



DEPARTMENT OF THE NAVY

COMMANDING OFFICER
HELTRARON TWENTY EIGHT
7180 USS LONG ISLAND STREET SUITE 320
MILTON FL 32570-6101

IN REPLY REFER TO:

HT-28INST 3750.1D
55
15 Jul 2013

HELTRARON TWENTY-EIGHT INSTRUCTION 3750.1D

Subj: SQUADRON PRE-MISHAP PLAN

Ref: (a) OPNAVINST 3100.6J, CH-2
(b) CNATRAININST 5720.20G
(c) OPNAVINST 3750.6R
(d) CNETINST 3750.1F
(e) NAVAIRINST 00-80T-116
(f) CNATRAININST 3750.23K
(g) OPNAVINST 3750.16C
(h) COMTRAWINGFIVE/NASWFINST 3750.8E
(i) CNATRAININST 1500.4G(Series)

Encl: (1) Operations Duty Officer Pre-Mishap Binder

1. Purpose. To establish the responsibilities and procedures for the investigation and timely reporting of aircraft mishaps occurring in this command.
2. Cancellation. HT-28INST 3750.1C
3. Scope. References (a) through (i) set forth requirements for the reports pertaining to aircraft accidents, incidents or rescues and indicate procedures to be followed in the submission of these reports.
4. Action
 - a. General. Any person having knowledge of an overdue aircraft or of one receiving damage of any nature shall report such facts to the Squadron Duty Officer immediately.
 - b. Specific. Action Officers will utilize this instruction in discharging their responsibilities in the event of an aircraft mishap involving damage to an aircraft or government property, or involving injury or death to personnel, civilian or military. Nothing in this instruction shall preclude logical additional action, should the situation warrant.
5. Assignment. Personnel with responsibilities herein shall familiarize themselves thoroughly with this instruction and with the requirements of their post-mishap duties.
6. Forms. Blank forms are available in the Safety Office.

C L Pesile

C. L. PESILE

Distribution:
Electronic distribution

PRE-MISHAP ORGANIZATION AND ADMINISTRATION PLAN

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PART I

INDIVIDUAL RESPONSIBILITIES

1. SDO/ODO/CDO

a. Duty Officers have an extremely important role in the implementation of a pre-mishap plan. They are generally the first notified of a mishap and must execute the pre-mishap plan, including the responsibility for coordinating command efforts, in the period immediately following a mishap. To meet these responsibilities, it is essential for all Duty Officers to be familiar with this plan prior to a mishap.

b. Ensure full compliance with the HT-28 Mishap Action Checklist.

c. Determine if an incident meets the criteria of reference (a) and if a special incident report is necessary in addition to those reports generated for safety purposes. If there is any doubt, initiate the HT-28 Mishap Action Checklist (enclosure 1). Valuable time and information can be lost if this is not implemented immediately.

d. Prepare a preliminary message for release as per the HT-28 Mishap Action Checklist.

e. Take charge; control the flow of people through the duty office and get assistance with the recall, securing of logbooks and other pertinent legal documents.

2. OPERATIONS OFFICER. The Operations Officer, upon notification of an aircraft accident, shall:

a. Adjust squadron commitments as necessary and remove Aviation Mishap Board (AMB) members from the flight schedule.

b. Ensure OPREP reports are submitted in the proper format and within the required time limit.

c. Secure flight schedules and restrict them from on-line viewing per the Mishap Action Checklist.

d. Ensure that no information is erased from the Aircraft Status Board until photographs have been taken and any other pertinent information is recorded.

3. ADMINISTRATIVE OFFICER. The Administrative Officer shall ensure compliance with administrative procedures contained in references (a) and (b) to:

a. Alert the designated message release personnel to aid in preparing messages.

b. Provide officer and enlisted personnel service records and any other information required by the AMB.

c. Notify the Squadron Legal Officer if it is determined that a JAG Manual Investigation will take place.

d. As directed by the Commanding Officer, be responsible for all administrative and legal requirements in the handling of claims by or against the government that may involve the squadron.

e. Provide TAD orders as necessary when the mishap occurs away from the NAS Whiting Field area.

f. Prepare required notification and report messages in the event of personnel injury or death, and initiate required administrative procedures per reference (c).

g. Prepare casualty reports for foreign students per references (a) and (i).

h. When necessary, arrange for personal effects inventories and supervise proper disposition of them.

i. Ensure all flight pay records are closed out on aviation crewmembers who will not be returning to flight status.

j. For accidents involving Coast Guard personnel, notify the Coast Guard Liaison Officer at NAS Pensacola. For accidents involving Marine personnel, notify MATSG, NAS Pensacola; and for accidents involving Foreign Students, notify the Squadron International Military Student Officer.

NOTE: MAKE NO MENTION IN ANY REPORT AS TO THE CAUSE OF THE MISHAP.

4. SENIOR MEMBER OF AVIATION MISHAP BOARD

a. The senior Naval Aviator assigned by the unit commander or higher authority will serve as the senior member of the AMB. The senior member will, in all cases, be senior to the pilots involved in the mishap. The senior member should be thoroughly familiar with the responsibilities set forth in references (c), (d), and (e).

b. Preplanning and "before-the-fact" training is essential to the effective implementation of an Aviation Mishap Investigation. Training readiness of board members is the responsibility of the senior member. Photo lab and medical personnel should not be overlooked in this training even though they may not be assigned to the senior member's command.

c. Senior members should be knowledgeable of each board member's experience and expertise in order to facilitate effective task assignment during an investigation. The senior member should also be familiar with other individual responsibilities promulgated in this instruction to enhance coordination in the event of a mishap and minimize interference with the investigative effort.

d. The following is a brief overview of the senior member's responsibilities in the event of a mishap. Refer to references (c) and (e) for a more detailed description.

(1) Obtain the materials and equipment in the command mishap investigation kit, which is maintained by the Aviation Safety Officer.

(2) Assign investigation tasks to board members. Use section E of reference (e) for board organization and thorough investigative techniques.

(3) In the event of a mishap, ensure the notification of all board members and transportation to the crash site for them.

(4) Proceed to mishap site as soon as possible and take charge of the investigation.

(5) As appropriate, recommend to the appointing authority:

(a) Augmentation of the AMB.

(b) Replacement of the members of the AMB.

(c) Changes in the AMB membership to comply with reference (c).

(6) Determine requirements and arrange for photographic and technical assistance.

(7) Establish communications with the squadron. Pass vital information and ensure all reports are made promptly.

(8) Prepare a list of additional personnel/equipment required to secure or recover wreckage and forward to the NAS Whiting Field Operations Officer.

(9) Prior to removal of wreckage, ensure a complete wreckage diagram has been compiled with adequate photographic documentation.

(10) Release wreckage to the Salvage Officer when it is no longer required for investigative purposes.

(11) Oversee the completion and submission of a succinct aircraft mishap investigation report per the format in reference (c).

(12) Ensure all members understand the "Concept of Privilege" and that they are not to divulge names of deceased or injured personnel, make statements expressing opinions, or give out any information concerning the mishap. Refer all inquires to the COMTRAWING FIVE PAO, extension 7651/2. Make no statement other than: "The mishap investigation has just begun, and it is impossible to make a statement at this time." Advise reporters the COMTRAWING FIVE PAO will have statements to release as soon as the exact events are known.

(13) Be aware of and inform the other members of the Aviation Mishap Board that a Safety Investigation Report (SIR) is a privileged document and can be used only for analysis and statistical studies for prevention of aircraft mishaps. The contents of an SIR, enclosures, attachments, or endorsements thereto may NOT be used in any other report, as an enclosure or otherwise, unless the sole purpose of the report or document is to prevent aviation mishaps.

(14) Advise board members that there will be only two complete copies of the SIR, and no member shall keep a personal copy.

PART IIAVIATION MISHAP BOARD

The squadron Commanding Officer will appoint the Aviation Mishap Board (AMB) per reference (c). The AMB will normally consist of a minimum of five officers: a senior member, the Aviation Safety Officer, the Flight Surgeon, a maintenance representative and an operations representative. Other members may be assigned as deemed appropriate by the Commanding Officer and senior member.

1. GENERAL INSTRUCTIONS TO BOARD MEMBERS

- a. Be thoroughly familiar with the contents of references (a) through (i).
- b. When notified, report as directed to HT-28 for transportation to the crash site or as directed by the senior member.
- c. The first member to arrive at the site will be in charge until relieved by the senior member of the board.
- d. The primary duty after rescue of personnel will be to preserve evidence. Do not make any attempt to remove the deceased from the wreckage until full photographic and other documentation has been compiled. Use all available means to secure the area after fire fighting and rescue operations are completed.
- e. Take note of any witnesses and obtain a written or recorded statement as soon as possible.
- f. Do not allow any salvage or removal of wreckage that is not in keeping with humanitarian aspects or requirements as stated in reference (c).
- g. The senior member will assign specific responsibilities to each member of the AMB.
- h. Refer all inquiries to COMTRAWING FIVE PAO at ext 7651/7652
- i. Function as a team to acquire all the information necessary for a complete investigation. All members will actively participate in the entire course of the investigation and the completion of the SIR.

2. AVIATION SAFETY OFFICER (ASO). Be responsible for overall coordination and supervision of aviation mishap reporting. The ASO shall:

- a. Serve as a member of the AMB.
- b. Maintain a complete "mishap kit" readily available to members of the AMB at all times.
- c. Ensure the SDO/CDO have all necessary forms available to initiate any report required by this instruction.
- d. Ensure all necessary publications are readily available.
- e. Proceed to the scene of all accidents immediately, unless directed otherwise by the Commanding Officer or senior member.

f. Ensure safety reports are submitted in the proper format and within the required time limits. The CDO or other board members can submit these reports if the ASO is at the mishap site conducting the investigation.

g. Make the telephone report to the Safety Center.

h. Assist in the preparation of the SIR.

i. Maintain an up-to-date HT-28 Mishap Action Checklist in the Squadron Duty Office.

3. FLIGHT SURGEON. The Flight Surgeon shall serve as a member of the AMB and shall adhere to the duties delineated in the U. S. Naval Flight Surgeon Aircraft Mishap Investigation Pocket reference. Duties include but are not limited to:

a. Proceed to the scene of the mishap and care for survivors.

b. Document relationships at mishap site before the remains are moved (Coordinate with local coroner as needed).

c. Draw appropriate samples and conduct required physical exams.

d. Impound flight equipment and medical/dental records.

4. MAINTENANCE REPRESENTATIVE. The Maintenance Representative shall serve as a member of the AMB and is preferred to be a post maintenance functional check pilot or an officer with like experience if the former is unavailable. Duties include the following:

a. Proceed to the scene of the accident by the appropriate mode of travel unless otherwise directed by the Commanding Officer or the senior member.

b. Secure and make available to the AMB all records concerning the aircraft involved in the accident.

c. Be prepared to coordinate the appointment of a specialized investigation group, including specialists in structures, power plants, electrical components, and avionics.

d. Assist the Salvage Officer in the preservation/removal of aircraft wreckage, providing technical expertise in the area of loading and transporting that model aircraft in order to preclude any further damage.

e. Provide appropriate technical publications for the AMB, including an Illustrated Parts Breakdown (IPB) for use in identifying wreckage at the scene.

f. When appropriate and directed by the senior member, prepare and ensure the accurate and timely submission of requests for engineering investigations.

g. Provide liaison with TW5 Maintenance Detachment and Contract Maintenance to personnel and facilities for removal, inspection, tear down, packing, and shipping of parts removed from the accident scene for further investigation or inspection.

h. If a material failure or malfunction is indicated, comply with reference (a).

i. Prepare a statement outlining damage to the aircraft and the estimated man hours required for repair.

j. Perform other investigative functions as directed by the senior member.

5. OPERATIONS REPRESENTATIVE. The operations representative upon notification of an aviation mishap shall:

a. Collect all of the mishap aircrew logbooks, training jackets, NATOPS records and appropriate data for ready access to the AMB. All records shall be locked in the dedicated cruise box located in the Safety Department. Relinquish all keys to the senior member.

b. Prepare and submit reports and messages per reference (g) if there is FAA/Civilian involvement in the aircraft mishap.

c. For the AMB's use, compile aircrew flying experience as required by page 2, section C of OPNAV Form 3750/1. Compile other logbook information as the AMB may request.

d. Create a hard copy of all scheduling documents for date of mishap to include immediate photographs of the Duty Office Aircraft Status board, executed portion of TIMS flight schedule, Snivel logs, and any other pertinent information that might serve to create an accurate picture of the Squadron's situational awareness at the time of the mishap.

e. Remove the squadron's daily flight schedule from the website.

PART III

COMMANDING OFFICER'S GUIDE

1. Responsibility. The Commanding Officer will convene the Squadron Aviation Mishap Board and will ensure submission of all messages and reports relating to the mishap. Paragraph 2 below provides a summary of reports required, and associated time limits.

2. Summary of Reports and Time Limits

<u>Action Required</u>	<u>Responsibility</u>	<u>Date/Time</u>
a. <u>Immediately</u>		
(1) OPREP-3 telephone report NLT 5 minutes (OPNAVINST 3100.6)	SDO/ODO/CDO	_____
(2) OPREP-3 message report NLT 60 minutes (OPNAVINST 3100.6)	SDO/ODO/CDO	_____
(3) Notification of next of kin (BUPERSMAN 4210100)	CACO/Chaplain	_____
(4) Casualty report	Administrative Officer	_____
b. <u>Within 1 Hour</u>		
(1) Telephone Report to Safety Center.	SDO/ODO/CDO	_____
(2) Telephone Report to CNET for Class A/B	SDO/ODO/CDO	_____
c. <u>Within 4 hours</u>		
(1) NAVSAFECEN Priority Message report (Class A and B only) (OPNAVINST 3750.6)	ASO	_____
(2) CNATRA telephone report (reference (c)).	SDO/ODO/CDO	_____
(3) TRAWING FIVE notification (CNATRA 3750.23)	Safety Officer	_____
(4) FAA Telephone Report if required (OPNAVINST 3750.6, OPNAVINST 3750.16)	Operations Officer	_____
d. <u>Within 24 hours:</u>		
(1) 1st Amended Mishap Message Report (OPNAVINST 3750.6)	Safety Officer/Senior Member	_____

- | | | | |
|--------------------------------------|--|--------------------|-------|
| (2) | CNATRA Class "A"
Telephone Report
(CNATRA 3750 (Series)) | Operations Officer | _____ |
| (3) | FAA Message if
required (OPNAVINST
3750.16) | Operations Officer | _____ |
| (4) | Class C Mishap Report
Priority Message | Safety Officer | _____ |
| e. <u>Within 48 hours:</u> | | | |
| | Letters to the Next of
Kin (MILPERSMAN 1170-140) | Commanding Officer | _____ |
| f. <u>Within 5 working days:</u> | | | |
| | Rescue Report
(OPNAVINST 3750.6) | Safety Officer | _____ |
| g. <u>Within 7 working days:</u> | | | |
| | 2nd Amended Mishap
Message Report
(OPNAVINST 3750.6) | Senior Member | _____ |
| h. <u>Within 30 working days:</u> | | | |
| (1) | Mishap Investigation
Report (OPNAVINST
3750.6) | Senior Member | _____ |
| (2) | Aeromedical Analysis
Report (OPNAVINST
3750.6) | Flight Surgeon | _____ |
| i. <u>Other reports as required:</u> | | | |
| (1) | ODR Report (OPNAVINST Maintenance Rep 4790.2) | | _____ |
| (2) | JAG Investigation
(JAG Manual) | As assigned | _____ |

Part IVAVIATION MISHAP BOARD CHECKLIST

1. Naval Safety Center Telephone Report within one hour for class A.
2. Naval Safety Center Mishap Report message for class A and B, four hours. Class C, 24 hours to CNATRA only (reference (d)).
3. Naval Safety Center Mishap Report message update periodically, if requested until SIR sent.
4. Wreckage preservation within 24 hours of the mishap.
5. Photographic coverage.
6. Aircrew statements.
7. Witness statements.
8. Other statements.
9. Sketches/diagrams.
10. Press releases.
11. Aircrew data.
12. Aircraft data.
13. Life support system data.
14. Takeoff data.
15. Landing data.
16. Mission qualification record - NATOPS qualification jacket page.
17. School/course attendance record - NATOPS qualification jacket page.
18. Operational physiology and survival training record - NATOPS qualification jacket page.
19. Mishap/flight violations record - NATOPS qualification jacket page.
20. Pilot and crewmen log books.
21. Aircraft log books.
22. Engineering investigation reports.
23. Fire and rescue report (NAVAIR Form 1135/1) (OPNAV 3750/13, 7 calendar days).
24. Voice and radar tapes from Air Traffic Control.

PART VMISHAP INVESTIGATION GENERAL CHECKLIST

This list is not intended to replace the normal activities of an aircraft mishap investigation. Each mishap requires its own particular investigative approach; however, some elements of investigation are common to all mishaps and must be noted in each and every case. This checklist is an attempt to enumerate these common items in order to assist the investigators in organizing their work and in conducting preliminary analysis of the mishap at the scene. For more detailed information, refer to reference (e).

1. Angle of Impact: _____ Deg.
2. Attitude at time of Impact: _____ Deg; Nose (Up) (Down)
Wings: (Level) or (Right) (Left) Wing Down _____ Deg
Yaw: (Right) (Left); (Inverted) (Normal)
3. Points of initial impact: _____
4. Type Wreckage Distribution: (Spin) (Dive) (Spiral) (Low Level)
(Mid-Air Disintegration)
5. Type Terrain: (Swamp) (Marsh) (Water) (Desert) (Level-Hard)
(Level Cultivated) (Hilly) (Trees) (Other) _____
6. Condition of Terrain: (Dry) (Moist) (Water Covered)
7. Evidence of Fire: (In-Flight) (Post-Crash) (None)
8. Evidence of Explosion: (In-Flight) (Post-Crash) (None)
9. Weather at Scene: Ceiling _____; Visibility _____
Type Weather _____: Temperature: _____
Dew Point _____ F: Wind _____ KTS from _____
10. Military Casualties: _____ Fatal: _____ Serious: _____ Minor
_____ None
11. Civilian Casualties: _____ Fatal: _____ Serious: _____ Minor
_____ None
12. Aircrew Evaluation: Pilot: (Normal Deplane) (Remains in A/C) (Ejected)
Co-Pilot: (Normal Deplane) (Remains in A/C) (Ejected)
Crew: (Normal Deplane) (Remains in A/C) (Ejected)
13. Cursory Investigation: Make cursory investigation of the wrecked aircraft, particularly looking for:
 - a. Appropriate switch positions in cockpit
 - b. Effectiveness of harness
 - c. Make brief sketch of mishap scene showing distances, skid marks, headings, location of separate parts of aircraft.
14. Interview: Interview and record names, rank, unit of qualified witnesses, check phone numbers and request written statements from:
 - a. Mishap Aircrew.

- b. Maintenance Officer (as necessary).
- c. Tower operator or Air Operations Officer in case of landing mishap occurring in the vicinity of the field.
- d. Other pilots or crew who observed the mishap.
- e. Any witness who is able to give an intelligent account of what occurred.
- f. Medical Officer or Corpsman in attendance of crew or injured personnel.

NOTE: Statements should be taken as soon as possible, and audibly recorded if possible.

15. Photographs: Give positive directions regarding required photographs, a photo log and proper labeling of each photo. The following photographs are essential:

- a. Scene of cockpit covering all appropriate switches, handles, control units and safety.
- b. General crash scene (close-up) covering position of control surfaces.
- c. Scenes of path along flight deck or ground, with emphasis on contact point and position of scattered parts.
- d. Any views of aircraft showing obvious material failure, such as damaged compressor or turbine blades.

16. Public Information Release: Ensure the PAO coordinates and controls the release of all information regarding the mishap according to current directives.

17. Contact Witnesses: When contacting witnesses or families who have suffered injury or property damage, extreme care must be taken not to inadvertently divulge any information or commit any act that could ultimately lead to additional legal claims. Tactful, diplomatic conversation must be used and any information concerning the facts of the mishap must be guarded as privileged information.

REMINDER LIST:

_____	Standard Photographs	_____	Samples of Fuel
_____	Wreckage Diagram	_____	Humanitarian
_____	Security of Wreckage	_____	Witness Names, Address (Privacy Act req.)

PART VIMISHAP INVESTIGATION AMPLIFIED CHECKLIST

1. Preliminary. This list is not intended to cover every type of investigation that might arise. By careful attention to this list; however, one can accomplish a methodical approach to the investigation.

2. The Crash Site

- a. Attitude of the aircraft at impact, and impact angle:
 - (1) Damage to trees, vertical structures
 - (2) First ground impact
 - (3) Ground marks
 - (4) Distribution of wreckage
- b. Evidence of in-flight disintegration:
 - (1) Distribution
 - (2) Varied damage
- c. Evidence of in-flight fire:
 - (1) Extreme temperature
 - (2) Streaming
- d. Cockpit:
 - (1) Instrument indications: Were caution lights on at impact (save caution light bulbs for analysis)?
 - (2) Control positions
 - (3) Equipment selections
 - (a) Radar altimeter
 - (b) UHF
 - (c) TACAN
 - (d) Transponder
 - (e) VHF
 - (4) Circuit Breakers
 - (5) Seats
 - (6) Fire/Explosion
 - (a) Before or after impact
 - (b) Scar
- e. Engines:
 - (1) Compressors:
 - (a) Blades missing or interference
 - (b) Peening
 - (c) Case scoring
 - (d) High or low RPM
 - (e) Any melting of late stages
 - (f) Unstacking
 - (g) Obvious exit holes
 - (2) Combustion:
 - (a) Hot spots
 - (b) Beading
 - (c) Cracking
 - (d) Buckling
 - (3) Fuel Control:
 - (a) Position
 - (b) Function
 - (c) Security
 - (d) Fuel samples for contamination
 - (e) Witness marks

- (4) Turbines:
 - (a) Warping
 - (b) Blade damage
 - (c) Creep
 - (d) Beading
 - (e) Flaking
 - (f) Hot spots
 - (g) Chunk failure
- (5) Bearings:
 - (a) Galling
 - (b) Race-scoring
 - (c) Freezing
- (6) Shaft:
 - (a) Warping
 - (b) Torque shear
 - (c) Spline warp
 - (d) Buckling
 - (e) Bending
- (7) Position/Location
- (8) Accessories:
 - (a) Indications of RPM
 - (b) Evidence of failure
- (9) Oil Samples
- (10) Exhaust Sections:
 - (a) Beading
 - (b) Hot spots
 - (c) Steaming

- f. Control Surfaces:
 - (1) Rotor Blades:
 - (a) Location
 - (b) Condition of blades (twisted/bent)
 - (c) Fracture
 - (d) Witness marks
 - (e) Blade strike
 - (2) Skids:
 - (a) Bending
 - (b) Cracked
 - (c) Stress fractures
 - (d) Spreading

- g. For instrument flight:
 - (1) Was pilot heat on?
 - (2) Engine anti-ice on?
 - (3) Primary or secondary attitude reference selected?
 - (4) Primary or secondary heading reference
 - (5) TACAN channel/NAVAID frequencies
 - (6) Gyros turning
 - (7) VSI
 - (8) Radar altimeter
 - (9) Pressure altimeter
 - (a) Settling
 - (b) Sticking
 - (c) Indication at impact
 - (10) Navigation information publications in cockpit?

- h. For night flights:
 - (1) Instrument console light settings
 - (2) Flashlights in cockpit
 - (3) External lights

- i. Diagram crash site:
 - (1) Reference line
 - (2) Flight path
 - (3) Landmarks/topography
 - (4) Impact point
 - (5) Significant aircraft parts
 - (6) Fin scar
 - (7) Prevailing winds
 - (8) Magnetic orientation

3. Witness Statements

- a. Mishap Crew (as applicable). Remember the Privacy Act Statement.

- (1) Any noted discrepancies during run-up?
- (2) What first attracted attention to the emergency situation?
- (3) What were indications at that time?
 - (a) Control feeling?
 - (b) RPM, TOT, Torque?
 - (c) Oil pressure?
 - (d) Hydraulics?
 - (e) Caution lights/Advisory lights?
 - (f) Smoke?
 - (g) Odor?
 - (h) Yaw?
 - (i) Loss of power?
 - (j) Unusual sounds?
 - (k) Altitude?
 - (l) Airspeed?
- (4) What was diagnosis at the time?
- (5) What was immediate decision as to corrective action?
- (6) What was immediate action?
- (7) Did you observe any change in indications?
- (8) Did you change your diagnosis and/or corrective action?
- (9) At what point in the sequence was the crew informed of the difficulty?
- (10) At what point was UHF/VHF first transmitted?
 - (a) To whom?
 - (b) What frequency?
 - (c) What time (approximately)?
- (11) At what time was the transponder setting changed?
 - (a) What setting?
 - (b) Any confirmation of change?
- (12) Was the NATOPS pocket checklist used?
- (13) Survival equipment worn, carried, utilized, condition:
 - (a) Clothing
 - (b) Boots
 - (c) Gloves
 - (d) Helmet
 - (e) Visor
 - (f) LPA flotation gear
 - (g) Survival vest
 - (h) Knife
 - (i) Signaling devices (Smoke, Mirror, Flares, Strobe light)
 - (j) Compass
 - (k) Other
- (14) Give a narrative account of the entire incident.

- (15) Physical condition
 - (a) General
 - (b) Flight time
 - 1. Since last sleep
 - 2. Since last hot meal
 - 3. Last 24 hours
 - 4. Last 48 hours
 - 5. Last 72 hours
 - (c) Sleep
 - 1. Last 24 hours
 - 2. Last 48 hours
 - 3. Last 72 hours
 - 4. Usual average
 - (d) Food
 - 1. Within 4 hours of flight
 - 2. Recent missed meals
 - (e) Alcohol during last 24 hour period.
 - (f) Medication last 48 hour period.
 - (g) Other demanding activities.
 - 1. Last 24 hours
 - 2. Last week

(16) Have you experienced previous emergencies in this aircraft?
Describe.

(17) Did this incident recall another (of your own or someone else's experience) to mind?

(18) When did you last review the emergency procedure involved?

In the simulator?

(19) Were you suffering from fatigue, strain, cold, or ill effects?

b. Visual Controller

- (1) What first attracted your attention to the emergency?
- (2) Were you observing the aircraft before emergency occurred?
- (3) Describe what you actually saw?
- (4) Did you receive any transmission from the aircraft?
 - (a) Before the emergency?
 - (b) During the emergency?
- (5) What action did you take?

(6) Have you previously observed (type/model) aircraft in the traffic pattern?

- (7) Did the aircraft appear in any way unusual?
- (8) Was the pattern in any way unusual?
- (9) Give a narrative account of the entire incident.
- (10) What aviation experience have you, including controlling?
- (11) If control may be a factor, determine the witness state of physical condition, fatigue factor.

c. Radar Controller

- (1) Describe the entire aircraft track from initial acquisition.
- (2) Point out where transmissions occurred and/or transponder replies changed.
- (3) At what altitude and positions were frequency changes given and/or accomplished?
- (4) Describe the GCA C-scan and PPI track, pointing out where corrective information was given.
- (5) Use a penetration plate to describe PPI track and make a graph showing C-scanned GCA PPI.
- (6) If control may be a factor, determine fatigue factors, experience, supervision.

4. Documentary Evidence

- a. Photographs:
 - (1) Crash scene
 - (2) Personal cameras
 - (3) Official photographs before the incident
- b. ATC Radar tapes
- c. Fuel, oil, and hydraulic sample reports
- d. Yellow sheets
- e. Aircraft and flight crew logs
- f. Landing aids
 - (1) Approach light intensity
 - (2) Runway condition
 - (3) NAV aid conditions