AGREEMENT

BETWEEN

THE AMERICAN INSTITUTE IN TAIWAN

AND

THE TAIPEI ECONOMIC AND CULTURAL REPRESENTATIVE OFFICE IN THE UNTED STATES

FOR COOPERATION IN AND THE PROMOTION OF TRANSPORTATION OF SAFETY

Article I - Parties and Scope

This Agreement between the American Institute in Taiwan (AIT) and the Taipei Economic and Cultural Representative Office in the United States (TECRO) provides a framework through which AIT and TECRO, (hereinafter referred to as the Parties), through their respective Designated Representatives, the National Transportation Safety Board (NTSB) and the Aviation Safety Council in Taipei (ASC), can exchange transportation accident investigation information, technical services, expertise and training, some of which may be provided on a reimbursable or in-kind basis, in areas of mutual interest concerning transportation safety and accident investigations, particularly in the area of civil aviation.

Article II – Objectives

The broad objective of this Agreement is to set forth the principles of a cooperative working relationship among the Parties and their Designated Representatives in the area of transportation accidents and incident investigations. The Parties and their Designated Representatives have a mutual interest in training in accident investigation theory and techniques that contribute to international aviation safety. The Parties' Designated Representatives, the NTSB, an Independent Agency of the United States of America, and the ASC, investigate transportation accidents and determine the circumstances and causes thereof with the aim of improving safety. The Parties, through their Designated Representatives will, to the extent authorized by applicable laws, regulations, and policies, cooperate in transportation accident investigations, training in investigation techniques and procedures, and the sharing of information and expertise by:

- (1)Promoting and advancing transportation safety;
- (2)Coordinating investigation activities to enhance cooperation, and increase efficiency, and achieve consistent investigation standards, policies, guidelines, and procedures relating to civil aviation safety;
- (3)Identifying common concerns for sustaining an equivalent level of safe operation of civil aircraft; and
- (4)Supporting each other's investigations and sharing expertise and training opportunities;

The specific objectives of cooperation are in the following areas of mutual interest:

- (1)Accident investigation support;
- (2)Provision of accident investigation expertise and facilities;
- (3)Provision of opportunities to observe each other's investigations, in order to enhance accident investigation expertise;
- (4)Provision of opportunities for training and courses for investigators;
- (5)Exchange of information on the use of specific investigative techniques, methodologies, standards and procedures;
- (6) Joint development of such techniques, methodologies, standards and procedures;
- (7)Exchange of information on investigation and operational experiences and policy development; and
- (8) Advancement of public understanding of independent accident investigations.

Article III - Cooperative Activities

- A. Other specific cooperative activities related to accident investigations and training may be determined after consultation between AIT and its Designated Representative, NTSB and TECRO and its Designated Representative, ASC.
- B. Activities under this Agreement may include joint research and development projects, collaboration on scientific elements of accident investigation and investigation techniques, exchanging technical information to the extent permitted by law, exchanging scientists and technical experts, convening seminars and meetings, training participants, and engaging in other forms of cooperation in the areas of transportation accident investigations and related

technologies, as may be mutually agreed.

- C. There shall be an Implementing Arrangement that describes any specific technical scope of the activities that are described generally in this Agreement, covering management responsibilities, specific funding arrangements, cost and schedule estimates, specific procedures to be followed, treatment of intellectual property (if any), liability and other appropriate matters. The Implementing Arrangement shall be subject to the terms of this Agreement, and if there is a conflict between any provision(s) of the Implementing Arrangement and this Agreement, the applicable provisions of this Agreement shall govern.
- D. All Cooperative activities undertaken pursuant to the specific Implementing Arrangement under this Agreement shall be subject respectively to the laws, regulations, policies, funding, and administrative procedures applicable in the territories of the authorities represented by AIT and TECRO.

Article IV - Coordination

Overall coordination of the activities covered by this Agreement and its Implementing Arrangement and the provision for use of any administrative facilities and support for this Agreement shall be the responsibility of AIT and TECRO and their Designated Representatives. Responsibility for managing the specific activities undertaken and the roles and responsibilities of other entities in these activities shall be determined mutually by AIT and TECRO and their Designated Representatives, and specified in the Implementing Arrangement.

Article V – Responsibilities of AIT

Subject to the determination by AIT's Designated Representative, the NTSB, that extending support to TECRO's Designated Representative, the ASC, does not interfere with the mission of the NTSB to provide investigations of accidents under 49 U.S.C. § 1101, et seq., or impinge on any of NTSB's other legal responsibilities under the laws applicable in the territory of the authorities represented by AIT, to include but not limited to, NTSB's responsibilities under the International Civil Aviation Organization (ICAO) international standards and recommended practices for the conducting of investigation inquires as prescribed in Annex 13 to the Convention on International Civil Aviation (Chicago, 1944), AIT agrees that its Designated Representative, NTSB, will provide the resources in support of accident safety investigations and training to the extent that the NTSB has available the personnel, technical resources, and material resources to fulfill an

international request from ASC and perform the following activities:

- A. Determine staffing requirements and select personnel, institutions, and organization as necessary to fulfill AIT's responsibilities for implementation of its obligations under this Agreement. If procurement activities are necessary, the selection process is to be carried out on the basis of professional capability, academic qualifications, experience and other merit factors. NTSB will conduct any procurement actions in conjunction with the activities under this Agreement in accordance with standard NTSB acquisition procedures and Federal Acquisition Regulation requirements.AIT, through its Designated Representative, NTSB, will provide releasable information to TECRO's Designated Representative, ASC, regarding awardees if requested;
- B. Use its best efforts to assure that TECRO and its Designated Representative, ASC, are held free and clear of all customs duties and imposition of charges by the authorities AIT represents. Neither TECRO nor its Designated Representative, ASC, shall be required to pay any duties or taxes in executing the terms and conditions of this Agreement;
- C. Provide overall management of the cooperative activities under this Agreement;
- D. Make available upon request to TECRO or its Designated Representative, ASC, releasable written records of the activities covered by this Agreement, subject to the statutory authority of the NTSB, the Export Control laws of the United States, the Freedom of Information Act and Privacy Act and any trade secret, copyright, and data rights of the NTSB and third parties.

Article VI - Responsibilities of TECRO

Pursuant to his Agreement, TECRO, through its Designated Representative, ASC, shall:

A. Determine staffing requirements and select personnel, institutions and organizations as necessary to fulfill TECRO's responsibilities for implementation of its activities under this Agreement. This selection process will be carried out on the basis of professional capability, academic qualifications, experience and other merit factors. Any procurement actions conducted for the benefit of AIT and its Designated Representative, NTSB, will be conducted in accordance with standard AIT and NTSB procedures. TECRO, through its Designated Representative, ASC, will provide information to AIT's Designated Representative NTSB regarding these selections as requested;

- B. Make available upon request to AIT or its Designated Representative NTSB, releasable written records of activities covered by this Agreement;
- C. Subject to availability of funds and in-kind reimbursement and funding, support activities described by this Agreement by cash reimbursement and/or through-in kind deliverables as may be further described in the Implementing arrangement and in Article VII below;
- D. Use its best efforts to assure that AIT and its Designated Representative, NTSB, are held free and clear of all customs duties and imposition of charges by the authorities TECRO represents. Neither AIT not its Designated Representative, NTSB, shall be required to pay any duties or taxes in executing the terms and conditions of this Agreement.

Article VII - Financial Arrangements

- A. Reimbursement for services provided by AIT's Designated Representative, NTSB, and incurred expenses such as overhead, transportation, per diem/lodging and miscellaneous costs of NTSB shall be reimbursed from TECRO through AIT to the NTSB via prepaid funds, based on the NTSB's best current estimate for course fees, material costs, overhead and miscellaneous travel related expenses, except to the extent NTSB and ASC agree that in-kind expenditures for travel and lodging appropriately reimbursable through kind costs are deliverables/reimbursements that may be accepted by NTSB under its gift acceptance authority. For prepaid cash reimbursements, if the actual costs to provide the products/services/training exceed the initial prepayment estimate, the ASC through AIT will be billed for the difference. If actual costs are less than indicated on the prepayment invoice, the NTSB will refund the difference to ASC through TECRO and AIT, or the ASC may request through TECRO and AIT that it apply the difference to a subsequent request or order from the NTSB.
- B. AIT shall provide TECRO with any requested documentation to support these or any other requests for reimbursement, in accordance with the standard financial regulations and practice of AIT and its Designated Representative, NTSB.
- C. When reimbursement is required by the NTSB, TECRO shall provide AIT funds in accordance with the Implementing Arrangement that specifies payment processes and procedures for activities covered by the Implementing Arrangement.

Article VIII - Intellectual Property Considerations

- A. AIT and TECRO encourage the widest possible dissemination of information provided, exchanged, or arising under this agreement, subject to any statutory or other non-disclosure requirements of their respective Designated Representatives, and the need to protect confidential or proprietary information and other data that is subject to patent, trademark and copyright protections.
- B. Details regarding intellectual property considerations and information disseminating procedures will be specified in the Implementing Arrangement to this Agreement.
- C. Information transmitted by either Party or its Designated Representative under this Agreement to the other Party or its Designated Representative shall be accurate to the best knowledge and belief of transmitting Party or Designated Representative, but the transmitting Party or its Designated Representative does not warrant the suitability of the information transmitted for any particular use or application by the receiving Party, its Designated Representative, or by any third party. Information developed jointly by the Parties or their Designated Representatives shall be accurate to the best knowledge and belief of both Parties or Designated Representatives. Neither Party nor its Designated Representative warrants the accuracy of the jointly developed information or its suitability for any particular use or application by either Party, or Designated Representative, or by any third party.

Article IX - Liability

- A. This Agreement is between the Parties as designated in the Agreement and is not intended, and should not be construed, to create or confer on any other person or, entity any right or benefit, substantive or procedural, enforceable at law, or otherwise, against AIT, NTSB, the territory of the authorities represented by AIT or any State or locality thereof, or against TECRO, ASC, the territory of the authorities represented by TECRO, or any other entity under whose auspices a Party or its Designated Representative is participating in an investigation, or any entities' officers, directors, employees, detailers, agents, representatives, task force members, contractors, sub-contractors, consultants, advisors, successors, or assigns.
- B. The Parties and their Designated Representatives assume no liability for any claim or loss arising out of advice or other assistance provided or work performed by it

under this Agreement or amendments, annexes or appendices to this Agreement or arising out of any action or decision by the other Party, its current or former officers, employees or contractors, in relation to such advice, assistance, or work. To the extent there are claims by third parties against any Party to this Agreement or its Designated Representative, each Party and its Designated Representative agree to cooperate in the defense of such suit brought in any jurisdiction to the extent they have knowledge of facts relevant to such defense, and to the extent permitted under the laws applicable in the territory of the authorities they represent.

C. Gross negligence, fraudulent, or criminal acts resulting in personal injury, death or property damage shall not be considered within the scope of advice or assistance provided or work performed under this Agreement in the context of defending or cooperating in the defense of any suit brought in any jurisdiction arising as a result of work performed under this Agreement.

Article X - Period of Agreement and Modification/Termination

- A. This Agreement will become effective when signed by both Parties on the date of the last signature hereafter.
- B. Either Party may terminate this Agreement by providing sixty (60) days prior written notice to the other Party and its Designated Representative. Termination of this Agreement also terminates at the same time all Implementing Arrangements issued hereunder, unless they have been previously terminated. It is understood that an attempt will be made to reach mutual agreement on the termination dates to allow orderly termination of activities.
- C. Any equitable adjustment of any termination shall provide for payment to AIT for services rendered and expenses incurred by its Designated Representative, NTSB, prior to the termination, in addition to termination settlement costs reasonably incurred by the NTSB relating to commitments that cannot be canceled without liability at the time of termination. NTSB will use its best efforts to stop the accrual of charges and expenses upon notice of termination.
- D. The equitable adjustment of any termination shall provide for payment to TECRO for services rendered and expenses incurred by its Designated Representative ASC prior to the termination in addition to termination settlement costs reasonably incurred by ASC relating to commitments that cannot be cancelled without liability at the time of termination. ASC will use its best efforts to stop the accrual of charges and expenses upon notice of termination.

E. This Agreement may be modified in writing by mutual agreement of AIT in consultation with is Designated Representative, NTSB, and TECRO in consultation with its Designated Representative, ASC. Any modifications take effect when signed and dated by the Parties to this Agreement.

Article XI - Resolution of Difficulties

FOR THE AMERICAN INSTITUTE

AIT and TECRO and their respective Designated Representatives shall consult, upon request of either Party, regarding any matter related to the terms and conditions of this Agreement and shall endeavor jointly in a spirit of cooperation and mutual assistance to resolve by informal means any difficulties or misunderstandings that may arise.

IN WITNESS WHEREOF, the undersigned, being duly authorized, have signed this Agreement.

FOR THE TAIPEI ECONOMIC AND

DONE at Washington, D.C., in duplicate, in the English language.

IN TAIWAN	CULTURAL REPRESENTATIVE OFFICE IN THE UNITED STATES
Barbara J. Schrage Managing Director 6/15/10	Deputy Representative June 22, 2010
Date:	Date:

TECHNICAL IMPLEMENTING ARRANGEMENT NUMBER 1 TO THE AGREEMENT

BETWEEN

THE AMERICAN INSTITUTE IN TAIWAN

AND

THE TAIPEI ECONOMIC AND CULTURAL REPRESENTATIVE OFFICE IN THE UNITIED STATES

FOR COOPERATION IN AND THE PROMOTION OF TRANSPORTATION SAFETY

Article I: Purpose

This Technical Implementing Arrangement Number 1 to the Agreement Between the American Institute in Taiwan and the Taipei Economic and Cultural Representative Office in the United States for Cooperation in and the Promotion of Transportation Safety (hereinafter referred to as Implementing Arrangement) is entered into by the American Instituted in Taiwan (AIT) and the Taipei Economic and Cultural Representative Office in the United States (TECRO), hereinafter referred to as the Parties, to implement program activities under the Agreement Between the American Institute in Taiwan and the Taipei Economic and Cultural Representative Office in the United States for Cooperation in and the Promotion of Transportation Safety (hereinafter referred to as the AIT/TECRO Agreement). AIT, through its Designated Representative, the National Transportation Safety Board in Washington, D.C., (NTSB) in cooperation with TECRO, through its Designated Representative, the Aviation Safety Council in Taipei (ASC), shall carry out program tasks, determine priorities for future cooperation activities, and develop further Implementing Arrangements which shall set forth work programs for any future activities. Activities may include joint research and development projects, collaboration on scientific elements of accident investigation and investigation techniques, exchanging technical information to the extent permitted by law, exchanging scientists and technical experts, convening seminars and meetings, training participants, and engaging in other forms of cooperation in the areas of transportation accident investigations and related technologies, as may be mutually agreed between the Parties.

Article II: Authorization

The activities described in this Implementing Arrangement shall be carried out under the general terms and conditions of the AIT/TECRO Agreement. This Implementing

Arrangement is hereby attached to the AIT/TECRO Agreement and is incorporated into that Agreement.

Article III: Scope of Work

General program tasks areas to be carried out under this Implementing Arrangement are summarized in Attachment 1 (AIT-TECRO Technical Cooperation Program Descriptions). More detailed project work descriptions will be added by the Parties by amendment to Attachment 1 as more specific details of particular projects become available and are agreed upon by the Parties and their Designated Representatives.

Attachment 2 will contain the AIT-TCERO Technical Cooperation Program Estimated Budgets to be determined on a project basis when NTSB determines the estimated costs for particular services/training that are mutually agreed upon by the Parties and their Designated Representatives and ordered by ASC. The specific costs associated with each project will be added by amendment by the Parties to Attachment 2.

Article IV: Responsibilities of AIT

The responsibilities of AIT, through its Designated Representative, NTSB, under this Implementing Arrangement are:

- A. To undertake the asks and manage the funds set forth in the attachments;
- B. To make available personnel, materials, and other assistance as may be necessary to carry out such tasks;
- C. To facilitate and provide support for consultations between and among representatives of TECRO, ASC, NTSB, and any other agencies or entities involved in any projects concerning transportation safety that are conducted among the Parties and their Designated Representatives; and
- D. To report on an annual basis or, in the event of termination, at the end of the term of this Implementing Arrangement to TECRO on AIT's use of funds received form TECRO.

Article V: Responsibilities of TECRO

The responsibilities of TECRO under this Implementing Arrangement are:

- A. To provide all necessary financial assistance in accordance with the AIT/TECRO Agreement and Article VI of the Implementing Arrangement, as well as providing administrative and other assistance to support AIT in undertaking the tasks described in the Attachments;
- B. To provide guidance for and to facilitate consultations between and among representatives of NTSB, AIT, and any other agencies or entities involved in any transportation safety related projects conducted among the Parties and their Designated Representatives under this Implementing Arrangement; and
- C. To ensure that all necessary logistical arrangements for tasks that are to be conducted in the territory of the authorities represented by TECRO are made, including the provision of training and conference facilities, and to ensure that these activities are completed prior to the commencement of each such task.

Article VI: Financial Arrangements

- A. In accordance with the AIT/TECRO Agreement and this Implementing Arrangement, and during each fiscal year for which this Implementing Arrangement is in force, TECRO shall advance to AIT the amount of funds (in U.S. dollars) specified in the attachments, annexes, and amendments to this Implementing Arrangement for services/training ordered by TECRO's Designated Representative, ASC, and approved by AIT's Designated Representative, NTSB, which are to be performed by NTSB. The funds must be prepaid at least 60 days prior to the commencement of NTSB's performance unless NTSB agrees in writing to a lesser period of time. These funds shall be used by AIT's Designated Representative to defray costs that it incurs in carrying out the tasks described in the Attachments that are undertaken during each fiscal year.
- B. Upon receipt of funds from TECRO During each fiscal year, AIT, through its Designated Representative, NTSB, shall commence such tasks subject to NTSB's determination that extending support to TECRO's Designated Representative, ASC, does not compromise or jeopardize the mission of the NTSB to provide investigations of accidents under 49 U.S.C. §1101, et. seq., or impinge on any of NTSB's other legal responsibilities under the laws applicable in the territory of the authorities represented by AIT.
- C. Reimbursement for services/training performed by AIT's Designated Representative, NTSB, includes such expenses as course fees, staff compensation, overhead, transportation, per diem/lodging and other identified miscellaneous costs.

The NTSB shall be reimbursed based on the NTSB's best current estimate of the estimated costs prior to the expenses being incurred and must be paid by TECRO through AIT by prepaid funds, except to the extent the Parties' Designated Representatives agree that in-kind expenditures for travel and lodging costs are appropriately reimbursable through in-kind deliverables/reimbursements accepted by NTSB under its gift acceptance authority. In the event of termination by TECRO's Designated Representative, ASC, AIT will require that TECRO ensure that its Designated Representative, ASC, pay all costs incurred by the NTSB for services/training performed and other costs actually incurred prior to and as of the date of termination. Upon notice of termination, the NTSB will use its best efforts to prevent the accrual of costs after notice of termination. In the case of termination by the NTSB because of NTSB's priority mission requirements, AIT will require that TECRO or its Designated Representative, ASC, pay only the costs of services/training actually performed by the NTSB prior to the date of NTSB's termination.

D. For prepaid cash reimbursements, if the actual costs to provide services/training by AIT's Designated Representative, NTSB, exceed the initial prepayment estimate, TECRO will ensure that its Designated Representative, ASC, is billed for the difference. If actual costs are less than indicated on the prepayment invoice, the NTSB will refund the difference to TECRO, through AIT, unless TECRO requests in writing, through AIT, prior to the refund that it will apply the difference to a subsequent request or order for NTSB services/training.

Article VII: Intellectual Property Considerations

A. It is the intent of the Parties and their Designated Representatives that no third party intellectual property or confidential business information will be shared in conjunction with activities to be undertaken pursuant to this Implementing Arrangement. However, to the extent that intellectual property is needed for a task described in this Implementing Arrangement, the Parties or their Designated Representatives will execute applicable license agreements to use intellectual property. Except to the extent that the Parties and their Designated Representatives obtain the right to use intellectual property through license agreements, the Parties and their Designated Representatives shall not otherwise use intellectual property or obtain any right to intellectual property by implication, estoppel, or in any other manner except as expressly granted in license, and no express or implied right under any patent, copyright, mask work rights, trademark,

or other intellectual property rights shall otherwise arise.

- B. In performance of the tasks hereunder, if AIT's Designated Representative, the NTSB, uses NTSB data (as described in this Article) that it considers to be confidential, NTSB shall appropriately mark the data, and the data shall not be disclosed to any third party by TECRO or its Designated Representative unless prior written permission is received from AIT's Designated Representative, the NTSB, through AIT. Confidential NTSB data or information includes, but is not limited to, NTSB testing protocols; descriptions of NTSB existing, pending or proposed work; NTSB opinions, analysis and conclusions; statements and compilations of data performed for the NTSB; correspondence that includes preliminary discussions or deliberations; and/or any other information/records supplied to or by the NTSB in the course on an accident investigation or incident.
- C. The Parties' Designated Representatives shall release technical data to the public only by mutual agreement in accordance with the NTSB statute (49 U.S.C. § 1101, et. seq.), and other applicable law.
- D. The Parties agree and shall ensure that their Designated Representatives agree that they shall take appropriate measures to protect proprietary, privileged, or otherwise confidential information that may come into their possession as a result of this Implementing Arrangement. TECRO, as the receiving Party, and its Designated Representative, ASC., and its contractors, consultants, and anyone acting on its behalf under this Implementing Arrangement shall keep confidential any and all written, electronic, photographic or other data, records, and/or written or verbal information, and all translations thereof, that are provided by AIT's Designated Representative, the NTSB, or any other party to an accident investigation or incident unless AIT's Designated Representative, the NTSB, has given express permission to release the confidential data or information.
- E. For non-NTSB work-Product and data, AIT, as a Receiving Party and its Designated Representative, the NTSB, will not disclose non-public information, documents, or materials/data obtained from any providing party without obtaining written consent from the party providing the information, except to the extent disclosure is required by law.
- F. All Parties and their Designated Representatives are responsible for obtaining, and complying with (i) all import/export laws and regulations, and approvals or permits necessary to either import/export or use any intellectual property in the territories of the respective authorities represented by the Parties, and (ii) all import/export laws and regulations, and approvals or permits necessary to return any intellectual

property to the holder or licensee of the intellectual property upon the termination in whole or in part of this Implementing Arrangement or the completion of the task for which the property is used.

Article VIII: Effective Date, Amendment and Termination

This Implementing Arrangement shall enter into force on the date of the last signature hereinafter, may be amended by written agreement of the Parties at any time, and will remain in force for two years unless extended by mutual agreement or terminated by either Party upon sixty days prior written notice to the other Party and its Designated Representative. Termination shall not affect the validity or duration of activities not fully completed at the time of termination.

IN WITNESS WHEREOF, The undersigned, being duly authorized, have signed this Implementing Arrangement.

DONE at Washington, D.C., in duplicate, in the English language.

FOR THE AMERICAN INSTITUTE IN TAIWAN

FOR THE TAIPEI ECONOMIC AND CULTURAL REPRESENTATIVE OFFICE IN THE UNITED STATES

Ta- Jeg Charg

Barbara J. Schrage Managing Director

Barn I Schy

Deputy Representative

June 22, 2010

6/15/2010

Date

Date

ATTACHMENT 1

AIT-TECRO Technical Cooperation Program Descriptions

The AIT-TECRO Technical Cooperation Program descriptions involves training/refresher training, and other activities, including but not limited to, joint research and development projects, corroboration on scientific elements of accident investigation and investigation techniques, exchanging technical information to the extent permitted by law, exchanging scientists and technical experts, convening seminars and meetings, training participants, and engaging in other forms of cooperation in the following sample areas of transportation accident investigations and its technologies, as many be mutually agreed:

1. The Mission of AIT's Designated Representative, the NTSB, and its Operating Rules and Legal Authority
☐ The NTSB mission ☐ The NTSB and other federal agencies ☐ Independent organization-Independent Safety Board Act of 1975 ☐ Rules of authority ☐ Regulations and authorizations
2. Accident Site Management
Securing the site Site safety and safety equipment Documentation Wreckage recovery Transportation and storage of wreckage Examination
I: Preparation and Initiation II: On-Scene Arrival and Documentation III: On-Scene Wrap-up and Follow-up IV: Follow-up Investigations and Reports Conducting an Accident Investigation concerns the duties of an investigator wire emphasis on the importance of having a good sound working knowledge aviation and factor that affect operating as a whole. AIT's Designate Representative, NTSB, includes the principles developed by the Internation Civil Aviation Organization (ICAO) in its Manual of Aircraft Accide Investigations (1970). ICAO stresses technical skill, perseverance, and logic important tools of the professional accident investigator.
☐ Attributes of the ideal investigator ☐ Preparing to be on-call ☐ Initial notification and coordination ☐ Getting there

Arrival on-scene
The on-scene investigation phase
Tools of the accident investigator
Documentation
Field tests
On-scene wrap-up
The follow-up investigation
Preparing reports
A A Color Day 1 March 1
4. <u>Assisting Family Members</u> The Aviation Disaster Family Assistance Act of 1996 outlines specific
responsibilities for the NTSB and the airlines in dealing with the families of the
victims of an airline disaster and NTSB addresses improved ways to address the
needs of families immediately following an aviation disaster.
needs of families ininicatatory following an aviation disaster.
The Aviation Disaster Family Assistance Act of 1996
☐ Victim issues
Stress
Describe ways combat job stress
Trauma and post trauma response
Self-care in mass casualty events
5. Major U.S. Investigations
5. Major C.S. Investigations
Case studies are used to understand the role of the NTSB at a major
accident site; the application of NTSB investigative processes; and how
the safety and regulatory systems work together to achieve a safety goal
Basic NTSB Organization
Major Domestic Aircraft Accident Investigations processes and
procedures used
Parties to the investigation
The Role of the Federal Aviation Administration
Case Studies
6. Media Relations
AIT's Designated Representative, NTSB, explains various techniques for
balancing the needs of the media to have real time information with the need of
the NTSB to perform a thorough investigation and reach sound conclusions as to
the probable cause of an accident.
F
Strategies
NTSB Board Members as spokesperson
Potential parties
Common threads (good job in communicating)
Common threads (poor job in communicating)
Four-point formula
How do you leave a news briefing?

☐Sample questions ☐Common message mistakes
7. Weather-Related Accidents AIT's Designated Representative, NTSB, explains how to gather publicly available weather data while investigating accidents, and how weather data can be used in investigations. Real-world examples of past investigations are used to illustrate the importance of weather data.
 ☐ Accident statistics ☐ Various types of weather-related accidents (includes hazardous weather such as wing shear, turbulence and icing) ☐ NTSB meteorology and procedures ☐ Examples ☐ Weather resources for accident investigations
8. Recorders AIT's Designated Representative, NTSB, explains the types and capabilities of flight recorders and the various types of recorders used in aviation.
☐ History of recorder ☐ Flight data recorders (FDR) ☐ Animations ☐ Cockpit voice recorder (CVR) ☐ Policies and procedures ☐ What's new in the recorders field?
9. <u>Aircraft Systems & Party Perspective</u> AIT's Designated Representative, NTSB, explains the perspective of a party participant to an accident investigation and other party participants discuss the working relationship with the NTSB in an investigation.
☐ What kinds of expertise do third parties bring to an investigation and what do they contribute☐ What parties to an investigation get from the investigation
10. <u>Air Traffic Control</u> AIT's Designated Representative, NTSB, discusses the role and capabilities of Air Traffic Control in aviation accidents.
☐ Introduction to Air Traffic Control (ATC) ☐ Use of ATC in investigations ☐ What information is available from ATC ☐ Services involving an ATC specialist ☐ Examples where ATC was a factor in accidents

11. Fire-Related Accidents w/Exercise

apply investigative methodology to fire investigations.	ow to
☐ Understand the combustion process ☐ Learn the definitions of fires and explosions ☐ Investigating fires; what we look for ☐ Case study of in-flight fire	
12. <u>Fracture Recognition</u> AIT's Designated Representative, NTSB, presents a practical background fracture and structural failure so that investigators are better equipped determine if a fracture or structural event precipitated an accident. In principles can be applied in mid-air collisions cases and in-flight breakups.	ed to
 ☐ The types of loading to which a structure is subjected ☐ The role of structures in transferring loads into stress ☐ The ways in which materials fracture and structures fail ☐ Material characteristics and how they affect fracture characteristics ☐ Fracture types ☐ How to determine the initial point of a structural failure ☐ A description of composite failures ☐ The capabilities of NTSB's Materials Laboratory 	
13. Reciprocating Engines/Propellers AIT's Designated Representative, NTSB, presents an overview of value aspects of propeller-driven aircraft to include reciprocating engines propellers.	
General types of propellers Single-engine propellers Multi-engine propellers Turbine engine propellers Forces to actuate propellers Propeller stresses Reciprocating engine types Internal working and failures of reciprocating engines What to look in reciprocating engines at the scene	
14. Flight Crew Operating Factors AIT's Designated Representative, NTSB, presents factors that NTSB Opera Investigators examine when investigating an accident and discusses the u animations in identifying issues where critical operations failure indentified.	use if
What do Operations investigators do?What are their sources of information?What more is needed in the industry to help operations investigation.	s?

Examples and case studies of actual investigations; animations
15. Survival Factors & Airports Survival factors rarely help determine the probable cause of an accident However, AIT's Designated Representative, NTSB, looks at the cause of injury and explains injuries in the context of an accident. Many of the improvements seen in occupant safety are the result of survival factor investigations.
☐ Background and expertise ☐ What NTSB looks for in a Survival Factors investigation ☐ Airports, Emergency Response, biomechanics ☐ Case studies
16. Aircraft Performance
Instruction includes case studies to help investigators determine various aspects of aircraft performance and how that information can be used during an aircraft accident investigation.
☐ Defining and measuring the motion of an airplane ☐ How to determine speed using time and distance ☐ Trajectories ☐ Icing
 ☐ Wet/contaminant runway performance and investigative techniques ☐ Wake turbulence ☐ What we look at/for on-scene to give us more information ☐ Practical exercises
17. <u>Investigating Reason</u> Various logistical tools, such as fault-tree analyses, are used to assist the investigative process.
☐ The needs and challenges of an accident investigation ☐ Helpful tools and Fault-tree analyses ☐ Faults versus Failures ☐ Case Study
18. <u>Major Foreign Investigations</u> AIT's Designated Representative, NTSB, discusses its role at a major foreign accident site.
☐ICAO and NTSB Operations within that framework ☐Annex 13 of the International Civil Aviation Convention ☐Basic differences when working outside the United States ☐U.S. Department of Stat involvement ☐Scenarios and examples of Foreign Investigations

19. Cognitive Interviewing

Interviewing are important to proper investigations.
☐ Importance of Interviewing ☐ Current techniques ☐ Different interviewing styles ☐ Current/typical approach to interviewing ☐ Typical interviewing errors ☐ Component psychological processes of effective interviewing
20. In-Flight Breakups and Mid-Air Collisions w/Exercise
AIT's Designated Representative, NTSB, explains what to look for in mid-air collisions and in-flight breakups while in the field and how to develop an understanding of how to investigate these types of accidents.
Sources of information
Using physical evidence
Locating and measuring valid scratch marks
Determining collision and convergence angles
☐Propeller slashes ☐In-flight breakups
On-scene in flight breakup exercise
21. <u>Turbine Engines</u> Case studies are used to discuss the uses and types of turbine engines to investigate accidents involving turbine engines.
Introduction to the turbine engine
Types of investigations involving turbine engines
On-site engine examination
Types of failures-videos
Bird strikes
Case Studies
☐JT-8D examination
22. <u>Tutorial</u> Group exercises are used in which an appointed Chief Investigator must take charge of a staged accident and use the NTSB group and party system to gather information and apply the principles and techniques NTSB uses to complete the investigation.
☐ Setup of Working Groups/Parties—Group Chairs ☐ Factual information gathering ☐ Daily reports

Interviewing witnesses at an accident scene using techniques of Cognitive

23. Human Factors and Performance

AIT's Designated Representative, NTSB, explains how to conduct a human

factors investigation, as well as how to evaluate human factor findings.
General topics of a human factors investigation Special topics of a human factors investigation Evaluating human factors findings
24. Biomedical Issues in Accident Investigation
Case studies are used to teach the importance of biomedical issues as they relate to an accident investigation.
Purpose of evaluating biomedical issues Factual tools
Analytical resources
Case studies
25. <u>Safety Recommendations</u> AIT's Designated Representative, NTSB, explains its safety recommendation process.
The importance of safety recommendations
☐ The NTSB process of safety recommendations
Emergency recommendations
Classifications of safety recommendations
26. <u>Board Meeting & Public Hearings</u> AIT's Designated Representative, NTSB, explains the importance of and differences between public hearings and Board meetings and the advantages and limitations of each venue.
☐ Public hearing - preparation and products ☐ Board meetings - preparation and products

ATTACHMENT 2

AIT-TECRO Technical Cooperation Program Estimated Budgets

(Information to be added by amendment by AIT and TECRO in consultation with their Designated Representatives NTSB and ASC)

Designated Representatives NTSB and ASC)
Description of Task(s):
Number of Host and Non-Host Participants:
Date and Location of Task Performance:
Total estimated cost:
Payment methods and date: