## Soviet Economy by Rachel Douglas

## Czech-Russian machine-tool center

A joint Soviet-Czech R&D center called "Robot" assures the U.S.S.R. of getting the best of Eastern European machine-tools.

Using the framework of the Council for Mutual Economic Assistance (CMEA), the Soviet Union is funneling to itself the best products and R&D talents of Eastern Europe's industrial powerhouses, Czechoslovakia and East Germany.

As reported in this column on April 30, CMEA member-countries are slated to produce 200,000 industrial robots by 1990, with those two countries in the lead. The Soviets have taken formal steps to ensure that the best of this output, from the Warsaw Pact's chunk of northern Europe's heavy-industry zone, is at the disposal of the Soviet defense industry.

On March 22, the Soviet and Czechoslovak governments signed an agreement to set up "Robot," an International Scientific-Technical Association (STA). Conveniently located in the western Slovakia city of Prešov, close to the Soviet border, the "Robot" center will design and produce robots for use in Czechoslovakia, the U.S.S.R., and in third countries.

The Moscow weekly Ekonomicheskaya Gazeta, in a two-page feature this April (issue No. 16), hailed the establishment of the "Robot" STA as a breakthrough for "specialization and cooperation" within the CMEA. Other countries, starting with East Germany and Bulgaria, will be brought into its work before long, and more such joint projects are mandated by the CMEA's Committee on Cooperation in the Area of Machine Building.

From the Soviet side, the main industrial ministry involved in the "Robot" STA is the Ministry of the Ma-

chine-Tool and Tool-Building Industry, headed by Boris V. Balmont. In 1981, Balmont was transferred to this post from the Ministry of General Machine Building, which builds missiles. This was one of several important appointments, by which key sectors of the Soviet economy—machine-tools, atomic energy, and transport machinery—were put under the thumb of experienced defense-sector managers.

Balmont, in an article contributed to the Ekonomicheskaya Gazeta spread, explained that his ministry is already "carrying out a unified technical policy in the area of creation, preparation, introduction, and technical servicing of flexible production systems at machine-building and metal-working facilities." This refers to large, computerized machine-tools, which are programmable to produce several of the components that a given factory needs to turn out. The U.S.S.R. Ministry of the Machine-Tool Industry will produce more than 4,000 industrial robots during 1985, Balmont projects, and 15 of the large, "flexible production systems."

With Balmont on the case, the "Robot" STA will channel the ideas of Soviet-Czechoslovak designers and engineers into Soviet industry. The process already began, under the predecessor organization of the "Robot" STA, the Design and Drafting Bureau by the same name. This earlier "Robot" center was set up in November 1983 as "one of the first temporary international collectives of the CMEA countries"—Balmont's bureaucratese

for a crash project—"for creating promising types of automated equipment."

Balmont unabashedly described the cooptation of Eastern European resources into the Soviet and Warsaw Pact economic mobilization: "Cooperation with the CMEA member countries is beginning to make a tangible contribution to solving the tasks of complex automation of production processes, on the basis of flexible technology. Cooperation in this area, in particular with Czechoslovakia... has led to the creation of several industrial robots for servicing forgepresses, pressure casting machines, and metal-cutting tools. . . . Work is now in progress to create industrial robots for automated welding and assembly work."

Vladimir Čop, Deputy Chairman of the Czechoslovak State Commission on Scientific, Technological, and Investment Development, acknowledges that a primary goal of the "Robot" joint endeavor, is to ensure the highest-quality input from Czechoslovakia to the U.S.S.R. "It is anticipated that the portion of Czechoslovakia's exports to the U.S.S.R., prepared under the aegis of 'Robot,' will increase," said Čop in Ekonomicheskaya Gazeta. He added, "This provides a good, long-term guarantee for the export of Czechoslovak machines and equipment of the highest technical specifications." Just what the Soviet marshals ordered!

For Czechoslovakia itself, Čop added, the work of the "Robot" STA is "immediately linked to the long-term complex program for computerization of the national economy and the . . . complex program for automation of production processes by means of industrial robots and manipulators." The center will work on computerized management of industrial robots.