

Within this element of the 'CT@G® CRUISE' system, the database was populated with information regarding possible landing sites and reception centres. As passengers and crew members arrived at the primary Reception Center, their cruise cards were scanned and the PDAs recorded the relevant Reception Center destination.

In the event, it was found that there was no wireless network available at the primary Reception Center. However, CT@G® staff were able to record the arrival of passengers and crew. As the PDAs maintain the full passenger and crew manifest internally, these records were passed back to the Command and Control Center as soon as access to the wireless network was restored.

For a number of reasons beyond the control of CT@G® staff, not all arriving personnel could be accounted for at the primary Reception Center.

Conclusions

'CT@G® CRUISE' effectively demonstrated the capability to provide 100% accountability during the 'shipboard muster' phase of the exercise in a very short period of time. The development of the 'LANDELL' capability provided an integrated accountability process throughout the exercise, even after passengers and crew were landed ashore.

'LANDELL' generates manifests for each Reception location, in a similar manner to those generated for survival craft, with local Search capabilities to determine the location of individual survivors. This would be of great benefit to cruise ship operators' call centers in the event of emergencies and evacuation from a ship as it continues to provide real-time information.

Access To Real Time Data – The Benefits

With access to real-time data, 'CT@G® CRUISE' provides an exceptional system that generates

- Instant passenger identification and registration at the PDA when scanned
- Accurate, real-time reports of muster progress
- A real-time overview of events

Given that passengers and crew had to Abandon Ship, the ultimate benefit was provided through the 'LANDELL' function: muster records and data stored in the memory of the PDAs was thus transferred ashore with evacuated passengers and crew.

This allowed the accountability to be continuous from ship to shore.



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ALASKA MASS RESCUE



Demonstration Trial of CT@G®
*real-time passenger and crew
accountability systems
for USCG and others*



SEATAG Safety Systems Ltd.
2009

Alaska 2009 – Mass Rescue Demonstration of CT@G®

On April 28 & 29, 2009 USCG, Ketchikan Fire Department, Holland America Line and US Customs and Border Protection sponsored a major exercise in Ketchikan, Alaska to simulate the evacuation of 1800 passengers and 700 crew from ship to shore.

The primary objective of the exercise was 100% accountability for passengers and crew throughout the exercise. Seatag Safety Systems Ltd was invited to take part in this exercise to demonstrate the capabilities of the CT@G® system for real-time passenger and crew accountability.

Defining Feature

PDA operations are the heart of the CT@G®'s award-winning systems and the defining feature is access to the personnel manifest replicated within each handheld wireless PDA. When passengers' cruise or ID cards are scanned by crew members, 'CT@G® CRUISE' provides information on, *inter alia*, muster verification, boat assignment, main vertical zone reporting, children, special needs and "LANDFALL" (accounting for passengers and crew once landed). Regardless of the passenger or crew actual location during the muster they can be identified and registered at any muster station or boat.

CT@G® 's Aims & Objectives / Pre-Exercise Preparation

The aims of the demonstration trial were to prove that, by using the 'CT@G® CRUISE' system, an accurate (100%), real-time account of all passengers and crew members arriving at Muster Stations could be achieved in a shorter time than may be the case using more traditional methods of, for example, calling out names and cabin numbers.

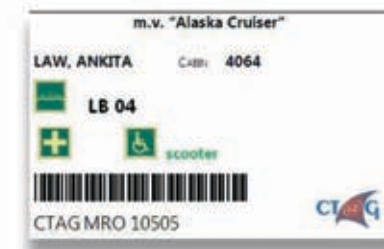
The objectives were to demonstrate that:

- Passengers and crew members can be registered using hand-held PDAs, which have been pre-programmed with appropriate data, by scanning the passengers' and crew members' "cruise cards";
- Registration can be achieved using multiple PDAs at a Muster Station, linked by WiFi communications to a tablet pc;
- the tablet pc can collate the data from multiple PDAs and can generate a number of displays with respect to the progress of the muster, including the generation of lists of those passengers and crew members yet to arrive and, at the end of the muster, to list those passengers and crew members that did not muster;
- the collated data can be distributed around the Emergency Centre network such that the real-time passenger and crew member account can be viewed at multiple locations;
- By access to the internet, the same real-time reports can be made available to all participants in the MRO exercise.

Pre-exercise Preparation

USCG provided the manifest details for passengers and crew members assigned to the exercise for m.v. "ALASKA CRUISER". Seatag Safety Systems Ltd prepared "cruise cards" for ALL manifested personnel: each passenger and crew member was assigned a unique id for this exercise. The cruise cards identified each passenger and crew member by unique id, name, cabin number, lifeboat or liferaft number.

Two representatives from Seatag attended the exercise in Ketchikan, AK and, with this data loaded into a tablet pc and into PDAs, used at least 2 PDAs for this exercise.



Demonstration - Exercise Phase 1

At the request of USCG, CT@G® representatives 'pre-screened' the passengers and crew members assumed to have come ashore during the first phase. This was carried out in the Cape Fox Lodge Hotel using 2 PDAs, working on a very variable wireless network and connected to the CT@G® server in North Wales, UK.

CT@G® achieved the following results:

- **100% accountability during the onboard muster to boats**
- **1781 passengers and crew accounted to boats and rafts in just under 2 hours using only 2 PDAs. This represents scanning passengers approximately once every 3 to 5 seconds.**
- **In a shipboard installation, this would have been achieved with approximately 24 PDAs – somewhere between 10 and 15 mins maximum elapsed time for the muster.**

During the muster, at each PDA it was possible to:

- account for each passenger and crew member at their Muster Station (lifeboat or liferaft station) by scanning their cruise card;
- Indicate and identify the status of passengers and crew members - e.g., injured, unconscious etc.

The tablet pc provided the following visual reports and indications:

- Running count of passengers and crew members already mustered at each Muster Station;
- Running count of passengers and crew members still to muster;
- preparation of survival craft manifests;



Demonstration - Exercise Phase 2

After discussions with USCG, CT@G® staff 'pre-screened' the following:

- triage passengers and crew, indicating their landing location;
- remaining passengers and crew to lifeboats 12, 14 and 16 and liferafts 14 to 19;
- Crew members identified as being 'joiners' or 'of special interest' to US CBP (These role players would be segregated at the Reception Centers for appropriate attention)

Additionally, the cruise cards for the volunteer role players were labelled with appropriate bar-codes. Some volunteers were designated as solo travellers, others represented up to 12 persons – 187 volunteers represented 720 passengers and crew.

Given the vagaries of the wireless networks available in Ketchikan, it was agreed that CT@G® staff would attend at the primary Reception Center and account for 'survivors' arriving there. This was in order to maintain accountability throughout the exercise and demonstrated the 'LANDFALL' capability of the 'CT@G® CRUISE' system.

