



ISTANBUL **2024**
CONFERENCE

THE FUTURE
IS NOW

SUSTAINABILITY
EFFICIENCY
DIGITALISATION

TIME TO ACT

Advancing Airfreight Sustainability and
Accountability: Integrating ULD CARE Initiatives

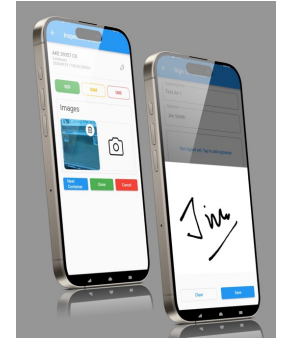
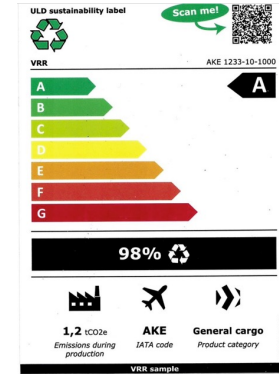
Who is ULD CARE

- Roots go back to 1970's
 - IATA special interest group
 - Set up to facilitate the efficient interchange of members ULD assets in the course of cargo interlining
- Evolved to become a not for profit trade association, devoted to facilitating a better environment for ULD operations.



Introducing ULD CARE's Initiatives

- Digitalise the management of transfers of ULD assets between various parties in the air cargo eco system
- Contribute to industry sustainability ambitions
- Continuously leverage ULD CARE's extensive subject matter knowledge to support industry wide low cost knowledge/education



Introducing our team

- Bob Rogers- VP and Treasurer ULD CARE- 40+ years in ULD
- Terry Waithe- ULD Logistics and Cool Chain-Air Canada
- Louise Platell-Innovation Engineer-VRR
- Pertti Mero- Managing Director-Airport College
- Celine Hourcade-Vice President, Global Head of ESG / Sustainability -SATS

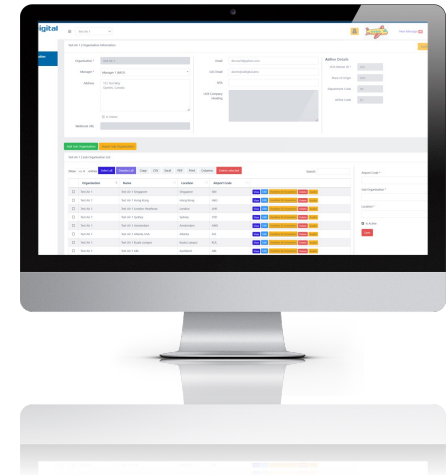
What's in it for the air cargo industry?

ULD are the oil that lubricate the global air cargo “gearbox”, greatly under appreciated yet without this “oil” the gearbox grinds to a halt.



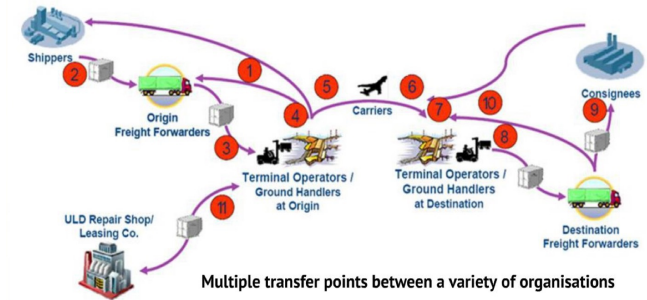
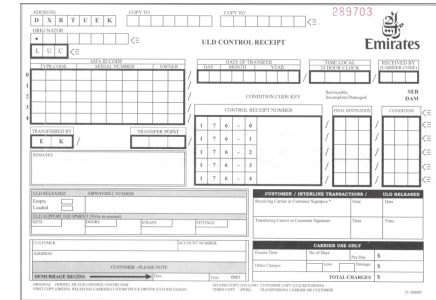
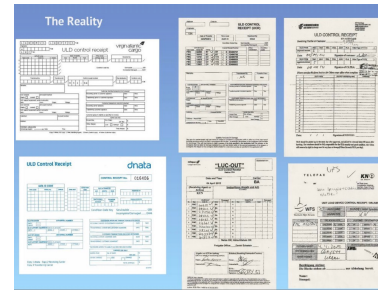
Digital value proposition

- ULD underpin the multimodal characteristic of air cargo, enabling cargo build up and break down at multiple off airport locations
- ULD CARE, through its subsidiary ULDigital has repurposed its legacy IULDUG system to cater for intermodal transfers of ULD along the cargo chain
- Delivering efficiency and sustainability



E-UCR what is it?

- A ULD is an expensive asset that enables intermodal air cargo operations
- Legacy paper based / EDI messaging are seriously dated
- Begs an industry solution benefitting all stakeholders



What's in it for the airline/owners of ULD?

- Benefit from the intermodal nature of modern air cargo
- But suffer the collateral damage to their ULD
- ULD research:
 - A typical PMC makes 6 trips off airport per year
 - An average turnaround of 13 days
 - At any point in time around 8% of global PMC fleet- 35000 units- is idle beyond 5 days- that's around 700 freighter aircraft ship sets.



What's in it for the cargo terminals?

- Cargo terminals are the intermediary between the airline and the forwarder:
 - Physical handling
 - Transaction recording
- The e-UCR app provides the terminal industry with a single tool to record and transfer the enhanced e-UCR to the ULDigital platform for display to the stakeholders



What's in it for the freight forwarder?

- Visibility of those ULD assets in their care.
- Increased participation in the global ULD operation, which benefits the entire industry
- Contribute to industry sustainability



Lamppost moment !!!

- On line tool displaying the status of all open ULD transfers between an airline and their 2 forwarders at that city location.
- Sounds simple enough, but **ONLY** the ULDigital solution can provide a universal, industry wide solution at a community level cost



Airport College International

Online Training for Airlines,
Ground Handling and Logistics

Advancing Airfreight Sustainability and Accountability

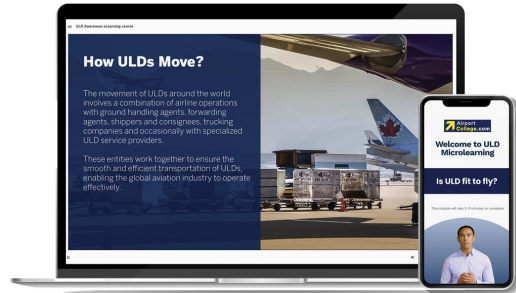
Integrating ULD CARE Initiatives

Istanbul 2024 Conference

INTRODUCING THE NEW ULD TRAINING CONCEPT

A brand new online ULD training concept for Aviation and Logistics to reduce ULD damage and improve safety

eLearning | Virtual Reality (VR) Training | 60 Second Videos



October 28th - 31st 2024 Istanbul

ULD CARE, ASA - Aviation Connect

We will showcase the ULD Challenge 2025 and brand-new online training concept for airlines, ground handling and logistics.



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www.airportcollege.com

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Airport College International Ltd.

1. Airport College International Ltd.
2. ULD Training Concept
3. ULD Challenge 2025

Online eLearning for Airlines, Ground Handling and Logistics

Passenger Service



Ramp Handling



Air Cargo Terminal



Logistics



Tools for ULD Training

eLearning courses

ULD Operations



Section introduction

An aircraft Unit Load Device is allowable on board a given aircraft type if its airworthiness is approved (certified) by a Civil Aviation Authority and allowed, through its certification classification identifying code, for installation on the aircraft type.

Limitations apply to all ULDs as a result of either the regulatory requirements, or the aircraft structural limitations, or both. In this section you will learn these limitations.

ULD Awareness



What ULDs are?

Aircraft Unit Load Device (ULD) is either an aircraft pallet and pallet net combination, or an aircraft container.

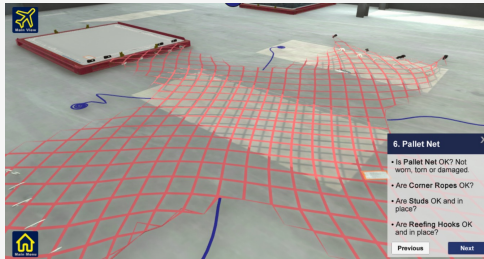
The purpose of ULD is to enable cargo, baggage or mail to be assembled into a standardized unit to facilitate rapid loading onto and offloading from aircraft having compatible loading and restraint systems, which directly interface with the unit.

Virtual Reality (VR) Training

Container Inspection



Pallet and Net Inspection



ULD60seconds.com Videos

Container Inspection



Pallet Inspection



ULD Build up

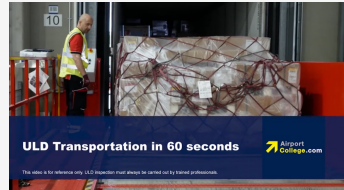


ULD60seconds.com Videos

Container Inspection

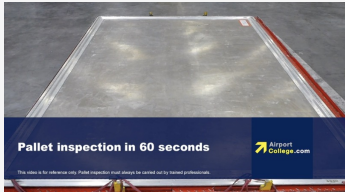


ULD Transportation



Airport College International and ULD CARE provides **free video tools** for the aviation industry.

Pallet Inspection



ULD Airside Check



The concept includes series of **multiple-language** videos for ULD inspection, handling and storage.

ULD Build up



Preventing Hold Damage

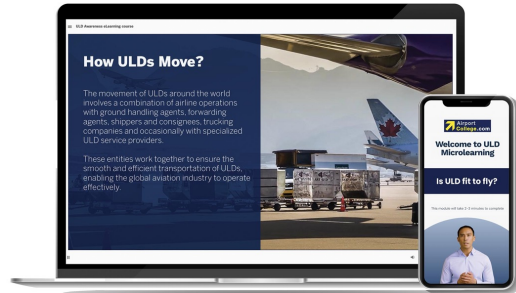


“It does not take too long to inspect a ULD” is our message to operational staff when preparing ULDs to the flight.

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Airport College International Ltd.

1. Airport College International Ltd.
2. ULD Training Concept
3. **ULD Challenge 2025**

ULD CARE and Airport College are **looking for a partner for a one year project to evaluate the effectiveness of training in reducing ULD damage**

ULD Challenge 2025 Next Steps

1

Stations Selected

The station(s) that participate in the project are selected.

2

Current State

Current state:

- Challenges
- Number and type of damages
- Stations
- Frequency

3

Free Training

The Airport College provides online training for staff

- eLearning
- VR training
- 60-second videos

4

Performance Monitoring

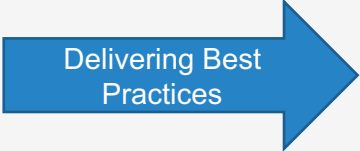
Project Partner must have reporting system in use

- Follow-up monthly and quarterly meetings

5

Final Report

Project results and recommendations will be presented in our 2025 Meeting



Delivering Best Practices

Candidates are welcome to report their interest to Bob or Pertti

Thank You!



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AIRPORT COLLEGE INTERNATIONAL LTD.

Airport College offers a comprehensive portfolio of online eLearning training courses covering aviation safety, security and service topics. Courses vary in length from 1 to 3 hours, with the primary objective of maintaining the competence of operational staff. To ensure regulatory compliance, course contents are based on international training standards set by governing bodies such as ICAO, FAA, EASA and IATA.

COMPETITIVE ADVANTAGE

We have over 30 ready-to-use online eLearning courses available worldwide 24/7 in many languages including English, Japanese, Korean, Chinese, Finnish, French, Thai, Spanish and more to come. We work with the leading experts in the aviation industry to ensure that the training content is relevant and always up to date. Our eLearning courses can be used for self-study, as part of a blended learning environment or to support instructors in the classroom. The AirportCollege.com training service reduces the various costs typically associated with classroom training, with the potential to significantly reduce training related costs by up to 80%.

IDEAL CLIENT

Our ideal clients are aviation and logistics companies or organisations that want to take advantage of the benefits of digital training for their employee development. Our clients understand the value of their employees' operational skills as the foundation for successful business and safe operations.

COMPANY

Airport College International Ltd, based in Helsinki, is an independent company with a creative approach to your training and employee engagement management. Our services are used in more than 140 countries, and we are represented through our partner network in more than 20 countries in the Americas, Europe, the Middle East, Africa, Asia and the Pacific.

Advancing Airfreight Sustainability and Accountability: Integrating ULD CARE Initiatives.



Agenda

- Aviation accounts for approximately 2.5% of global carbon dioxide (CO₂) emissions resulting from fuel burn. This contributes to about 4% of global warming.
 - ULD Manufacturing
 - Digitalization
 - Recycling

Data Source: Hannah Ritchie (2024) - "What share of global CO₂ emissions come from aviation?" Published online at OurWorldinData.org. Retrieved from: '<https://ourworldindata.org/global-aviation-emissions>

ULD Manufacturing

- Lightweight Materials
- Environmental Impact of Manufacturing & Repairs
- Product Life Cycle

When you know better you do better.

Maya Angelou



Digitalization

- Network Rebalancing
- Unreported & OTC
- Data Capture



You can't use what you don't know you have.

*OTC = Out to Customer



Recycling

- Recyclability
- Accountability



We talk the talk and walk the walk!

Final Thoughts

"If you're not part of the solution, you're part of the problem."

Eldridge Cleaver



Thank you.



ULD Climate Impact Label

Presented by: Louise Platell (innovation engineer at VRR)



Compliance Airworthiness Regulations Education

What if...?



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Weight



End-of-life

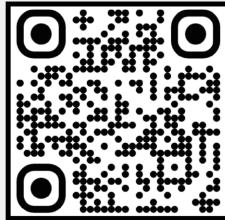


Spare parts

ULD Climate Impact Label



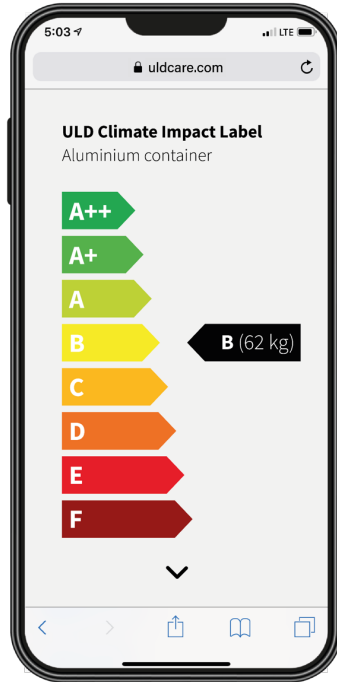
Weight: 62 kg

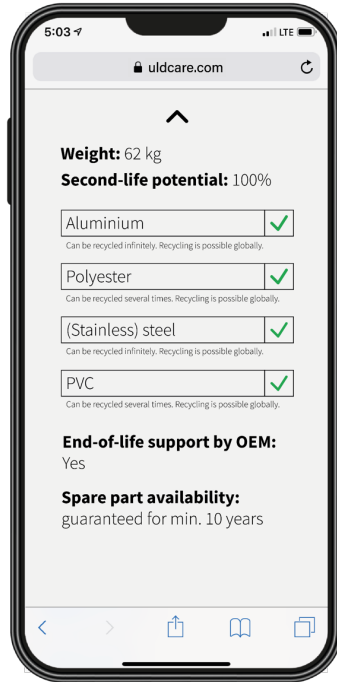


Second-life potential: 100%

Aluminium	✓
Polyester	✓
(Stainless) steel	✓
PVC	✓

uldcare.com/label





Limitations



Lifetime &
durability



Lifecycle
emissions



Compliance Airworthiness Regulations Education

Transparency is key.



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Compliance Airworthiness Regulations Education

Launch in 2025!



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Made possible thanks to:



Rishani Desaiyake; Charles Drummond; Dennis Demtröder; Lauren Ricks; Ben Lakerveld; Louise Platen; Jos Jacobsen; Terry Weithe; Willem-Jan Loomans; Kellie Beville



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Advancing airfreight sustainability and accountability

Celine Hourcade, Vice President, Global Head of ESG & Sustainability

ACHL, Istanbul, 30 October 2024

Our global business at a glance*



Employees
50K with **45+**
nationalities



Passengers handled
each year
80M



Flights handled
each year
600K



Meals produced
each year
96M



Chefs
1000+



Operating in over
215 airports in
27 countries



Cargo/mail processed
annually
8M tonnes



Customers
350+



Annual revenue
S\$5.1B

*Annual FY24 figures

Operating Statistics cover SATS and its subsidiaries, but do not include associates/ joint ventures

Our global network*



27
countries

Americas
Europe
Middle East
Africa
Asia Pacific



215
stations

125 Cargo handling

111 Ground handling

32 Food

Our definition of sustainability



8 ESG priorities defined forming our license to operate and grow



Environment

- Decarbonisation
- Waste & packaging



Social

- Safety & security
- Diversity & inclusion
- Human capital development



Governance

- Cybersecurity & data protection
- Sustainable sourcing
- Governance & business ethics



We have launched several decarbonisation initiatives



Electrification of fleet



Energy consumption optimization



Food waste reduction



Biofuel & renewable diesel



Biodegradable plastics



Solarization



Docking management systems

We are reducing waste and improving circularity



WFS Americas pioneered the use of BioNatur biodegradable plastics in the global air cargo industry

WFS Italy recycles plastic sheets to build up pallets in warehouse use.

WFS India introduced plastic pallets to increase reusability and reduce wooden pallet waste

We champion the waste segregation to maximize recycling, circularity

Our Indian stations use treated wastewater from the Sewage Treatment Plant for toilet flushing

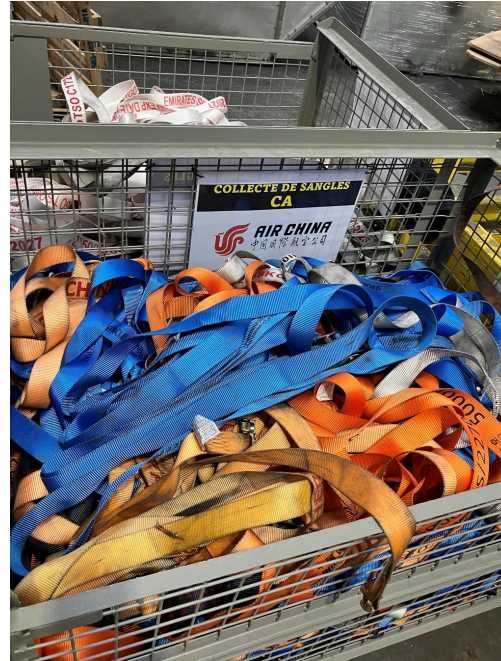
Member of the IATA Technical Advisory Group on LCA Methodology



What more & what next?



What can we do collectively to improve waste management on the ground?





Thank you

For more information, reach out to me at
Celine_Hourcade@sats.com.sg

The ULD CARE challenge to the industry...

Every person in the room has a stake in modern, efficient, safe and sustainable ULD operations- why settle for less?

ULD CARE devotes its financial and human resources to achieving this goal.

We invite the industry to take advantage of this work to raise the bar on industry wide ULD operations.