

# Science & Mechanics

JUNE STILL 35¢

SENATOR  
WILLIAM PROXMIRE  
WARNS OF  
CREDIT CARD  
DANGERS

**THIS  
UFO  
WAS  
PHOTOGRAPHED  
BY ASTRONAUT  
GORDON  
ON GEMINI  
11 FLIGHT!**



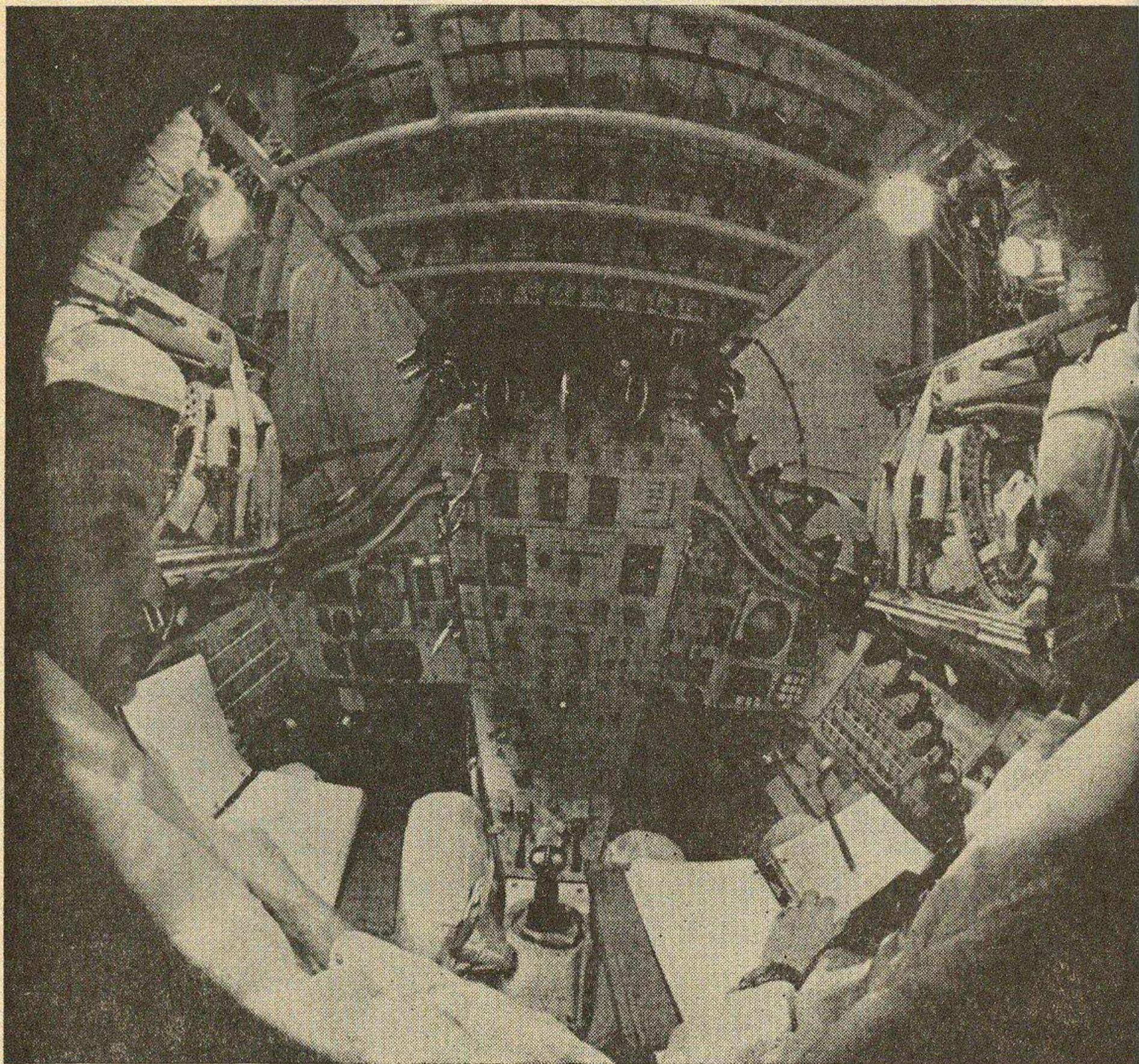
**Exclusive Interview Uncovers  
Outer Space Mystery!**

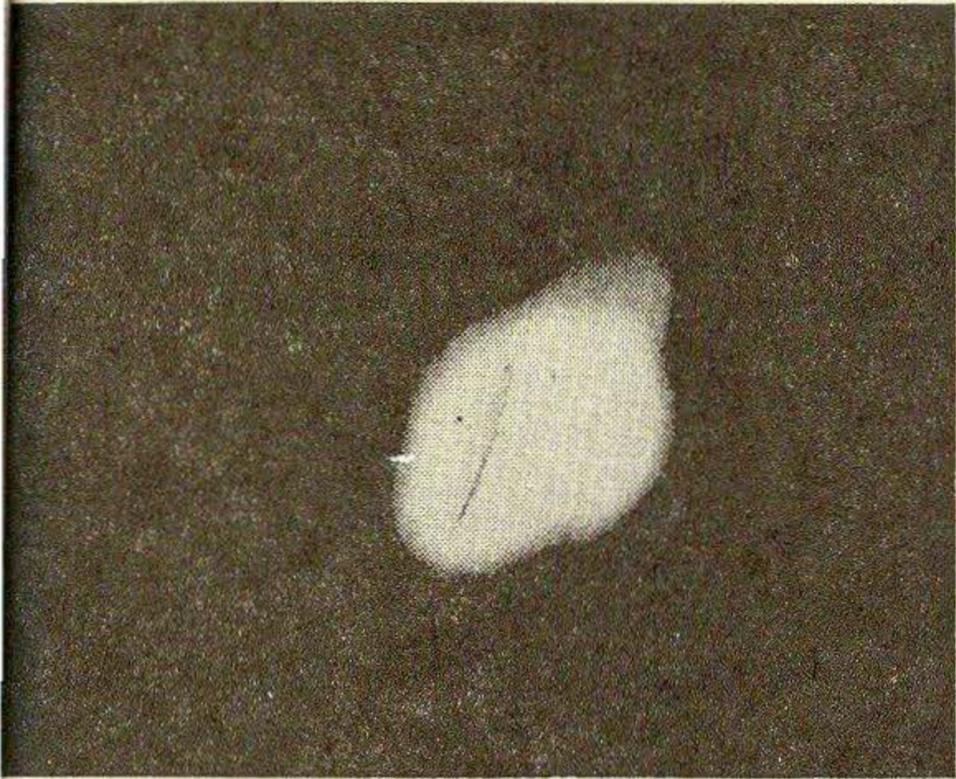
**Vietnam Fallout: Horrible Diseases for the U.S.**

**Joe Gutts on the Hemi Road Runner: Superperformance!  
Basil Thursday on the Renault R-16: Gallic Gadabout!**

# ARE UFO

## SPACE CREWS SPYING





*The brightly glowing object seen at left and on the cover of this month's S&M was photographed by Astronaut Charles Gordon during the flight of Gemini 11 in September, 1966. At first it was identified as the unmanned Russian satellite Proton III, but as the author explains below, this has been shown impossible. NASA now simply terms the object "unidentified."*

By Lloyd Mallan

## ON OUR ASTRONAUTS?

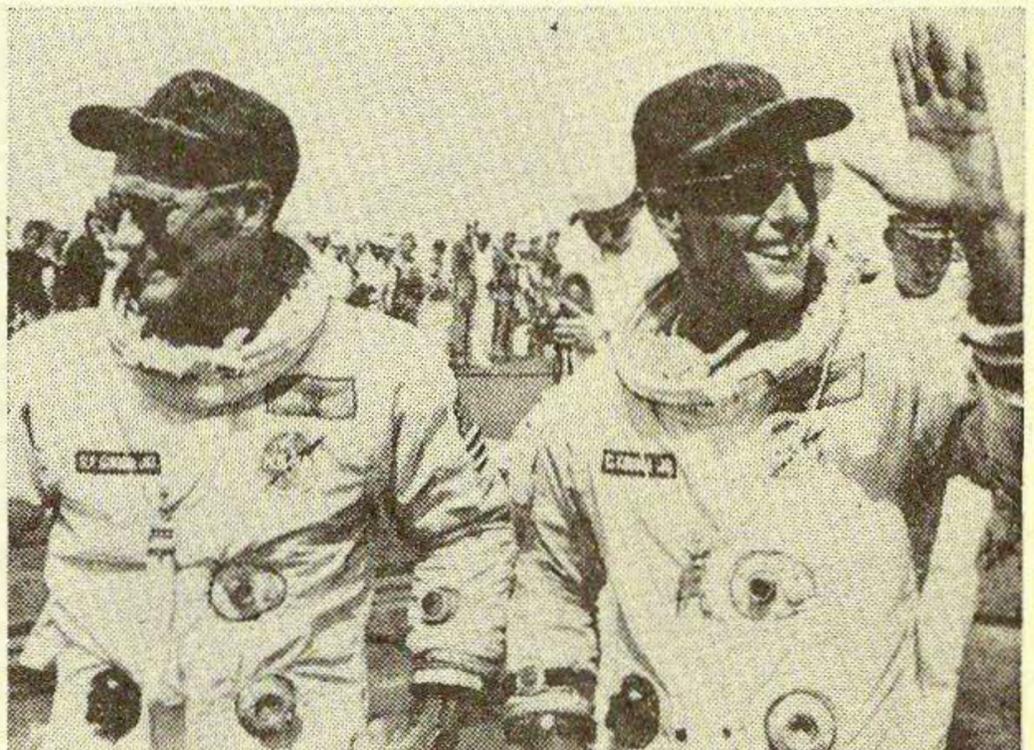
Even NASA and NORAD cannot satisfactorily identify four known sightings of UFOs made by American astronauts during flight missions

□ Are alien UFO space crews curiously watching our astronauts as they whirl about the earth on their scientific missions? There are at least four known sightings of UFOs by American astronauts. In most cases, the UFOs (Unidentified Flying Objects) were photographed.

I have recently managed to obtain color transparencies of the UFOs last photographed from earth-orbit. One of these is on the cover of this issue of S & M. The transparencies were loaned to me by NASA Headquarters in Washington, D.C. and were accompanied by this caption: "During Gemini 11 flight, Astronaut Gordon photographed an object which has not been identified."

The Gemini 11 spacecraft was launched atop a Titan II booster from Cape Kennedy on September 12, 1966, with two former Navy test pilots as crew—Charles Conrad as command pilot and Richard F. Gordon, Jr. as pilot. A major purpose of the flight was to test the capability of rendezvous and docking with an Agena Target Vehicle (unmanned)—which was launched into orbit on the same day—during the astronauts' first revolution of the earth. Conrad and Gordon accomplished the feat and remained in

*At left is a photograph of the complex interior of a Gemini spacecraft, showing two backup pilots running through final checkup tests prior to flight. At right are the happily smiling astronauts Richard F. Gordon Jr. (left) and Charles Conrad Jr. on board the USS Guam after successfully completing the Gemini 11 mission. It was during this flight that Gordon sighted and photographed the UFO seen above.*



## ARE UFO CREWS SPYING?

space for 46 more revolutions. They splashed down safely in the Atlantic Ocean after 71.3 hours in space.

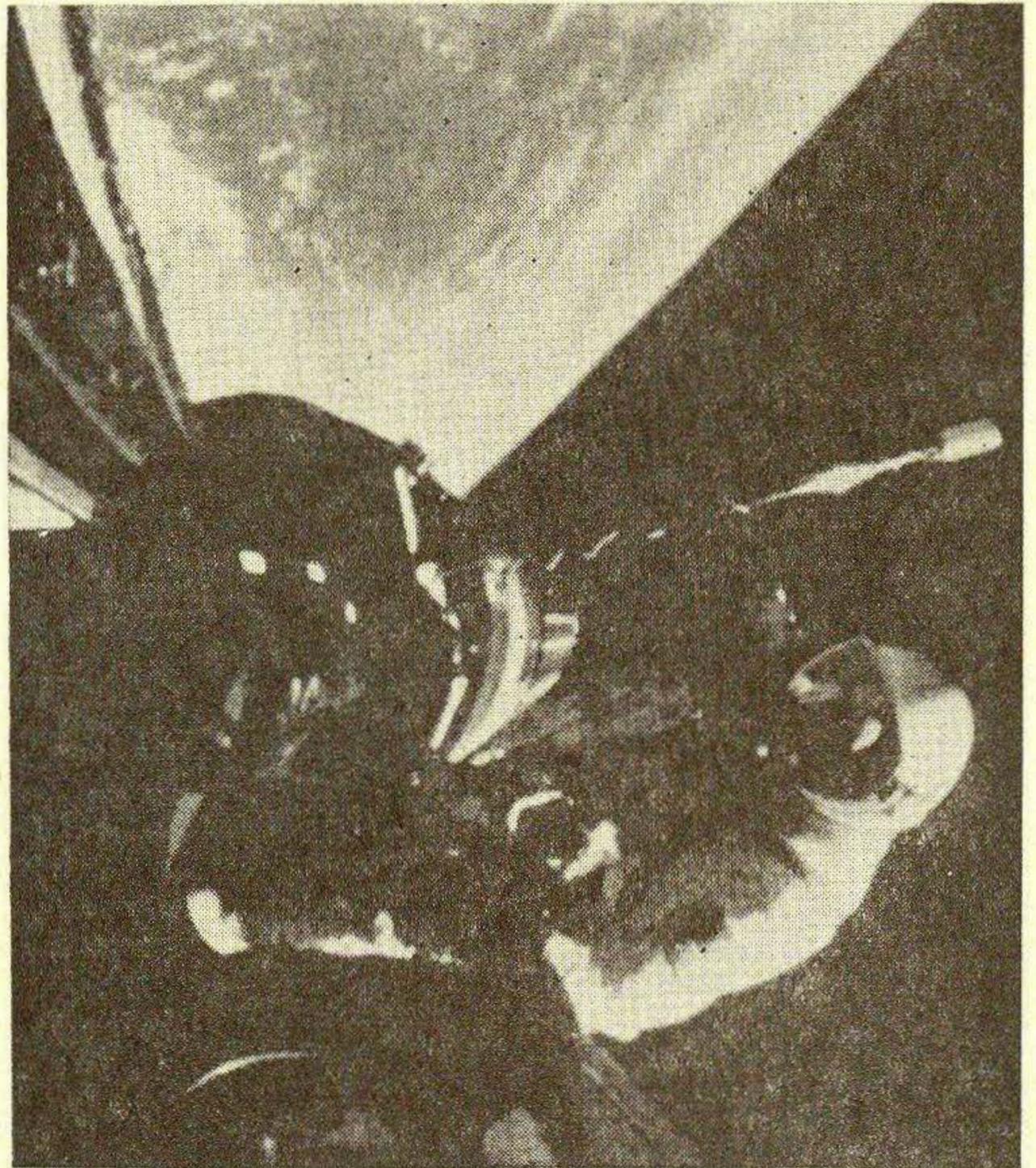
During that period they saw and photographed a UFO, which the North American Air Defense Command (NORAD) later "identified" as "probably" the unmanned Russian satellite Proton III. *But it could not possibly have been the Proton III.* And here's why:

After I received the color transparencies from NASA with their caption saying that the object photographed was *unidentified*, I recalled the newspaper stories in which a big fuss was made that Astronaut Gordon had not photographed a UFO after all—even though he and his command pilot could not identify it visually in space. So I immediately contacted Gordon by telephone. I told him about the color transparencies I had just received from NASA Headquarters and asked him to describe the episode.

"We were going SEF [Southeast Forward]," he began, "heads forward in orbit. And it came from our left and went across us and down below us. In other words, it came into view from our left window, flew out in front of us and then we lost it when it sort of dropped down in front of us."

What did it look like? I asked. "It looked just like spacecraft look when they're flying. It was a brilliant source of light. We knew it was another space vehicle of some kind. But we had no idea of what kind, so we just grabbed the camera and snapped a couple of quick color pictures of it." What actually was the color of it as you saw it with your eye? "I'd say the color was a sort of yellow-orange. It looked just like the way the sun reflects off most metals up there. It had to be made of something like a metallic material to reflect light the way it was doing."

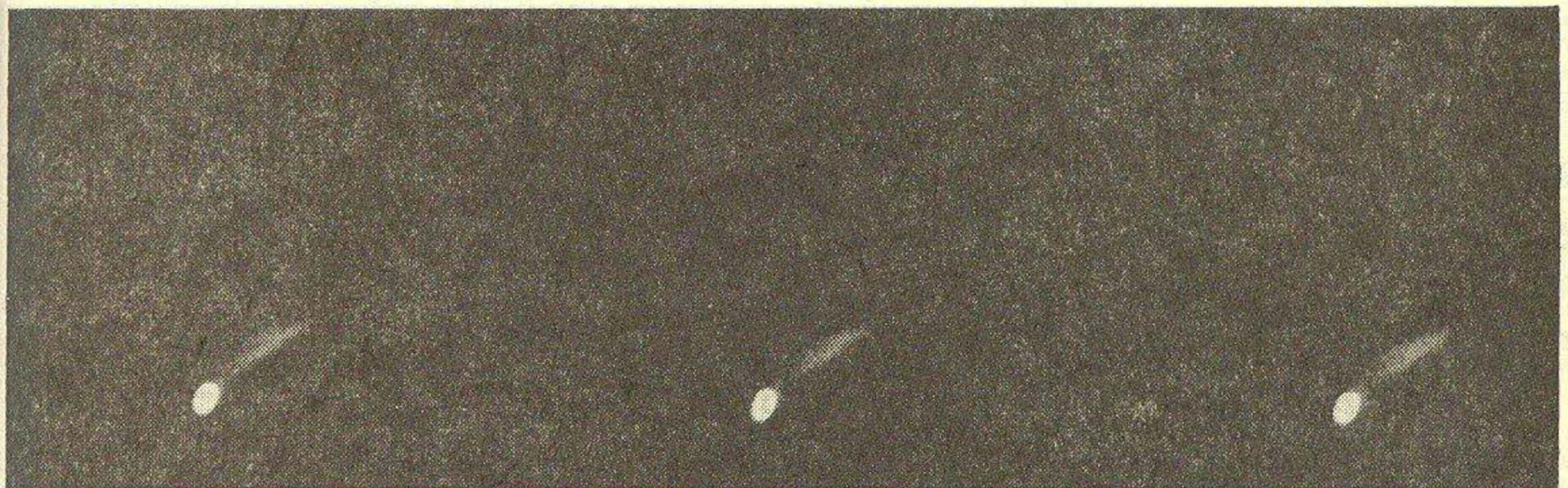
You mean, I queried, that it was actually a very solid object? It wasn't an optical situation, or an illusion? "Oh, no. Heavens no! We *knew* there was something else out



there. But we didn't know what it was. It could have been anything." Were there *any* distinguishing features, I persisted, any at all? "It just looked like a bright object," he answered, "that's all there was to it. There was nothing that we could distinguish as having shape. We thought the object was tumbling because it would flash. You know, the reflected light from it would be flashing."

How far away would you estimate it to be from your spacecraft? "Well, it was fairly far away, but it was close enough to be seen. I'd estimate it at maybe a hundred miles—" Then he quickly corrected himself: "Scrub that. A better ballpark figure would be, say, fifty miles." Can you remember the approximate heading as it approached you? "Oh, it was more southeasterly than was ours."

Well, what do you think it was that you saw? I asked Astronaut Gordon. "I think we were told, after the tracking was all over, that at that particular time [in orbit], it was probably the Soviet Proton III." You mean, NASA told you this? "No, no. They didn't tell us. It was NORAD, the people who were tracking us. NORAD said it could very



*It was also during the Gemini 11 flight that Astronaut Gordon made his famous space-walk seen at left to attach a tether from the Agena target vehicle to the spacecraft. Object protruding from top of Agena is radar antenna.*

*This photograph, made from 16mm movie film exposed by Astronaut James McDivitt during the Gemini-4 mission, shows the "satellite" he observed over Hawaii. The Condon Report concludes that identification is not confirmed.*

possibly have been Proton III—because they didn't have tracks on anything else [at the time]." But, I said, NASA now lists it as unidentified. "Well, then, I guess it's unidentified," was his casual response.

Next I phoned NORAD Headquarters at Ent Air Force Base in Colorado Springs, Colo. I gave Lt. Col. Bernard "Bee" Rhees, head of press relations in the office of Command Public Affairs, the details of my conversation with Astronaut Gordon and asked him to check out their validity in terms of Proton III. The Colonel read to me from a piece of paper he found in the tracking files on Gemini 11: "The NORAD Space Defense Center advises that Proton III passed within 401 kilometers [about 249 statute miles] behind GT-11 [Gemini-Titan 11] over the South Atlantic Ocean. Proton III was traveling roughly southwest to northeast." Then followed a listing of the orbital elements of the Soviet satellite.

Colonel Rhees added: "So in other words, in answer to your question: did NORAD track this? Affirmative. They certainly did." He paused and reread the first sentence of the report again. "But I'm not sure how the heck they [the GT-11 crew] could get a picture of the Proton III."

That's right, I agreed. Nobody could get a picture of something almost 250 miles behind him—unless he had a corkscrew lens that could travel supersonically. Astronaut Dick Gordon told me that the unknown object was in *front* of him and coming from the *southeast* when he photographed it. I asked Colonel Rhees to check out this situation further for me, and also to find out if NORAD was tracking anything else at that time, beside GT-11 and Proton III.

The next morning, Major Del Kindschi, who works with (Continued on page 79)

one would buy a conventional car when there are station wagons on the market, because the carrying capacity of the wagon is so much greater, and the shape is much more logical.

The basic capacity of the R-16 is used to the fullest extent. This is partly due to the fact that the engine and running gear is all up front, and so are the spare tire, jack, battery, etc. At the rear, the trunk lid is hinged above the rear window for maximum entrance area, and additionally the rear parcel shelf pivots up and forward with the movement of the trunk lid to give even better access. If more space is needed, the rear seat can be pivoted forward, and if that isn't sufficient, there is an arrangement for swinging the seat back up so that it can be at-

tached to the ceiling. Very ingenious, these Frenchmen.

So what does it all cost? Well, \$2500 is the list price, and although this is considerably more than smaller cars such as the VW Beetle, you are getting proportionately more for your money. In fact, the R-16 is out of the Beetle class, and into the Ford Cortina, Toyota Corona and VW fastback field, where it competes admirably in my opinion.

Personally I like the Renault R-16 very much indeed, and I also like my new Labrador, Jack Daniels. However, I am worried about old Joe Gutts, because if he chooses dogs the same way as he chooses test cars and goes on looking at those pictures of Brigitte Bardot, he'll probably end up owning a miniature French poodle. ■

## Are UFO Crews Spying?

(Continued from page 47)

Colonel Rhees, phoned me. "I checked with our Space Defense Center," he began, "and they don't have any record of any unknown object other than the one that Colonel Rhees told you about yesterday—which was the Soviet satellite Proton III." But that one, I said, was to the rear of GT-11 and too far away to be photographed anyway.

Major Kindschi added: "Since we didn't have any record of the object in front of GT-11, I talked with the NASA Goddard Space Flight Center at Greenbelt, Md. Normally we provide NASA/Greenbelt with all of our reports on all objects we track in earth-orbit and they use that data for their *Satellite Situation Report* [a biweekly rundown on every object, including space-junk, in orbit around the world, and even around the sun, giving the orbital elements and radio frequencies as well as listing all of the objects that have fallen out of orbit and burned up in the earth's atmosphere]. So I thought they might have some record of an unknown object in front of GT-11. But they didn't."

Doesn't the whole thing seem kind of odd? I asked. "Believe me," he answered, "the NORAD Space Defense Center keeps a pretty close watch on everything in earth-orbit—and they didn't have any record of any other object being associated with GT-11. You know, any other satellite." I thought to myself: *But suppose the unknown object that flew in front of GT-11 was not a satellite?!* Major Kindschi continued: "The Space Defense Center told me that they would check further into this, and if anything

turned up they would let me know—but to them, it didn't look like anything *would* turn up." As of this writing, nothing else has been turned up on the case of the GT-11 UFO. And if the Space Defense Center of NORAD couldn't track it, nobody could!

To summarize why the Russian Proton III could *not* have been the UFO observed and photographed by the GT-11 crew: Proton III at the time was traveling roughly southwest to northeast. The UFO was flying southeasterly of GT-11, which was flying on a southeast heading. The UFO was an estimated 50—at the most, 100—statute miles in front of GT-11. The Proton III was tracked at a distance of 249.1413 miles *behind* GT-11.

Three other earlier cases exist wherein American astronauts observed Unidentified Flying Objects, which were casually—if not erroneously—"identified" at the time. These UFOs were seen by the crews of GT-4 and GT-7. The Gemini-4 was the first manned flight of the two-man Gemini spacecraft, from which a so-called "space walk" was made by the late Ed White. James A. McDivitt was the command pilot. He described the UFO as "an object that appeared to have big arms sticking out [of it]."

Gemini-7 was manned by Frank Borman, command pilot, and James Lovell, pilot. It was the longest spaceflight ever made by men up to that time, December 1965—220 orbits, or 330 hours 35 minutes in flight.

The UFOs observed by crewmen of GT-4 and GT-7 were thought to be other, unmanned satellites by NASA and the crews themselves. Oddly enough, the change of category from "known" to "unknown" was

made in the widely publicized Condon Report. The report resulted from a two-year "Scientific Study of Unidentified Flying Objects," sponsored at the University of Colorado by the U.S. Air Force and directed by the highly respected physicist, Dr. Edward U. Condon. Dr. Condon selected as his principal investigator into the astronaut-UFO cases a man who was not only intimately familiar with astronomical phenomena but who also knew the astronauts—Dr. Franklin E. Roach, Professor Adjoint in the Astrogeophysics Department of the University of Colorado. Dr. Roach is also a consultant to NASA, has done research at various Governmental agencies, including the National Bureau of Standards, and has taught at the University of Arizona. He earned his Ph.D. degree in astrophysics at the University of Chicago. His extensive and detailed analysis of the astronaut-UFOs is well worth excerpting from at some length:

"There are three visual sightings made by the astronauts while in orbit which, in the judgment of the writer, have not been adequately explained. These are:

"1. Gemini-4, Astronaut McDivitt. Observation of a cylindrical object with a protuberance.

"2. Gemini-4, Astronaut McDivitt. Observation of a moving bright light at a higher level than the Gemini spacecraft.

"3. Gemini-7, Astronaut Borman saw what he referred to as a 'bogey' flying in formation with the spacecraft." It should be mentioned here that a bogey, in the jargon of fighter pilots and fighter-interceptor air-defense pilots, is an aircraft that cannot be identified and hence must be considered with suspicion and caution.

Dr. Roach continues with his report: "I had a conversation with Astronaut McDivitt on October 3, 1967, about this sighting and reproduce here my summary of the conversation. McDivitt saw a cylindrical-shaped object with an antenna-like extension . . . It was not possible to estimate its distance, but it did have angular extension—that is, it did not appear as a 'point.' It gave a white or silvery appearance as seen against the day sky. The [Gemini] spacecraft was in free drifting flight somewhere over the Pacific Ocean. One still was taken [of the UFO] plus some movie exposures on black and white film. The impression was not that the [unknown] object was moving parallel with the spacecraft, but rather that it was closing in, and that it was nearby. The reaction of

the astronaut was that it might be necessary to take action to avoid a collision . . .

"It is McDivitt's opinion that the object was probably some unmanned satellite. NORAD made an investigation of possible satellites and came up with the suggestion that the object might have been Pegasus, which was 1,200 miles away at the time. McDivitt questions this identification . . . A preliminary identification of the object as Pegasus is suspect. When fully extended, Pegasus-B has a maximum dimension of 29.3 meters, which corresponds to 1/20 minutes of arc at a distance of 2,000 kilometers [about 1,200 miles]. This is much too small an angular extension for the structure of the craft to be resolved and thus does not agree with [McDivitt's] description of 'arms sticking out.' . . ."

Dr. Roach later refers to the second UFO observed by Astronaut McDivitt: "At 50 hours 58 minutes 3 seconds of elapsed time of GT-4, Astronaut McDivitt made the following report:

"Just saw a satellite, very high . . . spotted away just like a star [from] the ground when you see one go by, a long, long ways away. When I saw this satellite go by, we were pointed just about directly overhead. It looked like it was going from left to right . . . back toward the west, so it must have been going from south to north."

"Although McDivitt referred to this sighting as a satellite, I have included it among the puzzlers because it was higher than the GT-4 and moving in a polar orbit. It was reported as looking like a 'star,' so we have no indication of an angular extension.

"The suggestion at the time of sighting that this was a satellite has not been confirmed, so far as I know, by a definite identification of a known satellite."

Regarding the sighting by the GT-7 crew, Dr. Roach first excerpts a sequence of the radio intercom between the spacecraft and Gemini Mission Control at Houston, Texas. To save space, I will condense this even further:

SPACECRAFT: Gemini 7 here. Houston, how do you read?

CAPCOM: Loud and clear, 7. Go ahead.

SPACECRAFT: Bogey at 10 o'clock high.

CAPCOM: Roger, Gemini 7. Is that the booster or is that an actual sighting?

SPACECRAFT: Actual sighting.

CAPCOM: You have any more information? Estimate distance or size?

SPACECRAFT: We also have the booster in

sight . . . We have a very, very many [of what] look like hundreds of little particles banked on the left, out about 3 to 7 miles . . .

CAPCOM: Were these particles in addition to the booster and the bogey at 10 o'clock high?

SPACECRAFT: (*Astronaut Lovell talking*) I have the booster on my side. It's a brilliant body in the sun, against a black background, with trillions of particles on it.

CAPCOM: Roger. What direction is it from you.

SPACECRAFT: (*Lovell again*) It's about at my 2 o'clock position.

CAPCOM: Does that mean that it's ahead of you?

SPACECRAFT: It's ahead of us at 2 o'clock, slowly tumbling.

Dr. Roach then gives his interpretation of the intercom: "The general reconstruction of the sighting, based on the above conversation, is that in addition to the booster traveling in an orbit similar to that of the spacecraft, there was another bright object (bogey) together with many illuminated particles. It might be conjectured that the bogey and particles were fragments from the launching of Gemini 7, but this is impossible if they were traveling in a polar orbit, as they appeared to the astronauts to be doing."

Dr. Franklin Roach then concludes his extensive scientific analysis of astronaut UFOs: "The training and perspicacity of the astronauts put their reports of [UFO] sightings in the highest category of credibility. They are always meticulous in describing the 'facts,' avoiding any tendentious 'interpretations' . . .

"The three unexplained sightings, which have been gleaned from a great mass of reports, are a challenge to the analyst. Especially puzzling is the first one on the list, the daytime sighting of an object showing details such as arms (antennae?) protruding from a body having a noticeable angular extension. If the NORAD listing of objects near the GT-4 spacecraft at the time of the sighting is complete, as it presumably is, we shall have to find a rational explanation or, alternatively, keep it on our list of unidentified."

In other words, Dr. Roach's study for the Condon Project convinced him that the flying objects observed by the astronauts he was considering were UFOs.

Somehow he missed the GT-11 sighting by Astronaut Gordon. I wonder what his learned reaction would be if he delved into that case as thoroughly as I have? ■

## Junkyard To Mule Power

(Continued from page 53)

mantling and cleaning. As a by-product, unskilled workers would receive on-the-job tractor maintenance training while working on the production line, then go into villages to work as mechanics. The students envision villagers sharing a tractor and sending one of their number to work at the plant while learning how to take care of it.

**The work plan avoids** casting or punching of new parts, which would require an advanced machine tool industry. What new structural parts are needed, the welders would make from steel pipe and sheet metal with necessary weight to be added in the form of concrete wheel weights and even a concrete block for the operator's platform.

An example is rear wheel rims large enough to accept tractor-size tires. Old rims can be modified with welded outer flanges. Ordinary pipe or solid rod can serve as a rear axle. Original front wheel and ball joint assemblies are welded to a 6-inch I-beam that serves as the front axle and elevates the front end level with the rear.

To build "The Mule," the students first cut away the body of the original hulk, shortening the chassis 5 feet and moving the differential forward by cutting 18 inches out of the drive train. A sprocket-and-chain drive was mounted to the rear wheels. Brakes were left intact, the motor overhauled as needed, the kitchen-chair seat and controls installed over the rear axle, and a hand throttle installed on the steering column. "The Mule" is capable of 20 mph and has the pulling power equivalent to that of a brand new tractor.

A Boston area junk car dealer gave the students prices on stripping off bodies (which the dealer would retain for scrap) and preparing the carcasses for shipment. The students figured total cost of procurement and preparation at \$145 per car in 400-car quantities, with water freight adding \$130 per car. Using their experience with "The Mule," Davis and Chandra budgeted \$220 for new and spare parts. Tires at \$100 a pair and roller chain at \$80 per tractor are the most expensive items.

"The objective is to get one tractor from one car," Davis said. "This provides a market for otherwise almost useless junked cars and sets up a valuable industry in an underdeveloped country. The tractors may not be pretty, but they work just fine." ■