

News and Comment

Titov in Washington: The Soviet Cosmonaut Was Talkative, But He Managed To Say Nothing

Major Gherman S. Titov, the Soviet Union's prize space exhibit, came to Washington last week and put in 4 days talking about space without really saying anything.

It was unquestionably a virtuoso performance, even for a city where caution in public statement is a well-refined art. The Soviet political attendants at Titov's side apparently had no grounds for displeasure; but then, in some respects, neither did American space and propaganda officials, who were happy to note the contrast between this country's fairly obsessive openness about nonmilitary space activities and the Soviet's cards-to-the-vest policy. For anyone who believes that the path to an East-West millennium is routed through outer space, Titov's performance demonstrated that the Soviet's interest in space cooperation is motivated by a narrow conception of Soviet interests; the argument that science has no national boundaries may hold sway among a substantial number of Soviet scientists, but their political chiefs seem to have important reservations.

Titov's arrival here was especially looked forward to since the occasion for his visit was a meeting of the Committee on Space Research (COSPAR) of the International Council of Scientific Unions, a body that grew out of the close cooperation that prevailed during the International Geophysical Year. It was hoped that in the congenial atmosphere of COSPAR, the Soviet delegation and Titov might open up a bit and expand on the skimpy details that the Russians have offered on their experiences in manned space flight.

A few scraps of previously unoffered information were tossed to Western curiosity, among which were Titov's statement that his booster employed six

liquid propellant engines, developing a total thrust of 1.32 million pounds, and that he was able to use manual controls to orient his space ship. Nothing was said about the number of stages in the booster, nor were any details furnished on the manner in which he controlled the ship.

Titov was pressed for additional information in the course of two press conferences in Washington, but he regularly fell back on the same reply, which was to the effect that his space ship was carried into orbit by military boosters, and, until disarmament is achieved, the Soviet Union intends to be cautious in revealing information about its space hardware. An Italian journalist, reflecting the frustration felt by many of his colleagues, sought to draw Titov into making a distinction between military and peaceful space applications.

"I am not asking about boosters," the journalist stated at the outset. "Nothing about rockets. I'm only asking about the capsule. I hope that you don't consider the capsule a terrible, warlike weapon that should be so classified and secret, like the booster. . . . Can he (Titov) tell us the story of the landing of the capsule?"

Though Titov was not ready to tell the world about the landing of his capsule, he nevertheless managed to issue a goodly number of words in reply. (It should be noted that the Russian interpreter who accompanied Titov appeared to find his task a difficult one. Several Russian-speaking Americans expressed dismay at his performance, and, on one occasion, Soviet Ambassador Dobrynin cut the interpreter short and translated one of Titov's replies to a reporter's question.)

"Come to Moscow"

"You know, the capsule, or, as we call it, the spaceship, is exhibited. . . . in Moscow," Titov said. "This is not the original, but it's a model because

apparently that ship, the original Vostok II, is going to fly again. If you would like to see that capsule, please come to Moscow and see it. Well," he continued "as far as their landing system is concerned, it is not important whether we use wings or whether we use parachutes or whether we use retro-rockets. The thing is that it is very good, I mean the landing system is very good and the ship is not damaged and it landed just near to me."

The major's evasive skills were also demonstrated when he was asked whether the Soviets have a moon exploration program similar to the one announced by this country. He replied:

"I'll tell you one thing, that all the scientific programs and all the space explorations are conducted according to certain scientific programs, certainly. I'll tell you more, that human beings, man certainly will fly to the moon. But when it will be, it's difficult to say. We can plan somehow, but how can you plan that the question of weightless state will be decided during one flight and everything will be clear to you. You must have some admissions [?] and if you talk about them, certainly you cannot fix exactly the date. And I again repeat, you don't say that you have finished the thing before you have really done this."

Titov's space counterpart, Lieutenant Colonel John Glenn, fared no better than the press in attempting to draw the Soviet cosmonaut into a public discussion of his spaceship. At a joint press conference, a reporter noted that a photo released by the Soviets "showed a large ring at the base of the spacecraft with what appeared to be rocket motors on it. Was this your retrorocket package? Was this installed in the instrument compartment?" the reporter asked.

Glenn Curious, Too

Before Titov could reply, Glenn jumped in, saying, "I might take the question one step further. Since we have the picture right here (another reporter had meanwhile handed it to Glenn) was this part of the actual spacecraft or was this just a fairing put on it so it could be carried under a helicopter. I remember the photograph very well," Glenn continued, "I saw it, and speculation for lack of any better information in this country was that perhaps this ring was placed on so that it would remain in this position while

it was carried by a helicopter. Or was this part of the actual spacecraft?"

Titov was not inclined to enlighten Glenn or the press:

"We'll not comment to details as far as the outside appearance of the ship is concerned," he said. "Well, whether it is retrorockets or some other thing, you know that our retrorockets have operated splendidly, the landing system has operated splendidly and that's why there's no need to come into detail as far as this picture is concerned."

Titov's visit was the occasion for another attempt by this country to get a Russian representative to visit Cape Canaveral, an object which has become something of a fixation among those who lead the nation's civilian space effort. The Russians, on the other hand, continue to regard the invitations with considerable suspicion. They sometimes accept the invitations, but they never show up.

Titov, upon his arrival in New York, declined on the grounds that he did not feel there was anything worth seeing there. He later explained that he would not visit military installations, and this was followed by an official Soviet explanation that said the invitation was turned down for "obvious reasons." Somewhere along the way, a Soviet official told the State Department that the invitation was suspect because it was regarded as an attempt by this country to maneuver the Soviets into a position where we could invoke the reciprocity principle that generally applies to East-West traffic. The Soviets were assured that the U.S. was not conspiring to embarrass them into a return invitation, but the decision to stay away from the Cape has held fast. Titov, at one of his press conferences in Washington, said of the invitation: "I think we have not yet reached the level of conditions that will allow us to see military rockets. We must have disarmament."

Prospects Cooperation

The Soviet performance at the COSPAR meeting is regarded by American space officials as fairly standard, and it has not caused this country to re-evaluate the prospects for developing joint space efforts. The cooperation proposals put forth by Kennedy were deliberately drafted with a view to undertakings that do not involve lifting security on what seems to be a subject

most sensitive to the Soviets—their rocket boosters. Preliminary talks on joint efforts involving weather and communication satellites were reported to have been fruitful, although concrete programs remain to be worked out. In addition, Soviet and American delegates held a day-long informal meeting on medical problems of space travel, particularly the "sea-sickness" symptoms that troubled Titov.

In terms of admiration and goodwill in international relations—for whatever they are worth—the United States emerged well in the lead from the COSPAR meeting. The Soviet space achievements—especially Titov's unmatched all-day orbit—are proof of technological ability of a high order, but Soviet secretiveness, in contrast to the American policy of inviting the world to watch, has created the suspicion that Russia's space establishment may be afflicted by embarrassing deficiencies. A number of foreign delegates to the conference commented to the effect that they considered Titov's unresponsiveness rather puzzling for the representative of a nation that claims to lead the world in the space arts. This reaction is a source of pure delight for those American officials who have been boosting international space cooperation and an open civilian program as a means of making friends for the United States.—D. S. GREENBERG

Research Contracting: Study Says U.S. Cannot Be "Sophisticated Buyer" with Present Pay Scale

Since 1950, annual federal expenditures for research and development have risen from \$1.1 billion to a projected \$12.4 billion for the forthcoming fiscal year. Currently, more than 80 percent of this is paid to nongovernmental organizations.

These vast sums, and their rapid growth, have inevitably aroused the interest of Congress, which on several occasions has criticized the government's heavy reliance on outside contractors, especially among the so-called nonprofit institutions. Last year the House Appropriations Committee charged that the government is incurring unnecessary costs and undermining its own research capabilities by assigning most of its research and development work to outside contractors, who generally offer pay and working

conditions that put government laboratories in a poor competitive position. The Committee emphasized its concern by recommending a cut in an appropriation for one of the government's outside contractors, the Aerospace Corporation, on the grounds that the firm's salaries "are excessive, that its overhead costs are too high, and that it plans to employ too large a staff." Since the Appropriations Committee is in a position to command respectful attention, the Administration took note.

Last week, the Administration replied to the criticism with a report titled "Government Contracting for Research and Development." Its general conclusions were that the present policies for allocating research are basically sound, but that the government's control over its research and development purchases is seriously handicapped by salary scales which make it difficult to develop and keep competent science and engineering administrators. One result is the flourishing of the nonprofit firms, a good number of which exist solely on government business that they carry on with personnel to whom they pay salaries considerably above the civil service scale. This outflanking of the federal pay system is a publicly acknowledged operation, but while it nettles Congress, the prospect of a substantial increase in the upper range of federal salaries is even more nettlesome. In its recommendations for raising federal salaries, the Administration originally sought increases for the top-level appointive posts, but since this would put many of these salaries above the \$22,500-a-year salaries of senators and representatives, congressional reception was cool. The Administration paid court to congressional feelings by noting that it might be a good idea also to raise the salaries of congressmen, but such a move is unlikely to gain any support in an election year, and the appointive level was excluded from the federal pay bill now before congress. The emphasis in this bill is on raising substantially the salaries along the upper ranges of the civil service scale to make government service more attractive for career personnel, especially scientists and engineers.

The disparities between government and nongovernment pay scales have been the subject of a number of studies, all of which conclude that the