

Interview with Air Ambulance Provider, CSI Aviation

SHIV GAGLANI / MedGadget Exclusive / Nov 26, 2013



There is a remarkable degree of overlap between medical technology enthusiasts and aviation aficionados. Perhaps this is why there are so many analogies drawn between the aviation and health care industries, with the former serving as a model that the latter strives to emulate (e.g. safety checklists, decision support tools/gauges, etc). A few of us *Medgadget* editors also have backgrounds as aeronautical engineers or pilots, so when we had the opportunity to learn more about air ambulances we jumped on it. The result is the interview below with Michele Martinez of **CSI Aviation**, which arranges for air ambulance transport services.

Shiv Gaglani, Medgadget: *How did your company get into medical transport?*

Michele Martinez: We are an Aviation Management company specializing in urgent air charter requirements for over 34 years. We are available 24/7/365, so we are available at a moment's notice for any type of air charter requirement. We have been providing air ambulance services to various entities and currently have agreements in place with several government agencies and corporations to provide air ambulance, medical evacuations and in-flight medical services worldwide.

Medgadget: *Which aircraft are in your fleet and what types of medical equipment do they carry?*



Michele Martinez: CSI is a global aviation services and management company and does not own aircraft. We arrange commercial aircraft, executive jets and turboprops, using a wide variety of certified air carriers, as agent for our customers or the air carrier. By virtue of our position as an aviation management company, versus being an operator of a specific aircraft type, we are not limited to just one class of aircraft, and our flexibility is what guarantees aircraft availability. CSI has no geographic restrictions.

King Air's and Lear Jets are the most common aircraft types configured for air ambulance and typically the most cost effective for these type missions. They are suitable for the range (distance) needed for most requirements and meet the number of passengers needing to be transported.

Aircraft may be equipped with the following equipment, but this is dependent on each individual requirement: Standard medication, bandages, oxygen, mechanical suction, intubation equipment, ventilator support equipment, cardiac monitor, defibrillator, ACLS drugs and therapeutic modalities; mission specific equipment (as required) including sharps disposal container, collection container for soiled and disposable items.



Medgadget: *Can you describe some of the challenges associated with air ambulances?*

Michele Martinez: Almost all requirements are short notice, so we have to respond immediately. We have arranged flights in as few as two hours. Challenges are having the right aircraft available to meet the needs of the mission at a cost-effective price for the customer. Many times an aircraft will have to position from another city, which adds time to the flight that you at times do not have, and it also increases the cost — which is a factor for some. We have access to many aircraft, so we are not restricted to one geographical region or

one specific aircraft type. Being in business for over 34 years has allowed us to have long-standing relationships with air carriers worldwide, so we are capable of finding an aircraft option for any urgent requirement.

Most daily missions consist of transferring patients who are in the end stages of life due to terminal cancer or other terminal diseases. Some missions consist of transferring psychiatric inmates. Ongoing communication with the medical staff and flight crew is crucial for the overall success of each mission

We have transferred morbidly obese patients, which can be very challenging because many are unable to walk on their own. We therefore have to find suitable aircraft to transport a patient of this nature and coordinate with the airfield and air carrier on how to safely board the patient to the aircraft. We must also ensure the receiving facility and airfield has the proper equipment to deplane the patient and the ground transportation can accommodate the patient to complete the medical transfer to the facility.

For the transfer of patients on life support the degree of medical care requires further planning and communication with the facility, medical staff and air carrier prior to flight and in flight.

Medgadget: *What type of training does the caregiver on the airplane need?*

Michele Martinez: A licensed medical staff typically provided by the air carrier accompanies the patient for air ambulance flights. Medical staff may be one of the of the following: Flight Nurse (or Flight Physician) with BLS and ACLS current certification and ventilator current certification as well as a Medical flight attendant with a minimum EMT qualification.

All medical personnel are experienced physicians, registered nurses, respiratory therapists and/or paramedics with extensive training such as flight physiology, certified in advanced cardiac life support and advanced trauma life support.

In-flight treatment and medical conditions varies for each requirement. Some may require Basic Life Support (BLS) services, where some may need Advanced Cardiovascular Life Support (ACLS). At times, the patient may just require nurse supervision.

Medgadget: *Can you tell us a little bit more about CSI Aviation?*

Michele Martinez: We are a service-disabled veteran owned aviation management company, founded in 1979 by Allen Weh. CSI Aviation is one of the world's most respected aviation support companies. The CSI team specializes in designing and implementing complex air transportation programs which include everything from emergency evacuations, to the movement of people, to solving complicated aviation problems with unrivaled service, knowledge and aviation expertise.

CSI Aviation operates globally and serves customers, which include Fortune 500 corporations, federal agencies, athletic organizations, the film industry, energy and oil and gas industries, and many more.