Review Of Selected Operations At Joliet Army Ammunition Plant
Dear Mr. Secretary:

The General Accounting Office recently completed a review of operations at the Joliet Army Ammunition Plant (JAAP), Joliet, Illinois, a Government-owned installation operated by Uniroyal, Inc., under cost-plus-fixed-fee contract DA-11-173-AMC-62(A). The Army Procurement and Supply Agency (APSA) has management responsibility for the activities of JAAP and is also a tenant activity at JAAP. Contract -62(A) is administered by the Commanding Officer of JAAP, who also acts as the Contracting Officer's Representative (COR).

During our review we identified several aspects of Uniroyal's operations where costs could be reduced by as much as $615,000 annually. These were: (1) the use of economic order quantity techniques in managing the maintenance, repair and operations inventory; and, (2) better utilization or elimination of certain indirect labor, namely, warehousemen, laundry operators, firefighters and medical personnel. Uniroyal was in general agreement with our observations, revising its procedures to include the application of economic order quantity techniques and initiating action to improve the utilization of warehousemen and laundry operators. With respect to the firefighters and medical personnel, the contractor indicated that further review would be made and appropriate corrective actions taken.

We identified other areas where annual operating costs could possibly be reduced significantly. These included (1) motor pool operations, (2) operation of oleum producing facilities, and (3) funding of capital items. These matters were discussed with APSA officials and their comments are noted below, as appropriate.

POTENTIAL SAVINGS IN MOTOR POOL OPERATIONS

At the time of our review, both the COR and Uniroyal motor pools were providing on-call chauffeur service to O'Hare International Airport, about 65 miles from JAAP. Pick-up and delivery
points which could be at JAAP, a local motel or at the travelers residences, as well as the time of pick-up, are at the discretion of the travelers.

Commercial limousine service between Joliet and O'Hare is limited to two round trips daily except weekends. It appears that the present commercial service may not be adequate for accommodating APSA travelers.

Based on our analysis of data available, it appears that significant savings may be realized, with little or no degradation in service to travelers, if a scheduled vehicle service were to be substituted for the on-call service now being provided. Records were not available showing the total annual mileage driven between JAAP and O'Hare but, based on tests of available data for selected periods, we projected the mileage at about 500,000 annually. APSA has estimated that the cost of the chauffeur service at about 38-3/4 cents a mile; therefore, we estimated the total cost of the on-call chauffeur service to O'Hare approximates $194,000 a year.

We believe that the use of sedans on a scheduled basis, with reimbursements for local travel to specified pickup points, would result in satisfactory service for routine travel requirements at substantially reduced costs. For example, five round trips a day, 7 days a week would cost about $37,000 annually or about $157,000 less than the on-call chauffeur service. This savings would be reduced somewhat by the cost of travel (taxi or privately-owned vehicles) to and from pickup points. Also, when necessary, the service could be supplemented by available commercial limousine service.

We discussed our findings with APSA officials and they subsequently conducted a study from which they concluded that the cost of commercial service exceeded the cost of the JAAP on-call chauffeur service. The APSA study, based on selected trips made during June, July, and August 1970, is summarized below, followed by our evaluation.

Cost of commercial service

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost</th>
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</thead>
<tbody>
<tr>
<td>Transportation fares (including taxi-cab fares to pick-up/delivery points)</td>
<td>$18,700a</td>
</tr>
<tr>
<td>Increased lost productive time and per diem (in excess of costs of using on-call chauffeur service)</td>
<td>25,700</td>
</tr>
<tr>
<td>Total commercial service</td>
<td>44,400</td>
</tr>
<tr>
<td>Cost of JAAP on-call chauffeur service</td>
<td>34,700</td>
</tr>
<tr>
<td>Cost of commercial service in excess of on-call chauffeur service</td>
<td>$9,700</td>
</tr>
</tbody>
</table>

aIncludes cost of taxicab between residence and airport if limousine service was not convenient.
Based on this study of the cost of commercial service, APSA concluded that it was not economically practical for JAAP to provide its own regularly scheduled service.

We believe that APSA overestimated the overall cost of commercial service and did not adequately consider the economics of providing regularly scheduled service supplemented by commercial service. Furthermore, in its study:

- APSA overestimated the per mile cost of taxi fares; as a result, the cost of commercial transportation fares were overestimated by $3,600.

- APSA estimated the cost of additional lost productive time and per diem on the assumption that under the JAAP chauffeur service all travel began and terminated at times that held these costs to the absolute minimum. This assumption, however, was not realistic. For example, we noted that only 8 percent of the trips to O'Hare included in the APSA study originated on the JAAP post; the remaining 92 percent originated off-post, usually at the residence of the travelers, indicating that the travelers were not engaged in productive work at the time their travel began.

Conclusion and recommendation

We believe that the costs of transporting travelers to O'Hare Airport may be significantly reduced by replacing the on-call chauffeur service with regularly scheduled service supplemented by commercial limousine service, if necessary. Unlike commercial transportation (the only alternative considered by APSA in its study), regularly scheduled service by JAAP would be controlled by APSA and could be scheduled during predominate travel times.

In view of the results of our limited review, and the limitations of the APSA study, we recommend that the Secretary direct APSA to reexamine the feasibility of providing regular schedule service to O'Hare instead of the on-call chauffeur service.

POSSIBLE SAVINGS THROUGH UNIROYAL OPERATION OF OLEUM FACILITIES

As directed by the Army, Unroyal purchases oleum, a chemical used in the manufacture of TNT, from Wilson Pharmaceutical and Chemical Corporation under a negotiated cost-plus-fixed-fee subcontract. Wilson produced the oleum in Government-owned facilities located within the JAAP complex and adjacent to acid producing facilities operated by Unroyal. Wilson also sells spent acid from
the Uniroyal manufacturing process in return for a portion of the net profits from those sales. On the basis of 1970 requirements, we estimated that the overall cost of TNT production at JAAP can be reduced by over $400,000 annually if the Secretary of the Army would terminate the lease with Wilson, permit Uniroyal to operate the presently leased oleum facilities, and if Uniroyal marketed its own spent acid.

**Leased oleum facilities**

The Department of the Army leased the three oleum producing units to a commercial chemical company in 1959, when the facilities were in standby. In 1962, the lessee advised the Army that it could no longer carry on operations and the parties terminated the lease.

In March 1964, Wilson and the Army (Corps of Engineers) executed a lease for the oleum units. The lease provided that Wilson was to operate one unit for commercial production of sulphuric acid and maintain two units in standby. The parties agreed to a lease period of 5 years effective September 15, 1964. The agreement provided Wilson with an option to renew the lease for three successive 5-year periods and, in 1969, Wilson exercised its option for an additional 5 years. The lease, and the provisions of 10 U.S. C. 2667 (b)(3) and (4) permit the Secretary of the Army to terminate the agreement by giving 30 days written notice to the lessee. The terms of the contract between Uniroyal and Wilson (see below) also permit termination whenever the contracting officer under the prime contract determines that such action is in the best interests of the Government.

**Army directed purchase of oleum**

In 1965, Uniroyal indicated an interest in operating the leased facilities to produce oleum needed for the production of TNT and APSA considered terminating the lease with Wilson. In lieu of terminating, however, the Army directed Uniroyal to purchase oleum from Wilson to the extent of the latter's production capacity. Uniroyal and Wilson negotiated a CPFF subcontract which provided that Wilson would sell its oleum production to Uniroyal and would market spent acid for Uniroyal. The current subcontract specifies fees to Wilson of $0.50 a ton for delivered oleum and 25 percent of the net profit from sales of spent acid. Additionally, Wilson's reimbursed operating costs include fire insurance premiums which amounted to about $14,200 annually. The insurance premiums, fees on delivered oleum, and profit on acid sales are ultimately charged to the Government under the CPFF prime contract -62(A).
New facilities

As part of a plant modernization program, Uniroyal had submitted proposals for construction of two new oleum and sulphuric acid producing plants. On June 30, 1970, the Army awarded a contract for construction of the first of the two plants which will be operated by Uniroyal. These will eventually replace the older inefficient facilities presently operated by Wilson.

During our review, Uniroyal officials indicated that they were still interested in operating the oleum producing facilities leased to Wilson. Uniroyal officials stated that the capacity of the new plant, which is expected to be operational in June 1972, will not be sufficient to provide enough oleum to satisfy expected maximum TNT requirements. Therefore, until a second plant is constructed and operational, Uniroyal will continue to purchase oleum from Wilson under the existing subcontract.

At the time of our review, we estimated that, on the basis of 1970 oleum requirements, JAAP operating costs could be reduced by as much as $467,000 annually if Uniroyal operated the JAAP oleum facilities during the modernization period. The estimated savings in operating costs consisted of the Wilson share of net profits from the sale of spent acid ($323,500), Wilson fees on oleum ($129,300) and reimbursements for the cost of fire insurance premiums included in Wilson's costs ($14,200). The cost of administering the lease agreement and the subcontract with Wilson would also be eliminated.

In response to our inquiry, APSA stated that it would not attempt to alter the existing arrangement. APSA pointed out that new oleum facilities were planned for JAAP and Uniroyal would require a decreasing quantity of oleum from Wilson through 1973. APSA further commented that it believed that the Uniroyal fees plus its cost of a sales force and developing a market for the spent acid would equal or exceed the Wilson fee.

Conclusions and recommendations

The current lease agreement with Wilson was negotiated on the basis of utilization of the facilities for commercial production of sulphuric acid rather than for the production of oleum. When Uniroyal expressed an interest in the facilities, in 1965, Wilson offered to produce the oleum.

The production of oleum for TNT, however, is an integral part of the explosives manufacturing operations now managed by Uniroyal. It would therefore appear that, from the standpoint of both effective management and reduced costs, Uniroyal should be operating the oleum...
facilities. Furthermore, upon completion of the new oleum production facilities in June 1972, there will be two contractors producing the same product (oleum) at the same location unless Wilson's lease is terminated.

Operating the old oleum facilities would be a relatively minor expansion of the Uniroyal management of JAAP. The Uniroyal fee is paid primarily on the basis of the quantity of end products accepted, not on the quantity of ingredients manufactured. Therefore, in our opinion, transfer of operating responsibilities should not result in a significant increase in fees to Uniroyal. Also, it appears to us that Uniroyal should be able to effectively develop markets for spent acid since it is in the chemical industry.

We recommend that the Secretary of the Army review the present contractual arrangement for producing oleum and consider our findings along with the future operating potential of JAAP. Further, in the absence of any compelling reasons to continue the current arrangement, and, if appropriate, we recommend that the Secretary consider termination of the lease agreement with Wilson and permit Uniroyal to assume responsibility for operating the old oleum facilities.

FUNDING RESTRICTIONS PREVENTED REDUCTION IN OPERATING COSTS

During our review we noted several instances in which funding restrictions had been instrumental in preventing Uniroyal from making capital improvements that were economically justified.

Since 1966, Uniroyal has leased trailer complexes for use as administrative offices and employee change-house locker facilities. The trailers were leased under contracts which permitted a portion of the rental payments to be applied toward purchase of the trailers.

Our review disclosed that it was economically advantageous to purchase the trailers rather than to continue paying rentals. For example, the rentals paid for one complex had exceeded the purchase price by $4,800. In another instance, an expenditure of $11,800 to purchase trailers would have eliminated future rental costs of about $20,000 annually.

We also noted that the Defense Contract Audit Agency (DCAA) issued two reports in February 1969, stating that the installation of modern laundry equipment and automatic car wash equipment could reduce operating costs by about $267,000 annually. In both instances, DCAA stated that savings would begin to be realized during the first year of operations.
Uniroyal officials and the COR agreed that purchasing the trailers, the laundry equipment and automatic car wash equipment would reduce operating costs, but that funding restrictions had precluded procurement. They stated that the trailers are considered to be real property, and since funds for acquisition of real property are limited, they have been unable to obtain approval to procure the trailers.

After receiving the DCAA reports, Uniroyal requested funds for purchasing the trailers, laundry equipment and automatic car wash equipment, but in September 1969, APSA returned the requests stating previously approved purchases of other equipment would have to be withdrawn before the requests for the laundry equipment and automatic car wash equipment could be considered. New requests had not been submitted at the time of our review; however, Uniroyal personnel and the COR stated that revised requests for funds would be submitted.

Conclusions and recommendation

In our opinion, investment decisions should be based primarily on the ability to recover costs and realize future savings, not on the technicalities of funding procedures. We believe it would have been economically advantageous to approve the purchase of the trailers, laundry equipment and automatic car wash. We, therefore, recommend that the Secretary take action to permit capital improvements when they result in the reduction of current operating costs and the rapid recovery of investment.

We would appreciate your views on the matters presented in this report as well as advice as to any actions taken or contemplated by the Department on the matters discussed.


Sincerely yours,

[Signature]

Director

The Honorable
The Secretary of the Army