Toronto Pearson International Airport is one of the largest airports in North America in terms of passenger and air cargo traffic. In 2003, the airport handled over 30% of Canada's passenger traffic, 24.7 million passengers and more than 40% of the nation's cargo, in excess of 380,000 tons. The Greater Toronto Airports Authority, the GTAA operate the airport.

Toronto Pearson International Airport opened its new mega Terminal 1 complex in the spring of 2004. Opening along side Terminal 1 was the new eight-level, 9000-vehicle garage facility built at a cost of $220 million, the first phase of a 12,600-vehicle garage facility.

When it came to planning for Toronto Pearson's new parking garage, GTAA management had three thoughts in mind, customer service, customer safety and customer security. The new garage has been designed to make airport parking a pleasant and easy experience. “Right from the beginning there was a need to ensure that this garage was more than just a place to park, but the start of an enjoyable and stress free journey through the new Toronto Pearson airport,” said Frank Miceli, manager of the garage construction and a key member of the GTAA's Airport Development team.

Foresight into the changing demographics and future needs of the traveling public was a major contributor in the design of the parking garage, nestled within the horseshoe shaped new terminal building. When completed the garage will be the largest structure of its kind in Canada.

Accessibility and customer service are prominent features throughout the new parking garage.

The garage has used a number of new and existing technologies that will ensure a smooth flow of traffic in and out of the facility, and has also utilizes a number of existing technologies that help provide safety, security and information for the traveling public and employees in the facility.

Communication and building security technology play an increasingly important role in the support of efficient operation and security of parking garages in the airport environment. To optimize the efficiency and effectiveness of these systems, interfaces are utilized between the different systems, depending on the actual operational requirements. System integration optimizes the effort, hardware and space required to operate individual systems and effectively eliminates manual data entry. This assures the same data is utilized for each system.

The RING Communications Intercom system is the heart of the garage Duress system. It is the key item that is activated by a passenger or employee pressing one of the large emergency call buttons located at one of the more than 230 call box locations. Pressing the emergency call button at any garage Duress call site, automatically provides the following features:

* Alerts the Airport Security Operations Centre of a call
* Establishes a voice communication path and logs the call
* Directs or points the CCTV camera at the call site area
* Switches the digital video and audio recording systems to real time record mode at that Security Operations Centre.

The RING Communications Intercom system was selected for the airport in 1990. The former Engineer and Manager of Airport Electronic Security systems, Frank Marchase reaffirmed just recently, “I was determined that the airport purchased a robust modular system capable of expansion as the airport requirements grew, able to operate effectively in the harsh airport environment with little or no down time. I believe that decision was right at that time and 25 years later the RING intercom system is still one of the vital backbones of the airport security system.”

The RING system has grown a great deal in 25 years and now has expanded to an airport wide network of 14 intercom systems interconnecting more than 1000 individual intercom stations.