### Award-Winning Software Sets A New Standard

Coupling the use of modern technology with established safety processes and procedures, CT@G°'s award-winning software achieves fast, accurate, real-time accountability for personnel during an emergency regardless of its location, whether this is on a cruise ship, on an oil rig, in a large building — in fact, anywhere that people need to be accounted for.

PDA operations are the heart of the CT@G® systems and the defining feature is access to the personnel manifest replicated within each handheld wireless PDA.

In order to accelerate the processes by which large numbers of people are accounted for in the event of a major emergency, CT@G® products utilise asset tracking capabilities such as barcodes and RFID, to provide a rapid, accurate, real-time indication of people muster.

### 'CT@G® CRUISE'

### Passenger and Crew Accountability on board Cruise Ships

The UK Marine Accident Investigation Branch (MAIB) raised a number of issues with respect to passenger muster in their Report into the fire on board the cruise ship "Star Princess" in March 2006. With 2690 passengers and 1123 crew on board, it took over 6 hours to account for all passengers and crew.

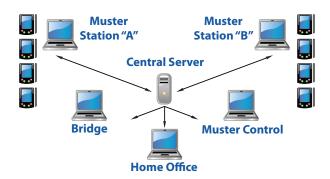
#### The MAIB stated that

" ...Until advances in technology are forthcoming, the completion of a full roll call on board large passenger cruise ships will be difficult to achieve within a reasonable timescale."

Built around industry standard software used in mobile applications for asset management and extensive maritime industry specific experience, 'CT@G® CRUISE' utilises Commercial Off The Shelf (COTS) PDAs with WiFi capability and custom software for the management of the passengers and crew during a muster or abandon ship scenario.

The PDAs are in continuous communication with the onboard server to synchronize with the onboard manifest. Through access to this database, PDAs are able to distribute real-time reports across the ship's network and anywhere web access is available.

### Typical System Set Up



Personnel may be identified from barcodes or RFID tags integral to their cruise cards or ID cards when scanned by PDAs running CT@G° CRUISE software. By passing ID information between PDAs and the on-board hotel and crew management system, real-time passenger and crew accountability can be achieved with accurate, real-time reports readily available to Command and Control Personnel. CT@G° CRUISE is web-based so that this information can be available ashore to operators, SAR authorities and other interested parties.

The recent experience with the USCG MRO exercise in Ketchikan, AK demonstrated that, in the event of a major marine casualty where large numbers of personnel will be landed ashore, there is a need for effective and accurate accountability of all evacuees, regardless of their origin or their final destination.

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.

PDA operations are the heart of the CT@G® 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.

"LANDFALL" 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.

#### MOBILE SOLUTIONS

Based on the CT@G® software as an integral part of the product package, Seatag Safety Systems Ltd has developed a number of mobile solutions for use in a variety of circumstances, including remote areas where 'conventional' mobile communications may not be available.

The CT@G® mobile solutions come in a ready-to-go, hard case and typically consist of the following:

- 2 nos rugged laptop computers, pre-loaded with CT@G® software;
- 12 nos rugged PDAS, pre-loaded with CT@G® software;
- 12 nos Bluetooth enabled mobile printers for use with PDAs - these generate wristbands that provide a unique ID to all personnel involved;
- 2 nos local area network WiFi signal generators;
- 1 no. Satellite mobile phone



#### "BEACHMASTER"

Personnel accountability software for use by rescue authorities for Mass Rescue Operations

"BEACHMASTER" provides a comprehensive and integrated solution to the management and co-ordination of evacuees and participants in Mass Rescue Operations using either the PDA's supplied on board the evacuating vessel (if the vessel was using 'CT@G" CRUISE') or those from the "BEACHMASTER" kit. Regardless of the passenger or crew actual location throughout the evacuation, on board or ashore, they can be identified and registered. On completion of registration, data on those persons is available through web-based facilities to all interested parties, including SAR authorities, ship owners and the like.

# "EVENTMASTER" Large Event Safety Management System

At any large event, the accountability (and, therefore, the safety) of all participants throughout the event is paramount. "EVENTMASTER" provides a comprehensive and integrated solution to the management and co-ordination of those participants.

On completion of registration, data on all participants is available through web-based facilities to all interested parties, regardless of a participant's actual location with respect to the event control centre. In the unlikely event of an emergency, this data can be made available to SAR and emergency organizations.



## "MAROONS" Mass Rescue Exercise Operations Organiser

The name is derived from the UK practice of firing a maroon rocket to summon assistance to vessels in distress.

The recent experience with the exercise in Ketchikan, AK demonstrated that better co-ordination of participants, whatever their role — staff, participants etc — throughout a major exercise will contribute to the success of the exercise.

CT@G° "MAROONS" provides a comprehensive and integrated solution to the management and co-ordination of participants in Mass Rescue Operations and Exercises.

# "HEALTHMASTER" Casualty And Patient Tracking System

Using CT@G°'s proven software, HealthMaster provides a comprehensive, integrated solution for patient and casualty tracking within the healthcare environment. Helathcare providers have complete, secure access to patient records and treatment regimes, allowing for effective care management througout the period.



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