

TSUNAMI SOCIETY INTERNATIONAL

1741 Ala Moana Blvd. No 70, Honolulu, Hawaii 96815, USA http://www.tsunamisociety.org

Tel (808) 781-6164

Email: drgeorgepc@yahoo.com Web Site: http://drgeorgepc.com

Subject: STATIM Shelter System December 26, 2012

TO WHOM IT MAY CONCERN

The purpose of my letter is to offer my strong recommendation for further development, testing and adaptation of the "STATIM" Shelter System (SSS). Based on my experience with disaster mitigation for almost 50 years, I believe that the STATIM" Shelter System offers a critical, first line of defense in disaster preparedness in regions vulnerable to earthquakes, tsunamis, hurricanes, hurricane surges, floods and a multitude of other hazards.

As Director of the International Tsunami Information Center (ITIC), as Tsunami Advisor for the State of Hawaii's Civil Defense and as Consultant to UNDP (UN Development Program), UNDRO, UNESCO, the Intergovernmental Oceanographic Commission, the US State Department AID, and several other national and international organizations, I helped develop regional plans for disaster mitigation and the establishment of Regional Tsunami Warning Systems. Furthermore, I prepared master plans for the development and implementation of disaster preparedness, as well as proposals for UN funding of such efforts. As chief scientist on UNDP assignments in South and Central America, the Southwest Pacific and Southeast Asia, I identified vulnerable communities and developed a clear understanding of the impact disasters can have on their safety and their socioeconomic development. Specifically in my reports, I warned about the lack of adequate disaster preparedness in Indonesia, India, Bangladesh, Myanmar, Thailand, Papua-New Guinea, the Solomon Islands and many other countries bordering the Pacific and Indian Oceans - emphasizing the need for the establishment of evacuation zones and the construction of shelters that could save lives and mitigate the impact of disasters. Unfortunately, the great 2004 Indian Ocean tsunami validated my early concerns and the lack of adequate preparation.

Similarly, as consultant to a UNESCO Special Committee, I helped develop and prepare for the UN Secretary General a program of implementation for the International Decade for Natural Disaster Mitigation (IDNDR) and as co-founder of the International Natural Hazards Society I helped emphasize the need for proper preparedness and shelters. Finally, as Oceanographer of the U.S. Army Corps of Engineers, its Coastal Engineering Research Center and as consultant to the US Nuclear Regulatory Agency in developing mathematical modeling for hurricane surges, I became aware of historical hurricanes like Betsy (1965) Camille (1969) that threatened New Orleans and other low lying areas in the Gulf and warned of the potential danger of devastating surge flooding – which indeed occurred subsequently when Hurricane Katrina impacted New Orleans. Clearly, what made this particular disaster so devastating was the lack of proper planning and of adequate shelters.

Therefore, based on this experience and concerns, I have been reviewing and evaluating all available tools and methodologies that could mitigate the impact of disasters. When the "STATIM" Shelter System (SSS) was initially brought to my attention, I embraced it as good concept but required to be provided with more specific information so that I could critically evaluate its feasibility for disaster mitigation. Subsequently, based on a thorough and objective evaluation I reached the following conclusions.

- 1. There is a need for shelters in areas vulnerable to flooding from tsunamis, hurricane surges or from floods and the STATIM Shelters can partially meet this need and help save lives particularly if they become readily available.
- 2. The pre-cast concrete modular design and the ease of assembly make the STATIM shelter a low cost, low tech, low maintenance, long life supplement to the first line of defense in disaster preparedness in regions vulnerable to a multitude of hazards.
- 3. The STATIM Shelter is a cost-effective and feasible solution in addressing the safety of vulnerable communities around the world particularly in low-lying areas vulnerable to frequent seasonal floods and storms as well as tsunamis.
- 4. The STATIM Shelters can provide shelf sufficient platforms and communication capabilities to communities for better management of a disaster situation.

Based on these conclusions, I strongly recommend the development of prototypes for testing and design refinements, to be followed by construction and placement of the STATIM shelters in communities vulnerable to flooding and other disasters.

Sincerely,

Dr. George Pararas-Carayannis

President, Tsunami Society International

Editor, "Science of Tsunami Hazards"

Retired Director, UNESCO - IOC - International Tsunami Information Center

Former Director, World Data Center A - Tsunami