



Office of Inspector General
Washington, DC 20546-0001

November 30, 2007

TO: Associate Administrator for Institutions and Management
Director, Glenn Research Center

FROM: Assistant Inspector General for Auditing

SUBJECT: Addendum to Final Memorandum on Observations on the Review
and Approval of Glenn Research Center's Relocation of the
Cryogenic Components Laboratory Facility (Report No. IG-07-027,
September 28, 2007)

We requested additional management comments on the subject final memorandum because we did not consider the comments on Recommendation 1 to be responsive. We received additional management comments on October 17, 2007 (see the Enclosure), and subsequently met with representatives from the Office of Facilities Engineering and Real Property (FERP) Division and Glenn Research Center (Glenn), who provided additional documentation that met the intent of our recommendation. Therefore, we agreed that the recommendation was resolved and closed. Following is a summary of management's comments and our evaluation of those comments.

Recommendation 1

In our draft report, we recommended that Glenn fully inspect the Cryogenic Components Laboratory (CCL) facility to determine the extent of work needed to complete it and the estimated cost for completion.

Draft Report Comments. In NASA's August 21, 2007, response to the draft report, the Associate Administrator for Institutions and Management concurred with Recommendation 1, stating that inspection of the CCL facility was already occurring as an integral part of the Research Systems Validation and Acceptance Criteria (RSVAC) checkout process. The RSVAC process consists of integrated system testing that includes rigorous piping system cleanliness testing, a review of piping systems and documentation, and correction of construction deficiencies in preparation for research testing. The Associate Administrator further stated that commissioning plans and cost estimates are updated monthly as a regular part of the project management process, so the extent of the work needed to complete the project is assessed frequently and adjusted as conditions warrant. He added that in the course of completing the CCL commissioning project, many unanticipated latent construction defects were identified and corrected and that the commissioning process may find more defects requiring correction.

We did not consider management comments on Recommendation 1 to be fully responsive because they did not address the need to adequately inspect the CCL facility and prepare

a cost estimate for completion of the entire facility. We noted that Glenn estimated that it needed \$909,000 to complete the facility. However, without fully inspecting the facility, Glenn does not know if this amount is a realistic estimate. Therefore, in our final report, we requested additional comments on Recommendation 1.

Final Report Comments. NASA's Associate Administrator for Institutions and Management provided additional comments on October 17, 2007, stating that through its scrutiny of the project's commissioning plans and cost estimates, NASA is aware of the deficiencies of the CCL facility. Further, he stated that the ongoing commissioning and inspecting process satisfied the recommendation to develop a cost estimate to complete the facility, and he did not recommend going beyond this level of effort.

On November 6, 2007, we met with FERP and Glenn representatives, who agreed to provide documentation to support that a facility inspection was performed and cost estimates were prepared prior to NASA assuming responsibility of the CCL facility in 2005. That documentation, which was not provided to the audit team during the audit, provides a baseline for completing the facility and preparing the monthly commissioning plans and cost estimates. Taken together, these documents provide a reasonable basis for estimating the cost to complete the facility and meet the intent of Recommendation 1. We consider this recommendation resolved and closed.

We appreciate the courtesies extended the audit staff during the review. If you have any questions, or need additional information, please contact Ms. Carol Gorman, Space Operations and Exploration Director, at 202-358-2562 (carol.n.gorman@nasa.gov), or Mr. Ashton Coleman, Project Manager, at 202-358-3860 (ashton.coleman@nasa.gov).



Evelyn R. Klemstine

Enclosure

cc:

Deputy Administrator
Associate Deputy Administrator
Associate Administrator
NASA Office of General Counsel
Assistant Administrator for Infrastructure and Administration
Director, Facilities Engineering and Real Property Division
Chief Counsel, Glenn

Management's Additional Comments

National Aeronautics and
Space Administration
Headquarters
Washington, DC 20546-0001



October 17, 2007

Facilities Engineering and Real Property Division

TO: Assistant Inspector General for Auditing
FROM: Associate Administrator for Institutions and Management
SUBJECT: Response to Final Memorandum on Observations on the Review and Approval of the Glenn Research Center's (GRC) Relocation of the Cryogenic Components Laboratory (CCL) Facility (Report No. IG-07-027, Assignment No. A-06-002-01) September 28, 2007

The Office of Infrastructure and Administration, Facilities Engineering and Real Property Division and GRC have reviewed your memorandum and are providing this consolidated Agency response.


The Office of Inspector General requested that management provide additional comments that address fully inspecting the CCL facility and preparing additional cost estimates because the current GRC process of cost updating may not contain sufficient prediction accuracy of the final cost. Although we concurred with the recommendation to fully inspect the CCL facility to determine the extent and cost of the work needed to complete the facility, we do not agree that further inspection or cost estimating beyond that currently being provided is warranted.

Through its close scrutiny of the project progress and monthly review and cost estimate update process, NASA is aware of the deficiencies of the CCL facility. Inspection of the facility is occurring as an integral part of the final commissioning and certifying process. The monthly technical evaluations provided by the NASA facility manager are comprehensive, cost-predictive and sufficient to identify facility deficiencies.

This ongoing commissioning and inspecting process meets your recommendation to fully develop a cost estimate to complete the facility. We do not recommend going beyond this level of effort.

GRC management does not intend to use NASA appropriated funds to complete the CCL facility. Before using appropriated funds to complete CCL, GRC management would reprioritize the remaining City of Cleveland funds.

If you have any further questions, please contact James W. Wright, Director, Facilities Engineering and Real Property Division at 202-358-1090 or Scott E. Robinson, Chief, Engineering, Maintenance and Operations Branch, at 202-358-1414.



Tom Luedtke

cc:

Associate Administrator/Mr. Scolese

Associate Deputy Administrator/Mr. Scales

Assistant Administrator for Infrastructure and Administration/Ms. Dominguez

Glenn Research Center/Dr. Whitlow