

ULD Handling Requirements

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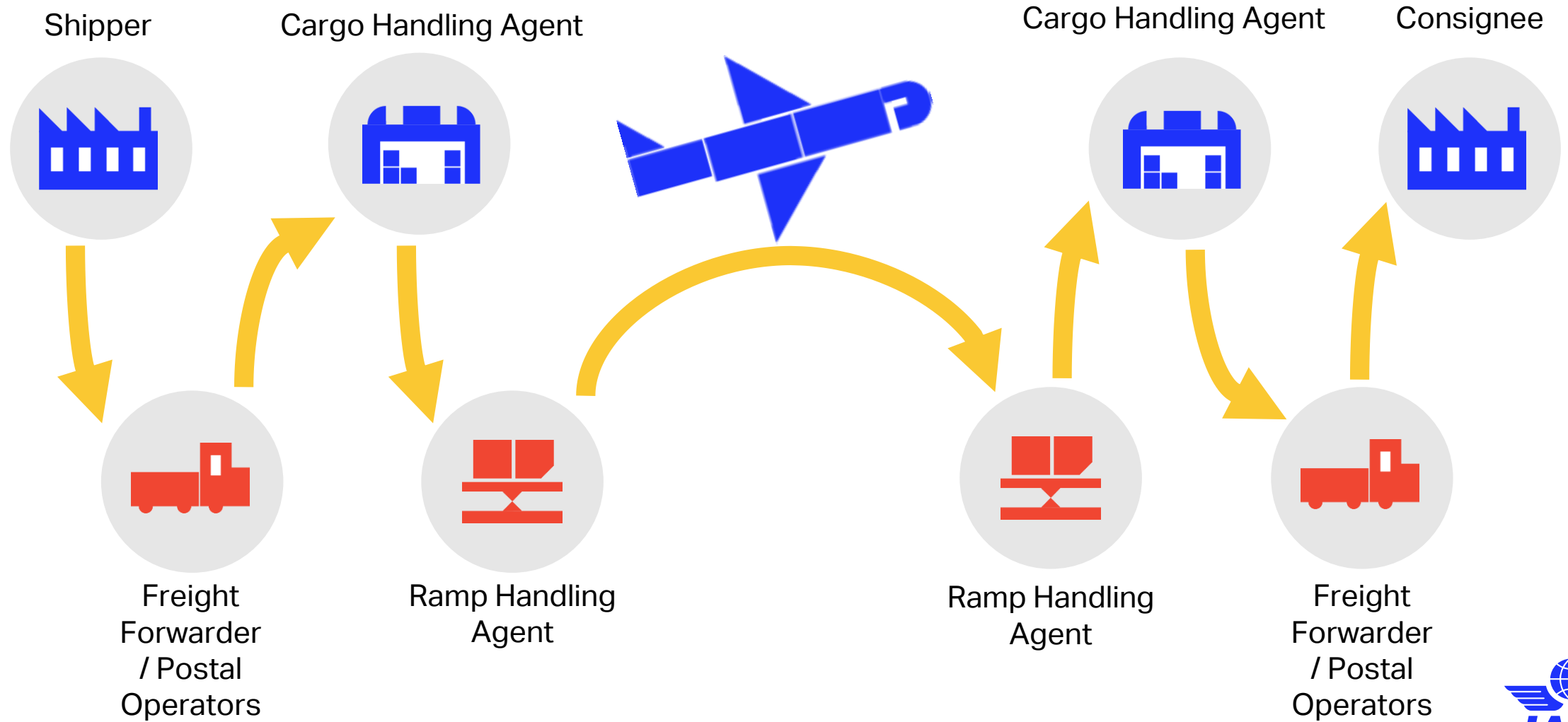
Regulatory Requirements

State/Authority	China Civil Aviation Administration CAAC	Europe European Aviation Safety Agency EASA	Japan Civil Aviation Bureau JCAB	U.S.A. Federal Aviation Administration FAA
Area concerned				
Equipment approval requirements	CCAR-21 <i>Certification Procedures for Products and Parts</i> CTSO	EASA Part 21 <i>Certification of aircraft and related products, parts and appliances</i> CS-ETSO	—	14 CFR Part 21 <i>Certification Procedures for Products and Parts</i>
ULD design/tests and certification	CTSO C90 <i>Cargo pallets, nets and containers</i>	ETSO C90 <i>Cargo pallets, nets and containers</i>	JTSO C90 <i>Cargo pallets, nets and containers</i>	TSO C90 <i>Cargo pallets, nets and containers</i>
Aircraft airworthiness certification	CCAR-25 <i>Airworthiness Standards Transport Category Airplanes</i>	EASA CS-25 <i>Certification Specifications for Large Aeroplanes</i>	Airworthiness Standard Part 3 Civil Aeronautics Act Art. 10	14 CFR Part 25 <i>Airworthiness Standards: Transport Category Airplanes</i>
Carrier certification and operations	CCAR-121 <i>Air Carriers Certification and Operations</i>	EU-OPS 1 <i>Commercial Air Transportation (Aeroplanes)</i> OPS 1.035, 1.037 & AMC <i>Quality System Safety Management System</i>	Civil Aeronautics Act & Ordinance for Enforcement Chapter VI, Operation of Aircraft and VII, Air Transport Services and application Circulars No. 4 and 5	14 CFR Part 121 <i>Air Carriers Certification and Operations</i> 14 CFR Part 5 <i>Safety Management System</i> AC 120-59A <i>Air Carrier Internal Evaluation Programs</i>
Service providers safety system	—	EU Reg. 376/2014 Reporting, analysis and follow-up of occurrences	—	AC 120-92B <i>Safety Management System for Aviation Service Providers</i>
Operations, cargo	—	—	—	AC 120-85A <i>Air Cargo Operations</i>
Maintenance of approved equipment	CCAR-43 <i>General Rules for Maintenance</i> CCAR-145 <i>Maintenance Organization Certification</i>	EASA Part M <i>Continuing Airworthiness Rqts</i> EASA Part 145 <i>Maintenance Organisation Approval</i>	Civil Aeronautics Act & Ordinance for Enforcement Art. 20, <i>Approval of Organizations</i> and application Circular No. 2-001	14 CFR Part 43 <i>Maintenance</i> 14 CFR Part 145 <i>Repair Stations Certification</i>

Only ULDs in airworthy condition and approved for the intended aircraft are allowed to be installed.



Air Cargo Supply Chain Overview



ULD Regulations – Industry's Solution

“one means of compliance containing a single set of regulations for all parties involved conforming to all legally applicable and industry agreed regulations”



Basic ULD Handling Requirements

1.5.7 Post Offices

Post Offices hold responsibility to implement the Universal Postal Union (UPU) Convention, which forbids the carriage of dangerous goods in mail except as permitted (see DGR). If Post Offices perform ULD handling or build-up, they must, as any other shipper, ensure that:

- requirements (d) through (l) of [1.4.2](#) are met in accordance with these Regulations and the instructions of the carrier (Operator);
- all ULD handling is carried out in accordance with [Section 9](#);
- all personnel and supervising personnel receive training appropriate to the tasks performed;
- full access is guaranteed to inquiries or audits from the Quality Control department of the carrier (Operator).

Basic ULD Handling Requirements

1.4.2 Specific Responsibilities

STATE VARIATIONS

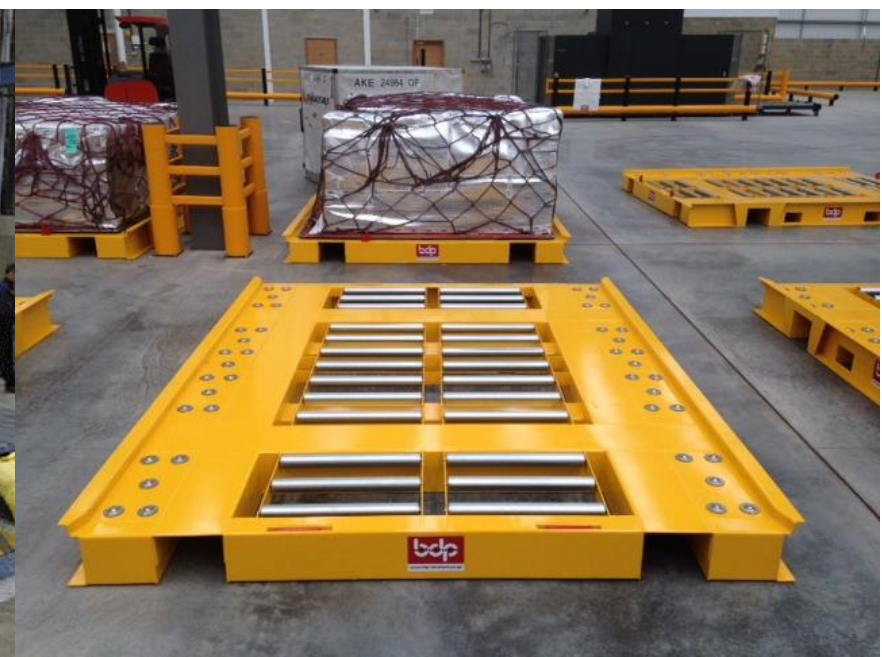
OPERATOR VARIATIONS

 As specifically regards ULDs, carriers (Operators) responsibilities include ensuring that:

- (d) each ULD is inspected prior to and after build-up, and a ULD in a non-airworthy or non aircraft-safe condition is not loaded aboard an aircraft;
- (e) all applicable limitations and restrictions are met, including nature of contents, weight and load distribution, maximum allowable damage, and any aircraft specific rules;
- (f) any special load items are identified and dealt with in accordance with the Regulations. Any dangerous goods shall be accepted and loaded in full compliance with the IATA Dangerous Goods Regulations;
- (g) the maximum ULD centre of gravity offset limits are not exceeded;
- (h) all items of load are adequately restrained inside/on the ULD;
- (i) the applicable Security and Customs control requirements are met;

Basic ULD Handling Requirements

Ensure all Ground Support Equipment for ULD handling is in good working order (e.g. conveyor, dolly, base support device)



Basic ULD Handling Requirements



Basic ULD Handling Requirements

Ensure ULD is Serviceable before build-up

ULD Serviceability Check

1. Purpose

Whether empty (unladen) or laden, ULD serviceability check shall be conducted by checking against the ULD damage limits in the course of daily operations, including but not limited to the following occasions:

- prior to ULD buildup
- prior to dispatch to an aircraft
- prior to loading aboard an aircraft
- when unloading from an aircraft
- during ULD breakdown
- during inventory check
- whenever ULD is interlined, interchanged, or otherwise transferred between parties prior to acceptance (see [1.4.7](#) in Section 1 and [8.2.2](#) in Section 8)

Basic ULD Handling Requirements

ODLN for Container

**OPERATIONAL DAMAGE LIMITS FOR CONTAINER
FOR REFERENCE ONLY**

**- DO NOT COVER -
Visual Check of Container is REQUIRED BEFORE USE**

MANUFACTURER XYZ
CONTAINER TYPE/SERIES xxxxx
NOTICE Reference No. xxxxxx

Location	Component	Code	ULD may not be used if any of the conditions below are exceeded
Base	Sheet ①	SB	No more the xxx inch / xxx mm sized cracks, holes or indentations
	Extrusion ②	EB	No broken or missing parts
			No penetration into hollow chamber
			No more the xxx inch / xxx mm sized cracks in any direction
			No more the xxx inch / xxx mm sized gouges
	Tie-Down ③	TB	No more than 1 inch / 25,4 mm bowed, warped or deflected extrusion
Fastener ④	FB	No broken, cracked or deformed Tie-Down Lips	
		No loose or damaged attachment to the container structure	
Fabric Doors	Corner ⑤	CB	No broken, cracked or deformed Tie-Down Lips
	Curtain ⑥	CD	No loose or damaged attachment to the container structure
			No more than xxx broken, loose or missing rivets
	Lock ⑦	LD	No more the xxx inch / xxx mm between broken, loose or missing rivets
No broken, loose or missing Hardware/Locks			
Webbing ⑧	WD	No damaged / worn-out restraint straps	
		No damaged / missing stitching	
Solid Doors	Panel ⑨	PD	No damaged / missing stitching
	Lock ⑩	LD	No more than within original contour deflection
			No broken, loose or missing parts
Panels (incl. Doors)	Hinge ⑪	HD	No broken, cracked, bent, loose or missing bottom restraints and easy to lock
			No broken, cracked, bent, loose or missing parts
			No more than xxx holes / cracks with no more than xxx inch / xxx mm of size
	Sheet ⑫	SP	No less than xxx inch / xxx mm between holes/cracks
No tears / holes within xxx inch / xxx mm of frame extrusions			
No more than 1 inch / 25,4 mm deflection of roof sheet			
Extrusion ⑬	EP	No more the xxx inch / xxx mm sized cracks in any direction	
		No more than 1 inch / 25,4 mm deflection	
		No broken, fractured or crushed stiffeners	
Fastener ⑭	FP	No more than xxx broken, loose or missing fasteners	
		No less than xxx inch / xxx mm between broken, loose or missing rivets	
Corner Connections	Gusset ⑮	CP	No broken, cracked, bent or loose corner gussets
Others	Welding ⑯	CP	No cracks in original weldings (for welded frames only)
			No damaged, worn-out or missing pull-straps
	Webbing ⑰	WP	No damaged, worn-out or missing pull-straps
Special Requirements	TSO ⑱	TM	In place and legible
			Owner Airline / Manufacturer Requirements

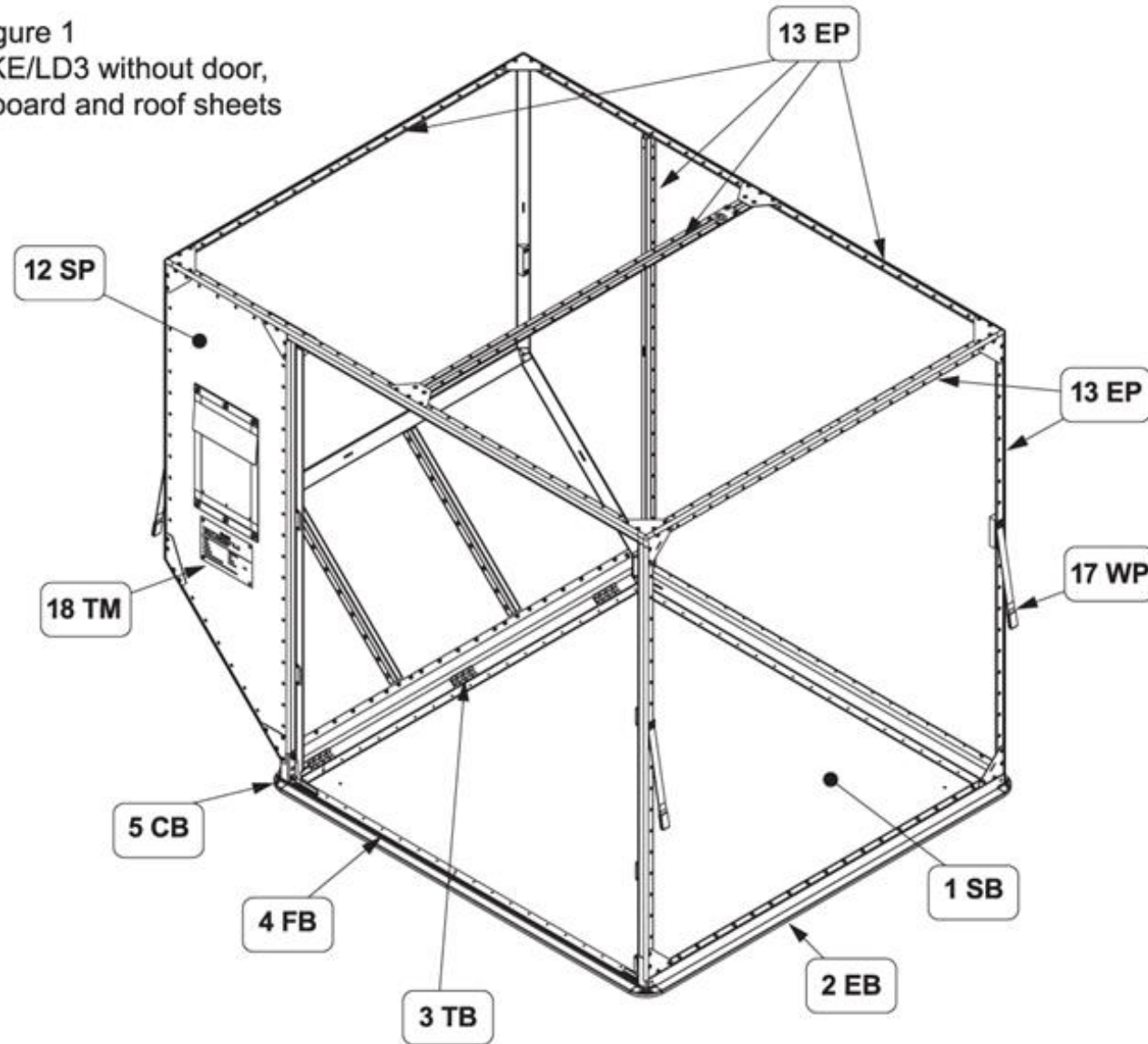
When in doubt refer to CMM

Notice for operational use ONLY

Serviceability NOT affected when missing or legible

Basic ULD Handling Requirements


Figure 1
AKE/LD3 without door,
inboard and roof sheets




ULD Safety Campaign


ULD, It's not just a box...
it's YOUR responsibility

 Handle the ULD with care,
it's an aircraft part


 Protect the lives of
passengers, crew and
aircraft by loading
airworthy ULDs


 Inspect ULDs prior to use
and at every transfer


 Ensure your employees
and service providers are
properly trained

 Remember ULD buildup
is aircraft pre-loading and
contributes to flight
safety




 Don't damage ULDs

 Don't put the safety of
passengers, crew and
aircraft at risk

 Don't forget to inspect
ULD for damage

 Don't handle ULDs if you
are not properly trained

 Don't ignore the aircraft
load limitations in ULD
buildup



Do's and Don'ts

You Are the Champions!

Promote the ULD Safety Campaign within your network

載具, 它不單只是一個箱...
它還需要你的
小心處理與注意

你可使乘客, 機組人員及
飛機的安全受到威脅

www.iata.org/ULD

Hactl IATA

ULD, it's not just a box...
It needs your care
and attention

It's a seatbelt for the content

www.iata.org/ULD

DAS IATA

ULD, it's not just a box...
Correct handling
will save you
millions

ULD repairs cost the industry **\$330 million / annum**

80% ULD repair costs could be avoided if handled correctly

www.iata.org/ULD

sats GATEWAY SINGAPORE AIRLINES CARGO IATA

Um ULD não é apenas uma caixa...
Ele entrega aquilo
que você prometeu

O manuseio incorreto de ULDs
traz perdas e danos à reputação

www.iata.org/ULD

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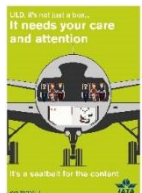


Co-branding the ULD Safety Campaign

Yes, it's **FREE** too! Simply send me (liaozy@iata.org) your company logo in both normal and negative versions in one of the following formats:

- .ps
- .eps
- .ai

8 available languages and more to come!





Thank You!

**Working together
to shape the future**