OVERVIEW

The Technical Rescue venue has been the back bone of IRECA’s yearly conferences for many years. Teams from all over the country and from various disciplines take part in the competition to test their skills and knowledge. Teams consist of seven members including a Captain, Co-Captain, Equipment Person, two Medical and two additional rescuers. All rescuers may be called on by the Captain or Co-Captain to perform various tasks.

The team’s equipment is basic and regulated by the association, making all teams equal as far as the tools that they have to work with. This challenges each member of the team to prove their skills and that they have the knowledge to complete a safe and effective rescue with limited equipment. Team equipment includes a maximum of 800 ft. of 1/2” Static Kernmantle rope of various lengths, five pulleys, and 3 rope grabs. Team member “personal equipment” consists of a flashlight, triangular bandages and a minimum of three carabiners. Stokes baskets, ladders, tripods and any extra equipment required to complete a project, will be provided by IRECA.

There are usually four technical projects that the teams have to complete in a specified amount of time, usually 45 to 60 minutes. On competition day, the teams are told to report to the site where they are taken separately to where their project will begin. When the judges are told to start the project, they hand a printed sheet containing the project to the Captain who reads the project to the team members. Teams are scored from 0 to 10 in various categories which include but not limited to, Recon/size-up/evaluation of the project, Captains duties, Co-captains duties, scene stabilization and safety, personal safety, access to patient, patient care and handling, equipment care, knowledge of equipment, proper use of anchors, haul systems and lowering systems.

This year’s conference was located in Virginia Beach, VA at a beautiful hotel located on the Chesapeake Bay. The Technical Competition took place at the hotel and at a local fire training facility. There were four excellent projects that the teams had to complete.
IRECA 2009

PROJECT # 1
LADDER SLIDE

YOUR TEAM HAS BEEN CALLED TO THE VIRGINIA BEACH RESORT HOTEL WHERE TWO WORKERS WERE INJURED WHILE WORKING IN THE LOWER AREA. YOU WILL ACCESS THE PATIENTS, PACKAGE THEM IN A STOKES BASKET AND RAISE THEM USING A LADDER SLIDE TO THE DESIGNATED AIDE STATION.

WORKERS LADDER WILL BE USED AS PART OF YOUR EQUIPMENT.

YOUR TEAM HAS 60 MINUTES TO COMPLETE THIS PROJECT.

GOOD LUCK!!

This project was located at the parking garage below the hotel, where one patient was located just outside an opening to the lower level and the other was located inside the lower level. After the start of the project, the Captain gives assignments to his team. The equipment has to be safety checked while recon members search for the patients. Once the patients are located, rigging in completed for two rescuers to repel or be lowered to the ground below. The patients are then treated for specified injuries and packaged in a Stokes basket.

While this is being accomplished, other rescuers are getting the ladder ready and locating anchor points for the haul system. The patient in the lower area of the parking garage is handed out of an opening to rescuers waiting to receive the patient. Once the rigging is complete for the haul system and safety systems are in place, the rope is attached to the Stokes basket and the patient is hauled up via a ladder slide to the upper level of the parking garage.

The second patient is moved in the same fashion, where both are turned over to the Judges at the first aid station. Patient assessments are continually done, ensuring that the medical condition of the patient does not change for the worse during the project. Once the patient is safely delivered and a turnover has been given to the Medical Judge, the team retrieves and inspects all equipment, lines up for a final head count and the captain gives his report to the Head Judge.
In this project, there are two patients located in the lower area of the parking garage. After starting the project and given assignments by the Captain, rescuers are lowered or repel to the area below. While a search is being conducted to locate the patients, rescuers above are rigging to an overhead anchor point to facilitate raising the patients. The anchor point is located just out of reach and over the opening to the area below, so they have to be safely tied off before climbing up onto a short wall to reach the anchor point.

While rigging for a raise is being completed, rescuers below have located the patient, treated for specified injuries and are placing them in a Stokes basket before moving to the area where the raise will take place. Once the patient moved, the haul line is secured to the horizontal lifting bridal that is attached to the basket and the safety belay is attached to the head of the basket. After completing another medical survey, the rescuers safely raise both patients using a mechanical advantage of their choice. After raising the patients, rescuers that were working below had to be raised also. After a final medical check, the patient is turned over to the medical judge at the first aid station, the rescuers gather and safety all equipment and line for a head count and Captain’s report to the Chief Judge.
IRECA 2009

PROJECT # 3
LADDER HINGE / VERTICAL LOWER

YOUR TEAM HAS BEEN CALLED TO THE VIRGINIA BEACH RESORT HOTEL WHERE A WORKER WAS INJURED WHILE WORKING ON THE UPPER ROOF. YOU WILL ACCESS THE PATIENT USING THE LADDER PROVIDED. PACKAGE THE PATIENT IN A STOKES BASKET AND LOWER TO YOUR STARTING LEVEL BY A LADDER HINGE. YOU WILL THEN LOWER THE PATIENT VERTICALLY TO AIDE STATION ON GROUND.

YOUR TEAM HAS ACCESS TO GROUND BY EXIT STAIR CASE.

ALL TEAM MEMBERS AND EQUIPMENT WILL BE ACCOUNTED FOR ON GROUND.

YOUR TEAM HAS 60 MINUTES TO COMPLETE THIS PROJECT.

GOOD LUCK!!

This project starts on the roof where the patient is located on different roof that is one level higher. After starting the project, rescuers have to use a ladder to climb up to locate the patient. After an initial medical check and treating for specified injuries, the patient is placed in a Stokes basket. Rescuers on lower lever are preparing the ladder hinge lower while others are locating and preparing anchor points for the vertical lower to the ground.

Once the ladder is rigged, it is raised back up where the foot of the Stokes basket is securely attached to the top of the ladder. The head of the basket has two lines attached, one that runs to a friction lowering device and the other runs to a safety belay device. Once both the upper and lower rescuers are ready, the rescuers on the lower lever take slack out of the two guys that control the ladder and the rescuers on the upper level start the lower. The basket and the ladder pivot down to the lower roof where the basket is removed, Patient rechecked and taken to the area to get ready for the lower to the ground.

Now that all rescuers are back on the lower lever roof, the rigging consisting of a lower line and a safety belay are attached to the head of the basket. There is a control line attached to the foot of the basket and lowered to a rescuer that is now on the ground. The patient in the Stokes basket are now lowered to the ground vertically, the patient is again checked medically and turned over to the first aid station. While rescuers make a medical turnover of the patient, the remaining rescuers gather all equipment and proceed down the stairs to the ground, where they line up and the Captain makes his report to the Chief Judge.

The technical teams that compete in IRECA’s conferences require hundreds of hours of specialized training. The safety of each Team member and patient is of the highest priority. We strive to create a realistic and challenging learning environment for our teams.
In this project the patients require two separate raises, one using a davit and the other using a tripod. A davit is a portable overhead anchor that is lashed at the base to a handrail and has a tieback that is under tension from the top of the davit to an anchor point. A tripod is another type of overhead anchor that is used in most cases where a patient needs to be raised through an opening in a floor or top of a tank.

After the start of the project, the patients had to be located and treated for specified injuries. The patients were packaged in a Stokes basket and rigged for a horizontal raise. Both the davit and the tripod require specialized rigging consisting of a safety belay and a haul system that has a mechanical advantage specified by the Captain. These lines are attached to the basket to facilitate the raise.

Once the raise has been completed the patients are moved to the top of the stairs where a stair slide is used to move the patients down to lower levels. A stair slide in most cases is used where the integrity of the stairwell has been compromised due to some type of damage. To simulate this, a maximum weight allowance is placed on the stairs. This allows only one rescuer or one patient to be on the stairs at a time. One rescuer will go to the bottom of the stairs and the rest of the rescuers remain at the top landing. A friction lower and a safety belay are set up to facilitate the slide of the patient to the bottom landing. After the patient is removed the rest of the rescuers are allowed to exit across the stairs one at a time. The patient is then turned over to the first aid station and the project is completed.