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Glasnost link-up

Christopher Reed on an extraordinary entry into computer comradeship

THE ONLY high-speed, computer satellite link between the two superpowers has its western office above a kitchenware shop in San Francisco's Pacific Heights neighbourhood.

The equally unlikely president of what is now officially San Francisco/Moscow Teleport, Inc. is Joel Schatz. He's a 51-year-old former military intelligence analyst turned self-described "cultural repairman" whose tastes tend toward sitar music and post-hippie esoterica. No computer expert, he has nevertheless created an electronic connection which only a few years ago would have been dismissed as impossible.

Here's just a hint of the Schatz success formula. On a Moscow visit in 1984, Schatz, who spoke no Russian, was shuffling through the snow on his way to an appointment at the Soviet Academy of Sciences. Wearing jeans, a white sheepskin coat and multi-coloured ski cap, he was carrying his recently acquired, first computer, a \$399 Tandy 100 laptop wrapped in purple cloth.

He arrived 20 minutes late, his granny glasses fogged over. Six senior Soviet officials in dark blue suits were waiting under a portrait of Lenin. There was a long silence.

Perhaps it was Schatz's Marx-style beard, but finally Academician Boris Naomov advanced beaming, with arms outstretched. "Aha!" he cried. "A Californian..."

Schatz the computer comrade has been back 20 times since. This summer he will move to Moscow for a few months with

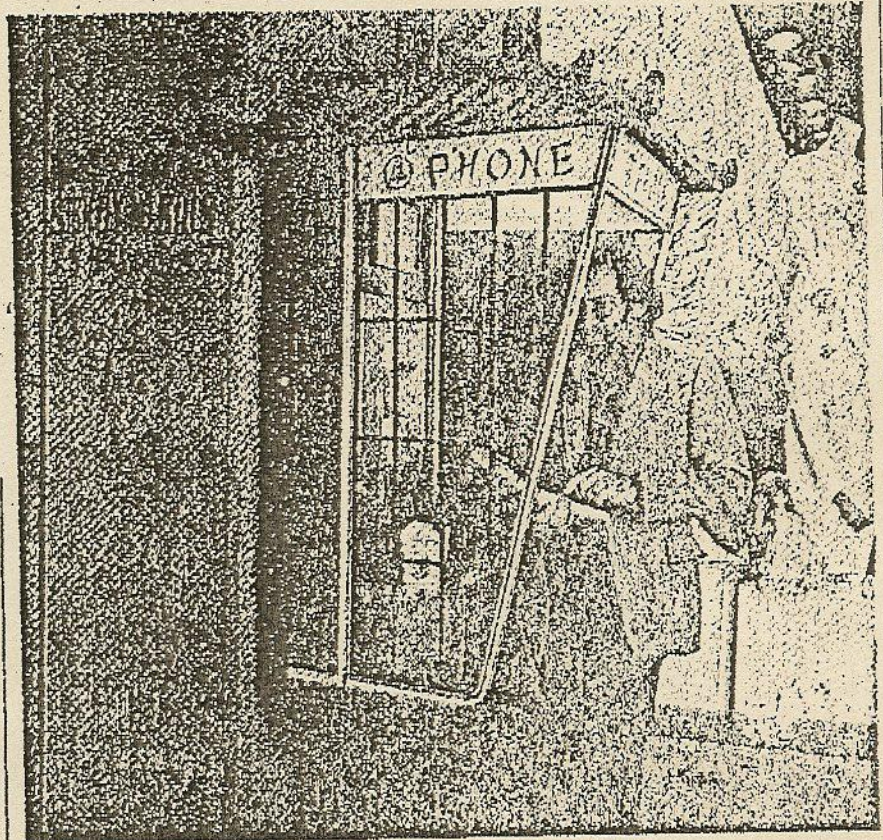
his wife and partner Diane, to streamline what is now a burgeoning enterprise. Teleport Inc employs 14 people including two translators in San Francisco, has an office in Moscow and plans to expand to Europe.

Customers range from scientists, philanthropists and institutions, to private enthusiasts and businessmen attracted by the Soviet market. Teleport has the blessing of Academy of Sciences vice-president Yevgeny Velikhov, Gorbachev's science and technology adviser and an early promoter of personal computers.

Ironically for defenders of free speech, it was the United States that obstructed the network venture. Soviet obstacles surfaced from an entrenched bureaucracy. But for 23 days in 1985 the US Department of Commerce declared the fledgling computer link illegal, and shut it down. It was then transmitting via a mainframe computer at the New Jersey Institute of Technology and a ground link in Vienna.

At that time the US government was hysterical about hi-tech exports to Russia. Schatz asked how mere words could be exports. "It turned out that since there was no regulation saying you could do this kind of thing, they automatically said you could not," he recalled. Despite a letter from Commerce legitimising the network, the US Defence Department is now also registering unease about US-Soviet computer links.

This extraordinary entry into electronic glasnost began in 1983 when Joel and Diane returned from their first visit to the USSR. They realised there



Through to Moscow . . . Joel Schatz on line from San Francisco

was no satisfactory way to keep in touch with the friends they had made. Mail could take weeks, telex or telephone was expensive. An idea was born.

By 1985 Gorbachev had come to power and Schatz had bought his Tandy. He immediately sent a telex to academician Velikhov. He received four replies inviting him to Moscow, and in May 1985 the link was approved in principle.

However the Vienna route was costly and unreliable. In February last year Schatz proposed using the Intelsat satellite to speed messages and save money. Last October he signed a contract with the Soviet Institute for Automated Systems.

The technology is relatively simple. In Schatz's office is an Apple Macintosh and a US Robotics Courier 2400E modem going up to 24000 baud. Cyrillic messages may be sent through a software modification. The text proceeds like normal elec-

tronic mail. You dial a local number for Globenet, type in a code for a mini-computer Teleport uses in nearby Palo Alto, and follow the upload sequence. From there the line goes to Staten Island, New York, to a teleport owned by IDB Communications Group, a California corporation operating the Intelstat link.

The Soviet Ministry of Post and Telecommunications then takes over. The message arrives at Bear Lake antenna station near Moscow and a private wire runs it through the national packet switching gateway for digital data from abroad. Finally, the message enters the Moscow telephone system and subscribers receive it via a special US Robotics error-correcting modem.

US users do not, of course, have to enter the system via Schatz's Macintosh. Once Palo Alto accepts a message it is in the Russian subscriber's mail

box within two seconds. The system works so well Schatz says he now talks to Russians more often than to friends across San Francisco Bay.

Costs are \$200 a month for commercial users, and \$25 for others plus another \$75 for special help in Moscow. The on-line cost is 25 cents a minute.

Schatz says he was in the right place at the right time. "In this part of California one can imagine ideas and try them out with relative ease. This is the planetary centre for it."

"It marks a profound shift. When people start talking like this they won't be able to stop. We'll be leaping over the governments on both sides."

All sorts of new uses are planned, including participation by thousands of schoolchildren in both countries. Schatz firmly believes personal computers will change the world. To those who are sceptical, he is a personal refutation.