

NATIONAL TRANSPORTATION SAFETY BOARD
INVESTIGATOR'S MANUAL
VOLUME I - GENERAL INFORMATION

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INTRODUCTION

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AUTHORITY AND RESPONSIBILITIES

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ALERTS, BULLETINS, AND NOTES

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VOLUME I

THIS MANUAL IS PREPARED TO PROVIDE INFORMATION AND TO ASSIST NATIONAL TRANSPORTATION SAFETY BOARD EMPLOYEES. THIS MANUAL IS NOT REGULATORY IN NATURE, IS NOT A STATEMENT OF POLICY, AND THIS INFORMATION IS NOT ALL-INCLUSIVE. THIS MANUAL SHOULD NOT BE USED AS A DEFINITIVE INTERPRETATION OF ANY LAW OR RULE, AND IT CAN BE CHANGED AT ANY TIME.

Overview

The National Transportation Safety Board (NTSB), established by statute in 1966 (Public Law 89-670) as an independent agency of the United States Government, located within the Department of Transportation, was by virtue of the Independent Safety Board Act of 1974 (Public Law 93-633), made independent of any other agency of the Federal Government in order to permit the NTSB to properly conduct independent accident investigations and to formulate safety improvement recommendations. The NTSB is charged with the responsibility of "vigorous investigation" of transportation accidents for the purpose of formulating recommendations to prevent such accidents from recurring, and that duty "demands continual review, appraisal, and assessment of the operating practices and recommendations" of the modal administrations within the Department of Transportation. The NTSB's investigative task must be accomplished without fear or favor and, indeed, some of the recommendations that the NTSB makes may be critical of or adverse to the persons, including other Government agencies, to whom they are directed.

The powers and duties of the NTSB are set forth in its currently effective enabling statutes, one of which is the Independent Safety Board Act of 1974, as amended (49 U.S.C. 1901 et seq.), and the other, Title VII of the Federal Aviation Act of 1958 (49 U.S.C. 1441). The NTSB was directed by Congress to perform nine categories of duties, the primary duty that of accident investigation for the purpose of accident prevention. The powers that have been granted to the NTSB are intended to be used for the singular purpose of accomplishing the duties assigned to it. The NTSB has the power to hold hearings, administer oaths, require by subpoena or otherwise the attendance and testimony of witnesses and the production of evidence, and any employee of the NTSB, in the exercise of NTSB duties, is authorized to enter property wherein a transportation accident has occurred, to take custody of wreckage and other evidence deemed reasonably relevant to the accident investigation, and to do all things necessary to ensure the integrity of the NTSB investigation.

NTSB investigators carry official identification credentials that contain a statement of the NTSB's powers and duties. Each investigator should also make it his business to, at all times, maintain a current copy of the NTSB's enabling statutes at the ready to respond to any challenge that might arise in the context of an investigation. As recently as November 1990, the NTSB's primary enabling statute was

Original

expanded to include provisions that clarify the NTSB's authority to determine the manner in which testing will be carried out, to withhold from public disclosure cockpit voice recorder recordings and transcriptions under certain specified circumstances, and to obtain the positive results of drug testing that the Secretary of Transportation has ordered. (Public Law 101-641). Another recent amendment enlarged the NTSB's responsibility for recording the occurrence of public aircraft accidents to include the requirement that, with the exception of aircraft operated by the military and intelligence agencies of the Federal Government, including the security agencies, the operator shall report such accidents and enumerated incidents to the NTSB and the NTSB must report on such accidents to Congress.

Original

The Role of the Federal Aviation Administration in NTSB Accident Investigation

The Federal Aviation Administration (FAA) participates actively in every aircraft accident investigation, having been directed to do so by Congress (49 U.S.C. 1441(g)). The Administrator, FAA (cited in the statutes as the Secretary of Transportation), designates a representative or representatives to actively participate in every major accident investigation, and every full field investigation. The Appendix o Part 800 of the NTSB Organizational Rules sets forth a delegation of authority to the FAA to investigate certain selected kinds of accidents on behalf of the NTSB. However, the FAA does not participate in the probable cause findings. The NTSB is authorized to utilize the FAA report of an accident so delegated in making its determinations of probable cause (49 U.S.C. 1441(f)). The presence of the FAA provides technical expertise, institutional knowledge, i.e., knowledge of Airworthiness Directives, airman and aircraft history, type certification data, and more, as well as enabling the FAA to its statutory responsibilities, e.g., regulatory. FAA representatives should be encouraged to participate to the fullest extent possible. Considerable deference can be given to the FAA representative's as that understanding accords with the NTSB's historical interpretation and application of any Federal Aviation Regulation (FAR) provision. In the event of a lack of agreement on the proper application of any FAR provision to a specific accident/incident, the NTSB Office of General Counsel and the Chief, Regional Operations Division, may be consulted.

Regulation of the National Transportation Safety Board

Certain portions of Parts of the NTSB's regulations (49 CFR Parts 800-850) are of particular significance to the NTSB's aviation accident investigation function. Copies of all of the regulations are included in Volume IV of this manual and they should be updated whenever a change is made to any of these regulations. Any such change is circulated to all NTSB investigators and it is incumbent upon each investigator to maintain an up-to-date set of the NTSB rules.

Certain rules require the use of forms. For example, Part 830, the rules that pertain to reporting of accidents, may require the use of a Form 6120.1/2. Copies of forms that are used in connection with aviation accident investigation are contained in Volume IV. Also included in Volume IV is a collection of forms and letters that NTSB investigators have found to be helpful in the conduct of accident investigations. For example, there is a letter suitable for editing to suit your own purposes to be addressed to any person who seeks party status in any NTSB investigation but whose presence during the fact finding portion of the investigation is not needed. In addition, there is a cover letter, sometimes used to good effect, to accompany a subpoena duces tecum, i.e., a subpoena demanding the production of documents or things, in contrast to a subpoena for the appearance and testimony of a witness.

Although NTSB investigators should be aware of all of the regulations, certain portions of those regulations are specifically addressed to the accident investigation function. These are Part 830, the rules that pertain to the reporting of accidents and incidents and the preservation of wreckage; Part 831, aircraft accident/incident investigation procedures, and Part 845, rules of practice in transportation accident/incident hearings and reports. The procedural regulations are intended to assist the investigator in the performance of his/her investigative duties and to ensure that the public interest and the integrity of the investigation are both well served in the process, i.e., the operator is required to complete the report for any accident but is not required to submit the report for a listed incident unless requested.

Phase 1- The Investigation Begins: The initial task is to define the scope of the accident investigation in terms of the nature and proportions of the event reported. Upon notification to the NTSB Regional Director or a Headquarters

Original

staff person, as the case may be, he/she determines whether the NTSB investigator should be assigned to the event that was reported or whether the event is one that should be investigated by the FAA, under delegated authority. Upon initial notification a determination must also be made as to whether the operator is required to complete a Form 6120.1/2.

Part 830 contains definitions by virtue of which the event can be properly classified (accident, incident, reportable event) and explains when a Form 6120.1.2 is required.

Phase 2- Fact-Finding and Party Selection: In the event that an NTSB investigator is assigned to conduct an on-site investigation of an aircraft accident, his first concern is, in most cases, the securing of all relevant evidence. In this endeavor, he should first refer to the section on preservation of wreckage (Section 830.10, found in Sub-part C of Part 830), and decide whether he will take custody of the wreckage which may already have been secured by local law enforcement officers. In the event the NTSB investigator does assume custody of the wreckage, the problem of wreckage release arises when the investigator has no more need of the wreckage.

Proper wreckage release involves use of a wreckage release form (See Volume IV), and, in some cases, will require that the owner of record be located and informed that the accident has occurred. Ideally, after inspection has been completed the wreckage is returned to the owner of record who acknowledges receipt by signing the official wreckage release form.

The remainder of the investigator's duties in regard to obtaining all of the evidence that is "reasonably relevant" are addressed in Part 831, see especially Section 831.9, which describes the investigator's authority in regard to entering property, inspecting records, and obtaining copies of documents. Part 831 should be read in consonance with Section 304(b) of the Independent Safety Board Act which sets forth the NTSB's powers to be used to obtain evidence, and Section 701(c) of the Federal Aviation Act of 1958.

Original

Subpoena Power

The use of the NTSB subpoena power is appropriate when all else fails. The subpoena authority is found in Sections 304(b)(1) and (3), and is to be exercised only by the Chairman unless express delegation of authority is issued by the Chairman to the Investigator-in-Charge (IIC), a delegation that is usually made in any major aircraft accident investigation. Otherwise, any investigator who deems it necessary to issue a subpoena should draft one, specifically setting forth the name, address, and telephone number of the recipient; identifying the accident date, place of occurrence, and aircraft make, model, and registration number; in addition, the investigator should identify the document, information, or thing, known to be in the possession or custody of the recipient, with great specificity. Whenever possible, limit the request. For example, if you wish to obtain a description of injuries sustained by each person aboard an air carrier when an accident occurred, than ask the hospital to which the patient or patients were brought for the "discharge summary containing a description of injuries sustained." Volume IV contains examples of subpoenas that have been served and a copy of the cover letter that is often used to personalize the subpoena. subpoenas to hospitals are served only after requests have been made and the hospital records administrator informs the NTSB investigator that the information cannot be released unless a subpoena is issued. The draft can be forwarded to the Chief, Regional Operations Division, for signing and mailing by the Chairman's Office. Occasionally, an investigator may prefer to serve the subpoena in person, especially when blood or other toxicological samples are involved.

Original

Witnesses

Another source of information for NTSB investigators is the witness interview. Witness interviews are ideally conducted as soon as possible after the event and each person interviewed should be asked to complete a witness statement for which a form is provided (See Volume IV, Form 6120.11). On occasion, when absolutely necessary, NTSB investigators may be obliged to resort to the use of an administrative subpoena to require a witness's testimony. This usually occurs within the context of a full field investigation when parties have been selected. In the event of non-cooperation on the part of a key witness, i.e., a person who played a role in the operations surrounding the accident, the investigator may be obliged to engage the services of a court reporter, set up a specific date and place for the interview, and take sworn testimony. The NTSB does not at present have procedural rules for the conduct of such an interview, often described as a staff-conducted deposition; accordingly, the rules for hearings (Part 845) are modified in their application to provide guidance when sworn testimony is being taken. NTSB investigators should be aware that, on occasion, a witness asked to give sworn testimony will decline to do so claiming his right to immunity from self-incrimination under the Fifth Amendment to the Constitution. In these cases it is incumbent upon the investigator to rely on other sources of information. The office of the General Counsel can provide advice on the validity of any fifth amendment claim.

Original

Parties to the Investigation

Another initial investigatory task that arises in the context of a full field investigation or a major accident investigation is the selection of parties to the fact-finding portion of the investigation. Party status confers many benefits on the party and, when properly selected, parties may enhance the investigator's access to data and information and to expert knowledge. The Federal Aviation Administration is, by virtue of Title VII, Federal Aviation Act, a party of right, i.e., the FAA Administrator is entitled to appoint a representative to participate in any civil aircraft investigation. Other parties are selected by the NTSB Investigator-in-Charge on the basis of need, i.e., the investigator's need for the specialized knowledge of a suitable qualified technical employee of a person or company whose employees, functions, activities, or products were involved in the accident or incident and who can provide suitable qualified technical personnel to actively assist in the field investigation. Section 831.11 provides the procedural guidance for the selection of parties to any field investigation.

Once parties to the field phase of the investigation have been selected, the investigator is occasionally called upon to explain why he determined that a person or company that applied for party status was not selected. Volume IV contains a standard letter of explanation to the representative of the estate of the owner-pilot of an aircraft explaining why the Investigator-in-Charge determined that he would have no need for participation as an observer by the representative. The NTSB's Office of General Counsel will assist in the preparation of such letters; however, the determination whether to grant party status must be made by the Investigator-in-Charge applying NTSB guidelines. In no case is observer status granted without prior coordination with the Chief, Regional Operations Division. Observers are neutral parties who were not involved in the accident but who have an institutional interest in aviation safety, for example, the Canadian Safety Board, or a representative of another Government's aviation safety authority.

Original

Documentation of the Field Investigation

Section 306 of the Independent Safety Board Act requires that the results of any NTSB investigation be made available to the public, except under certain articulated circumstances (See Section 206(b) of the Independent Safety Board Act and Section 831.6 of the NTSB investigation procedures). As set forth in Section 801.2 of the NTSB implementation of the Freedom of Information Act (49 CFR Part 801), it is the NTSB's stated policy to make information available to the public to the greatest extent possible. As a practical matter, the NTSB's ability to conduct its investigations in the manner the Board determines to be proper, to include participation only by persons qualified to actively assist in the investigation, is possible only when the general public can be assured that the results of any accident investigation will be publicly released within a reasonable time after the investigation is completed. The investigator is not responsible for dissemination of written accident data to the public. Instead, the investigator's duty is to complete the investigation, and to gather together all witness statements, photographs, reports of engine evaluation, wreckage diagrams, and other pertinent factual information, and to forward these materials, together with his factual report, confidential analysis, and recommended probable cause, to the Chief, Regional Operations Division, for inclusion in the public docket or the "FOR OFFICIAL USE ONLY" file, and the adoption of the NTSB's synoptic report of probable cause.

Original

Overview

Each Regional office is under the supervision of a Regional Director who is responsible to the Director, Office of Aviation Safety (OAS). Air Safety Investigators assigned to each office are responsible to the Supervisory Air Safety Investigator, Field Office Chief, and subsequently the Regional Director.

The NTSB Regional office, having the responsibility for the area of occurrence, is primarily responsible for providing initial coverage of accidents or other occurrences. However, final responsibility for the conduct of an investigation may be assigned to personnel of another Regional office by the Regional Directors concerned when circumstances require such action because of workload or other factors.

In order to avoid duplication of work and effort the following procedure is established: Regardless of where the accident occurs within the regional jurisdiction, the office in whose area the aircraft lands will be responsible for the investigation. When an investigator is assigned from another office the investigating office will assign the accident number.

All major catastrophic air carrier accidents, accidents with national significance, and all general aviation accidents and incidents occurring outside the continental limits of the United States (except Alaska, Hawaii, and Puerto Rico) are the direct responsibility of the Washington Office. When a Regional office receives notification of such an accident or incident, the office receiving the notification or information shall forward it to the Washington Office. The Chief, Major Investigations Division, will evaluate the reported item and make necessary assignments of his assigned personnel if the investigation is to be conducted by this division.

Original

LOCATION OF REGIONAL OFFICES

AREAS OF RESPONSIBILITY

AREA OF RESPONSIBILITY

<p>NORTHEAST REGIONAL OFFICE NY, 2001 Route 46 Suite 203 Parsippany, NJ 07054</p>	<p>ME, NH, MA, RI, CN, VE, NJ, PA, DE. OH, KY</p>
<p>NORTHEAST FIELD OFFICE 490 L'Enfant East, S.W. Washington, DC 20219</p>	<p>MD, VA, DC, WV</p>
<p>SOUTHEAST REGIONAL OFFICE 8405 N.W. 53rd St. Suite B-103 Miami, FL 33166</p>	<p>FL, PR, MS</p>
<p>SOUTHEAST FIELD OFFICE 1720 Peachtree St., N.W. Atlanta, GA 30309</p>	<p>TN, NC, SC, GA, AL</p>
<p>NORTH CENTRAL REGIONAL OFFICE MN, 31 West 775 North Ave. West Chicago, IL 60185</p>	<p>ND, SD, NB, KS, MO, IA, MI, WI, IL, IN</p>
<p>SOUTH CENTRAL REGIONAL OFFICE 1200 Copeland Rd. Suite 300 Arlington, TX 76011</p>	<p>TX, OK, AR, LA</p>
<p>SOUTH CENTRAL FIELD OFFICE 4760 Oakland St. Suite 500 Denver, CO 80239</p>	<p>CO, NM</p>
<p>NORTHWEST REGIONAL OFFICE 19518 Pacific Highway South Room 201 Seattle, WA 98188</p>	<p>WA, OR, ID, UT, WY, MT</p>
<p>NORTHWEST FIELD OFFICE 222 West 7th Ave. Room 142 Anchorage, AK 99513</p>	<p>AK</p>

Original

SOUTHWEST REGIONAL OFFICE
1515 W. 190th Street
Suite 555
Gardena, CA 90248

CA, NV, AZ, HI

Original

The Divisions of the Office of Aviation Safety and the Office of Research and Engineering have specialists covering a wide variety of technical areas. While these specialists do participate in major team investigations, this is not their exclusive activity. In many areas, such as metallurgy, structures, power plants, air traffic control, and meteorology, frequent assistance on non-team investigations is provided. However, there are many areas of available technical assistance which remain relatively untapped. The question then arises as to what forms of assistance can be supplied and under what circumstances should assistance be requested.

On one hand, the staff at headquarters is as near as the telephone. Calls from the Board's staff are encouraged whenever a technical question in any given discipline arises. In the event the answer is not immediately available, the technician involved will research the question expeditiously and call back.

Special written investigative reports and studies can be prepared on request by headquarters staff members whenever the complexity of the technical questions involved warrants such action. These requests must be made in writing to the chief of the division involved, and will be through the Chief, Regional Operations and General Aviation Division, if the request is from the field.

In the interest of further augmenting the flow of information to and from the Office of Aviation Safety and Office of Research and Engineering, an information dissemination program consisting of three types of transmittals has been initiated. (1) Information Bulletins, (2) Investigative Alerts, and (3) Investigative Notes. These transmittals will be prepared and signed by individual specialists in the headquarters offices and will be approved by the appropriate division chief prior to dissemination. They will be given an appropriate heading identifying the originating unit, the type of information involved and the number of issuances of such information during that calendar year. In addition, information should be passed via the periodic conference calls using the format promulgated by the Chief of the Regional Operations and General Aviation Division.

Original

Overview

The Regional Director or Field Office Chief, as appropriate, shall be responsible for the designation of the standby investigator in his office.

A current "Go Team" listing shall be published on Friday of each week by the Office of Aviation Safety. The list shall show the names and home and pager numbers of all Board personnel assigned standby duty. A new list shall be prepared as needs dictate during each week. In addition to the "Go Team," the list shall include names, titles, and phone numbers of frequently contacted individuals and/or organizations that are needed in the event of a major accident. This list shall include the name and phone and pager numbers for Regional Directors and Field Office Chiefs. Copies of the "Go Team" list shall be distributed to each Headquarters Director's Office, each Regional and Field Office, each Board Member, appropriate offices within the FAA, and to each investigator who is on standby.

All personnel assigned standby duty shall be prepared to depart for the scene of an accident within one and one-half hours of notification. This entails maintaining (a) a point of contact with the responsible communications officials, (b) adequate rest period for the purpose of assuring physical and mental preparedness, and (c) avoiding excesses in any activities which would tend to detract from alertness and an ability to respond quickly to the exigencies of an emergency situation. If, for any reason, an individual investigator would be unable to respond during a period of standby duty in accordance with the above guidelines, that person shall immediately notify his/her supervisor.

The latter paragraph also relates to the use of alcohol. Investigators must not drink alcohol while on standby duty to the extent that, if called to official duty, their performance would in any way be impaired or their conduct would be unbecoming of a government official.

The Investigator-in-Charge of the accident "Go Team" is responsible for: assuring, prior to departure for the accident site, that no member of the team reporting for duty is under the influence of alcohol, removing any investigator found to be under the influence from the "Go Team," and documenting the circumstances and the actions taken.

An investigator is on official duty as soon as he or she

Original

enters into travel status enroute to an accident site. During that time, no alcoholic beverages shall be consumed. The use of alcohol is prohibited as well while actually engaged in accident investigation duties.

A sample "Go Team" listing is attached.

Overview

Part 830 of the Board's Safety Investigation Regulations is entitled: "Rules Pertaining to the Notification and Reporting of Aircraft Accidents or Incidents and Overdue Aircraft, and Preservation of Aircraft Wreckage, Mail, Cargo, and Records."

Initial information concerning the facts and circumstances of an occurrence are subject to later correction and modifications. The essential value of early notification is to issue prompt instructions initiating the investigation and to begin the organization. This value is reduced by inaccuracies of particulars, but can be easily adjusted as the investigation progresses; however, due to the inaccuracy of early information, the information must be handled with discretion. Parties, and others notified of the occurrence are to be cautioned concerning the accuracy of early information.

In view of the heavy workload imposed on duty officers, personnel on duty status, and the traffic load imposed on communications facilities during the initial stages of notification, the utmost cooperation is to be exercised in keeping phone calls to the minimum required for the passing of operational information.

Original

Regional and Field Office Responsibilities and Procedures

Regional and Field Offices are responsible for implementing notification procedures in their geographic area of jurisdiction. These offices will assure that specific personnel assignments are made and that duty assignments are published, distributed and maintained on a current basis.

During headquarters duty hours (8:00 am to 5:00 pm, ET), field offices will notify the Office of Aviation Safety by phone using the designated division contact whenever an accident occurs involving:

- (1) air carrier operations
- (2) air taxi and commuter operations
- (3) public figures or officials of widespread recognition or prominence
- (4) midair collisions where a fatality(s) occurs
- (5) other events as directed from the Office of Aviation Safety.

During after duty hours, if a designated regional duty officer receives notification of an accident of the type described above, he shall notify the Office of Aviation Safety duty officer by the most expeditious means. In the event the OAS duty officer cannot be reached, the Chief of the Major Investigation Division shall be notified. Following notification, travel to the accident scene will be initiated in coordination with the major investigation and as the circumstances of the event require. Notification may not always follow the same pattern. Thus, the field duty officer shall carry out notification procedures outlined above so as to ensure that proper notification is made. In addition, the OAS duty officer shall ensure that the field office in the regional area involved is notified, if notification did not come from that source.

Original

Headquarters Responsibilities and Procedures

As a public agency concerned with both commercial and private means of transportation, the Board has a responsibility for providing information to the public as rapidly as is consistent with its duties. Consequently, queries are frequently directed to officials of the Board by members of Congress, other government officials, news media, and others relative to accident information. To respond intelligently, albeit briefly, the preliminary information surrounding the occurrence and the resultant Board actions must be known to those personnel of the Board likely to receive such queries.

During duty hours, initial notification of an accident of the type described above will be received in OAS. During nonduty hours, initial notification will be received normally by the duty officer. In either case, the recipient of the call will advise the Chief of the Major Investigation Division.

The Chief of the Major Investigation Division will contact the Director, or, in his absence, the Deputy Director of OAS regarding the decision to dispatch the "Go Team." In the event that the above cannot be reached, the Chief of the Major Investigation Division will ascertain the decision of the Board Chairman without delay.

Immediately upon reaching the affirmative decision to dispatch the "Go Team," the Chief of the Major Investigation or the Director of OAS shall without delay:

- (1) notify the Chairman of the preliminary circumstances of the involvement of hazardous materials if any. Provide the OAS views on the advisability of the "Go Team" Board Member proceeding to the accident scene. The Chairman will decide if a Board Member is to attend and will communicate this to the "Go Team" member. In the absence of the Chairman, contact the Acting Chairman or the Board Member on the "Go Team" in that order.
- (2) obtain the Board Member's decision regarding travel and ascertain if that person will accompany the team or arrange other means of transportation.
- (3) notify the managing director.

Original

- (4) notify the Office of Public Affairs.
- (5) notify the Board Members.

Original

- (6) notify the Office of Congressional and Intergovernmental Relations.
- (7) brief the IIC on Board Member travel plans.
- (8) notify the regional/field office of plans and direct their initial involvement.

Original

Congressional Contacts

- (1) The Director, Office of Congressional and Intergovernmental Relations, shall make appropriate congressional contacts.
- (2) The Major Investigation Division shall complete the appropriate congressional contacts if the Director, Office of Government Affairs, cannot be reached.

The Chief of the Major Investigation Division will advise the Chairman and Managing Director of the occurrence of any accident outside of the United States or its Territories involving a U.S. manufactured aircraft regardless of the source of the information. If the Board is sending a U.S. accredited representative, the Office of Public Affairs and the Office of Congressional and Intergovernmental Relations will also be notified.

Original

Notification of Board Members - "High Visibility" Accidents Which May Require Dispatch of a Headquarters "Go Team," Partial "Go Team" or a Headquarters IIC, or Accidents Involving High Public Interest or Individuals of National Prominence

Headquarters or Regional/Field Office duty officers, upon receipt of initial notification of an accident which is - or has the strong potential of being - one of those specified above must notify immediately the OAS or the Chief of the Major Investigation Division to ensure the proper response is made. This shall be coordinated with the Director, OAS, who orders the investigation.

The Director, OAS, his designated duty officer, or the Major Investigation Chief, will ensure that the following persons, in the order listed, are notified as soon as possible:

- (1) Chairman or Assistant
- (2) "Go Team" Board Member or Assistant
- (3) Director, Office of Public Affairs
- (4) Managing Director or Deputy
- (5) Director, Office of Intergovernmental Affairs

The Chairman or Acting Chairman and "Go Team" Board Member will be notified regardless of the hour. The off-duty methods of contact will be:

- (1) through the special or confidential assistant
- (2) the designated off-duty telephone number
- (3) the paging system

The Chairman will contact the other Board Members or may request that such contact be made by the OAS or duty officer. Notification of other Board Members will not be made between the hours of 2300 and 0630, unless specifically requested by a Board Member.

The Chairman or Acting chairman, Vice Chairman and "Go Team" member (in addition to written notification procedures) are expected to be verbally informed, even to the extent of personally locating them and advising them of the event and/or action taken.

These instructions supplement current NTSB orders.

Original

Determination of Size and Scope of the Investigation

The term investigation as employed by the Board is defined as a process conducted for the purpose of accident prevention which includes gathering and analysis of information, the drawing of conclusions, including the determination of probable cause(s) and, when appropriate, the making of safety recommendations.

Once the initial notification of an accident has been received, it is imperative that certain decisions are made expeditiously and that the investigation is begun without delay.

At the outset, a preliminary assessment must be made as to the magnitude of the tasks and the probable scope of the investigation. This assessment involves the marshalling of an investigation team sufficient in size and expertise to cope with the task at hand. Generally, there is a direct correlation between the size of the aircraft and the size of the team. However, one must be aware at all times that there are complex accidents involving small aircraft and relatively simple accidents involving large aircraft. Consequently, the determination of the initial team complement must be based on initial evaluation of information by the IIC. Some of the factors affecting this decision are:

- | | |
|---------------------|--|
| (1) Accident Type | (5) Injuries/Fatalities |
| (2) Aircraft Type | (6) Ground Injuries/Fatalities |
| (3) Aircraft Damage | (7) Public Interest |
| (4) Ground Damage | (8) Likelihood of a Public Hearing |
| | (9) Likelihood of a "Blue Cover" Report. |

In the paragraphs which follow, the above factors will be discussed further for guidance in determining the appropriate scope of an investigation.

- (1) **Accident Type:** Interest in specific types of accidents varies because of the associated accident prevention potential of particular types existent at any point in time. The current relative repetitiveness of the accident type should be considered under this heading.
- (2) **Aircraft Type:** This factor must take into consideration fleet trends and is partially based on historical events. Both new aircraft in the fleet

Original

and aging aircraft are of high interest. The greatest accident prevention potential and consequently, the greatest accident investigative interest, in terms of aircraft types, are those which have a history of given problem areas.

- (3) **Aircraft Damage:** A loss which poses a potential or real threat to the safety of the passengers, either in transit or in egress, must generate a higher degree of interest than those without these types of loss.
- (4) **Ground Damage:** In this area, consideration should be given to the location of the accident in terms of proximity to high density population areas, schools, etc. Those accidents which occur in high density population areas will attract more public attention than the same accident in a rural setting, and more property damage will occur, which raises the relative value of the accident.
- (5) **Injuries/Fatalities:** This are considers not only the numbers of people but their prominence. The ratio of fatal to non-fatal injuries is a factor in public exposure as well as a factor in the accident and scope of the planned investigation.
- (6) **Ground Injuries/Fatalities:** The same guidelines as described under paragraph 5 above will apply.
- (7) **Public Interest:** This can be the most difficult factor to evaluate. Upon receipt of the initial information concerning an accident, little is known other than the occurrence of an "event." The media, in all its modes, has a broader initial access to information, and is not limited to factual data. They can and do speculate, and will attempt to get speculation from the Board representative. Remember, the news media is going to take liberties in order to arouse public interest. The evaluator can accurately assess the media attention by keeping the above in mind and assessing the amount of public attention by gauging what the media can use in the event to arouse the public interest.
- (8) **Likelihood of a "Blue Cover" Report:** Generally, the reports are issued for major accidents involving air carriers. In some cases, largely depending on the

issues and public interest, other accidents may generate a report of this type.

- (9) **Likelihood of a Public Hearing:** Public hearings are usually generated as a result of a major public issue or a broad public interest. Generally, accidents which do not generate wide public interest do not generate a public hearing.

By evaluating the above areas, the IIC or other evaluator can accurately assess the size and scope of the investigation. Keep in mind that it is easier to scale down the amount of response when it is found that the scope of the investigation is not of the magnitude which the original assessment indicated.

Team Regular and Delegated Investigations

Full Central Team

The full central team is referred to as the "Go Team" and is on standby status for immediate assignment to a major accident investigation. The Major Investigation Division provides the IIC for the full central team. Specialists and laboratory support are provided by divisions of the Office of Aviation Safety and the Office of Research and Engineering. Field staff members may be used on the "Go Team" as the needs of the investigation dictate. Initial stakedown of the accident scene and wreckage is accomplished by the regional field office which covers the geographic area where the accident occurred. A hearing officer may be assigned to the team, but may not travel to the accident site. A Board Member may respond with the team. This Board Member serves as the senior NTSB representative on the scene, and in coordination with the representative from the Office of Public and Governmental Affairs, will handle all contacts with the media.

The number of specialty groups formed for the investigation depends on the size and scope of the investigation. The IIC will form those groups which are deemed necessary according to the needs of the investigation. Other groups may be formed, which do not attend the field portion of the investigation. These are groups formed to handle such portions of the investigation which do not have a function at the accident site. Examples include: flight data recorder, voice recorder, and records.

All NTSB personnel assigned to an investigation shall remain responsible to the IIC until released by him. However, the IIC is to be cognizant of the overall need for optimum utilization of personnel and that personnel may be working on several concurrent projects. Personnel not needed during a particular time phase of the investigation are to be released to their functional organization or agreement shall be reached regarding the proportion of time to be spent by individuals on the different projects. The IIC shall coordinate such scheduling with the Major Investigation Division chief. Upon completion of their assignments, the IIC will release personnel to their functional organization.

It must be remembered that the Major Investigation Division, during a major accident investigation, is authorized to draw on the full resources of the Board staff in order to conduct the investigation.

Original

Partial Team

This team is headed by an IIC designated by the Major Investigation Division. It may not be a person from that division. The scope of the investigation may not be as great as for full team coverage. Some of the groups are combined, or are eliminated, on the basis of the scope of the investigation. As a result, the size of the team may be somewhat smaller and the nature of the accident may not require the presence of a Board Member. Press requirements may still be sufficient to warrant the presence of a specialist from Public Affairs, who will coordinate press briefings for the IIC.

Full Field Team

A full field team consists of an IIC designated by the Office of Aviation Safety, and the geographic office with jurisdiction will be responsible for the conduct of the investigation. The team may be made up of specialists from both the Regional/Field offices and from headquarters as the needs of the investigation dictate. Some groups may be formed, but the bulk of the investigation will be performed by individual Board specialists.

Partial Field Team

A partial field team is made up of investigators from the field staff, usually the office having jurisdiction over that particular geographic area. Groups are not typically formed, although the individual investigators are assigned specialty areas. The IIC, assisted by other specialists or field investigators, collects all the factual data through individual investigative effort. Specialists from headquarters may be assigned. The IIC has the authority to enlist such assistance as he deems necessary. This team handles the bulk of nonfatal air carrier accidents and fatal large business aircraft accidents.

Regular Investigations

A regular investigation is defined as a non-team accident or incident investigation handled by a single field office investigator, or through the delegation agreement with the FAA. When an NTSB field investigator covers the accident or incident, specialist support will be provided from headquarters, as required by the scope of the investigation.

Original

The bulk of investigations in the field are "one-man operations" with a field investigator covering the accident or incident from the appropriate Regional/Field office. Most of the accidents involve general aviation type aircraft. The majority of smaller commercial accidents and air taxi accidents are also handled by a single investigator.

FAA Delegated

The Federal Aviation Administration (FAA) investigates aircraft accidents for the NTSB pursuant to the delegation authority contained in the Letter of Agreement executed between the Board and the FAA. This agreement is altered from time to time and should be referred to for guidance. (See Volume IV). The FAA reports the factual information in the form and manner designated by the Board and to the extent sufficient to enable the Board to determine the probable cause of the accident. The report is reviewed in the appropriate Board Regional/Field office for sufficiency of factual information, and the facts are analyzed for assignment of a recommended probable cause.

Group Organization

Group formation in complex accidents has evolved as the most efficient method of tasking the functions of the investigation. In partial team investigations, some of the individual groups are combined, or are eliminated altogether, on the basis of the information needed for the successful completion of a comprehensive investigation.

The early decision to combine or eliminate certain groups must be approached cautiously. Initial information regarding an accident is often fragmentary and can lead to false assumptions. Groups may be created and/or eliminated as the needs of the investigation clarify. It should be remembered that it is easier to eliminate groups than to form them after the fact. If there is any doubt regarding the necessity to form a particular group, it is always best to form and then later eliminate the group. The group can be disbanded at an early date, but the nonavailability of a group can delay an investigation and, at times, affect adversely the collection of vital, time critical information.

Except for those accidents which are rated as regular investigations, the final determination as to team complement rests with the Office of Aviation Safety or designee. Regular

Original

investigations involve assignments by the Regional Director or Field Office Chief in whose area the accident occurred. If manpower considerations so dictate, he will seek assistance from other offices through the system.

Original

Arranging for Security of Wreckage and Other Actions Prior to Departure for the Scene

Prior to departure for the scene of the accident, the Investigator-in-Charge must, if practical, ascertain that the wreckage is being guarded effectively by appropriate officials, e.g., law enforcement. Of all the early problems associated with an investigation, the guard detail before arrival at the scene, is one of the most important. This phase of wreckage security is important since there should be a minimum amount of disturbance of the wreckage and, of course, the way it came to rest should be documented as much as possible. The problem is one of preplanning and providing to local authorities, who may be accomplishing the guard duty, information regarding how you expect it to be carried out. The regulations of the Safety Board clearly state in Part 830 that prior to the arrival of a Board representative, the aircraft "wreckage, mail or cargo, may be disturbed or moved only to the extent necessary:

- (1) To remove persons injured or trapped;
- (2) To protect the wreckage from further damage;
- (3) To protect the public from injury; and
- (4) Where it is necessary to disturb or move aircraft wreckage, mail or cargo, sketches, descriptive notes, and photographs shall be made, if possible, of the accident locale including original position and condition of the wreckage and any significant impact marks."

This regulation requires that only those persons authorized by the Investigator-in-Charge or the Director of Office of Aviation Safety, may participate in examination of the wreckage, records, mail or cargo which is the Board's custody.

At times, well-meaning persons, not knowing the reasons for our request for complete security, may let unauthorized personnel through to the accident scene before the Board's investigator(s) arrive. To preclude this, an investigator is dispatched to the scene from the nearest office upon notification of the accident. It is this investigator's responsibility to set up and administrate site security pending the arrival of the "Go Team." All offices must pursue a continuing educational program in the interest of impressing

Original

upon law enforcement officials the necessity for strict security measures.

In addition to assuring himself regarding the adequacy of security measures, the Investigator-in-Charge must arrange for appropriate lodging and transportation for the team in the area of the crash scene. He may do so personally or can request assistance from field personnel, who are more likely to be familiar with the area, in order to complete this task.

It is essential that a well coordinated transportation effort and communications center be immediately available to the team upon its arrival.

Arranging for autopsies is the responsibility of the Investigator-in-Charge. This can be delegated to the Human Factors Group Chairman and initial action can be delegated to the field representative who is first on scene. Toxicology should be arranged at this time also, and again, can be initially delegated. Every effort shall be made to contact the coroner or medical examiner of the locale involved and requests made to that person as early as possible. Preplanning and education can, to a great degree, solve the problems that arise in this area.

Original

Personnel Safety Management in Accident Investigations

The unpredictable nature of accidents implies unpredictable working conditions for National Transportation Safety Board personnel conducting the on-the-scene investigation. Our investigators must be flexible and have proven to be ready at a moment's notice to switch from an office environment to hard labor and extended hours under adverse conditions, in all extremes of climate and terrain on all points of the globe.

Although the hazards in this type of work need no explanation, it might be well to summarize with respect to personnel safety management in accident investigations. The desire to get the job done expeditiously, thoroughly, and economically can easily lead to disregard for personal risks. Perseverance, dedication, and initiative have always been the hallmark of our investigators. These are precious commodities that have to be preserved by the judicious application of risk controls. All supervisory personnel must continuously monitor and educate to ensure risk management.

Physical Condition

It is difficult to remain conditioned for the rigors of field work while leading a tranquil existence. The sudden transition from a sedentary life to strenuous, outdoor activity can be hazardous, especially for those who reflect fondly on their prime of life.

Passing a yearly physical exam does not necessarily mean that you are in top-notch shape with regard to your endurance and your capability for adjustment. Give yourself a chance. Don't expect to switch from an office routine to the demands of a "12 or more hours a day" field existence without suffering some ill effects or even endangering your health. The deleterious effect of such a switch of endeavor can be lessened by performing regular moderate to vigorous exercise. Regular exercise is beneficial for endurance, muscle tone, and overall general "good" health.

The usual "past the prime" physical activities, such as golf and bowling, while somewhat helpful, are insufficient to provide adequate conditioning. Mild calisthenics and activities such as tennis, cycling or short periods of jogging can be much more beneficial. Walking also provides many of these same benefits, but must be engaged in for considerably longer periods in order to derive a comparable conditioning

Original

affect.

The investigation will probably be completed more quickly, and more efficiently when the IIC sees to it that everyone on his team adheres as much as possible to a regular working day, as soon as the investigation is in hand. This not only makes for controlled expenditure and restoration of energies, but it provides the opportunity to consolidate and document the day's work and to coordinate the activities of the next day.

Psychological Factors

A catastrophic accident can have a disruptive affect on the composure of those exposed to the confusion and emotions of the true disaster. One of the common defenses against the associated traumatic experiences is the irresistible urge to act, even when human lives are no longer at stake. This need for activity may seek expression without regard for endurance, personal safety, or the safety of others, and often without apparent rationale. For this reason, the greatest discretion should be used when attempting to guide the activities of those persons into proper channels. The calm and competent behavior of each NTSB team member and the firm comprehensive management of the IIC and Group Chairman are required to conduct a safe, efficient, and comprehensive investigation.

Protective Clothing

Although it is impossible to plan for all conditions that may exist at a particular accident site, it is expected that every investigator will arrive at the scene equipped with basic suitable gear. Preplanning by supervisors in ensuring suitable generic equipment is acquired for staff members is essential. In extreme conditions, suitable equipment, specific to the conditions may have to be acquired. This is the responsibility of the IIC, and in some cases is available through local military or other Federal agency sources. The logistics for and control of these supplies are the responsibility of the Investigator-in-Charge.

THE WEARING OF PROPER PROTECTIVE CLOTHING WHEN HANDLING WRECKAGE IS MANDATORY.

Special gloves, masks, and outer clothing shall be provided for those persons working directly with wreckage at the scene of an accident. Hardhats shall be provided and be worn by all persons working around, in , or under wreckage.

Original

In case of doubt as to the type of protection needed in certain locales or under certain conditions, it is best to follow the advice of local NTSB personnel, and/or local officials. They have the best knowledge of what is needed in accordance with local conditions.

Original

Climate and Terrain

The quickness of our response to a call for action precludes the chance to get acclimated to conditions that vary widely from those to which we are accustomed. There is no need to elaborate on the health hazards associated with physical labor in extreme temperatures and altitudes. It might be important, however, to remind ourselves of the affects of fatigue on the safety of our performance long before total exhaustion takes place. Here again is an area where supervisors must adjust the workload and hours of their personnel to the circumstances, for example, overtime for the sole purpose of expediting the return to the home office. The quality of the investigation is best served by management awareness of the need for fitness, mentally as well as physically, until the job is done.

Terrain hazards of high elevations are compounded by lower atmospheric pressure. Respiratory and circulatory problems are accentuated and can easily become critical. A briefing of all personnel involved would be most appropriate under these circumstances. In addition, it is strongly recommended to have portable oxygen and other emergency equipment available at these accident sites.

Unexpected weather or equipment failures may isolate the investigation team in remote areas. Provisions for first aid, shelter, food, water and fuel in such a contingency should be made before the need arises. It is recommended to use the buddy system and a method for the logging in and logging out of personnel operating in remote areas.

Proper planning and supervision can greatly help to forestall health hazards associated with extremes in terrain and climate. The greater the risks involved, the more important it is to apply restrictive and binding controls. We should not let enthusiasm and lack of discipline lead to overexertion or worse.

Original

Hazards at the Site

Our familiarity with the work and the hazards at an accident site may make us overlook the lack of experience of those who assist us. For this reason, it is highly desirable that the IIC, as well as each Group Chairman, brief non-NTSB personnel on all known hazards and established safety practices. Remember, we are responsible for the safety of all persons participating in the investigation.

The air-freighting of certain types of hazardous materials is common. Although with appropriate packaging these materials are properly protected against rough handling and moderate impact conditions, it is impossible to maintain their integrity in a high energy impact scenario.

The best protection against these hazards is timely coordination with carrier personnel responsible for the cargo manifest. When appropriate, or in case of doubt, the manufacturers of the material involved should be consulted regarding exposure hazards and protective measures.

Communications

Safety as well as coordination benefit from reliable communications between the investigation headquarters and the various scenes of activity. Short range two-way communications can be performed adequately by use of small hand held radios. Where possible, and as soon as it is practicable, telephone communications should be established between all areas of activity. If the accident scene is beyond short range radio range, or in an area which precludes telephone installation, long range radio equipment should be brought in by helicopter, or any other suitable means, at the earliest practicable time.

Original

Helicopter Operations

The use of helicopters as a tool to enhance the accident investigation is becoming more and more common. While the use of helicopters is usually associated with inaccessible accident sites, the IIC should keep in mind both the advantages and hazards associated with helicopter use. Because of the inherent safety requirements associated with helicopter use, the IIC should maintain strict control over the utilization of this equipment, in coordination with the operator of the equipment.

When circumstances permit, all helicopter operations should be centrally controlled from a conveniently located base where the IIC, or his designee, and the helicopter operations manager can establish their operational headquarters and communications center during working hours. At the accident site, the operations should be under control of a qualified loadmaster who maintains radio contact with base operations as well as all incoming aircraft.

Base operations should maintain an accurate log of all aircraft movement and the loads carried; this will ensure an orderly flow of traffic and an immediate alert in case of a mishap.

All personnel associated with helicopter operations should be briefed daily on the proper working procedures around helicopters and the inherent hazards. (Main and tail rotor hazards, plus FOD and rotor wash.) The IIC, in conjunction with the helicopter operator, should establish the working environment for helicopter operations. The movement of aircraft components and/or persons via helicopter should be done only under the exclusive control of qualified personnel.

NTSB personnel should be aware of the affects of ambient temperature, wind, altitude, and general weather on helicopter operational capabilities. Good planning entails the following considerations:

- (1) Limit the transportation of personnel to those persons who are indispensable for the conduct of the investigation;
- (2) The landing site should be established in such a manner that disablement of one helicopter will not preclude the landing of a relief ship; and

Original

- (3) A fire watch type fire extinguisher should be placed at each landing site.

Original

Use of Heavy Equipment

The use of heavy lift equipment is common at major accident sites. This equipment should be operated and managed by qualified operators under the overall guidance of NTSB personnel. No NTSB personnel will operate any piece of heavy equipment or allow any person to approach or work around partially suspended wreckage. The IIC, through his designated representative, will be responsible for ensuring that safety considerations in conjunction with the use of heavy equipment at an accident site is not compromised.

In general, the senior NTSB staff person at any accident site shall assume responsibility for the enforcement of safety rules and practices.

Original

Over Water Operations

When surface and submersible vessels are needed in the course of an investigation, we shall provide general guidance for the operation. The actual operation of equipment and the supervision of assisting personnel shall be left to the equipment operator. No personnel shall interfere with the tactical aspects of such operations. Only fully qualified and properly trained and equipped personnel will be assigned special missions, such as underwater recovery and photography.

The IIC shall ensure that no NTSB personnel are included in areas which require special qualifications and training.

Original

Stakedown Guidelines - Major Investigations

The Major Accident Investigation Division shall ensure that stakedown personnel have a single point of contact within the Major Investigation Division during the initial coordination of a major accident.

Personnel assigned to stakedown a major accident site shall proceed to the scene of the accident as expeditiously as possible following notification and the short preplanning which ensures a successful stakedown.

NTSB representation at this time is highly essential to convey to the news media and local authorities through personal contact and display of the NTSB insignia that the investigation is under NTSB jurisdiction. Our presence and activities at the scene should be such as to reflect favorably in the eyes of the public. Initial activities, in addition to those listed herein, should be aimed at gathering as much information as possible to brief the "Go Team" upon arrival.

Remoteness of the crash site or difficult accessibility does not diminish the need to establish NTSB jurisdiction. Every effort should be made in getting to the crash site using whatever special conveyances that are available or in use by local authorities or rescue personnel. Getting to the crash site in these cases should be accomplished on at least a one time basis prior to the team arrival though environmental conditions may preclude remaining at the actual crash site for any appreciable length of time.

- (1) Immediately upon arrival at the scene, provide initial stakedown and ensure that desired security of the crash site is established. Prominently and diplomatically display one or all NTSB credentials and insignia to facilitate identification and recognition of NTSB presence at the scene.
- (2) Establish initial liaison with local authorities at the scene to make known NTSB presence and jurisdictional control of the accident investigation. Set forth to local authorities the initial requirements for security, autopsies, and toxicology, and set up a base of operations at the scene where you can be found at most any time and one which will be known to the local authorities. As soon as possible, provide Washington and your office with a telephone contact point. When active

Original

on other duties, check with your base of operations frequently for messages and to maintain control of the scene. Direct the initial operation and be prepared to update those with a need to know on the circumstances of the accident. Use caution and good judgment if you find it necessary to commit the Board to activities involving other than minor expenses. If possible, at the earliest feasible time, secure FAA information through the nearest facility.

- (3) Provide initial effective liaison with communication media in accordance with Board policy and cautious good judgment. Say no more to the media than is absolutely necessary.
- (4) Initiate preliminary investigative efforts directed at enhancing the investigation. Record witness contacts, take photographs and make arrangements for local authority photograph copies, and collect pertinent data which may be useful in the early stages of the investigation. Arrange for copies of all local authority reports, and locate and secure the flight data recorder and cockpit voice recorder, if applicable. Provide initial briefing to FAA personnel and persons who may be potential parties to the investigation. Brief on Board procedures only.
- (5) Prepare to brief the investigative team upon arrival at the scene to facilitate an orderly transfer of control of the investigation.
- (6) Many of the procedures described above apply equally to the investigation of accidents involving small aircraft. The basic difference lies in the fact that one investigator may be responsible for all phases of the investigation. In such investigations, it is also essential that travel be commenced appropriately following notification, and that security at the wreckage site be accomplished without delay.

Transportation

National
Safety Board
Memorandum

Date: March 4, 1992

To: All Regional Directors and Field Chiefs

From: Director, Office of Aviation Safety

Subject: Public Use Aircraft Accident/Incident Reporting

This memorandum supersedes the memorandum dated January 5, 1989 on the same subject. This memorandum, with attachments will be placed in the Investigators Manual, Volume 1 and replace pages 1-38 through 1-43.

Public Law 100-223 requires the reporting of public aircraft accidents and incidents to the National Transportation Safety Board in a manner set forth in 49 CFR Ch. VIII, Part 830, Subpart E, Paragraph 830.20. The instructions contained in this memorandum are designed to enhance the procedures presently used to locate and release the NTSB Form 6120.1/2 to the public.

As you know, we are presently in the process of redesigning and testing of computer programs that will allow direct entry of Preliminary, Factual and Causal analysis data by the Regional and Field Offices into the data base in Washington. Additionally, we will be working on a permanent system for implementation during 1993. This will result in three changes in the entry procedures for the following instructions concerning the computer screens for the Preliminary Report (NTSB Form 6120.19A). The first procedures will be to use the PRELIM System presently installed in your 3B2. The first follow on will be to use the CAVIA System which will hopefully be installed within the next few weeks. The final and permanent procedures will be to use the new preliminary report screens presently under development.

To separate these occurrences from our mandated accidents and the public use aircraft accidents which we investigate, the following format will be used for assignment of Regional

Original

Office accident numbers:

The first three characters will be the Regional Office three letter code; the fourth and fifth character will be the Fiscal Year; the sixth character will be a "T" for Other investigation; the seventh character will be a "#" to identify this as an accident or incident that has only an NTSB Form 6120.1/2 report and will not have a probable cause determined; the next character will be an "A" for aviation; the ninth and tenth characters will be a sequential number assigned by your office beginning with "01". An example of the format follows:

ATL92T#A01

The example indicates the first aircraft accident/incident report by the Atlanta Field Office under PL 100-223 for fiscal year 1992.

The following fields of an NTSB Form 6120.19A must be completed. Some of the listed data blocks are necessary for retrieval of the data and the other data blocks are mandatory blocks required for transmission of the Preliminary Report.

DATA FIELD 1, 2, 6, 7, 8, 9, 10, 11, 12, 13, 14, 20, 21, 22, 23, COMPLETE INJURY CODE, COMPLETE "A" AND "D" UNDER CREW, 42 (ENTER THE PUBLIC AGENCY), 46, 47, 48, 49, 53 (ENTER PUBLIC USE AFTER A), 59, 62, 78 (ENTER: SEE ATTACHED COPY OF NTSB FORM 6120.1/2 AS REQUIRED BY PL 100-223), 79 (ENTER GOVERNMENT AGENCY OPERATING THE AIRCRAFT), 80, 85 AND 86.

Attached to this memorandum you will find a sample copy of a completed NTSB Form 6120.19A.

When you receive a report of a public use aircraft accident under PL 100-223, please make a copy of the NTSB Form 6120.1/2 and keep the copy for the Regional or Field Office records. Mail the original NTSB Form 6120.1/2 to AS-20 Washington, DC. Please enter the office number assigned to this accident or incident on page 6 of the original NTSB Form 6120.1/2.

Original

Signed

Timothy P. Forte'

Original

OVERVIEW

The purpose of this procedure is to provide for the development and adoption of safety recommendations from regional aviation accident investigations. This procedure should ensure that proposed safety recommendations have maximum possible justifications, are consistent with past safety recommendations (or justify a departure from previously recommended directions), are coordinated with other programs, are processed expeditiously, and are well documented. This procedure is a supplement to NTSB Order 82. Safety proposals, the evaluation thereof, and draft safety recommendations are external, confidential records.

Original

Regional Office and Outside Source Proposal Procedures

Every accident investigated by a Regional Air Safety Investigator (ASI) will be studied to identify the hazards which, if eliminated, would minimize or prevent similar accidents. The IIC is responsible for formulating proposed safety recommendations and forwarding them to the Office of Safety Recommendations through the Chief, Regional Operations and General Aviation Division. Proposed safety recommendations should be prepared in accordance with the format shown in this section.

The Office of Safety Recommendations will:

- (1) Assign a log number to the safety proposal,
- (2) Establish a file under the assigned log number,
- (3) Enter the safety proposal into the Safety Proposal Data Base under the assigned log number, and
- (4) Place the safety proposal on the agenda for the next monthly meeting of the Safety Proposal Review Board.

The Safety Proposal Review Board will:

- (1) Review the safety proposal, and if considered feasible for further review, will
- (2) Assign the safety proposal to a division within the Office of Aviation Safety for review and development, and
- (3) Immediately notify the ASI of the Division assigned to review the safety proposal.

The Division assigned to review the safety proposal will:

- (1) Assign a specialist to review the safety proposal, and
- (2) Notify the Office of Safety Recommendations of the individual assigned.

The specialist assigned to review the safety proposal will:

Original

- (1) Immediately notify the ASI of the assignment to review the safety proposal,
- (2) Review the safety proposal for potential as a safety recommendation, and if deemed feasible,
- (3) Develop a draft letter of recommendation (greensheet) and draft Notation Memorandum for review and submittal to the Board.

If the review finds the safety proposal not feasible for further development, the reviewer will develop a "Staff Study" along the lines of the format shown in this section.

Proposed Safety Recommendations from Major Investigations,
Special Investigations, and Safety Studies Procedures

Proposed safety recommendations generated from these sources will be processed as follows:

As soon as issues become evident in major investigations or studies, the IIC or Study Project Manager should contact the Office of Safety Recommendations for a listing of historical data on the specific issue. This information should be discussed at work planning meetings and in any planning or preparation for public hearings.

Proposed safety recommendations will include, when possible, the initial and director's drafts of reports and studies to allow for the widest possible review of the proposed language, justification, and direction of the safety recommendations.

Computer Storage and Retrieval of Safety Recommendations Procedures

All safety recommendations and associated data are placed on the Safety Board's Safety Recommendation Information System (SRIS). The stored data on the SRIS is available to all Safety Board personnel. Requests for listings of information from SRIS should be directed to the Office of Safety Recommendation. Each request will be recorded on the "Request for Safety Recommendation Information" form. (Copy of this form is included i this section.)

A sample of a typical computer listing is included in this section.

Original

Sample Format

Safety Recommendation Proposal

A. Accident Number/Identifier (or other source):

Location:
Date:
Type of Aircraft:
Owner/Operator:

B. Nature and Circumstances of Accident:

C. Discussion:

D. Proposed Safety Recommendations:

E. Supporting Documentation:

1. Service difficulty Report list
2. Accident Statistics
3. Copies of pages from maintenance manuals or operating manual
4. ETC.

signed Investigator-in-Charge _____

Date _____

Original

Sample Format

Safety Proposal Evaluation

A. Source of Proposal:

1. Accident Location
2. Accident Date
3. Type of Aircraft Involved

B. Nature of Proposal:

C. Discussion of Review Findings:

D. Recommended Disposition of Safety Proposal:

Prepared By: _____
Date: _____
Reviewer

Approved By: _____
Date: _____
Division Chief

Copy Sent to Originating Regional Office and Air Safety Investigator on:

Date: _____

Original

By: _____

Overview

It shall be the responsibility of the Office of Aviation Safety to assure the timely updating of this manual.

Revisions will be required when there are changes or obsolescence of procedures or techniques, new procedures or techniques, form revisions, organizational changes, correction of omissions or errors, etc. Changes to this manual will be directed to the Regional Operations and General Aviation Division. Specific changes will be annotated on the page. An amendment page will be carried in the introduction sections of this manual and will be posted with the appropriate changes.

Revisions will be prepared and forwarded with a cover memorandum to the Director, Office of Aviation Safety for approval. Approved revisions shall be printed and distributed by AS-20. The revised changes will reflect the date of change on the bottom left hand corner.

An example of a revision memorandum is attached.

Original

* * Sample only * *

* * Sample only * *

Date:

To: Director, Office of Aviation Safety
Thru: Director, Regional Operations and General Aviation
Division

From:

Subject: Updating of Investigation Manual

The following are suggested changes to the Investigation Manual. Attached are the pages that include these changes. We feel the changes are necessary for the following reasons.....

<u>Volume</u>	<u>Pages</u>	<u>Responsible Office</u>
---------------	--------------	---------------------------

_____ Approved

Director, Office of Aviation Safety _____

Original

_____ Disapproved

_____ Date

Original

ACCIDENTS INVOLVING MILITARY AIRCRAFT

Special Boards of Inquiry

General outline of policy relating to coordination between the NTSB and the FAA in aircraft accident investigations

Coordination with military in accidents involving civil and military aircraft

Participation in military aircraft accident investigations

Investigation of accidents/incidents involving foreign aircraft in the United States and its territories

Participation of representatives of the State of Registry and State of manufacture in the investigation

Participation in the investigation of accidents involving aircraft of U.S. Registry and/or U.S. manufacture which occur in foreign countries or in international water

THESE SECTIONS ARE CURRENTLY BEING REVISED.

Original

Transportation

National
Safety Board
Memorandum

Date: August 22, 1990
To: General Counsel
Thru: Director, Office of Aviation Safety
From: Chief, Major Investigation Division
Subject: DOD CRAF and Contract Flights -- Potential
Accidents/Incidents

The attached memoranda are forwarded for your information and assistance in establishing a Safety Board policy and contingency plan for potential accidents or incidents involving U.S. airline airplanes conducting the extensive military flight operations to the Middle East.

As you know, there are numerous charter flights and Civil Reserve Air Fleet (CRAF) aircraft hauling troops and cargo as part of the current military crisis. CRAF aircraft are routinely owned and operated by airlines; however, they have been fitted with certain special equipment, including large cargo doors, heavy duty cabin and cargo floors, at the expense of DOD for ware time contingencies. I believe the airlines receive a subsidy for the extra fuel burn (to carry the extra weight) and maintenance expenses. The CRAF flights are flown by airline pilots and are maintained by the airlines. Some of these aircraft are operating virtually exclusively for the military, while others are operating partially in commercial service and military service. For example, TWA is flying troops to Saudi Arabia in CRAF airplanes and when the flight returns to the U.S., it stops in Rome and continues as a commercial flight. This is the first time that the CRAF option has been activated. Military charter flights have always been routine; however, many non-scheduled operators of "old" equipment are now being pressed into service.

In the past, we have had a somewhat unclear policy about what constitutes a "public use" versus "civil" aircraft, when DOD or other government agencies have chartered an N-registered airplane for its use. Consequently, our mandate to

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investigate has not always been clear. Generally, we have worked out each occurrence on a case-by-case basis (e.g. Southern Air Transport L-382 (C-130) at Kelly AFB, Texas, and Evergreen Airlines DC-9 at Carswell AFB, Texas). Further, the Regional Offices have worked other cases through letters of agreement or case-by-case.

After a discussion last week with Mr. Bob Johnson (AS-20) about what happens if one of these aircraft has an accident, I contacted the Air Force Safety Center personnel who hold primary investigative responsibility for all military airlift (passenger and cargo) accidents and incidents. Lt. Col. Doug Haydon, Chief of the Programs and Policy Branch, at the Safety Center acknowledged and understood my concerns and asked for a legal opinion from the Safety Center legal office. The legal office response to Lt. Col. Haydon is attached. However, the Safety Center intends to forward this matter to a higher level within DOD before any formal written position is set.

I am aware that the FAA staff have mixed opinions about this issue. However, based on conversations with Mr. John Rawson of the FAA accident investigation staff (AAI-100), the FAA apparently is treating the present flights as 14 CFR 121 operations. They have initiated enhanced surveillance of operations and maintenance, and have initiated efforts to "certificate" certain military airports in the U.S. and overseas in accordance with 14 CFR 139. They have also issued exemptions from Part 121 hazardous materials requirements and flight and duty regulations for the pilots of these flights. These include both straight charters and CRAF flights. However, Mr. Rawson admitted that the FAA senior staff have differing opinions about the flights being considered "civil" aircraft.

I advised Mr. Rawson about my contact with the Air Force and advised him about the attached initial opinion from the Safety Center. I told him that we needed to have a plan for potential minor and major occurrences and that our agency would work with the Air Force and FAA to resolve this issue.

I have several concerns and suggestions for the various possibilities that might occur, and for which the Safety Board should establish clear policy and plans. I suggest that your office discuss this matter with the FAA General Counsel's office and the Air Force legal staff. Once we work out the various options, we should suggest to the Chairman a policy and action plan. We should have the policy established and a plan in mind, before an occurrence to avoid confusion.

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We need to define clearly our role and disseminate our plans to our Region Office staff in the case of a "minor" occurrence that would be handled as a field investigation. Other staff should be apprised so that we are prepared to handle notification and response to a major accident, both in the U.S. and overseas.

Remember, a "civil" aircraft accident overseas comes under the provisions of Annex 13 to the ICAO treaty, which stipulates that the country of an occurrence is in charge of an investigation, unless that country delegates the investigation to the country of the operator. Of course, as the country of the operator, we would have specific rights to participate. Therefore, once we establish our policy and plans, it should be communicated to the proper ICAO officials, as well as State Department. State could advise the appropriate embassies and we could advise our counterpart agencies in certain key countries.

At this time, our staff have the necessary 24-hour contacts established to communicate, should we have an occurrence before a clear policy is established. As the attached correspondence suggests, the DOD may take quite a while to put something official together. I suggest that we work something up and advise the DOD and FAA as soon as practical.

1990)

(Signed August 22,

Ronald L. Schleede

cc: AS-20

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INSTRUCTIONS
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