

1 PETER D. KEISLER
2 Assistant Attorney General
3 DEBRA W. YANG
4 United States Attorney
5 ELIZABETH J. SHAPIRO, DC Bar 418925
6 DAVID M. GLASS, DC Bar 544549
7 Attorneys, Department of Justice
8 20 Mass. Ave., N.W., Room 7140
9 Washington, D.C. 20530
10 Tel: (202) 514-4469
11 Fax: (202) 616-8470
12 E-Mail: david.glass@usdoj.gov
13 Attorneys for Defendants

11 UNITED STATES DISTRICT COURT
12 CENTRAL DISTRICT OF CALIFORNIA
13 WESTERN DIVISION

15	_____)	No. CV 03-08023-AHM (RZx)
16	H. RAY LAHR,)	
17	Plaintiff,)	SECOND DECLARATION OF
18)	RICHARD S. BREUHAUS
19	v.)	Date: October 31, 2005
20	NATIONAL TRANSPORTATION)	Time: 10 a.m.
21	SAFETY BOARD, <i>et al.</i> ,)	Judge: Hon. A. Howard Matz
22	Defendants.)	
23	_____)	

24
25
26
27
28

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28

UNITED STATES DISTRICT COURT
CENTRAL DISTRICT OF CALIFORNIA

WESTERN DIVISION

CAPTAIN H. RAY LAHR,

Plaintiff,

v.

NATIONAL TRANSPORTATION
SAFETY BOARD, et al.,

Defendants.

Case No. 03-cv-08023-AHM-RZ

SECOND DECLARATION OF
RICHARD S. BREUHAUS

I, Richard S. Breuhaus, declare and affirm as follows:

1. I am Chief Engineer of Air Safety Investigation for The Boeing Company. I am Boeing's primary contact for any National Transportation Safety Board ("NTSB") investigation into the crash of a Boeing aircraft and I coordinate the technical support that Boeing gives to the NTSB upon request.

2. I am over the age of 21 years and competent to testify herein. The facts stated herein are based on my personal knowledge, on my review and familiarity with Boeing's business records that are maintained in the ordinary course of business, and on my discussions with Boeing employees knowledgeable about and responsible for the documents and activities discussed herein, including computational fluid dynamics ("CFD"). I would so testify if called to do so.

3. As stated in my initial Declaration, the documents at issue (collectively "the Records") contain information voluntarily provided by Boeing in support of the NTSB's and the CIA's TWA Flight 800 investigation ("Information").

4. Boeing provided the Information specifically in response to a request for technical assistance concerning the mass properties, aerodynamic and engine

1 characteristics of the Boeing Model 747-100 aircraft. Because public disclosure of
2 these trade secrets could cause Boeing competitive harm, Boeing provided them to
3 the NTSB and the CIA with the belief and understanding that these agencies would
4 disclose the Information only if necessary for the health or safety of the flying
5 public. Further, Boeing's understanding was that, if disclosure should become
6 necessary for this reason, the federal agencies would take all measures available to
7 lessen the resulting competitive harm to Boeing.

8 5. The Records contain confidential business and technical information
9 regarding the baseline mass properties, aerodynamic and engine characteristics of
10 the Boeing Model 747-100 aircraft. This information is "Boeing Proprietary," or
11 third-party proprietary information that is subject to a Proprietary Information
12 Exchange Agreement between Boeing and one of its suppliers. Boeing does not
13 disclose this information without appropriate restrictions on use and further
14 disclosure of the information by the recipient. The proprietary information is
15 identified as redacted in Exhibit 1 attached to my prior Declaration. Contrary to the
16 assertions in the Affidavit of Mr. Brett M. Hoffstadt, Boeing has not consented to
17 this information entering into the public domain and such information is not in the
18 public domain.

19 6. The central premise of Mr. Hoffstadt's assertion that this Boeing 747
20 information is in the public domain is the existence of CFD models made by
21 Analytical Methods, Inc. ("AMI") that he believes provide the geometry of a Boeing
22 747-200 and 747-300.

23 7. Mr. Hoffstadt's belief that CFD models are essentially equivalent to
24 actual 747 baseline mass properties, aerodynamic and engine characteristics is
25 woefully mistaken. As explained in my initial Declarations, the Records are not
26 CFD program outputs. Contrary to his belief, even state-of-the-art CFD programs
27 cannot reproduce aircraft aerodynamics data to the level of accuracy required for all
28 of the commercial purposes for which Boeing and third parties use the data

092705/1538[SL052700.007]

03007-0111-000000

presented in or derivable from the Records. Boeing verifies its preliminary CFD information using aircraft models in a wind tunnel and, contrary to Mr. Hoffstadt's assertion, Boeing continues to make extensive use of wind tunnels. The wind tunnel results are adjusted for scale effects and aeroelastic differences, and are then verified through actual flight testing. Boeing then extracts the aircraft's aerodynamic characteristics from the flight test data.

8. While Boeing has released certain airplane geometry information and a limited amount of wind tunnel data in the past without restriction, the information is limited to partial model configurations without the tail of the aircraft and does not represent a configuration of the complete aircraft. In addition, the wind tunnel data encompasses a limited range of flights conditions (e.g. Mach number and angle of attack). Neither the geometry information nor the wind tunnel data include modeling of the aeroelastic effects of the Boeing Model 747-100 aircraft. Further, Boeing provides such information only in very limited circumstances.

9. The CFD model licensed by AMI and discussed by Mr. Hoffstadt has not been validated by flight testing or comprehensive wind tunnel testing. To the best of our knowledge and belief, CFD models typically have an error factor of 5-30 percent (compared to the actual in-flight airplane characteristics) depending upon the factor at issue. If one developed a simulator based upon the CFD model discussed by Mr. Hoffstadt and without validation using wind tunnel and flight test data, the Federal Aviation Administration would not certify that flight simulator.

10. Mr. Hoffstadt asserts that the flight information in the Records has little commercial value to Boeing. We believe that Boeing knows far better than Mr. Hoffstadt the commercial value of its proprietary information. My initial Declaration detailed at length the many reasons why the Boeing information at issue has substantial commercial value to Boeing. For example, I noted the enormous investment that Boeing has made to generate this information and the revenues that Boeing receives from such information.

092705/1538[SL052700.007]

03007-0111-000000

11. The information in the Records is Boeing's best representation of the actual flight characteristics for the Boeing Model 747-100 aircraft that, as detailed in my initial Declaration, Boeing uses in many aspects of its business. Boeing goes to great lengths to protect the confidentiality of this proprietary information. Boeing would hardly do so if this information had little commercial value to Boeing.

12. As support for his assertion that the information in the Records has little commercial value to Boeing, Mr. Hoffstadt claims that this is true because the 747 is a model of declining use. My initial Declaration explained that Boeing offers a variety of goods and services to the owners and operators of the 501 747 Classic aircraft that are currently available for service and widely used throughout the world. Further, Boeing is currently working on the design of a 747 Large Cargo Freighter and the 747 Advanced. While these new 747 models will certainly include many features not previously available, it is also true that they will include portions of the original 747 design.

13. Further, contrary to the apparent assertion in Mr. Hoffstadt's Affidavit, Boeing has previously objected to release of the information which was contained in NTSB Records 6-10. I attach to this Declaration as Exhibit 1 a true and correct copy of a March 13, 2001 letter (without enclosures) from Boeing to NTSB, objecting to such disclosure. In addition, Boeing intervened in previous cases in which Mr. Lahr sought such information in order to oppose disclosure of this information.

14. If the Boeing proprietary information in the Records is released, Boeing will be forced to reconsider the kind of proprietary information it will provide voluntarily to agencies such as NTSB in the future.

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28

I declare under penalty of perjury that these statements are true and correct to the best of my knowledge and belief.

DATED: September 27, 2005


Richard S. Breuhaus

EXHIBIT 1

Office of
The General CounselBoeing Commercial Airplanes Group
P.O. Box 3707 MC 21-03
Seattle, WA 98124-2207RECEIVED NTSB
OFFICE OF GENERAL COUNSELRECEIVED NTSB
OFFICE OF GENERAL COUNSEL2001 MAR 13 P 7:29
Via Facsimile (202-314-6090) and First Class U. S. Mail

2001 MAR 13 P 7:29

March 13, 2001

National Transportation Safety Board
Office of General Counsel
490 L'Enfant Plaza East, S.W., 6th Floor
Washington, D.C. 20594-2000

Attn.: Ms. Kathleen Silbaugh, Attorney

Subject: Freedom of Information Act (FOIA) Request for Boeing Proprietary
Information Provided for Creation of the Main Wreckage Flight Path
Study for TWA Flight 800

Reference: Letter from Ms. Kathleen Silbaugh dated February 15, 2001

This is in response to your request for comments by Boeing on the releasability of certain documents by the National Transportation Safety Board (NTSB) pursuant to the subject FOIA request relating to information provided for creation of the main wreckage flight path study for TWA Flight 800.

The NTSB has identified for review thirteen (13) pages of engineering documents and four (4) pages of fax cover sheets. Boeing has carefully reviewed these materials and has the following comments:

I. Boeing will not object to the release of the pages contained in Attachment A as redacted. In Attachment A, I have included the 4/2/97 version of the "TWA Mass Properties" sheet, that was released in the Flight Path Study. You will note that in the four (4) fax cover sheets, I have redacted the names and other identifying information for Boeing employees, including telephone numbers. This is in accordance with the analysis under Exemptions 4 and 6 outlined in the enclosed Federal Aviation Administration administrative action addressed to Michelle Earl-Hubbard, Esq.

II. Boeing objects to release of the information/pages contained in Attachment B. These documents contain confidential, proprietary information with continuing commercial/competitive value to Boeing. Boeing believes this information clearly meets the test enunciated in *Critical Mass Project v. NRC*, 975 F.2d 871, 879 (D.C. Cir 1992). This information was voluntarily disclosed to NTSB. In accord with *Critical Mass*, such voluntarily submitted information shall be treated as confidential information under exemption 4 of the Freedom of Information Act (FOIA) "if it is of a kind that would customarily not be released to the public by the person from whom it was obtained."

Boeing does not customarily release the graphs, charts and other engineering data on these sheets to the public. Therefore, under *Critical Mass*, the information/pages should be treated as confidential commercial information under Exemption 4 of the FOIA.

EXHIBIT

Furthermore, Boeing also believes that the information clearly meets the test enunciated in *National Parks and Conservation Association v. Morton*, 498 F.2d 765 (D.C. Cir. 1974), should the information be deemed mandatorily disclosed to the FAA. Under *National Parks*, "commercial or financial matter is 'confidential' for purposes of the exemption if disclosure of the information is likely to have either of the following effects: (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." *Id.* at 770. In the present situation, disclosure of the subject information will be likely to cause substantial harm to the competitive position of Boeing.



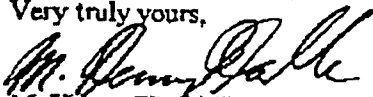
The engineering data in these sheets are sensitive data that describe flight characteristics and performance of our aircraft. If this data were released to the public, a competitor would have a benchmark against which to compare and possibly modify its own aircraft. Furthermore, these data form part of the classified training simulator database that was developed at considerable expense by Boeing. If a competitor were to obtain this information through a public release, without having to go to the effort and expense Boeing did, Boeing could be competitively harmed.

We therefore believe that the subject materials contain confidential commercial information which also meets the test enunciated by the *National Parks* decision.

It therefore is clearly appropriate to protect the pages/information in Attachment B from disclosure under the Exemption 4 of the FOIA.

We believe that for all of the foregoing reasons, the redacted identifying information in Attachment A and the material identified in Attachment B should be withheld from disclosure to the requester. If you have any questions or comments on this position, please feel free to contact the undersigned, or E. Allen John, Jr. at (206) 766-1812.

Very truly yours,


M. Henry (Hank) Halle
Counsel

The Boeing Company
PO Box 3707, MC 21-03
Seattle, WA 98124-2207
Tel: (206) 766-1818
Fax: (206) 766-1825
Email: hank.halle@pss.boeing.com

