



**InterShelter, Inc.**  
*"We shelter the world"*

**TESTIMONY BEFORE THE U.S. HOUSE OF REPRESENTATIVES  
COMMITTEE ON HOMELAND SECURITY  
U.S. House of Representatives**

**JULY 8, 2009**

**"FEMA Housing: An Examination of Current Problems and Innovative Solutions"**

**By**  
**Capt. Don Kubley**  
**President/CEO**  
**InterShelter Inc.**



## **Mr. Chairman and members of the Committee:**

My name is Captain Don Kubley. I am President/CEO of InterShelter Incorporated, headquartered in Juneau, Alaska. I would like to thank the Committee for the privilege of addressing you here today concerning your effort to examine our current national disaster response problems and capabilities.

I applaud you, Mr. Chairman, and the Committee for your vision and leadership in reviewing the shortcomings of our present response systems. There are few issues as important as sheltering the victims and first responders as they meet the emergency needs of our communities, treat the injured and shelter the homeless. As a matter of reference, The Department of Homeland Security (DHS) issued a detailed report on December 16, 2006, reviewing how they and other first responders could have improved the response to the aftermath of Hurricane Katrina. DHS concluded in their report that "*Hurricane Katrina transformed thousands of people's lives into a battle for survival—and, for some, finding adequate shelter proved at least as difficult as finding something to eat or drink.*" To meet this need, InterShelter has designed and produced a revolutionary portable, prefabricated structure called The InterShelter Dome™ which is pictured above.

Adequate emergency shelter is a global problem. After the recent earthquake north of Rome, I had the opportunity to talk with The First Counselor at the Italian Embassy, Mr. Marco Mancini, about their response to those communities devastated by the quake. While discussing his nation's response he made a very profound observation. He said "you know Mr. Kubley, I'm embarrassed to tell you that the emergency temporary shelters we are responding to this disaster with are the very same thing the Romans used after Mt. Vesuvius destroyed Pompeii.....tents"!! We all understand the attributes of tents in a situation like this. They are portable, easy to assemble quickly, and can be warehoused until needed. Just as obvious, to all who have ever been forced to live in a tent for weeks or months, are their many shortcomings. They are too hot in the tropics, too cold in the Northern climes, damp and unhealthy in wet inclement weather, are extremely susceptible to fire, drafty in blustery weather, dusty in desert areas, and become projectiles in anything above "Gail Force" winds. One of the tent's strongest assets is that they have by far the easiest "exit

strategy". However, they have very short life expectancy and once they have gotten wet they are prone to mold and mildew when stored for reuse. Anyone who has gone from a normal accommodation to a tent will tell you that they were neither comfortable nor safe and couldn't wait to get to an adequate form of shelter.

In this regard, I would like to share some comments from General Craig Campbell, Commander of the Alaska National Guard in a letter dated May 16, 2009. He stated concerning our domes:

*"These domes provide safe, reliable shelter in all types of extreme weather conditions. They are easy to assemble and easily transportable.*

*I would recommend you contact the Federal Emergency Management Agency (FEMA) and encourage their purchase of these domes for emergency deployment use. Should FEMA purchase your shelters, I would encourage them to be deployed to FEMA Region 10, so that they would be accessible to Alaska and other states in the Pacific Northwest."*

*These shelters are optimal for use as temporary shelters in times of disaster emergencies and these domes would be exceptional for use in Alaska. They far exceed the existing canvass tents."*

Mr. Chairman, I would suggest that if our domes are a vast improvement over tents their attributes can apply nationwide. With our cutting edge insulation kits and alternative energy systems installed they are the most efficient, off-the-grid, portable structures on earth and are as effective in keeping you cool in the Mohave Desert as they are in keeping you warm and dry on the North Slope of Alaska.

To provide a more substantial shelter response agencies often have turned to trailers or mobile homes. These, of course, provide more creature comforts and are used for longer term temporary housing requirements. However, there are many, very large differences between our "domes" and trailers. Trailers take longer to produce and are more expensive to acquire, warehouse, transport and maintain. The entrance and exit strategy for a trailer or similar hard-wall structure is much more difficult to plan and execute. Often existing roads are blocked with traffic or debris and cannot accommodate the passage of large trucks that transport them. As evidenced in Katrina, too often they can only be used once, if at all, and proper disposal is extremely difficult and an added expense.

Obviously, the use of tents and trailers leaves a huge unfilled gap in providing adequate, safe and reusable accommodation. After Katrina, we heard from response agencies, first responders, those being housed and many NGO's that, "trailers just don't work, and tents are simply not acceptable". We are confident that we have developed the "missing link" in the emergency accommodation scheme.

Our structures go up as fast as a tent and because of their dome design once erected they are stronger than a trailer and many stick built houses. Utilizing simple tools and unskilled labor, they can be erected in a couple of hours and when they are sealed and anchored properly, they are hurricane proof, earthquake proof, water proof and extremely fire resistant. They can remain in place for months or years, as necessary, or dismantled and stored in a matter of hours. In contrast to trailers or other hard-wall structures, our portable shelters can be transported using light trucks or medium lift helicopters and can be easily placed close to response victim centers using parking lots or existing athletic fields. Over the past twelve-years they have been fully tested and used successfully in the most extreme weather and hazardous terrain on earth.

On the homepage of our website at [www.intershelter.com](http://www.intershelter.com) you will see one of our domes sitting next to the helicopter that brought it there, on a mountain top above Valdez, Alaska. This is one of the snowiest places on earth with an average of 300 inches. On top of that mountain overlooking Prince William Sound our 14ft Survival Sphere is hit by winds in excess of 175 MPH during the fall and winter storm seasons. In winter it is then buried under 40ft. of snow until melt-off in late summer. This shelter has housed sensitive telecommunications and computer equipment used to communicate with the oil tankers plying the waters below. It has withstood 6 winters with absolutely no maintenance or structural damage fully protecting the expensive, important satellite communications gear inside. The versatility, durability, storability, mobility, and economy of our buildings cannot be matched by any of the tent or trailer variants on the market today.

We feel that our buildings would be a great asset for the sustainment of the victims of disaster. Using our domes it may not be necessary to totally remove those left homeless from their local communities. Once the area is cleared, it may be possible to accommodate families on or close to familiar surroundings. In a best case scenario, families could stay on or close to their own property, near

their neighbors and friends, protecting what little property and belongings they have left to begin the daunting task rebuilding their lives and homes. In time, when families can be adequately housed, whether in weeks or months, the "exit plan" for our shelters couldn't be simpler. The domes can be washed, disassembled in under an hour and stored until they are need with no requirement for the recurring maintenance required for tentage or trailers.

Because of the "Pringles" like stack- ability of our dome components, in the same space it takes to ship one FEMA trailer we can ship enough domes to house 300 people. Instead of spending \$45,000 to \$70,000+ for a trailer that cannot be easily disposed of or reconditioned for reuse. Our domes, which do not have these limitations, can be produced for under \$20,000 which is less than many of the proposed tentage systems for this purpose.

Our domes can be used as command posts for "first responders", emergency communications centers, and MASH style hospitals, and triage facilities, long-term accommodations for offices or shelter for the homeless. They can be interconnected in any configuration needed. Because the domes are of fiber-glass resin construction many types of computer, communications and satellite equipment can be used and protected from the elements with absolutely no signal interference from the building materials. To meet the needs of FEMA and other global response organizations

InterShelter has proposed to team with the AAR Corporation to build "total response" packages using our modular dome designs which can be seen in the Annex to this presentation. Our objective is to produce fully air deployable self-contained and supported camps that can be installed with little or no site preparation for 300 people within 24 hours and for up to 2000 people within 72 hours. This effort, using U.S. manufactured products, is well underway and will incorporate totally interoperable communications and IT systems for police, fire and military response teams, ID card production facilities, over-pressure systems for chemical and biological response teams to include decontamination facilities and medical modules with complete field surgical capabilities and accommodation packages for first responders, office and lodging, and family accommodation modules. AAR's mobility systems and Contingency Response Communication Systems, integrating first responder communications nets, are presently in use in the US Army and Army National Guard Units. All modular dome configurations will be supported by fully integrated alternative energy sources,

solar and wind, as well as, potable water production facilities and waterless human and hazardous waste disposal systems.

If given the opportunity, we stand ready to provide "The Next Generation of Emergency Shelter", in the numbers needed at a substantial savings to our Government.

Again, Mr. Chairman and members of the Committee, I would like thank you for the honor and privilege of addressing you here today.