LIGHTER AND STRONGER

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Since the appearance of wide-body containerized aircraft in the 1970s, Unit Load Devices (ULDs) have grown to become an indispensable part of global baggage and cargo operations. Today, airlines and freight forwarders operate over 800,000 ULDs with a replacement value of approximately US$ 1 billion, upon which US$ 300 million per year is spent in repairs and maintenance.

At first sight, the evolution of ULD design over the past 40 years may not appear to have been as dramatic as some other aspects of the aviation industry. But today's container or pallet is a far cry from those used on the early Boeing 747 flights. Indeed, it is quite reasonable to say that without ULDs' contribution to the efficient and reliable handling of cargo between shipper and consignee, the air cargo industry as we know it today could not exist.

The overriding functional performance requirements for ULDs are specified in aircraft Weight and Balance manuals and must be met without fail every time a wide-body aircraft loaded with ULDs takes off. Thus, it is of upmost importance that ULDs meet the same exacting standards for operation and maintenance as any other aircraft part and in fact, this is required by the aviation authorities.

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The primary challenge facing any ULD engineer is to design a unit that can meet the aforementioned performance standards established by the Federal Aviation Administration and the European Aviation Safety Agency, while creating the lightest possible ULD which is also able to sustain the often harsh handling environment each unit may face over its lifetime.

For over 40 years, Nordisk has successfully balanced these often conflicting requirements and takes much pride in having played a significant role in the ULD's evolution to-date. Sample Nordisk innovations include welded corner pallets, full width lower deck containers, all-aluminium 20 foot pallets, and today, having the lightest certified AKE in the market, weighing in at just 55 kg. Owned by AAR, a diversified $2 billion aviation industry leader, Nordisk counts nearly 200 airlines as loyal customers, from New Zealand to Finland, from Chile to Mongolia.

Today's ULDs are generally 30-40% lighter than their equivalents from the 1970s, made possible by advanced design techniques coupled with the availability of new lightweight materials. They are also more volumetrically efficient, facilitating the use of every available cubic inch of the aircraft holds, utilizing a combination of body contours that enable their efficient use in different aircraft hold types.

Looking ahead, ULD manufacturers will need to continue to innovate to address the aviation industry's many challenges such as high fuel prices, risks associated with the transport of lithium ion batteries and other dangerous goods, and financial pressures. New repair-efficient designs, high technology composite materials and IT solutions have emerged as playing important roles.

Nordisk's goal going forward is simple: to develop creative solutions that enable customers to increase cargo revenues, reduce operational costs, and improve asset risk management. Nordisk will continue to invest in its ability to deliver such solutions globally through production facilities in Norway, China, and the United States, plus spares inventory and locally staffed Service Centers of Excellence in each of the Americas, Europe/Middle East/Africa, and Asia regions.

Here's to another successful 40 years together! •