India-Russia Rocket Deal

United States: superpower or supercop?

by Ramtanu Maitra

As anticipated, Russia has formally frozen the two-year-old cryogenic rocket and related technology contract with India under pressure from the United States. Along with the threat of economic sanctions, the United States also offered Russia eligibility for cooperation in various fields. It is believed that Russians and Americans will be working under the umbrella of NASA.

Beside the fact that for India, Moscow's reliability as a long-term partner has taken a tumble, what has emerged from the just-concluded saga is that the West is hell-bent on tightening the noose on important technology transfers to the developing nations. At the same time, there is no doubt that Washington has used the issue to make it clear to the Russians that the independence that the erstwhile Soviet Union enjoyed in the days of the Cold War is over and from now onwards, the Russians, like other western nations, will need clearance from Washington to transfer technology to the developing nations, even if it flies in the face of the sacred "free trade" principles.

It should also be apparent to New Delhi that their own lack of understanding of what the new world order means forced the country into a situation where India was left with no leverage. The Indian wailing that the cryogenic rocket engine technology is meant for launching satellites into geostationary orbit was summarily dismissed, and Washington used its economic leverage on Russian President Boris Yeltsin to acknowledge that such a transfer of technology would provide India the technology to develop inter-continental ballistic missiles (ICBMS).

To say that Washington was arm-twisting Moscow to scrap the deal would be one-sided—although the situation in Russia itself is highly volatile, and not everyone there is disposed to sell out to the United States (see article, p. 40).

Russia is not a signatory to the Missile Technology Control Regime (MTCR), a formulation of a caucus of seven western nations to control the transfer of missile technology and maintain their superiority in this field, and had been giving signals for a while of its desire to join the elite group. The Russian Foreign Ministry under Andrei Kozyrev had long been pushing for closer relations with Washington along the lines of the new world order set in motion by the previous U.S. President George Bush, and faithfully adhered to by his successor, President Bill Clinton.

In the past, beside the United States, the Soviet Union had used its own indirect influence to restrain India from developing its indigenous nuclear and missile capabilities. Now, however, the perception in New Delhi is that there is an overt confluence of views on such matters between Washington and Moscow.

Impact of denial of technology

Washington's ruse that India is seeking the cryogenic technologies in order to develop ICBMs has few takers among missile experts. It has been pointed out by Leonard Spector of the Carnegie Foundation, who is incidentally no friend of India, that India will not gain significantly in the military sphere by acquiring the disputed cryogenic rocket engine technology.

In a paper produced for the so-called Ad-hoc Working Group on Non-proliferation and Arms Control, Spector said: "The booster employs liquid hydrogen fuel, which is nonstorable and must be loaded at super-cool temperatures, making it extremely difficult and expensive to maintain." It has also been pointed out that because of this disadvantage posed by the cryogenic rocket engines, no nation has ever used hydrogen-fueled rocket engines in a ballistic missile. "Acquiring the rights to build this engine under license, as India did in this sale, will not significantly improve India's missile capability," the paper added. This is in addition to the fact that the United States has not cited an iota of evidence to even suggest that India is planning to develop ICBMs in the first place.

The immediate impact on India's space program due to the scrapping of the deal will not be substantial. Scientists at the Indian Space Research Organization (ISRO) have already told newsmen that it would provide the necessary impetus to indigenous development of the technology, which was sitting on the back burner in anticipation of the deal going through. ISRO chief Dr. U.R. Rao said that Indian space scientists have developed a good one-ton cryogenic engine at a cost of \$5.5 million, and they are working on a 12-ton one. "It [the deal] was to reduce the time-gap and rule out technological uncertainties that we chose to take the cryogenic engine from Russia," Rao said. It is estimated that the collapse of the deal will delay India's ability to send satellites weighing 2,000 kg and up into geostationary orbit by five years or so.

Indian space scientists continue to claim that Washington's main interest in pressuring Moscow was commercial. They point out that today India is in a position to give the West a run for its money as far as space technology is concerned because of competitive prices. ISRO scientists had also made it categorical that any attempt by the Russians to sell cryogenic rocket engines off the shelf would be rejected out of hand, primarily because this would imply that after two launches of the geostationary satellites, the geostationary launch vehicle (GSLV) has to be redesigned completely.

India space scientists are also thinking aloud at this point as to whether ISRO can altogether abandon the cryogenic route and develop a four-stage rocket with four liquid boosters.

Technological apartheid

While there is little doubt that the Indian space program is now at a stage where scrapping of the cryogenic rocket engine technologies will not have major impact, the larger issue here is the brazen adoption of the policy of technological apartheid by the West. The MTCR is not a treaty like the Nuclear Non-Proliferation Treaty (NPT) or the proposed convention for chemical and biological weapons (CBW) which a government can ratify and become a party to. It is simply a club where the seven western nations with advanced missile capabilities, are trying to maintain their missile superiority for commercial or military reasons, or both, by offering the carrot and stick to others.

No nation can formally join this club, unlike the NPT, and will require approval of the seven nations to become a member.

The MTCR, a brainchild of the United States, was formulated on April 16, 1987 as a set of common export policy guidelines (called Guidelines) applied to a common list of controlled missiles and launch vehicle-related technologies (called ANNEX), and was informally agreed upon by the United States, Canada, France, Germany, Italy, Japan and the U.K.—the Group of Seven nations.

Since then, Australia, Austria, Belgium, Denmark, Finland, Greece, Iceland, Ireland, Luxembourg, the Netherlands, New Zealand, Norway, Portugal, Spain, Switzerland, and Sweden have been allowed into the elite club, raising the members to 23. From the developing world, two countries, Argentine and Brazil, were earlier lured to join. It is evident that Argentina will soon become a member, but Brazil, which refuses to stop its sounding rocket project, the civilian launch vehicle program, and the missile program, has been slapped with sanctions by the club, although Brazil follows the MTCR guidelines scrupulously.

More importantly—and all developing nations must take note—the MTCR is yet another tool to deny technologies to developing nations. Already, the Australia Group, Commodity Control List (CCL), Cocom (Coordinating Committee for Multilateral Export Control), EPCI (Enhanced Proliferation Control Initiative), Foreign Policy Export Controls, NSEC (National Security Export Control), NSG (Nuclear Suppliers' Group), and the Supercomputer regimes are in place to deny a myriad of essential technologies to the developing nations.

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