

*U.S. DEPARTMENT OF COMMERCE
Office of Inspector General*



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*NATIONAL OCEANIC AND
ATMOSPHERIC ADMINISTRATION*

*Weather Service Modernization
Contract To Be Reduced*

Audit Report No. ENT-8749-7-0001 / March 1997

*Office of Audits
Environment and Technology Division*



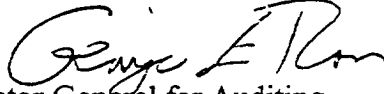


UNITED STATES DEPARTMENT OF COMMERCE
Office of Inspector General
Washington D C 20230

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MEMORANDUM FOR: Dr. Elbert W. Friday, Jr.
Assistant Administrator for Weather Services
National Oceanic and Atmospheric Administration

William O. Mehuron
Director, Systems Acquisition Office
National Oceanic and Atmospheric Administration

FROM: George E. Ross 
Assistant Inspector General for Auditing

SUBJECT: Weather Service Modernization Contract to Be Reduced
Final Audit Report No. ENT-8749-7-0001

The Office of Inspector General has completed a limited review of the National Oceanic and Atmospheric Administration's use of support contractors to assist with the National Weather Service's modernization and restructuring effort. NOAA has used support contractors in this capacity since 1983. To date, NOAA has spent over \$34 million on these services, with another \$28 million projected as the ceiling cost of the recently recompleted contract.

Our review focused on the accelerated level of expenditures on the recently completed contract and the planned expenditures for the follow-on contract. Specifically, we sought to determine whether administrative controls are in place to ensure that contract expenditures are proper. We found that although the contract, originally scheduled to expire in May 1997, appeared to be well managed, it nevertheless ran out of funds early in fiscal year 1997. According to NWS officials, unforeseen complications with deploying new systems and congressionally mandated certification procedures resulted in the need for increased contractor support.

We also found that the level of effort projected for the new contract, awarded in September 1996 and scheduled to run through 2001, appeared too high for the phasing-down period of the modernization effort. We discussed our observations with NOAA officials, who stated that the projected level of effort could be reduced without seriously affecting the modernization. Consequently, NOAA agreed to reduce its projected costs by \$6.3 million. Because of our agreement on reducing the projected level of effort, this report is issued in final with the consent of NWS and NOAA's System Acquisition Office.

We appreciate the cooperation and courtesies extended to us by program and procurement officials during the review.

Introduction

NWS is undergoing a transition that involves consolidating approximately 300 field offices into 119 weather forecast offices and deploying state-of-the-art technology. To assist in this effort, NOAA has been acquiring system engineering and technical support services through level-of-effort contracts. Under these contracts, costs are incurred as services are acquired. The contracting officer initially negotiates the estimated total contract cost, including option years, based upon minimum and maximum levels of effort and predetermined labor rates for the various types of skills expected to be needed. As program needs arise, task orders are issued, and specific resource estimates are negotiated for each task. The contract remains in effect until the maximum level of effort is reached or the contract expires, whichever comes first.

A previous review of an earlier contract disclosed that NWS had allowed the contractor to use higher skilled employees than agreed to, increasing the cost of the services acquired. When we learned that NOAA had reached the 1992 contract's dollar limit earlier than planned, we became concerned that a similar situation had occurred. As a result, we began this review of the 1992 support contract and its replacement contract.

Purpose and Scope of Review

The purpose of our review was to determine the reasons for the early completion of the 1992 contract and to assess the validity of the level of effort and costs proposed in the follow-on contract. We limited our scope to reviewing contract-related documents, analyzing labor hours and costs charged to the completed contract, and evaluating the acquisition plan, cost estimates, and other documentation for the follow-on contract. We also interviewed NWS managers, Systems Acquisition Office managers, NOAA contracting officials, and contract employees. We conducted our audit from December 1995 through November 1996 at NOAA offices in Silver Spring, Maryland, and Sterling, Virginia.

Because of the limited scope of our work, we confined our review of internal controls to those associated specifically with the 1992 contract. We found them adequate to ensure that costs and task orders were proper. We did not evaluate the reliability of computer systems because we did not rely on computer-generated information. We did not perform any compliance testing because there were no specific laws or regulations associated with the review. Our work was conducted in accordance with generally accepted government auditing standards. This audit was performed under the authority of the Inspector General Act of 1978, as amended, and Department Organization Order 10-13, dated May 22, 1980, as amended.

Concerns About the 1992 Contract Proved Unfounded

We determined that NOAA had properly managed the 1992 contract and that it reached its dollar limit earlier than expected as a result of additional work assigned to the contractor. In 1992, when the contract was awarded, NOAA anticipated that approximately \$19 million would cover the cost of the five-year contract, which was to expire in May 1997. However, NOAA officials later realized that funds would be expended earlier than the anticipated expiration, and in July 1995 approved a plan to acquire a new contractor by the beginning of fiscal year 1997. Based on our audit of the prior contract (see audit report no. NOA-4646-2-0001, September 1992), we were concerned that the funds had been expended due to an unsupported increase in skill level. However, our review disclosed that this was not the case. In fact, NOAA had used the services faster than planned primarily because of problems with the deployment of the new systems and congressionally mandated certification procedures for closing old weather offices. As a result, we plan no further review in this area.

Agreement Reached on Reducing Level of Effort for Follow-on Contract

We reviewed the follow-on contract's level of effort and found that it appeared too high for the phasing-down period of the modernization effort. We discussed our concerns with Automated Surface Observing Systems (ASOS) and Transition Program Support managers, who, upon reevaluating the proposed level of effort, agreed that it could be reduced without seriously affecting the modernization.

Automated Surface Observing Systems

The ASOS program office is responsible for deploying the ASOS systems that should be in place in 1997. However, we found that the office did not reduce its projected use of the contractor as the systems were deployed. According to one program official who has since retired, the level of effort remained unchanged to cover potential delays in the deployment schedule. When this situation was brought to their attention, program officials immediately reduced the estimate to coincide with the current deployment schedule. This reduced the follow-on contract's level of effort for ASOS acquisition support from 45 staff years to about 12 over the five-year life of the contract. The chart below shows the estimated difference in staffing between the NOAA's original and revised projections for ASOS acquisition.

Number of Projected Staff Years for ASOS Acquisition						
Proposal	Contract Year #1	Contract Year #2	Contract Year #3	Contract Year #4	Contract Year #5	TOTAL
Original	9	9	9	9	9	45
Revised	9	3	0	0	0	12

Source: OIG analysis of NOAA data.

Transition Program Support

Various program offices are responsible for managing the transition of the field offices. Transition activities include preparing and monitoring modernization budgets and schedules, monitoring weather office construction plans and schedules, communicating the progress of the transition and answering questions from interested parties, and maintaining transition-related data bases. The level of effort requested by the program offices to accomplish these tasks increased over the contract performance period. However, we expected to see a decrease as the transition comes to a close.

In reviewing the tasks proposed in the follow-on contract, we noted that by performing some tasks in-house and eliminating others, this level of effort could be reduced. For instance, one task included developing a national maintenance plan for newly constructed offices. We believe that this task could be performed by NWS facilities staff in the Office of Systems Operations, with the assistance of field employees who have been maintaining the old weather offices. Another task included construction site survey work that we believe could be eliminated from the follow-on contract because the work is already being managed by the Special Engineering Projects Office. We discussed these and other observations with NWS program officials. Accordingly, program officials reevaluated and subsequently reduced their projection for the follow-on contract's level of effort from 260 staff years to about 203 over the five-year life of the contract. The chart below shows the estimated difference in staffing between the original and revised projections for the Transition Program Support area.

Number of Projected Staff Years for Transition Program Support						
Proposal	Contract Year #1	Contract Year #2	Contract Year #3	Contract Year #4	Contract Year #5	TOTAL
Original	48	54	54	52	52	260
Revised	42	48	46	35	32	203

Source: OIG analysis of NOAA data.

Recommendation

During this review, we recommended, and NOAA program managers agreed, that NOAA should reevaluate the level of effort projected for the ASOS and Transition Program Support areas.

Funds to Be Put to Better Use

As a result of our recommendation, projections for ASOS Acquisition and Transition Program staffing requirements during the follow-on contract were reduced from 305 to 215 staff years over the five-year contract (see previous charts). Reducing the projected level of effort will reduce the NOAA cost projections by \$6.3 million. NOAA officials pointed out that the recent budget reductions made it uncertain whether funding would be available to support even these reduced projections. Memorandums from the ASOS program office and the Transition Program Support area outline the revised level of effort. The following chart shows the projected cost reductions by contract year.

Cost Reductions Resulting from Revised NOAA Projections (\$ x 1000)						
Estimated Reductions for:	Contract Year #1	Contract Year #2	Contract Year #3	Contract Year #4	Contract Year #5	TOTAL
ASOS Acquisition	\$ 0	\$ 380	\$ 603	\$ 627	\$ 652	\$ 2,262
Transition Program Support	316	410	608	1,217	1,523	4,074
Total						\$ 6,336

Source: OIG analysis of NOAA data.