

UNITED STATES DISTRICT COURT
FOR THE CENTRAL DISTRICT OF CALIFORNIA
WESTERN DIVISION

H. RAY LAHR,)	
Plaintiff,)	
v.)	CV 03-08023-AHM (RZx)
)	
NATIONAL TRANSPORTATION)	
SAFETY BOARD, et al.,)	
Defendants.)	

DECLARATION OF MELBA D. MOYE

I, Melba D. Moye, declare as follows:

1. I am the Chief of the Public Inquiries/Freedom of Information Act (FOIA) Branch, Office of Research and Engineering, National Transportation Safety Board (NTSB). I have held this position for approximately six (6) years. In my capacity as Chief of Public Inquiries/FOIA Branch, I also serve as the FOIA Officer of the NTSB. I have been the Records Management Officer since 1992, and therefore was in charge of records throughout the period at issue. I have been on staff at the NTSB since 1983.
2. 49 C.F.R. §800.26 delegates to the Chief of the Public Inquiries Branch, "the authority to determine, initially, the withholding of a board record from inspection or copying, pursuant to part 801 of the chapter." Part 801 describes the public availability to information, including exemptions from public disclosure.
3. The statements made in this Declaration are based upon my review of the official files and records, my review of the records at issue in this litigation, my personal knowledge, and information acquired by me from others in the course of the performance of my official duties.

NTSB BACKGROUND AND MISSION

4. The NTSB was established in 1967, and in 1974 became an independent Federal agency with a focused mission. See 49 U.S.C. § 1101 et seq. Congress tasks the NTSB with the

investigation of every civil aviation accident in the United States and significant accidents in other modes of transportation, which include railroad, highway, marine and pipeline. 49 U.S.C. § 1131(a)(1); 49 C.F.R. § 831.2(a). The NTSB is also responsible for issuing safety recommendations intended, in the Board's judgment, to increase safety in transportation and/or prevent future accidents. The NTSB has no regulatory power or enforcement responsibility over any mode of transportation, domestic or foreign. Neither does the NTSB have regulatory power or enforcement responsibility with regard to the adoption, use and application of the safety recommendations of the Board.

5. At the core of NTSB major aviation investigations is the "Go Team." The purpose of the Go Team is to begin the investigation of a major accident at the accident scene, as quickly as possible, assembling the broad spectrum of technical expertise that is needed to solve complex transportation safety problems. The team can number from three or four to more than a dozen specialists from the Board's headquarters staff in Washington, D.C., or when necessary, its regional offices throughout the country.
6. With less than 400 employees available to investigate all civil aviation accidents in the United States, the Board accomplishes the task of accident investigation by leveraging its resources. One way the Board does this is by designating parties to its investigations, such as the aircraft manufacturer, that possess pertinent technical data required to understand the nature of the accident. Other than the FAA, which by law is automatically designated a party, the NTSB has complete discretion over which organizations it designates as parties to the investigation. Only those organizations or corporations that can provide expertise to the investigation are granted party status and only those persons who can provide the Board with needed technical or specialized expertise are permitted to serve on the investigation. All party members report to the NTSB.

7. Because of the small size of the Safety Board, it is impossible for Board to be expert in every type of airplane, helicopter, engine, or component; therefore, the Board must rely on the voluntary cooperation of parties in providing expert technical information. The gathering of this information is crucial so that NTSB investigators can utilize the data in order to analyze the potential cause of the accident. Without the cooperation of the parties in freely providing this information, the Safety Board would be unable to adequately investigate accidents, determine their probable causes, and issue recommendations to prevent future accidents.
8. In all major Safety Board investigations, groups are formed to look at different aspects of the accident. Each group is headed by an NTSB investigator and made up of members from the parties who can lend specific technical expertise.
9. In most instances, investigative group chairmen prepare a factual report and each of the parties in the group, if one is formed, is asked to verify the accuracy of the report. The factual reports are placed in the public docket. This docket is described in more detail below.

THE INVESTIGATION OF TWA FLIGHT 800

10. On July 17, 1996, about 2031 eastern daylight time, Trans World Airlines, Inc. (TWA) flight 800, a Boeing 747-131, N93119, crashed in the Atlantic Ocean near East Moriches, New York. TWA flight 800 was operating as a scheduled international passenger flight from John F. Kennedy International Airport (JFK), New York, New York, to Charles DeGaulle International Airport, Paris, France. The flight departed JFK about 2019, with two pilots, two flight engineers, 14 flight attendants, and 212 passengers on board. All 230 people on board were killed, and the airplane was destroyed.
11. This investigation has been by far the most expensive and the most extensive in the history of the Board. It was the longest on-scene investigation, and has involved more

Safety Board staff than any investigation - almost 1/3 of the Board's 370 employees at that time. At the conclusion of the investigation, some 75 NTSB investigators had participated in it. The Board utilized a variety of resources, calling on experts from different disciplines, as well as countries.

12. Parties providing technical assistance to this investigation included: the Federal Aviation Administration; the Boeing Commercial Airplane Group; Trans World Airlines; the International Association of Machinists and Aerospace Workers; the Flight Attendants Association; the Air Line Pilots Association; the National Air Traffic Controllers Association; Pratt & Whitney; Honeywell; and the Crane Company, Hydro-Aire.
13. The five-member Safety Board determined that the probable cause of the TWA flight 800 accident was an explosion of the center wing fuel tank (CWT), resulting from ignition of the flammable fuel/air mixture in the tank. The source of ignition energy for the explosion could not be determined with certainty, but, of the sources evaluated by the investigation, the most likely was a short circuit outside of the CWT that allowed excessive voltage to enter it through electrical wiring associated with the fuel quantity indication system. Contributing factors to the accident were the design and certification concept that fuel tank explosions could be prevented solely by precluding all ignition sources, and the design and certification of the Boeing 747 with heat sources located beneath the CWT with no means to reduce the heat transferred into the CWT or to render the fuel vapor in the tank nonflammable.

INTRODUCTION

14. The purpose of this declaration is to advise the Court as to how the plaintiff's FOIA requests, particularly the October 8, 2003 request numbered 2004-0027, to the National Transportation Safety Board have been processed, and to provide the Court and the

plaintiff with a Vaughn index (including a narrative description of the material being withheld) for documents still at issue which were subject to plaintiff's October 8, 2003 FOIA request but withheld from disclosure under the FOIA, in accordance with Vaughn v. Rosen, 484 F.2d 820 (D.C.Cir. 1973), cert. denied, 415 U.S. 977 (1974), on remand, 383 F.Supp. 1049 (D.D.C. 1974), aff'd 523 F.2d 1136 (D.C.Cir. 1975) and Wiener v. FBI, 943 F.2d 972 (9th Cir. 1991), cert. denied, 112 S.Ct. 3013 (1992). This declaration (including the narrative descriptions found before each document in Exhibit V) provides the Court and plaintiff with an identification of each document or portion thereof withheld which is still in dispute, the statutory exemption claimed, and the justification for the assertion of the FOIA exemptions used to withhold certain information contained in the records still at issue (or how disclosure would damage the interests protected by the claimed exemption).

15. This declaration consists of: (I) a listing of the relevant correspondence regarding plaintiff's October 8, 2003 request, and prior FOIA requests; (II) an explanation of the search for records and the identification of records responsive to the plaintiff's October 8, 2003 request; (III) a detailed explanation of the format utilized for justification of deleted material; and (IV) the justification for the withheld materials under the FOIA. Exhibits I and II consist of the relevant correspondence between plaintiff and defendant NTSB, including documents relevant to plaintiff's prior FOIA requests. Exhibit III is a compendium of the Table of Contents for the public docket available for the TWA flight 800 accident investigation. This docket includes approximately 2,750 documents, totaling approximately 16,230 pages and approximately 1,350 photographs¹. Exhibit IV

¹ A complete copy of the public docket for this accident investigation is available from our distributor, General Microfilm, Inc., at 301 929-8888. A portion of the public docket also is

consists of excerpts from the National Transportation Safety Board final report on this accident, adopted by the five-member Board on August 23, 2000². Exhibit V consists of the narrative descriptions that contain detailed identification and justification for the withheld information still at issue. Documents in redacted form are also included in Exhibit V, where appropriate.

16. NTSB FOIA Procedures: As the Records Management and FOIA Officer, I am familiar with the types of records maintained by the NTSB as an agency. I am also familiar with the types of records maintained by different offices of the NTSB. In my role as FOIA Officer, I supervise the FOIA program of the NTSB. Among my responsibilities as the FOIA Officer is ensuring that, in response to a FOIA request, the appropriate personnel of the agency conduct a search for records responsive to the request. When records in the custody and control of the NTSB and responsive to a request are identified, they are gathered and forwarded to the Public Inquiries/FOIA Branch. It is my responsibility, along with other personnel at the Safety Board, to review these records to determine if, in fact, they are response to the request, and then to determine which, if any, exemptions to the FOIA may apply. Thus, it is my responsibility, taking into consideration applicable exemptions to the FOIA, to determine which responsive records, in whole or in part, may be released to the FOIA requester. In making this determination, I consult, as appropriate and as necessary, with subject matter experts and other personnel within the NTSB to

available on the NTSB's website, www.nts.gov. Select "Aviation;" at the next screen, select "Major Investigations," then scroll down the listing on the left-hand side and select "TWA Flight 800." The next screen is a menu listing a variety of items available from the public hearing held in December of 1997, through to the Board Hearing in the summer of 2000. Select "Docket Information," and this will connect to a listing of a number of the reports available in the public docket.

² A copy of the Safety Board's Aircraft Accident Report for TWA flight 800 is available through the NTSB's Public Inquiries Office at 202 314-6551.

ensure that disclosures comply with the FOIA. Upon making a determination that all or portions of responsive records may be released under the FOIA, I communicate in writing with a requester concerning my determination and arrange for the requester to receive releasable records in accordance with Board practice. Where responsive records are withheld, in whole or part, I explain, in my written response to a requester, his or her right to appeal my determination to the Managing Director of the NTSB, or to the court, whichever is appropriate.

17. NTSB Activity and Records: Given the focused mission of the NTSB, its records largely consist of accident investigation files and investigation related files.

CORRESPONDENCE CONCERNING PLAINTIFF'S REQUEST

Set forth below are the correspondence and communications pertaining to the plaintiff's October 8, 2003 request. True and correct copies are attached hereto as NTSB Exhibits I-1 through I-3.

18. Plaintiff's FOIA Request:

- a. The NTSB received plaintiff's October 8, 2003 FOIA request on that date. (Exhibit I-1) In all communications concerning the October 8, 2003 FOIA request, the NTSB has treated Mr. Lahr as the requester and has communicated with him.
- b. On November 6, 2003, the NTSB responded to Mr. Lahr concerning his October 8, 2003 request. (Exhibit I-2) In this letter the NTSB explained its FOIA processing procedures, and explained that the FOIA requires only that the agency provide the responsive, releasable records in the format in which they are maintained. Therefore, the agency would not be completing the Excel spreadsheet plaintiff provided. Further, the agency recommended that

plaintiff revise and/or clarify at least a part of his October 8, 2003 FOIA request. In particular, the NTSB suggested that the term "process" was indefinite and that a clearer indication of the records sought may help to speed the search and review procedures.

- c. On April 13, 2004, I sent to a supplemental letter to Mr. Lahr with the results of the NTSB's search for records responsive to his October 8, 2003 request.

(Exhibit I-3)

**SEARCH FOR AND IDENTIFICATION OF RECORDS RESPONSIVE TO
PLAINTIFF'S OCTOBER 8, 2003 FOIA REQUEST**

19. The NTSB has a multi-track system for responding to its FOIA requests. The plaintiff's October 8, 2003 request was determined to be a complex request (defined as requiring more than a short period of time to search for and review any responsive records), thus it would be placed in a queue to be responded to in turn in the numbered sequence of FOIA requests.

20. Search: With regard to accident investigations and accident investigation related material, the NTSB has primarily four sets of agency records, which are:

- a. NTSB Public Dockets: The primary records of accident investigations conducted by the NTSB are found within the Public Dockets of the NTSB. The public docket of an accident contains the Safety Board staff's factual reports and related supporting material, which document the NTSB's investigative efforts pertaining to a particular accident. The NTSB maintains an electronic index that lists the public dockets of investigations previously conducted by the NTSB. This index may be searched by accident date, location of the accident and an accident specific, unique number. The public cannot search electronically the contents of the reports and other material contained in the public dockets for individual words or terms. The NTSB can search electronically for words or terms in the titles of

reports and materials in the public docket. In response to his October 8, 2003 FOIA request, and in response to his three previous FOIA requests, plaintiff was referred to the public docket. The Table of Contents for this public docket for this accident investigation is at Exh. III.

- b. Accident Briefs/Summaries: In order to identify particular accidents investigated by the NTSB, certain summary information is maintained in a computerized database, which may be searched by particular topics or categories of information and by individual words and terms within those topics or categories. The topics and categories that may be searched via computer in order to identify particular accidents investigated by the NTSB include: Date of Accident (a specific date of the accident or a date range), Location of Accident (including city and state within the United States and foreign countries), Accident Aircraft Category (such as helicopter, airplane, blimp); Accident Aircraft Make (such as Cessna, Piper), Accident Aircraft Model, Aircraft Registration, Type of Operation (such as commercial or general aviation [non-commercial]), Accident Airline Name (if applicable), and NTSB Accident Number. This database may be found through the NTSB's web site at www.nts.gov. At the home page, select "Aviation," followed by the first highlighted bullet on the Aviation page, which is "Accident Synopses". Select either the Database Query form or the Monthly lists. Complete all information that is known when using the query form, or select the appropriate month and date using the monthly lists option. Then click "Submit Query", and the accident summary will be offered, or a table listing the investigations satisfying the criteria entered. From the table, select the highlighted "Final" or "Prelim" in the far left column to connect to the report. Not only are these briefs and summaries available to the public, but a search was conducted and no responsive records were found.

- c. NTSB Accident Investigation Files: In certain instances, at the conclusion of the investigation of an aviation accident, paper and/or electronic copies of documents collected during the investigation are maintained by the NTSB in an investigative file. The documents contained in these accident investigation files, while pertaining to a particular investigation, are not included in the public docket of an investigation. These investigative files also do not contain reports of the NTSB that are otherwise made available to the public under NTSB rules. As described below, the NTSB searched the locations where potentially responsive information was expected to be located.
- d. Safety Recommendation Files: The NTSB, in conjunction with its determination of the probable cause of the accidents, develops recommendations intended to address perceived safety issues. These recommendations are contained in a database. The database is organized by the date of the accident, location of the accident (including city and state if in the United States, or foreign country, as appropriate), and type of aircraft involved and airline involved (if appropriate). A reasonable reading by the NTSB of the October 8, 2003 FOIA request finds that the request does not reasonably describe these records.

- 21. The October 8, 2003 request consists of 145 specific requests for records as to the NTSB's "zoom-climb data and calculations," which the plaintiff has defined in his request as TWA flight 800's "aircraft's continuing to fly after the nose of TWA 800 was blown off, climbing as much as 3,200-feet (the "zoom climbs")." "The FOIA Requests are numbered 4 through 149." (See Exhibit I-1)
- 22. I, in conjunction with my staff in the FOIA Office and the Office of General Counsel, notified personnel of the existence of the October 8, 2003 request in those NTSB offices in which records responsive to the October 8, 2003 request might be located. While informing the concerned NTSB offices of the specifics of Mr. Lahr's October 8, 2003

FOIA request, the FOIA Office and/or the Office of General Counsel requested that a search be conducted for any records responsive to the October 8, 2003 request.

23. I have received three prior FOIA requests from plaintiff requesting information about the "zoom-climb conclusion," as he termed it. I, or my staff in the FOIA Office, in conjunction with the Office of General Counsel, contacted the Office of Research and Engineering, specifically the Vehicle Performance division and the Vehicle Recorder division, to search for and provide responsive records to those prior requests. Therefore, upon receipt of the October 8, 2003 request, I, in conjunction with the Office of General Counsel, contacted the staff who assisted with the prior requests.
24. Dennis Crider, the drafter of the final Main Wreckage Flight Path Study, did not use the word "zoom-climb" in his report. The flight path simulation he derived for this accident investigation is the motion of the aircraft following the loss of the forward fuselage. Plaintiff used the term "zoom-climb," and Mr. Crider, along with the FOIA Office and the Office of General Counsel, assumed that he was referring to the flight path of the airplane after the loss of the forward fuselage. Based upon this interpretation, the designated NTSB offices searched for potentially responsive information to the requests as understood in the locations where the information was reasonably expected to be located.
25. Similarly, the NTSB typically does not use the term "animation." Included with the term animation is the belief that the pictures are contrived or based upon imagined events. NTSB representations, however, are based upon verified data (such as radar or FDR data) as much as possible, and at times, wholly so. The NTSB prefers the term graphical accident reconstructions. However, for the ease of understanding plaintiff's requests, the agency will use "animations" to describe the four graphical accident reconstructions shown at the public hearing on December 8, 1997, which depicted the radar tracks of TWA flight 800 and other select vehicles in the area, and the motion of the airplane and the sequence of events related to the accident.

26. NTSB offices conducting the search for records responsive to Mr. Lahr's FOIA request included the Public Inquiries/FOIA Branch of the Office of Research and Engineering, the Vehicle Performance Division of the Office of Research and Engineering and the Vehicle Recorder Division of the Office of Research and Engineering. The Public Inquiries/FOIA Branch searched the public dockets of the NTSB and the files for previous FOIA requests concerning the records requested in the 145 requests. The NTSB Vehicle Performance and Vehicle Recorder Divisions of the Office of Research and Engineering searched the paper copies and computer systems of the NTSB employees principally responsible for the final Main Wreckage Flight Path Study for TWA flight 800 and the creation of the animations. This Main Wreckage Flight Path Study simulated the flight path of the main wreckage after the separation of the forward fuselage. The NTSB Vehicle Performance Division of the Office of Research and Engineering also searched for the potentially responsive documents and materials related to parts of the Trajectory Study because some of the work done for the Trajectory Study influenced the Main Wreckage Flight Path Study.
27. To the best of my knowledge, and as I was informed by the Office of General Counsel, Mr. Crider was the only NTSB staff responsible for deriving the calculations and/or computations of the flight path for TWA flight 800. Similarly, he was the only NTSB staff who created a computer simulation of the flight path of the accident airplane.
28. To the best of my knowledge, and as I was informed by the Office of General Counsel, Mr. Brazy was the only NTSB staff responsible for creating the animations of the flight path of TWA flight 800 shown at the public hearing on December 8, 1997.
29. Four animations were shown concerning the motion of the plane and the accident sequence. None of these animations were specific to Mr. Crider's report. The

animations depicted movement, or movements, of a variety of objects without an explanation for that movement. I was informed by NTSB staff that all of the animations present more information than just the flight path following the loss of the forward fuselage, the focus of Mr. Crider's report. Thus I did not consider these animations to present calculations or conclusions about the flight path.

30. Results of Search: The Public Inquiries/FOIA Branch found responsive records regarding an NTSB investigation of the aircraft accident identified in the October 8, 2003 FOIA request in the NTSB's public docket for the TWA flight 800 investigation, and previous FOIA requests from Mr. Lahr seeking some similar information. (See ¶33 below). The NTSB Vehicle Performance and Vehicle Recorder Divisions of the Office of Research and Engineering also found records responsive to the FOIA request. These records were identified to the FOIA Office, and with the assistance of the Office of General Counsel, all of the potentially responsive records were reviewed.

31. Following consultation with the Office Director, Division Chief and the creator of the animations, I learned that two files found during the search for responsive materials related to the animations contained data provided by the Central Intelligence Agency (CIA). Because the CIA provided the information, I determined that it should be referred back to that agency so it may decide whether the material is releasable under the FOIA.

32. Response to Request: By letter dated November 6, 2003, I sent to Mr. Lahr, the results of the NTSB's initial search for records responsive to his October 8, 2003 request. (Exhibit I-2) On April 13, 2004, I sent a supplemental letter to Mr. Lahr that included responsive, releasable materials, and well as informing him that records had been referred to the Central Intelligence Agency for its review. I identified the specific records requested, reviewed Mr. Lahr's previous FOIA requests to the Safety Board, informed him that

responsive records may be found in the NTSB's public docket for this investigation, informed him that some records were being released, informed him that some information was being referred to the agency that was responsible for the information, and identified the agency's reason for withholding information in whole or in part. I advised plaintiff that portions of five records would be released subject to exemptions (b)(4), (b)(5), and (b)(6) of the FOIA [5 U.S.C. §§ 552(b)(4), (b)(5), and (b)(6)]. I further advised plaintiff that a computer simulation program and documents were being withheld in full in accordance with the exemption (b)(4) and (b)(6), and that documents were being withheld in full in accordance with exemption (b)(5) and (b)(6). Last, I informed him that the agency would provide the records in the format in which they were maintained, and that the agency is under no obligation to complete the Excel spreadsheet he included with his October 8, 2003 letter. (Exhibit I-3)

33. The results of the search for each of the 145 enumerated requests, as initially described in my April 13, 2004 letter, are as follows:

- a. **Category 1 (requests 4-68):** With respect to plaintiff's requests 4-68 for all records of formulas used by the NTSB in its computations of the "zoom-climb" conclusions, some formulas are in reports in the public docket. Further, the predicate in Category 1 is similar to request FOIA 2001-0410; and as stated in that response, the investigators may have referred to one or more textbooks when working with the computer program for the TWA Flight 800 Main Wreckage Flight Path Study, but no record was created. The declarations, particularly of Melba Moye and Dennis Crider, presented in the Vaughn Index produced on October 3, 2003 during the litigation of plaintiff's July 31, 2002 FOIA request (CV 02-8708- AHM (RZx))(hereinafter identified as the October 3, 2003 Vaughn Index), may include some additional

details, which have been repeated herein. No new records were identified during the search for responsive material; therefore, there were no new responsive records. See also the declaration of Dennis Crider.

Category 1 (requests 70-73): With respect to plaintiff's requests 70-73 for all records of formulas used by the NTSB in its computations of the "zoom-climb" conclusions for the animations, no calculations, mathematical or otherwise, were done to change the radar, FDR and flight path data, except to convert units of measurement for ease of the computer program, and possibly to linearly interpolate all data to the thirty-times per second needed for the animation software. NTSB staff did not use any formulas in the creation of the animations; therefore, there were no responsive records.

- b. **Category 2 (requests 4-68):** With regard to plaintiff's requests 4-68 for all records of the weight and balance data used by the NTSB in its computations of the "zoom-climb" conclusions, weight and balance data are in reports in the public docket, and were provided in response to FOIAs 2001-0048, 2001-0410, and I referenced those responses in 2002-0306.³ No new records were identified during the search for responsive material; therefore, there were no new responsive records.

³ True and correct copies of plaintiff's prior FOIA requests 2001-0048 and 2001-410, 2002-0306, the agency's acknowledgment letters for 2001-0048 and 2002-0306, the agency's responses letters, plaintiff's appeal letters, and the agency's responses to the appeal letters are attached at Exhibit II-1 through II-15. Exhibit II-10 is a March 13, 2001 letter from Boeing to the NTSB responding to the NTSB's request for comments on the releasability of the Boeing documents potentially responsive to these FOIA requests. Because plaintiff repeated some of his specific requests in each FOIA letter, the NTSB considered Boeing's response letter of March 13, 2001 to encompass all three of plaintiff's FOIA requests (2001-0048, 2001-0410, and 2002-0306).

Category 2 (requests 70-73): With regard to plaintiff's requests 70-73 for all records of the weight and balance data used by the NTSB in its computations of the "zoom-climb" conclusions, with respect to the animations, no weight or balance data was used for the creation of the animations. Therefore, there were no responsive records.

- c. **Category 3 (requests 75 and 78):** With respect to plaintiff's requests 75 and 78 for all records of the formulas and data entered into the computer simulations regarding the NTSB's "zoom-climb" conclusion, please see the information identified in Category numbers 1 and 2 above, as well as the public docket, and information sent to him previously in response to his prior FOIA requests, particularly FOIAs 2001-0048 and 2001-0410, and in the October 3, 2003 Vaughn Index, which is duplicated herein. All other records are being withheld under exemption (b)(4) and (b)(5). Specifically, these withholdings are described in the NTSB's responses to FOIA 2001-0048 dated April 5, 2001; FOIA 2001-0410 dated September 6, 2001; FOIA 2002-0306 dated April 3, 2003; and in the October 3, 2003 Vaughn Index, and in this Index. See also the declaration of Dennis Crider.

Category 3 (requests 76 and 77): With respect to plaintiff's requests 76 and 77 for all records of the formulas and data entered into the computer simulations regarding the NTSB's "zoom-climb" conclusion, the programs known as BREAKUP and BALLISTIC are not a part of the simulation program for the main wreckage flight path. BREAKUP and BALLISTIC were used to determine the trajectory of certain pieces of the aircraft. The simulation concerns the flight path of the main wreckage after the separation of the forward fuselage. BREAKUP provided the timing of the nose separating from the aircraft. Specifically, the nose was found to have departed

the aircraft at a clock time of 8:31:15.2, which initially is stated on page 10 of the Main Wreckage Flight Path Study, and corrected in the Errata Main Wreckage Flight Path Study, dated December 4, 1997. (Exhibits VII and VIII) Both of these reports are included in the public docket. Except for providing this one point in time, which was used in the simulation, the BREAKUP and BALLISTIC programs played no role in the simulation. Therefore, there were no responsive records.

Category 3 (requests 80-83): With respect to plaintiff's requests 80-83 for all records of the formulas and data entered into the computer simulations regarding the NTSB's "zoom-climb" conclusion, as it relates to the animations, please see the response to Category 1 and 2 above relating to the animations. The records released related to the animations are described in paragraph 34.

- d. **Category 4 (requests 85 and 88):** In response to plaintiff's requests 85 and 88 for all records reflecting whether or not the NTSB conducted the computer simulations in-house and, if not, all records of when, where, and by whom the computer simulations was performed, responsive material may be found in the public docket. Records reflecting that work was conducted in-house were included with the releasable, responsive documents that were provided in response to previous FOIA requests, specifically FOIA 2002-0306, and in the October 3, 2003 Vaughn Index, and in this Index.

Category 4 (requests 86-87): In response to plaintiff's requests 86 and 87 for all records reflecting whether or not the NTSB conducted the computer simulations in-house and, if not, all records of when, where, and by whom the computer simulations was performed, the programs known as BREAKUP and BALLISTIC are not a part of the simulation program for the main wreckage flight path. BREAKUP and

BALLISTIC were used to determine the trajectory of certain pieces of the aircraft. The simulation concerns the flight path of the main wreckage after the separation of the forward fuselage. BREAKUP provided the timing of the nose separating from the aircraft. Specifically, the nose was found to have departed the aircraft at a clock time of 8:31:15.2, which initially is stated on page 10 of the Main Wreckage Flight Path Study, and corrected in the Errata Main Wreckage Flight Path Study, dated December 4, 1997. Both of these reports are included in the public docket. Except for providing this one point in time, which was used in the simulation, the BREAKUP and BALLISTIC programs played no role in the simulation. Therefore, there were no responsive records.

Category 4 (requests 90-93): In response to plaintiff's requests 90-93 for all records reflecting whether or not the NTSB conducted the computer simulations in-house and, if not, all records of when, where, and by whom the computer simulations was performed, as it relates to the animations, I interpreted the request broadly and the Safety Board developed the animations using the program VisLab, marketed by Engineering Animation, Inc. See Douglass Brazy's declaration included in this Vaughn Index. Records related to the animations are described further in paragraph 34.

- e. **Category 5 (requests 95 and 98):** In requests 95 and 98, plaintiff again requested the computer simulation programs used by the NTSB and the CIA. Responsive material may be found in the public docket, it has been provided previously, particularly in response to FOIAs 2001-0048 and 2001-0410, and in the October 3, 2003 Vaughn Index, and in this Index. As identified and addressed in the response letter to FOIA request 2001-0048, dated April 5, 2001, all other records related to the

simulation are being withheld under exemptions (b)(4) and (b)(5). These withholdings are further described in the NTSB's responses to the subsequent requests, FOIA 2001-0410 dated September 6, 2001; FOIA 2002-0306 dated April 3, 2003; and in the October 3, 2003 Vaughn Index, and in this Index. No new releasable records were identified during the recent search for responsive materials; therefore, there were no new responsive records. The NTSB has no records concerning what, if any, computer simulation program was used by the CIA.

Category 5 (requests 96 and 97): In requests 96 and 97, plaintiff again requested the computer simulation programs used by the NTSB and the CIA, but the programs known as BREAKUP and BALLISTIC are not a part of the simulation program for the main wreckage flight path. BREAKUP and BALLISTIC were used to determine the trajectory of certain pieces of the aircraft. The simulation concerns the flight path of the main wreckage after the separation of the forward fuselage. BREAKUP provided the timing of the nose separating from the aircraft. Specifically, the nose was found to have departed the aircraft at a clock time of 8:31:15.2, which initially is stated on page 10 of the Main Wreckage Flight Path Study, and corrected in the Errata Main Wreckage Flight Path Study, dated December 4, 1997. Both of these reports are included in the public docket. Except for providing this one point in time, which was used in the simulation, the BREAKUP and BALLISTIC programs played no role in the simulation. Therefore, there were no responsive records. The NTSB has no records concerning what, if any, computer simulation program was used by the CIA.

Category 5 (requests 100-103): In requests 100-103, plaintiff again requested the computer simulation programs used by the NTSB and the CIA, as it relates to the

animations, the computer simulation program was not used to animate the flight path of TWA flight 800. Therefore, there were no responsive records. The NTSB has no records concerning what, if any, computer simulation program was used by the CIA.

- f. **Category 6 (requests 105 and 108):** In response to plaintiff's requests 105 and 108 for the printout of the computer simulations used by the NTSB, no such record exists. Therefore, there were no responsive records.

Category 6 (requests 106 and 107): In response to plaintiff's requests 106 and 107 for the printout of the computer simulations used by the NTSB relating to the BREAKUP and BALLISTIC programs, the programs known as BREAKUP and BALLISTIC are not a part of the simulation program for the main wreckage flight path. BREAKUP and BALLISTIC were used to determine the trajectory of certain pieces of the aircraft. The simulation concerns the flight path of the main wreckage after the separation of the forward fuselage. BREAKUP provided the timing of the nose separating from the aircraft. Specifically, the nose was found to have departed the aircraft at a clock time of 8:31:15.2, which initially is stated on page 10 of the Main Wreckage Flight Path Study, and corrected in the Errata Main Wreckage Flight Path Study, dated December 4, 1997. Both of these reports are included in the public docket. Except for providing this one point in time, which was used in the simulation, the BREAKUP and BALLISTIC programs played no role in the simulation. Therefore, there were no responsive records.

Category 6 (requests 110-113): In response to plaintiff's requests 106 and 107 for the printout of the computer simulations used by the NTSB relating to the animations, I interpreted Mr. Lahr's request as broadly as possible, and determined that there is

no printout of the animations. Additionally, there is no print version of the simulation in the animations. Therefore, there were no responsive records.

- g. **Category 7 (request 115):** In response to plaintiff's request 115 for all records of the timing sequence of the "zoom-climb", including but not limited to radar, radio transmissions, and the flight data recorder, responsive material may be found in the public docket. For example, the final Main Wreckage Flight Path Study, its Errata, and reports on the radar study and the data from the FDR are available in the public docket and on the agency's web page. The search for records was not limited to those related to the simulation, but included records about the flight path of the aircraft, as is evidenced by the references to the FDR and radar data. Responsive material also was produced in the October 3, 2003 Vaughn Index during the previous litigation, including Records 19, 21, 22, and 24, which is repeated in this Index. No such record exists in relation to radio transmissions. This request is similar to FOIA 2002-0306, wherein plaintiff sought "all records of the timing sequence of the zoom climb, including but not limited to radar, radio transmissions, and the flight data recorder." All responsive records not made available publicly, not released in response to the previous FOIA requests, or not released in the October 3, 2003 Vaughn Index are being withheld under (b)(5). Specifically, these withholdings are described in the NTSB's response dated April 3, 2003, in the October 3, 2003 Vaughn Index, and in this Index.

Category 7 (requests 117-120): In response to plaintiff's requests 117-120 for all records of the timing sequence of the "zoom-climb", including but not limited to radar, radio transmissions, and the flight data recorder, as they relate to the animations, records are described in the October 3, 2003 Vaughn Index and this

Index, particularly in Mr. Brazy's declaration. Some of the inputs that are publicly available, for example, reports about the radar and the flight data recorder may be found in the public docket. No such record exists in relation to radio transmissions. Last, records related to the animations are described further in paragraph 34.

- h. **Category 8 (request 122):** In response to plaintiff's request 122 for all records of the correlation of the "zoom-climb" calculations with the actual radar plot, responsive material might be found in the public docket. Responsive material also was produced in the October 3, 2003 Vaughn Index during the previous litigation, including Records 19, 21, 22, and 24, which has been repeated herein. This request is similar to FOIA 2002-0306, wherein plaintiff sought "all records of the correlation of the zoom-climb calculations with the actual radar plot." All responsive records not made available publicly, not released in response to the previous FOIA requests, or not released in the October 3, 2003 Vaughn Index, or in this Index, are being withheld under (b)(5). Specifically, these withholdings are described in the NTSB's response dated April 3, 2003, in the October 3, 2003 Vaughn Index, and in this Index.

Category 8 (requests 124-127): In response to plaintiff's requests 124-127 for all records of the correlation of the "zoom-climb" calculations with the actual radar plot, concerning the animations, records are described in the October 3, 2003 Vaughn Index and this Index, particularly in Mr. Brazy's declaration. Some of the inputs that are publicly available, for example, reports about the radar may be found in the public docket. Records related to the animations are described further in paragraph 34.

- i. **Category 9 (request 129):** In response to plaintiff's request 129 for all records of the information provided by Boeing to the NTSB used by the NTSB to calculate these

“zoom-climb” conclusions, responsive material may be found in the public docket; responsive material also was produced in the October 3, 2003 Vaughn Index during the previous litigation, which has been repeated herein. This request is similar to FOIA 2002-0306, wherein plaintiff sought “all records of the information provided by Boeing to the NTSB used by the NTSB to calculate these zoom-climb conclusions.” All responsive records not made available publicly, not released in response to the previous FOIA requests, not released in the October 3, 2003 Vaughn Index, or in this Index, are being withheld under exemptions (b)(4), (b)(5), and (b)(6). Specifically, these withholdings are described in the NTSB’s response dated April 3, 2003, in the October 3, 2003 Vaughn Index, and in this Index.

Category 9 (requests 131-134): In response to plaintiff’s requests 131-134 for all records of the information provided by Boeing to the NTSB used by the NTSB to calculate these “zoom-climb” conclusions, with regard to the animations, no data from the Boeing Company was provided in order to create these animations.

Therefore, there were no responsive records.

- j. **Category 10 (requests 136, 138-141):** With respect to plaintiff’s request 136, and 138-141, for all records of the process by which the NTSB arrived at its “zoom-climb” conclusions, the request for “...records of the process...” is too inexact for the agency to determine how to search for responsive records. In the agency’s letters dated November 6, 2002, and November 6, 2003, we suggested that plaintiff amend his request to identify clearly the records he is seeking. He chose not to do so. The FOIA requires the request to reasonably describe the records sought. See 5 U.S.C. §552(a)(3)(A) (2000). “A request reasonably describes records if ‘the agency is able to determine precisely what records are being requested.’” *Kowalczyk v. Department*

of Justice, 73 F.3d 386, 388 (D.C.Cir. 1996), quoting *Yeager v. Drug Enforcement Administration*, 678 F.2d 315, 326 (D.C.Cir. 1982). The investigation of TWA flight 800 spanned more than four years and the public docket alone exceeds 13,000 pages. Without further definition, no search for potentially responsive records is possible.

- k. **Category 11 (request 143):** Finally, in response to plaintiff's request 143 for all records generated or received by the NTSB used in its computations of its "zoom-climb" conclusions, responsive material might be found in the public docket. Responsive material also was produced in the October 3, 2003 Vaughn Index during the previous litigation, which has been repeated herein. This request is similar to FOIA 2002-0306, wherein plaintiff sought "all records generated or received by the NTSB used in its computations of its zoom-climb conclusions." All responsive records not made available publicly, not released in response to the previous FOIA requests, not released in the October 3, 2003 Vaughn Index, or in this Index are being withheld under exemptions (b)(4), (b)(5), and (b)(6). Specifically, these withholdings are described in the NTSB's response dated April 3, 2003, in the October 3, 2003 Vaughn Index, and in this Index.

Category 11 (requests 145-148): In response to plaintiff's requests 145-148 for all records generated or received by the NTSB used in its computations of its "zoom-climb" conclusions, records related to the animations are described in the October 3, 2003 Vaughn Index, and is repeated in this Index. In particular, please note Mr. Brazy's declaration. Some of the inputs that are publicly available, for example, reports about the radar may be found in the public docket. Records related to the animations are described further in paragraph 34.

34. In response to requests 70-73, 80-83, 90-93, 100-103, 110-113, 117-120, 124-127, 131-134, 138-141, and 145-148 addressed in paragraph 33, the agency released records related to the animations shown at the public hearing on December 8, 1997. In response to plaintiff's various requests for records related to the NTSB's four animations presented on December 8, 1997, the agency found that the preliminary and final data are intermixed. While the preliminary data are validly exempt from release under the FOIA, in this specific instance, the agency determined that there was no significant harm in releasing these records. Thus, under cover of letter dated April 13, 2004 (Exhibit I-3), the agency used its discretion and made a discretionary release in full of Mr. Brazy's collection of records for the four animations, with the exception of those records that were referred to another government agency. The material provided includes data used in creating preliminary and/or versions not used as the final animations. It is not possible for the NTSB to indicate which files were used for the animations, whether final or not. Some files were created on a silicon graphics computer using a UNIX operating system. Further, intermixed with numerical data files may be files with still pictures. Again, some of these still pictures may be drafts that were not used in any of the final animations. Last, some files may not be directly related to the accident sequence, but were created to learn and adjust the functions and options of the animation program, VisLab, marketed by Engineering Animation, Inc. of Ames, Iowa.

35. In accordance with government-wide practice and policy, the responsive records that the NTSB locates that originated at other Federal agencies are referred to those agencies for release decisions. Following consultation with Mr. Brazy, his Office Director and Division Chief, I learned that Mr. Brazy maintained two files that contained data provided to him by the Central Intelligence Agency (CIA). These files were referred to

the CIA, because that was the agency that provided the information. Other than these two files referred to the CIA, and the information that is publicly available, I released all of the records requested related to the animations produced by Mr. Brazy.

36. In plaintiff's October 8, 2003 letter and/or requests, he made assertions that indicated to Mr. Crider and to me that he misunderstood the use some of the NTSB's computer programs. In requests numbered 76, 77, 86, 87, 96, 97, 106 and 107, and in the "explanatory notes," plaintiff implies that three programs were used to determine the flight path of TWA flight 800. This is not correct. The programs known as BREAKUP and BALLISTIC are not a part of the simulation program for the main wreckage flight path. BREAKUP and BALLISTIC were used to determine the trajectory of certain pieces of the aircraft. The simulation concerns the flight path of the main wreckage after the separation of the forward fuselage. BREAKUP provided the timing of the nose separating from the aircraft. Specifically, the nose was found to have departed the aircraft at a clock time of 8:31:15.2, which initially is stated on page 10 of the Main Wreckage Flight Path Study, and corrected in the Errata Main Wreckage Flight Path Study, dated December 4, 1997. Both of these reports are included in the public docket. Except for providing this one point in time, which was used in the simulation, the BREAKUP and BALLISTIC programs played no role in the simulation. Therefore, there are no responsive records for requests 76, 77, 86, 87, 96, 97, 106, and 107.

37. I was not able to determine what records plaintiff was seeking in some of the 145 enumerated requests. Specifically, the term, "...any and all records you unidentified in your responses to FOIA Request Nos...", and a series of numbers is given. The NTSB does not understand these requests, in particular what "records you unidentified" means. The NTSB is unable to respond to these requests because they do not reasonably describe

records as required by the FOIA. See 5 U.S.C. §552(a)(3)(A) (2000). Therefore, the agency has not, and cannot, provide a response to requests 74, 84, 94, 104, 114, 121, 128, 135, 142, and 149.

38. From my discussion, or from the Office of General Counsel's discussion with those likely to be involved, I learned that the NTSB had no role in the creation of the animation presented by the Central Intelligence Agency (CIA) in November 1997. The NTSB did not present the CIA video as asserted by plaintiff on page 48 of the October 8, 2003 correspondence. The NTSB does not know what, if any, information was used by the CIA in creating its video. The NTSB has no records responsive to requests 69, 79, 89, 95, 99, 109, 116, 123, 130, 137, and 144.

39. Two documents were previously released in full with the filing of the Vaughn Index in CV 02-8708-AHM (RZx)(Records 22 and 24). This declaration addresses the information and/or exemptions still withheld in whole or in part: sixteen (16) records withheld in full (189 pages and one computer program), and thirteen records withheld in part (twenty (20) pages). The exemptions being asserted to withhold the information in whole or in part are: 5 USC § 552(b)(4), (b)(5), and (b)(6). Copies of the thirteen records with redactions are included behind their respective narrative descriptions in Exhibit V.

EXPLANATION OF FORMAT UTILIZED FOR JUSTIFICATION OF DELETED MATERIAL

40. For the information of the Court, prior to the preparation of this declaration, the responsive records still at issue were reviewed. Each exemption utilized to withhold information still at issue is discussed below, including the basis for its application and a description of the subject matter of the particular deletion.

41. In Exhibit V, copies of the disputed records redacted in part contain, on their face, coded categories of exemptions that identify the nature of the information withheld pursuant to the provisions of the FOIA, Title 5, U.S.C., Section 552. For example, if (b)(6) appears on a document, the (b)(6) designation refers to Exemption (b)(6) of the FOIA concerning personal privacy information that is withheld because the disclosure of the information would be a "clearly unwarranted invasion of personal privacy. In addition, a separate narrative description of the information withheld and the justification is provided for each record in which information was withheld in part or in full. In preparing the narrative descriptions, each document was reviewed. The language contained in each narrative description is specific to each document. To describe in more detail the information being withheld could identify the material sought to be protected. The narrative descriptions and the coding on the documents are used to aid the Court's review of the NTSB's explanations for the FOIA exemptions used to withhold the protected material. Every effort was made to provide the plaintiff with all reasonably segregable portions of the material requested. No reasonably segregable nonexempt portions have been withheld from plaintiff. In fact, through the NTSB's review process, additional documents and information are being released with this Vaughn Index. Accordingly, all information withheld is exempt from disclosure pursuant to a FOIA exemption or is not reasonably segregable because it is so intertwined with protected material that segregation is not possible or its release would have revealed the underlying protected material.

JUSTIFICATION FOR WITHHOLDING MATERIALS

(A) Title 5 U.S.C. § 552(b)(5) - Inter-agency Or Intra-agency Memorandums Or Letters That Would Not Be Available By Law To A Party Other Than An Agency In Litigation With The Agency

42. 5 U.S.C. § 552(b)(5) exempts from mandatory disclosure “inter-agency and intra-agency memorandums or letters which would not be available by law to a party other than an agency in litigation with the agency.” The deliberative process privilege’s objective is to enhance the quality of agency decisions, by protecting open and frank discussion among those who make them within the government.

43. In Records 12 through 31, information was withheld pursuant to exemption (b)(5).

Records 12 through 31 are intra-agency documents.

44. The deliberative process privilege is applicable to information being withheld in Documents 12 through 31. To fall within the deliberative process privilege, a document must be both “predecisional” and “deliberative.” A predecisional document is one prepared in order to assist an agency decisionmaker in arriving at his decision and may include recommendations, draft documents, proposals, suggestions, and other subjective documents, which reflect the personal opinions of the writer rather than the policy of the agency. To be deliberative, the information must actually be related to the process by which policies are formulated. The material should be protected if the disclosure of the material would expose an agency’s decisionmaking process in such a way as to discourage candid discussion within the agency and thereby undermine the agency’s ability to perform its functions.

45. As is set forth in more detail in the narrative descriptions located in Exhibit V as to Records 12 through 31, the withheld information is both predecisional and part of the deliberative process.

- e. As described above, the NTSB’s accident investigations are conducted using a party system. The Investigator-In-Charge (IIC) designates the parties that may

participate in an investigation based upon their ability to provide an appropriately qualified technical representative who can assist with the investigative process.

49 CFR §831.11. For example, representatives from the engine manufacturer and the Air Line Pilots Association likely will participate in a major airline accident investigation. As detailed in 49 CFR §831, specific obligations and prohibitions flow from party representation status. Under 49 CFR §831.13(b), “no information concerning the accident or incident may be released to any person not a party representative to the investigation (including non-party representative employees of the party organization) before initial release by the Safety Board without prior consultation and approval of the IIC [Investigator-In-Charge of the accident].”

This is because these preliminary materials cannot be guaranteed as accurate or complete, and therefore release of such information would result in confusion and compromise the NTSB’s work. However, the free flow of information during the course of the investigations is critical to ensure all possible investigative avenues are considered. Thus, although the NTSB does not consider the party representatives to be quasi-employees of the agency, these representatives assist the agency in one of its primary missions, similar to the “special need for the opinions and recommendations of temporary consultants” identified in Soucie v. David, 448 F.2d 1067, 1078 n. 44 (D.C. Cir. 1971); cf. CNA Fin. Corp. v. Donovan, 830 F.2d 1132, 1161 (D.C. Cir. 1987)(recognizing importance of outside consultants in deliberative process privilege context.)

- b. Record 13 is a Boeing party representative’s list of initial comments for changes and considerations regarding the NTSB draft Trajectory Study. (Some information from the Trajectory Study was used for the Main Wreckage Flight Path Study.) Upon further review, the NSTB has released additional information in this document and redacted some information. Comments from individuals well versed in this field are critical to the decision-making process. Without the

protection provided by the exemption, full and frank discussion of options and opinions so vital to the decision-makers would be impossible. In this instance, NTSB staff is seeking review and confirmation of data and preliminary findings to prepare the NTSB studies for presentation to the Safety Board. The five-member Safety Board is the ultimate decisionmaker as to the probable cause of the accident. Additionally, disclosing these comments would allow the public to determine what the NTSB had written in its preliminary report, which is clearly predecisional.

- c. Record 14 is a draft copy of a page from Addendum II To Main Wreckage Flight Path Study including a handwritten question and response concerning the results of the simulation for this Study. These are preliminary findings and recommendations made to the decisional authority. The harm arising from the release of this information is that, without the protection provided by the exemption, full and frank discussion of options and opinions so vital to the decision-makers would be impossible. In this instance, NTSB staff is seeking review and confirmation of data and preliminary findings to prepare the NTSB studies for presentation to the Safety Board. The five-member Safety Board is the ultimate decision-maker as to the probable cause(s) of an accident, and the safety recommendations that follow from that cause.
- d. Record 15 is a computer program written by a staff member of the NTSB, that when combined with aerodynamic and suspected physical responses to flight forces of the targeted aircraft (provided by the aircraft manufacturer), generates velocity, position and orientation information for that aircraft. Thus, the flight path of the accident aircraft can be simulated, and this program is adjusted and adapted to analyze differing versions of aerodynamic data and physical attributes of aircraft. To reveal the program would expose the staff member's deliberations concerning the suspected flight paths. Also, without the protection provided by

the exemption, full and frank discussion of options and opinions as to the creation of the simulation and its results would be impossible. Deriving the flight path results assists the five-member Safety Board in determining the probable cause of the accident. But the Safety Board is the final decisionmaker as to the cause and the recommendations that follow from that cause.

- e. Record 16 is handwritten notes dated April 10, 1997 reflecting the writer's thoughts and comments received concerning the preliminary Trajectory Study. Preliminary findings and recommendations made to the decisional authority must be protected so as not to cause harm to the quality of the agency's decision-making process, and thereby the decision. The harm arising from the release of this information is that, without the protection provided by the exemption, full and frank discussion of options and opinions so vital to the decision-makers would be impossible. In this instance, NTSB staff is seeking review and confirmation of data and preliminary findings to prepare the NTSB studies for presentation to the Safety Board. The five-member Safety Board is the ultimate decisionmaker as to the probable cause of the accident and the recommendations that should follow from the investigation.
- f. Record 17 is handwritten notes and calculations written while deriving the preliminary Addendum II to the Main Wreckage Flight Path Study. This is a predecisional document because it is meant to assist with the derivation of the flight path of the accident aircraft, and it reflects the personal thoughts of the writer, not the agency. The results from the flight path studies, however, will be presented to the Safety Board. The five-member Safety Board is the ultimate decisionmaker as to the probable cause of the accident and the recommendations that should follow from the investigation.
- g. Record 18 is draft versions of a presentation concerning the affects of the forward fuselage loss on the accident aircraft. These drafts are pre-decisional in that they

were never finalized or published, and they reflect the personal thoughts of the writer, not the agency. The results from the studies showing the affects of the forward fuselage loss, however, will be presented to the Safety Board. The five-member Safety Board is the ultimate decisionmaker as to the probable cause of the accident and the recommendations that should follow from the investigation.

- h. Record 19 consists of three pages that were prepared by NTSB staff depicting various graphs of radar data provided in raw form by the Federal Aviation Administration (FAA) for TWA flight 800. Upon further review, the graphs have been released. These pages also have handwritten notes and identifiers on each page. NTSB staff is coordinating various types of data collected, here the radar data, into the simulation program in preparation of the final Addendum II to the Main Wreckage Flight Path Study. The output from the simulation(s) will be used to prepare and/or update the NTSB flight path studies for presentation to the Safety Board. Without the protection provided by exemption (b)(5), full and frank discussion of options and opinions so vital to the decision-makers would be impossible.
- i. Record 20 consists of six sets of draft sections of the Safety Board's report and/or questions concerning the Board's report. NTSB staff provided editorial and substantive comments to the parts of the Safety Board's report that address the flight path. The (b)(5) exemption for the protection of deliberative process materials has always encompassed the preliminary findings and recommendations made to the decisional authority so as not to cause harm to the quality of the agency's decision-making process, and thereby, the decision. The comments and edits may be used to inform the Safety Board, and assist in its understanding of the Main Wreckage Flight Path Studies. The five-member Safety Board is the ultimate decision-maker as to the probable cause(s) of an accident, and the safety recommendations that follow from that cause.

- j. Record 21 is a one-page document that was prepared by NTSB staff depicting the location of the radar antenna for the radar sites that provided data for TWA flight 800. Upon further review, the chart was released. However, this chart also has handwritten notes that are being withheld. These notes about the radar data were used as preparing Addendum II to the Main Wreckage Flight Path Study to track the movement of the aircraft. The output from the simulation(s) will be used to prepare and/or update the NTSB flight path studies for presentation to the Safety Board. A final version of this document also is a part of Airplane Performance Study, which is available in the public docket.
- k. Record 22 is being released in full with this Vaughn Index.
- l. Record 23 is a one-page document that was prepared or edited by NTSB staff discussing the secondary beacon returns for the listed subset of radar data. The table headings are included, but the preliminary data has been redacted. These data provided a starting point for the simulations that are included in Addendum II to Main Wreckage Flight Path Study. The information is predecisional and deliberative in nature. The author culled these data from an enormous collection of radar returns to contribute to the flight path derived from the simulations created and presented in Addendum II. The very act of distilling the significant facts from the insignificant facts constituted an exercise of judgment by agency personnel.
- m. Record 24 is being released in full with this Vaughn Index.
- n. Record 25 is a one-page document of handwritten notes of a NTSB staff member highlighting issues and matters to review for the NTSB Trajectory Study and perhaps the Main Wreckage Flight Path Study. Without the protection provided by exemption (b)(5), full and frank discussion of options and opinions so vital to the decision-makers would be impossible. In this instance, NTSB staff is seeking review and confirmation of data and preliminary findings to prepare the NTSB

studies for presentation to the Safety Board. The five-member Safety Board is the ultimate decision-maker as to the probable cause(s) of an accident, and the safety recommendations that follow from that cause.

- o. Record 26 is four pages and consists of two copies of a letter sent by an Air Line Pilots Association (ALPA) representative with his comments to the Trajectory Study for TWA flight 800. Each letter has a different set of handwritten notes by NTSB staff. Upon further review, the NTSB redacted portions of the letter, but released all facts that could be segregated. The remaining information, however, is predecisional and deliberative. Without the protection provided by the exemption, full and frank discussion of options and opinions so vital to the decision-makers would be impossible. In this instance, NTSB staff is seeking review and confirmation of data and preliminary findings to prepare the NTSB studies for presentation to the Safety Board. In addition to the harms identified, disclosing these comments would allow the public to determine what the NTSB had written in its preliminary report, which is clearly predecisional.
- p. Record 27 is a 15-page document prepared or edited by NTSB staff discussing the latitude, longitude, description and comments about pieces of debris from TWA flight 800 located in the ocean. These data provided a starting point and confirmation about event sequencing used in the simulations that were included in final Addendum II to the Main Wreckage Flight Path Study. The results from the simulation(s) would be used to prepare and/or update the NTSB flight path studies for presentation to the Safety Board. The five-member Safety Board is the ultimate decision-maker as to the probable cause(s) of an accident, and the safety recommendations that follow from that cause. This document is preliminary data similar to the type presented in two reports about the tagging and tracking of debris that are included in the public docket. The first report is titled Data Management Report and the second is the Tags Database.

- q. Record 28 is a one-page document prepared or edited by NTSB staff discussing the latitude, longitude, description, log and tag numbers of pieces of debris from TWA flight 800 located in the ocean. These data provided a starting point and confirmation about event sequencing used in the simulations that are included in final Addendum II to the Main Wreckage Flight Path Study. The results from the simulation(s) would be used to prepare and/or update the NTSB flight path studies for presentation to the Safety Board. The five-member Safety Board is the ultimate decisionmaker as to the probable cause of the accident and the recommendations that should follow from the investigation. This document is preliminary data similar to the type presented in two reports about the tagging and tracking of debris that are included in the public docket. The first report is titled Data Management Report and the second is the Tags Database. The author culled these data from a large collection of information to target the data needed to derive the flight path simulations created and presented in Addendum II. The very act of distilling the...significant facts from the insignificant facts constituted an exercise of judgment by agency personnel.
- r. Records 29, 30 and 31 are three, twelve, and one page, respectively. Each is a part of a draft of the Main Wreckage Flight Path Study, or the Addendum II to Main Wreckage Flight Path Study. Each has handwritten notes as well as text. Without the protection provided by the exemption, full and frank discussion of options and opinions so vital to the decision-makers would be impossible. In this instance, NTSB staff is seeking review and confirmation of data and preliminary findings to prepare the NTSB studies for presentation to the Safety Board. The five-member Safety Board is the ultimate decisionmaker as to the probable cause of the accident and the recommendations that should follow from the investigation.

s. Record 12 is a three page series of e-mail messages between staff of the NTSB and employees of the Boeing Company. These communications were preliminary discussions about changes and updates that resulted in Addendum II To Main Wreckage Flight Path Study. These discussions preceded the completion of the Addendum II to the Main Wreckage Flight Path Study, thus were predecisional, and discussed preliminary findings and recommendations to be made to the decisional authority. The harm arising from the release of this information is that, without the protection provided by the exemption, full and frank discussion of options and opinions so vital to the decision-makers would be impossible. In this instance, NTSB staff is seeking review and confirmation of data and preliminary findings to prepare the NTSB studies for presentation to the Safety Board. The five-member Safety Board is the ultimate decision-maker as to the probable cause(s) of an accident, and the safety recommendations that follow from that cause. In addition to the harms identified, disclosing these communications would allow the public to determine what the NTSB was evaluating in its preliminary report, which is clearly predecisional.

46. The withheld information in each document was part of the agency's deliberative process. In each instance, the disclosure of the withheld information would expose the government's decision-making process and would discourage candid discussion within the agency and government. Accordingly, the information is withheld pursuant to the (b)(5) exemption as it is protected by the deliberative process privilege.

(B) Title 5 U.S.C. § 552(b)(6) - Personnel And Medical Files And Similar Files The Disclosure Of Which Would Constitute A Clearly Unwarranted Invasion Of Personal Privacy

47. U.S.C. § 552(b)(6) ("Exemption 6") exempts from disclosure "personnel and medical files and similar files the disclosure of which would constitute a clearly unwarranted

invasion of personal privacy.” This protection is afforded to information, which would infringe on the personal privacy of individuals about whom it pertains.

48. In asserting the (b)(6) exemption, each piece of information was reviewed to determine the nature and strength of any individual’s privacy interest. In withholding the information, the individual’s privacy interest was balanced against the public’s interest in disclosure. In each instance where information was withheld, it was determined that the individual did have a privacy interest and that the individual’s privacy interests were not outweighed by any public interest. Disclosing the withheld information does not shed light on how the NTSB performs its statutory duties. To reveal the withheld information would constitute a clearly unwarranted invasion of personal privacy.
49. The NTSB withheld the names, telephone and facsimile numbers of Boeing Commercial Airplane Group employees in Records 1, and 2; the names, signatures, telephone and facsimile numbers of Boeing Commercial Airplane Group employees in Records 3, 4 and 10; the name and telephone number of an employee of the Boeing Commercial Airplane Group in Record 25; the name and telephone number of an Air Line Pilots Association employee in Record 11; the name and signature of an Air Line Pilots Association employee in Record 26; the names of Boeing employees and the signature of one of those Boeing employees in Record 13; the names and email addresses of Boeing Commercial Airplane Group employees in Record 12; the names, email addresses and telephone number of Boeing Commercial Airplane Group employees and a Central Intelligence Agency employee in Record 16; the names and facsimile numbers of a NTSB employee and a Central Intelligence Agency employee in Record 9; and the name of a Boeing Commercial Airplane Group employee(s) in Records 5, 6, 7, 8, and 9.

50. These individuals, with identifying information withheld under exemption (b)(6), were involved with and responsible for deriving and/or supervising the calculations related to the flight path for TWA flight 800 for their organizations. The NTSB accident investigations are conducted using a party system, as described above in paragraphs 5-8 and 11. Both Boeing and ALPA were parties to the TWA flight 800 investigation. Under the party system, members of outside organizations have access to most of the investigative materials relevant to their area of expertise. For this reason, under 49 CFR §831.13(b), "no information concerning the accident or incident may be released to any person not a party representative to the investigation (including non-party representative employees of the party organization) before initial release by the Safety Board without prior consultation and approval of the IIC [Investigator-In-Charge of the accident]." The privacy consideration is to protect these representatives to the Safety Board's investigation from unnecessary unofficial questioning as to the conduct of an investigation, project, or its conclusions regardless of whether or not they are currently employed by the private corporation or trade association. Furthermore, these individuals have access to or knowledge of commercially valuable proprietary data that may be of interest to the public in general and to competitors in particular. These consulting employees have a privacy interest in avoiding harassment and annoyance in their official and private lives. There is no public interest served by placing the identities of consulting representatives before the public. Release of this information could reasonably be expected to constitute an unwarranted invasion of the personal privacy of the individuals whose identities have been withheld.
51. In Records 9 and 16, exemption (b)(6) was asserted to withhold the name, email address facsimile and telephone numbers of a Central Intelligence Agency employee who was

involved with, responsible for conducting, and/or supervising the investigative activities reported in the records. The name and identifying information of the Central Intelligence Agency employee that appear in the records were withheld since the assignment to a particular investigation, project or case is not by choice, and publicity (adverse or otherwise) regarding any particular investigation, project or case may seriously prejudice the effectiveness in conducting other investigations. The privacy consideration also is to protect Central Intelligence Agency employees as individuals from unnecessary unofficial questioning as to the conduct of an investigation, project, or case regardless of whether or not they are currently employed by the Central Intelligence Agency. The Central Intelligence Agency employees have a privacy interest in avoiding harassment and annoyance in their official and private lives. There is no public interest served by placing the identities of Central Intelligence Agency employees before the public. Release of this information could reasonably be expected to constitute an unwarranted invasion of the personal privacy of the employees whose identities have been withheld. Whatever public interest there may be in knowing the names and identifying information of a government employee and third persons is outweighed by the individuals' right to privacy.

**(C) Title 5 U.S.C. § 552(b)(4) - Trade Secrets And Commercial Or Financial Information
Obtained From A Person And Privileged Or Confidential**

52. 5 U.S.C. § 552(b)(4) ("Exemption 4") exempts from disclosure: "trade secrets and commercial or financial information" that would customarily not be released to the public by the person from who it was obtained. The exemption is intended to protect the interests of both the government and the submitter of information. The exemption encourages submitters to furnish voluntarily, useful commercial or financial information

to the government, and it provides the government with an assurance that such information will be reliable. The exemption affords protection to those submitters who are required to furnish commercial or financial information to the government by safeguarding them from the competitive disadvantages that could result from disclosure.

53. The exemption covers (1) trade secrets or (2) commercial or financial information that is (a) obtained from a person, and (b) privileged or confidential. In determining whether commercial information is confidential, most courts have applied a two-part test.

Information is confidential if disclosure of it is likely either (1) to impair the government's ability to obtain necessary information in the future; or (2) to cause substantial harm to the competitive position of the person from whom the information was obtained. Actual competitive harm need not be shown; actual competition and the likelihood of substantial competitive harm are sufficient.

54. Records 1 through 13, and Record 15 were withheld in whole or in part pursuant to exemption (b)(4). Records 1 through 10 and 12-13 are records transmitted by Boeing and received by the NTSB. Record 11 was transmitted by ALPA and received by the NTSB, and Record 15 is a computer program written by an employee of the NTSB using the proprietary data provided by Boeing.

55. The NTSB withheld the names, telephone and facsimile numbers of Boeing Commercial Airplane Group employees in Records 1, and 2; the names, signatures, telephone and facsimile numbers of Boeing Commercial Airplane Group employees in Records 3, 4 and 10; the name and telephone number of an employee of the Boeing Commercial Airplane Group in Record 25; the name and telephone number of an Air Line Pilots Association employee in Record 11; the name and signature of an Air Line Pilots Association employee in Record 26; the names of Boeing employees and the signature of one of those

Boeing employees in Record 13; the names and email addresses of Boeing Commercial Airplane Group employees in Record 12; the names, email addresses and a telephone number of Boeing Commercial Airplane Group employees in Record 16; and the name of a Boeing Commercial Airplane Group employee(s) in Records 5, 6, 7, 8, and 9. This material is commercial information voluntarily submitted by Boeing, and it is confidential in nature. Boeing's employees, including its engineers and technical staff, are vital to the design, manufacture, sale and support of commercial aircraft, which are a primary product of the company. Use and disclosure of such information is restricted by agreements between Boeing and its employees, suppliers, and customers. Boeing has policies and procedures to prevent disclosure of this information, which is not customarily made available to the public. Boeing therefore has a commercial interest in its employees and the proprietary information they have created, accessed, or used in the course of their employment. Public disclosure of this information may impair the NTSB's ability to obtain needed information in the future, and it may cause substantial harm to Boeing's competitive position. If this information were released, names and contact information for employees who have access to or knowledge of Boeing's commercially valuable proprietary data would be available to the public in general, and to Boeing's competitors in particular. Boeing generally does not release direct contact information for its employees. (See Declaration of Richard S. Breuhaus of The Boeing Company) Armed with the basic knowledge of the employees' knowledge, skills, and responsibilities, Boeing's competitors could attempt to hire these individuals away from Boeing. If its employees were subject to burdensome or improper contact, it would be more difficult and expensive for Boeing to offer its most experienced and knowledgeable employees to support NTSB investigations, which would significantly impair the NTSB's

ability to complete its accident investigation work. And loss of members of its highly skilled workforce would have a detrimental effect on Boeing's ability to compete in a very demanding global marketplace. (See Declarations of Dennis Crider and Richard S. Breuhaus of The Boeing Company)

56. The NTSB withheld the name and telephone number of an ALPA employee in Record 11, and the name and signature of an ALPA employee in Record 26. This information is commercial information voluntarily submitted by ALPA, and it is confidential in nature. ALPA's employees are responsible for ensuring that the investigation into an aircraft accident accounts for the interests of its membership; protecting the interests of airline pilots is one of ALPA's primary missions. ALPA therefore has a commercial interest in its employees and the proprietary information they have created, accessed, or used in the course of their employment. Public disclosure of this information may impair the NTSB's ability to obtain needed assistance and information in the future, and it may cause substantial harm to ALPA's ability to complete its mission. (See Declaration of Dennis Crider) If this information were released, the name and contact information for an employee who has access to or knowledge of commercially valuable proprietary data and preliminary investigative conclusions would be available to the public in general, and to aircraft manufacturing competitors in particular. Armed with the basic knowledge of the employee's knowledge, skills, and responsibilities, competitors could attempt to hire this individual away from ALPA. If its employee were subject to burdensome or improper contact, it would be more difficult and expensive for ALPA to offer its most experienced and knowledgeable employees to support NTSB investigations, which would significantly impair the NTSB's ability to complete its accident investigation work. And loss of members of its highly skilled workforce would have a detrimental effect on

ALPA's ability to provide representation to its members. (See Declaration of Dennis Crider)

57. As stated in paragraph 6 above, it is impossible for the Board to be expert in every type of airplane, helicopter, engine, or component; therefore, the Board must rely on the voluntary cooperation of parties in providing expert technical information. Parties are uniquely able to provide information about aircraft design and manufacturing, airline and airport operations. The gathering of this information is vital so the NTSB investigators can use the data to analyze the potential cause(s) of the accident. Equally as important, because the parties have participated in the investigative process, they are more likely to implement the recommendation(s) that follow the Safety Board's finding(s) of probable cause. Thus improving the safety of the flying public.

58. Originally, Records 6-9 and 15 were withheld in full. Upon further review, Record 5 was released in part, and a part was redacted. Records 5-9 are data provided in tabular and graphic form representing the physical characteristics and aerodynamic reactions of a Boeing 747 aircraft needed to analyze the possible physical responses of the plane following a catastrophic event, such as the loss of the nose section. These data describe the flight characteristics and performance of the 747 aircraft, including the baseline lift coefficient and pitching moment coefficient, and the net thrust from the engines.

Optimizing the performance of aircraft is a fundamental activity of an aircraft manufacturer, such as Boeing, and requires innumerable staff-hours and other resources. Releasing this information would give a competitor this valuable and highly sensitive engineering data without expending the time and money that Boeing invested in developing the data, thus causing Boeing competitive harm. This material is commercial information voluntarily submitted by Boeing, and it is confidential in nature.

Furthermore, disclosing this information would impair the NTSB's ability to obtain needed information in the future. (See Declaration of Dennis Crider) Boeing provides valuable commercial information (including proprietary engineering data) to the NTSB for its use in investigating aviation accidents and incidents. Boeing does not customarily make this information available to the public, but shares it with the NTSB under the belief and understanding that it will not be publicly disclosed. (See also the Declaration of Richard S. Breuhaus of The Boeing Company) Boeing's aircraft data and other resources are vital to the NTSB's ability to complete its accident investigation work. (See the Declaration of Richard S. Breuhaus of The Boeing Company, and the Declaration of Dennis Crider)

59. Record 15 is a computer program written by a member of the NTSB staff to simulate the flight path of aircraft considering different engine, aerodynamic and mass properties, and control inputs. This is not an off-the-shelf program; in fact, its creator never intended it for public use. (See Declaration of Dennis Crider) The simulation requires aircraft data to derive results. This is the data provided by Boeing in Records 1-9, which Boeing has identified as proprietary. This proprietary data concerning forces, etc., are combined with equations of motion to produce results including the velocity, position and orientation of the aircraft. The proprietary data including the forces operating on the aircraft as it flies are inextricably intertwined with computer code to formulate the velocity, position and orientation. (See Declaration of Dennis Crider) Releasing this information would give a competitor this valuable and highly sensitive engineering data without expending the time and money that Boeing invested in developing the data, thus causing Boeing competitive harm. This material is commercial information voluntarily submitted by Boeing, and it is confidential in nature. (See Declaration of Richard S. Breuhaus of The

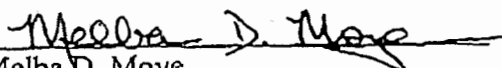
Boeing Company) Releasing this information to the public would have a chilling effect on Boeing's, and other manufacturers' willingness to provide data in the future and thus compromise the NTSB's ability to enhance the flying public's safety. (See Declaration of Dennis Crider) Also, although wanting to assist with an accident investigation in order to insure safety in flight, if doing so may risk the release of vital data, Boeing may provide only the most basic, or very limited, information. So as not to jeopardize the release of data, it may not provide the cooperation and coordination with Boeing employees, which was essential to prompt and confirmed hypotheses about the flight path of TWA flight 800. This knowledge and these resources are vital to the NTSB's ability to complete its accident investigation work. (See the Declaration of Richard S. Breuhaus of The Boeing Company, and the Declaration of Dennis Crider)

60. The NTSB only discloses trade secret or proprietary information to the general public when it is in the interest of safety, and all available safeguards are used to lessen any harm to the company. 49 USC § 1114.

61. Furthermore, the Trade Secrets Act (18 U.S.C. 1905) imposes personal sanctions against Government employees who improperly disclose confidential commercial information that is not supported by the NTSB's statutory authority to permit such a release. This obligation imposed by the Act removes any discretion from release of such information pursuant to the FOIA.

I declare under the penalty of perjury that the foregoing is true and correct.

Executed on this 17 day of May, 2004, in Washington, D.C.


Melba D. Moye
FOIA Officer