National Aeronautics and
Space Administration

Office of the Inspector General
Washington, DC 20546-0001

AUG 15 2003

The Honorable Sean O'Keefe
Administrator
National Aeronautics and Space Administration
Washington, DC 20546-0001

Subject: Observations on the Independence of the Columbia Accident Investigation Board

Dear Mr. O'Keefe:

Here are some observations I have about the Columbia Accident Investigation Board (CAIB), particularly as regards CAIB independence. These observations result from my role as an observer to CAIB activities, a role which I sought and you effected by letter dated February 2, 2003.

Although NASA policy and the CAIB's original charter contained provisions that could have hindered an independent investigation, based on my observations, I believe the CAIB, under Admiral Harold Gehman's leadership, is and has been conducting its investigation independently and without undue influence from NASA. I say this while recognizing the reliance that any investigative body would have on obtaining information and analysis from NASA. I also note the time-sensitive nature of the Board's challenge in light of the status of the International Space Station.

The CAIB has been diligently focused on determining the cause(s) of the accident and the remedies needed to prevent future mishaps. The CAIB, despite the breadth of its inquiry and expertise, has not been chartered to conduct a public policy debate on the merits of human space flight or to examine whether, from a public policy standpoint, return to flight best serves the public interest. However, to the extent the Board distinguishes between return-to-flight and long-term recommendations, it will facilitate NASA's return to flight. Overall, it is my expectation that CAIB recommendations will help shape any debate on the public policy issues.

NASA and the public will be best served by the issuance of an accurate, constructive, and credible report by the CAIB. One possible impediment to the Board's ability to issue such a report would be a compromise of the CAIB's independence. Of course, "independence" is subjective. The CAIB has constituencies including NASA, Congress, the Administration, and the public. These constituencies and the media provide information, advice, requests, and

expectations. The Board has been in contact with these constituencies and has sought to be responsive to their needs.

My conclusion that the CAIB is acting independently and without undue influence is based on my view that the Board can address the challenging questions associated with the loss of the Space Shuttle Columbia in good faith and without material impediments from organizational or personal conflicts of interest. I have primarily focused on the question of CAIB independence from NASA—the organization in the best position to interfere in the CAIB's pursuit of its objectives and with the most at stake in terms of the Board's report and recommendations.

Appointment of the CAIB

On February 1, 2003, at approximately 9:00 a.m., mission control at Johnson Space Center lost communication with Columbia during re-entry into Earth's atmosphere. At 9:15 a.m., NASA declared a mishap after determining that Columbia had experienced a critical failure in the atmosphere over eastern Texas. At 9:16 a.m., the Associate Administrator for Space Flight initiated the NASA Contingency Action Plan, a document that delineates the pre-planned contingency response to a space flight operations mishap. Within 24 hours of the Columbia accident, NASA had formally activated the CAIB and published its charter.

Independence of CAIB Questioned

The initial implementation of the CAIB was not without its difficulties. During the first few weeks after the Columbia accident, members of Congress and the news media expressed concerns that the Board would operate at the direction of the NASA Administrator and that NASA's influence would prevent the CAIB from conducting an independent and objective investigation. CAIB members themselves expressed concerns about taking direction from the NASA Administrator.

Revisions to the CAIB Charter

In connection with the issues regarding the CAIB's independence, I recommended that the Chairman consider four modifications to the Board's charter. These revisions addressed membership and staffing, direct supervision of the CAIB by the NASA Administrator, access to records, and review of NASA's management and fiscal environment relating to Shuttle crew safety. In a separate letter to the CAIB, I advised the Chairman that he should take steps to ensure its independence in connection with the participation of certain senior-level NASA executives on the Board. (See Enclosures 1 and 2 for February 14, 2003, memoranda to the CAIB.) The CAIB was already contemplating independence issues, and it sought changes to the charter and took other actions to address these issues. NASA management was supportive of changes to the CAIB charter, which was revised several times.

As a result of one of the charter revisions, the CAIB was no longer required to follow the NASA mishap policy. This change provided the Board the ability to alter the organization and composition of its membership. For example, the change to the charter that permitted the

CAIB to determine its own policies gave it the flexibility to make changes that would eliminate the perception of conflicts of interest in Board proceedings. Specifically, the Chairman replaced an ex officio member of the Board who was a NASA senior official whose NASA duties would likely fall under the broad scope of the CAIB's review. Another NASA senior official, while nominally an ex officio member of the CAIB in an administrative capacity, returned to his NASA duties with very little association with the Board after mid-March. While the officials had proven invaluable in helping establish the CAIB, the need for their services lessened as the Board became fully staffed and supported.

Ultimately, the CAIB Chairman added four new members with expertise in aeronautics, astronautics, physics, space science, and space policy. The changes to the charter, composition, and manner of operations were intended, in part, to address questions about CAIB independence.

Relationships Between NASA and Individual Board Members

In my view, the CAIB has been composed and operated in a manner that strikes an appropriate balance between those with limited or no prior dealings with NASA and those with familiarity with the Agency. The military members of the Board and the FAA employee have had, for the most part, little or no association with NASA beyond participating in mishap activities. Their collective expertise lies primarily in safety and accident investigations. In contrast, other Board members have had greater prior exposure to NASA operations. For example, based on publicly available information, seven of the thirteen CAIB members worked as NASA contractors or received NASA grants in the past. Two of these seven members have served on the NASA Advisory Council, and two are former NASA employees (one worked on the Gemini and Apollo programs in the 1960s, and the other is a former astronaut and member of the Rogers Commission, which investigated the Challenger accident.) Another CAIB member was a White House Fellow at NASA and worked as the NASA administrator's executive assistant and White House liaison at the time of the Challenger accident. Also, one CAIB member is a full-time NASA employee. The breadth of experience of CAIB members has enabled the Board to engage in a comprehensive and independent examination of the shuttle disaster.

The CAIB was criticized on the basis of independence because those persons who were added after the original composition of the Board were placed on the NASA payroll. Critics presumed that anyone receiving a paycheck from NASA would somehow be compromised. Without any exercise of supervision by NASA over these persons, there is no merit to a claim that NASA controls the actions of these persons or that they might be beholden to NASA because of the salaries' source. In some respect, making these persons NASA employees reduced the opportunity for conflicts of interest. In becoming Federal employees, these individuals became subject to conflict of interest laws that otherwise would not have applied.

CAIB Disclosure to the Public

To address the public's interest in the proceedings, the CAIB began holding press conferences and public hearings. However, public disclosure was complicated because the CAIB was

conducting a safety investigation that extended a limited privilege to certain witnesses. Limited privilege protects witness statements from public disclosure. The theory behind a safety investigation is that an accident's cause(s) can be best determined in an atmosphere where admissions of mistakes and criticisms of superiors or programs are free from reprisal or retribution. As the objective of the CAIB is to identify the cause(s) of the accident rather than to place blame on particular individuals, the limited privilege procedure seems reasonably designed to assist in this regard. In my role as observer, I respected the principle of limited privilege and, therefore, was not privy to the testimonies of those witnesses to whom limited privilege was extended. It is noteworthy that the privilege in no way protects information suggesting criminal activity.

As a result of the limited privilege protection, some information obtained by the CAIB will be withheld from public release. Pursuant to an arrangement with oversight committees, the CAIB is permitting inspection of the privileged testimony of witnesses by congressional members and staff, subject to certain limitations. Heightened attention is warranted for proceedings that have not been entirely transparent. Congress, the Office of Inspector General, the media, and the public will generate additional scrutiny.

Office of Inspector General (OIG) Continuing Role in Columbia-Related Matters

The conclusions presented in this memorandum are based solely on my observations. (The conclusions are not the product of a formal audit conducted in accordance with generally accepted Government auditing standards.)

Future activities are planned by the OIG to review the CAIB's activities and the Agency's resulting implementation of the Board's findings and recommendations. We are currently conducting an audit of CAIB financial and procurement management. The audit is examining whether the CAIB established controls to ensure that cost expenditures were reasonable, necessary, and accounted for and whether the Board established contract agreements in accordance with the Federal Acquisition Regulation. We will also monitor the Agency's plans for implementing the Board's recommendations, including return-to-flight activities, and consider all referrals the Board makes to the OIG. In addition, the OIG will review NASA's contingency plans in the event one or more of the three remaining orbiters is subject to catastrophic loss or is otherwise out of service.

Because of the importance of its work to NASA, I sought to be an observer to the Board's activities and to make recommendations regarding CAIB organization on an ongoing basis rather than waiting until after a report is issued, when any recommendations I might have would be too late to be of any value. I also believed that proximity to CAIB activities would strengthen the ability of my office to follow up on CAIB-identified issues and to promote the efficiency and effectiveness of NASA.

I appreciate the opportunity to have served as an observer to the CAIB, which has permitted me to coordinate OIG activities with those of the CAIB and to make these observations.

Sincerely,

Robert W Cobb

Robert W. Cobb
Inspector General

Enclosures

cc:
Admiral Harold S. Gehman, USN (Ret.)
Chairman
Columbia Accident Investigation Board

The Honorable Ted Stevens
Chairman
Senate Committee on Appropriations

The Honorable Robert C. Byrd
Ranking Member
Senate Committee on Appropriations

The Honorable Christopher Bond
Chairman
Senate Subcommittee on VA, HUD, and Independent Agencies

The Honorable Barbara Mikulski
Ranking Member
Senate Subcommittee on VA, HUD, and Independent Agencies

The Honorable John McCain
Chairman
Senate Committee on Commerce, Science, and Transportation

The Honorable Ernest Hollings
Ranking Member
Senate Committee on Commerce, Science, and Transportation

The Honorable Sam Brownback
Chairman
Senate Subcommittee on Science, Technology, and Space

The Honorable John Breaux
Ranking Member
Senate Subcommittee on Science, Technology, and Space

The Honorable Susan Collins
Chairwoman
Senate Committee on Government Affairs

The Honorable Joseph Lieberman
Ranking Member
Senate Committee on Government Affairs

The Honorable C.W. Bill Young
Chairman
House Committee on Appropriations

The Honorable David R. Obey
Ranking Member
House Committee on Appropriations

The Honorable James T. Walsh
Chairman
House Subcommittee on VA, HUD, and Independent Agencies

The Honorable Alan Mollohan
Ranking Member
House Subcommittee on VA, HUD, and Independent Agencies

The Honorable Tom Davis
Chairman
House Committee on Government Reform

The Honorable Henry Waxman
Ranking Member
House Committee on Government Reform

The Honorable Todd Russell Platts
Chairman
House Subcommittee on Government Efficiency and Financial Management

The Honorable Edolphus Towns
Ranking Member
House Subcommittee on Government Efficiency and Financial Management

The Honorable Adam H. Putnam
Chairman
House Subcommittee on Technology, Information Policy,
Intergovernmental Relations and the Census

The Honorable William L. Clay, Jr.
Ranking Member
House Subcommittee on Technology, Information Policy,
Intergovernmental Relations and the Census

The Honorable Sherwood Boehlert
Chairman
House Committee on Science

The Honorable Ralph Hall
Ranking Member
House Committee on Science

The Honorable Dana Rohrabacher
Chairman
House Subcommittee on Space and Aeronautics

The Honorable Bart Gordon
Ranking Member
House Subcommittee on Space and Aeronautics

Enclosure 1

National Aeronautics and
Space Administration

Office of the Inspector General
Washington, DC 20546-0001

February 14, 2003

Admiral Harold Gehman, USN (ret.)
Chairman
Columbia Accident Investigation Board
Houston, Texas 77058

Dear Admiral Gehman:

At the February 12, 2003, Congressional hearing on the Columbia accident, members of NASA's oversight committees expressed concern that the membership of the Board and its charter could limit the Board's ability to carry out its duties with independence and objectivity. In response to the concern expressed at the hearing, the NASA Administrator amended the Board's charter to expand your flexibility and remove any inference of NASA oversight.

In order to assist you and the Administrator in ensuring that the Board's activities are independent, here are some general ideas for your consideration. These could be worked into the guidelines section of the charter, any further amendment of the responsibilities listed in the charter, or in a letter summarizing your interpretation of the Board's responsibilities under the charter.

- The Board will add members and use independent technical expertise as necessary to reach independent conclusions and recommendations.

- The Board will not be subject to supervision by the Administrator or any employee of NASA. Neither the Administrator nor any delegate of the Administrator will prevent or prohibit the Board from initiating, carrying out or completing any task regarding the investigation of the Columbia accident.

- The Board shall have access to all records, reports, audits, reviews, documents, papers, recommendations, or other material available to NASA programs and operations that are relevant to the investigation of the Columbia accident.

- In considering all causes of the accident, the Board will review NASA budgeting and management to determine whether an environment could have existed that did not maximize human space flight safety.

I am prepared to discuss these suggestions or any other matter as the Board deliberates how it can effectively accomplish its mission in a technically sound and independent manner.

Sincerely,

Robert W. Cobb
Inspector General

cc: NASA Administrator

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February 14, 2003

Admiral Harold Gehman, USN (ret.)
Chairman
Columbia Accident Investigation Board
Houston, Texas 77058

Re: Involvement in Board Activities by NASA Employees

Dear Admiral Gehman:

The Board will need to be extraordinarily sensitive to the issue of NASA employees' involvement in Board activities. There is tremendous value in the information and views that these employees provide. On the other hand, these persons may appear to some to have loyalties to NASA and NASA programs that could impair their objectivity.

In particular, the Board's ex officio member (Bryan O'Connor) and executive secretary (Theron Bradley) are NASA's Associate Administrator for Safety and Mission Assurance and Chief Engineer, respectively. The Board will delve into NASA's safety and mission assurance and engineering programs. The Board should take steps to ensure independence in its evaluation of program management in these two areas. More, the board must strive to prevent even the appearance of conflict of interest in these areas.

In addition, Scott Hubbard is the Center Director at the Ames Research Center. While Mr. Hubbard does not appear to have significant programmatic responsibilities relevant to the investigation, his status as a senior NASA official establishes the appearance of an organizational conflict that the other members of the Board need to be mindful of in the conduct of Board activities.

The Board has already taken some helpful steps:

1. The breaking of the Board into subgroups has taken the initial consideration of issues out of the boardroom and into smaller groups that do not include the executive secretary or the ex officio member.

2. The Board in at least one instance has had certain NASA employees step out of the room in connection with a briefing to assure the free flow of information to the Board and to minimize any appearance of conflicts of interest.

3. The Board has sought and obtained amendments to the charter to provide it greater independence from NASA.

The Board should consider taking the following steps:

1. When the Board collectively evaluates the program management of engineering and of safety and mission assurance, it should request that the program officials in these areas step out of the boardroom – except where those officials are answering questions about their programs posed to them by the Board.

2. The Board should treat any information obtained by witnesses from within the engineering and safety and mission assurance programs that is critical of program organization or management as being privileged from release to these program heads so that there is no organizational disincentive for witnesses from within those particular programs to provide information. Witnesses in these areas should be advised of the Board's policies in this regard and specifically asked if they want the information they have provided to be shielded from these program managers. NASA employees who are witnesses should be told that they might seek protection from reprisal by calling the Office of Inspector General, which is by statute obligated to protect whistleblowers.

I also note that since the revised charter indicates that the Board is subject to its own policies rather than those of NASA, there is no limit on the Board's ability to reorganize its support in such a way as to eliminate appearances of conflicts of interest that may arise by virtue of provisions in NASA's policies concerning mishap investigation.

I hope this is of assistance to you.

Sincerely,

Robert W. Cobb

Robert W. Cobb
Inspector General