

**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!**





777-300ER COMBI Full Freighter Cargo = Matching Capacity with Demand

Patent Pending



- Most, if not all, **COVID-19** Emergency Passenger to Cargo conversions are based upon temporary “exemptions”

This presentation is about a cargo design based upon a **FULL STC** modification and **does not** rely on any temporary exemptions. It can be used for as long as the Customer Airlines wants

B777-300 Cabin Cargo 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 and A340 aircraft.

This presentation is for the 777-300ER COMBI and Full Freighter that allows for the simultaneous carriage of both PAX and Cargo & 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 Full Freighter

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

B777-300 Cabin Cargo Business Case Discussion

The IFC COMBI & Full Freighter designs are 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. After months of research and design combined with planned stringent airworthiness testing, IFC has the best solution that can realize substantial cargo revenue with minimal capital investment.

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.

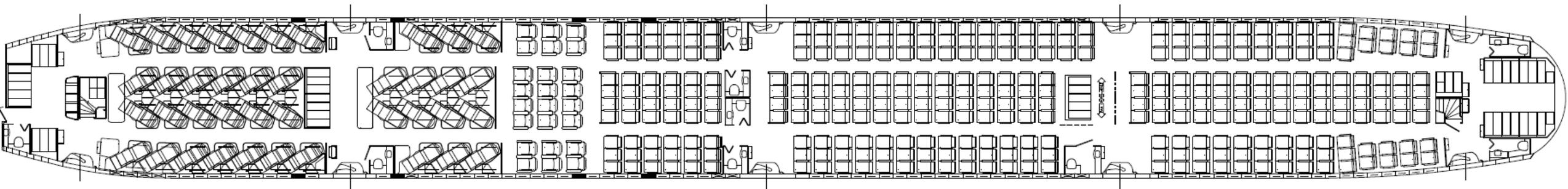
B777-300 Cargo Conversion



Straight Forward Conversion: (No special & costly mods)

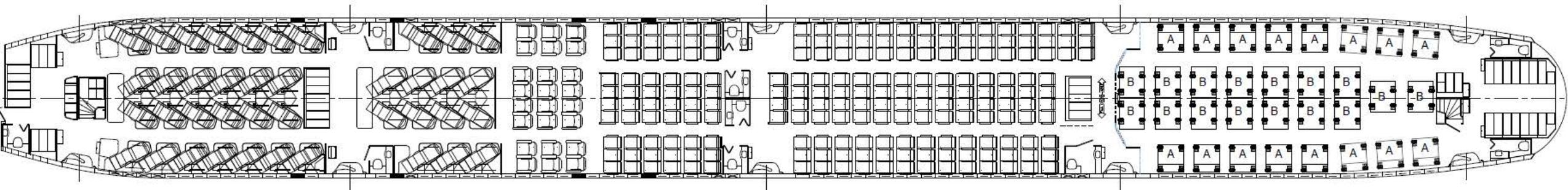
- Use existing fleet or lease surplus passenger aircraft and convert. No need to purchase aircraft because the IFC design is reversible allowing a “lease return” configuration eliminating high capital expenditures.
- No requirement for costly and long lead time aircraft cargo conversion mods such as large cargo doors, strengthened floors, smoke detection and fire suppression systems.
- No long term and costly heavy maintenance visits. Transferring the IFC Kit from one aircraft to another.
- This IFC design allows for the economical and fast conversion that meets all airworthiness requirements.
 - Remove PAX seating & Carpet from intended cargo cabin(s). Retrieve IFE LRUs for COMBI Conversions.
 - Install IFC COMBI Bag Bin Kits and re-install retrieved IFE LRUs into them.
 - Install IFC COMBI IFE Wire Harness Kit and connect bag bin mounted LRUs.
 - Install IFC COMBI Floor Container Seat Track Kit.
 - Install Cabin Floor Protective Covering.
 - Install IFC COMBI Safety System Kit.
 - Install IFC COMBI Cabin Dividers.

B777-300ER Passenger Configuration



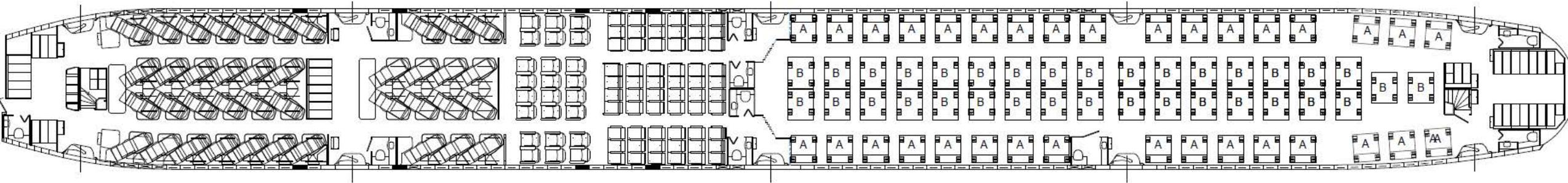
Typical, 777-300ER, 3 Class Cabin, 400 PAX Configuration

Cabin Cargo Module Configuration



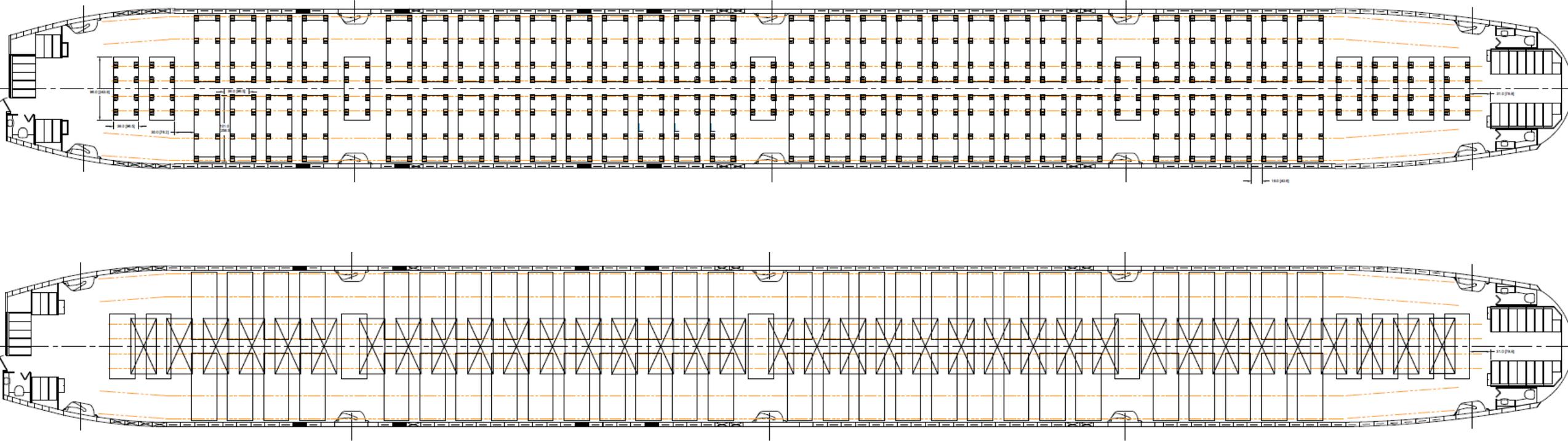
B777-300ER, 264 PAX COMBI Cargo Module Configuration
16 ea. Outboard Cargo Modules
16 ea. Center Cargo Modules

Cabin Cargo Module Configuration



B777-300ER, 124 PAX COMBI Cargo Module Configuration
33 ea. Outboard Cargo Modules
34 ea. Center Cargo Modules

Cabin Cargo Module Configuration



777-300ER, Full Freighter Cargo Module Configuration

56 ea. Outboard Cargo Modules

9 ea. Center Cargo Modules

34 ea. Ceiling Cargo Modules

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.

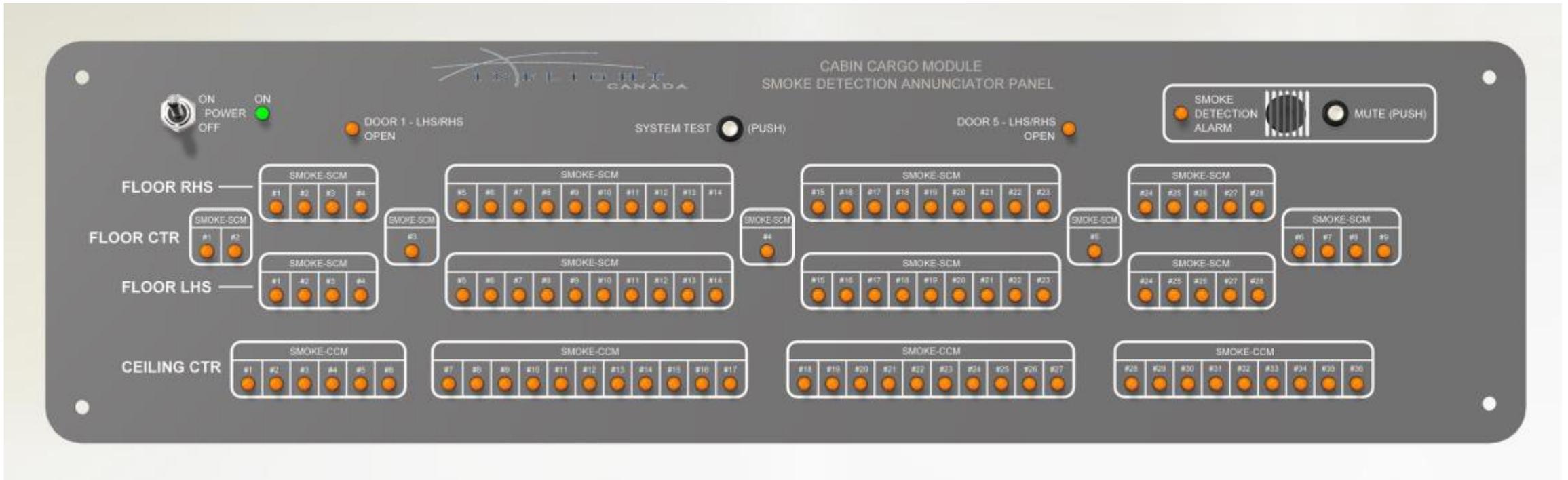


Cargo Module Cabin Safety Features



Annunciator Control Panel (ACP) for Full Freighter Configuration

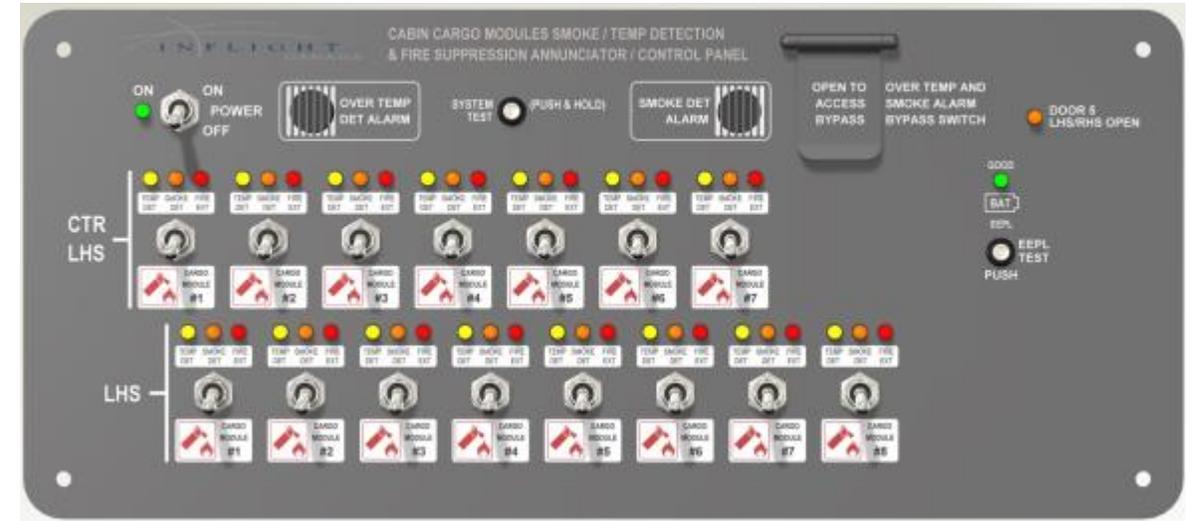
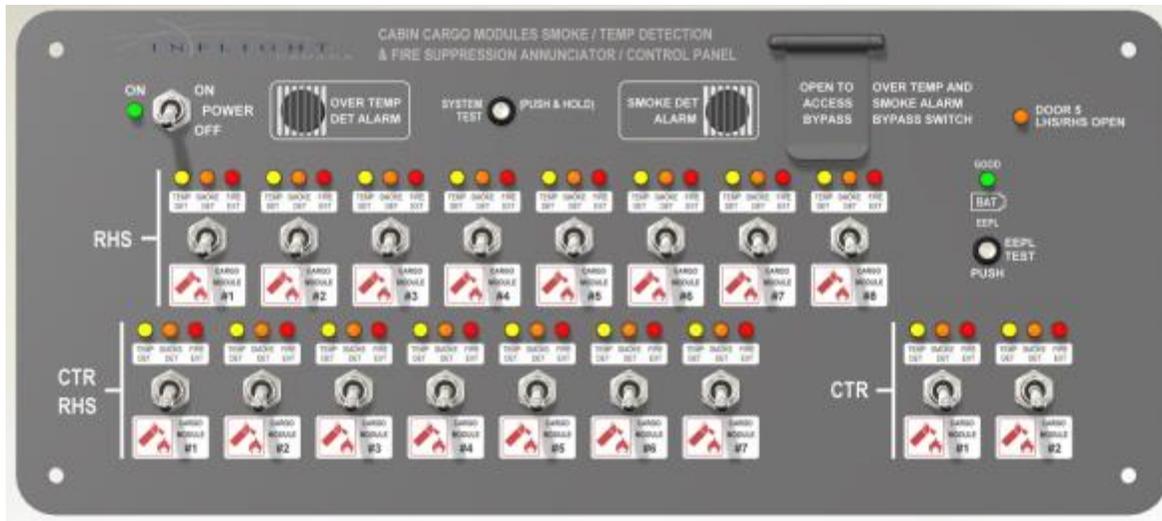
- Smoke/Temperature Monitoring and Reporting
- Located at the designated Fire Marshal Station.
- Provides Visual & Aural Warning of Smoke/Temperature Indication.
- Allows System Power On/Off & Test
- Also has Aural Annunciation in Cabin Area via P.A. System



Cargo Module Cabin Safety Features

Annunciator Control Panel (ACP) for Aft COMBI Configuration

- Smoke/Temperature Monitoring and Reporting
- Remote Fire Suppression Activation with Emergency Override
- Controls/Powers EEPL System
- Built-In Test Equipment(Bite) and Door Open Override
- Located at the designated Fire Marshal Stations.
- Provides Visual & Aural Warning of Smoke/Temperature Indication.



Cargo Module Cabin Safety Features



Annunciator Control Panel (ACP) for Mid/Aft COMBI Configuration

- Smoke/Temperature Monitoring and Reporting
- Remote Fire Suppression Activation with Emergency Override
- Controls/Powers EEPL System
- Built-In Test Equipment(Bite) and Door Open Override
- Located at the designated Fire Marshal Stations.
- Provides Visual & Aural Warning of Smoke/Temperature Indication.



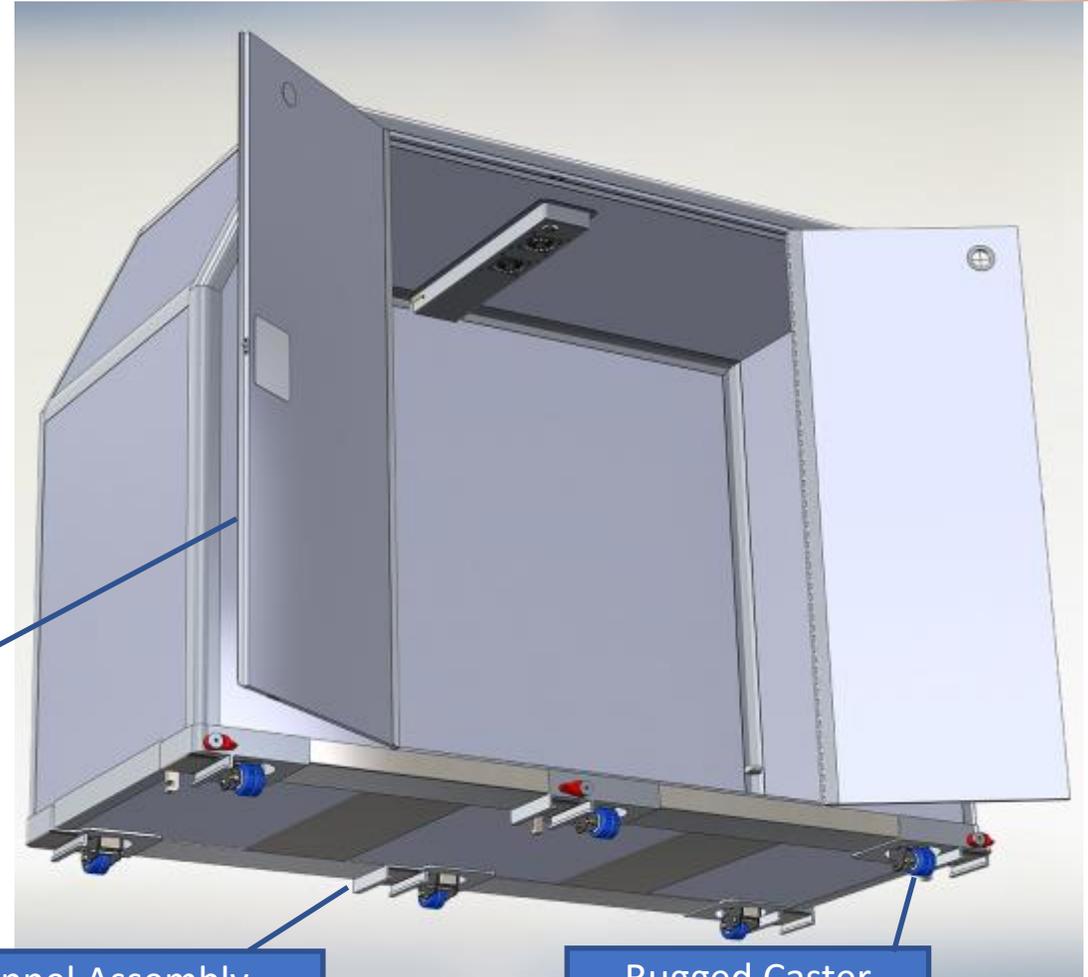
Floor Cargo Module Structural Features

- 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.

180 degree door swing, both doors

Channel Assembly Guides Module into Floor Roller Assy

Rugged Caster Double Wheel Assemblies



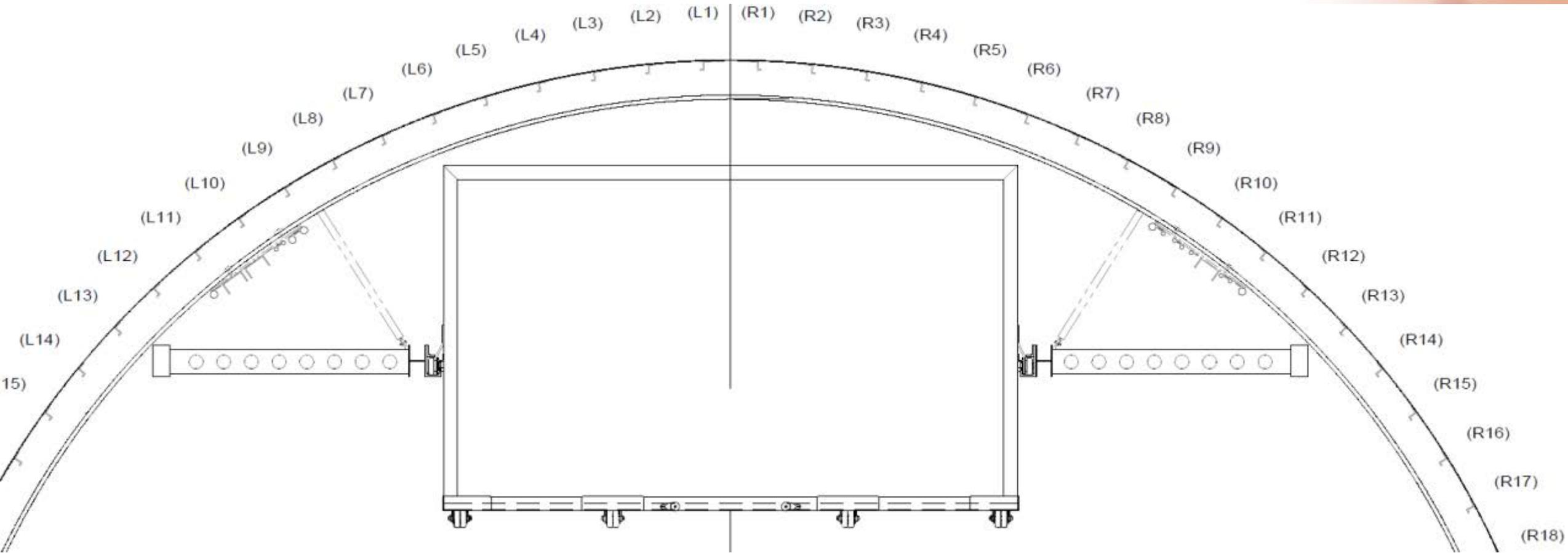
Floor Cabin Cargo Module Configuration



Floor Cargo Configuration

Ceiling Cargo Module Loading and Structural Attachments

- Ceiling mounted Rails attach to existing Overhead Baggage Bin structural attachments allowing for their easy and quick installation and removal.



Typical Ceiling Cargo Module Shown
(Design pending full structural analysis of existing 777 Overhead Structure.)

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.



Similar Commercially available Material Lift

Patent Pending

Designs In Process



- A330-200 COMBI
- A330-200 Full Freighter
- A330-300 COMBI
- A330-300 Full Freighter
- A340-600 COMBI
- A340-600 Full Freighter
- A310-300 Full Freighter

- B777-200 COMBI
- B777-200 Full Freighter
- B777-300 COMBI **(This Presentation)**
- B777-300 Full Freighter **(This Presentation)**

- 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.

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Patent Pending