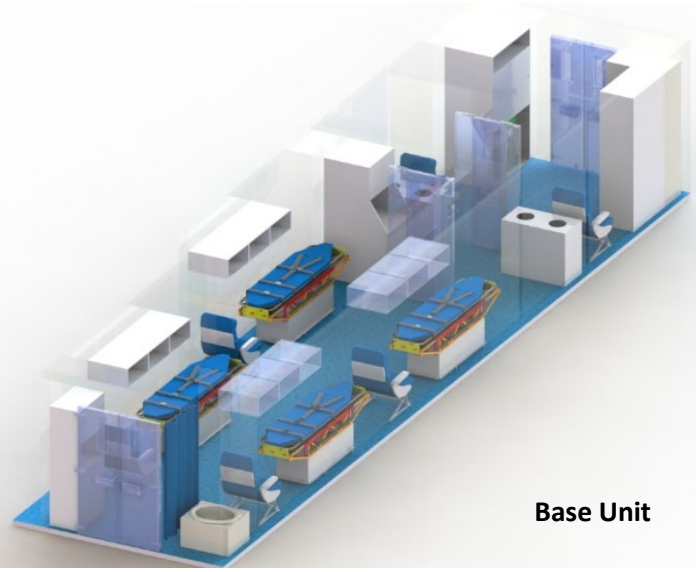
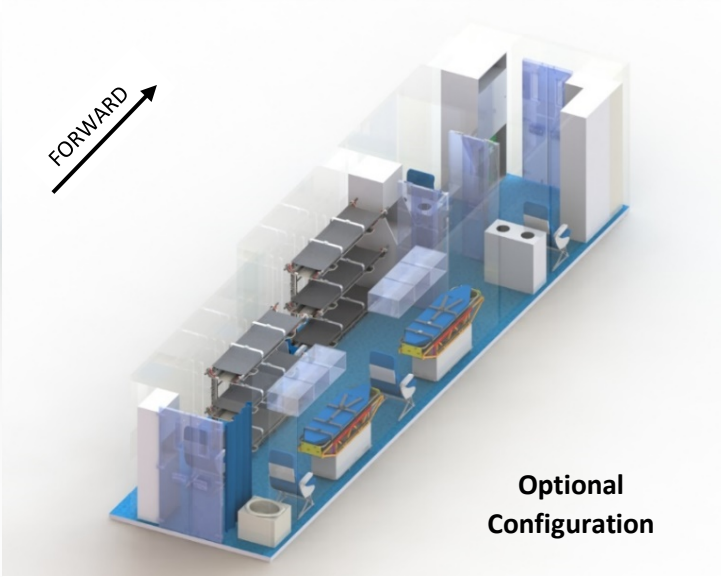
New Technology to Transport COVID-19 and Other Contagious Patients

Aeromedical Bio-Containment Module (ABCM) for Patient Isolation Transportation Requirements

Part Number: 40000-1



Base Unit



Optional Configuration

ABOUT THE ABCM:

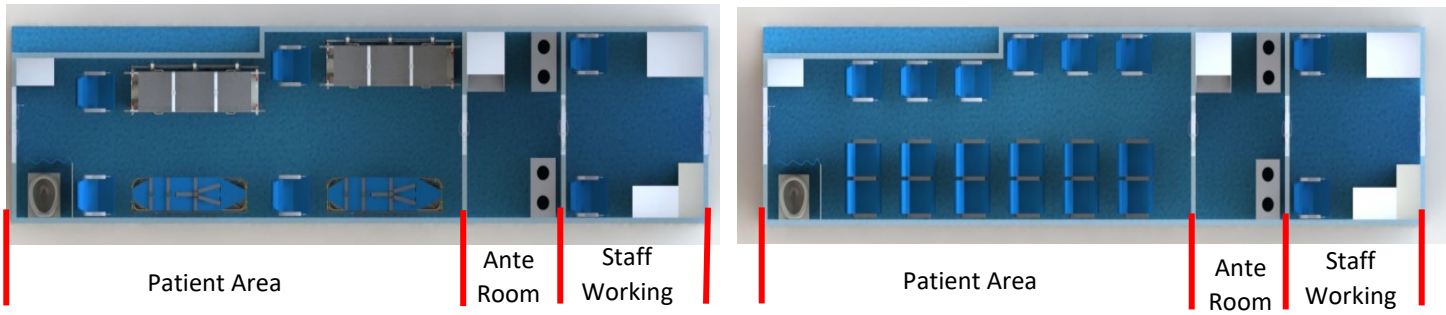
The five pallet ABCM allows for multi patient transport requiring isolation or transport in a specialized care area. The module will allow for both patient isolation and independent crew member isolation. The three-room concept allows for self-contained transport which provides separation of the patient and medical crew with that of the air crew and airframe. The entry area serves as the Staff Area for medical crew documentation, research, and rest. The Anteroom allows for direct visual monitoring of the patient care area by a safety officer or buddy system. In the Anteroom, donning and doffing procedures are completed with appropriate bio-waste containment. The Patient Care Area allows for direct patient care of multiple patients and adequate space for medical providers. It includes bio-waste containment and toilet facilities, if needed for patient care. Direct visual, audio and video communications systems enhance the safety features of this unit and protection of personnel.

AIRCRAFT AND AIRWORTHINESS PLATFORM:

These “flying patient care rooms” can be quickly loaded and activated within an array of aviation platforms, allowing full integration and mission flexibility with the C-390. ABCM provides separation of the aircrew and medical environment and eliminates aircraft down time. The design is based on Knight’s proven Modular System technologies which have received approvals from all major aircraft OEMs as well as airworthiness certification from the USAF and other independent organizations. The ABCM is built to the highest OEM standards for airworthiness (full integration into the aircraft Cargo Handling System, no tie downs, no weldments, no wood, etc.). The units are fully operational while in flight. Airworthiness per FAA Standards and MIL-HDK-516 Criteria.

Key features of the ABCM include:

- Five (5) Standard Pallet positions in length (450” L x 108” W x 100” H/11.43 m L x 2.74 m W x 2.54 m H)
- Three separate areas: Patient Area, Anteroom and Office Area
- Can be utilized to transport up to 18 patients simultaneously and treat patients with different degrees of acuity, including highly contagious diseases.
    - To achieve a higher patient count the single medical beds or Medical Stacking Litters can be changed with Economy Class Seats.
- Provides complete separation of patient and medical crew from air crew
- Negative pressurization with HEPA filtration, directed airflow and a separate oxygen system (LOX/GOX).
- Multiple Outlets for medical equipment with battery backup
- Audio/Video inside of the ABCM and audio interface with the aircraft
- Easy decontamination allows for aircraft to return to service quickly after the ABCM is delivered.
- Egress walkway on the aft left-hand side of the Module for forward to aft walkway inside the C-130 aircraft (walkway is in the wheel well area).
- State-of-the-art hospital environment allows for transportation of highly infectious disease patients. Other aspects of the Module can be transformed for major trauma, resuscitative and surgical procedures while in flight.
- Acoustic/vibration package, for decreased interior noise levels and reduced staff fatigue during flight
- ABCM units are fully operational while in flight. Once unloaded, they can be easily connected to a power supply and remain operational on the ground.
- Customization options include telemedicine capabilities to provide additional expertise while patients are being transported or when units are staged on the ground as part of efforts to surge medical facilities in impacted areas.
- Optional features include the inclusion of an environmental control unit (for heating and cooling) with positive pressurization, cabin management system and an increased acoustical and vibration package.



ABCM interior layouts. The Module can be configured to accommodate 4-18 patients and medical capabilities can be customized. Separate anteroom and office area for separation of the aeromedical staff and the patients

Knight Modular systems being loaded onto a C-130J (left) and a C17 aircraft (right). The new medical ABCM’s will be similarly loaded/unloaded to allow for quick reconfiguration of the aircraft.

ABCMs ARE NOW IN PRODUCTION AND CAN BE SCALED TO MEET OPERATIONAL NEEDS

Following a multi-year design process in partnership with aircraft manufacturers and medical professionals and assisted by an advisory council that features top retired military medical commanders, including a former U.S. Air Force Surgeon General, the ABCM is now in production. Knight has begun building the first unit, with expected completion in the summer of 2020. Based on demand, the company's facility can scale production to many units per year, Acceleration possible.

ABOUT KNIGHT AEROSPACE

Headquartered in San Antonio, Texas, Knight Aerospace has operated for almost 30 years, establishing itself as the industry leader in providing quality and reliable "Quick-Change/Roll-On Roll-Off" modules and pallets to enhance the functionality of various cargo aircraft. The self-contained units include passenger seating, lavatories, galleys, communications equipment, head-of-state suites, and combinations of the foregoing. Knight Aerospace exists at the exciting intersection of aerospace, military, and medical technology. Its mission is to modernize aerospace transportation to be modular, adaptable and customizable in an ever-changing world. Knight's products allow its customers to quickly adapt their aircrafts to fit their current needs. It has longstanding working collaborations with aircraft manufacturers, the U.S. defense community, and foreign militaries.

The company operates within a 120,000-square-foot state-of-the art facility at Port San Antonio—a large technology campus whose platform allows the company to scale production and provides a direct air connection via Kelly Field (SKF), a joint-use industrial airport operated by the Air Force and located within proximity to the Knight facility.

Knight's products are designed in-house; 85% of products are fabricated in-house and 95% are assembled in-house.

The company is a woman owned minority small business.

Government Cage Code: 7AYX2

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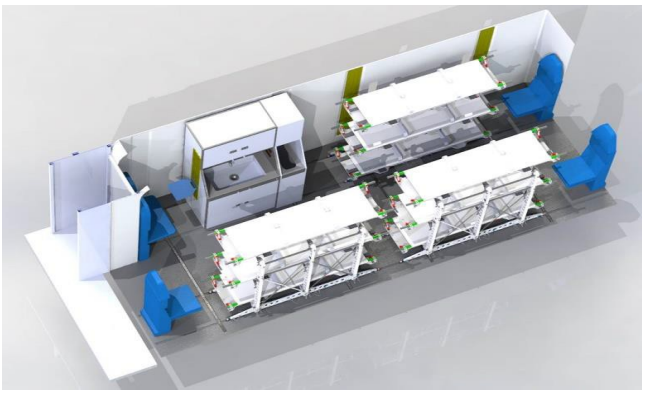
Other Medical and Transport Systems

Universal Patient Module (UPM)



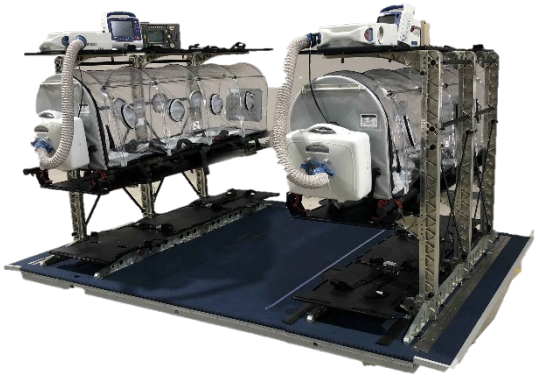
Features

- Separates Aircrew and Patients
- Provides sterile environment for patients
- Provides a familiar environment for Medical Staff
- Provides 30 air changes per hour
- Provides negative/positive pressure inside of the module

Critical Care Bed Pallet with Seating
(Part Number: 20619-1)

Litter with Isolation System Pallet with Seating and Storage
(Part Number: 20655-7)

Critical Care Bed Pallet with Seating
(Part Number: 20619-3)



Litter with Isolation System Pallet
(Part Number: 20655-5)

Air-Transportable Galley Lavatory Pallet
(Part Number: 20692-1)

15 Passenger Seating Pallet
(Part Number: 20270)