

RAPID RESPONSE WHEN 'RED PHONE' RINGS



Operated by CHC, the Irish Coast Guard's fleet of Sikorsky S-92 helicopters cover the country's rugged and stormy coastline, writes Lukasz Gancarz. Here he provides a snapshot of some search and rescue callouts, and the prompt response by the pilots and winch crews when the 'red phone' rings, where every second can change the outcome of each mission.

Every search-and-rescue base has a prominent device that snaps everyone into action when it sounds off – a radio, telephone, or pager. When the device goes off, everyone knows right away that someone somewhere needs help.

It immediately triggers an automated chain reaction. While helicopters or rescue vehicles are readied for immediate departure, courses are plotted and crews are dispatched. With search and rescue (SAR) callouts, every second can change the outcome of the mission. If a casualty is in the water, each member of the team knows that the clock is ticking.

At the Dublin base of the CHC Helicopters' Irish Coast Guard unit, that all-important klaxon is the 'red phone', located in the main crew briefing room, overlooking the brand-new hangar and the muscular Sikorsky S-92 parked inside.

When the 'red phone' rang on 8 September 2018, Captain Ed Shivnen answered. Air Traffic Controllers

informed him that about 35 nautical miles north of Dublin, a pilot had flown into bad weather, on Instrument Meteorological Conditions (IMC).

The crew – Shivnen as the pilot in command, co-pilot Patrick Edgeal, winch operator Ciaran Murphy, and winchman Mick Treacy – scrambled to the S-92. While speaking to the tower, Ed requested to assign a separate radio frequency that would allow him and the air traffic controllers a direct communication channel with the distressed pilot.

A TEXTBOOK LANDING

"I knew that our time was limited by the fuel on board that aircraft," according to Shivnen. When the helicopter arrived at the location and had established visual contact with the single engine Cessna, Shivnen found there was a clearing in the clouds that was giving a good approach to the local beach.

Then he remembered there was an inactive military airfield just few miles away with over 2,500 feet of runway. It was more than sufficient for the aircraft in distress to land. The crew relayed the information about the plan of action to the pilot and Shivnen decided to fly over the field to assess it.

To his surprise there were military trucks present at the tarmac, but they were quickly waved off for an incoming emergency landing and he gave the airplane pilot the all-



The second attempt resulted in a textbook landing. When the aircraft came to a full stop the rescue crew learned there were two children on board with the pilot. In the stress of an emergency, the pilot stated that she was flying on her own, when in fact there were three souls on board. "There are some things out there that you can't train for," Shivnen noted.

PASSION FOR AVIATION

He was passionate about aviation, especially helicopters, from an early age. This passion was strengthened when he read Robert Mason's 'Chickenhawk', a memoir of the author's time as a 'Huey' UH-1 Iroquois pilot during the Vietnam War.

"As a 19-year-old, that book changed my life. From that moment I knew that flying helicopters was what I wanted to do. I still have this book, although now it's quite worn out," he recalled.

After receiving his private helicopter pilot's license at an age of 22, Shivnen worked as a carpenter to fund his further training in Ireland and was eventually able to obtain a certified flight instructor rating.

In search of new job opportunities, he ventured to New York, where he flew as an instructor. He remembers flying a tiny Schweizer S300 over the Manhattan skyline for a local TV news station, covering traffic and weather reports in through the city's busy airspace. From there his flying career wound through skies over California, Alaska, the Gulf of Mexico and then back to Ireland to join the CHC's SAR unit.

FROM ROYAL NAVY TO CHC IRELAND

Pilots who are employed by CHC to perform SAR missions in Ireland come from all backgrounds and different levels of flying experience. Captain Sid Lawrence was inspired by his father, who flew with the Royal Navy.

Seeing a Sea King, during a visit to his school on 'Career Day', hovering right over the football pitch

clear. The Cessna, carrying too much speed, had to abort the first attempt. Shivnen decided to calm the pilot down, talking her through the approach and encouraging her to treat this location as her own home airfield, with no traffic at all and with a long runway only for her.



The main strengths of the Sikorsky S-92 include its SAR-specific avionics and flight systems. The helicopter is equipped with the SAR Automated Flight Control System, which is a revolutionary and strategically important part of the aircraft, as it gives the pilots more time to focus on flight operations.



A senior pilot with CHC Ireland, Captain Ed Shivnen is pictured in the S-92 hangar at the Dublin base for 'Rescue 116'.

solidified his determination to become a pilot. He began flying in the 1990s with the Royal Navy, training on a 'de Havilland Canada DHC-1 Chipmunk' and the 'Scottish Aviation Bulldog'.

Lawrence progressed to helicopters with the Aérospatiale Gazelle and eventually the Sikorsky SH-3 Sea King. After few years, he decided to leave the Navy to work as a civilian pilot. He joined CHC in 1997 and began flying a variety of helicopters such as Sikorsky S-61 in the North Sea and later Bolkow Ba-105 and Eurocopter (now Airbus) AS355 Écureuil 2 for the British Police.

"The hardest missions are the ones you can't help with. Getting to the scene is a challenge but getting back safely is what's important," claimed Lawrence. He recalled one particular call they received years ago to a serious accident south of Dublin.

"We knew that the casualty needed an immediate assistance, but the weather was getting worse and worse as we flew there. That is when you must make that call and turn around."

He said that the hardest part of being a SAR pilot is in understanding the constantly changing rules and regulations. "Constant training of all crew members is paramount; it is an ongoing process." So, what then is the best part of the job? "When people see that white and red helicopter, they know that there is a paramedic coming to help them."

MEDICAL TRAINING OF CHC CREW

In Ireland, a medically trained saviour is also a winch operator aboard the helicopter. The majority of CHC winch operators are fully trained paramedics or at least Emergency Medical Technicians (EMTs).

Most of the CHC crewmen come from either military or civilian EMS backgrounds, such as Keith Carolan, who has over 30 years' experience as a SAR paramedic. Carolan is a former combat medic and SAR operator with the Irish Air Corps, and also worked as a firefighter/paramedic with Dublin Fire Brigade.

He is responsible for the medical training of all crew members and oversees the critical stress management team, which is vital in his role. "The new paramedics undergo six months of winch training. No plan will survive the contact with reality. We are building a mental picture of the incident scene when we get called upon, which is a vital part of the training programme."

That training approach served Jim O'Neill well. During a routine flight to Kerry Airport, the senior crew member and trainer based with Shannon Station's 'Rescue 115' and his team received word that a four-year-old child had been swept out to sea on an inflatable toy raft.

"While I was getting ready for a 'wet rescue', I was building a mental picture of the scene. I knew that it was a young child, and I was sure that the downdraft from the helicopter

will quite possibly push her off the inflatable," he recalled.

When 'Rescue 115' arrived at the scene, the crew expected to find the child a few hundred meters from shore, but currents had carried her more than a mile offshore. Pilot in command Capt Greg Hauser, along with Capt Sean Murphy approached the location at an angle, which directed most of the downdraft away from the child, while O'Neill placed himself in the helicopter door.



Keith Carolan brings 30 years of SAR experience to CHC Ireland and is responsible for the medical training of all crew members and oversees the critical stress management team.



Jim O'Neill is a senior crew member and trainer based with Shannon Station's 'Rescue 115'.



Constant training of all crew members is paramount; it is an ongoing process, according to Capt Sid Lawrence, who's based with 'Rescue 116' in Dublin.

SUCCESSFUL CHILD RESCUE

Paramedic Colm Hilary, who was a winch operator that day, lowered O'Neill over the water while the aircraft started slowly closing in on the inflatable. "Suddenly the floating toy simply shot out from under the kid," O'Neill said.

"In a split second I couldn't see either the toy or the child as she immediately went under. The thing about water in that bay is that it's like chocolate; currents pick up the mud from the bottom and I knew that the situation was serious."

O'Neill noticed two small hands desperately reaching from under the water. "I hit the emergency release box on my harness and swam approximately 15 meters to her. We very rarely do this as we are not rescue swimmers but this



IRELAND'S HIGHLY SOPHISTICATED COAST GUARD SAR NETWORK

Ireland has one of the most sophisticated and experienced Coast Guard SAR networks in the world. CHC has been providing this service on behalf of the Irish Coast Guard since July 1999. CHC Ireland crews would not be able to perform search and rescue missions and medical transports without the capabilities of the Sikorsky S-92.

Helicopter bases are located in the following four regional stations:

- WEST: R115 – Shannon.
- EAST: Rescue 116 – Dublin
- SOUTH-EAST: Rescue 117 – Waterford
- NORTH-WEST: Rescue 118 – Sligo

Each station has one Sikorsky S-92, with an additional aircraft on stand-by, which rotates as a back-up between each of the four locations. In 2020 CHC flew a total of 781 missions alone. The most common incidents involve search operations for casualties in the water, falls from height and medical transport.

With close to approximately 200 flying hours per month for all four bases, this includes both training and operational flights. The service is 24/7 365 with a contractually required 98% availability at 15 minutes readiness from 7.30am to 9pm, and 45-minutes readiness from 9pm to 7.30am. These requirements are industry standard, and customer required.



"Covid-19 has caused havoc for everyone in aviation, which meant we had to review everything we do to protect the service" – Rob Tatten, CHC's General Operations and Accountable Manager for Ireland



The Sikorsky S-61, seen here during a rescue demonstration with the RNLi at the Bray Air Show, before it was retired in December 2013.

was the only option. I reached under the spot where I saw her last. I grabbed her arms and I pulled her to the surface," he recalled.

The child was tired, hypothermic and very scared. O'Neill knew that getting reconnected to the winch wire and going up would be nearly impossible, but luckily, he spied a Kilrush RNLi rescue vessel approaching.

He waved the helicopter to land while he swam to the boat on his back with the girl secured on his chest. They both were safely plucked from the water by the rescue boat and brought to shore, where 'Rescue 115' airlifted them to the hospital.

MULTI-AGENCY OPERATION

According to Rob Tatten, CHC's General Operations and Accountable Manager for Ireland "The strength of a global CHC family has meant that we are able to leverage experience and support from around the world. Covid-19 has caused havoc for everyone in aviation, which meant we had to think differently and review everything we do to protect the service.

"We had to review the cleaning of the bases, created base isolation, operated within pods on each station, shift handovers took place in the open, along with a full review in how we recovered patients/casualties to the helicopter, all for the reason of mitigating the risk of passing the virus to the operating crew.

"In the early days of the pandemic, we relied heavily on our colleagues in the Health Service Executive to have our crew tested with fast-track results to maintain the service. This is a multi-agency operation. We're constantly working with RNLi, Mountain Rescue, An Garda S6och6ana and the National Ambulance Service, sharing knowledge and experiences."

The finest and most experienced pilots to the elite of

global winch crews continue to live around the 'red phone', 24 hours a day, ready to save lives so that others may live.

** The article was first published in the Spring 2021 edition of 'Vertical Valor' – the Canadian helicopter industry magazine. Click on link <https://bit.ly/3dSOK7t>*

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