GAO

Accountability * Integrity * Reliability

December 19, 2005

The Honorable Howard L. Berman
Member of Congress

Dear Congressman Berman:

It has been nearly three years since GAO issued its report entitled *Review of Allegations about an Early National Missile Defense Flight Test* (GAO-02-125, dated February 2002).

The GAO review was in response to a joint request from Senator Charles Grassley and you for an investigation of certain allegations of fraud in the missile defense program brought to your attention by Dr. Nira Schwartz, a former employee of TRW, Inc. (now part of Northrop-Grumman), a defense contractor specializing in technologies for the missile defense system.

GAO issued another report, *Review of Results and Limitations of an Early National Missile Defense Flight Test* (GAO-02-124), at the same time in response to a separate request from Congressman Edward Markey. The two reports had much in common.

At the time of your July 2000 request, Dr. Schwartz was pursuing her own *qui tam* lawsuit regarding these allegations against Boeing and TRW. She did so after the Department of Justice declined to intervene on her behalf.

You specifically requested GAO investigate whether Boeing and TRW had manipulated the test results, tampered with data, or made false claims about the antimissile system they were developing with Department of Defense funds. You also asked us to evaluate if the decision by the Department of Justice not to intervene was based on unbiased opinion from expert panels such as the Phase One Engineering Team (POET), which worked for the Missile Defense Agency.

I was the lead technical analyst of the GAO team that investigated these allegations regarding the Integrated Flight Test (IFT) –1A, which was the first flight test of what was then known as the Ground-Based Interceptor (GBI) – an element of the national missile defense program. GBI has since been renamed the Ground-based Mid-course Defense (GMD), which is now being fielded in Alaska.

IFT-1A - also known as the Sensor Flight Test - took place in June 1997. Its purpose was to demonstrate the performance of Boeing's infrared sensor. As such, it was a crucial test for the embryonic program because it was essential to demonstrate early that the interceptor could discriminate the warhead from its decoys.

We had gathered most of the information that was necessary for us to answer your questions. However, at the urging of its attorneys whose sympathies clearly lied with the Pentagon, GAO made a decision some ten months after the start of our review to not answer your original questions.

Instead, it gave you and Senator Grassley a report that was heavily biased in favor of the defense contractors, and exonerated Boeing and TRW of wrongdoing despite compelling evidence to the contrary. It did so in close collaboration with defense program officials. In the pages to follow, I have discussed in detail what we found and also what was not reported to you.

I know you were deeply concerned about crucial aspects of the report and expressed your concern to the Comptroller General. Unfortunately, after much foot dragging and delays your concerns were not addressed.

At your request, I am writing because much of what we discovered was not actually revealed to you as you requested, and I feel it is in the public interest to give you a full accounting and let you know the disturbing reasons why this information was withheld from you.

Unfortunately, our mishandling of your request not only reveals a major problem with the integrity and independence of GAO, but the realities of what we found may have serious implications for the effectiveness of the missile defense system about to be deployed in Alaska.

I believe this to be true for the reasons as follows. IFT-1A and IFT- 2 were the only two sensor flight tests for the Boeing and the Raytheon sensor, respectively, which addressed discrimination. 12 other tests have taken place since then - the last one being IFT-14. But none has assessed discrimination in a realistic condition. Many experts we talked to expressed concern about the capabilities of the current Raytheon sensor, which as you know well was selected under questionable circumstances. As the lead analyst for this study I can remain silent no longer.

The below timeline should help explain how the study progressed in the unfortunate manner that it did, what steps I took to correct this problem through the appropriate bureaucratic channels, and why I now feel compelled to bring it to your direct attention. I have also written some background information on myself and others; a detailed description of the actual problems, misstatements and omissions in the GAO report; and an outline of what corrective measures I think are needed.

TIMELINE

July 2000 – March 2002
GAO Investigation consisting of data gathering, analysis, and writing of the report

GAO formed a review team after receiving your request. The core team members belonged to the Acquisition and Sourcing Management (ASM) group led by Mr. Jack Brock, who was the Managing Director of ASM. Mr. Robert Levin, an ASM Director, was the head of the team. Barbara Haynes, an Assistant Director, was responsible for overseeing our work, and for producing the final draft report. David Hand was the Analyst-in Charge, who acted as the

project manager. I was effectively the lead analyst because the allegations were highly technical and I had the necessary background. (A more detailed description of the team can be found in the Appendix.)

Our investigation lasted nearly two years from July 2000 to March 2002, when the formal report was issued. Initially, the GAO team operated without any interference as we interviewed officials from the Department of Defense, visited contractor facilities and met with scientists in the academia. We also began to collect a large amount data in the form of system design documents, test reports, analyses by the POET team led by the MIT Lincoln Laboratory, and Nichols Research Corporation.

We briefed your staff Bob Blumenfield and Doug Campbell three times in person and at other times via telephone and e-mail. My initial analysis of the test data indicated that a problem with the functioning of the Boeing sensor during the flight test was so significant that it would likely invalidate the test. We reported our initial finding to your staff and requested your approval to expand the scope of our work to study the sensor issue in greater depth. At the same time, we reported to you that we were also looking at the issue of independence of the POET team, as you had requested us to do.

I believe that the focus and direction of our investigation changed soon after Ms. Stephanie May took over as the legal counsel for the team from Mr. Bill Woods, which occurred sometime soon after Mr. Tony Gamboa was appointed the GAO General Counsel in March 2001. Gamboa had been Acting General Counsel since September 2000. It was a part of an overall realignment of the GAO divisions undertaken by Mr. David Walker, who was appointed the Comptroller General in 1998. Walker replaced then head of the Office of the General Counsel Robert Murphy with Tony Gamboa – a veteran of the Army General Counsel's office. Gamboa had come to GAO in 1996. He was followed from his former office by Stephanie May, who joined GAO in 1998 as an Assistant General Counsel. She was promoted to the position of Managing Associate General Counsel in July 2002 - two months after I had written to Mr. Walker expressing my concerns about her role in our review.

It was clear to all from the very beginning that May did not wish the review to go forward. She kept saying: "We should have never done this job." However, that did not seem to be an option since GAO had already made formal commitment to you and Senator Grassley to do the job. She reluctantly agreed, but effectively dictated that we could not answer your original questions about contractor fraud. Ostensibly, this was due to ongoing litigation by Dr. Schwartz and May told us that she (Schwartz) could use our findings to help her case. May was also against reporting much of our findings about the failure of the sensor and blocked all our efforts to answer your question regarding POET's independence.

The review team discovered much evidence that the contractor made false statements about success and skewed test results by manipulating data - the things you had asked us to verify. This evidence is undeniable. However, Ms. May explained that if the contractors had disclosed to the government their actions, they could not be accused of wrongdoing under the False Claims Act. Subsequently, the team made a huge effort to demonstrate that the contractors disclosed everything.

The original question you had asked in your July 5, 2000 letter to the Comptroller general was: "*Did TRW or any related party falsify or cover up test data, computer algorithm results,*

or any other relevant information?" Following her re-direction of our efforts it was changed to: "Did the contractors disclose the key results and limitations of the flight test?"

This was a clever move the import of which I only realized later. I do not know who specifically was responsible for formulating it, but I believe that by asking such a question, GAO found a way to seemingly exonerate the contractors of any wrongdoing. However, giving them a clean bill of health was not easy because we were unable to find written reports that supported our foregone conclusion, which was – "the contractors disclosed everything!"

Therefore, the only way for the GAO to support such an assertion was to find verbal or non-written "evidence" about this disclosure. Barbara Haynes, with help from the government program officials in Huntsville (specifically Mike Holbert from Nichols Research Corporation), came up with a story of a late-August meeting in which the contractors supposedly disclosed everything verbally. I find it very difficult to believe that such important disclosures would take place verbally and I believe that lack of documentation along with certain timeline discrepancies indicates that the story about these verbal disclosures was a fabrication by Ms. Haynes, Mr. Holbert, someone else, or some combination of these people.

The fictional nature of this meeting was evident in several ways. First, I recall Mr. Holbert told us initially that the meeting took place sometime between the publication of the 45-day and the 60-day reports, which would place it in the time frame between August 13, 1997 and August 22, 1997. The contractors told us that there was too little time between these dates in which such a meeting could have taken place. Given that Mr. Holbert was based in Huntsville, Alabama and both Boeing and TRW were in California, there had to be some evidence of either Mr. Holbert traveling to California or the contractors to Huntsville. None was brought to our attention.

He said later that it could have been August 29. However, we had documentation from the Defense Criminal Investigation Service (DCIS) in our possession which cast doubt on an August 29 meeting because that was the day he met with DCIS and not the contractors. Most ironic, the contractors had no evidence or even recollection of any such meeting. I have provided in the appendix a detailed timeline of meetings and briefings that took place between August and December 1997, which GAO refused to include despite repeated requests from your staff.

When questioned by your staff about GAO's disproportionate reliance on verbal evidence as was evident in a final draft, the published version significantly downplayed the August meeting. Instead, it highlighted a December 11 meeting that was barely mentioned in the final draft.

Nevertheless, these 'verbal disclosures' remained pivotal in determining contractor disclosure. In the absence of a specific date that was supportable, GAO referred to it as a "late August meeting." GAO's acceptance of such flimsy evidence revealed that there was likely a hidden agenda by Ms. May and others to exonerate the contractors at the expense of the facts.

Similarly, another issue that your staff raised caused GAO to take an unprecedented step to nearly force Boeing to recant an earlier statement. It was about a critical parameter of the sensor called the "acquisition range." In a nutshell, Boeing had earlier agreed to a GAO statement contained in the draft report, which said that sensor could not meet the acquisition range criteria. Boeing agreed with our statement because it was technically correct even though its 60-day report claimed that it had exceeded the range. Barbara Haynes was concerned about the contradiction because she thought Bob Blumenfield would "run with it" as a false claim. She decided to have it changed with Boeing's help.

For a large portion of that time, I struggled with the GAO management to bring out the truth and to report fully and accurately our findings. I tried to get this information out through the normal bureaucratic channels. However, I did not succeed.

I did not have much leverage because of my relatively low-level position in the organization. I was further handicapped because I did not hold a permanent position until September 2001 even though I was hired in May 1998.

In the end, despite my utter disgust with what was going on, I had little alternative but to give my concurrence to the report before it was published.

March 2002
GAO publishes a biased report exonerating Boeing of any wrongdoing

After the report was issued, I continued to be troubled by it and thought many times about writing to you to tell you how the GAO – the organization which I joined seven years ago with a strong desire to serve the public and whose mission I am still strongly dedicated to -- failed to live up to its purported standards of accountability, integrity, and reliability.

The truth is that we withheld crucial information, skewed other information, and colluded with the contractors and the program officials to put a positive spin on the results of a test that was a failure. Our own report showed that the requirements set out in Boeing's own plan for the test were not met. It was little wonder that the requirements were voided shortly before the test.

Yet, GAO went along with the "success" story that was spun by the contractors and the program officials, hiding behind such statements saying that words "success" and "excellent" could not be quantified. And, most sadly, we gave the contractors a clean bill of health by helping fabricate a story about a crucial meeting that likely never took place. I am embarrassed that my name appears on this report.

Throughout the investigation you and your staff, especially Bob Blumenfield, raised many difficult and insightful questions. You seemed highly skeptical about the direction of our inquiry and especially the lack of documentation surrounding the meetings that we reported as having taken place between the contractors and the Army's program office.

Unfortunately, rather than prompting us to reveal more of what we knew about contractor wrongdoing, your questions seemed to have caused certain people at GAO to stretch the truth further in an effort to cover up this wrongdoing.

April 2002
Rep. Berman writes to the Comptroller General David Walker requesting an "independent" investigation

Clearly you sensed that something was wrong because you asked Mr. David Walker, the Comptroller General, on April 24, 2002 for an independent investigation to determine if GAO's integrity was compromised.

In response, Mr. Walker at first asked Mr. Mike Gryszkowiez, the Chief Quality Officer, to conduct a review. It appears that Mr. Gryszkowiez, in turn, requested Bob Levin to prepare a detailed rebuttal to your letter. Levin prepared a draft around May 2, 2002 with help from Barbara Haynes. He did not ask me for my input, but included me in the distribution list for the draft. I was disturbed by both its tone and its factual errors. I was also disappointed that although he privately said to us on many occasions that the issues your staff was raising had merit, he chose to overlook them and take a defensive posture in his rebuttal. Levin sent his final draft rebuttal to Mr. Gryszkowiez with a copy to me among others.

I never heard from Mr. Gryszkowiez, nor was I aware of his inquiry. I assumed that it was not pursued because he was a stakeholder for the report and as such had an obvious conflict of interest.

May 2002 – September 2002
The investigation by the GAO Inspector General

I wrote to Dave Walker for the first time on May 7, 2002 to inform him that your concerns about the report were well-founded. In fact, as I had said before, I tried to raise similar issues within our team throughout our review without much success because of pressure from Stephanie May and her collaborators from the Office of the Chief Technologist. I also warned Mr. Walker that the rebuttal prepared by Mr. Levin was flawed and would not hold up to scrutiny.

Soon thereafter, he asked Ms. Frances Garcia, the GAO Inspector General, to conduct a review and to report back to him. Mr. Alan Bennett from her office contacted me in early June and I cooperated fully with her investigation by meeting with her and her staff on several occasions for long periods of time. I explicitly pointed out numerous problems with our study to her and her staff, and provided them documentation such as a detailed counter-response to Mr. Levin's draft, which I had prepared, and other relevant documents. .

Unfortunately, she did not respond to the points I raised in my rebuttal to Levin's draft, nor examine the data or any of the problems with the scientific conclusions we made and reported. To my knowledge, she wished only to focus on a narrow set of issues. She made it clear to me that she was only looking at the question concerning GAO's procedural compliance. I believe, she was not willing to look at the real failures and biases in the report. She also refused to look at the serious lapses in ethics I brought to her attention that had occurred during the two-year long study.

Consequently, she reported finding only minor problems, which focused mainly on a supposed procedural lapse, which was GAO's failure to formally notify you of the change in

the objectives of the review. GAO protocols require that a letter be sent to the congressional requester to communicate any change in the original objectives of a review should one become necessary. Such a change is subject to approval by the requester.

She agreed with the GAO management that the revision in the original question meant that the objectives of the job had changed fundamentally. She found that GAO had failed to notify you clearly of these changes. Unfortunately, this was largely the extent of her findings. It was a bogus finding because the objective of our job, which was to review allegations of fraud, was never changed as evidenced by the title of our report. What changed was one of our researchable questions. GAO's failure to formally notify you of that change was no doubt a procedural lapse. But, that was not the real issue.

We were well aware that while you might have accepted a change in the research question or the format of the report, you wanted answers to your initial questions. I clearly remember your staff making that point at a meeting held at the GAO headquarters in July 2001 and on other occasions. Yet, you did not get your answer to the question if Dr. Schwartz's allegations were legitimate despite the fact that we researched precisely this question for most of our review.

Ms. Garcia's review lasted from June 2002 to September 2002, when she provided Mr. Walker a verbal briefing of her findings, but issued no report. Furthermore, in a final briefing to the team on September 11, 2002, she told us that she would recommend against providing you with any written point-by-point response to your detailed April 24, 2002 letter. Neither the questions you raised in your letter and through your staff's inquiries, nor the questions I raised in my letter to Mr. Walker were specifically addressed by the IG.

September 2002 – April 2003

Walker does not communicate the IG's findings to Rep. Berman for many months

I was deeply disappointed by the misdirection of Ms. Garcia's investigation and considered leaving the agency. Instead, I took a leave of absence to pursue a Fellowship at the John F. Kennedy School of Government.

I had hoped to hear from Mr. Walker thereafter about what he intended to do about my concerns, since he was aware that I had serious doubts about the IG's review. I was also confident that he was going to brief you promptly and then perhaps let the team know about its outcome. But I was wrong on both counts. As you may recall, he did not make any effort to communicate Ms. Garcia's findings to you for nearly seven months after her review was completed. He made no effort to contact me either.

My letter to Mr. Walker expressing concerns about the IG investigation

Having heard nothing for four months, I decided to write to Mr. Walker once again on January14, 2003. I told him directly that the IG investigation was completely inadequate. I said that she did a disservice to you and to GAO by effectively ignoring both the serious concerns expressed by you and the ethical lapses of certain GAO staff, which tainted the

report. Although it seems that he was concerned about the issues I raised in my letter about the IG investigation, I received no reply to this letter either.

Mr. Walker asks Mr. Dexter Peach, a former Assistant Comptroller General, to perform a quality-check of the IG review

As I said above, although Mr. Walker did not respond to my second letter, he clearly wanted some reassurance that the IG review would pass muster. I learned later that his deputy, Mr. Gene Dodaro, asked Mr. Dexter Peach, a former high-ranking GAO official, to verify whether the IG investigation was properly conducted.

Mr. Peach, who had a consulting relationship with the GAO, carried out what could only be a perfunctory review that lasted only a week. Subsequently, he certified the IG's work as having met GAO's high standards.

Strangely, Mr. Peach never contacted me for his review, although it was my January 14 letter that brought about his appointment. When I was finally able to speak to him on the telephone in April 2004, he told me that his inquiry had focused on the IG's review process, not the substance. He also did not consider the scope of Ms. Garcia's investigation to be within his purview.

So, his findings were virtually meaningless although they were used by Mr. Walker to justify closing the entire issue. Consequently, neither the questions you raised nor the related questions that I raised were ever really addressed.

Mr. Walker provides a verbal briefing to Rep. Berman

Finally, about a year after you wrote to Mr. Walker, followed by much prodding from your staff, he gave you a briefing in February 2003 about Ms. Garcia's findings. Given the brevity of time for the meeting and the breadth of issues that had to be covered, it was perhaps of necessity a broad brush, which could have not delved into the thorny details.

I was pleased to learn that he did address the issue of the so-called verbal briefing from "late August 1997." However, I was dismayed to learn later that he assured you that the meeting in question "...was indeed corroborated by several sources." Unfortunately, this is simply not true. Even though our report attributed this meeting to "Project office and Nichols Research officials…" (p.6), there is to my knowledge no documentation whatsoever that we discussed this specific meeting with anyone other than Mike Holbert of Nichols Research. I remember, when the matter came up during a telephone conversation, everyone would ask Mike about it. He is the only person who had any knowledge about this meeting. He did not document anything and remembered little!

At your further prodding, in April 2003 Walker provided you more details in the form of a point-by-point rebuttal to your original letter to him from more than a year ago. This rebuttal document, as mentioned earlier, was initially drafted by Bob Levin in May 2002 and was subsequently revised by the IG. It is full of questionable claims. My own response to it, which I will be happy to provide upon request, was simply ignored by the IG.

It is noteworthy that Ms. Garcia, who was perhaps aware of the weaknesses in Mr. Levin's response had recommended against providing it to you. Consequently, I was not surprised to learn that Mr. Walker did not mention it to you in his briefing. It was apparently a slip of tongue from Mr. Mike Gryszkowiez, who accompanied Mr. Walker, which alerted your staff to the existence of the document. It was then provided to you only after further requests from your office. I heard also that Mr. Walker did not mention anything about the investigation that Mr. Gryszkowiez himself conducted although he was right there.

Final letter from David Walker to Rep. Berman

Walker followed up with a final letter to you on April 29, 2003. In it, he apologized for the procedural lapse of not having notified you of the change in objective of the review and assured you that he had instituted changes in policy to prevent any recurrence in the future. However, he argued that GAO had done all it could to ensure that the high standards of the agency were met. He also reminded you that GAO provides the Congress with "unbiased" reports consistent with its core values, which are *accountability, integrity, and reliability*. In his opinion, the report in question was no exception and consequently "no changes to the report are warranted." In his view, this letter was to have laid the matter to rest.

January - July 2004

My suggestion to Dexter Peach for an external peer review

On January 5, 2004 I returned to GAO from Harvard University, where I had spent some sixteen months on a sabbatical. About a month later I contacted Mr. Walker yet again to express my continuing concerns. I also requested a personal meeting with him.

When such a meeting became difficult to arrange, primarily because of his busy travel schedule, I suggested a meeting with Mr. Peach instead. Some time later, Ms. Nancy Spitzer from Mr. Gene Dodaro's office contacted me. She informed me that Mr. Peach had recently moved out of the Washington, DC area, which made a face-to-face meeting less likely. After several more weeks, Mr. Dodaro's office finally set up a conference call on April 23, 2004 at my request.

A brief summary of our conversation follows. I can provide you with a detailed account, which was edited and approved by Mr. Peach following my initial draft.

Mr. Peach described his review as a "broad brush" in which he tried to answer the question whether the IG looked at all the issues concerned. It was clear to me from our conversation that his review did not delve into the substance of my concerns.

He said that it was not his place to "second guess" the IG, although in his own words he said: "under government audit standards the GAO IG is not organizationally independent."

I believe, even if the IG wanted to examine the full scope of the problem with our report, she would have had great difficulty carrying out an objective investigation because leadership at the highest level was involved in influencing what GAO reported to you.

Likewise, Mr. Peach, having spent many years at the agency in various capacities, might also have had similar difficulties. Furthermore, to my knowledge, he was until recently a consultant to GAO working as an instructor of "internal controls." It would not be unreasonable to assume that he might not have wished to embarrass either his client, or for that matter himself, because it was the so-called internal controls he taught that had failed in this case.

Toward the end of our long conversation I suggested that an External Peer Review team should perform such a review. There were two reasons for my suggestion. First, an agency-wide peer review was about to take place at the time by an external team, which was a first in GAO's history. So, I felt it might be convenient to include our report as a candidate for the peer review team. Second, I believed that the presumed independence of an external review team would provide the needed legitimacy, which has been clearly lacking thus far. However, Peach thought it would be problematic.

June 30 Walker letter rejecting my suggestion for a peer review

Quite unexpectedly, some time after my conversation with Dexter Peach, I received a letter from Mr. Walker, dated June 30, 2004. It was primarily his response to my suggestion to Peach about the need for an independent external peer review.

Mr. Walker pointed out in his letter that GAO had already conducted three independent reviews to address my concerns. He said that in addition to the reviews by the IG, and Mr. Peach, he had another review performed by the GAO's Office of Quality and Risk Management (QRM). In light of this, he believed that my suggestion for a further investigation by the external peer review team was neither necessary, nor appropriate.

I have already discussed the serious limitations of the first two. Now, the QRM review was even less independent than the other two since then QRM Managing Director Mike Gryszkowiez, as mentioned earlier, was one of the report's stakeholders. As the Chief Quality Officer of GAO, Mr. Gryszkowiez was the key official responsible for ensuring the integrity of the report and ultimately approving it for publication. According to an e-mail, he was even responsible for suggesting questionable changes to "tone down" the draft report.

Mr. Walker had initially picked Mr. Gryszkowiez to do an investigation immediately after receiving your request in April 2002. He wrote to me about it in a brief e-mail in May 2002, which he sent in response to my original letter. However, he soon changed his mind and asked Ms. Garcia to do the review, instead.

I welcomed his decision at the time and offered my full cooperation, not aware at the time of the lack of independence of the IG. (Unlike the Inspector Generals for cabinet and major sub-cabinet level agencies, who are appointed by the President and confirmed by the Senate, the IG at GAO is appointed by the Comptroller General. It also does not provide a semi-annual report to the Congress, as is the practice with other IG's.)

In fact, in my letter of January 14, 2003 to Walker, while expressing my concerns about the IG investigation, I commended him for not appointing Mr. Gryszkowiez because of the obvious conflict of interest. Hence, I was surprised to learn that Mr. Gryszkowiez had

continued his review. Mr. Walker did not say if Gryszkowiez submitted a written report to him.

I was not aware of Mr. Gryszkowiez's review at all, since he never contacted me just as Mr. Peach never did either. I was doubly surprised to find that Mr. Walker would actually cite it in his letter to argue against any further investigation. Curiously, Walker did not mention it in his final letter to you on April 29, 2003. Why the omission? I do not know.

December 2005

My final action

On the basis of the work that my colleagues and I did for nearly two years in response to your GAO inquiry, I am certain that GAO's published report (GAO-02-125, dated February 2002) is not only biased towards defense contractors and their military boosters, it is also misleading and inaccurate despite Mr. Walker's assurances to you to the contrary.

Ironically, even the very limited IG review found plenty of problems, according to Mr. Peach. Few of them, if any, were reported to you and Mr. Walker saw no need to correct the acknowledged problems within the report or issue a retraction.

I believe I have done my best to alert Mr. Walker to the serious violations of ethics and integrity that occurred during the course of our review. As discussed earlier, I have written to Mr. Walker on several occasions in the last three years voicing my concerns.

I had informed him specifically that the GAO Office of the General Counsel applied intense pressure to limit our investigation and kept us from reporting facts in our possession that your staff repeatedly requested. It was this unwarranted pressure that kept us from criticizing the contractors and program officials who wanted to carry their water, even if they clearly deserved such criticism.

I also warned Mr. Walker about the IG's failure to look at the substance of my allegations. I brought to his attention the fact that the IG attempted to obtain a written waiver from me certifying that I have not provided evidence in support of my allegations, when in fact I was bending over backwards to do just that.

All of this seems to have fallen on deaf ears, which compels me to draw one inescapable conclusion: there was complicity of the GAO management at the highest levels. I have reached this point after much soul searching and agonizing, and after examining the relevant facts over and over again in the last three years or so.

The June 30, 2004 letter from Dave Walker was so to speak the proverbial last straw on the camel's back. I felt that I had no other choice but to bring all the information to you, the Congressmember for whom the report was written and who has consistently attempted to find out the truth.

In the last nearly three years since our report was published, your staff has asked me many questions about what really happened with this study. I continued my dialog with Bob Blumenfield letting him know about my efforts to convince the GAO management to

conduct a truly independent investigation. It was only in the last several months that I decided to undertake this task of documenting in detail what I knew and write this letter.

GAO's professed duty as the investigating arm of the Congress is to provide the Members of Congress all the facts. In my writing this letter, I believe I am fulfilling that duty. It is my profound hope that this letter captures the many details of this sordid saga as I have seen it unfold and finally provides answers to the many questions that you and your staff raised throughout the course of our review.

My purpose in writing you this letter and thereby bringing what some may consider an internal GAO problem out into the open is not in the least bit motivated by any personal vendetta against anyone in GAO. I have enjoyed nearly universal good working relationships with both co-workers and superiors. I am also grateful that GAO granted me a leave of absence twice in a span of three years to pursue my own research interests not readily available at GAO.

It has taken me this long to write to you because I wanted to do everything possible to get the problems resolved internally. I was deeply disappointed that I was not able to do so.

BACKGROUND INFORMATION:

Cutting through the technical maze of the fraud allegations

The allegations made by Dr. Schwartz had to do with the claim made by Boeing and TRW that the flight test named IFT-1A had demonstrated the Boeing sensor's ability to distinguish between a nuclear warhead and its decoys. She reviewed and analyzed at the behest of the Justice Department the results presented by Boeing and TRW in the so-called 45-day and 60-day reports that were published following the test. In doing so, she found certain critical discrepancies between the reports, which formed the core of her allegations.

She believed such discrepancies were deliberate actions of the contractors to hide the deficiencies in TRW/Boeing discrimination software. Dr. Schwartz appeared not to be aware of the malfunction of the infrared sensor and consequently did not question the poor quality of the data collected during the test.

For your convenience, I have described below as far as possible in non-scientific language the nature of the flight test and the major issues underlying her allegations.

The most crucial part of a hit-to-kill missile defense system is the so-called Exo-atmospheric Kill Vehicle – the EKV. It rides on the interceptor rocket, which carries it to a certain altitude in space before releasing it so that it can henceforth fly on its own power toward the target warhead to destroy it by collision.

The heart of the EKV itself is a super-cooled infrared sensor, which acts like the eye of the kill vehicle. The sensor finds and tracks the target warhead and decoys as it flies toward them. During this time, the sensor attempts to view them repeatedly and records their behavior over many tens of seconds by observing the infrared signals emitted by the warhead and decoys. To the infrared sensor cold objects appear dim and hot ones bright. The signals also fluctuate depending on many factors, including whether the objects rotate or tumble. The sensor records all of these characteristics.

The sensor's on-board computer continuously analyzes the collected data and compares it with the data already stored in the computer's memory from previous observations. At the end of the viewing period, the sensor software designates one of the target objects as the warhead and commands the "kill vehicle" to speed towards it and ultimately collide with it. In a real mission, all of this would have to happen during the relative short flight time of the interceptor.

However, since IFT-1A was only a "sensor flight test" - not an intercept test - the sensor only viewed the targets from some distance as it flew past them and recorded their infrared emissions. The recorded data was then sent down via telecommunications links to the mission control center at Kwajalein Missile Range on the Marshall Islands.

It was processed further by Boeing after the flight and then compared with a template of known characteristics of the objects that were flown in the mission. A close match between the collected signals and the template would demonstrate the sensor's ability to discriminate between warhead and decoys. Obviously, if the template could be changed after the fact, then it would be possible to get a match with virtually any data.

The template, which is a crucial part of a so-called Mission Data Load (MDL), was supposed to have been controlled by the government to guarantee the integrity of the test. Unfortunately, there was very little control on the MDL used for post-flight analysis.

Schwartz alleged that the MDL was indeed changed between the 45-day and 60-day reports to make the results of the test appear much more successful than they actually were. She also found, for example, that data was utilized selectively and certain data was excluded from the analysis without any explanation.

Nichols Research Corporation (NRC) had been tasked to make an independent evaluation of the Boeing sensor's performance in IFT-1A. They had the most intimate knowledge of not only the sensor hardware, but also the key discrimination software developed by TRW called the Base Line Algorithm (BLA) that would be used to compare the collected data with the pre-flight MDL.

We found all of her observations regarding unexplained changes to the MDL, selective uses of data, and claims made by contractors of successful discrimination I IFT-1A to be correct. We met other government experts familiar with the test, who said that they did not believe the contractors' claim that the test demonstrated discrimination.

We also found that none of the discrepancies between the 45-day and the 60-day reports were communicated to the government in written documents within a reasonable period of time after the test. The issue then was: did the government know about these problems and if so, when were they told by the contractors? This put Nichols squarely in the middle of the controversy, as they were the eyes and ears of the government.

Who I am and what's happening at GAO?

I came to GAO in 1998 via Capitol Hill, where I was a Congressional Science and Engineering Fellow in 1996 with the House Committee on International Relations. I was awarded the Congressional Fellowship by the Institute of Electrical and Electronics Engineers (IEEE). Following that, I worked as a Professional Staff Member of the House Armed Services Committee from 1997 to 1998.

I went to Capitol Hill after spending nearly twenty years in defense research and development as an engineer and also as a program manager. Although I left the technical world, I was very much interested in working at the intersection of science, technology, and public policy. At GAO, I was pleased to get an opportunity to apply my technical background and experience to evaluate defense weapons systems.

As a congressional staffer, I had interacted with the GAO and was impressed by the sincerity and the professional attitude of the staff. From my own experience, I know it is one agency that the Congress relies most heavily on to get objective reports and in-depth analyses to help carry out its oversight activities.

Because of its legislatively mandated access to the executive branch agencies, it is the only agency that is able to carry out such reviews. The members of Congress, media and researchers cite its legendary “blue books” frequently as sources of information or to expose wrongdoing within government agencies. It is always assumed that the information contained in these blue books is accurate and unbiased. GAO reports to all intents and purposes are the last word.

I have no doubt that the vast majority of the GAO staff is conscientious, dedicated to public service, and people of integrity. Some of the GAO reports are outstanding, but some are not. Many believe that in the last several years, there has been a decided shift in the tone of the reports dealing with the Pentagon, to one that is noticeably friendlier to the agency and its contractors.

I have heard through the grapevine stories of extreme frustration experienced by staff on some high profile jobs because of interference from both the General Counsel’s office and the top management. While there is always a certain amount of friction between the analysts and the management team, these were somewhat out of the ordinary.

The list includes, for example, reviews of Iraq contracts, the revolving door between government and contractors, and electromagnetic spectrum usage. In most of these cases, according to knowledgeable people, the OGC has been critical of the GAO staff for being “too critical” of the Pentagon or the contractors.

Sometime last year, a GAO analyst, who was leading a politically-sensitive job, otherwise called high risk, told me that a member of the OGC staff - who like Stephanie May came from the Army General Counsel’s office - had strongly suggested that the review should not proceed, presumably because it could prove embarrassing to the Pentagon. I told her that it reminded me of Stephanie May’s repeated attempts to abort your job. After experiencing the twisting of the truth in your GAO study, such occurrences are particularly worrisome.

I am, however, encouraged to learn that Ms. Katherine Schinasi, who took over from Jack Brock as the ASM Managing Director sometime in 2004, has been trying to resist overt

pressure from the OGC to tone down criticism of the Pentagon. Whether she will be able to do so, or not remains to be seen. At least she might have been able to save certain reviews from being scuttled.

As the watchdog agency for the Congress and the taxpayers, I believe that GAO must be held to a higher standard. Unfortunately, my four-year struggle with the management shows that the agency that recently sought and received approval from the Congress to change its name to *Government Accountability Office* is failing to measure up to its professed motto.

The past few years have been particularly distressing for me to watch one scandal after another unfold in the corporate and financial worlds, while I struggled with the GAO management quietly. Words like "shredding" or "cleaning up files", which our attorneys used in their instruction to us, struck a resonant note with the ones that emanated from the evolving scandals at Arthur Andersen, WorldCom, and Enron. While stories about scandals and corruption in the defense-industrial complex have become staples of the national press, GAO was the last agency I had expected to have such things happen.

A DETAILED ACCOUNT OF THE ACTUAL PROBLEMS WITH THE GAO STUDY AND HOW GAO COMPROMISED ITS INTEGRITY

GAO collaborated closely with government program officials and contractors Boeing and TRW to write a report that failed to characterize as such the many questionable, outright false or otherwise unsupportable claims made by these contractors in their missile defense tests. This was so despite substantial evidence to support such characterization.

A good-news story was placed up front to distract the reader from the details of a failed test described in the Appendices of the report

There is a glaring disconnect in our report between what we broadly claimed and what the detailed appendices contained. The assumption was that very few readers would bother to read the appendices let alone understand the technical details, yet they would be there for the record. The central message, which was that contractors disclosed everything, was placed right up front perhaps discouraging an average reader to go deeper.

GAO was caught in a bind. On the one hand, the review team was under intense pressure to exonerate the contractors and the Pentagon from any wrongdoing. Barbara Haynes told me Stephanie May did not want any negative information about the Pentagon included in the report. May was also insisting that we should strictly limit the amount of information to be included in the report. Her frequent refrain was: "Contractors disclosed everything. End of story!"

However, Jack Brock was concerned that you and others might question why GAO produced so little after investing such a large amount of resources. Nearly three staff-years were spent, if not more. It was then on Jack's suggestion that most of the technical findings were included in the appendix to showcase the return on investment, as it were.

Ms. May went along with this approach somewhat reluctantly. Quite likely she and others in GAO management did not to fully appreciate the contradiction between the technical details

that showed a failed test and the central message that apologized for the contractors and the Pentagon, which dubbed it as excellent. While not extensive, it did result in some difficulties later with the press, not to mention your own press release and the subsequent letter that directly questioned the apparent discrepancy.

For example, after the report was published, the press focused on the sensor problems described in the report. This led BMDO spokesman Lieutenant Colonel Rick Lehner to publicly question certain conclusions of the report. For example, an article in the Boston Globe on March 4, 2002 said as far as he knew, "the sensor guiding Boeing's 'Kill vehicle' worked as planned," quoting Lehner. According to the Globe, he further said: "I would guess our people will take issue with this [GAO] report', and added, "at face value, the only thing I was told was that the Boeing kill vehicle did discriminate against the decoys and warhead. Until the agency tells me otherwise, I have to go with that."

At a post-publication lunch hosted by Mr. Levin, which I attended, Stephanie May expressed her concern about such comments by Mr. Lehner and said: "Rick should not be saying those things because we did not say that the Boeing sensor failed." I was not surprised to hear her comment and found it to be yet another example of how she was attempting to make sure that the Pentagon understood that the GAO report was indeed supporting them.

Our central message of full disclosure by contractors was based on "verbal reports" from a suspect "late August 1997" meeting

The central message put forward in our report was that the contractors disclosed all their problems to government officials and therefore did not mislead them. At its core was a totally unsubstantiated story of a so-called "verbal briefing" sometime in late August 1997. We gave this story an inordinate amount of weight in our report since the written documents provided to us did not support our message of full disclosure and also because certain members of our team were looking to find anything that matched their pre-drawn conclusion,

The primary source of information on this meeting was Mr. Mike Holbert, a technical manager with Nichols Research Corporation (now Computer Sciences Corporation) located in Huntsville, Alabama, which was a contractor to the Army's EKV program office in Huntsville.

Nichols' job was to provide technical assistance to the government program officials in monitoring the main hardware contractors for the antimissile sensor system, which included Boeing, TRW, and Raytheon. According to program officials, Nichols was suited for the job because it had built up an expertise in the subject over many years, having been involved in the government's research and development program for the antimissile system.

According to one missile defense program official at the Pentagon, 'Nichols did not want to rock the boat.' There is no doubt that Nichols was concerned about the survival of the program because it affected its bottom line. In this regard, Nichols was no different from any other contractor. I was amused when I found a comment made by one of our team members about Nichols. It said that Nichols was a shade more credible than the "hardware contractors," presumably referring to the likes of Boeing and TRW.

According to reports that Nichols submitted to the program office, there was a lot of uncertainty about the data collected during the test and Boeing did not know until very late what they could present to the government. After what appeared to be a chaotic several weeks following the flight test, Boeing submitted two reports to the government as part of their contractual obligations. One was called the 45-day Report, which was in fact a collection of briefing charts from the IFT-1A Data Review Meeting held in Huntsville on August 13, 1997. The second was Boeing's final report on the test – also known as the 60-day Report, which was dated August 22, 1997.

Despite the fact that the sensor had failed to cool properly and thus was able to collect little, if any, useful data, the tone of the 45-day report was highly upbeat. The contractors claimed that the sensor performance was excellent and the test demonstrated discrimination. They then went one step further in claiming that the technology was robust enough to discriminate against even unknown targets the system would encounter in an operational scenario. I believe it took amazing "chutzpah" on the part of the contractors to make such a claim because nothing could be farther from the truth.

The 60-day Report, while acknowledging the sensor cooling problem, glossed over the seriousness of the issue and claimed that the sensor performed nominally despite its inability to reach the desired super-low temperature. It continued the upbeat tone of the 45-day Report that the sensor had performed excellently.

However, managing the collected data, which was of extremely poor quality and lacked ground calibration, proved to be extremely difficult. In the rush to produce the reports and to show that not only had the sensor performed "excellently", it also demonstrated discrimination. The latter claim required it to make selective uses of the data, make changes to the template, etc. Dr. Schwartz in her review of the 45- and 60- day Reports found that changes were made without any explanation. She cried fraud!

Nichols also had apparently raised a number of questions on its own at the 13 August meeting mentioned above. Its own document provided to GAO shows that Boeing did not answer those questions. When they asked Boeing about them at a meeting on August 28, Boeing simply told Nichols to look at the 60-day report, saying that it would find all the answers there. Unfortunately, neither Nichols, nor the Army Program Office could provide us a copy of these questions.

However, another Nichols document dated 5 March 1998, which reported Nichols' evaluation of the Boeing 60-day report, pointed out that Boeing was yet to clarify "significant differences" between the 45- and the 60-day Report results, presumably the same issues about which Nira Schwartz had earlier raised a flag.

We knew all of these facts. In fact, Nichols to their credit had been on many occasions highly critical of TRW and Boeing in their reports to the Army Program Office in Huntsville. Yet on the outside, they always supported the contractor's claims of success. A Nichols scientist named David Braswell joked in one of the telephone conferences by asking us if we were to going to "hang them" for all their damaging statements about the flight test? Fortunately for Nichols, GAO did nothing of that sort.

Neither Mr. Holbert, the main author of the verbal meeting, nor any other program official could remember anything about this "late August 1997" meeting except, strangely enough, that the contractors disclosed all problems. No other documents existed, we were told, - no names, location, even whether it took place in Huntsville or at contractor's facilities in California.

The other parties at the briefing - Boeing and TRW - did not do any better either. In response to a GAO question TRW said that such a meeting could have happened either two to three weeks after the August 22 Report or in February of 1998. The contractors also could not produce any documentation for the meeting. Therefore, I was truly dismayed to learn that Dave Walker assured you that the meeting was "multiply sourced."

The August 13 meeting also had little documentation other than a collection of viewgraphs, which was called the 45-day report, as referred to earlier. I was interested in reviewing documents or notes from this meeting because this was the first major presentation of the data from the flight test. A Nichols document from a later date indicated that in fact a number of "action items" for Boeing were generated at this meeting. We requested a copy of the action items list from the government program official Mr. A. J. Reinicke, who was in charge of these items. We never received them.

It appeared to me as unusual since the August 13 meeting was a high-level meeting to present the results of the flight test to Brigadier General Joseph Cosumano, who was at the time the Program Manager for the National Missile Defense Program. He reported directly to Lieutenant General Lester Lyles, the Director of the Ballistic Missile Defense Organization.

I believe Gen. Cosumano was the highest ranking Army official briefed on the subject until that point. I know from my own experience that contractors normally hand out well-prepared briefing books at such meetings. There is also normally a formal record of the action items. Nevertheless, we could not get anything.

Even in the most unlikely event that the government somehow lost the records, Boeing certainly could have produced them. I believe the Action Items list referenced above would perhaps have shown what limitations of the test the contractors disclosed. These could have also helped us in sorting out the discrepancies between the 45-Day Report, which was presented at this meeting and the 60-Day Report, dated August 22, 1997, which was published a week later.

The items were never provided to us, neither did we pursue them seriously. We simply took the program officials like Mr. Roberson and Mr. Holbert and other Nichols employees at their word that nothing existed. Most important, without any record from this meeting we could not verify if Gen. Cosumano was made aware of the problems with the test. We repeated the program office version that they did not tell higher-ups of the problems.

It also did not deter us from reporting that Boeing reported all problems orally at a late August 1997 meeting. To cover ourselves from outside criticism, we did put in a caveat that neither the program officials, nor the contractors could provide any documentation about this meeting. However, we omitted the fact that other documents that were provided to us - such as reports from Nichols and the Defense Criminal Investigation Agency - showed that the said discrepancies were not addressed until an Addendum to the final report was published in

April 1998. Even this report, which was provided because of pressure from the Defense Criminal Investigation Service (DCIS), did not clear up all of the discrepancies. Questions regarding changes to the MDL and truncation of data remained unresolved.

It is also important to note that timing of the disclosures was significant because what we were really looking for was evidence of voluntary and timely disclosure by the contractors, not what was disclosed either because of prodding by the Department of Justice, or after-the-fact meaning it has been raised others. Furthermore, without evidence of what was actually disclosed and to whom, there was no way for us to evaluate whether these disclosures were comprehensive and accurate enough to justify our sweeping conclusion that the contractors disclosed everything.

We refused to provide you with a detailed timeline of disclosures because we were aware that in many cases they were not voluntary. Nevertheless, we also persevered to retain this late August meeting in our report to preempt any question about timeliness. The timing was supposed to coincide with publication of the final 60-day Report. It gave the contractors a way out by claiming that they did not hide anything from the government.

For your information, I have constructed just such a timeline from unclassified documents that were in our files (please see the Appendix). The timeline clearly shows that the contractors did not discuss anything voluntarily.

For example, as late as November 1997, program officials including Nichols were pressing Boeing and TRW for answers to the discrepancies discovered by Dr. Schwartz. As mentioned earlier, they got no answers even in March 1998. Sadly, all of this information received little weight in our evaluation. GAO accepted an explanation by Bill Roberson, the Deputy Program Manager, that the March memo was a mere formality. They had already received the information from the contractors by e-mail. He did not voluntarily produce the e-mails and GAO did not ask for them.

Incidentally, in the draft version of the report that was sent to the Pentagon for comments in the fall of 2001, the August meeting was labeled interchangeably as a “briefing” and also a “verbal report”. A copy of this report was sent to your office as part of the GAO protocol.

A GAO Senior Analyst now retired, who checked the accuracy of the report by cross-referencing it with supporting material provided by us, objected to calling the meeting either a “briefing” or a “report” in the absence of any supporting evidence. He was quite critical of the use of hearsay to justify such a conclusion and felt it was not how things used to be done at GAO. He eventually agreed to allow its inclusion in the report provided we downplayed its importance.

Eventually, the words “oral communication,” were used in the final report instead of “briefing.” The change of wording allowed us to circumvent the referencing problem. As discussed below, the prominence of this meeting in our report was further reduced after discussions with your staff. Nevertheless, the central message of full disclosure remained unchanged.

An eleventh hour decision to downplay the significance of the late August meeting

To the best of my recollection, there was a telephone conference with your staff shortly before the report was ready to go to the press in January 2002. During the call, in commenting on the draft report, your staff pointed out that it had dedicated much more space discussing the unsubstantiated late August meeting. They said, for example, that the "verbal reports" section was two and a half pages long. In contrast, the section on the 45-day Report for example, consisted of no more than five lines.

The criticism clearly unnerved Levin, who immediately after the telephone call directed Barbara Haynes to remove the "verbal section" altogether. However, this caused a serious problem for the report because without the so-called verbal reports we could not say that the contractors disclosed all their problems and limitations. She found a way around this problem by doing a couple things as described below.

First, she deleted the section called the "Verbal Reports" altogether as directed by Levin. But, she did so in name only because she did not delete most of the original text contained in that section, which was two and a half pages long, as I said above. She only removed it only to include large parts of it in other sections of the report. These sections actually discussed written ***reports*** submitted by Boeing – the August 13 (45-day), the August 22 (60-day), and the April 1998 addendum.

This was highly disingenuous because it gave the appearance that we were discussing what was contained in those reports. In truth, we were adding credibility to hearsay and the technical opinion of mainly a single contractor, i.e. Mike Holbert, but no one could have possibly known about it. Moreover, such discussion did not take place between the contractors and the government at the time those reports were published. In actuality, they took place between the contractors and GAO in 2001 and 2002, which were irrelevant in regards to disclosures.

Second, she removed any explicit reference to the late August meeting in the prominent Table-1 (p.13), where it was placed originally. The title of the table was revised slightly to read: "What and When Key Results and Limitations Were Included in Contractors' *Written* Reports" [emphasis added]

Although explicit references to the meeting were removed, its significance to GAO did not diminish. In a key section entitled *Disclosures of Key Results and Limitations,* which appeared early in the report, GAO left intact a statement as follows:

> *"Project office and Nichols Research officials said that in late August 1997, the contractors orally communicated to them all problems and limitations that were subsequently described in the December 1997 briefing and the April 1998 addendum."* (p.6)

In my opinion, such a language could only be produced by our lawyers, not the people who did the review. I would just raise a small point to question the truthfulness of the statement. We know for a fact that the neither the Program office nor Nichols Research officials showed any familiarity with the December [11] 1997 briefing. So, how could they have known what was in them?

A dubious December 11 briefing replaces the late August meeting

GAO had to find something to take the place of the late August meeting. It was the December 11, 1997 briefing that was barely mentioned in the original draft even though we had information about it all along. In fact, a senior Boeing employee had handed me a copy of the briefing charts during our visit to Boeing's Anaheim, California facility in January of 2001.

The charts were stapled together and had a cover page entitled "IFT-1A Lessons Learned." As the title indicated, they contained a discussion of the many problems of the sensor in IFT-1A and a proposed solution for each problem. The bottom line was that Boeing had all the problems under control and they were confident to proceed to the next test IFT-3. This was to be the only remaining opportunity for the Boeing EKV and its sensor to demonstrate its feasibility. The test was later canceled and the Boeing sensor never got a second chance.

As I had said earlier, even though we had these charts in our possession, we did not pay particular attention to them because the contractors could not document the meeting well. So, why this suddenly renewed interest? There were two reasons.

First, we had to find something to replace the August meeting. Second, information became available from the Army Program office that someone representing the program office attended a meeting in Downey on December 11, at which these charts were presented.

We were told this information literally days before our report was published. Bill Roberson had located a trip report from Teledyne Brown, Inc. – another Huntsville contractor, who represented the Army Program office at the meeting. It was a so-called "targets meeting."

Its purpose as the name suggested was to decide the composition of the target complex to be flown in IFT-3, which was scheduled to take place some months later. In the IFT series of tests, the targets were carried by a missile from Vandenberg Air Force base in California to simulate an enemy missile, while the interceptor was launched from the Kwajalein atoll in the Pacific Ocean. A different set of people were involved in this targets exercise from both the government and the contractors.

To our knowledge, none of the principal government officials responsible for the sensor or discrimination was there. Although we could not find any record of whom was present from the contractors' side at this meeting, it is nearly certain that sensor specialists from the contractors were not there either. They were actually busy on the same day interacting with Mike Holbert and possibly others somewhere else in Downey to discuss discrimination, documents show.

There was little information about the briefing in the trip report submitted by Teledyne Brown. The distribution list for the trip report did not even include the names of any of the relevant EKV Program officials such as Bill Roberson or A. J. Reinicke, and Nichols officials such as Mike Holbert.

In a conference call in February 2002 - literally days before the report was published, Bill Roberson could say only that he recalled having seen *similar* charts. He had nothing to do with the meeting. Mike Holbert was equally in the dark saying only that he had heard about the meeting, but could not definitively remember having seen them.

It was apparent from the charts that Boeing did not make this presentation to clear up discrepancies in their previous reports to the government. In fact, the reports in question – the 45-day and the 60-day reports - were not even mentioned at this meeting, let alone the issues we have been concerned with.

However, it did not seem to bother Barbara Haynes and Bob Levin. They clearly had to find some other "evidence" showing disclosure. Now, there was a trump card because they could cite an actual "briefing" to buttress their argument that contractors disclosed everything. The December 11 briefing served just that purpose.

All Levin wanted to see in this case was proof that "someone" - anyone - from the government was there, regardless of whether they were responsible or even cognizant about the issues concerned. The Teledyne Brown's trip report does not provide any information about who from the contractors actually presented the briefing.

If such important disclosures were made, it is not clear why neither Mr. Roberson, nor Mr. Holbert had any recollection of even having seen them. Stranger yet, as mentioned earlier, Mike Holbert was in Downey, California on the same day, but did not attend the meeting. Coincidentally, Holbert could not find a copy of his own trip report for visiting Boeing on that day. Neither could the program office.

Given all of the above, I cautioned Mr. Levin against using these charts as evidence of further disclosure by contractors. But he was not to be deterred. He said that he was satisfied that the *government* was briefed, once Bill Roberson said he would fax the trip report showing that certain members of Teledyne Brown staff had attended the briefing.

As my own timeline in the appendix shows, a Defense Criminal Investigative Service memo from 22 December 1997 said that contractors had not provided answers to the questions about discrepancies between the 45-day and 60-day reports. A Nichols memo three months later dated March 5, 1998 complained about the same thing.

It did not matter. A live meeting with hard copies of the presentation material was too precious to pass up given the general absence of written evidence. Mr. Levin overruled my objections.

GAO fudged a crucial fact to exonerate the contractor from an appearance of wrongdoing

In order to exonerate the contractor from any appearance of wrongdoing, Assistant Director Barbara Haynes went so far as to change a crucial fact in the report. In an unprecedented action, she pressured the Chief Scientist of Boeing, Mr. Bob Caswell, to modify a footnote that appeared in the draft report referenced earlier, which was sent to the Pentagon and the contractors for their comments.

The footnote had to do with the so-called "acquisition range" of the sensor, which is its ability to acquire objects at a long distance. During the acquisition process, the sensor has to keep false alarms – which are to detect an object when there are none - at a small number so as to not overwhelm the sensor. Both of these conditions – detection of an object at a certain

range (distance) and a low false alarm rate - had to be satisfied *simultaneously* in order to claim that the system demonstrated a certain acquisition range.

It was naturally a key parameter because, if the sensor could detect the attacking warhead and its decoys accurately at a long distance, it would provide the defense system more time to pick out the warhead carrying a nuclear weapon and intercept it, i.e. to discriminate the warhead from its decoys - an essential function for a missile defense system.

Boeing had claimed in its final 60-day report that during the flight test, its sensor not only met, but exceeded the required acquisition range. However, my analysis of the sensor performance based on other details contained in the same report showed the sensor failed to meet the required acquisition range, let alone exceed it. The sensor had failed to function properly due to a malfunction in its cooling system, which produced excessive false alarms.

In our draft report in Appendix 5, which I prepared, we stated that the 'requirement for the acquisition range could not be met.' The reason was simply that one of the two conditions was not met because of the extremely high rate of false alarms – more than 200 times the normal!

It took Pentagon more than two months to review our draft report and to provide GAO detailed comments. They made many comments and suggested changes. However, they did not object or even suggest any change to our conclusion that the sensor did not meet the acquisition range. It was technically correct and Boeing scientists admitted it.

However, shortly before the publication of the report, Bob Blumenfield pointed out during a telephone conference that there was an obvious contradiction in this matter between the GAO finding and the contractor's claim. At this, Haynes became extremely alarmed that Berman staff was going to "run with it" by calling it a "false claim."

Subsequently she asked me to call Mr. Bob Caswell, the Boeing Chief Scientist and get a clarification. I was disturbed by this development because in my mind there was nothing to clarify because we had made a statement of fact based on Boeing's own data. Moreover, as mentioned above, Boeing had more than two months to review the draft and did not object.

She still insisted that I get in touch with Boeing. After all, she was also my direct supervisor. So, I had little choice but to call him. By this time I had come to know Bob well having interacted with him frequently in the past two years and grew to respect him as a scientist.

He was traveling when I called, but I was able to reach him on his cell phone in-between his meetings. We had a three-way conference call including David Hand in Washington, DC. I told him how I had reached my conclusion that the acquisition range criterion as defined by Boeing could not have been met in IFT-1A. His response was that 'I had handled it reasonably.' I wrote up a brief memo to record this conversation and sent it to Barbara hoping it would close the matter. But, it was not to be so.

Later I heard from David that Barbara was not satisfied with this outcome and that she was going to set up another conference call in which she herself could participate. A day later, she and I talked to Caswell in a three-way conference call that I recall having been initiated

by her. To my regret, there was nobody else from GAO who participated, especially David, who had listened to my conversation with Bob a day or so earlier.

I have said earlier that she was alarmed that your staff (referring to Bob Blumenfield) might "run with it" as a false claim. It is my recollection that she said to Caswell something to that effect without, of course, mentioning his name.

According to my contemporaneous notes, she also said to Caswell: "What I am afraid of is someone is going to say that you did not meet the criteria when you said you did." The "someone" was a clear allusion to your staff. Subsequently, she urged him to reconsider his earlier statement.

I remember the conversation to be very confusing because it was not clear what she was trying to say to Caswell. His response was equally confusing. He kept saying things like "there was not good enough data to measure probability of detection" or that "it was not a good environment", etc.

I was extremely frustrated and after a while interjected and reminded him of our earlier phone conversation in which he had said that I had handled the issue reasonably. I recall that Mr. Caswell was clearly embarrassed and could not respond. Then I made a suggestion to Mr. Caswell that he should provide GAO a revised version of the footnote. He did so and it appeared in our final report. I was so shaken after this phone call that a colleague noticed it and asked me what had happened.

Ironically, all Mr. Caswell managed to say in his revised text was that the "acquisition range" could not be measured in the test. His admission about the sensor's inability to measure was right on the mark. As we have reported, because of the abnormally high noise in the sensor, most of the data had to be discarded, especially early in the test when the targets were far from the sensor. This is when the range was supposed to have been determined.

One does not have to be a rocket scientist to understand the simple logic: if the range could not be measured, it was not possible to know whether it met or exceeded the requirement. It made the original Boeing claim of "exceeding the requirement" even more ridiculous. The statement in the April 1998 report that said that the acquisition range of the sensor was actually two thirds of the "nominal" was perhaps closer to reality although the truth remains that the "acquisition range" could not be measured.

So, was it a false claim? Absolutely! But, we did not say so in our report and moreover, we tried to cover it up in a clumsy way.

Refused to address potential conflicts of interest involving the POET panel

I understood from my conversations with Barbara Haynes that Stephanie May did not want to include any specific information about potential conflicts of interest faced by the POET team and the MIT Lincoln Laboratory, despite repeated requests from your staff. For example, she refused to allow even publicly available information- such as the amount of funds received by the POET member institutions from the BMDO – to be included in the report.

I also found evidence of what I believed to be a serious conflict of interest for the MIT Lincoln Laboratory, which led the POET panel. It was contained in a letter from TRW to the Department of Justice. TRW stated that its discrimination software, which was central to the allegations made by Dr. Schwartz, was actually based on concepts developed through many years of government-funded research by MIT Lincoln Laboratory, among others. We were told by Lincoln Laboratory that it was similarly helping Raytheon – the current EKV contractor.

I believe TRW was developing its specific discrimination software called the Baseline Algorithm or BLA building on these concepts. It seems that they wanted to respond to Dr. Schwartz's allegation that TRW's software did not work by putting in a disclaimer that the software was not TRW's original and that renowned organizations like the Lincoln Laboratory have been advocating such algorithmic approaches for a long time.

In my opinion, it posed a serious conflict of interest for the POET. I pointed out that the POET team, which was led by Dr. Ming Tsai of the Lincoln Laboratory, could not make an objective evaluation of the software in question since the Lincoln Laboratory had actually helped develop and advocate the mathematical principles and algorithms underlying the TRW software.

It called into question the independence and objectivity of the POET report, which was instrumental in the Department of Justice's decision not to intervene in Dr. Schwartz's lawsuit under the False Claims Act.

Barbara Haynes and Bob Levin both saw enough merit in my argument to include in the draft a paragraph I wrote regarding this matter. Haynes later told me that Stephanie would not allow it.

However, the GAO IG agreed with me referring to a "margin note" about the conflict of interest that I had left in the TRW letter, which became a part of the work paper files, and which I had refused to clean up. The IG supposedly chastised the agency for not pursuing the issue. Francis Garcia, the IG, told us about it in her out brief on September 11, 2002. Stephanie May was on vacation and did not attend the IG's final briefing. I am afraid Walker did not tell you any of this, but just that no change in the report was necessary.

GAO attorneys directed staff to clean-up files and to shred documents, if necessary

Mid-way through our review there was a meeting at the GAO Headquarters to discuss the direction of the report. Its importance was underscored by the fact that Ms. Sheila Ratzenberger, a Managing Associate General Counsel, who was Stephanie May's supervisor at that time, and Managing Director Jack Brock attended the meeting. This was the only time Ms. Ratzenberger attended any of our meetings and one of the few times that Jack was present. Others in attendance were Bob Levin, Barbara Haynes, Naba Barkakati and Hai Tran (both from the Chief Technologist's office), Stephanie May, David Hand, and me.

At this meeting, Ms. Ratzenberger directed GAO staff to "shred documents", if necessary, in order to clean up the files. Stephanie May was somewhat taken aback by Ratzenberger's choice of words and asked her if she really meant it. Ms. Ratzenberger said she certainly did. Jack Brock, as if to reinforce what Ms. Ratzenberger had said, warned staff by saying that he

was aware of people whose once-promising GAO careers were aborted in the past for not cleaning up their files. For example, someone already in the Senior Executive Service (SES) pool did not make it to the SES ranks – a rare occurrence - for having left a comment in the margin of a draft report saying that the report was "watered down" by the management.

I was deeply shocked to hear such things and later felt ashamed for not protesting immediately. After the meeting I followed Bob Levin into his office to express my shock. I told him that I was not going to follow such instructions. To his credit, Mr. Levin said that I would not have to do anything I was not comfortable with.

I reported this whole incident to the IG who, instead of investigating such a serious allegation, basically downplayed it. Worse yet, the IG staff tried to turn the table on me by saying that I was not thoroughly familiar with GAO policies and procedures regarding retention of work papers.

I admitted that I was not familiar with the fine print of the retention policy. However, my understanding of the policy was that we were not supposed to discard any job related documents before the job was over, i.e. the report is published. On the contrary, evidentiary files and audit work papers are typically kept for up to five years after the job is completed.

Indeed, GAO policy says that work papers that are relevant to the final product must be retained as the official record. In addition, work papers relevant to the engagement objectives, even if not addressed in the final product, must also be retained as part of the official record. What evidence was Ms. Ratzenberger asking us to purge from our files?

Despite all the ill connotations of the word "shredding", however, it was not the real issue. One did not need to actually shred any document to remove it from the work papers. It just had to be tossed in a trash can. The net effect is the same. The point is: why did GAO lawyers instruct us to purge files in the middle of a job? The IG refused to ask this obvious question.

The IG reported that she found "no evidence of shredding." However, Mr. Peach said to me that he was told that files were cleaned up due to the *high-risk* nature of the job. Precisely my point!

Getting to the bottom of whether discrimination was demonstrated – how GAO dropped the ball?

Nichols possessed a copy of the TRW discrimination software. They had already installed it on their computer and verified that it functioned as claimed by TRW. In fact, they had run over forty test cases to evaluate the software's performance under various missile defense operational scenarios.

They had the raw data from IFT-1A, which was the government's copy. They also needed the Mission Data Load (MDL) for the flight test to carry out the discrimination analysis. One part of the MDL, which contains the template of the target characteristics, is actually provided by the government. However, the other part deals with sensor characteristics such as responsivity, etc., which are proprietary to the contractor. They needed this data from TRW and Boeing.

With the computer program under their control, plus the data, they could have performed a total verification of the claims made by TRW and Boeing once they obtained the MDL from the contractors.

We found during our review that Nichols indeed started this verification process, but had abruptly abandoned the effort without any explanation. When asked by GAO, they said other priorities took precedence because they had limited resources.

During our visit to Nichols in Huntsville, Alabama in March 2001, at my request, Dr. Phil Barton and Dr. David Braswell – two Nichols scientists who worked with Mike Holbert - had informally agreed to finish the IFT-1A data analysis. They estimated that their work would have taken no more than a few weeks and likely cost no more than fifty thousand dollars.

As an aside, I would like to say that I interacted with Phil Barton and Dave Braswell many times and discussed many a technical issue. They were both technically sophisticated and decent people.

It would have been incredibly valuable for all concerned to have this validation performed to prove once and for all whether the contractors had fudged data, or whether the software was able to discriminate the warhead from the decoys. However, to my dismay the Deputy Program Manager of the EKV project, Bill Roberson, rejected my request for Nichols to complete the task. He said that if GAO wanted to hire Nichols to do it they would have no objection.

Unfortunately, Stephanie May resisted my efforts saying GAO did not have the charter to request additional work from executive branch agencies. I believed it was a shame to have come so close and yet not get the answer.

We did not explore the possibility of hiring Nichols to complete the task for us. We just dropped the ball and shamelessly put out a statement in the report that said:

> *"Because it [Nichols] did not perform this assessment, Nichols could not be said to have definitely proved or disproved TRW's claim that its software discriminated the mock warhead from decoys…"*

It was classic legalese with Stephanie May writ large!

I met Mike Holbert and Phil Barton at the GAO headquarters at a meeting in early 2002 to review the Pentagon's comments on our draft report. They told me at that time that they never received the revised MDL from TRW despite several requests following the IFT-1A test. The MDL needed revision to reflect the abnormally high temperature of the sensor during the test. Without the revised MDL, they could not have completed their analysis.

I do not know why Roberson rejected my request. Could it be possible that he knew about the MDL fiasco? Since the analysis of discrimination performance would have been impossible without the MDL, it would have cast serious doubt about the contractor's claims regarding successful demonstration of discrimination. Could it also be the reason why Nichols had abruptly stopped their original analysis? Anyway, we dropped the ball and let the matter rest.

A disingenuous claim that Mr. Berman was unhappy because he was not fully made aware of the revised objectives

GAO has been trying to sweep it all under the rug by claiming that there has been a huge misunderstanding because GAO did not adequately communicate to you the changes in objectives of the review.

This same theme has been repeated several times by the GAO management – in Mr. Walker's letter to you and to me, in my conversations and correspondence with the IG, and finally my conversation with Mr. Peach. Such a unified response from GAO and its independent reviewers is unlikely to be a mere coincidence. It became a party line for everyone to follow including the so-called independent reviewers.

More to the point, GAO decided to do a *mea culpa* on a matter of process, which was supposedly GAO's failure to notify you about the revision in one of the researchable questions. By doing so, it has tried to distract you and everyone else from the main issue, which is that it found many questionable actions by the contractors and refused to report them appropriately.

On our General Counsel's advice, GAO revised your original question, which asked whether the contractors made false claims, tampered with data, etc. The new question that GAO formulated for you was whether the contractors disclosed key results and limitations of the early flight test called IFT-1A.

The motive behind this revision was as follows: Under the False Claims statute, a contractor is culpable if it submits false vouchers to get paid by the government. Therefore, it did not matter if the flight test was a failure as long as the contractors told the government it was so presumably before submitting the vouchers. This is the reason why GAO made the statement that contractors disclosed everything. And then, in order to justify its position, it went so far as to help concoct a phony meeting at which the contractors supposedly told government officials of all their problems. It had to do so because no written reports or documents did so in a timely manner.

It was a clever move by the GAO. By asking the question whether the contractors disclosed everything and then answering it in the affirmative, GAO effectively exonerated the contractors of any wrongdoing. Thus, GAO would indeed settle the fraud issue, while at the same time it refused to even raise the question directly. Stephanie May was adamant about the point. She said many times, the message is that contractors disclosed everything and that was the end of the story.

On the other hand, if we had retained your original question, "Did the contractors tamper with data, or skew the results?" the answers would have been yes to both. There was ample evidence that the contractors had modified data. And, yes they had skewed the results to put a highly positive spin despite the fact that there was little useful data to begin with. The high sensor temperature drove it outside the range where it was calibrated before the flight.

Without calibration the measurements were meaningless. Yet, it did not prevent Boeing and TRW from claiming at the 45-day Data Review that the test was highly successful and that it demonstrated the technology to discriminate between warhead and decoys.

There is no doubt in my mind that both your staff and the GAO team understood that there was no change in the intent of the review. In fact, the title on the cover page of the report betrays any such notion. Indeed the title "*Review of Allegations of an Early National Missile Defense Flight Test*" is what you had asked GAO to do to begin with. There was also little doubt about the context of the report. It was GAO's assessment of the allegations made by Dr. Schwartz under the False Claims Act, which Senator Grassley and you have been leading proponents of.

WHAT IS AT STAKE?

GAO's reputation and politicization of the process

Ever since assuming his position as the Comptroller General in 1998, David Walker has repeatedly emphasized the value of GAO's integrity. Having come from the now discredited auditing and consulting firm Arthur Anderson, Walker is also keenly aware of the need for accountability, integrity, and reliability of the financial audits of federal agencies and the reports issued by GAO. In fact, Mr. Walker has explicitly stated these attributes as the core values of the agency. He has gone so far as to push for legislation to change the name of GAO recently from the General Accounting Office to the Government Accountability Office, which occurred several weeks ago.

The politicization of the report, the cover up, and the gross violations of GAO's own procedures and professed values can seriously undermine the ability of the Congress to oversee the Pentagon and other executive branch agencies. The exoatmospheric kill vehicle of the antimissile system had cost the taxpayers $800 million in research and development alone by the time we did our review. The single test under question cost $100 million. Many hundreds of millions more have been spent since then and subsequent tests pronounced as excellent and successful. How can one trust their results any more than the results of the IFT-1A?

Indeed, it is the politics of missile defense that likely influenced the GAO management and ultimately corrupted the process. Stephanie May, GAO counsel and former Army JAG, said in one of the discussions that the NMD program was under attack and GAO should not knock it any more.

Ramifications for False Claims Acts suits

You, Mr. Berman, and Sen. Grassley have worked hard for a number of years to revitalize the False Claims Act, which has been instrumental in recovering hundreds of millions of dollars for the U.S. Treasury from errant contractors, who defrauded the government.

Given the lengthy time period in prosecuting such cases and the enormous resources of large contractors, it is almost impossible for a Qui Tam litigant to pursue such a case without help from the Department of Justice. To his credit, Attorney Dennis Egan of the Department of

Justice labored on this case for a long time. The technical nature of the allegations made it difficult, however, for the Department of Justice to make a decision on its own whether to intervene on behalf of the plaintiff Dr. Schwartz. It had in fact to rely on the Ballistic Missile Defense Organization, and the Army Space and Missile Defense Command for a recommendation whether to do so.

It was evident to all at GAO that the personnel in these agencies had much at stake to keep the program alive. They and the contractors were saying that the flight test was a success even though they knew that the test failed to meet most test criteria. As I have discussed in detail in my letter, the so-called "independent" evaluators such as Nichols Research Corporation and MIT Lincoln Laboratory had a large stake in the fate of the NMD program. Yet it was them who were given the task of evaluating the allegations.

GAO General Counsel's stubborn refusal to allow us to look at the conflicts of interest of Lincoln Laboratory and Nichols Research Corporation was a betrayal of its congressional mandate.

It was also a tremendous loss of an opportunity to shed light on a vexing problem of how to bring proper accountability to scientific projects that spend billions of taxpayer dollars, but hide wrongdoing under technical jargon and doublespeak. An objective assessment by GAO of both the true nature of the relationship among these organizations and the reasons behind their recommendation not to intervene would have been extremely valuable for the Congress.

GAO could have done a major service to the taxpayer, if it chose to highlight this issue. Instead, it shirked from its duties by hiding behind, what you had correctly pointed out in your April 2003 letter to Mr. Walker as "boiler plate" language and a legalistic argument about how existing federal acquisition regulations were sufficient to prevent conflicts of interest from occurring.

It was difficult to understand why we took such a hands-off approach because Justice Department had already decided in 1999 not to intervene – long before our review started. Therefore, GAO was not in any way going to interfere with the Justice Department's decision. It would have, however, helped the Congress to address the issue especially in regards to getting truly independent scientific peer reviews to help DOJ to make a better decision in similar cases in the future.

Relevance to the current missile defense system

While the larger issues discussed above are truly significant, the issue of missile defense is also important. The unacknowledged failure of the Boeing sensor in IFT-1A was followed by allegations by Raytheon that Boeing stole its technology, which resulted in an arbitrary down-select decision in favor of the Raytheon sensor. Ironically, if the failure of the Boeing sensor had been properly acknowledged, it is likely that the NMD program would have been forced to test another Boeing sensor in IFT-3 as originally planned.

Most scientists believe if the Boeing sensor were to cool properly as would likely have in a second test, it would prove to be superior to the Raytheon technology, which is based on a sensor that operates at a much higher temperature than the Boeing unit. After spending close

to a billion dollar of taxpayer money in developing this technology, we may now have a sensor that is not up to the task.

One of the widely-acknowledged major deficiencies of the system is the lack of a demonstration of the sensor's ability to discriminate. IFT-1A was one of the two crucial tests ever conducted to evaluate the system's ability in this regard. We now know what really happened in IFT-1A.

There was not, to my knowledge, an independent verification of the results of IFT-2 - the flight test for the Raytheon sensor. Furthermore, no tests have been conducted since then to properly test the discrimination capabilities of the Raytheon sensor since the test schedule was revised after the down select. Given the propensity of the program officials and technical support contractors like Nichols, who would go to any length such as to perhaps make up a non-existent meeting to ensure program continuity, it is essential that the results of the IFT-2 be subject to an independent verification.

Under direction of the President, the U.S. is soon going to deploy a missile defense system that has not been tested. Even GAO reports published since 2002 have observed that the tests were scripted and not rigorous. The Director of Operational Testing and Evaluation, Thomas Christie, has warned that he could only certify the system as no more than 20 percent effective.

The antimissile program since then has decided to focus on other aspects of the system leading up to the deployment. No further testing has been done to evaluate the current Raytheon sensor's ability to discriminate against multiple targets.

IFT-1A and IFT-2 even though they took place more than seven years ago remain to this day the most current assessment of the interceptor's discrimination capability – an essential requirement for any missile defense system.

Fielding an inferior EKV sensor system

It is true that mainly the cooling problems of the Boeing sensor, which was compounded by a failure of other components and the data communications links, bedeviled the IFT-1A. It is also true that the contractors and program managers characterized the test results as excellent, when they were indeed a failure. However, what got lost in the shuffle and the ensuing chaos was a very important decision that took place a year later. It was the arbitrary and also highly questionable decision to choose a sensor for the antimissile system without proper evaluation.

As preparations were ongoing for IFT-3, in which the Boeing sensor would have had one more shot at demonstrating its technology, the test was abruptly cancelled. Under threats of a lawsuit by Raytheon and possible disbarment from future contracts, Boeing threw out its own sensor and elected Raytheon's, instead. Another GAO investigation at your request revealed that the decision was made without any documentation of its rationale.

Stories about espionage by rival contractors in the defense business are becoming all too familiar. In this case it has another dimension to it, which is the extraordinary irony of a contractor rejecting its own product. A second irony is that the Boeing's sensor is widely

viewed as potentially much more capable, despite its failure in the now infamous IFT-1A. For reasons of classification, I cannot discuss further why it is considered more capable.

However, one bad decision should not be allowed to follow another, especially since the effectiveness of a system about to be fielded may be at issue. At the time of this decision, nearly a billion dollars in taxpayer funds were spent on the EKV program of which the Boeing portion was at least half of that amount. Clearly, taxpayers deserve better.

CORRECTIVE MEASURES

What I would like to see happen?

1. Mr. Walker must accept the ultimate responsibility for the ethical violations and announce immediately transparent steps to correct them.

2. An external review team appointed by Mr. Walker with the concurrence of the Congress should investigate the following and report back to the Congress.

    - What role did the OGC Chief Tony Gamboa and his subordinates, especially Stephanie May play in unduly influencing this review?
    - Did their close relationship with the Pentagon and its attorneys influence their judgment?
    - What was the role of the Chief Technologist and his staff in this process? Did they carry out their work objectively?

3. Mr. Walker must issue a retraction of the report and appoint a different team to review and issue a new report within a short period of time. It should answer the original questions about contractor wrongdoing. now that Dr. Schwartz's lawsuit has been dismissed on the grounds of national security.

4. GAO should immediately ask Nichols Research Corporation to complete the unfinished IFT-1A data analysis under supervision of above the external review team.

5. The Missile Defense Agency should revisit the feasibility of the Boeing sensor if the GMD Program continues as planned.

6. An eminent panel similar to the shuttle Challenger Commission should review the discrimination issue and determine if the physics and engineering issues are solvable.

7. Congress should hold hearings to evaluate the need for organizational reform within GAO as follows:
    - Independence of the Office of the Inspector General
    - Mandating the IG to publish its findings
    - Feasibility of appointing an ombudsman who will report annually to the Congress about GAO's work independently of the Comptroller General

8. Congress should ask DOJ to study:

a. How DOJ could acquire independent scientific and technical expertise to help with false claims investigations?
b. The appropriate role for a governmental agency like the MDA in the DOJ decision to intervene in a qui tam suit.

On a personal note, I would say that the opportunity to delve into the technical and scientific issues in this review was greatly satisfying to me and I was pleased to receive an award from the GAO, with the following commendation:

> *"As the lead analyst, you demonstrated tremendous skill and patience in working through and understanding the complex technical materials provided by the Boeing and TRW contractors, Dr. Schwartz and Dr. Postol, the Phase One Engineering Team, and program officials….. By exercising your responsibilities with great care, you made the engagements an unqualified success."*

While I was extremely pleased that the GAO team recognized my contributions, it was obviously bitter sweet. After all, GAO was crediting me for helping to make the report an "unqualified success" – a characterization I did not agree with. Incidentally, after my return from Harvard University, I was not assigned to any more reviews of the missile defense program.

I sincerely believe that the information I am bringing to your attention is the ultimate result of many oversights, mistakes, poor judgments and understandable biases of individuals caught up in their routine work everyday, where it is difficult for anyone to see things beyond their immediate horizon. Nevertheless, the cumulative outcome of these problems has proven to be extremely serious.

Finally, I would once again like to say that most of the people I have named in this document are decent and honorable individuals. I have worked closely with many of them in and out of GAO. Without fail we maintained almost always a cordial and professional relationship even though we clearly had disagreements.

I would like to do my part in helping you and the Congress address these issues so that we can bring much more transparency and accountability to these organizations and programs, especially GAO. This is one of the major reasons that I have not resigned my position.

I also stand ready to answer any questions that you might have. Please feel free to contact me either by telephone or e-mail. I have provided my contact information on the last page.

I thank you and Senator Grassley for all your efforts and leadership in the Congress to strengthen the legislation for the False Claims Act that has helped recover billions dollars for the taxpayer. With highest regards,

Sincerely,

Subrata Ghoshroy
Senior Defense Analyst

APPENDIX

The GAO Review Team

Core Members

The responsibility for the review fell under the GAO team called Acquisition and Sourcing Management (ASM), which was headed at the time by Mr. Jack Brock, the Managing Director, who has since retired. Mr. Robert Levin, Director, ASM, who reported to Mr. Brock, was the senior person within ASM responsible for the review. It happened to be his first major job in defense acquisition since his joining the ASM team several months earlier as a new member of GAO's Senior Executive Service cadre.

As an Assistant Director, Ms. Barbara Haynes, was in charge of all missile defense work and reported to Mr. Levin. She was responsible for supervision of the team and for producing the draft report for Mr. Levin's approval before it went to other "stakeholders" within GAO for their review and approval. Mr. David Hand was the Analyst-in-charge, who mostly dealt with non-technical issues and made sure that all the paperwork was in place. I was the technical leader of the review team and, as such, was responsible for identifying and analyzing all technical issues, which formed the core of the allegations of fraud made by Dr. Nira Schwartz. Outside the main ASM team, there were two other significant players in the review process who were external stakeholders as described below. They exercised near-total veto power over the report because without their written concurrence the report could not processed for final approval by the upper management – Gene Dodaro and Dave Walker, in this case.

External Stakeholders

One was Ms. Stephanie May, from the Office of the General Counsel. At the time of the review, Ms. May was an Assistant General Counsel. She was promoted to the SES cadre in July 2002 as an Associate Managing General Counsel. I found Ms. May to be the primary person in terms of influencing the review and the final report.

Whatever the reasons for the strong-arm influencing by the GAO management, Ms. May was the right person to do it since she had intimate knowledge of the Army and the Missile Defense Agency, having worked for a number of years in the Army General Counsel's office prior to coming to GAO. It appeared to me that she knew the BMDO attorney Ross Branstetter very well.

Incidentally, about six months or so into the job, Ms. May abruptly replaced attorney Bill Woods as the OGC representative assigned to our job. Mr. Woods has been a member of the OGC staff for many years and told me that he was worried about my situation. He made the comment after GAO received a letter from the BMDO General Counsel Mr. Cifrino, who wrote to Mr. Gamboa questioning my objectivity. To my knowledge, Mr. Woods left the General Counsel's office sometime later to join the SES pool. He is now a Director in ASM responsible for Defense Contracting issues.

It was during Mr. Woods' watch that we conducted our initial analysis and briefed your staff in early 2001. At that time, I was not aware of any noticeable pressure from the OGC that we

could not investigate whether contractors had made false claims. Of course, I was not privy to any behind-the-scenes discussions that might have been taking place at the headquarters, especially at higher levels. Woods did tell me once that he was worried about me after GAO received the Cifrino letter mentioned above. The situation changed quickly after Stephanie May took over.

It was abundantly clear from her actions and also what I heard from Bob Levin and Barbara Haynes that she did want the report to say anything negative about the Pentagon and the contractors. Throughout the review I had many encounters with her and I must admit that it was an adversarial relationship because of my efforts to challenge her motives.

The other was the Chief Technologist Mr. Keith Rhodes and two members of his staff - Hai V. Tran and Naba Barkakati. While Mr. Rhodes did not much directly participate in the review, he designated Tran and Barkakati to work with the ASM team. I interacted with them on numerous occasions.

Initially, there was a tussle within GAO about which group was going to be in charge of the investigation. Bob Levin told me that, as the Chief Technologist, Keith Rhodes laid claim to the review since it was going to be technical in nature. However, he proposed my name for the person who could actually do the work.

Mr. Lou Rodrigues, who retired a year or so ago, had basically Jack Brock's job at the time, Lou had little respect for Rhodes. He wanted Mr. Levin to be in charge as long as I could lead the technical part. An obviously nervous Mr. Levin, who was at that point fairly new to missile defense issues, telephoned me one day to inquire if I felt I could do the job. He was very relieved when I told him that I felt totally comfortable in leading the technical effort.

While as the technical leader of the review, I did nearly all of the data review and analysis, the role of the Chief Technologist and his staff was to review my work and validate them. Some times they did not review the original document in question and yet provided their opinion. They were clearly pressured by Ms. May to change their assessment after we had reached agreement about the conclusions drawn from my analysis.

For example, perhaps the only one e-mail I received from Rhodes throughout the two-year review was his response to my assessment of TRW's exclusion of data from the last several seconds of the IFT-1A. Strangely, in his response the *Chief Technologist* did not devote his attention to the technical issues at hand. His conclusion was that we found no criminality - not very different from the Pentagon attorney Ross Branstetter, who recommended that the title for our report should be "GAO found no fraud!" Lou's concerns about Rhodes turned out to be right on the mark.

Evolution of the Report

Barbara Haynes produced the first draft of the report after I had given her my inputs, which were heavily edited by Barbara with the help of Naba Barkakati and Hai Tran from the Chief Technologist's Office. I was away in India to take care of my parents and therefore not aware of the changes. David Hand, Evaluator-in-Charge, sent me a copy by Fed Ex, which I received on August 10, 2001.

I promptly reviewed the draft and found that I had major concerns with it because of the unfailing positive spin favoring the MDA and the contractors, which was not reflective of our findings. In a telephone conversation with Mr. Levin I expressed my concerns. He told me not to worry because it will go through major revisions. I continued to challenge the report in the ensuing months without a lot of success. Many times Bob Levin and Barbara Haynes agreed with the points I was raising and tried to include them in the draft, only to be overruled by Ms. May or on purely technical issues by the Chief Technologist's office.

The draft report produced by Ms. Haynes had to be approved first by Mr. Levin and subsequently by Mr. Jack Brock, who was Mr. Levin's boss. Additionally, Mr. Rhodes and Ms. May had to approve it before it could go forward. It was obviously Ms. May's biggest leverage in getting Mr. Levin and Ms. Haynes to bow to her pressures, which they did despite their reservations, which they privately expressed to us.

Furthermore, since the report was branded as high risk due to political sensitivity of the missile defense program, Mr. Mike Gryszkowiez, the Quality Officer and Mr. Gene Dodaro, the Chief Operating Officer, also reportedly reviewed and approved it. In fact, during the IG Francis Garcia's final briefing to the staff on September 11, 2002, she said that she found the report to have certain factual errors. Brock responded by saying that he would object "violently" to any such assertion and reminded her that both Mike and Gene had reviewed the report.

There is no doubt in my mind that Ms. May was not acting alone. GAO management at the highest levels was involved in decisions regarding this review especially since you had taken a keen personal interest and your staff had raised numerous issues throughout two years. This was clearly evident when Ms. Sheila Ratzenberger, who was Ms. May's supervisor at the time, directed GAO staff to "shred documents" or otherwise purge and clean up files.

The Review and its Objectives

The two so-called independent investigators - the GAO IG, and Mr. Dexter Peach, have made much about how GAO had failed to convey the change in the objectives of our review to you. They tried to say that you had different expectations about the job and implied if you were made aware of the change, you would likely have no concerns. This was nothing but a smoke screen and a blatant effort to distract from the real issue.

The truth is that even though GAO later made much about a change in objectives, in reality there was no change in objectives. What GAO changed was a researchable question which already had an answer – the contractors did not commit fraud. GAO was able to pull this off by not answering the specific questions you had asked.

In fact, the decision to not answer the question whether the contractors made false claims about the results of the flight test was made months after our investigation began. Much of our data collection to answer your original questions was already over by that time.

For example, GAO had a meeting on April 23, 2001 with Bob Blumenfield and Doug Campbell of your staff to discuss among other things the scope of our work. Bob Levin, Barbara Haynes, and I attended. At that meeting, GAO asked for an *extension of the scope* of our review so that we could examine the quality of the data from the test. GAO felt it was

necessary to understand more thoroughly the failure of the sensor because my own analysis indicated that the infrared sensor had failed to perform properly due to a cooling system malfunction.

Further analysis of reports and additional information provided by the contractors in response to my numerous questions revealed more problems with the test. We found out that not only did the sensor fail to cool properly; there were other critical components of the system, such as the electronic power supply and the telecommunications link with the earth, which had also failed.

The net result was that very little useful data was collected during the flight. This was admitted by Mr. Caswell, the Boeing Chief Scientist during our visit to their facility in January 2001. It turned out to be our most important finding because we were able to explain why the contractors had to chop off data and recreate the template Mission Data Load, etc.

GAO also requested at that meeting that the question you had asked us originally about false claims, data tampering, etc. be revised to one that asked: 'What did the contractor disclose, or not disclose about the results and limitations of the IFT-1A?'

The GAO investigation lasted nearly eighteen months during which we reviewed numerous classified and unclassified documents, met with government officials, visited contractor sites, and spoke to outside experts. We also met with Dr, Nira Schwartz and Prof. Ted Postol of MIT on several occasions.

We started our review in July 2000 and provided your staff with interim results several times. You had quite correctly pointed out in your April 24, 2002 letter to the CG that, in a January 2001 briefing to your staff, the GAO stated that it was pursuing the questions of contractor wrongdoing and falsification of data by the contractors as you had requested. It was after nearly nine months that GAO suddenly determined it could not answer the question about false claims. The question is why?

DETAILED TIME-LINE OF EVENTS BETWEEN AUGUST AND DECEMBER 1997

[*Prologue: IFT-1A was held on June 24, 1997. Boeing made a preliminary presentation of the results on July 28, 1997. An NRC trip report following that meeting was highly critical of the Boeing/TRW presentation indicating that NRC was skeptical about the results. Regardless, Boeing/TRW claimed two weeks later at the 45-day review that they had obtained excellent results and demonstrated discrimination. Below is a chronology of events and disclosures made by contractors, starting with the 45-day Report review on August 13*]

Date	Event Description	Location	Reference Document	Author/Source
August 13	IFT-1A Data Review (45-day Report)	Huntsville, AL	45-day Report	Boeing/TRW
	[*Neither the GBI office, nor the contractors produced any record from this very high-level meeting at which Brig. Gen. Cosumano, NMD Program Manager was briefed on the results of IFT-1A. A number of action items were said to be generated for the contractors. However, despite our request GBI Program office did not provide GAO a copy of the items.*]			
August 22	60-day Report published (nominal date)		60-day Report	Boeing/TRW
	[*Report is not actually distributed until after Labor Day, Sept. 1. According to Nira Schwartz, she received the 45-day and the 60-day reports about ten days later and took about ten more days working round the clock to review them.*]			
August 28	Data review at Boeing	Downey, CA	NRC trip report (9/2/97)	Mike Holbert, NRC
	[*According to the NRC trip report, Boeing refused to provide answers to the questions raised at the earlier meeting. Boeing said that all the answers could be found in the 60-day Report. Most likely, this was a reference to the Action Items generated at the August 13 meeting in Huntsville. Needless to say, Boeing was not forthcoming even about the issues that were already known, let alone those yet to be discovered by Schwartz.*]			

DETAILED TIME-LINE OF EVENTS BETWEEN AUGUST AND DECEMBER 1997

Date	Event Description	Location	Reference Document	Author/Source
August 29	Meeting between NRC and DCIS Re: NRC evaluation of TRW Discrimination algorithm	Downey, CA	NRC trip report (9/2/97) DCIS letter (9/16/97)	Mike Holbert, NRC Sam Reed, DCIS
"Late August Meeting"	Informal meeting	Unknown	None (Verbal)	Mike Holbert
	[*This is the meeting that GAO report states, where the contractors disclosed all the problems. Who was present? Where was it held? When? Nothing is known. Significantly, as this chronology of events shows, Nira Schwartz did not even receive the 45-day and 60-day reports until September 2 in the earliest, most likely later. It took another ten days for her to review them, which would mean her allegations would not be known until September 12 at the earliest.]*			
Week of Sept. 8	Telecon between NRC and Gov't Re: TRW Discrimination algorithm		DCIS Letter (9/16/97)	Sam Reed
October 4	DCIS Meeting with GBI rep Hank Barcikowski Re: TRW Discrimination document	Downey, CA	DCIS memo (10/8/97)	Sam Reed
Sept 12 – Nov 20	Schwartz reports her findings about the discrepancies between 45-day and 60-day Reports to GBI representative	Downey	DCIS Letter (12/22/97) to Mr. Keith Englander (BMDO)	Robert Young
	[*Specific date of this meeting is not stated in the source document. However, it is reasonable to assume that it happened sometime after she finished her analysis in the middle of September and before November 20, when the GBI representative asked TRW about them as noted below. This is a clear documentation of the fact that Dr. Schwartz explained her findings from her review of the 45-day and the 60-day reports to the GBI representative well before the December 11 briefing cited by GAO.*]			

DETAILED TIME-LINE OF EVENTS BETWEEN AUGUST AND DECEMBER 1997

Date	Event Description	Location	Reference Document	Author/Source
November 20	TRW Presentation to GBI/DCIS	Downey, CA?	DCIS Letter 12/22/97	Robert Young, DCIS
	[*At this meeting GBI representative asked TRW about the discrepancies between the 45-day and the 60-day reports. TRW was asked by GBI to submit an "errata sheet" to explain them.*]			
November 24	TRW Follow-up Presentation to GBI/DCIS	Downey, CA?	DCIS Letter 12/22/97	Robert A. Young
	[*At this meeting, which was attended by Don Boster, GBI Program Manager, TRW was asked to provide an errata sheet for the 60-day report. It was not received as of December 22, 1997. Also, note that the March 5, 1998 NRC Technical Memo states that TRW did not respond to several questions regarding the 45-day and 60-day reports*.]			
December 2 and 3	NRC Presentation to DCIS Re: NRC of evaluation of TRW Discrimination Software (BLA) Attendees: Nira Schwartz, Sam Reed, Dennis Egan, Hank Barcikowski, Bill Roberson, A.J. Reinecke, Mike Holbert, Phil Barton et al.	Huntsville, AL	DCIS memo 12/5/97 Army memo 6/8/98	Sam Reed Shleba Proffitt
	[*NRC presented the results of their testing of the BLA, which they characterized as "no Nobel Prize" winner, but capable of meeting minimum requirements. DCIS said, NRC also indicated that as the technical representative for GBI, they had a lot to lose if TRW's discrimination technology failed.]*			

DETAILED TIME-LINE OF EVENTS BETWEEN AUGUST AND DECEMBER 1997

Date	Event Description	Location	Reference Document	Author/Source
December 11	TRW/Boeing briefing to GBI SETA Contractor Teledyne Browne	Downey, CA	Teledyne Brown Trip Report	GBI Program Office

[*Despite overwhelming evidence in GAO's possession, as presented above, which unequivocally demonstrates that Dr. Schwartz presented her findings to GBI, which were then brought to the attention of TRW on November 20. It was at this meeting that the GBI representative asked TRW about the discrepancies between the 45-day and 60-day reports. It completely shatters the GBI/GAO story about complete disclosure in a late August meeting. Subsequent meetings above show that despite request by then GBI Program Manager, TRW did not provide the answers. December 22 DCIS letter and March 5, 1998 NRC memo clearly document that the contractors did not come clean. December 11 charts were not presented to the appropriate GBI representatives. No documentation about who made the presentation from Boeing and TRW was available. In fact, a letter dated March 5, 1998 from Mr. Robert Hughes of TRW to Mr. Bill Roberson, GBI, stated that Mr. Holbert was indeed at Boeing, Downey that very day (December 11) to make a presentation on NRC's testing of TRW's BLA, which they found as "no Nobel Prize" winner. Here, it was NRC - the GBI rep - that was making the disclosure to Boeing/TRW, not the other way around. How ironical!*]

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United States Government Accountability Office
East Region-Boston Office

Room 575
10 Causeway Street
Boston, MA 02222

Present Address:

Mr. Subrata Ghoshroy, Research Associate
Program in Science, Technology, and Society
Massachusetts Institute of Technology
77 Massachusetts Avenue, Building E51-163F
Cambridge, MA 02139

Tel: (617) 253-3846
Fax: (617) 258-5750
E-mail: Ghoshroy@mit.edu