TO: AO/Chief Information Officer

FROM: W/Assistant Inspector General for Auditing

SUBJECT: Final Report on Year 2000 Program Oversight

of NASA's Production Contractors Assignment Number A-HA-98-044

Report No. IG-99-004

The subject final report is provided for your use. Please refer to the Results in Brief section for the overall audit results. Your comments on a draft of this report were responsive to our recommendations. Our evaluation of your responses has been incorporated into the body of the report, and an additional audit response is in Appendix C. The report's two recommendations will remain open for reporting purposes pending implementation of planned and ongoing corrective actions.

If you have questions concerning the report, please contact Mr. David L. Gandrud, Program Director, Information Technology Program Audits, at (650) 604-2672, or Mr. Roger W. Flann, Program Manager, at (818) 354-9755. We appreciate the courtesies extended to the audit staff. The report distribution is in Appendix D.

## [original signed by]

Russell A. Rau

Enclosure

cc:

B/Chief Financial Officer G/General Counsel JM/Director, Management Assessment Division bcc:

AIGA, IG, Reading (w/o Encl.) Chrons ARC/204-11/D. Gandrud JPL/180-300/R. Flann

# AUDIT REPORT

# YEAR 2000 PROGRAM OVERSIGHT OF NASA'S PRODUCTION CONTRACTORS

**DECEMBER 17, 1998** 



National Aeronautics and Space Administration

**OFFICE OF INSPECTOR GENERAL** 

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#### **ACRONYMS**

CIO	Chief Information Officer
DCAA	Defense Contract Audit Agency
DCMC	Defense Contract Management Command
DoD	Department of Defense
FAC	Federal Acquisition Circular
FAR	Federal Acquisition Regulation
OMB	Office of Management and Budget
PIC	Procurement Information Circular
Y2K	Year 2000

## NASA OFFICE OF INSPECTOR GENERAL

IG-99-004 A-HA-98-044 **DECEMBER 17, 1998** 

## YEAR 2000 PROGRAM OVERSIGHT OF NASA'S PRODUCTION CONTRACTORS

#### Introduction

The NASA Office of Inspector General is performing a review of the Year 2000 (Y2K) Program at five NASA Centers<sup>1</sup> and the Jet Propulsion Laboratory. Our objectives were to (1) evaluate the adequacy of NASA's efforts to renovate and validate systems with Y2K date problems, (2) evaluate the adequacy of NASA's oversight of contractor renovation and validation activities, and (3) determine whether NASA's Y2K reporting to the Office of Management and Budget (OMB) is accurate and well-supported. During the review, we identified an issue regarding the adequacy of NASA's oversight of its production contractors'<sup>2</sup> efforts toward achieving Y2K compliance. Details on our scope and methodology are in Appendix A.

## Results in Brief

NASA lacks reasonable assurance that its production contractors will provide Y2K-compliant data to support the Agency's key financial and program management activities. Without reasonable assurance that contractor systems are Y2K compliant, NASA risks receiving, processing, and placing reliance on erroneous data that could adversely affect Agency operations.

## Background

The Y2K problem affects computer systems worldwide. Software application programs that use a standard two-digit format (mm/dd/yy) to generate a date may not work properly after the year 2000. Systems that will continue to function properly are designated "Y2K compliant." Systems that are not "Y2K compliant" are at risk of failure and may cause other systems to fail. Y2K compliance is defined in NASA's Year 2000 Test and Certification Guidelines and Requirements as information technology that:

. . . accurately processes date/time data (including, but not limited to, calculating, comparing, and sequencing) from, into, and between the twentieth and twenty-first centuries, and the years 1999 and 2000 and leap year calculations, to the extent that other information technology, used in combination with the information technology being acquired, properly exchanged date/time data with it.

<sup>&</sup>lt;sup>1</sup> Goddard Space Flight Center, Lyndon B. Johnson Space Center, John F. Kennedy Space Center, Lewis Research Center, and George C. Marshall Space Flight Center.

<sup>&</sup>lt;sup>2</sup> Contractors who provide goods to NASA and submit required reporting on contractor-owned and -operated information technology systems.

The Y2K problem is especially relevant to NASA's relationship with its contractors. NASA contracts out about 90 percent of its total budget and, therefore, relies heavily on contractor reporting for its key financial and program management information. In this regard, NASA has taken steps to work with its contractors and business partners on the Y2K problem. These steps have included sending more than 3,000 letters, signed by the NASA Administrator, to every business and institution that works with NASA. The letters state the importance of NASA's Y2K program, request assurance that the organization has a Y2K plan of action, and ask for a point of contact. In addition, NASA has established Y2K outreach efforts with the Aerospace Industry Association.

In addition to the above actions, the Office of Procurement has issued two Y2K-related Procurement Information Circulars (PICs) (PICs 98-8 and 98-9, each dated May 21, 1998). The PICs require contracting officers to include Y2K-compliance clauses in Y2K-affected solicitations and contracts for NASA information technology. The clauses require the contractor to meet Y2K requirements within established milestones.

NASA largely depends on Department of Defense (DoD) organizations to perform the contract administration and audit functions at NASA's contractor locations. The principal DoD organizations providing those services are the Defense Contract Audit Agency (DCAA) and the Defense Contract Management Command (DCMC). NASA's Office of Procurement may request services from each of those organizations. An agreement signed in 1969 delineates the contract administration and contract audit services that DoD will provide to NASA. Under this agreement, the DCAA performs audits of contractor operations including financial management systems and the DCMC performs contract administration responsibilities including administration of property, industrial facilities, production, and quality assurance.

## **Contractor Reporting**

**Finding.** NASA lacks reasonable assurance that its production contractors will provide Y2K-compliant data to support the Agency's key financial and program management activities. This condition occurred because the Office of Procurement has not asked the DCAA or DCMC to conduct Y2K reviews at NASA's major contractor locations. As a result, NASA risks using noncompliant data that may adversely affect the Agency's control, budgeting, program management, and cost accounting activities.

NASA requires its contractors to submit key financial and program information. For example, NASA Policy Directive 9501, "NASA Contractor Financial Management Reporting System," April 23, 1996, requires contractors to report cost, schedule, and performance data. NASA Federal Acquisition Regulation (FAR) Supplement 1845, "Management of Government

Property in the Possession of Contractors," requires contractors to report any Agency property in their possession. Information submitted in response to these reporting requirements<sup>3</sup> is critical to NASA's financial and programmatic activities.

DCAA and DCMC Headquarters officials told us they had no overall plan to verify Y2K compliance at NASA contractor locations. At the time of our review, the DCAA and DCMC were developing guidance for performing Y2K work but had been unable to reach agreement on the contents of the guidance. To determine whether other Y2K work may have been in process at NASA contractor locations, we contacted DCAA representatives at the Jet Propulsion Laboratory; Boeing Rocketdyne Division; and Cordant Technologies, Inc. (Thiokol Propulsion Group). The representatives confirmed that the DCAA had no plans to verify Y2K compliance at their locations. Further, NASA had no plans to determine the status of Y2K compliance efforts by NASA's production contractors.

Subsequent to completion of our initial field work, on September 14, 1998, DCAA Headquarters issued guidance to its regional offices regarding the need to consider Y2K issues in DCAA audits. The guidance discusses audit responsibilities related to inquiries about contractor Y2K remediation efforts, internal control risk assessment consideration of Y2K issues, and cost and going concern<sup>4</sup> issues. However, the guidance did not specify a timetable for providing Y2K audit coverage at major or nonmajor locations. These audit activities should be consistent with NASA's overall Y2K goals and milestones for ensuring Y2K compliance and should place maximum reliance on assessments performed to fulfill other needs such as those initiated by the Securities and Exchange Commission for quarterly and annual reporting by registrants.

As a customer of DCAA and DCMC services, NASA needs to specify the extent of coverage and milestones for examination of contractor Y2K compliance. At a minimum, the Agency should seek reasonable assurance that major contractors are examined and that the nature and extent of their Y2K compliance is determined. NASA should also require that Y2K compliance problems identified in these examinations be monitored through completion of corrective action.

## Recommendations for Corrective Action

**Recommendation 1.** The NASA Associate Administrator for Procurement, in coordination with the NASA Chief Information Officer, should request the DCAA and DCMC to: assess Y2K compliance at major NASA contractor locations, with emphasis on systems that provide critical management information to NASA; and track corrective action on identified deficiencies.

<sup>&</sup>lt;sup>3</sup> Specific reporting requirements are in NASA Form 533, "NASA Contractors Financial Management Reports," and Form 1018, "Report of Government-owned/Contractor-held Property." NASA Form 533 identifies basic financial management information on contract cost, schedule, and performance, and represents the basis for NASA's largest financial statement liability account (Accounts Payable). NASA Form 1018 identifies various types of property, including land, buildings and structures, material, plant equipment, space hardware, special tooling, and special test equipment. These assets represent the single largest asset account

<sup>(</sup>part of the Property, Plant and Equipment account) listed in the Agency's financial statements.

The ability of an entity to continue to exist.

**Recommendation 2.** The NASA Associate Administrator for Procurement, in cooperation with the NASA Chief Information Officer, should establish milestones for DCAA and DCMC progress in reviewing contractor Y2K compliance.

## Management's Response

Concur with intent. After submitting a response dated November 2, 1998, the Chief Information Officer (CIO) submitted additional comments dated November 19, 1998 (see Appendix B), that stated "We are taking steps that we believe concur with the intent of the recommendations, that is, to seek reasonable assurance that major contractors are examined and that the nature and extent of their Y2K compliance is determined." Specifically, NASA will issue a letter to DCAA requesting the dates DCAA plans to perform Y2K assessments at each of NASA's major contractors. Based on the DCAA response, NASA management will determine whether further action is necessary. Also, NASA will issue a letter to its Center Procurement Officers communicating the DCAA Y2K guidance and the DCAA response to NASA's letter on major contractor coverage. The letter will remind the Procurement Officers of their responsibilities for monitoring Y2K problems identified by DCAA.

Management also provided general comments on the report that we address in Appendix C.

## Evaluation of Management's Response

We consider management's planned actions responsive to the recommendations. The actions should enable NASA to achieve visibility of its contractors' Y2K status and determine whether further DCAA direction is necessary. While NASA did not specifically task DCMC to track Y2K efforts of NASA contractors, the NASA letter to the DCAA dated November 6, 1998, adequately addressed the DCMC role regarding Y2K assessments of Government-owned/Contractor-held property.

## SCOPE AND METHODOLOGY

We conducted the audit in accordance with generally accepted government auditing standards. We performed the audit field work for this report from July 15, through September 11, 1998. We examined and tested applicable records and documentation (dated from May 1969 through August 1998),<sup>5</sup> to identify applicable management controls and to verify that the controls were working as described. Specifically, we:

- Reviewed contract support agreements between NASA and the DoD, NASA's
  Y2K documented communications with its contractors, NASA's financial
  statements, applicable NASA policy directives, NASA procedures and guidance,
  and applicable sections of the NASA FAR Supplement.
- Interviewed Y2K Headquarters representatives at the DCAA, the DCMC, and the NASA Office of Procurement.
- Interviewed DCAA office managers at the Jet Propulsion Laboratory; Boeing Rocketdyne Division; and Cordant Technologies, Inc. (Thiokol Propulsion Group) to determine the extent of the DCAA Y2K audit work performed or planned at those locations.

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<sup>&</sup>lt;sup>5</sup> Agreements between NASA and DoD for performance of contract administration and contract audit services in support of NASA contracts, dated 1969 and 1992; NASA Policy Directive 9501.1F, "NASA Contractor Financial Management Reporting System," April 23, 1996; NASA Procedures and Guidance 9501.2C, "Procedures for Contractor Reporting of Correlated Cost," April 23, 1996; FAR Part 45, "Government Property"; NASA FAR Supplement, Subpart 1845, "Management of Government Property in the Possession of Contractors."

### MANAGEMENT'S RESPONSE

National Aeronautics and Space Administration

Office of the Administrator Washington, DC 20546-0001



NOV - 2 1998

TO: W/Inspector General

FROM: AO/Chief Information Officer

SUBJECT: NASA Response to Draft Report on Year 2000 Program Oversight of

NASA's Production Contractors Assignment Number A-HA-98-044

This responds to your draft report on the Year 2000 Program Oversight of NASA's Production Contractors under Audit Assignment Number A-HA-98-044. This response represents the Agency's position relative to your report recommendations, and has been concurred on by the Office of Procurement and the Office of the Chief Financial Officer.

NASA does not concur with the finding and two recommendations. However, we are taking steps that we believe meet the intent of the recommendation, that is to "seek reasonable assurance that major contractors are examined and that the nature and extent of their Y2K compliance is determined." These steps are described within this memorandum. NASA is committed to ensure we are not adversely impacted by critical business partners and suppliers and appreciate your timely report on this issue.

We do not concur with the finding that, "NASA lacks reasonable assurance that its production contractors will provide Y2K compliant data ... because the Office of Procurement has not asked the Defense Contract Audit Agency (DCAA) or the Defense Contract Management Command (DCMC) to conduct Y2K reviews at NASA's major contractor locations." The subject draft audit report fails to establish a compelling rationale that supports the recommendation that the Acting Associate Administrator for Procurement request that the DCAA and the DCMC perform specific purpose Y2K audits at NASA's "major" (not defined) contractor plants. The draft report fails to place proper value on existing Y2K oversight, such as that available through the Securities and Exchange Commission's disclosure requirements, or audit reviews performed by certified public accountants during the course of a contractor's own internal controls review. For example, the American Institute of Certified Public Accountants (AICPA) interpretation of Statement of Auditing Standards (SAS) Number 59 requires auditors to consider the effect of Y2K compliance on an entity's ability to continue as a going concern for a period of up to 1 year beyond the date of the financial statements being audited. In addition, NASA's outreach work with Aerospace and Aeronautics industry groups indicate that prime contractors have well-established and comprehensive Y2K programs underway. These corporate programs have generally been subjected to stringent in-house and independent Y2K audits and reporting requirements to ensure their stakeholders and customers, NASA-included, are not

2

negatively impacted by Y2K problems. We believe common industry practices and internal and independent controls provide reasonable assurance that contractors' systems will provide reliable data.

As of September 14, 1998, DCAA Regional Directors were instructed to consider the effects of Y2K compliance issues as a standard part of their audits (see enclosure 1, DCAA Memorandum 98-PAS-128 R). Consistent with this guidance, Y2K consideration is now also an integral part of DCAA's internal control risk assessment process. We believe that DCAA's new guidance to incorporate Y2K as an integral part of overall audit planning considerations, relying heavily on existing data and reports, is reasonable and sufficient to mitigate potential Y2K risks to NASA. NASA will take full advantage of DCAA's approach for obtaining reasonable assurance that contractor proposals, submissions, and claims are free of material misstatement which is caused by fraud or error (including Y2K system errors). Requests to DCAA by NASA for specific Y2K audits will, however, be reserved for situations where circumstances clearly warrant them and, consistent with DCAA guidance, will be supplemented by internal audit reports of Y2K readiness and/or other Y2K-specific reports to minimize the impact of duplicative audit activities. Using DCAA's new service is superior to the direct audit approach called for in recommendation 1 and will be adopted unless urgent and compelling reasons warrant the time and expense of a direct Y2K audit at a particular contractor's plant.

Notwithstanding our nonconcurrence, in response to recommendations I and 2, we are taking the following steps:

- NASA will issue a letter to the Assistant Director of Operations for the DCAA, requesting the dates DCAA plans to perform Y2K assessments for each of NASA's "major" contractors. NASA is applying the term "major" used in the draft report to be defined as NASA's top contractors as determined by award values (see enclosure 2).
- (2) NASA will issue a letter to Center Procurement Officers that communicates the new DCAA audit guidance relative to Year 2000 issues and communicates DCAA's response to our request (e.g., planned audit dates for major contractors). In addition, the letter will remind them of their responsibilities vice DCAA audit findings, which include monitoring Y2K findings that require corrective action through completion (see enclosure 3).

NASA's focus will be on contractors who hold in excess of \$50 million each in awards, thus making their Y2K efforts more important to the Agency from a risk standpoint. DCAA will still audit the rest of NASA's contractors per their memorandum, and our letter to the Procurement Officers will permit them to deal with DCAA directly, if a need is identified, to obtain specific audit schedules for contractors other than those on our "major" list.

3

Our proposed approach is responsive to the draft audit's recommendations and would be cost effective to implement. We believe that both recommendations should be closed with the issuance of the referenced letters from the NASA Office of Procurement. We plan to issue these letters by November 15, 1998.

Lee Holcomb

3 Enclosures

cc:

AO/A. Nomis

AO/C. Simonson

B/A. Holz

BF/S. Varholy

H/T. Luedtke

HC/R. Crider

HK/J. Horvath

JM/D. Green

National Aeronautics and Space Administration Office of the Administrator Washington, DC 20546-0001



NOV 1 9 1998

TO: W/Inspector General

FROM: AO/Chief Information Officer

SUBJECT: NASA Addendum to Response to Draft Report on Year 2000 Program

Oversight of NASA's Production Contractors

Assignment Number A-HA-98-044

This is an addendum to the memorandum, "NASA Response to Draft Report on Year 2000 Program, Oversight of NASA's Production Contractors, Assignment Number A-HA-98-044. This addendum reflects the results of discussions held with your office regarding our response to the original referenced draft report.

We preserve NASA's original position as stated in the referenced memorandum. However, in the interest of coming to closure on the draft audit recommendations as quickly as possible, we are making the following changes to our original submission for clarification:

Replace the first and second sentence in paragraph two with the following sentence:

"We are taking steps that we believe concur with the intent of the recommendations, that is "to seek reasonable assurance that major contractors are examined and that the nature and extent of their Y2K compliance is determined."

 Add to paragraph four, page two, the following words immediately after the sentence ending "...mitigate potential Y2K risks to NASA.":

"We also believe that DCAA's intent to coordinate their Y2K assessment efforts with the Defense Contract Management Command (DCMC) is inherent in their guidance."

Enclosed are revised copies of the enclosures to the November 2, 1998, response which have been modified to reflect the DCMC issue (see enclosures 1 and 2). Reference to NASA's interpretation and desire for this type of cooperation is mentioned in enclosure 2.

2

 Replace the lead sentence at paragraph five, which begins with "Notwithstanding our nonconcurrance ...", with the following:

"We are taking the following steps in response to recommendations I and 2:"

Add the following sentence at the end of item number (1) at paragraph five:

"Any needed follow-up on DCAA's Y2K assessment plan will be coordinated between Codes AO and Code H. NASA management will determine if further action is required."

With this addendum, we consider the response to the referenced draft report closed.

Lee Holcomb

2 Enclosures

AO/A. Nomis

AO/C. Simonson

B/A. Holz

BF/S. Varholy H/T. Luedtke

HC/R. Crider

HK/J. Horvath

JM/D. Green

Netional Aeronautics and Space Administration

Headquarters

Washington, DC 20546-0001



. In Attn of

HC

6 1998

TO:

Procurement Officers

FROM:

HC/Director, Analysis Division

SUBJECT: DCAA Audit Guidance on the Consideration of Year 2000 Computer

Issues in DCAA Audits

We are forwarding for your information (Enclosure 1) a Memorandum, which was sent to DCAA Regional Directors by the DCAA Headquarters Assistant Director, Policy and Plans. It requires DCAA auditors to include in their audit plans, an assessment of contractor Y2K efforts with respect to internal controls, system remediation cost allocation, and a general reading of the contractor's ability to continue as a going concern after the year 2000.

As you are aware, NASA Headquarters issued guidance, including clauses and statement of work text, to help NASA address its own Y2K preparedness, including systems required to be delivered under contract. The assessments made by DCAA will now give you insight into what your contractors are doing to assure the integrity of their own management information systems. This is important because NASA relies on many of these systems to generate such things as the NASA Form 533, "NASA Contractors Financial Management Reports," and Form 1018, "Report of Governmentowned/Contractor-held Property," reports.

We have asked DCAA (Enclosure 2) to provide us with information from their audit plans that will show when each of NASA's top twenty contractors (in terms of award dollars received in Fiscal Year 1998) will be Y2K assessed in accordance with their September 14, 1998 Memorandum. If you need schedule information on contractors not covered by our request, please work directly with DCAA to obtain it. You should also provide DCAA with any information that would assist them in preparing their audits.

DCAA will include a specific statement regarding Y2K in audit reports only when they find an issue or problem that requires corrective action by the contractor. You should be alert to these findings when they appear and monitor them through completion of the corrective action. This will require you to stay in touch with DCAA and DCMC to let them know you are interested in the contractor's progress and ultimate resolution.

Enclosure 1

Should you have any questions regarding this letter, please contact Ron Crider on (202) 358-0428 for Y2K issues, or Jack Horvath on (202) 358-0456 for audit issues. anne Quentter 2 Enclosures cc: H/Luedtke HK/Thompson HS/Balinskas HK/LeCren AO/Nomis Center DCAA Audit Liaison Representatives Enclosure 1



#### DEFENSE CONTRACT AUDIT AGENCY 8725 JOHN J. KINGMAN ROAD, SUITÉ 2135 FORT BELVOIR, VA 22060-6219

PAS \$-730.1

14 September 1998 98-PAS-128(R)

MEMORANDUM FOR REGIONAL DIRECTORS, DCAA
DIRECTOR, FIELD DETACHMENT, DCAA

SUBJECT: Audit Guidance on the Consideration of Year 2000 Computer Issues in DCAA Audits

#### SUMMARY

Year 2000 (Y2K) computer problems could cause contractor systems to malfunction or shut down, resulting in inaccurate proposals, claims, and billings to the government. DCAA audits should include consideration of the effects of Y2K issues with regard to contractor:

- · internal control systems,
- · treatment of Y2K system remediation costs, and
- ability to remain a going concern

#### BACKGROUND

In January 1998, the AICPA issued an interpretation of AU section 311, Planning and Supervision, a dressing the auditor's responsibility regarding Y2K issues. The interpretation notes that the responsibility is already an integral part of planning considerations: to plan and perform the audit to obtain reasonable assurance that material misstatements do not exist.

In June 1998, the AICPA issued an interpretation of AU Section 341 (SAS No. 59) addressing the effect of Y2K issues on the auditor's consideration of an entity's ability to continue as a going concern. The interpretation requires the auditor to consider any Y2K conditions and events that come to the auditor's attention when evaluating whether there is substantial doubt about the entity's ability to continue as a going concern for a period of up to one year beyond the date of the financial statements being audited.

#### GUIDANCE

It is the responsibility of the contractor to assess and remediate the effects of the Y2K issue on its computerized systems. The DCAA auditor's responsibility is to plan and perform audits to obtain reasonable assurance that contractor proposals, submissions, and claims are free of material misstatement, whether caused by fraud or error (including Y2K system errors). Guidance on the key aspects of meeting the auditor's responsibility is presented below.

ENCL 1

PAS 8-730.1 SUBJECT: Audit Guidance on the Consideration of Year 2000 Computer Issues in DCAA Audits

#### 1. Planning

When planning procedures to meet the audit responsibilities described in this memorandum, auditors should make appropriate inquiries to contractor management about the contractor's Y2K remediation efforts. At major contractor locations, the inquiries should be made at the earliest possible date and the cognizant ACO should be encouraged to participate. At non-major locations, inquiries should be made during the next regularly scheduled audit visit. Inquiries should be supplemented by supporting data, such as contractor:

- 10-K and/or 10-Q reports filed with the SEC (MD&A section disclosures);
- Y2K surveys in which the contractor participated (surveys from financial institutions, industry associations, higher tier prime contractors, government customers, etc.);
- · Internal audit department reports of Y2K readiness/compliance; and
- Y2K remediation plans, capital investment plans, and budgets

#### 2. Internal Control Risk Assessments

DCAA internal control risk assessments should include consideration of the effects of Y2K issues. The consideration may affect the assessed level of control risk, testing of internal controls, and extent of subsequent substantive audit procedures. The consideration should be an integral part of risk assessment procedures starting in the contractor's accounting period in which it initiates system remediation, or the accounting period that contains the date 1 January 2000, whichever occurs first. The inherent risk associated with these accounting periods is increased due to the possibility that:

- contractor computer system remediations may contain new defects, may not function as intended, may not be adequately controlled, and may not be properly tested.
- contractor inaction to remediate computer systems may result in system malfunctions or shut downs as of 1 January 2000.

At major contractor locations, consideration of the impact of Y2K issues on internal controls should be included in each ICAPS-related audit performed. Given the cyclical process of reviewing individual accounting and management systems (CAM 5-103) and the rapidly diminishing window of opportunity before 1 January 2000, auditors should give higher priority to systems that may be significantly impacted by Y2K issues. Follow-up procedures may be necessary for systems that were already reviewed within the current cycle.

At non-major locations, the consideration should be included as part of the next regularly scheduled audit visit and documented in the SHORTICQ. Although internal control risk is inherently higher as ADV increases, small to medium size contractors are of special concern regarding Y2K control risk because they may not have adequate resources to devote to Y2K remediation.

A sentinder to review Y2K issues during internal control reviews will be included in ICAPS-related audit programs and the SHORTICQ in the next FAO DHS update.

PAS 8-730.1

SUBJECT: Audit Guidance on the Consideration of Year 2000 Computer Issues in DCAA Audits

#### 3. Cost Issues

Costs incurred by contractors to become Y2K compliant should be reviewed as part of the audits of forward pricing rates, proposals, claims, terminations, incurred cost submissions, or any other type of contractor cost submission in which Y2K remediation costs have been claimed.

The Financial Accounting Standards Board (FASB) recently issued guidance (EITF No. 9614) that companies should expense, as incurred, internal and external costs specifically
associated with modifying existing internal-use software for Y2K compliance. The AIPCA
recently issued a Statement of Position (SOP 98-1) which recommends the capitalization of the
costs of internal-use software that is developed or obtained when there is a foreseeable benefit to
future periods (see MRD 98-PAC-113). The SOP recognizes the EITF guidance and reiterates
that costs (for Y2K compliance) associated with modifying internal-use software should be
expensed. When reviewing Y2K compliance costs, auditors should ascertain the type of internaluse software remediation (modification, development, or purchase) and review the contractor's
compliance with the FASB guidance and the AICPA SOP.

#### 4. Golng Concern Issues

In all audits, auditors should maintain an awareness of Y2K conditions and events that may affect the financial ability of a contractor to perform on government contracts. Going concern risk is inherently higher at contractor locations where the cost of Y2K remediation is material in amount and/or the contractor's ability to finance the costs of Y2K remediation is questionable. Where substantial levels of planned expenditures are noted, further analysis of contractor cash flows may be warranted to determine the contractor's ability to meet near-term operating costs.

#### CONCLUDING REMARKS

Please direct any questions or concerns you may have to your regional office. Regional offices may address their questions to Mr. Robert Kratochvil, Program Manager, Auditing Standards Division, at (703) 767-3274, fax (703) 767-3234, or E-mail at \*pas@hql.dcaa.mil.

Lawrence P. Uhlfelder Assistant Director

Policy and Plans

DISTRIBUTION: C

National Aeronautics and Space Administration

Headquarters

Washington, DC 20546-0001



POY IS After of

HC

NOV 6 1998

Mr. Russell Richards Assistant Director, Operations Defense Contract Audit Agency (DCAA) 8725 John J. Kingman Road Suite 2135 Fort Belvoir, VA. 22060-8219

Dear Mr. Richards:

Recently I received a copy of DCAA Memorandum 98-PAS-128(R), dated September 14, 1998, Subject "Audit Guidance on the Consideration of Year 2000 Computer Issues in DCAA Audits." We assume, because of the important role that the Defense Contract Management Command plays in the control of Government-owned/Contractor-held property, that Year 2000 (Y2K) assessments will be coordinated with them. I would like to express my appreciation and support for your efforts in this area.

It would be most helpful if you could provide me with the dates you plan to perform Y2K assessments, in accordance with the September 14, 1998 Memorandum, for each of NASA's top twenty-five contractors. For your convenience, I have enclosed a list of those contractors. If possible, could you also provide periodic updates if audit dates change for these firms between now and December 31, 1999?

I would appreciate your response as soon as possible, but not later than November 30, 1998 as we have a time sensitive need for this information. Questions may be referred to Mr. Ron Crider at (202) 358-0428.

Thank you in advance.

Sincerely,

10 Tom Luedtke

Acting Associate Administrator for Procurement

Code H

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

Encl. TopTwenty-Five Contractor List

ENCL 2

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## MANAGEMENT'S GENERAL COMMENTS AND AUDIT RESPONSES

The CIO provided the following general comments on the draft report.

## Management's Comments

Although the CIO concurred with the intent of the report's recommendation "to seek reasonable assurance that major contractors are examined and that the nature and extent of their Y2K compliance is determined," the CIO did not concur with the finding that NASA lacks reasonable assurance that its production contractors are Y2K-compliant. The CIO stated that the report failed to show why the DCAA and the DCMC should perform specific-purpose Y2K audits at major NASA contractors, given the contractors' existing level of Y2K oversight. The CIO cited examples of existing Y2K oversight including the Security and Exchange Commission's disclosure requirements, audit reviews by certified public accountants, corporate in-house Y2K audits, and NASA's outreach work with the aerospace and aeronautics industry groups.

## Audit Response

We agree that Y2K oversight may exist at NASA's production contractors; however, we found no evidence that NASA was assessing the adequacy of its contractors' Y2K activities. Also, we found no evidence that either the DCAA or the DCMC was assessing the contractors' Y2K activities. Accordingly, we concluded that NASA lacked reasonable assurance that its contractors were or would be Y2K-compliant. We believe NASA can better assess the adequacy of its contractors' Y2K activities after the DCAA has implemented its guidance for assessing contractors' Y2K status and has responded to NASA's letter requesting data on Y2K coverage. If NASA finds the DoD audit or contract Y2K coverage inadequate, then NASA can take appropriate action to address the deficiencies.

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#### Non-NASA Federal Organizations and Individuals

Assistant to the President for Science and Technology Policy

Assistant to the President and Chair, President's Council on Y2K Conversion

Deputy Director of Management, Office of Management and Budget

Deputy Associate Director, Energy and Science Division, Office of Management and Budget

Budget Examiner, Energy Science Division, Office of Management and Budget Associate Director, National Security and International Affairs Division, General Accounting Office

Special Counsel, House Subcommittee on National Security, International Affairs, and Criminal Justice

Professional Assistant, Senate Subcommittee on Science, Technology, and Space Assistant Inspector General for Auditing, Department of Defense Director, Defense Contract Audit Agency

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#### **Congressional Member**

The Honorable Pete Sessions, U.S. House of Representatives

## MAJOR CONTRIBUTORS TO THIS REPORT

David L. Gandrud, Program Director, Information Technology Program Audits Roger W. Flann, Program Manager Barbara J. Smith, Program Assistant