Audit Report

OFFICE OF THE INSPECTOR GENERAL

SUPPLEMENT TO AUDIT REPORT 91-029 - UTILIZATION OF THE WILLIAM LANGER JEWEL BEARING PLANT

Report Number 91-029A

August 31, 1992

Department of Defense

The following acronyms are used in this report.

AMC.....Army Materiel Command
CRT.....Cathode Ray Tube
DLA.....Defense Logistics Agency
LCD.....Liquid Crystal Display

INSPECTOR GENERAL
DEPARTMENT OF DEFENSE
400 ARMY NAVY DRIVE
ARLINGTON, VIRGINIA 22202-2884

August 31, 1992

MEMORANDUM FOR ASSISTANT SECRETARY OF DEFENSE (PRODUCTION AND LOGISTICS)
DIRECTOR, DEFENSE PROCUREMENT
DIRECTOR, DEFENSE LOGISTICS AGENCY

SUBJECT: Supplement to Audit Report 91-029 - Utilization of the William Langer Jewel Bearing Plant (Report No. 91-029A)

This is our supplementary report to Audit Report No. 91-029, *Utilization of the William Langer Jewel Bearing Plant*, (issued December 31, 1990) provided for your review and comments. It provides the results of our follow-on audit of information provided and actions taken in response to Report No. 91-029.

After fully considering management responses to Report No. 91-029 as well as the results of our additional follow-on work, we revised the thrust of our recommendations and recommended a sequence of actions starting with an objective determination of qualitative and quantitative requirements for jewel bearings and jewel bearing related items.

A draft of this supplementary report was issued for review and comments on February 24, 1992. Comments, which generally agreed with our revised recommendations, were provided by the Office of the Assistant Secretary of Defense (Production and Logistics) on April 28, 1992. Management concurred with 4 recommendations, concurred in part with 3, and stated that the Director of Defense Procurement will implement another, if the analysis of jewel bearing requirements indicates that the defense industrial base will not be adversely affected.

We considered management's comments on the recommendations to be responsive except for Recommendations A.1.b., A.1.c., A.1.f. and B. Because management comments did not adequately describe proposed actions and completion dates in response to these four recommendations, additional comments are requested. Details on these unresolved recommendations are discussed in the Audit Response sections in Part III of this report and specific requirements to be addressed in your comments are shown in the "Status of Revised Recommendations" chart at the end of Part III. Unresolved recommendations are subject to resolution in accordance with DoD Directive 7650.3. Your comments are requested within 60 days of the date of this report.

If you have any questions on this report, please contact Ms. Mary Lu Ugone on (703) 692-3320 (DSN 222-3320) or Mr. Lloyd O'Daniel on (703) 692-2878 (DSN 222-2878). Copies of this supplementary report will be distributed to the same activities that received Report No. 91-029 (see Appendix G).

Edward R. Jones
Deputy Assistant Inspector General
for Auditing

Enclosures

cc:
Under Secretary of Defense for Acquisition
Director, Defense Acquisition Regulations Council

Office of the Inspector General, DoD

REPORT NO. 91-029A August 31, 1992
(Project No. 0RB-0009.02)

SUPPLEMENT TO AUDIT REPORT 91-029 - UTILIZATION OF THE WILLIAM LANGER JEWEL BEARING PLANT

EXECUTIVE SUMMARY

Introduction. As part of our project to audit the requirements process for the National Defense Stockpile (the Stockpile), Project No. 0RB-0009, we evaluated the utilization of the William Langer Jewel Bearing Plant (the Plant). The results of the evaluation were provided in a draft audit report on August 22, 1990, and in a final audit report, Report No. 91-029, on December 31, 1990, to DoD management officials for comments. Management comments were received on March 26, 1991. The comments were extensive and contained new information that was not provided to the auditors during the initial evaluation, some of which addressed events that occurred after the period covered by the audit.

Objective. The objective of this follow-on work was to verify the new information provided in the management comments and to determine the impact on our audit findings and recommendations.

Audit Results. The results of our follow-on work confirmed the basic tenets of Audit Report No. 91-029. The information provided after the report was issued, including a statement as to the purported criticality of jewel bearings produced at the Plant in support of Operation Desert Shield/Storm, was not corroborated with substantive documentary evidence to warrant revision of the report findings. The basic condition remains that there is no military requirement for the quantities of jewel bearings in the order of magnitude produced by the Plant and stockpiled by DoD.

Internal Controls. Internal controls were not reviewed in the follow-on work.

Summary of Recommendations. Having fully considered management responses to Report No. 91-029 as well as the results of our follow-on work, we revised the thrust of our recommendations. Essentially, we recommended that the Assistant Secretary of Defense (Production and Logistics) take the following sequence of actions: establish qualitative and quantitative requirements that will result in the optimum use of the facility, establish criteria for stockpiling jewel bearings, determine a cost-effective method of acquiring jewel bearing blanks, delete FAR provisions mandating use of the Langer Plant, determine the optimum future status of the Plant, and return the management of the dosimeter facility to the Federal Emergency Management Agency.

Management Comments. The Office of the Assistant Secretary of Defense (Production and Logistics) either concurred with or concurred in part with all recommendations. Management also stated that the Director of Defense Procurement agreed to delete FAR provisions requiring the use of the Plant if the action would not adversely affect the defense industrial base. We requested management comments on Recommendations A.1.b., A.1.c. and A.1.f. as to the proposed action for implementing the recommendations. In addition, we requested completion dates for actions that will be taken for Recommendations A.1.b., A.1.c., A.1.f. and B. Details on management's comments are provided in Part III of this report, and the text of management's comments is in Part V.

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This report was prepared by the Readiness and Operational Support Directorate, Office of the Assistant Inspector General for Auditing, DoD. Copies of the report can be obtained from the Audit Planning and Technical Support Directorate at (703) 614-6303.

PART I: INTRODUCTION

Background

Report No. 91-029

As part of our project to audit the requirements process for the National Defense Stockpile (the Stockpile), Project No. 0RB-0009, we evaluated the utilization of the William Langer Jewel Bearing Plant (the Plant). The results of the evaluation were provided to DoD management officials in a draft audit report on August 22, 1990, for comments. On December 31, 1990, we published the final report, Report No. 91-029, *Utilization of the William Langer Jewel Bearing Plant*, without having received management comments on the draft.

Management Response To Report No. 91-029

In accordance with established audit reporting procedures, the addressees of the final report were again requested to provide comments on the final report within 60 days. Despite considerable interest in the published report, both within the Department (Appendix C) and outside the Department (Appendixes A and B), a management reply to the final report was not received within the allotted time. On March 21, 1991, the report was transmitted to the Office of the Assistant Inspector General for Analysis and Follow-up to initiate mediation action on the case based on nonreceipt of a management reply. Comments were provided by the Assistant Secretary of Defense (Production and Logistics) on March 26, 1991.

The response from the Assistant Secretary concurred with the finding that there was noncompliance with Federal Acquisition Regulation (FAR) provisions that require Defense contractors to purchase jewel bearings from the Plant; however, the response nonconcurred with the other report findings and all the report recommendations. The reply from the Assistant Secretary included comments from the National Defense Stockpile Center, a component of the Defense Logistics Agency. The comments were extensive and contained new information that was not provided to the auditors during the initial evaluation, some of which addressed events that occurred after the period covered by the audit. A complete text of the comments is provided in Appendix D.

Follow-on Mediation

Because of the extensive information supplied in the management response, we initiated follow-on work in April 1991 to determine the effects of the new information on our audit findings and recommendations and to verify additional data. This final report contains the results of that follow-on work and is intended to satisfy our full disclosure reporting standards. When we initiated this follow-on effort, mediation on Report No. 91-029 was discontinued. We notified the Assistant Inspector General for Analysis and Follow-up to remove that report from his follow-up suspense record and to initiate joint follow-up and/or mediation on the recommendations in this report, after we receive comments to this final report.

PART II: FINDINGS A AND B AND RECOMMENDATIONS IN REPORT NO. 91-029, AND RESULTS OF FOLLOW-ON AUDIT

Findings A and B and Recommendations in Report No. 91-029, and Results of Follow-on Audit

The comments provided by the Assistant Secretary of Defense (Production and Logistics) in response to Audit Report No. 91-029, *Utilization of the William Langer Jewel Bearing Plant*, were extensive and contained new information that was not provided to the auditors during the initial evaluation. Some of the comments provided an explanation of mitigating events that occurred after the period covered by the audit. The results of our follow-on audit work to evaluate the new information follow. The introductory paragraphs to the two findings and the recommendations included in Audit Report No. 91-029 are repeated verbatim. The findings and recommendations are followed by the Management Comments on each finding and recommendation. The results of the follow-on audit are provided after the Management Comments.

Finding A: Production and Stockpiling of Jewel Bearings

The William Langer Jewel Bearing Plant (the Plant) produced more jewel bearings than were needed for peacetime and contingency requirements. In addition, the Plant charged significantly higher prices than commercial vendors in order to recover the costs of its operations. The rate of overproduction was increasing because production goals were not adjusted downward to reflect a pronounced decline in Government and commercial usage of mechanical, or analog, devices requiring jewel bearings. Procedures were not established to ensure that accurate qualitative and quantitative requirements were determined for jewel bearings that were needed to be stored in the National Defense Stockpile (the Stockpile). Rather, production of types and quantities of bearings was scheduled largely to maintain the various skills of the work force. As a result, jewel bearings produced by the Plant and sold to the Stockpile in fiscal year 1989 for $2 million might have been purchased from commercial vendors for savings of about $1.4 million. Also, there was no evidence, in terms of quantities and types, that the jewel bearings being sold to the Stockpile were needed.

Management Comments. The reply from the Assistant Secretary of Defense (Production and Logistics) nonconcurred with the finding that the Plant produced more jewel bearings than were needed for peacetime and contingency requirements. The response commented that since the audit report showed that it would take the Plant many years to meet requirements, the conclusion that the Plant produces more bearings than are needed was based purely on speculation about requirements, particularly wartime requirements. The management reply stated that assertions in the audit report (that annual production levels at the plant are based on factors such as recovering the cost of plant operations and maintaining employee skill levels) are probably true since Public Law 90-469 specifically allows production to be based on these factors, regardless of price competitiveness. Finally, the reply stated that procedures for determining that qualitative and quantitative requirements for the stockpiling of jewel bearings existed.

Follow-on Audit Results. We concluded from our follow-on work, discussed in the following paragraphs, that end-item applications and quantitative requirements remain illusive. This matter is acknowledged in the testimony of the Assistant Secretary (Appendix E) and in the information provided by Senator Conrad (Appendix F). Therefore, the management comments concerning the many years it would take the Plant to meet "established" requirements are based on the incorrect interpretation that the stated goal represents a legitimate DoD requirement. In the section of Finding A titled *Sales to Stockpile*, the report establishes that the reduced Stockpile goal of 84 million jewel bearings was meaningless as a factor in setting production quantities. The goal was not supported by demonstrated future requirements for specific quantities or types of products. While the goal was reduced by 30 percent in the draft *Report to the Congress on National Defense Stockpile Requirements, 1990*, the key factor is still substantiation of requirements. Available information supports a much lower requirement than the current stated goal. Consequently, the finding that the Plant produces more jewel bearings than are needed remains valid. The management comments further stated that overproduction and price competition of jewel bearings are not relevant issues because of the provisions of Public Law 90-469. As discussed in the initial audit report and in the following Audit Responses, it is this overproduction and the pricing issues, coupled with the predicted future decline in the demand for jewel bearings, that is the basis for our recommendation that Public Law 90-469 be amended.

Report No. 91-029 Recommendation A.1.a.

We recommend that the Deputy Assistant Secretary of Defense (Production Resources) discontinue operations at the William Langer Jewel Bearing Plant by:

a. Including a proposal in the Department of Defense Legislative Program to amend Public Law 90-469 to delete the requirement that DoD operate the Plant for producing jewel bearings and related items for Government use or for resale.

Management Comments. The response nonconcurred with the recommendation, stating that the audit report merely asserted that current contingency requirements were too high without producing any new or independent evidence about such emergency requirements. The reply asserted that the audit conclusions about overproduction at the Plant were unsupported by evidence. In support of this position, the comments provided by the Assistant Secretary stated that requirements for jewel bearings had more than doubled during Operation Desert Shield/Storm. The comments also stated that jewel bearings are critical components in the Patriot and Tomahawk missiles (each missile contains 24 jewel bearings) and in the F-15 aircraft (each aircraft contains 12 jewel bearings).

Follow-on Audit Results. We conducted additional audit work to evaluate the requirements for jewel bearings that were generated by Operation Desert Shield/Storm. We visited the Plant, visited or contacted the 38 contractors who had submitted purchase orders during the Operation Desert Shield/Storm time frame, and visited or contacted Defense Logistics Agency (DLA) activities that managed jewel bearings listed in the Federal Logistics (Fedlog) Data System.

Our follow-on audit showed that the Plant received purchase orders from trade (defense customers other than the Stockpile) for about 920,000 jewel bearings and about 207,000 jewel bearing related items during the Operation Desert Shield/Storm time frame, which is about double the amount of jewel bearings and jewel bearing related items ordered during a similar prior period. Jewel bearing related items are defined in the Federal Acquisition Regulation as items that are made from the same material used for jewel bearings, but are not classified as jewel bearings. We contacted the 38 contractors who submitted the purchase orders for jewel bearings to determine the end-item use, buying command, contract number, and whether the end

item was in support of Operation Desert Shield/Storm. We also contacted the 27 contractors who submitted purchase orders for jewel bearing related items.

Jewel Bearings. About 511,000 jewel bearings were ordered under emergency procedures established for Operation Desert Shield/Storm. A total of 427,000 of the 511,000 bearings were ordered in February 1991 for use in 61,000 wristwatches. Each wristwatch contained seven jewel bearings. On March 14, 1991, the first shipment of 4,042 jewel bearings for wristwatches was made. According to the Surge Review Committee, Army Materiel Command (AMC), which was established to monitor critical material requirements for Operation Desert Shield/Storm, wristwatches were not critical items, and their procurement should not have been classified as such. Army officials from the Office of the Deputy Chief of Staff for Logistics and from AMC stated that many activities used Operation Desert Shield/Storm as justification to satisfy requirements that they believed were valid, but would not have otherwise been funded and were not essential to the conduct of Operation Desert Shield/Storm. Accordingly, we concluded that although orders at the Plant had increased significantly during the period, the majority of the orders were not critical or essential to Operation Desert Shield/Storm.

The Fedlog Data System managed by DLA contains 84 line items that have the words "jewel bearing" in the item name. We visited or contacted the Navy Aviation Supply Office, the Defense General Supply Center, and the Defense Industrial Supply Center to review demand histories for 53 line items that were managed by those organizations to determine demand during the most recent 4 quarters and the demand associated with Operation Desert Shield/Storm. Of the 53 line items, 27 line items had no demand during the past 4 quarters. The other 26 line items had demand for 1,657 items, of which 2 line items, totaling 101 items, were identified as being related to Operation Desert Shield/Storm. We did not review demand histories for the other 31 line items at 5 locations because of the time limitations. However, we have no reason to believe that the demand histories for the remaining line items would be significantly different.

We visited the Army Aviation Systems Command, the Air Force Aeronautical Systems Division, and members of the Joint Services Review Committee/Avionics Standardization Committee to determine trends in the utilization of jewel bearings in aircraft. Officials at those organizations stated that the use of meter movements that use jewel bearings had declined significantly and that the declining trend would continue.

The officials attributed the decline in jewel bearing usage to the increased usage of cathode ray tube (CRT) and liquid crystal display (LCD) technology.

CRT and LCD usage has increased because of better reliability and maintainability in that these technologies contain fewer moving parts. For example, the 8-day mechanical aircraft clock that contains 19 jewel bearings will be replaced by a clock with a quartz crystal movement that will increase reliability and maintainability at about half the cost. Officials at the program office for the quartz clock stated that production of the clocks is scheduled to begin in March 1992 with an initial production of 12,000 units. The new clock will not be installed in aircraft with a remaining service life of less than 10 years. Demand for the 8-day mechanical clock is expected to decrease from 400 per month to approximately 200 per month. The manufacturer of the mechanical clock purchases about 40,000 jewel bearings annually from the Plant. With the fielding of the new clock, jewel bearing purchases are expected to initially decrease by one-half, and as older aircraft are phased out, the decrease will continue. Also, increased pilot work load demands the use of central display units that use CRT and LCD technology to display data on weapons, aircraft performance, and navigation on a single screen.

Jewel Bearing Related Items. Of the 27 contractors we contacted, one contractor purchased 129,600 jewel bearing related items in support of Operation Desert Shield/Storm, 19 contractors purchased 71,011 items that were not related to Operation Desert Shield/Storm, and 7 contractors who purchased 6,285 items did not respond to our inquiries.

We visited or contacted the program managers and contractors for the Patriot and Tomahawk missiles and the F-15 aircraft to determine the use of jewel bearings in those end items. Program managers and contractor representatives told us that the guidance systems for both the Patriot and Tomahawk missiles did not contain 24 jewel bearings as stated in management comments, but that each system actually contains 12 jewel bearing related items (which are also procured from the Plant.) In addition, contractor representatives told us that the guidance system for the F-15 aircraft did not contain 12 jewel bearings as stated in management comments, but that the system actually contains 22 jewel bearing related items. The 129,600 jewel bearing related items were ordered in support of the guidance systems for the missiles and aircraft.

Jewel bearing related items that were manufactured to contractor-unique specifications were critical to the

operation of the war. Military specifications for jewel bearing related items were canceled on May 27, 1975. Since then, the Plant manufactured jewel bearing related items in response to contractor-unique specifications. The Stockpile had on hand 236,156 jewel bearing related items that had the same part number as the 129,600 items ordered for Operation Desert Shield/Storm, of which 188,812 were purchased between fiscal years 1986 through 1990. Stockpiled quantities were not used to fill requirements for Operation Desert Shield/Storm.

Based on the results of our follow-on audit, we believe that the recommendation to discontinue Plant production of jewel bearings is still warranted. Recent demand histories for 53 of 84 line items further showed a declining trend in usage of jewel bearings, and future requirements for jewel bearings are projected to decline further. This is consistent with our analysis of jewel bearing usage and the decline projected by a 1982 Institute for Defense Analysis study, "DoD Needs for Jewel Bearings and Related Items," which were discussed in Report No. 91-029. Additionally, about 83 percent of the jewel bearings ordered for Operation Desert Shield/Storm were for wristwatches, which were not considered critical items. The remaining 17 percent ordered were used in the manufacture of magnetic compasses, fuel flowmeters, gyroscopes, gyroscope repair and night vision clocks.

In summary, 129,600 jewel bearing related items were ordered for critical applications during Operation Desert Shield/Storm. About 84,000 jewel bearings (511,000 bearings ordered less 427,000 for watches, discussed above) may have been critical to Operation Desert Shield/Storm. If the Plant were to be closed, future quantities of this magnitude for many items then needed could be stockpiled by purchasing at lower cost from other sources.

Report No. 91-029 Recommendation A.1.b.

b. Establishing procedures for determining qualitative and quantitative requirements for jewel bearings to be stored in the Stockpile.

Management Comments. The Assistant Secretary nonconcurred with the recommendation, stating that procedures already existed. The comments stated that both the qualitative and quantitative requirements were based in part on extensive surveys, conducted by the Department of Commerce, of domestic jewel bearing consumption, but that in recent years, the Department of Commerce has terminated its jewel

bearing consumption surveys. However, the reply also stated that there was room for improvement in the procedures used to determine Stockpile requirements for jewel bearings.

Follow-on Audit Results. Our follow-on audit included a detailed review of records for sales to trade and to the Stockpile during fiscal years 1986 through 1990, which identified the types and quality of jewel bearings purchased. We also reviewed the Stockpile inventory of jewel bearings as of April 1991.

Our review showed that jewel bearings were being stockpiled without considering trends in current or future demands of trade. For example, during the 5-year period, 7 specifications of jewel bearings had sales to trade of only 260 jewel bearings, but the Stockpile had purchased excess production of over 257,000, resulting in a total inventory of more than 1 million jewel bearings of those 7 specifications.

Records on jewel bearing part number MS-27041-5 disclosed that sales to trade totaled only 24 for fiscal years 1986 through 1990, whereas 88,000 bearings were sold to the Stockpile for the same period. The Stockpile inventory of that jewel bearing totaled over 301,000.

Similar examples exist for other jewel bearing part numbers. Another 8 jewel bearing part numbers had no trade demand during fiscal years 1986 through 1990, but over 194,000 jewel bearings with those 8 part numbers were produced and sold to the Stockpile, resulting in a Stockpile inventory of over 1.5 million.

The need for improved requirement determinations is evidenced by this analysis of specifications. In addition, the acknowledgments by the Assistant Secretary and Senator Conrad, as stated in Appendixes E and F, respectively, that jewel bearing requirements should be assessed, further support our recommendation to establish procedures specific to jewel bearings.

Whether or not the Plant is closed, there is a need to improve the process of determining requirements for jewel bearings. As long as the Plant operates, requirements decisions may be influenced by maintenance of employment levels and skills in the Plant, though this need not necessarily occur. The need is to focus first on national defense needs for critical items not quickly available, whether they be jewel bearings, related items, or any other items. Limited war reserve funds should then be allocated appropriately to maintain stock of those items. If the Plant is closed, the bearing items can be obtained in quantities to allow for problems of replenishment. If the Plant is left in caretaker status, the quantities stockpiled should be sufficient to cover a period required for

reopening, training, and starting production. The Department has used this method of economically preserving industrial base resources for many years.

Report No. 91-029 Recommendation A.1.c.

c. Procuring jewel bearings from commercial sources.

Management Comments. The response from the Assistant Secretary nonconcurred, stating that the purpose of the Plant was to establish and maintain a domestic capability to produce jewel bearings needed for national emergencies, because of unreliable foreign suppliers in previous national emergencies, regardless of whether the resulting bearings are price competitive. Management commented that Public Law 90-469, enacted August 8, 1968, specifically instructs the Plant to "produce jewel bearings and related items for Government use or for sale, at prices determined by the Administrator to be sufficient to cover the estimated or actual cost of production, including depreciation." Further, management disagreed with the audit position that the Plant is not a domestically independent source of bearings because of its use of imported blanks, which are used to make jewel bearings.

The management comments pointed out that there were two domestic firms, Crystal Systems and Union Carbide, that could produce the synthetic material, or boule, to make jewel bearing blanks. Management also challenged the audit analysis on the basis that it included only 2 types of bearings from a universe of 1,500 to 2,000 types of bearings and that the analysis did not differentiate between simple and complex bearings or between custom bearings for military applications and commercial bearings for civilian and military applications.

Follow-on Audit Results. Since its inception in 1952, the Plant has been dependent on foreign sources for the raw materials from which jewel bearings are made, the cutting of the materials into usable shapes, and for repair parts of machinery used to manufacture jewel bearings. During the audit, Stockpile officials told us that raw materials supplied by Crystal Systems and other firms had been tested at the Plant during 1986 or 1987 to determine whether those materials could be used to make blanks. However, at that time, we were told that documentation on neither the purchase of the raw materials tested nor test results was available. The Stockpile officials stated that they intended to acquire the tooling needed to make blanks from the raw materials, but would continue to buy raw materials from foreign sources until a domestic raw material source had been cultivated. Because the reply to the report

also indicated that the Plant could use raw materials acquired from Crystal Systems to make blanks, we again requested supporting documentation for the acquisition and testing of raw materials as part of our follow-on audit. We were provided a copy of a test result, dated September 1983, that indicated that raw materials produced by Crystal Systems could be used to manufacture jewel bearing blanks.

We visited Crystal Systems during our follow-on audit. Management officials at Crystal Systems stated that they had previously met with Plant representatives to discuss the availability of raw materials. The officials could not recall whether the Plant had purchased materials for testing. The officials indicated that they could provide raw materials in the forms needed to meet the Plant's requirements, but that their products would be significantly more expensive and did not recommend their use except in the event of a contingency. The probable availability of some domestic source for raw materials in an emergency is acknowledged. The significant point remains that the Plant has operated for 40 years without adequate cutting equipment and until only relatively recently without any confirmed domestic source of raw materials. These conditions dilute the argument that the Plant operates primarily as a domestic source of jewel bearings in the event of national emergency.

Concerning the validity of our analysis in regard to the universe of types of bearings and the differentiation between military specification and commercial specification, our audit had disclosed that Military Specification MIL-B-27497C identifies nine types of jewel bearings as meeting military standards. We had reviewed 2 types of jewel bearings consisting of 30 jewel bearing part numbers that met military standards. Within these 9 types, there is a universe of 106 jewel bearing part numbers that comply with military standards. More significantly, the follow-on audit showed that many contractors did not design end items to incorporate jewel bearings that met military standards. Our review of the blueprints maintained by the Plant disclosed that the Plant had produced, since its inception, jewel bearings for 768 different specifications. For the past 5 years, jewel bearings for 465 specifications have not been produced and, of the 303 specifications sold to the Stockpile or to Government contractors, only 50 specifications were military standard items. The remaining 253 types of bearings were produced to contractor-unique specifications.

During fiscal years 1986 to 1990, the Government stockpiled about 1.9 million jewel bearings produced to contractor-unique specifications and about 2.5 million jewel bearings produced to military specifications. As previously stated, excess production of jewel bearings is stockpiled without regard to current or future requirements. Consequently, the potential increases for stockpiling much larger additional quantities of jewel bearings that will be obsolete. In 1986, about 68 percent of the stockpiled jewel bearings were already identified as obsolete.

General Accounting Office Report No. B-159463, *Need For Improvement in Procuring and Stockpiling Jewel Bearings*, April 17, 1969, recommended that procurement regulations be revised to require the use of military standard jewel bearings in the design of equipment. The DoD nonconcurred with the recommendation. Stockpiling excess production of jewel bearings that have contractor-unique specifications compounds the problem of potential additional obsolescence because procedures have not been established to determine and use jewel bearing requirements as a basis for stockpiling.

Concerning the issue that the Plant charged significantly higher prices than commercial vendors, our follow-on audit validated the original conclusion. Two contractors provided us with cost analyses, which showed that for the same jewel bearing part numbers, the Plant charged 5 to 20 times more than commercial vendors, depending on the volume of bearings ordered. We requested Plant officials to provide us data on price differences between simple and complex bearings and between custom and commercial bearings. The Plant officials were unable to differentiate between those prices. In a Letter Report dated September 19, 1972, the General Accounting Office reported that the Plant's prices were 8 to 20 times higher than imported bearings.

Public Law 90-469 does not preclude the use of sound management practices in acquiring jewel bearings for the Stockpile. To continue manufacturing jewel bearings at the same level of production and to continue stockpiling jewel bearings that are not sold to trade is clearly not prudent given that jewel bearing usage is declining, that 83 percent of jewel bearings ordered for the most recent wartime environment was for noncritical end items, and that procedures for determining qualitative and quantitative requirements for stockpiling jewel bearings are ineffective. Further, bearings having a valid requirement to stockpile in order to assure availability in times of national emergency should be acquired at the most economical price, particularly in view of the potential obsolescence of items

having contractor-unique specifications. In his July 31, 1991, testimony (Appendix E), the Assistant Secretary stated that the capability of the Plant to produce additional products is being investigated. In our opinion, this action is consistent with the basic objective to reassess the best future use and ownership of the Plant as proposed by Senator Conrad (Appendix F).

Report No. 91-029 Recommendation A.2.

We recommend that the Deputy Assistant Secretary of Defense (Procurement) [1/] direct the Defense Acquisition Regulatory Council [2/] to propose that Federal Acquisition Regulation, subpart 8.2, and sections 52-208-1 and 52.208-2 be deleted.

Management Comments. The reply from the Assistant Secretary nonconcurred with the recommendation on the basis of the disagreement with the basic findings and with Recommendations A.1.a. and A.1.c. He stated that contracting officers and private contractors, rather than the Plant, were not complying with the Federal Acquisition Regulation (FAR).

Follow-on Audit Results. We did not perform follow-on audit work related to this recommendation. Our response to the management comments is that we agree that contracting officers did not always comply with the FAR, as reported in Audit Report No. 91-029. However, for the reasons cited above, we believe that Recommendations A.1.a. and A.1.c. are still warranted. The continuation of the FAR provisions cited in Recommendation A.2. would continue to complicate the acquisition process and result in the same lack of compliance previously experienced and discussed in Audit Report No. 91-029. Also, we do not believe that the Government should continue to force uneconomical procurement from the Plant, whether it continues to operate or not. Therefore, for purposes of clarifying regulatory requirements to acquisition officials, and acquiring jewel bearings at the most economical price, Recommendation A.2. should be implemented.

1/ Now Director, Defense Procurement

2/ Now Defense Acquisition Regulations Council

Report No. 91-029 Recommendation A.3.

We recommend that the Director, Defense Logistics Agency, pending a decision on Recommendation A.1.a., defer obligation of funds provided by the Military Interdepartmental Purchase Request for the maintenance and repair of equipment and facilities and the purchase of tooling at the William Langer Jewel Bearing Plant.

Management Comments. The Director, Defense Logistics Agency, nonconcurred with the recommendation in a memorandum to the Assistant Secretary. The Assistant Secretary also nonconcurred with the recommendation. The response stated that it was extraordinary that the audit report recommended deferral of obligations that would make the Plant completely self-sufficient and then conclude that the Plant is not an independent domestic source. Management also stated that whether some additional time and cost must be expended before domestic sources of raw materials would be available for making blanks was not relevant to the broad and erroneous finding that the Plant is not a domestically independent source of jewel bearings.

Follow-on Audit Results. The Plant has been dependent on foreign sources for the input stock used to produce jewel bearings for about 39 years. The issue addressed in Audit Report No. 91-029 is that the raw materials needed for producing blanks would have to be purchased from foreign sources until a viable domestic source could be developed. As discussed in the Follow-on Audit Results to Recommendation A.1.c., Crystal Systems officials stated that raw materials could be provided in the form needed for making blanks. During our visit, we also discussed the type and costs of equipment needed to convert raw materials into blanks. The officials believed that $1 million to acquire the equipment was excessive and that the firm could cut the raw materials into the forms needed. However, cost estimates were not available since the firm had no prior experience in providing raw materials in the form needed to make jewel bearing blanks. Crystal Systems officials also mentioned that there were other firms that could cut the raw materials into the needed forms.

We asked Stockpile officials if analyses had been performed on alternatives, such as sources available for providing blanks, purchasing a saw (the equipment), buying blanks from domestic sources, or stockpiling blanks obtained from current suppliers, as part of the decision process to purchase the equipment. Stockpile officials indicated that no analyses had been conducted. They stated that their

action to purchase equipment was being taken in response to recommendations in a June 30, 1981, General Services Administration, Inspector General Report No. 3B-10868-11-11 that a saw be procured or that the Plant be closed.

In our opinion, the available alternatives are sufficiently different for an analysis to be made to determine the most cost-effective means of obtaining blanks in the event of mobilization or if the source of raw materials is cut off. The deferral in obligating funds provided by our recommendation, while the decision-making process regarding Recommendation A.1.a. is active, could be used to perform the cost-effective analysis on this matter.

Finding B: Plant Dosimeter Operations

The dosimeter operation at the William Langer Jewel Bearing Plant (the Plant) cannot be used for the full-scale production of dosimeters to meet the needs of the Department of Defense. The Federal Emergency Management Agency (the Agency) determined that the Plant's dosimeter operation would be for pilot production only. As a result, the Department of Defense is managing an operation that does not support the Department.

Management Comments. The Assistant Secretary of Defense nonconcurred with the finding, stating that the dosimeter operation does meet the pilot production needs of the DoD. The Assistant Secretary also stated that the Agency never had management responsibility for the Plant.

Follow-on Audit Results. We agree that the dosimeter operation is used for pilot production of dosimeters that have supported the DoD. The issue raised by our audit report was that the dosimeter operation is not used for full-scale production of dosimeters to meet the needs of DoD and that since it became responsible for Plant operations, the DoD has not elected to challenge limitations on mass production. The management reply did not address the issue. We agree that the General Services Administration had operational responsibility for the Plant. However, the Agency had overall policy and oversight responsibility for the Plant and had established the dosimeter operation at the Plant to meet the Agency's requirements.

Report No. 91-029 Recommendation B.

We recommend that the Deputy Assistant Secretary of Defense (Production Resources) include a proposal in the Department

of Defense Legislative Program to amend Public Law 100-440 that will return management responsibility of the dosimeter operation at the William Langer Jewel Bearing Plant, to include contract award and administration, to the Federal Emergency Management Agency.

Management Comments. The Assistant Secretary nonconcurred with the recommendation to return management responsibility of the dosimeter operation at the Plant to the Agency. The reply stated that 10,000 dosimeters provided on a test basis to the Navy related to a DoD mission. Also, the Assistant Secretary stated that a special dosimeter was needed for Operation Desert Shield/Storm and that the Plant quadrupled its dosimeter production in August 1990. Management further stated:

> *because the Plant already produces pilot production for the Military Departments, it can quickly switch to emergency pilot production for national emergency situations that emerge without the extensive warning period needed for a transfer to commercial production.*

Follow-on Audit Results. Audit Report No. 91-029 clearly recognized that dosimeters were produced for pilot rather than mass production. Our follow-on audit determined that the Army ordered a limited number (amount was classified by the Army) of dosimeters from the Plant to support Operation Desert Shield/Storm. The Army Communications and Electronics Command requested procurement of dosimeters through the agency and purchased dosimeters from the Plant. The Army also had about 2,800 dosimeters in stock that were purchased from the Dosimeter Corporation of America, of which about 975 were shipped to the Middle East. The Army did not attempt to acquire dosimeters from commercial sources, citing urgency of the procurement. Officials of the Office of the Army Deputy Chief of Staff for Logistics and the Surge Review Committee, AMC, told us that although dosimeters were a valid requirement, they were not a surge item and their procurement should not have been classified as such.

The events described above further substantiate our position that the dosimeter operations should be managed by the Agency rather than the DoD. Further, the Army ordered dosimeters through the Agency rather than through DoD since the Agency directed and funded dosimeter operations. The management reply did not describe how the DoD plans to use the dosimeter facility beyond limited production. We maintain that the recommendation remains valid.

Part III: REVISED RECOMMENDATIONS, MANAGEMENT COMMENTS, AND AUDIT RESPONSE

Revised Recommendations, Management Comments, and Audit Response

The following recommendations replace those that were in Report No. 91-029. Although not all recommendations were changed, we requested that designated officials consider the additional audit information and statement of audit position in this report and respond to each recommendation, since management nonconcurred with all recommendations in the original report.

Recommendation A

1. We recommend that the Deputy Assistant Secretary of Defense (Production Resources).

a. Direct an objective and prompt evaluation of the qualitative and quantitative requirements for jewel bearings and jewel bearing related items for a military emergency. This review should specifically determine what items are known to be critical to weapon systems, and those items and quantities should be clearly reported in the results of the review. Computed requirements should specifically not include forced purchases through FAR provisions, and should recognize declining future needs for bearings. (Partially replaces Report No. 91-029 Recommendation A.1.b.)

Management Comments. The Deputy Assistant Secretary of Defense (Production Resources), Office of the Assistant Secretary of Defense (Production and Logistics) (OASD[P&L]), concurred with Recommendation A.1.a., stating that the Defense Logistics Agency had requested the Logistics Management Institute (LMI) to conduct a study of the operations of the Plant. An analysis of the need for a domestic jewel bearing production capability will be included in the study. Implementation of the appropriate LMI report recommendations is planned by December 1, 1992. The Director, Defense Procurement, agreed to delete FAR provisions if the OASD(P&L) analysis indicates that the defense industrial base will not be adversely affected.

Audit Response. The actions described are responsive provided that the LMI analysis and report includes the specific identification of the qualitative and quantitative requirements for jewel bearings and related items for a military emergency and the items critical to weapon systems. The computed requirements should not include forced purchases from the Plant because of FAR provisions.

b. Establish a means of continually or periodically receiving data on the critical wartime use of jewel bearings and jewel bearing related items so that requirements for

these items are treated equitably with requirements for other comparable critical components, especially including those other components not likely to be readily available domestically. (Partially replaces Report No. 91-029 Recommendation A.1.b.)

Management Comments. Management concurred in part with Recommendation A.1.b., stating that the LMI report will assist in establishing a baseline to evaluate wartime requirements for jewel bearings and related items. Management stated the Strategic and Critical Materials Stockpiling Act (the Act) specifies national emergency requirements for strategic and critical materials. Consequently, management cannot guarantee that planning guidance will be comparable to other critical components not designated strategic and critical materials.

Audit Response. Management comments on the recommendation are partially responsive. To comply with the requirements of DoD Directive 7650.3, pertaining to management comments on audit reports, a position addressing establishing a means for continually or periodically receiving data on the critical wartime use of jewel bearings and related items should be provided in response to this final report. Also, the time frames and completion dates for the actions planned that will establish the means of updating requirements data need to be provided in response to this final report.

c. Assess the cost of regularly acquiring and retaining contingency quantities of currently needed war reserve items from other sources as determined in above recommendations, and compare this cost to the cost of (1) continuing to operate the Plant actively at a level sufficient to produce reasonable surge requirements and thereby being able to stockpile minimal quantities; (2) continuing to operate the Plant with a skeleton staff to maintain minimal active operating and machine repair skills, and produce only emergency small quantities of nonstocked items, still requiring stocks in the Stockpile; (3) deactivating the Plant but retaining it as a mobilization asset, requiring larger stocks in the Stockpile to meet requirements until the Plant could be activated and begin producing; and (4) closing the Plant entirely, relying on other sources, and stockpiling for a larger contingency on the same basis as stockpiling other critical materials not available domestically, based on the Joint Chiefs of Staff (JCS) war planning guidance.

Management Comments. Management concurred in part, stating that analysis of the LMI's recommendations will put management in a better position to evaluate alternatives. The response further stated that because jewel bearings are designated strategic and critical materials, they will be

covered by the Act's planning guidance, not just JCS war planning guidance. Consequently, the reliability of any foreign sources will need to be assessed.

Audit Response. Subject to the qualification regarding requirements specificity stated in the Audit Response to Recommendation A.1.a., we agree that the LMI study will facilitate an evaluation of alternatives. However, the reply to the draft report does not provide a position on the performance of the cost comparison of the alternatives specified in the recommendation, or the estimated date for completion of the comparison. It is requested that this information be provided in response to this final report.

d. If, in Recommendation 1.c., above, option (1), (2), or (3) appears to be a cost-favorable option, confirm whether domestically produced raw material can be obtained in the quality, quantity, and time needed to support a domestically self-sufficient mobilization base capability; determine the most cost-effective method of domestically cutting the raw material to produce blanks; and if peacetime investment is the only assured option for ensuring a viable blank cutting capability in wartime, include the cost of that option in the cost comparison.

Management Comments. Management agreed to reexamine the 1982 analysis that at the time performed, confirmed that sufficient domestically produced raw material could be obtained to support domestic mobilization base capability. Management stated a new analysis will include the 16 million carats of synthetic sapphire and rubies for which there is no goal. Additionally, the cost to produce blanks will be calculated and compared to the cost of purchasing and stockpiling them. Management stated that blank producing equipment had been ordered, and some had been installed at the Plant.

Audit Response. Management comments are responsive to the recommendation. The issue of obligating funds for the procurement of blank producing equipment is addressed below.

e. Continue to defer obligations of funds for the purchase of tooling and repair of facilities at the William Langer Jewel Bearing Plant until the sequential actions under Recommendations A.1.a., A.1.c., A.1.d., and A.1.e. produce a determination as to whether the Plant should remain in operation and whether alternatives dictate that internal blank-producing facilities are needed. Unless the option plan dictates such an investment, release the funds for alternative use. (Replaces Report No. 91-029 Recommendation A.3.)

Management Comments. Management concurred and stated further obligation of referenced funds would be deferred. However, the bulk of the funds had already been obligated.

Audit Response. The Deputy Secretary of Defense memorandum, "Department of Defense Internal Audit Resolution and Follow-up," August 16, 1989, directs that preemptive actions relative to issues raised in unresolved audit reports be avoided. The DoD Policy has been disregarded in this instance. The funds were obligated despite a recommendation contained in Report No. 91-029 that pending a decision on the continued operation of the Jewel Bearing Plant, obligation of funds be deferred.

f. Draw a conclusion as to the optimum future status of the Plant based on the results of Recommendations A.1.a., A.1.c., and A.1.d. above, and submit a proposal in the Department of Defense Legislative Program to amend Public Law 90-469 to operate the Plant at the indicated reduced level or be closed, as appropriate. (Replaces Report No. 91-029 Recommendation A.1.a.)

Management Comments. Management concurred in part, stating that any required legislative changes cannot be made until a decision regarding the most appropriate method for meeting jewel bearing requirements is made. Recommendations made in the LMI report will be considered in making the determination.

Audit Response. We agree that a decision regarding the most appropriate method for meeting jewel bearing requirements should precede legislative changes. That decision should be based on the use of current, validated data in the cost comparison that will be performed in response to Recommendation A.1.c.

2. We recommend that the Director, Defense Procurement, direct the Defense Acquisition Regulations Council to propose that Federal Acquisition Regulation, subpart 8.2., and sections 52-208-1 and 52.208-2 be deleted. (Same as Report No. 91-029 Recommendation A.2.)

Management Comments. As stated in response to Recommendation A.1.a., the Director, Defense Procurement, agreed to delete Federal Acquisition Regulation provisions if the OASD(P&L) analysis indicates that the defense industrial base will not be adversely affected.

Audit Response. Management comments are considered responsive.

Recommendation B

We recommend that the Deputy Assistant Secretary of Defense (Production Resources) include a proposal in the Department of Defense Legislative Program to amend Public Law 100-440 that will return management responsibility of the dosimeter operation at the William Langer Jewel Bearing Plant, to include contract award and administration, to the Federal Emergency Management Agency. (Same as Report No. 91-029 Recommendation B.)

Management Comments. The Deputy Assistant Secretary of Defense (Production Resources) concurred, stating that there is no valid military requirement for this capability. Also, there are domestic producers of dosimeters; hence, expansion beyond pilot production would violate the provisions of Office of Management and Budget Circular A-21.

Audit Response. Management comments are responsive to the recommendation. In response to the final report, a date should be provided for submission of the legislative proposal to amend Public Law 100-440.

STATUS OF REVISED RECOMMENDATIONS

		Response to Final Should Include:	
Number	Addressee	Proposed Action	Completion Date
A.1.a.	DASD(PR)[1/]	N/R[2/]	N/R
A.1.b.	DASD(PR)	X	X
A.1.c.	DASD(PR)	X	X
A.1.d.	DASD(PR)	N/R	N/R
A.1.e.	DASD(PR)	N/R	N/R
A.1.f.	DASD(PR)	X	X
A.2.	DDP[3/]	N/R	N/R
B	DASD(PR)	N/R	X

1/ Deputy Assistant Secretary of Defense (Production Resources)
2/ Not Required
3/ Director, Defense Procurement

PART IV: ADDITIONAL INFORMATION

Appendix A: Subcommittee on Seapower and Strategic and Critical Materials, House Armed Services Committee Letter to the Assistant Secretary of Defense (Production and Logistics), January 17, 1991

U.S. House of Representatives
COMMITTEE ON ARMED SERVICES
Washington, DC 20515

January 17, 1991

Mr. Colin McMillan
Assistant Secretary of Defense
(Productions & Logistics)
The Pentagon, Room 3E808
Washington, D. C. 20301-8000

Dear Mr. McMillan:

We have just received and reviewed the Department of Defense Inspector General Audit Report on the "Utilization of the William Langer Jewel Bearing Plant".

We are concerned about the reported findings which conclude that the Jewel Bearing Plant has produced more jewel bearings than are needed for peacetime and defense contingency requirements; that the current stockpile requirement of 120 million pieces could not be substantiated and that 68 percent of the bearings now in the stockpile are obsolete, and annual savings of $1.4 million could be realized if commercial sources were substituted for the jewel bearings produced by the William Langer Plant.

Since the audit was completed, it is our understanding that orders for jewel bearings from the Langer Plant have increased dramatically as the result of "Operation Desert Shield".

The plant was established to relieve the United States from foreign dependancy for jewel bearings which were in critically short supply during World War II. We understand that the Langer Plant is still the only plant of its kind in the western hemisphere.

This subcommittee would appreciate receiving your comments and views on the findings in the report so that we can make our judgement on the recommendations in the report, and to determine if hearings should be scheduled on the continued operation of the William Langer Jewel Bearing Plant.

Sincerely,

Charles E. Bennett
Chairman
Subcommittee on Seapower and
Strategic and Critical Materials

Floyd Spence
Ranking Minority Member
Subcommittee on Seapower and
Strategic and Critical Materials

CEB/FS:dppc

APPENDIX B: North Dakota Congressional Delegation Letter to the Secretary of Defense, January 18, 1991

KENT CONRAD
NORTH DAKOTA
202-224-2043

COMMITTEES
AGRICULTURE, NUTRITION AND FORESTRY
ENERGY AND NATURAL RESOURCES
BUDGET
SELECT COMMITTEE ON INDIAN AFFAIRS

United States Senate
WASHINGTON, DC 20510

January 18, 1991

The Honorable Dick Cheney
Office of the Secretary
Room 3E880, Pentagon
Arlington, VA 20301-1000

Dear Mr. Secretary:

We urge you to reject a report recently issued by the Inspector General of the Department of Defense relating to the William Langer Jewel Bearing Plant in Rolla, North Dakota. The Plant is vitally needed to meet DoD requirements for Operation Desert Storm and to address ongoing stockpile needs.

The William Langer Jewel Bearing Plant was established in 1952 to guarantee that the United States would have a domestic source of jewel bearings. As you know, jewel bearings are an essential part of various guidance and navigation instruments. Those instruments are used in a variety of United States fighter aircraft and in other critical elements of our national defense. Other items produced using jewel bearing material will likely have applications for fiber-optics and liquid metering. In addition, the plant produces dosimeters to meet DoD requirements.

We are concerned that the Inspector General's Audit Report No. 91-029, issued December 31, 1990 without management comments, contains many major inaccuracies that give a false impression of the Jewel Bearing Plant's effectiveness. In addition, the report's drafters fail to recognize the reasons why the plant exists.

First, the report states that "the Plant will continue to use foreign sources for the raw materials until a viable domestic source is developed." In truth, the synthetic materials used to manufacture jewel bearings are available from two U.S. corporations--Crystal Systems and Union Carbide. The Plant in the past has utilized material provided by Crystal Systems. In addition, 16,305,502 carats of synthetic rubies and sapphires are available at Fort Knox and West Point. Several hundred jewel bearings can be manufactured for each carat.

Second, the report states that the Plant "does not support the DOD's requirements" for dosimeters. One need only look to recent history to refute this assertion. During mid-1990, the Navy needed 10,000 dosimeters, all of which were supplied by the Plant. In addition, a special dosimeter was needed for operation

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The Honorable Dick Cheney
January 18, 1991
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Desert Shield. In order to meet DoD's needs, the Plant has quadrupled its production, and is now producing 1,000 items per week. The resulting cost to DoD has actually decreased from $25-$30 to $10-$15 per item.

Third, the executive summary states that the "Plant did not comply with all provisions of the Federal Acquisition Regulation regarding jewel bearings." However, page 9 of the report reveals that it was actually purchasing offices that did not comply, not the Plant.

These multiple fallacies aside, the report demonstrates absolutely no recognition of the reasons for the Plant's existence. The Plant is our nation's sole domestic source of jewel bearings. It was created to guarantee that jewel bearings would be available in times of war, in the event that foreign supply lines are cut off.

The report cites what it terms the Plant's overproduction. It inaccurately states, "Overproduction in peacetime resulted in an increasing number of jewel bearings being placed in the Stockpile for which requirements had not been substantiated."

The Plant exists in order to ensure that workers retain the highly specialized skills needed to manufacture jewel bearings. It's basic operating level of 35,000 bearings per week is the minimum level possible to both maintain a profitable operation and ensure that employees retain their skills.

The plant is designed to "surge" its production in times of emergency. A quick look at the plant's activities connected with operations Desert Shield and Desert Storm demonstrates its effectiveness at achieving this goal, not only in dosimeter production, but also with jewel bearings.

The I.G.'s report reads as a conclusion in search of an argument. In so doing, it opens up a very real issue regarding U.S. dependence on foreign sources for materials vital to our national security. Prior to advocating U.S. dependence on the Swiss for jewel bearings, the I.G. would have been well-advised to determine whether those products are even available from the Swiss or any other foreign source. In fact, many are not. Gulton Industries requires a special jewel bearing for one of its products. That part is unavailable, except from the William Langer Jewel Bearing Plant. The same is true for bearings used

Appendix B: North Dakota Congressional Delegation Letter to the Secretary of Defense, January 18, 1991

The Honorable Dick Cheney
January 18, 1991
Page Three

for a lensatic compass manufactured by Stocker & Yale and a guidance system and gyroscope manufactured by Litton Systems.

We respect the Inspector General's obligation to conduct audits on the quality of, and need for, various work conducted by government facilities. However, before the I.G. issues such a report, he should insure that it is truthful. In addition, he should ensure that it contains management comments. We understand that the Defense Logistics Agency submitted comments well before the deadline. However, those comments were not included. In our view, such action is absolutely inexcusable.

We believe that the Inspector General should retract his report In the alternative, we urge your non-concurrence with that report. Thank you for your attention to this matter.

Sincerely,

Kent Conrad
United States Senator

Quentin Burdick
United States Senator

Byron Dorgan
United States Congressman

Appendix C: Director, Defense Procurement Memorandum, March 7, 1991

03/08/1991 10:14 IP PENTAGON 202 695 1493 P.02

OFFICE OF THE UNDER SECRETARY OF DEFENSE
WASHINGTON, DC 20301

ACQUISITION

7 MAR 1991

DP/FC

MEMORANDUM FOR DEPUTY ASSISTANT SECRETARY OF DEFENSE
(PRODUCTION RESOURCES)

SUBJECT: Comments Regarding DoD IG Audit No. 91-029, "Utilization of the William Langer Jewel Bearing Plant"

I have reviewed the subject audit report and your comments regarding the report. I do not agree with your proposed response to the IG. My comments include the following two main points.

The Army established the plant in 1952. In 1968 the Congress authorized its operation as a production facility for jewel bearings. The audit report questions:

- whether or not the rationale for operating the plant is valid today;
- whether or not the plant is offering the types and quantities of bearings required by DoD;
- if the bearings are being sold at reasonable prices; and
- whether national security requires that a domestic source for jewel bearings be preserved and if so, whether this plant does create a secure domestic source for jewel bearings.

It is the policy of DoD to obtain products and services competitively from the private sector to the maximum extent practicable. This general policy has served us well, and exceptions to this policy should not be made without sound and valid reasons. When we adhere to this policy, audits such as this are rarely required.

I believe the IG raised valid questions as to whether it makes sense to continue this facility as a government owned, controlled, and subsidized manufacturing facility for either jewel bearings or dosimeters. The audit report presents strong arguments that it does not.

03/08/1991 10:14 IP PENTAGON 202 695 1493 P.03

Your comments do not refute these arguments. You defend the plant by stating that, during Desert Shield/Desert Storm, orders at the plant increased and that jewel bearings are critical components in high technology weapon systems. This argument is not convincing because it doesn't address whether contractors could as easily have obtained these jewel bearings from commercial sources, whether domestic or foreign.

The IG recommends that operations at the plant be discontinued, but the audit does not support such a conclusion. I therefore cannot concur with this recommendation. However, your proposed response to the report does not rebut the concerns raised by the IG. I suggest you change your proposed nonconcurrence to state that the IG recommendations are not sufficiently supported, but that, in view of the legitimate concerns raised by the IG, DASD(PR) will sponsor a more thorough investigation as to the need for the continued operation of the plant.

My second point involves the findings pertaining to the award and administration of contracts for jewel bearings. The audit report recommendations that these clauses be deleted from solicitations is based on the recommendation that operations at the plant be discontinued. These recommendations are not adequately supported by the IG. I do not concur that these clauses should be deleted without further investigation as to the need for the continued operation of the William Langer Jewel Bearing Plant.

Since the audit report indicates that contracting activities are not fully complying with FAR requirements, I will send a memorandum to the services and DLA reminding them of the requirement to include these provisions in contracts and to properly administer them.

I appreciate this opportunity to review your comments.

Eleanor R. Spector
Director, Defense Procurement

Appendix D: Management Comments from Assistant Secretary of Defense (Production and Logistics), March 26, 1991

ASSISTANT SECRETARY OF DEFENSE
WASHINGTON, D C 20301-8000

PRODUCTION AND LOGISTICS

March 26, 1991

MEMORANDUM FOR DOD INSPECTOR GENERAL

SUBJECT: Audit Report No. 91-029, "Utilization of the William Langer Jewel Bearing Plant," December 31, 1990

Attached are our comments on your audit of the William Langer Jewel Bearing Plant. We nonconcur with all of the findings and recommendations that relate to termination of Department of Defense (DoD) operation of the Plant to produce jewel bearings and dosimeters, commercial procurement of jewel bearings by DoD, National Defense Stockpile requirements for jewel bearings, and deletion of Federal Acquisition Regulation (FAR) provisions requiring contractors to purchase jewel bearings from the Plant. We concur in the finding that there is noncompliance with the FAR provisions requiring contractors to purchase jewel bearings from the Plant. We have also included as an attachment the comments on the audit of the Defense Logistics Agency.

Colin McMillan

Attachments

ASD(P&L) Comments on DoDIG Audit of
William Langer Jewel Bearing Plant Plant
Audit Report No. 91-029

The major findings of the audit report on the Government-owned William Langer Jewel Bearing Plant are: (1) the Plant produces more jewel bearings than are needed to meet the Department of Defense (DoD) peacetime and emergency requirements; (2) the Plant charges significantly higher prices for its jewel bearings than commercial vendors; (3) procedures have not been established to ensure that accurate qualitative and quantitative requirements are determined for jewel bearings for the National Defense Stockpile (NDS); (4) the Plant depends on foreign sources for its input stock of jewel bearing blanks and therefore is not a domestically independent source of jewel bearings; (5) significant noncompliance exists for the Federal Acquisition Regulation (FAR) provisions requiring contractors to acquire needed jewel bearings from the Plant; and (6) the dosimeter operations at the Plant do not meet the needs of the DoD since a policy decision has limited future output to pilot production only.

Our comments on the findings are as follows:

(1) We nonconcur in the finding that the Plant produces more jewel bearings than are needed to meet peacetime and emergency requirements. The audit report merely asserts that current contingency requirements are too high without producing any new or independent evidence about such emergency requirements. The audit report notes that peacetime sales of jewel bearings have declined and that a working group chaired by the Defense Logistics Agency (DLA) accordingly recommended reduced NDS requirements in 1990. However, alternative data on requirements, particularly wartime requirements, are not presented by the auditors in the report.

On page 7 the audit report itself acknowledges that, even based on the lower jewel bearing requirements recommended by the work group in 1990, "...it would take the Plant many years to meet the [recommended] Stockpile goal at current production rates." Since the audit report itself states that meeting the recommended lower requirements would take "many years," its assertion that the Plant produces more bearings than are needed is based purely on speculation about requirements, particularly wartime requirements.

It should be noted that there was no 1990 Secretary of Defense Report to Congress on NDS Requirements (which would have contained the recommended changes in jewel bearing goals). Secretary Cheney decided to await a new threat assessment that reflected the political, economic and military restructuring in Eastern Europe before recommending new NDS requirements. Therefore, the recommended reductions in NDS jewel bearing goals have not yet been adopted.

Att 1

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Finally, assertions in the audit report that annual production levels at the Plant are based on factors such as recovering the cost of operations and maintaining employee skill levels do not address the issue of whether the Plant's production exceeds total peacetime and wartime requirements. Conclusions about overproduction at the Plant are unsupported by evidence that warrant the finding.

(2) We nonconcur in the finding that the Plant charges significantly higher prices for jewel bearings than commercial vendors. The findings about comparative prices in the audit report are based on a totally unrepresentative statistical sample. The auditors examined prices for only two commercial bearings out of a possible universe of between 1,500 and 2,000 bearing types. In addition, the auditors did not differentiate in their sample between simple and complex bearings or between custom bearings for military applications and commercial bearings for civilian and military applications. Findings in audit reports must be based on statistically valid evidence.

In addition, the audit report ignores an even more important fact--the intent of Congress with regard to the Plant's pricing policy. Section 1 of Public Law 90-469, enacted August 8, 1968, specifically instructs the Plant to "...produce jewel bearings and related items for Government use or for sale, at prices determined by the Administrator to be sufficient to cover the estimated or actual costs of production, including depreciation."

The purpose of the Plant is to establish and maintain a domestic capability to produce jewel bearings for national emergencies, because of unreliable foreign suppliers in previous national security emergencies, regardless of whether the resulting bearings are price competitive. (For background, see Office of Emergency Planning Advisory Committee on Jewel Bearings [chaired by General Omar N. Bradley], Report to the Honorable Frank Ellis, Director, Office of Emergency Planning, "The Fulfillment of Essential Jewel Bearings Requirements to Meet a National Emergency," November 13, 1961 [hereafter referred to as Bradley Commission Report]; Committee Report No. 58, Subcommittee No. 1, House Armed Services Committee, June 11, 1968.) The audit report provides no evidence that foreign suppliers of jewel bearings are now reliable in terms of meeting the total production requirements, delivery schedules, and custom design requirements of U.S. defense contractors or in terms of their ownership patterns, economic viability and physical location.

(3) We nonconcur in the finding that procedures were not established to ensure that accurate qualitative and quantitative requirements were determined for jewel bearings that needed to be stored in NDS. Procedures were established in prior decades to determine qualitative and quantitative NDS requirements. Both the qualitative and quantitative requirements were based, in part, on extensive surveys

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of domestic jewel bearing consumption conducted by the Department of Commerce. In recent years the Department of Commerce has terminated its jewel bearing consumption surveys. As a result, changes in jewel bearing requirements for NDS recommended by the work group in 1990 were based on percentage reductions from these earlier estimates to reflect the percentage reductions in peacetime sales.

The audit report states that there was no analysis in the 1989 Secretary of Defense Report to Congress on NDS Requirements to support the goal of 120 million bearings from which a percentage reduction was recommended by the DLA-chaired work group in 1990. However, the Secretary's 1989 Report specifically states on pages 2 and 37 that analysis of existing requirements for non-model materials was not included in the 1989 Report. A list of these non-model materials, including jewel bearing, appears on page 7 of that report. Therefore, there was no reason for an analysis of the 120 million requirement to appear in the 1989 report. If the auditors wanted to examine the evidence for that 120 million bearing requirement, they would have had to contact the Federal Emergency Management Agency (FEMA) which conducted the previous study on which the 120 million figure was based.

If the auditors found the procedures for determining jewel bearing requirements inadequate, their findings should have been limited to such assertions. We believe there is room for improvement in the procedures used to determine NDS requirements for jewel bearings. However, such procedures do exist and the audit report even contains a discussion of such procedures on pages 6 and 7.

(4) We nonconcur in the finding that the Plant is not a domestically independent source of bearings because of its use of imported jewel bearing blanks as feedstock. As the audit report itself states on page 8: (1) DLA has arranged this year to acquire equipment to greatly expand the Plant's capability to make blanks; (2) Congress provided $1 million in the FY 1990 Defense Appropriations Act for equipment maintenance and tooling; and (3) Army procurement funds from the Army Materiel Command were provided at DLA request by Military Interdepartmental Purchase Request for the purpose of acquiring additional equipment to produce 2.5 million jewel bearing blanks per year.

The audit report acknowledges on page 8 that the new blank-making equipment will make the Plant "self-sufficient in blank manufacturing." However, the report asserts that "this would provide for very limited surge capability in the event of mobilization." Unfortunately, the report provides no evidence for wartime requirements and, as noted above, the auditors are unwilling to

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accept estimates of emergency requirements provided by the DLA-chaired working group in 1990. Therefore, the auditors have nothing on which to base statements about surge capability needs. Moreover, if more equipment to make jewel bearing blanks is needed to meet surge requirements, it can be purchased in future years. We find it extraordinary that the audit report acknowledges that the Plant is about to become fully independent and yet later recommends that the funds to achieve this goal should not be obligated, thereby confirming the finding that the Plant is not an independent domestic source. Such circular reasoning has no place in an audit report.

In addition, the audit report makes other unfounded statements with regard to the independence of the Plant from foreign sources of raw material. On page 8, the report asserts that even with new blank-making equipment, the raw materials needed for producing blanks "... still would have to be purchased from foreign sources until a viable domestic source could be developed." However, on page 2 of the report, the auditors acknowledge that a synthetic material that "could possibly" be used to make blanks is produced in the United States although at higher cost and in a form that would require special cutting prior to use for blanks.

The facts of the matter are that two domestic firms -- Crystal Systems and Union Carbide -- produce the synthetic material or boule from which jewel bearing blanks can be made. In addition, in the past the Langer Plant has used material produced by Crystal Systems to make blanks. Moreover, there are two other domestic sources of raw material for jewel bearing blanks within NDS: (1) 16.3 million karats of ruby and sapphire boule; (2) 51.7 million obsolete jewel bearings in the current inventory. Whether some additional time and cost must be expended before these sources of raw materials would be available for blank-making is not relevant to the broad and erroneous finding contained in the audit report.

Moreover, it is not unusual for some additional time and money to be expended by industrial firms when they receive raw materials from NDS. Technological change and the risks of obsolescence often prevent NDS from keeping raw materials in a form that would be immediately converted into manufactured product. Therefore, many of the materials in NDS require some final-stage processing before they are fabricated into components. We attempt to keep lead times to a minimum by upgrading raw materials to the highest form that is feasible given technological change and the risks of obsolescence.

Furthermore, there is a one-year warning period in the Joint Staff-approved war scenario for NDS planning. Many of the projected supplies for strategic and critical materials would be expanded during this period and during the early stages of the legislatively-mandated three-year war used for NDS planning.

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(5) We concur in the finding that there is significant noncompliance with the Federal Acquisition Regulation (FAR) regulations requiring contractors to acquire needed jewel bearings from the Plant. This noncompliance has a long history and was cited by the Bradley Commission in its 1961 report on jewel bearing requirements to the Director of the Office of Emergency Planning. However, the audit report contains yet another erroneous statement on page ii of the Executive Summary where it asserts that "the Plant does not comply with all provisions of the Federal Acquisition Regulation (FAR) regarding jewel bearings." In fact, it is contracting officers and private contractors who are in noncompliance, not the Plant.

(6) We nonconcur in the finding that the dosimeter operations at the Plant do not meet the needs of DoD since a FEMA policy decision in 1983 limited future output to pilot production only. First, the statement on page 13 of the audit report that "...the facility does not, and according to current plans, will never serve any production role related to DoD's mission" is out of date. In mid-1990, as the audit report acknowledges on page 12, the Plant provided 10,000 dosimeters to the Navy. This order relates directly to a DoD mission even if it is classified as pilot production. In addition, a special dosimeter was needed for Operations Desert Shield and Desert Storm. Consequently, in August, 1990, the Plant quadrupled its dosimeter production and now produces 1,000 items per week. The resulting cost to DoD per dosimeter decreased from $25 to $30 per item to $10 to $15 per item. Because the Plant already produces pilot production for the military services, it can switch to emergency pilot production quickly for national emergency situations that emerge without the extensive warning period needed for transfer to commercial production.

The audit report contains six specific recommendations based on its findings. The recommendations and our comments follow:

(1) The Deputy Assistant Secretary of Defense (Production Resources) should discontinue Government operations at the Plant by:

(a) Including in the DoD Legislative Program a proposal to amend Public Law 90-469 to delete the requirement that DoD operate the Plant for producing jewel bearings for Government use or for sale. We nonconcur. We find it extraordinary that your agency would issue an audit report recommending elimination (rather than improvement) of a sole domestic source with absolutely no evidence concerning the reliability of foreign sources in terms of meeting total production requirements, delivery schedules, and custom design requirements of U.S. defense contractors, the economic viability of those foreign sources, trends in their ownership and physical location, or the criticality of the component. We might disagree over interpretation

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of facts on these subjects but your report provided no evidence on any of them. These issues are absolutely essential to determining questions of domestic sourcing vs. foreign sourcing of defense-related components.

Since the audit report recommends legislation to terminate a Congressionally-mandated program, a well-documented set of findings is absolutely essential. Yet the audit report provides no evidence that the purpose for which the Plant was established, providing a domestic capability for production of jewel bearings in a national emergency, is no longer valid. It should be noted that Operations Desert Shield and Desert Storm provide evidence that jewel bearing requirements can escalate rapidly during a national security emergency. From the start of Desert Shield and continuing during Desert Storm, orders at the Plant from defense contractors more than doubled. Jewel bearings are critical components in many high technology weapon systems including the Patriot and Tomahawk missiles and military aircraft.

The focus of the audit report is on potential cost savings from commercial procurement of jewel bearings. It is possible that cost savings in the aggregate, if not in every case, would occur from commercial procurement of bearings. However, as noted above, speculation on cost savings begs the question of whether foreign suppliers can meet U.S. national security requirements.

(b) Establishing procedures for determining qualitative and quantitative requirements for jewel bearings for NDS. We nonconcur with the recommendation because of the manner in which it is stated. Procedures for determining NDS jewel bearing requirements need to be continually reviewed and improved as do procedures for determining requirements for other strategic and critical materials. However, such procedures do already exist for estimating jewel bearing requirements for NDS. Now that Operation Desert Storm has concluded, we will review procedures for determining jewel bearing requirements for NDS and undertake a new study of peacetime and wartime requirements for these items.

(c) Procuring jewel bearings from commercial sources. We nonconcur. A decision on this issue is directly linked to the question of whether domestic sourcing of jewel bearings is necessary for national security. As we noted in (1)(a) above, absolutely no evidence was provided on the critical issues of whether foreign suppliers of jewel bearings are reliable in terms of meeting total production requirements, delivery schedules, and custom design requirements of U.S. defense contractors or in terms of their ownership trends, physical location, and economic viability. In addition, the audit report fails to note that the FY 1991 Defense Appropriations Act (Public Law 101-511) contains language in Section

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8121 which requires DoD to purchase an additional $2.4 million in jewel bearings from the Plant.

(d) Including in the DoD Legislative Program a proposal to amend Public Law 100-440 that will return management responsibility of the dosimeter operation at the Plant, including contract award and administration, to FEMA. We nonconcur in this recommendation. First, a factual error must be noted. FEMA never had management responsibility for the William Langer Jewel Bearing Plant. Prior to management responsibility for the Plant being transferred to DoD, that responsibility resided with the General Services Administration. Second, FEMA can be given more control over contract award and administration of dosimeter production for emergency civilian uses through contract modification, without legislation transferring management of the Plant. Third, since we nonconcur in the finding that the dosimeter operations at the Plant are unrelated to DoD missions, we nonconcur in the recommendation.

(2) The Deputy Assistant Secretary of Defense (Procurement) [now Director, Defense Procurement] should instruct the Defense Acquisition Regulatory Council to propose deletion of the FAR provisions requiring contractors to procure jewel bearings from the Plant. Again, the audit report provides no evidence to indicate that total reliance on foreign sources is appropriate at this time in terms of their ability to meet total production requirements, delivery schedules, and custom design requirements of U.S. defense contractors or in terms of their economic viability and trends in their ownership and physical location. Since we nonconcur in recommendations (1)(a) and (1)(c) above and the findings on which they are based, we also nonconcur in this recommendation.

(3) The Director, Defense Logistics Agency should defer obligation of funds provided from Army procurement accounts for the maintenance and repair of equipment and for tooling at the Plant to reduce foreign dependency on jewel bearing blanks. As noted above, we find it extraordinary that the audit report recommends deferral of obligations that will make the Plant completely self-sufficient and then concludes that the Plant is not an independent domestic source. Since we nonconcur in recommendations (1)(a) and (1)(c) above and the findings on which they are based, we also nonconcur in this recommendation.

DEFENSE LOGISTICS AGENCY
HEADQUARTERS
CAMERON STATION
ALEXANDRIA, VIRGINIA 22304-6100

IN REPLY REFER TO DNSC

27 FEB 1991

MEMORANDUM FOR ASSISTANT SECRETARY OF DEFENSE (PRODUCTION & LOGISTICS)

SUBJECT: Audit Report on the Utilization of the William Langer Jewel Bearing Plant (Report No. 91-029)

The Defense Logistics Agency (DLA) has received a copy of the final version of the report cited above and noted that our comments forwarded on 19 October 1990 were not received by the Inspector General. The Acting Deputy Assistant Secretary of Defense (Production & Resources) decided that the Assistant Secretary of Defense (Production & Logistics) should not coordinate on DLA's response.

On 15 November 1990, the Defense National Stockpile Center (DNSC), DLA received a request to reverse its position and concur in concept with the Inspector General's recommendation to discontinue operations at the William Langer Jewel Bearing Plant.

The DNSC would not reverse its position since the existing report rejected the rationale of the Public Law which established the plant, included incorrect statement of fact, and did not reflect the surge activities resulting from Operation Desert Shield/Storm. The same reasons for nonconcurrence that existed for the draft report remain sound for the final report as well. (The enclosed charts outline our final position on this matter.)

Reliance on foreign sources forces us to depend upon offshore factories to manufacture the spare parts and components that we would need in time of emergency. Thus, our ability to achieve our national security objectives may ultimately hinge upon the capability or willingness of offshore manufacturers to fill our orders. The cost of insurance related to mobilization and industrial base capacity is a monetary factor that must be paid. I continue to recommend that the Department reject and nonconcur in the Inspector General's Audit Report Number 91-029.

1 Encl

BRADY M. COLE
RADM, SC, USN
Deputy Director

ATT 2

AUDIT REPORT: UTILIZATION OF THE WILLIAM LANGER JEWEL BEARING PLANT

Report 91-029 31 December 90

Issue: Audit Statement -- "The sales to the Stockpile occurred despite a stockpile goal that was unsubstantiated at 120 million jewel bearings for Fiscal Year 1989, and remains unsubstantiated at a goal of 84 million for 1990."

Sub-Issue	Audit Report	Stockpile Finding
1. Goals Based on Commercial Sales vs Goals Based on Emergency Needs	Page 6, Para 3: In 1989, a Federal working group organized by the Defense Logistics Agency ... found that annual customer sales averaged about 928,000 jewel bearings during the 1980's or 30 percent less than the 1970's. As discussed later in this report, the results of this comparison were used as a basis to reduce the Stockpile goal for FY 1990.	Despite the reduction in the jewel-bearing goal due to a declining industrial demand, the current and continuing uses of jewel bearings within missiles, such as the Tomahawk and Patriot, require continuing DoD support of the William Langer Jewel Bearing Plant's "craft-shop" capabilities.
2. Current Requirements for Jewel Bearings vs Future Requirements for Labor Skills	Page ii, Para 1: Overproduction in peacetime resulted in an increasing number of jewel bearings being placed in the Stockpile for which requirements had not been substantiated.	Jewel bearings in the Stockpile reflect what is being, or will be, produced. The lead time for many weapons systems is 10-12 years.
3. Overproduction vs Labor Proficiency	Page 5, Para 1: The William Langer Jewel Bearing Plant (the Plant) produced more jewel bearings than were needed for peacetime and contingency requirements.	Contingency requirements include the maintenance of critical industrial skills.

Conclusion: The auditors claim a prescience which neither we nor DoD econometricians possess. The declining industrial use of jewel bearings does not imply that the remaining uses in missiles and other military applications should not be maintained through annual Stockpile purchases from the Plant.

AUDIT REPORT: UTILIZATION OF THE WILLIAM LANGER JEWEL BEARING PLANT

Report 91-029 31 December 90

Issue: Intent of Congress -- Maintenance of a State of Readiness in Job Skills (Page 1 of 2)

Sub-Issue	Audit Report	Stockpile Finding
1. Established Procedures vs Enabling Legislation	Page 5, Para 1: The rate of overproduction was increasing because production goals were not adjusted downward to reflect a pronounced decline in Government and commercial usage of mechanical, or analog, devices requiring jewel bearings. Procedures were not established to ensure that accurate qualitative and quantitative requirements were determined for jewel bearings that needed to be stored in the National Defense Stockpile (the Stockpile). Rather, production of types and quantities of bearings was scheduled largely to maintain the various skills of the work force.	This audit finding is a case of presenting a solution for which there is no problem. Production scheduling to maintain the various skills of the work force is specifically required by P.L. 90-469. As stated in the original contract with the Department of the Army--Frankford Arsenal, the Jewel Bearing Plant is to "... use its best efforts to hire or to select the key personnel necessary for the operation of the plant and to **retain the group of key personnel so trained hereunder, in readiness for such operations.**" In an early supplement to the original instrument, the contractor was directed to "make provisions for the training of other personnel who can act as replacements or substitutes for key personnel."
2. Years to Fulfill Goal vs Overproduction	Page 7, Para 3: The reduced goal for FY 1990 was still so high that, after allowing for obsolete quantities in inventory, it would take the Plant many years to meet the Stockpile goal at current production rates.	The long-term maintenance of production and labor skills is precisely what Congress intended. The Stockpile is following the findings of the 1961 Bradley report which Congress used in writing P.L. 90-469. Gen. Bradley and the other Advisory Committee members, frustrated at the minimal success in requiring government agencies to buy domestic bearings, recommended storing bearings in the Stockpile. The Committee's report stated that the Advisory Committee acted "to maintain the production of bearings domesti-

AUDIT REPORT: UTILIZATION OF THE WILLIAM LANGER JEWEL BEARING PLANT

Report 91-029 31 December 90

Issue: Intent of Congress -- Maintenance of a State of Readiness in Job Skills (Page 2 of 2)

Sub-Issue	Audit Report	Stockpile Finding
		cally, despite the fact that the cost of such production exceeds the cost of imported bearings. Further, the action was taken under the Stockpiling Act so items being produced must be sent to storage in most cases and are not immediately consumed. An attempt has been made to utilize defense procurement to compel the continuance of bearing production, but whatever are the results of these efforts, they have been less than hoped for." The level of contractor compliance with current FAR provisions continues to be insufficient to absorb the Plant's annual production.
3. Mobilization vs Maintenance of Skills	Page 6, Para 1: The Plant uses prior year sales, availability of equipment, and maintenance of employee skills as factors in setting annual production levels.	Although the Plant sets its annual production levels in order to allocate its overhead, the actual mix of jewel bearings produced for the Stockpile varies indirectly with the rate of incoming commercial and military orders. Currently, the Plant is producing jewel bearings on a "surge" basis for Desert Storm. Jewel bearings are critical components in the guidance systems of Tomahawk and Patriot missiles.

Conclusion: Since 1961, when Gen. Bradley recommended that the Stockpile absorb whatever production the Turtle Mountain Ordnance Plant (the current William Langer Jewel Bearing Plant) could not sell to military, industrial, and civilian customers, the Plant's production rate has been established by the need to maintain various labor skills, rather than by commercial demand.

AUDIT REPORT: UTILIZATION OF THE WILLIAM LANGER JEWEL BEARING PLANT

Report 91-029 31 December 90

Issue: Audit Statement -- "Unsubstantiated Stockpile goal"

Sub-Issue	Audit Report	Stockpile Finding
1. Report is Not Consistent between Page 9, Para 4 and Page 7, Para 3	Page 9, Para 4: Considering the diminishing peacetime demand for jewel bearings, coupled with the unsubstantiated Stockpile goal, we concluded that the Plant's operational level is determined most heavily by the quantities of production needed to maintain the unique production skills of the Plant's employees.	The auditors contradict themselves. The goal is substantiated by the Federal working group. The goal is set for the total number of jewel bearings to be stockpiled, rather than the type of specific jewel bearings.
	Page 7, Para 3: The Stockpile goal for 1990 was established at 84 million, down 30 percent from the 1989 goal, based upon a Federal working group's finding that the Plant's average jewel bearing sales had decreased by 30 percent from the 1970's to the 1980's.	The types of jewel bearings placed in the Stockpile reflect the types of jewel bearings acquired by the industrial sector.
2. Unsubstantiated Current Needs vs Actual Usage in Missiles	Page 5, Para 1: Also, there was no evidence, in terms of quantities and types, that the jewel bearings being sold to the Stockpile were needed.	The types of jewel bearings placed in the Stockpile reflect the types of jewel bearings ordered and used in major weapon systems.

Conclusion: The Stockpile goal is substantiated by the Federal working group. The bearings placed in the Stockpile are based on current industrial and military usages.

AUDIT REPORT: UTILIZATION OF THE WILLIAM LANGER JEWEL BEARING PLANT

Report 91-029 31 December 90

Issue: The Audit Findings Have Been Largely Overtaken by Events.

Sub-Issue	Audit Report	Stockpile Finding
1. Subsequent Events	This issue was not addressed in the Audit Report. The acceleration of orders in response to Desert Shield and Desert Storm have directly contradicted the audit findings. The audit needs to be withdrawn.	This caption speaks for itself: after years of peacetime preparations and planning, after decades of econometric studies which have tried to forecast actual jewel bearing demand in a war, we have a small scale, but real, war which in the short term has more than doubled jewel bearing orders. The audit report's calculations are predicated on, among other things, the assumptions which are used to calculate the original Stockpile goal. These assumptions, and the Stockpile goals they generated, have to be re-examined and challenged in light of the new, "real world" experience growing out of the war in the Gulf. Accordingly, we think it futile to act on recommendations which we now know are based on assumptions which may not be supported by hard data. We think it would be more logical to lay this audit aside and reexamine the whole process after the Gulf war is over and the new data on Desert Storm usage are available.

AUDIT REPORT: UTILIZATION OF THE WILLIAM LANGER JEWEL BEARING PLANT

Report 91-029 31 December 90

Issue: Statistical Significance -- Two Bearings vs 1,500-2,000 as a Basis for DoD Savings

Sub-Issue	Audit Report	Stockpile Finding
1. Shutdown and Save vs Insurance	Page 9, Para 4: We believe by terminating the jewel bearing operations at the Plant and by purchasing jewel bearings for the Stockpile from commercial vendors, the DoD could save about $1.4 million annually.	Emergency preparedness is the Congressional intent, not cost savings. Commercial vendors import, rather than manufacture, foreign jewels. If imported jewel bearings were procured for the Stockpile, **DoD's savings of $1.4 million annually would have to be balanced against the domestic loss of a controlled source of combat resupply.** In the current Desert Storm operation, each Patriot missile requires 24 jewels; each Tomahawk requires 24 jewels; and each F-15 requires 12 jewel-bearing systems.
2. Simplistic Equation for a Change in National Policy	Page 8, Para 1: We compared the prices charged by the Plant for two types of jewel bearings to prices quoted to us by two firms that imported jewel bearings for resale.	The Audit Report gives no indication that the commercial jewels used in defense applications are simple or complex in their engineering design. The selection of two bearings out of 1,500-2,000 in the universe of bearing types is not a sufficient sample size for the complex variations in jewel bearings.

Conclusion: We believe basing such a sweeping conclusion on such shaky statistical underpinnings does not meet contemporary audit standards and as such need not be discussed. The recommendation to amend a Public Law based on a suspect statistical sample without consideration of the related issues of quality, delivery, reliability, and engineering consultant services displays a lack of understanding and acceptance of the legislative mission of this mobilization and industrial preparedness program.

AUDIT REPORT: UTILIZATION OF THE WILLIAM LANGER JEWEL BEARING PLANT

Report 91-029 31 December 90

Issue: Plant Services in Excess of Contract (Page 1 of 2)

Sub-Issue	Audit Report	Stockpile Finding
1. Delivery delays	The issues of Plant services in excess of contract were not addressed in the Audit Report. They should have been if the audit were intended to address services provided and their costs. Without these issues, the costs comparisons are not valid.	The Plant provides a number of services which the Swiss do not. In the most striking example, Rolla has been filling orders for missile parts from production held at the Plant for acceptance into the Stockpile. Thus, Rolla is shipping critical parts on receipt of the order and earmarking future production to fill the Stockpile order. Rolla is offering delivery times of 10 days to 6 weeks for normal bearings, and 6 to 10 weeks for specialty items; the Swiss delivery time, in comparison, is 12 to 14 weeks for normal tolerance bearings and 16 to 20 weeks for special items.
2. Technological Consultant Services	This issue was not addressed in the Audit Report.	Rolla provides craftsman-type technological services to customers. For example, in 1986 Rolla developed a way of using a bearing as a barrel of a detonation device for both conventional and nuclear weapons. Customers for this special bearing include Lockheed Missile and Space, EG&G, LANL, and Sandia Labs.
3. Quality Assurance	This issue was not addressed in the Audit Report.	In 1981 and 1982, Rolla won the Contractor Assessment Program Award from DLA and flew the "E" pennant from the plant flagpole. By gentlemen's agreement, Rolla withdrew from the competition thereafter so someone else could have a chance.

AUDIT REPORT: UTILIZATION OF THE WILLIAM LANGER JEWEL BEARING PLANT

Report 91-029 31 December 90

Issue: Plant Services in Excess of Contract (Page 2 of 2)

Sub-Issue	Audit Report	Stockpile Finding
4. Client services	This issue was not addressed in the Audit Report.	Rolla is working with Litton Industries on a gyro mechanism on the Tomahawk missile. Litton was experiencing too much breakage on the endstones during assembly; trial and error found the ruby endstone could not handle the shock of having the gyro dropped on it. Diamond endstones were not the answer; after visits and consultations with Litton engineers and Rolla personnel, a more highly polished ruby endstone is being tried. Rolla does not charge consulting fees for this service.

AUDIT REPORT: UTILIZATION OF THE WILLIAM LANGER JEWEL BEARING PLANT

Report 91-029 31 December 90

Issue: Intent of Congress -- Pricing the Jewel Bearings

Sub-Issue	Audit Report	Stockpile Finding
1. Price/Cost Benefit vs National Policy and Public Law	Page 5, Para 1: The plant charged significantly higher prices than commercial vendors in order to recover the costs of its operations.	The Audit Report is correct, but this audit statement is not a finding. It only states the Plant's pricing policy as Congress intended. Sec. 1 of Public Law 90-469, August 8, 1968, instructed the William Langer Jewel Bearing Plant to "produce jewel bearings and related items for government use or for sale at prices determined by the administrator to be sufficient to cover the estimated or actual costs of production, including depreciation."
2. Management Stabilization	Page 8, Para 1: We compared the prices charged by the Plant for two types of jewel bearings to prices quoted to us by two firms that imported jewel bearings for resale.	The auditors should not have made this comparison; the use of commercial vendors who import bearings from overseas does not comply with Public Law 90-469.
3. Marketing	Page 6, Para 1: Jewel bearings are sold to the Stockpile at a 25-percent discount on the unit prices established for sales to other customers.	The plant is in compliance with the law in recovering the cost of production. The Stockpile obtains a discount because it buys in volume, with annual orders that help maintain a stable rate of production.

Conclusion: The premise of the Report is based on "commercial vendors." However, commercial vendors import bearings for mounting and incorporation as a system. In contrast, the William Langer Jewel Bearing Plant designs and fabricates individual jewel bearings for military and industrial applications. **P.L. 90-469 authorizes the Plant to charge break-even prices for its jewel bearings. The pricing of jewel bearings is an issue of national policy: to be self-reliant and not dependent on imported jewel bearings.**

AUDIT REPORT: UTILIZATION OF THE WILLIAM LANGER JEWEL BEARING PLANT

Report 91-029 31 December 90

Issue: Audit Statement -- "The goal was meaningless as a factor in setting production quantities."

Sub-Issue	Audit Report	Stockpile Finding
1. Report is Not Consistent between Page 7, Para 2, and Page 7, Para 3	Page 7, Para 2: The 1989 "Report to Congress on National Defense Stockpile Requirements" contained a goal to stockpile 120 million jewel bearings. We found no analysis to support this goal.	The interagency group determined the change in domestic demand for jewel bearings, and then applied a proportional change to the goal. This comparison of demand and supply data is a long-standing and widely applied analytical technique.
2. Stockpile Goals vs Production Quantities	Page 7, Para 3: The goal was meaningless as a factor in setting production quantities. The goal was not supported by demonstrated future requirements for specific quantities or types of products.	The goal is not related to production quantities. The annual production levels support the law to assure maintenance of skills and to stay current in supplying the jewel bearings.
3. Support the Congressional Intent	Page 6, Para 1: The Plant uses prior year sales, availability of equipment, and maintenance of employee skills as factors in setting annual production levels.	Use of prior year sales, by type and quantity, projects current market demand. The use of prior years sales and equipment complies with the enabling legislation. The goal is gross quantities and should reflect what is currently being used by industry.

Conclusion: The Audit Report is simply oblivious to the clear intent of the law; the Report expects the Plant to set its production quantities as if the Plant were a private enterprise. The Plant operates to satisfy both current industrial demands for jewel bearings and long-term emergency demands for specific job skills.

AUDIT REPORT: UTILIZATION OF THE WILLIAM LANGER JEWEL BEARING PLANT

Report 91-029 31 December 90

Issue: Audit Statement -- "There was no evidence, in terms of quantities and types, that the jewel bearings being sold to the Stockpile were needed."

Sub-Issue	Audit Report	Stockpile Finding
1. Usage of Overproduction	Page 5, Para 2: Bearings not sold to current users are sold to the Stockpile.	A more accurate statement would be: Bearings not sold to fill specific orders for current production are sold for the Stockpile to hold against future or new production on sub-systems such as those in the Patriot and Tomahawk missiles, and the F-15 fighter plane.
2. Determination of Need	Page 5, Para 1: Also, there was no evidence, in terms of quantities and types, that the jewel bearings being sold to the Stockpile were needed.	There is evidence that jewel bearings sold to the Stockpile are needed for critical guidance systems and small moving parts within the military arsenal. The quantity of these jewel bearings that would be demanded in an emergency cannot be determined without exact knowledge of the future scenario.
3. Determination of Production Levels	Page 6, Para 1: The Plant uses prior year sales, availability of equipment, and maintenance of employee skills as factors in setting annual production levels.	The Plant can only forecast future demands by prior year sales and anticipated military usages. In 1979, when the Plant designed and produced some of the jewel bearings now finding success in the Desert Storm operation, there was no assurance that the production would prove useful twelve years later.

Conclusion: Bearings held against goal reflect current usage. Bearings held in a "non-goal" position can be converted into boule and blanks during a national emergency.

AUDIT REPORT: UTILIZATION OF THE WILLIAM LANGER JEWEL BEARING PLANT

Report 91-029 31 December 90

Issue: Audit Statement -- "We found no analysis to support this goal."

Sub-Issue	Audit Report	Stockpile Finding
1. Analysis to Support the Goal	Page 7, Para 2: The 1989 "Report to Congress on National Defense Stockpile Requirements" contained a goal to stockpile 120 million jewel bearings. We found no analysis to support this goal.	The auditors contradict themselves: an Interagency Committee analyzed the jewel-bearing goal during 1989. As a result of this analysis, the Secretary of Defense recommended the goal be reduced to 84 million pieces. Congress accepted this recommendation as the current goal. Previous analyses by interagency committees resulted in goal reductions to 200 million pieces in 1976 and to 120 million pieces in 1979.
2. Report is Inconsistent between Page 7, Para 2 and Page 6, Para 3.	Page 6, Para 3: In 1989, a Federal working group organized by the Defense Logistics Agency (DLA), with representatives from DLA, OSD, and the Department of the Interior, compared jewel bearings sales for DoD (other than the Stockpile) use during two 10-year periods, 1970 to 1979 and 1980 to 1989. The working group found that annual customer sales averaged about 928,000 jewel bearings during the 1980's, or 30 percent less than the 1970's. As discussed later in this report, the results of this comparison were used as a basis to reduce the Stockpile goal for FY 1990.	The Interagency Committee's analysis of long-term commercial sales is a valid method to aid in the determination of defense, industrial, and essential civilian demands.

Conclusion: The Audit Report states that there was no analysis to support the Stockpile goal. However, on Page 6 and on Page 7 the Report discusses the effect of the Federal working group's findings. The auditors' statement that they could not find analyses to support the goals is inconsistent.

AUDIT REPORT: UTILIZATION OF THE WILLIAM LANGER JEWEL BEARING PLANT

Report 91-029 31 December 90

Issue: Intent of Congress -- Principal Reason for Plant's Existence (Raison d'Etre)

Sub-Issue	Audit Report	Stockpile Finding
1. "Independent Source" is not Required by P.L. 90-469	Page 8, Para 3: The principal reason for the Plant's existence is to provide a domestic source of jewel bearing items, but without the capability to produce blanks, the Plant is not a domestically independent source.	The purpose of the Plant is to maintain the knowledge and skill necessary to produce jewel bearings as required. The "independent source" is not a requirement of P.L. 90-469, and should not have been presented as an audit finding.
2. Report is not Consistent between Page 8, Para 3 and Page 2, Para 4	Page 2, Para 4: The Plant procures blanks needed for manufacturing jewel bearings from foreign sources, primarily from Switzerland. A synthetic jewel material that could possibly be used to make blanks is produced in the United States, but at a much higher cost.	The source material issue is being addressed as a management initiative: (1) there are two domestic firms that produce boule; (2) the Stockpile has ruby and sapphire boule as a critical material; (3) the Stockpile keeps the obsolete bearings to be used as source material; and (4) machines and equipment are being procured for blank manufacturing.

Conclusion: The Report analyzes the Plant as if it were a vertically-integrated profit center for DoD. It is not, nor was it ever the Army's intent in 1952 or Congress' intent in 1968 that it should be. The intent of the enabling legislation was not to make the plant self-sufficient from the raw-material standpoint, nor was the intent to maintain the Plant only if it were profitable. Rather, the law ensures a domestic pool of skilled craftsmen.

AUDIT REPORT: UTILIZATION OF THE WILLIAM LANGER JEWEL BEARING PLANT

Report 91-029 31 December 90

Issue: Audit Statement -- "We concluded that the purchases for DoD use were 'forced' and that most of the customers would have used other sources in an open market situation."

Sub-Issue	Audit Report	Stockpile Finding
1. Legislative History	Page 7, Para 1: Given the high percentage of purchases that were for DoD use, the FAR provision requiring use of the Plant's products on DoD contracts and the much higher prices paid by customers for the Plant's products..., we concluded that the purchases for DoD use were "forced" and that most of the customers would have used other sources in an open market situation.	The audit finding is a restatement of the recommendation of the Bradley Commission in 1961. This is what is supposed to happen. The FAR encourages a number of socio-economic policies -- such as the hiring of minorities, the use of U.S. carriers, the favoring of small businesses, and the forcing of domestically-produced jewel bearings. These policies could not be achieved without the financial power of the Federal Government. All of these policies have a purpose. **The purpose of requiring the use of jewel bearings from the Plant is to ensure a domestic production capability during a national emergency.** The domestic capability to resupply the missiles now being consumed in Desert Storm is a benefit that this nation has achieved from its many years of "forcing" the usage of domestically-produced jewel bearings in Federal products.

Conclusion: The Audit Report's focus is purely economic, without reference to legislative history, policy, or mobilization principles. **The events of Desert Storm prove that jewel-bearing requirements and orders can escalate rapidly during a national emergency.** These requirements and orders can best be filled during national emergencies by requiring contractors to support a domestic capability during peacetime.

AUDIT REPORT: UTILIZATION OF THE WILLIAM LANGER JEWEL BEARING PLANT

Report 91-029 31 December 90

Issue: Audit Statement -- "The Plant did not comply with all provisions of the Federal Acquisition Regulation (FAR) regarding jewel bearings."

Sub-Issue	Audit Report	Stockpile Finding
1. FAR Compliance	Page ii, Para 3: The Plant did not comply with all provisions of the Federal Acquisition Regulation (FAR) regarding jewel bearings. We did not recommend that these weaknesses be corrected, because we concluded that the Plant was not needed for the production of jewel bearings and related items, and we recommended that the FAR provisions referred to above be eliminated.	A "mandatory source" requirement that DoD contractors use the Plant's jewel bearings has been in effect since November 15, 1961. GAO and other audit reports since that time report that the requirement has been routinely ignored by DoD contracting officers and regularly evaded by contractors.
2. Required Sources	Page 9, Para 1-2: [The FAR] requires contracting officers to insert the clause, FAR section 52.208-1, "Required Sources for Jewel Bearings and Related Items," in solicitations and contracts for end items that may contain jewel bearings.... We visited 25 purchasing offices and reviewed 119 contracts.... We found that not all provisions of the FAR were being complied with, as described in Appendix B.	There is a consensus among auditors, plant officials, and others conversant with the Plant that the diversion of contracts to overseas suppliers has been the principal hinderance in successfully pursuing the Plant's business plan fully.

Conclusion: Contracting officers are not complying with the FAR. Canceling the mandatory source provision because it has never been successfully applied or enforced would not make the Plant operate more effectively or more efficiently. The audit should address methods to enforce the Congressionally mandated socio-economic policy requiring defense contractors to procure jewel bearings from the Plant.

AUDIT REPORT: UTILIZATION OF THE WILLIAM LANGER JEWEL BEARING PLANT

Report 91-029 31 December 90

Issue: Intent of Congress -- Role of FEMA in Public Law 100-440

Sub-Issue	Audit Report	Stockpile Finding
1. Role of the Stockpile Manager	Page 13, Para 4: We recommend that the Deputy Assistant Secretary of Defense (Production Resources) include a proposal in the Department of Defense Legislative Program to amend Public Law 100-440 that will return management responsibility of the dosimeter operation at the William Langer Jewel Bearing Plant, to include contract award and administration, to the Federal Emergency Management Agency.	The auditors are proposing a legislative solution, which is not necessary, and citing the wrong law as well. **Public Law 100-440, September 22, 1988, does not relate to FEMA.** Rather, the law pertains to the Stockpile Manager, a position that the President previously delegated to the Director of FEMA when Stockpile operations were part of GSA. Sec. 630 of this law states, "Notwithstanding any other provision of law, Public Law 89-784, 80 Stat. 1367 and Public Law 90-469, 82 Stat. 666 pertaining to the naming, maintaining and operation of the William Langer Jewel Bearing Plant are amended by ... inserting ... 'the National Defense Stockpile Manager.'"
2. Dosimeter Production	Page i, Para 2: Our audit also showed that the Plant's dosimeter operation is a requirement of the Federal Emergency Management Agency and has no relation to the requirements of the National Defense Stockpile (the Stockpile) and thus far has not served any requirement of DoD.	FEMA is a customer of the Plant. The two parties could amend their existing purchase order within the Executive Branch without reference to Congress.

Conclusion: The Audit Report based its recommendations on a misinterpretation of P.L. 100-440. This law does not refer to FEMA. The law refers to the Stockpile Manager. Although the Director of FEMA had been the Stockpile Manager, the current Stockpile Manager is the Assistant Secretary of Defense (Production and Logistics), by delegation from the Secretary of Defense.

AUDIT REPORT: UTILIZATION OF THE WILLIAM LANGER JEWEL BEARING PLANT

Report 91-029 31 December 90

Issue: Audit Statement -- "The [dosimeter] Plant does not support the DoD's requirements."

Sub-Issue	Audit Report	Stockpile Finding
1. DoD's Requirements for Dosimeters	Page ii, Para 2: The DoD is responsible for the Plant's dosimeter operations; however, the Plant does not support the DoD's requirements.	The Plant is currently producing dosimeters for the Army.
2. DoD's Management of Dosimeter Production	Page 11, Para 1: As a result, the Department of Defense is managing an operation that does not support the Department.	DLA manages the Plant in order to support the Army's and Navy's interest in personal radiation meters.
3. Examples of Applications for Dosimeters	Page 12, Para 2: The DoD has requirements for dosimeters, which measure various levels of radiation.... In both wartime and peacetime, DoD activities use dosimeters in areas where there is a potential for exposure to radiation, such as on nuclear powered ships and in shipyards that perform work on these ships.	The Plant's production is inconsistent with the Report's statement that "the Plant does not support the DoD's requirements."
4. NavSea Purchase of Dosimeters	Page 12, Para 3: The Naval Sea Systems Command purchased 10,000 dosimeters, manufactured at the Plant, at a cost of $300,000. The dosimeters are to be used on a test basis to determine if they will fulfill Navy requirements.	The Plant is now earning revenue from its trial dosimeters. DLA expects its final designs for dosimeters to be extremely useful for Service personnel at risk to radiation.

Conclusion: The audit statement is not true: the dosimeter plant exists solely to support DoD requirements. The dosimeter plant should be a topic for a closed discussion to clarify both the facts and the issues involved in DLA's management of dosimeter production.

Appendix E: Assistant Secretary of Defense (Production and Logistics) Testimony, July 31, 1991

STATEMENT

TO THE

HOUSE COMMITTEE ON ARMED SERVICES

SUBCOMMITTEE ON SEAPOWER AND STRATEGIC AND CRITICAL MATERIALS

BY

COLIN McMILLAN

ASSISTANT SECRETARY OF DEFENSE

FOR PRODUCTION AND LOGISTICS

JULY 31, 1991

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GOOD MORNING: MR. CHAIRMAN, I AM HERE TODAY AT YOUR INVITATION TO DISCUSS THE POSITIVE CHANGES I ANTICIPATE AS THE DEPARTMENT OF DEFENSE VIGOROUSLY MANAGES THE NATIONAL DEFENSE STOCKPILE (NDS). BGEN CUNNINGHAM IS WITH ME TODAY TO ADDRESS QUESTIONS YOU MAY HAVE CONCERNING THE JOINT STAFF PLANNING FACTORS OF OUR REPORT.

THE REPORT TO CONGRESS ON THE NATIONAL DEFENSE STOCKPILE WHICH IS REQUIRED BY LAW IS AN ATTEMPT TO ADDRESS THE CONCERNS RAISED BY THE DEPARTMENT OF THE DEFENSE INSPECTOR GENERAL AND THE OFFICE OF THE SECRETARY OF DEFENSE. THE REPORT WITH ITS VARIOUS TABLES AND APPENDICES REPRESENTS THE MOST COMPREHENSIVE REVIEW OF THE NDS IN MORE THAN A DECADE. I WOULD POINT OUT THAT THIS REPORT IS PRELIMINARY IN THAT WE HAVE BASED THE NEW NDS REQUIREMENTS ON THE MILITARY FORCE STRUCTURE USED LAST YEAR. IT IS MY INTENT TO REVISE THE REPORT AND SUBMIT IT TO CONGRESS THIS FALL USING THE LATEST FORCE STRUCTURE DATA. I CANNOT OVEREMPHASIZE THAT THE CURRENT REPORT IS A SOUND DOCUMENT WHICH CLEARLY INDICATES THE DIRECTION THE NDS SHOULD TAKE. IF ANYTHING, THIS DOCUMENT OVERSTATES THE INVENTORY SIZE OF THE NDS. THE REPORT SUBMITTED IN THE FALL SHOULD FURTHER REDUCE INVENTORY REQUIREMENTS.

THE REPORT CALLS FOR A REDUCTION IN THE REQUIREMENTS OF THE NDS FROM ABOUT $20 BILLION TO $5.6 BILLION. THIS WILL ALLOW US TO BETTER

FOCUS ON THOSE ITEMS WE TRULY NEED. THOSE NEEDED ITEMS GENERALLY WILL INCLUDE MINERALS WHICH ARE NOT PRESENT IN ADEQUATE QUANTITIES IN THE STOCKPILE OR IN NORTH AMERICA AND THE CARIBBEAN AREA. THE MOST SIGNIFICANT NON-METAL ITEM IDENTIFIED IN THE STUDY IN SHORT SUPPLY IS RUBBER. THE MOST SIGNIFICANT OVERSUPPLY EXISTS IN TIN, LEAD, ZINC, SILVER, CHROMITE, FERRO CHROMIUM, MANGANESE, AND FERRO MANGANESE. BASED ON NEW REQUIREMENTS IN THE REPORT THERE WOULD BE ABOUT $4.8 BILLION IN EXCESS INVENTORY OF SPECIFICATION GRADE MATERIAL AND $1.9 BILLION IN SHORTAGES OF SPECIFICATION GRADE MATERIAL. FOR A NET SURPLUS IN DOLLARS OF $2.9 BILLION. THESE LARGE DIFFERENCES BETWEEN WHAT WE NEED AND WHAT WE HAVE OCCUR WHEN A THREE-YEAR NON-NUCLEAR GLOBAL WAR SCENARIO IS APPLIED AS IS REQUIRED BY LAW. AS AN EXAMPLE OF MILITARY USE OF NDS INVENTORIES, WE SHOULD ACKNOWLEDGE THE FACT THAT IN OUR MOST RECENT MILITARY ENGAGEMENT, DESERT SHIELD/DESERT STORM, THERE WERE NO REQUIREMENTS FOR MATERIALS FROM THE NDS. ALTHOUGH THERE WAS AN ACCELERATED NEED FOR JEWEL BEARINGS AT THAT TIME, DIVERSIONS OF JEWEL BEARINGS FROM THE PRODUCER EASILY HANDLED THE MILITARY REQUIREMENT.

WE APPLAUD YOUR INTRODUCTION OF THE ADMINISTRATION'S PROPOSED LEGISLATION, H.R. 2599, A BILL "TO AUTHORIZE THE DISPOSAL OF CERTAIN STRATEGIC AND CRITICAL MATERIALS FROM THE NATIONAL DEFENSE STOCKPILE DURING FISCAL YEARS 1992 AND 1993 AND TO AMEND THE STRATEGIC AND CRITICAL MATERIALS STOCKPILING ACT TO IMPROVE THE MANAGEMENT OF THE STOCKPILE."

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THE DOD ALSO RECENTLY COMPLETED INDIVIDUAL MATERIAL STUDIES ON DEPLETED URANIUM (DU) AND GERMANIUM (GE). THE INDIVIDUAL MATERIAL STUDIES CONCLUDE THERE IS NO NATIONAL DEFENSE NEED TO SPEND TAXPAYERS MONEY TO BUY DU AND GE FOR THE NDS AND SHOULD INDICATE THAT WE ARE SERIOUS ABOUT HAVING A VIABLE NDS THAT MEETS THE REQUIREMENTS OF DOD.

THE AGGREGATED DOLLAR VALUE OF PROPOSED NDS REQUIREMENTS AS MENTIONED EARLIER OF $5.6 BILLION IS BASED ON MATERIAL PRICES AS OF JANUARY 31, 1991. THIS AGGREGATE INCLUDES REQUIREMENTS FOR 20 MATERIALS THAT ARE ANALYZED OFF-LINE BECAUSE THEY ARE MATERIALS WHICH CANNOT BE MACROMODELED. THEY ARE REFERRED TO AS NON-MODEL MATERIALS. THESE NON-MODEL REQUIREMENTS ARE ESTIMATED BY TECHNICAL EXPERTS. THE AGGREGATE ALSO INCLUDES REQUIREMENTS DETERMINED OFF-LINE FOR FOUR ADVANCED MATERIALS THAT WERE ADDED TO THE NDS TWO YEARS AGO. THE AGGREGATE DOLLAR VALUE OF $5.6 BILLION FOR ALL MATERIALS COMPARES TO AN AGGREGATED DOLLAR VALUE OF $7.3 BILLION FOR THE BASE CASE OF THE 1989 SECRETARY OF DEFENSE REPORT ON NDS REQUIREMENTS, WHICH WAS THE LAST SET OF REQUIREMENTS DOD SENT THE CONGRESS IN AN ANNUAL REPORT.

REALISM REQUIRES US TO FOCUS FUTURE EFFORTS ON ACQUISITIONS OF PRODUCTS FAR FROM OUR SHORES THAT WOULD NOT BE READILY AVAILABLE DURING MILITARY CONFLICT. THAT IS IN FACT WHAT WE HAVE DONE WITH

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THIS NEW REPORT. RECOGNIZING THE VALUE OF THESE REPORTS MEANS THAT WE MUST CALL FOR SIGNIFICANT DISPOSALS OF WHAT WE DON'T NEED, AND WE HAVE ALREADY ASKED FOR LEGISLATION TO GIVE US ADDITIONAL AUTHORITY TO DO WHAT IS NEEDED. IN CONSONANCE WITH PUBLIC LAW, ALL DISPOSALS OF COMMODITIES WILL BE DONE IN A DELIBERATE PROCESS OVER TIME TO AVOID UNDUE DISRUPTION OF DOMESTIC AND INTERNATIONAL MARKETS.

THE NEW NDS REQUIREMENTS RESULTING FROM THIS WORK ARE BASED ON THE LEGISLATIVELY-MANDATED THREE-YEAR WAR SCENARIO. WE ORIGINALLY INTENDED THAT THIS REPORT WOULD REFLECT FY 1991 SCENARIOS AND FORCE STRUCTURES, BUT WE COULD NOT FINISH BY JULY OF THIS YEAR. SO, WE DECIDED TO PROCEED WITH THE SAME MILITARY FORCE STRUCTURE DEVELOPED FOR THE 1989 NDS REQUIREMENTS STUDY TO GIVE THE CONGRESS A CLEAR IDEA OF WHERE WE ARE GOING. THEREFORE, THE FORCE STRUCTURE USED IS SLIGHTLY LARGER THAN THE FORCE STRUCTURE FOR THE STUDY STILL UNDER DEVELOPMENT. THE SAME HOLDS TRUE FOR THE CIVILIAN REQUIREMENTS WHICH ARE BASED ON ECONOMIC PROJECTIONS FROM LAST YEAR'S STUDY AND ARE SOMEWHAT MORE OPTIMISTIC THAN ECONOMIC FORECASTS BEING DEVELOPED TODAY. UNDER THESE CIRCUMSTANCES, WE BELIEVE OUR CONSERVATISM WITH REGARD TO KEY ASSUMPTIONS SHOULD BE REASSURING TO THOSE WHO ARE CONCERNED ABOUT THE EFFECTS OF REVISED THREAT ASSESSMENTS. THIS FALL WE WILL COMPLETE OUR REASSESSMENT BASED ON THE LATEST THREAT ASSESSMENTS, FORCE STRUCTURE ANALYSES AND ECONOMIC FORECASTS. OUR

RECOMMENDATIONS FOR LEGISLATIVE AUTHORIZATION OF THE NEW REQUIREMENTS ARE BEING HELD UNTIL THAT TIME.

THE DIFFERENCES IN TOTAL DOLLAR VALUE BETWEEN THE BASE CASE IN THE 1989 REPORT AND THE LATEST STUDIES ARE DUE, IN PART, TO THREE FACTORS: FIRST, REQUIREMENTS FOR NON-MODEL MATERIALS HAVE DROPPED $714 MILLION. SECOND, WE EXPANDED THE NUMBER OF ASSURED SUPPLIERS BY ADDING THE COUNTRIES IN THE CARIBBEAN BASIN AS ASSURED SUPPLIERS FOR THE MILITARY SECTOR REQUIREMENTS. AND THIRD, WE EXPANDED THE SUPPLY ASSUMPTIONS FOR DOMESTIC FACILITIES. BOTH THE EXPANSIONS IN ASSURED SUPPLIERS AND IN DOMESTIC FACILITIES ARE CONSISTENT WITH THE RECOMMENDATIONS OF THE DoD INSPECTOR GENERAL IN A RECENT AUDIT REPORT ON THE NDS REQUIREMENTS PROCESS.

HERE ARE THE FACTS ON THE DOMESTIC SUPPLY ASSESSMENT PORTION OF THE NDS STUDY. IN THE 1989 STUDY, THE BUREAU OF MINES SUPPLIED DoD WITH PRODUCTION DATA ON THREE TYPES OF PROGRAMS: (1) TO EXPAND PRODUCTION AT CURRENTLY OPERATING DOMESTIC FACILITIES; (2) TO RESTART CURRENTLY CLOSED FACILITIES IN THE U.S.; AND (3) TO START NEW DOMESTIC FACILITIES. AT THE TIME OF THE 1989 REPORT, DoD CHOSE TO USE NONE OF THE PRODUCTION DATA FOR THESE PROGRAMS. THE AUDIT REPORT BY THE DoD INSPECTOR GENERAL SUGGESTED USE OF ALL BUREAU OF MINES DATA ON ESTIMATED PRODUCTION FROM CAPACITY EXPANSIONS, RESTARTS AND NEW

STARTS. I GENERALLY CONCUR WITH THE FINDING OF THE DoD INSPECTOR GENERAL. SOME OF THESE PROGRAMS SHOULD BE CONSIDERED.

IN OUR LATEST STUDY, WE EXAMINED THE BUREAU OF MINES SUPPLY DATA ON WHICH PROGRAMS WERE FEASIBLE GIVEN THE POSSIBILITY OF BOTTLENECKS DURING THE LEGISLATED SCENARIO DUE TO SHORTAGES IN THE CAPITAL GOODS INDUSTRIES AND IN SPECIAL EQUIPMENT. AS A RESULT OF THE REVIEW, WE HAVE REVISED DOWNWARD SOME OF THE BUREAU OF MINES DATA FOR THE CONCERTED PROGRAMS. HOWEVER, I AUTHORIZED THE USE OF THREE CAPACITY EXPANSIONS, ONE RESTART OF A CURRENTLY CLOSED FACILITY AND THREE RESTARTS OF NEW FACILITIES SINCE THIS WOULD NOT LEAD TO LONG PRODUCTION DELAYS DUE TO BOTTLENECKS IN THE DELIVERY OF NEEDED CAPITAL GOODS AND SPECIAL EQUIPMENT. MANY OF THE OTHER PROGRAMS WERE UNNECESSARY BECAUSE WE ALREADY HAD SUFFICIENT SUPPLIES FROM OTHER SOURCES.

IN PAST REPORTS, THE DoD USED AN "ALL OR NOTHING" APPROACH TO A COUNTRY'S RELIABILITY DURING THE MANDATED WAR --EITHER A COUNTRY WAS ONE HUNDRED PERCENT RELIABLE OR IT WAS TOTALLY UNRELIABLE. AS A RESULT, THERE WAS CONSIDERABLE RISK INVOLVED IF THE ASSESSMENT OF A MAJOR SUPPLIER TURNED OUT TO BE WRONG DURING AN ACTUAL WAR. FOR THIS STUDY, WE RATED EACH PRODUCER COUNTRY ON A SCALE OF ONE TO SIX WHICH DoD THEN CONVERTED TO PERCENTAGE TERMS. AS A RESULT, IF A COUNTRY HAD A SCORE LESS THAN A PERFECT SIX, DoD ASSUMED THAT ONLY A

PERCENTAGE OF THE COUNTRY'S EXPORTS WOULD BE RELIABLE DURING THE WAR SCENARIO. WE USED THIS ASSESSMENT METHOD OF FOREIGN SUPPLIES AS A WAY TO IMPLEMENT THE DIRECTIVE IN SECTION 2(b) OF THE STRATEGIC AND CRITICAL MATERIALS STOCK PILING ACT TO DECREASE THE "...DANGEROUS AND COSTLY DEPENDENCE BY THE UNITED STATES UPON FOREIGN SOURCES FOR SUPPLY...."

FINALLY, AS RECOMMENDED BY THE INSPECTOR GENERAL'S AUDIT REPORT, WE ARE SUPPORTING AN UPDATING OF THE MATERIAL CONSUMPTION RATIOS THAT ARE USED IN OUR MODELING EFFORT TO DETERMINE NDS REQUIREMENTS. THE INITIAL PHASE SHOULD BE COMPLETED IN SIX MONTHS.

I WOULD LIKE TO SUBMIT THE PROPOSED NDS REQUIREMENTS FOR THE RECORD AS ATTACHMENT 1 OF MY FORMAL HEARING STATEMENT. WE RECOMMEND THAT THE SECTION OF THE DEFENSE AUTHORIZATION ACT FOR FISCAL YEARS 1992 AND 1993 WHICH SETS NDS DISPOSAL LIMITS FOR THOSE YEARS ALLOW DISPOSALS UP TO $500 MILLION SO THAT EXCESS REQUIREMENTS CAN BE SOLD AS MARKET CONDITIONS ALLOW.

I CALL YOUR ATTENTION TO THE PARTICULAR REQUIREMENTS FOR FERROCHROMIUM AND FERROMANGANESE. UNDER THE TEN-YEAR FERROALLOY UPGRADE PROGRAM, THE FINAL SEVEN YEARS WERE LEGISLATIVELY-MANDATED IN PUBLIC LAWS 99-591 AND 99-661. THE NDS WAS REQUIRED BY LAW TO ADD 374,000 TONS OF FERROCHROMIUM AND 472,000 TONS OF FERROMANGANESE. WE

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ARE CURRENTLY IN THE EIGHTH YEAR OF THAT PROGRAM. BASED ON NDS STUDY REQUIREMENTS FOR THESE TWO FERROALLOYS IN THE NEW STUDY, WE FIND AN EXCESS OF FERROALLOYS CURRENTLY HELD IN NDS INVENTORIES.

IN ADDITION TO THE REQUIREMENTS FOR MATERIALS THAT ARE ALREADY IN THE STOCKPILE AND ADVANCED MATERIALS NEWLY ADDED, WE ALSO COMMISSIONED THE SPECIAL STUDY OF NDS REQUIREMENTS FOR DU TO BE CONDUCTED BY THE INSTITUTE FOR DEFENSE ANALYSES (IDA) WHICH WE MENTIONED EARLIER IN THIS STATEMENT. AS YOU ARE AWARE, THE DEFENSE APPROPRIATIONS ACT FOR 1991 MANDATED THAT THE STOCKPILE PURCHASE 36 MILLION POUNDS OF DU OVER A TEN YEAR PERIOD. HOWEVER, THE ARMY STUDY OF DU REQUIREMENTS ON WHICH THE 36 MILLION POUND FIGURE IS BASED, WAS NEVER COORDINATED BY EITHER THE JOINT STAFF OR THE OFFICE OF THE SECRETARY OF DEFENSE AND IT CONTAINED A NUMBER OF QUESTIONABLE ASSUMPTIONS. IN SHORT, ONLY THE IDA STUDY CORRECTLY ESTIMATES DoD NEEDS FOR DU AND NO NDS INVENTORIES ARE REQUIRED.

IDA RECENTLY COMPLETED ITS ANALYSIS OF DU REQUIREMENTS UNDER THE STOCKPILE THREE-YEAR WAR SCENARIO. THE IDA STUDY IS CLASSIFIED IN PART. HOWEVER, I CAN TELL YOU THAT IT CONCLUDES THAT STOCKPILING IS NOT NECESSARY FOR THREE REASONS: 1) NO NDS INVENTORIES ARE NEEDED TO MEET AIR FORCE REQUIREMENTS FOR GAU-8 AMMUNITION USED IN THE A-10 AIRCRAFT OR ANY FOLLOW-ON TO THE A-10; 2) THE ARMY'S REQUIREMENTS FOR DU FOR TANK ARMOR CAN BE MEET FROM FEASIBLE SOURCES OF SCRAP DU, AND

3) OTHER WARTIME REQUIREMENTS CAN BE MET BY WAR RESERVES AND FEASIBLE CAPACITY EXPANSIONS OF EVEN ONE DU FACILITY DURING THE LONG WARNING PERIOD NOW CONTAINED IN THREAT ASSESSMENTS OF A POSTULATED MASSIVE WAR WITH THE SOVIET UNION. IN ADDITION, DU STORAGE PRESENTS ENVIRONMENTAL PROBLEMS DUE TO ITS HAZARDOUS NATURE. THE IDA STUDY USED CONSERVATIVE ASSUMPTIONS FOR MANY OF ITS KEY VARIABLES. IN SHORT, DoD WOULD HAVE NO CUSTOMER FOR DU FROM NDS INVENTORIES IF DU WERE ADDED TO THE NDS. THE ARMY AND AIR FORCE HAVE CONCURRED WITH THE RESULTS OF THE IDA STUDY. THE STUDY CONTAINS SOME PROPRIETARY INDUSTRY DATA; HOWEVER, AFTER PROTECTING THESE SECTIONS, WE CAN MAKE THE CLASSIFIED VERSION OF THE STUDY AVAILABLE TO YOU. ON THE BASIS OF THE STUDY, DOD HAS SUBMITTED LEGISLATION THAT WOULD REPEAL SECTION 8095 OF THE DEPARTMENT OF DEFENSE APPROPRIATIONS ACT, 1991 (PUBLIC LAW 101-511) WHICH REQUIRES DoD TO PURCHASE 36 MILLION POUNDS OF DU FOR THE NDS. THAT PURCHASE IS CURRENTLY VALUED AT $180 MILLION. THE NATION HAS NO CUSTOMER AND NO USE FOR THE PURCHASE. WE APPLAUD YOUR INTRODUCTION OF LEGISLATION THAT WOULD REPEAL THE MANDATED DU PURCHASE.

AS A PARALLEL ISSUE, WE HAVE ALSO RECENTLY COMPLETED A DRAFT ASSESSMENT OF Ge REQUIREMENTS FOR THE NATIONAL DEFENSE. THE STUDY CONCLUDES THAT THERE IS NO NEED TO BUY ADDITIONAL Ge FOR THE NDS. BECAUSE A BILL HAS BEEN INTRODUCED WHICH WOULD MANDATE PURCHASE OF Ge FOR THE NDS, WE ARE ADVISING THIS COMMITTEE THAT THE NATION HAS NO

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WARTIME CUSTOMER FOR ADDITIONAL Ge AND, THEREFORE, NO NEED FOR THE PURCHASE.

FINALLY, WE ARE REASSESSING WHAT IS NEEDED TO OPERATE THE WILLIAM LANGER JEWEL BEARING PLANT WITH RESPECT TO FUTURE OPERATIONS. THE INSPECTOR GENERAL'S REPORT SUGGESTED THAT WE CURRENTLY HAVE AN OVERSUPPLY OF JEWEL BEARINGS; HOWEVER, P.L. 101-511, SECTION 8121 MANDATED THAT DoD PURCHASE $2.4 MILLION OF JEWEL BEARINGS FOR THE NDS. AS ONE RESULT, WE INFORMED THE DoDIG THAT WE WOULD CONDUCT FURTHER STUDIES OF JEWEL BEARING REQUIREMENTS. ANOTHER KEY FACTOR WE ARE INVEST'GATING IS THE CAPABILITY OF THE PLANT TO PRODUCE ADDITIONAL PRODUCTS, INCLUDING FOR EXAMPLE, FIBER OPTIC CONNECTORS WHICH MAY BE A CRITICAL FACTOR DURING A MOBILIZATION. ONE OF THE KEY ISSUES FOR ITEMS SUCH AS JEWEL BEARINGS AND FIBER OPTIC CONNECTORS THAT HAS NOT BEEN SUFFICIENTLY ADDRESSED IS ASSURED RELIABILITY OF FOREIGN SUPPLIERS. WHEN OUR ASSESSMENT OF THE PLANT SITUATION IS COMPLETED, WE CAN DECIDE ON WHAT WOULD BE REQUIRED TO OPERATE THE PLANT AND THE LEVEL OF OPERATIONS NEEDED.

IN ADDITION TO THE PREVIOUSLY SUBMITTED LEGISLATIVE RECOMMENDATIONS I HAVE MENTIONED THAT RELATE SPECIFICALLY TO REQUIREMENTS, DoD ALSO SUBMITTED LEGISLATIVE PROPOSALS ON MAY 30TH THAT RELATE TO THE ADMINISTRATION OF THE NDS PROGRAM. THESE PROPOSALS INCORPORATED INTO H.R. 2599 WOULD INCREASE DISPOSAL AUTHORITY FOR MATERIALS THAT ARE

ALREADY IN EXCESS OF REQUIREMENTS, INCREASE FLEXIBILITY IN IMPLEMENTING THE ANNUAL MATERIALS PLAN, REDUCE REPORTING REQUIREMENTS BY MAKING THE SEMI-ANNUAL REPORT ON OPERATIONS AN ANNUAL REPORT AND MAKING THE ANNUAL REQUIREMENTS REPORT AN EVERY OTHER YEAR REPORT, ALLOW FOR ROTATION OF INVENTORIES TO AVOID TECHNOLOGICAL OBSOLESCENCE, ALLOW TRANSACTION FUND MONIES TO BE USED FOR THE MAINTENANCE AND DISPOSAL OF NDS INVENTORIES, LIFT THE CAP ON DISPOSALS WHEN THE UNOBLIGATED BALANCE IN THE TRANSACTION FUND EXCEEDS $100 MILLION AND AUTHORIZE ADOPTION OF NEW NDS REQUIREMENTS AFTER A 30-DAY REVIEW PERIOD BY THE CONGRESS, SIMILAR TO THE PROCESS USED FOR CONGRESSIONAL ADOPTION OF OUR ANNUAL MATERIALS PLANS.

LET ME SAY A FEW WORDS ABOUT EACH OF THESE PROPOSALS. AS FOR DISPOSAL AUTHORITY, WE NEED TO DISPOSE OF DECLARED NDS EXCESSES THAT EXIST UNDER CURRENT REQUIREMENTS AND WE HAVE DIMINISHING DISPOSAL AUTHORITY FOR TEN MATERIALS. PROPER ASSET MANAGEMENT REQUIRES THAT WE PLAN AHEAD SO WE CAN MAINTAIN A CONSTANT PRESENCE IN THE MARKET PLACE. NEW DISPOSAL AUTHORITY IS NEEDED TO MAINTAIN CONTINUANCE OF THE ENTIRE PROGRAM UNDER STATUTORY GUIDELINES, INCLUDING AVOIDANCE OF UNDUE MARKET IMPACT. AS FOR REPORTING REQUIREMENTS, WE DO NOT BELIEVE THERE IS A NEED FOR A REPORT ON NDS OPERATIONS EVERY SIX MONTHS. WE BELIEVE THE REPORTS ARE VIRTUALLY REDUNDANT AND WASTE MANPOWER AND RESOURCES. A REPORT ONCE A YEAR SHOULD BE SUFFICIENT. SIMILARLY, AN NDS REQUIREMENTS REPORT SHOULD

NOT BE REQUIRED MORE THAN ONCE EVERY OTHER YEAR BECAUSE THREAT ASSESSMENTS AND PROJECTED FORCE LEVELS DO NOT NORMALLY CHANGE QUICKLY. WE ARE AGAIN RECOMMENDING ROTATION OF INVENTORIES TO AVOID TECHNOLOGICAL OBSOLESCENCE BECAUSE INCREASING TECHNOLOGICAL CHANGES IN INDUSTRY REQUIRE KEEPING INVENTORIES UP TO DATE TO MEET ONGOING INDUSTRIAL NEEDS. TRANSACTION FUND MONIES ARE NEEDED FOR MAINTENANCE AND DISPOSAL ACTIVITIES TO CONFORM WITH THE PRESIDENT'S BUDGET WHICH FUNDS O&M OUT OF THE REVOLVING FUND. LIFTING THE CAP ON DISPOSALS WHEN THE UNOBLIGATED BALANCE IN THE TRANSACTION FUND EXCEEDS $100 MILLION WILL ALLOW US TO DISPOSE OF MATERIALS WITHOUT THE NEED FOR ANNUAL LEGISLATIVE EXEMPTIONS TO THE CAP AND UPPER LIMITS ON DISPOSALS. IN THIS WAY, WE CAN RESPOND MORE QUICKLY TO RAPID CHANGES IN THE MARKET PLACE. AUTHORIZING ADOPTION OF NEW REQUIREMENTS AFTER A 30-DAY REVIEW PERIOD, SIMILAR TO THE PROCESS USED FOR AMP ADOPTION, WOULD AGAIN ALLOW US TO ENTER THE MARKET PLACE IN A RESPONSIVE FASHION WITHOUT WAITING UP TO A YEAR FOR THE CONGRESS TO APPROVE AND LEGISLATE DoD RECOMMENDATIONS. SINCE THESE PROPOSALS WOULD RESULT IN IMPROVED MANAGEMENT OF THE NDS PROGRAMS, THE DoD CONCURS IN H.R. 2599.

IN CLOSING, WE APPRECIATE THE DoDIG EFFORTS TO REVIEW THE NDS REQUIREMENTS PROCESS USED FOR DEVELOPING THE 1989 REPORT TO CONGRESS ON NDS REQUIREMENTS. ALTHOUGH MANY OF THE PREMISES USED FOR THE 1989 REPORT HAVE BEEN OVERTAKEN BY INTERNATIONAL EVENTS AND SIGNIFICANT

CHANGES IN THE DoD STRATEGIC PLANNING PROCESS HAVE OCCURED, A REFLECTION ON THAT EARLIER PERIOD OF TIME IS USEFUL. WE VIEW DoDIG EFFORTS AS USEFUL WHEN MANAGEMENT PROCESSES SHOULD BE IMPROVED. TO MEET OUR ROLE IN MANAGEMENT OF THE NDS, FOR EXAMPLE, IN RESPONSE TO THE DoDIG'S REPORT ON THE NDS REQUIREMENTS PROCESS, WE ARE PROVIDING A NUMBER OF TECHNICAL CORRECTIONS, LEGAL INTERPRETATIONS, OMITTED FACTS, LEGISLATIVE REFERENCES AND RATIONALE WITH WHICH TO SUPPORT AND COMPLETE A SOUND AND CORRECT ANALYSES NEEDED FOR FUTURE DECISION MAKING CONCERNING THE NDS PROGRAM.

THAT CONCLUDES MY PREPARED STATEMENT. I WILL BE HAPPY TO ANSWER QUESTIONS THE COMMITTEE MAY HAVE AT THIS TIME.

Appendix F: Senator Conrad Letter to the Inspector General, DoD, October 18, 1991

KENT CONRAD
NORTH DAKOTA
202-224-2043

COMMITTEES
AGRICULTURE, NUTRITION, AND FORESTRY
ENERGY AND NATURAL RESOURCES
BUDGET
SELECT COMMITTEE ON INDIAN AFFAIRS

United States Senate
WASHINGTON, DC 20510-3403

October 18, 1991

The Honorable Susan Crawford
Inspector General
Department of Defense
400 Army Navy Drive
Arlington, VA 22202

Dear Ms. Crawford:

I am writing to provide you with input that I hope will assist your office in drafting its forthcoming report that evaluates the William Langer Jewel Bearing Plant ("Plant").

Craig Obey of my staff recently met with several individuals from your office who have been scrutinizing the Plant as it relates to the defense requirements of the United States. While no individual stated that the final report would recommend shutting down the Plant, Mr. Obey received the distinct impression that such a recommendation is contemplated. I firmly believe that such a proposition would be an enormous mistake, and respectfully urge your office to consider productive alternatives.

As the North Dakota congressional delegation stated in its January 18, 1991 letter to Secretary Cheney, the Plant continues to play a vital role as the nation's sole source of jewel bearings. At the same time, it is obvious that requirements for jewel bearings are changing. Clearly, neither the I.G. nor any other entity can define current requirements or predict future requirements for jewel bearings with certainty. The United States will continue to need a viable, domestic source of jewel bearings and jewel bearing-related items as long as they are used in <u>any</u> component of <u>any</u> weapons system.

Consequently, I believe it is in the national interest for the Department of Defense to determine actual requirements for jewel bearings before any decision is made regarding the plant's future. An informed decision requires both that the end application of jewel bearings and jewel bearing-related items be determined, either by the I.G. or the Department of Defense, and that projected demand for jewel bearing production be assessed.

After actual jewel bearing demand is assessed, the Department of Defense should evaluate how the plant can best meet whatever need actually exists. The Department of Defense then can objectively determine whether changes in the Plant's production procedures are warranted or feasible. But it would be premature to alter

The Honorable Susan Crawford
October 18, 1991
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overall jewel bearing procurement practices prior to such an assessment.

Second, I have been informed that some hostility toward the Plant exist in the I.G.'s office, because the Plant is government-owned. I agree that it is preferable for the government to refrain from competing with private enterprises wherever possible. But it is important to keep in mind the purpose for the Plant. The Plant's principal purpose has always been to guarantee a reliable domestic source of jewel bearings, rather than subject basic U.S. defense needs to the whims of private producers. The nature of jewel bearing production requires that the Plant be capable of operating at production levels that are much more flexible than many private enterprises could tolerate.

At the same time, there may be some merit to considering a gradual shift of the Plant to private ownership. However, the implications of such a change should be considered very carefully. It would be inadvisable to contemplate any shift to private ownership unless the Federal government provides the intermediate support necessary to guarantee the Plant's continued viability. In addition, I understand that some may advocate selling the Plant into minority ownership so that it can be admitted into the Small Business Administration's 8(a) program. While I believe such an approach is appealing on its face, it could be difficult to accomplish. It is very difficult for many small business enterprises, particularly Indian enterprises, to gain admittance into the 8(a) program. Therefore, if the I.G. report recommends such an approach, it should also recommend assisting any new private owner in gaining admission into Federal programs such as 8(a).

For example, the Federal government could provide technical and administrative assistance. In addition, the Federal government might provide financial incentives for a private entity to continue to produce jewel bearings at a reduced level, if the Department of Defense ultimately determines that a reduced level of production is warranted. The Federal government could also assist the Plant in identifying new product lines on which it could increase production if the need for jewel bearings decreases in the future. Product development assistance would help the Plant remain financially stable during the transition, thus guaranteeing a domestic source of jewel bearings as long as they are needed.

The Honorable Susan Crawford
October 18, 1991
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Whether or not the report ultimately recommends an ownership transfer, I strongly urge you to recommend that the Federal government assist the plant with developing additional product lines. For example, the government could assist the plant in its current effort to develop fiber-optic connectors.

Finally, I understand that some individuals in your office are skeptical of the Plant's dosimeter operation, in large part because it competes with certain large private enterprises. However, I urge you to remember the Plant's exemplary track record in dosimeter production. The I.G. report should not dismiss the Plant's many accomplishments simply because of the philosophical bias of a few individuals.

If the I.G. report makes any recommendations regarding the dosimeter operation, it should endorse the removal of the statutory restriction limiting the Plant's allowable dosimeter production. Any recommendation to shift the Plant to private ownership strengthens the argument for removing the restriction. In addition, the cost to the American taxpayer of dosimeter procurement will decrease as the Plant's production volume increases.

In conclusion, a balanced appraisal of the Plant's future potential will benefit all concerned. The Department of Defense stands to benefit by retaining a valuable supplier of an item that is still utilized in our national defense. The taxpayers will benefit from any resulting reduction in procurement costs. And the people of Rolla, North Dakota and the Turtle Mountain Indian Reservation will benefit from the continued availability of much needed employment.

Thank you for considering my views. Please feel free to contact my office with any questions.

Sincerely,

KENT CONRAD
United States Senator

KC:wcdo

Appendix G: Report Distribution

Office of the Secretary of Defense

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House Committee on Government Operations
House Subcommittee on Legislation and National Security, Committee on Government Operations
House Committee on Armed Services
House Subcommittee on Seapower and Critical Materials, Committee on Armed Services
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Other

Institute for Defense Analyses
Lowes Corporation
Bulova Watch Company, Incorporated
General Manager, William Langer Jewel Bearing Plant

PART V: MANAGEMENT COMMENTS

Deputy Assistant Secretary of Defense (Production Resources) Comments

PRODUCTION AND LOGISTICS

OFFICE OF THE ASSISTANT SECRETARY OF DEFENSE

WASHINGTON, DC 20301-8000

28 APR 1992

MEMORANDUM FOR DEPUTY ASSISTANT INSPECTOR GENERAL FOR AUDITING

SUBJECT: Draft Supplemental Report, "Utilization of the William Langer Jewel Bearing Plant," Project No. ORB-0009102

Attached are our comments on your Supplemental Report to the audit of the William Langer Bearing Plant. We concur in whole or in part with all of the recommendations.

Nicholas M. Torelli, Jr.
Deputy Assistant Secretary
(Production Resources)

Attachment

RECOMMENDATION A.1.a: We recommend that the Deputy Assistant Secretary of Defense (Production Resources) direct an objective and prompt evaluation of the qualitative and quantitative requirements for jewel bearings and jewel bearing related items for a military emergency. This review should specifically determine what items are known to be critical to weapon systems, and those items and quantities should be clearly reported in the results of the review. Computed requirements should specifically not include forced purchases through FAR provisions, and should recognize declining future needs for bearings. (Partially replaces Report No. 91-029, Rec A.1.b)

OSD COMMENTS: Concur. On January 1, 1992, DLA requested that the Logistics Management Institute (LMI) conduct a comprehensive study of the operations of the William Langer Plant. This study specifically includes an analysis of the need for a domestic jewel bearing production capability. The LMI report should be completed by June 1, 1992. OASD(P&L) expects to complete its review of the report and to begin implementation of appropriate recommendations by December 1, 1992. The Director for Defense Procurement has agreed to delete the FAR provisions if the OASD(P&L) analysis indicates that such action will not adversely affect the defense industrial base.

RECOMMENDATION A.1.b: We recommend that the Deputy Assistant Secretary of Defense (Production Resources) establish a means of continually or periodically receiving data on the critical wartime use of jewel bearings and jewel bearing related items so that requirements for these items are treated equitably with requirements for other comparable critical components, especially including those other components not likely to be readily available domestically. (Partially replaces Report No. 91-029, Rec A.1.b.)

OSD COMMENTS: Concur in part. The LMI report, referred to above, will assist OASD(P&L) in establishing a baseline for evaluating wartime requirements for jewel bearings and related items. However, the Strategic and Critical Materials Stock Piling Act (50 U.S.C. 98 et seq.) specifies certain planning assumptions and guidance for review of national emergency requirements for materials designated as "strategic and critical." Therefore, we cannot guarantee that the planning guidance will be the same as for "other comparable critical components" that are not designated as "strategic and critical" materials.

RECOMMENDATION A.1.c: We recommend that the Deputy Assistant Secretary of Defense (Production Resources) assess the cost of regularly acquiring and retaining contingency quantities of currently needed war reserve items from other sources as determined in above, and compare this cost to the cost of (1) continuing to operate the Plant actively at a level sufficient to produce reasonable surge requirements and thereby being able to stockpile minimal quantities; (2) continuing to operate the Plant with a skeleton staff to maintain minimal active operating and machine repair skills, and produce only emergency small quantities of non-stocked items, still requiring stocks in Stockpile; (3) deactivating the Plant by retaining it as a mobilization asset, requiring larger stocks in the Stockpile to meet requirements until the Plant could be activated and begin producing; and (4) closing the Plant entirely, relying on other sources, and stockpiling for a larger contingency, on the same basis as stockpiling other critical materials not available domestically, based on JCS war planning guidance.

OSD COMMENTS: Concur in part. Upon receipt and analysis of the LMI recommendations, we will be in a better position to determine which of the alternatives would best serve defense needs. However, as we noted above, jewel bearings are designated as a "strategic and critical" material under the Strategic and Critical Materials Stock Piling Act. The Act's planning guidance will be used in determining requirements, not simply JCS "war planning" guidance. Therefore, in assessing the possibility of acquiring jewel bearings from "other sources," the reliability of these potential "other sources" will be considered if they are foreign sources.

RECOMMENDATION A.1.d: We recommend that the Deputy Assistant Secretary of Defense (Production Resources) if, in Recommendation A.1.c., above, option (1), (2), or (3) appears to be a cost favorable option, confirm whether domestically produced raw material can be obtained in the quality, quantity, and time needed to support a domestically self-sufficient mobilization base capability; determine the most cost-effective method of domestically cutting the raw material to produce blanks, and if peacetime investment is the only assured option for ensuring a viable blank cutting capability in wartime, include the cost of that option in the cost comparison.

OSD COMMENTS: Concur. We will reexamine the 1982 DNSC analysis (made in response to a GSA IG recommendation) which confirmed that at that time "sufficient domestically produced raw material can be obtained in the quality and time needed to support a domestically self-sufficient mobilization base capability." This new analysis will be expanded to include the 16 million carats of synthetic

sapphires and rubies for which there is no goal and, consequently, for which disposal authority is being requested.

We will also calculate the costs involved in producing blanks as opposed to stockpiling them, noting however, that blank producing equipment has been ordered and in some cases already installed at the Plant.

RECOMMENDATION A.1.e: We recommend that the Deputy Assistant Secretary of Defense (Production Resources) continue to defer obligations of funds for the purchase of tooling and repair facilities at the William Langer Jewel Bearing Plant until the sequential actions under Recommendation A.1.a, A.1.c., A.1.d., and/or A.1.e produce a determination as to whether the Plant should remain in operation and whether alternatives dictate that internal blank-producing facilities are needed. Unless the option plan dictates such an investment, release the funds for alternative use. (Replaces Report No. 91-029, Recommendation A.2)

OSD COMMENTS: Concur. We will defer further obligations of funds in this area. However, as noted in our response to Recommendation A.1.e. immediately above, the bulk of the funds available for this project have already been obligated in this and previous fiscal years.

RECOMMENDATION A.1.f: We recommend that the Deputy Assistant Secretary of Defense (Production Resources) draw a conclusion as to the optimum future status of the Plant based on the results of recommendations A.1.a, A.1.c., and A.1.d above, and submit a proposal in the Department of Defense Legislative Program to amend Public Law 90-0469 to operate the Plant at the indicated reduced level or be closed, as appropriate. (Replaces Report No. 91-029, Recommendation A.1.a)

OSD COMMENTS: Concur in part. A determination on any appropriate legislative changes that might be required will not be possible until the ASD(P&L) has made a determination as to the most appropriate method for meeting jewel bearing requirements. The recommendations of the LMI report will be considered in making this determination.

RECOMMENDATION B: We recommend that the Deputy Assistant Secretary of Defense (Production Resources) include a proposal in the Department of Defense Legislative Program to amend Public Law 100-440 that will return management responsibility of the dosimeter operation at the William Langer Jewel Bearing Plant, to include contract award and administration, to the Federal Emergency Management Agency. (Same as Report No. 91-029, Recommendation B)

Deputy Assistant Secretary of Defense (Production Resources) Comments

OSD COMMENTS: Concur. There is no valid military requirement for this capability. The Military Departments have not identified dosimeters as a "war stopper" item requiring special consideration in industrial base planning. Furthermore, as there are existing domestic producers of dosimeters, expansion of the GOCO facility beyond a pilot capability would be in violation of OMB Circular A-21.

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