Docket No. SA-521

Exhibit No. 2P

NATIONAL TRANSPORTATION SAFETY BOARD

Washington, D. C.

FAA Cargo Strategic Action Plan

March 5, 2001

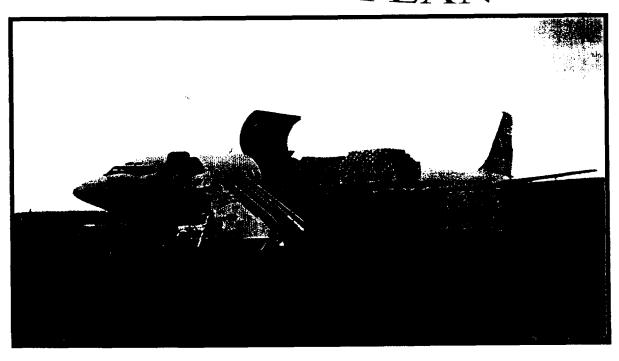
(27 Pages)



FLIGHT STANDARDS SERVICE AND AIRCRAFT CERTIFICATION SERVICE

CARGO STRATEGIC

ACTION PLAN



March 5, 2001

Prepared for:

Manager, Continuous Airworthiness Maintenance Division, AFS-300 Flight Standards Service Washington, DC 20591

Prepared by:

Cargo Strategic Planning Group Air Carrier Maintenance Branch, AFS-330





Executive Summary

The Flight Standards Service (AFS) established the Cargo Strategic Planning Group (the group) in April 2000 to identify pertinent issues related to the transportation of cargo by air and to respond to recommendations made by the National Transportation Safety Board (NTSB). Over the years, in response to cargo air carrier accidents, the FAA has taken steps to focus on cargo issues separately involving certification, maintenance, operations, FAA oversight, training, and parts modification. Since there has not been a single focal point in the FAA to address all of these cargo-related problems, AFS decided to place emphasis on this matter and took actions to establish a joint Flight Standards and Aircraft Certification team to study the issues and develop recommendations for a comprehensive solution.

The group of technical subject matter experts used a brainstorming process to identify all the relevant issues and potential solutions; and they collected data and analyze it. They have assigned roles, responsibilities, and organizational tasks to establish accountability for addressing future cargo issues. From the findings, the group described short-term and long-term actions which are necessary to identify and assess the transportation of cargo by air. There were recommendations made that will address the impediments to safety in cargo transportation.

The scope of the issues addressed in this plan include *certification* issues, such as the certification guidelines for type certification (TC) and supplemental type certification (STC) cargo approvals, and certification issues related to unit load devices (ULD). The *operations* issues include cargo loading, training, and security. The *airworthiness* issues include cargo handling systems and related airworthiness manuals and procedures.

There are other specific *FAA oversight* issues concerning certification of Load Supervisors and Load Master Programs, the need for Air Transportation Oversight System (ATOS) cargo surveillance, and a single focal point for cargo issues. There are general issues regarding the AFS aviation safety inspector (ASI) *training*; the need to address the FAA Southern Region's Specialized Expanded Cargo Oversight Surveillance (SECOS) Program proposal on a national level; and the *parts modification* issue for enforcing 14 CFR Part 145.2 requirements for repair stations that are modifying restraint components without re-identifying part numbers.

This plan recommends rulemaking as a comprehensive solution to the issues identified above and also recommends interim measures for addressing the issues while the rulemaking process is undertaken. The action plan prioritizes interim measures and establishes recommended time frames for completion. Implementation of this plan will ensure systems safety and increase public confidence and trust while reducing accidents and incidents in the diverse and ever-expanding cargo industry. The actions in this plan have a direct impact on safety in air transportation.

Approval

:

The Manager, Continuous Airworthiness Maintenance Division, AFS-300, (in coordination with the Manager, Aircraft Engineering Division, AIR-100, and the Manager, Air Transportation Division, AFS-200) will lead the planned work and assigned activities of this action plan. The Air Carrier Maintenance Branch, AFS-330, will manage the day-to-day accomplishment of this plan.

This Cargo Strategic Action Plan must be approved by the Director, Flight Standards Service, AFS-1, and the Director, Aircraft Certification Service, AIR-1, before any transfer of funds or commitments are made.

PROGRAM SPONSORS:		
Congress D. Singer	1-22-01	
Angela Elgee, Manager	Date	
Continuous Airworthiness Maintenance Divis	sion, AFS-300	
	1/24/61	
Gregory L. Michael, Manager	Date	
Manager, Air Transportation Division, AFS-2	800	
for D Al	2/8/01 Date	
James Jones, Manager	Date	
Aircraft Engineering Division, AIR-100		
CARGO ACTION PLAN CONCURRENCE/	APPROVAL:	
L. Nicholas Lacey, Director	Elizabeth Exickson, Director,	
Flight Standards Service, AFS-1	Aircraft Certification Service, AIR-1	
MAR = 5 200i	,	
Date	Date	

Note: During the coordination process, it was determined that this plan does not require the signature of the Director, Aircraft Certification Service, AIR-1.

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Distribution:

Copies of this approved Cargo Strategic Action Plan will be distributed to all Flight Standards and Aircraft Certification headquarters and regional personnel associated with this program. The Manager, Continuous Airworthiness Maintenance Division, AFS-300, will maintain the central repository of approved action and implementation plans and associated documents.

1.0 Background

Recent incidents and accidents have shown that there are continuing cargo-handling issues that relate to 14 CFR Part 121/135 passenger and all-cargo operators. As a result, the FAA identified a need to develop a strategic action plan. This plan articulates a complete and appropriate FAA response to address issues related to transporting cargo by air and to respond to NTSB Safety Recommendations A-98-45 through A-98-48.

In April 2000, AFS formed a Cargo Strategic Planning Group to develop an action plan. The group developed the plan by collecting data, analyzing that data, and evaluating current cargo operations and related regulatory requirements. The group was also chartered to assign roles, responsibilities, and organizational tasks to establish accountability for addressing future cargo issues. The group will present recommendations to the Director, Flight Standards Service, AFS-1, and Director, Aircraft Certification Service, AIR-1.

The Cargo Strategic Planning Group Charter (Appendix 1) describes the actions which were necessary to identify and assess the transportation of cargo by air and to produce recommendations that will address the impediments to safety in cargo transportation.

A list of the individuals from FAA Headquarters and regional Flight Standards and Aircraft Certification Directorate organizations, who served on the Cargo Strategic Planning Group, is found in Appendix 1 of this document. These skilled people are responsible for the development of this strategic action plan.

2.0 Group Actions

The group examined pertinent cargo information, data, and regulatory requirements surrounding the transport of cargo by air. This included certification, maintenance (continuous airworthiness), operations, weight and balance, freight forwarding, personnel qualifications, training, and FAA oversight. The group then identified issues to effectively accomplish the FAA's Flight Standards mission of assuring that operators have built safety into their systems to ensure accident-free operations. The group also categorized and prioritized the findings accordingly. Related NTSB Safety Recommendations were also reviewed for incorporation into the overall strategic plan. As a result, the group has prepared recommended strategies with proposed actions to develop safety standards governing the design, production, and airworthiness of aviation products. These strategies take a systems approach to improve the overall level of safety of cargo transportation by air.

The group developed an Issues Identification Working Document, which summarizes and details all the issue statements, short-term and long-term FAA actions, and delineates organizational responsibilities. This document will be the guidelines for the Air Cargo Implementation Team in its comprehensive "fix" of certification, operations, and maintenance issues involving the carriage of cargo by air.



In summary, in the Issues Identification Working Document, the group determined that the certification, operations, and maintenance standards require updating and new development. The existing regulations are vague and imprecise. There is no coherent method of managing air cargo safety issues. A comprehensive solution is required.

As interim solutions, the group determined that measures need to be introduced to ensure consistent application of existing standards: AC 120-27C, Weight and Balance; AC 25-18, Aircraft Modified for Cargo; 14 CFR 25.1581(c), Weight and Loading; and 14 CFR 119.49(a)(9), Authorization for the Method of Weight and Balance.

The group determined that long-term solutions include establishing the FAA internal responsibility for air cargo loading operational approvals and surveillance and that a Cargo Management System requirement through rulemaking should be established. Associated training, guidance, and advisory material needs to be developed; and qualification and training standards for air cargo loading personnel through rulemaking needs to be established.

3.0 Scope of the Issues

- 3.1 <u>Certification</u>: The group recommends focusing on the following issues:
 - ULD's compatibility with the loading system;
 - TC versus STC being deficient in identifying what ULD's are compatible with the airplane installation (e.g., weight and balance);
 - Light Part 25 cargo conversion activity;
 - Supernumeraries being carried without appropriate exemption to the regulations;
 - Legal definition of ULD's to know which ULD's are Technical Standard Orders (TSO) approved or non-TSO'd as appliances;
 - Instructions for Continued Airworthiness to identify the ULD maintenance responsibilities;
 - De-certification of containers, and the removal of TSO identifications from TSO'd ULD's;
 - National Aerospace Standards NAS 3610 items (standards for ULD construction);
 - TSO C-90c, Classification requirements for nets, pallets, and containers; and
 - Non-certified containers which have varied design standards.



- 3.2 Operations: The group found the following specific issues which should be addressed:
 - Regulatory requirements for Load Master Programs and a cargo loading checklist;
 - Training for flight crews (all cargo and supplemental operations)
 - Training for cargo loaders;
 - Computer-based instruction (CBI) Cargo Training Course; and
 - Cargo handling and loading procedure for company materials (COMAT) as Air Dangerous Goods.
- 3.3 <u>Airworthiness</u>: The recommended issues that should be addressed include:
 - The cargo system equipment where the carriers are inter-mixing load-bearing restraint parts without FAA approval;
 - Cargo-loading system maintenance and programs and the necessary guidance material;
 - Air carrier cargo handling procedures and associated training;
 - Policy and procedures for controlling the calibration of scales; and
 - Programs and requirements for surveillance of cargo operations (code share/ international) for inter-line transfers.
- **3.4 FAA Oversight:** The group recommended the following other specific issues to be addressed:
 - Regulatory requirements for Loading Supervisors;
 - Regulatory requirements for Load Master positions and programs;
 - Need for Air Transportation Oversight System (ATOS) cargo surveillance elements (such as cargo/ground-handling issues);
 - Need for subject matter experts (FAA resources) and a national focal point for cargo to provide a point of contact for cargo issues;
 - AFS ASI training issues which concern updating the CBI training course to include more directed maintenance-issues and specialized cargo-related training.
 - Need to address the Southern Region's Specialized Expanded Cargo Oversight Surveillance (SECOS) Program proposal on a national level.
 - Parts modification issue for enforcing 14 CFR Part 145.2 requirements for repair stations that are modifying restraint components without reidentifying part numbers;
 - Specific approval for the carriage of animals via operations specifications and the need for related handbook material.



4.0 Group Recommendations:

Based on a joint AFS/AIR technical analysis of the pertinent issues, the group recommends the following strategies as comprehensive solutions for improving the overall safety level of cargo transportation by air.

4.1 Rulemaking:

- 4.1.1 Establish subparts to the appropriate operational rules (14 CFR Parts 119, 121, 125, 129, and 135) to require operators to establish and maintain a Cargo Management System for the control of transportation of cargo by air. (Appendix 2 contains the group recommendation for a proposed regulatory initiative.)
- 4.1.2 Provide consolidated guidance material in the form of advisory circular and policy handbook materials.

4.2 <u>Interim Measures</u>:

- 4.2.1 To work within established framework to ensure the consistent application of existing regulations, policy, and guidance.
- 4.2.2 To update and ensure the accuracy of FAA policies and guidance material regarding the transportation of cargo by air.
- 4.2.3 To identify, provide, and require the necessary training of FAA inspection personnel and operator personnel on the consistent application of that guidance.

4.3 Prioritization:

- 4.3.1 The recommended solutions are categorized and prioritized in the areas of certification, maintenance, operations, and FAA oversight of the air transportation industry.
- 4.3.2 Resources are needed to train inspectors to current standards.



4.4 Resolutions:

- 4.4.1 Resolution begins with development of standardized policy guidance from within FAA concerning carriage of cargo. This includes rulemaking to consolidate existing regulations and new regulations to close shortfalls in the existing FAR's.
- 4.4.2 Partnerships with air carriers are required to develop proper procedures for cargo handling, audit requirements to ensure compliance with the carrier's manuals, and aircraft inspection programs to ensure that aircraft meet type design.

5.0 Program Considerations

5.1 Responsible Organizations:

5.1.1 Flight Standards Service (AFS)

- ➤ Flight Standards will be required to provide the necessary resources and leadership to develop the Rulemaking Project Record (RPR). This rulemaking will establish a new subpart to the appropriate operational rules which will provide a regulatory means to address cargo operations. The establishment of this new subpart will provide substantive requirements which will facilitate a standardized regulatory approach for the carriage of cargo in air transportation.
- ➤ In conjunction with the rulemaking effort, AFS will be responsible for developing advisory circular material, handbook guidance, and appropriate ASI training.
- ➤ While the rulemaking effort is underway, AFS-200/300 will need to review all pertinent regulations, policy, and guidance material to ensure a comprehensive standardized approach to the cargo transportation issues that have been identified.
- > AFS-300 will be responsible to interface with AIR and ACS to ensure successful implementation and completion of this plan.

5.1.2 Aircraft Certification Service (AIR)

- ➤ AIR will provide the necessary resources and leadership for the certification requirements specified in 14 CFR §§ 25.23 through 25.29.
- In accordance with 14 CFR § 25.1583(c), AIR will assure compliance for type certificate (TC) and supplemental type certificates (STC) programs associated with the production or modification of cargocarrying aircraft.
- AIR will take the lead on assessing the Technical Standard Order (TSO) system, including procedures (14 CFR §§ 21.601 through 21.621), and revising as appropriate, for the purpose of standardization of cargo-carrying devices. This lead includes the standardization of Parts Manufacturer Approval for cargo associated components authorized via 14 CFR Part 21, Subpart K, Approval of Materials, Parts, Processes, and Appliances.

5.1.3 Office of the Chief Counsel (AGC)

➤ AGC-200 will determine the definition for Unit Load Devices (ULD).

5.1.4 Office of Civil Aviation Security (ACS)

- ➤ Civil Aviation Security will support AFS and AIR, as necessary, to ensure necessary training and guidance for safe transportation of air dangerous goods (ADG) as company materials (COMAT) are provided to field ASI's.
- Requirements Analysis: As required by the National Civil Aviation Review Commission (NCARC) report, dated December 12, 1997, the FAA has been directed to develop strategic plans to improve safety with specific priorities based on objective, quantitative analysis of safety information and data. The Continuous Airworthiness Maintenance Division and the Air Transportation Division have therefore jointly undertaken a major initiative to examine pertinent cargo information, data, and regulatory requirements surrounding the transport of cargo by air. The Flight Standards and Aircraft Certification organizations entered into the joint strategic planning process to identify operational problems and issue statements.

- 5.2.1 An FAA team of subject matter experts reviewed the causes of cargo-related accidents/incidents and identified short-term and long-term actions. This effort presents recommendations that will have a direct impact on safety and accident prevention. This initiative supports the agency's national safety goal of reducing the aviation accident fatality rate by 80 percent over the next 10 years.
- 5.2.2 The critical requirement for this initiative is to respond to recommendations made by the National Transportation Safety Board (NTSB), as a result of an accident on August 7, 1997, involving a Douglas DC-8 operated by Fine Airlines, Inc. (Fine Air). The NTSB determined the probable cause of the accident to be improper cargo loading and load shift during takeoff.
- 5.2.3 There is an associated link to the FAA Strategic Plan, specifically, a key component in the Administrator's Safety-Focused Agenda and Safer Skies Corporate Project to reduce the fatal accident rate. This planning effort addresses the cause of cargo-related accidents to determine the best actions to break the chain of events that lead to these kinds of accidents.
- 5.2.4 There is a direct link to AVR Performance Goal #3: Enhance the AVR Surveillance Program to utilize risk management models and tools to forecast, identify and target areas where surveillance best addresses critical safety issues.
- 5.2.5 There is an associated link to the GAO Study RCED-98-21, October 1997, Aviation Safety: FAA Oversight of Repair Stations Needs Improvement, concerning record keeping requirements. FAA surveillance has shown that repair stations are intermixing parts of cargo retention systems without approval, repairing these components without current data, and repairing Unit Load Devices (ULD) without current data. In addition, most ULD's are certified via TSO, and Part 43 has record keeping requirements that are not being followed. An example of this happening is the interline transfer of the ULD from carrier to carrier. This raises the question as to how records for these ULD's are being retained and by whom.

- 5.3 <u>Benefits</u>: The following benefits that will be attained through implementation of this Strategic Plan are significant to the agency and the aviation community.
 - 5.3.1 If this initiative is approved and application of the regulations is standardized, safety will be increased. As world-wide cargo operations increase, interline transfer of cargo between American and foreign operators will increase. This initiative will ensure that cargo trans-shipped to U.S. carriers meets the requirements of the carrier and the FAA.
 - 5.3.2 Efficiencies will be realized through the use of standard procedures, equipment, and training requirements. Carriers will realize savings when inspectors are trained to current standards and application of standard requirements. This will mitigate the delay of aircraft operations due to inspectors not giving accurate information and possibly delaying departure of an aircraft that may meet FAA requirements.
- 5.4 Impact: The following delineates the impact on air carriers, the limitations to implement both within the industry and FAA, and direct costs:
 - 5.4.1 The impact on the aviation industry would be moderate. Existing regulations require adherence to FAA-approved weight and balance procedures. This includes loading, cargo system serviceability, and ULD serviceability.
 - 5.4.2 Historically, the FAA has had to increase inspections so that these regulations are being enforced to the extent required to ensure the highest level of safety for all carriers that transport cargo.
 - 5.4.3 The current limitations are dictated by the size of the inspector workforce and the training level of these inspectors. Resources are needed to train inspectors to current needs and requirements. In addition, air carriers may incur costs associated with the training of their personnel, development of acceptable procedures, and inspection of aircraft and ULD's to ensure compliance with the type design of the product involved.
 - 5.4.4 The direct costs include loss of life due to accidents involving cargo operations not conducted as required, and hull losses due to the same issues, as well as ground collateral damage.

- 5.5 <u>Criticality</u>: As evidenced by recent accidents and incidents involving all-cargo operations and some passenger operations, this strategic plan should be given high priority in order to address inconsistencies.
 - 5.5.1 There are inconsistencies identified in various accident reports when describing carrier procedures which cast a doubt on the FAA's ability or commitment to oversee these types of operations.
 - 5.5.2 The inconsistencies include policies and procedures of air carriers, major alterations of aircraft that do not meet FAR requirements, parts substitutions in cargo handling systems that have not been approved, and the lack of knowledgeable FAA oversight.

6.0 Time-line/Schedule for Implementation

The proposed timeframe when the agency must have completed the recommended actions to avoid adverse impact on aviation safety and cargo services is in two parts. The group identified short term actions that should be accomplished within the next 12 months with ongoing monitoring. The second, longer-term, part involves new rulemaking to establish a subpart to Part 121 that details requirements for cargo operations by both all-cargo operators and passenger operators.

Successful completion of the Strategic Action Plan is predicated upon obtaining approval by AFS-1/AIR-1 by the second quarter of FY-01 on the Cargo Strategic Action Plan. The planned actions for full implementation of this initiative are recommended to be completed within 4 years. The following planned actions must be considered:

- An approved Cargo Strategic Action Plan is published in the <u>Federal Register</u> for public comment. The input from industry will be used to develop the Cargo Management System Implementation Plan.
- AFS and AIR Chief Financial Officers are to obtain/release funds allocated to support
 this initiative, which must occur in FY 2001 and in all subsequent years until the
 Cargo Management System (CMS) is fully implemented.
- Budget Increase Issue Papers (BIIP) and Call for Estimates for CMS requirements
 must be submitted in FY 2001 and in all subsequent years until CMS is fully
 implemented.
- A Rulemaking Project Record (RPR) for Cargo Management System NPRM is to be submitted.

• The short-term Priority #1 actions to develop and revise policy and technical guidance material and training (Appendix 2, Page 5) should be accomplished within 12 months after the Cargo Management System Implementation Plan is approved.

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- The CMS Implementation Team should plan to have the CMS Notice of Proposed Rulemaking drafted, as determined by the Office of Rulemaking priority and scheduling, approximately 21 months after the Cargo Management System Implementation Plan is approved.
- The Priority #2 actions to develop and revise policy and technical guidance material and training (Appendix 2, Page 6) should be planned for accomplishment approximately 27 months after the Cargo Management System Implementation Plan is approved.
- The Priority #3 actions to develop and revise policy and technical guidance material and training (Appendix 2, Page 7) should be planned for accomplishment approximately 36 months after the Cargo Management System Implementation Plan is approved.
- Following the rulemaking priority and scheduling process, the CMS Implementation Team should plan to have the disposition of comments and the CMS Final Rule Rulemaking drafted, and to complete the coordination and publication of the CMS Final Rule in the <u>Federal Register</u> within 18 months after the CMS NPRM is published.

7.0 Estimated Resources for Implementation

FAA funding will be impacted during each of the next four fiscal years to implement this action plan. For budgetary planning purposes, it is expected that estimates should be based, on average, on approximately one-fourth of a full-time equivalent (FTE) position (approximately 450 hours) in each of the affected organizations. The stakeholder organizations include the AFS Headquarters and FSDO organizations; in the AIR Headquarters and the Aircraft Certification Directorate organizations; in Office of Civil Aviation Security; and the Office of Rulemaking. The projected travel, training, supplies and contract dollars to support this project in the Flight Standards Service are expected to be approximately \$130 K per year. Program Requirements must be submitted in the Budget Increase Issue Papers (BIIP) starting in FY 2001, and all subsequent years, until the Cargo Management System is fully implemented.

It is expected that jointly Flight Standards should plan to assign 11 individuals (6 headquarters, 5 regional employees) to serve as team members on the ongoing efforts to fully implement this plan; Aircraft Certification Service should plan for three individuals (1 headquarters and 2 directorate employees); and the Office of Civil



Aviation Security and the Office of Rulemaking will need to assign one representative each to serve on the team. As stated above, these individuals will need to plan to be available to provide approximately 450 hours on an as-needed basis. It is anticipated that one meeting per quarter for one week will be scheduled for planning and the team is is encouraged to use interim NetMeetings to accomplish its objectives. There should be representatives from the (*) AFSCME Bargaining Unit and (#) PASS Bargaining Unit on the team.

Flight Standards Organizations	No. of Estimated Resources
AFS-300	 (Airworthiness ASI (*), management program analysts for planning and legal counsel)
AFS-200	1 (Operations ÁSI)
AFS-500	1 Instructional Systems Design Specialist
AFS-600	1 Aviation Safety Inspector/Staff Specialist
ASO-FSDO-01 (#)	2 (Operations and Airworthiness ASI's)
AGL-FSDO-23 (#)	2 (Operations and Airworthiness ASI's)
ASO-Delta-CMO-27	1 (Supervisory PMI)
Aircraft Certification Organizations	No. of Estimated Resources
AIR-100	1 Aviation Safety Engineer
ANM-113	1 Transport Airplane Directorate Manager
ANM-230	1 Staff Specialist
Civil Aviation Security Organization	No. of Estimated Resources
ACS-40	1 Security Specialist
Office of Rulemaking Organization	No. of Estimated Resources
ARM-200	1 Regulatory Technical Writer/Editor



Cargo Strategic Planning Group Charter April 25, 2000

Background: This work plan describes actions necessary to complete the requirements for gathering data and identifying all issues related to transporting cargo by air. This work group is chartered to develop a strategic action plan that articulates a complete and appropriate FAA response to address issues related to transporting cargo by air.

Cargo Strategic Planning Group: The following named individuals from FAA Headquarters and regional Flight Standards Service and Aircraft Certification Directorate organizations, in a structured team setting, will assess air cargo transportation issues and produce those recommendations necessary to address impediments to safety in cargo transportation.

Angela Elgee Russell Unangst Emilio Estrada Jeane Hinton Angela Washington William D. Scott (*) Carl R. Welke (*) James Dodge James G. Greenwood (*)

Lirio Liu Nelson

Barry Basse Efrain Arroyo Renton S. Bean Theodore (Ted) Perry Manager, Continuous Airworthiness Maintenance Div., AFS-300 Team Leader - Resource and Program Mgmt. Br., AFS-310

Technical Leader (ASI), Air Carrier Branch, AFS-330 Management/Program Analyst (Planning), AFS-310 Management/Program Analyst (Legal Counsel), AFS-310

ASO-FSDO-01, Louisville, KY (PMI, UPS) AGL-FSDO-23, Detroit MI (PMI, Spirit Airlines)

Staff Specialist, ANM-230, Renton, WA (Airworthiness ASI)

ASO-FSDO-01, Louisville, KY(PMI, DHL Airways) Mgr, Standardization Br., ANM-113, Transport Airplane

Directorate

ASO-Delta CMO-27, College Park, GA (Supervisory PMI, DAL) AGL-FSDO-23, Detroit, MI (Supervisory ASI, Operations)

Technical Programs and Continued Airworthiness Br., AIR-120

Air Carrier Branch, AFS-220

(*) PASS Bargaining Unit Members

Objective: The AFS/AIR Cargo Strategic Planning Work Group will review data (including relevant NTSB Safety Recommendations) to identify major cargo issues. This group will identify the appropriate organizations, their roles, responsibilities, and tasks required for dealing with cargo issues. The work group will present recommendations for addressing cargo issues to the Director, Flight Standards Service, AFS-1, and the Director, Aircraft Certification Service, AIR-1.

APPENDIX 1

Page 2

Tentative Schedule: The Cargo Work Group will hold its first meeting on April 25-27, 2000, in Washington, DC, to initiate its planning strategies and complete a draft strategy and action plan. The team will meet as scheduled throughout the next 20 weeks in order to submit its final action plan to AFS-1 by August 31, 2000.

April 25 27 2000	Data Davisus/Diaming Consists
April 25-27, 2000	Data Review/Planning Session
June 20-21, 2000	Complete identification of cargo issues.
June 28, 2000	Netmeeting/Telecon conducted to review planning documents
July 18, 2000	Netmeeting/Telecon conducted to continue development of draft plan
August 2, 2000	Netmeeting/Telecon conducted to continue development of draft plan
August 24, 2000	Netmeeting/Telecon conducted to complete draft Cargo Strategic Action Plan
August 2000	Present AFS-1/AIR-1 Management Briefing
September 2000	Submit Strategic Plan for approval
December 2000	Complete Final Strategic Plan

Methodology: The AFS/AIR Cargo Strategic Planning Group will accomplish its objective using overlapping phases:

<u>Phase 1 - Background review and issue identification</u>: Examine pertinent cargo issues, including certification, maintenance (continuous airworthiness), weight and balance, freight forwarding, personnel qualifications, training, and FAA oversight.

<u>Phase 2 - Analysis</u>: Review safety aspects, and then categorize and prioritize the findings according to certification, operations, and airworthiness functions.

<u>Phase 3 - Consolidate Findings and Prepare Recommendations</u>: Prepare recommended strategies with proposed actions to improve the level of safety for transportation of cargo by air.

Deliverables:

- Recommend strategies with proposed actions
- Cargo Strategic Action Plan
- Executive Briefings to AFS-300, AFS-200 and ANM-100.

Performance Criteria:

The Cargo Strategic Planning Group is expected to perform a review of current cargo operations, collect data, analyze cargo issues; to assign roles, responsibilities, and organizational tasks to establish accountability for addressing future cargo issues; and to present recommendations to senior management.

Using the methodologies and submitting the deliverables cited above, the Cargo Strategic Planning Group will have completed its requirements analysis phase of the AFS planning process. The requirements and objective of this charter are accomplished when the Executive Briefings and Program Manager submits the final Cargo Strategic Action Plan to top management of Flight Standards and Aircraft Certification for approval.

The *Requirements Analysis* for this project involves issue identification, requirement assessment, and determination of the relevance of requirements so that they clearly link to the FAA mission and appropriate AVR/AFS/AIR safety goals and initiatives. The roles and responsibilities and assigned tasks of all affected organizations must be addressed. Other interested organizations (i.e., Congress, Department of Transportation, NTSB, or other aviation industries or organizations) should be identified.

Submission of the final Cargo Strategic Action Plan to Flight Standards and Aircraft Certification management for approval will require that a new charter be developed. This will direct the future development of any further requirements analysis, investment analysis, and the implementation action.

- Investment analysis defines all the resources (money, personnel, equipment, facilities, and time) needed to meet the requirements. This phase of the planning process is intended to align AFS/AIR resources to meet each validated requirement in order to gain the greatest possible benefits for FAA. All possible funding sources for the AFS and AIR initiatives should be considered. The Program Division is responsible for making resource estimates, prioritizing the requirements, and identifying proposed funding sources. All relevant assumptions and constraints should be considered.
- Implementation planning identifies all the ongoing activities and associated actions
 which must occur to accomplish each approved and validated requirement. Specific
 tasks, milestones, resource allocations, responsibilities, and external impacts
 associated with the implementation of each approved and funded requirement are
 documented. The assigned Program Division has responsibility to approve and
 distribute the action plan; to track the implementation and initiation of requirements
 in their organizations' areas of responsibility; and to keep AFS/AIR management
 apprised of any problems or issues which arise.
- A parallel *Process assessment* will occur to monitor the effectiveness and progress of the implementation planning.

APPENDIX 1 Page 4

Attachment 1

Data Resources:

AFS Joint Handbook Bulletin HBAT/HBAW 97-12A, Special Emphasis Surveillance of Part 121 Air Carrier Cargo Loading Procedures

AFS Handbook Bulletin HBAW 00-04, Special Emphasis Surveillance of Part 121 Air Carrier Cargo DC-9's, dated March 22, 2000.

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Technical Standard Order, TSO C90c, Cargo Pallets, Nets, and Containers, dated April 3, 1992.

NTSB Safety Recommendations A-98-45 thru A-98-58 (AFS-200/AFS-300/AFS-900)

CBI Course #27013, Cargo Inspection and Surveillance

Audit reports on all 14 CFR Part 121 supplemental cargo operators collected as a result of the HBAW and HBAT bulletins and CBI instruction.

JOINT FLIGHT STANDARDS SERVICE AND AIRCRAFT CERTIFICATION SERVICE

APPENDIX 2 Page 1

CARGO ACTION PLAN PROPOSAL Rulemaking Proposal of Part 121, Subpart XX.

The group recommends the following outline for developing rulemaking to establish an Air Cargo Management System as a subpart to 14 CFR Parts 119, 121, 125, 129, and 135.

Guidance

- □ Advisory Circulars TBD
- □ Handbooks TBD

Accountable Manager

Director of Cargo/Air Dangerous Goods

- Experience
- Qualifications
- □ Certification

Responsibility

Oversight of Transportation of Cargo by Air

- Ground Handling
- □ GSE Equipment
- □ Unit Load Device (ULD) serviceability
- Training

Organization

- Cargo Handlers
- Load Planners
- ADG Personnel
- Auditors

APPENDIX 2 Page 2

Competent Personnel

Certification

- Load Supervisors
- Load Masters

Facilities and Equipment

Provide Adequate Equipment

- □ Load Aircraft
- Unload Aircraft
- Cargo Retention

Program

- □ Unit Load Device Maintenance Programs
- Cargo Handling Procedures
- Authorized Unit Load Devices for Aircraft Operated

Unit Load Device Serviceability

Center of Gravity Offset Control

Manual

List of Manual Contents

- Organization Chart
- Duties and Responsibilities
- Policy
- Procedures
- Training Requirements
- ADG
- □ Recurrent Training

Operations Specifications

- Specific Authorization for Weight and Balance Programs for carriage of cargo
- Authorization for Transportation of Animals

Reporting - Add items to 121.703 to require reporting of cargo incidents, such as:

- a failure of load bearing components,
- a cargo shifts,
- improper loading that affects weight and balance.

CASS (Continuing Analysis Surveillance System)

□ Procedures to establish audit requirements for cargo operations both passenger and all cargo.

Records

- Training
- Retention
- ULD Certification
- GSE Records

Personnel Certification

Certification requirements

- Load Supervisors
- Load Masters
- Ground Handlers

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Training

- Requirements
- Syllabus
- □ Recurrent

Equipment Standards

- Aircraft
- □ GSE
- ULD
- Bulk Load Retention
- Animal Transportation

Short Term Actions:

While the rulemaking project is in process, the following interim steps will be initiated:

- ➤ Evaluate procedures in place that show compliance with FAR 121, subpart G, section 121.135(a)(1), (b)(2), (b)(16), (b)(20), (b)(23) and also subpart T, section 121.665. Consolidate handbook guidance and policy to ensure standardized approach for inspectors. Research past Action Notices, Orders, and handbooks for applicable guidance.
- ➤ Review and/or revise existing training for flight crews and comply with section 121.401/403
- Evaluate maintenance programs for airworthiness of ULD's and cargo-handling systems to comply with section 121.153(a)(2). Disseminate guidance to inspectors on data required to substantiate parts substitutions, modifications, and serviceability standards.
- ➤ Compliance with Operations Specifications Part A, paragraph A-001 that states "The certificate holder shall conduct these operations in accordance with the specific authorizations, limitations, and procedures in these operations specifications and all appropriate Parts of the CFR". This Part requires compliance with all policies and procedures stated in manuals accepted by the FAA to comply with Section 121.135 and Section 121.369.

The Group has assigned priorities to various activities that are defined as short-term actions. These items will supplement the long-term recommendation of rulemaking.

Priority #1

Specialty	Assigned Actions	Responsible Organization
a. Certification:	Have ARAC tasked to begin work on the multiple complex supplemental type certification modifications.	ANM-100
b. Operations	 Establish requirements for Cargo Loading Establish requirement for training of Flight and Load Crews 	AFS-200 AFS-500/AFS-600
c. Airworthiness	 Establish requirements for Load Handler Training Evaluate Air Carrier Procedures for adherence to current requirements 	AFS-500/AFS-600 AFS-300
d. FAA Oversight	Inspector training via Computer- based Training and handbook bulletins	AFS-500/AFS-600

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Priority #2

Specialty	Assigned Actions	Responsible Organization
a. Certification:	Update certification requirements of Unit Load Devices (ULD)	AIR-100
b. Operations		
c. Airworthiness	 Cargo Handling Systems Unit Load Devices (ULD) Maintenance Programs 	AFS-300/ANM-100 AFS-300
d. FAA Oversight	Formal Inspector Training in cargo operations and aircraft configuration	AFS-500
e. Transportation of Animals	Policy included in maintenance programs to require operations specification which should list special requirements for transportation of animals to include procedures, aircraft configuration, weight and balance concerns, supernumeraries for animal handling.	All organizations

Priority #3

Sp	pecialty	Assigned Actions	Responsible Organization
a.	Certification:	Light Cargo ConversionsCarriage of Supernumeraries	ANM-100/AFS-300 ANM-100/AFS-300
b.	Operations	•	
c.	Airworthiness	•	
d.	FAA Oversight	Determine responsibility for cargo- loading operations (operations vs. airworthiness)	AFS-200/AFS-300
		Hazardous materials	ACS-40
		Company Materials (COMAT)	ACS-40/AFS-300
f.	Specialist Expanded Cargo Oversight Surveillance (SECOS)	Determine feasibility of continued SECOS operations.	AFS-1/AFS-300

APPENDIX 3

Glossary Of Terms

AC Advisory Circular

ACS Office of Civil Aviation Security

ADG Air Dangerous Goods
AEG Aircraft Evaluation Group
AFS Flight Standards Service
AIR Aircraft Certification Service
ANM Northwest Mountain Region
ATOS Air Transport Oversight System

AVR Associate Administrator for Regulation and Certification

BIIP Budget Increase Issue Paper
CBI Computer Based Instruction

COMAT Company Materials

EPI Element Performance Inspection
GAO General Accounting Office

ICA Instructions for Continued Airworthiness

NAS National Aerospace Standard

NCARC National Civil Aviation Review Commission

NPRM Notice of Proposed Rule Making
NTSB National Transportation Safety Board

RPR Rule Making Record

SAE Society of Automotive Engineers
SAI Safety Attribute Inspection

SECOS Specialized Expanded Cargo Oversight Surveillance

SFAR Special Federal Aviation Regulation STC Supplemental Type Certificate

STI Short Term Incentive

Supernumeraries Non-flight crewmember carried aboard an aircraft in accordance

with 14 CFR Part 121.583

TAD Transport Airplane Directorate

TC Type Certificate

TSO Technical Standard Order

ULD Unit Load Device