YOUR AIRWAYS
CARGO HANDLING MANUAL

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Revision Orig

Date 08/15/09

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PERSON/LOCATION MANUAL ASSIGNED TO: _____

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Orig	08/15/09						

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REVISION HIGHLIGHTS AND INSTRUCTIONS

CONTENTS

1. Effectivity

This document highlights revisions incorporated into Your Airways Cargo Handling Manual Revision No. Orig. Refer to the List of Effective Pages for complete listing of current effectivity.

2. Instructions and Highlights

A. FORMAT: This manual is in Section/Chapter format and numbered in "page-blocks". See “Preface: Manual Formant” for details on page numbering and manual layout specific to this manual.

B. CHANGE BARS:

(1) Additions and changes on text pages are indicated by a vertical line adjacent to the change. Revision bars are not included where an editorial change is made (i.e., those correcting format or style changes).

(2) Entire Manual: (Action: New Manual)

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DATE: 08/15/09

LIST OF EFFECTIVE PAGES

REVISION: Orig

(Continued on next page)

FAA APPROVAL (SO FSDO 11)

Effective Date:	Print Name:	Signature:

DATE: 08/15/09

List of Effective Pages

REVISION: Orig

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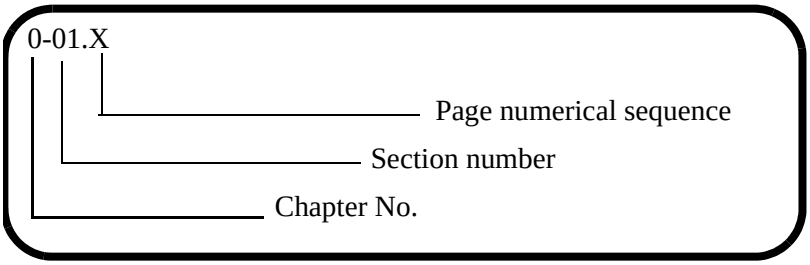
MANUAL FORMAT

CONTENTS

1. Manual Numbering

This manual is numbered in page blocks (Chapter/Section/Pages). An example of Page Numbering is as follows:



2. Revision Service (Cargo Handling Manual)

You can help Your Airways improve this publication by calling attention to errors and by recommending improvements and stating reasons for the recommendation. A Your Airline (Manual Change Request) Form WP-020 must be completed in order to initiate a change to a company manual or form. Refer to Ch 2 Sec 1 in the Your Airways Publications Manual for instructions on how to complete the form.

3. SRRS/Related CFRs

A. Specific Regulatory Requirements

(1) 119.43(b), 119.43(b)(1), 119.43(b)(2), 119.43(c), 121.135(a)(1), 121.135(b)(1), 121.135(b)(2), 121.135(b)(20), 121.135(b)(3), 121.135(b)(9), 121.153(b), 121.198(a), 121.198(c), 121.665, 121.693(a), 121.693(b)(1), 121.693(b)(2), 121.693(b)(3), 121.693(b)(4), 121.693(c), 121.693(d), 121.693(e), 121.695(a)(1), 121.695(a)(2), 121.695(a)(3), 121.695(b), 121.697(a)(1), 121.697(a)(2), 121.697(a)(3), 121.697(a)(4), 121.697(a)(5), 121.697(b), 121.697(c), 121.697(d), 121.697(e)(1), 121.697(e)(2), A.096, A.097, A.098, A.099, E.096 Weight and Balance Control Procedures

B. Related CFRs and FAA Policy/Guidance

(1) FAA Order 8900.1, Vol.6 Ch.2 Sec. 3

(2) Advisory Circular AC 120-27E

- END -

CODES

CONTENTS

1. Basics

A unit load device, or ULD, is a pallet or container used to load luggage, freight, and mail on wide-body aircraft and specific narrow-body aircraft. It allows a large quantity of cargo to be bundled into a single unit. Since this leads to fewer units to load, it saves ground crews time and effort and helps prevent delayed flights. Each ULD normally has its own packing list (or manifest) so that its contents can be tracked.

ULDs come in two forms: pallets and containers. ULD pallets are rugged sheets of aluminum with rims designed to lock onto cargo net lugs. ULD containers, also known as cans and pods, are closed containers made of aluminum or combination of aluminum (frame) and Lexan (walls), which, depending on the nature of the goods to be transported, may have built-in refrigeration units. Examples of common ULDs and their specifics are listed below.

CONTINUED ON FOLLOWING PAGE

A. Common ULD Designation Table

Container Type	Volume	Base Dimension	Overall Dimension	Remarks
LD1	(4.90 M3) 173 cu ft	(156 x 153 x 163 cm) 61.5 x 60.4 x 64 in	(234 x 153 x 163 cm) 92 x 60.4 x 64 in	Contoured, Half Width
LD2	(3.40 m3) 120 cu ft	(119 x 153 x 163 cm) 47 x 60.4 x 64 in	(156 x 153 x 163 cm) 61.5 x 60.4 x 64 in	Contoured, Half Width
LD3	(4.33 m3) 153 cu ft	(164 x 153 x 163 cm) 64.5 x 60.4 x 64 in	(201 x 153 x 163 cm) 79 x 60.4 x 64 in	Contoured, Half Width
LD6	(8.95 m3) 316 cu ft	(318 x 153 x 163 cm) 125 x 60.4 x 64 in	(407 x 153 x 163 cm) 160 x 60.4 x 64 in	Contoured, Full Width, Equivalent to 2 LD3s
LD8	(6.88 m3) 243 cu ft	(244 x 153 x 163 cm) 96 x 60.4 x 64 in	(318 x 153 x 163 cm) 125 x 60.4 x 64 in	Contoured, Full Width, Equivalent to 2 LD2s
LD11	(7.16 m3) 253 cu ft	(318 x 153 x 163 cm) 125 x 60.4 x 64 in	(318 x 153 x 163 cm) 125 x 60.4 x 64 in	Same as LD-6 Without Contours, Rectangular

Figure 2-01-1

B. Common Pallet ULD Designation Table

Pallet Type	Volume	Base Dimensions	Remarks
LD8	(6.88 m3) 243 cu ft	(153 x 244 cm) 60 x 96 in	Same footprint as container variant (FQA-prefix)
LD11	(7.16 m3) 253 cu ft	(153 x 318 cm) 60.4 x 125 in	Same footprint as container variant (FLA & PLA-prefix)
LD7 (variant 1)	(10.8 m3) 381 cu ft	(224 x 318 cm) 88 x 125 in	(PAG & P1P-prefixes)
LD7 (variant 2)	(11.8 m3) 417 cu ft	(244 x 318 cm) 96 x 125 in	(PMC & P6P-prefixes)

Figure 2-01-2

2. Main Deck ULDs

There several common types of contoured main deck ULDs. Initially ULD contouring was simply a triangle removed from one or two corners of the profile of the ULD, such as the common LD3 and LD6. Main deck ULDs use curves for the contoured shape to truly maximize cargo volume.

Main Deck ULDs and pallets are not only taller than lower deck ULDs, they are frequently two or four times longer. They are usually organized like an LD6, using the width of the plane and missing two profile corners.

3. ULD capacity

Container capacity of an aircraft is measured in positions. Each half-width container (LD1/ LD2/LD3) in the aircraft it was designed for occupies one position. Typically, each row in a cargo compartment consists of two positions. Therefore, a full-width container (LD6/LD8/ LD11) will take two positions.

Aircraft loads can consist of containers, pallets, or a mix of ULD types, depending on requirements. See Chapter 6 for specific configurations of Your Airways aircraft.

4. Identification

For each Unit Load Device (ULD) different terminology is used to describe them, these either originate from the Aircraft Builder or IATA. The IATA definitions are more commonly known and are referred to as the common designator. The IATA Identification code consists of nine to ten characters, The Code is consists of letters and numbers.

A. The three-letter prefix identifies its type,

The characters or letters identifying the ULD as follows.

(1) 1st Letter: ULD Category;

1st Letter	ULD Category
A	Certified Aircraft Container
D	Non Certified Container
F	Non Certified Aircraft Pallet
G	Non Certified Aircraft Pallet Net
J	Non Certified Thermal Aircraft Container
M	Non Certified Thermal Aircraft Container
N	Certified Aircraft Pallet Net
P	Certified Aircraft Pallet
R	Certified Thermal Aircraft Container
U	Non Structural Igloo

Figure 2-01-3

CONTINUED ON FOLLOWING PAGE

(2) 2nd Letter: ULD Base (dimensions and compatible net when applicable);

2nd Letter	Dimensions
A	(224 x 318 cm) 88 x 125 in
B	(224 x 275 cm) 88 x 108 in
E	(224 X 135 cm) 88 x 53 in
F	(244 x 299 cm) 96 x 117.75 in
G	(244 x 606 cm) 96 x 238.5 in
H	(244 x 913 cm) 96 x 359.25 in
J	(244 x 1219 cm) 96 x 480 in
K	(153 x 156 cm) 60.4 x 61.5 in
L	(153 x 318 cm) 60.4 x 125 in
M	(244 x 318 cm) 96 x 125 in
N	(156 x 244 cm) 61.5 x 96 in
P	(119 x 153 cm) 47 x 60.4 in
Q	(153 x 244 cm) 60.4 x 96 in
R	(244 x 498 cm) 96 x 196 in
X	Miscellanies Size
Y	Miscellanies Size
Z	Miscellanies Size

Figure 2-01-4

(3) 3rd Letter: ULD Contour or Compatibility.

B. Followed by a 4 or 5 digit serial number (4 if prior to October 1, 1993; either 4 or 5 if post October 1, 1993) to uniquely identify it from others of the same type,

C. Ending with a two character (alpha-numerical) suffix identifying the ULD's owner (if an airline, often the same as IATA designator codes).

Example: **AKN 12345 DL** means that the ULD is a forkliftable LD3 with the unique number 12345 and its owner is Delta Air Lines.

CONTINUED ON FOLLOWING PAGE

5. Common prefix Table

Code	Description
AVY	LD1 with forklift holes
AKC	LD1 without forklift holes
DPN	LD2 with forklift holes
DPE	LD2 without forklift holes
AKN	LD3 with forklift holes
AKE	LD3 without forklift holes
QKE	LD3 same as AKE but made of Kevlar
RKN	LD3 with refrigeration unit
ALB	LD4 with forklift holes
ALP	LD4 without forklift holes
AWC	LD6 with forklift holes
ALF	LD1 without forklift holes
PAD	LD7, large pallet (88" x 125"), flat
P1P	LD7, large pallet (88" x 125"), folding wings for overhang
XAW	LD7, large pallet (88" x 125"), fixed wings for overhang
AAA	LD7 container (88" x 125"), 81" tall, contoured for maindeck narrow-body
AAD	LD7 container (88" x 125"), 96" tall, contoured for maindeck wide-body (aka A1)
AAY	LD7 container (88" x 125"), 81" tall, contoured for maindeck wide-body and narrow-body (aka A2)
AAZ	LD7 container (88" x 125"), 64" tall, contoured for maindeck wide and narrow-body and any belly (aka L9)
PMC	LD7, large pallet (96" x 125")
AMJ	LD7 container (86" x 125"), 96" tall, contoured for maindeck wide-body (aka M1)
DQF	LD8 with forklift holes
FQA	LD8 pallet (same floor dimensions as DQF)
AAP	LD9
RAP	LD9 with refrigeration unit
ALD	LD11 container (aka L11)
ALP	LD11 without forklift holes

Code	Description
RWB	LD11 with refrigeration unit
FLA	LD11 pallet
PLA	LD11 pallet
AAF	LD26 container
AAU	LD29 container
RAU	LD29 container with refrigeration unit
AMU	LD39 container contour similar to ALF, but deeper and bigger extensions. biggest lower-deck container
AKH, AKW	LD3-45 mainly for A320/321, same base as AKE, extensions on both sides, 45 inches high
AMA	M1 container
AMD	M1H container
AGA	M2 container
PGA	M6, large pallet, 96 by 238.5 inches. freighter main deck only
VRA	M6, large pallet, 96 by 196 inches. Twin car rack
HMA	Horse stall
KMA	Sheep and goat pen

Figure 2-01-5

6. Pallet Maximum Gross Weight Table

Size Code	IATA Code	Pallet Size	Maximum Gross Weight
A	P1/PA	88 x 125 in (2235 x 3175 mm)	15,000 lb (6,804 kg)
B	P2/PB	88 x 108 in (2235 x 2743 mm)	10,000 lb (4,536 kg)
G	PG	96 x 238.5 in (2438 x 6058 mm)	30,000 lb (13,608 kg)
K	PK	60.4 x 61.5 in (1534 x 1562 mm)	3,500 lb (1,587 kg)
L	PL/P9	60.4 x 125 in (1534 x 3175 mm)	7,000 lb (3,175 kg)
M	PM/P8	96 x 125 in (2438 x 3175 mm)	15,000 lb (6,804 kg)
N	PN	61.5 x 96 in (1562 x 2438 mm)	5,400 lb (2,450 kg)
R	PR	96 x 196 in (2438 x 4978 mm)	25,000 lb (11,340 kg)

Figure 2-01-6

7. Commonly Used ULD Table

Type	Size	Codes
Pallets	88 x 125	PAA, PAB, PAC, PAD, PAE, PAG, PAH, PAJ Obsolete codes: P1A, P1C, P1D, P1E, P1G, PAP, PAU, PAW
Pallets	88 x 108	PBA, PBB, PBC, PBD, PBE , PBF, PBG, PBH, PBJ, PBK, PBL, PBM, 463L (military) Obsolete code: PDP,P2A,P2C, P2G, P2J, P2P
Pallets	96 x 238.5	PGA, PGE, PGF, PGG Obsolete codes: P7A, P7E, P7F, PSA, PSG
Pallets	60.4 x 125	PLA, PLD Obsolete codes: P9A, P9B, P9P, P9R, PLB
Pallets	96 x 125	PMA, PMB, PMC Obsolete codes: P6A, P6P, P6Q, PMP, PQP
Pallets	96 x 196	PRA Osolete codes: P4A, P4M, PMA, PZA
Main Deck Containers	88 x 125	AAY Obsolete Codes: AA3, AAA, SAA, SAY, TA5, SAB, TAB
Main Deck Containers	96 x 96 x 125	AMJ, HMJ
Centerline Containers	96 x125 x 88	AAA
Centerline Containers	96 x 96 x 238.5	AGA, ASEE
Centerline Containers	96 x 96 x 125	AMA, AMK, AQ6, AQA, RQA, HMA
Lower Hold Containers	88 x 125 x 64	AAF, RAF, QAF, AAK, DAK, LAK, MAK, RAK, UAK, QAK, AAP, DAP, MAP, RAP, QAP Obsolete Codes: AAA, AAN, AAR, MA4, MAN, RA4, RAN, RAS, RAZ, SAK, SAR, AA2, RA2
Half Width Containers	60.4 x 61.5 x 64	AKE, AVA, AVB, AVE, AVM, DVA, DVE, DVP, AKN, AVN, DVN
Half Width Containers	60.4 x 125 x 64	ALD, ALP, AW2, AWB, AWD. DLP, AW4, AWN, AWR, AWS, ALF, AWA, AWF, AWG, AWC, DWB, MWB, RWB, MWN, RW2, RWD
Containers	96 x 125 x 64	AMF
Other odd sized ULD’s may be accommodated on MD-11F an d DC-10F. Refer to the IATA ULD Technical Manual		

Figure 2-01-7

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ULD QUICK REFERENCE TABLE

CONTENTS

1. Table Notes

A. Internal Volume

Not all ULD's in a given series may not be identical as construction techniques and material used in their construction may have impact on the internal volume. When a range is provided it represents the low and high values from various reference material. When a single number is used, it represents the best data available.

B. Tare Weight

The Weight range provided is based on the best available data. Pallet and container weights do not include the weight of nets or straps. If equipped with either 25 pounds should be added per net and 1 pound per strap.

C. Maximum Gross Weight

This is Maximum Gross weight of the ULD. During operations, the operational maximum weight may be further limited by aircraft, position or inoperative lock mechanisms.

CONTINUED ON FOLLOWING PAGE

2. Unit Load Devices Reference Table

Unit Load Device Refrence Chart		Base Dimensions Cm & (In)	TYPE	NOTE	LBS TARE	LBS MAX	KGS TARE	KGS MAX	M 3	CONT	LBS Lower	LBS Main	KGS Lower	KGS Main
AAA	N/A	318 x 224 (125 x 88)	MD		430	13325	195	6045	Variable	N/A	-	13325	-	6045
AAC	N/A	318 x 224 (125 x 88)	MD		550	13325	250	6045	Variable	N/A	-	13325	-	6045
AAF	LD26	319 x 224 (125 x 88)	LD		585	13300	265	6033	13,2	LDW	13300	-	6033	-
AAP	LD9	318 x 224 (125 x 88)	LD		475	13300	215	6033	10,0	LD	11100	13300	5035	6033
AAU	LD29	318 x 224 (125 x 88)	LD		585	13300	265	6033	14,2	LDW	13300	-	6033	-
AKC	LD1	156 x 153 (61,5 x 60,4)	LD		200	3500	85	1587	4,8	LDW	3500	-	1587	-
AKE	LD3	156 x 153 (61,5 x 60,4)	LD		200	3500	85	1587	4,2	LDW	3500	-	1587	-
ALF	LD6	318 x 153 (125 x 60,4)	LD		500	7000	230	3175	8,8	LDW	7000	-	3175	-
AMA	M1	318 x 244 (125 x 96)	MD		775	15000	350	6804	16,4	Q6	-	15000	-	6804
AMD	M1H	318 x 244 (125 x 96)	MD		815	15000	370	6804	19,9	Q7	-	15000	-	6804
AMU	LD39	318 x 244 (125 x 96)	LD		640	11100	290	5035	15,8	LDW	11100	-	5035	-
DPE	LD2	119 X 153 (47 x 60,4)	LD	*	200	2700	80	1225	3,4	LDW	2700	-	1225	-
PAG	P1P	318 x 224 (125 x 88)	-		255	13300	115	6033	Variable	*	10640	13300	4826	6033
PBJ	P2P	274 x 224 (108 x 88)	MD	1	255	10000	115	4536	Variable	*	10000	10000	4536	4536
PGA	P7E	606 x 244 (238,5 x 96)	MD	2	940	25000	425	11340	Variable	*	-	25000	-	11340
PLA	HP	318 x 153 (125 x 60,4)	LD		210	7000	95	3175	Variable	LD	7000	-	3175	-
PMC	P6P	318 x 244 (125 x 96)	-		275	15000	125	6804	Variable	*	11100	15000	5035	6804
PRA	P4M	496 x 244 (196 x 96)	MD	4	805	16210	365	7352	Variable	*	-	16210	-	7352
PYB	N/A	244 x (96 x 55)	MD	3	220	4740	100	2150	Variable	Q6	-	4740	-	2150
					LBS		KGS				LBS		KGS	
SPECIAL ULD's		Base Dimensions Cm & (In)	TYPE	NOTE	TARE	MAX	TARE	MAX	M 3	CONT	Lower	Main	Lower	Main
AAQ	SECURITY	318 x 224 (125 x 88)	LD		805	13300	365	6033	Variable	LD	10640	13300	4826	6033
HMA / PAB	HORSE	318 x 244 (125 x 96)	MD		2100	7715	950	3500	N/A	Q6	-	7715	-	3500
KMA	SHEEP	318 x 224 (125 x 88)	MD	5	995	15000	450	6804	N/A	Q6	-	15000	-	6804
RAP	COOLER	318 x 224 (125 x 88)	LD		885	13325	400	6045	Variable	LD	10640	13325	4826	6033
VRA	CAR	496 x 244 (196 x 96)	MD	5	1215	19620	550	8900	N/A	Q7	-	19620	-	7352

Figure 2-02-1

A. B747 Notes

*: For use on 8747 only load in pairs, container wings are towards the aircraft centerline.

(1) Locks will need to be adjusted to accommodate, additional tie downs may be required.

(2) Weights above 25.000 Lbs require additional tie downs, Prior Permission required from Your Airways for weights exceeding 31.200 Lbs.

(3) Only permitted in Positions QL & QR or as Floating Pallets

(4) Weights above 16.230 Lbs require additional tie downs, Prior Permission required from Your Airways for weights exceeding 20.000 Lbs.

(5) Additional tie downs may be required.

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ULD PHOTOS

CONTENTS

1. ULD Pictorials

A. LD-1

IATA ULD Code, AKC Contoured Container
Also known as, AVC, AVO, AVK, AVJ
Forkable, AVY
Classification, LD-1
Rate Class, Type 8
Suitable for, B747, B767, B777
Internal volume, 4.8 cu m (169.5 cu ft)
Maximum gross weight 1,588 kg (3,501 lb)

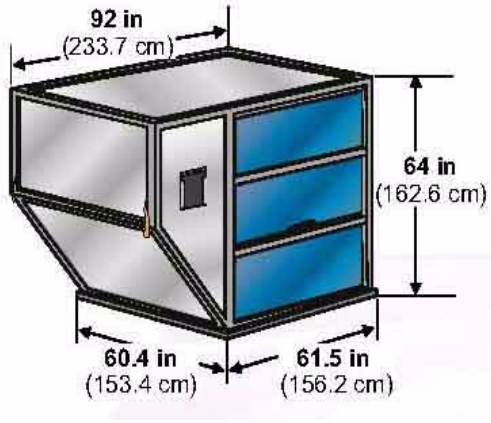

Figure 2-01-1

B. LD-2

IATA ULD Code, OPE Contoured Container
Also known as, APA, DPA
Forkable,DPN
Classification, LD-2
Rate Class, Type 80
Suitable for, B767, MD-11, DC-10
Internal volume, 3.4 cu m (120 cu ft)
Maximum gross weight 1,225 kg (2,700 lb)

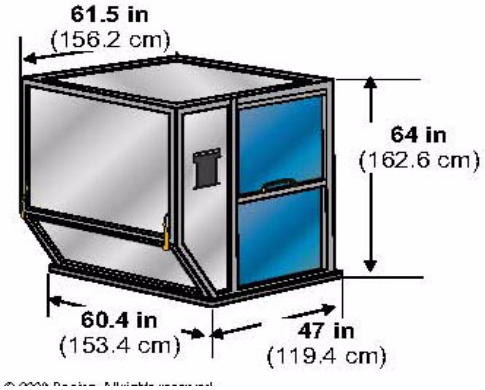

Figure 2-01-2

C. LD-3

IATA ULD Code, AKE Contoured Container
Also known as, AKE, AVA, AVB, AVC, AVK, OVA, DVE, DVP, XKS, XKG
Forkable, AKN, AVN, DKN, DVN, XKN
Classification, LD-3
Rate Class, Type 8
Suitable for, A300, A310, A330, A340, B747, B767, B777, DC-10, MD-11, L1011
Internal volume, 4.3 cu m (152 cu ft)
Maximum gross weight 1,588 kg (3,500 lb)

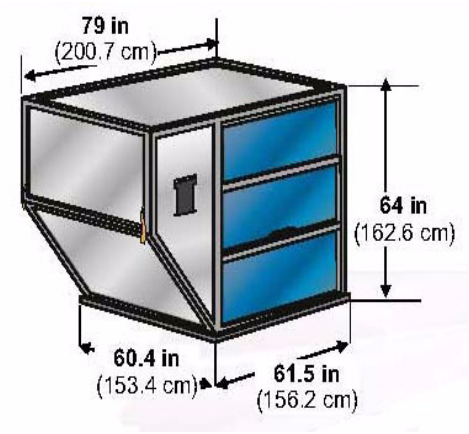

Figure 2-01-3

D. LD-4

IATA ULD Code, ALP Rectangular Container
Also known as, ALD, AWD, AWl, DLP
Forkable, ALB, ALC, AWB, AWC
Classification, LD-4
Rate Class, Type 8
Suitable for, B767, B777
Internal volume, 5.7 cu m (201 cu ft)
Maximum gross weight 2,449 kg (5,399 lb)

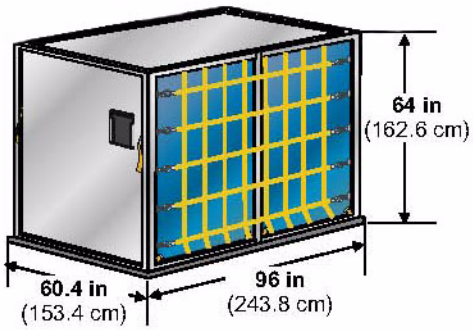

Figure 2-01-4

E. LD-6

IATA ULD Code, ALF Contoured container
Also known as, AWD, AWF
Forkable, AWC
Classification, LD-6
Rate Class, Type 6W
Suitable for A300, A310, A330, A340, B747, B777, DC-10, MD-11, L1011
Internal volume, 8.9 cu m (314 cu ft)
Maximum gross weight 3,175 kg (7,000 lb)

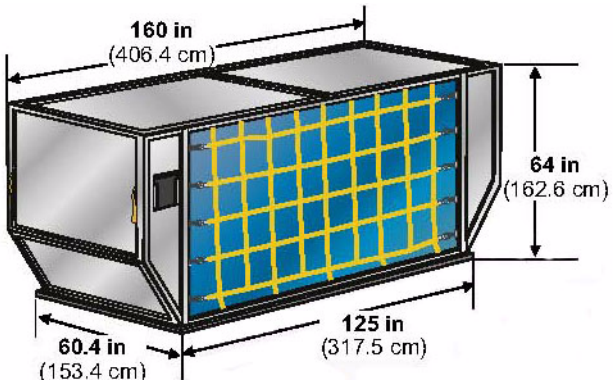

Figure 2-01-5

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F. LD-8

IATA ULD Code, OAF
Also known as, ALE, ALN, OLE, DLF,
Dap, Map
Classification, LD-8
Rate Class, Type 6A
Suitable for, B767
Internal volume, 6.85 cu m (242 cu ft)
Maximum gross weight 2,450 kg (5,401 lb)

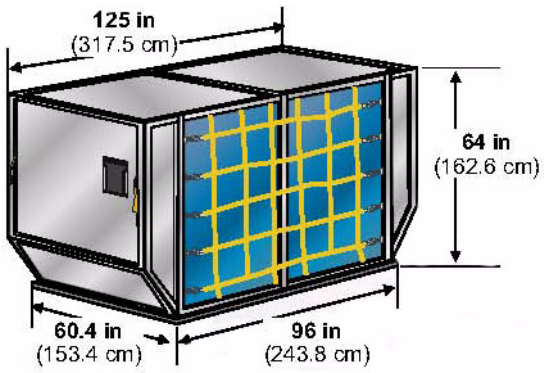

Figure 2-01-6

G. LD-9

IATA ULD Code, AAP Enclosed pallet on PIP base
Also known as, AA2, XAG, XAV
Classification, LD-9
Rate Class, Type 5
Suitable for, A300, A310, A330, A340,
B747, B767, DC-10, MD-11, L1011
Internal volume, 9.1 cu m (321 cu ft)
Maximum gross weight
4,624 kg (10,194 lb) lower deck
6,000 kg (13,227 lb) main deck

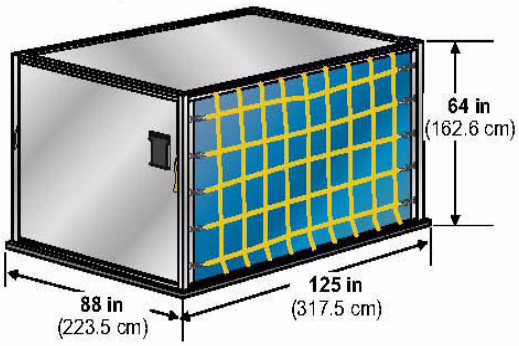

Figure 2-01-7

H. LD-ll

IATA ULD Code, ALP Rectangular Container
Also known as, ALD, AW2, AWB, AWD,
AWl, DLP, DWB, MWB
Refrigerated version, RWB, RWD, RWl
Classification, LD-11
Rate Class, Type 6
Suitable for, A300, A310, A330, A340, B747,
B777, DC-10, MD-11, L1011
Internal volume, 7.2 cu m (253 cu ft)
Maximum gross weight 3,176 kg (7,002 lb)

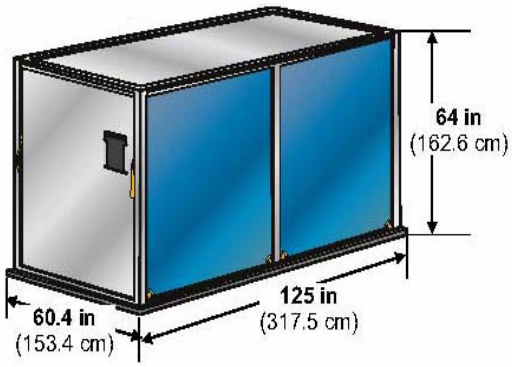

Figure 2-01-8

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I. AQ6

IATA ULD Code, AMA Rectangular Container on P6P Base
Also known as, AMF, AMG, AMK, AMP, ADA, ADO, AD6
Classification, M-1
Rate Class, Type 2
Suitable for, B747F, B747Combi
Internal volume, 17.5 cu m (618 cu ft)
Maximum gross weight 6,804 kg (15,000 lb)

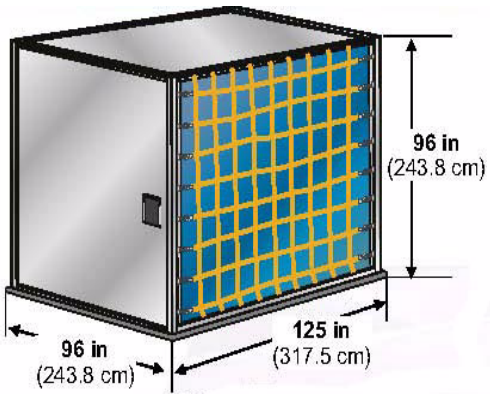

Figure 2-01-9

J. AQ7

IATA ULD Code: AMD Contoured Container on P6P Base
Also known as: AQA, AQ7
Classification: M1H
Rate Class: Type 2H
Suitable for: B747F, B747Combi
Internal volume: 19.9 cu m (702 cu ft)
Maximum gross weight: 6,800 kg (14,991 lb)

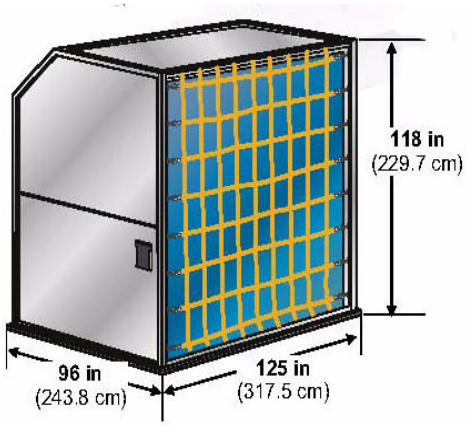

Figure 2-01-10

K. M-6

IATA ULD Code: AGA 20ft Box Container
Also known as: ASE
Classification: M-6
Rate Class: Type 1
Suitable for: B747F, B747 Combi
Internal volume: 33.0 cu m (1,165 cu ft.)
Maximum gross weight: 11,340 kg (25,000 lb)

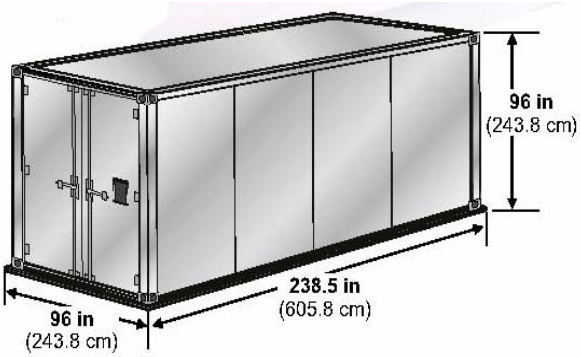

Figure 2-01-11

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L. LD-26

IATA ULD Code AAF
Classification: LD-26
Suitable for: B747, B777, DC-10
Maximum gross weight:
747/DC-10: 6,033 kg (13,300 lb)
777/DC-10: 4,626 kg (10,501 lb)

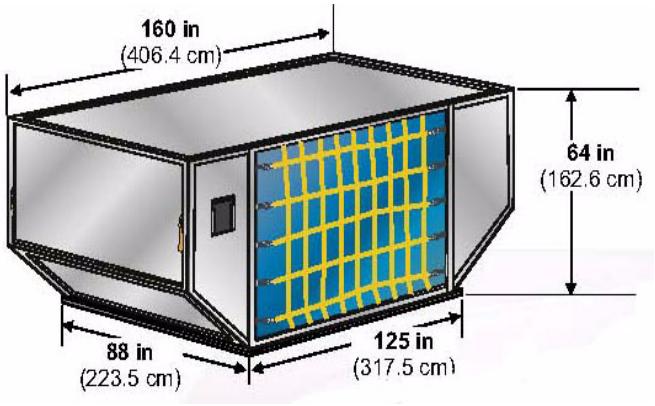

Figure 2-01-12

M. LD 29

IATA ULD Code: AAU Contoured Container on P1P base
Classification: LD-29
Rate Class: Type 5
Suitable for: B747
Internal volume: 14.2 cu m (501 cu ft)
Maximum gross weight: 6,033 kg (13,300 lb)

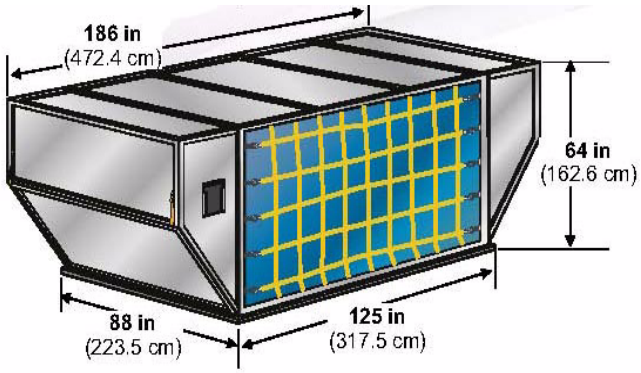

Figure 2-01-13

N. LD-39

IATA ULD code: AMU contoured container on P6P base
Rate class: Type 2BG
Description: Full-width lower hold container angled at both ends. Door is canvas with built-in net door straps.
Suitable for: 747 lower hold
Door opening: 120 x 60-in (305 x 152-cm)
Maximum gross weight: 5,035 kg (11,100 lb)

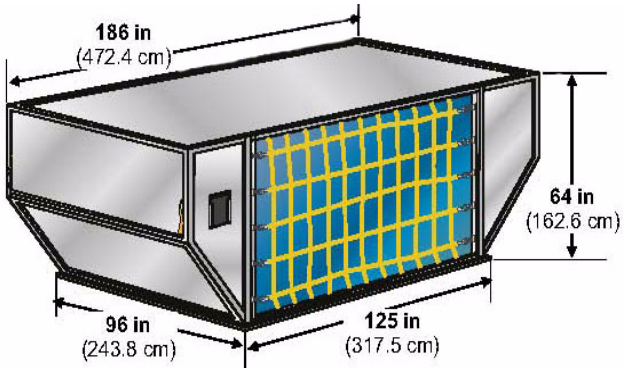

Figure 2-01-14

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2. Pallet Pictorials

A. LD-7

IATA ULD Code, XAW PIP Pallet with fixed angle wings and net
Classification, LD-7
Rate Class, Type 5
Suitable for, Wide body, All aircraft
Maximum volume with overhang, 14.0 cu m (494 cu. ft)
Maximum gross weight, 5,000 kg (11,023 lb)

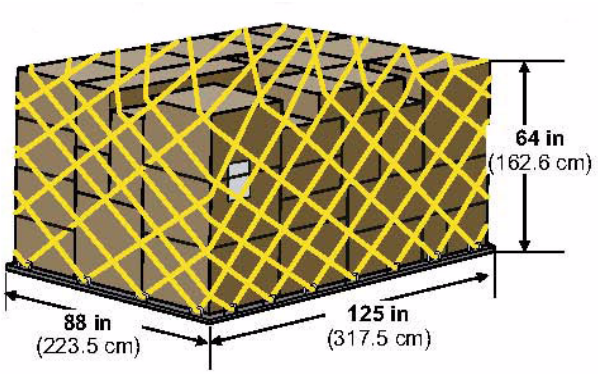

Figure 2-01-15

B. 88" PALLET

IATA ULD Code: P1P
Classification: 88” Pallet with net
Suitable for: B747, B767, B777, DC-10
Maximum volume: 11.9 cu m (420 cu ft)
Maximum gross weight:
747/DC-10: 6,033 kg (13,300 lb)
767: 5,103 kg (11,227 lb)
777/DC-10: 4,626 kg (10,501 lb)
Can be loaded to 96" (162 cm) and 118" (300 cm) on freighters

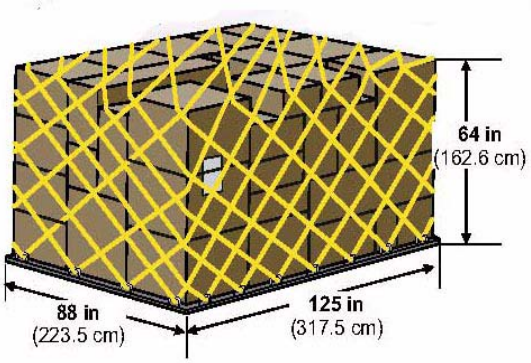

Figure 2-01-16

C. 96" PALLET

IATA ULD Code, P6P 10 ft flat pallet with net
Also known as, P6A, P6C, P6D, PMA, PMC, PMP, PDP
Classification, LD-9
Rate Class, Type 2BG
Suitable for, A300, A310, A330, A340, B747, B767, Bm, DC-10, MD-11, L1011
Maximum volume, 21.2 cu m (747 cu ft)
Maximum gross weight 6,804 kg (15,000 lb)
Can be loaded to 96" (162 cm) and 118" (300 cm) on freighters

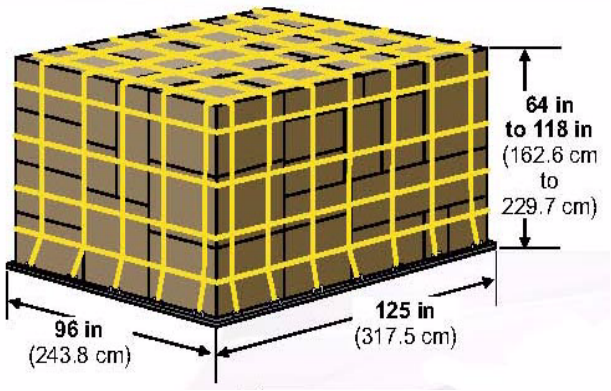

Figure 2-01-17

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D. HALF PALLET

IATA ULD Code, PLA half pallet with net
Also known as, PLB, FLA, P9A, P9B, P9P, P9R, P9S
Classification, HP
Rate Class, Type 6
Suitable for, Lower deck, B747, B777
Main deck, B707F, B727F, B737F
Maximum volume, 7.2 cu m (254 cu ft)
Maximum gross weight 3,175 kg (6,999 lb)

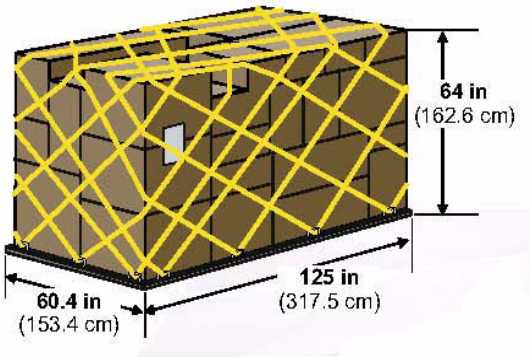

Figure 2-01-18

E. 16 FT PALLET

IATA ULD Code, PRA 16ft flat pallet with net
Also known as, PMA, P4A, P4M, PZA
Classification, MOP
Rate Class, Type 1P
Suitable for, B747, B747Combi
Maximum volume, 26.8 cu m (946 cu ft)
Maximum gross weight 11,300 kg (24,991 lb)

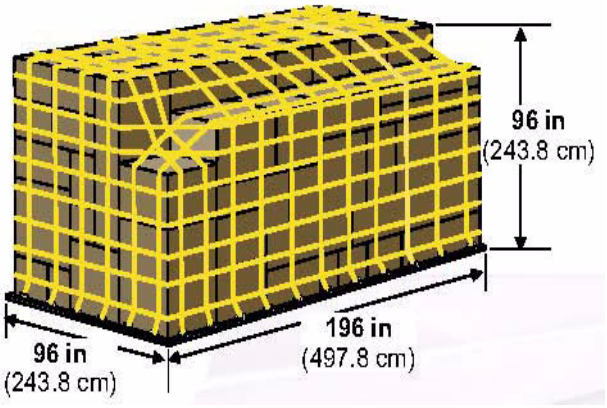

Figure 2-01-19

F. 20 FT PALLET

IATA ULD Code, PGA 20ft flat pallet with net
Also known as, PGA, PGE, PGF, PSA, PSG, P7A,
P7E, P7F, P7G
Classification, M-6
Rate Class, Type 1
Suitable for B747F, B747 Combi
Maximum volume, 33.2 cu m (1,174 cu ft)
Maximum gross weight 11,340 kg (25,000 lb)

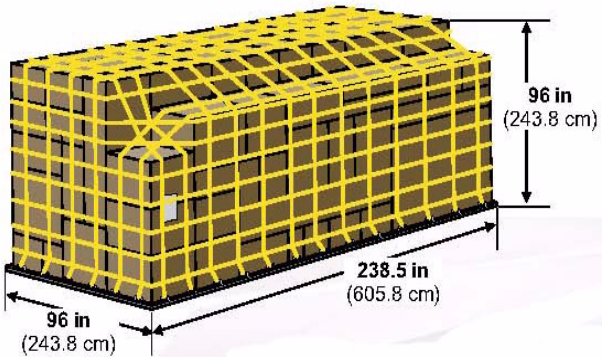

Figure 2-01-20

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3. Net Pictorials

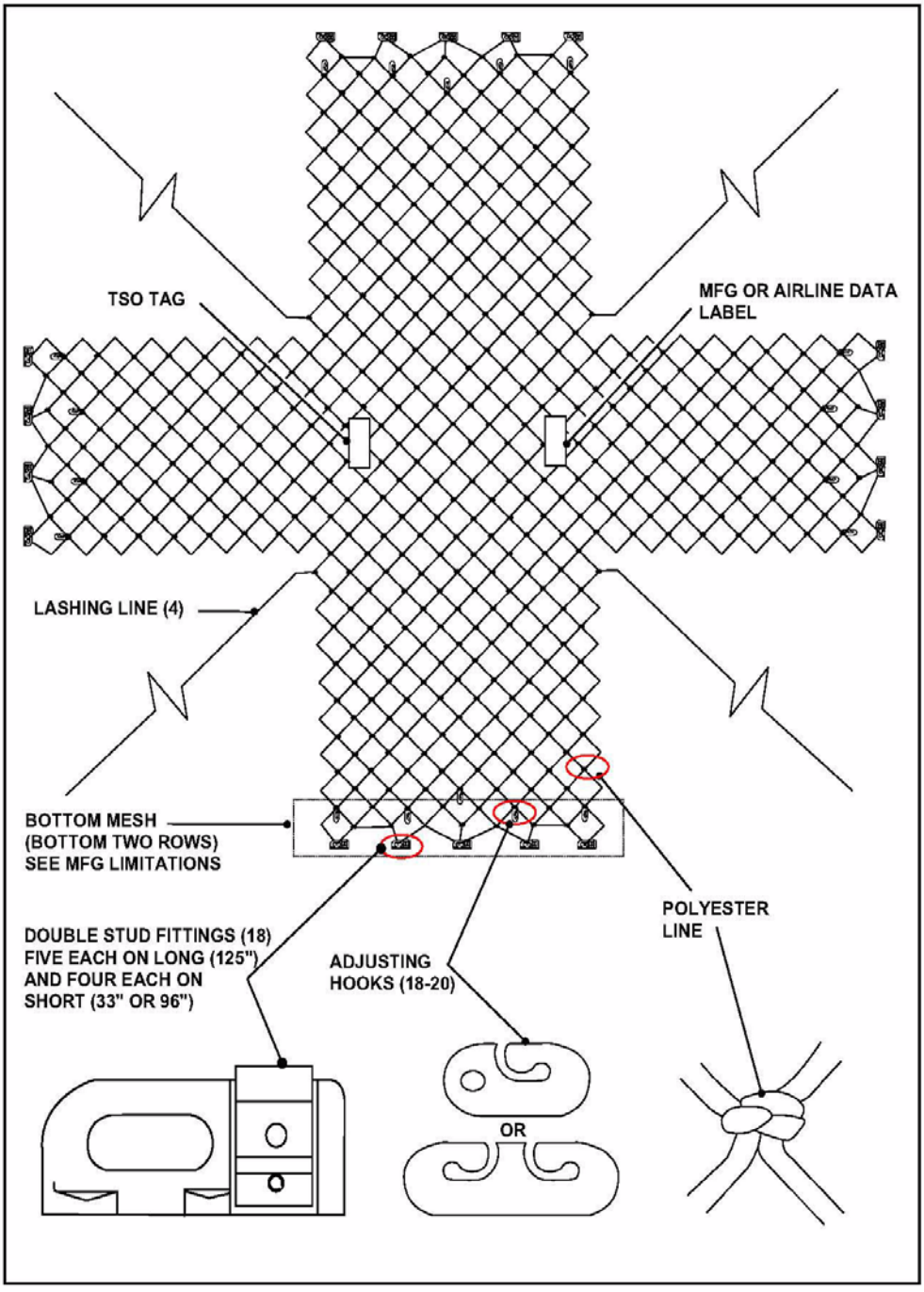

Figure 2-01-21

- END -

ULD BUILD UP

CONTENTS

1. General

The requirements set forth in this section are intended for YourYour Airways clients, ground handlers, Your Airways personnel and contractors. To comply with the pertinent airworthiness regulations all ULDs, nets, straps and their components must be inspected prior to use on board Your Airways aircraft as outlined in Ch 2 Sec 5. Any **Non**-airworthy ULD, net, cargo strap and their components must not be used for loading or securing cargo on board Your Airways aircraft.

Be aware that the guidelines set forth are not meant as a substitute for good common sense or safety practices. All Your Airways employees and contractors are responsible for ensuring that the highest level of safety is maintained in all aspects of flight and ground operations. A thorough check for any non-airworthy equipment BEFORE tendered for carriage on board Your Airways Aircraft will help minimize problems and delays to our clients, while ensuring a safe operation is always maintained.

NOTE: The PIC is ultimately responsible for the serviceability of the ULD's loaded onboard the aircraft. The captain relies upon the Loadmaster inspection to verify the serviceability of the ULD's placed onboard the aircraft.

A. Constructing Serviceable ULDs

A pallet and cargo net assembly becomes a serviceable unit load device only under the following conditions.

(1) All cargo fits inside the allowable dimensional profiles.

(2) A complete undamaged cargo net with all net-to-pallet attachments secured to the ring track completely restrains the cargo.

(3) All center of gravity limits for the device (vertical lateral and longitudinal) are complied with as specified below.

PALLET SIZE	VERTICALLY	LATERAL	LONGITUDINAL
96 x 125 in (10ft.) pallets.	48 in	9.6 in	12.5 in
96 x 238.5 in (20 ft.) pallets	48 in	9.6 in	11.9 in
88 x 125 in pallets	48 in	8.8 in	12.5 in

Figure 2-04-1

(4) The maximum certified restraint/limit value per ULD is not exceeded. These values are found in Ch 3 Sec 2.

(5) The pallet and cargo net assembly is certified under NAS 3610 and the appropriate TSO C90c numbers are printed and legible on both the pallet and cargo net assembly.

(6) The distribution of the cargo conforms to the maximum allowable bearing weight specified below.

PALLET SIZE	MAXIMUM FLOOR LOADING	
96 x 125 in (10ft.) pallets.	136 kg ft^2	300 lb ft^2
96 x 238.5 in (20 ft.) pallets	181 kg ft^2	400 lb ft^2
88 x 125 in pallets	136 kg ft^2	300 lb ft^2

Figure 2-04-2

Note

ALL OTHER CARGO IS CONSIDERED "NON-UNITIZED CARGO" AND MUST BE RESTRAINED IN ACCORDANCE WITH Ch 3 Sec 2

2. Basic Construction Rules

A. Maximize the amount of cargo

Maximize the amount of cargo placed in the ULD, using all the space available. This minimizes cargo shifting within the ULD. However, the capacity of the ULD and the maximum allowable weight for the position in the aircraft must not be exceeded.

B. Distribute Evenly

Distribute the load evenly around the pallet centroid

C. Place Heavy and Large item on Bottom

Place the heavy items on the bottom and lighter ones on the top. The nature of the cargo to be loaded will determine the placement that will best achieve this goal.

Packages and boxes should be stacked to prevent movement or deformation. Small packages should be placed "inside" of larger ones on the "outside."

D. Prevent Shifting

When the ULD is less than full, cargo should be evenly distributed over the entire width and length of the ULD. This minimizes cargo shifting within the ULD.

A container or load former should not be used in those instances when the cargo is limited to one or two heavy and/or large pieces that do not take up the entire length and width of the ULD (unless it has internal tie-down tracks and the cargo is secured to these tracks) because the cargo may shift within the ULD. Instead a pallet/net or pallet/strap combination should be used.

E. Interlock Pieces

As shown below, interlock or overlap small cargo pieces when possible, especially those of the same size. This will help prevent the load from shifting or collapsing under the net and will create a sturdier load.

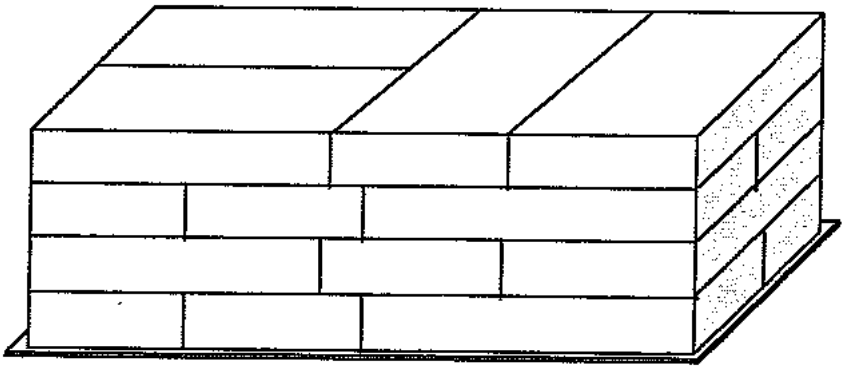

Figure 2-04-3

F. Contour Pallet

Contour the load for the aircraft's interior dimensions. This will prevent damage to the aircraft's lining and allow the ULD to be moved in and out of the aircraft freely.

As shown below, when the load is not built for maximum contour it should be evenly spread over the entire length and width of the pallet. This will prevent the load from shifting and collapsing under the net and prevent the pallet from bowing when the net Is cinched tight.

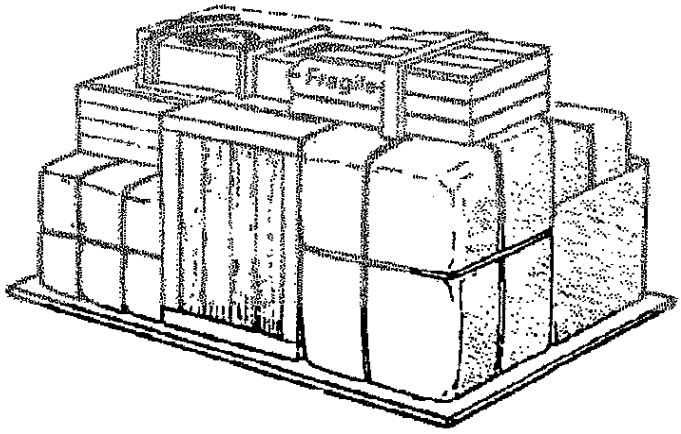

Figure 2-04-4

Place all cargo pieces within the confines of the net. Do not allow cargo to stick out through the rope diamonds or web pattens of the net unless part of the net is securing the cargo piece. Failure to do so causes inadequate restraint of cargo.

G. Do not place cargo on top of the tie-down track

Do not place cargo on top of the tie-down track on the open side of the container or load former. This will prevent proper attachment of its net or door assembly.

H. Do not allow the ULD to Bulge

Do not place cargo in the ULD in a way that it will bulge out the net assembly. Bulging ULDs are difficult to load into position on the aircraft and indicates the cargo inside may not be stable. In accordance with its design, attach the ULD's net assembly using all fasteners, buckles, hooks, and locking studs and cinch the net tight with its cinch straps/ rope. The net assembly should not be over tightened to the point that the pallet base or shell becomes bowed. The aircraft's cargo loading system cannot properly secure a bowed pallet base.

I. Assure ULD doors are closed

When using a ULD that has rigid doors, close the doors completely and lock in accordance with the design of the ULD.

J. Use Shoring if Required

When using a military pallet, shoring Ch 3 Sec 2 is required for cargo pieces that have a load bearing weight exceeding 250 pounds per square inch. Adequate shoring will prevent the pallet base from being pierced.

Do not place cargo on top of the pallet's tie-down tracks (or tie-down rings on the military pallet). This could prevent the nets locking studs (or hooks on the military net) from being evenly spaced or properly attached. It may also prevent the pallet from being properly secured into the aircraft's cargo loading system.

K. Use Tarps and Shrink Wrap

Drape a plastic tarp (or shrink-wrap) over the entire cargo load before netting. This will provide weather protection as well as prevent small pieces from becoming dislodged from the net, especially at the bottom of the net where the webbing of the net is larger. If necessary, place a plastic tarp under the cargo and tuck the ends of the tarp into the cargo approximately two feet up from the bottom. This will provide additional weather protection and help restrain smaller pieces loaded at the bottom. This procedure must be used when smaller pieces of cargo can become dislodged from the net. This procedure is not mandatory on large pieces.

3. Netting

Place the net over the cargo so it Is correctly aligned with the pallet The locking studs for the short side of a net are attached to the short side of the pallet and the locking studs for the long side of the net are attached to the long side of the pallet.

A. Commercial Pallet and Net

All 88 x 125-inch nets have five locking studs on the long sides and four locking studs on the short sides. All 88 x 108--inch nets have four locking studs on the long sides and four locking studs on the short sides.

B. Military Pallet and Net

When using a military pallet and net, the hooks on the net are attached to the rings on the pallet. The military pallet has five rings on the 88-inch side and six rings on the 108-inch side. The net has five hooks on the 88-inch side and six hooks on the 108-inch side.

C. Rope Net Installation Procedure

The following steps are the preferred method of installing netting.

(1) Spread the net evenly over the cargo and property align its short and long sides to the short and long sides of the pallet

(2) Evenly space the locking studs and attach them to the tie-down track of the pallet.

(3) Take up excess slack in the net by pulling up vertically on the tensioning hooks and attaching them onto the upper portion of the net at rope knot locations.

(4) Tie one end of the rope lashing line to the top intersection of the two sides of the net.

(5) Using a shoelace pattern, thread the other end of the rope lashing line back and forth through adjoining sides of the net (use inner rope diamonds as appropriate). This will join both sides of the net together. As the net sides are sewn together apply pressure so the net becomes tight around the cargo and follows the contour of the cargo.

(6) Securely tie the opposite end of the lashing line to the bottom rope diamond so it does not become unknotted during flight.

(7) After the cargo Is netted, give a stiff pull on each side of the net to check for excess slack. If excess slack is found, correct it with the tensioning hooks or by using supplemental rope.

NOTE: Ensure the pallet base is not distorted by an over tensioned net.

NOTE: Make sure the pallet tag is completed and visible (destination and weight must be marked on the tag).

WARNING

IF REQUIRED, THE DANGEROUS GOODS PALLET TAG SHOULD BE LOCATED ON BOTH SIDES OF THE PALLET. AT LEAST ONE DANGEROUS GOODS PALLET TAG MUST BE LOCATED IN AN AREA VISIBLE TO CREW MEMBERS.

D. Typical Net Installation Diagram

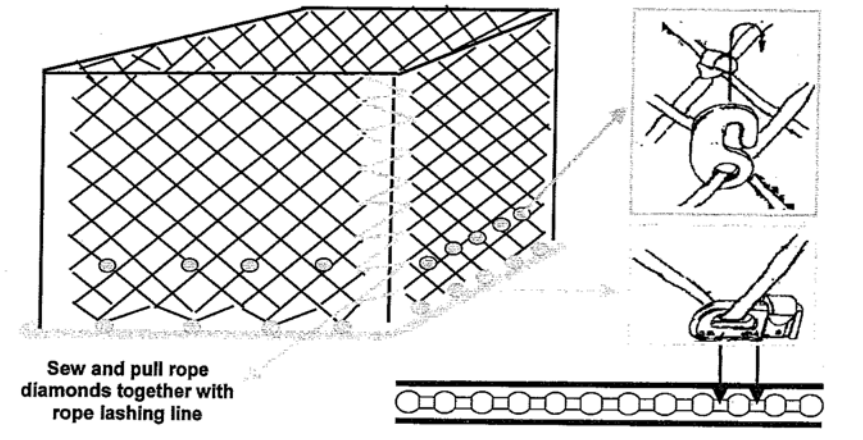

Figure 2-04-5

E. Quick Zip Rope Net Installation Procedure

Below is a step-by-step process that explains installation of the Quick Zip Rope Net.

(1) Spread the net evenly over the cargo and properly align the short and long sided of the pallet.

(2) Evenly space the locking studs and attach them to the tie-down track of the track of the pallet.

(3) Take up excess slack in net by pulling up vertically on the tensioning hooks and attaching them onto the upper portion of the net.

(4) Using the multiple tensioning loops to join adjacent sides of the net, weave the top loop through an adjacent rope diamond and pull tight (use inner rope diamonds as appropriate). Subsequent loops are weaved through the previous loop and then through an adjacent rope diamond and pulled tight. This is repeated until the bottom of the net is reached and the last loop is pulled tight. Attach the locking stud on the last loop to the pallet's tie-down track.

(5) After the cargo is netted, give a stiff pull on each side of the net to check for excess slack. If excess slack is found, correct it with the tensioning hooks.

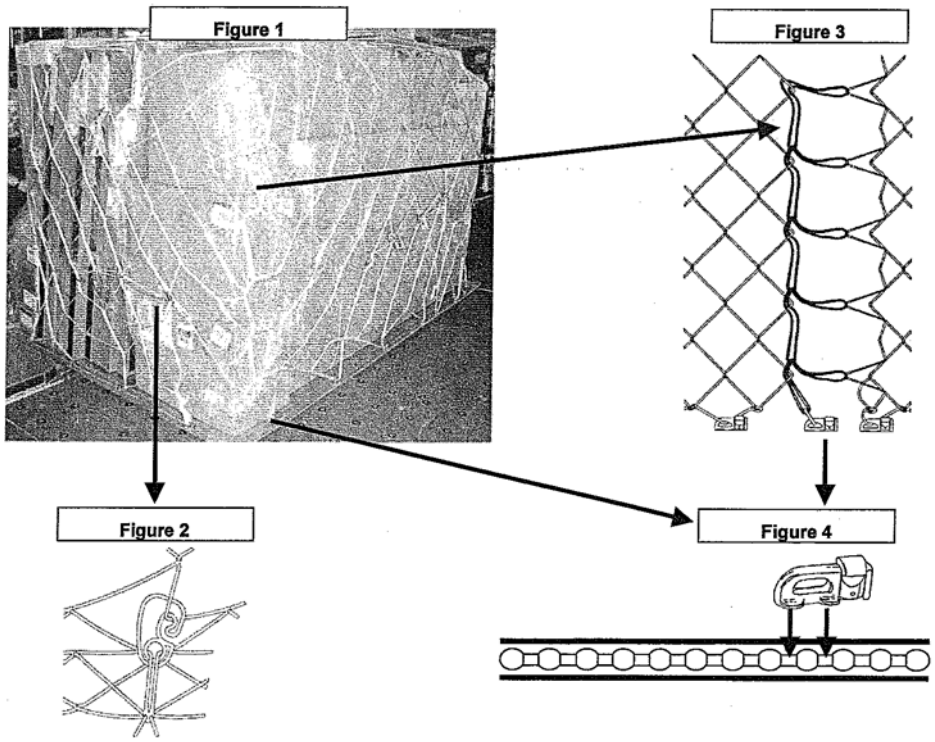

Figure 2-04-6

4. Restraining of ULDs

Cargo loaded on a pallet is normally restrained by the net, the strength of which is certified for the maximum gross weight of the pallet. Tie downs as outlined in Ch 3 Sec 1 must be used as a replacement of the pallet net only in any one of the following circumstances:

- Loads such that it does not allow using the net without risk of damage (examples: automobiles, helicopters, and aircraft engines).

- Loads which cannot be effectively restrained by the net because of mesh size (i.e., pipes, extrusions).

5. Cargo Weighing and Pallet Identification

Scale accuracy is of utmost importance when weighing final pallet loads for Load Planning (Weight and Balance) purposes. A compliant scale (one which is verifiably proven to have been serviced within the manufacturer's required time-frame) is only to be utilized for weighing Your Airways pallet loads.

Scales used to weigh cargo to be loaded on Your Airways aircraft must be calibrated and traceable to a National Institute of Standards and technology (NIST) standard or equivalent. Calibration must be performed in accordance with the Civil Authority for Weights and measures having jurisdiction over the area in which the scales are used.

A. Equipment

All scales are to be on file and available for inspection at the local Your Airways Agent or vendor location. Non-compliant equipment is considered out of service and is not to be utilized until compliance is achieved.

B. Personnel

All handlers weighing pallet loads will first ensure the scale being used is within compliance as established by the manufacturer and maintained by the operator. Non-compliant equipment is to be reported to the operator immediately and will not be utilized until compliance is achieved.

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6. Pallet Stacks

Your Airways procedure for transporting pallet stacks is to have a maximum of 20 pallets, excluding the base pallet, per stack. Stacks of pallets must have 3 lateral and 4 longitudinal technical standard order approved tie-down straps.

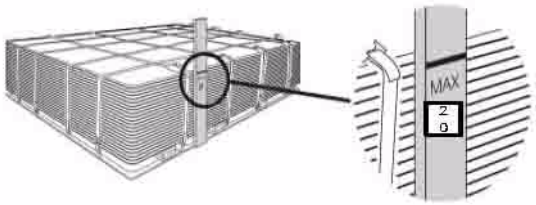

Figure 2-04-7

If cargo or loose pallet nets are placed on top of the pallet stack a net must be attached to the bottom pallet in addition to the straps that are used to secure the pallet stack.

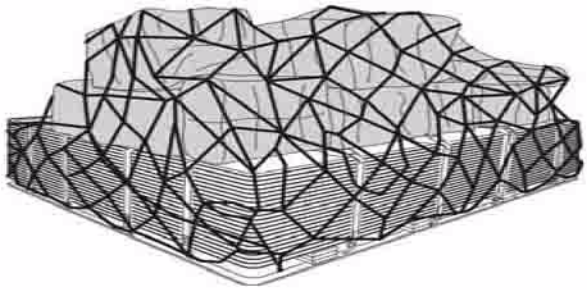

Figure 2-04-8

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