

# For those airlines operating with temporary freighters, time is running out! The Cargo exemption is expiring! Get your Full Freighter Conversion without the need of an exemption NOW!





#### A330 Freighter Conversion = Matching Capacity with Demand

**Patent Pending** 

 Most, if not all, Emergency Passenger to Cargo conversions are based upon <u>temporary</u> "exemptions"

This presentation is about a design based upon a **FULL STC** modification and **does not** rely on any temporary exemptions

## A330-300 Full Freighter Business Case Discussion

Until recently there was optimism that some degree of normalcy to PAX demand would return over the Summer Season and possibly into the Autumn Season as well.

As a result of this optimism toward passenger recovery the only real investments into the cargo business that passenger airlines wanted to make were short-term and low-cost solutions such as strapping cargo to seats or removing seats and strapping hand-loaded cargo to the floor mounted seat tracks. These are not viable long-term solutions, nor were they designed to be. Now airlines are looking for longer term revenue generating solutions in the range of one to three years.

"Global export orders are rising at a substantial rate, prompting to strong cargo volumes and a rise in demand, the International Air Transport Association (IATA) reported on September 9, 2020."

To meet this demand IFC has created both Full Freighter and COMBI designs applicable to B737, B757, B767, B777 and B787 and A32X, A330, & A340.

This presentation is for the A330-300 Full Freighter "reversible" design that allows for the carriage of maximum Cargo in the main cabin, can be easily reverted back to PAX for lease return, integrates with existing cargo logistics, meets all airworthiness requirements and is economical.

S&P Global reports that International Load Factors are at 28% in 2020 and it projects Load Factors of 50% in 2021, and 60% in 2022. In 2023, projections are only at 75-80% on these international routes. Convert your aircraft to a freighter.

Major commercial airlines have recently indicated that carrying cargo was the only part of their business making any money.

## A330-300 Full Freighter Business Case Discussion

The IFC Full Freighter design is a longer term solution unlike the stop-gap hand-loaded solutions that have been used up until now and it is designed to be flexible enough to allow for the easy re-configuration back to a PAX aircraft for continued use or Lease Return purposes or a COMBI with the right balance between PAX and Cargo that can be easily and quickly adjusted up or down to maximize revenue.

The hand-loaded solutions available up until now rob the passenger airline of its core competency and prevents the cargo airline from reaching full potential without massive and time consuming capital investments.

With the IFC Full Freighter design both the passenger airline and the cargo airline can achieve the best results, using all aircraft to their maximum value.

With PAX Load Factors substantially down and cargo rates up, the IFC Full Freighter design offers passenger airlines a method to monetize all that unused capacity and cargo airlines to lease, vs purchase aircraft.

IFC has the best solution that can realize substantial cargo revenue with minimal capital investment, now!!

Like all new initiatives the key is making the business case while also meeting all the airworthiness requirements. PAX airlines are now seeing the severe COVID-19 drop of RPKs/RPMs is a long-term reality. Cargo airlines need capacity now. A viable business plan that involves the right approach to cargo can be the key to success in this new reality.

# Low initial cost + available space + cargo demand + high cargo rates + IFC's design flexibility to reach the "sweet spot" of cargo capacity = profitability for the airline.



Typical, A330-300, 3 Class Cabin, 291 PAX Configuration

#### **Cabin Cargo Module Configuration, Full Freighter**



#### A330-300, Full Freighter Configuration



# 46 ea Outboard Cargo Modules8 ea Center Cargo Modules



29 ea Ceiling Cargo Modules

#### Cabin Cargo Module Configuration



Patent Pending

# INFLIGHT CANADA 86.0" [218.4] 66.0" [167.6] A330-300, Cargo Module Configuration **Center Cargo Modules Shown, with Ceiling Cargo Module**

#### Cabin Cargo Module Configuration

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### Cargo Module Monitoring and Safety Systems

Cargo Module design incorporates the following safety features to meet the EASA/FAA/TCCA Requirements for a stand alone certified Cargo Compartment:

- Cargo Modules are sealed to resist:
  - Fire Propagation
  - Keep smoke or halon from entering cabin
- Cargo Module liner and structure to be designed and tested to meet the fire proofing requirements.
- Cargo Module includes a Fire Suppressant port for a Fire Marshall to manually distribute fire suppressant into the Cargo Module without the requirement of opening the door.
- Smoke/Temperature Detector with Annunciation at ACP and Cockpit Panel, Integrated Cargo Module Flashing Light, and Chime in cabin.





#### Cargo Module Flight Deck Safety Features

#### **Annunciator Control Panel (ACP) for Flight Deck**

- Individual Power ON indicator
- System Test Switch/Failure Indicator
- Cargo Module Smoke/Temperature Detection Alarm with ability to Mute.
- Cockpit location based on specific aircraft space availability.





#### Cargo Module Safety Features

- Cabin Cargo Modules, Smoke Detector Annunciator Control Panel (ACP)
  - Located at the designated Fire Marshal Station.
  - Provides Visual & Aural Warning of Smoke Indication.
  - Allows System Power On/Off & Test





#### Floor Cargo Module Structural Features

- Cargo Modules sized to optimize available space.
- Corners Contoured/Reinforced to survive typical cargo abuse environment.
- Multi-Point Door Latch.
- Provisions for Customs Seal & Padlock.
- Doors Swing 180 Degrees to facilitate loading.
- Locking wheels for stability during loading.
- In lieu of Structural Shelf a Structural Bar will be installed after cargo loading across door opening.

180 degree door swing, both doors I N F L I G H T CANADA



#### **Floor Cabin Cargo Module Configuration**





### Ceiling Cargo Module Portable Lifting Device

 Loading of the Ceiling Cargo Modules is accomplished using customized material lifts that are stored in galley areas on board while not in use.





## **Designs In Process**

- A330-200 COMBI
- A330-200 Full Freighter
- A330-300 COMBI
- A330-300 Full Freighter (This Presentation)
- A340-600 COMBI
- A340-600 Full Freighter
- A310-300 Full Freighter
- B777-200 COMBI
- B777-200 Full Freighter
- B777-300 COMBI
- B777-300 Full Freighter
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- B767-300 Full Freighter
- B767-400 COMBI
- B787-8/-9/-10 COMBI
- B737-800 COMBI
- B737-800 Full Freighter
- A319/A320/A321 COMBI
- A319/A320/A321 Full Freighter
- B757-200 Full Freighter
- B757-300 COMBI



#### **\*\*** Refrigerated Cargo Modules **\*\***

For the anticipated COVID-19 world wide vaccine distribution IFC is presently designing Refrigerated Cargo Modules that shall maintain between 2C –to-8C and can be powered by any typical warehouse local power, any aircraft power or any typical vehicle power.

These features preclude and eliminate any special requirements such as costly and large ramp equipment to off-load cargo, (local galley truck and fork-lift is sufficient), refrigerated warehouses and ground distribution vehicles making it possible to operate into any aircraft around the world and reach the most remote medical clinic.

# For Detailed Information Contact;



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