
Interview: John Bruce Medaris



Space programs must see fifteen years ahead

Father Bruce Medaris, a retired general, gave an interview to Marsha Freeman in Huntsville, Alabama on July 16, 1989. Freeman is the associate editor of the bi-monthly journal 21st Century Science & Technology.

EIR: Could you give us your appraisal of what the space program has accomplished in the 20 years since the first Apollo landing?

Medaris: Any review that we make of the past with respect to space programs inevitably should discover that what was done with respect to the Apollo Moon landing, could have been several years earlier. But when it was finally accomplished, it was done as a political matter. And it was in that light that it was finally put under way. There had been a program developed years before, at the time when we were using the first very rudimentary satellites, investigating the Van Allen Belts and things of that sort, that a program was developed for establishing a scientific colony on the Moon, known as Project Horizon.

EIR: What year was that developed?

Medaris: Nineteen fifty-eight. There is no way that one can reasonably reconcile what happened at the end of the Apollo Program with anything that resembles real interests in the development of our space operations. The people for whom I had some consideration in those days, was in my function as a management consultant then in technical management of complex programs—that was my forte. And a year before the landing on the Moon, I told my people, “You get ready to close down. There’s nothing behind this, nothing being talked about, nothing being considered, and if there is no program under consideration at this time, there can be nothing ready to follow the Moon landing. And when the Apollo Program ends, the whole business is going to come to a grinding stop.” And I said, “You’d better be prepared for it, because if it were not to be so, there would have to be something in the works now.” That’s the lead time in this business, you have to look that far ahead. Fortunately some of them paid attention, and it saved them a lot of money, because

that’s precisely what happened, as you well know. Everything just fell apart and we lost some of the best scientists we had, we lost some of the best people we had, because there was no work, because there was no project, because there was no program. Nothing to follow Apollo. And then, in order to have something with which to proceed as an organization—NASA—they began to develop projects—not programs—projects.

I’m going to cut across most of the time in-between and say simply that we have no space program today. What we have today is a collection of miscellaneous projects, each one having enough backing to get something done, but none of which bear on the others, none of which are part of an ongoing program with a true program objective. There is a vast difference between an array of projects and a program. How we could develop, I do not know, because, at the present time, it is my considered judgment that the government isn’t running the space program at all; the aerospace industry is doing what they please, putting what they wish on the board to be done, each one after something that they can have a big chunk of, as far as budget is concerned, and with a lot of lobbying in Washington to get their individual, particular project under way.

We’re talking about a space station. The present concept of a space station is utterly ridiculous. And it should have been done 10 years ago. It should have been started immediately following the Moon landing. That’s what should have followed what became a dead-ended operation of landing on the Moon. It should have been translated into an ongoing program and an intermediate station that could become a relay station for men, equipment, and fuel, and all sorts of things on the way should have been developed at that time—but it would not have looked like what they’re going to do now, because it would have been a working station. What they’re doing now has all sorts of odds and ends to it and pieces sticking out of it to do specific things that somebody wants done, again. The concept of it looks like the product of a committee to begin with.

Anyway, what I’m trying to say, is that as long as we

abandon the field to the aerospace industry and those who are involved in space-type operations to tell us what we can do to promote the projects, to promote the money out of Congress to do them—as long as we have not only done that, but we've gone so much further that there's no question that we're wasting all kinds of money in what we are doing. The reason is simply that we do not have any competent, government-employed representatives to look at the plants, to be there, to see what's going on, to know what's happening in the field. If there's one thing that should prove it, the Challenger disaster should prove it. We're in the position of having the fox watch the hen house and nobody's watching the fox. The result is that we cannot, under any circumstances at the present time, claim to have a space program, or to have reasonably controlled, economically sound use of the funds that are being devoted to all these projects.

It isn't a matter of bragging, it's a matter of a system that we had. I had men in every plant that was of any size. There was at least one man there, just to see what was going on, just to be aware of what was happening, to check the manufacturer's own quality control and see that he was enforcing it, and those men were able to report back to me on a red line, the minute they saw anything going wrong in any one of the plants. The result was that little people in the plants could come up and whisper in their ear and tell them, something was haywire and they'd better go look. If it was anything of any consequence, I was in my airplane out there the next day.

The result was that everything we did was done within budget and on time. We haven't had anything completed within budget and on time for so long that it's hard to see when. The overruns we have are strictly the result of no control, none at all. It is profitable to the manufacturer to waste money. He's going to do it, if you let him. So we're not getting our money's worth.

Out of the Challenger disaster came some window dressing, but there was little that really spoke of change. It is incredible to believe that, on the morning of the Challenger's disastrous launch, there was *no one* at the launch site who could say, "Shut it down." Either the computer shut it down or it went. It should never have been there, under those conditions, the weather conditions and everything else; the thing should never have been on the pad, it should have been back being redone after four failures but there was nobody there—it's incredible to believe—there was nobody there that could say, "Stop!" We never had a launch where, either Wernher von Braun, Kurt Debus, or myself was not present, and any one of the three of us could shut it down any minute we wanted to and say, "That's enough. We're not going to do this one."

EIR: Did that ever happen?

Medaris: Oh yes. I shut down more than one and carried them over a day. I used to sit in the control house with my

earphones on and I could check in on everybody that was working on the stands. I could check in on the bosses, and their conversations with their men in their group, and the conversations between the bosses. More than once, I called a halt—delay—simply because I could hear tension in the voices of the men. They were tired and they were beginning to make mistakes and I'd say, "I'm calling a two-hour hold. Now get down off of there and go take a break." Wernher did the same thing, if he was there and I wasn't. But I was usually there.

We have lost all sense of individual responsibility in the whole field of what we're trying to do and I do not think there is any possible way that we can have a decent, productive use of tax money, and people's money, under such conditions. In fact, they're always investigating something but they don't do anything. When they find out what happened even, they don't look at the causes to see what you have to do to stop it. We have no men now that we could put out in a plant, incidentally, because since the arsenal system was closed down, there's no place to grow them. That's where we developed those men who could go out there, and knew what was going on, knew what they were looking at. We don't have them now.

EIR: What would constitute a program, as opposed to a project?

Medaris: The elements of a program, as distinguished from projects, are simple:

First of all, the whole of the operation, everything that's being done has to be under a single coordination. You cannot have splintered authorities, and splintered controls, and splintered planning.

Second, you have to have an objective that is consistent, that is maintained, but that is always at least 15 years in front of you. And at any given time, under a program concept, you have going on that which is putting together, that which has now been tested and known and will work, to perform a step in the function. You have another area of work in proving out the developed technology and components for the next step in the system and proving them, testing them, trying them out, sending them onboard the current flights, and things, to work them through.

And at the same time, you have ongoing exploration into the outer fringe of what you know in the direction that you want to go. So, there are three phases that go on at the same time, but they're all headed in the same direction to accomplish the same purpose. That's a program. We can't have a program because everybody's running their own selfish show.

We couldn't have a program unless somebody has guts enough in the government, someplace, to tie this thing into the hands and responsibility of some people who accept responsibility and carry it out, without favor or without any attention to where they were going to come out or planning

where they were going to work when they have done doing what they were doing, and who would consistently insist on the pattern of the program being continuously followed. Where are you going to find them? I don't know.

We don't have any more statesmen, we have nothing but politicians. The Congress has sold out to the lobbyists, and the lobbyists—not to the government—but to the industries that the government is keeping alive. To me, it is a disastrous situation in the long run. I do not begrudge the money that is going into space, I begrudge how that money's being used, because we aren't getting our money's worth.

The resources, properly used, would develop a great deal more than we have. And there would be much more along the line of controlled spinoff to civilian industry than there has been. That's come about by accident, or theft, or what-have-you most of the time, instead of by a controlled process. Gen. James Abrahamson {the first director of the Strategic Defense Initiative Organization} was starting to set one up for SDI, but I think it's gone down the drain now. But there are none of the ingredients presently in operation that would indicate that we can maintain any kind of leadership, control in space, and it may wind up that the whole space operation is done by industry for their own benefit. There are some signs of that already, of private enterprise setting up a launch for satellites, to put them in orbit. Anything can happen under the present circumstances because nobody has got their hand on the tiller, watching the compass. Nobody. We're just adrift in an unpredictable sea of political operations—totally. I'm sorry I've put it that way, but that's the only thing I can say.

EIR: What do you think the program should be that would subsume most of the separate projects? Where should we be going if you were to look 15 years into the future?

Medaris: In the first place, I said years ago that, if we were not alert to what was going on, we would go in the wrong direction, that we would find that our opposition, so to speak—the Soviets—had taken control of that part of space that affects the Earth, while we were wandering off to look at Mars. See what I mean?

EIR: But we should have both a military and civilian space program—

Medaris: That is not a good way to say it. It doesn't make any difference whether it's military or civilian. One of the greatest mistakes in the whole business was trying to divorce it from the military, and we were the laughingstock—and are—of the world, because we have given away technology that was worth years of work and effort, by trying to have a so-called open civilian program, and yet the two are so interlinked.

At the time that NASA was formed, the three services together had all the resources necessary to carry on a space program. All that would have been necessary would have

been to form a joint space command of the three services, and you wouldn't have had to build a whole lot of new places like NASA did, because they already had what they needed. This was recommended and tossed out the window.

What has been done by the Jet Propulsion Laboratory is some of the finest work in the world and there's no question that, in their particular field, they are the artists, the best. But the same thing that they're using for spanning the whole galaxy can also be used extremely effectively to put us in a position where nothing can surprise us.

As far as an objective for the next 15 years, I believe that there is nothing that could yield more benefit to this country and to the world at large than to place a permanent, scientific colony on the Moon. We proposed that—kicked out the window. This is the perfect point of observation for everything, and there's nothing unreal or unrealistic about doing it. It was worked out in detail, and I still think that it is a still-demanded objective. If this were the objective, everything, including an intermediate space station and everything else, begins to melt into the program as a whole, you see.

EIR: By an intermediate space station you mean one that would be specifically designed for the lunar colonization purpose?

Medaris: Exactly. There should be a station in between what was there for the purpose of being a relay station. To be the base for storing and forwarding. You could tether all kinds of stuff to it out in space while they are waiting to send it on, and it would be a proper staging area up and back for people. This would be part of the total program. And between that station and the colony on the Moon, nothing could happen that was not under observation anyplace in this world. We could observe everything. And there's nothing superior in any kind of competition, including the international competition that always exists, than knowledge, observation, reconnaissance, finding out what the other guy is up to.

Take it back to the times of armor and take it up to the times of the space station, and you need the same thing. You need to know what's going on, and if you know exactly what's happening, then you can be prepared to meet whatever comes along, but you need to know exactly what's happening.

EIR: But today the military services are under the gun of budget cuts. The SDI program itself has just been cut substantially. They do not have anything like a 15-year perspective for space technology development.

Medaris: But, if they understood what could be done with it, and if we got away from this silly division of civilian/military—which is the basic error that was made in the first place, no other country in the world has made that mistake—the European programs, such as they are, and there are some good ones, their programs have all

been headed by the best man they could get, whether it was a civilian or an officer. And they have dealt with the aspects of whatever came along that could be attributed to civilian use, and to the needs of the military, and you do the whole business for half the price, if you're doing it for both of them at the same time.

EIR: Of course, you had a general who headed up the Apollo Program, Gen. Sam Phillips, and you now have two generals who head NASA centers, the Jet Propulsion Laboratory and the Kennedy Space Center, so in a certain sense there has never been a separate civilian space program. There's never really been a strict division.

Medaris: No there hasn't, but they are under constraints. As long as they are under the NASA banner they're still wide open.

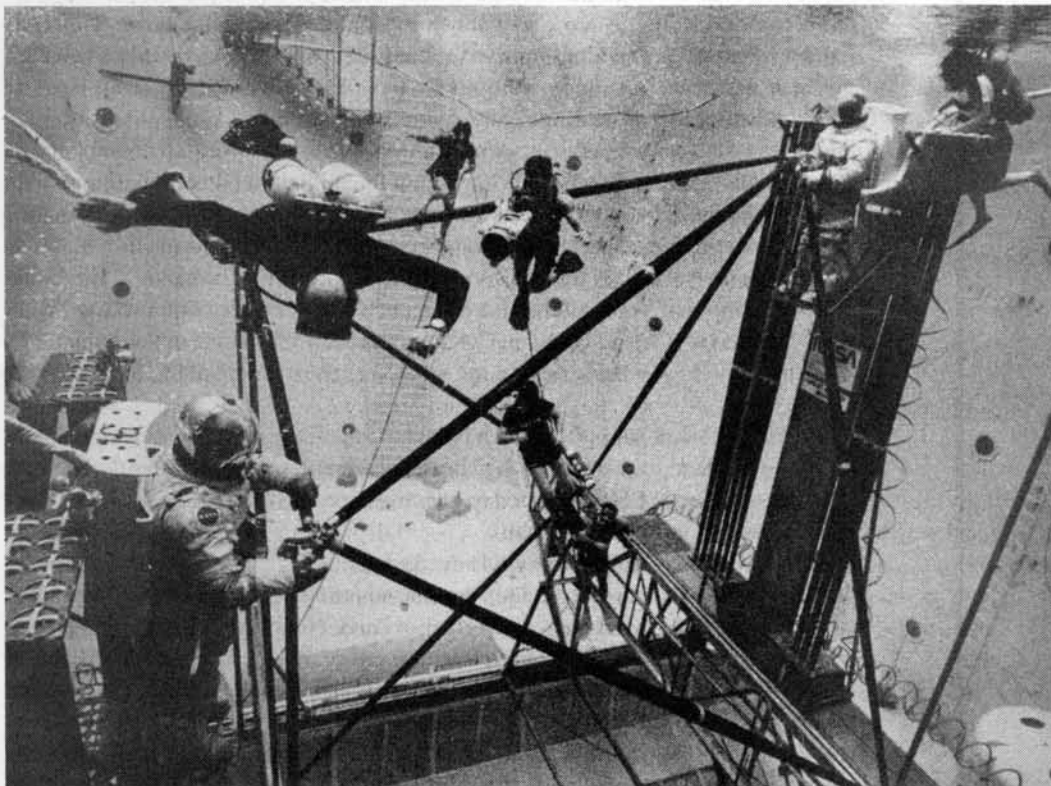
Look at the stuff that has been able to be pulled out of there by this Freedom of Information Act. You make them produce things that—good Lord in Heaven—should have been so highly classified. This is the ridiculous part of the situation. First of all, what has happened as a result of putting the civilian constraints on the NASA operations, we've given away billions of dollars worth and years of effort that would have taken someone else a long time to catch up with, but we gave it to them. They had no problem getting it, none whatever.

The next thing, of course, is the matter, as I've said, of economy because if you're doing both, you can do them for much less money than you can if you separate them, because much of what you do can be applied to both sides. What has happened, unfortunately, is not only that the military has been given a second-rate position in space, improving a little at present, but the whole business is being governed by 10,000 civil servants in Washington that is—as they used to say—like a bum missile: It won't work, and you can't fire it. All they do is increase their numbers every year.

We can't even have true civilian control of an election, because if you take all of the government workers from top to bottom, all the strata of our governments—city, county, state, and federal, plus a few odd ones in between—and they are no longer under the Hatch Act, they're perfectly allowed to engage in political operations, add them up and add up all of their families, the numbers of people in their families that vote, and then add to that the people who are dependent on their opinion for voting, because they're going to get their meal from selling them something, I can tell you who wins elections.

EIR: The incumbents.

Medaris: Of course. Unless the incumbent has tried to get rid of some of the dead wood in which case the incumbent hasn't got a chance.



Space-suited engineers assemble truss structures in the neutral Buoyancy Simulator, a huge water-tank facility which allows a close approximation of zero gravity, at the Marsall Space Flight Center in Huntsville, Alabama.