, extremely high speed, vertical flight, right-angle turns and silent flight.

They were also symmetric in shape without wings or tail features and they had strange glows, as opposed to color.

Friedman conceded that scientists, particularly in the academic field of astronomy, have tended to discount the UFO theory.

However, those who work in the "Hardware" end, designing nuclear aircraft, know that extraterrestrial travel of the kind cited is possible, he said. The "completely maneuverable" characteristic already is being developed by those in magnetoaerodynamics, he said.

Westinghouse, for example, has a similar vehicle for under-water travel.

In Texas to speak to university science classes, Friedman said the serious student must ask why sightings have been more prevalent in the "modern" age.

He thinks it could be that nations are now showing their capability in rocketry and atomic bombs. "These things surely could be observed from outer space."

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From KP4CH:

Record Courier - 9-14-68 - UFO ROW HEATS UP - by Jack Anderson. Washington - Dr. Edward U. Condon is putting the final touches to a 350,000-word report on flying saucers which already has space scientists in an uproar.

Under Air Force contract, the respected 66-year-old physicist has directed a University of Colorado study of the flying saucer mystery. The Condon report will present a pains-

taking, case-by-case analysis of flying saucer sightings and will conclude that these offer no "hard evidence" of visitors from outer space.

However, the opposite conclusion has been reached by a senior University of Arizona physicist, Dr. James E. McDonald, who has been conducting his own independent study of unidentified flying objects.

"My position," he said, "is that UFOs are entirely real, with the strong possibility that we are under surveillance by an extraterrestrial intelligence."

He has interviewed dozens of witnesses around the world who have reported seeing flying saucers. The separate descriptions they gave him are remarkably similar, he told this column.

Even before the Condon report is published, space scientists already are taking sides with Dr. Condon or Dr. McDonald in a controversy that is growing increasingly acrid.

McDonald got hold of a preliminary memo, for instance, in which Robert J. Low, a former Condon associate, stated that the University of Colorado study would be conducted "almost exclusively by nonbelievers."

McDonald cited this as evidence that the forthcoming report will be biased. He charged that Condon had formed his conclusions in advance then had set out to justify them.

Dr. Condon had no comment, but associates suggested that some flying saucer advocates might have a profit motive. Some specialize in writing books about flying saucers, and others would like to get money out of the government for flying saucers research.

The Condon sympathizers charged that Dr. McDonald had urged a multi-billion-dollar government spending program to find out whether UFOs are spacecraft from other planets.

They also accused McDonald of using Naval funds, intended for atmospheric research, to investigate flying saucers. Pentagon regulations give the Air Force sole responsibility for UFO investigations. Yet McDonald spent the Navy's money, they charge, to visit Australia and Tasmania, where he interviewed 80 flying saucer witnesses.

Dr. McDonald told this column that his flying saucer research and his expenditures had been approved by the Navy.

Meanwhile, it looks as if the Condon report may exacerbate the flying saucer controversy instead of settling it, as the Air Force had hoped.

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October 29, 1968 - REPORT ON UFOs TO GO TO AIR FORCE - Boulder, Colo. (AP) - A report on an investigation of unidentified flying objects by a research team at the University of Colorado will be sent to the Air Force probably some time next week.

The report runs an estimated 1,500 typewritten pages. It is being edited by Dan Gillmore, former New York newspaperman and science writer.

Dr. Edward U. Condon, university physicist who has headed the research group, said yesterday that "the best guess" is that the findings from many months of studies of reports of UFOs will be released some time in January.

Condon declined to discuss the report in any particular.

From Boulder the report will go to the Office of Research and Development in the Air Force. Then it will be reviewed by the National Academy of Science.

Condon said he has no information as to whether the report will be released in Washington or at the university, but said there is a possibility of simultaneous release at both places.

The university research team has spent two years investigating UFO reports under two Air Force appropriations amounting to more than \$500,000. The first appropriation covered research from November 1, 1966, to last February 1, then the period was extended to September 1 with an additional \$300,000 in government funds.

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From WA5ROW:

The Dallas Times Herald - Oct. 1, 1968 - STRANGE RADIO SIGNALS, UFOs SYMPOSIUM TOPICS - Strange radio signals that come from deep space with amazing regularity, the presence of unidentified objects in space and a debate on fireballs - "The Beginning of the Universe," will be the subjects discussed in Dallas at the Fourth Texas Symposium on Relativistic Astrophysics in December.

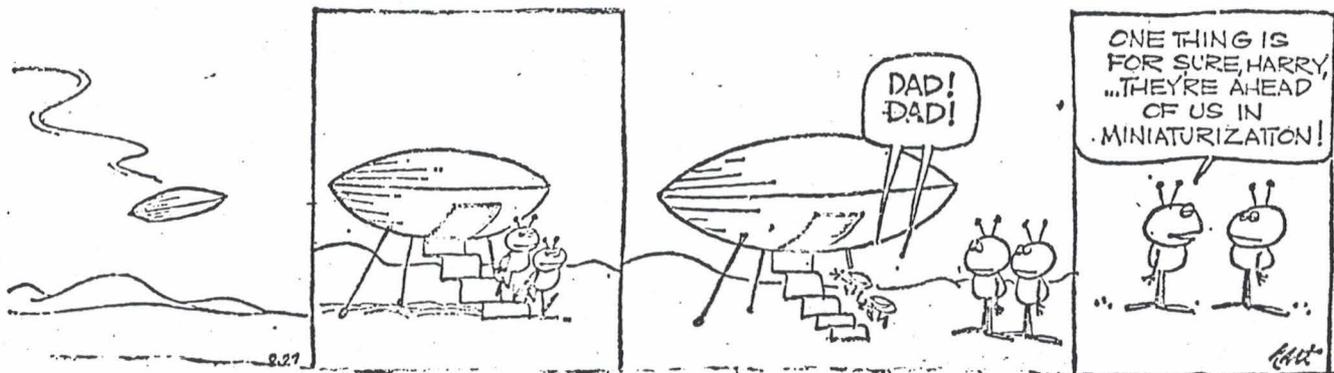
The scientific meeting, to be held at the Statler-Hilton Hotel will be jointly sponsored by the Southwest Center for Advanced Studies, the University of Texas at Austin and the American Astronomical Society.

Among other subjects the scientists will discuss pulsars, both the radio and optical variety, that pour signals over a quadmillion miles into radio astronomy antennas; quasars, powerful but irregular radio signals; advances in the study of gravity and the fireball theory of how the universe began.

B.C.

W-57143

By Johnny Hart



From WA5RON:

The Dallas Times Herald - Editorials - Sept. 30, 1968. GREAT ISSUES. A report on an 18-month investigation of unidentified flying objects may be finished in late November says Dr. Edward U. Condon, who headed the Air Force-financed investigation.

Dr. Condon doesn't seem particularly concerned about the UFOs. "It's not," he said, "one of the great issues of the world today." Well now, if some of those UFOs do turn out to be visitors from outer space, they might just settle some of the great issues of the world today, like all the earth people fighting among themselves, for instance.

The Dallas Times Herald - ASTRONAUT McDIVITT SAYS HE'S SEEN UFOs IN SPACE - by Bill Case, Science Writer. Col. James A. McDivitt is a level-headed astronaut who believes in UFOs.

As command pilot for the Gemini 4 earth orbiting mission, he's seen them in deep space. "They're there without a doubt," McDivitt asserted at a press conference in Dallas Saturday, "but what they are is anybody's guess."

McDivitt said he sighted three separate UFOs on his Gemini mission in June 1965.

"The first was simply a dot of light - not a star - that moved on a parallel course. The second was a white tubular device with a long pole sticking out of the end, and the third defied description."

McDivitt doesn't try to analyze UFOs. He's too busy as command pilot of the Apollo 9 mission, scheduled to orbit the earth next February, in the initial test flight of an Apollo spacecraft linked to a lunar landing module.

At 39, McDivitt, a former Air Force test pilot, has been assigned the most complex earth-orbiting space mission the U.S. has yet undertaken.

It will be his responsibility (in company with two fellow astronauts) to test and prove the feasibility and capability of the Apollo spacecraft and the lunar landing module to safely put American astronauts on the moon and bring them back.

The Apollo 9 mission will be the first U.S. flight in which the Apollo, designed for lunar missions, has actually been connected to the lunar landing module.

It is now scheduled to be boosted into a 270-mile high orbit around the earth sometime next February by a giant Saturn V rocket. Once in orbit, McDivitt and his crew will spend the next 10.5 days conducting maneuvers, engineering and research projects and exhaustively testing the lunar landing module.

When reporters asked how much difference there was between commanding the Apollo 9 and the Gemini 4, McDivitt replied: "It's so completely different I can only describe the change by saying: Gemini 4 was a Piper Cub compared to this. The Apollo is the latest supersonic fighter."

"Ours is a dual spacecraft mission," he explains. "We will continue to check out the Apollo capsule changes brought about by the Apollo 7 and 8 missions and we will make the first transfers from Apollo to the lunar landing module."

McDivitt and his crew will go into orbit on the three-stage Saturn. After going into orbit they will travel around the earth three times then separate from the third stage of the rocket and the lunar module.

"Carrying out in-space maneuvers we will dock the Apollo with the lunar module and release it from the third stage of the rocket," McDivitt explains. "The two vehicles lock together in orbit."

Cruising around the globe at 18,000 miles per hour, McDivitt and his crew will carry out experiments in transferring from the Apollo to the lunar module, both through outer escape hatches and a connecting transfer tunnel in the nose of the Apollo.

"There are enormous unknown factors in a mission as complicated as this," he points out. "We have been in intense training for it over the past two years."

Col. McDivitt and his wife were in Dallas as honored guests at the annual Galaxy Ball held Saturday night in the grand ballroom of the Sheraton-Dallas Hotel for the benefit of the Texas Mental Health Association.

What comes after Apollo 9 - which obviously is the final dress rehearsal of both man and equipment for an attempted lunar landing?

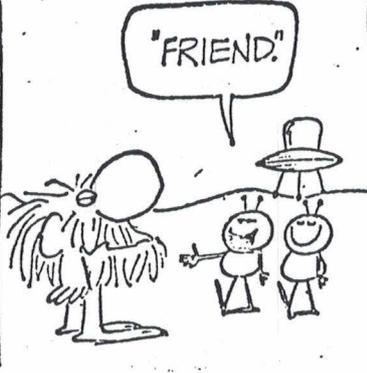
McDivitt can only speculate. "The possibilities are fantastic," he points out. "We're learning more from every mission - and the results from Apollo 9 could open doors we've never dreamed of."
(Sunday, Oct. 6, 1968)

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B.C. #3

WAS THE

By Johnny Hart



From KP4CH:

9-20-68 - MYSTERY OBJECT HOVERS OVER YAUCO MOUNTAINS - Yauco (AP) - Two policemen reported Monday that they saw a bright object hovering over a mountain near here and that, after a while, the object sped away over the ocean.

Local police officials, however, admitted that they were not quite sure how to go about investigating the report.

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From KP4CH:

August 9, 1963. UFOs CALLED SUITABLE FOR A SERIOUS STUDY - New York Times News Service-Washington- Six scientists have insisted before Congress that unidentified flying objects were fitting subjects for serious investigation, but complained that attempts at rational study had been "laughed out of court."

Several witnesses before the House Committee on Space and Astronautics urged federal support for a huge program to collect information to finally settle the debate about extra-

terrestrial visitors.

The testimony was extremely serious and talk of little green men was taboo, while the term "flying saucer" was mentioned rarely, and then only in whispers.

Yet, some bizarre anecdotes were read into the record, including an account of an attempt by some Australian kangaroo hunters using a spotlight to communicate with a hovering UFO "even though the men didn't know morse code."

Dr. J. Allen Hynek, an astronomer at Northwestern University who has been a consultant to the United States Air Force on UFO, the setting up of "a mechanism for studying reports with scientific respectability."

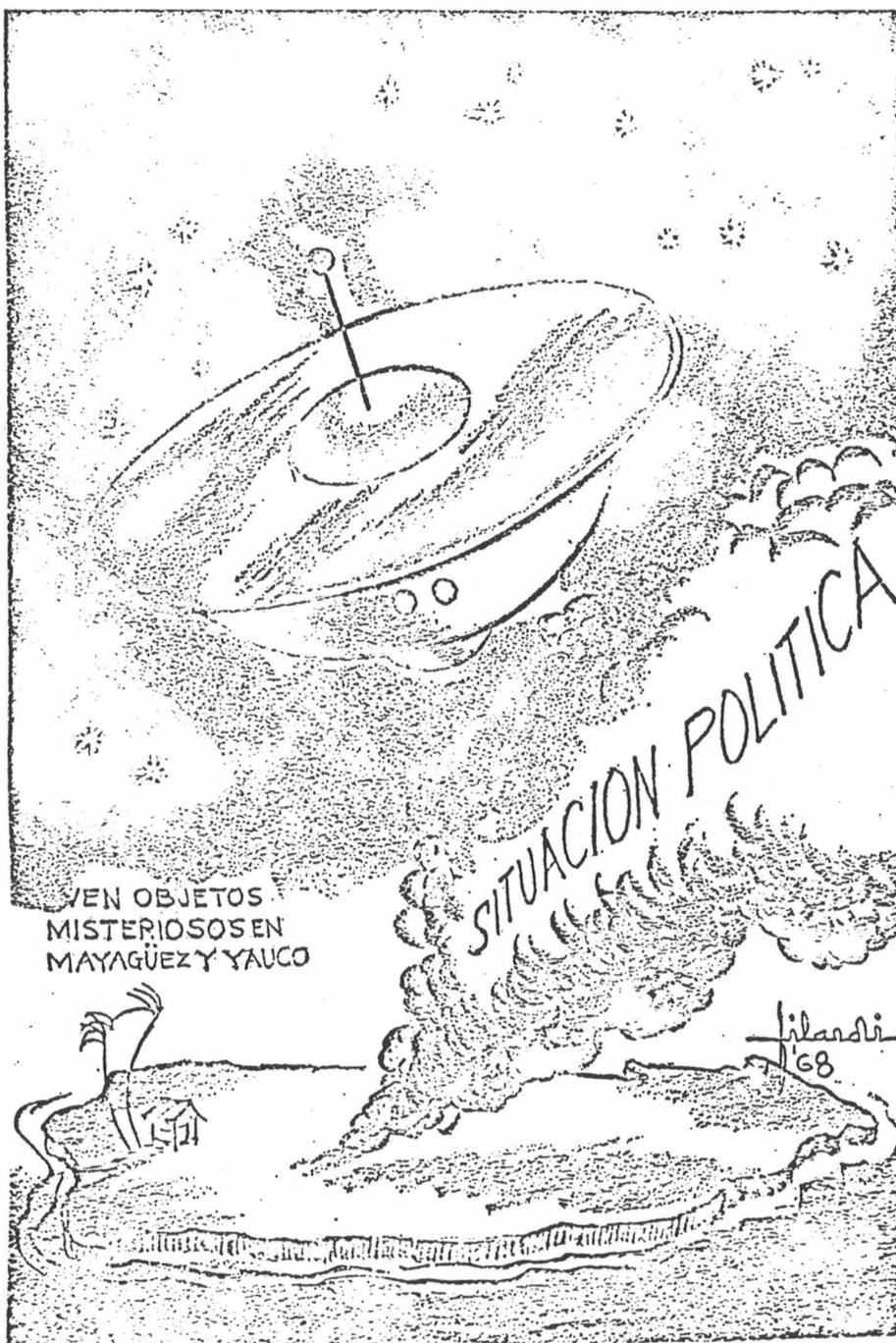
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From KP4CH:

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¿Acaso nos Espian?

por Filardi



From KP4CH:

Record Courier - PROF DEBUNKS FLYING SAUCERS: THEY FLUNK HIS PHYSICAL TEST - By Arthur J. Snider. If the laws of physics are valid, UFOs cannot be under extraterrestrial control, a professor of physics said today.

William Markowitz of Marquette University, Milwaukee, said the principles of celestial mechanics, Newtonian gravitation and Einstein relativity equations are all violated by the claims that space ships have entered our atmosphere, even landing and taking off.

In reopening the flying saucer controversy, Markowitz contends in the current issue of the journal, Science:

No reliable report exists of anyone having talked with an extraterrestrial visitor.

No accident has ever occurred at landing or lift-off that has left an extraterrestrial spacecraft on the ground.

"Believers in the possibility of interstellar travel have great difficulty in trying to explain why the visitors make no attempt to communicate with us after a voyage which supposedly has lasted tens, hundreds of thousands of years," Markowitz asserts.

He replied to a question published earlier in Science by Prof. J. Allen Hynek, chairman of astronomy at Northwestern University, who is willing to entertain the possibility of visits by extraterrestrial beings.

"Why should extraterrestrial visitors try to communicate with us?" Hynek asked. "We would observe but wouldn't try to communicate with a new species of kangaroo in Australia."

Markowitz countered: "This is not a convincing explanation. Intelligent human beings are not in the class of kangaroos. A more appropriate case is that of Columbus. When he landed in the new world he did communicate with the natives."

If extraterrestrial beings have discovered a gravity shield, one idea frequently suggested, they would not have solved the problem of propulsion. Inertia would remain. Reaction would still be needed to obtain acceleration.

Propulsion without reaction is the same as a man trying to lift himself by his bootstraps, he said.

In other theoretical modifications of physical law, Markowitz added, little attention is being paid to the practical difficulties of converting matter into energy and using it in a spacecraft without burning up the occupants.

The physicist said he will not deny that intelligent beings may exist within other solar systems but exchanges of messages will require hundreds of years because of distances.

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From KP4CH:

SCIENTIST SAYS UFOs MAY BE TURNING US OFF- Star-Ledger Wire Services - Washington - A University of Arizona physicist indicated yesterday there might be some relationship between identified flying objects and power failures, particularly the 1965 blackout of the Northeast section of the United States.

Dr. James E. McDonald, senior physicist at the Institute of Atmospheric Physics, told a House committee "there are too many instances of sightings of UFOs hovering near power plants."

McDonald said during the New York power failure which began Nov. 9, 1965, the Federal Power Commission had hundreds of reports of UFO sightings.

"There also were reports in upstate New York of a glowing object at the instant the lights went out," he said. The power failure was believed to have begun in upstate New York.

"The source of the pulse which triggered the safety mechanism has not been identified," McDonald said, referring to the power system.

McDonald testified before the House Science and Astronautics Committee which held a symposium on unidentified flying objects.

He would not say flatly that the power failures were caused by some form of extraterrestrial life but he said "there is a puzzling and quite disturbing coincidence between the sightings and power blackouts."

McDonald said all too often reports of UFOs contain information about power failures

in houses or automobile engines going dead.

In answer to a question by Rep. William F. Ryan (D-N.Y.), McDonald said there should be further investigation by the Federal Power Commission or some other government agency into the relationship of UFOs and power failures.

McDonald, in his former statement, agreed with Dr. J. Allen Hynek, head of the Astronomy Department, Northwestern University, that the government should establish some agency to adequately study UFO reports.

"The possibility that the earth might be under surveillance by some high civilization in command of a technology far beyond ours must not be overlooked in weighing the UFO problem," McDonald said. "I am one of those who lean strongly towards the extraterrestrial hypothesis.

"I am convinced that the recurrent observations by reliable citizens here and abroad over the past 20 years cannot be brushed aside as nonsense, but rather need to be taken extremely seriously as evidence that some phenomenon is going on which we simply do not understand.

"Although there is no current basis for concluding that hostility and grave hazard lie behind the UFO phenomenology, we cannot be entirely sure of that. For all of these reasons, greatly expanded scientist and public attention to the UFO problem is urgently needed," said McDonald.

Dr. Carl Sagan, astronomy professor at Cornell University, said "if there are other technical civilizations among the hundreds of billions of stars in the universe, any random one of them is likely to be vastly ahead of us."

Hynek said: "My scientific hunch...is that there is scientific pay dirt in the UFO phenomenon."

He urged Congress to establish and support a "UFO board of scientific inquiry" to sponsor a variety of investigations along with an "international clearing house" to correlate reports of UFO sightings from around the world.

Noting UFO sightings by responsible and skeptical witnesses around the world, McDonald said: "Far too many defy our best analysis."

He said "these included some cases where witnesses on the ground flashed lights into a pattern of hovering, disc-like craft which responded with flashing lights in the same pattern.

"It would be terrible if this was surveillance and our technology was represented by the EverReady flashlight."

If the earth is being watched, Sagan said, "it would be folly to ignore it...it is not beyond question that we could be visited."

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Dallas Times Herald - Oct. 14, 1968 - UFO GETS MYSTERY BLAST BLAME - Lakeland, Fla. (AP) - Sheriff's deputies said a booming explosion that shattered the windows of a nearby trucking company was caused by an unidentified object that crashed into an orange grove Sunday night.

"Something from up there smashed into the ground," said a spokesman for the Polk County sheriff's department. Deputies said the explosion broke windows in the trucking company and a house a mile away and rattled buildings several miles away.

"I've heard sonic booms before and that thing sounded like 14 sonic booms" said dispatcher George Wimberly of the Watkins Motor Line Trucking Co.

James Taylor and Randal Costine, truckers at the nearby Watkins Garage, said they saw a cloud of white smoke after the explosion at 10:20 pm.

Investigating Polk County sheriff's deputies said they found a hole in the ground four feet wide and 1½ feet deep about 100 feet from the trucking company office.

Deputy Bob Westmoreland said a search of the crater and nearby area turned up no sign of metals or other object except hard clay. He said the hole was smooth and warm.

Investigators planned to check today the possibility the explosion might have been caused by falling debris connected with the Apollo 7 launch Friday at Cape Kennedy, about

90 miles to the northeast.

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IIT FINDS WAY TO PARE SIZE OF ROCKET ENGINES AND KEEP NEEDED THRUST - By Richard Lewis - A new principle in the behavior of rocket fuel which may revolutionize future construction of missiles and space rockets has been discovered at Illinois Institute of Technology.

It opens the way toward reducing the size of liquid fuel rocket engines without sacrificing thrust, according to T. Paul Torda, professor of aerospace and mechanical engineering.

With a smaller engine, a rocket can lift more payload and is more maneuverable, said Torda, who directed the research.

The discovery came out of an 18-month analysis of the life and death of a drop of rocket fuel in the combustion chamber of a rocket engine.

The analysis revealed a basic error in the formula rocket engineers have been using for the last 20 years to predict the rate of vaporization of fuel droplets in the combustion chamber.

Under high pressures, Torda said, the droplets become vapor much faster than the accepted formula, called the Renz-Marshall model, predicts.

The consequence of this is that the size of all rocket combustion chambers can be reduced, said Torda. The research at IIT proves they are bigger than they have to be.

This makes it possible, in turn, he explained, to reduce the size of the engine. The consequent decrease in engine mass boosts the efficiency of the rocket and makes it respond more quickly to steering commands.

A nationally known expert on rocket technology, Torda has reported the discovery to the National Aeronautics and Space Administration.

The agency has been financing his work under a \$100,000-a-year research contract.

Torda said he did not believe the new vaporization finding would lead to modification of existing rocket engines, such as the H-1 which propels the Saturn 1B and the F-1 which boosts the giant Saturn 5.

But he said it might be speculated that engines developed in the future will be influenced by the finding - one of the major discoveries in rocket technology since the development of reliable fuel injection systems.

Basically, he said, the concept of the rate of fuel vaporization - which partly determined the size of the combustion chamber - was based on an assumption that the fuel droplet remains liquid until it is entirely vaporized. It was assumed also, he said, that its temperature remained constant.

The investigation at IIT showed those ideas were wrong, Torda said. It disclosed that the droplet quickly becomes transformed from the liquid to the vapor state, forming what might be described as a vapor ball.

Instead of remaining constant, the temperature of the vapor ball rises to accelerate vaporization, he said.

Torda said the experiments also showed that the higher the pressure in the combustion chamber, where the fuel vapor is mixed with an oxidizer so it will burn, the faster the vaporization goes.

Thus, high-pressure combustion chambers can be relatively small, and a new generation of compact but powerful chemical rocket engines might be evolved from this principle.

Lack of understanding of how fuel droplets behave in a combustion chamber has been a major gap in chemical rocket development, Torda said. Learning how they behave is essential to prevent instabilities in combustion which may prove disastrous.

More detailed knowledge of those processes will enable engineers to design advanced rocket engine systems on computers, Torda said.

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WAT 43

B.C.

By Johnny Hart



SPECULATE ON GALAXY RADIO BEEPS - By Richard Lewis - Two experts on the nature and origin of the universe speculated Wednesday that mysterious radio signals emitted from deep within our galaxy may be transmitted by intelligent beings.

The authorities, both scientists at California Institute of Technology, made it clear that this is merely speculation.

It is more likely, they said, that the interstellar radio beeps which were first detected last July are emitted by dying stars.

Nevertheless, said Harrison Brown, professor of geochemistry, "it is conceivable that these could be intentional signals sent by some kind of high level, technological civilization."

"They would make a wonderful beacon, and some people do think they are attempts to communicate," said William A. Fowler, professor of physics.

"The most puzzling thing is that the sources seem to be stationary and the period (repetition of the beeps) is so constant that the motion of the Earth had to be taken into account to measure them."

Astronomers who discovered the mystery beeps last July at Cambridge University, England, found that the radio pulses lasted three-tenths of a second and were repeated every 1.337 seconds.

The accuracy of the period between signals was measured by Cambridge to one part in 10,000,000, according to the published report of the Cambridge scientists in the British journal, Nature.

The amazing precision of the beeps is one of the most astonishing aspects of the discovery, Brown said.

He suggested that the beeps could be used as navigation beacons for U.S. spacecraft. Perhaps this is the purpose of the signals for an advanced, interstellar civilization, Brown speculated.

The subject of the intriguing radio pulses or "pulsars" as they are coming to be called arose during a press conference with the Cal Tech scientists at Ambassador West Hotel.

The fascination generated by the pulsars, said Brown, is significant in itself. It indicates that more scientists are thinking seriously about the likelihood of life beyond the Earth, and about the impact of its discovery on human beings.

Brown, co-author of a science fiction novel using this theme, said that if the pulsars are artificial they would answer one of the great questions facing humanity.

That is whether a high-energy civilization, such as ours, can ever stabilize itself and survive more than a few centuries, he said.

For, he reasoned, the technology represented by transmitters capable of sending the

radio pulses across an estimated 300 light years would be ahead of ours.

Energy sources available on Earth are not yet powerful enough to generate such signals, Brown said.

While 300 light years is within our Milky Way galaxy, the scientists added, it still is far away. A light year is the distance light travels in one year at a speed of 180,000 miles a second.

The enormous energy required to send the radio pulses over such a span enhances the probability that they are natural, rather than artificial, Fowler said.

"If you look for a natural explanation," said the physicist, "the best bet is dwarf stars - condensed stars, or neutron stars."

Such stars represent the end of stellar evolution, wherein after burning itself out, the star collapses.

Cambridge observers estimated each of four sources of beeps they found were less than 2,880 miles in diameter, indicating a super-dense, collapsed stellar object.

In addition to Brown and Fowler, Cal Tech scientists participating in the conference were Murray Gell-Mann, professor of theoretical physics, Robert L. Sinsheimer, professor of biophysics, and James Bonner, professor of biology.

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RUSSIA REPORTS ON UFOs; SCIENTIST ASKS WORLD STUDY - Moscow (UPI) - Dr. Feliks Zigel, astronomy professor at the Moscow Aviation Institute, has released findings of Soviet scientists' studies of sightings of "luminous orange-colored" flying saucers over Russia.

He called for global investigation of the phenomena.

The Statement by Zigel, issued to the foreign press through the news agency Novosti but not circulated domestically, follows revelation of Air Force Maj. Gen. Porfiry Stolyarov in November that an official commission had been established to investigate unidentified flying objects.

Zigel said the UFO phenomenon was "a problem of prime importance that can be solved only by a joint effort of all the scientists of the world."

"It is safe to claim that the UFO problem has assumed a global character and therefore calls for global research," he said.

Zigel reported that a "big team" of Soviet scientists and specialists has studied 200 reports of sightings - including observations by Kazan astronomers and the astronomical station near Koslovodsk of UFOs seen over the Ukraine, Crimea and Caucasus in July, September and October of 1967.

"The most characteristic type of UFO," wrote Zigel, "is a luminous orange-colored crescent with a diameter of 15 to 20 degrees of the arc, flying with its outward curve forward. Its surface is only a little duller than that of the moon.

"The horns of the crescent throw out jets, sometimes with sparks.

"A bright flaming disc preceded by a crescent is observed sometimes. Sometimes the crescent is preceded and flanked by what look like first-magnitude stars which keep at a constant distance from the crescent."

Zigel said studies have indicated that such objects "obviously could not have been made by man and are definitely not artificial Earth Satellites or space rockets."

The Soviet scientists reported on the observations of three Latvian astronomers at Ogra on July 26, 1965, when they were studying silvery clouds at the observatory and spotted an unusually bright star slowly moving West. They said:

"Viewed through eight-power binoculars, the star appeared as a small flat spot. The telescope revealed a truly amazing picture: There was a small ball in the center of the lens-shaped disk. The astronomers set the disk diameter at about 100 meters (328 feet).

"Around the disk, at a distance of its two diameters, there were three balls like the one in the center of the disk. The balls slowly rotated around the disk, and the whole system dwindled as it receded away from the Earth.

"Some 15 to 20 minutes later, the balls began to depart from the disk in different directions. The ball in the center also left its place and flew aside. Finally at 10 p.m. (25 minutes after the first sighting), all these bodies, which emitted a greenish-pearl glow, faded into the distance."

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NO DUMMY EVEN THOUGH HE'S A 'DUMMY' - By Frank Macomber - Military-Aerospace Writer - Copley News Service - Nobody is all bad, not even ED. True, he's not too much of a man. In fact he's only half a man. But the half is doing a good job for the Federal Space Agency.

ED is the acronym for electronic dummy. He is helping National Aeronautics and Space Administration engineers at the Manned Spacecraft Center, Houston, Tex., in the design and checkout of space suit communications systems for Apollo moon-bound astronauts.

The noise level in an Apollo spacecraft as it lifts off atop a Saturn booster will be about 125 decibels. That's about the racket level generated by a big jet airliner as it takes off.

MSC engineers were told to come up with a space suit communications system that will work at this high noise level, allowing astronauts and ground controllers to exchange vital information by voice.

It turned out to be a tough assignment, but the center's instrumentation and electronic systems division designed ED, a plastic head-and-shoulders dummy whose measurements are a composite of Apollo flight crew dimensions.

ED's ears actually are microphones and his mouth is a miniature loudspeaker. His electronic voice and hearing ranges are pretty much akin to those of humans.

In MSC's acoustical chambers ED is fitted with an Apollo helmet, sealed at the base to prevent leaks. As artificial sound levels - simulating those during a Saturn blastoff - build up in the chamber, ED carries on pre-recorded "conversations" with test conductors outside the chamber.

Electronic equipment, installed where ED's stomach would be if he had one, registers his response to liftoff noise. This helps the engineers to develop audio-headsets for astronauts and to soundproof the Apollo spacecraft.

ED serves another vital purpose. Before astronauts are subjected to the inevitable high "screech" levels of booster liftoffs, ED finds out through his electronic ears whether the test conditions are safe for men.

Engineers claim the dummy is superior to human subjects during noise tests. Its response to a noise level remains the same, for example, and its reactions aren't affected by emotions or other interference. ED is a constant sort of fellow.

He was built for MSC by Columbia Broadcasting System Laboratories.

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San Francisco Chronicle - 8-24-68 - HUNDREDS LOST IN HUGE WAVES - Jakarta (Reuters) - Five hundred persons were reported missing yesterday when huge tidal waves swept the tiny Indonesian island of Tuguan in central Celebes.

The Antara news agency said the tidal waves were caused by powerful earthquakes which have rocked the island since August 10. Fifty-six bodies were discovered and hundreds were still missing.

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From KP4CH:

The San Juan Star - 8-9-68 - RATE WOULD NOT ERR BY MORE THAN ONE SECOND IN 30 MILLION YEARS - PERPLEXING PULSARS BEAT THE CLOCK - By Walter Sullivan - New York Times News Service - It has been discovered that the mysterious pulsars, or radio-pulsing "clocks in the sky," tick at a rate so uniform that it is comparable to a clock that does not err by more than one second in 30 million years.

This uniformity of tempo, amounting to one part in a million billion has been recorded by scientists of the California Institute of Technology over periods measured in days using an atomic clock of extreme precision.

The measurements have shown that the pulsars are one of nature's most extraordinarily rhythmic phenomena. Such precision would make them useful as navigational beacons for those traveling between far-flung super civilizations.

However, the suggestion that they might be artificial navigational aids has been dismissed by most astronomers because their signals show no other aspects of the pulsars, such as concentration of their energy at frequencies unsuited to space communications seem illogical for such a purpose.

The known number of the perplexing pulsars has almost doubled in recent days, bringing the total to nine. For almost a year, following their discovery by the British, it stood at four. Three weeks ago a Harvard University team found another and now British and Australian astronomers have discovered four more.

The two found by the Australian's are the first to be detected in the southern sky. The discovery was made with a giant antenna system near Sydney.

The locations of the nine known pulsars suggest that they are randomly scattered around the sky, encouraging the view that they are comparatively near the earth. Yet in at least two of their locations nothing can be seen through even the most powerful optical telescopes.

If the pulsars were scattered thinly through the Milky Way galaxy, or flattened system of stars which includes the sun and its planets, one would expect to find most of them lying in or near the Milky Way, as seen from the Earth.

Since this is not the case, they may be nearby, implying that thousands or millions of others may be scattered through the galaxy, their pulses too weak for detection at such distances.

News of the Australian discovery was phoned last week to Dr. Yervent Terzian at Cornell University in Ithaca, New York. The Australian set-up of two mile-long antennas in the form of a cross is operated by Sydney University in a joint effort with Cornell. It is named the Mills Cross for its designer, Dr. B. Y. Mills.

Dr. Terzian pointed out that the pulse rates of all the known pulsars are very similar, lying between 0.25 and 2 seconds. The Australian ones pulse once every 0.56 and 1.96 seconds respectively. Some had expected that, as more pulsars were found, they would display a wider range of rates.

It is hoped now that their uniformity will ultimately help astronomers figure out what they are.

The two British discoveries have been announced by the the Central Bureau for Astronomical Telegrams, the world clearing house for such findings at the Smithsonian Astrophysical Observatory in Cambridge, Mass. They were made by the Cambridge University team, in England, that discovered the first four pulsars last year.

The pulse rates of the two newest British finds are 1.29223 and 0.71446 seconds respectively.

Terzian said Wednesday, in a telephone interview, that the pulse rate of almost two seconds for one of the Australian finds made it appear unlikely that pulsating neutron stars could account for the signals. Neutron stars are hypothetical objects of extraordinary density, being solid balls of nuclear particles (neutrons).

Calculations indicate that, if they are quivering or "ringing" like a bell, it should be at much shorter intervals than those observed.

The pulse rates are more compatible with the proposal that they emanate from "white dwarfs," Terzian said. Like the neutron stars, these are the "cinders" of stars that have consumed their nuclear fuel, but are larger and less dense than neutron stars.

The extraordinarily uniform pulse rhythm of several pulsars was reported in a telephone interview, by Dr. R. D. Ekers of the California Institute of Technology. The rates are far more uniform than the spin tempo of the earth. Timing with an atomic clock, the most accurate standard available, has so far shown no variation whatsoever.

Ekers also noted that the pinpointing of their positions showed that at least two pulsars lie in patches of sky where nothing can be detected in photographs taken through powerful telescopes.

White dwarfs have been photographed, but none has been detected so far at pulsar locations.

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Wayne Green stated in his ELECTRONICS ILLUSTRATED article (see page 4) that the Aricebo crew places the signal sources on a "great circle route in the galaxy," also that they "do not originate at random."

In the above Sullivan article we read that the pulsars are "randomly scattered around

the sky." Quite a contradiction for our truth-seeking, fact-worshiping scientists.

To those involved in UFO research it amounts to just another case of adjusting the facts to support the theory. (Ed.)

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Chicago Sun-Times, Mar. 17, 1968. FUND PINCH THREATENS THE U. OF I.'s 'BIG EAR' - by Richard Lewis. The University of Illinois may have to shut down its giant radiotelescope July 31 because of a cutback in federal funds.

Unless it receives emergency funds from the National Science Foundation or the state, the \$871,650 "Big Ear" in the Vermillion River Valley near Danville, Ill., will become a casualty of the rising war budget.

University scientists told The Sun-Times Saturday they cannot even afford to modify the instrument to join a worldwide search for mysterious, beaconlike radio signals coming from deep within the Milky Way.

The signals are radio pulses or "beeps" lasting precisely three-tenths of a second and coming at exact intervals of 1.337 seconds.

The "beeps" were first noticed by scientists at the Mullard Radio Astronomy Observatory at Cambridge University, England, last July.

Prof. George C. McVittie, head of the U. of I. department of astronomy, said the radiotelescope's huge antenna, with its great reflector 600 feet long and 400 feet wide, had swept the region of the galaxy where British scientists believe the signals originated.

But it found nothing matching the beaconlike beeps.

"This simply meant that the signals were below the detectability of our instrument," McVittie explained. "The whole of our telescope is built to operate at 610.5 megacycles. The Cambridge people detected them on 81.5 megacycles.

While the U. of I. telescope is tuned to receive signals at the higher frequency, it could be adjusted for reception at lower frequencies if money were available.

McVittie said he and Prof. George W. Swenson, the electrical engineer who designed the telescope, looked into the feasibility of modifying the instrument so that it could scan for the beeps on a frequency of 75 megacycles.

"We decided against it," McVittie said. "Frankly, the reason is - it will cost money, and we cannot do anything now involving cash. That is our situation."

McVittie said that when this year's \$125,000 grant from the Office of Naval Research runs out at the end of July, there is no more money in sight to operate the telescope - one of the largest of its type in the world.

"We shall have to stop our survey, just when the instrument is producing what it was built for," McVittie said. "I am hoping that the National Science Foundation could save us - but Congress is not increasing its budget."

The astronomer said he does not expect help from the State of Illinois. No state funds for such research projects are provided in the U. of I. budget.

In Washington, a spokesman for the Office of Naval Research told the Sun-Times that the five-year contract with the U. of I. has expired. It cannot be renewed because of the new policy of holding down research grants.

Three other institutions, the University of Michigan, the California Institute of Technology and the University of California at Berkeley, will continue to receive ONR money for radio astronomy, but they will get much less, the spokesman said.

The cutback is part of a generalized phasing out of big research projects at the universities which the Defense Department has been financing for 15 years.

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Chicago Sun-Times, Jan. 30, 1968. ASTRONOMICAL THEORY SHEDS NEW LIGHT ON STAR MYSTERY - By Richard Lewis. A theory that strips much of the mystery from quasars, which have been considered among the most mysterious objects in the universe, was described here Monday by Fred Hoyle, one of England's foremost astronomers.

If the theory is correct, Hoyle told a spellbound audience at the University of Chicago, it implies that:

1. Quasars, or quasi-stellar objects, are not as far away as many astronomers believe.

A number of astronomers have considered quasars - masses of highly energetic matter larger than a star but smaller than a galaxy - to be the most distant objects man can see in the universe.

2. Quasars may be much more common in the universe than many astronomers suspect. In fact, Hoyle said they may actually represent "a major component of the mass of the universe." Other experts have considered quasars a kind of rarity.

3. Quasars may be a prime, extragalactic source of cosmic rays. These are nuclear particles which speed through the heavens at velocities close to the speed of light.

Cosmic rays measured near the Earth by instruments on spacecraft generally have been believed to originate in exploding stars (super novae) or from storms on the sun.

Hoyle described the theory in a packed Eckhart Hall with equations he drew on the blackboard and charts flashed on a screen.

The theory, which he and others have developed in the last three years, holds that quasi-stellar objects are composed of pieces of matter, representing in total a very large mass in a small volume of space.

The energy radiated by these "QSOs," as Hoyle calls them, is produced when one piece smashes into another almost at the speed of light.

"If two objects collide with the speed of light," explained Hoyle, "your're going to have something of a mess - a cloud of particles. You would have the energy for cosmic rays and radio waves."

The pieces of a quasi-stellar object, he added, "are pretty compact." When they hit, they would produce a diffuse cloud of particles and electromagnetic radiation (light and radio waves).

This would explain the origin of extraordinarily powerful radio and light emissions from quasars, according to Hoyle. How such objects, which have been assumed to be stars, shine with the energy of whole galaxies of millions of stars has puzzled the scientific world for years.

As Hoyle described it, the energy emitted by pieces colliding in a quasar is "enormous." For his fellow scientists, Hoyle wrote it on the blackboard as 10 to the 47th (power) ergs (a unit of energy) per second, or possibly 10 to the 60th ergs.

That is a number so high the zeroes would more than fill the width of this newspaper. The masses involved in such energy production, he estimated, must be many million times the mass of the sun.

The theory Hoyle advances may also explain rapid changes in the energy radiated by quasars. The radiation has been observed to double in a day, or increase or drop tenfold in a few months, he said.

What produces the collisions of the pieces which creates this energy?

Gravitational force, said Hoyle. And this, he added, may explain the phenomenon of the "red shift" which has led astronomers to believe that quasars are very distant and steadily moving farther away.

When an illuminated object moves away from an observer fast enough, its light rays seem to lengthen and their frequency shifts toward the red part of the spectrum.

The red shift can be produced by powerful gravitational forces in the quasar masses, he said.

From this viewpoint, a conception held by some astronomers that quasars are racing away at incredible speed, thus proving that the universe is expanding, may be an illusion.

Yet, this idea about quasars has been dominant since 1963, when they became prominent objects of worldwide study and speculation.

Tied to this expanding-universe interpretation of the red shift which quasars display is the theory that the universe has been growing since a primeval explosion - the "big bang" theory.

Hoyle never has agreed with it. His new theory of quasars tends to torpedo it.

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KF4CH reports a recent sighting over Santa Monica. Many people saw a UFO which was yellow in color with windows. The sighting was reported on TV stations.

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MYSTERIOUS VOICES FROM SPACE - by John A. Keel - Saga Magazine - November 1968.

"For the last several years, particularly during flying saucer "flap" periods, our airwaves have literally been jammed with eerie guttural voices chattering away in a language unlike any known on earth. What has frightened everyone who has heard these strange messages - and baffled the Federal Communications Commission - is that they're not coming from some remote galaxy but from very close by!"

Keel makes a lengthy attempt to convince us that "unknowns" are threatening us via the air waves.

The interference is most prevalent on the VLF (very low frequencies), but is sometimes heard "at the low end of the amateur band after midnight during UFO "flap" months, March-April and July-August."

The sounds are like speeded-up phonograph records and in some cases blast from radios which are not even turned on.

From unintelligible jamming noises, Keel shifts to actual messages in English! One received through the Midwest in January 1954, and again at the London airport, stated, " I wish no one to be afraid, although I speak from outer space. But if you do not stop preparations for war, you will be destroyed."

Project Blue Book received a registered letter in 1953 issuing a similar type warning. Many HAMS have picked up strange unintelligible conversations, some while their gear was turned off.

The VLF are not used by amateurs, so the "hoax" theory is viewed with skepticism.

Keel reports that on August 3, 1958 HAM operators picked up a strange broadcast on the 75-meter international band. A male voice purporting to be "Necoma from the planet Jupiter:" warning that American atomic bomb tests could lead the world to disaster.

"He spoke for two and a half hours in English, German, Norwegian, and his own language which was described as a kind of "musical jibberish," Keel reports.

Both Russia and the U.S. have been baffled by unaccountable signals; the FCC, NASA, and Aricebo have reported interference by strange unintelligible transmissions.

Are we being confused by normal atmospheric disturbances, sunspots, static, etc? Or by some elaborate hoax?

Do any of our members have anything similar to report? If so, what is your reaction? (Ed.)

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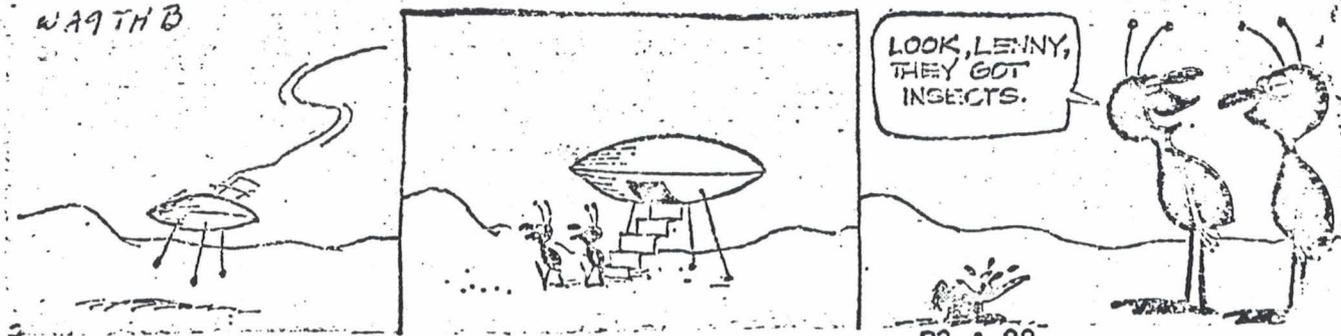
DIYUFOs (do it yourself UFOs) have become the fascinating project of two University of Illinois students, Richard Roush and Kirk Bresee.

Their DIYUFO consists of a hot air balloon heated by burning, paraffin-filled straws, lighted by the straws' flame, and propelled by mild wind buffeting.

The idea originated with an aeronautical engineer, Mike Elbl, who says, "Last year alone, we sent three UFOs over Illinois Residence Hall from Florida Avenue Residence Hall. About a week later, I.S.R. sent one back to us. It was really cool." (From an article by Gale F. Wiley, IT'S A BIRD-IT'S A PLANE!)

B.C.

By Johnny Hart



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