

Miami's New Ethnic Conflict:

Haitians vs. American Blacks

By JEFFREY SCHMALZ

New Satellite Channel Opens Computer Link to the Soviets

By JOHN MARKOFF

erally permitted data to move only from the West to the Soviet Union. They functioned sporadically, were costly to use and were discouraged by both Governments.

But last month a group of entrepreneurs in San Francisco, in a joint venture with the Soviets, established the two-way satellite connection, and traffic flowing in both directions has been growing.

Users Are Elated

Although there are still reservations about the computer network connection in this country, both Governments are now permitting the data exchange.

Many users are elated with the new access.

"It's just wonderful," said David Leith, a high-energy physicist at the Stanford Linear Accelerator Center in Stanford, Calif., who last year began communicating with Soviet researchers by the earlier, more cumbersome route. He exchanges messages and data with physicists in Novosibirsk who are conducting joint scientific experiments with United States scientists.

"Letters and telephones are difficult," he said. "Telexes frequently don't work. This is an excellent way for scientists in the two countries to communicate."

A variety of other United States organizations are now using or plan to use the new service. They include microbiology researchers at Columbia University who want to stay in contact with their counterparts at the Institute of Genetics in Moscow.

Space Missions Discussed

Researchers at the Space Studies Institute at Princeton are using the computer link to discuss joint Soviet-United States space missions with researchers at the Moscow Aviation Institute. There is also a computer link between the United States Academy of Science and its Soviet counterpart.

In addition to its use for scientific exchanges, the computer link has been adopted by a number of United States corporations to keep in closer contact with their Soviet branch offices. For example, last year Combustion Engineering Inc., a chemical corporation based in Stamford, Conn., began using the computer link.

But computers are not wide-

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U.S.-Soviet Data Flowing Through New Satellite Link

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spread in Soviet society, so in some cases the link has served as little more than a telex and using it has been frustrating for Amer-

Ben & Jerry's Experience

Ben Cohen, the chairman of Ben & Jerry's Homemade Inc., a Waterbury, Vt., ice cream maker, said that last year his company established an electronic mail account to promote a joint venture for making the company's product in the Soviet Union.

Attempts to make contact with potential partners proved frustrating. Mr. Cohen's company was never able to get a response, and he said he had heard conflicting tales about what had happened to his messages. One account said they were received but then had to be hand-delivered to the intended recipients.

While international data networks linking computers have been widely available in the United States for many years, access in the Soviet Union has until now been highly restricted.

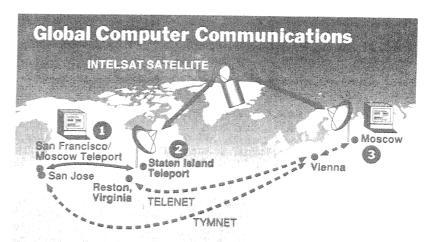
Those restrictions appear to be loosening. United States experts on the Soviet computer industry suggested that the proliferation of network links may prove a thorny problem to Soviet authorities by opening new grass-roots contacts between Soviet citizens and the West.

'Fantastic Boon to the U.S.'

"What's happening right now in the Soviet Union is a fantastic boon to United States," said Robert Park, director of the American Physical Society's Washington office. "We've always grumbled that they have an intelligence advantage because our system is open and theirs is closed. Anything that opens it up has got to work to our benefit."

The emerging computer ties are viewed as vital by many American scientists and business executives, who believe that direct communication will serve to lessen tensions and increase economic and scientific cooperation.

The new network links make it possible to send electronic mail instantly or transfer software or technical information between the two countries. It will consortium, the International Institute also make it possible for people in each for Applied Systems Analysis, contend-



Map shows how a computer connected to a modern can communicate with computers in the Soviet Union. The new network (indicated by solid lines) is a joint venture with a Soviet organization. Two other existing systems (indicated by dotted lines) connect indirectly to Soviet computers through Radio Austria in Vienna.

- 1 A personal computer user, either in the United States or the Soviet Union, dials a local telephone number that is automatically connected via a network to a computer at the San Francisco/Moscow Teleport.
- 2 The call is relayed via a satellite link to the Staten Island Teleport, a satellite communications earth station.
- 3 Users in the Soviet Union can connect to a Moscow-based computer that is directly linked to the San Francisco computer. The Soviet computer is maintained by the Institute of Automated Systems in Moscow.

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country to operate computers in the ing that it had become a gateway for other country directly.

U.S. Concerns About Openness

But the openness has not been welcomed in all quarters in this country.

In the Reagan Administration, Govcomputer networks because of technology transfer and computer security concerns. The new ties have been the renewal. cleared, however, by a variety of Government agencies, including the Department of Defense, according to executives involved.

In 1982, the White House withdrew this country from a 17-nation computer the Soviets to tap into American data.

'Technology Transfer' Is Worry

Last year, financing for the institute was partly restored. But the issue has continued to divide the Government. ernment officials raised concerns The decision to continue financing was about Soviet access to United States made at a meeting of the National Security Council only after a number of other United States agencies opposed

"There has been a general concern about technology transfer for all the traditional reasons," said Joel Schatz, president of San Francisco/Moscow Teleport, the San Francisco company that established the link last month.

The company is now negotiating to begin the sale in this country of Soviet technical and scientific computer data, which might be available by midyear. "We have been in very thorough contact with the United States departments of Defense and Commerce," he said.

Monitoring of Data on Link

He said it would be unlikely any illegal activities would take place over the new direct link because the exchanges are easily monitored by authorities in both countries. Such monitoring by United States officials without a search warrant, however, is illegal under the Foreign Intelligence Surveillance Act

Other computer experts said national security concerns about the new direct links to the Soviet Union are unfounded because access had already been available to experts and intelligence agents from virtually any spot in the world by simply placing a long-distance telephone call to an appropriate computer in the United States.

"The information is unclassified and in the public domain," said Ken Allen, senior vice president of the Information Industry Association. "How difficult is it for anyone, including Soviet citizens, to obtain the information le-

Commercial Network Providers

Before establishment of the new satellite link, both American commercial computer network companies -Telenet, a subsidiary of the McDonnell Douglas Corporation, and Tymnet, a subsidiary of the U S Sprint Communications Company - offered access to Soviet computers through Radio Austria in Vienna. All three networks are connected to computers at the Institute for Automated Systems in Moscow, But that link was sporadic and expensive.

Despite the apparent new openness that the link with the Soviets represents, most of the computer network communications are still funneled through the Institute for Automated Systems, a Soviet Government organization that has played an aggressive role in promoting t international computer communications.

"We do not foresee any political or social obstacles to the smooth increase of two-way electronic communications between our two countries," Oleg L. Smirnov, director of the institute, said in response to a question submitted to him last week by the computer network. "Moreover, we are witnessing a great demand for such a service in our country and abroad.'

Attention From Hobbyists

the attention of both Soviet and American computer enthusiasts who devote



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Joel Schatz, president of San Francisco/Moscow Teleport, and his wife, Diane, talking to Moscow on their video telephone, which allows simultaneous voice, picture or data commuications via satellite.

The system is 'a fantastic boon to the United States.'

programs and working with the equipment. Last December, computer en-thusiasts in the Soviet Union founded the International Computer Club at a Moscow meeting.

Simon Furman, a San Francisco business executive who attended the meeting and is serving as a United States representative of the organization, said the club has plans to create an exchange program that would include students from this country lieve there are risks in increased contraveling to the Soviet Union with a tact between Soviet and United States personal computer that they would citizens. leave for their Soviet counterparts.

these exchanges have become the sub-The new openness has not escaped ject of a debate among some American ject of a debate among some American Technology who has been active in the experts about whether sensitive com- debate. "Given the open communicaputer programs and other information tion channel between hackers, who much of their time to writing computer will flow unrestricted to the Soviets.

Discussion Group Controversy

The debate started after John Draper, a well-known computer programmer and hobbyist in Alameda, Calif., visited the Soviet Union last year. Upon his return Mr. Draper proposed connecting the Soviet Union to an international computer network called Usenet, which links thousands of computers that run the Unix operating system, a widely used software package for controlling computers.

The idea has caused a heated controversy on computerized discussions that take place on the network. Mr. Draper said he has been carrying on an active correspondence with Soviet computer enthusiasts, but has exercised particular care not to discuss advanced technologies with them.

Some participants in the Unix network have said, however, that they be-

"My concern is that these folks are Hobbyists in both countries are now exceeding their authority as private communicating over the network. But citizens," said Will Bralick, a computer scientist at the Air Force Institute of knows what these people are getting?'