

Be a Surveyor in Emergency Conditions Shipwreck Costa Concordia - Emilia Romagna Earthquake

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SUMMARY

Climate change and human intervention have resulted unfortunately into unprecedented catastrophic events. During the aftermath of these events, what can a surveyor's main role be?

Following the events of January 2013, on the incident the cruise ship Costa Concordia near the island of Giglio off the coast of Tuscany, I and a group of fellow volunteers from the Provincial Colleges of Surveyors and Graduate Surveyors of Modena and Grosseto, were tasked by the Operational Core of the Vigili del Fuoco (Italian Fire Department) and Dipartimento della Protezione Civile DPC (National Civil Protection Department) to install and create a GPS system and Total Station which aimed to monitor the movements and slips of the Costa Concordia ship and to guarantee safety for the rescuers, while search and rescue operations were taking place.

Moreover, on the event of the 2012 earthquake in the region of Emilia Romagna, I and some other volunteer colleagues from the Provincial College of Surveyors and Graduate Surveyors of Modena were assigned by the regional DPC to map and the first evacuation camps for displaced citizens, therefore allowing field operators – the Military, Armed Forces - to design and build the camps in the best possible way and in accordance to the immediate needs of the population.

This paper intends to illustrate the different phases we undertook in these natural catastrophic events. It is essential that our science, technical knowledge, and our experience are utilized, especially during the first critical and emergency phases. It is also important to highlight the importance of our involvement as surveyors, the right attitude to maintain, both in the personal and professional perspectives, whenever we work alongside rescue facilities. In this way, we play an important role in monitoring and data

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planning.

Our experience emphasized the need for a coherent operational protocol and the availability of readily-used data derived from (simulated) case-by-case scenarios, in order to create a framework and a responsive network of surveying professionals that could be easily activated as soon as any emergency arises.

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