

United States General Accounting Office Washington, DC 20548

April 29, 2003

The Honorable Howard L. Berman House of Representatives

Dear Mr. Berman:

Thank you for taking the time to meet with me to discuss our work on the National Missile Defense Program. As requested, I have enclosed a detailed response to your April 24, 2002, and March 10, 2003, letters concerning the report. As you know, I also initiated two independent examinations of the methods used to carry out the engagement. The examinations confirmed that the work was done in accordance with generally accepted government auditing standards. Consequently, I am convinced that no changes to the report are warranted.

You also asked for certain Nichols Research Corporation (NRC) documents. We have two kinds of NRC documents. The first set, which we have enclosed, includes documents marked "competitive sensitive." Although these documents are several years old, they may still include information protected from disclosure under 18 U.S.C. 1905 and 41 U.S.C. 423. The second is a set of seven classified reports. The classified documents are available for review by members of your staff who hold the required security clearance. To obtain access to these documents, please call Robert Ackley in our General Counsel's office at 202-512-9960.

It is evident that there was a communications gap concerning the revision of our audit objectives for this report. While I regret the problem, I do believe there are circumstances where it is inappropriate for GAO to report on an issue that is directly related to a matter pending in the Courts. As a rule, we will not accept such engagements. In some instances, like the review we conducted at your request, we have made exceptions. Generally, we have done this where we believe we can structure the review to avoid influencing or interfering with the litigation. Accordingly, we revised the audit objectives in your request to enable us to respond to the extent practicable under our longstanding policy.

In each of our engagements, we provide congressional requesters with timely, unbiased reporting consistent with our core values of accountability, integrity and reliability. I believe that our report meets GAO's high standards. In view of our

previous discussions and the two independent reviews noted above, I trust that we can deem this matter to be closed.

Sincerely yours,

David M. Walker Comptroller General of the United States

Enclosures

Detailed Response to Statements in April 24, 2002, Letter

Page 1, Issues concerning structure (1) – The facts indicate a more complex story; significant findings were buried in appendix; the principal finding on sensor's cooling problem was not mentioned in letter; GAO did not highlight that no one had verified the contractor's claims

- We focused our assessment on whether the contractors had disclosed information on the results and limitations of the flight test--not whether they disclosed them in response to Dr. Schwartz' allegations.
- Although the April 24 letter indicates that some wrongdoing occurred, we did not find evidence to support such a belief.
- In our view, no significant findings were buried in the appendix. By their nature, cover letters cannot be comprehensive. We put the main findings in the cover letter and inserted highly technical information in the appendices. This is a common practice in writing GAO reports.
- We disagree that the sensor cooling problem was our principal finding. Our principal finding was that the contractors disclosed the key results and limitations of IFT-1A in written reports provided to the government between August 1997 and April 1998. Furthermore, as noted on page 16 of the report, the experts from Utah State University's Space Dynamics Laboratory, whom we hired to evaluate the sensor's performance, found that the power supply, rather than the temperature, was the primary cause of excess noise early in the sensor's flight.
- We were not quick to assert that the contractors disclosed major results of the flight test. We came to this conclusion only after extensive data collection and analysis. Specifically, our technical team reviewed the Boeing and TRW reports, met with the scientists from those contractors, discussed technical issues with Nichols Research and project office officials, and received briefings from Dr. Postol and Dr. Schwartz on their allegations. We also hired Utah State University's Space Dynamics Laboratory for an in-depth review of the performance of the Boeing sensor. The requester's staff did not have the complete picture because they did not have access to most of these documents and officials.
- Regarding our statement that no one had neither proven nor disproven the
 claims of successful discrimination is technically true but only because POET
 and NRC chose to make use of the TRW/Boeing processed data. At the time of
 the POET and NRC reviews, no one had made allegations that anyone had
 tampered with the raw data. In fact, the DCIS investigator had told us in an
 interview that nobody has ever questioned the sensor data being tested. Since
 there was no allegation that the raw data was tampered with, we did not
 believe it was unreasonable or inappropriate for POET or NRC to use the
 processed data.
- In terms of the April 24 letter's contention that we failed to highlight the limitations of the POET and NRC analyses, we placed this information in the cover letter and in the appendix.

Page 2, Issues concerning overall balance (2) – No mention was made of Dr. Schwartz' analysis and GAO created appearance of favoring the views of the contractors; GAO counsel directed staff to cut off contacts with Dr. Schwartz; GAO lost the opportunity to make use of her analyses

- In terms of the technical aspects of our review, we were not reporting on Dr. Schwartz' analyses; we reported on analyses by the contractors, the POET, and Nichols. We interviewed Dr. Schwartz, Dr. Postol, Boeing and TRW contractors, and POET, Nichols, DOD, and Justice officials, as we considered necessary to address the researchable questions. We interviewed Dr. Schwartz at length on two occasions to understand her allegations fully. The first interview took place at a day-and-a-half meeting at MIT in Cambridge, MA, in which our technical staff received briefings from Dr. Postol and Dr. Schwartz and had the opportunity to ask questions. The second interview, which took almost four hours, took place at Dr. Schwartz' home in California.
- We decided to revise the first researchable question to be more fact-based and less judgmental. The revised question focused factually on what the contractors did or did not disclose. The original question asked us to make a judgment about whether TRW or any related party falsified or covered up test data or results. The courts would be making such judgments in adjudicating Dr. Schwartz' suit. During a meeting in the summer of 2001 with the requester's staff, our attorney specifically explained that we would not be answering the question whether or not false claims had been made as that was the very question posed by Dr. Schwartz's *qui tam* case. We met with the requesters' staffers and provided them with the reformulated questions.
- Regarding contact with Dr. Schwartz, we had all the access to her expertise we considered necessary to do our work. It was only after we received notification from her by email that she was asking the court to make GAO a party to her lawsuit that the issue of restricting contact with her arose. After this notification, our counsel's litigation group advised that contact should be limited since the nature of her discussions with us dealt with the very issues presented by her litigation. The team was further advised that if we did identify a need to follow up with her on anything, we could do so by providing written questions. Our reason for making no further contact after this point was that we did not need to do so.
- Page 2, Issues concerning connecting obvious dots (3) GAO was reluctant to draw basic conclusions about technical issues such as the spike in importance of the medium balloon; GAO staff refused to characterize the contractors' contradictory and unsubstantiated claims as such; GAO obfuscated issue about contractors' use of terms such as "excellent" and highly successful;" GAO made claim that such words were devoid of meaning
 - We spent considerable effort trying to determine why the medium balloon spiked and the last seconds of data were excluded. Our findings are detailed on page 21 of the report. Ultimately, as the report states, some uncertainties

- could not be explained. Also, we could not confirm some contractor statements.
- As for the contractors' statements that the sensor performance was "excellent" and the test was a "success," we treated this as a central point both in the cover letter and appendix I. We did not say the terms were devoid of meaning. The terms had meaning to those using the terms. Starting on page 13, we cited the contractors' explanation for use of the terms. Those explanations have merit. Our point was that such terms by their nature are qualitative and subjective and their use increased the likelihood that test results would be interpreted in different ways.

Page 2, Issues concerning hearsay versus fact (4) – GAO did not draw bright line between verbal and written disclosures; GAO could not document who attended meetings; disclosures at December 1997 meeting should not have been included in report

- We disagree with the April 24 letter's contention that our report did not distinguish clearly between written and verbal disclosures. From page 13 to the top of page 22, we identified the written disclosures. We devoted two paragraphs on page 22 to the verbal. These sections are clearly marked.
- We also state on page 22 that project office officials and contractors could not provide us with documentation of the verbal disclosures that they said were provided in August 1997.
- We were able to document which organizations attended the December 1997
 meeting. We have a trip report from Teledyne Brown Engineering, a SETA
 contractor for the project office, identifying the content of the meeting and the
 organizations attending the meeting.
- The December 1997 briefing slides were a written disclosure by the contractor that we would have been remiss in not recognizing.

Page 3, Issues concerning lack of healthy skepticism (5) – GAO did not recognize potential inherent conflict of interest and went out of its way to buttress statements of program officials; contractor's explanations not scrutinized even though they were changed after questioning

- While DOJ depends on affected agencies in investigating possible contractor false claims, the law does not preclude the Justice Department from pursuing cases regardless of whether the affected agency is supportive. In any case, we did not assume that government agencies have no interest in assuring that they receive what they are paying for and that they are not being lied to.
- It is unfair to assert that GAO went out of its way to buttress program officials' statements, including unsubstantiated ones. We quoted agency officials appropriately and pointed out when documentation could not be provided. As for changes in the contractors' explanations, we believe the report and our work papers show how very thoroughly we pursued the basis for these explanations. We did not take the statements at face value.

Page 3, Issues concerning false reporting versus disclosure (6) – GAO declined to investigate the issue of false reporting; GAO did not assess whether disclosures were timely; comparison of when Dr. Schwartz made her allegations and when contractors revealed problems with the test; GAO changed terms of work over objections; GAO effectively exonerated the contractor by reporting that crucial information was disclosed verbally (without documentation)

- As noted above, we decided to revise the first researchable question to be more fact-based and less judgmental. We recognize that Rep. Berman and his staff believe that the contractors' use of the terms "success" and "excellent" constitutes false reporting. We disagree. They are qualitative and subjective terms and subject to different interpretations but they are not obviously false to us.
- To answer the researchable questions, we did not see the need to draw a timeline between Dr. Schwartz' allegations and the contractors' disclosures. Regarding a timeline between what Dr. Schwartz alleged and what the contractors disclosed, Dr. Schwartz first filed suit in 1996 and amended her complaint in April 1997, some two months before the June 1997 flight test. She amended her suit a second time in April 1999. Boeing's 45- and 60-day reports were contract deliverables that Boeing prepared after the June 1997 flight test. We have no evidence that Boeing made disclosures in the 45- and 60-day reports in response to Dr. Schwartz' allegations. We also have no evidence that the disclosures in the December 11, 1997, briefing were made in response to Dr. Schwartz' allegations. We believe that any objective reading of the December 11 briefing would indicate that the contractors prepared the briefing to help themselves get ready for the upcoming third flight test. Neither the briefing nor our interviews with contractor officials supports the view that the meeting was held to counter allegations made by Dr. Schwartz. On page 19 of our report, we state that the April 1, 1998, addendum was prepared, in part, in response to the DCIS' questions. Dr. Schwartz was providing input to the DCIS investigation at that time.
- We believe we did a very thorough review and had no interest in trying to exonerate the contractor. We believe the report shows clearly how much effort we put into verifying information presented by the contractors. We came to our conclusion about the contractors' disclosures only after extensive data collection and analysis. Specifically, our technical team reviewed the Boeing and TRW reports, met with the scientists from those contractors, discussed technical issues with Nichols Research and project office officials, and received briefings from Dr. Postol and Dr. Schwartz on their allegations. We also hired Utah State University's Space Dynamics Laboratory for an indepth review of the performance of the Boeing sensor.
- Our reasons for revising the researchable question are stated under "Overall Balance" (2).

Page 4, Issues concerning conflicts of interest (7) – Displeasure with GAO's response to original question was expressed; GAO chose to limit answer to an extremely narrow definition of conflict of interest; amount of funds Federally Funded Research and Development Centers (FFRDCs) received

from BMDO was not included; GAO did not evaluate allegations of bias against Nichols Research; GAO appears to give tremendous credibility to statements made by Nichols officials

- Amendment 3 to the Yellow Book (Government Auditing Standards) describes three general classes of impairments to independence—personal, external, and organizational. The FFRDCs have been established by the Congress precisely to prevent such impairments from occurring.
- Because the FFRDCs are federally funded organizations by definition, the actual amount of funds BMDO paid the FFRDCs did not strike us as particularly germane. However, if we had decided to present data on the amount of funding that BMDO provided the FFRDCs, we would have had to determine the total amount of funding provided to the FFRDCs by all user government agencies in order to provide context and a full understanding of the relative importance of any one entity's funding to the FFRDC. Regardless of the amounts received by the FFRDCs represented on the POET, this fact alone would still not present a lack of independence and objectivity. We presented this reasoning to the requester's staffer.
- Until the very end of the review, there was no indication or allegation that any of the scientists appointed to the POET review team had a relationship or financial interest that would present an impairment to independence. As we were finalizing the report, the requester's staffer passed on an allegation by Dr. Schwartz that one of the scientists had worked for TRW in the past. We made an inquiry and determined that she was mistaken. We informed the staffer of this information.
- Regarding the allegation of bias against Nichols, we stated on page 3 of our report that the POET was formed to review Dr. Schwartz' allegations because the DCIS investigator expressed concern to the project office about the ability of Nichols, as a support contractor, to provide a truly objective assessment. The DCIS investigator told us that while he had no specific information indicating bias at Nichols, he believes any support contractor can not be considered fully independent because of its contractural relationship with the government.
- Based on our review of Nichols documents such as trip reports and our interviews with Nichols officials, we believe Nichols carried out its responsibility to provide technical advice to the government. It was not within the scope of our review to identify and assess public statements made by Nichols officials. In any case, our report included a discussion of the limitations of Nichols' evaluation of TRW's discrimination software.

Page 4, Issues concerning significance of IFT-1A (8) – GAO highlighted an opinion by program officials that flight test was not significant

• The first flight test was designed as a sensor calibration and data collection effort. On pages 1 and 2 of our report, we explain the purpose of the test and attempt to put this first of 21 planned flight tests in perspective. It must be understood that this was an early test in a long-term research and

development effort. While the first flight test was certainly important, we are not aware of any major defense acquisition program that has been cancelled based on the results of the first major test out of more than 20 planned tests. General Kadish's quoted characterization of the test objectives is, in our view, a reasonable one.

Page 5, Issues concerning claim versus requirements (9) – GAO made a big distinction between government and Boeing requirements; GAO initially resisted use of word "requirements"; DOD regulations that differentiate between contractor and government requirements requested; GAO missed contractor's false claims and obvious discrepancies

- We originally used the term "evaluation criteria" rather than "requirements" in appendix V because it struck us as more reflective of the real meaning of the terms in the context of an early test in a long-term research and development effort. However, based on our referencing of the report and the requester staffer's continued questioning based on his possession of unclassified portions of the source document, we changed appendix V to refer to requirements and carefully explained their meaning in the body of the report and in the first footnote on page 40.
- A significant distinction exists between the government's single shot probability of kill (SSPK) requirement (the actual value is classified) and the "requirements" that Boeing established for itself to evaluate its own progress towards ultimately meeting the government's SSPK requirement. Boeing had considerable flexibility in how it would ultimately achieve the government's SSPK requirement. In addition, perspective is needed here. No one in DOD demanded that the contractor's system must meet a "requirement" in its first R&D flight test. Testing against requirements would normally occur during operational testing of a system ready to be fielded. We made repeated efforts to explain this to the requester's staff. We also believe that the report (pages 12-13 and 40) very clearly explains this point.
- We would refer the requester to the DOD 5000 series regulations on major defense acquisition programs. According to these regulations, Operational Test and Evaluation (OT&E) is responsible for determining whether thresholds and objectives in the government's approved operational requirements documents have been satisfied. Operational testing occurs late in an acquisition cycle, not during the first of more than 20 integrated flight tests.
- Again the April letter raises the issue of characterization of the sensor as
 excellent when the sensor had so many problems. We address this issue in our
 report's cover letter and appendix I. On the bottom of page 13, we state that
 we asked Boeing why it characterized its sensor's performance as excellent
 when it had a number of problems. We printed the contractor's answer.
 Ultimately, we noted that such terms as success and excellent are qualitative
 and subjective and their use could lead the test results to be interpreted in
 different ways.
- As for the content of footnote b on page 40, we spent many hours trying to reach an understanding of the system's performance compared to the desired acquisition range. The fact is that the sensor did detect the target at the

desired distance. However, because the observation time was so limited and false alarms occurred, Boeing's Chief Scientist cautioned against placing too much weight on that fact. That explanation seemed reasonable to us.

Page 5, Issues concerning gratuitous inclusion (10) – GAO inclusion of unbelievable statement by contractor hurts GAO's credibility

 Based on our understanding of Dr. Schwartz' allegations, we could not challenge the statement attributed to the POET member. We are not aware of any allegation she made prior to the POET review in 1998 and January 1999, when the POET report was finalized, that the contractor had tampered with the raw data or used inappropriate reference data. As discussed on page 24 of our report, the focus of the POET's evaluation was Dr. Schwartz' allegations about the discrimination software.

Detailed Response to Statements in March 10, 2003, Letter

Page 2, Issues concerning GAO's reliance on a poorly documented verbal meeting in August 1997

- In the final report, we devoted one paragraph to the verbal disclosures at this August 1997 meeting (see paragraph on page 22). We disagree with the contention that we gave the meeting much more weight and credibility than written reports.
- In reporting on the Boeing and TRW disclosures, we did not believe it necessary to mention specifically the cited Nichols Research Corporation report of March 5, 1998. We did state, however, that the written disclosures in the April 1, 1998, revised addendum were prepared in response to comments and questions from a variety of sources, including Nichols and the Defense Criminal Investigative Service.