## Science & Technology

# Is Mars mission aimed against SDI?

by Marsha Freeman

After the 1975 Apollo-Soyuz joint space mission, U.S. and Soviet scientists discussed the possibility of a future joint manned mission to Mars. Although dropped in intervening years of crises in relations, it was a good idea: A manned Mars mission would challenge the state of science and technology of both nations. It would require new space-propulsion, environmental, and control systems to keep crews and spacecraft in operation for nearly three years, and new scientific projects for the exploration and development of the planet most like Earth.

Now a U.S.-Soviet mission to Mars has been raised for discussion again—by nuclear-freeze spokesmen! They propose a joint, "peaceful" U.S.-Soviet manned mission to Mars, as an alternative to the "militarization of space" under President Reagan's Strategic Defense Initiative for beam-weapon defense systems.

In fact, like some pieces of U.S. defense legislation, the idea originated in the Soviet embassy in Washington, and was conduited through Carol Rosin of the Institute for Security and Cooperation in Outer Space into freezenik congressional offices in order to, as Rosen told *EIR*, be "more effective" in killing the SDI by offering a "positive" alternative.

The proponents of this "peaceful" substitution do not acknowledge the existence of the advanced Soviet beamweapon program. But following the recent record-breaking stay of Soviet cosmonauts in the Salyut 7 space station, there has been substantial media hype about how advanced Soviet Mars plans are. Suddenly, congressional representatives never before interested in the civilian space program, and "scientists" who enjoy backchannel discussions with Soviet scientists on how to tear down U.S. defenses—and the Soviets themselves—have become great champions of a Mars mission.

### Are the Soviets Ready for Mars?

Is it a near-term possibility? The question is, what is needed to send men to Mars?

The past two-decade history of Soviet unmanned mis-

sions to Mars have been marked by an overwhelming percentage of failures (see below). Out of eight flights between 1962 and 1973, seven did not produce significant scientific data. Three spacecraft missed the planet.

The data which has revolutionized our knowledge of Mars has been mainly from the U.S. Viking lander which conducted biological and chemical analyses of Martian soil. Viking was designed to operate for nine months and sent back data for six years. No Soviet long-range spacecraft have ever lasted that long.

Moreover, to send people to Mars will require entirely new technologies for long-duration flight in terms of guidance, communications, and reliability; Improved rocket propulsion and spacecraft design; and new facilities for medical care and other needs likely to arise during three years in space.

Soviet cosmonauts have never left low-Earth orbit. In order to leave the Earth's protective radiation shield, the Soyuz craft used for two decades is inadequate. Trips beyond the Earth's Van Allen belt demand new spacecraft with better protection from the increased radiation environment.

The U.S. did this fifteen years ago in the Moon landing. At the present time, the Soviets have no booster that could carry men and materials to the Moon, much less to Mars. The Apollo Saturn rocket carried 300,000 pounds to the Moon, but the astronauts only stayed a few days. A Mars-bound ship must weigh between four and eight times that amount to carry the consumables and equipment for the longer journey.

There are constant rumors that the giant Soviet G-1 space booster, reportedly twice the power of the Saturn V, is ready for testing. But this rocket had two catastrophic failures in the 1969-1972 period, one of which killed 100 people, and went through a decade of redesign; it will have to be flown successfully by itself a number of times before it is manrated.

The Soviets have been two decades behind the United States in rocket propulsion technology. The Centaur rocket, built in the U.S. in 1963, was the first space booster to use liquid hydrogen and liquid oxygen, rather than kerosenederived fuels. The Soviets have never mastered the technology to use this energetic but highly explosive fuel. Yet, going to Mars with carbon-based fuels would mean an enormous increase in the amount of weight at lift-off, to carry the extra fuel and fuel tanks that the less efficient fuel would require. It does not seem conceivable that anyone would make a manned trip to Mars without liquid hydrogen fuel, or a nuclear porpulsion stage, but there is no evidence that the Soviets have mastered these techniques.

Large kerosene fueled rockets would be useful for Earthorbiting military payloads, however. Soviet watchers have pointed out that rather than planning an immediate Mars mission, the Soviets and their U.S. apologists are more likely going to use Mars mission propaganda as a handy cover for developments which are primarily military, such as the use

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of a super booster not for manned missions, but for the deployment of space-based laser battle stations.

On September 13, the Senate Foreign Relations Committee held hearings on Senate Joint Resolution 236, sponsored by Sen. Spark Matsunaga (D-Hawaii), calling for renewed space cooperation as an alternative to an "arms race in space." One of the witnesses was Dr. Carl Sagan, a founder of The Planetary Society, which has opposed every manned space program. Yet, Sagan presented himself as a great champion of the joint manned Mars mission! Sagan suggested that the mission be targetted for 1992, which, he explained, would not only be the 500th anniversary of Columbus' discovery of America, but also the 75th anniversary of the Bolshevik Revolution!

Dr. Carol Rosin was there, of course. She stated that a joint Mars mission "is an excellent one, as long as 'Star Wars' budgets do not accompany it. Even a small amount of SDI funding," she said, "would eventually eliminate the Mars project as SDI would preempt the resources."

This "Mars fever" has been aided by a disinformation campaign surrounding the recent, record-breaking 237-day Soviet space station mission. On Oct. 15, Sen. Matsunaga stated that this flight was evidence that the Soviets are planning a manned Mars mission. He failed to state that it will take 10-15 years years to develop the technology required. In 1980, the chief Soviet space doctor, Oleg Gazenko, told a press conference that the flight could happen in "ten, fifteen or twenty years, but I believe it will be before the year 2000."

A joint mission would be valuable. Rather than using this important goal of spreading human civilization to other planets as a weapon against strategic defense, a Mars program taking advantage of the directed energy, computer, and other advances from the beam defense program itself would reach its goal that much sooner. But the Soviets, in their mad dreams of world domination which U.S. beam-weapon defenses would crush, have refused to take up President Reagan's offer to develop this defensive technology with the United States ("mutually assured survival"), and begin the planning for a joint manned Mars mission at the same time.

## Soviet unmanned flights to Mars

Nov. 1, 1962: Missed the planet by 120,000 miles.

Nov. 30, 1964: No data returned due to loss of signal from the spacecraft.

May 19, 1971: Entered Mars orbit, but the lander crashed on impact.

May 28, 1971: Communcations with lander lost after 20 seconds.

July 21, 1973: Missed Mars by 1,375 miles.

Aug. 5, 1973: Achieved orbit and returned scientific data.

Aug. 5, 1973: Transmissions from the lander lost after three minutes.

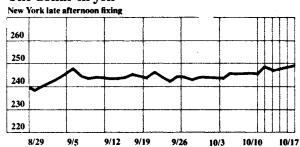
**Aug. 9, 1973:** Lander was released, but missed the planet by 800 miles.

## **Currency Rates**

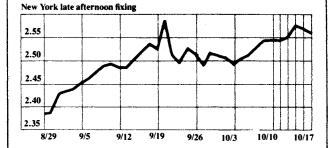
#### The dollar in deutschemarks



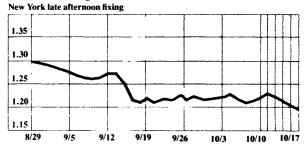
### The dollar in yen



## The dollar in Swiss francs



## The British pound in dollars



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