

## U.S.-RUSSIAN COLLABORATIONS

# Cold Wind Blows Through Arctic Climate Project

Hydrologists Larry Hinzman and Vladimir Romanovsky were packing up to leave Russia's Far East earlier this month at the end of a 4-week research trip when disaster struck. The trip had already been a bit of an ordeal for the University of Alaska, Fairbanks, researchers, who were taking part in an international project involving Japanese and Russian scientists to monitor ground water and climate inside the Arctic Circle. It took three times longer than they had expected to clear their gear through customs and obtain the necessary permits for their equipment, which included a differential global positioning system (GPS), and a portion of their research had to be abandoned. But the fieldwork itself—staking out a 1-kilometer square of tundra and installing markers and sensors—had gone well.

The first inkling that something was amiss came on Friday, 30 May, when customs officials in Yakutsk told them that the Federal Security Bureau, Russia's internal police, was interested in their activities. After being ordered to transfer their equipment to the Geodesic Supervision Commission and spending an anxious weekend worrying about its fate, they learned on Monday that the instrument's ability to obtain precise geographic coordinates made their data a state secret that could not leave the country. There was worse to come on Tuesday: a 3-hour interrogation by the security forces, who assumed the scientists were spies, and the seizure of Hinzman's logbook. On Wednesday, the police claimed his laptop computer and disks. With only 4 days to go on his visa, Hinzman and Romanovsky (a Russian citizen) decided the next day to leave Yakutsk. On 7 June, they arrived back in Fairbanks, safe but badly shaken, minus their data and equipment.

U.S. government officials are weighing how to respond to Hinzman's treatment. "We're extremely concerned about this interruption in the free flow of scientific information," says Douglas Siegel-Causey of the National Science Foundation's (NSF's) Office of Polar Programs, who says Hinzman "did nothing wrong" during his visit. But a strong formal complaint or a threat to pull out of joint activities might prejudice future joint ventures in a region that U.S. researchers are eager to study. "We spend a lot of time promoting collaborations, and any problem can put a real damper on things," says Cathy Campbell of the White House Office of Sci-

ence and Technology Policy. But "without all the facts, it's hard to know how [Hinzman's case] should be resolved."

NSF, which had awarded Hinzman \$242,000 for the 2-year project, would like to know not just the facts of this case but whether it fits into a pattern. Several U.S. scientists working in Russia's Far East in the past few years have reported problems ranging from unilateral restrictions on their activities by provincial authorities to last-minute financial demands. NSF has asked its grantees to submit information on such episodes. If the reports do point to a pattern, they say, the next step may be to air the problem before a commission, headed by Vice President Al Gore and Russian Prime Minister Viktor Chernomyrdin, formed in 1993 to foster cooperation in science and other areas between the two former Cold War enemies.

One complicating factor is the growing independence of local and regional officials from the central government in Moscow. In June 1995, for example, the governor of the Chukotka region that borders the Bering Sea enacted a new policy requiring permits for all scientific activity in his jurisdiction. Over the next few months, three U.S.-Russian projects were canceled and eight more were delayed as scientists scrambled to meet the new rules. In the Hinzman episode, it is unclear whether the local security police were acting on their own or under orders from Moscow.

Some government officials say the episode is no cause for alarm, however. "From where I sit, it's not a recurring problem," says Environmental Protection Agency (EPA) official Gary Waxmonsky, who staffs the environmental committee of the Gore-Chernomyrdin Commission. "There are other scientists using GPS equipment in Russia, so I don't see [the security police's reaction] as a generic problem." He says problems are less likely to occur when federal officials are involved from the start, as with most of the projects EPA sponsors.

U.S. researchers hoping to conduct re-

search in Russia's Far East—an area rich with opportunities that was largely closed to outsiders during the Cold War—are anxious that any official action by the U.S. government not make an already difficult situation worse. "There are still lots of opportunities, but some U.S. scientists have given up because it's too difficult to overcome the bureaucratic obstacles," says Dale Taylor of the U.S. Geological Survey's biological resources division in Fairbanks and a driving force behind an effort to create a Beringian Heritage National Park that spans the two countries. "And that's very sad for Russia, where good scientists are working under very difficult conditions." Collaborations, says Taylor, also are an essential ingredient in keeping Rus-



**Frozen out.** Romanovsky (right) and Japan's Norifumi Sato with the GPS that was seized. Behind them is a grid marker.

sian researchers afloat.

For glacial geologist Julie Brigham-Grette of the University of Massachusetts, Amherst, Hinzman's experience has forced her to examine the balance between her quest for discovery and her concern about safety. Brigham Grette's students encountered problems last fall during a field expedition in Chukotka, and she had to postpone a project scheduled for this spring after it became snarled in local politics. "There's an unexplored meteorite crater lake formed 4 million years ago that may have a continuous climate record, and I want to get a core sample," she says about the Russian site. "It could be a major research project that would also contribute a lot to the local economy. ... But I don't want my family to have to worry that I might be arrested just for doing my work."

Hinzman is also taking stock. "When I got home, I said I'd never return. But last night, my wife bet me \$1000 that I'd be back in Russian within a year." He paused, turning the idea over in his head. "There's just so much science that needs to be done, and so much to learn."

—Jeffrey Mervis