

Built Safe, Built Tough, Buy Bell

By David Cruz, Bell Helicopter-Textron

Bell Helicopter was issued the first U.S. civil rotorcraft certification on March 8, 1946, with the Model 47. It wasn't long afterwards when the New York City Police Department became the first police agency to place an order and take delivery of the Model 47.

Bell Helicopter has had a long and proud history providing helicopters to law enforcement agencies. But it takes more than just manufacturing a helicopter to be a supplier to law enforcement. As everyone in this business knows, the actual aircraft is just the tip of the iceberg. It takes a complete support organization to provide an aircraft that will serve for many years and thousands of hours of reliable operation.

That support starts with the engineering department, which actually designs the features that the customer requires. One of the basic tenants of Bell Helicopter is that of safety. Safety is built into the basic airframe. Numerous safety features are incorporated into Bell's civil aircraft that were derived from military requirements. The cabin structure is designed to protect the occupants in a crash by using metal alloys that combine strength with light weight. Features such as crash resistant fuel cells are also incorporated into the basic aircraft. An example of this is the Bell 407, which is a close cousin of the Bell OH-58D. The OH-58D is still in use by the U.S. Army and currently serves in many theaters of operation. The rotor system has proven itself in battle and has brought back its crew safely (as shown in the below picture). It's comforting to know that the Bell 407 can handle whatever the bad guys on the street can dish out.

Just as important as having a helicopter is keeping it available for service. No supervisor wants to get the call from the chief asking why the helicopter isn't available. Customer support and aircraft on ground (AOG) parts availability is important to Bell and is one of our core business principles. Bell is proud to have been voted number one in customer support for 15 years in a row by the readers of Professional Pilot magazine. Having the necessary parts in stock is a huge responsibility, and with over 15,000 aircraft in the field worldwide, it takes a big facility to store everything. Bell maintains spares supply centers in the Netherlands, Singapore, Canada and Texas. The Texas facility, located just north of Fort Worth, houses over \$450 million of inventory ready for overnight shipment.

It takes more than parts to provide a customer support network; it takes people. Bell has a staff of customer support representatives that work in the field directly with the customer for technical assistance. Bell has 15 of these dedicated professionals in the U.S. to cover customer needs.

Bell also has customer service facilities (CSFs) that can perform maintenance on all models of our aircraft. There are over 60 CSFs in the U.S. Each is independently owned and periodically recertified by Bell to accomplish the maintenance they are certified to perform.

Safety is more than design. Safety is also how the helicopter is operated. To that extent, Bell has arguably the best training school and facility in the world. Located at the Alliance Airport, the Bell Training Academy facilitates both pilot and maintenance training.

Bell Helicopter maintains a fleet of aircraft for training at this facility to provide for model-specific pilot initial transition and recurrency courses. To address the needs of law enforcement, most of Bell's training aircraft are NVG equipped. The training academy also has full visual flight training devices (FTDs) to practice normal and emergency procedures. One of the FTDs incorporates an FLIR controller and screen so that police aircrew cockpit coordination procedures can be accomplished.

Bell can customize a training syllabus to address any training issues the customer may have. The training academy has a staff of 25 flight instructors to assure that the customer's training time is not wasted. To maximize the training time, Bell has a private training facility at the edge of the Alliance control zone. This 275-acre facility has five hard surface runways and a 30-foot elevated platform for pinnacle operations. During flight operations, a crash/rescue crew with firefighting and EMS capabilities staffs the practice area.

Bell Helicopter realizes that sometimes it is not possible for flight crews to travel to our facility for training. Our instructors can travel to the customer's location and provide practically any type of training required.

The Bell Training Academy is not limited to pilots. A 40,000-square-foot hangar is dedicated to maintenance training with hands-on instruction for every current production model available. Bell has model-specific maintenance aircraft that the technician can learn and work on under the supervision of his instructor. Maintenance courses include technician training, field maintenance, electrical maintenance, component overhaul and composite repair. (A complete offering of the pilot and maintenance courses are available online at www.bellhelicopter.com.)

Finally, there are the aircraft that Bell Helicopter manufactures. Bell has an aircraft for every law enforcement mission. Many agencies started out with Bell aircraft and have continued to be a part of the Bell family. Bell takes a conservative approach to designing and building aircraft. Nothing is more important than the safety and reliability of a Bell helicopter. Recently, it has been said that Bell does not innovate new designs into the model lineup, but nothing could be further from the truth. The V-22 Osprey is a perfect example of innovation. This revolutionary aircraft has taken a long time to develop and mature into the product that is being fielded today. To make something truly different takes talented engineers, machinists, designers, pilots and technicians. Bell has them all.

By the time this article is published, the FAA may have granted Bell the type certificate for the new Model 429. The 429 is a departure in design from Bell aircraft of the past. This new light twin still incorporates the safety features of past aircraft but is engineered to provide a completely open cabin from the cockpit to the rear bulkhead. This is the first Bell aircraft to have a complete glass cockpit, and it is configured for single pilot IFR as the basic aircraft. Our customers, including some law enforcement agencies, put a lot of faith in Bell Helicopter and have proven it with over 300 orders for the 429.

Bell has a proud history and a bright future. Bell Helicopter will be a mainstay and choice of many law enforcement agencies for many years to come.