Attachment 3

International Air Transportation Association ULD Technical Manual

STANDARD SPECIFICATION 40/1

IATA IDENTIFICATION CODE FOR UNIT LOAD DEVICES

The very rapid development of aircraft types and the rapid expansion of the cargo market during the 1960's culminated in the wide-bodied aircraft which are capable of carrying intermodal units. This rapid development led to a proliferation of unit types with an assortment of characteristics and dimensions. The description of units by a simple word or phrase is only satisfactory for very limited purposes and can easily lead to confusion. These words do not convey exact meanings because the words are not clearly defined and cannot convey such mathematical data as the extent to which a contoured unit is compatible with the complex interior cross section of an aircraft.

The Identification Code has therefore been developed with particular attention being given to definition of terms. The logic in the code takes account of all the purposes as stated and if used correctly will convey the exact information required.

Obviously, the Code has its limitations, in that it contains only essential data and the user will have to refer to the IATA ULD Technical Manual for further technical information if this is required.

The definitions of the Code have been framed to encompass all existing units, but have also taken account of future developments as far as these can be foreseen. In this respect it has been envisaged that current freighter aircraft of the Boeing 707 and DC-8 era are now of limited life, especially in terms of development and that the new generation of freighter aircraft are capable of accepting up to ISO dimension units.

The assignment of IATA Identification Codes for Unit Load Devices is governed by Resolution 686 which is reproduced below (effective 1 October 1999).

RESOLUTION 686
IATA IDENTIFICATION CODE FOR UNIT LOAD DEVICES
CS(18)686 Expiry: Indefinite
Type: B

RESOLVED that, unit load devices shall be marked in accordance with the following:

Introduction

This Resolution describes the method of ULD marking and numbering, as well as effectiveness date where applicable. It also lists ULD types, related equipment and equates type codes to base dimensions. Finally it deals with ULD contours and compatibility to aircraft.

1. PURPOSE

The Identification Code gives each unit an individual identification and permits the easy exchange of the information contained in the marking of units.

2. SCOPE AND APPLICATION

The Identification Code is intended to be applicable to all unit load devices (see 6.1.3 for exceptions). The administration of the Identification Code and Markings requirements is vested in the IATA Registrar of Unit Load Devices.

The code is also available to non-IATA airlines and to non-airline owners. Details of the use and availability of the code may be obtained on application to IATA.

3. FUTURE REQUIREMENTS

The Identification Code contained in this specification is broken down into two time frames:

those new units purchased or delivered and old units remarked after 1 October 1984; and

those new units purchased or delivered and old units remarked after 1 October 1993.

Carriers using or contemplating the use of automated processing system for the control of ULDs should provide for an identity code up to 14 characters so to accommodate possible future changes and growth.

The space allotted to these 14 characters would be broken down to include four character type code, six character serial number, four character owner code.

For those airlines who anticipate handling air/surface (intermodal) containers bearing the ISO code should make provisions in their data processing system to accept an 11 character code effective 1 October 1999.

4. REFERENCES

4.1 Administration

Registrar of ULDs, IATA, Montreal.

4.2 Technical information

IATA ULD Technical Manual (Recommended Practice 1681, Attachment 'A') — available from the Registrar of ULDs (see 4.1) and NAS 3610 (see 4.3).

4.3 NAS 3610 *(for information purposes only)*

In developing the Identification Code, due note was taken of specification NAS 3610 which is a reference document for airworthiness certification of aircraft unit load devices, as prepared by the Aerospace Industries Association of America, as a United States National Aerospace Standard. This document lays out the requirements which unit manufacturers must meet in order to have the unit carried in United States manufactured aircraft. This document is used in conjunction with the Federal Aviation Administration (FAA) Technical Standards Order (TSO) C90c which provides a simplified procedure for certification. Copy of this document may be obtained from the Aerospace Industries Association of America, 1250 Eye Street, N.W., Suite 1200, Washington, DC, 20005 3924 USA

STANDARD SPECIFICATION 40/1 *(cont'd)*

There are many National licensing authorities who have already recognised NAS 3610 criteria for licensing equipment for use in civil transport aircraft. NAS 3610 is also a de facto International Standard under reference ISO 8097.

5. THE IDENTIFICATION CODE (Construction)

5.1 General Composition

The IATA Identification Code is intended to fully describe the unit load device and therefore combines the factors of type, external dimensions (base size), contour and compatibility, and airworthiness certification. Construction to IATA standard specifications will also be indicated. The code also includes an ownership/registrant code.

5.2 Identification Code

5.2.1 Prior to 1 October 1993

The IATA Identification Code consists of nine (9) characters, comprised of the latin alphabet and arabic numerals, composed of the following elements:

Position	Character Type	Description
1	alphabetic	ULD Category
2	alphabetic	Base Dimensions
3	alphabetic	Contour or Compatibility
4, 5, 6 and 7	numeric	Serial Number
8 and 9	alpha-numeric	Owner/Registrant

5.2.2 Effective 1 October 1993

For units marked or remarked the IATA Identification Code will consist of nine (9) or ten (10) characters, comprised of the latin alphabetic and arabic numerals, composed of the following elements:

Position	Character Type	Description
1	alphabetic	ULD Category
2	alphabetic	Base Dimensions
3	alphabetic	Contour or Compatibility
4, 5, 6, 7 and 8	(see Note below)	Serial Number
9 and 10	alpha-numeric	Owner/Registrant

Note: *The serial number will consist of four or five numerics. All entities transmitting or receiving electronic messages containing ULD serial numbers are required to modify their communication systems to handle 5-numeric ULD serial numbers.*

6. TYPE CODE (Positions 1, 2 and 3)

6.1 Position 1

6.1.1 Commentary

Position 1 shall be used to describe the general type of the unit considering only the following characteristics:

certified as to airworthiness *or* non-certified;
structural unit *or* non-structural;

but also considering some features which have a significant requirement for special traffic handling

fitted with equipment for refrigeration, insulation or thermal control (referred to as "Thermal" as a generic term for the further purposes of this specification but includes all the types mentioned) or not fitted for refrigeration, insulation or thermal control,

also considering specific units:

containers, pallets, nets, pallet/net/non-structural igloo assembly.

Note: *Definitions of these characteristics and specific units will be found in the IATA ULD Technical Manual and should be read in conjunction with this specification.*

6.1.2 Code List

Code Letter	ULD Category
A[1]	Certified aircraft container
D[1]	Non-certified aircraft container
F	Non-certified aircraft pallet
G	Non-certified aircraft pallet net
J	Thermal non-structural igloo
M	Thermal non-certified aircraft container
N	Certified aircraft pallet net
P	Certified aircraft pallet
R	Thermal certified aircraft container
U[1]	Non-structural container

The following previously used codes are not to be used for new registrations:

(B)	Certified main deck aircraft container
(C)	Non-aircraft container
(E)	Non-certified main deck aircraft container
(S)	Structural igloo — solid doors
(T)	Structural igloo — other closures (other than solid doors)

[1] These categories do not include thermal units.