

## LEGAL BACKGROUND

Loading requirements are defined in IATA Dangerous Goods Regulations:

#### 9.3.5 General Loading and Securing Requirements

9.3.5.1 When dangerous goods subject to the requirements herein are loaded in an aircraft, the operator must protect the packages of dangerous goods from being damaged, including by the movement of baggage, mail, stores or other cargo. Particular attention must be paid to the handling of packages during their preparation for transport, the type of aircraft on which they are to be carried and the method required to load that aircraft, so that accidental damage is not caused through dragging or mishandling of the packages.



#### **PROPERLY SECURED?**

The shipments in these ULDs are only partly or not at all secured. The result is that the shipments tumble together and fall on one another.

#### But why do shipments not stay where you put them?







#### **TYPES OF MOVEMENT – START & LANDING**



Because of the forces that are created during the flight.

Most people are aware of the forces during start and landing. The shipment may move from one side to another or drop down.



#### **TYPES OF MOVEMENT – FLIGHT PHASE**



The force during the flight is **twice as high** as during starting and landing! Shipments jump up and down and may again drop down or fall off as a result of this movement. To prevent this, also secure shipments from the top.



## REMEMBER, REMEMBER...



The CIS ULD Build Up Course has taught you the basic methods of load security:

- -T-Stacking
- -Lashing
- -Using boards
- -Using pallets
- Using nets
- Using canvas

If you did not have the CIS course yet, you will soon as it is part of the "My function" module.



### **T-STACKING**

The space between the shipments needs to look like a T to increase security.





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## LASHING





## PALLETS

Ideal for securing NCY: Barrells, cars, high density cargo, tubes, engines...

When building palletts always use nets and plastic foils over the net.

Heavy cargo needs to be lashed down seperatly.







## NETS

Nets are used to secure cargo from all sides, for example when built on palletts.

If nets are used make sure to use **all** available hooks and tighten the net as necessary when you have finished the build-up.



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## **BOARDS AND PALLETS**

Boards must be used to secure dangerous goods on the top if the ULD is not full. Lash down accordingly.

Boards or palletts must be used for heavy cargo so that the weight is evenly distributed in the ULD.









# LAST BUT NOT LEAST

Dangerous goods need to be loaded after the Last In First Out principle in the front right corner.



