



# KNIGHT AEROSPACE'S INNOVATIONS SAVING LIVES AROUND THE WORLD

INDUSTRY LEADER COMPLETES SECOND STATE-OF-THE-ART AEROMEDICAL  
MODULE FOR THE ROYAL CANADIAN AIR FORCE.

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SAN ANTONIO, TX – Knight Aerospace continues to launch transformative innovations that are having life-saving implications on a global scale.



The company is on the leading edge of the integration of medicine and aerospace, having delivered its first state-of-the-art aeromedical module to the Royal Canadian Air Force (RCAF) in 2021 to provide hospital-grade care to seriously ill or highly contagious patients while in flight.

The first Knight Aerospace medical module as it is loaded onto a Royal Canadian Air Force (RCAF) aircraft at Kelly Field in early 2021 – ready to undertake life-saving missions in Canada and around the world. The second unit is now complete and has been delivered to the RCAF.



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A second unit has been completed for the RCAF and was recently showcased during an open house event at Knight Aerospace's headquarters on the Port San Antonio technology campus, where industry and other community leaders got to see first-hand the next-generation flying medical module while learning about the organization's plans ahead in growing the community's tech ecosystem.

"We are proud to bring to culmination years of research and development," said Knight Aerospace President and CEO Bianca Rhodes. "Understanding this need makes Knight's technology the long-term, sustainable solution to the problem of safe transportation of critically ill or highly contagious patients."



Knight Aerospace President and CEO Bianca Rhodes addresses attendees during the unveiling of the second medical module to be delivered to the RCAF.

As evidenced by the COVID-19 pandemic, the world needs to adapt to meet urgent demands for the expansion of hospital capacity and transportation of patients.

Knight Aerospace's self-contained, hospital-caliber module allows for the safe transport of patients on board of an array of large cargo aircraft. In addition, utilization of the patient area in the module can be expanded to transport critical vaccines. It is the first airworthy modular enclosed hospital system in the world, able to operate within air cargo standard bearers like C-130 and C-17 aircraft.

The RCAF is utilizing this technology to execute urgent medical transports within Canada and internationally.

Hermetically sealed and negatively pressurized with an independent air supply, the modules protect the pilots and aircrew from infection — allowing aircraft to be returned to service immediately upon unloading by eliminating the need for costly and time-consuming decontamination of the plane. Interoperability between the C-130 and the C-17 aircraft further increase flexibility and cost efficacy.

The units are outfitted with state-of-the-art medical equipment and offer a wide range of critical care capabilities. These allow for the treatment of ill patients while in flight, including performing emergency surgery.



Interior image of Knight Aerospace's second completed medical module, which can provide a full spectrum of hospital grade care while in flight or as a standalone emergency medical facility on the ground.



Knight Aerospace's modern large space at Port San Antonio allows the company to conduct research, engineering, fabrication, testing and product demonstrations within a single facility.

Upon landing, the units can continue operating on the ground, since all that is required is a power supply, such as a gas-powered generator. This capability allows for the expansion of field hospitals and other temporary medical facilities that are dealing with pandemic surges or other emergencies. The units can also provide much-needed care to remote places that currently lack such facilities altogether.

For nearly 30 years, Knight Aerospace has specialized in the fabrication of quick-change roll-on / roll-off systems such as palletized seating and VIP cabins that allow cargo aircraft to be quickly converted to different uses. The company began to focus on the design of aeromedical solutions, including

innovations for the safer transportation of highly contagious patients, beginning seven years ago following global outbreaks of Ebola.

As part of that development of its technology, the company consulted and worked in close alignment with numerous defense and medical organizations around the world, including the U.S. Centers for Disease Control (CDC), to develop a product that can provide the highest quality medical care while in flight and can be adapted to meet different needs.

Long before the current COVID-19 pandemic, Knight also began to build its expertise. The medical team is led by Dr. Paul K. Carlton Jr., who is one of the world's top experts in medical evacuation and the developer of Critical Care Air Transport Team (CCATT) currently used by the U.S. Air Force and military forces around the world and serves as an advisor to Knight.

Considering the effects of COVID-19 pandemic and the likelihood of future disease outbreaks, Knight anticipates growing global demand as governments better prepare to respond to similar situations.

The company's 160,000-square-foot facility at the Port provides the growing team — which includes an array of engineers, designers, and fabrication specialists — the ability to continue to develop the new technology while fulfilling orders from other defense, public health, and NGOs worldwide.