

Preliminary research of making an inflatable personal shelter

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Abstract

This paper reports a preliminary research of how to make a pneumatic personal shelter. The number of deaths in the great east Japan earthquake in 2011 was more than fifteen thousand and most of them were killed by Tsunami, which hit the area in thirty or forty minutes after the tremolo. Most of them were weak people who could not immediately evacuate to higher places. The authors had a thought to provide a lightweight personal shelter that could be stored in a compact configuration and expanded instantly when it was needed. The authors actually made a preliminary model of an inflatable personal shelter supported by six air tubes and inflated it. This paper reports how we designed, prepared and inflated it. They also conducted an ad hoc test. The result of it is also reported.



References

- [1] K.Kawaguchi and T. Sato, "Development of Deployable Geodesic Full Sphere with Scissors Members," *Proceedings of the IASS Annual Symposium 2015*, Amsterdam, Netherland, Aug. 2015. 10 pages.