GM Wants to Use Soviet Launchers

Hughes Aircraft, supplier of space technology to the Pentagon, has asked through its parent company, General Motors, to be allowed to launch communications satellites aboard Soviet rockets.

In a "Dear George" letter to U.S. Secretary of State George Shultz, GM's chairman, Roger Smith, has asked for a sweeping change of the export policy that now prohibits the shipment of U.S. satellites to the Soviet Union. He wants clearance to put American satellites aboard a Soviet vehicle known as Proton.

The GM letter, dated 17 August, appears to have embarrassed the company, for GM declined to release the text or elaborate on its contents last week. A company spokesman described his chairman's plea for a reversal of space and export policy as "a private matter," saying, "it would be inappropriate to comment further."

However, observers say that GM proposed the new policy as an extension into the commercial sphere of the current military rapprochement with the Soviets. "Detente II," as some are calling it, might include a partnership in commercial space ventures.

One reason GM's plea may seem awkward at the moment is that the Japanese company Toshiba is being punished for violating similar export rules in the sale of metal milling equipment to the Soviet Union. GM may not want to call attention to the fact that it is seeking to amend the rules while others are being penalized for breaking them.

Hughes and GM made their proposal to the State Department because the United States' space transport system has collapsed and the Soviet Union's has at the same time reached a new level of success. Early this year, the Soviets jumped into the commercial space business, offering to sell rides to orbit on their Proton launcher for $30 million. This is by far the lowest fee quoted by any launching service. It is also attractive because the Soviets say they are ready to accept customers immediately, while the major alternative launching service, Arianespace, is booked through 1990 and has had launching failures.

Interest in the Soviet offer increased recently because of a bold move by the government of Australia. It has said it would like communications suppliers in future to consider using the Soviet space service in order to lower costs. Australia is soliciting bids for two new relay satellites and has said that bidders should include an option to reach orbit aboard the Proton.

At present, Hughes has no clearance to develop technology that would mate its satellites to the Proton launcher. Thus, bidders on the Australian contract will not be able to include Hughes products in their low-cost Soviet launch option. Because communications satellites are generally U.S.-made, one space policy expert says, "The question is whether the Soviets are going to be allowed to get into the commercial space business at all."

The State Department has not yet sent a reply to General Motors. But officials confirm that they have a draft letter in hand, and that the answer is an emphatic "No." Unless the Secretary of State changes his mind, which one official thinks is very unlikely, this is the answer GM will receive. ■

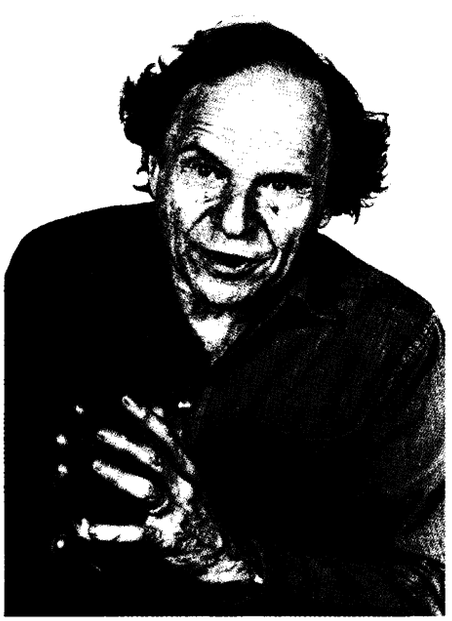
ELIOT MARSHALL

Briefing:

Morrison Makes TV Debut

Indefatiguable physicist Philip Morrison of the Massachusetts Institute of Technology has put together a six-part series on science, called "The Ring of Truth," that will be aired on the Public Broadcasting System starting on 20 October.

The purpose of the show is not to dazzle viewers with the products of scientific exploration but to show, in a down-home way, how science is done. Highlights of the show, screened recently at the National Academy of Sciences, include a demonstration of how to measure the earth's circumference with the aid of a van, some tape, and a star for reference; an explanation of the celestial doppler shift using a man swinging a tone-emitting coffee can around his head; and a man pouring a quarter teaspoon of olive oil on a lake to show how thinly oil spreads.



Morrison, who wrote the show with his wife Phylis, indulges in personal touches—for example, he gets his Cambridge, Massachusetts, neighbor, chef Julia Child, to bake a souffle until it is black to show that carbon is the basis of everything.

The show contains some nice illustrations of basic scientific principles and techniques. However, it may lack sex appeal for the average viewer—too many shots of grass and trees and Morrison himself, few graphics, and a general absence of Carl Sagan-style fabulous cosmic photography. ■ **C.H.**

Busy Signal at NSF

If the heavy volume of inquiries is any indication, a crowded field will compete for the first awards under the National Science Foundation's new science and technology research center program. President Reagan gave the idea his personal backing when he mentioned the centers as part of his economic competitiveness initiative in his State of the Union message.

According to the NSF formal solicitation issued on 11 September, the primary objective of the centers "is to exploit opportunities in science and technology where the complexity of the research problems or the resources needed to solve these problems require the advantages of scale, duration, and/or equipment and facilities that can only be provided by a campus-based research center."

The foundation plans to spend about $30 million on the program in the next year; that assumes that the overall NSF budget escapes drastic cuts. Awards for individual centers are expected to range from $500,000 to $5 million a year for up to 11 years. The foundation is not only asking for proposals for centers, but also inviting competition for planning grants of $35,000 each to assist groups to develop center proposals for future submission. The deadline for center proposals is 15 January and the tentative time for announcing the first awards is late summer next year. The new science centers will resemble the existing NSF engineering research centers, but differ in several respects including being less "product" oriented. If NSF's experience with the new science centers is like that that in the opening round with the engineering research centers—with $10 million available, the agency got about 150 bids asking for $2 billion—NSF is in for a plethora of proposals. ■ **J.W.**