

1999

Volume

3 of 3

# **Aircraft Loading Manual**

## **Training Material**

**March 24, 1999**

# **VOLUME III AIRCRAFT LOADING MANUAL**

## **TRAINING MATERIAL**

1. Training Sources
2. Course Syllabus
3. Course Outline
4. Ground Services Department Seminar (GSD)
5. Computer Based Training (CSD)
6. Forms/Test
7. Emery Intranet
8. Illustrations
9. GSD Trained
10. EWW Service Centers
11. EWW HDY
12. MSL's/Handouts
13. Dayton ULD Training
14. Future Training





**Griffin, Debbie F.**

---

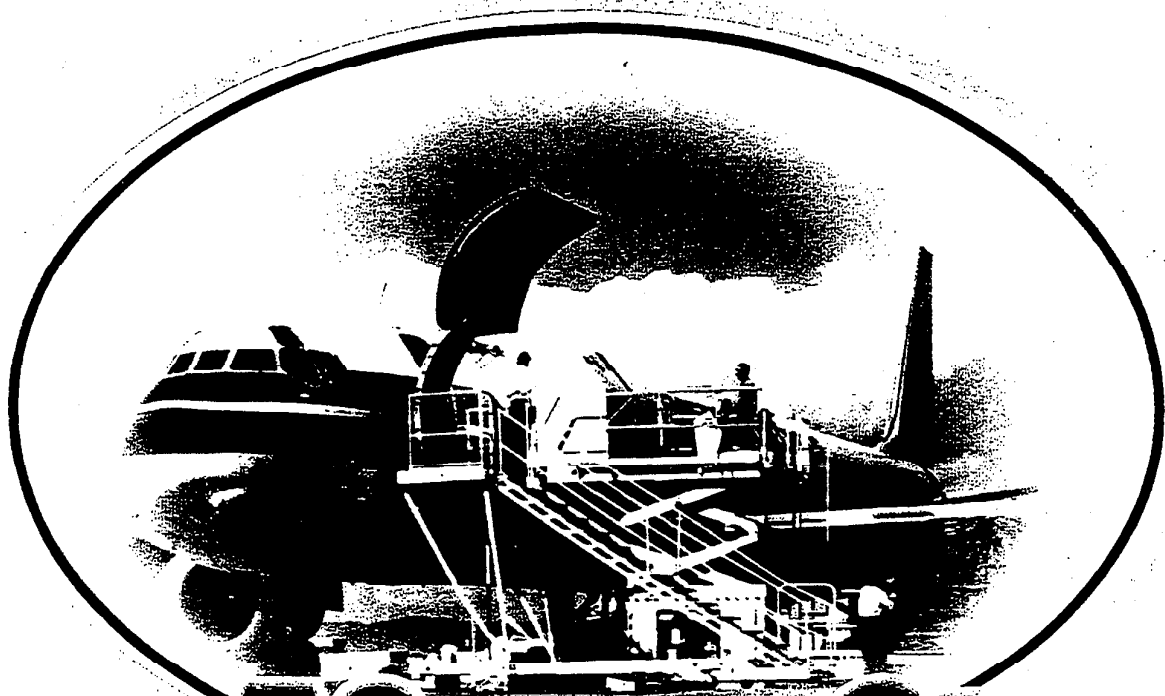
**From:** Griffin, Debbie F.  
**Sent:** Tuesday, November 10, 1998 4:03 PM  
**To:** Griffin, Debbie F.  
**Subject:** Aircraft Loading Training Status

Maintenance Training has completed the following training requirements:

Contracted Groundhandlers Supervisors and Mgrs./ 08/02/98 / 100% complete  
Thomas J Nanna/CER/EWW 08/25/98 and 10/14/98 / 100% complete  
RickKlemann/WER/EWW 09/28/98 / 100% complete  
Wayne Driscoll/EAR/EWW 10/01/98 / 100% complete  
Charters Department/HUB 09/23/98 / 100% complete  
EWW HUB Supervisors / Trainers 10/07/98 / 100% complete

*Debbie Fusco Griffin*  
Maintenance Training Program Specialist  
[REDACTED]

**EMERY**  
**WORLDWIDE**  
**AIRLINES**



# Aircraft Loading

**M A N U A L**

September 9, 1997

**ACTION:** FAA Improvements as a Result of Fine Airlines,  
Inc. Issues

Acting Director, Flight Standards Service, AFS-1

Managers, AFS-200, AFS-300  
Managers, All Flight Standards District Offices  
Through: Managers, Regional Flight Standards Divisions

Administrator Garvey has asked that the improvement actions she initiated be aggressively pursued toward a 60-day completion and that she be advised on the progress at the 30-day point. These actions were reported in her September 4 press release regarding the Fine Airlines, Inc., voluntary cessation of flying.

I am assigning the responsibility for completion of these actions to the AFS organizations shown in the attached table. The completion date is November 3. Lead Organizations are to report by ccMail to AFS-1 by 11:00 am EDT each Monday on the status of these actions, until completed.

Since some of the efforts listed consist of longer term activities, the short term (60-day) goal should be reported as the status of the project development planning.

Please provide by ccMail the name of your designated point of contact for these actions to Bernie Busby. For further information he may be reached at

These efforts will significantly improve our oversight of this segment of the industry and result in improved safety of flight.

/s/

Thomas E. Stuckey

Attachment

## FAA OVERSIGHT IMPROVEMENTS OF AIR CARGO OPERATIONS

Action	Lead Organization
<p>1. Increase focus on FAA inspection of cargo loading procedures</p>	AFS-200/300
<p>2. For each cargo only carrier, inspect:</p> <ul style="list-style-type: none"> <li>- carrier oversight, responsibility and supervision of cargo loading operations</li> <li>- cargo handler training</li> <li>- cargo weighing and handling procedures</li> <li>- cargo system maintenance procedures (pallets, nets, aircraft cargo floors, etc.)</li> <li>- aircraft loading and cargo retention</li> <li>- air carrier's oversight of freight forwarders</li> <li>- if applicable, air carrier's use of interior "profiler" to ensure proper clearance between freight and interior sides of fuselage. (Note: profiler is a tool that is placed between cargo pallets and side wall of fuselage to ensure enough space is maintained.)</li> <li>- condition and approval method of 9 G barrier nets and lower lobe restraint nets and straps</li> <li>- condition of cargo handling systems (rollers, locks, ball mats, etc.)</li> <li>- cargo netting, ropes, and straps to ensure all meet burn test requirements</li> <li>- all cargo containers, nets and pallets to ensure articles are properly marked per TSO marking requirements, ensure maintenance program exists for continued airworthiness of these articles</li> </ul>	All FSDOs (RO's Reporting)

- all TSO'd articles to ensure eligibility for use on an air carrier's particular make and model aircraft

3. Retest performance of Flight Data Recorders

4. Inspect operator oversight and audit of contracted out cargo services

5. Revamp FAA inspection procedures

ACE-200  
Sandia National  
Laboratories  
(Sandia)

6. Initiate, with Sandia, an assessment of steps to be taken to strengthen aviation inspection programs

ACE-200  
Sandia

7. Review inspection methods for effectiveness in detecting problems

AFS-900

ORDER: 8300.10 And 8400.10  
APPENDIX: 3  
BULLETIN TYPE: Joint Flight Standards Handbook Bulletin for  
Airworthiness (HBAW) and Air Transportation  
(HBAT)  
BULLETIN NUMBER: HBAW 97-12 and HBAT 97-12  
BULLETIN TITLE: Special Emphasis Surveillance of Part 121 Air  
Carrier Cargo Loading Procedures  
EFFECTIVE DATE: 09-05-97  
TRACKING NUMBER: N/A

-----  
NOTE: THIS BULLETIN REQUIRES SPECIFIC PTRS INPUT. SEE ITEM #5  
-----

1. PURPOSE. This bulletin has two specific purposes. The first purpose is to reemphasize and expand current policy and guidance concerning weight and balance control procedures, cargo loading procedures, and loading schedules and instructions. The second purpose is to validate compliance with those currently approved procedures to include the surveillance of cargo loading operations aboard an aircraft. This validation process will be accomplished by the completion of a special emphasis ramp check on all Title 14 of the Code of Federal Regulations (14 CFR) part 121 air carriers that currently conduct any type of cargo loading operation, to include the loading of passenger bags or company material aboard any air carrier aircraft.

2. BACKGROUND.

A. Part 121, section 121.665 states that the certificate holder is responsible for the preparation and accuracy of a load manifest form before each takeoff. In addition, the load manifest form must be prepared and signed for each flight by employees of the certificate holder who have the duty of supervising the loading of aircraft and

preparing the load manifest forms. If these duties are accomplished by other than the certificate holder's employees, then those individuals must be qualified and authorized by the certificate holder.

NOTE: In addition to that stated in section 121.665, the Federal Aviation Administration's (FAA) policy is that the certificate holder must ensure that those individuals, who are not the certificate holder's employees, are directly supervised, during the performance of their duties, by an appropriately qualified supervisor employed by the certificate holder.

B. Part 119, section 119.53 outlines the requirements for wet leasing of aircraft and other arrangements for transportation by air. Upon receiving a copy of the wet lease, the Administrator determines which party to the agreement has operational control of the aircraft. Once that determination is made, the appropriate principal inspector issues amendments to the operations specifications of each party to the agreement, as needed. In making that determination, weight and balance control procedures are considered relevant factors in determining operational control.

NOTE: Principal inspectors shall review and approve all weight and balance control procedures that will be accomplished during all wet leasing arrangements. It is imperative that any outsourced personnel used for cargo loading are qualified and authorized by the certificate holder to perform these functions. In addition, the FAA's policy is that the certificate holder must ensure that those individuals, who are not the certificate holder's employees, are directly supervised, during the performance of their duties, by an appropriately qualified supervisor employed by the certificate holder.

C. Part 121, section 121.135 requires each certificate holder to prepare and keep a current manual for the use and guidance of ground personnel. That manual must contain, among other items, information on the methods and procedures for maintaining the aircraft weight and center of gravity within approved limits.

D. Currently, part 121, section 121.400 prescribes the requirements applicable to each certificate holder for establishing and maintaining a training program for crewmembers, aircraft

dispatchers, and other operations personnel. While the term "other operations personnel" is not currently defined in this subpart, it is evident that employees of a certificate holder who have the duty to supervise the loading of an aircraft or who qualify and authorize

other persons to perform this function, must be trained on the certificate holder's procedures. Principal inspectors are encouraged to review any training program their certificate holder accomplishes for personnel who supervise the loading of aircraft, prepare load manifest forms, or qualify and authorize other persons to accomplish these requirements.

### 3. DISCUSSION.

A. Airworthiness inspectors shall review existing guidance material located in FAA Order 8300.10, Airworthiness Inspector's Handbook:

- (1) Vol. 3, Chapter 1, Introduction to Aircraft and Equipment
- (2) Vol. 3, Chapter 3, Conduct Ramp Inspection of Operator's Aircraft
- (3) Vol. 3, Chapter 4, Conduct Cockpit En Route Inspection
- (4) Vol. 2, Chapter 74, Evaluate FAR Part 121/135 (10 or more Turbine Powered Aircraft) Operator's Weight and Balance Control Program
- (5) Vol. 2, Chapter 84, FAR Part 121/135 Operations Specifications, Part E: Paragraph E96
- (6) FSAW 97-21, Acceptable Means of Maintaining Cargo Containers, Pallets, and Netting Installed on Transport Category Aircraft

B. Operations inspectors shall review existing guidance material located in FAA Order 8400.10, Air Transportation Operations Inspector's Handbook:

- (1) Vol. 3, Chapter 6, paragraph 1159
- (2) Vol. 3, Chapter 6, paragraph 1189
- (3) Vol. 3, Chapter 15, paragraph 2133
- (4) Vol. 3, Chapter 15, paragraph 2147

NOTE: The existing guidance material recognizes that Airworthiness and Operations inspectors possess various degrees and types of expertise and experience in the area of load manifests, cargo loading procedures, and weight and balance programs. Any inspector who needs

additional information or guidance should coordinate with personnel experienced in that particular specialty. An effective weight and balance program will require the knowledge and skills provided by both Operations and Airworthiness inspectors.

C. Both Operations and Airworthiness inspectors shall review Advisory Circular (AC) 120-27C, Aircraft Weight and Balance. This document provides guidance to certificate holders that are required to have an approved weight and balance program by part 121.



#### 4. ACTION.

A. Upon receipt of this bulletin, principal inspectors are to review their assigned air carrier's weight and balance control procedures. This review shall include the subject areas discussed in this bulletin, along with the appropriate air carrier's manuals, operations specifications, and wet lease agreements.

B. Within 60 days of the date of this bulletin, principal operations inspectors (POI) and principal maintenance inspectors (PMI) are to ensure that two additional special emphasis ramp checks are completed on their assigned air carrier(s). This means that a total of four (two Operations, two Airworthiness) special emphasis ramp checks shall be completed on all part 121 air carriers, that currently conduct any type of cargo loading operation, to include the loading of passenger bags or company material aboard any air carrier aircraft.

NOTE: The locations of these special emphasis ramp checks are at the discretion and judgment of the respective principal inspector. However, the location should be representative of the air carrier's typical area of operations.

#### 5. PROGRAM TRACKING and REPORTING SYSTEMS (PTRS) INPUT.

A. Special emphasis ramp checks are to be conducted in order to validate the current state of weight and balance control procedures and cargo loading operations. The attached PTRS Data Sheets have been modified in order to focus inspector surveillance and inspection activities, and are to be used to report the inspector's findings.

NOTE: The use of the modified forms are not intended to limit an inspector's surveillance or inspection activity, but merely to focus on certain aspects of cargo loading operations.

B. There are two special emphasis ramp check forms attached to this bulletin. Activity number 1638 is to be used by Operations inspectors and activity number 3623 is to be used by Airworthiness inspectors. Section I of the modified form contains standard transmittal information. Section IV of the modified form contains specific inspection items. There are five mandatory inspection items and ten optional inspection items. During the special emphasis ramp check, inspectors need to ensure that ALL five mandatory inspection items have been accomplished and then select at LEAST five of the ten optional inspection items to report on as the situation warrants.

C. Inspectors shall complete Section I of the form and the Section IV "Opinion Code" for each of the Mandatory and at least five Optional Inspection Items. The "Opinion Code" summarizes the inspector's impressions about the activity. There are three opinion codes:

"I" Information, "P" Potential, "U" Unacceptable

D. Mandatory Inspection Items. Any mandatory inspection item considered "acceptable" DOES NOT require the completion of an "Opinion Code" for that inspection item. However, any mandatory inspection item coded "I, P, or U" needs to be explained with appropriate comments following the specific inspection item.

E. Optional Inspection Items. Inspectors shall pick at least five optional inspection items from the list of ten items. The optional inspection items are to be chosen by the inspector as the situation and events require. Any optional inspection item considered "acceptable" DOES NOT require the completion of an "Opinion Code" for that inspection item. However, any optional inspection item coded "I, P, or U" needs to be explained with appropriate comments following the specific inspection item.

NOTE: Any inspection item that the inspector finds as unacceptable shall be brought to the attention of the appropriate pilot-in-command or air carrier supervisor prior to the movement of that aircraft.

6. INQUIRIES. This bulletin was developed by AFS-300 and AFS-200. Any questions or comments concerning its content should be directed to Dick Berg (AFS-300) at (202) 267-3786 or Kent Stephens (AFS-200) at (703) 661-0571.

7. LOCATION. This bulletin will remain in effect until incorporated into FAA Order 8300.10, Airworthiness Inspector's Handbook; Volume 2, Chapter 74 and FAA Order 8400.10, Air Transportation Operations Inspector's Handbook; Volume 6, Chapter 2, Section 2. Inspectors should make a note of this bulletin in the margin of the affected chapters.

/s/  
Gary E. Davis  
Acting Manager,  
Air Transportation Division

ATTACHMENTS

**PROGRAM TRACKING AND REPORTING SUBSYSTEM DATA SHEET**  
 (One PTRS Record Required for Each Unit of Work as defined in the PPM)

SECTION I - Transmittal

SPECIAL EMPHASIS RAMP CHECK: CARGO LOADING OPERATIONS

Inspector Name Code:

Record ID:	Activity Number: 1638	14 CFR: 121
Start Date:	Status (POC):	Callup Date:
Designator:	Results (ACEFISTX):	Closed Date:
Aircraft Reg #:	Loc/Departure Point:	Flight #:
Make-Model-Series:		
Non-Cert Activity Name/Company:		

**SECTION IV - INSPECTION ITEMS**

Primary Area	Key Word	Opinion Code	INSPECTION ITEMS (Mandatory Items)
A	613		1a. The load manifest form is prepared and signed by <u>employees</u> of the certificate holder who have the duty of <u>supervising</u> the loading of aircraft and <u>preparing</u> the load manifest form.
A	899		1b. The load manifest form is prepared and signed by <u>other qualified persons</u> authorized by the certificate holder who have the duty of <u>supervising</u> the loading of aircraft and <u>preparing</u> the load manifest form.
A	767		2. Cargo carried in an approved cargo rack, bin, or compartment.
A	603		3. Cargo secured by means approved by the Administrator.
F	801		4. Cargo is properly secured by an appropriate tiedown having enough strength to eliminate the possibility of shifting under all normally anticipated flight and ground conditions.
	625		5. Cargo does not impose any load on the floor structure that exceeds the load limitation of that floor structure.
			(Optional Items)
			Choose at least 5 of the 10 items to report)
A	515		1. General condition of ramp area (FOD, fuel/oil spills, etc.)
A	721		2. Pallet locks checked by load supervisor to ensure locks are in locked position
A	609		3. Cargo weights furnished by freight forwarders are spot checked for accuracy
A	711		4. Cargo loaded in accordance with the air carrier's approved policies and procedures
H	809		5. All compartments and other loading stations are properly marked and the identification used corresponds with the instructions established for computing weight and balance of the aircraft
A	605		6. Flightcrew has either properly computed actual weight and balance of aircraft prior to takeoff or has received this information through approved means.
A	105		7. Contract personnel load the aircraft in accordance with air carrier's approved procedures
A	621		8. Information relative to maximum capacities and other pertinent limitations affecting the weight or balance of the aircraft is provided and known by the flightcrew.
A	517		9. Cargo doors and loading equipment secured prior to aircraft movement
A	641		10. Review load manifest for hazardous cargo procedures (report discrepancies to appropriate FAA PSI)

Date:	Originator:	Office:
Inspector Signature:		Supervisor Initials:

**PROGRAM TRACKING AND REPORTING SUBSYSTEM DATA SHEET**  
 (One PTRS Record Required for Each Unit of Work as defined in the PPM)

SECTION I - Transmittal

SPECIAL EMPHASIS RAMP CHECK: CARGO LOADING OPERATIONS

Inspector Name Code:

Record ID:	Activity Number: 3623	14 CFR: 121
Start Date:	Status (POC):	Callup Date:
Designator:	Results (ACEFISTX):	Closed Date:
Aircraft Reg #:	Loc/Departure Point:	Flight #:
Make-Model-Series:		
Non-Cert Activity Name/Company:		

**SECTION IV - INSPECTION ITEMS**

Primary Area	Key Word	Opinion Code	INSPECTION ITEMS (Mandatory Items)
A	613		1a. The load manifest form is prepared and signed by <u>employees</u> of the certificate holder who have the duty of supervising the loading of aircraft and preparing the load manifest form.
A	899		1b. The load manifest form is prepared and signed by <u>other qualified persons</u> authorized by the certificate holder who have the duty of supervising the loading of aircraft and preparing the load manifest form.
A	767		2. Cargo carried in an approved cargo rack, bin, or compartment.
A	603		3. Cargo secured by means approved by the Administrator.
F	801		4. Cargo is properly secured by an appropriate tiedown having enough strength to eliminate the possibility of shifting under all normally anticipated flight and ground conditions.
	625		5. Cargo does not impose any load on the floor structure that exceeds the load limitation of that floor structure.
			(Optional Items)
			Choose at least 5 of the 10 items to report)
A	515		1. General condition of ramp area (FOD, fuel/oil spills, etc.)
H	853		2. Cargo compartment structural damage, liners free of tears/punctures, etc.
H	826		3. Cargo compartment fire detection/protection for its classification
H	852		4. Cargo door free of fluid leaks and structural damage
F	825		5. Loading systems (main deck and lower deck) serviceability
H	803		6. Forward, aft, and side restraints serviceability
H	851		7. Roller assemblies secure with no missing or broken rollers
H	810		8. "9G" forward restraint net serviceability (SRM Chapter 51 limits)
A	816		9. Unit Load Devices (ULD) serviceability
A	501		10. Current calibration of cargo scales

Date:	Originator:	Office:
Inspector Signature:		Supervisor Initials:

# EMERY WORLDWIDE AIRLINES AIRCRAFT MAINTENANCE MANUAL

## CARGO LOAD RESTRAINT SYSTEM MAINTENANCE AND TRANSPORTATION PROCEDURE

### I. CARGO LOAD RESTRAINT SYSTEM MAINTENANCE

#### A. Introduction

1. This section will contain cargo load restraint requirements for all aircraft utilizing rollerized cargo handling systems.
2. Cargo Restraint involves the prevention of movement in five principal directions: Forward, Aft, Upward (vertical), Left (side), and Right (side). These movements are the result of forces exerted upon the cargo due to acceleration or deceleration of the airplane in take-offs and landings as well as forces due to air turbulence in flight. Such forces are commonly expressed in terms of gravitational units (G's). Correct restraint provides the proper relationship between the weight of the cargo and restraint required in G's. Restraint is required for flight and taxi loads and for crash loads.

#### B. Maintenance

The Cargo System Maintenance Program is to include:

1. Inspection during scheduled checks.

#### C. Pallet Lock Limitations and Procedures

1. It is permissible for some pallet locks to be missing or inoperative along each lateral edge (fwd. & aft edges) provided:
  - a. One lock per position may be broken or missing without any load limitations to that position.
  - b. **AT NO TIME WILL IT BE PERMISSIBLE TO HAVE MORE THAN ONE LOCK PER POSITION MISSING OR BROKEN.**
2. Side restraint rails or rail assemblies are required to be installed, if a rail or rail assembly is unserviceable the position is to be blocked and NOT loaded. The affected rail/position is to be placed on the NON-MEL list and Maintenance Control notified. Maintenance Control is to notify Operations of the blocked position.
3. A good pallet lock may be shifted to a position where more than one lock is broken or missing in order to carry maximum loads in all positions.

Make an entry in the Log Book giving location of broken or missing lock and place item on Non-MEL deferred list by calling Maintenance Control and following applicable procedures in MPP Manual Chapter 3.

# EMERY WORLDWIDE AIRLINES AIRCRAFT MAINTENANCE MANUAL

## DC-8-63/71/73 BROKEN OR MISSING PALLET LOCK LOCATIONS

**Note:**

- a. Only one lock per position may be broken or missing
- b. All side restraint rails or rail assemblies are required

3759566-503  
End Restraint Fitting  
(Rigid)

A1 thru A5

38893344-501  
End Restraint Fitting

B6 thru B10  
C11 thru C15

3889344-1  
End Restraint Fitting

D16 thru D20  
E21 thru E25  
F26 thru F30  
G31 thru G35  
H36 thru H40  
I41 thru I45  
J46 thru J50  
K51 thru K55  
L56 thru L60  
M61 thru M65  
N66 thru N70  
O71 thru O75  
P76 thru P80  
Q81 thru Q85  
R86 thru R90

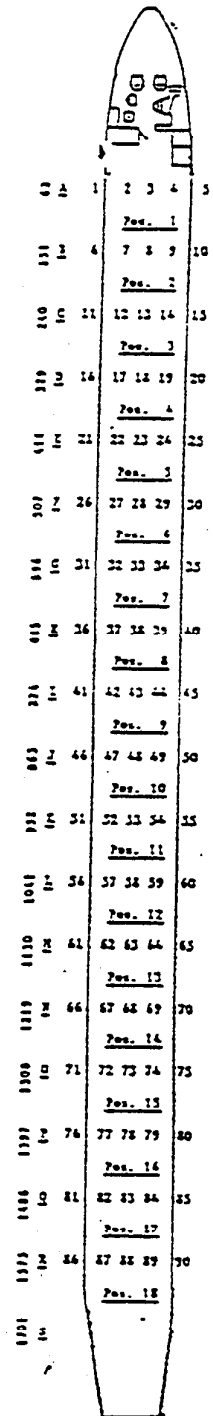


Figure 3

# EMERY WORLDWIDE AIRLINES AIRCRAFT MAINTENANCE MANUAL

## DC-8F-54 BROKEN OR MISSING PALLET LOCK LOCATIONS

Note:

- a. Only one lock per position may be broken or missing
- b. All side restraint rails or rail assemblies are required.

3759566-503  
End Restraint Fitting  
(Rigid)  
A1 thru A5

38893344-501  
End Restraint Fitting

B6 thru B10  
C11 thru C15

3889344-1  
End Restraint Fitting

D16 thru D20  
E21 thru E25  
F26 thru F30  
G31 thru G35  
H36 thru H40  
I41 thru I45  
J46 thru J50  
K51 thru K55  
L56 thru L60  
M61 thru M65

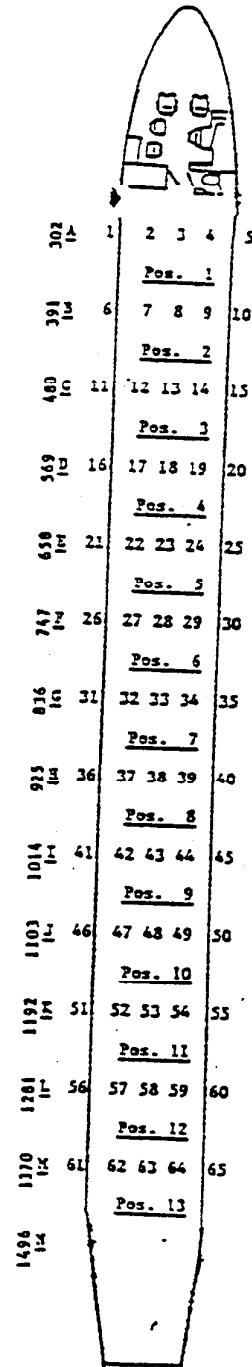


Figure 1





**Griffin, Debbie F.**

---

**From:** Wood, Thomas M  
**Sent:** Friday, June 12, 1998 4:14 PM  
**To:** Robbins, Bruce A.; Griffin, Debbie F.  
**Subject:** FW: Syllabus for EWA Cargo Handling Training

Bruce/Debbie: This syllabus is just each section subject as titled in the manual. It is ok for us to say we will train on all these items. I explained to Rick today that all parties would receive fam of the manual, and it would be taylored to the group it is instructed to.  
Thomas

---

**From:** Morgenstern, Rick K  
**Sent:** Monday, June 08, 1998 11:18 AM  
**To:** Robbins, Bruce A.  
**Cc:** Wood, Thomas M  
**Subject:** Syllabus for EWA Cargo Handling Training

Bruce,

Enclosed is a proposed syllabus for Cargo Handling Training that I would like to present to the FAA on Tuesday, 6/16/98. The topics come straight out of the Cargo Handling Manual and should already be covered by the CBT course you are developing.

Please let me know if you have any corrections, additions, or deletions to the syllabus as soon as possible. I plan to propose the full course as a 24 hour course as you and I talked about for a new employee who has no previous experience handling cargo for EWA. However, I will also propose a 2 hour initial course for experienced EWW/EWA Loaders and Supervisors which will take place here at the Hub with an instructor in the Hub auditorium within the first 30 days after the manual is accepted. During the 2 hour course, the instructor (yourself or Jim Owens) will simply review most parts of the manual and spend the majority of the time going over Chapters 4 and 9 (tie down limitations and system appraisal procedures).

I also plan to propose a 1 hour annual review for Pat Nelson's folks to include in their yearly meetings.

Please send me any changes via Exchange. Thanks for your help.

Regards,

Rick



Cargo Handling  
aining Syllabus 2.doc

# SYLLABUS FOR EWA CARGO HANDLING TRAINING

## **Introduction**

1. FAA Emphasis
2. Safety
3. Company Policy

## **Department Organization**

1. General
2. Customer Relations
3. Duties and Responsibilities
4. Personal Appearance
5. Aircraft Security

## **Department Duties and Responsibilities**

1. Director of Operations
2. Director of Ground Services
3. Senior Director of Operations Control
4. Director of Transportation Logistics
5. Director of ULD Logistics

## **Cargo Load Restraint Requirements and Tie-Down Limitations**

1. General
2. Types of Cargo
3. Cargo Restraint Requirements
4. Local Tie Down Methods
5. Forward Cargo Barrier Net
6. Pallet and Pallet net Capabilities
7. General pallet Loading Profile Dimensions
8. Palletizing
9. Tying Down
10. Structural Containers
11. Shoring
12. Pallet Shoring Techniques

## **Aircraft Doors**

1. General
2. Main Cargo Compartment
3. Lower Cargo Compartment
4. Personnel Doors
5. Cargo Loading Equipment Damage
6. Main Cargo Door - B727

# SYLLABUS FOR EWA CARGO HANDLING TRAINING

## **Cargo Loading System**

1. General
2. Pallet Nets
3. Sill Guards
4. Ball Transfer Conveyor
5. Roller Conveyor
6. Side Rail Assemblies
7. End Restraint Fittings
8. Side Guide Rail Fittings
9. Pallet Snubbers
10. Forward Cargo Barrier Net

## **Weight and Balance System**

1. General
2. Definitions
3. Ferry Flights
4. Deadhead Void Limits
5. Tail Tipping Tables
6. and B-727 Optimum C.G.
7. Weight and Balance Control
8. Completing the Weight and Balance Form - B-727
9. Completing the Load Planning Sheet - DC-8
10. Required Documentation

## **Palletized Loading and Offloading**

1. General
2. Install Loaded Pallets
3. Remove Loaded Pallets
4. Disabled Aircraft with Stranded Cargo
5. Cargo Handling Procedures
6. Shock-Watch Tip-and-Tell Shipments
7. Belly Freight Limitations
8. Transit Station Ground Time
9. Offload and Freight Availability Goals
10. Security
11. Overlooked / Missed Freight
12. Freight Tender Requirements
13. Load Plan to Crew
14. Package Dimension Limitations
15. Main Cabin Cargo Door Package Dimensions B-727
16. Lower Cargo Compartments B-727
17. Forward Lower Deck Cargo Compartment Package Dimensions
18. Aft Lower Cargo Compartment Door Package Dimensions

# SYLLABUS FOR EWA CARGO HANDLING TRAINING

## ULD and Loading System Appraisal Procedures

1. Description
2. Condition Appraisal Procedures
3. Identification and Notification
4. Condition Appraisal of 96 X 125 Aluminum-Polycarbonate/Fabric Roll-Up Door Restraint
5. Condition Appraisal of 88 X 125 Fiberglass Shell w/ Curtain and Net Restraint
6. Condition Appraisal of 88 X 125 All Aluminum Pallets w/ Knotted Rope Net Restraint
7. Condition Appraisal of 88 X 125 Aluminum/Polycarbonate (Lexan) w/ Curtain and Net Restraint
8. Condition Appraisal of 88 X 125 Aluminum Framed Shell w / Fiberglass/Lexan (Polycarbonate) Panels
9. Condition Appraisal of 88 X 125 Fiberglass Shell with Latching Doors
10. Condition Appraisal of 88 X 125 Fiberglass Shell with Fiberglass Door Restraint

## Ground Handling

1. Marshaling - General
2. Arrivals
3. Parking the aircraft
4. Hand Signals
5. Move Forward Signal
6. Slow Down Signal
7. Turn Signals
8. Stop Signal
9. Engine Shutdown Signal
10. Departure Signal
11. Release to New Signal Person Signal
12. Release from Guidance Signal
13. Brakes On / Brakes Off Signal
14. Start Engines Signal
15. Chocks Inserted Signal
16. Fire Warning Signal
17. Aircraft - General Description
18. Jet Blast and Suction Precautions
19. Aircraft Ground Support
20. Towing Aircraft Policy
21. Aircraft Parking and Mooring Policy

## Operating Procedures

1. Operation Departure Procedures
2. Departure Time Line Procedures
3. Block Turn Back / Air Turn Back Procedures
4. Maintenance Status Reports
5. Flight Line Safety
6. Fork Lift Operations
7. Ground Support Equipment Operations
8. Post Flight Operation Procedures
9. Flight Operations Forms

## CARGO HANDLING TRAINING

Due to the new EWA Cargo Handling Manual which contains the policies and procedures to be followed by all cargo handlers, initial training of cargo handlers will be conducted upon approval of the manual. This training will be broken down into different types of training as not all personnel will require training in some areas and will include the following:

Supervisors/Leads will be trained on all aspects to better understand the system.

Terminal Personnel (Sort) \*

Aircraft Loading Personnel \*\*

### 1. Introduction: (\*, \*\*)

- a. Emery Worldwide Airlines views on the importance of proper loading and handling of cargo.
- b. EWA Cargo Handling Manual
- c. Discussion

### 2. Department Organization: (\*, \*\*)

- a. General
- b. Customer Relations
- c. Duties and Responsibilities (General)
- d. Personal Appearance
- e. Aircraft Ground Security
- f. Discussion

### 3. Department Duties and Responsibilities:

- a. Director of Operations
- b. Director of Ground Services
- c. Senior Director of Operations
- d. Director of Transportation Logistics
- e. Director of ULD Logistics
- f. Operations Control Planning Supervisor
- g. Discussion

### 4. Cargo Load Restraint Requirements: (\*, \*\*)

- a. General
- b. Types of Cargo
- c. Cargo Restraint Requirements
- d. Local Tiedown Methods
- e. Forward Cargo Berrier Net
- f. Pallet and Pallet Net Capabilities
- g. Pallet Loading Profile Dimensions General

- h. Palletizing
- i. Tying Down
- j. Structural Containers
- k. Shoring
- l. Pallet Shoring Techniques
- m. Shoring Configurations
- n. Discussion

5. Aircraft Doors (\*\*)

- a. General
- b. Main Cargo Compartment
- c. Lower Cargo Compartment
- d. Personnel Doors
- e. Cargo Loading Equipment Damage
- f. Main Cargo Door - B727
- g. Upper Deck Cargo Door
- h. Discussion

6. Cargo Loading System - General (\*\*)

- a. General
- b. Pallet Nets
- c. Door Sill Conveyor Assemblies
- d. Ball Transfer Conveyor Assemblies
- e. Roller Conveyor Assemblies
- f. Side Rail Assemblies
- g. End Restraint Fittings
- h. Side Guide Rails and Rigid Side Restraint Fitting
- i. Pallet Snubbers
- j. Forward Cargo Berrier Net
- k. Cargo Load Restraint System Maintenance
- l. Discussion

7. Weight and Balance (As required for job position)

- a. General
- b. Definitions
- c. Training, Ferry Or Test Flights
- d. Deadhead Void Limits (DC-8)
- e. Tail Tipping Charts (DC-8)
- f. DC-8 & B727 Optimum C.G.
- g. Weight and Balance Control
- h. Completing The Form
- i. Load Planning Sheet
- j. Required Documentation
- k. Discussion

8. Palletized Loading and Unloading (\*\*)

- a. General
- b. Install Loaded Pallets
- c. Remove Loaded Pallets
- d. Side Rail Positioning
- e. Package Dimension Limitations
- f. Main Cabin Door Package Dimensions B-727
- g. Lower Cargo Holds B-727
- h. Forward Lower Deck Cargo Hold Package Dimensions
- i. Aft Lower Deck Cargo Hold Door Package Dimensions
- j. Discussion

9. Unit Loading Device and Loading System Appraisal Procedures (\*, \*\*)

- a. Description
- b. Condition Appraisal Procedures
- c. Identification and Notification
- d. Discussion

10. Marshaling Procedures (\*\*)

- a. Arrivals
- b. Parking The Aircraft
- c. Hand Signals
- d. Jet Blast and Suction Precautions
- e. Aircraft Ground Support
- f. Discussion

11. Operating Procedures (\*, \*\*)

- a. Safety
- b. Ground Support Equipment (GSE)
- c. Post Flights, Reports and Forms
- d. Discussion

## AIRCRAFT LOADING TRAINING

- Why the crackdown on Air Carriers?

Fine Air crash due to improper lock down of containers. Emery is targeted more by the FAA due to the hazardous conditions that can arise from large heavy cargo.

Once a ULD or unit loading device has been loaded onto the aircraft, it becomes an aircraft component and must conform to the FAR (Federal Aviation Regulations) specified for a Part 121 carrier.

- Why Emery Airlines Maintenance Training is required to perform the training?

We are not instructing on the professional qualities most workers already have. It is the responsibility of Maintenance Training to instruct on the contents of the manual and how all job functions can relate to the safety of the airplane.

- Continued Training:

It is your responsibility to take the information provided by Maintenance Training and train your employees on the importance of the Aircraft Loading Manual.

- About the Manual:

The major difference between the manual you have referred to in the past and the Aircraft Loading Manual is that this manual has been accepted by the FAA and required to be distributed and understood by all cargo involved departments. Now Emery, Emery Airlines, and contracted ground handlers that load EWA aircraft, are regulated by the government to handle freight in accordance to this manual. If we do not comply with the manual, we can be held individually responsible.

- Training Syllabus:

The training syllabus on the next page can be modified by reviewing the contents of certain areas in more depth than others due to the job function of each student.





# **EWA Aircraft Loading Training Outline**

## **Introduction**

**My name is Debbie Griffin/Training specialist representing Emery Airlines Aircraft Maintenance Training section. I am here because Federal Aviation Regulation requires that you as ground handler supervisors and managers receive the Aircraft Loading manual and training and fully understand its contents.**

**This manual is still being reviewed. Once we have all of the revisions and after its acceptance by the FAA, you will receive your updated and issued copy. What you have in front of you is a draft copy. Only hang on to it until you receive your issued copy, transfer any notes or highlights that you interpret from the class and then throw it away.**

**We anticipated acceptance a few weeks ago and after the scheduling of this seminar. Because of the delays, I am apologizing to you in advance, if material that we go over, changes in a few weeks. Most of what we are going over is review of the basics of the manual and should not change.**

**I would consider the handout you have in front of you to be most of the changes. We received these last Friday morning and I have not had a lot of time to review them. As we are going over material, please feel free to stop me if you see a revision or clarification to any statements that I make that may have been prepared prior to the revisions.**

**Once you have your final issued copy, use it as gospel. Review it again and again and use it for training your employees. All parties involved with the movement of Emery's cargo must fully understand the purpose and the responsibilities bestowed on them because of this manual they must adhere to its contents or be subject to fine, possible imprisonment, or company shutdown.**

**That seems like a rather harsh opening statement, but it is important that these possibilities are not ignored. We as individuals are responsible for our own actions everyday. If we do something overstepping our judicial system, we have to pay the consequences. A person who gets caught robbing a bank will have to serve jail time. With our job, we must be responsible for the decisions we make, and with our business of express service, sometimes having to make a quick decision could lead to making an unsafe decision based on "hurry and get the freight out!!"**

Because of this manual, I would be extremely careful that all decisions follow the guidelines laid out in this book. For example, If you knowingly allow an unsecured pallet to board the aircraft because you don't want to take a delay to secure it properly/ It then terminates at a line station with FAA standing by for an unannounced inspection/ They can either fine the company, pilot or pending an investigation, fine the loading supervisor who signed the load planning sheet. To really get your attention, If that pallet shifted during turbulence and had piercing objects not properly strapped down, causing the objects to protrude through the barrier net into the cockpit and injures a crew member, you could serve a jail term.

These risks have always been a part of Emery Worldwide Airlines due to the fact that no airline certificate holder may operate an aircraft unless that aircraft is in an airworthy condition. Airworthiness is defined as a condition in which the aircraft or a component of the aircraft, meets the conditions of its type design and is in a condition for safe operations. An airworthy condition includes the condition of the equipment on board the aircraft. Once a ULD or unit loading device, has been loaded onto the aircraft, it becomes an aircraft component and must conform to the FAR (Federal Aviation Regulations) specified for a Part 121 carrier.

The major change between the manual you have referred to in the past, is that this is the first Aircraft Loading Manual that will be accepted by the FAA and required to be distributed and understood by all cargo involved departments. Now Emery, Emery Worldwide Airlines and contracted ground handlers for Emery are regulated by the government to handle freight in accordance to this manual. If we do not comply with the manual, we can be held individually responsible.

You are already professionals at what you do, and I am not here to instruct your professional qualities. I am here because I am required as an employee of the maintenance training section, to tell you how to do your job in accordance with this manual.

You may be asking why is Maintenance training required, as outlined in the manual, to train on groundhandling duties? I was asked the question just the other day from a EWW supervisor at the Hub. He said that Emery has always ran the freight portion of our company and the airlines took care of the aircraft operations duties. As an airline operator, Maintenance Training is a required section of the Quality Control department. Our responsibility is to insure that adequate training is provided to increase awareness and knowledge of all areas of the aircraft conforming to the students job functions. Well I have already mentioned that once a ULD is loaded onto an aircraft it becomes an aircraft component. Whether it be changing connectors on the flight panel or instructing Aircraft loading, it all boils down to providing information to ensure the safety of the aircraft as well as training to decrease damage to the structure of the aircraft.

It is my interpretation that the reason they changed the title of the manual from cargo handling to aircraft loading is to reemphasize the fact that even from the beginning process of receiving the freight and how it is packaged could in fact effect the safety of the aircraft.

It will be your job to emphasize and train your employees the contents of this book and its importance. We need to train all ground handlers to understand the effects of each individual job and how we all play important parts of insuring the stability of our company through safety concerns and preventive damage.

Some of this information may already be currently implemented as company policy and old news to you. There should be some new loading procedures that may be new to you and may seem impossible to comply with. Remember, all 121 air carriers must comply with these new regulations.

I will review the manual in its entirety as briefly as possible and then we will have guest speakers, specialist in their area going over different chapters in this book Tomorrow.

Bill Artin/Ground Services Dept. will go back over Weight & Balance / Chapter 7  
Jim Owens/Director of ULD's will go over ULD compliance / Chapter 9  
Dave Malson / Director of Safety will go over Operating procedures / Chapter 11

Please be sure to ask questions if you do not understand something. If we can't answer the question, we will get the information back to you.

Whether you read this manual or not, you are going to be responsible for understanding it.

## Turn to Preface

### 1. Manual revisions and Responsibilities

It is your responsibility to make sure that these manuals are kept up to date. The Technical Publication department issues revisions to the manual holders when corrections are made to policies, procedures, techniques or methods. As long as your book correctly shows your name as assigned to the book, then you will get the revisions and insert as soon as possible. It is your responsibility to sign and return the transmittal form back to Tech Pubs.

***\*\*\* show transparencies of page 4***

It is also your responsibility to sign and date the Record of Revision on page one.

**\*\*\* show transparencies of page 1**

FAR (Federal Aviation Regulations) 121.137 requires that all manual holders keep their assigned manuals updated.

We have had cases where Emery Airlines maintenance facilities were fined for not keeping their manuals up to date.

Anyone can submit a request to revise this manual. On page 5 you will see Request for Manual/Publication for revision. You can call Tech Pubs 937 264-5520 and they can send you a form if anyone feels something in this manual is incorrect or additional information should be added. Fill out the form completely. Make a copy of the page in the manual and highlight the area needed to be revised. Be specific. The Director of Operations and the Director of Quality Control must approve the revision and make sure it meets the requirements of the FARs before it would be submitted.

To assist you in your training to your employees, Maintenance training technical writers, Cecil Warner and Sal Chirico have developed a computer based training course. As soon as all revisions can be incorporated into the CD we will distribute two CD's to each service station. One for Ground Services and one for the EWW Service Center. It is up to you to make sure you have a computer to review it. Sorry we can't supply those.

I will take you through it briefly so you know how to use it. Again I apologize for errors that we will see due to the revisions so recently distributed. Some of the modules we will fly through because they don't apply to. Other training materials that you will hopefully see in the future will be a website for Aircraft Loading Training.

Try to follow along with me in the book.

### ***Chapter One*** ***Department Organization***

Chapters one and two review our companies departmental/individual duties and responsibilities. Flight Operations, Ground Services and Operation Control Departments take the initial responsibility to provide the service that our customer has contracted. Their duties are to insure that all the aircraft and cargo related services operate with the efficiency and the professionalism expected of them. These services include:

**Aircraft Handling**- (Ground services including contracted ground services out in the field)

**Cargo Handling** - (Traffic Control, ramp, build up, secondary, breakdown, envelope sort, Emery customs, customer service ect. Hazmat documentation)  
- At the hub. And Emery service centers.

**Governmental agencies include** - Department of Defense, the Military standards to run charters.

Of course there are many other departments that assist the above mentioned departments in specialized areas.

Number 2. Customer Relations - The manual reads that the Ground Services Department is looked upon as a direct representative of the Company. When the manual refers Ground handlers they are using the terminology that is viewed by and set forth as a standard term throughout most airlines, and which the Hub terminology also includes cargo handlers. It is the ground handlers responsibility to deliver, to the best of their ability, the services that were sold to the customer.

### ***3. Duties and Responsibilities (General)***

There are multitudes of details involved in the duties and responsibilities that contribute to an efficient, safe, and timely flight departure.

#### **CBT**

The Pilot In Command (PIC) is responsible for the safety of the flight, He alone will be the final determining factor in the acceptance of an aircraft loaded by trained and qualified ground handlers or cargo handlers. This does not always mean that he will take all the responsibility in regards to unknowingly factors on board the aircraft. In order for the load to meet the criteria of acceptance, it must meet these standards:

1. Proper securing of cargo which includes restraining cargo from shifting forward, aft, horizontal or vertical in flight.
2. Compliance with loading limitations
3. Proper placement of hazmat materials.
4. Unrestricted access by flight crew members to those cargo compartments requiring access for fire detection or protection while in flight.

We will be going over number one and two in much more depth throughout the manual.

#### **CBT**

As long as the aircraft is on the blocks it is the ground handlers responsibility to ensure the safety and security of the aircraft. It is the ground handlers responsibility to delay or stop loading entirely, in order to insure compliance of the aircraft. Any delay time must be reported to the Ground Services in a written report.

## **CBT**

Charter flights / Although unscheduled, require coordination and communication to the ground services persons involved. This communication is handled through the Operations Control Department.

There is always supposed to be ground services personnel in the vicinity of the aircraft at all times during on/offloading.

If an aircraft is to be unattended for a while, it must be parked in a well lighted parking area if possible with all doors and hatches secured. It is also important the ground handlers make sure that equipment is removed from the vasinity just in case inclimate weather occurs. We had two aircraft struck and damaged by flying empty structural containers during a bad wind storm. They should have been moved away from the plane or place inside.

All air carrier employees, in non-public air carrier, such as the Emery hub, and the Airport Operations Area or the AOA must wear an air carrier, airport or other acceptable identification badge or can not enter the area. It is also our responsibility to oversee and report persons without the proper identification.

## **Chapter 2**

This chapter outlines the duties and responsibilities of the individuals representing the departments who are initially responsible to provide the service that was contracted to the customers as discussed earlier.

I am not going to go over each individuals job description and who they report to. If you need that information you can reference chapter two. I will tell you who these titles are:

**Director of Operations - Ted Graves**

**Director of Ground Services - Pat Nelson**

**Senior Director of Operations Control - Rob Slavens**

**Director of Unit Load Device - Jim Owens**

**Operations Control Planning Supervisor - Steve Hodgson**

The organizational chart speaks for it self

### Chapter 3

#### Aircraft Loading Training

**Training Program Policy:** I have already mentioned the importance passing on this training in my introduction and under policy, once again it reemphasizes this in Chapter three.

The Maintenance Training Section of the Quality Control Department will schedule training sessions when new or not previously utilized equipment is added to Emery Worldwide Airlines. DC-10!!!!!! We will be meeting again very soon.

#### Training Format

We are required to formally train all supervisors/managers/teamleaders of the Hub, Emery Service stations and the Ground Services. All training will be filed and tracked through the Ground Services Department or EWW Human Resources Department. When you provide your own training to your employees, I would keep records on file. At this time it does not seem required, but I wouldn't be surprised if the requirement comes up in the near future.

#### Show MSL

Maintenance Service Letters (MSL) are also considered to be formalized training and may be used when the manual is revised or updated. The current purpose of MSL's is to provide training for all EWA Mechanics and Flight Engineers on acquiring new or changing existing equipment, or when implementing new procedures or inspection techniques. Each individual receiving an MSL are required to read and understand the material, sign and return to maintenance training or where ever their records are kept. These files can be inspected by FAA or auditors to insure the follow ups are done.

On-the-Job training should be used by you supervisors on your employees to acquire specialized skills.

#### Types of Training:

1. Indoctrination  
Covers policy and procedures
2. Initial Training  
Covers the basics of this entire manual. Just touch on each chapter to familiarize the employee.
3. Recurrent Training



This training is used after deficiencies are discovered or where improvement is needed in specific areas. It is also used to review, reinforce and upgrade training. This type of training can be conformed totally based on its specific needs. Service Letters as discussed earlier, can also be used to perform recurrent training.

#### 4. Specialized Training

This training would accomplish authorization or certification in a critical tasks or specialized area like preparation of load planning sheets, ULD inspection, or cargo lock verification.

This training will need to be given to all new employees. I realize this can be a difficult task and may have to be done gradually so that the new employee can gain on-the-job experience before actually being able to understand the manuals contents.

### **Main MENU CBT**

#### *Chapter 4*

#### *Cargo Load Restraint Requirements and Tie-Down Limitations*

Why do we have to restrain the freight? To all of us here, it may seem obvious. If you were to ask a majority of new cargo handlers I would be surprised if a large percent could answer the question correctly.

#### Everyone needs to read and understand letter A. on page 4-1 or CBT SCREEN

Of course we think of other important factors like preventing damage to the freight. But the most important factor that needs to be stressed is that the freight must be restrained to prevent the movement that could take place as a result of forces caused by acceleration, deceleration, or turbulence in flight which could produce an unsafe aircraft. These forces are know as gravitational pulls or "G" forces which can move in five principal directions; forward, aft, upward, vertical, left or right.

When they are referring to the Universal Cargo Loading System furnished with the airplane, they are referring to the freight being secured in pallets and ULD's or a solid type load only. This type of load provides restraint for all the principal directions except forward crash load. This restraint is provided by installation of the forward cargo barrier wall or net. The forward cargo net is conformed to withstand a deceleration force up to 9 G's.

#### Types of Cargo

#### **CBT**

**Palletized Cargo** - cargo being placed on approved pallets with loading restrictions that we will talk about later in this chapter.

#### **CBT**

**Bulk Cargo** - This is cargo placed on the airplane floor and restrained by local tie down. A forward barrier net may or may not be required, depending on the tie down restrictions.

#### **CBT**

**Solid loaded cargo** - must totally fill the entire main cabin cargo compartment. This type of cargo is loaded so tightly conformed that it is restraining with no need for ropes, straps or any other restraining devices except of course the forward barrier net.

### **MAIN MENU**

#### **Floor Load Limits**

Any cargo loaded on the aircraft floor must not exceed 300 pounds per square foot. Any small freight that is extremely heavy should be shored to distribute the weight over more square ft of the floor area. Shoring is the process of using a material chosen for its stiffness and its geometric properties like a pallet, and anchoring or restraining a pc of freight to it to distribute the weight and remain within floor load limits.

#### **CBT**

#### **Number of lashings Required**

The weight of the cargo will change the amount of restraint required for flight, taxi and crash loads. The charts on page 4-3, figure 4-3 and 4-4 gives you the requirements for a bulk loaded aircraft, and its rope and fitting requirements and strap and fitting requirements. As difficult as it will be to actually measure the amount of restraint necessary to apply to keep the freight from being shifted around, this chapter will give you the knowledge along with guidelines to use in estimating and using the best judgment.

The chart on page 4-4, figure 4-5 refers to crash restraint only, which is the requirements if the 9-G barrier is not installed.

**CBT**

**Local Tie-down Methods**

This talks about the restrictions for tie-down fittings for tie-down tracks for bulk loaded airplanes.

**CBT**

**Forward Cargo Barrier Net or Wall**

This will provide 9G forward restraint, provided the following requirements are followed:

1. Solid loaded cargo does not apply
2. All shell zones must not exceed their capacity.
3. When the C.G. (center of gravity) is outside the allowable limits and sufficient cargo is not available, a ballast must be carried to obtain allowable C.G. Ballast is the act of placing 50 gallon drums of sand or a heavy substance to obtain the allowable C.G.
4. Proper weight and balance must be complied with.

Loading of sharp or piercing/penetrating objects must be loaded and restrained behind the cargo barrier net with at least 89 inches of cargo between the net and the piercing object to prevent the item from passing through the barrier net under emergency landing conditions.

**Mixed Cargo (Compressible and Incompressible)**

The definition of compressible freight would be cargo having a density not exceeding 20 pounds per cubic ft. Think of freight that is light enough to compress and absorb forces applied to it. It can be difficult to distinguish the difference between the two. Try to use a little bit of common sense along with this equation. A shell zone is approximately 458 cubic ft. Take in consideration the utilization of the container and try to estimate the cubic ft. If the container is only 50% full, than take the weight of the container and divide by 225. Does this amount exceed 20 pounds per cubic ft? Lets use an example of a hut weighing 5,000 lbs that is 75% utilized. 75% of 458 is 343 so we will divide 5,000 into 343 which comes to 14.5. This is under 20 pounds per cubic ft. which would make this ULD compressible.

This complicated chart tries to explain the requirements of the maximum amount of compressible freight is required in front of incompressible freight. I will try to simplify for now and let Jim Owens go into more detail later.

At least 89 inches of Compressible cargo must be loaded ahead of the incompressible cargo and possibly more depending on the load.

This would require pallets to be loaded with compressible material to be loaded in front of any ULD's. Let us see if we can work this out.

**\*\*\*show transparency of abscissa and the load sheet.**

#### **Disregard CBT Pallet and Pallet Net Capabilities**

All ULD/pallets must be manufactured under TSO (technical standard order) C90 and/or STC (supplemental type certificate) and certified for use with the Universal Cargo Loading System.

To maintain maximum pallet and net restraint capabilities, the Center of Gravity of a loaded pallet must not be farther than 12 inches from the pallet center line.

Rope, straps, and nets must meet the NAS (National Aircraft Standards) 3610 requirements. The chart at the bottom of the page shows the diameter required to restrain the amount of weight on the right.

On page 4-10, figure 4-10 the maximum capacity using the required net assembly for the approved pallet.

#### **General Pallet Loading Profile Dimensions**

You must load a pallet to fit the contour of the airplane.

#### **CBT**

#### **Palletizing**

Palletization is the first step in the process of preparing cargo for movement by air. It refers to the placement and securing of cargo on or in and ULD.

It reduces the time necessary for loading and offloading the aircraft. It is quite obvious how the quick turn of the aircraft relies on these ULD's to be loaded and ready before the arrival of the aircraft and /or after its departure.

It is very important that each ULD is visually inspected by a qualified person to insure the containers airworthiness prior to the loading of any freight. The inspection will be discussed in chapter 9.

## **CBT**

The following rules for building ULD's to insure safety and stability:

1. Make use of the entire pallet area.
2. Heavy items at the bottom and lighter ones at the top.
3. Too much of a concentration of heavy items in the center can have a tendency to raise up the sides (dishing) which will cause problems / delays when trying to fit the sides within the restraint system.
4. Stack packages for maximum stability (interlocking)
5. Ensure that the contour of loaded pallets corresponds with the contour of the aircraft.
6. Secure heavy or awkward items individually and shore if freight exceeds the floor limitations (300 pounds per cubic foot). The standard use of anything exceeding 500 pounds should be individually tied down.

**read**

**\*\*\*\*** A piece that should be individually tied down should be loaded on a PN and netted for restraint.

**read**

The pallets center of gravity must be within 12 inches from the center pallet. Basically try to teach employees that build the huts to understand and memorize this statement. Think of the total weight of the pallet and try to insure that 10% of the weight of the ULD is within the 12 inches of the center of the pallet. This can not always be exactly accurate but must be as accurate as possible.

Overhanging freight can not exceed 30 inches beyond the end of a pallet.

**CBT**

### **Tying Down**

Once again, a pallet is regarded as a component of the aircraft floor. Its load should arrive to the aircraft in a condition that meets all the rules defined above. All ULD's must be inspected by a supervisor / team leader to insure that they comply to the rules of correctly building a pallet before the pallet arrives at the aircraft. Once on the aircraft and because of the guidance and restraint fittings, the pallet should be restrained from moving forward, aft, upwards, and sideways.

Restraining the freight onto the pallet is accomplished by a net. These nets must meet the standards set forth by the NAS (National Aviation Standards). They must be tightened to keep freight from shifting, sliding, or toppling in flight. Do not exert so much force when tightening the nets, that the pallet bends.

## **CBT**

### **Structural Containers**

A structural unit loading device or an igloo is more suitable than the use of pallets for certain kinds of freight. They are designed to provide adequate protection to the aircraft systems and structure. The same rules apply to these containers that apply to the pallet.

Most structural containers weight around 525 lbs which adds weight to the aircraft, reducing payload. Pallets weight around 265 lbs.

The benefits to using these containers are:

1. The contour of the container ensures conformity with the interior of the aircraft.
2. The container can be closed to prevent exposure to poor weather conditions, pilferage, or loss.
3. Good for moving high value items.

### **Shoring**

#### **read CBT**

We have already discussed the definition of shoring. The purpose of shoring is to meet the floor and pallet requirements.

Important considerations of shoring is the material used to shore. Weight should be minimized but not at the expense of an insufficient shore.

Shoring materials are skids, rectangular beams of fir, pine, or hemlock. Aluminum "I" beams are also used.

**Skip through shoring for Groundhandlers.**

### ***Chapter 5***

#### ***Aircraft Doors***

In this chapter, the main emphasis is to improve the training given to all ground handlers / cargo handlers and to strengthen awareness of the importance of the installation of the lower cargo compartment nets and barriers and the proper

handling of all aircraft doors. If the ground handlers understand more about the doors, than aircraft damage may be reduced.

Improper installation of lower cargo compartment nets and barriers results in 190 hours of delay, annually. If the nets are not installed properly, freight can fall onto the door preventing the door from opening. The extra time it takes to open the door causes the delay time.

We will review the main cargo compartment door, forward and aft lower cargo compartments, flight compartment and emergency exit doors.

All the exterior doors are the plug type except the main cargo compartment door. Plug type doors are like a cork in a bottle. Each door has a pressure seal that is depressed by a seal depressor.

#### The DC-8 Main Cargo Compartment Door

This is the cargo door on the left side of the DC-8 fuselage, 85"x140" in size. It is hinged at the top and opens outward and upward.

EWA aircraft has three different types of main cargo doors.

Type I - McDonnell Douglas  
Type II - Rosenbalm  
Type III - Monarch

All three have safety features built into them to reduce the risk of the door coming down.

On June 13<sup>th</sup>, N995CF, a Rosenbalm main cargo door came fully opened to the vertical position at approximately 400 feet above ground level during a departure from the HUB. Apparently no warning lights came on to alert the crew. The Dayton tower noticed the door opened and notified the crew and then coordinated their emergency return. This incident is still under investigation as to how this happened. I do not know that only minor damage was done to the door and we are all very lucky the crew landed safely and no freight was damaged.

In telling you about this incident, I want you all realize the importance of visually inspecting an aircraft that you have just loaded. Only the Flight crews or aircraft maintenance personnel may open or close the main cargo compartment door. This rules out the chance of a cargo/ground handler being at fault.

Visual awareness is everyone's responsibility. By working around airplanes all day, you gain the ability to know when something unusual to the appearance of the doors or outer fuselage or FOD located in the area could cause a problem. If you notice anything out of the ordinary notify the crew as soon as possible.

#### **CBT**

The sill guards and Conveyor assemblies are the ground handlers responsibility to make sure they are used prior to offloading or onloading to prevent the possibility of damage to the structure of the aircraft and to protect the roller system.

If the sill guards are not used, approximately \$1,200.00 of damage will be incurred on the sill.

The loading supervisor or team leader must verify that the sill guard/conveyor assemblies are in a secure position away from and clear of the cargo door opening after onloading or offloading. Each sill guard cost about \$5,000.00 per set.

After the supervisor or team leader verifies that sill guards are stow away and clear of the door, they need to communicate to the aircrew that the load is complete and the Flight Engineer can close the main door.

#### **CBT**

##### **DC-8 Lower Cargo Compartments**

The lower cargo compartments are equipped with one large door and one small door for side-loading cargo. After off-load and prior to loading lower compartments, the compartments need to be inspected for cleanliness, missed freight, and nets/ smoke barrier inspected for rips tears. If any of these conditions exist, call EWA maintenance.

There are three different types of lower compartment doors.

1. Sliding - which are larger and normally located in front forward and the aft forward compartments. (Alpha belly and Charlie belly)
2. The fold up doors are normally located in behind the sliding - in the front aft and the rear aft. (Bravo belly and Delta belly).
3. Cargo basket doors or bombay doors are on the newer DC-8's instead of the slide loading doors.

With the sliding doors, make sure that the loading ramp is secured by the struts at the forward and aft edges of the ramp to prevent interference when opening and closing the door.



After freight is loaded in the bellies, make sure the cargo nets are properly installed and verified by the team leader or supervisor before the door is closed.

When the doors are closed, make sure the aircrew is notified immediately.

In the removal, securing, and the storage of the Lower cargo compartment cargo nets and door protective covers the following important factors need to be stressed:

1. When opening the door, before offload or onload, make sure the door is in the full open position and secured.
2. Release the cover hold-open struts and slide pins.
3. Install the struts or pins in their stowage/holding fixtures on the cover and release the protective cover.
4. If net adjusters are installed, release the cargo nets and cargo net adjusters to loosen the net assemblies.
5. Remove the cargo nets anchor or securing rings in order to remove the net assemblies.
6. Stow or remove net assembly to gain access to the cargo compartment for unloading or offloading.

For installing the cargo nets:

1. unstow and reinstall the remove cargo nets.
2. Install the net anchor securing rings and adjust the net adjusters if installed.
3. Raise the door protective cover.
4. While holding cover, unstow and place the cover hole-open struts/pins into hold-open strut/pin stationary fittings located on both sides of the door frame structure in the lower cargo compartment.
5. Close the lower cargo door using the proper closing procedures for that particular door.

#### Personnel Doors

1. Crew door - The forward entrance door to the flight deck not to be used for freight.
2. Overwing exits - Four of these are provide for access to the upper wing area.
3. Service door - These doors are located on either side of the aft upper cargo area and used for emergency evacuation.

**Main menu CBT**

## **Chapter 6**

### **Cargo Loading System**

This system is comprised of ball transfer conveyor assemblies, roller conveyor assemblies, side rail assemblies, side restraint latches, door sill guard/conveyors, end restraint fittings, a forward cargo barrier net, and including the nets used to restrain loads on pallets.

The system is designed to accommodate different sizes and types of cargo pallets. We use the standard 88" x 125". On Paragraph D, it explains how to move side rails, ball transfer conveyors and side latches to accommodate a different size container. There should be a note here in regards to aircraft maintenance is the only personnel that can perform these task.

This system provides restraint for flight and taxi loads. The forward barrier net must be in place to provide restraint up to 9-G's in case of emergency landing conditions.

#### **Pallet Nets**

One piece rope net or a webbing pallet net can be used. Webbing consist of three pieces, a top net and two side nets and joined by metal rings and hooks.

#### **CBT**

#### **Door Sill Guard/Conveyor Assemblies**

The statement in paragraph three, letter c: "Sill guards are normally carried in flight and are not considered station equipment". Should read: "Sill guards should always be carried in flight and never consider station equipment.

ULD's should not be brought into the cargo door area unless the loader or forklift is in position to accept them.

#### **CBT**

#### **Ball Transfer Conveyor Assemblies**

These assemblies are in positions 2 and 3 and are used to transfer the pallets from lateral to fore and aft movements.

Proper care should be enforced to all loaders.

1. Never slam ULD's into locks, siderails, or ballmats.

**LOCKS ARE SUPPOSE TO BE USED TO LOCK DOWN ULD's NOT FOR STOPPING ONE.**

2. Minimal impact from loader device to upper deck.
3. ULD's should be walked through the aircraft, avoiding sudden jolts to floor locks.
4. Any problems with any of the assemblies, should be reported to aircraft maintenance as soon as possible.

#### Roller Conveyor Assemblies

These also assist in the movement of pallets. They provide low friction forward and aft movement of the pallets. These sections are not located in the ball transfer area.

CBT

#### Side Rail Assemblies

These assemblies provide side restraint of the pallets. They are located from position 1 through the last position along both sides of the airplane except for the left side in the ball transfer conveyor assemblies are located in position 2 and 3 where latches provide the side restraint.

These are adjustable and once again if they ever need adjusted call aircraft maintenance.

CBT

#### End Restraint Fittings

There are two basic types of end restraint fittings: Rigid and retractable. Rigid are located in the front of position 1 and the back of the last position only. Retractable fittings are used in the front and back of all other pallets. They provide longitudinal and vertical restraint at the ends of the pallet.

The retractable fittings have two basic models, one with rollers and one without rollers. The fittings with rollers are used in all positions except the areas on the ball transfer conveyor assemblies. These rollers provide additional rolling surface to reduce friction when pallets are moved fore and aft.

#### Side Guide Rails and Rigid Side Restraint Fittings

These side rails provide side and vertical restraint to the last position.

CBT

#### Pallet Snubbers

Pallet snubbers are energy absorbing fittings not always installed in all DC-8's. If they are installed, they are considered part of the universal cargo system.

They slow the speed of the pallets during off and on loading operations. Five snubbers are used, three in the forward end of position 4 which aid in offloading operations, and two located in the forward end of the aftmost pallet position which function during unloading operations.

The snubber is a single-action hydraulic shock absorber.

## **CBT**

### **Forward Cargo Barrier Net**

Once again, the forward cargo barrier net is used to provide 9-G crash load forward restraint. This barrier net is located in front of position 1. The net consist of 25 radial straps made of dacron webbing looped and sewn around a polyurethane filled glass fiber center ring and terminating in stainless steel fittings for attachment with ball locks pins to floor and sidewall fittings.

### **Cargo Loading Equipment Damage**

## **CBT**

Over 90 hours of delays were caused by careless loading last year, costing our company millions of dollars and producing dissatisfied customers.

These transparencies are in your manual and show the causes and cost of the cargo loading equipment.

## **MAIN MENU CBT**

### ***Chapter 7***

### ***Weight and Balance***

Due to this chapters specialized context. I will cover this briefly. Bill Artin, the Weight and Balance Specialist, will cover this subject manner in more detail later.

### **Definitions**

**CBT**

### Ferry Flights

When no cargo is boarded on an aircraft, is either considered a ferry flight to position for onload or maintenance or performing test flights. It is important that sufficient fuel must be on the aircraft at takeoff and remain on board for landing. This is called ballast fuel.

**CBT**

### Deadhead Void Limits

A void position is a pallet igloo position or shell zone that is not occupied by either a loaded or empty pallet/igloo. Deadhead Void limits apply when the courier seats are occupied during takeoff and landing. This chart shows the maximum number of void position allowable in relation to the Main Cabin Gross Weight.

**CBT**

### Tail Tipping

These are tables for a DC-8 to assist in the prevention of tail tipping during unloading and offloading.

Regardless of what kind of aircraft you are loading, nothing should be pushed past the wings without your heaviest container in position 1. This is used like a ballast (**BOWLEST**) to maintain the center of gravity.

In all case use a tail stand.

### Weight and Balance Control

The aircraft must be loaded within forward and aft loading limits. These are expressed in percentage of Mean Aerodynamic Cord (MAC). This control is the distribution of the weight so as not to exceed the weight capacities of each shell zone, the total compartment weight limitations and the maximum total weight limits of the aircraft.

Completing the Weight and Balance load manifest will be done tomorrow.

## Transparency on load plan

### Load planning

The load planning sheet is used to tell the loaders what ULD's to load in the correct order to maintain the proper percent of MAC of the aircraft. It also tells destination and weight of each compartment including the lower belly compartments.

The load planning sheet requires four different signatures.

1. A qualified EWA Dangerous Goods specialist must inspect all hazmat onboard the aircraft and sign the load planning sheet to verify the inspection and notification to the crew.
2. A qualified Weight and Balance specialist must sign the load sheet to indicate to the PIC that the aircraft load plan complies with the weight & balance limitations.
3. A loading supervisor will sign the load sheet to indicate to the PIC that he/she has supervised the loading of all cargo and ULD's, and has determined that the cargo is secure in the positions and properly restrained meeting the standards prescribed in the EWA Aircraft Loading Manual.
4. The PIC must sign the load plan to indicate that he was notified of the cargo load and basically, he believes that the other three individual specialist have done their jobs to meet the standards set forth in this manual.

Each individual, if proven that they knowingly violated these standards can be held legally responsible for their actions.

### Required Documentation

The responsibility for having all required documentation on board the aircraft at point of traffic origination and termination, under law, is the air carrier (EWA). It is the Ground Services Department to insure compliance for the load planning sheet.

Each PIC of each aircraft must carry in the airplane to its destination the original or a signed copy of:

Load Manifest or load planning sheet

Flight Release and flight plans are distributed and initialed off by Flight dispatchers

Airworthiness Release is contained in each maintenance log book

Pilot Route Certification is included in the flight release

The Supervisor / Team leader is responsible for :

Completing the load planning sheet and giving one sheet to the PIC.  
Completing an Air Waybill if it is a charter flight  
Completing or providing a COMAT manifest to the PIC  
Forwarding any pertinent delivery receipt copies or other cargo related paperwork as requested by the shipper

A copy of each document shall be placed in a manila envelope marked with:

Flight Number  
Aircraft Number  
Point of Origin  
Point of Destination

These are kept on file for 30 days.

Main menu CBT

### *Chapter 8* *Palletized Loading and Offloading*

All pallets or ULD's must be visually inspected prior to loading to make sure there are no surface irregularities that can damage the cargo loading system. Prior to onload, and preferably after offload, the aircraft should be visually inspected to make sure the airplane cargo loading system is installed and in working order. Make sure that the latches are lowered in position 2. If something on the cargo loading system appears to be inoperative, call aircraft maintenance to have it serviced. The sooner that problems are located and resolved, the less chances of delays and damages taking place on the aircraft.

All pallets should be identified properly to clearly mark weight and destination. They should be arranged in the ground handling equipment or dollies so that the sequence of unloading can be achieved in a sufficient manner.

Aircraft maintenance must be notified if the rigid end restraint fittings are to be moved. The retractable fittings should be lifted up to secure a pallet next to a void position.

Sill guards should be stored in the same place in the aircraft.

DC-8 between positions 1 and 2 or 2 and 3 if these positions are pallets with nets. If they are all huts, place between position 3 and port side wall. Never toss or throw.

B727- Between positions Bravo or Charlie on main cargo deck floor. If there is no room, place between position 3 and side wall. ????

**These sill guards remain on the aircraft at all times**

The ground handling conveyor or lift platform should be lifted 1 inch above the rollers of the conveyor system.

Move the loaded pallet into the airplane approximately one foot and then lower the lift platform slightly to permit the protruding portion of the pallet to rest on the rollers of the door sill guards and continue moving the pallet into airplane until approximately one foot is remaining outside of the airplane. Slowly lower the lift platform until the pallet is completely supported by the airplane conveyor system.

Pallet locks are used for locking not stopping. Never slam ULD's into locks, siderails, or ballmats. ULD's should be walked through the aircraft, avoiding sudden jolts to the floor locks.

Always check belly compartments even if the load plan does not show any freight in the belly compartments. Transit cities need to look for mixed freight with the downline stations.

If a hazardous shipment does not appear to be properly inspected, do not load and notify a local EWW representative for assistance. Always make a mental note where you have loaded hazmat shipments and load with extreme care.

#### **Install Loaded Pallets**

Position 1 should be loaded first as long as it maintains a weight that will provide the airplane with C-G limits and also does not exceed the limitations for that position.

Do not let two structural containers be loaded where the covers face each other. They can become tangled and amount in costly and damaging to recover. All containers should face forward to the aircraft.

Always be alerted to the fact that there may be a discrepancy to the load manifest for uploads and downloads. This could prevent further problems relating to mis-tagged containers.

The loading supervisor must fill out a lock verification form prior to each aircraft departure.

The cautions for both onloading and offload refer to staggering the load which may be necessary to further prevent a tipping condition.



All operable locks should be raised, including those in void positions. If locks are not raised due to inoperable condition, they must be reported to a flight crew member and also notify the supervisor who fills out the lock verification form.

Barrier net locks should always be locked in before dispatching the aircraft. If locks are missing or inoperative, report to crew and report on problems report form.

#### Disabled Aircraft with Stranded Cargo

A Ground handler is required to always stay with an aircraft that has freight on board until further instructions:

The handler will be required to wait until the aircraft is green or operative, or offload and onload onto trucks or another aircraft or have Operations Control authorize your departure.

If envelope bags or other important shipments listed individually on the load manifest are not located, notify an EWW representative as soon as possible.

#### Aircraft Loading Procedures

1. Never throw freight
2. Follow orientation/directional arrows
3. Watch for fragile markings and take extra care
4. Belly freight is more subject to damage and extra care should also be placed when loading into a belly container.
5. If damaged freight is found off of an inbound aircraft, set aside and contact quality control or and EWW representative. Also note on a problems report.

#### Shock-Watch and Tip-and Tell Shipments

We don't want dissatisfied customers or large claims to our company. Notify the EWW rep if you receive an activated shipment.

#### Belly Freight Limitation

No single piece shall exceed 250 lbs. and no pc. shall exceed a floor limitation of 120 lbs per square foot.

Never use a forklift to maneuver cargo in or out of a belly.

### Transit Station Ground Time

The important factor here is to make sure that loading equipment is in good condition, all freight has been properly built and restrained within its pallet and is pre-staged in order for continuous on load.

Think ahead and be aware of any foreseeing complications that may hinder the operation.

Once again notify the crew when loading the last position to allow them time to complete final paperwork.

### Package Dimension Limitations

\*\*\*\* Show pictures of the aircraft engines and how they meet the dimension limitations.

The dimensions are 153"X100"X83" Length width and height. 10,000 lbs. These charts are conservative to allow for clearance.

Chart for conversion from inches to centimeters

### *Chapter 9*

#### *Unit Loading Device (ULD) and Loading System Appraisal Procedures*

#### ULD Container Compliance Video will be shown on Monday

This chapter is designed to follow FAA guidelines and to ensure that serviceable ULD's are loaded onto the aircraft and locked down correctly to prevent any more mishaps such as the Fine Air crash.

Empty ULD's must also be locked down properly and the shell must be attached to the base. In some instances, a container that is approaching any of the limits specified in this chapter or unserviceable may still be loaded on an aircraft and flown to a repair station with no freight inside.

#### Condition Appraisal Procedures

A detailed visual appraisal of all containers and restraint locks/side rails on board the aircraft, after offload and prior to onload will be performed by and authorized personnel. This person can be a contracted personnel or and EWW personnel as long as they have been trained, qualified and authorized by EWA.

A minimum of two persons shall perform these inspections per shift. At multiple aircraft sites, like the hub, It is expected that management provide the sufficient

personnel to accomplish these appraisals in a timely and efficient manner and also maintain the integrity of the appraisal.

Upon completion of the appraisal, the designated personnel shall report any ULD's that are out of service to the supervisor/team leader. The designated personnel assigned to perform the visual on the cargo lock system shall also report any obvious defects, loose or missing pallet locks or side rail restraints.

The supervisor will report any unserviceable ULD's to Operations Control immediately.

If there are any defects noted on the cargo lock system, the designated personnel shall notify a supervisor who shall immediately notify aircraft maintenance. A verification form must be completed after onload to insure that all ULD's are correctly positioned and locked.

**\*\*\*Show the lock verification form transparency will be shown by Jim Owens**

It is important to label an unserviceable ULD immediately after being verified. A service tag (Figure 9-1) shall be taped or attached on the front so easily seen and not mistaken for a serviceable hut and stationed elsewhere.

Unserviceable huts shall follow the routing procedures as graphed out on figure 9-2.

Page 9-11 shows a condition appraisal of 88"x126" fiberglass shell with curtain and net restraint.

## ***Chapter 10*** ***Ground Handling***

### **Marshaling**

Each Marshaller needs to plan the parking of the aircraft so proper signals can be given to the Captain avoiding mistakes and giving the Captain ample time to execute the desired maneuver.

The use of wands is particularly important to increase the clarity of each signal. The wing walker should also use wands.

Parking areas should be clearly defined with wheel spots and nose wheel guide lines.

Always allow at least a 5-foot straight roll-out before or after turns. If the nose gear is turned, the cargo door may not open properly because of a twisted fuselage.

### Hand Signals

If you are already not familiar with the ramp signals involved in guiding and parking the aircraft, It will be your responsibility to know them and keep your employees familiarized with all hand signals as outlined in this manual.

No less than two persons shall park the aircraft. If parking in close quarters, another guide person should be used.

One is the guide person who will be located near the wing tip and the signal person who signals directly to the airplane cockpit or tractor if guiding an aircraft towing.

Stay in constant alert to keeping a safe distance between yourself and the aircraft.

### Aircraft General Description

The turning radius and aircraft layout for reference to support ground handling task is on page 10-7 through 10-18.

### Jet Blast and Suction Precautions

Jet engines can generate jet blast forces up to 60 miles per hour and increase air temperatures during normal ground operations. The greater the engine operating power level, the larger the suction force at the intake areas.

#### **\*\*\*\*Show danger zone transparency**

Maintain a minimum of 30 feet from engine inlets for engines operating at idle. If the suction force is felt, it is too late to escape the hazard.

When the engines are operating, service personnel must not go into areas aft of the forward passenger door. All duties must be performed before engines start. This once again stresses the importance of communication with the crew. Do not enter the area until all engines have shut down.

On page 10-21 temperatures and jet blast velocities are shown.

The suction is strong enough to pull object into the engine inlet. This can cause severe damage to the engine. Even a small piece of paper can damage an engine and cause up to \$500,000.00 of damage. It is the loading crews responsibility to complete a routine sweep of the area surrounding the aircraft. Any type of debris should be picked up and placed in a suitable container before the engines are started. All employees working on or around the ramp are responsible for keeping the ramp free from FOD (Foreign Object damage).

## Aircraft Ground Support

This manual contains general operating procedures for the use of aircraft ground equipment. These were taken from the EWA Aircraft Maintenance Manual where you can find more detailed information.

Equipment should be serviced prior to use during aircraft operations. All ULD's and equipment should be no closer than 10 feet from the aircraft. This includes fire extinguishers, power carts, airstart carts/trucks, and ULD's.

Store all equipment away from an aircraft not due to depart. This includes empty ULD's. We had a severe storm during the Dayton airshow a couple weeks ago that caused severe winds to pick up a empty hut and slam it into the plane causing damage.

Stairs, K-loaders and beltloaders should never touch the aircraft. The minimum clearance is 2 inches. Beltloaders should be adjusted to a vertical height of 16 inches. Always set or chock the brake on the stairs.

Once again we stress the importance and FAA flight requirement of making sure all belly and barrier nets are secure.

Never use a forklift in and out of a belly.

The aircraft fire extinguisher should be place within 10-15 feet of the aircraft nose during all ground operations. For the Dayton Hub only, because of congestion, may the fire extinguisher be place on the crewstairs or on the truck/cart.

Wing tip, engine marker cones must be used even for short ground time.

When ever approaching an aircraft, in vehicles or ground handling equipment, use the brake test procedure. Come to a complete stop at no less than 25 feet from the aircraft before proceeding any further and then proceed slowly and with caution or with spotters.

Make sure all vehicles equipment lighting is working properly.

Tail stand procedures on page 10-24.

## Aircraft Chocks

Aircraft chocks must be placed right after engine shut down about two inches from the aircraft tires. This is to prevent the possibility of the chocks getting struck after increase of weight due to freight onloads and fuel added will spread the tires out.

At transit stops, only the nose gear needs to be chocked.

### Towing Policy

Only qualified and authorized persons shall tow Emery Worldwide Airlines aircraft. Even if the person is qualified, an Aircraft Maintenance personnel. Must assist.

Towing instead of taxing the aircraft is preferred. Anytime we are running the engines we are increasing risk for a hazard. Towing also conserves fuel cost.

Make sure the appropriate towing bars and tugs are used for each individual type aircraft.

### Aircraft Mooring

Aircraft Mooring is normally handled by aircraft maintenance and should be done if unfavorable weather conditions exist or are anticipated. Mooring is the act of tying down the aircraft to offer the least resistance to winds. The ropes are attached to the main landing gears and the tail post fitting at aft fuselage. Ropes should run vertically, if possible, providing a slight slack to prevent stress or strain caused by shrinkage of the ropes due to moisture absorption.

Maintenance Control must be notified whenever an aircraft has been exposed to excessive gust velocities.

### *Chapter 11* *Operating Procedures*

#### Operation Departure Procedures

This amazing freight handling business, could never succeed without a procedure outlined to all parties evolved, including you as contracted ground handlers. This procedure is required to coordinate all aspects of business and ensure safety and an on time departure.

#### Time Line Procedures

See Ground Handling

#### Block Turn Back / Air Turn Back Procedures

This procedure is set forth for flight crews when they determine a situation that will require assistance from Emery Airlines maintenance. The procedure should

eliminate premature shut down of the aircraft that could cause extensive delays waiting for ground support equipment to restart the aircraft.

These procedures are outlined for a return to Dayton ramp only.

The engines should remain running unless a condition exists that would affect the safety of the flight crew. Engine fires etc...

#### Maintenance Status Reports

There are three types of status reports that relate to the extent of situation.

The extent of the problem is rated in terminology expressed in colors.

Red - no continuation until the aircraft problem has been resolved.

Yellow - will allow continuation with minor maintenance performed or if the item causing the problem can be deferred or have component failures that are determined not to effect the safety of the aircraft but must be fixed at the next layover.

Green - will allow continuation with no maintenance action required.

#### Flight Line Safety

Keep ramp clear of FOD

Fire bottles must be positioned within 15 ft of the aircraft nose during every operations. And serviced daily.

It is a FAA guideline of no smoking permitted on an aircraft ramp or within 50 ft of a fueling truck.

It is the responsibility of airline maintenance to be in contact with the cockpit crew during engine start and pushbacks. If maintenance is not available, a ground handler must familiarize them selves with the standard communication sequences.

1. Make contact by letting the crew know that you are on the line. Always begin radio communication with "ramp" and crew will begin with "crew"
2. Let the crew know when the GPU and airstart are connected and running accordingly.
3. Let the crew know when all lower compartment doors are closed, stairs removed, and don't forget to check for FOD.
4. Crew is required to let you know before starting all engines. They must here your reply before doing so.
5. Crew will let you know when the breaks are set and they are ready to taxi. Ramp will walk along the fuselage only to retrieve the chocks and assume taxi position and advise the crew your going off-line.

### Fork Lift Operations

Max speed in marked traffic lanes is 15MPH  
with 50 ft of an aircraft is 3MPH

All other areas - 5MPH

All equipment must stay 10 ft away from aircraft surfaces unless the equipment is a beltloader or a k-loader.

Beltloader drivers at the hub are notorious for pulling up to the belly before the engines have been shut down. Wait until all engines are shut down.

ULD's not being used should be stored 200 ft away from ground services equipment and the aircraft. They can obstruct vision easily be moved by high winds or jet blast.

To protect the electrical components of the aircraft, ULD's should be protected and loaded onto the aircraft as dry as possible.

Always check the condition of the nets and covers to make sure they are secure. Transporting to and from the buildup area to planeside can sometimes cause freight to shift and loosen areas from restraint. This can also entangle nets causing damage to the ULD's or equipment.

Keep the forklift blade under 15.5 to 20 degrees when transporting a ULD and never bareblade.

### Ground Support Equipment Operations

Three Sets of full-width moulded rubber aircraft chocks shall be kept on hand at all stations.

Transit station operations can use one set, in front and in back of the nose gear wheels. Terminating aircraft must have gears chocked nose and main gear tires located two inches from the rubber to allow for wheel expansion.

They should be chocked immediately after engine shut down until engine start up. Be very careful to walk along the fuselage when removing chocks. Stay clear of the engines.

Ground Services equipment parked around the aircraft should be chocked front and back.

Always use all support pods on the crew stairs.

Crew Stairs, K loader and beltloaders should be no more or less than 2 inches away from the aircraft, and the stairs never any lower than 12 inches lower than the crew entrance door.



All Ground Services equipment should be fueled and inspected before aircraft arrival. Always consider the worst case as far as thinking of safety and preventing delays.

If an equipment failure occurs during on/off loading, remove the equipment within five minutes. Do not take a delay on trying to fix the problem. Replace as quickly as possible.

#### Post Flight Operation Procedures

Every Manager should devise a check list to ensure that all critical tasks have been performed prior to departure. I wouldn't be surprised if this will soon be a mandatory form just like the lock down verification form.

#### Go over list

Delays should be reported on the EWA Delay sheet and faxed to GSD immediately. The Daily Operations Report is faxed every Saturday. Problems Report should be used to alert GSD about any problems from the operational aspect to ULD's.

The flight release, load plan, weight and balance form, problems reports and lock verification forms should be kept in a designated area on hand for at least 30 days. These forms can only be surrendered to the FAA or EWA.



# **GSD TRAINING**

**September 28, 1997  
1:00-2:00 PM**

## **Aircraft Systems, ULD Handling Procedures Outline**

Slide one intro

Slide two Agenda

### **Introduction**

Slide three Introduction

The aircraft maintenance primary involvement with the groundhandlers is to insure that the Federal Aviation Administration (FAA) regulated inspection checks are performed daily and that they prepare the loader for the opportunity to load the aircraft within the allotted time frame, without hazards or obstacles which could lead to damage/delays to the aircraft. It is also the groundhandlers responsibility to report any structural problems to aircraft maintenance that are encountered while loading or unloading the aircraft.

### **ULD PROCEDURE**

Slide four terms

Airworthiness is defined as a condition in which the aircraft or a component meets the conditions of its type design and is in a condition for safe operations.

A ULD - (unit loading device) once it is loaded onto an aircraft, becomes a component, which is part of the aircraft and must conform to all airworthiness regulations specified for a Part 121 carrier. Under the Federal Aviation Regulation (FAR) Part 25, which describes most of the cargo loading regulations for a Part 121 carrier. Some of these requirements are as follows:

Slide five, six, and seven: current procedures

1. Materials must conform to approved industry or military specifications established on the basis of experience or tests.
2. Fabrication methods and workmanship must produce a consistently sound structure and must be an approved process specification. Workmanship shall be consistent with high-grade aircraft manufacturing practices.
3. Protection to the ULD must be suitably protected against deterioration or loss of strength in service due to weathering, corrosion, abrasion or other causes where the type of material used requires such protection. The ULD must have provisions for ventilation or drainage where necessary for protection.
4. The container must be constructed to adequately encompass the cargo and shall provide for proper support and restraint of the cargo. This cargo restraint involves the prevention of movement in five principal directions: Forward, Aft, Upward (vertical), Left (side), and Right (side). These movements are the result of forces exerted upon the cargo due to acceleration or deceleration of the airplane in take-offs and landings as well as forces such as air turbulence in flight. These forces are commonly expressed in terms of gravitational units or "G"s. Correct restraint provides the proper relationship between the weight of the cargo and restraint when the ultimate forward emergency landing conditions - inertia force is 9 G's (nine times the gravitational pull).
5. Each pallet, net, and container must be legibly and permanently marked in an area clearly visible after the article is loaded with cargo and must have the following information:
  - A) Name and address of the manufacturer
  - B) The weight of the article to the nearest pound
  - C) The serial number or date of manufacture or both
  - D) The identification of the article in the code system set out in paragraph 1.2.1.
  - E) If the article is not omnidirectional, the words "FORWARD", "AFT", and "SIDE" must be conspicuously and appropriately placed.
  - F) The burning rate determined for the article under paragraph 3.7.
  - G) The applicable TSO (Technical Standard Order) number which is C90B.

Maximum gross weight capacities for the ULD are not defined under any specification. Actual gross weight limits for a loading device in a given airplane are determined in compliance with FAR 25 and listed in the approved

Weight and Balance Manual for that particular aircraft.

Due to the recent Fine Air crash which was caused by improper loading of the aircraft, Congress passed to the FAA, a special emphasis to be placed on the surveillance of Part 121 Air Carrier cargo loading procedures. This will expand current policy and guidance concerning weight and balance control procedures, cargo loading procedures, and loading schedules and instructions.

The FAA oversight improvements of Air Cargo Operations are as follows:

Slide eight, nine, and ten: future changes

1. Increase focus on FAA inspection of cargo loading procedures
2. For each cargo only carrier, inspect:
  - carrier oversight, responsibility and supervision of cargo loading operations
  - cargo handler training
  - cargo weighing and handling procedures
  - cargo system maintenance procedures (pallets, nets aircraft cargo floors, etc.)
  - aircraft loading and cargo retention
  - air carrier's oversight of freight forwarders
  - if applicable, air carrier's use of interior "profiler" to ensure proper clearance between freight and interior sides of fuselage. (Note: profiler is a tool that is placed between cargo pallets and side wall of fuselage to ensure enough space is maintained.)
  - condition and approval method of 9 G barrier nets and lower lobe restraint nets and straps (will be discussed later)
  - condition of cargo handling systems (rollers, locks, ball mats, etc.)
  - cargo netting, ropes, and straps to ensure all meet burn test requirements.
  - all cargo containers, nets and pallets to ensure articles are properly marked per TSO marking requirements, (discussed earlier) ensure maintenance program exists for continued airworthiness of these articles
  - all TSO'd articles to ensure eligibility for use on an air carrier's particular make and model aircraft
3. Inspect operator oversight and audit of contracted out cargo services
4. Revamp FAA inspection procedures

5. Review inspection methods for effectiveness in detecting problems.

You will be hearing more about the updated inspection program as well as the new cargo loading procedures and training requirements within the next 60 days. FAA agents will be randomly looking for any areas that may cause damage to the aircraft and enforce violations by downing an aircraft much more seriously than they have in the past.

Preventive aircraft damage can start now. Prior to loading cargo on a ULD (which may consist of a pallet and net or it may be a container), each must be visually checked to insure that it is not damaged. Pallets with torn skins and edges and surface irregularities such as gouges, waviness, punctures, or delaminations can cause severe damage to the cargo loading system and/or airplane floor and lining. If damage to a ULD should exceed 15% of the container, it should be pulled out of service and sent for repair.

### Cargo Load Restraint System

#### Slide eleven: cargo restraint

The Inspection checks that our Aircraft maintenance perform include checking all pallet locks, side restraint rails or rail assemblies, the forward barrier net, and lower cargo compartment nets. Only one pallet lock or beartrap per lateral edge position may be broken or missing without any load limitations to that position. **AT NO TIME WILL IT BE PERMISSIBLE TO HAVE MORE THAN ONE LOCK PER POSITION MISSING OR BROKEN.** A good pallet lock may be moved to a position where more than one lock is broken or missing in order to carry maximum loads in all positions and Aircraft maintenance must be notified of the missing or broken lock. All positions between cargo loads must position the pallet locks in the upward and locked position to provide for the proper restraint throughout the Aircraft. All side restraint rails or rail assemblies are required to be installed, if a rail or rail assembly is unserviceable the position is to be blocked and not loaded and aircraft maintenance notified.

On all Douglas freighter aircraft, the forward barrier net, which separates the crew galley and the cargo bay area, must be installed to provide the 9G crash load forward restraint.

In some modified aircraft instead of a net they have permanent 9G walls installed.

The lower cargo compartment nets must be securely fastened in all areas to keep cargo from shifting onto the door. If nets are missing or need repaired, aircraft maintenance must be notified.

### **Tail Stand and Sill Guards**

#### Slide twelve tail stand / sill guards

It is our company standard that sill guards and tail stands are used to protect the aircraft. Sill guards are used to provide protection of the main cargo door threshold when moving containers through the cargo door area. The door sill conveyors contain one row of rollers to provide easy lateral movement of the pallets across the threshold and onto the ball transfer conveyors. The Sill guards should always be installed before loading and removed upon completion. Although a tail stand is not a regulated requirement, a tail heavy condition could occur under certain loading or unloading conditions and severe damage to the aircraft could occur without a tail stand. During all loading and unloading operations, the center-of gravity shall be maintained with the help of step loading and the use of the tail stand.

#### Slide thirteen concluding remarks

#### Show video

#### Questions

I am not a certified A&P mechanic, If you have any technical questions that I am not qualified to answer, I will be happy to get an answer back to you as soon as possible.

#### Reference Material slide fourteen





**Griffin, Debbie F.**

---

**From:** Griffin, Debbie F.  
**Sent:** Monday, October 19, 1998 9:53 AM  
**To:** Nanna, Thomas J; Driscoll, Wayne T; Klemann, Rick; Artin, William W; Spillane, Michael K; Nelson, R P; Griffin, Douglas L; Carpenter, Jeffrey S; Henderson, Mark; Morgan, Raymond J; Bailey, Chris B; Slavens, Rob L; Hilliard, Michael A; Olson, Tom R; Robbins, Frank H  
**Cc:** Warriner, Cecil L.; Robbins, Bruce A.; Newsome, Johnny L; Wood, Thomas M  
**Subject:** ALM CBT MEMO

Gentlemen,

The following Word document memo may be used along with the Aircraft Loading Manual, Computer Based Training for distribution to assist in installation, setup and to explain all available training options.



CBT@CER2.doc

Many of you have mentioned making copies of chapter nine and chapter four for distribution to employees. Per Director of Quality Control, Thomas Wood and Technical Publications Department, Johnny Newsome, please make sure that all copies are controlled and must state on the front page "For Reference Only"

Please call if you have any questions,

*Debbie Fusco Griffin*  
Maintenance Training Program Specialist



## MEMORANDUM

TO: Area Service Centers, Ground Services, Charters, EWW Dayton Hub and EWA Employees

FROM: Debbie F. Griffin / EWA Maintenance Training

SUBJECT: Aircraft Loading Manual Computer Based Training

DATE: March 23, 1999

---

This memo is to advise and provide instructions on the Aircraft Loading Manual Computer Based Training (CBT).

This CBT course was developed by Emery Worldwide Airlines Maintenance Training to assist in training aircraft loading and cargo handling personnel and to place strong emphasis on "Safety in Flight." It was created from information taken directly from the EWA Aircraft Loading Manual.

The EWA Aircraft Loading Manual is the first to be accepted by the Federal Aviation Administration (FAA).

So what does this mean? It means that every employee who handles cargo may be held individually responsible for their actions or decisions concerning cargo restraint. Cargo containers, once loaded onto an aircraft, must meet all specifications that will prevent damage to the cargo system and prevent hazards from causing unsafe conditions to the aircraft.

Once a unit loading device is loaded onto an aircraft, it becomes a component of that aircraft and must conform to Federal Aviation Regulations (FAR) specified for a Part 121 carrier.

Awareness of reasons loading limitations must be followed, and awareness of the ways in which improper restraint of freight or the use of nonairworthy containers can effect safety in flight, are what this training is all about.

### Installation and Setup

The compact disk (CD) is included in this package. Installation instructions are located on the inside of the CD container.

When you run the Aircraft Loading CBT program, you will view a menu of the three different courses: The Full Course, the Cargo Handler Course and the Loader Course. Each is designed to meet the job requirements outlined for specific employees. It is important that you review the entire course before you begin training.

The CD must be placed in the drive to run the program. If your computer does not have a compact disk drive, contact Maintenance Training and we will provide you with floppy disk.

The Full Course is designed for managers and supervisors. They should also become thoroughly familiar with the EWA Aircraft Loading Manual.

The Cargo Handler Course is designed for employees who handle freight but don't perform duties on aircraft.

The Loader Course is designed for contracted ground handlers and other employees who work on or around aircraft.

### **Bookmarking**

Training sessions may become lengthy, so interruptions may occur. In case you need to exit the course during a module, the program offers a bookmark feature that will return you to where you left off.

You must use the same login name and number to take advantage of the bookmark feature.

### **Testing and Certification**

Along with the three courses, the CD also includes eleven Microsoft Word documents (see attachment).

These Word documents can be seen in Windows Explorer on the root directory of the CD (Drive D: or E:) and can be printed and duplicated as necessary.

Included are test questions that also appear during the progress through the course. This allows the option of using tests as paper copy or on the screen. The instructor may use the test questions during the course as group discussion, or have the students write the answers on their answer sheets and then grade them after class.

The answer key for each test is also included on the CD as a Word document.

Another method of training and testing, recommended for the management level, is as an individual training course.

The program maintains a progress report for the individual taking the course. It can be printed out or e-mailed and should be kept in the individual's training records.

A Training Acknowledge Form may also be printed out and kept in the individual's training records representing proof of training.

#### **Aircraft Loading Manual, Chapter Nine**

A copy of the Aircraft Loading Manual, Chapter Nine, ULD & Loading System Appraisal Procedures, should be placed in areas where ULD inspections take place.

The FAA Spot Checklist and the ULD Inspection Checklist should be copied and distributed to all employees. (If you have not received a copy of this checklist, please contact either Jim Owens or myself)

These checklists are necessary during training as reference for some of the ULD appraisal criteria test questions. They will be incorporated into the Aircraft Loading Manual in a future revision.

#### **Corrections and Changes**

If you have any comments or suggestions regarding the CBT, please use the Change Recommendation Form included on the CD.

Recommended changes to the Aircraft Loading Manual must be annotated on Form RFO03, Request for Manual/Publication Revision, located in the manual. The form is then forwarded to the Director of Operations.

#### **Seeking Help**

If you need assistance with CBT or if you have any questions regarding the training, please email or call either of the individuals below at the Maintenance Training Center in Dayton or fax at 937-264-5570.

Debbie Griffin

[REDACTED]  
[REDACTED] or 888-390-1761

Cecil Warriner

[REDACTED]  
[REDACTED] or 888-390-1761



**Full Course Written Exam  
ANSWER SHEET**

Name \_\_\_\_\_ Station \_\_\_\_\_

Employee Number \_\_\_\_\_ Date \_\_\_\_\_

- |           |           |           |           |           |
|-----------|-----------|-----------|-----------|-----------|
| 1. _____  | 15. _____ | 29. _____ | 43. _____ | 57. _____ |
| 2. _____  | 16. _____ | 30. _____ | 44. _____ | 58. _____ |
| 3. _____  | 17. _____ | 31. _____ | 45. _____ | 59. _____ |
| 4. _____  | 18. _____ | 32. _____ | 46. _____ | 60. _____ |
| 5. _____  | 19. _____ | 33. _____ | 47. _____ | 61. _____ |
| 6. _____  | 20. _____ | 34. _____ | 48. _____ | 62. _____ |
| 7. _____  | 21. _____ | 35. _____ | 49. _____ | 63. _____ |
| 8. _____  | 22. _____ | 36. _____ | 50. _____ | 64. _____ |
| 9. _____  | 23. _____ | 37. _____ | 51. _____ | 65. _____ |
| 10. _____ | 24. _____ | 38. _____ | 52. _____ | 66. _____ |
| 11. _____ | 25. _____ | 39. _____ | 53. _____ | 67. _____ |
| 12. _____ | 26. _____ | 40. _____ | 54. _____ | 68. _____ |
| 13. _____ | 27. _____ | 41. _____ | 55. _____ | 69. _____ |
| 14. _____ | 28. _____ | 42. _____ | 56. _____ | 70. _____ |

**Full Course Written Exam**  
**Do not write on these pages.**

1. Who is responsible for the safety of flight?
  - A) Flight Operations
  - B) The Pilot-In-Command
  - C) Ground Services
  - D) Operations Control
  
2. Who is responsible for safety and security of the aircraft and cargo while the aircraft is on the blocks?
  - A) Ground Services
  - B) Operations Control
  - C) The Pilot-In-Command
  - D) Transportation Logistics
  
3. What do Ground Services personnel do with a passenger's baggage or cargo when the passenger is not on board at departure time?
  - A) Load it and inform the PIC.
  - B) Contact Airport Security and wait for further instructions.
  - C) Locate the passenger to determine the disposal procedure.
  - D) Remove it to an isolated area and inform the charter's agent or representative.
  
4. What type of training includes critical tasks such as preparation of load planning sheets, ULD inspection, and cargo lock verification?
  - A) Indoctrination Training
  - B) Initial Training
  - C) Recurrent Training
  - D) Special Training

**EMERY WORLDWIDE AIRLINES  
AIRCRAFT LOADING MANUAL TRAINING**

5. Cargo restraint is required for what loads?
- A) Flight Loads
  - B) Taxi Loads
  - C) Crash Loads
  - D) All of the above
6. What normally provides forward crash load restraint?
- A) Pallet Locks
  - B) Rigid End Restraints
  - C) Retractable Side Restraints
  - D) Forward Cargo Barrier/Barrier Net
7. How is palletized cargo load restrained to the pallets?
- A) Restrained to the pallets with approved pallet nets, and the pallets restrained
  - B) With approved pallet nets attached to the cargo loading system fittings
  - C) With restraining straps tied to the cargo loading system fittings
  - D) Attached to the Forward Barrier Net
8. What type of cargo is placed on the airplane floor, or on pallets or shoring resting on the airplane floor, with restraint accomplished by local tie down?
- A) Bulk Cargo
  - B) Palletized Cargo
  - C) Solid Loaded Cargo
  - D) Loosely Loaded Cargo



**EMERY WORLDWIDE AIRLINES  
AIRCRAFT LOADING MANUAL TRAINING**

9. What type of cargo essentially fills the main cabin cargo compartment?
- A) Bulk loaded cargo
  - B) Solid loaded cargo
  - C) Palletized cargo
  - D) Loosely loaded cargo
10. How much forward, side, and aft flight and taxi load restraint is required in all positions?
- A) 1.5 G's
  - B) 3.0 G's
  - C) 6.0 G's
  - D) 9.0 G's
11. How much vertical flight and taxi load restraint is required in all positions?
- A) 1.5 G's
  - B) 3.0 G's
  - C) 6.0 G's
  - D) 9.0 G's
12. What is the load limit in the DC-8 lower cargo compartments?
- A) 300 pounds per square foot
  - B) 260 pounds per square foot
  - C) 120 pounds per square foot
  - D) 100 pounds per square foot

13. How much cargo shall be placed between the barrier net and items of a piercing or penetrating nature?
- A) No more than 89 inches of cargo
  - B) At least 89 inches of cargo
  - C) A distance equal to two times the the amount of overhang on the pallet
  - D) No cargo is required between them
14. What is incompressible cargo?
- A) Loosely packed styrofoam
  - B) Cargo having a density exceeding 20 pounds per cubic foot
  - C) Cargo that compresses no more than 15 percent of its total length
  - D) Cargo with a density less than 20 pounds per cubic foot
15. When palletizing, what can result from a concentration of heavy items at the center of the pallet?
- A) Pallet dishing
  - B) The sides having a tendency to rise
  - C) The sides not matching properly with the restraint system
  - D) All of the above can result.
16. What is FALSE concerning the correctly built pallet?
- A) It is built with heavier items on top.
  - B) The pallet center of gravity is within 12 inches of the center of the pallet.
  - C) Overhanging freight is limited to 30 inches beyond the end of the pallet.
  - D) It is properly shored to uniformly distribute the weight of extremely heavy cargo.

**EMERY WORLDWIDE AIRLINES  
AIRCRAFT LOADING MANUAL TRAINING**

17. What is a danger of exerting too much force while fastening pallet nets while tying down cargo on a pallet?
- A) The pallet edge will break.
  - B) Bent pallet edge, making securing the aircraft locks impossible.
  - C) Too much tension is placed on the net, resulting in stretched or snapped nets.
  - D) There is no danger.
18. When filling a Unit Load Device, what should you do about open spaces?
- A) Ignore them.
  - B) Fill them with pieces of foam or packing peanuts.
  - C) Fill them with small cargo to restrict movement of freight in flight.
  - D) Move the larger pieces of freight as necessary to eliminate open spaces.
19. How should shoring in contact with the upper face of a pallet be placed?
- A) Over rollers in roller trays
  - B) Parallel to the roller trays
  - C) Extending to the next roller
  - D) Both a and c are correct.
20. At what spacing should LONGITUDINAL shoring be supported along its span by either floor beams, rollers or lateral shoring?
- A) A minimum of 20 inch intervals
  - B) A maximum of 20 inch intervals
  - C) A minimum of 30 inch intervals
  - D) A maximum of 40 inch intervals

**EMERY WORLDWIDE AIRLINES  
AIRCRAFT LOADING MANUAL TRAINING**

21. At what spacing should LATERAL shoring be supported along its span by either seat tracks, rollers or longitudinal shoring?
- A) A minimum of 25 inch intervals
  - B) A maximum of 25 inch intervals
  - C) A minimum of 35 inch intervals
  - D) A maximum of 35 inch intervals
22. In respect to shoring, how should a package be placed in the main cabin?
- A) The long dimension placed fore and aft
  - B) The long dimension placed perpendicular to the rollers
  - C) At an angle not exceeding 30 degrees to either side of the centerline of the fuselage
  - D) There are no restrictions.
23. What is the recommended material for shoring a flexible pallet?
- A) 2 X 4-inch timber placed sideways symmetrically under the load
  - B) 4 X 6-inch timber placed sideways symmetrically under the load
  - C) 2 X 4-inch timber placed fore and aft symmetrically under the load
  - D) 4 X 4-inch timber placed fore and aft symmetrically under the load
24. When shoring rigid pallets, how should the load be placed?
- A) At least 10 inches from all edges of the pallet
  - B) At least 20 inches from all edges of the pallet
  - C) A minimum of 18 inches from the fore and aft edges, and 9 inches from the sides
  - D) A maximum of 18 inches from the fore and aft edges, and 12 inches from the sides

**EMERY WORLDWIDE AIRLINES  
AIRCRAFT LOADING MANUAL TRAINING**

25. With what do we associate cargo handling delays during aircraft loading and unloading?
- A) Extra time required to open cargo compartment doors when cargo has fallen on the doors
  - B) Pressure seals on exterior doors not releasing to allow the doors to be opened
  - C) Damaged door sill guards and conveyor assemblies
  - D) Both b and c are correct.
26. Who opens the main cargo compartment door on an EWA aircraft?
- A) Any qualified cargo handler
  - B) Only the team leader or the loading supervisor
  - C) An EWA flight crew or aircraft maintenance person
  - D) All of the above may open the main cargo door.
27. At what wind velocity and to what position is the DC-8 main cargo door NOT to be opened?
- A) In the canopy position in winds exceeding 60 knots
  - B) In the canopy position in winds exceeding 69 knots
  - C) In the full open position in winds exceeding 30 knots
  - D) In the full open position in winds exceeding 46 knots
28. Which cargo loading component prevents damage to the cargo door opening structure of the aircraft and cargo system roller mat assemblies during loading and offloading operations?
- A) The Roller Conveyor Assembly
  - B) Retractable End Restraint Fittings
  - C) Forward Rigid End Restraint Fittings
  - D) The Main Cargo Door Sill Guard/Conveyor Assembly

**EMERY WORLDWIDE AIRLINES  
AIRCRAFT LOADING MANUAL TRAINING**

29. When is the lower cargo compartment checked for cleanliness and missed freight and the smoke barrier checked for tears and holes?
- A) During the parking roll
  - B) Before engine shutdown
  - C) After offload and prior to loading
  - D) After loading and before cargo nets are installed
30. Who verifies all cargo nets are properly installed before the lower cargo compartment doors are closed?
- A) Any cargo handler
  - B) The team leader or loading supervisor
  - C) The Flight Engineer or the Pilot-In-Command
  - D) Any of the above can verify net installation
31. During airplane loading, raise the ground handling conveyor platform to what height?
- A) Even with the rollers of the airplane conveyor system
  - B) Approximately one inch above the rollers of the airplane conveyor system
  - C) Approximately two inches above the rollers of the airplane conveyor system
  - D) Approximately three inches above the rollers of the airplane conveyor system
32. During pallet installation, which pallet positions are to be installed first?
- A) Position 1 on the DC-8; Position 1 on the B-727-200
  - B) Position 1 on the DC-8; Positions 1 and 2 on the B-727-200
  - C) Positions 1 and 2 on the DC-8; Position 2 on the B-727-200
  - D) Positions 1 and 2 on the DC-8; Positions 1 and 2 on the B-727-200

**EMERY WORLDWIDE AIRLINES  
AIRCRAFT LOADING MANUAL TRAINING**

33. If a tipping condition could occur during pallet installation, immediate action is required. It may be advantageous to:
- A) ensure end restraint fittings at aft end of pallet are raised and locked.
  - B) move pallets aft to a temporary position, place another loaded pallet in position 2.
  - C) reposition the remaining pallets to a more forward position.
  - D) raise the center guide fittings in pallet positions being loaded.
34. Which is true concerning beltloader freight?
- A) It should be set aside.
  - B) It must be placed/stacked into a belly hut.
  - C) It must be noted on Daily Operations Report.
  - D) It is not vulnerable to external damage.
35. Damaged belly freight should be set aside, noted on Daily Operations Report (where required), and:
- A) returned to the Hub.
  - B) reported to the aircrew.
  - C) repacked into a belly hut.
  - D) reported to the EWW representative.
36. What is the maximum weight allowed for a single piece of freight loaded in the belly of an airplane?
- A) 125 pounds
  - B) 200 pounds
  - C) 250 pounds
  - D) 300 pounds

**EMERY WORLDWIDE AIRLINES  
AIRCRAFT LOADING MANUAL TRAINING**

37. When is the detailed visual appraisal of all ULDs to be performed?
- A) Any time the aircraft is on the ground
  - B) When cleared by the Pilot-In-Command
  - C) Before the aircraft offload has started
  - D) After the aircraft offload and prior to the upload
38. Each facility performing these appraisals shall designate a minimum of how many personnel per shift to accomplish the appraisal?
- A) 1
  - B) 2
  - C) 3
  - D) 4
39. How are unserviceable ULD's identified?
- A) Tape over the ULD Number.
  - B) Attach a Form MEO 143 to the front of the unit.
  - C) Annote the ULD serial number in the flight records binder.
  - D) Either a or b can be used.
40. Who performs the cargo pallet lock verification during loading to ensure the locks are correctly positioned and properly locked?
- A) A supervisor or designated ground handler
  - B) Anyone can perform the verification
  - C) The Flight Engineer
  - D) The Pilot-In-Command



**EMERY WORLDWIDE AIRLINES  
AIRCRAFT LOADING MANUAL TRAINING**

41. Who designates the person to perform the offload visual appraisal of the entire upper cargo compartment for obvious defects, loose or missing pallet locks, or side rail restraints?
- A) The Flight Engineer
  - B) The Pilot-In-Command
  - C) The offload crew supervisor
  - D) Any of the above can designate.
42. Who does the designated appraiser notify if he/she identifies a defect during the offload cargo lock system visual appraisal?
- A) The load supervisor
  - B) EWA maintenance
  - C) The flight crew
  - D) Either b or c is notified.
43. When does loading continue after the person performing the cargo locking device verification notes a defect and stops the loading process?
- A) When the defect is repaired
  - B) When authorized by the flight crew
  - C) When authorized by an EWA maintenance representative
  - D) Either b or c is correct.
44. Where and when do ULD's need to be inspected?
- A) At the Service Center prior to loading cargo
  - B) At the aircraft prior to loading cargo
  - C) At the aircraft after cargo is loaded
  - D) Both A and B are correct.

**EMERY WORLDWIDE AIRLINES  
AIRCRAFT LOADING MANUAL TRAINING**

45. Where are ULD allowable damage limits detailed?
- A) The Aircraft Loading Manual, Chapter 7
  - B) The Aircraft Loading Manual, Chapter 9
  - C) The EWA Maintenance Manual, Chapter 7
  - D) The EWA Maintenance Manual, Chapter 9
46. How many Vertical Straps or Fittings can be cut or missing on a PC ("A" container)?
- A) One maximum
  - B) Two maximum
  - C) Three maximum
  - D) No Vertical Straps or Fittings can be cut or missing on a PC.
47. What is the maximum length of a crack in a Fiberglass PC Shell?
- A) Six inches
  - B) Twelve inches
  - C) Fourteen inches
  - D) There is no limit to the length of cracks in a Fiberglass PC Shell.
48. What are the damage limits for a Cargo Net used on a PN?
- A) The net must be in perfect condition.
  - B) The net can have one segment broken.
  - C) Two segments of the cargo net can be frayed.
  - D) There are no damage limits for a cargo net used on a PN.

**EMERY WORLDWIDE AIRLINES  
AIRCRAFT LOADING MANUAL TRAINING**

49. Complete the acceptable response to an FAA Inspector who questions damage to a ULD. "The ULD has been inspected according to the allowable limits:
- A) in the Maintenance Manual, Chapter 9, and is airworthy."
  - B) in the Maintenance Manual, Chapter 11, and is airworthy."
  - C) in the Aircraft Loading Manual, Chapter 9, and is airworthy."
  - D) in the Aircraft Loading Manual, Chapter 11, and is airworthy."
50. The acceptable response if an FAA Inspector disagrees with the Airworthiness of a ULD based on the limits in Chapter 9 is, "Please show me, in writing,:
- A) the ATA's cargo container airworthiness criteria."
  - B) where you get your information concerning our containers."
  - C) the established FAA container appraisal standards."
  - D) where our limits fail to meet OEM Specifications."
51. What is the allowable damage criteria for a pallet net?
- A) One broken segment
  - B) Two broken segments
  - C) One broken buckle
  - D) No damage is acceptable.
52. When are bent or distorted base rails on a PN or PC unacceptable?
- A) When they are bent or distorted over 1 ½" inches.
  - B) Any bend or distortion is unacceptable.
  - C) As long as the rail is not cracked.
  - D) There is no restriction on bent or distorted base rails on a PN or PC.

53. Where are cargo strap requirements discussed in the Aircraft Loading Manual?
- A) Chapter 4, Page 4-1
  - B) Chapter 9, Page 9-3, Figure 9-4
  - C) Chapter 4, Page 4-3, Figure 4-4
  - D) Chapter 4, Page 4-8, Figure 4-5
54. When do the people parking an aircraft place the wheel chocks, connect the GPU, install tail stand, position aircraft guards and place the crew stairs at the crew door?
- A) After the aircraft is stationary and the engines are shut down
  - B) After the cargo doors are opened and offloading has begun
  - C) As the aircraft approaches the parking spot
  - D) At the direction of the Pilot-In-Command
55. A general rule of thumb is to maintain how much distance from engine inlets for engines operating at idle?
- A) 10 feet
  - B) A minimum of 30 feet
  - C) A maximum of 30 feet
  - D) A maximum of 60 feet
56. When is it safe to install landing gear pins, chocks, and clearance cones on arriving aircraft?
- A) After the nearest engine has stopped operating
  - B) As soon as the aircraft has stopped moving
  - C) After all engines have stopped operating
  - D) When the Pilot-In-Command has indicated so

**EMERY WORLDWIDE AIRLINES  
AIRCRAFT LOADING MANUAL TRAINING**

57. How much clearance is to be maintained between the aircraft and beltloaders and K-loaders?
- A) A minimum of two inches horizontal clearance
  - B) A maximum of two inches horizontal clearance
  - C) A minimum of two inches vertical clearance
  - D) A maximum of two inches vertical clearance
58. What loading components prevent damage to the door sill area and the ballmats and remain with the aircraft, stored in specified locations?
- A) Fire bottles
  - B) Wing tip/engine markers
  - C) Door sill guards/conveyors
  - D) All of the above
59. What are the normal requirements for fire extinguishers?
- A) 50 pound extinguisher within 10 feet of the aircraft nose
  - B) 100 pound extinguisher within 20 feet of the crewstairs
  - C) 150 pound extinguisher within 10-15 feet of the aircraft nose
  - D) 200 pound extinguisher within 100 feet of the aircraft crewstairs
60. How long do wing tip and engine markers remain in place?
- A) Until just after engine start
  - B) Until just prior to engine start
  - C) Until the cargo upload is complete
  - D) Until maintenance is to be performed on the aircraft

**EMERY WORLDWIDE AIRLINES  
AIRCRAFT LOADING MANUAL TRAINING**

61. When is the tailstand installed on a DC-8?
- A) Just prior to engine start
  - B) Immediately after the aircraft is parked
  - C) When directed to do so by the Flight Engineer
  - D) The tail stand is not installed on the DC-8.
62. When is the loading equipment to be at the aircraft?
- A) Ten minutes before the departure time
  - B) Fifty minutes before the departure time
  - C) One hour before the departure time
  - D) One hour thirty minutes before the departure time
63. When is the last Service Center truck to arrive at the aircraft?
- A) Ten minutes before the departure time
  - B) Thirty minutes before the departure time
  - C) Fifty minutes before the departure time
  - D) One hour before the departure time
64. How often are fire bottles are to be checked?
- A) Daily
  - B) Weekly
  - C) Bi-weekly
  - D) Monthly

**EMERY WORLDWIDE AIRLINES  
AIRCRAFT LOADING MANUAL TRAINING**

65. Under what condition is smoking permitted?
- A) On an aircraft ramp
  - B) Inside the main cargo compartment
  - C) Within 50 feet of a fueling truck off the ramp
  - D) Beyond 50 feet of a fueling truck off the ramp
66. What type shoes should be worn by cargo handling personnel during ramp operation?
- A) Sneakers
  - B) Gym shoes
  - C) Steel-toed safety shoes
  - D) Any of the above are acceptable.
67. During the ramp operation, who is required to wear an approved reflective safety vest and when?
- A) All ramp personnel at all times
  - B) Aircrew personnel at all times
  - C) All ramp personnel during loading and offloading operations.
  - D) Nobody is required to wear the vest.
68. What precaution should you take when preparing to bareblade a ULD?
- A) Never bareblade a ULD.
  - B) Lift the ULD from the rear only.
  - C) Transport the ULD directly to the K-Loader.
  - D) It is permissible only with a spotter present.

**EMERY WORLDWIDE AIRLINES  
AIRCRAFT LOADING MANUAL TRAINING**

69. After the load is complete, what must be done if any pallet locks are left down?
- A) Nothing is required.
  - B) Notify the flight crew.
  - C) Notify Airport Security.
  - D) Notify EWA Maintenance.
70. Problems in what areas of the aircraft are annotated on the Problem Report Form?
- A) The ball mat
  - B) Door sill guards
  - C) The cargo nets in the C pit
  - D) All of the above.



**Full Course Written Exam**  
**ANSWER KEY**

70% passing score: 49 correct

1. B	15. D	29. C	43. D	57. A
2. A	16. A	30. B	44. D	58. C
3. D	17. B	31. B	45. B	59. C
4. D	18. C	32. B	46. D	60. B
5. D	19. D	33. B	47. B	61. B
6. D	20. B	34. B	48. A	62. C
7. A	21. B	35. D	49. C	63. B
8. A	22. A	36. C	50. D	64. A
9. B	23. D	37. D	51. D	65. D
10. A	24. B	38. B	52. A	66. C
11. B	25. A	39. D	53. C	67. C
12. C	26. C	40. A	54. A	68. A
13. B	27. A	41. C	55. B	69. B
14. B	28. D	42. A	56. C	70. D

Full Course

3/24/99

Student Name:

Module	Lesson Completions	First Access	Last Access	Total	Done	Score
--------	--------------------	--------------	-------------	-------	------	-------

EMERY WORLDWIDE AIRLINES  
AIRCRAFT LOADING MANUAL TRAINING

TRAINING ACKNOWLEDGMENT FORM

SUBJECT: AIRCRAFT LOADING MANUAL

This signifies that the following has received appropriate training on the EWA Aircraft Loading Manual.

PRINT NAME: \_\_\_\_\_

SIGNATURE: \_\_\_\_\_

STATION: \_\_\_\_\_

DATE: \_\_\_\_\_

SUPERVISOR'S SIGNATURE: \_\_\_\_\_

This acknowledgement form is to be filed in the individual's records.

MEO 103 (5/9/94)

## CHANGE RECOMMENDATION

Please enter the information for a recommended change/correction to the EWA Aircraft Loading Manual CBT Course and fax to Maintenance Training at (937) 264-5570.

Course: \_\_\_\_\_ Full Course      \_\_\_\_\_ Cargo Handler      \_\_\_\_\_ Loader

Module: \_\_\_\_\_ Lesson: \_\_\_\_\_ Screen #: \_\_\_\_\_

Discrepancy: \_\_\_\_\_

---

---

---

---

---

---

---

---

Correction: \_\_\_\_\_

---

---

---

---

---

---

---

---

---

---

Name \_ Station \_\_\_\_\_

Phone \_\_\_\_\_ Date \_\_\_\_\_

EMERY  
WORLDWIDE  
AIRLINES

AIRCRAFT LOADING MANUAL  
CHAPTER 11  
OPERATING PROCEDURES  
PAGE 11 -15

---

FAA SPOT/RAMP INSPECTION PROCEDURES

1. General

- a. At any time or place the FAA may conduct an inspection to determine if the certificate holder (EWA) is complying with policies and procedures in the Aircraft Loading Manual.
- b. It is essential that we provide the FAA with correct EWA or Ground Handler Supervisor contacts as well as access to certain related information.
- c. Any questions regarding ULD inspection procedures should be directed to the Director of ULD Management.
- d. During an FAA inspection of ULD's, the Inspector may ask questions concerning specific damage to a ULD. Chapter 9 of this manual will be used to provide established limitations.

2. Procedures

- a. To assure that we properly handle FAA Inspector contacts, it is essential that the following procedures be observed.
  1. Ensure the FAA Inspector is properly identified by means of credentials or self recognition.
  2. FAA Inspectors may examine records and manuals, or discuss matters during routine investigations or informal visits. This could involve adherence to regulations, as well as routine station operations.
  3. When the FAA Inspector requests information, refer them to the responsible supervisor. Discussions should be limited to the factual issues or documents that are relative. Avoid giving any conjectural statements.

4. **If requested, the FAA Inspector shall be provided with copies of EWA documents that are associated with the area which is being investigated. Written statements are not required to be provided to the FAA inspector. MEO 146 will be completed and a copy faxed to the Director ULD Management (include all documents provided to the FAA as well as MEO 146).**
5. **If discrepancies are noted by the FAA Inspector, request such discrepancies in writing to ensure the correct information is received.**

EMERY WORLDWIDE AIRLINES  
FAA/ULD INSPECTION REPORT

CHAPTER 11  
AIRCRAFT LOADING MANUAL  
OPERATING PROCEDURES  
PAGE 11-17

FAX: 937 264-6072

ATTN: DIRECTOR ULD MANAGEMENT

FAA ULD INSPECTION CONDUCTED AT \_\_\_\_\_ AND/OR \_\_\_\_\_  
(Station) (Aircraft)

ON \_\_\_\_\_  
(Date)

FAA INSPECTOR(S): \_\_\_\_\_ FROM: \_\_\_\_\_

DISCREPANCIES FOUND:

---

---

---

---

---

---

---

AREAS OF INSPECTION:

---

---

---

---

---

DOCUMENTS/DATES REQUESTED:

---

---

---

---

---

---

STATION: \_\_\_\_\_ NAME: \_\_\_\_\_

MEO: 146 (09/01/98)

---

EMERY WORLDWIDE AIRLINES - ULD INSPECTION CHECKLIST

CONTAINERS MUST BE TAKEN OUT OF SERVICE FOR REPAIR WHEN ANY OF THE FOLLOWING ARE PRESENT.

Place a check mark next to the damage noted.

FIBERGLASS CONTAINERS WITH PALLETS (COOKIE SHEETS) CURTAIN/NET

- |   |  |   |
|---|--|---|
| <input type="checkbox"/> Webbing cut                              | <input type="checkbox"/> Base rail or corners bent more than 1 1/2 inches                              | <input type="checkbox"/> Manufacturers' data plate missing              |
| <input type="checkbox"/> Base rail broken                         | <input type="checkbox"/> Damaged seat track  | <input type="checkbox"/> Crack in shell not to exceed 12"               |
| <input type="checkbox"/> Base sheet cracked or torn               | <input type="checkbox"/> Hole in shell exceeding 10"x 10" (not to exceed 100 sq. inches per container) | <input type="checkbox"/> Corner post cracked, torn, or loose            |
| <input type="checkbox"/> Cover straps cut - none cut              | <input type="checkbox"/> Front hoop cracked or broken two places                                       | <input type="checkbox"/> Base sheet cracked or torn                     |
| <input type="checkbox"/> Missing hardware/fittings - none missing |  | <input type="checkbox"/> Missing base rivets. No more than 3 continuous |
| <input type="checkbox"/> Shell loose from attach rail             |  |   |
| <input type="checkbox"/> Base corners missing or broken           |  |   |

FIBERGLASS CONTAINERS WITH SOLID DOORS (INCLUDING GOH)

All of the above with the exception of Net/Fittings

- |  |   |
|--|---|
| <input type="checkbox"/> Doors bent, torn, or delaminated  | <input type="checkbox"/> Missing or loose shell mounted door edge rails or headers    |
| <input type="checkbox"/> Doors locks inoperable  | <input type="checkbox"/> Two or more adjacent broken or missing hinges on either door |
| <input type="checkbox"/> Holes, punctures, or cracks in door panels that exceed 5 inches in any direction. |   |

LEXAN (CLEAR CONTAINERS)

All of the above except for holes in shell.

- |  |  |
|--|--|
| <input type="checkbox"/> Three (3) 3 inch x 3/4 inch cracks (if more than 4 inches from side of the container)   | <input type="checkbox"/> Extrusion rail cracked or torn not to exceed 1 1/2 inches. No more than three (3) per rail. |
| <input type="checkbox"/> Three (3) 6 inch x 1 1/2 inch cracks (if more than 4 inches from side of the container) | <input type="checkbox"/> Roll up door cable broken   |
| <input type="checkbox"/> Roll up curtain no more than three (3) 8 inch x 10 inch holes                           | <input type="checkbox"/> Roll up door - door bar. No more than three (3) 3/8 inch cracks                             |

ALUMINUM FRAMED SHELL WITH FIBERGLASS/LEXAN PANELS

All of the above except for the following in any direction. No more than 50 sq. inches per container.

- |   |  |
|---|--|
| <input type="checkbox"/> Frame extrusions cracked or torn           | <input type="checkbox"/> Gussets or stiffeners cracked or broken |
| <input type="checkbox"/> Fasteners missing joining gussets to frame |  |

PALLETS (COOKIE SHEETS)

- |   |   |
|---|---|
| <input type="checkbox"/> Corners missing or torn  | <input type="checkbox"/> Rails cracked or broken                                  |
| <input type="checkbox"/> Manufacturer/part number not engraved on edge rail   | <input type="checkbox"/> Hole or crack in sheet                                   |
| <input type="checkbox"/> Base rails or sheet bent more than 1 1/2 inches  | <input type="checkbox"/> Seat track lips damaged. No more than three (3) per rail |
| <input type="checkbox"/> Rivets - no more than five (5) missing per rail. None adjacent. Minimum distance between missing rivets is 20 inches |   |

PALLET NETS

- |   |   |
|---|---|
| <input type="checkbox"/> Fittings - none missing      | <input type="checkbox"/> Lashing Lines - none missing |
| <input type="checkbox"/> Missing manufacturer TSO tag | <input type="checkbox"/> No breaks in webbing         |

NOTE: If damage to Shell, Lexan Panels, and Door Net are within the limits shown above the ULD may be used at 50% capacity or (6,750 lbs.). It is however recommended that the ULD be taken out of service for repair if other equipment is available for use.

This checklist does not replace the Aircraft Loading Manual but is a guide for determining ULD airworthiness.



PLEASE RETURN THE ANSWER SHEET ONLY.  
KEEP YOUR COPY OF THE QUIZ.

## MEMORANDUM

From: Gary Dybdal  
Director of Flight Training

SUBJECT: Recurrent Home Study

DATE: September 21, 1998

---

You have four weeks to review the material, answer the questions, and return the answer sheets to the Training Department.

The answer sheets must be returned no later than October 21, 1998

Enclosed in this month's package are the following:

- Chapter 9, Aircraft Loading Manual, ULD & Loading System Appraisal Procedures
- 20 question quiz- ULD Home Study Test
- Answer sheet
- A postage-paid return envelope
- Corrected copies of previous months' questions

A postage-paid return envelope is enclosed for your convenience. You may choose to return the answer sheet directly to the Training Department-Attention Home Study, in an interoffice envelope when you transit the Dayton Hub. If you do not use the postage-paid envelope to return your answer sheet, please return it to us unsealed so we may reuse the envelope.

Your comments, suggestions and criticisms are welcome. Please write any comments, etc., on a **SEPARATE** sheet of paper and return it with your answer sheet. Any questions on this test may be addressed to Mike Hilliard at 1-800-248-8629.

**Please do not write comments on your answer sheet. This sheet is filed in your permanent record!**

If you have not returned your completed Home Study Answer Sheets for the Oxygen quiz, please do so as soon as possible. For those of you who have...thank you.

EMERY WORLDWIDE AIRLINES  
RECURRENT HOME TRAINING  
ANSWER SHEET

Name: \_\_\_\_\_ Position: \_\_\_\_\_ Employee#: \_\_\_\_\_

Subject: ULD Date: \_\_\_\_\_ Score: \_\_\_\_\_

**DIRECTIONS:** Fill in the box over the letter of your choice.  
Example (\*) (B) (C) (D)

- |                                  |                                  |
|----------------------------------|----------------------------------|
| 1. (A) ( <del>B</del> ) (C) (D)  | 11. (A) (B) ( <del>C</del> ) (D) |
| 2. ( <del>A</del> ) (B) (C) (D)  | 12. (A) (B) (C) ( <del>D</del> ) |
| 3. ( <del>A</del> ) (B) (C) (D)  | 13. (A) (B) ( <del>C</del> ) (D) |
| 4. ( <del>A</del> ) (B) (C) (D)  | 14. (A) (B) ( <del>C</del> ) (D) |
| 5. ( <del>A</del> ) (B) (C) (D)  | 15. <del>(A) (B) (C) (D)</del>   |
| 6. (A) (B) (C) ( <del>D</del> )  | 16. ( <del>A</del> ) (B) (C) (D) |
| 7. (A) ( <del>E</del> ) (C) (D)  | 17. (A) ( <del>B</del> ) (C) (D) |
| 8. (A) (B) (C) ( <del>D</del> )  | 18. (A) ( <del>B</del> ) (C) (D) |
| 9. (A) (B) ( <del>C</del> ) (D)  | 19. (A) (B) ( <del>C</del> ) (D) |
| 10. (A) (B) (C) ( <del>D</del> ) | 20. (A) ( <del>B</del> ) (C) (D) |

**EMERY WORLDWIDE AIRLINES**  
**RECURRENT HOME STUDY QUIZ Sept 1998**  
**UNIT LOADING DEVICE (ULD) AND LOADING SYSTEM APPRAISAL PROCEDURES**

1. It shall be the policy of Emery Worldwide Airlines to perform a detailed visual appraisal of all ULD's after the aircraft offload and prior to the upload. This must be performed by EWA personnel.

- A. True
- B. False

2. If any unit is found unusable it shall be removed from service immediately and Systems Control notified as soon as possible.

- A. True
- B. False

3. To readily identify unservicable ULDs, a form stating "ULD DAMAGED - OUT OF SERVICE - DO NOT USE" will be attached to the front of the unit OR the ULD number will be taped over.

- A. True
- B. False

4. If pallet locks require relocation or damage is noted, the loader shall notify EWA maintenance. Under no circumstances will the loaders relocate any cargo system component. If they do not comply with this requirement, cargo could move in flight and cause the loss of aircraft and flight personnel.

- A. True
- B. False

5. If any defects are noted, loading shall immediately cease and EWA maintenance or operations (flight crew) department will be notified. Loading will not continue until authorized by a representative of EWA maintenance or operations (flight crew).

- A. True
- B. False

6. On an 88 x 125 Inch Fiberglass Shell With Curtain and Net Restraint, which of the following defects are allowable? The Container Shell:

- a) Is missing it's data plate.
- b) Has damage which reduces it's structural integrity by 20%.
- c) Has a hole which covers 115 square inches.
- d) Has a puncture in the shell which is 12.3 inches high.

- A. a) and b) above, but not d)
- B. a), b) and c) above, but not d)
- C. a), b) and d) above, but not c)
- D. None of the above.

11. When examining the container listed in Question 10, you find the following damage. Which damage is not allowable?

- a) The plate is warped 3/4".
- b) One edge rail is bent up 1/2".
- c) There are two damaged seat track lips on the outboard edge rail.
- d) One attachment device has been torn off the net.

- A. a) above
- B. b) above
- C. d) above
- D. All are allowable.

12. Considering the Floor and Net of an 88 x 125 Inch All Aluminum Pallet with Knotted Rope Net Restraint, which of the following defects are allowable?

- a) There are 4 damaged seat track lips on the inboard edge rail.
- b) The plate is dished in the center about 1 1/2".
- c) There are 5 loose or missing rivets on one edge rail, two of the rivets are 18" apart.
- d) The net has a four inch tear in the center section.

- A. a) above
- B. b) above
- C. d) above
- D. None of the above.

13. When examining an 88 x 125 Inch Aluminum/Polycarbonate (Lexan) container with Curtain and Net Restraint, you find that the center of the base assembly has 3 damaged points, each about five inches long by one inch wide.

- A. This is major damage and the container is not airworthy.
- B. The container is not airworthy, but can easily be repaired on the spot.
- C. The container has minor damage, is airworthy, and may be used at full rated capacity.
- D. None of the above.

14. When examining the container in Question 13, you find a crack on the base which is 3" long and 1" wide adjacent to the edge extrusion.

- A. This is major damage and the container is not airworthy.
- B. The container is not airworthy, but can easily be repaired on the spot.
- C. The container has allowable damage, is airworthy, and may be used at full rated capacity.
- D. None of the above.

15. Assume the container above is in position No. 8. You find minor damage at two locations on the base. The Data Book shows a maximum of 7,200# may be carried in position No. 8.

- A. The container can not be used, but may be shipped with no load in the container.
- B. The container can not be used or shipped until repaired.
- C. The container can be used with a load of 4,250#.
- D. The container can be used with a load of 3,455#.



**Griffin, Debbie F.**

---

**From:** Griffin, Debbie F.  
**Sent:** Wednesday, January 06, 1999 4:44 PM  
**To:** [DL] EWW Exchange Users-All  
**Subject:** Aircraft Loading Manual CBT  
**Importance:** High

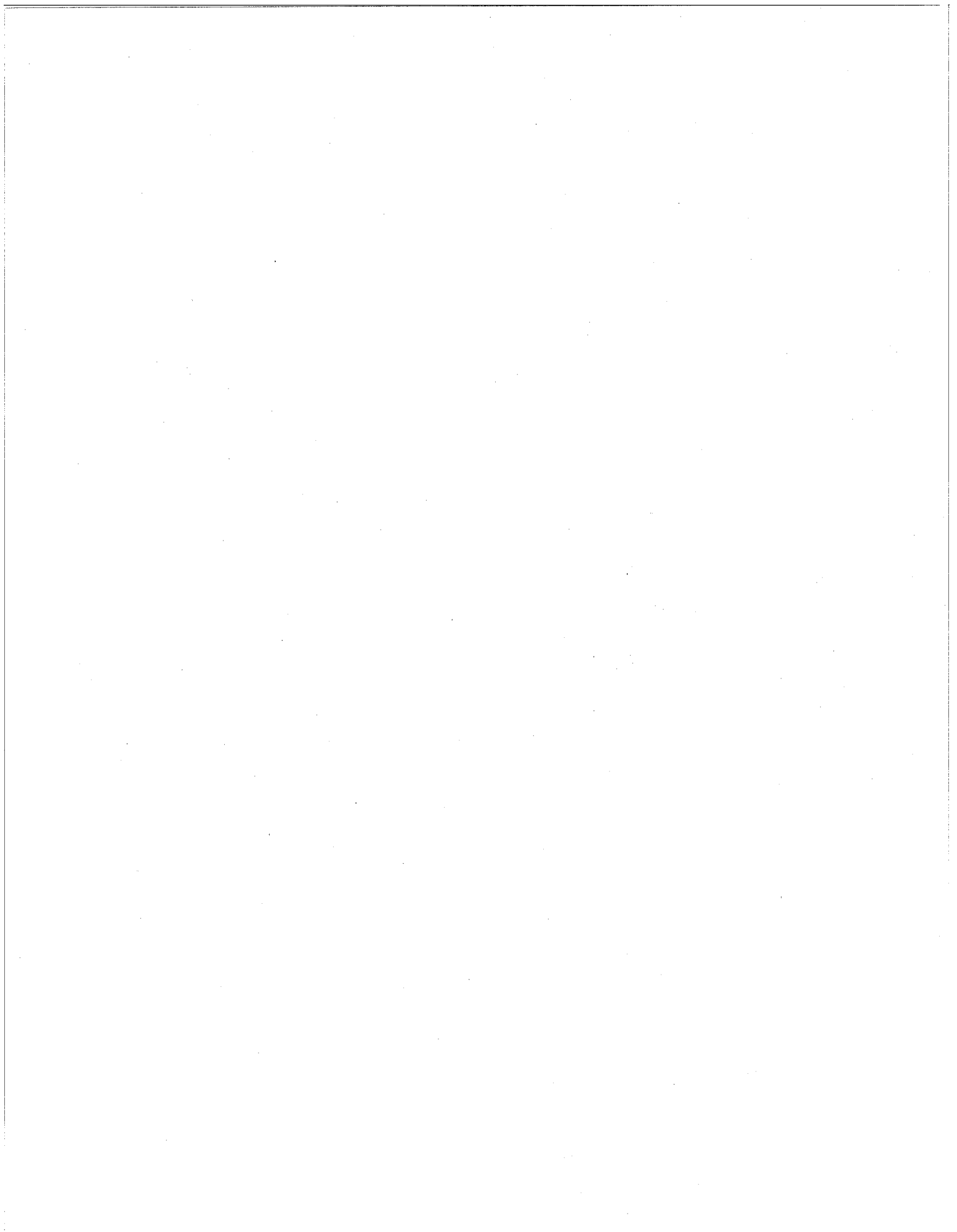
For all individuals required to receive the Aircraft Loading Manual Training:

The Aircraft Loading Manual Computer Based Training can now be downloaded off the Intranet onto your harddrive. The following is the Uniform Resource Locator (URL) to the Aircraft Loading Manual CBT Instructions page in the EWA Home Page. Click on the URL to download.

[http://intranet.emeryworld.com/EmeryWeb/site\\_EWA/aircraftloadingmanual/instructions.asp](http://intranet.emeryworld.com/EmeryWeb/site_EWA/aircraftloadingmanual/instructions.asp)

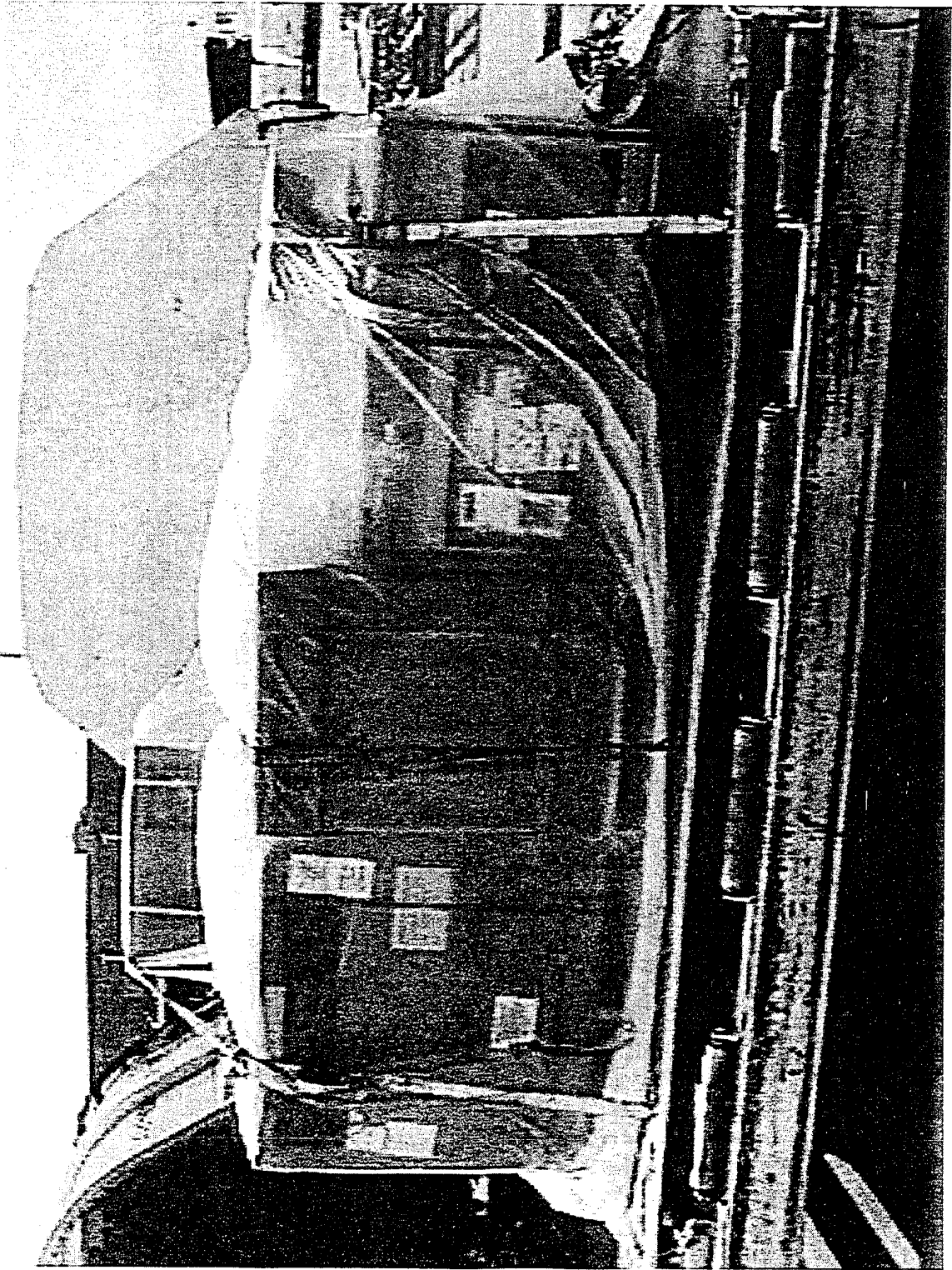
We hope this will be especially helpful for all individuals that have been experiencing problems accessing the CBT via CD ROM.

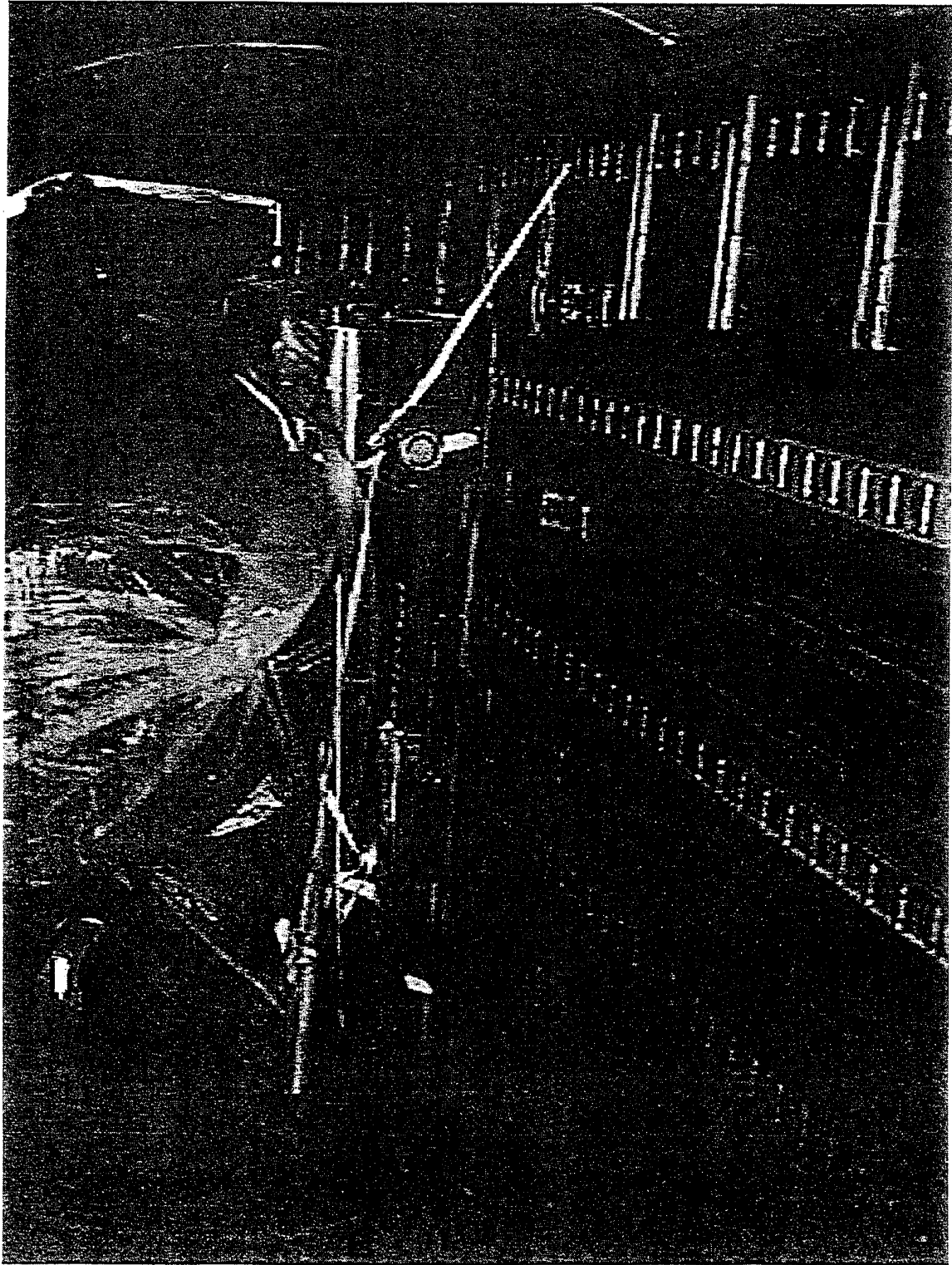
*Debbie Fusco Griffin*  
EWA Maintenance Training Program Specialist

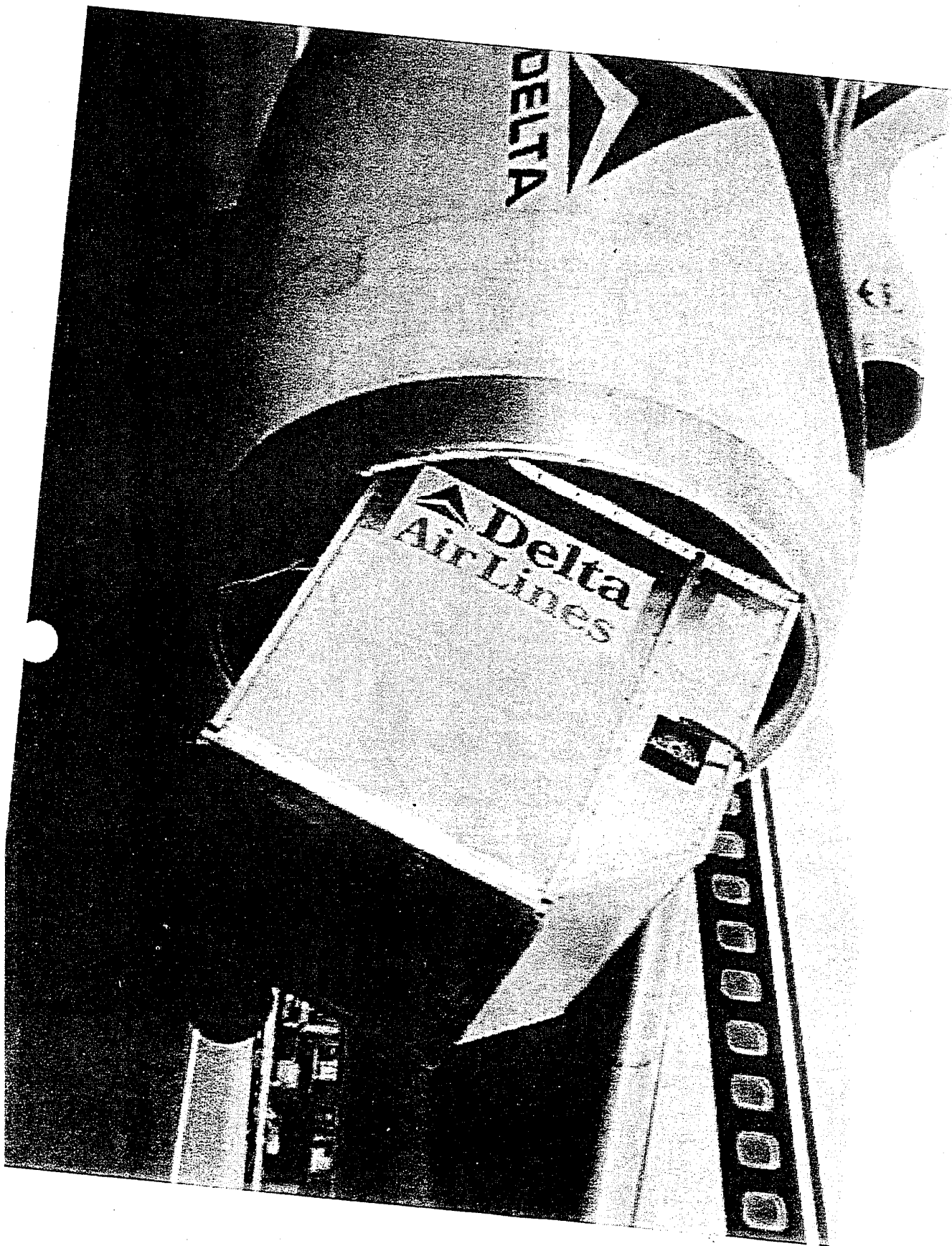








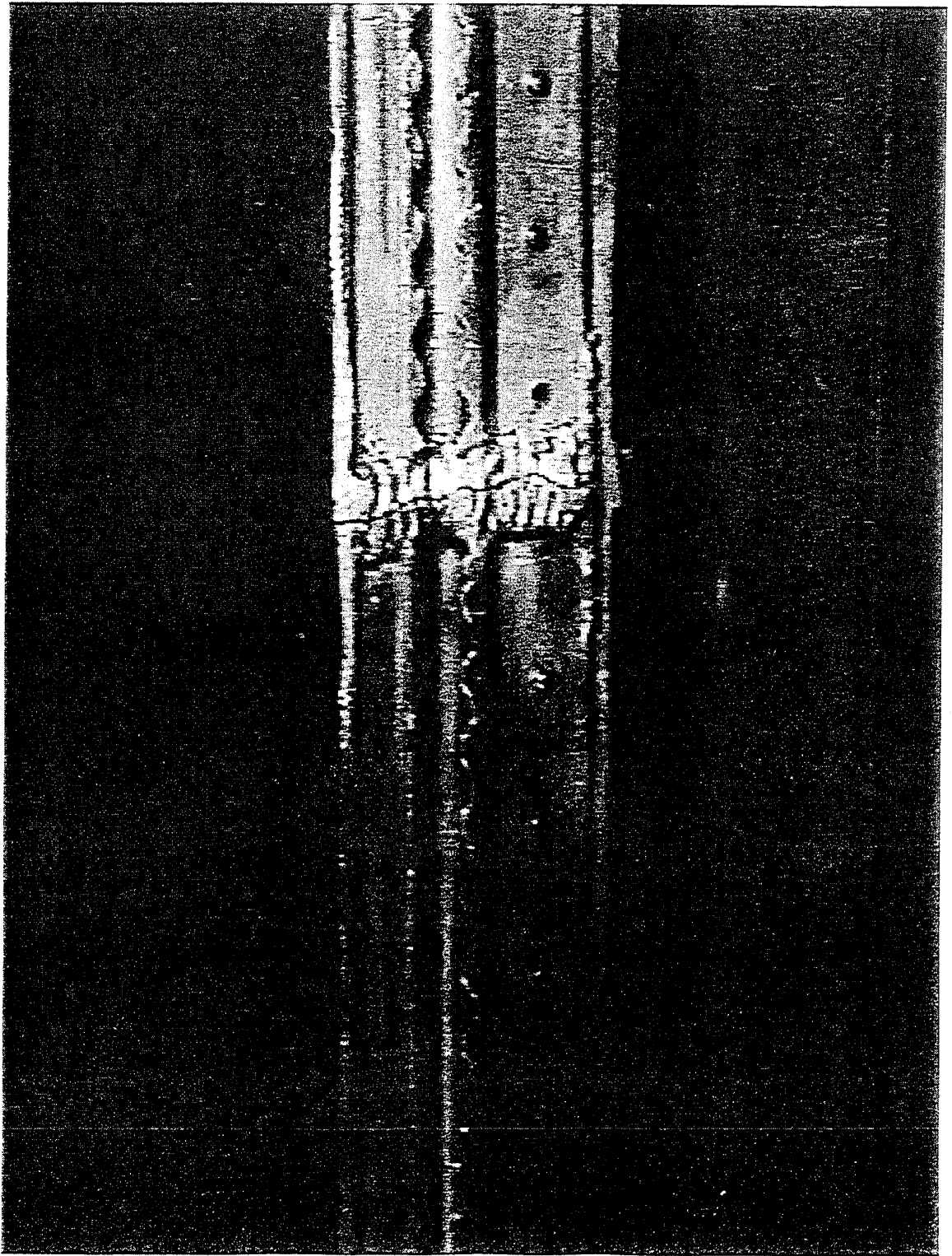


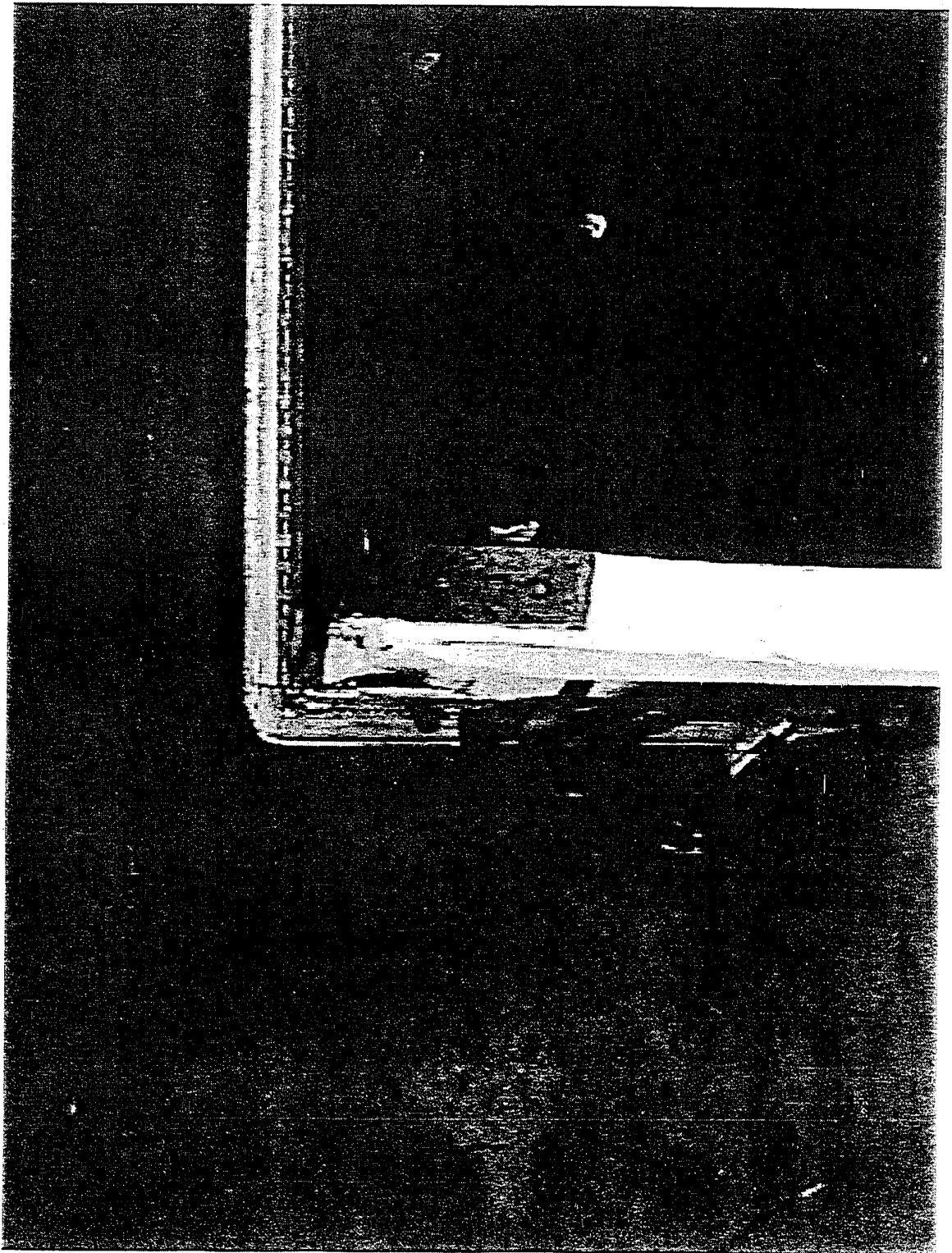


DELTA

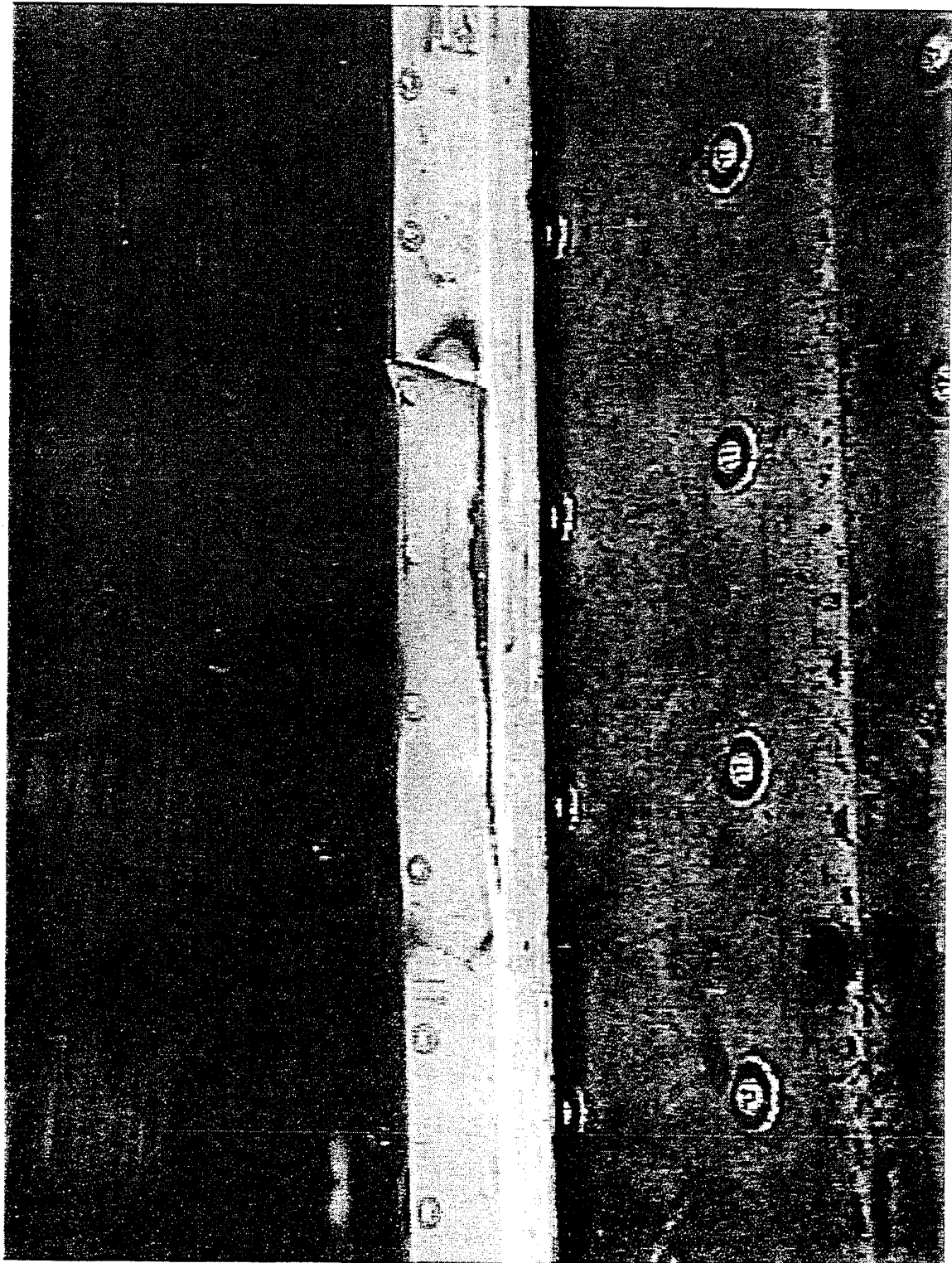
Delta  
Air Lines

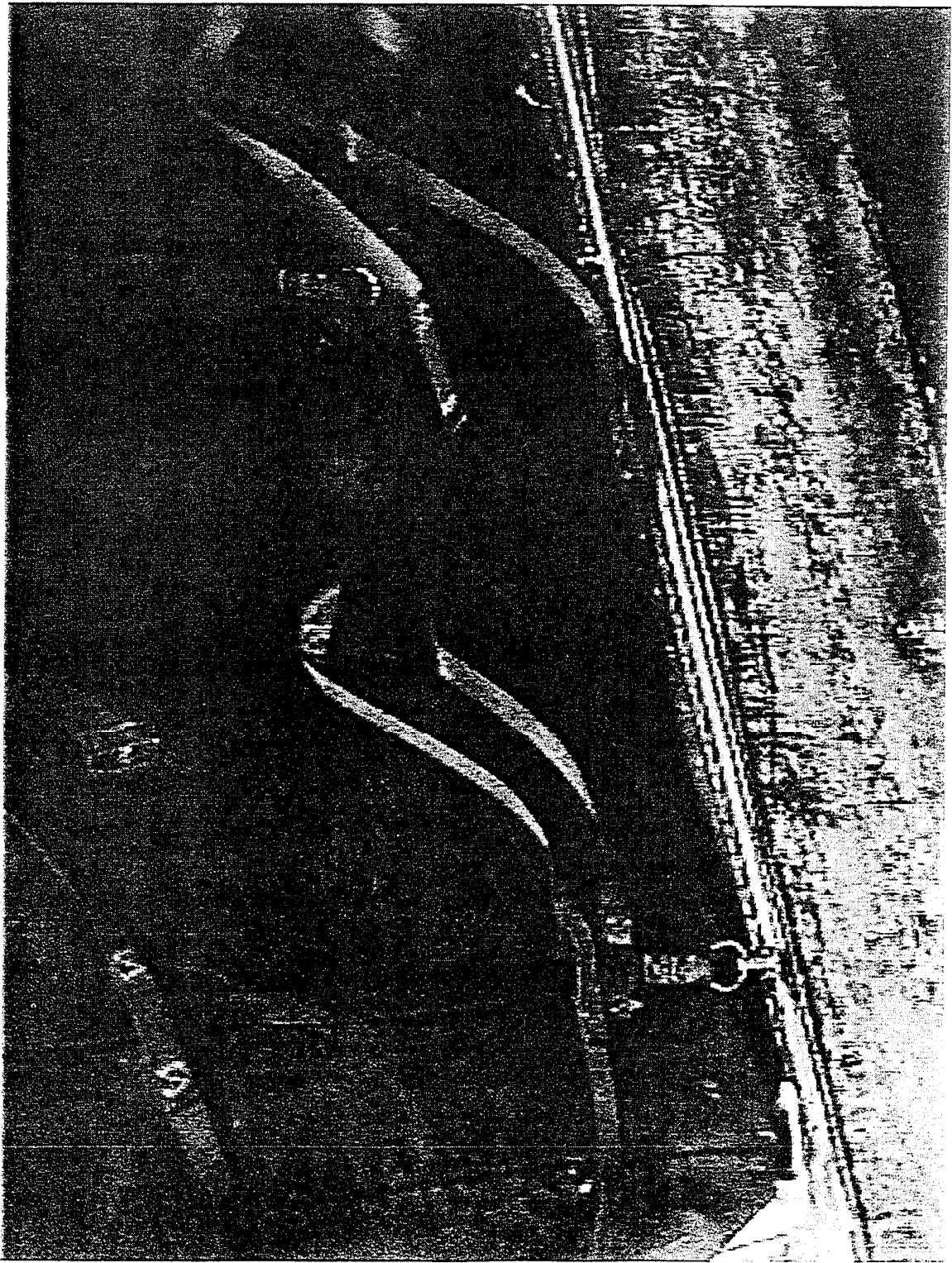




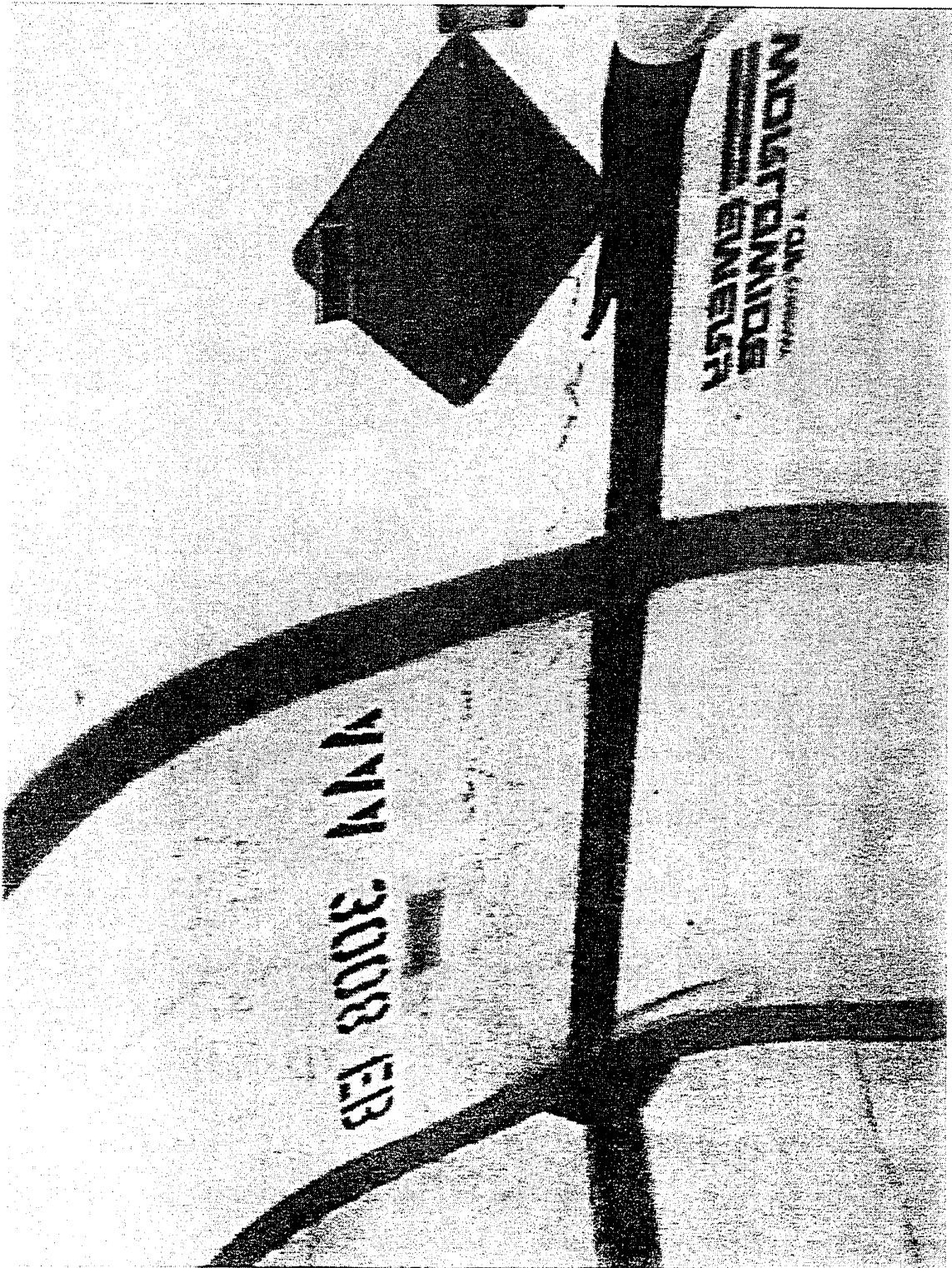






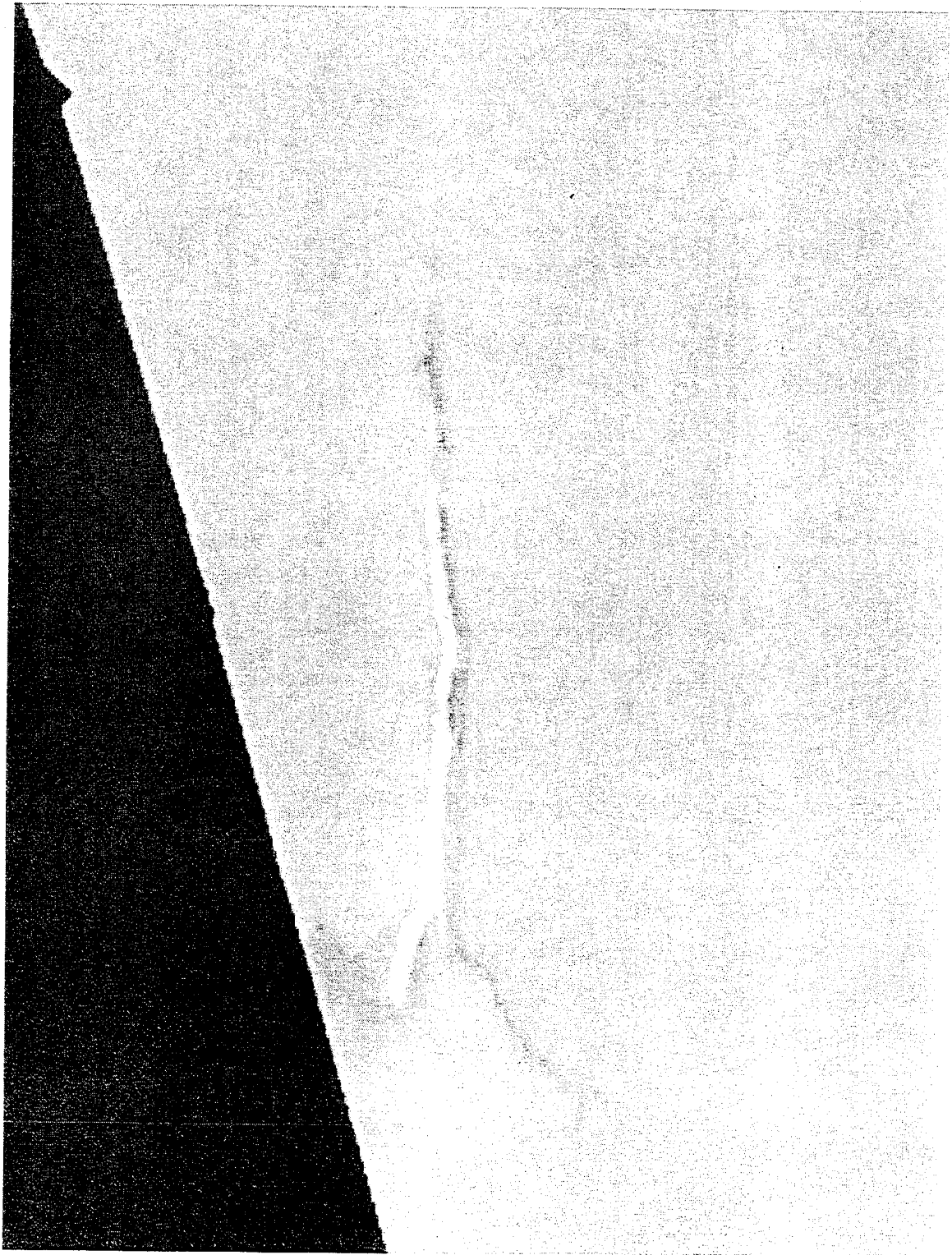


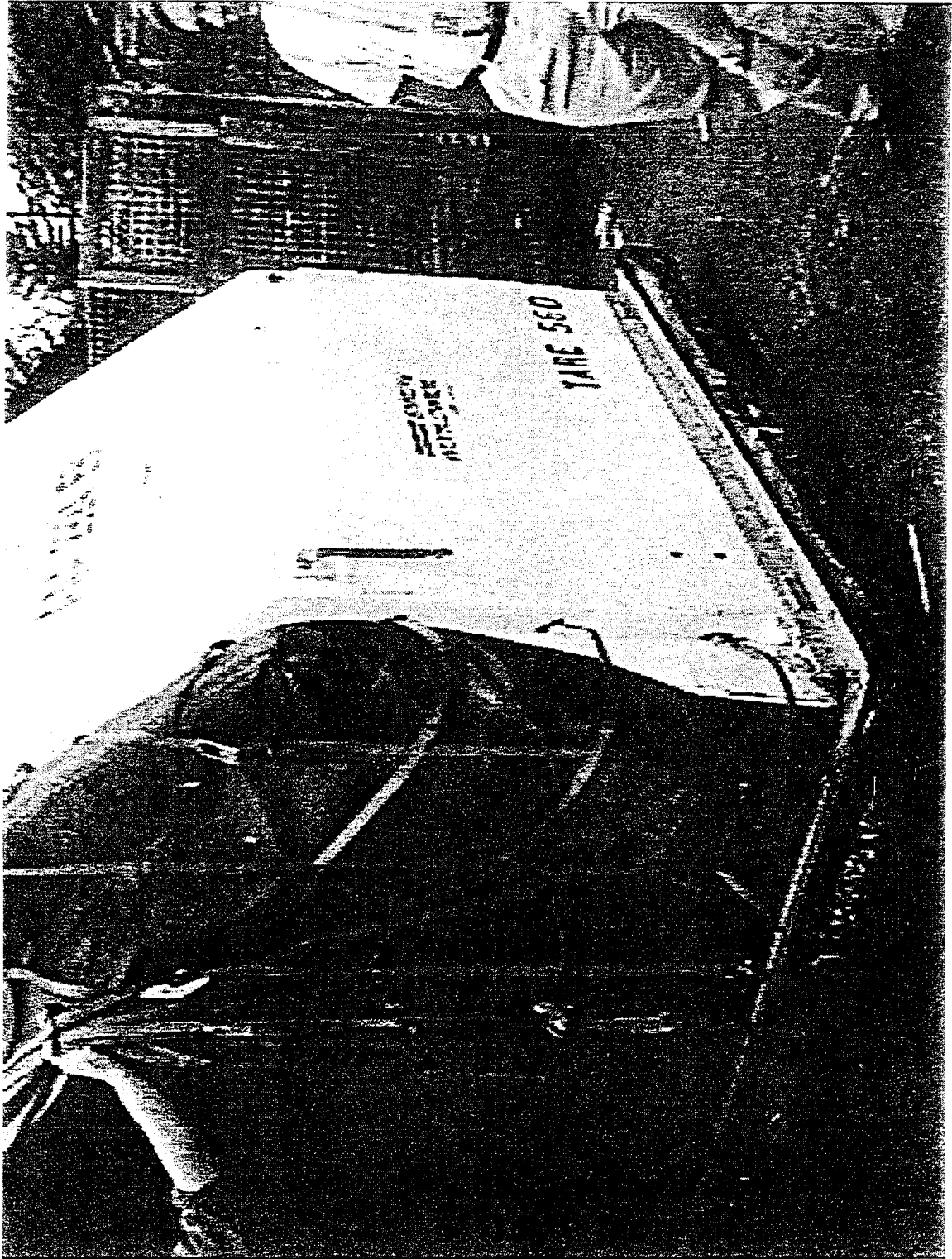


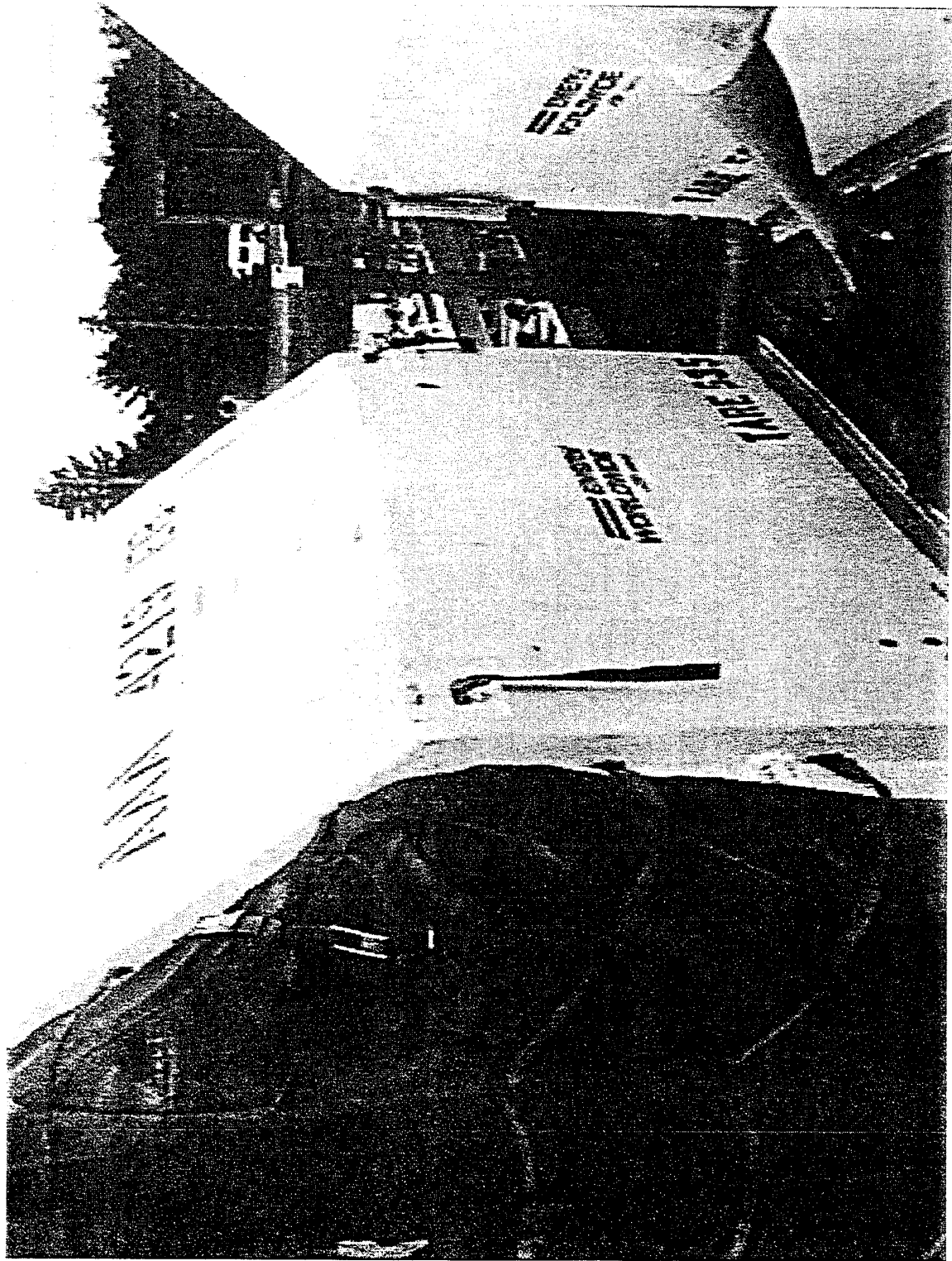


MOULTON BOWEN  
BY APPOINTMENT

11/11 2008 FEB



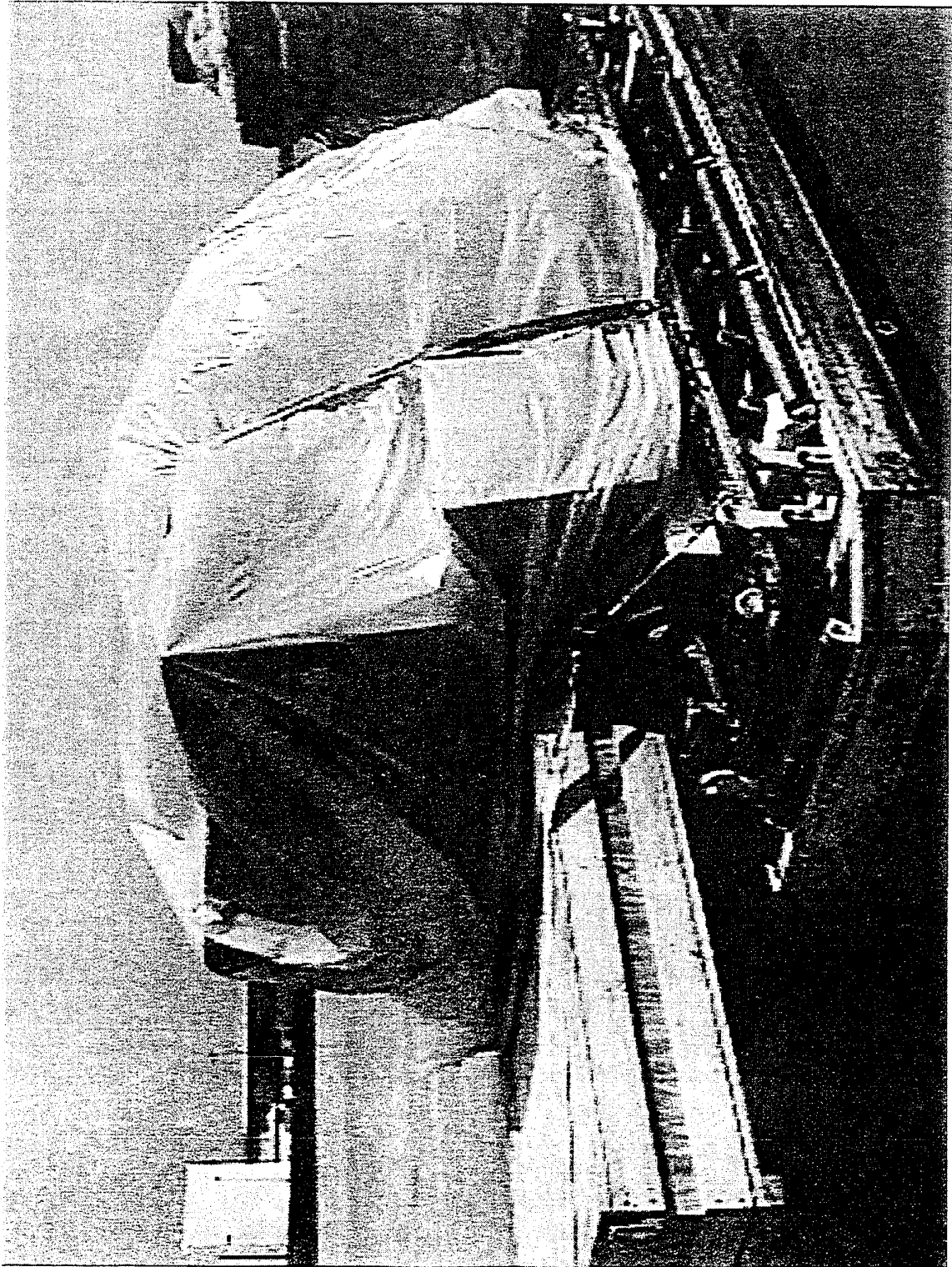
















**Griffin, Debbie F.**

---

**From:** Griffin, Debbie F.  
**Sent:** Tuesday, November 10, 1998 4:03 PM  
**To:** Griffin, Debbie F.  
**Subject:** Aircraft Loading Training Status

Maintenance Training has completed the following training requirements:

Contracted Groundhandlers Supervisors and Mgrs./	08/02/98 / 100% complete	
Thomas J Nanna/CER/EWW	08/25/98 and 10/14/98 / 100% complete	Training held in Chicago, IL
RickKleemann/WER/EWW	09/28/98 / 100% complete	Training held in Haywood, CA
Wayne Driscoll/EAR/EWW	10/01/98 / 100% complete	Training held in Newburgh, NY
Charters Department/HUB Dayton, OH	09/23/98 / 100% complete	Training held Maintenance Training Dept.
EWW HUB Supervisors / Trainers	10/07/98 / 100% complete	Training held Dayton Hub Facility in Ohio.

*Debbie Fusco Griffin*  
Maintenance Training Program Specialist  
[REDACTED]

attendees

STATION	ATTENDEE	2-Aug	3-Aug
ATL	Dickie Hough	X	X
BDL	Craig Malinowski	X	X
BNA	Bill Davis	X	X
BOS	Ray Caristi - EXP1	X	X
BOS	Mark Holbrook - Signtr	X	X
BRO	Felipe Guterrez	X	X
BSM	Kevin King	X	X
BWI	Ricardo Winfree	X	X
CAE	Mike Ramsey	X	X
CLT	Joe O'Faire	X	X
CUU	Ricardo Rodriguez	X	X
DEN			
DFW	Butch Solignani	X	X
DSM	Pat Clark	X	X
ELP	Gilbert Carrera	X	X
EWR	Luis Augusto	X	X
FLL	Ron Shultz	X	X
FNT	Steve Roby	X	X
GDL	Rogelio Valenzuela	X	X
GRR	Wayne Dobson	X	X
GSO	Keith Carroll	X	X
GSP	Terry Halligan	X	X
HSV	Stacey Entwistle	X	X
IAH	Bob Roark	X	X
IAD	George Jackson	X	X
ICT	Duane Scherer	X	X
JAX	Craig Barkley	X	X
JFK	Kevin Tibbetts	X	X
JFK	Robert Walsh	X	X
LAX	Mike Geigler	X	X
LRD	Fernando Franco	X	X
MCI	Bob Smelko	X	X
MCO	Rich Molettiere	X	X
MDT	Chuck Hock	X	X
MEM	Michael Whitfield	X	X
MEX	Alex DelOlma	X	X
MEX	Daniel Salinas	X	X
MHR	Gary Crane	X	X
MIA	Larry Leiman	X	X

attendees

<b>MKE</b>	<b>Don Spitzer</b>	<b>X</b>	<b>X</b>
<b>MSP</b>	<b>Wanda Heck</b>	<b>X</b>	<b>X</b>
<b>MSP</b>	<b>Luis Anchondo</b>	<b>X</b>	<b>X</b>
<b>MSY</b>	<b>Gerard Diest</b>	<b>X</b>	<b>X</b>
<b>MTY</b>	<b>Gustavo Gomez</b>	<b>X</b>	<b>X</b>
<b>MTY</b>	<b>Samantha Orta</b>	<b>X</b>	<b>X</b>
<b>OAK</b>	<b>Jerome Johnson</b>	<b>X</b>	<b>X</b>
<b>OKC</b>	<b>Jason Fenn</b>	<b>X</b>	<b>X</b>
<b>ONT</b>	<b>Evan Waythomas</b>	<b>X</b>	<b>X</b>
<b>ORD</b>	<b>Daniel Malinowski</b>	<b>X</b>	<b>X</b>
<b>PDX</b>	<b>Buck Sweet</b>	<b>X</b>	<b>X</b>
<b>PHL</b>	<b>Charles Robinson</b>	<b>X</b>	<b>X</b>
<b>PHX</b>	<b>Tim Sisung</b>	<b>X</b>	<b>X</b>
<b>PIA</b>	<b>Ed Bryant</b>	<b>X</b>	<b>X</b>
<b>PSM</b>	<b>Don Delande</b>	<b>X</b>	<b>X</b>
<b>PSM</b>	<b>Ted Robertson</b>	<b>X</b>	<b>X</b>
<b>RDU</b>	<b>Kirby Canada</b>	<b>X</b>	<b>X</b>
<b>RIC</b>	<b>Richard Schmidling</b>	<b>X</b>	<b>X</b>
<b>RNO</b>	<b>Ron Riegger</b>	<b>X</b>	<b>X</b>
<b>ROC</b>	<b>Rusty Thompson</b>	<b>X</b>	<b>X</b>
<b>SAN</b>	<b>Fred Eslinger</b>	<b>X</b>	<b>X</b>
<b>SEA</b>	<b>Saifoloi Tausiji</b>	<b>X</b>	<b>X</b>
<b>SHV</b>	<b>Dillard Lee</b>	<b>X</b>	<b>X</b>
<b>SHV</b>	<b>Brian Kemp</b>	<b>X</b>	<b>X</b>
<b>SJC</b>	<b>Jose Buenrostro</b>	<b>X</b>	<b>X</b>
<b>SJU</b>			
<b>SLC</b>	<b>Conway Smith</b>	<b>X</b>	<b>X</b>
<b>STL</b>	<b>Steve Rogers</b>	<b>X</b>	<b>X</b>
<b>SWF</b>	<b>Jim Mazzola</b>	<b>X</b>	<b>X</b>
<b>TPA</b>	<b>Tom Cox</b>	<b>X</b>	<b>X</b>
<b>TUL</b>	<b>Kevin Geiger</b>	<b>X</b>	<b>X</b>
<b>TUS</b>	<b>Tim Reddoch</b>	<b>X</b>	<b>X</b>
<b>YYZ</b>	<b>Mike Armes</b>	<b>X</b>	<b>X</b>
<b>YMX</b>	<b>Brian Saucier</b>	<b>X</b>	<b>X</b>
<b>YOW</b>			
<b>YVR</b>	<b>Pat Dinan</b>	<b>X</b>	<b>X</b>
<b>YXU</b>	<b>Tony Campos</b>	<b>X</b>	<b>X</b>
<b>YXU</b>	<b>Chris Roy</b>	<b>X</b>	<b>X</b>
<b>YYC</b>	<b>Keith Johns</b>	<b>X</b>	<b>X</b>
<b>YYZ</b>	<b>Joe Carrerra</b>	<b>X</b>	<b>X</b>

attendees

<b>MAS</b>	<b>Gerald Finn</b>	<b>X</b>	<b>X</b>
<b>MAS</b>	<b>Bob Phelan</b>	<b>X</b>	<b>X</b>
<b>MAS</b>	<b>Doug Mohring</b>	<b>X</b>	<b>X</b>
<b>CFE</b>	<b>John Wilson</b>	<b>X</b>	<b>X</b>
<b>CFE</b>	<b>Mike Ferrigno</b>	<b>X</b>	<b>X</b>
<b>IND</b>	<b>Doug Whitlow</b>	<b>X</b>	<b>X</b>

attendees

STATION	ATTENDEE	2-Aug-99	3-Aug-99
ATL	Dickie Hough	[Redacted]	[Redacted]
BDL	Craig Malinowski	[Redacted]	[Redacted]
BNA	Bill Davis	[Redacted]	[Redacted]
BOS	<sup>Ray</sup> Francis Gay - EXP1	[Redacted]	[Redacted]
BOS	Mark Holbrook	[Redacted]	[Redacted]
BRO	Felipe Guitierrez	[Redacted]	[Redacted]
BSM	Kevin King	[Redacted]	[Redacted]
BWI	Ricardo Winfree	[Redacted]	[Redacted]
CAE	Mike Ramsey	[Redacted]	[Redacted]
CLT	Joe O'Faire	[Redacted]	[Redacted]
CUU	Ricardo Rodriguez	[Redacted]	[Redacted]
DEN		[Redacted]	[Redacted]
DFW	Butch Solignani	[Redacted]	[Redacted]
DSM	Pat Clark	[Redacted]	[Redacted]
ELP	Gilbert Carrera	[Redacted]	[Redacted]
EWR	Luis Augusto	[Redacted]	[Redacted]
FLL	Ron Schultz Shultz	[Redacted]	[Redacted]
FNT	Steve Roby	[Redacted]	[Redacted]
GDL	<sup>Rogelio O. Valenzuela</sup> Alfredo Rendo <sup>Rogelio O. Valenzuela</sup>	[Redacted]	[Redacted]
GRR	Wayne Dobson	[Redacted]	[Redacted]
GSO	Keith Carroll	[Redacted]	[Redacted]
GSP	TEREY HALLIGAN	[Redacted]	[Redacted]
HSV	Stacey Entwistle	[Redacted]	[Redacted]
IAH	Bob Roark	[Redacted]	[Redacted]
IAD	George Jackson	[Redacted]	[Redacted]
ICT	Duane Scherer	[Redacted]	[Redacted]
JAX	Craig Barkley	[Redacted]	[Redacted]
JFK	Robert Walsh	[Redacted]	[Redacted]
LAX	Mike Geigler	[Redacted]	[Redacted]
LRD	Fernando Franco	[Redacted]	[Redacted]
MCI	Bob Smelko	[Redacted]	[Redacted]
MCO	Rich Molettieri	[Redacted]	[Redacted]
MDT	Chuck Hock	[Redacted]	[Redacted]
MEM	Michael Whitfield	[Redacted]	[Redacted]
MEX	Alex DelOlma	[Redacted]	[Redacted]
MEX	Daniel Salinas ✓	[Redacted]	[Redacted]
MHR	Gary Crane	[Redacted]	[Redacted]
MIA	Larry Leiman	[Redacted]	[Redacted]
MKE	Don Spitzer	[Redacted]	[Redacted]

attendees

		2 AUG 98	3 AUG 98
MSP	Wanda Heck	<del>Wanda Heck</del>	<del>Wanda Heck</del>
MSP	Luis Anchondo	<del>Luis Anchondo</del>	<del>Luis Anchondo</del>
MSY	Gerard Diest	<del>Gerard Diest</del>	<del>Gerard Diest</del>
MTY	Gustavo Gomez	<del>Gustavo Gomez</del>	<del>Gustavo Gomez</del>
MTY	Samantha Orta	<del>Samantha Orta</del>	<del>Samantha Orta</del>
OAK	Jerome Johnson	<del>Jerome Johnson</del>	<del>Jerome Johnson</del>
OKC	Jason Fenn	<del>Jason Fenn</del>	<del>Jason Fenn</del>
ONT	Evan Waythomas	<del>Evan Waythomas</del>	<del>Evan Waythomas</del>
ORD	Daniel Malinowski	<del>Daniel Malinowski</del>	<del>Daniel Malinowski</del>
PDX	Buck Sweet	<del>Buck Sweet</del>	<del>Buck Sweet</del>
PHL	Charles Robinson	<del>Charles Robinson</del>	<del>Charles Robinson</del>
PHX	<i>Tom S. Sun</i> Steve Clark	<del>Steve Clark</del>	<del>Steve Clark</del>
PIA	Ed Bryant	<del>Ed Bryant</del>	<del>Ed Bryant</del>
PSM	Don Delande	<del>Don Delande</del>	<del>Don Delande</del>
PSM	Ted Robertson	<del>Ted Robertson</del>	<del>Ted Robertson</del>
RDU	Kirby Canada	<del>Kirby Canada</del>	<del>Kirby Canada</del>
RIC	Richard Schmidling	<del>Richard Schmidling</del>	<del>Richard Schmidling</del>
RNO	Ron Riegger	<del>Ron Riegger</del>	<del>Ron Riegger</del>
ROC	Rusty Thompson	<del>Rusty Thompson</del>	<del>Rusty Thompson</del>
SAN	Fred Eslinger	<del>Fred Eslinger</del>	<del>Fred Eslinger</del>
SEA	Saifoloi Tausili	<del>Saifoloi Tausili</del>	<del>Saifoloi Tausili</del>
SHV	Dillard Lee	<del>Dillard Lee</del>	<del>Dillard Lee</del>
SHV	Brian Kemp	<del>Brian Kemp</del>	<del>Brian Kemp</del>
SJC	Jose Buenrostro	<del>Jose Buenrostro</del>	<del>Jose Buenrostro</del>
SJU	Luis Macias →	<del>Luis Macias</del>	<del>Luis Macias</del>
SLC	Conway Smith	<del>Conway Smith</del>	<del>Conway Smith</del>
STL	Steve <del>Conway</del> Rogers	<del>Steve Rogers</del>	<del>Steve Rogers</del>
SWF	Jim Mazzola	<del>Jim Mazzola</del>	<del>Jim Mazzola</del>
TPA	Tom Cox	<del>Tom Cox</del>	<del>Tom Cox</del>
<del>TUE</del>	<del>Bobby Bentley</del>	<del>Bobby Bentley</del>	<del>Bobby Bentley</del>
TUL	Kevin Geiger	<del>Kevin Geiger</del>	<del>Kevin Geiger</del>
TUS	Tim Reddoch	<del>Tim Reddoch</del>	<del>Tim Reddoch</del>
YMX	Mike Armes	<del>Mike Armes</del>	<del>Mike Armes</del>
YMX	Brian Saucier	<del>Brian Saucier</del>	<del>Brian Saucier</del>
YOW	Non-EWA (Bradley 1st is carrier & handler) did not attend.		
YVR	Pat Dinan	<del>Pat Dinan</del>	<del>Pat Dinan</del>
YXU	Tony Campos	<del>Tony Campos</del>	<del>Tony Campos</del>
YXU	Chris Roy	<del>Chris Roy</del>	<del>Chris Roy</del>
YYC	Keith Johns	<del>Keith Johns</del>	<del>Keith Johns</del>
YYZ	Joe Carrera	<del>Joe Carrera</del>	<del>Joe Carrera</del>

attendees

2-AUG 98 3 AUG 98

MAS	Gerald Finn	<del>_____</del>	<del>_____</del>
MAS	Bob Phelan	<del>_____</del>	<del>_____</del>
MAS	Doug Mohring <i>Mohring</i>	<del>_____</del>	<del>_____</del>
<del>PMPC</del>	<del>Tom Dyer</del>	<del>_____</del>	<del>_____</del>
CFE	John Wilson	<del>_____</del>	<del>_____</del>
CFE	Mike Ferrigno	<del>_____</del>	<del>_____</del>
CFE	Terry Halligan	<del>_____</del>	<del>_____</del>
IND	Doug Whitlow	<del>_____</del>	<del>_____</del>

Kevin /JFK  
TIBOETS

~~\_\_\_\_\_~~





**Griffin, Debbie F.**

---

**From:** Griffin, Debbie F.  
**Sent:** Tuesday, November 10, 1998 9:25 AM  
**To:** Wood, Thomas M  
**Subject:** E-mail Response to ALM

Tom, I am responding to an e-mail sent to me by Jim Owens in regards to the letter sent to Ted Graves regarding Status of Aircraft Loading Manual training.

I am requesting your approval before I send it out. I want to make sure that it is OK to forward Terje Kristiansen's letter to all involved. Please let me know if this is OK to send. Thanks!

**To:** Nanna, Thomas J; Driscoll, Wayne T; Klemann, Rick; Carpenter, Jeffrey S; Henderson, Mark; Griffin, Douglas L; Patrick, Mike D; Olson, Tom R; Nelson, R P; Robbins, Frank H

**CC:** Robbins, Bruce A.; Wood, Thomas M; Owens, James H; Warriner, Cecil L.; Graves, Melvin T

Gentleman,  
The FAA has requested a written progress report or matrix showing the status of the Aircraft Loading Manual Training. Can you please send me an update, showing the Service Center or Hub department and the percentage of completion.

I will compile all information and forward a matrix to Terje Kristiansen/Principle Operations Inspector. I apologize for any difficulty in reading the following letter requesting this information:

**Griffin, Debbie F.**

**From:** Owens, James H  
**Sent:** Wednesday, November 18, 1998 12:15 PM  
**To:** Slavens, Rob L; Wendling, Tim E  
**Cc:** Scott, Kent T; Carpenter, Jeffrey S; Robbins, Bruce A.; Griffin, Debbie F.; Wood, Thomas M  
**Subject:** Aircraft Loading Manual Training

It was brought to my attention today that Aircraft Loading Manual Training at HDY is not being accomplished.

The FAA has requested a progress report concerning this training and our failure to accomplish or at least show progress will not be acceptable to the FAA.

All Cargo Handlers, Loading Crews, Managers, Supervisors must to be trained and the training documented.

Tim, please let me know what can be done to provide the mandatory training.

Best regards,

Jim Owens



U.S. Department  
of Transportation  
Federal Aviation  
Administration

San Jose Flight Standards District Office

San Jose International Airport  
1250 Aviation Avenue, Suite 285  
San Jose, CA 95110-1128  
Phone: (408) 261-7981  
FAX: (408) 776-9448

October 30, 1998

Melvin T. Graves, Director of Operations  
Emery Worldwide Airlines, Inc.  
One Emery Plaza  
Vandalia, OH 45377

Dear Ted:

This letter is in response to a concern of the FAA that according to the results of ramp and enroute inspections conducted by "geographic" inspectors since August 1, 1998, it appears that many personnel involved in the handling and loading of ULD's on Emery aircraft are still either not trained, not sufficiently trained, are using unacceptable checklists, or are not following the relevant guidance in the current Emery Aircraft Loading Manual. Since the vast majority of loading and cargo handling supervisors were trained in early August, we would naturally have assumed or anticipated that by now, three months later, all ground support personnel are trained to the standards prescribed in the manual. Please provide a written progress report or matrix that would show the actual status of each line station's (including Emery's hub in Vandalia) personnel training accomplishment as of November 1, 1998. This listing should be in sufficient detail so as to clearly identify which stations and personnel that have or have not accomplished the training requirement.

Also, on a related subject, we continue to receive reports that unworthy ULD's are loaded, or attempted to be loaded on Emery aircraft. The last written progress report on the ULD inspection program that was implemented on April 6, 1998, was received on May 21, 1998. We would appreciate receiving an updated (November 1, 1998) status report on the repair and/or replacement rate of ULD's in the Emery's system.

We ask that these reports to be forwarded to our office no later than November 13, 1998. As always we appreciate your cooperation.

Sincerely,

Terje Kristiansen  
Principal Operations Inspector

Also, Jim Owens has revised the ULD checklist. Please disregard all old copies and forward the new copy:



ULD INSPECTION  
PROCEDURE\_doc

If you have any further questions, please call me,  
Thank you for your quick response,

Debbie Fusco Griffin  
Maintenance Training Program Specialist

**Griffin, Debbie F.**

**From:** Owens, James H  
**Sent:** Friday, November 13, 1998 2:37 PM  
**To:** Griffin, Debbie F.  
**Subject:** FW: Eastern Area - Aircraft Loading Manual Training

Debbie:

Thought you might be interested.

Regards,

Jim

**From: Ganey, Barbara P**  
**Sent:** Friday, November 13, 1998 1:07 PM  
**To:** Owens, James H  
**Cc:** Klemann, Rick  
**Subject:** RE: Eastern Area - Aircraft Loading Manual Training

Dear Jim:

I apologize -- I attached the wrong document. ~~Had it!~~ !



Eastern Area Results  
CBT Training

*see chart From Eastern Area →*

Thank you,

**Barbara Ganey**  
Eastern Area Office  
(914) 567-9723 - Telephone  
(914) 567-9690 - FAX

**From:** Owens, James H  
**Sent:** Friday, November 13, 1998 12:09 PM  
**To:** Ganey, Barbara P  
**Cc:** Klemann, Rick  
**Subject:** RE: Eastern Area - Aircraft Loading Manual Training

Barbara:

I must be missing something.

There is no status report attached.

Thank you.

Best regards,

Jim

**From: Ganey, Barbara P**  
**Sent:** Friday, November 13, 1998 12:02 PM  
**To:** Owens, James H  
**Cc:** Klemann, Rick

**Subject: Eastern Area - Aircraft Loading Manual Training**

**Dear Jim:**

**Please find attached the current status of the Eastern Area's Aircraft Loading Manual Training by Service Center.**

<<File: Aircraft Loading - CBT Training.doc>>

**Thank you,**

***Barbara Ganey***  
*Eastern Area Office*  
*914 567-9323 - Telephone*  
*914 567-9690 - FAX*

		and Kevin Concannon will also complete the training. The following drivers are in the process of completing the training. G Paulicelli, F Dawson, C Hannon, R Duggan, C Hensley, M Spina, N Frenzo, and F Campanella.	
<b>BTV</b>	Yes	Tom Filipinno has completed the training. He is the only person in operations.	
<b>MHT</b>	Yes	MHT List Bcb Leikauskas           GM Paula Kvetkosky       Am Ops Sup Mark Karolkiwicz       Pm Ops Sup	
<b>PWM</b>	No		
<b>POU</b>	In Process	POU Supervisors are in the process of taking it: 1) Eugene Pozza: PM Supervisor and 2) William Curran: AM Supervisor	
<b>PVD</b>	No		We have not completed this training. We do have the CD ROM and it will be completed by Nov. 1998 per the memo.
<b>SYR</b>	No		I was not aware when I sent my original reply that Jean DeLitta, our Sr. Spvr, worked with Debbie Griffin, in Jim Owen's department, for approximately one hour yesterday, because we have been having problems

			<p>downloading the disk into our desktop. They were finally able to download the entire program, but because of the length of the course for the drivers, we are planning to have the drivers take this course and test, along with their annual haz mat test, on Saturday, December 5. Debbie did not have a problem with that. All other Syr supervisory and ops personnel who are required to take the test will complete the course by the end of November.</p>
--	--	--	---

PHILADELPHIA DIVISION			
Service Center	Training Completed	Personnel	Comments
ABE	No		At this time ABE has not had anyone complete the training. The supervisor for the cartage company has started training, but is far from complete. We are being hit from all sides, Emcon 2000, driver shortages, 1999 budget, and 4th quarter service shipment count.
BWI	Partially	<p>The following schedule is in place at BWI for completion of the Aircraft loading CBT</p> <p>John Hammett Ops Mgr completed  Doug Gelfand GM  to be completed by Nov 30</p>	

		Patti Owens AM Ops Sup to be completed by Nov 30 Sal Germano PM Ops Sup to be completed by Nov 30 Doug Zuger Dockman to be completed by Nov 13 (Cargo Handler only) Butch Ball Dockman to be completed by Nov 13 (Cargo Handler only) Dwayne Wilkins Dockman to be completed by Nov 13 (Cargo Handler only) Joe Berman Dockman to be completed by Nov 13 (Cargo Handler only)	
<b>EWR</b>	No - In Process		
<b>IAD</b>	Yes	The names listed below have completed the aircraft loading manual  Mike Weir Kim George Donald Miller	
<b>JFK</b>	No		JFK HAS NO CURRENT SUPERVISORS THAT HAVE TAKEN THE CBT CDROM TEST. THEY HAVE ALL REVIEWED THE AIRCRAFT LOADING MANUAL.  THE JFK STAFF WILL BEGIN



			<p>THIS CBT COURSE THIS WEEK AND SHOULD ALL BE TESTED BY 16NOV.</p> <p>THESE FOLKS WILL BE : CHUCK MARTIN</p> <p>RUGGIANO                      ROBERT</p> <p>SEYMOUR                      RICK</p> <p>SPEAR                      ROB</p> <p>DOMINICI                      LAURA</p>
MDT	No - In Process	<p>MDT training</p> <p>Terry Mc Carthy</p> <p>George Stuck</p> <p>Terry George</p> <p>Don Stuck</p> <p>25% complete</p>	
PHL	Yes	<p>Here are the people who have taken this course.</p> <p>Mike Gossman</p> <p>Anne Mary Adamski</p> <p>Pat Dick</p> <p>Bill Walsh</p> <p>Fran Ward</p>	

		<p>John Schmitt  Roger White  Al Lieberman  Ray Mcgarvey  Hank Ward  James Madison  Mark Murphy  Frank Ritacco  James McCarney  Charles Liszewski  Rick Carosi  Lou Di Lossi  Dean Crabbe'  Steve Bruenkel  Pat Dick  I will take the course today. So  include my name.  Bill Welsh/PHL</p>	
TTN		<p>We are currently still training , so  far the following employees are  complete.  Everyone else will be done by  November 30th.</p> <p>Bill Farrell  Johnny Ricks  Lonnie Ricks  Bob Messenleher  John Venti</p> <p>Still have 8-more to do.</p>	

<b>CHARLOTTE DIVISION</b>			
<b>Service Center</b>	<b>Training Completed</b>	<b>Personnel</b>	<b>Comments</b>
AVL	No - By Next Week		
CAE	Partially	<p>The following members of Team CAE have completed or will be completing by the end of this week the CBT training for Aircraft Loading:</p> <p>Brian Irving - Complete Course (Have completed three sections)            Ron Swanson - Cargo Handler (Has completed one section)            Carlis Kohn - Cargo Handler (Has completed one section)</p>	
CHS	See Above		
CLT	No		
GSO	No - Terminal Relocation		
GSP	No		
ORF	No		
RDU	Partially	<p>Completed - Joe Ward            In Process - Chuck Birmingham</p>	
RIC	Yes		The chapters specified have been reviewed by Emery Richmond Supervisors and Mgmt.
ROA	No		
TRI	N/A		TRI does not have aircraft at this facility. Have not received any training

### Eastern Area Office - CBT Training

BOSTON DIVISION			
Service Center	Training Completed	Personnel	Comments
ALB	Partially	<p>Please be advised that Ops Supervisor, Rich Thecphel and PM Ops Agent responsible for Container Build Up, Kevin Cary have completed the CBT. Drivers and AM Ops will complete as soon as possible. More than likely after Emcon 2000 installation, Basic PC Training and Cargo Ops Training currently going on until December 11, 1998.</p>	
BDL	Yes	<p>The following employees have been instructed on proper cargo handling at BDL:</p> <p>Ops Mgr: Kevin Mcviegh</p> <p>Supervisors: Bob Burns Dean Cook</p> <p>Jeff Anthony Rich Homan</p> <p>Drivers: Gary Piecuch Joe Galetta Mike morassi Mike Leroy Steve Sidor Al Sheldon Carl Lassiter John Pappas Bruce Winatt</p>	
BOS	Partially	<p>Rick Leikauskas and Steve Vining have completed the training. Bob Kelly, Chris Barba</p>	

CLEVELAND DIVISION			
Service Center	Training Completed	Personnel	Comments
BUF	Yes	Buffalo Service Center Employees who have taken the course. 1.Dave Tober-Supv 2.Dick Bizub-Dockworker 3.Roger Walters-Ops Agent	
CAK	Yes		CAK has three people that have completed the CBT program.  Elwin Coe Greg Conrad Paula Shellman
CLE	Partially	Sandra Felice	I am the only person who has taken the course at Cleveland, and I have taken the complete course, now I can get a job swinging those little flashlights around on the runway. Anyway, John K and Paul S will take course next week, but we have shorted the nightshift for the past 2 weeks by 2 or 3 persons due to E2K training, and we have not had an opportunity to have them train. The training states that 2 persons on each shift must be trained, and the cover states differently. We plan to train 2 drivers on each shift next week.

CMH	In Process		Glenn Cooper/Raymond Ramsey/John Cummings..Are in the process of completing the course..We will update you upon completion
ELM	Partially	Aaron Brott	I am the only person to complete the Cargo Handling Training thus far.  The entire staff is scheduled to complete the training by 11/20/98.
PIT	No	Kathy Chromchak	PIT has <b>not</b> completed training. We service the system in totes (wire cages). In the rare occasion a ULD is received, it is generally a non airworthy container as we have no roller system
ROC	No	Here are the employees from the Roc Service Center that will be taking the Aircraft Loading Manual Training : Brian Lonski Lenworth Myers Dave Jones Jason Israel Norman Ramsay Tevaras ST. Marthe Chris Kendrick	
CRW	Yes		Training has been completed by Hal Sharp, OPS Supervisor and Steve Barker,OPS manager.

MIAMI DIVISION			
Service Center	Training Completed	Personnel	Comments
FLL	No		The CBT training program for "Acf Loading" has been initiated at the <b>FLL svc ctr</b> with myself and 1 spvr 1/2 way completing it. It has been loaded on 2 PC's in the svc ctr, and the spvrs have been assigned time slots on these computers next week to meet the <i>NOV 30 ddl</i> .
JAX	No		JAX's Dell computer have just come online as of last night. I will make it a priority to have all drivers and inside staff complete the test. There is one CD-ROM computer in JAX for all to take the test.
ORL	No		
SJU	No		
BQN	No		
TPA	Partially	David Siegler	AS OF THIS TIME, I AM THE ONLY ONE WHO HAS COMPLETED THE REVIEW OF THE AIRCRAFT LOADING MANUAL ON CD.

**EMERSON**  
**WORLDWIDE AIRLINES**  
A CNF COMPANY

*This is to certify that*

*David E. Gentry*

*has completed Aircraft Loading Computer Based Training*

08/25/98

Date

  
Instructor



**EMERYS**  
**WORLDWIDE AIRLINES**  
A CNF COMPANY

*This is to certify that*

*Wayne Driscoll*

*has completed Aircraft Loading Computer Based Training*

10/01/98

Date

*Don. F. H. H.*  
Instructor

**EMERLY**  
**WORLDWIDE AIRLINES**  
A CNF COMPANY

*This is to certify that*

*Mark Laasof*

*has completed Aircraft Loading Computer Based Training*

10/01/98

Date

*[Signature]*  
Instructor

**EMERALD**  
**WORLDWIDE AIRLINES**  
A CNF COMPANY

*This is to certify that*

*Terry Holsten*

*has completed Aircraft Loading Computer Based Training*

10/01/98

Date

*Terry Holsten*  
Instructor

**EMERYS**  
**WORLDWIDE AIRLINES**  
A CNF COMPANY

*This is to certify that*

*Rick Klemann*

*has completed Aircraft Loading Computer Based Training*

09/28/98

Date

*[Signature]*  
Instructor

**EMERALD**  
**WORLDWIDE AIRLINES**  
A **CNF** COMPANY

*This is to certify that*

*Dimitri Zacharenko*

*has completed Aircraft Loading Computer Based Training*

08/25/98

Date

*D. J. Sullivan*  
Instructor



*This is to certify that*

*Todd Germain*

*has completed Aircraft Loading Computer Based Training*

08/25/98

Date

*W. D. ...*  
Instructor



*This is to certify that*

*Dennis Martin*

*has completed Aircraft Loading Computer Based Training*

08/25/98

Date

*[Signature]*  
Instructor



*This is to certify that*

*Christopher B. Bailey*

*has completed Aircraft Loading Computer Based Training*

10/14/98

Date

*[Signature]*  
Instructor





*This is to certify that*

*Thomas J. Nanna*

*has completed Aircraft Loading Computer Based Training*

08/25/98

Date

*[Signature]*  
Instructor





*This is to certify that*

*Brain Leach*

*has completed Aircraft Loading Computer Based Training*

10/07/98

Date

*[Signature]*  
Instructor



*This is to certify that*

*Raymond Morgan*

*has completed Aircraft Loading Computer Based Training*

10/07/98

*Date*

*Richard M. [Redacted]*  
Instructor



*This is to certify that*

*Mark Henderson*

*has completed Aircraft Loading Computer Based Training*

10/07/98

Date

*W. G. [Signature]*  
Instructor

**EMEREA**  
**WORLDWIDE AIRLINES**  
A CNF COMPANY

*This is to certify that*

*Douglas L. Griffin*

*has completed Aircraft Loading Computer Based Training*

10/07/98

Date

*W. G. Griffin*  
Instructor



*This is to certify that*

*Jeff Carpenter*

*has completed Aircraft Loading Computer Based Training*

10/07/98

Date

*[Signature]*  
Instructor

**Griffin, Debbie F.**

---

**From:** Wood, Thomas M  
**Sent:** Thursday, January 28, 1999 5:41 PM  
**To:** Griffin, Debbie F.  
**Subject:** FW: FAA (RASIP) Inspection

**From:** Owens, James H  
**Sent:** Thursday, January 28, 1999 1:25 PM  
**To:** Scott, Kent T; Slavens, Rob L  
**Cc:** Wood, Thomas M; Wendling, Tim E; Graves, Melvin T  
**Subject:** FAA (RASIP) Inspection

A meeting was held today with Tim Wendling and his staff and Ted Graves, Tom Wood and myself to discuss the actions necessary to insure that we are ready for this inspection.

The following items were discussed and action will be taken.

1. Aircraft Loading Manual Training.

Debbie Griffin, Tom Wood and I will train all EWA Management on 2/29/99.

Day Sort - 0730 - 0900  
Prime Time - 2100-2300

2. Tom Wood is preparing a presentation for the FAA Meeting on Tuesday February 2. Bruce Denlinger will present EWW Quality Standards and ISO 9000 procedures. Rich Klinedinst will present ULD Repair procedures. Frank Robbins will address EWW Loading and Ramp Procedures.
3. EWA Maintenance will be available to escort the Maintenance Inspectors.
4. Flight Operations Management and myself will be available to the Operations Inspectors.
5. I will be available on Day Sort and Prime Time to assist with this inspection.
3. Another meeting is scheduled for 1pm tomorrow with EWW, EWA including Safety and Security to insure that we have all of the major items covered.
4. A 10am meeting is tentatively scheduled for Monday February 1 to make sure there are no loose ends.

Tim and his staff are very concerned about this audit but I know that with their cooperation we will present a professional operation.

Regards,

Jim





*This is to certify that*

*Brian Smith*

*has completed Aircraft Loading Manual Training*

01/29/99

Date

*[Signature]*  
Instructor



*This is to certify that*

*Linda Walter*

*has completed Aircraft Loading Manual Training*

01/29/99

Date

*[Signature]*  
Instructor



*This is to certify that*

*William Hewitt*

*has completed Aircraft Loading Manual Training*

01/29/99

Date

*[Signature]*  
Instructor



*This is to certify that*

*Steve Oelger*

*has completed Aircraft Loading Manual Training*

01/29/99

Date

*[Signature]*  
Instructor



*This is to certify that*

*Warren Robeson*

*has completed Aircraft Loading Manual Training*

01/29/99  
Date

*[Signature]*  
Instructor



*This is to certify that*

*Amy Williams*

*has completed Aircraft Loading Manual Training*

01/29/99

Date

*[Signature]*  
Instructor



*This is to certify that*

*Shawn Boykin*

*has completed Aircraft Loading Manual Training*

01/29/99

Date

*W. L. Boykin*  
Instructor



*This is to certify that*

*Jerry McCormick*

*has completed Aircraft Loading Manual Training*

01/29/99

Date

*[Signature]*  
Instructor





*This is to certify that*

*Sharon E. Turner*

*has completed Aircraft Loading Manual Training*

01/29/99

Date

*[Signature]*  
Instructor



*This is to certify that*

*Matt Appenzeller*

*has completed Aircraft Loading Manual Training*

01/29/99

Date

*[Signature]*  
Instructor



*This is to certify that*

*Sandy Little*

*has completed Aircraft Loading Manual Training*

01/29/99

Date

*D. J. M. [Signature]*  
Instructor



*This is to certify that*

*Mark W. Henderson*

*has completed Aircraft Loading Manual Recurrent Training*

01/29/99

Date

*[Signature]*  
Instructor



*This is to certify that*

*Larry W. Stewart*

*has completed Aircraft Loading Manual Training*

01/29/99

Date

*Johnny M. [Signature]*  
Instructor



*This is to certify that*

*Doug Hampshire*

*has completed Aircraft Loading Manual Training*

01/29/99

Date

*D. L. Smith*  
Instructor



*This is to certify that*

*Howard Phillips*

*has completed Aircraft Loading Manual Training*

01/29/99

Date

*Robert Z. M. [Signature]*  
Instructor



*This is to certify that*

*Kathryn F. Collins*

*has completed Aircraft Loading Manual Training*

01/29/99

Date

*[Signature]*  
Instructor





*This is to certify that*

*Peggy Eisen*

*has completed Aircraft Loading Manual Training*

01/29/99

*Date*

*[Signature]*  
Instructor

**EMEREA**  
**WORLDWIDE AIRLINES**  
A CNF COMPANY

*This is to certify that*

*Cindy Schaffer*

*has completed Aircraft Loading Manual Training*

01/29/99

Date

*[Signature]*  
Instructor

**EMEREA**  
**WORLDWIDE AIRLINES**  
A CNF COMPANY

*This is to certify that*

*Frank H. Robbins*

*has completed Aircraft Loading Manual Training*

01/29/99

Date

*[Signature]*  
Instructor



*This is to certify that*

*Matthew D. Cottam*

*has completed Aircraft Loading Manual Training*

01/29/99

Date

*[Signature]*  
Instructor



*This is to certify that*

*Larry Walchli*

*has completed Aircraft Loading Manual Training*

01/29/99

Date

*[Signature]*  
Instructor



*This is to certify that*

*Brent Myers*

*has completed Aircraft Loading Manual Training*

01/29/99

Date

*[Signature]*  
Instructor



*This is to certify that*

*Garrett Scott*

*has completed Aircraft Loading Manual Training*

01/29/99

Date

*[Signature]*  
Instructor



*This is to certify that*

*John Seagraves*

*has completed Aircraft Loading Manual Training*

01/29/99

*Date*

*[Signature]*  
Instructor





*This is to certify that*

*John Shook*

*has completed Aircraft Loading Manual Training*

01/29/99

Date

*[Signature]*  
Instructor



*This is to certify that*

*Mike Patrick*

*has completed Aircraft Loading Manual Training*

01/29/99

Date

*[Signature]*  
Instructor



*This is to certify that*

*Rick L. Stewart*

*has completed Aircraft Loading Manual Training.*

01/29/99

Date

*[Signature]*  
Instructor



*This is to certify that*

*Rick West*

*has completed Aircraft Loading Manual Training*

01/29/99

Date

*Dr. Z M. [Signature]*  
Instructor



*This is to certify that*

*Mike Montgomery*

*has completed Aircraft Loading Manual Training*

01/29/99

Date

*[Signature]*  
Instructor



*This is to certify that*

*Gary Rice*

*has completed Aircraft Loading Manual Training*

01/29/99

Date

*[Signature]*  
Instructor



*This is to certify that*

*Esoter Tipple*

*has completed Aircraft Loading Manual Training*

01/29/99

Date

*Robert L. Y. H. H.*  
Instructor



*This is to certify that*

*Cheri Betts*

*has completed Aircraft Loading Manual Training*

01/29/99

Date

*[Signature]*  
Instructor



**EMEREA**  
**WORLDWIDE AIRLINES**  
A CNF COMPANY

*This is to certify that*

*Tanya L. Black*

*has completed Aircraft Loading Manual Training*

01/29/99

Date

*[Signature]*  
Instructor



*This is to certify that*

*Mary Kobladas*

*has completed Aircraft Loading Manual Training*

01/29/99

Date

*[Signature]*  
Instructor



*This is to certify that*

*David Howard*

*has completed Aircraft Loading Manual Training*

01/29/99

Date

*[Signature]*  
Instructor



*This is to certify that*

*Peggy Schultz*

*has completed Aircraft Loading Manual Training*

01/29/99

Date

*[Signature]*  
Instructor



*This is to certify that*

*Brian J. Leach*

*has completed Aircraft Loading Manual Training*

01/29/99

Date

*[Signature]*  
Instructor

**EMERALD**  
**WORLDWIDE AIRLINES**  
A CNF COMPANY

*This is to certify that*

*Thomas R. Olson*

*has completed Aircraft Loading Manual Training*

01/29/99

Date

*[Signature]*  
Instructor



*This is to certify that*

*Dave Amos*

*has completed Aircraft Loading Manual Training*

01/29/99

Date

*[Signature]*  
Instructor



*This is to certify that*

*William R. Knotts*

*has completed Aircraft Loading Manual Training*

01/29/99

Date

*[Signature]*  
Instructor





*This is to certify that*

*Chris J. Mazzeo*

*has completed Aircraft Loading Manual Training*

01/29/99

Date

*[Signature]*  
Instructor

**EMERLY**  
**WORLDWIDE AIRLINES**  
A CNF COMPANY

*This is to certify that*

*Gregory A. Kemp*

*has completed Aircraft Loading Manual Training*

01/29/99

Date

*[Signature]*  
Instructor

**EMEREA**  
**WORLDWIDE AIRLINES**  
A CNF COMPANY

*This is to certify that*

*Gregory K. Pike*

*has completed Aircraft Loading Manual Training*

01/29/99

Date

*[Signature]*  
Instructor



*This is to certify that*

*Scott Sayers*

*has completed Aircraft Loading Manual Training*

01/29/99

Date

*[Signature]*  
Instructor



*This is to certify that*

*Ray Morgan*

*has completed Aircraft Loading Manual Training*

01/29/99

Date

*[Signature]*  
Instructor

**EMERYS**  
**WORLDWIDE AIRLINES**  
A CNF COMPANY

*This is to certify that*

*Troy Adkins*

*has completed Aircraft Loading Manual Training*

01/29/99

*Date*

*[Signature]*  
Instructor



*This is to certify that*

*Dan Roberts*

*has completed Aircraft Loading Manual Training.*

01/29/99

*Date*

*[Signature]*  
Instructor



*This is to certify that*

*Valerie Couger*

*has completed Aircraft Loading Manual Training*

01/25/99

Date

*Donna Z...*  
Instructor





*This is to certify that*

*Joni Lakes*

*has completed Aircraft Loading Manual Training*

01/29/99

*Date*

*[Signature]*  
Instructor

**EMERYS**  
**WORLDWIDE AIRLINES**  
A CNF COMPANY

*This is to certify that*

*Jerry S. Wollett*

*has completed Aircraft Loading Manual Training*

01/29/99

Date

*[Signature]*  
Instructor



*This is to certify that*

*Jill R. Derrick*

*has completed Aircraft Loading Manual Training*

01/29/99

Date

*[Signature]*  
Instructor

**EMERH**  
**WORLDWIDE AIRLINES**  
A CNF COMPANY

*This is to certify that*

*Lori Withrow*

*has completed Aircraft Loading Manual Training*

01/29/99

Date

*[Signature]*  
Instructor

**EMEREA**  
**WORLDWIDE AIRLINES**  
A CNF COMPANY

*This is to certify that*

*Ken Crissinger*

*has completed Aircraft Loading Manual Training*

01/29/99

Date

*Robert S. Miller*  
Instructor



*This is to certify that*

*Michiel Cross*

*has completed Aircraft Loading Manual Training*

01/29/99

Date

*[Signature]*  
Instructor



*This is to certify that*

*Dan Clarkson*

*has completed Aircraft Loading Manual Training*

01/29/99

*Date*

*[Signature]*  
Instructor



*This is to certify that*

*Herb Sacrates*

*has completed Aircraft Loading Manual Training*

01/29/99

*Date*

*[Signature]*  
Instructor





*This is to certify that*

*Matt Springer*

*has completed Aircraft Loading Manual Training*

01/29/99

Date

*[Signature]*  
Instructor



*This is to certify that*

*Carol Heys*

*has completed Aircraft Loading Manual Training*

01/29/99

Date

*[Signature]*  
Instructor



*This is to certify that*

*Steven Phillips*

*has completed Aircraft Loading Manual Training*

01/29/99

Date

*W. G. M. J.*  
Instructor



*This is to certify that*

*Todd Popper*

*has completed Aircraft Loading Manual Training*

01/29/99

Date

*[Signature]*  
Instructor



*This is to certify that*

*Sheila Glynn*

*has completed Aircraft Loading Manual Training*

01/29/99

Date

*Sheila Glynn*  
Instructor



*This is to certify that*

*Christopher W. Caverlee*

*has completed Aircraft Loading Manual Training*

01/29/99

Date

*Christy A. [Signature]*  
Instructor



*This is to certify that*

*Claude W. Blosser 999*

*has completed Aircraft Loading Manual Training*

01/29/99

Date

*[Signature]*  
Instructor

**EMERLY**  
**WORLDWIDE AIRLINES**  
A CNF COMPANY

*This is to certify that*

*Paula H. Crosby*

*has completed Aircraft Loading Manual Training*

01/29/99

Date

*William J. Hampton*  
Instructor





*This is to certify that*

*Craig Wright*

*has completed Aircraft Loading Manual Training*

01/29/99

Date

*[Signature]*  
Instructor



*This is to certify that*

*Michael Patterson*

*has completed Aircraft Loading Manual Training*

01/29/99

Date

*[Signature]*  
Instructor



*This is to certify that*

*Theresa Galbraith*

*has completed Aircraft Loading Manual Training*

01/29/99

Date

*[Signature]*  
Instructor



*This is to certify that*

*Joseph W. Elmer*

*has completed Aircraft Loading Manual Training*

01/29/99

Date

*[Signature]*  
Instructor



*This is to certify that*

*Richard McGarvey*

*has completed Aircraft Loading Manual Training*

01/25/99

Date

*[Signature]*  
Instructor



*This is to certify that*

*Adrain Rembert*

*has completed Aircraft Loading Manual Training*

01/29/99

Date

*[Signature]*  
Instructor

**EMERALS**  
**WORLDWIDE AIRLINES**  
A CNF COMPANY

*This is to certify that*

*Richard Razor*

*has completed Aircraft Loading Manual Training*

01/29/99

Date

*[Signature]*  
Instructor



*This is to certify that*

*Jeffery Carpenter*

*has completed Aircraft Loading Manual Recurrent Training*

01/29/99

Date

*[Signature]*  
Instructor





*This is to certify that*

*Samuel Ferrel*

*has completed Aircraft Loading Manual Training*

01/29/99

Date

*Samuel Ferrel*  
Instructor



*This is to certify that*

*Robert R. Jones*

*has completed Aircraft Loading Manual Training*

01/29/99

Date

*[Signature]*  
Instructor



*This is to certify that*

*Bruce E. Derlinger*

*has completed Aircraft Loading Manual Training*

01/29/99

Date

*[Signature]*  
Instructor



*This is to certify that*

*Stephen Bickel*

*has completed Aircraft Loading Manual Training*

01/29/99

*Date*

*[Signature]*  
Instructor

**EMERLY**  
**WORLDWIDE AIRLINES**  
A CNF COMPANY

*This is to certify that*

*Shirley Rammel*

*has completed Aircraft Loading Manual Training*

01/29/99

Date

*Shirley Rammel*  
Instructor



*This is to certify that*

*Rick Koehler*

*has completed Aircraft Loading Manual Training*

01/29/99

Date

*[Signature]*  
Instructor

**EMERY**  
**WORLDWIDE AIRLINES**  
A CNF COMPANY

*This is to certify that*

*Rick Blaine*

*has completed Aircraft Loading Manual Training*

01/29/99

Date

*[Signature]*  
Instructor

**EMERY**  
**WORLDWIDE AIRLINES**  
A CNF COMPANY

*This is to certify that*

*Jim LaScala*

*has completed Aircraft Loading Manual Training*

01/29/99

Date

*[Signature]*  
Instructor





*This is to certify that*

*Mitch Munn*

*has completed Aircraft Loading Manual Training*

01/29/99

Date

*[Signature]*  
Instructor



*This is to certify that*

*Michael E. Cross*

*has completed Aircraft Loading Manual Training*

01/29/99

Date

*S. [Signature]*  
Instructor

# EVERETT WORLDWIDE

A CTF COMPANY

Course Name: A/C CBT Recurrent TRAINING ATTENDANCE FORM

Date: 1/29/98

Social Security #	Employee Name (Please Print Clearly)	Employee Name (Signature)	Time In	Time Out
	Amy Williams		YES	
	John Seagraves			
	GARRETT SCOTT			
	BRENT MYERS		YES	
	Larry Walchli		yes	
	Joni Lakes			
	VALERIE COWGER			
	JOSEPH WELSNER			
	THERESA GALBRAITH		YES	
	MICHAEL PATTERSON		Yes	
	Craig Wright			
	Paula H. Crosby			
	CLAUDE W BLOSSER		YES	
	CHRISTOPHER W. CLEVELAND		YES	
	Shawn Skelton		YES (TL)	
	SHEILA GLYNN			
	TODD POPPER			
	STEVEN PHILLIPS			
	CAROL HEYS			
	Math Springer			
	HERB SOCRATES			
	Dan Clarkson		Yes.	
	RICHARD MCGARVEY		Yes	
	ADRIAN REMBERT			
	Richard RAZOR			

# EVERETT WORLDWIDE

A CTF COMPANY

Course Name:

## TRAINING ATTENDANCE FORM

Date:

Social Security #	Employee Name (Please Print Clearly)	Employee Name (Signature)	Time In	Time Out
[REDACTED]	Brian Zent	[REDACTED]		
[REDACTED]	DAN Roberts	[REDACTED]		
[REDACTED]	TROY ADKINS	[REDACTED]		
[REDACTED]	RAY MORGAN	[REDACTED]		
[REDACTED]	Scott Sayers	[REDACTED]		
[REDACTED]	GREGORY K. PIKE	[REDACTED]		
[REDACTED]	Gregory A. Herp	[REDACTED]	Yes	
[REDACTED]	CHRIS J MAZZEO	[REDACTED]	Yes	
[REDACTED]	Bill Knotts	[REDACTED]		
[REDACTED]	DAVE Amos	[REDACTED]	YES	
[REDACTED]	Tom Olson	[REDACTED]		
[REDACTED]	PEGGY SCHULTZ	[REDACTED]		
[REDACTED]	David Howard	[REDACTED]		
[REDACTED]	Mary KOKIADAS	[REDACTED]		
[REDACTED]	TONYA L. BLACK	[REDACTED]		
[REDACTED]	CHERI BETTS	[REDACTED]		
[REDACTED]	ESTHER TIPPLE	[REDACTED]		
[REDACTED]	GARY Ries	[REDACTED]	yes	
[REDACTED]	LINDA WALTER	[REDACTED]	yes	
[REDACTED]	BRIAN SMITH	[REDACTED]	YES	
[REDACTED]	Mitch Munns	[REDACTED]		
[REDACTED]	Jim LaScala	[REDACTED]		
[REDACTED]	Rick Blaine	[REDACTED]	YES	
[REDACTED]	RICK KOEHLER	[REDACTED]	YES	
[REDACTED]	Shirley Rammel	[REDACTED]	yes	

# EVERETT WORLDWIDE

A CIE COMPANY

Course Name: A/C Loading CBT TRAINING ATTENDANCE FORM

Date: 1/29/99

Social Security #	Employee Name (Please Print Clearly)	Employee Name (Signature)	Time In	Time Out
	KEN CRISSINGER			
	Lori Withrow		yes	
	Jill R. Derrick		YES	
	Jerry S. Wollett		YES	
	MATTHEW D. COITAM		YES	
	FRANK H. ROBBINS		YES	
	CINDY SCHAFER.		YES	
	PEGGY EISEN		YES	
	Kathryn Collins			
	Howard Phillips		YES	
	STEVE DELUGR		YES	
	WILLIAM HEWITT		NO	
	MIKE MONTGOMERY		YES	
	RICK WEST		YES	
	R.L. STEWART		YES	
	MIKE PATRICK		YES	
	JOHN SHOOK		YES	
	WARREN ROBESON		YES	
	DOUG HAMPSHIRE		Yes	
	Larry W. STEWART		YES	
	Mark W. Henderson		Yes	
	SANDY LITTLE		yes	
	MATT APPENZELLER		YES	
	SHARON E TURNER		Yes	
	Jerry McCormick		YES	



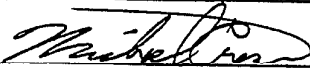
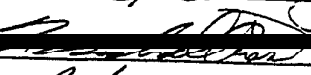
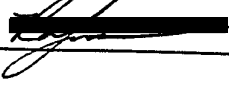
# EVERETT WORLDWIDE

A CIE COMPANY

Course Name:

## TRAINING ATTENDANCE FORM

Date:

#	Social Security #	Employee Name (Please Print Clearly)	Employee Name (Signature)	Time In	Time Out
1	—	STEPHEN BICKEL			
2	—	BRUCE E. DENLINGER			
3					
4		ROBERT R. JONES EWA SAFETY			
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
24					
25					

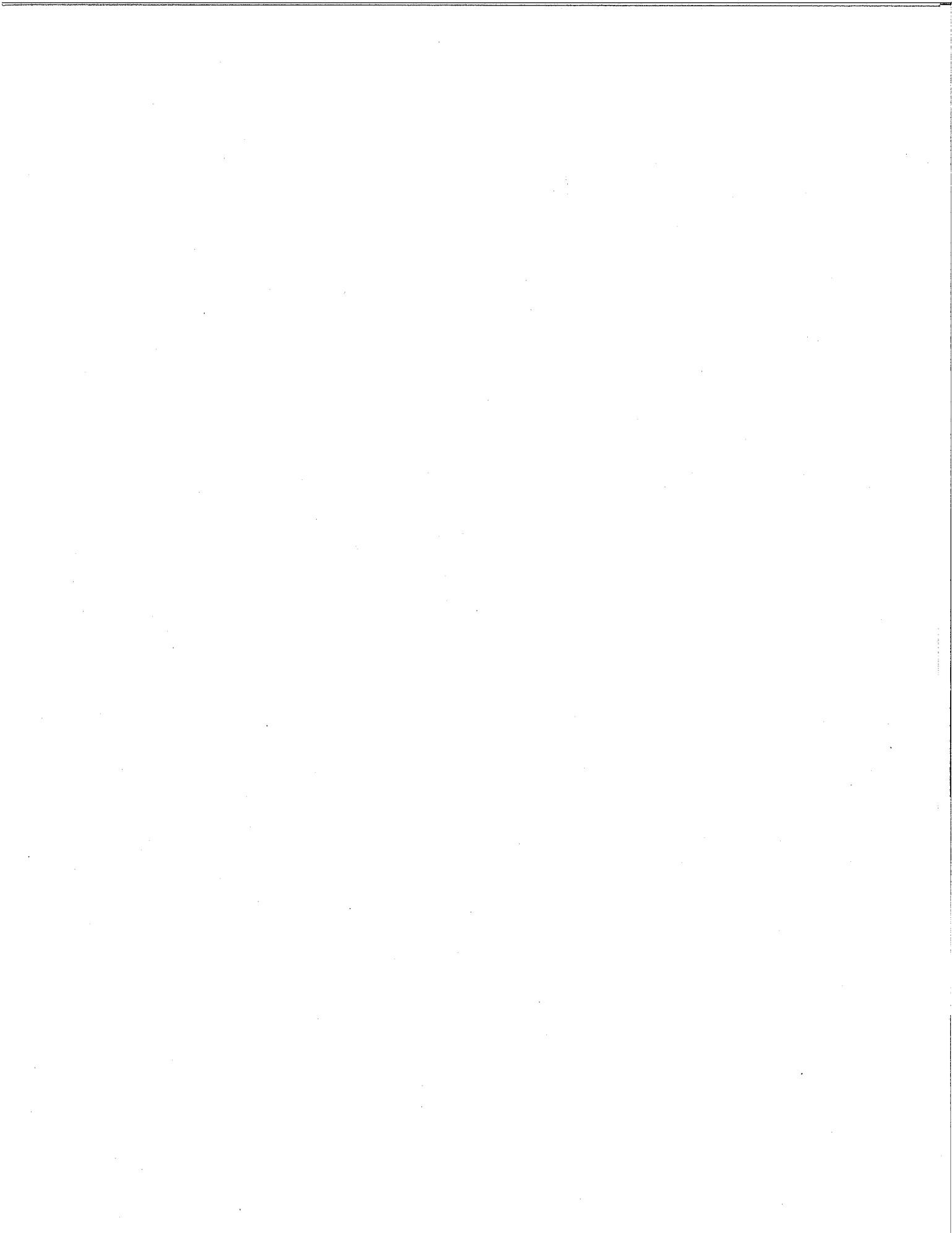


Course Name:

# TRAINING ATTENDANCE FORM

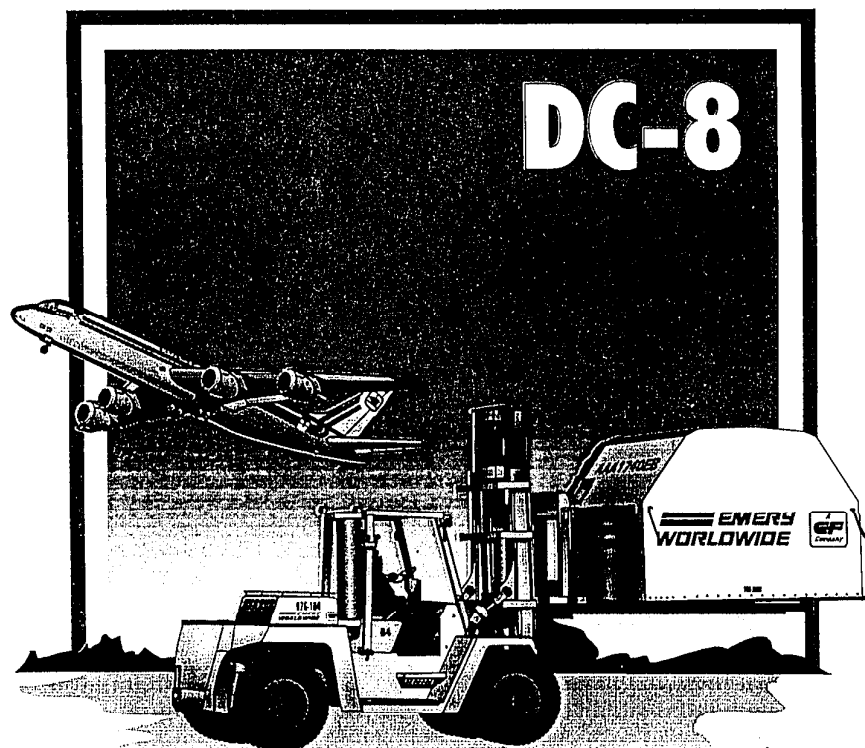
Date:

	Social Security #	Employee Name (Please Print Clearly)	Employee Name (Signature)	Time In	Time Out
1	[REDACTED]	SHAWN BOYKIN	[REDACTED]	yes	
2	[REDACTED]	LYNN A. DENLINGER	[REDACTED]	yes	
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
24					
25					





**EMERY**  
**WORLDWIDE**  
AIRLINES



# *Cargo Loader*

**T R A I N I N G**

**MAINTENANCE SERVICE LETTER**

NO. 98-03



**TO: ALL MAINTENANCE/OPERATIONS PERSONNEL**  
**FROM: BRUCE ROBBINS, MANAGER OF MAINTENANCE TRAINING**  
**SUBJECT: AIRCRAFT LOADING**  
**DATE: AUGUST 20, 1998**

*BRR*



**EMERY  
WORLDWIDE  
AIRLINES**



# Aircraft Loading<sup>®</sup>

## M A N U A L

### It's here ! The new Aircraft Loading Manual

(A)

Emery Worldwide, in concert with the Federal Aviation Administration, has set forth the standard in cargo loading and unloading to provide quality service while maintaining a safe environment. This manual is meant to encourage the exchange of information, to give you a correct source for information, and to give a broad scope for all cargo handling functions.

(B)

All topics will be discussed, these are just a few.

- Learn who does what and what your responsibilities are.
- How to build a pallet and secure all cargo properly.
- Procedures for filling out company forms.
- Familiarization with equipment and recognizing faulty equipment.
- How to recognize a non-airworthy container.

(C)

Contact your immediate supervisor for more information.



**Juggling Speed, Safety  
and Quality is no act...  
it's a SKILL !**

**EMERY  
WORLDWIDE**  
A CNF COMPANY

# Dayton Hub ULD Training

## ULD DAMAGE Recognition Training

**SYLLABUS FOR ULD DAMAGE RECOGNITION TRAINING**

2-15-99

1) INTRODUCTION	10 min.
2) Aluminum Polycarbonate/fabric roll-up door	15 min
3) Fiberglass Shell with curtain restraint	15 min
4) Aluminum pallets	15 min
5) Aluminum/polycarbonate(Lexan) with curtain and net	15 min
6) Aluminum Framed Shell with Fiberglass/Lexan panels, curtain and net	15 min
7) Fiberglass Shell with Latching Doors	15 min
8) Fiberglass Shell with Fiberglass Door restraint	10 min
9) DAMAGE RECOGNITION ACTIVITY	1 hour
	(20min activity, 10min report-out for 4 teams)
10) WRAP-UP	10 min
	<hr/>
	= 3 hours

**PURPOSE**

To be able to determine air worthiness of a ULD

air-worthy

unair-worthy

reduced capacity



INDEX

SUBJECT	PAGE
Description .....	9-1
Condition Appraisal Procedures .....	9-1
Condition Appraisal of 96 x 125 Aluminum- Polycarbonate/Fabric Roll-up Door Restraint .....	9-6
Condition Appraisal of 88 x 125 inch Fiberglass Shell..... with Curtain and Net Restraint	9-9
Condition Appraisal 88 x 125 Inch All Aluminum Pallets..... with Knotted Rope Net Restraint	9-11
Condition Appraisal of 88 x 125 Inch Aluminum/Polycarbonate..... Lexan) with Curtain and Net Restraint	9-13
Condition Appraisal of 88 x 125 Inch Aluminum Framed Shell..... with Fiberglass/Lexan (Polycarbonate) Panels, Curtain and Net Restraint	9-16
Condition Appraisal of 88 x 125 Inch Fiberglass Shell with Latching Doors .....	9-20
Condition Appraisal of 88 x 125 Fiberglass Shell with Fiberglass .....	9-22
Door Restraint orange or green, entire front comes off	

**UNIT LOADING DEVICE (ULD) AND LOADING SYSTEM APPRAISAL PROCEDURES**

**1. Description**

- A. Emery Worldwide Airlines have developed these procedures for use at all Service Centers and Contract Loading Facilities per the Original Equipment Manufacturer Specifications.
- B. This chapter contains policies and procedures to ensure serviceable ULD's are loaded onto aircraft and that the cargo loading system is correctly locked and positioned for the intended flight.
- C. This procedure does not apply to empty ULD's loaded on EWA aircraft. The only requirements for moving empty units are:
  - 1) The ULD must be able to be secured in the position by the locks.
  - 2) The shell must be attached to the base.

**2. Condition Appraisal Procedures**

**A. ULD Containers/Pallets**

**1) Policy**

- a) It shall be the policy of Emery Worldwide Airlines to perform a detailed visual appraisal of all ULD's after the aircraft offload and prior to the upload. This may be performed by contract personnel, qualified, trained, and authorized by EWA.
- b) Each facility performing these appraisals shall designate a minimum of two personnel per shift to accomplish the appraisal. At multiple aircraft sites, it is expected that the facility management provide sufficient personnel to accomplish these appraisals in a timely and efficient manner while maintaining the integrity of the appraisal.
- c) If any container, pallet, or net is found unserviceable it shall be removed from service immediately and Systems Control (HDY ULD) notified as soon as possible. In order to readily identify unserviceable ULD's attach Form MEO 143 (Figure 9-1) to the front of the unit or tape over the ULD Number. Route damaged ULDs in accordance with Figure 9-2.

**2) Procedures**

- a) After the aircraft offload the designated personnel shall perform a visual appraisal in accordance with the applicable paragraph of this chapter.
- b) Prior to the aircraft upload, the designated personnel shall perform a detailed visual appraisal in accordance with the applicable paragraph of this chapter.



2) Procedures

a) Offload Procedures

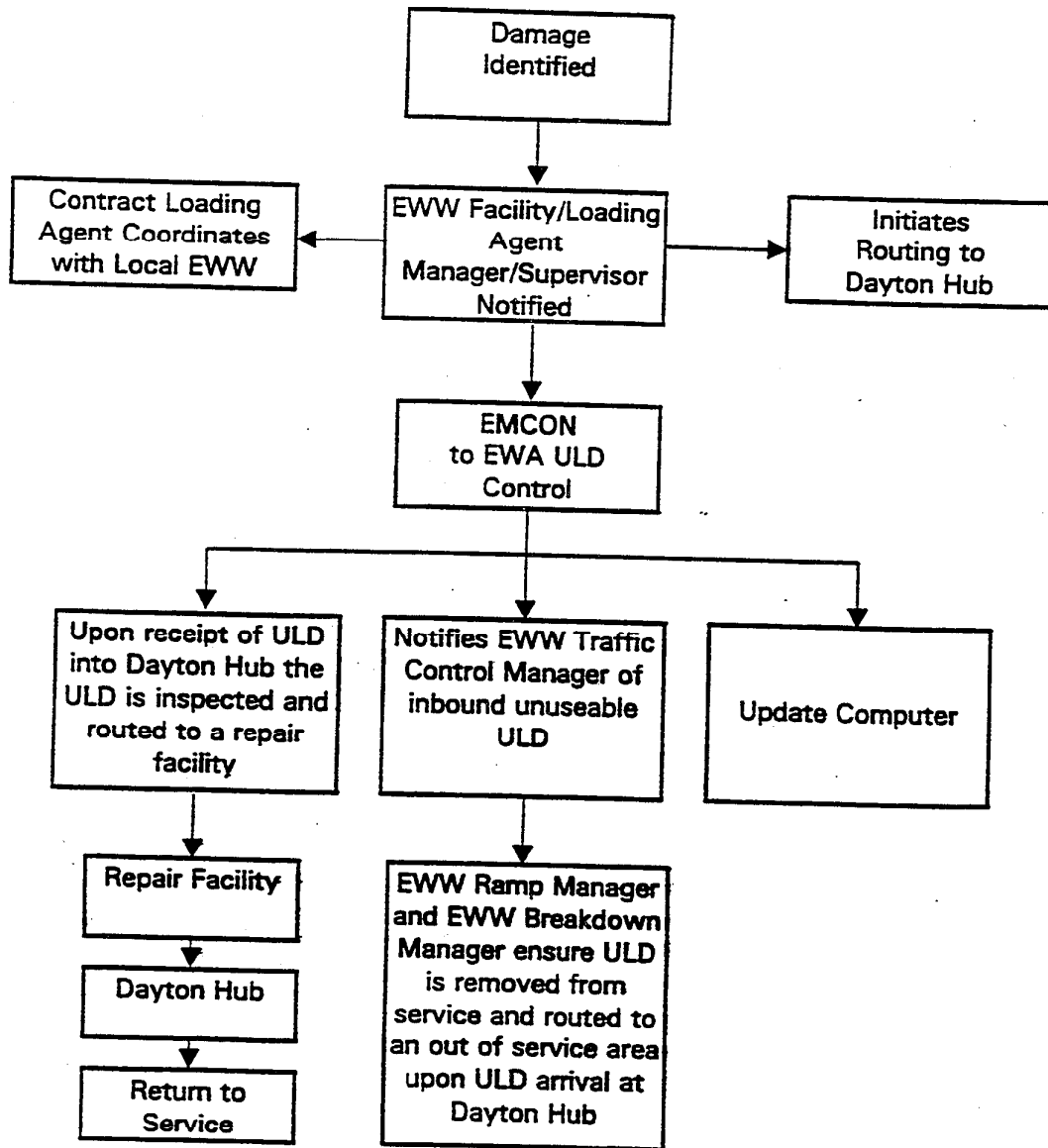
- (1) The person designated by the offload crew supervisor shall perform a visual appraisal of the entire upper cargo compartment for obvious defects, loose or missing pallet locks or side rail restraints.
- (2) If any defects, loose or missing equipment is identified, the person performing the appraisal shall immediately notify the load supervisor who shall in turn immediately notify EWA maintenance or operations (flight crew) personnel.

b) Upload Procedures

- (1) The supervisor or designee of the upload crew shall perform a verification that all cargo locking devices are correctly positioned and locked as the aircraft is being loaded.
- (2) If any defects are noted, the loading shall immediately cease and EWA maintenance or operations (flight crew) department will be notified. The loading will not continue until authorized by a representative of EWA maintenance or operations (flight crew).
- (3) Complete the Lock Verification Form procedures as outlined in Chapter 11, Page 11-11, Paragraph G.

**C. Damaged ULD Routing Procedures**

- 1) Refer to Figure 9-2 below.



**ULD REMOVAL FROM SERVICE LOGIC CHART  
Figure 9-2**

d) Major Damage - Base Assembly

Major damage consists of any damage exceeding allowable damage or allowable damage in more than three locations.

4) Container Body

a) Allowable Damage - Container Body - Aluminum

- (1) Damage to the container aluminum sheet must not exceed a four inches in length by two inches in width when located within three inches of the adjoining edge extrusions. Beyond three inches of the edge extrusions the damage must not exceed 7 inches in length by four inches in width.
- (2) Damage to the extruded edge members must not exceed cracks of one and one half inch longitudinally or one half inch laterally.
- (3) Distortion and or indentation of the edge extrusions must not exceed a maximum of three eighths of an inch over the length of the extrusion.

b) Minor Damage - Container Body

- (1) Minor damage consists of 2 or 3 locations that fall within the limits of allowable damage. A container body sustaining minor damage can be used at a 50 percent or less load factor. However, repair is recommended as soon as possible.
- (2) Any tear or puncture to any polycarbonate panel regardless of size or location is considered minor and must be repaired to maintain the structural integrity of the unit. If the tear exceeds the practical limits of repair, then the damage is considered major and the entire panel must be replaced.

c) Major Damage - Container Body

Major damage consists of any damage exceeding allowable damage or allowable damage in more than three locations.

5) Door Assembly

a) Allowable Damage - Door Assemblies

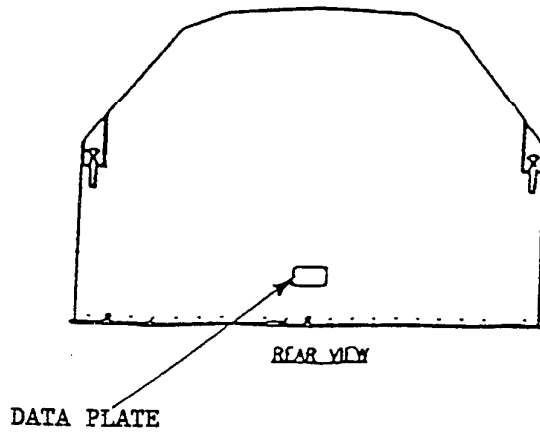
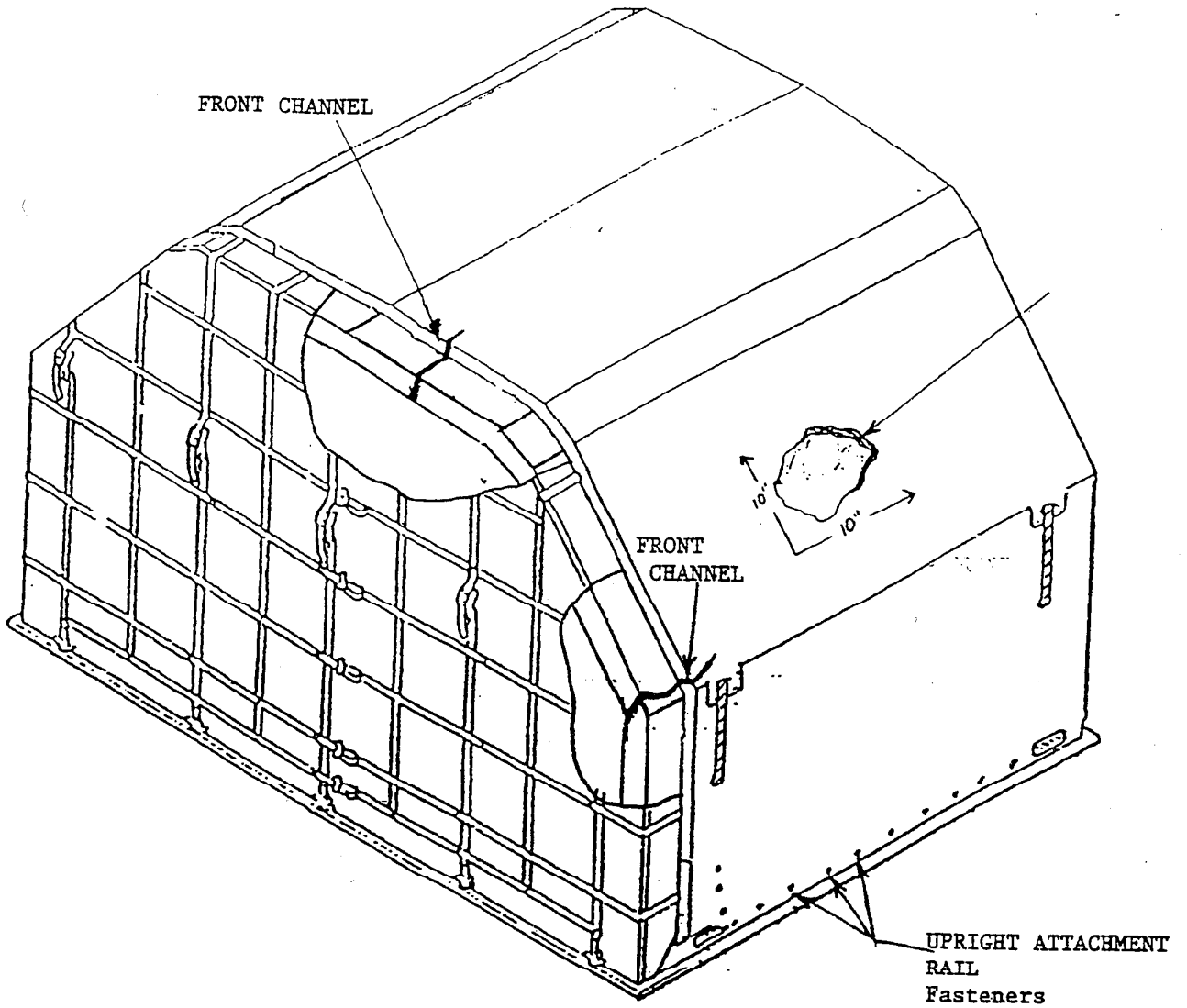
- (1) Any rip or tear to the vinyl door curtain less than 10 by 8 inches is considered allowable damage. However, allowable damage should be repaired as soon as possible to prevent intrusion of water.
- (2) Damage to the extruded door bar must not exceed cracks of one inch longitudinally or three eighths of an inch laterally.

4. Condition Appraisal Of 88 X 125 Inch Fiberglass Shell With Curtain And Net Restraint.

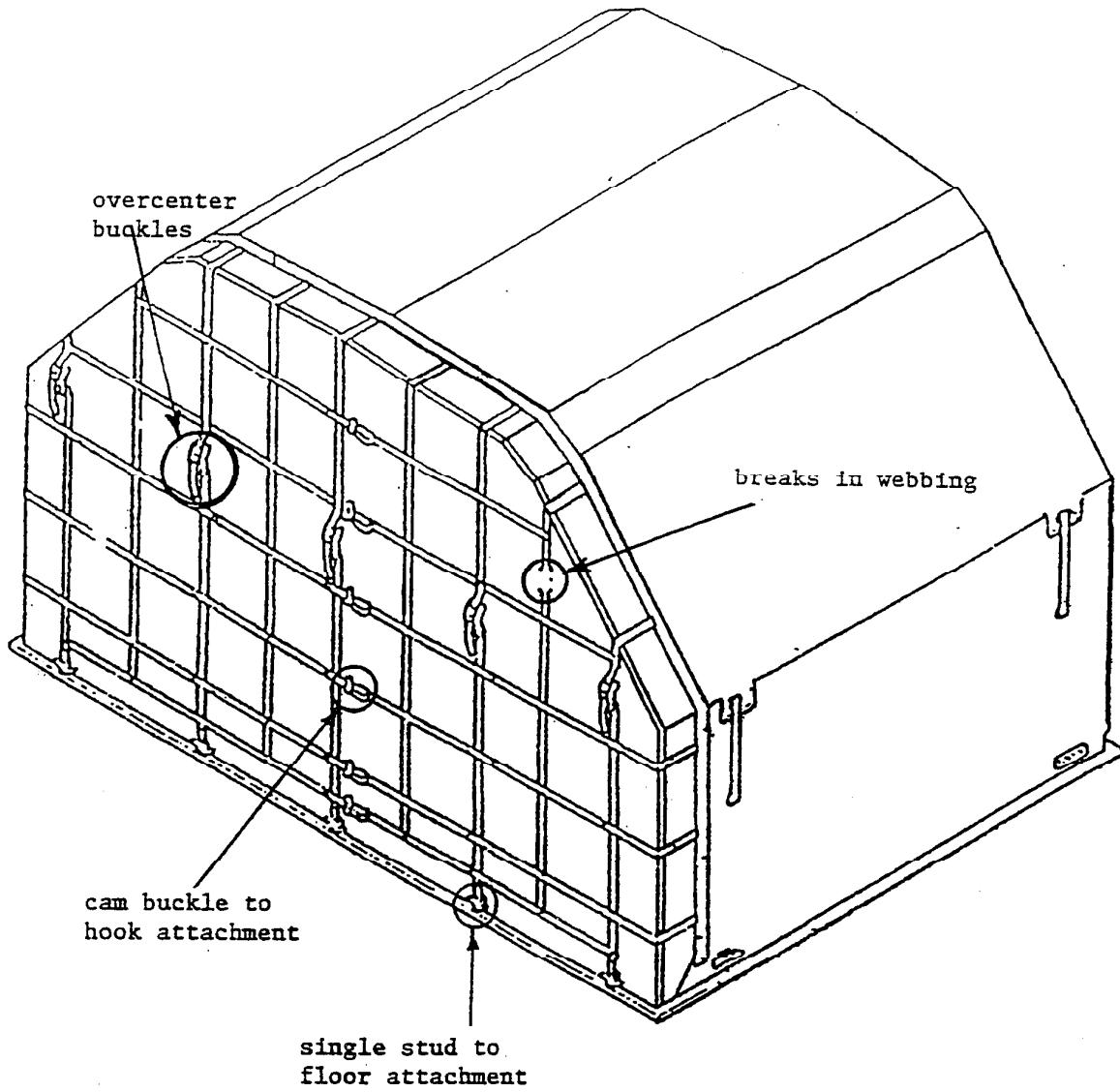
A. Procedures

- 1) Perform a detailed visual appraisal of the entire container assembly using the Damage Limit Criteria in steps 2 through 5.
  - a) If damage exceeds any of the limits, the container must be removed from service and Systems Control contacted immediately.
  - b) If damage is approaching any of the limits, Systems Control is to be notified no later than the next business day.
- 2) Allowable damage limits - These structural containers are considered non-airworthy if they exceed any of the following damage:
  - a) Container Type: 88 X 125 Inch Fiberglass Shell with Curtain and Net Restraint
  - b) Manufacturer:
    - Apeiron Technology, Inc. - Model #77801
    - C&J Enterprises - Model #CJE-90
    - Emery Worldwide - New Castle Plastics - Model EWW-1, EWW-2
    - KL Industries - Model #KL-1001C
    - TransEquip, Inc. - Model #305184 (-1) (-3) (-7)
    - W&M Enterprises - Model #WME-94, WME-94-500, WME-94-501
- 3) Container Shell
  - a) If missing data plate [FAR 21.607 (d) (1) (2) (3) (4)]
  - b) Damage which would reduce the structural integrity of the unit by 15% or more.
  - c) Significant damage either to the shell or failure of the fiberglass shell at two or more adjacent attachment fasteners are examples of significant damage.
  - d) Holes or punctures which, when combined, exceed 100 square inches.
  - e) Holes or punctures in the shell exceeding 12.00 inches in any direction.
- 4) Webbing
  - a) Damaged sections of webbing with 10 to 15 percent of the strands broken should be repaired.

88 X 125 Fiberglass Shell with Curtain and Net Restraint

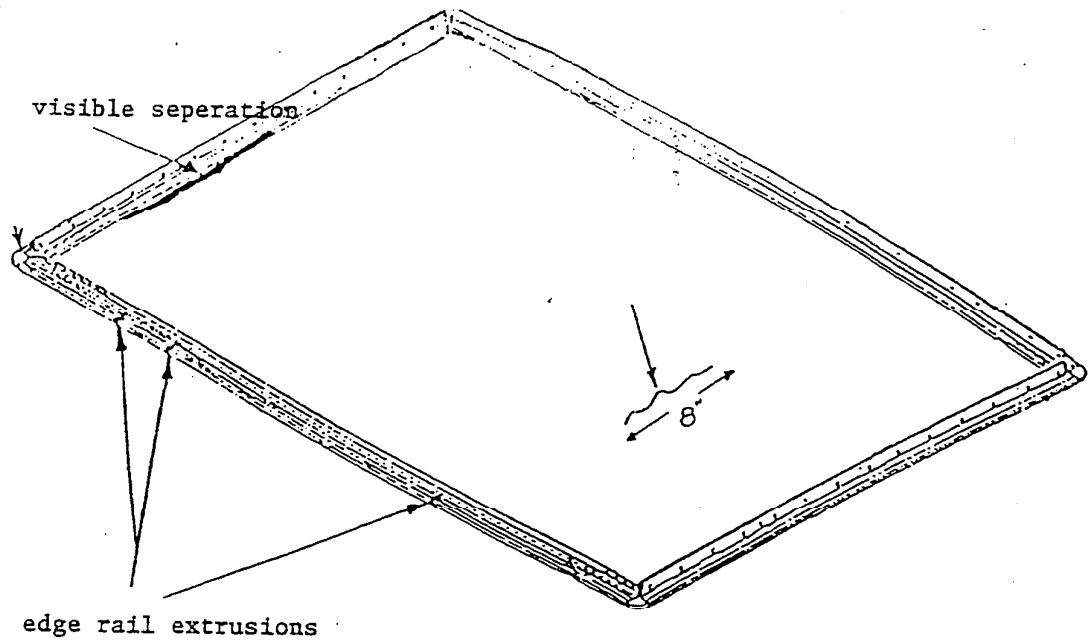


88 X 125 Fiberglass Shell with Curtain and Net Restraint



88X 125 Fiberglass Shell with Curtain and Net Restraint

Floor

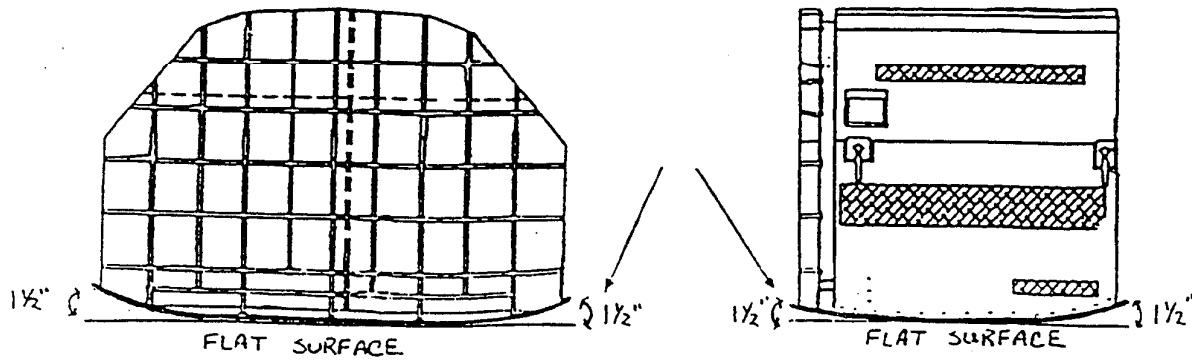


ATTACH RAIL

EXTRUDED RAIL

upright rail attachment

SEAT TRACK  
DAMAGED LIP



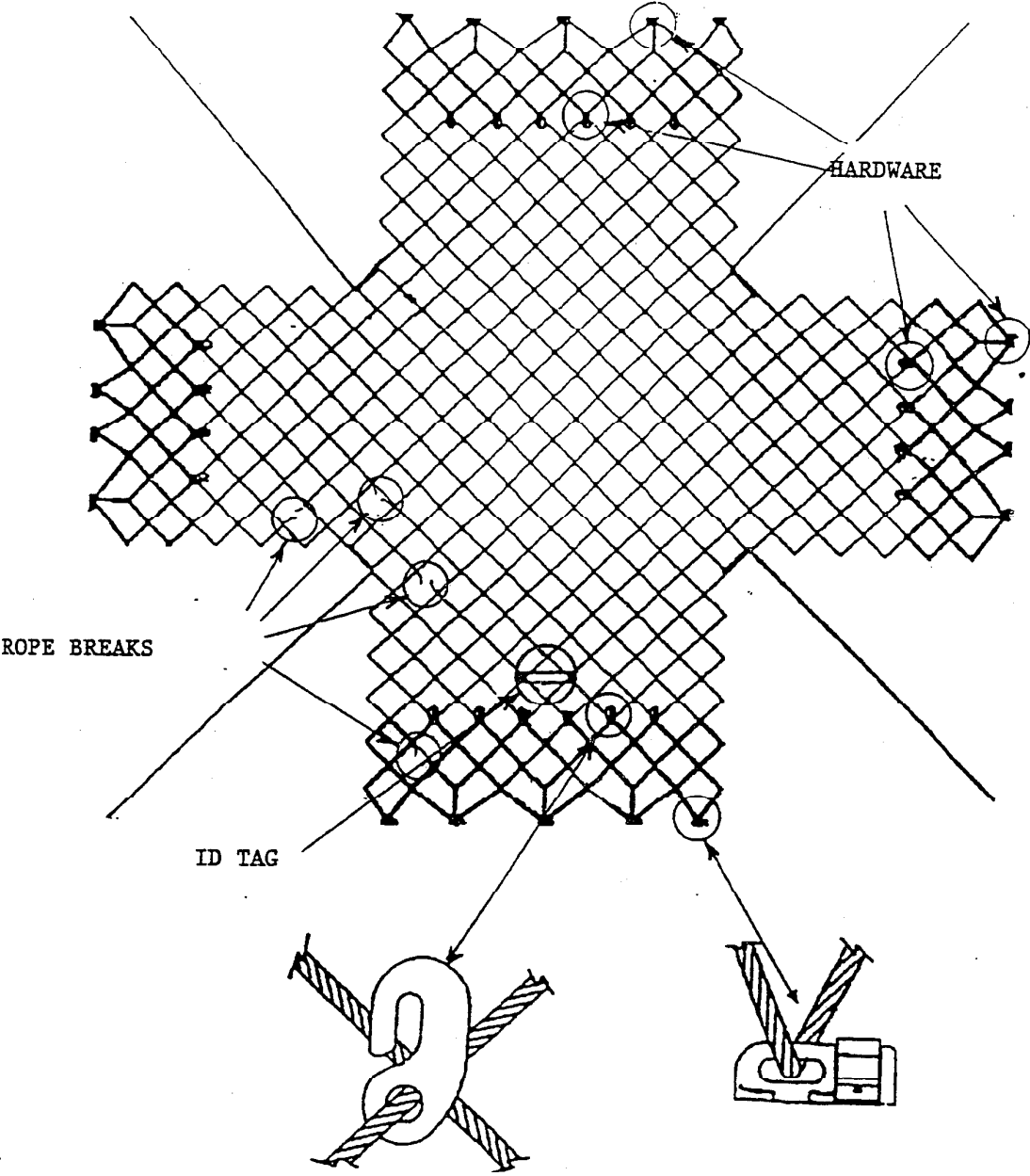
5. Condition Appraisal Of 88 X 125 Inch All Aluminum Pallets With Knotted Rope Net Restraint.

A. Procedures

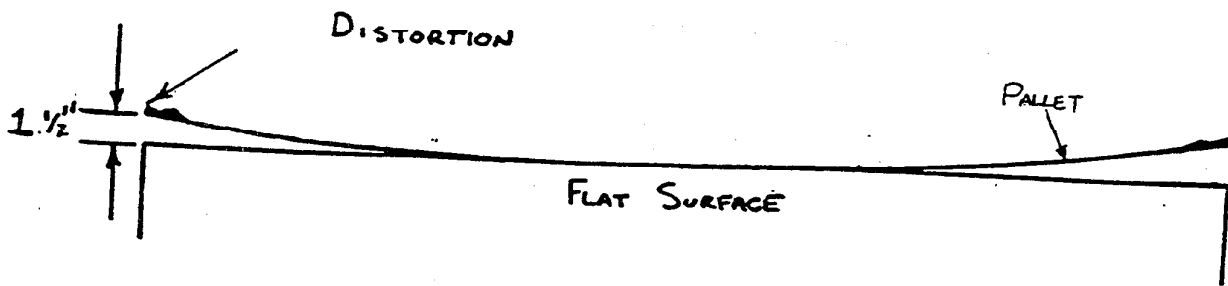
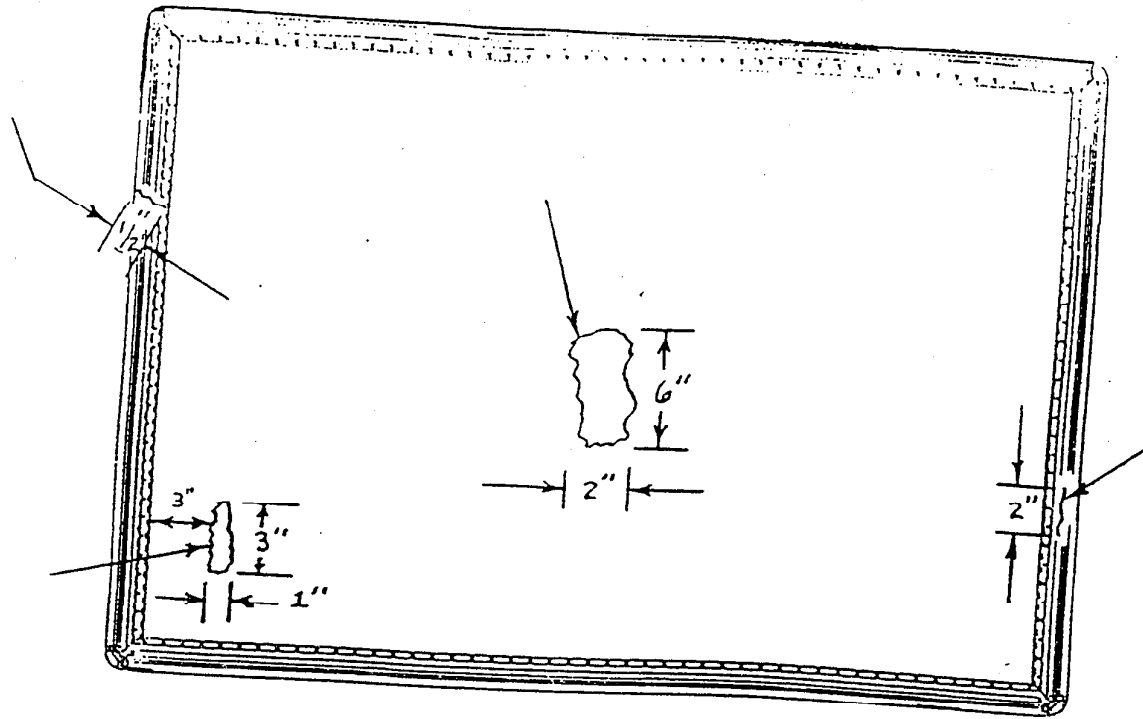
- 1) Perform a detailed visual appraisal of the entire ULD assembly using the Damage Limit Criteria in steps 2 through 4.
  - a) If damage exceeds any of the limits, the ULD must be removed from service and Systems Control is to be contacted immediately.
  - b) If damage is approaching any of the limits, Systems Control is to be notified no later than the next business day.
- 2) Allowable damage limits - These pallets are considered non-airworthy if they exceed any of the following damage:
  - a) Container Type: 88 X 125 Inch All-Aluminum With Knotted Rope Net Restraint
  - b) Manufacturer:
    - Alusingen - Model #081203
    - Bruggemann & Brand/TransEquip - Models #2104421-11, 2104421-16, 2104422-11, 2104423-11, 2104423-12, 2104424-11, 2104425-11, 2104426-11, 2104427-11, 2104428-11
    - Nordisk Aviation Products - Hydro Aluminum - Model #UA-121650-A, -AJ, -B, -E, -L, -M, -N, and -Q
    - Satco, Inc. - Models #31931-585, 335722-501 (pallets)
    - Satco, Inc. - Models #31831, 31440 (nets)
    - DOKASH Inc. - All Models
- 3) Pallet Inspection
  - a) If missing ID Tag - FAR 21.607 (d) (1) (2) (3) (4).
  - b) Bent edge rails.  
Permanent deformation should not exceed 1/2" measured vertically over full length of edge rail.
  - c) Broken corners.  
There shall be no broken corners.
  - d) Damages to continuous seat track.  
There shall be no more than 3 damaged seat track lips per edge rail. Minimum distance between two damaged lips shall be 26". It should be noted that to avoid inadvertently attachment of net fittings, any damaged seat track lip should be removed.



88 X 125 Aluminum Pallet with Knotted Rope Net Restraint



88 X 125 Aluminum Pallet with knotted rope net restraint



6. Condition Appraisal Of 88 X 125 Inch Aluminum/Polycarbonate (Lexan) With Curtain And Net Restraint.
- A. Procedures
- 1) Perform a detailed visual appraisal of the entire container assembly using the Damage Limit Criteria in steps 2 through 3.
    - a) If damage exceeds any of the limits, the container must be removed from service and Systems Control contacted immediately.
    - b) If damage is approaching any of the limits, Systems Control is to be notified no later than the next business day.
  - 2) Allowable damage limits - These structural containers are considered non-airworthy if they exceed any of the following damage:
    - a) Container Type: 88 X 125 Inch Aluminum/Polycarbonate (Lexan) with Curtain and Net Restraint
    - b) Manufacturer: Satco, Inc. - Model #35115-505, Model #35620-501
  - 3) Damage Classification
    - a) If missing data plate [FAR 21.607 (d) (1) (2) (3) (4)]
    - b) Damage resulting from accidents, rough usage, or abnormal stresses may be corrected by repairing the damaged area or replacing a damaged component. The extent of the damaged area determines how the compartment should be repaired or whether it should be replaced rather than repaired. To aid in the determination of damage classification, the following categories have been assigned:
      - (1) Allowable Damage
      - (2) Minor Damage
      - (3) Major Damage
- Containers described in the damage classification guideline will be described as three distinct assemblies: base assembly, container body and door assembly.

(2) Minor Damage - Container Body

- (a) Minor damage consists of 2 or 3 locations that fall within the limits of allowable damage. A container body sustaining minor damage can be used at a 50 percent or less load factor. However, repair is recommended as soon as possible.
- (b) Any tear or puncture to any polycarbonate panel regardless of size or location is considered minor and must be repaired to maintain the structural integrity of the unit. If the tear exceeds the practical limits of repair, then the damage is considered major and the entire panel must be replaced.

(3) Major Damage - Container Body

- (a) Major damage consists of any damage exceeding allowable damage or allowable damage in more than three locations.

e) Door Assembly

(1) Allowable Damage - Door Assemblies

- (a) Any holes or tears to the vinyl door cover are considered allowable as they do not effect the structural integrity of the unit. However, a damaged vinyl cover should be patched or the entire cover replaced in order to prevent water intrusion.

(2) Minor Damage - Door Assembly

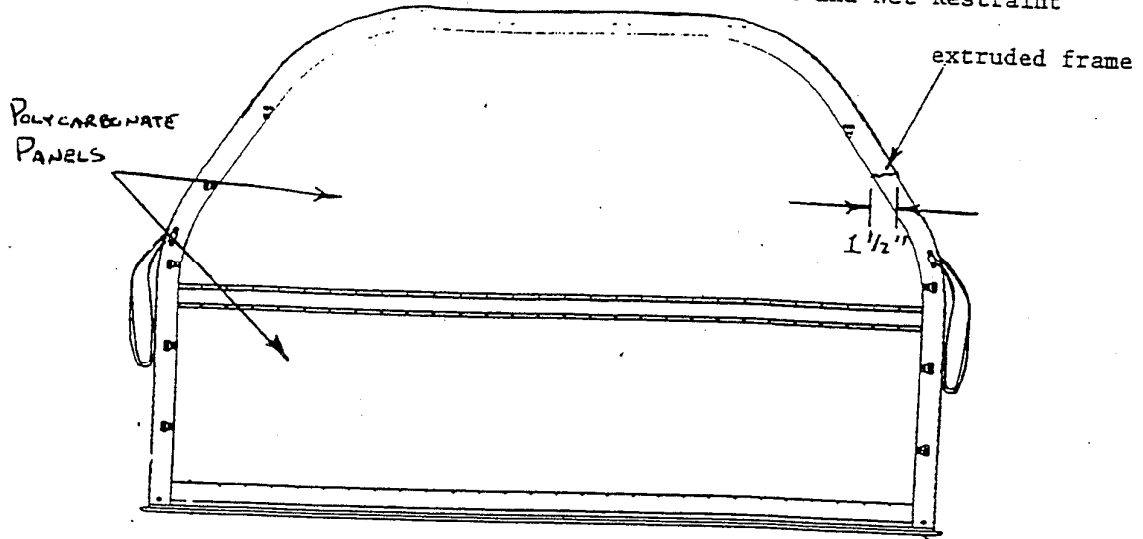
- (a) Any tear to the door net assembly regardless of location is considered minor and the net must be repaired to maintain the structural integrity of the unit and its airworthiness approval. If the tear exceeds the practical limits of repair, then the damage is considered major and the entire net assembly must be replaced.
- (b) Any broken or missing attach hardware regardless of location is considered minor and the net assembly cover must be repaired to maintain the structural integrity of the unit and its airworthiness approval. If the missing hardware exceeds the practical limits of repair, then the damage is considered major and the entire net assembly must be replaced.

- (c) Minor damage consists of 2 or 3 locations that fall within the limits of allowable damage. A container door sustaining minor damage can be used at a 50 percent or less load factor. However, repair is recommended as soon as possible.

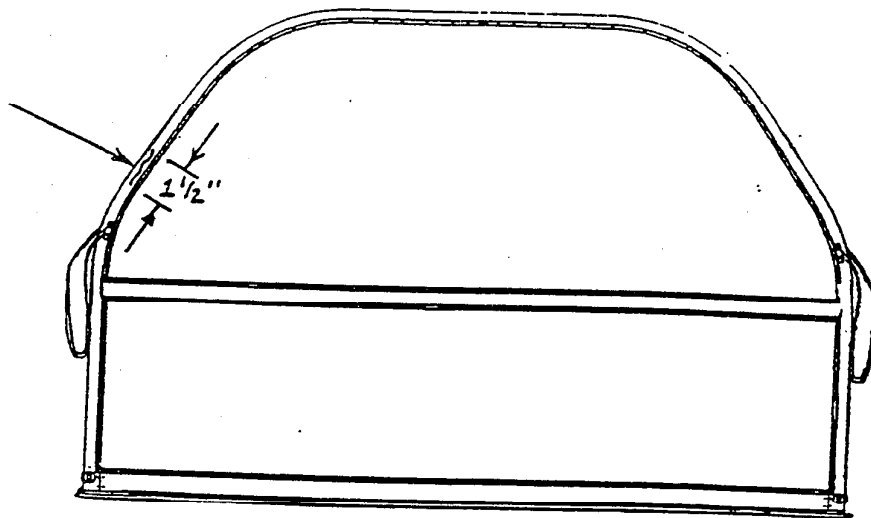
(3) Major Damage - Door Assemblies

- (a) Major damage consists of any damage exceeding allowable damage or allowable damage in more than three locations.

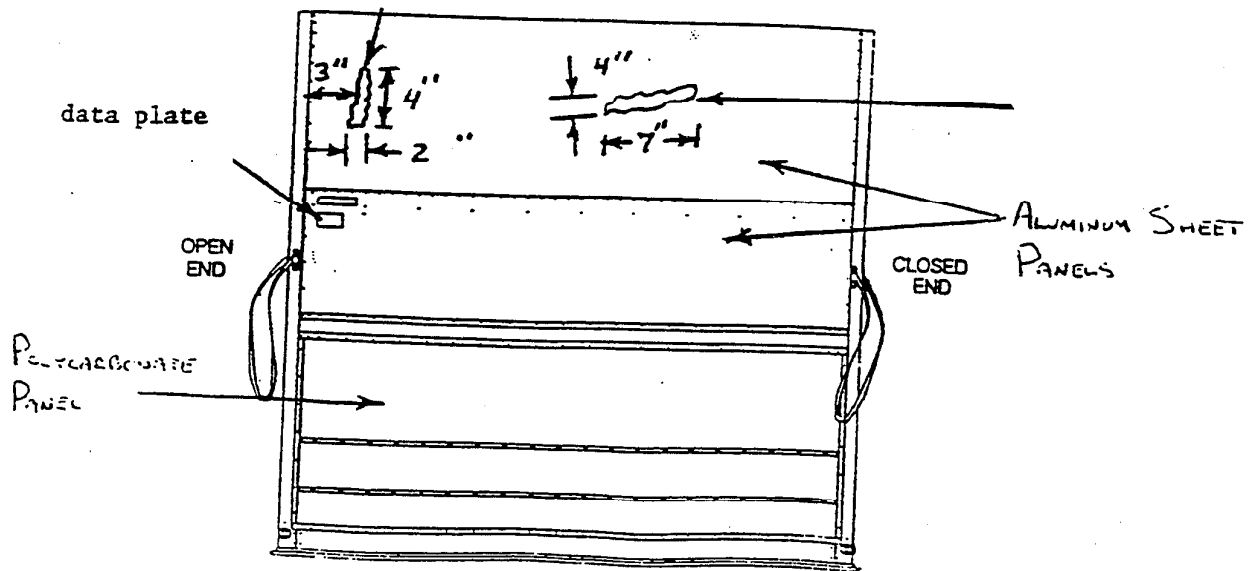
88 X 125 Aluminum/Polycarbonate(Lexan) with Curtain and Net Restraint



Front View

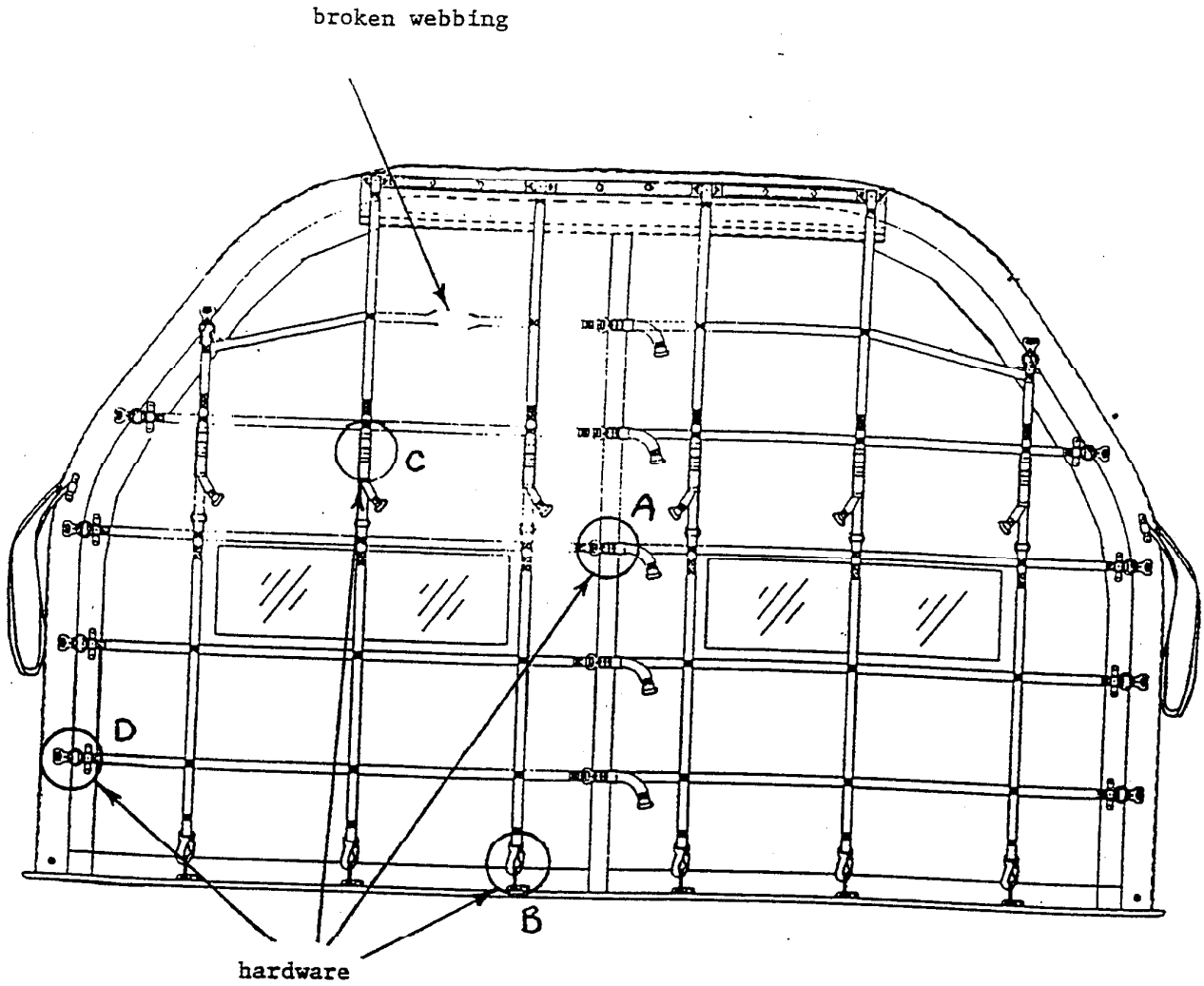


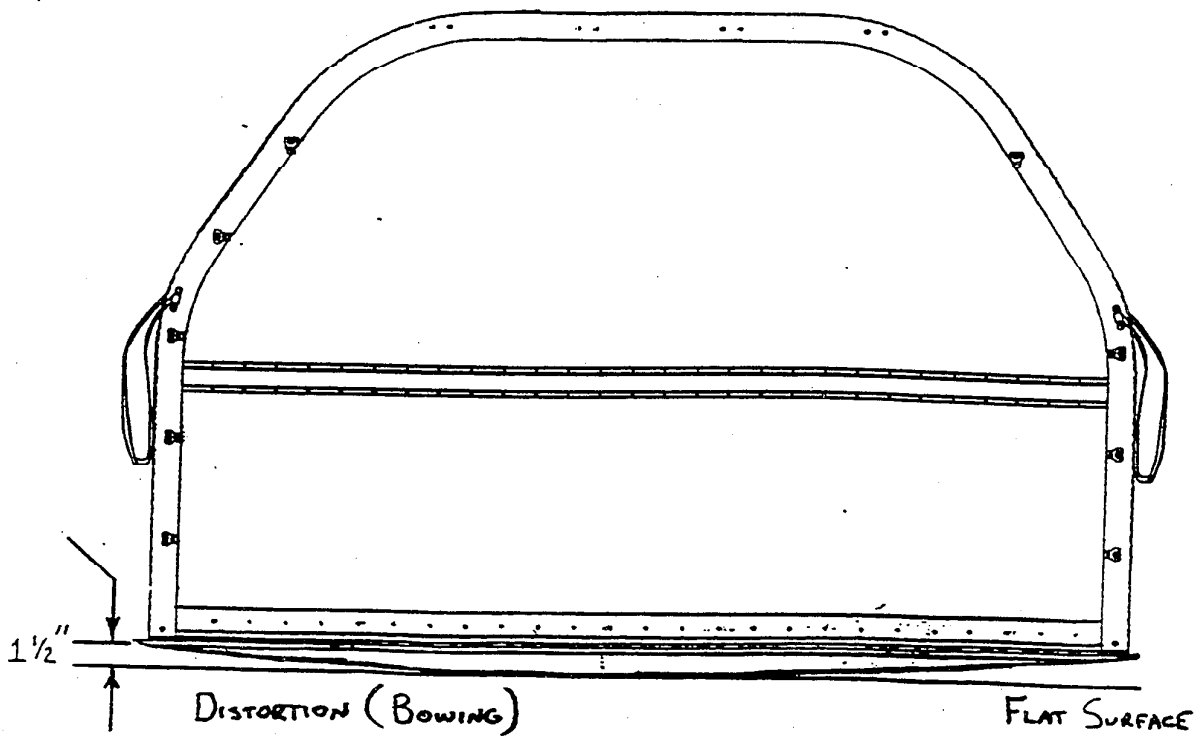
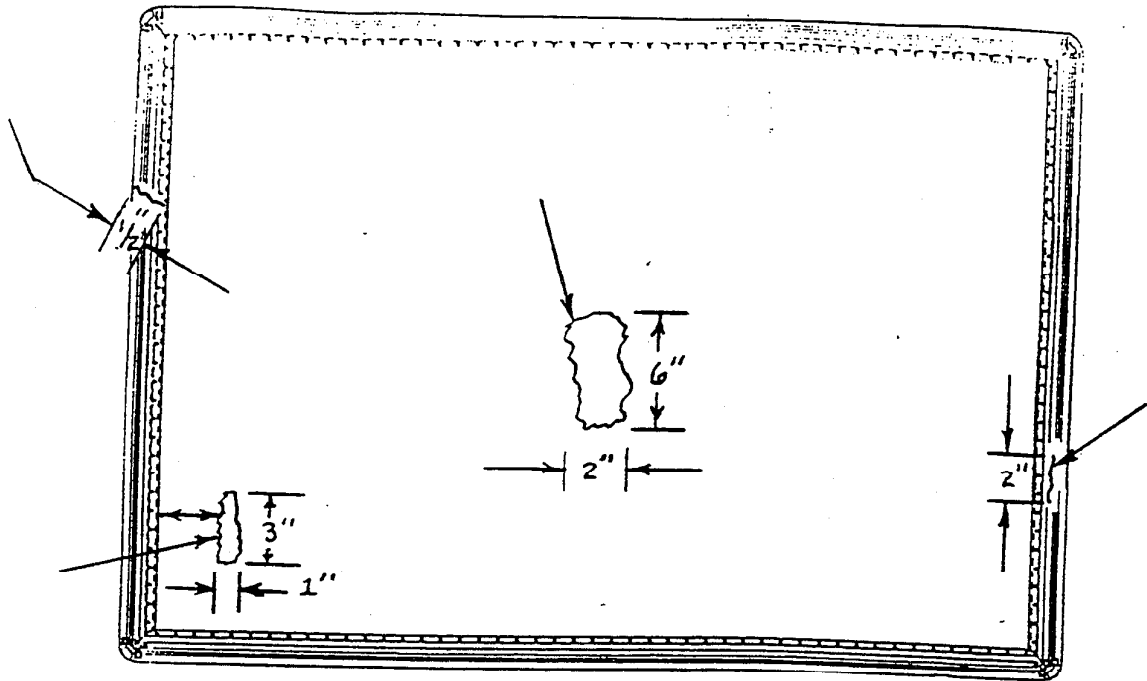
Rear View



Right Side View

88 X 125 Aluminum/Polycarbonate(Lexan) with Curtain and Net Restraint





88 X 125 Aluminum/Polycarbonate(Lexan) with Curtain and Net Restraint

**7. Condition Appraisal Of 88 X 125 Inch Aluminum Framed Shell With Fiberglass/Lexan (Polycarbonate) Panels. Curtain And Net Restraint .****A. Procedures**

- 1) Perform a detailed visual appraisal of the entire container assembly using the Damage Limit Criteria in steps 2 through 4.
  - a) If damage exceeds any of the limits, the container must be removed from service and Systems Control contacted immediately.
  - b) If damage is approaching any of the limits, Systems Control is to be notified no later than the next business day.
- 2) Allowable damage limits - These structural containers are considered non-airworthy if they exceed any of the following damage:
  - a) Container Type: 88 X 125 Inch Aluminum Framed Shell with Fiberglass/Lexan (Polycarbonate) Panels. Curtain and Net Restraint.
  - b) Manufacturer: Air Cargo Equipment, A Zero Corporation Company - Model #DCT5280, DCT5550 and DCT5560 series.
- 3) Damage Classification
  - a) If missing data plate. [FAR 21.607 (d) (1) (2) (3) (4)]

**b) Allowable Damage**

Damage defined as being within this classification does not influence airworthiness or serviceability and/or structural strength of the container. The container can remain in service, without operational restriction, pending scheduling of repair for other more serious damage or air carrier decision to conduct preventive maintenance repair. All allowable damage should be repaired in accordance with methods, standards, and techniques defined by the OEM Manual, at the earliest opportunity to avoid further damage to the container.

**c) Minor Damage**

Damage defined as being within this classification affects the serviceability and/or structural strength of the container. The container can remain in service, subject to operational restriction of 75% of allowable-maximum gross weight, as posted on container by original manufacturer. The container must be identified as being subject to operational restriction and operating personnel must be notified accordingly. All minor damage should be repaired in accordance with methods, standard and techniques defined herein at the earliest opportunity to remove operational restriction and avoid further damage to the container.



d) Major Damage

Damage defined as being within this classification affects the serviceability and/or structural strength of the container so that the container is not considered airworthy. The container must be removed from service immediately and tagged with MEO143 (Out of Service Tag). All repairs must be inspected to see that they comply with methods, standards and techniques defined herein.

4) Damage Classification Tables

- a) The following tables are arranged with respect to the container major assemblies (base assembly, container shell, net and cover assembly). Each table lists typical damage that may be observed during the inspection procedure. The classification given to each type of damage and appropriate repair procedures are indicated in the tables.
- b) Damage classifications refer only to airworthiness criteria for the container. Condition of the container for customs approval and security is the user's responsibility.

TYPE OF DAMAGE	DAMAGE DEFINITION			
	SIZE AND SCOPE	CLASSIFICATION		
		ALLOW	MINOR	MAJOR
Dents in Edge Rails		X		
Cracks or Holes in Edge Rails				X
Holes, cracks, punctures and tears in Base sheet	No more than 8.0 inches in any direction.		X	
	In excess of 8.0 inches in any direction.			X
Loose or Missing Rivets	1. Four or less un-continuous rivets.	X		
	2. Four or more un-continuous rivets or up to two continuous rivets.		X	
	3. Uncontinuous rivets exceeding 25% of total or more than 3 continuous rivets.			X
Broken Weld at Base Corner			X	

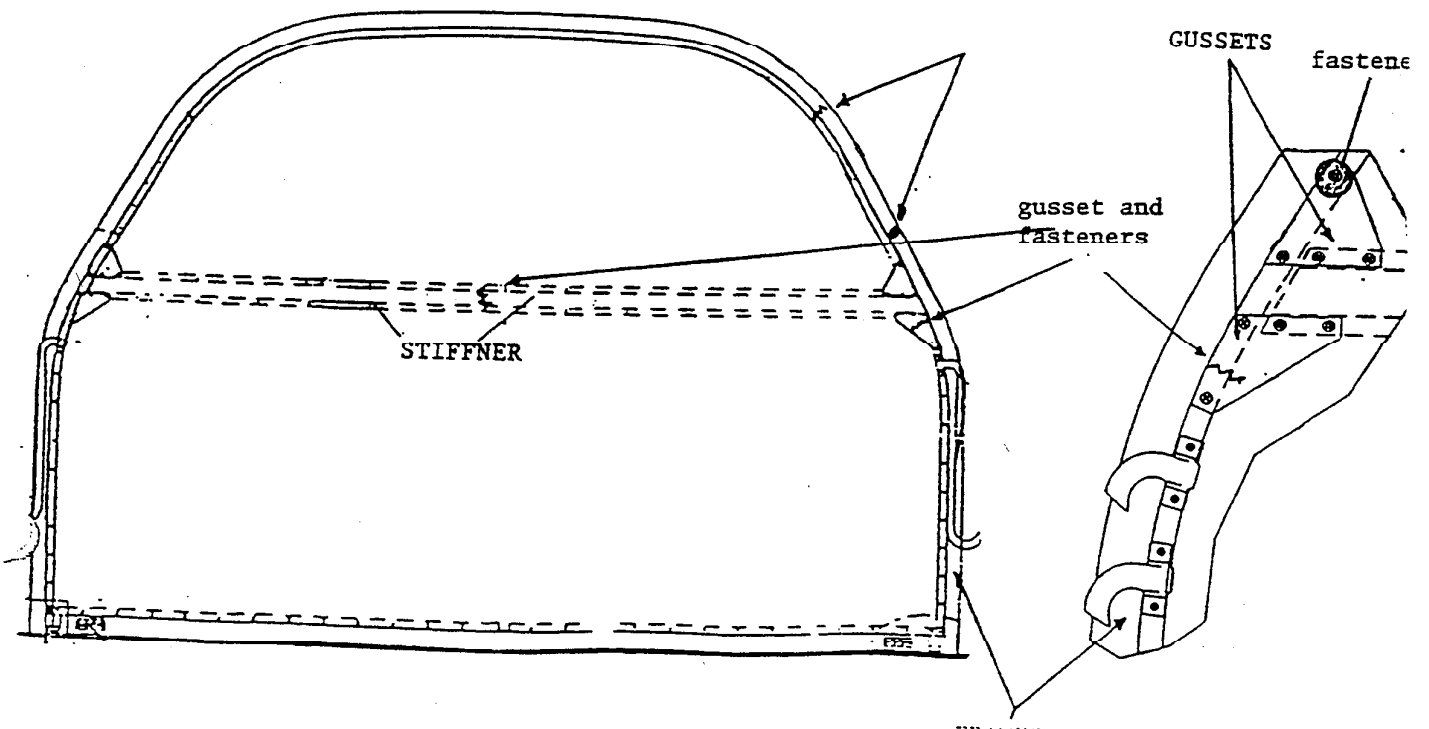
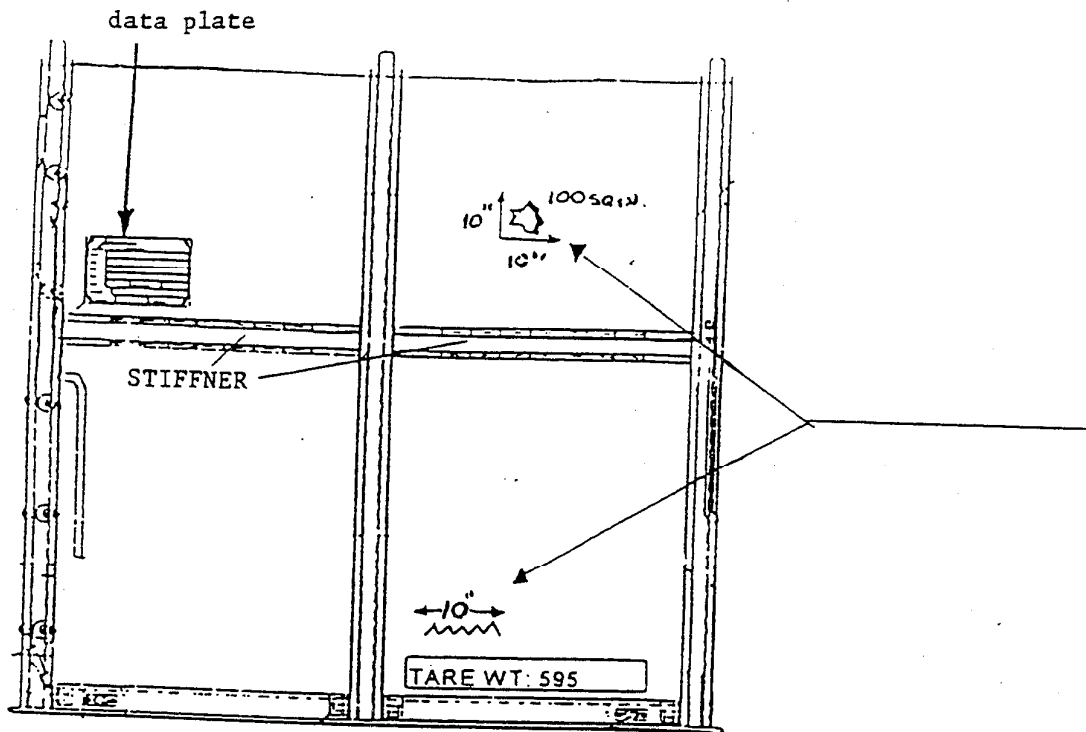
BASE ASSEMBLY INSPECTION TABLE

TYPE OF DAMAGE	DAMAGE DEFINITION			
	SIZE AND SCOPE	CLASSIFICATION		
		ALLOW	MINOR	MAJOR
Dents in Frame	Not affecting handling	X		
Cracks or holes in Frames				X
Cracks or Tears in gussets or stiffeners				X
Loose or missing fasteners	Four (4) or less uncontinuous, two (2) or less continuous		X	
	Exceeding above			X
	Any fastener joining gussets to frames			X
Handhole Straps* and Brackets	Missing		X	
	Loose or Damaged			X
Dents in Polycarbonate Aluminum Skin	Any	X		
Puncture and tears in Polycarbonate Aluminum Skins	Less than 12 inches in any direction or less than 50 sq. inches		X	
	Exceeding 12 inches in any direction or more than 50 sq. inches.			X

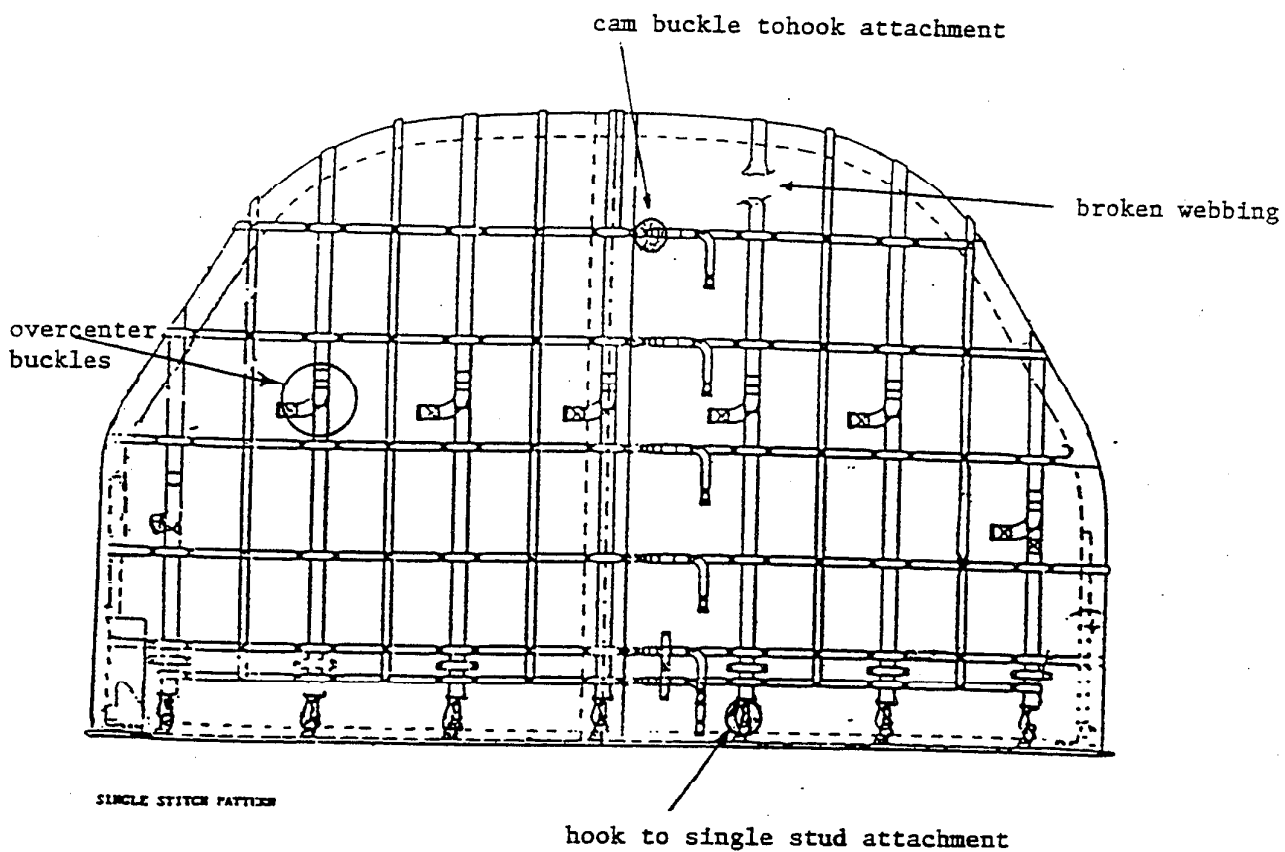
\* Damage to these components does not affect airworthiness consideration of the container but are issues of personal safety.

INSPECTION OF: PANEL ASSEMBLY

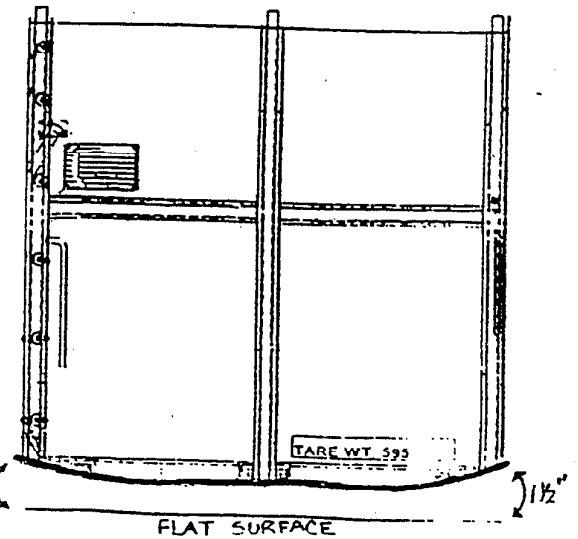
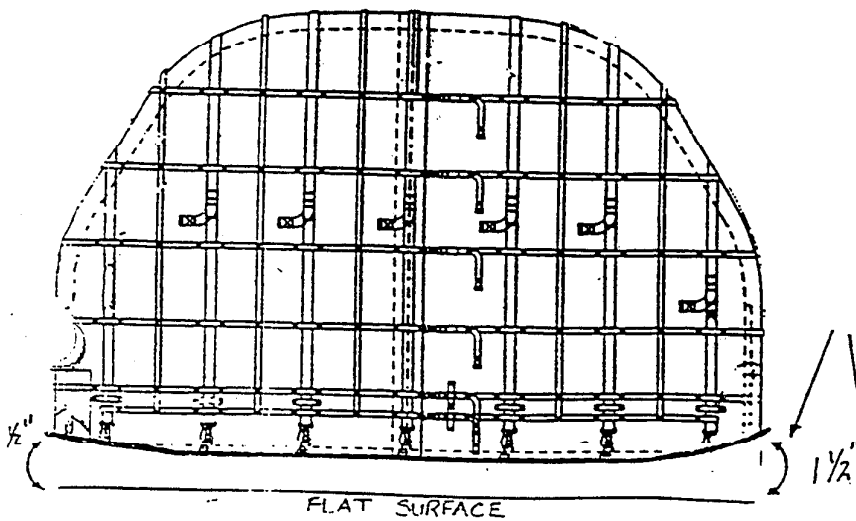
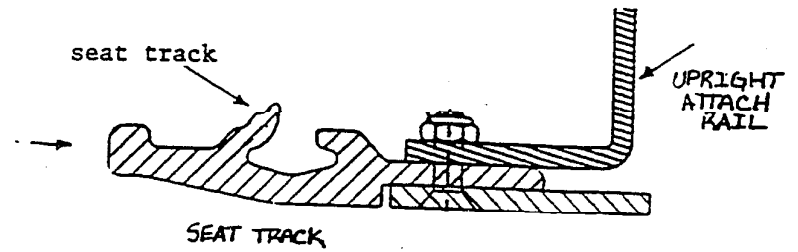
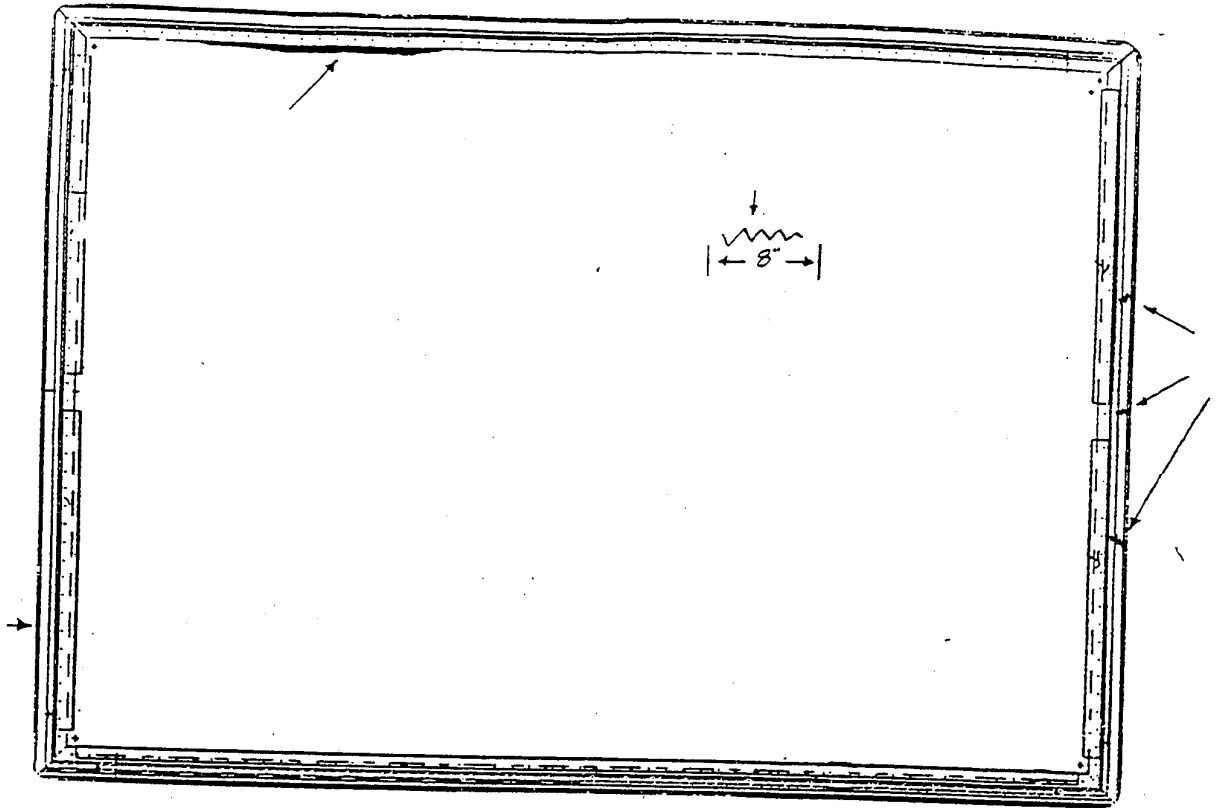
88 X 125 Aluminum Framed Shell with Fiberglass/Lexan(Polycarbonate) Panels  
Curtain and Net Restraint



88 X 125 Aluminum Framed Shell with Fiberglass/Lexan(Polycarbonate) Panels  
Curtain and Net Restraint



88 X 125 Aluminum Framed Shell with Fiberglass/Lexan(Polycarbonate) Panels, Curtain and Net

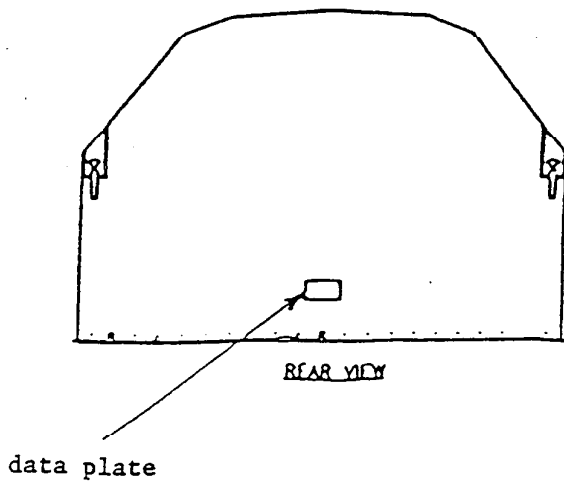
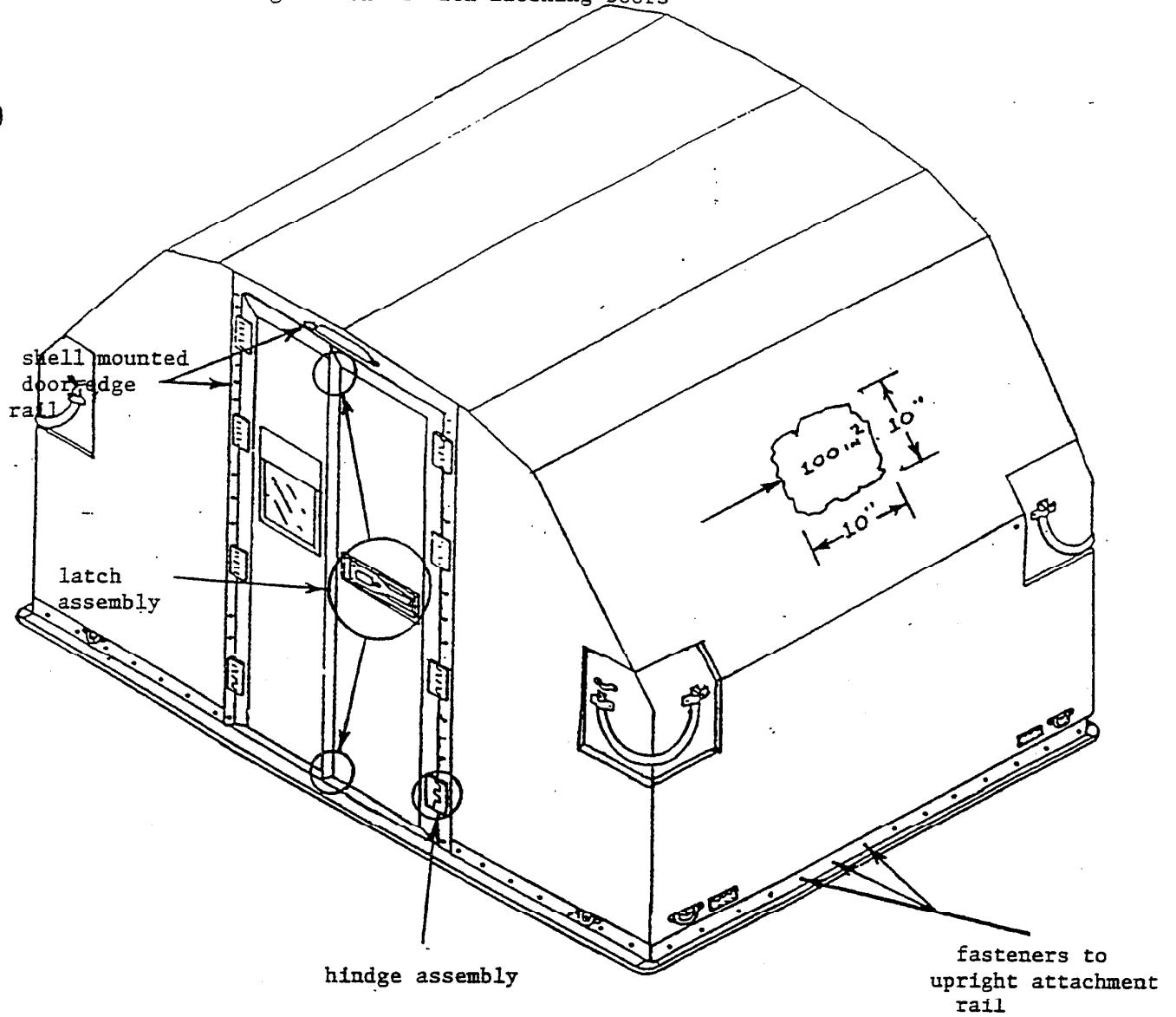


**8. Condition Appraisal Of 88 X 125 Inch Fiberglass Shell With Latching Doors.****A. Procedures**

- 1) Perform a detailed visual appraisal of the entire container assembly using the Damage Limit Criteria in steps 2 through 3.
  - a) If damage exceeds any of the limits, the container must be removed from service and Systems Control contacted immediately.
  - b) If damage is approaching any of the limits, Systems Control is to be notified no later than the next business day.
- 2) Allowable damage limits - These structural containers are considered non-airworthy if they exceed any of the following damage:
  - a) Container Type: 88 X 125 Inch Fiberglass Shell with Latching Doors
  - b) Manufacturer: Air Cargo Equipment Corporation (including containers manufactured under the Brownline, Inc. and TransEquip), C&J Enterprises, Aircargo - Model CJE #8610-101 and #305272 (-5) (-11).
- 3) Damage Classification
  - a) If missing data plate [FAR 21.607 (d) (1) (2) (3) (4)].
  - b) Any damage that would reduce the strength of the shell structure by fifteen percent (15%) or more.
  - c) Holes or punctures in the fiberglass shell that exceed 12.00 inches in any direction.
  - d) Holes or punctures in the fiberglass shell that exceed an area of 100 square inches.
  - e) Significant damage to the fiberglass shell in the areas of the vertical door rails, the door header or the shell-to-base attachment. Broken base attachment extrusion or failure of the fiberglass shell encompassing two or more adjacent fasteners within six (6) inches are examples of significant damage.
  - f) Holes, punctures or cracks in the base sheet exceeding 8.00 inches in any direction.
  - g) Broken, bent or otherwise damaged base edge rail section at the restraining lock area.
  - h) Two or more adjacent broken or missing hinge assemblies on either hinged door panel.
  - i) Loose or missing shell mounted door edge rails or door header.
  - j) Hole, punctures or cracks on the door panel that exceed 5.00 inches in any direction.

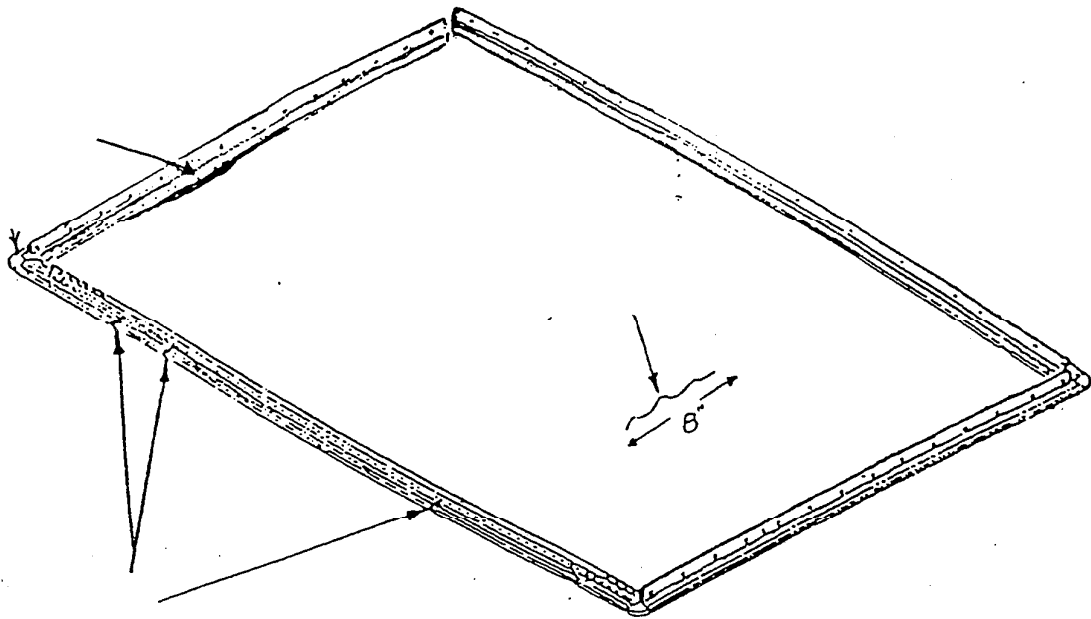
- k) Damaged or inoperable latch mechanism on the door.
- l) Bent, warped, broken or otherwise inoperable door.
- m) Bent or warped base that would prevent proper door engagement or proper engagement in the aircraft restraint system.

88 X 125 Fiberglass Shell with Latching Doors





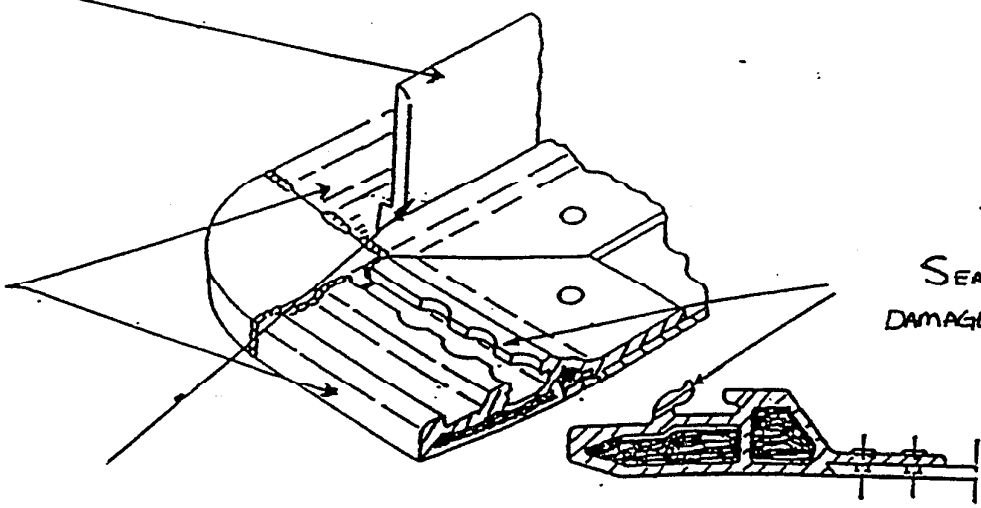
88 X 125 Fiberglass Shell with Latching Doors



ATTACH RAIL

EXTRUDED RAIL

SEAT TRACK  
DAMAGED LIP

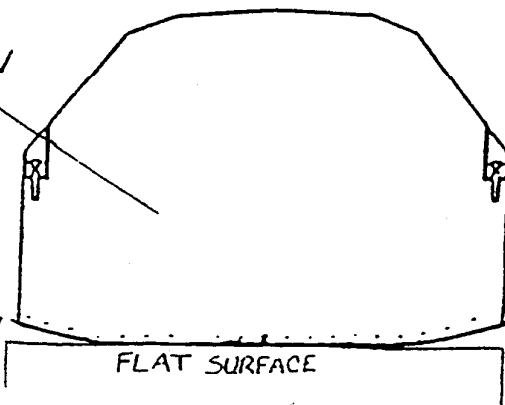


REAR VIEW

1 1/2"

FLAT SURFACE

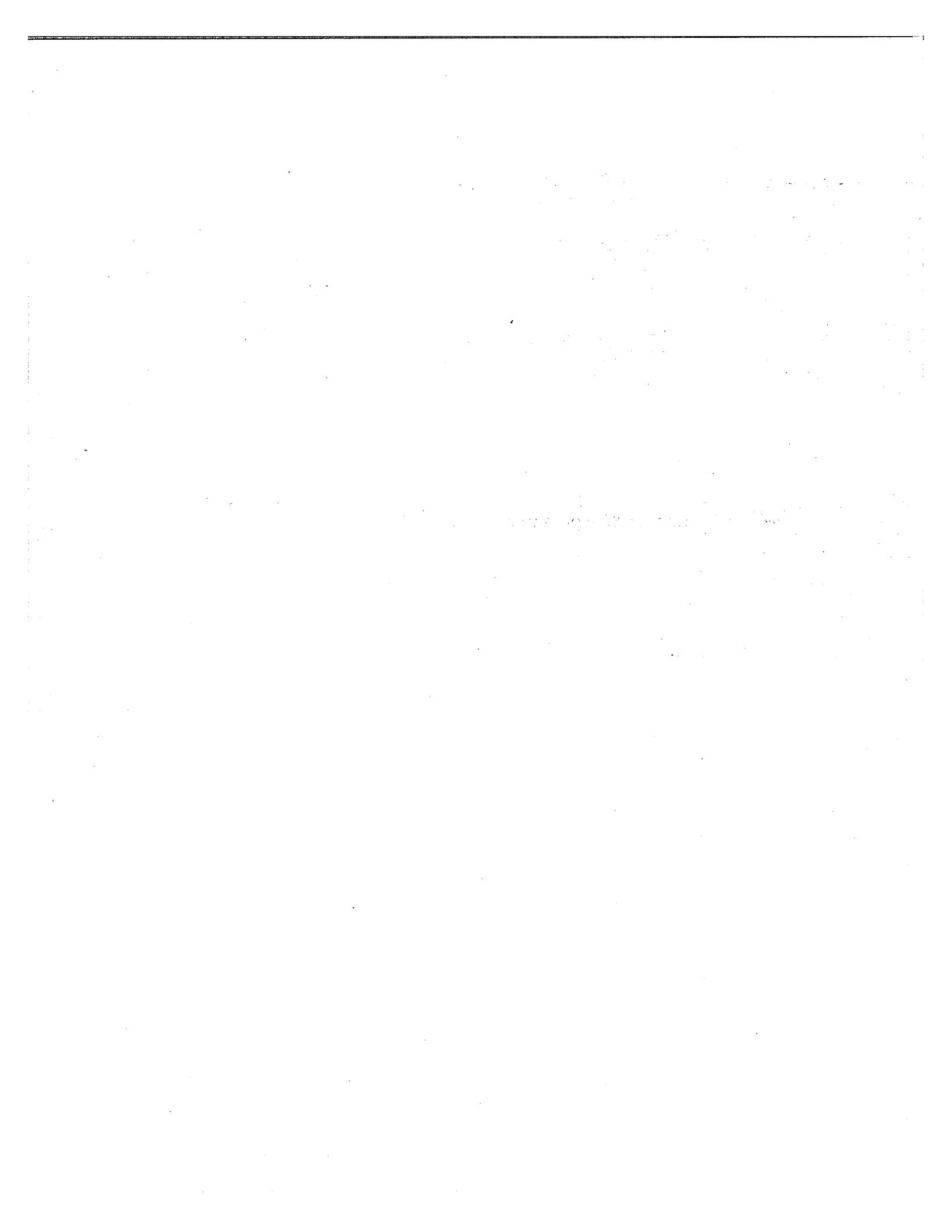
2 1/2"

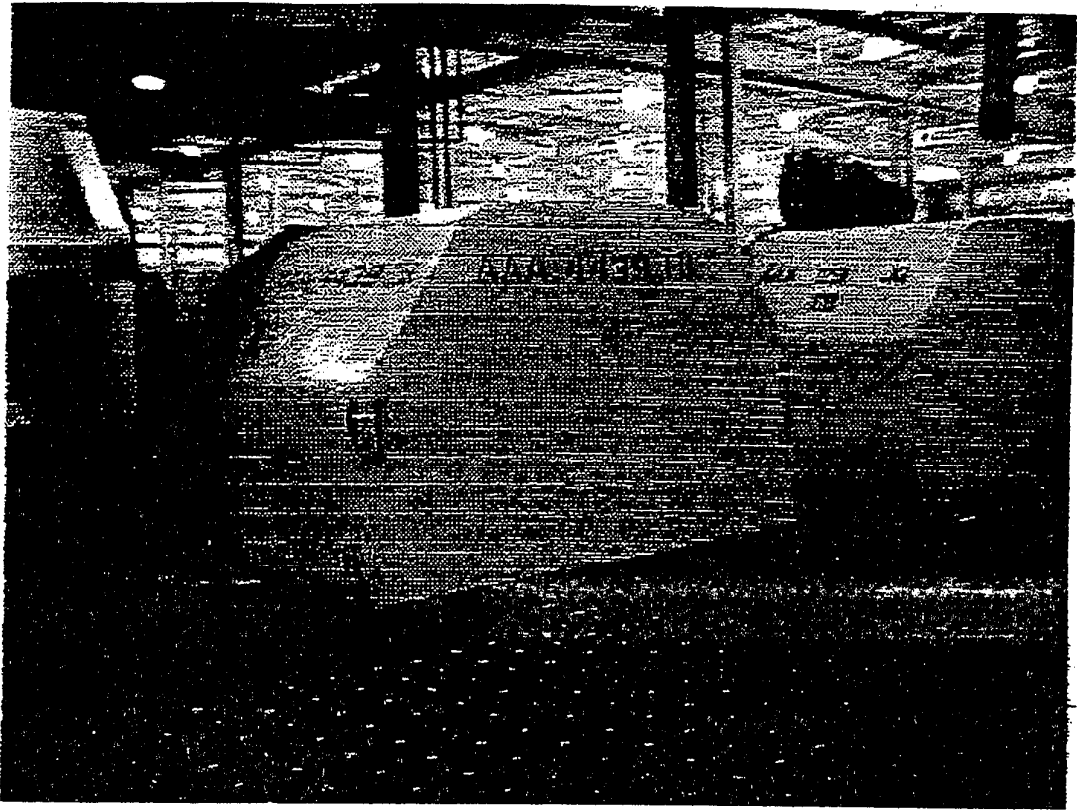


9. Condition Appraisal Of 88 X 125 Inch Fiberglass Shell With Fiberglass Door Restraint.

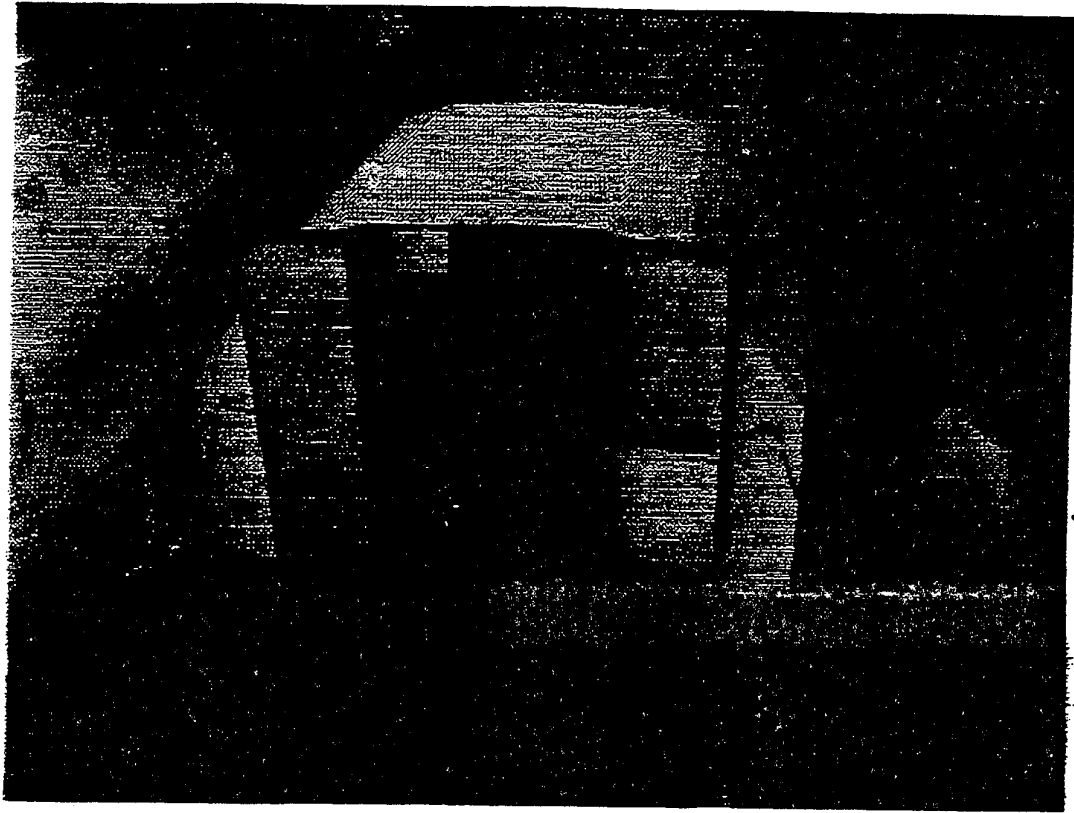
A. Procedures

- 1) Perform a detailed visual appraisal of the entire container assembly using the Damage Limit Criteria in steps 2 through 3.
  - a) If the damage exceeds any on the limits, the container must be removed from service and Systems Control contacted immediately.
  - b) If the damage is approaching any of the limits, Systems Control is to be notified no later than the next business day.
- 2) Allowable damage limits - These structural containers are considered non-airworthy if they exceed any of the following damage:
  - a) Container Type: 88 X 125 Inch Fiberglass Shell with Fiberglass door restraint.
  - b) Manufacturer: C&J Enterprises - Model #CJE-90  
W&M Enterprises - Model #WME-94-501
- 3) Damage Classification:
  - a) If missing data plate [FAR 21.607 (d) (1) (2) (3) (4)].
  - b) Any damage that would reduce the strength of the shell structure by 15% or more.
  - c) Holes or punctures in the fiberglass shell that exceed 12 inches in any direction.
  - d) Holes or punctures in the fiberglass shell that exceed an area of 100 square inches.
  - e) Significant damage to the fiberglass shell in the areas of the vertical rails, or the shell to base attachment. Broken base attachment extrusion or failure of the fiberglass shell encompassing two or more adjacent fasteners within 6 inches are examples of significant damage.
  - f) Holes, punctures or cracks in the base sheet exceeding 8 inches in any direction.





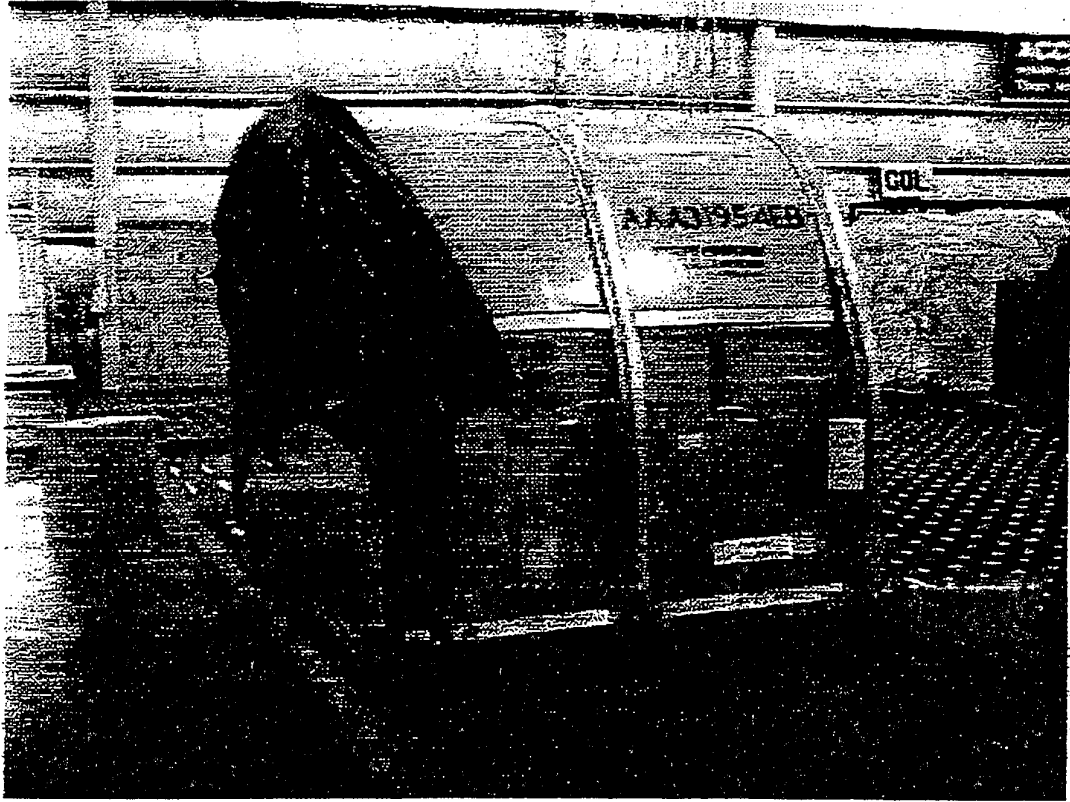
Fiberglass shell with curtain and net restraint



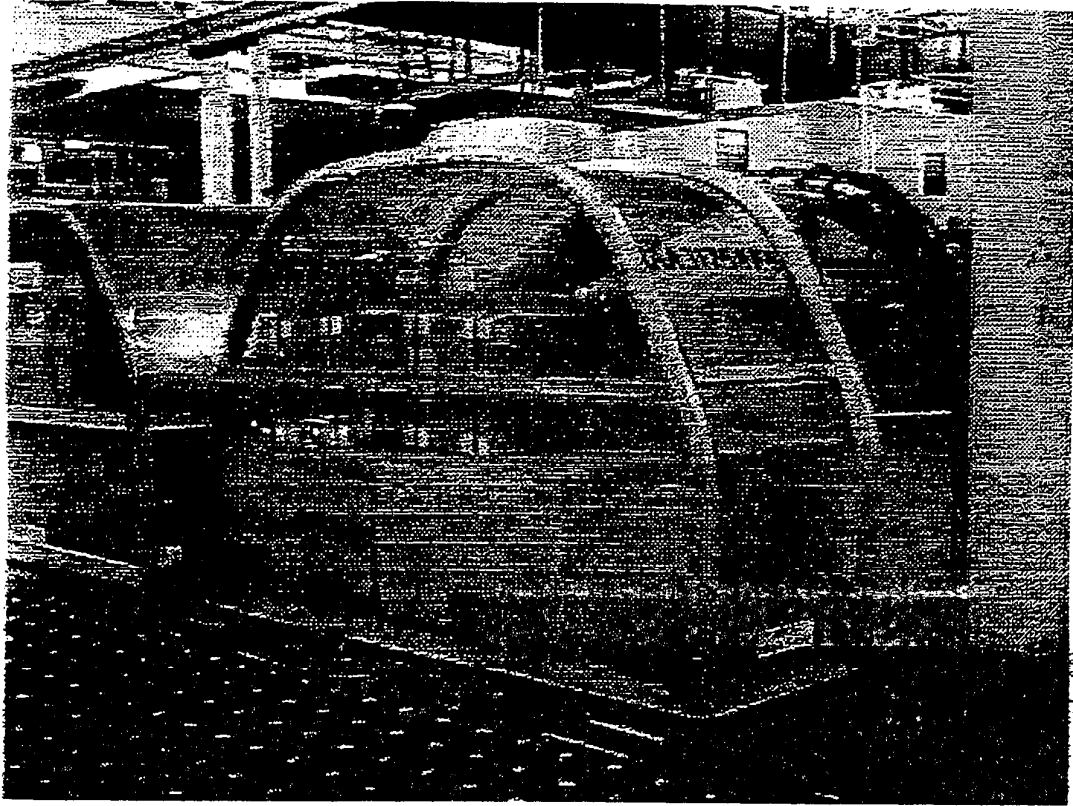
Fiberglass shell with latching doors



aluminum framed shell with polycarbonate(lexan) panels  
curtain and net restraint

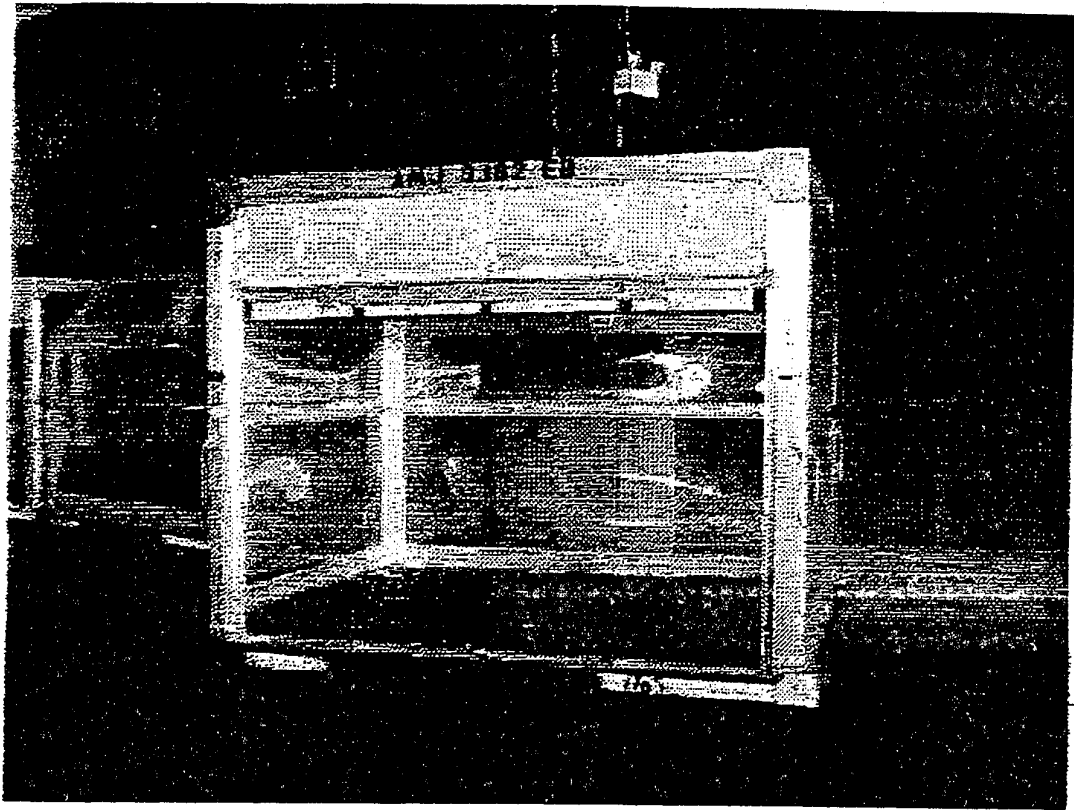


aluminum framed shell with fiberglass/lexan panels,  
curtain and net restraint

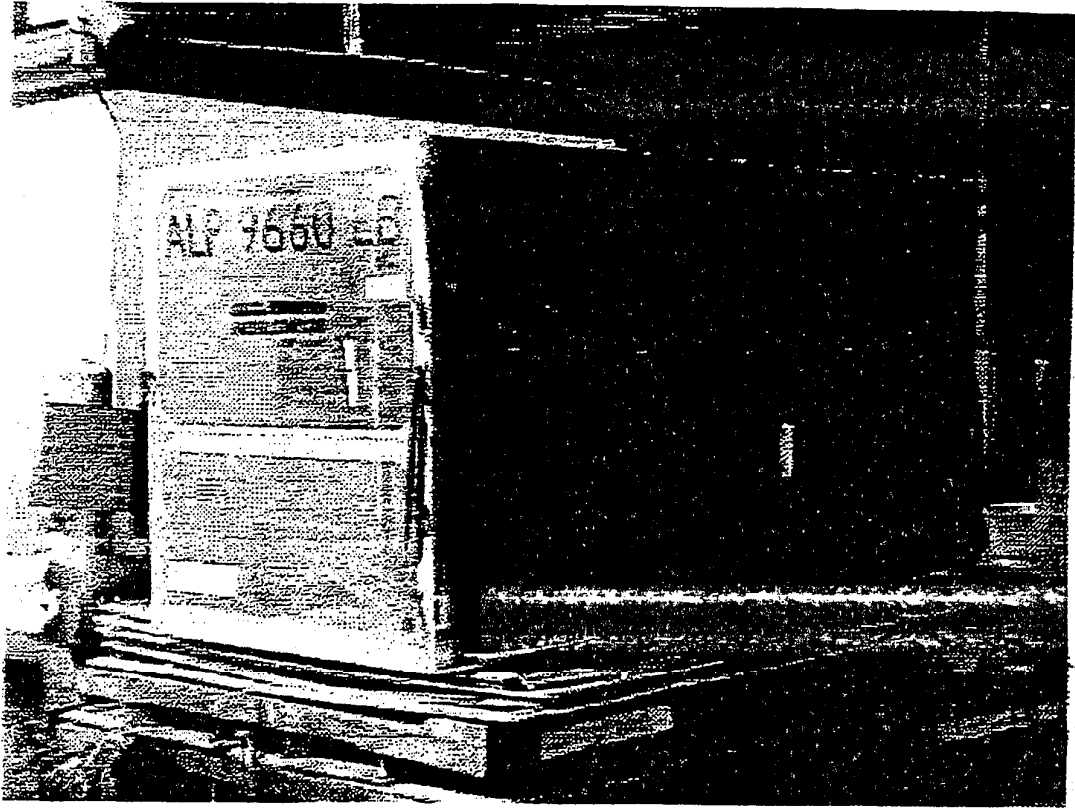


aluminum frame shell with lexan panels,  
curtain and net restraint





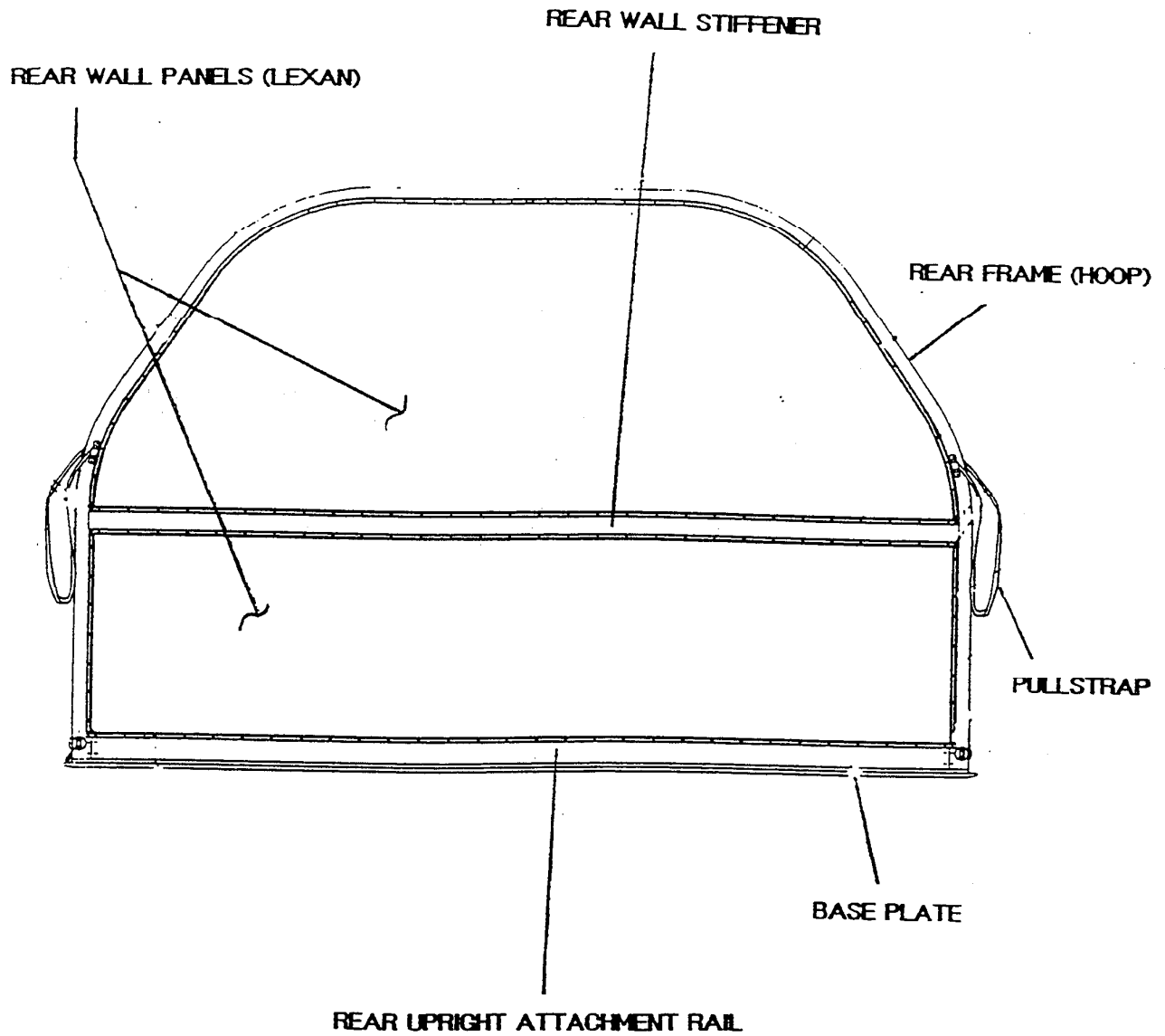
aluminum- polycarbonate with fabric roll-up door restraint



aluminum frame with polycarbonate panels,  
curtain and net restraint

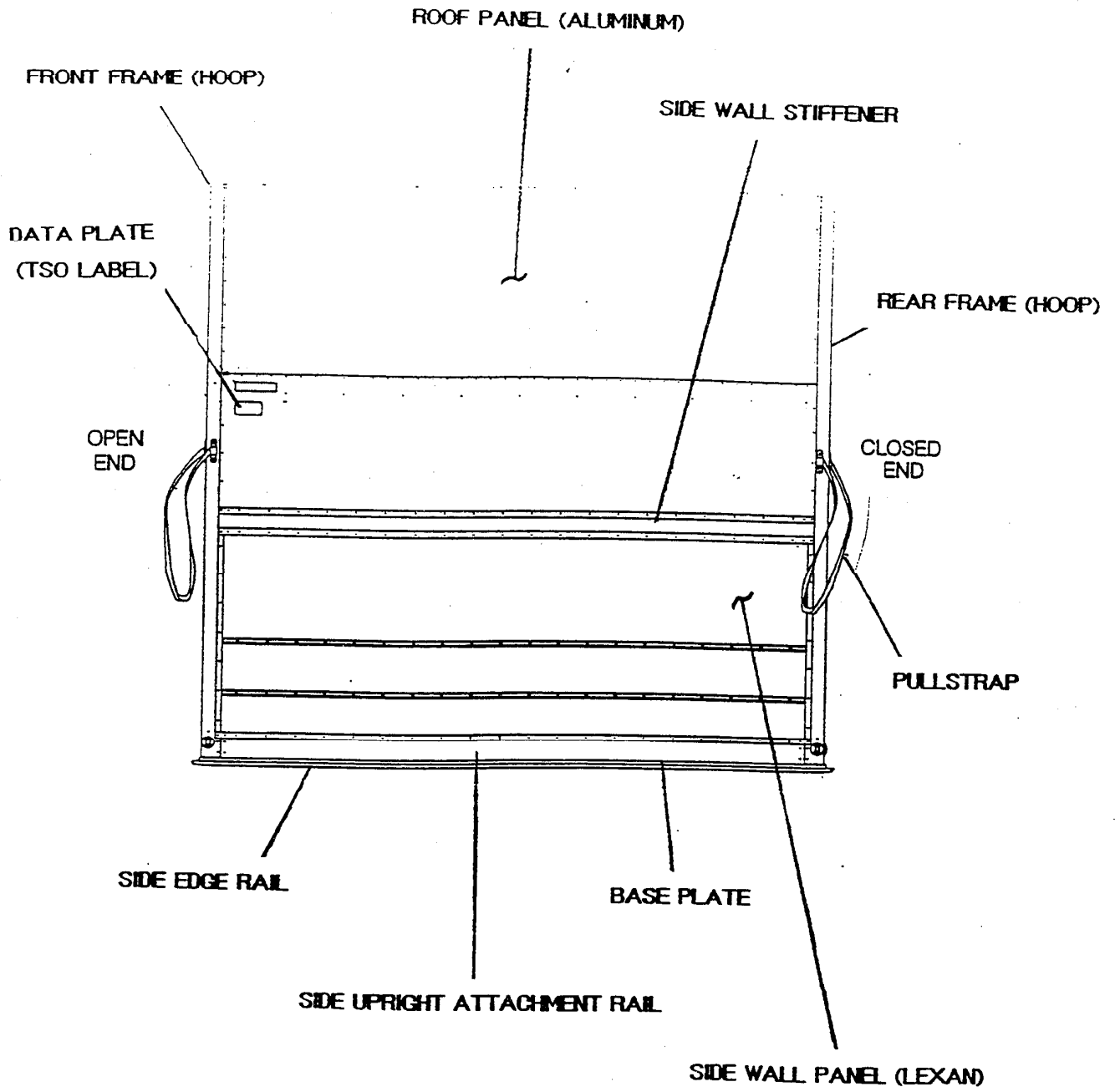


SATCO ALUMINUM / LEXAN CONTAINER  
PART NUMBER 35620 501



CONTAINER ASSEMBLY  
REAR VIEW

SATCO ALUMINUM / LEXAN CONTAINER  
PART NUMBER 35620 501

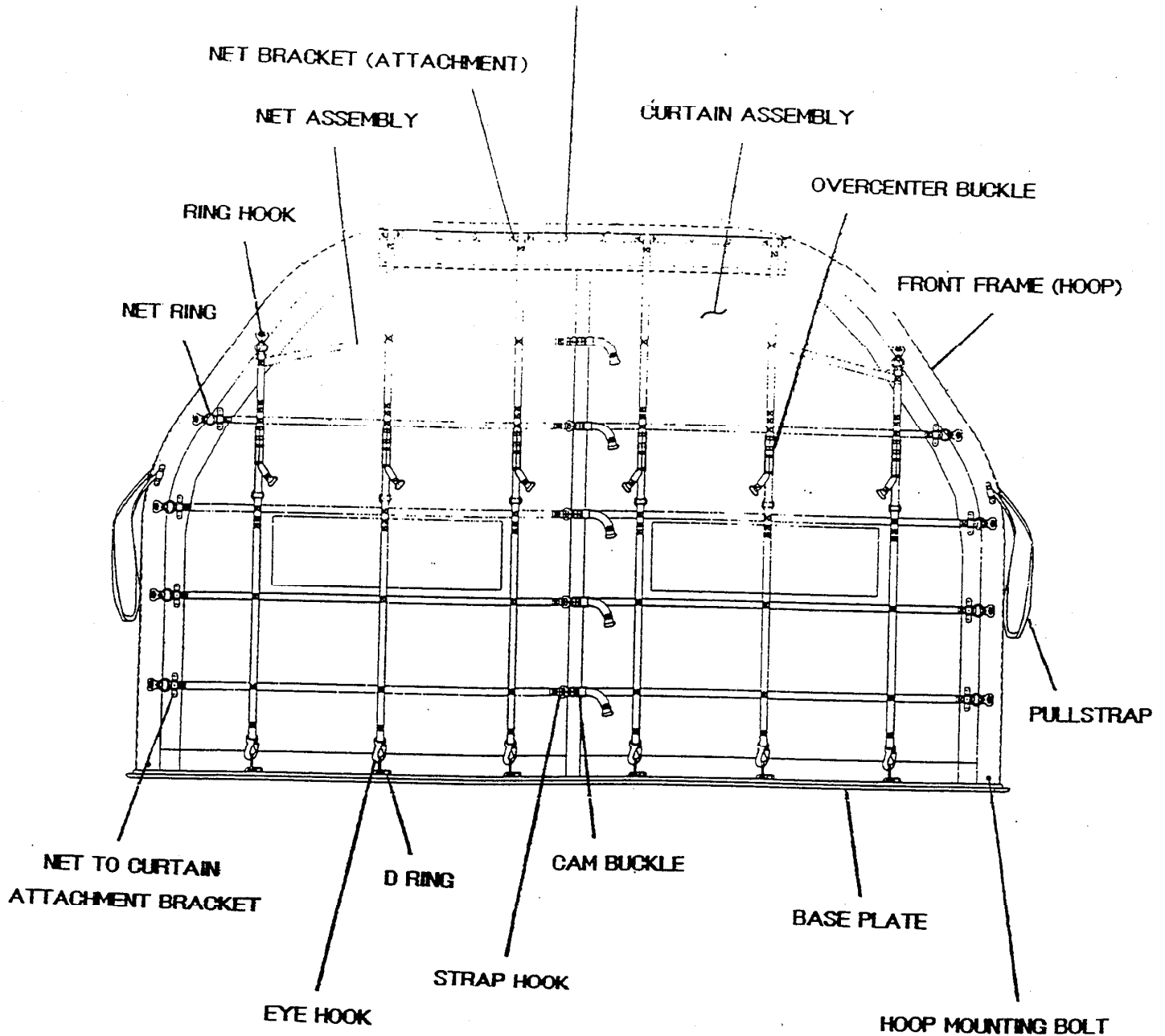


CONTAINER ASSEMBLY  
SIDE VIEW

SATCO ALUMINUM / LEXAN CONTAINER

PART NUMBER 35620 501

CURTAIN BRACKET (ATTACHMENT)



CONTAINER ASSEMBLY

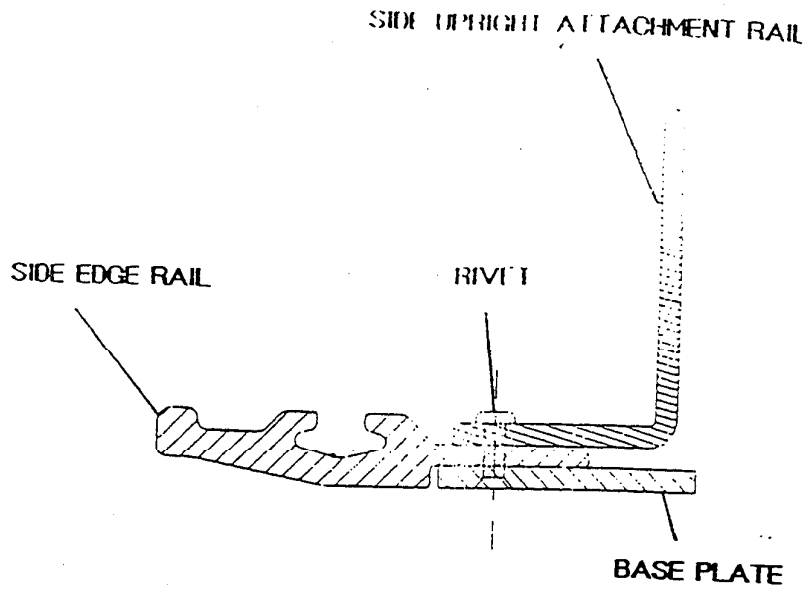
FRONT VIEW



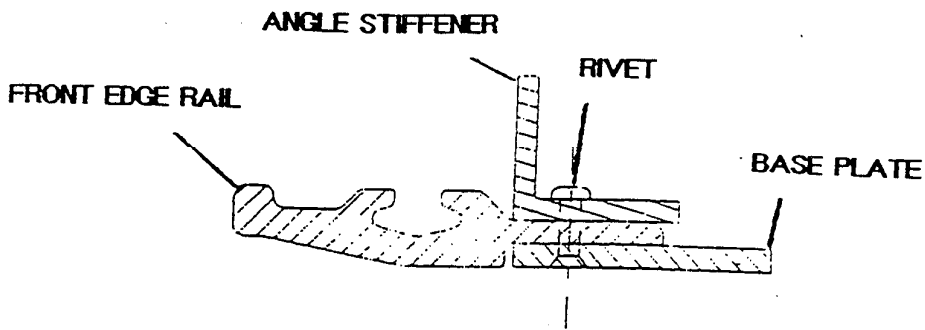
**Air Cargo Equipment**

A ZERO Corporation Company

PART NUMBER DCT5280-1



SECTION E-E



SECTION F-F

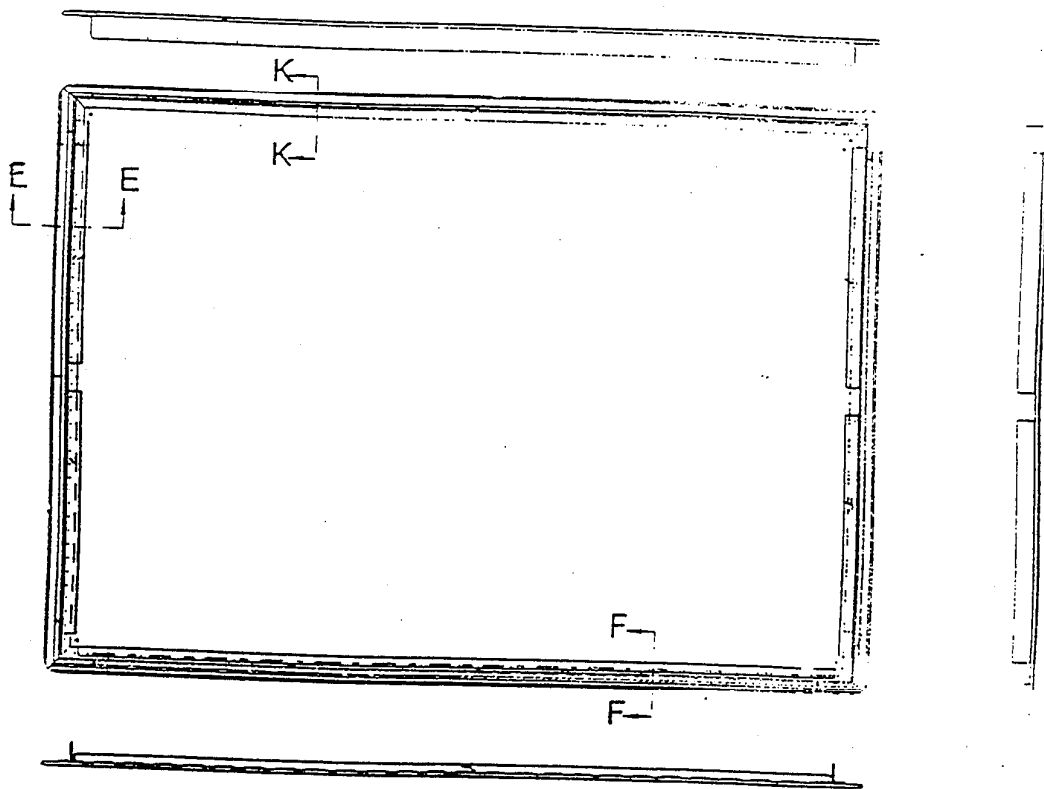
BASE ASSEMBLY



**Air Cargo Equipment**

A ZERO Corporation Company

PART NUMBER DCT5280-1



BASE ASSEMBLY

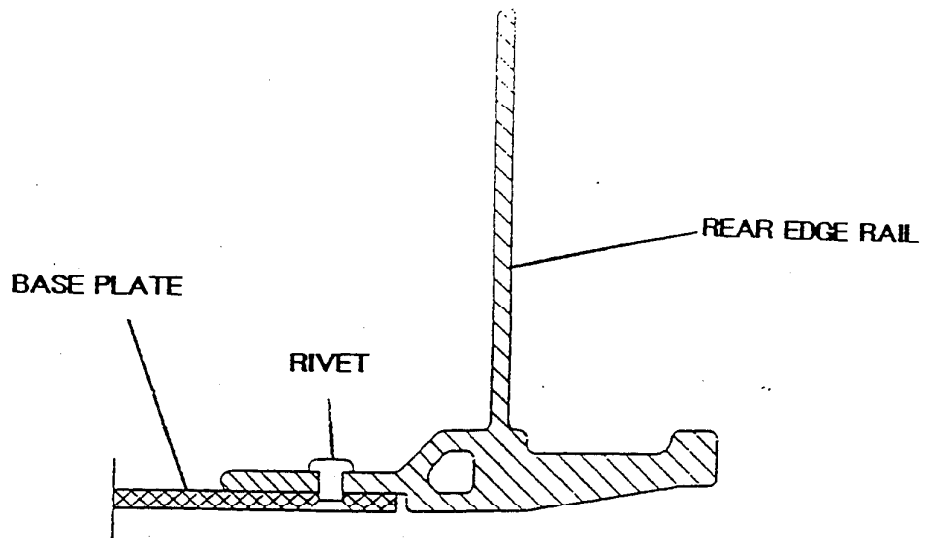




**Air Cargo Equipment**

A ZERO Corporation Company

PART NUMBER DCT5280-1



SECTION K-K

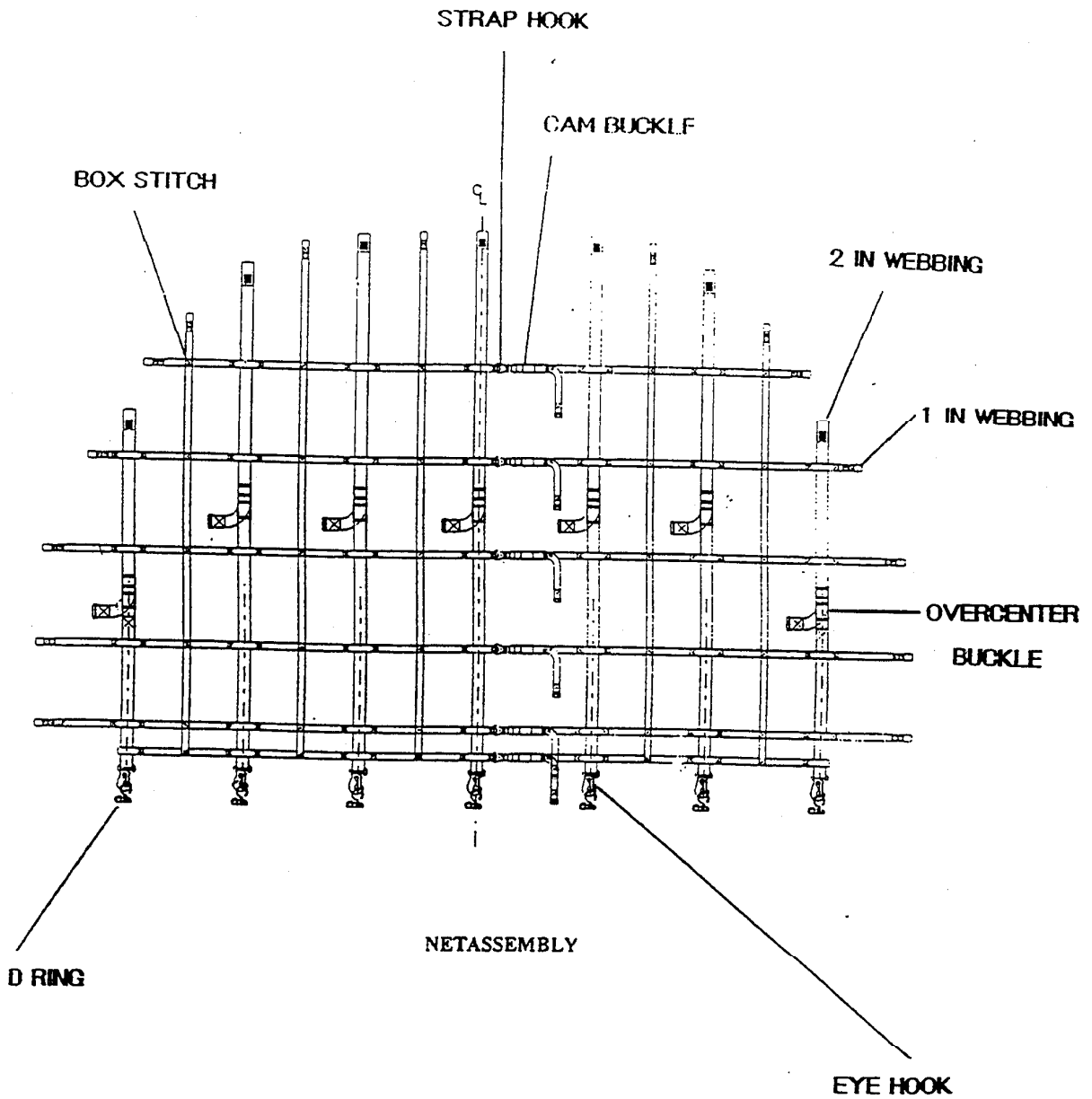
BASE ASSEMBLY



**Air Cargo Equipment**

A ZERO Corporation Company

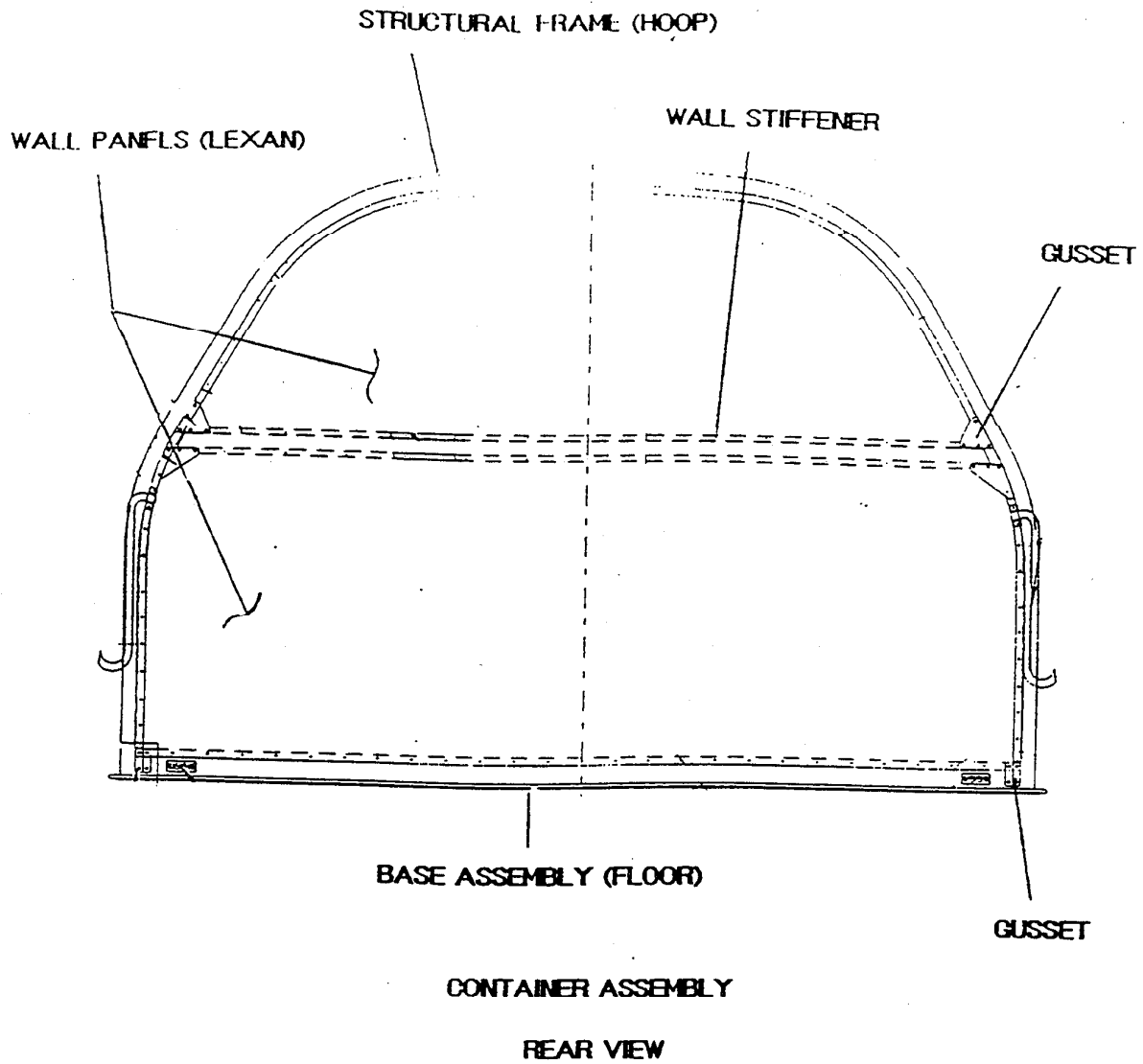
PART NUMBER DCT5280-1





**Air Cargo Equipment**  
A ZERO Corporation Company

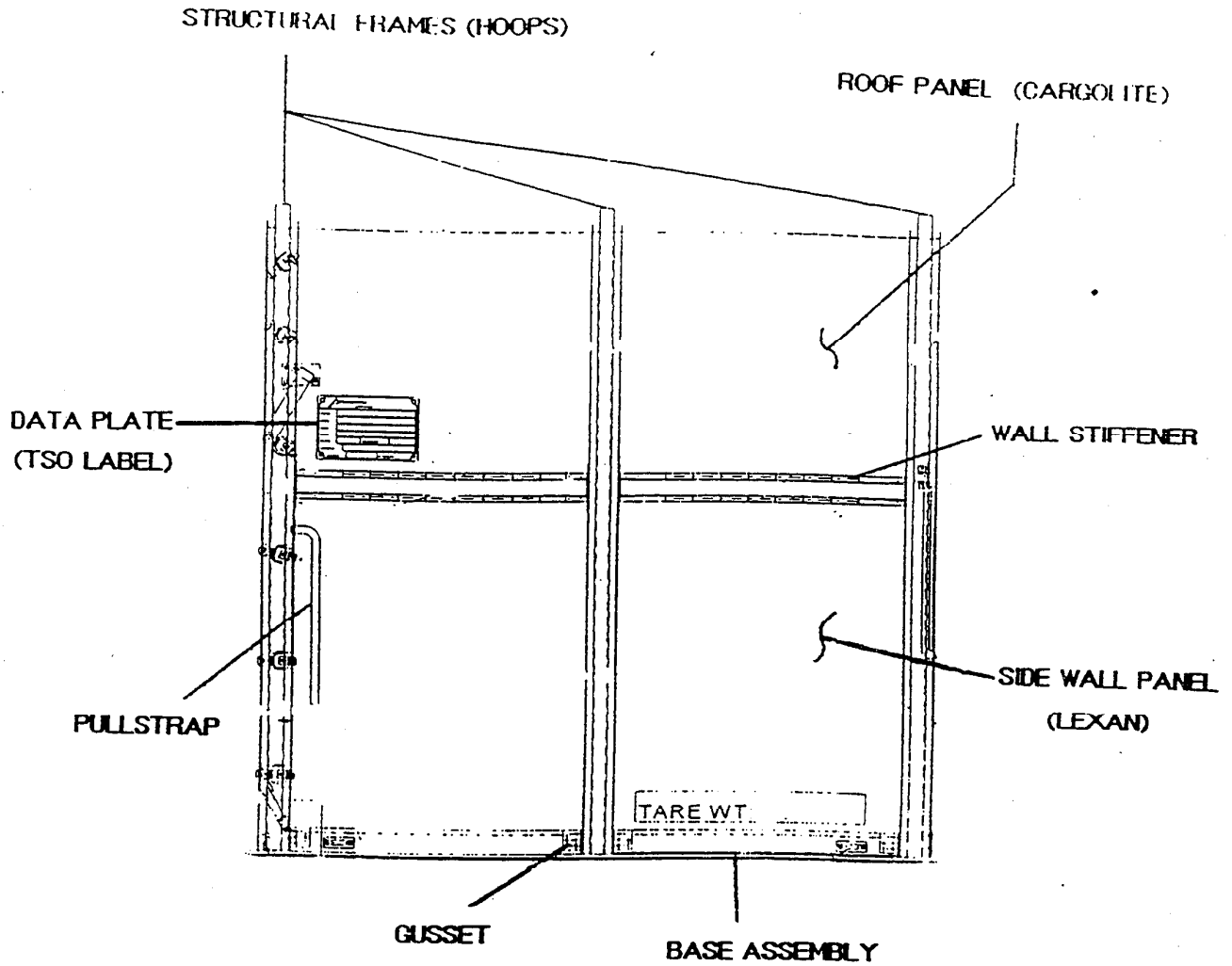
PART NUMBER DCT5280-1





**Air Cargo Equipment**  
A ZERO Corporation Company

PART NUMBER DCT5280-1



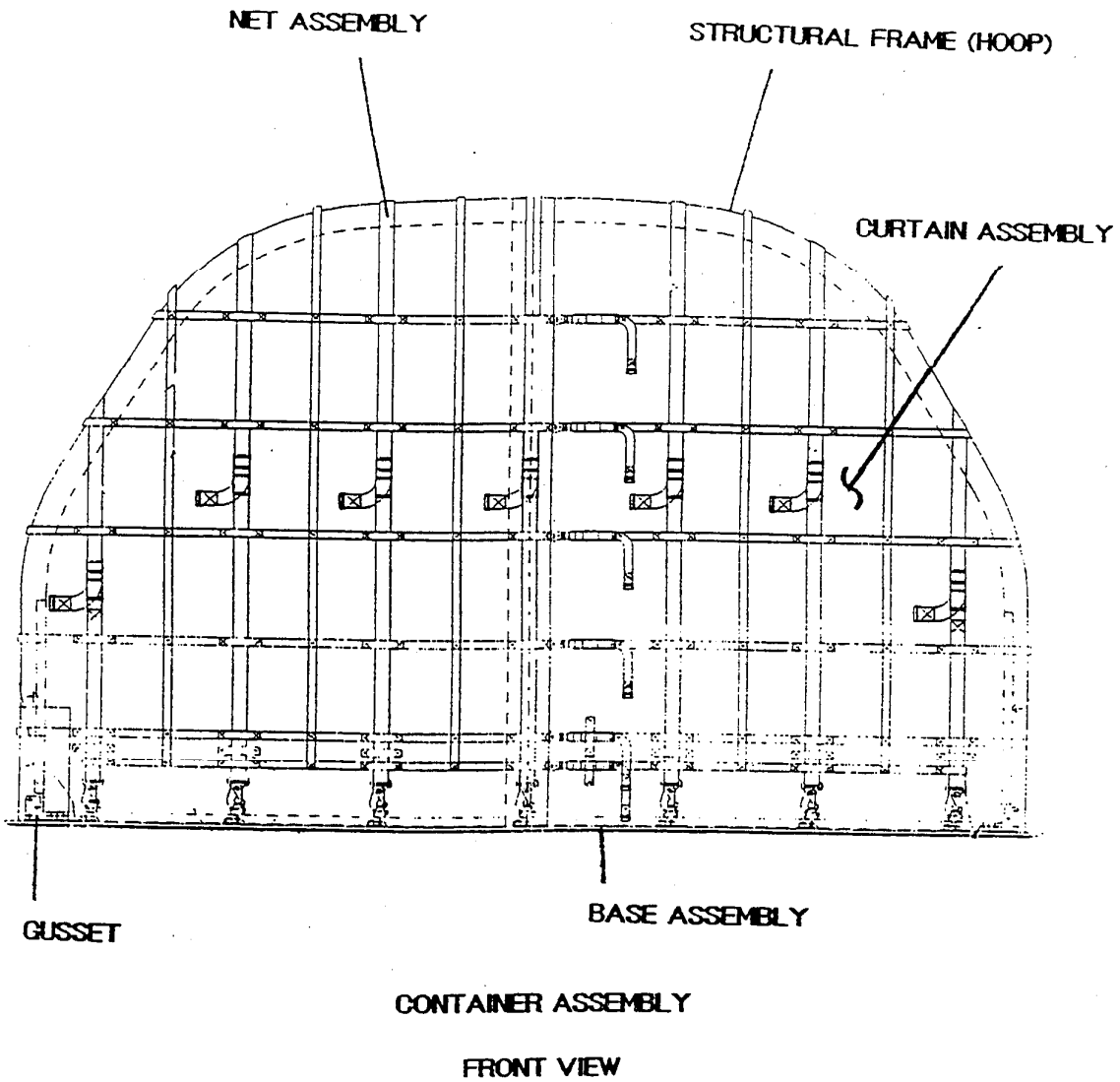
CONTAINER ASSEMBLY

SIDE VIEW

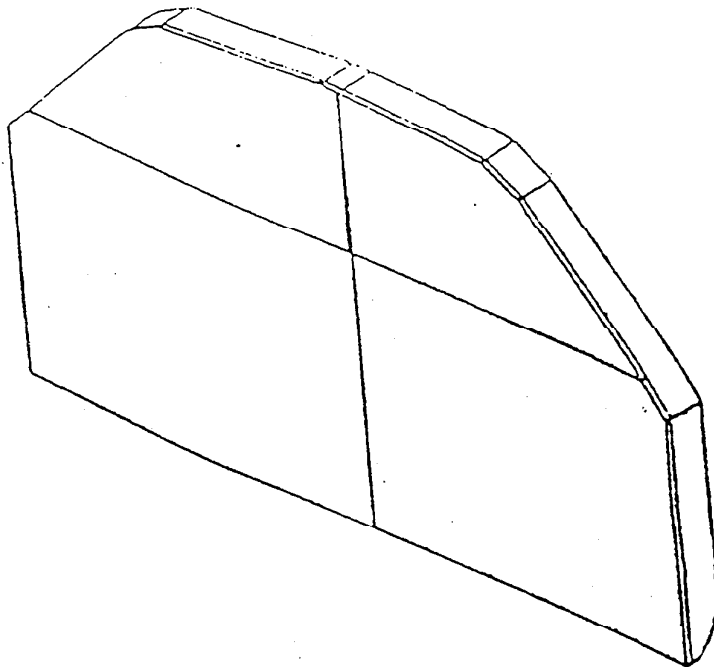


**Air Cargo Equipment**  
A ZERO Corporation Company

PART NUMBER DCT5280-1

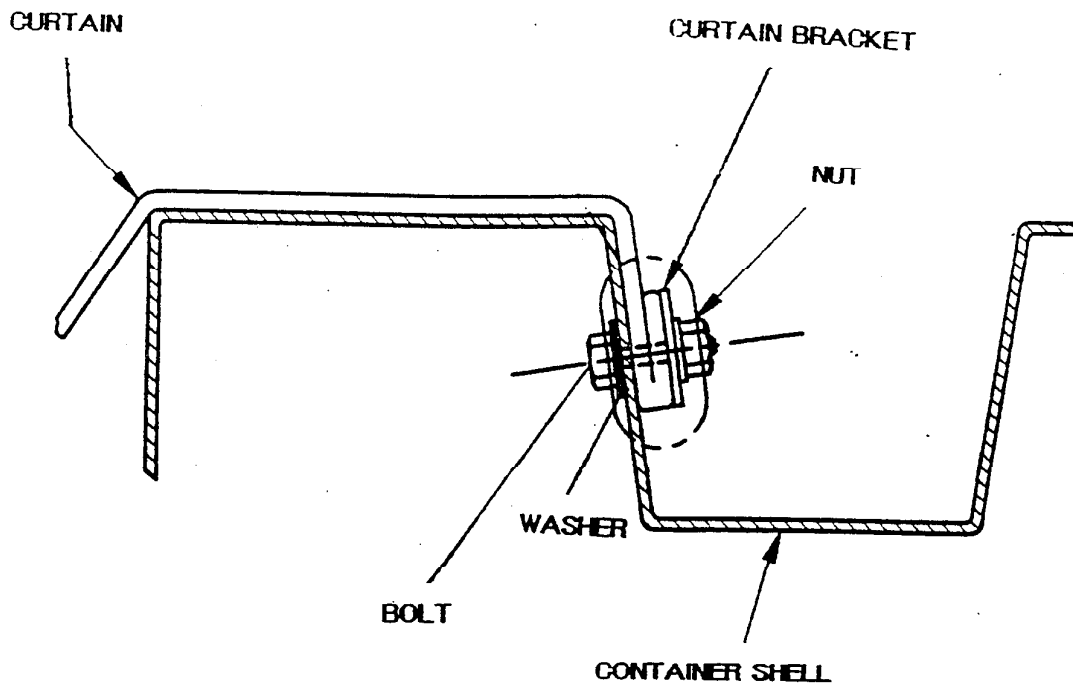


FIBERGLASS CONTAINER  
EMERY PART NUMBER EB 9



CURTAIN ASSEMBLY

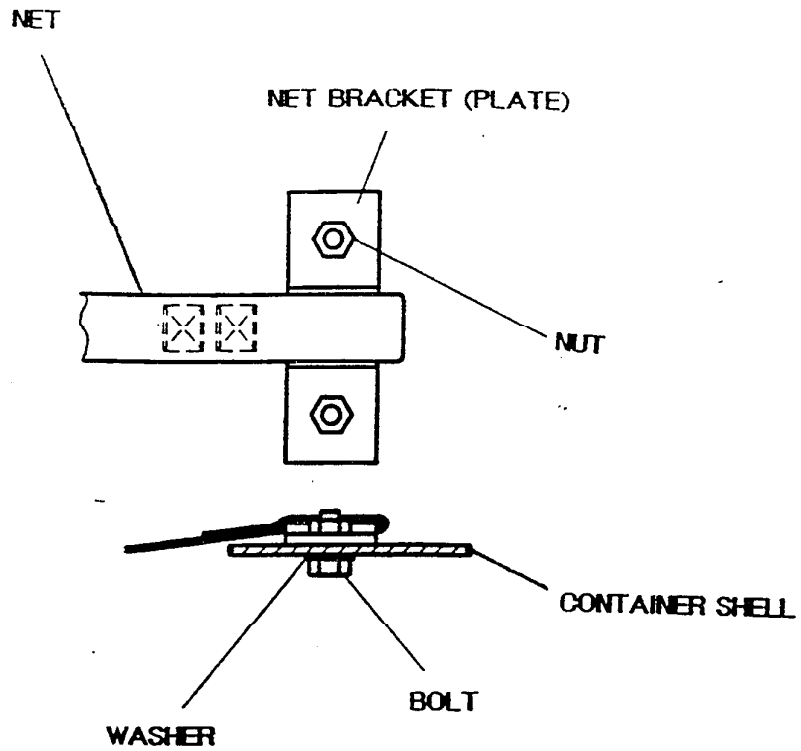
FIBERGLASS CONTAINER  
EMERY PART NUMBER EB 9



TYPICAL CURTAIN TO SHELL ATTACHMENT

CURTAIN ASSEMBLY

FIBERGLASS CONTAINER  
EMERY PART NUMBER EB 9

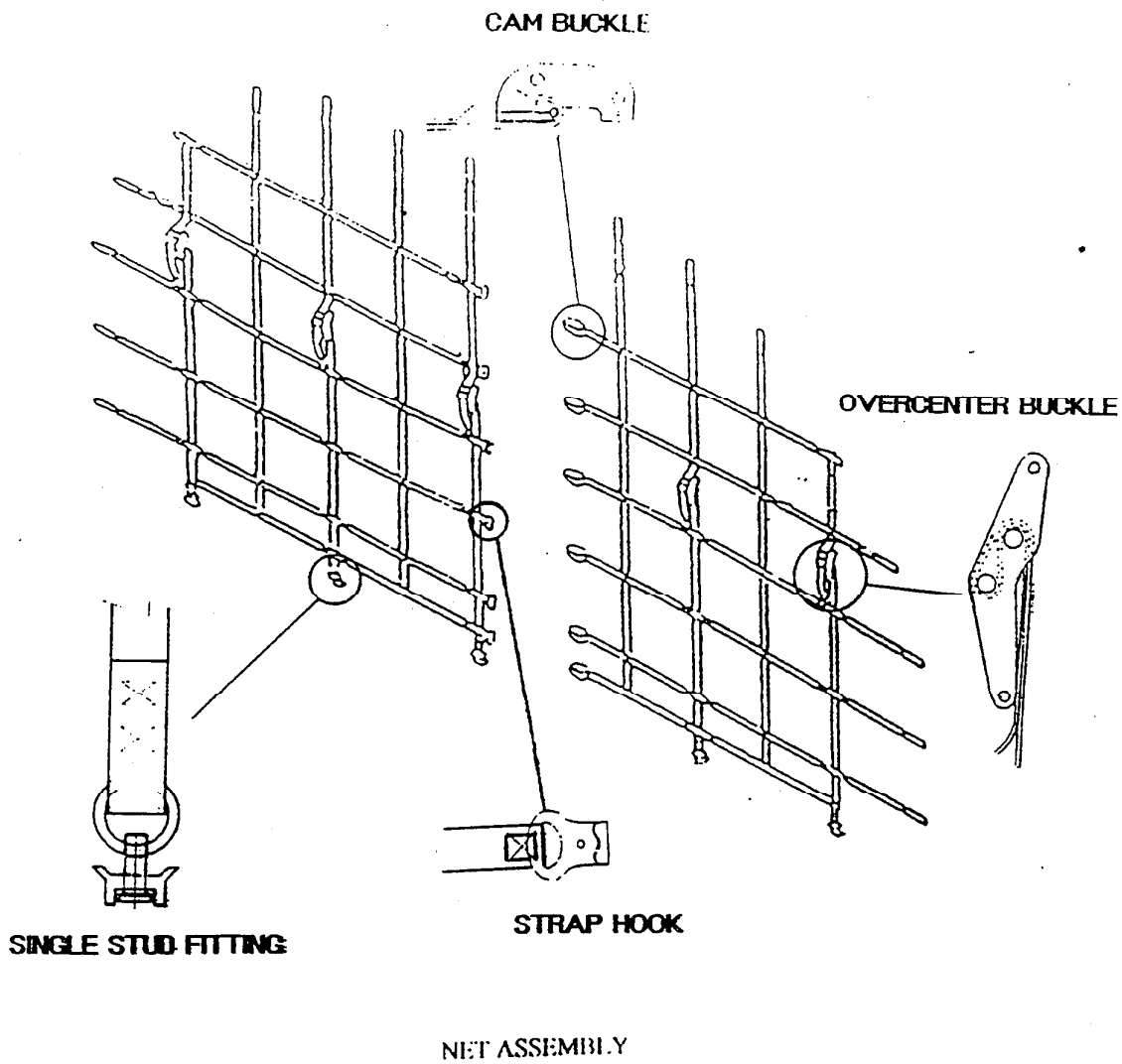


TYPICAL NET TO SHELL ATTACHMENT

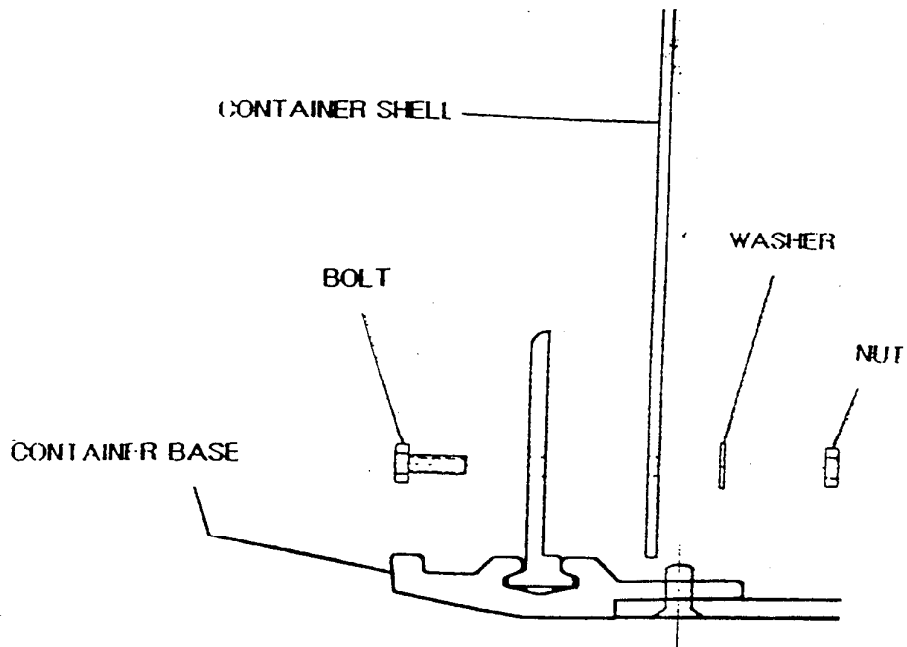
NET ASSEMBLY



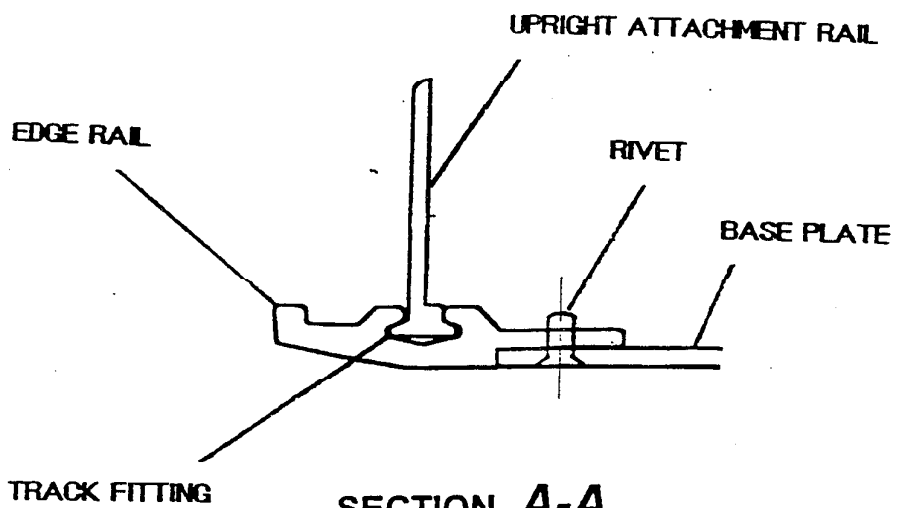
FIBERGLASS CONTAINER  
EMERY PART NUMBER EB 9



FIBERGLASS CONTAINER  
EMERY PART NUMBER EB 9



TYPICAL SHELL TO BASE ATTACHMENT

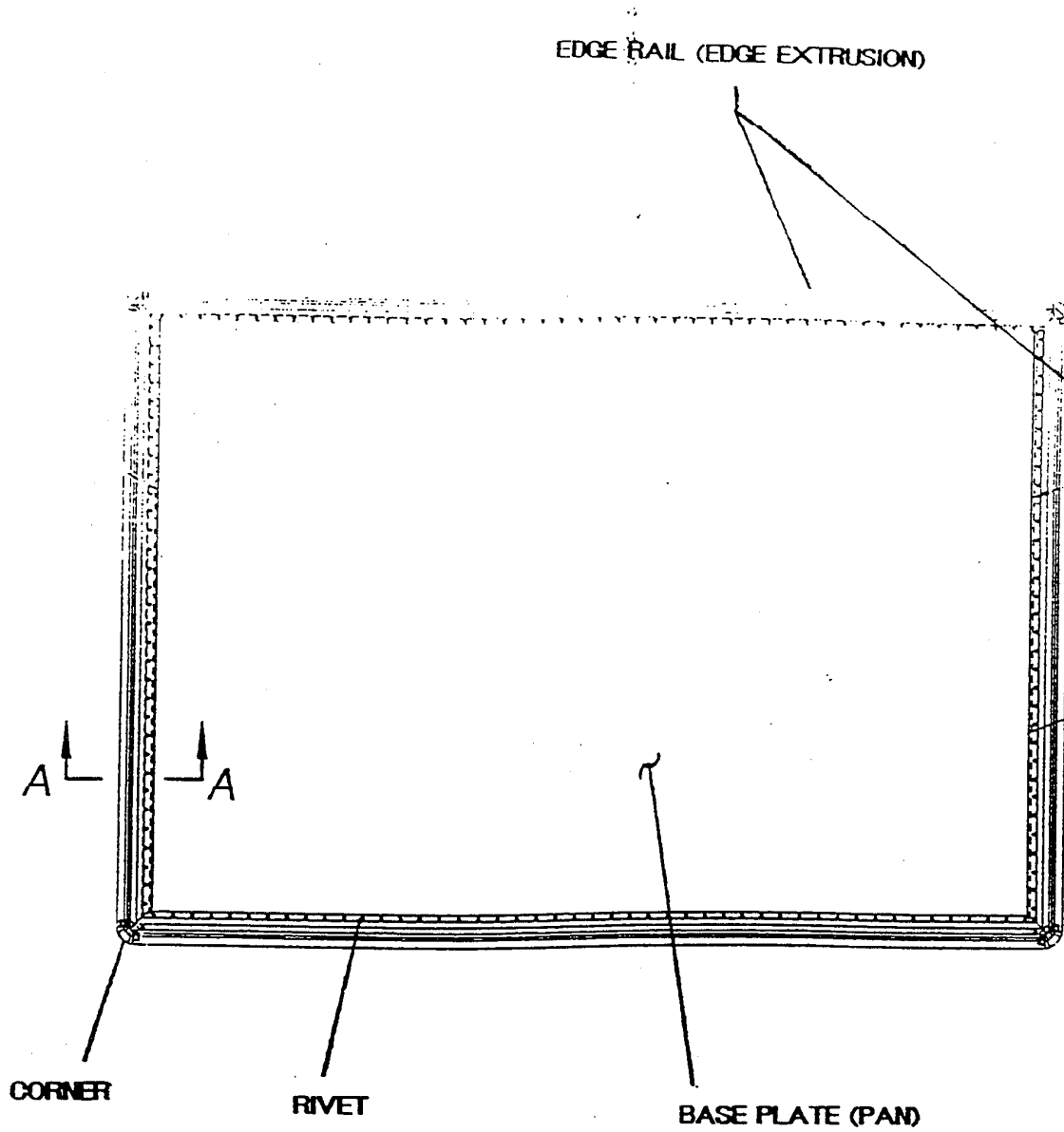


SECTION A-A

BASE ASSEMBLY

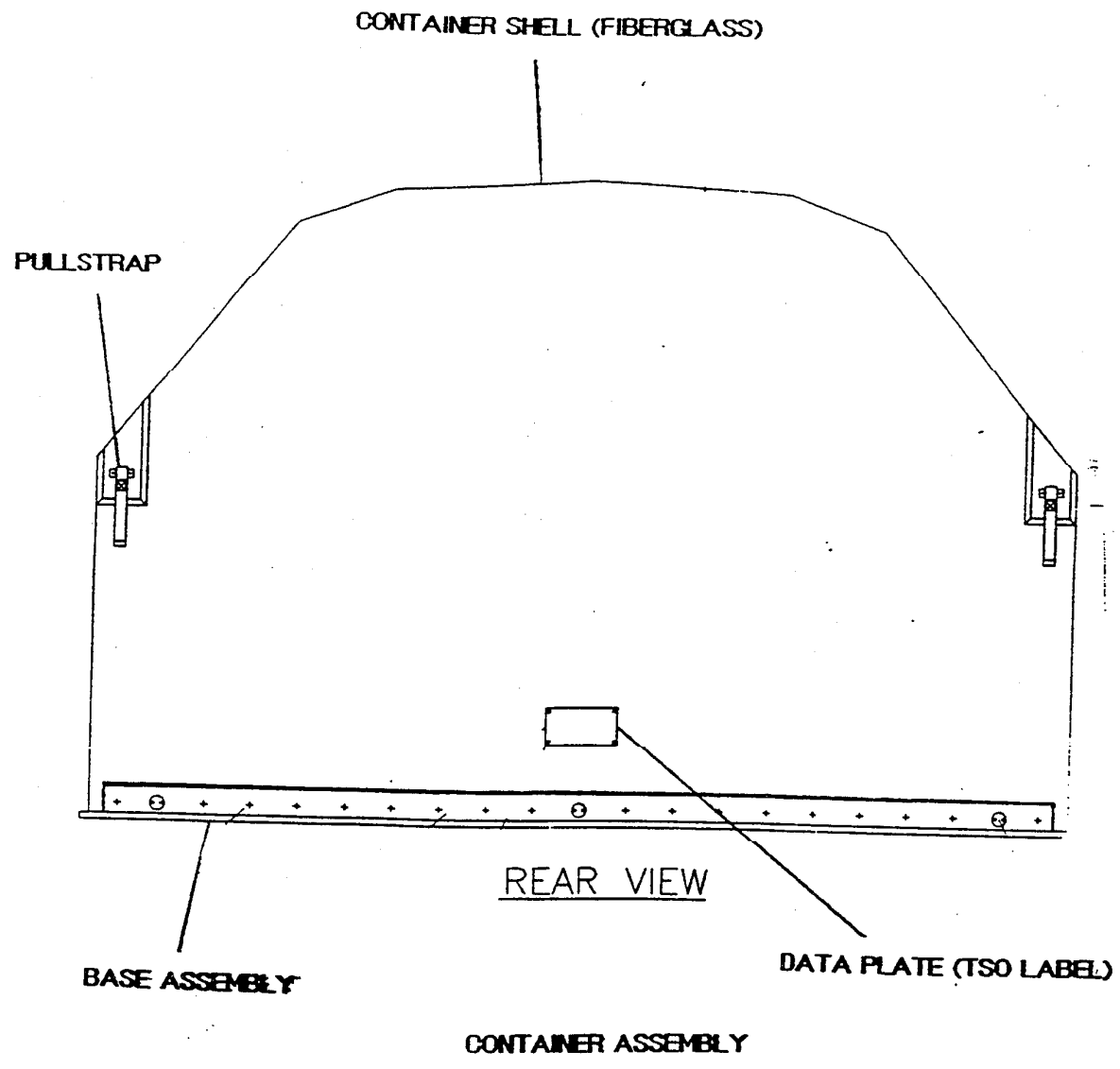
FIBERGLASS CONTAINER

EMERY PART NUMBER EB 9



BASE ASSEMBLY

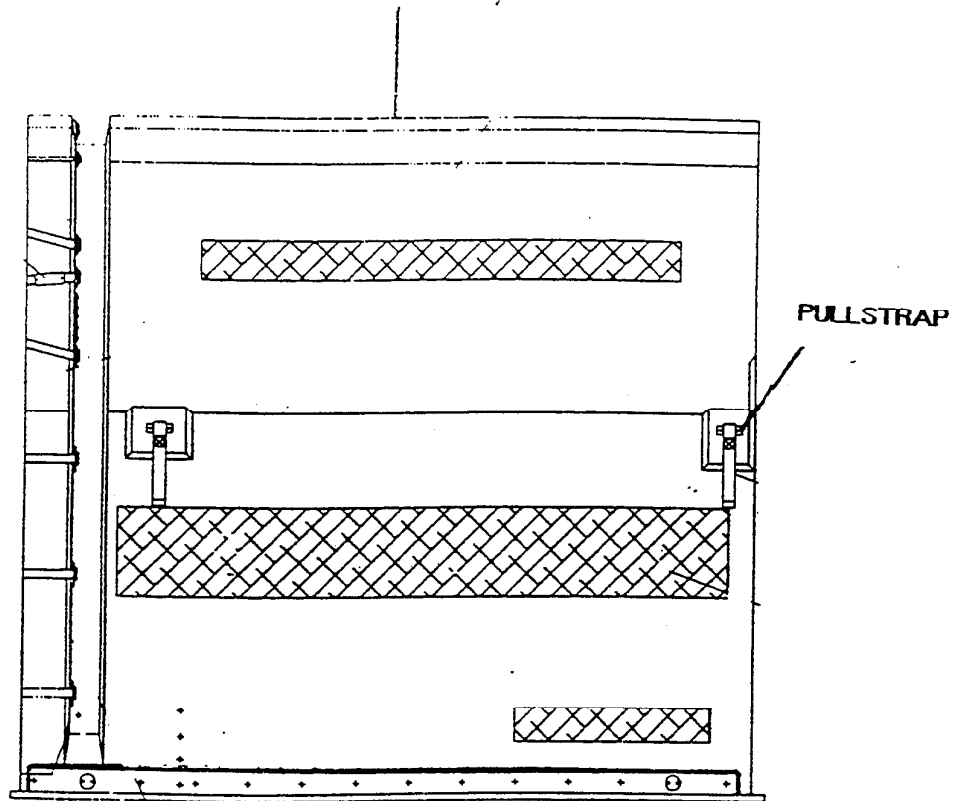
FIBERGLASS CONTAINER  
EMERY PART NUMBER EB 9



FIBERGLASS CONTAINER

EMERY PART NUMBER EB 9

CONTAINER SHELL (FIBERGLASS)

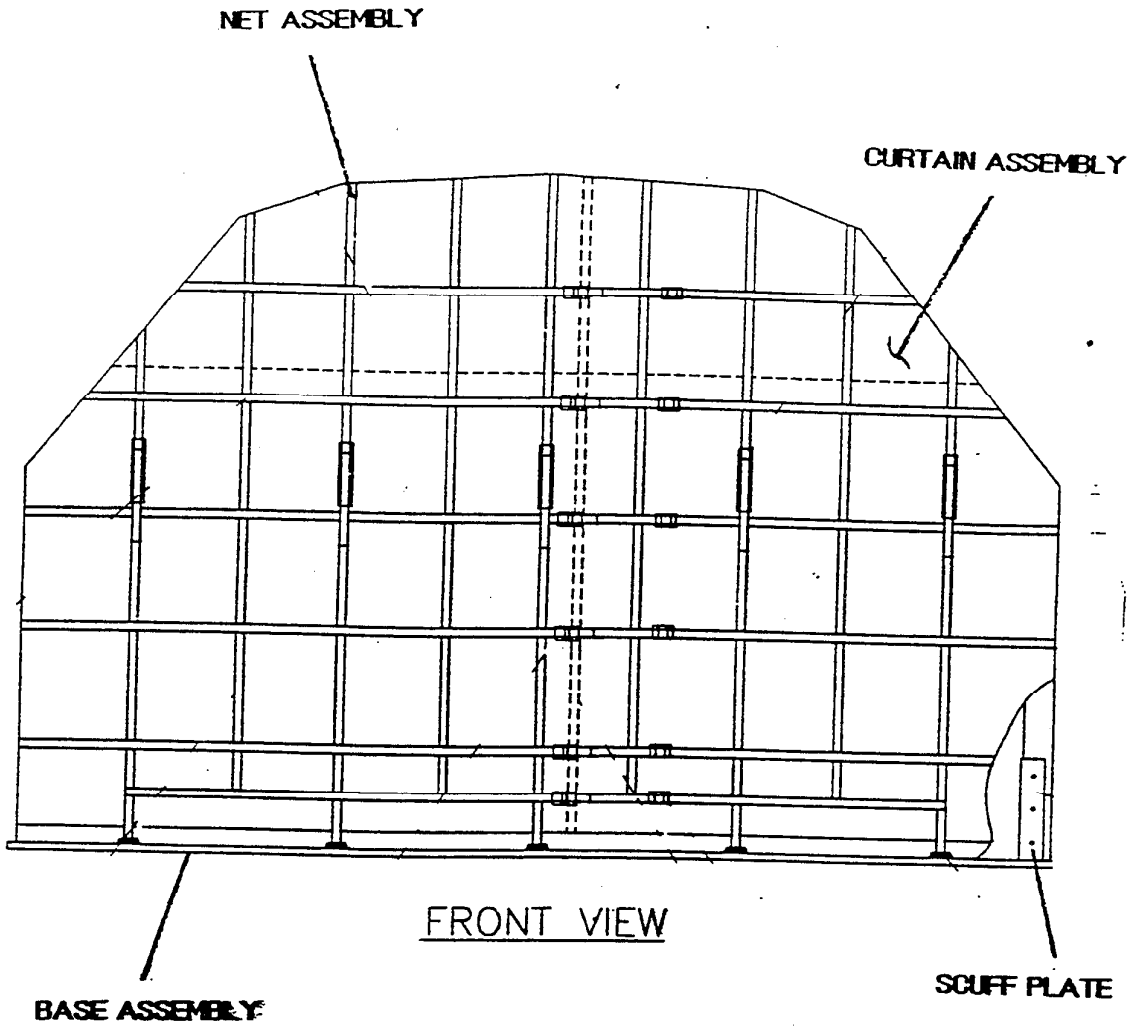


SIDE VIEW

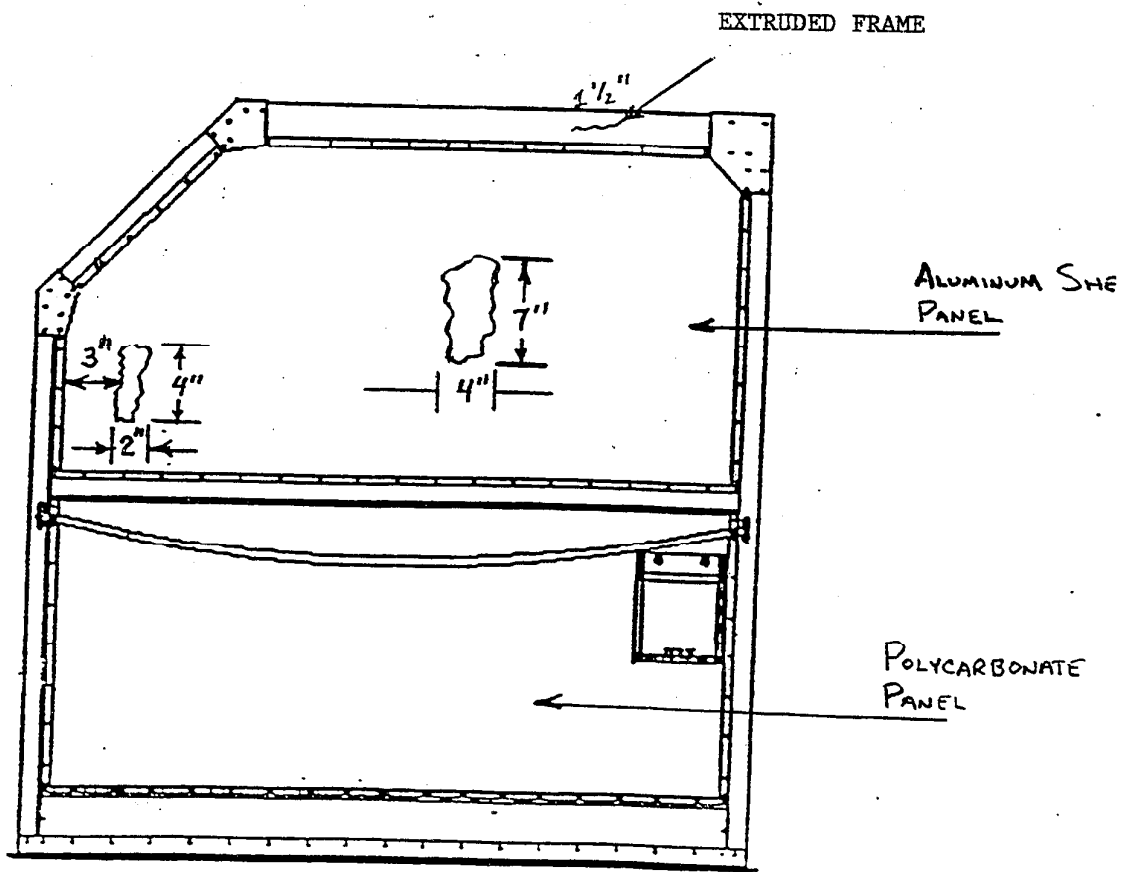
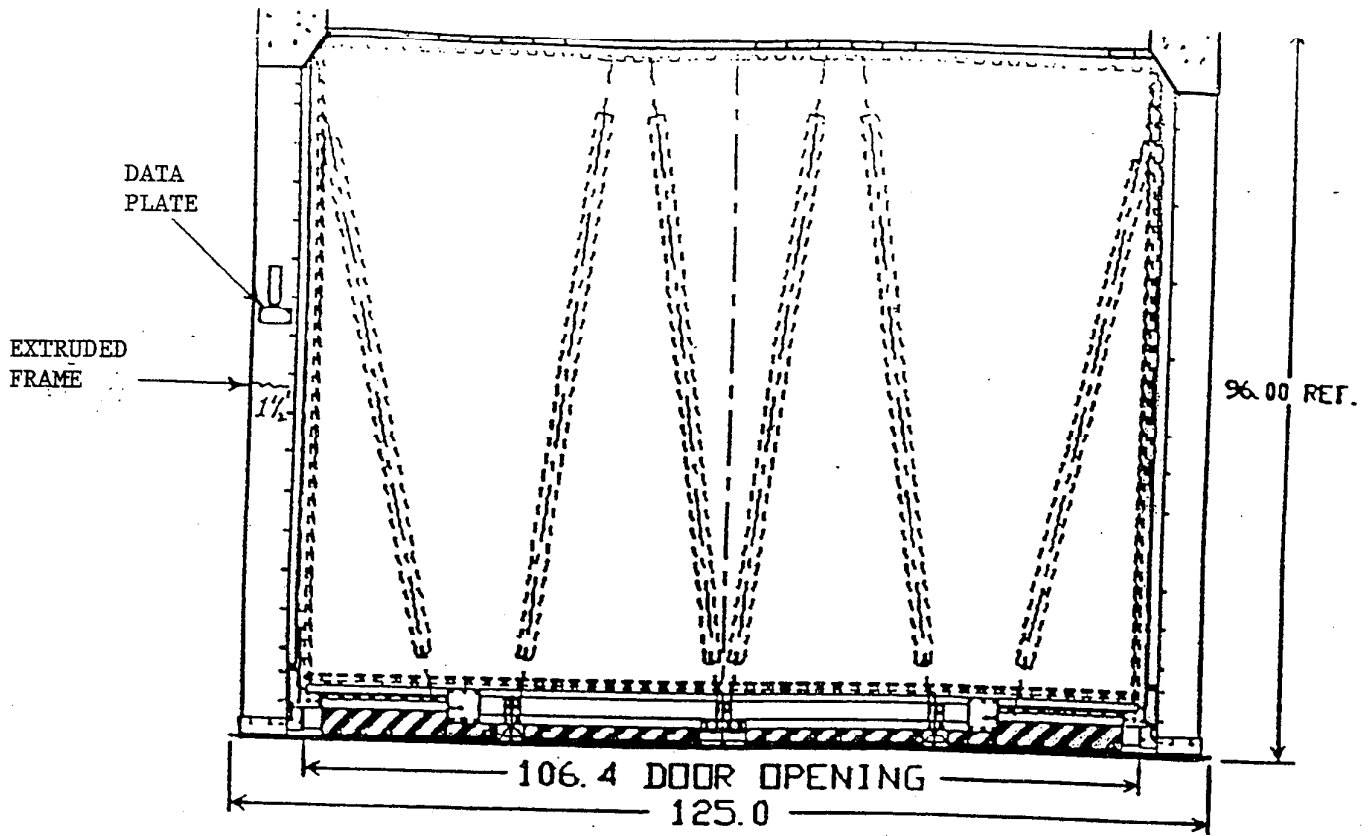
BASE ASSEMBLY

CONTAINER ASSEMBLY

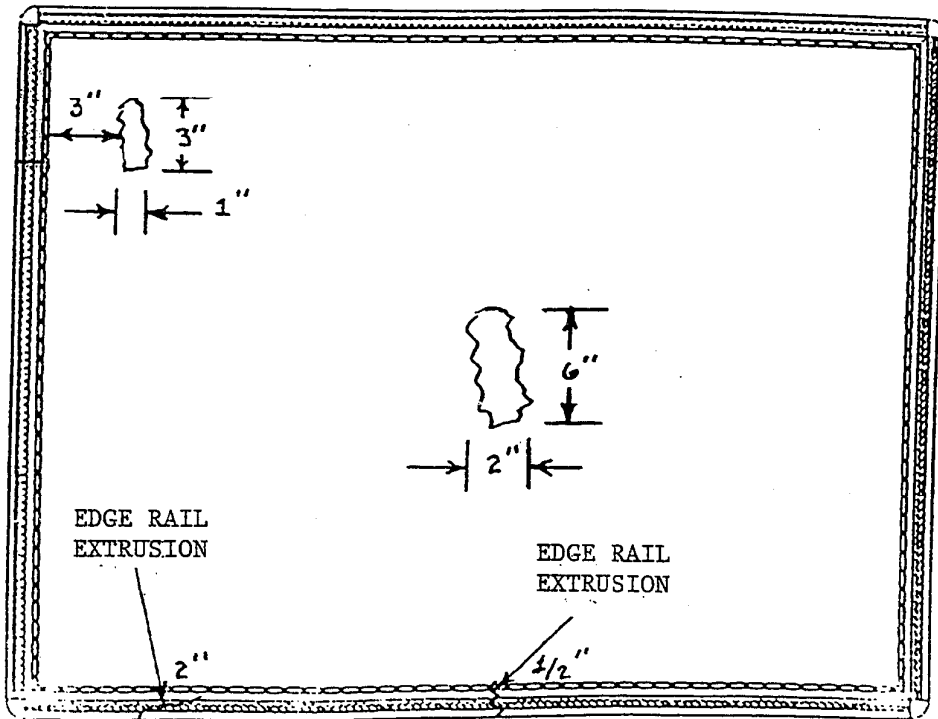
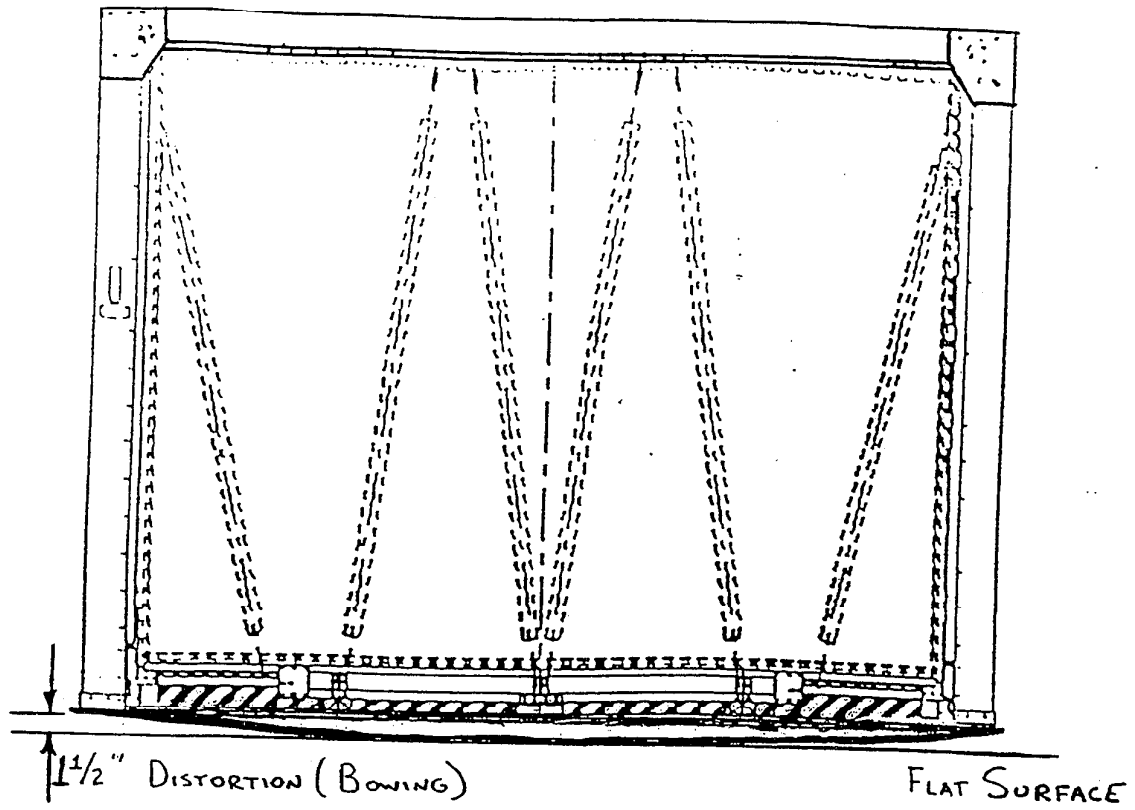
FIBERGLASS CONTAINER  
EMERY PART NUMBER EB 9



CONTAINER ASSEMBLY



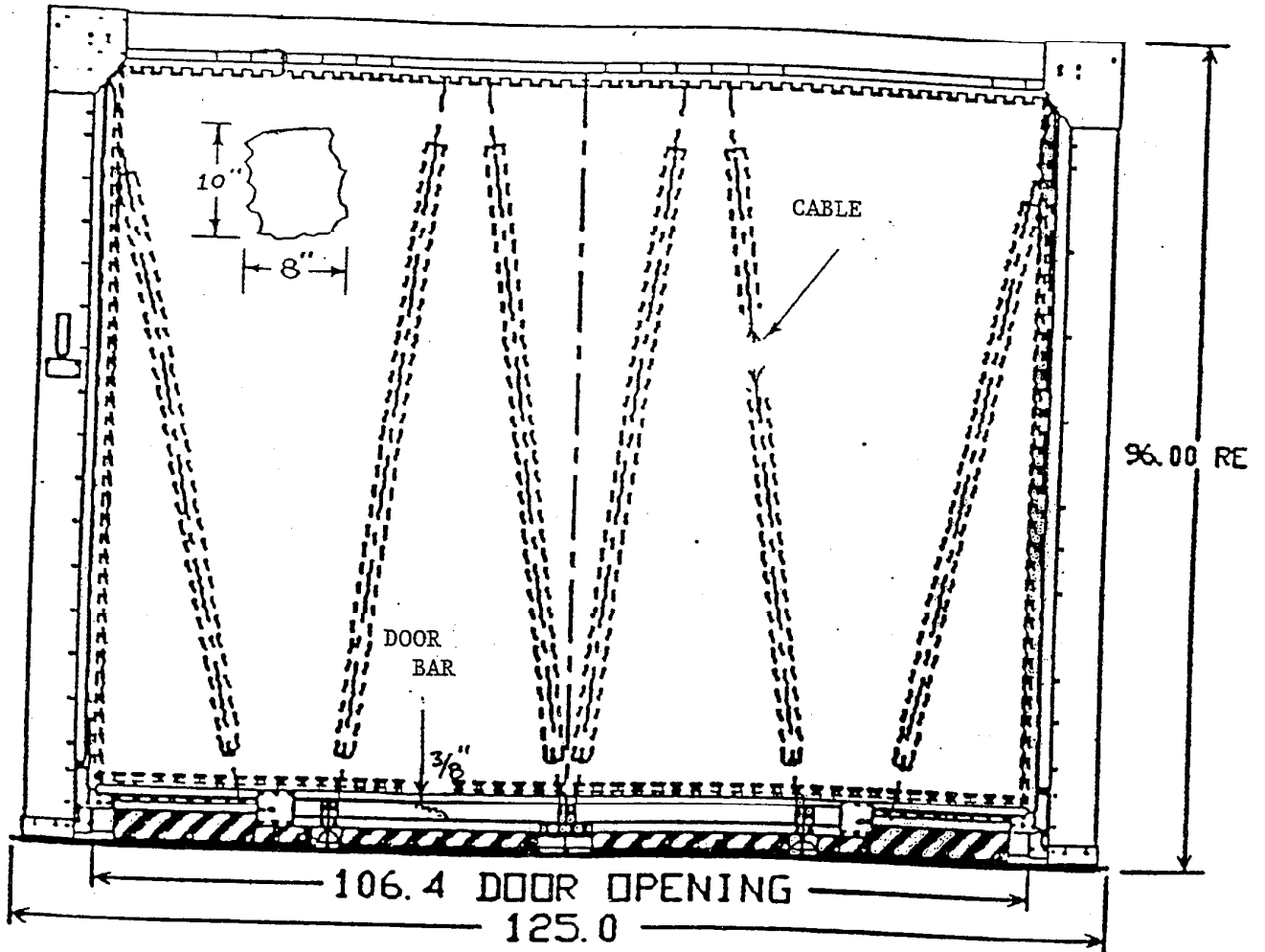
96 X 125 Aluminum Polycarbonate/Fabric Roll-up Door Restraint



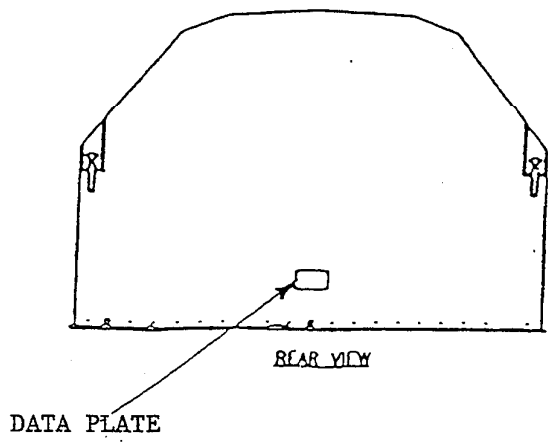
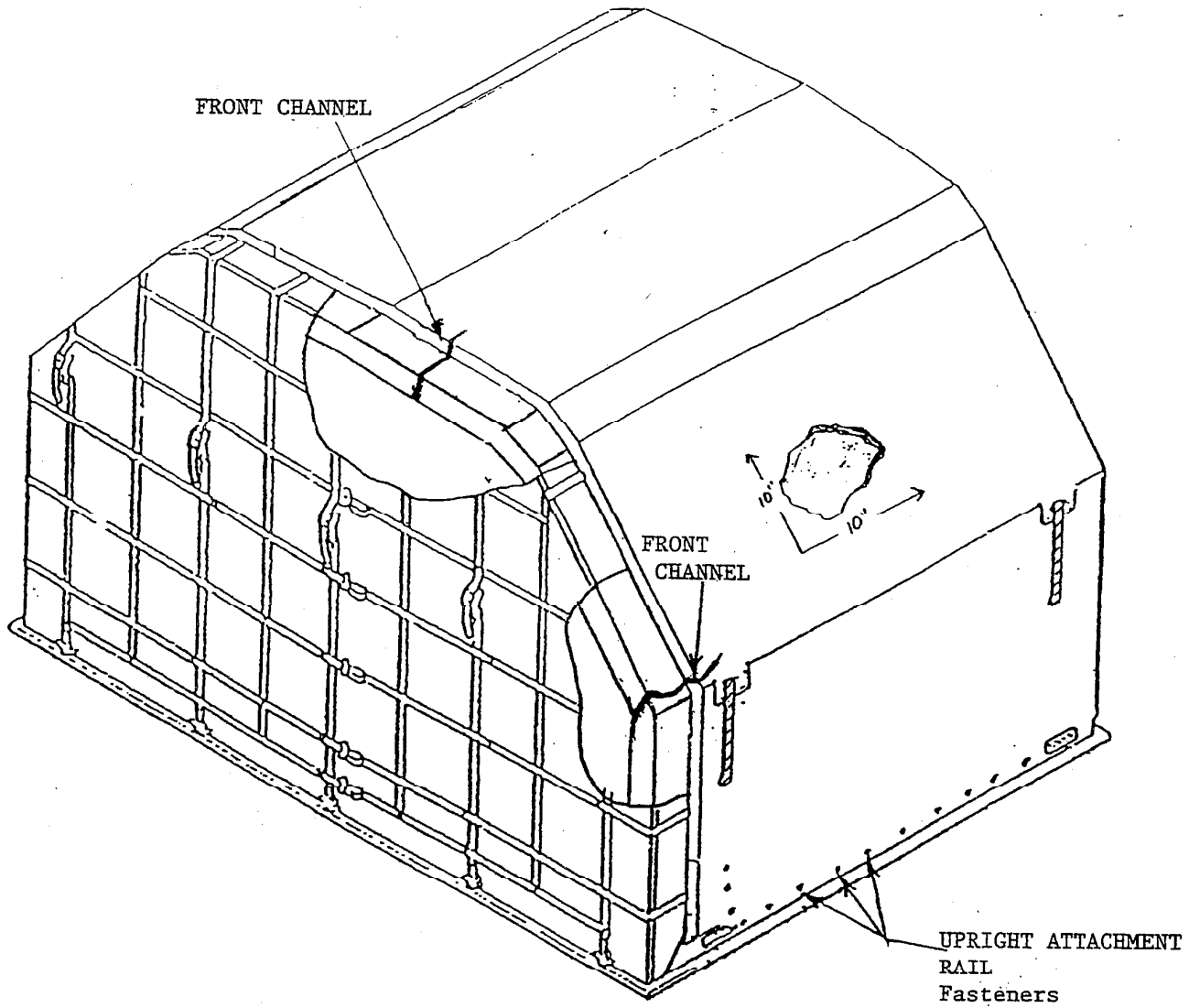
96 X 125 Aluminum Polycarbonate/Fabric Roll-up Door Restraint



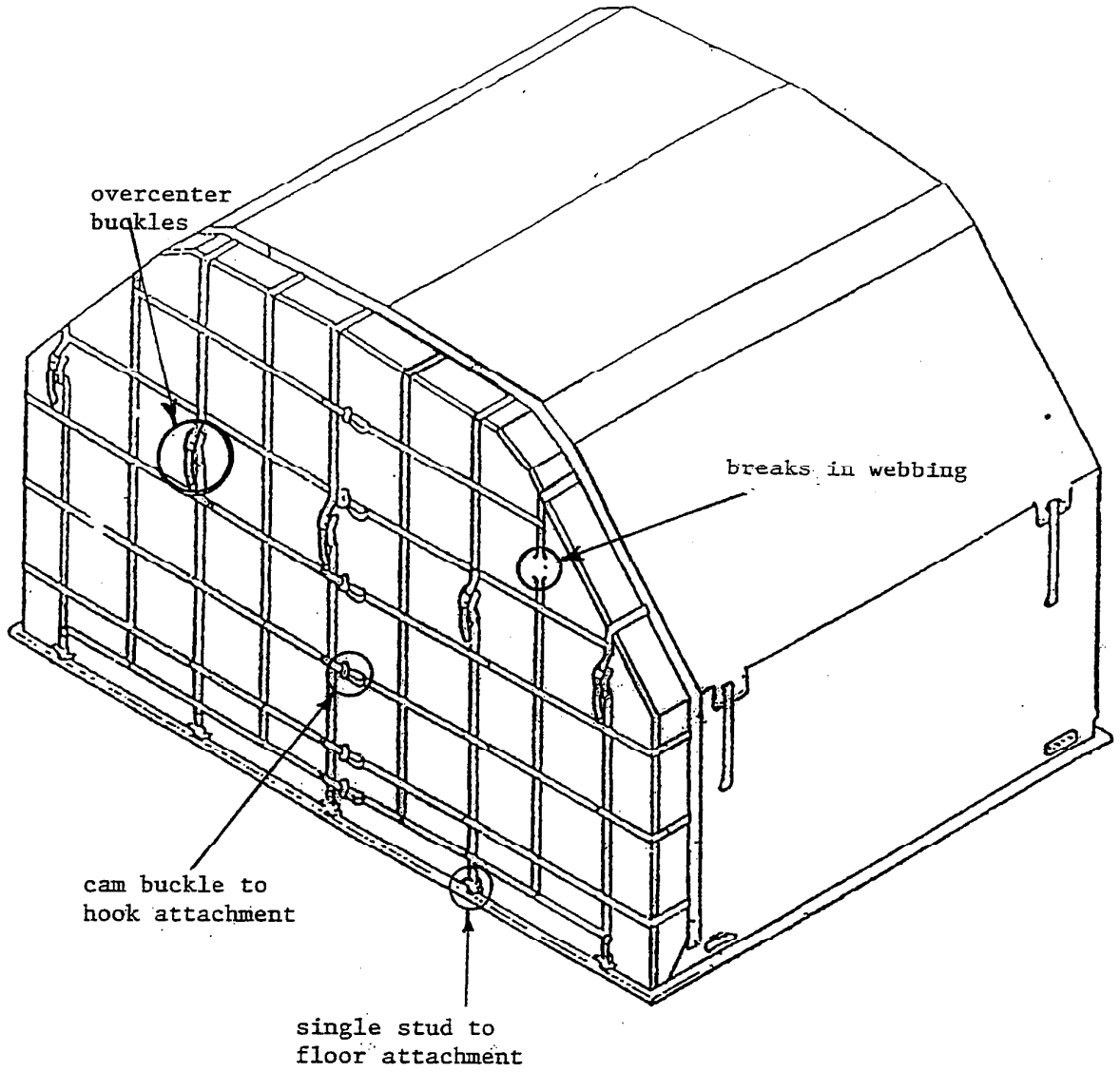
96 X 125 Aluminum Polycarbonate/Fabric Roll-up Door Restraint



88 X 125 Fiberglass Shell with Curtain and Net Restraint

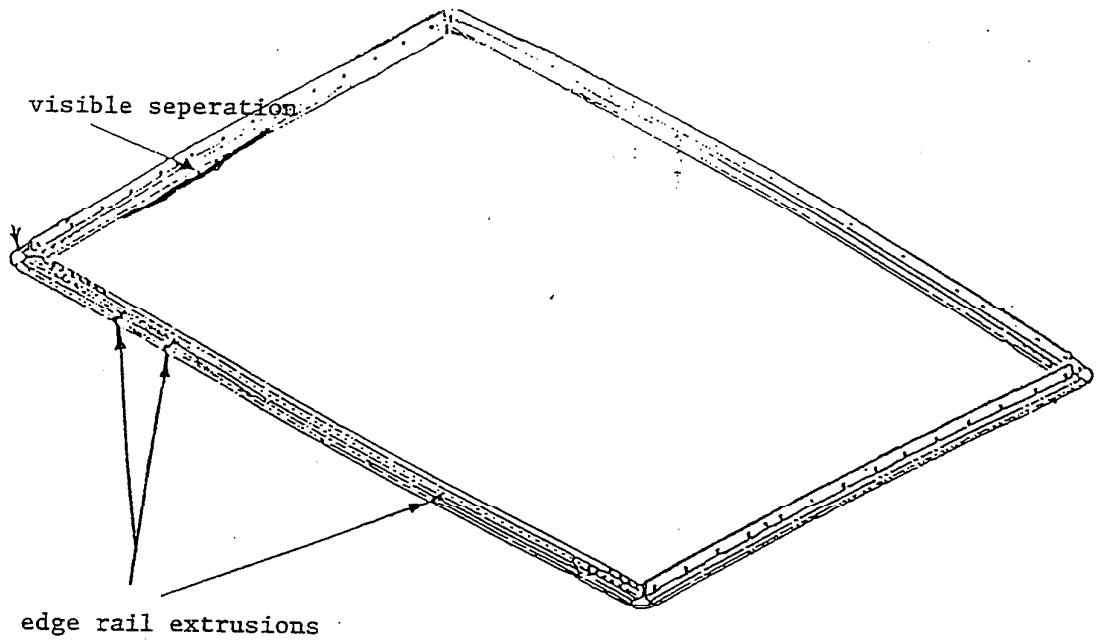


88 X 125 Fiberglass Shell with Curtain and Net Restraint

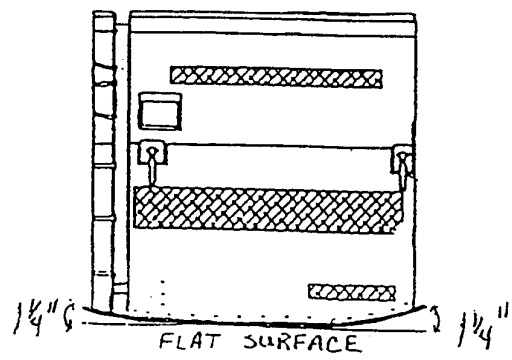
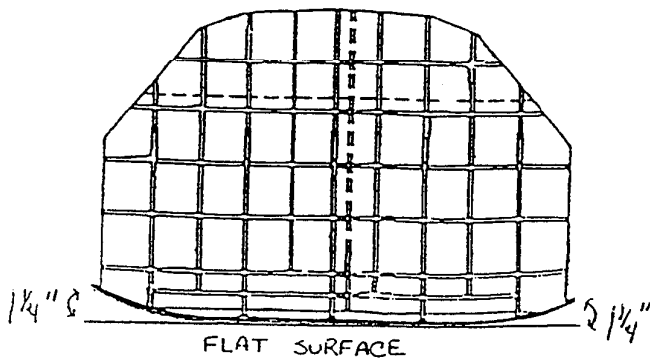
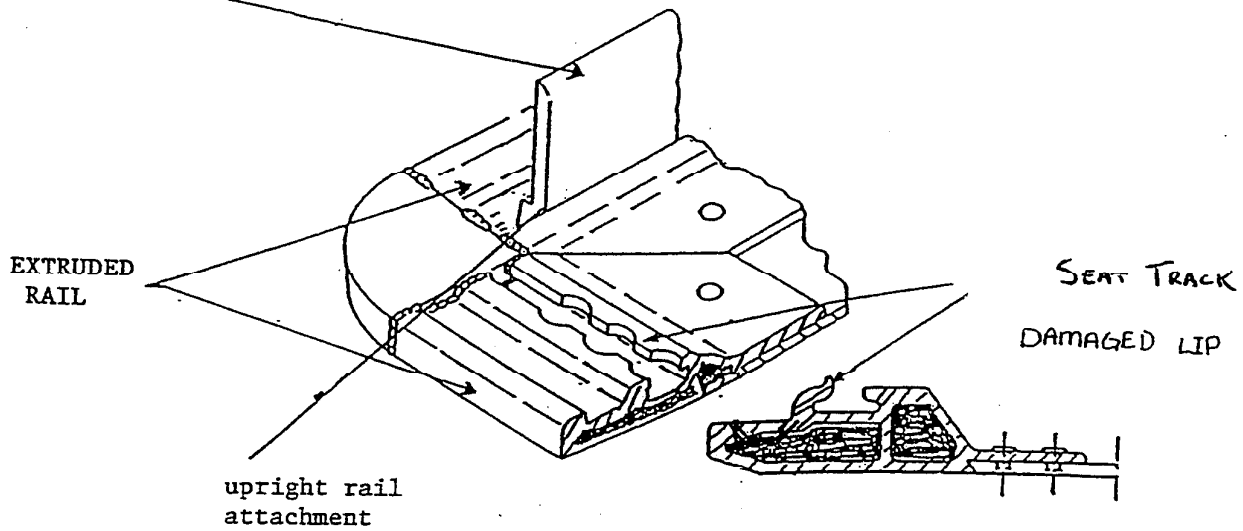


88X 125 Fiberglass Shell with Curtain and Net Restraint

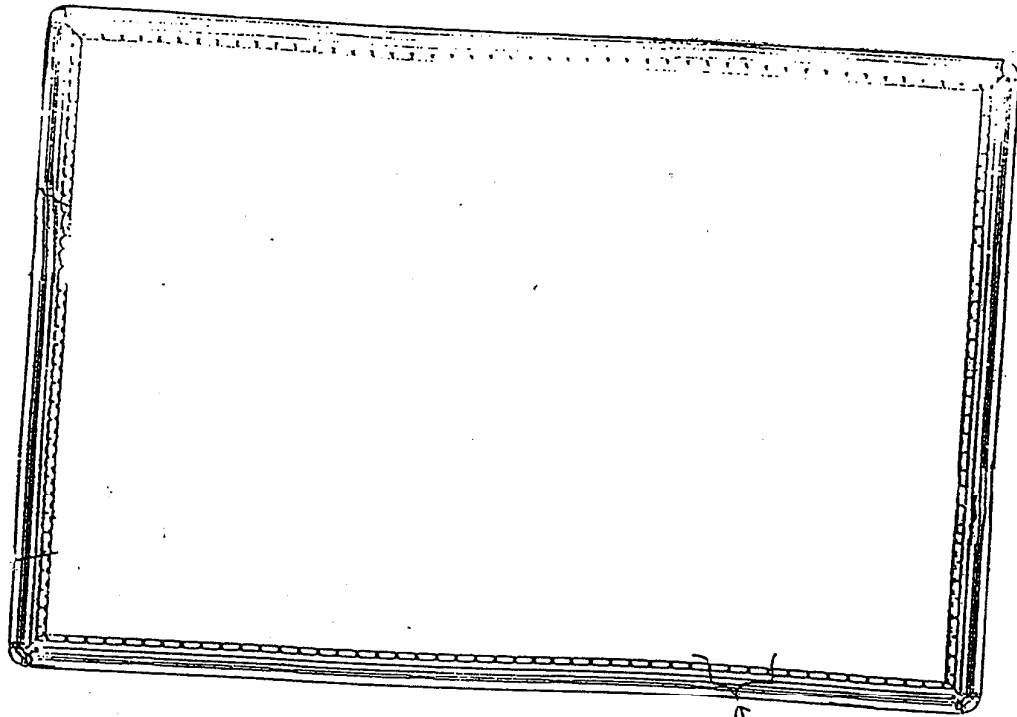
Floor



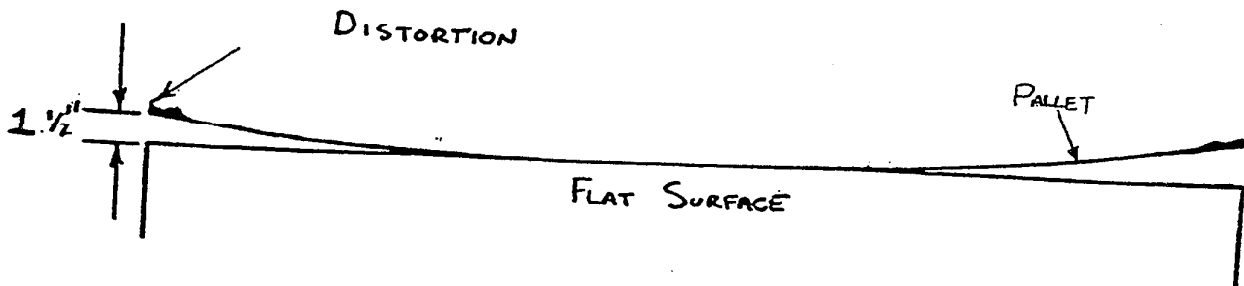
ATTACH RAIL



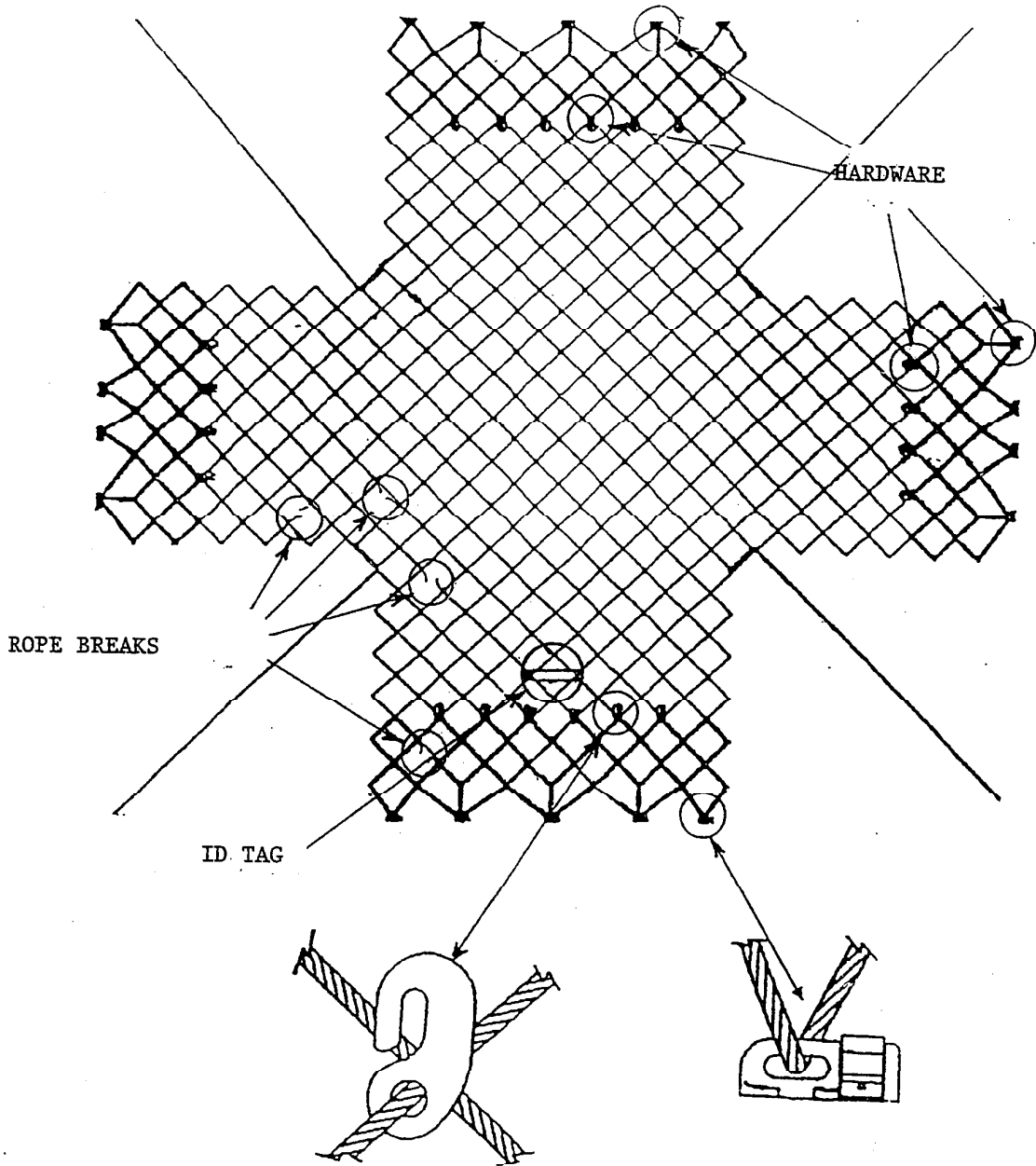
88 X 125 Aluminum Pallet with knotted rope net restraint



Seat Track lips

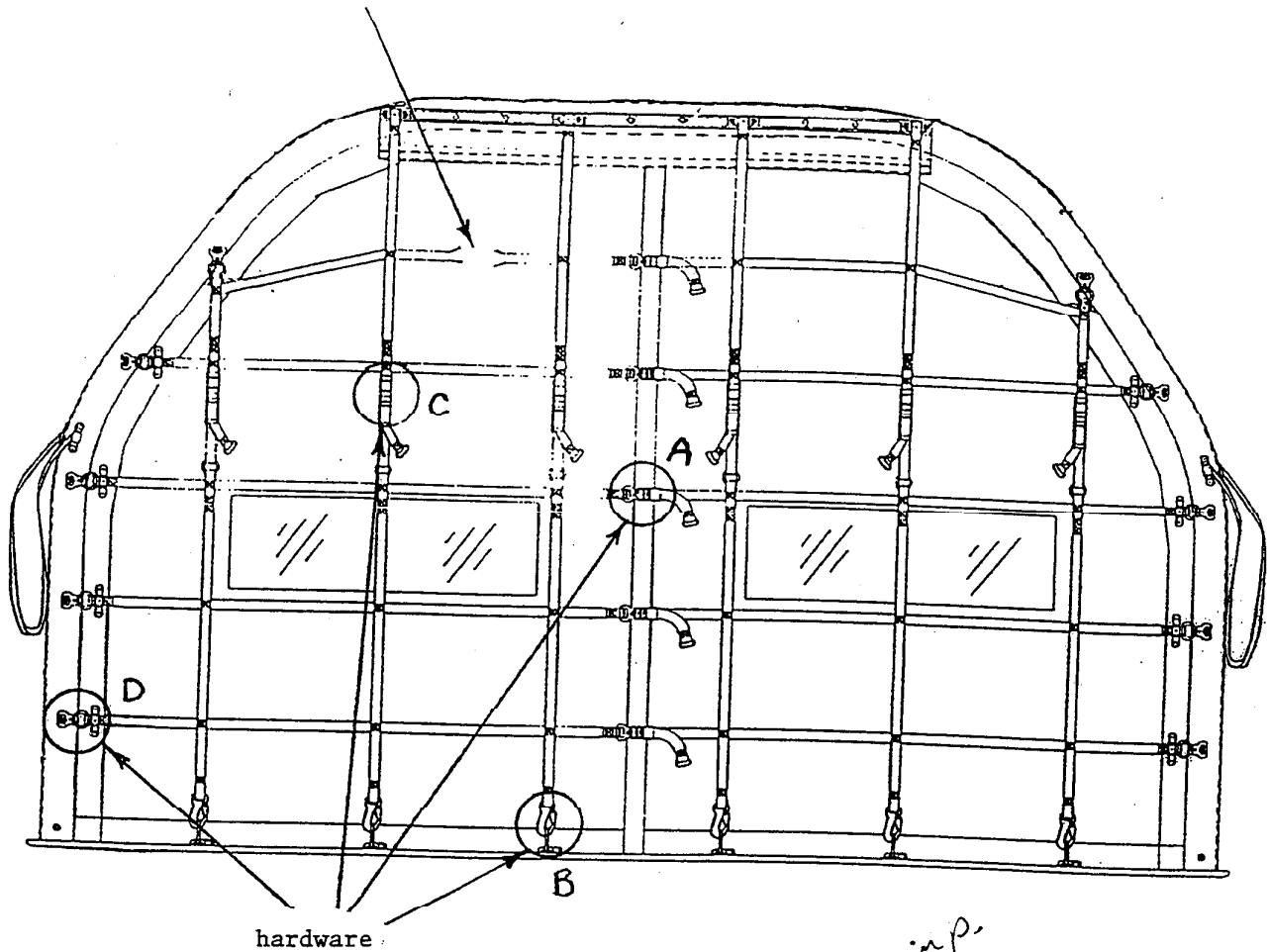


88 X 125 Aluminum Pallet with Knotted Rope Net Restraint

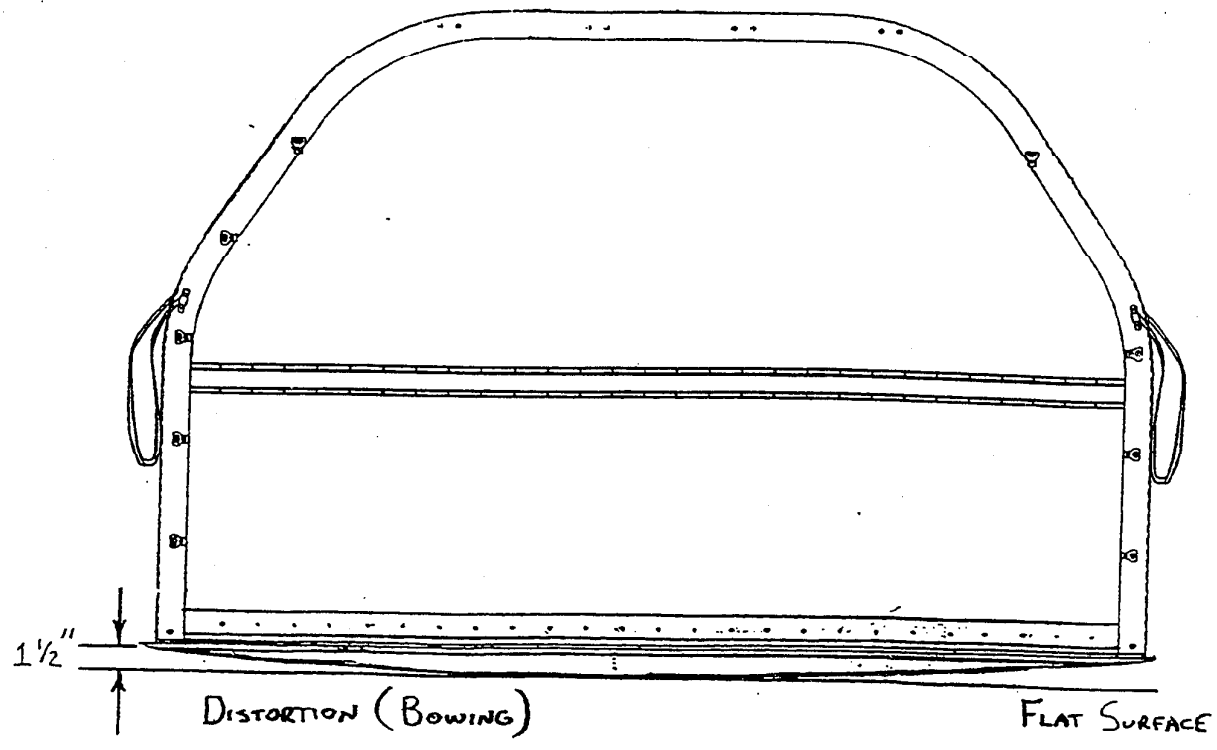
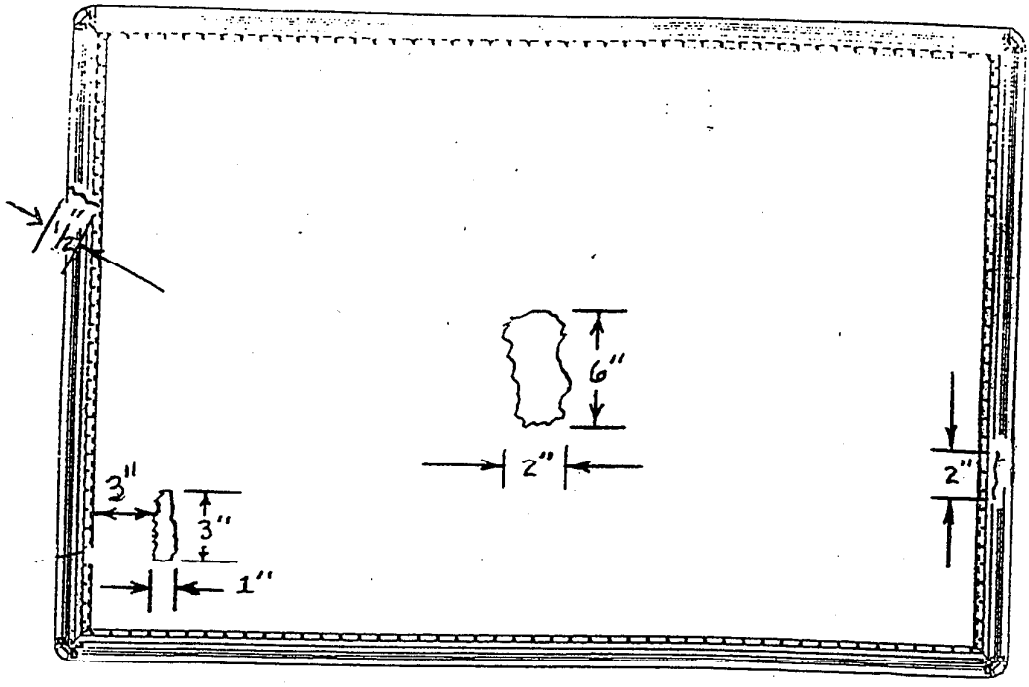


88 X 125 Aluminum/Polycarbonate(Lexan) with Curtain and Net Restraint

broken webbing



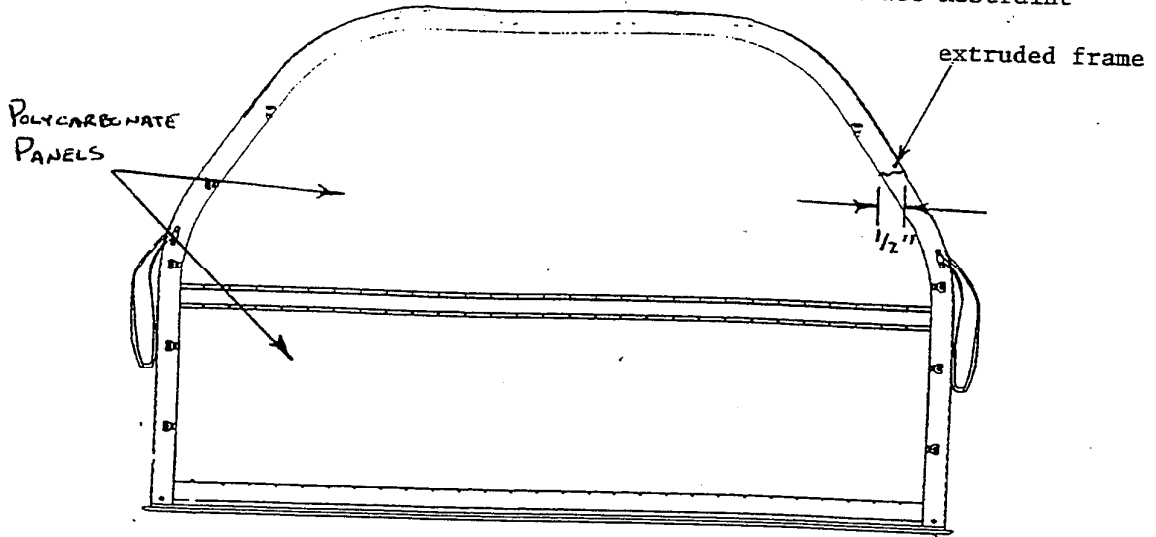
Nothing is more imp.  
vinal curtain can  
be torn.



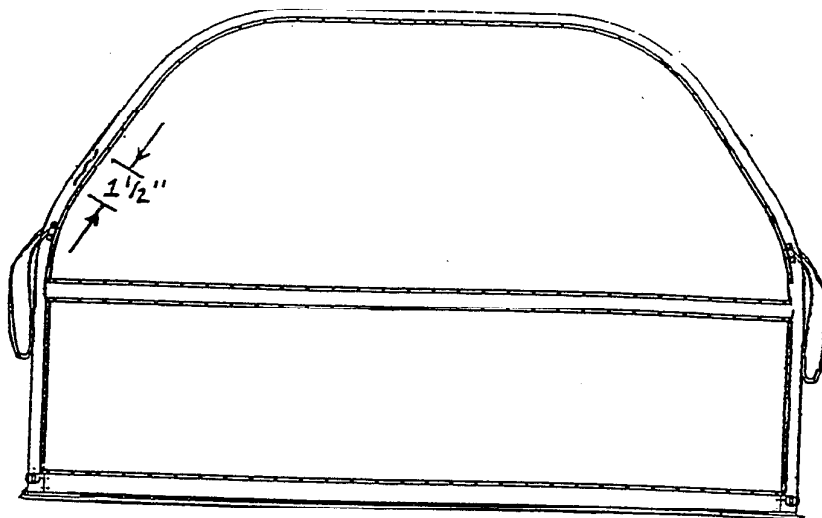
88 X 125 Aluminum/Polycarbonate(Lexan) with Curtain and Net Restraint



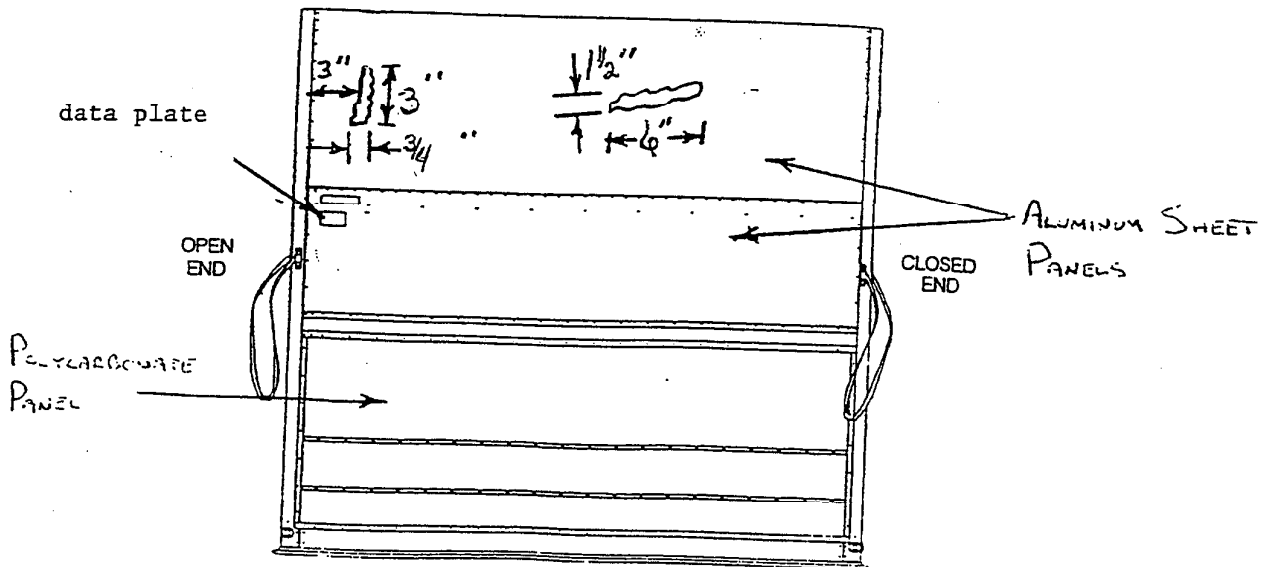
88 X 125 Aluminum/Polycarbonate(Lexan) with Curtain and Net Restraint



Front View

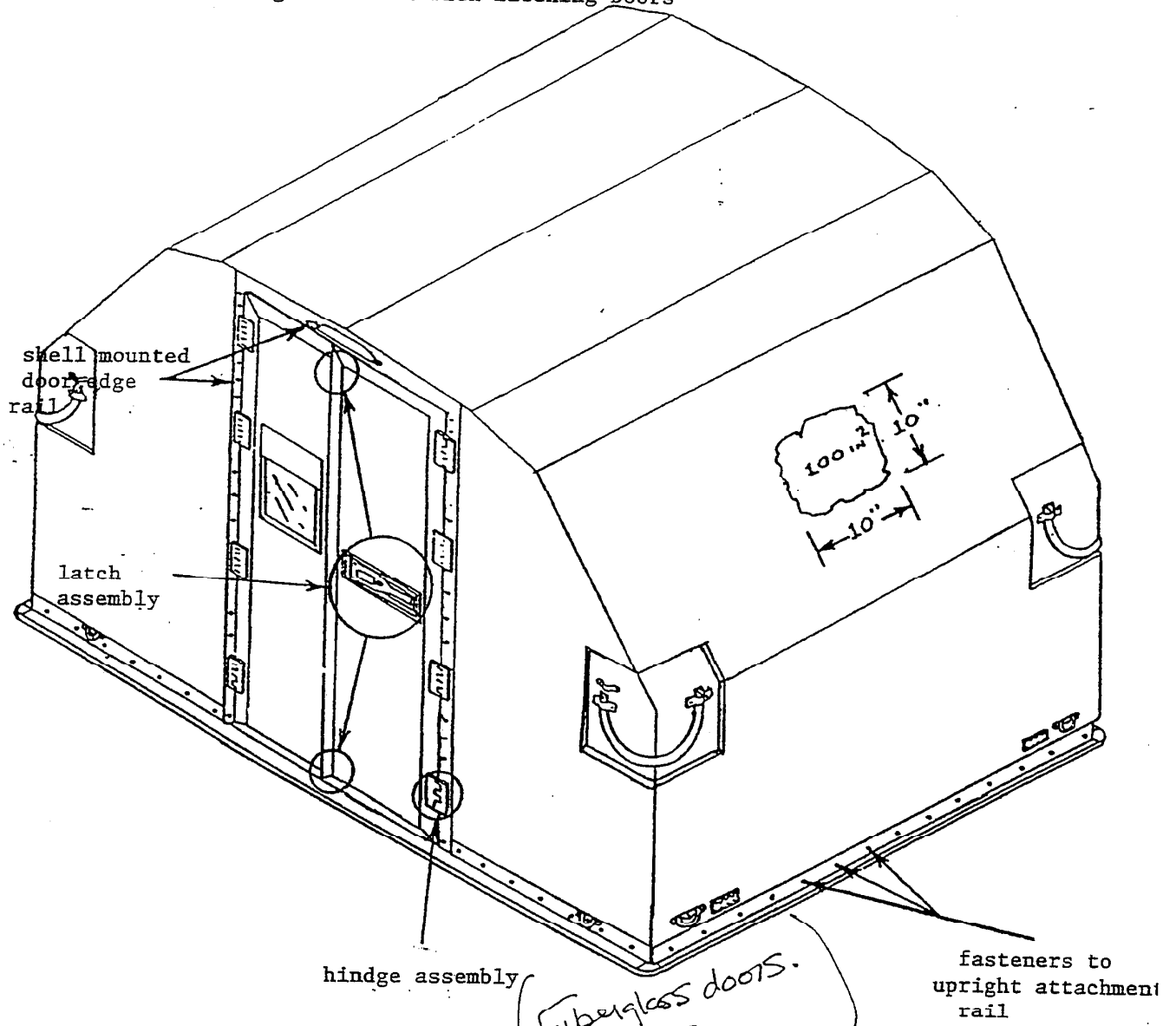


Rear View

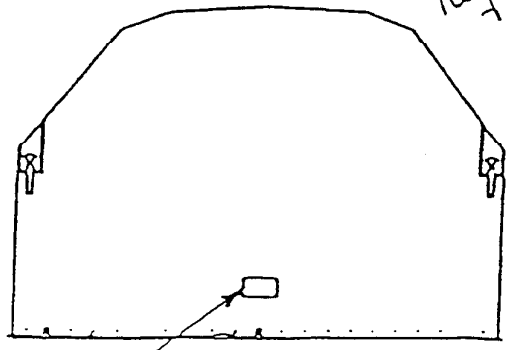


Right Side View

88 X 125 Fiberglass Shell with Latching Doors



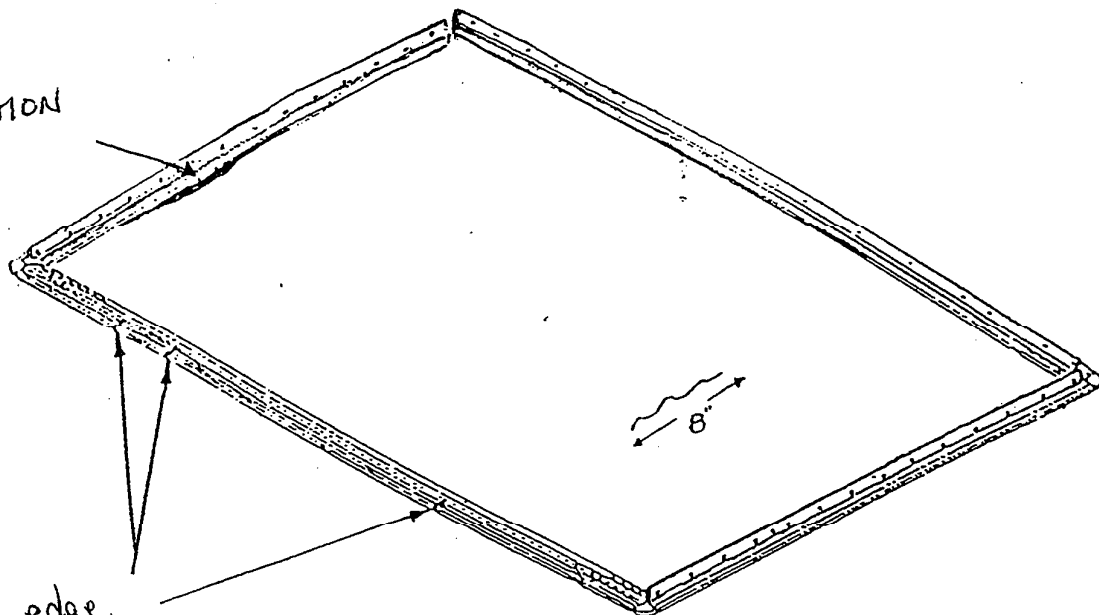
*Fiberglass doors.  
7 angle.  
Security door.  
Same  
Requirements.*



data plate

88 X 125 Fiberglass Shell with Latching Doors

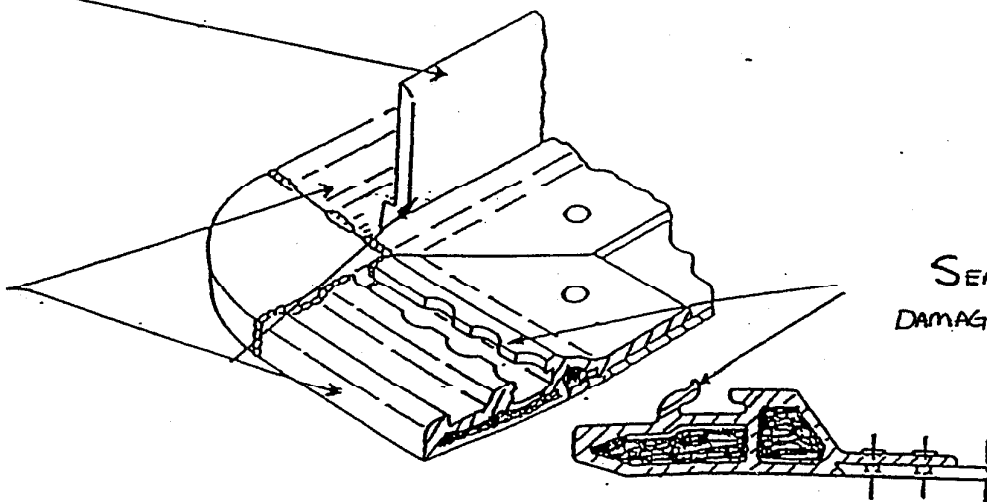
VISIBLE SEPERAYON



edge rail damage

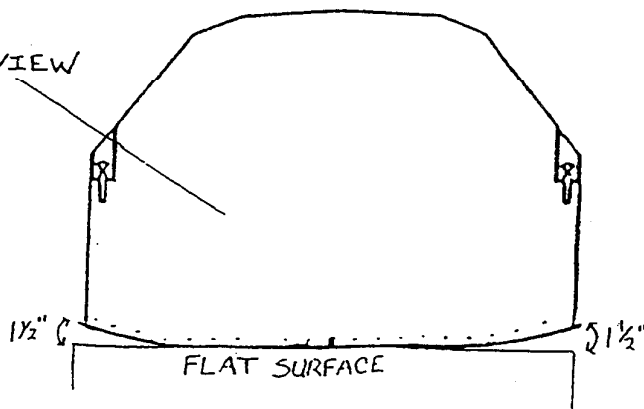
ATTACH RAIL

EXTRUDED RAIL



SEAT TRACK DAMAGED LIP

REAR VIEW

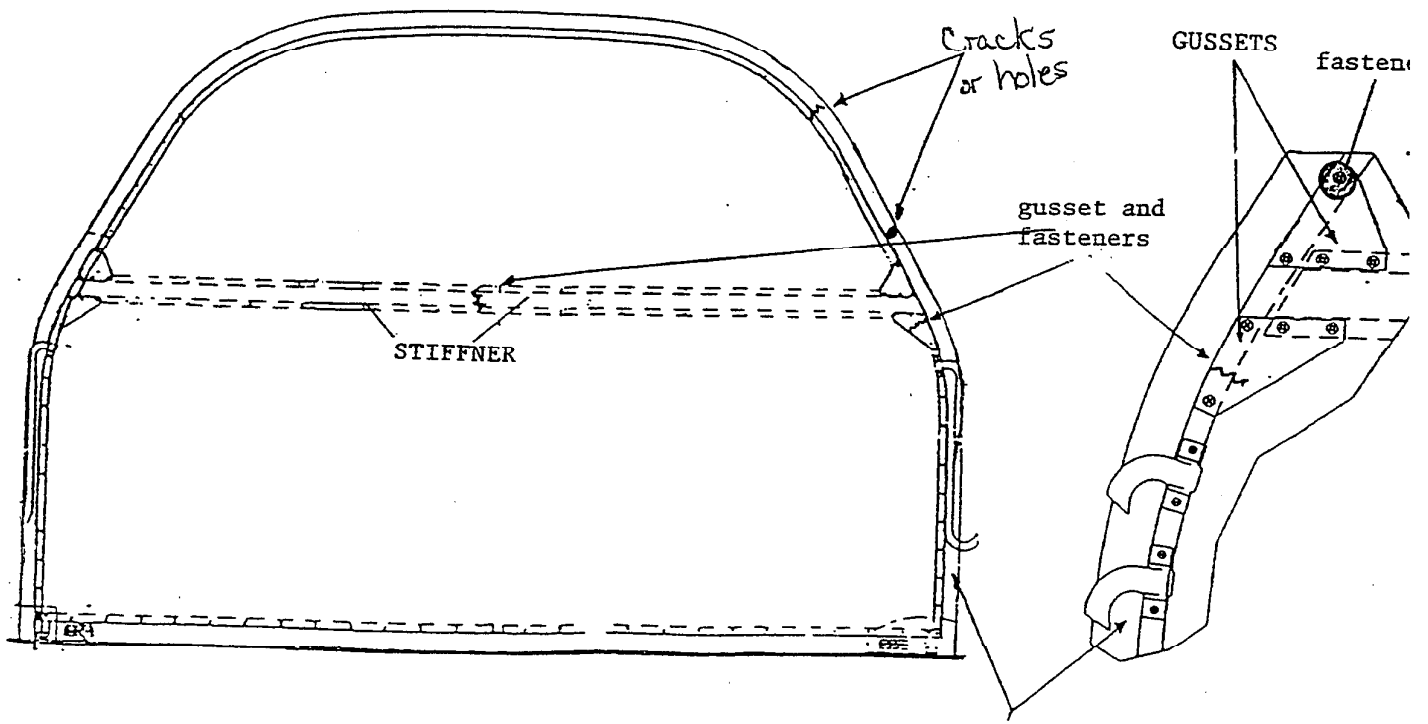
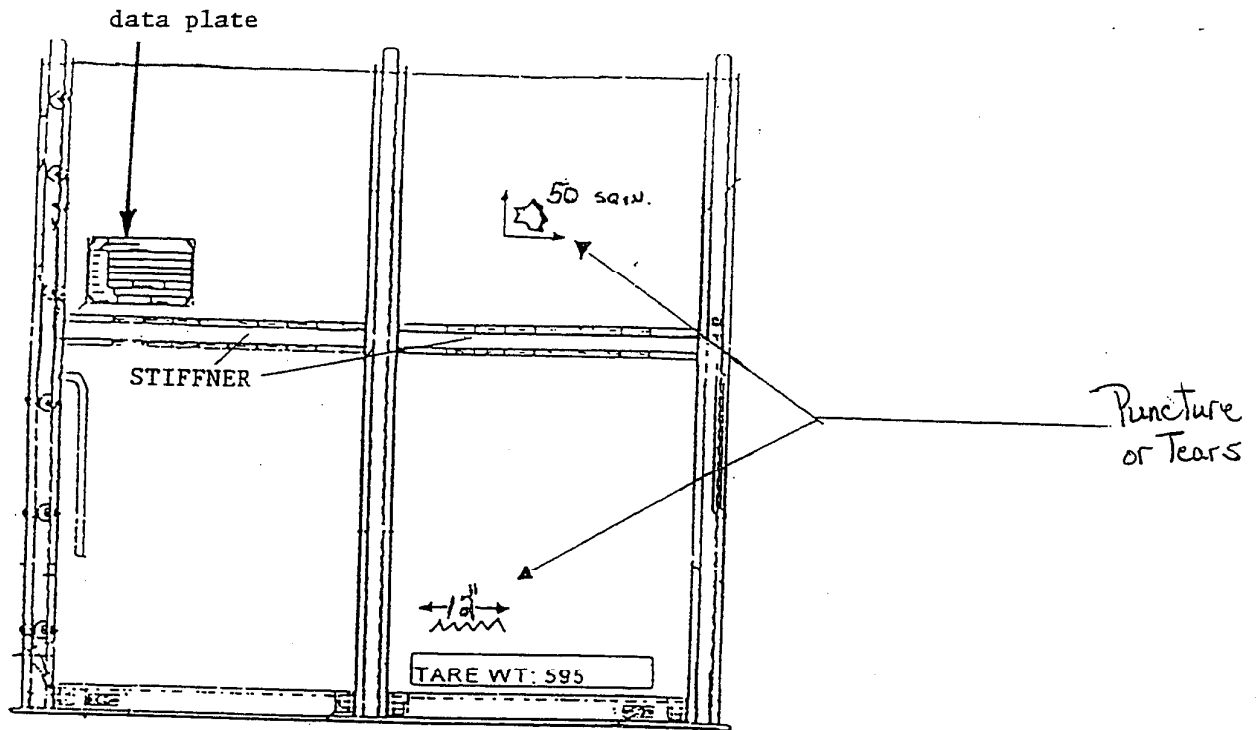


1 1/2"

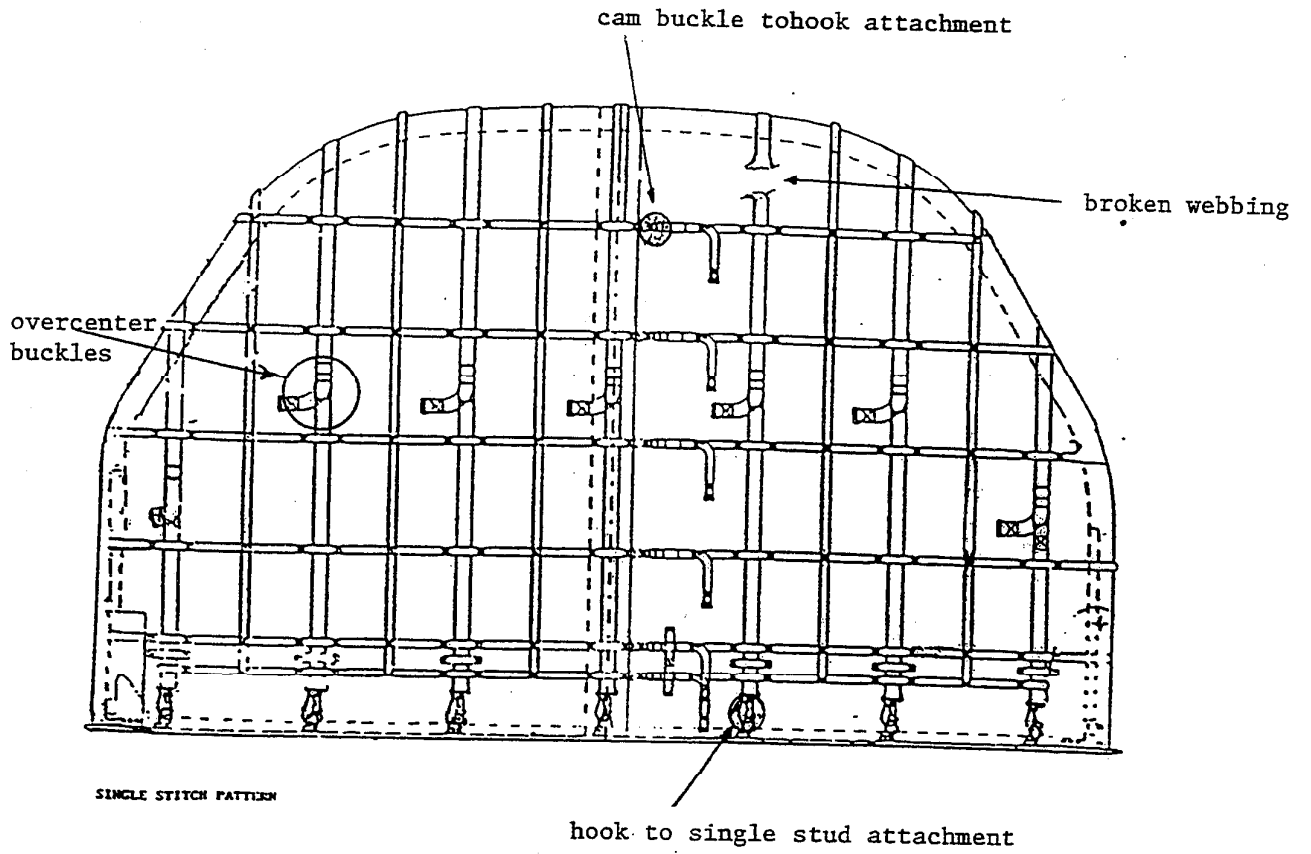
FLAT SURFACE

1 1/2"

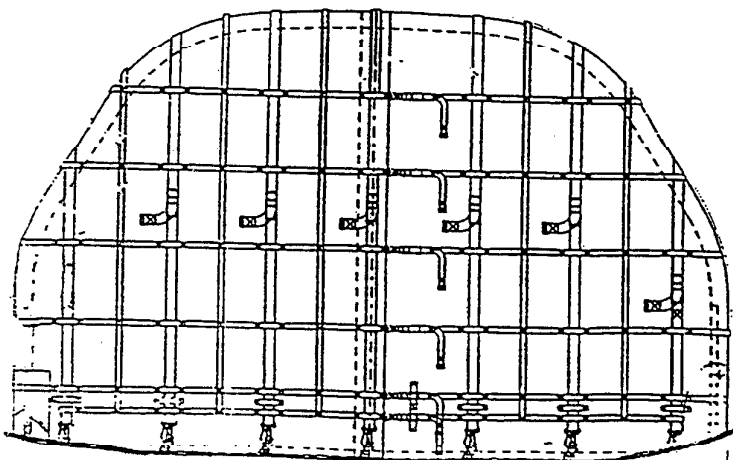
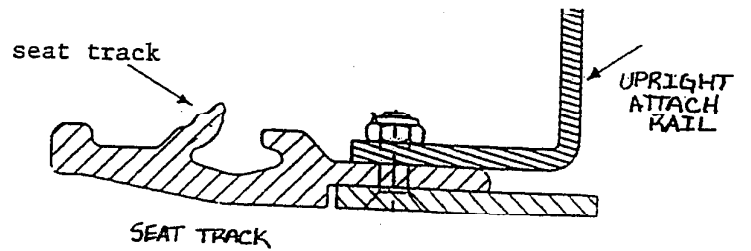
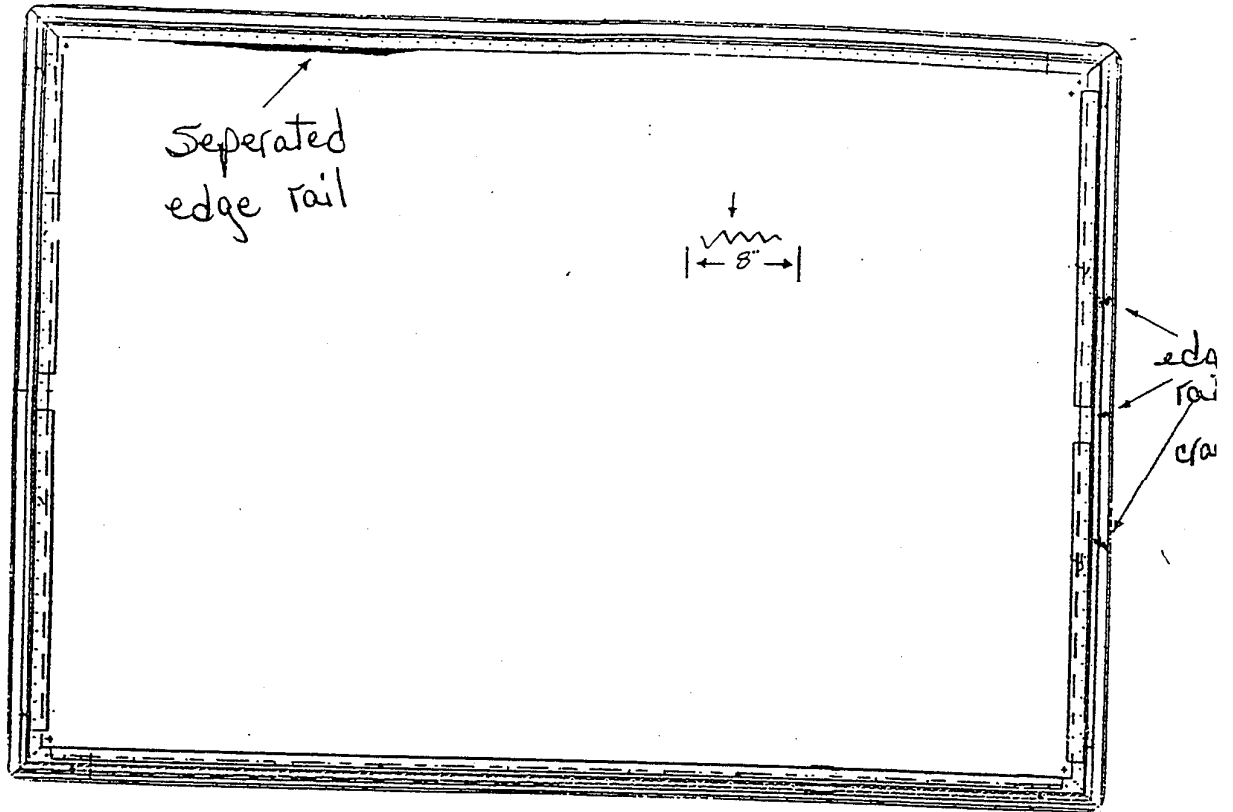
88 X 125 Aluminum Framed Shell with Fiberglass/Lexan(Polycarbonate) Panels  
Curtain and Net Restraint



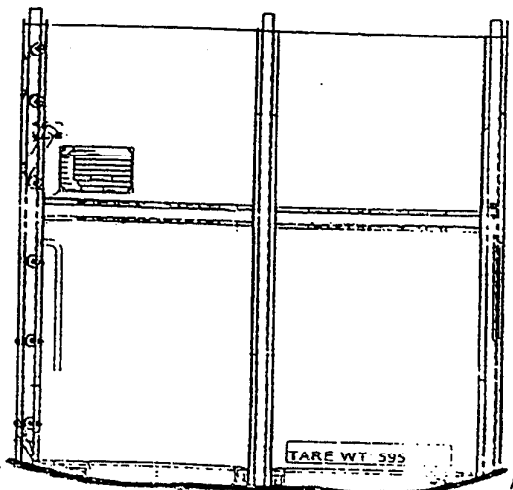
88 X 125 Aluminum Framed Shell with Fiberglass/Lexan(Polycarbonate) Panels  
Curtain and Net Restraint..



88 X 125 Aluminum Framed Shell with Fiberglass/Lexan(Polycarbonate) Panels, Curtain and Net



FLAT SURFACE



FLAT SURFACE

1 1/4"

2 1/4"

NAME \_\_\_\_\_

DATE \_\_\_\_\_

Container / Pallet Test

1. Where is the data plate (I.D. Tag) located on a fiberglass open front container if you are standing in front of the curtain looking at it?  
A. Left Side  
B. Right Side  
 C. Back  
D. Top
  
2. Do all containers need a data plate or I.D. Tag to be airworthy?  
 Yes or No
  
3. Where is the data plate (I.D. Tag) located on an Air Cargo aluminum lexan container if you are standing in front of the unit looking at it?  
A. Left Side  
 B. Right Side  
C. Back  
D. Top
  
4. Is a container airworthy if corners are missing on the base?  
 Yes or  No
  
5. Is a pallet airworthy if it has cracked or missing corners?  
 Yes or  No
  
6. If the doors will not lock on a fiberglass (Postal) door container, is it airworthy?  
Yes or  No
  
7. If you are looking at a fiberglass container and it has a crack in it that exceeds 12 inches is that container airworthy?  
Yes or  No

8. How much floor (Edgerail) deflection would take a pallet or container fully loaded out of service?
- A. 1/2 inches
  - B. 1 inch
  - C. 3/4 inch
  - D. 1 1/4 inches
9. Are any cracks or holes allowed in the plate or floor pan of any pallet or container?
- Yes or No
10. Are cracked corners just cause to take a container out of service?
- Yes or  No
11. On an Air Cargo aluminum lexan container - the allowable damage limit to lexan (not to exceed) airworthy?
- A. 5 inches not to exceed 50 square inches
  - B. 20 inches not to exceed 50 square inches
  - C. 12 inches not to exceed 50 square inches
  - D. 6 inches not to exceed 36 square inches
12. Are any cracks or tears on gussets or stiffeners allowed in Air Cargo aluminum lexan containers?
- Yes or  No
13. If you have 3 rivets missing in a row on an Air Cargo container panel will that put that container out of service?
- Yes or No
14. If you are looking at a fiberglass container with a 15 inch tear in the curtain is that unit considered unairworthy?
- Yes or  No
15. If you are looking at an AMJ with a severely damaged or ripped door cable would that make that container unairworthy?
- Yes or No





## MEMORANDUM

**TO:** Thomas M. Wood  
**FROM:** Debbie Griffin / Program Specialist / Maintenance Training  
**SUBJECT:** Aircraft Loading Manual Future Training  
**DATE:** March 25, 1999

---

Thomas,

I have recently had the opportunity to attend the ULD Training conducted at the Dayton Hub. It has been very successful thus far, at providing in depth training of Chapter Nine of the Aircraft Loading Manual.

I have asked several managers and supervisors how they were planning to train on the other contents of the manual. It is my understanding that the future and completion of ALM training is to be and currently being conducted by the managers and supervisors of each area of the Hub. The training is being designed to conform to each individual job function and taken directly from the ALM and the ALM CBT.

It is also my understanding that forth coming, the distribution of revision two of the ALM will also require Maintenance training to develop additional recurrent training materials. These materials will provide instruction to all previously involved and newly involved EWW, EWA or Contracted Employees. I am currently reviewing different possibilities at this time. Please let me know of any additional information regarding this issue comes about.

Thank you,

