

**MEMORANDUM OF UNDERSTANDING
BETWEEN THE
NATIONAL TRANSPORTATION SAFETY BOARD
DEPARTMENT OF THE AIR FORCE
AND FEDERAL AVIATION ADMINISTRATION
REGARDING SPACE LAUNCH ACCIDENTS**

BACKGROUND AND PURPOSE

Commonality of launch vehicles, launch vehicle systems, components, and launch range safety systems exists for launches conducted under launch licenses issued by the Federal Aviation Administration ("FAA") and launches conducted by and for the United States Air Force ("USAF"). The FAA and the USAF therefore require timely knowledge of the facts and circumstances of commercial space launch accidents. In accordance with the attached agreement between the National Transportation Safety Board ("NTSB") and the Federal Aviation Administration Associate Administrator for Commercial Space Transportation ("AST"), the NTSB may lead investigations of certain commercial space launch accidents. This MOU and the attached NTSB-AST agreement establish the relationship between the NTSB, USAF and FAA ("the parties") during space launch accidents, and guide the parties' exchange of accident information and participation in an accident investigation.

INVESTIGATIONS

The parties agree that either AST or NTSB will lead investigations of commercial space launch accidents, pursuant to the terms of the NTSB-AST agreement, and that the USAF will lead investigations of accidents involving USAF certified launches.

In the event NTSB leads an investigation of a commercial space launch accident in accordance with the NTSB-AST agreement, NTSB will permit, upon request of the USAF, appropriate USAF personnel to participate as official observers to the NTSB investigation. USAF may also be offered "party status" to an NTSB investigation, in accordance with the provisions of 49 C.F.R. Part 831, in appropriate circumstances.

Personnel observing or participating in an investigation will be under the control and direction of the lead agency's chief investigator (e.g., NTSB "Investigator-In-Charge," FAA "Investigator-in-Charge," or USAF "Safety Investigation Board President"). All such personnel will follow the lead agency's rules regarding the handling or release of information or other evidence collected during an investigation.

CONFIDENTIAL NATURE OF NTSB ACCIDENT INVESTIGATIONS

All NTSB investigation data, information, documents or other material obtained by USAF or USAF personnel in the course of an accident investigation led by NTSB shall be treated as confidential (not in the classified sense, but, rather, in the sense that it is subject to claim of governmental and/or other privilege) and not disclosed in any manner without the written consent of the NTSB Investigator-in-Charge. This restriction also applies to all accident

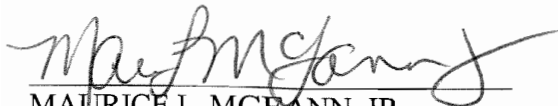
investigation work performed by USAF or USAF personnel in support of an investigation led by NTSB, and any such information or documents will be considered the confidential work product of the NTSB. In addition, any Freedom of Information Act (FOIA) request, subpoena, or other request for such information that is directed to USAF or USAF personnel will be referred to the NTSB for resolution.

CONFIDENTIAL NATURE OF USAF SAFETY INVESTIGATIONS


In USAF led investigations of space launch accidents or mishaps, the NTSB (if they participate) and FAA agree to abide by the rules in DoD and USAF instructions on safeguarding safety information protected by the military safety privilege; DoDI 6055.7, Accident Investigation, Reporting, and Record Keeping, and AFI 91-204, Safety Investigation and Reports. Information collected by or for a USAF safety investigation may only be released to the NTSB or FAA during the investigation by the safety board president with the consent of the convening authority chief of safety. If USAF safety investigators discover a critical safety concern applicable to commercial launches, that information will be provided to the FAA, NTSB and others in accordance with AFI 91-204. Any FOIA request, subpoena, or other request for safety information protected by the military safety privilege that is directed to FAA or NTSB personnel will be referred to the USAF for resolution.

DURATION, MODIFICATION AND TERMINATION

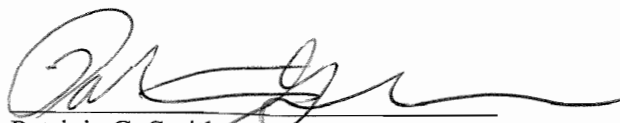
This MOU becomes effective upon signature by all parties, and shall remain in effect until cancelled. Any modifications to this MOU must be in writing and signed by all parties.


MAURICE L. MCFANN, JR.
Major General, USAF
Chief of Safety

30 Aug 04
Date: _____


Mr. John C. Clark
Director, Office of Aviation Safety
National Transportation Safety Board

9/7/04
Date: _____


Patricia G. Smith
Associate Administrator for
Commercial Space Transportation
Federal Aviation Administration

8/18/04
Date: _____

POINTS OF CONTACT

	Notification Information During Office Hours	Notification Information After Office Hours
Air Force Safety Center Space Safety Division AFSC/SES 9700 G. Avenue SE, Suite 120 Kirtland AFB NM 87117-5670	AFSC/SES Phone: (505) 846-9897 Fax: (505) 846-6027	Kirtland AFB Command Post Phone: (505) 846-3776 Fax: (505) 846-4733
National Transportation Safety Board Office of Aviation Safety Major Investigations Div. 490 L'Enfant Plaza East, S.W. Washington D.C. 20594-2000	Robert Benzon Phone: (202) 314 6313 Fax: (202) 314-6319	NTSB Comm Center Phone: (202) 314-6290 Fax: (202) 314-6293
Federal Aviation Administration Office of Commercial Space Transp. Mgr., Licensing and Safety Div. 800 Independence Avenue, SW Washington, D.C. 20591-0001	AST-200 Phone: (202) 267-7793 Fax: (202) 267-5450	FAA Operations Center Phone: (202) 267-3333 Fax: (202) 267-5289

APPENDIX H

FEDERAL AVIATION ADMINISTRATION

ASSOCIATE ADMINISTRATOR FOR COMMERCIAL SPACE TRANSPORTATION

This Appendix H is an appendix to the "Reimbursable Memorandum of Agreement Between Department of Transportation and National Transportation Safety Board" entered into on May 15, 1975 and establishes the relationships, notification procedures, coordination requirements, and reporting responsibilities of the Federal Aviation Administration's (FAA) Associate Administrator for Commercial Space Transportation (AST), and the National Transportation Safety Board (NTSB) in connection with accident investigations associated with commercial space launch activities, and identifies areas in which exchange of data and use of resources or services of one agency by another may be requested.

1. ACCIDENT INVESTIGATION

NTSB will investigate all commercial space launch accidents resulting in:

- a. Known impact of a commercial launch vehicle, its payload or any component thereof outside the impact limit lines designated by the launch range facility; or
- b. A fatality or serious injury (as defined in 49 CFR 830.2) to any person who is not associated with commercial space launch activities and who is not located on the launch range facility; or
- c. Any damage estimated to exceed \$25,000 to property which is not associated with commercial space launch activities and which is not located on the launch range facility.

Nothing in this agreement impairs the authority of the NTSB to investigate any other commercial space launch accident which, in the judgement of the Board, is subject to Section 304(a)(1)(F) of the Independent Safety Board Act of 1974.

Any other investigations of commercial space launch accidents by NTSB, other than those described above, will be subject to the mutual agreement of NTSB and FAA.

2. ACCIDENT NOTIFICATION

NTSB and FAA agree to notify each other promptly of the occurrence of all commercial space launch accidents which NTSB will investigate as provided for in paragraph 1.

3. ACCIDENT INVESTIGATION PROCEDURES

The following general procedures govern investigations of commercial space launch accidents by NTSB:

- a. The accident investigation will be under the control and direction of the NTSB investigator-in-charge (IIC).
- b. NTSB will be solely responsible for releasing factual information on the investigation to the public and will assign the official spokesperson for the investigation.
- c. FAA shall be designated by NTSB as a party to each accident investigation and public hearing, and will in turn designate a principal representative as the FAA coordinator for each accident.
- d. Selection of FAA/AST personnel to participate in the investigation shall be determined by the FAA coordinator and subject to approval by the NTSB IIC. The coordinator shall work with the IIC in conducting his or her activities.
- e. FAA personnel assigned to a particular investigative group shall work under the direction of the group chairperson and shall remain with the assigned group until that phase of the investigation has been completed or they are released by the IIC and the FAA coordinator. They will submit to the group chairperson whatever information they obtain during the course of the investigation.
- f. The IIC shall keep the FAA coordinator informed of the progress of the investigation.
- g. Pertinent records obtained and factual reports prepared during the investigation shall be made available to FAA/AST through the FAA coordinator in a timely and orderly manner.

- h. In the event additional facts are needed by FAA/AST but not required by NTSB, they may be obtained by the FAA coordinator following notification of the NTSB IIC, on the condition that it does not interfere with the on-going NTSB investigation. In obtaining such facts, FAA personnel shall make it clear that they are not acting under NTSB direction. In addition, the FAA coordinator shall notify the NTSB IIC of any FAA intent to take any enforcement action, if the NTSB investigation is not yet completed.
- i. Subject to the provisions of Section 304(a)(1)(F) of the Independent Safety Board Act of 1974, as amended, nothing in this agreement impairs the authority of FAA/AST to conduct investigations of accidents under applicable provisions of law or to obtain information directly from parties involved in, and witnesses to, a commercial space launch accident.
- j. The NTSB IIC shall not release any wreckage until FAA/AST agrees that it is no longer needed. In the event FAA/AST requests NTSB to retain control of any wreckage for a period of time beyond NTSB's investigative needs, that period of time shall not exceed 60 days from the date of request. FAA/AST shall be responsible for the storage and security costs, if any, for this additional time.

4. EXCHANGE OF INFORMATION

NTSB and FAA will each provide to the other copies of all accident reports, research reports, studies and other documents normally available to the public upon request. In addition, NTSB and FAA shall each have access to the other's accident data files and tapes on a continuing basis.

Approved


 Associate Administrator for Commercial
 Space Transportation


 Date


 National Transportation Safety Board

1-3-00
 Date