REPORT BY THE U.S.

General Accounting Office

Details Of Certain Controversial Export Licensing Decisions Involving Soviet Bloc Countries

Over the years, critics have taken issue with the U.S. export licensing policy process by calling attention to numerous approved exports which they believe demonstrate that national security interests are not being properly protected. These cases have been mentioned either in the media or in testimony before Congress, and each involved the export of state-of-the-art or advanced technology.

GAO examined some of the more publicized cases in detail to shed light on the considerations and actions attendant to each one.



121292



GAO/ID-83-46 MAY 5, 1983

025491

Request for copies of GAO reports should be sent to:

U.S. General Accounting Office
Document Handling and Information
Services Facility
P.O. Box 6015
Gaithersburg, Md. 20760

Telephone (202) 275-6241

The first five copies of individual reports are free of charge. Additional copies of bound audit reports are \$3.25 each. Additional copies of unbound report (i.e., letter reports) and most other publications are \$1.00 each. There will be a 25% discount on all orders for 100 or more copies mailed to a single address. Sales orders must be prepaid on a cash, check, or money order basis. Check should be made out to the "Superintendent of Documents".



UNITED STATES GENERAL ACCOUNTING OFFICE WASHINGTON, D.C. 20548

INTERNATIONAL DIVISION

B-201919

MAY 5, 1983

The Honorable Edwin (Jake) Garn United States Senate

Dear Senator Garn:

Subject: Details of certain controversial export

licensing decisions involving Soviet

Bloc countries (GAO/ID-83-46).

This report responds to your July 15, 1982, request for information on nine controversial licensing decisions. One of the nine cases had to be deleted because it is currently being reviewed by the Department of Justice for possible criminal prosecution. To provide for public disclosure of the other eight cases, the Department of Commerce has deleted all information which is protected by Section 12(c) of the Export Administration Act.

The short case studies in the appendix were prepared to shed light on the considerations and actions attendant to each licensing decision. In seven of the eight cases, the military risk of exporting each product or technology was recognized, deliberated, and often lessened by some means before the export was approved. Further, all appropriate departments and agencies, including the White House, were involved as considered necessary in each determination. In one case, military risk was not recognized and the Government licensed the export of a product containing technology critical to anti-submarine warfare.

Because the licensing process is directed by executive policy, it should be pointed out that the individual judgments are strongly influenced by such direction. Throughout the 1970s, it was well recognized within the licensing community that the executive branch favored using trade as an important foreign policy tool with the Soviet Union, particularly trade involving technology.

Our review consisted primarily of summarizing information in case files developed by the Departments of Defense, State, and Commerce. We also discussed the cases with members of the licensing community and with industry officials, when possible.

Our efforts, however, were hampered by the age of the cases; some of them were 10 years old and persons knowledgeable about them were either not available to us or their recollections were less than perfect. We performed our review in accordance with generally accepted Government auditing standards.

The case studies were provided to the Departments of Defense, State, and Commerce and the Central Intelligence Agency for review. These departments, however, chose not to comment on the accuracy or substance of the individual cases.

Sincerely yours,

Frank C. Conahan

Director

DETAILS OF CERTAIN CONTROVERSIAL EXPORT LICENSING DECISIONS INVOLVING SOVIET BLOC COUNTRIES

BALL BEARINGS

In 1972, the Commerce Department granted a U.S. anti-friction bearing manufacturing company licenses to export sophisticated manufacturing equipment to various locations within the Soviet Union. This approval, in effect, overturned a 1961 Commerce decision to revoke similar licenses to the Soviet Union because the equipment is capable of producing precision anti-friction bearings used in both strategic and non-military end items.

Our review of the case disclosed that all appropriate departments and agencies were involved in the determination and that the military risk involved in exporting the equipment was given detailed consideration before the licenses were approved. Further, all reviewing officials were well aware that the equipment could, and probably would, significantly alleviate Soviet military shortages of precision anti-friction bearings.

Just 4 months prior to final approval, the interagency operating committee unanimously recommended that the licenses be denied. The recommendation was reached despite evidence that comparable equipment was available from several foreign manufacturers and that recent efforts to control such equipment through the multilateral coordinating committee had failed.

The interagency committee's recommendation, which was communicated to the White House just prior to President Nixon's visit to Moscow, was never adopted. Instead, a decision was made sometime after the President returned to reconsider approving the licenses on the basis that comparable equipment was available from foreign manufacturers. It should be noted that such a rationale for approving the licenses was clearly contrary to President Nixon's stated East-West trade policy, which specifically excluded consideration of foreign availability when an export would contribute significantly to Soviet development, production, or use of military hardware.

Commerce sent one of its technicians to visit a Swiss bearing manufacturer who had reportedly sold precision miniature bearings and grinders to the Soviet Union. The technician viewed U.S. and Swiss made internal grinders in side-by-side operation and talked extensively with a senior plant official about the capabilities of the two pieces of equipment. He concluded, without reservation, that the U.S. and Swiss made internal grinders were comparable.

Based on this finding and similar conclusions made by the U.S. anti-friction bearing manufacturing company and Machine Tool Association officials, Commerce asked Defense to concur in a recommendation of approval for the licenses. Defense agreed to withdraw its objection to the transaction without ever addressing the question of whether the Swiss could be persuaded to refrain from selling such equipment to the Soviets.

The interagency operating committee met once again on the case and without much discussion agreed to recommend approval of the licenses denied earlier. The recommendation was referred to the White House and then quickly approved by Commerce.

ARRAY TRANSFORM PROCESSORS

In 1970, the Commerce Department granted a U.S. manufacturing company licenses to export five digital seismic data acquisition systems to the Soviet Union. The systems and their associated office playback equipment are geophysical exploration devices used primarily in searching for underground structures likely to contain petroleum reservoirs. The array transform processors within the office playback equipment, however, could be used for military purposes, such as anti-submarine warfare (ASW).

Our review disclosed that the U.S. Government was deficient in its efforts to control the export of this advanced technology. The Government did not include it on the Commodity Control List for more than 10 years after initial development of the array processor and 8 years after the first export of the equipment to the Soviet Union. Prior to this, array processors were considered computer processing equipment and controlled accordingly. Such control never focused on the technology's important military applications.

The use of array processor engineering for military application began with development of the array processor in 1967. The Naval Research Lab, for one, immediately recognized the new technology's ASW potential and started developing its own equipment. Other Government entities and U.S. manufacturers soon became involved in array processor engineering for a variety of purposes. The veil that covered these efforts was lost, however, when the first commercial array processor was announced in mid-1968. At that time, it was widely reported that the new technology had valuable application for ASW and a variety of other military purposes.

In this case, the potential military use was never recognized at any level; interagency consideration of the licenses never focused on the playback system or its possible diversion for Soviet military purposes. The review was heavily influenced

by the fact that similar seismic systems had been licensed to three East European countries and by statements that similar equipment was available from foreign manufacturers. The software to be provided was analyzed in detail, the speed and capacity of the equipment was compared with existing export control thresholds, and strategic factors related to increasing Soviet oil production capabilities were considered. The analysis showed that the system, for the most part, was well within existing control parameters, but it did not surface any concern about the sophistication of the array processor.

From our review, we cannot be sure whether reviewing officials carelessly overlooked the significance of the array processor or simply lacked any real knowledge of the new technology and its application. The effect, however, was the same; the licensing process failed in its statutory obligations by permitting critical new technology to be exported to the Soviet Union.

The U.S. company received the first license to export seismic equipment containing an array processor to the Soviet Union. In our opinion, this would not have occurred had the Government identified array processors for strict export control or had Defense been required to obtain comments on the case from the defense research community or the technical commands.

NUMERICALLY CONTROLLED MACHINES

In 1972, a U.S. machine tool manufacturer was granted licenses to export three numerically controlled and two tracer controlled milling machines to the Soviet Union's Kama River Truck Plant. These machines were of advanced design and were used to manufacture a variety of special parts for both civilian and military application. The machines were the first COCOM items and the first numerically controlled equipment to be licensed for export from the United States to the truck project.

Our review disclosed that, based on information supplied by the applicant and on independent technical review, a positive finding of foreign availability was made during consideration of the licenses. No foreign site visits were made or independent discussions held with other machine tool producers.

The information provided by the applicant included a letter outlining strong Swiss and West German competition for the tracer machine order and evidence suggesting that as many as three European manufacturers had exported numerically controlled machines to the Soviets. Licensing officials considered this information and their collective knowledge of foreign machine tool manufacturers as sufficient evidence of foreign availability for the tracer controlled machines. The applicant's statement concerning foreign competition appeared on operating committee documents recommending approval of the tracer machine license.

The foreign availability assessment for the numerically controlled machines did include what appeared to be a more comprehensive technical review, which concluded that these machines were available from Sweden, West Germany, and Italy. It also noted that another member had been granted COCOM exceptions to export numerically controlled machines. To our knowledge, these findings were never questioned or discussed during operating committee meetings. Instead, interagency policy review focused on President Nixon's earlier decision to participate in the Kama River project and on the fact that the machines were subject to COCOM embargo. Committee members were uncertain whether the President's desire to participate in the truck project extended to COCOM embargoed machine tools and therefore agreed to call attention to the problem when they forwarded their recommendation to the White House for final review.

The committee's decision to recommend approval of the license was strongly influenced by a proposal the Government was considering to relax the COCOM embargo of machine tools designed for numerical controls. The proposal was of U.S. origin and involved a change in definition that would exclude machinery such as that for which the applicant had submitted a license from COCOM embargo. Although the proposal had not been adopted as a U.S. position prior to the committee's decision to approve the license, the effect was much the same; except for the Defense representative, all committee members seemed to support relaxing the controls on numerically controlled machine tools.

PROTECTIVE CERAMIC COATINGS

In January 1980, the Government suspended and then permanently revoked three licenses granted to a U.S. corporation for exports to the Soviet Union. These licenses, approved in mid-1978, involved the export of technical data describing the technology for manufacturing and applying advanced metal coating compounds. In a complementary action, the Government also revoked the company's general licenses to export related production equipment to the Soviet Union.

The decision to revoke the company's licenses was made on national security grounds. The Defense Department initiated the action after reviewing the case and finding that the Soviets would in all likelihood use the products, procedures, and equipment to improve the performance and reliability of their military gas turbine engines.

Our review of the case disclosed that the Government used essentially the same information to approve the licenses as it did to revoke them some 21 months later. Before the Afghanistan

invasion, there was a conscious effort to avoid being overly restrictive in Soviet bloc export determinations and Defense officials evidenced a definite willingness to compromise. We found that the licenses were approved only because Defense officials, in the spirit of cooperation, continually narrowed their concern when prompted and agreed to an unenforceable and poorly conceived compromise on the most sensitive of the three license applications.

Originally, the Defense Department had recommended to Commerce that all three licenses be denied because:

- -- The technologies were widely used in jet engine and hot section applications.
- --Defense's technical laboratories indicated that there was no appreciable difference in the manufacturing technology or the application techniques required for the products and those used in military jet engines.
- --The Air Force used the U.S. company's products in many gas turbine engines and exports of these products could not be safeguarded against diversion to Soviet military gas turbine engines.

At this time, the Defense Department also knew that Soviet officials had initially discussed obtaining one of the compounds with the intent of applying it to high-performance military jet aircraft engines.

Defense's recommendation troubled Commerce officials, because Commerce had formally advised the U.S. company 8 months earlier that two of the three license applications would probably receive favorable Government consideration. Commerce, therefore, asked Defense to reevaluate its position on these two licenses.

After further consideration by Air Force and other Defense technicians, Defense amended its earlier position to approve the two licenses in question. The basis for this approval is not clear in the documents we examined, but the decision appears to stem from the fact that the two applications involved technology not applicable to the hot sections of jet engines. The fact that there was no appreciable difference in the manufacturing or application technology required for any of the company's product line was apparently overlooked or dismissed.

After learning of the Government's decision, the company requested a meeting with Defense officials to discuss what revisions would be necessary to overcome Defense objections

on the most sensitive license. Such a meeting, we understand, was quite uncommon. Commerce, however, agreed and arranged the meeting, which was attended by Air Force, Office of the Secretary of Defense, Commerce, and company officials.

During the meeting, Government officials were told that:

- -- The Soviets would not accept the package without the technical data for the most sensitive compound.
- -- The Soviets had the compound in question but not the method for formulating the mixture.
- --Application technology was available from many foreign sources.
- --The technical documents to be provided would not describe any procedures for coating actual engine or other machinery parts.

Based on this information, the Defense Department approved the license on the condition that it contain specific prohibitions against providing any demonstration or information on application techniques beyond that required for standard forms. Further, the technology to be provided was limited to that level available in June 1978.

Commerce accepted Defense's position on the case and issued all three export licenses in mid-1978. These licenses, however, did not designate the ultimate consignee as required by export administration regulations. Without such a designation, the Soviet Union was at liberty to provide the technical data to anyone it wished.

This omission was a recurrent concern throughout the licensing process because of the possible diversion of the technology to the aircraft engine industry. The applicant eventually told officials that the ultimate consignee was the ministry of shipbuilding and the technology would be used to coat marine industrial engine parts at its Nikalayev facility. Why Commerce never had the applicant identify the end user on the license as required by its own regulations is not known. We do know, however, that the applicant did not want to narrow the license to a specific end user.

More than 18 months after the licenses were issued, the President suspended all validated licenses pertaining to shipments to the Soviet Union. At this time, the company told Commerce officials that all technical data had been transferred and

that technical assistance and training had been partially completed. Commerce also learned that most of the "general license" equipment had not yet been exported.

After reexamining the case, the Defense Department reversed its position and requested immediate revocation of the licenses. The operating committee reluctantly agreed to this request and recommended that all of the company's licenses be revoked, including the general licenses for the production equipment.

INTEGRATED CIRCUIT TECHNOLOGY

In March 1972, President Nixon, under established COCOM procedures, removed previous U.S. objections to proposed exports by other countries of integrated circuit manufacturing technology to Poland. This deicision, which was made despite opposition by Defense and Commerce, resulted in the first export of this important technology to the Soviet bloc.

COCOM approval permitted other countries to compete for the Polish contract. A foreign firm was eventually selected to provide the technological assistance and integrated circuit manufacturing equipment appropriate to move Poland from a pilot to a mass production stage. The purpose of the agreement was to improve Polish manufacture of integrated circuits for civilian use; i.e., television sets, desk calculators, and small computers. The integrated circuits produced, however, could be used in military equipment and more advanced computers. Also, the assistance rendered would help Poland to advance to strategically more significant circuits.

Our review attempted to determine whether U.S. integrated circuit technology and production equipment was identified in the foreign firm's package approved by the U.S. Government and whether the foreign firm reexported such equipment to Poland without obtaining U.S. approval.

We found that there was strong suspicion that the package contained machinery of U.S. origin and technology when the request was first received. These suspicions permeated the lower levels of the decisionmaking process and were based on knowledge that the COCOM country involved imported much of its integrated circuit production equipment from the United States. It was also known that the foreign firm did not manufacture such equipment, although its parent company could, and that the COCOM country had reexported U.S. equipment without approval in the past.

Licensing officials were unable to confirm their suspicions because documents provided by the foreign firm contained only the quantity and type of equipment and not the brand name or

style number of each item to be exported. Although such a clarification was never requested from the COCOM government involved in this case, we understand that all previous attempts to obtain brand name and style number information had been adamantly refused by the COCOM delegate of that country. Without such detail, licensing officials had no tangible basis for complaint. Consequently, the report prepared for the President's decision on the cases contained only passing reference to the concern.

Shortly after the President approved the case, the issue resurfaced with reports that U.S. integrated circuit technology and production equipment had been exported to Poland without U.S. approval. An official of a U.S. firm specializing in semiconductor technology first reported the diversion. He told U.S. officials that a corporate team had recently toured Polish integrated circuit production facilities and had observed U.S.-patented planar process technology and equipment in use. He said that some of the equipment observed looked identical to U.S.-manufactured equipment except for the label. He therefore, concluded that the foreign company was responsible for the diversion.

Shortly thereafter, another industry source reported that employees of his firm had recently observed modern U.S. maskmaking technology in Poland. The equipment, he said, had come from the foreign company.

Government officials were unable to confirm these reports when, some months later, a U.S. team toured semiconductor facilities in Poland. The team was not permitted to see the sizable amount of integrated circuit production equipment provided by the foreign company or certain other advanced production areas. A high-level Polish official told the team that limited access was considered necessary because Poland had acquired some of its production equipment illegally and might lose suppliers if this fact were confirmed by U.S. officials. The team was also told that Poland would prefer to obtain technology and equipment directly from U.S. firms instead of secondhand from the country involved at possibly twice the price. Polish officials added that they are able to obtain any equipment they really want, despite COCOM controls.

On another visit to Poland, Government officials actually observed U.S. integrated circuit technology and production equipment in use; however, they were not able to directly link the foreign company or any other company with the diversion. We noted that Commerce's Compliance Division received reports of the possible diversion but never took any action.

KAMA RIVER COMPUTERS

In mid-1975, a U.S. computer manufacturer was granted a license to export a computer system to the Soviet Union's Kama

River Truck Plant. This large-scale computer system was intended to automate control and operations of the new truck foundry but did, however, have potential for purely military application.

Our review of the case revealed that three factors influenced the decision to approve the license. Licensing officials (1) were preconditioned by knowledge that the President strongly supported U.S. industry participation in the Kama River project, (2) recognized that a denial action would not stop the Soviets from obtaining such capabilities because other countries could and would provide comparable systems, and (3) most importantly, agreed that the Soviets would probably not risk diverting any significant portion of the system's capacity due to the great importance placed on the project and the Soviet investment in it. Moreover, if the system was properly sized, it would remain fully dedicated to the foundry operation.

These understandings were reached very early in the review process. As a result, licensing officials focused their attention on developing safeguards against possible diversion of the system's capacity for weapons research. This was necessary because a precise determination of need (system sizing) was too dependent on data supplied by the Soviets.

The "safeguards" question was addressed on three separate occasions by different panels of technical experts. The last group to consider the question was an interagency task force headed by the Defense Department. This group, building on the work of the panels, concluded that safeguards could greatly reduce the risk of diversion and limit technology transfer in the case. More specifically, the group found that the presence of U.S. company personnel on the site for 4 or 5 years, supplemented by a system of monitoring and reporting by the company, would provide adequate assurance against diversion of the equipment or computer time. It also believed that a substantial technology transfer could be avoided by limiting the depth of information, training, and number of Soviet personnel trained in crucial areas to the minimum level required to support the foundry operation.

Based on the task force's findings, which included 10 specific safeguards to be made part of the company's license, the Export Administration Review Board recommended approval of the license. This recommendation was then forwarded to the White House for final review and approval.

During this period, the company raised objections to certain of the safeguards conditions, stating that it would not allow its employees to collect or transmit any information on computer time use on behalf of the U.S. Government. The company's concern was that a charge of espionage could be trumped

up against any of the employees found with such information in their possession.

The task force met again to consider the company's objections. In its judgement, the original set of safeguards comprised the minimum needed; however, in an effort to accommodate the company as far as possible, it drew up a modified set of safeguards which involved having a Kama River representative rather than a company employee submit monthly computer time use reports and other information to the U.S. Embassy in Moscow. The company, however, remained responsible for the reports' accuracy, as it was required to countersign all reports provided.

The modified safeguards were reviewed and accepted by both the Export Administration Review Board and the company. We were unable to determine, however, whether all identified safeguards were made part of the final license because Commerce could not locate the document. Other documents we examined indicated that the safeguards concerning the transfer of technology may not have been made part of the final license.

GEARMAKING MACHINERY

In May 1971, the President authorized an American manufacturing company to export 311 gear-cutting machines to the Gorky Motor Vehicle Plant, the Likhachev Truck Plant, and the Ulyanovsk Automobile Plant in the Soviet Union. These machines were all standard items of automobile industry equipment; they were not subject to COCOM embargo but were subject to U.S. control. The Soviets were to use the equipment to produce the main drive and differential gears for trucks, light vans, and buses.

Our review of the case indicates that foreign policy considerations dominated high-level decisionmaking on the licenses; the Government attempted to use approval of the gearmaking machinery to gain political concessions from the Soviets. This linkage, however, was attempted only after national security concerns were dismissed on the ground that other countries could provide comparable equipment to the Soviets with no requirement to first obtain COCOM or U.S. approval.

Prior to giving his approval, the President turned down the company's application for export licenses on three separate occasions. The first denial was contained in National Security Decision Memorandum 15, which directed that the Government should not issue licenses for the proposed sales in view of overall U.S.-Soviet relations. The document went on to say that the Government should be prepared to move generously to liberalize U.S. trade policy toward the Soviet Union and other Eastern European countries whenever there was sufficient improvement in overall relations with them. Before the denial, operating

committee members, including the Defense representative, supported the export of the U.S. equipment. They were concerned, however, with public and congressional reaction to approval because of impending congressional hearings on the Export Control Act and because their information justifying approval was not so solid that it could not be challenged. The committee, therefore, suggested that the cases be reviewed by the President.

The second denial occurred some 10 months later and involved an expanded proposal by the company. Although no formal decision was issued, the Secretary of State informed the Secretary of Commerce that the President had reaffirmed his earlier rejection of the transaction. The Secretary of Defense believed that export of the equipment would substantially improve Soviet military capabilities; accordingly, he argued that national security considerations should override considerations of foreign availability. In making this position known, he also recognized that there might be overriding political and diplomatic reasons, including the possibility of obtaining some form of quid pro quo from the Soviets, for acting favorably on the case. Whether the President based his denial on Defense's position or other reasons is not made clear in the documents we examined.

The case was reconsidered 2 months later, due to a change in the guidance on what items should be subjected to export control for national security reasons. Defense, however, continued to recommend denial, and both Commerce and State favored approval. In trying to resolve the impasse, State suggested that the Government first approve the licenses and then make a low-key request to the Soviet Government to use its good offices with the North Vietnamese to improve conditions for U.S. prisoners. This proposal was found unacceptable by the Deputy Secretary of Defense. He favored approval of the licenses, provided that the case would be subject to review in 3 or 4 months under criteria determined by the President. This criteria, he believed, should be the extent of progress being made in the Paris peace negotiations and in identifying, treating, and releasing U.S. prisoners of war in Vietnam.

The Secretary of Defense, however, did not support this proposed change in the Defense position. He continued to believe that the licenses should be considered for approval only if an adequate and specific quid pro quo could be obtained from the Soviet Union. As a result, the issue once again was brought to the President's attention, who decided that a decision on the licenses should be postponed until after U.S. withdrawal from Cambodia.

Following this decision, Defense officials attempted to convey to the Soviets that their actions on matters such as prisoners of war, etc., would enable the United States to be

more forthcoming conerning trade matters. They asked the U.S. Ambassador to the Soviet Union to relay such a message and to indicate that if U.S.-Soviet relations improved over the next 90 days it would be helpful to a case like the U.S. company's contract. Defense officials also suggested that such a message be given to the Soviet Ambassador to the United States. Whether such messages were actually given to the Soviets is not made clear in the documents examined. We did find, however, that the Soviet Union was well aware that the U.S. Government was attempting to link increased trade with Soviet political concessions and that the Soviets publicly rejected such efforts.

The President's third denial of the licenses occurred a few months later. At this time, however, all concerned favored approval, including the Defense Department. Defense had changed its position based on the current status of U.S.-Soviet relations and on the belief that approval of the transaction would have a very small impact on Soviet military capability, if indeed it would have any.

The President's reasons for denial of the licenses at this time or for his final approval some 9 months later was not made known in the documents we examined.

LASER WELDING

In July 1979, a U.S. laser manufacturing company was granted a license to export a CO₂ laser for demonstration at the Zil Auto Plant in the Soviet Union. A month later, the company was granted a license to export a similar laser and accessories to the Zil Auto Plant. Both export licenses excluded welding and cutting capabilities originally contained in the license applications.

In June 1980, the Government revoked these two licenses on national security grounds. At this time, it was found that one of the lasers had been exported and that the other had never been shipped.

In 1978, the Government approved, subject to COCOM concurrence, the export of a CO₂ laser with welding equipment to Zil. COCOM rejected the U.S. proposal, however, and no license was issued. Another COCOM government had objected because the export included welding capabilities and the U.S. Government had recently objected to the other's request to export the same type of equipment to Zil. As a result of the objection, the U.S. Government withdrew its request for exception.

At this time, the Defense Department also withdrew its recommendation of approval for the U.S. company's license. Defense's new position was that the CO₂ laser without welding and cutting accessories could be exported to Zil.

The Defense Department was not concerned with export of the CO₂ laser, because the technology embodied in it was no longer deemed important from a weapons standpoint. Further, lasers with comparable specifications were exportable under general license to Eastern bloc countries.

After learning of Defense's new position, the company revised its application to exclude all welding and cutting accessories; these revisions were acceptable to licensing officials, and Commerce subsequently issued the company licenses to export two CO₂ lasers to Zil.

Just what the $\rm CO_2$ laser without welding equipment would be used for at Zil was never adequately addressed in the documents we reviewed. We did note, however, that welding accessories could be exported to Eastern bloc countries without license. It is, therefore, conceivable that Zil received not only the $\rm CO_2$ laser but also the welding equipment.

			•		
				0	
					,
		, 4			

		•			
,					
				**	
					+
				*	
			•		

25000

AN EQUAL OPPORTUNITY EMPLOYER

UNITED STATES
GENERAL ACCOUNTING OFFICE
WASHINGTON, D.C. 20548

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE,\$300

POSTAGE AND FEES PAID
U. S. GENERAL ACCOUNTING OFFICE



THIRD CLASS