Computers and Communism

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Jan. 30, 1977



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VIENNA—Not that it's the sort of thing that's easily misplaced, but an International Business Machines System 370 computer was .delivered to an Austrian affiliate of a West German concern recently and, presto, disappeared.

"It's now somewhere in the East, most probably in the Soviet Union," said an official familiar with the case. An investigation has shown that waybills and customs papers accompanying the big computer had surreptitiously been replaced with forged papers, making it appear to be in transit, rather than destined for a client here.

"Such things happen all the time, despite great vigilance," the official remarked.

"Components of advanced systems, manuals and other software—they're
constantly being smuggled to the Communist countries. Their hunger for the latest
Western computer technology seems inexhaustible."

Every Eastern bloc country has a special computer board on a high Government level, usually attached to the supreme economic planning authority. In the Soviet Union a project is being considered to link Moscow's five-year planners with peripheral production sites by a computer with 18,000 terminals, a project that is expected to need Western technology and software.

Although purchases are a more usual way of filling such needs than thievery, an East-West computer deal is not easy to arrange. Both a license from the United States Department of Commerce and clearance from the Paris Coordination Committee of the North Atlantic Treaty Organization are required, and for both it means getting assurance that the client, always a state agency, will not use the equipment for strategic purposes.

But there are many nonstrategic uses. An Austrian who works for a big United States computer maker explained: "Data processing seems ideally fitted for the centrally planned economies. With the right system and programming, a department in the national capital can, let's say, read on a screen moment for moment at what temperature steel plate is being rolled in each outlying plant of the state metal combine.

"On the other hand, computers allow also for a high degree of decentralization and flexibility," he added. "Look at Yugoslavia. It's a federation of six republics, and its Communist system is based on what they call self-management. Computerization

now allows the Yugoslavs to work out quotas and an infinity of other data for every enterprise and every republic quickly. The computer may make self-management work."

A less sanguine view of the computer's role in planned economies was given by a recent visitor from Poland who is a Communist Party member, though a critical one. "Our economists were building mathematical models based on computer data in the nineteen-sixties," he remarked. "And look at the miserable condition of our agriculture right now. We have to spend precious foreign currency to import food instead of computers."

And an I.B.M. executive here tersely added: "There is no worse mess than a computer mess."

Nevertheless, one Eastern country where automation seems to be working is Bulgaria, Moscow's staunchest ally. The small country's 90 state industrial combines and 170 agro-industrial com plexes are centrally guided from Sofia, and computers are an important tool in the control.

"The Bulgarian state planners were among the first Communist functionaries to become enchanted with the data systems and their possibilities," said a West German expert. "Sofia's love affair with the computer probably started when the Bulgarians found that with a medium-sized unit, they could keep track of all their long-distance haulers all over Europe."

Bulgaria operates the largest international trucking fleet in Europe. Huge trailer trucks marked "Bulgariya" in Cyrillic lettering ship Black Sea grapes to the Netherlands and French fashions to Iran. The position and cargo of each vehicle can be determined quickly from printouts in Sofia, but it may not be infallible.

"You have to be damn smart to beat the computer," a Bulgarian trucker told an Austrian colleague in a roadside tavern near Linz recently. He winked, grinned broadly, but wouldn't explain how he managed to wangle an extra day on the road or a sidetrip with his heavy rig despite the Sofia computer.

The Comecon countries, not surprisingly, are trying to develop their own equipment to match Western systems and are showing their joint-venture Riad-Esra models at Eastern European trade fairs.

But as a British expert who often visits such fairs remarked: "Comecon Is a couple of generations behind Western technology, and their computers are unmarketable in our part of the world."

The I.B.M. unit spirited out of Austria was fourth-generation equipment, and fifth-generation systems are being produced in the United States, while the sixth generation is being planned.

In contrast the most advanced Soviet built computers commercially available to Comecon clients are ,third generation, and they are hard to get, although United States experts point out that Soviet space and defense achievements indicate that very sophisticated equipment exists.

"Imagine!" a visiting Czech exclaimed. "The Russians tried to foist on us old machines of the Minsk and Ural types. They run on valves."

Valves—vacuum tubes—in the computer world are rather like outboard spare tires in the automotive world.