

**Large Home Fires:
A Unique and Growing Challenge**

By Chief Gary Bowker (Ret)

The size of the average American home has more than doubled since the 1950s; it now stands at 2,349 square feet. Whether it's a 5000 to 10,000 sq ft. Mega Home/McMansion in a wealthy neighborhood, or a bigger, cheaper house in the exurbs, the move toward ever larger homes has been accelerating for years. The continued growth in large residential structures has created overwhelming challenges for fire departments that are unprepared, untrained, understaffed, and underestimate the operational demands of a rapid developing fire in one of these residential structures. The photo above is a single-family Mega Home was destroyed on 3/19/11 in Huntington, MD and resulted in a Mayday situation with 9 firefighters injured after fire spread rapidly from a basement level chimney void into the 10,000 SF attic space



Large home fires cannot be treated with the same conventional firefighting mind-set of a home built decades ago. Fire's involving today's newly built residential structures demand a strategic and tactical approach that is focused on training, pre-planning, and well defined tactics based on current technology. Pre-planning is essential. Especially regarding access, water supply, and hose lay distances. Large residential structures are not bound by the same code requirements for sprinklers and draft stopping of void spaces as similar sized commercial structures. Essentially, a fire involving a large wood frame home should be treated like a commercial building fire.

In addition to the lightweight construction concerns, and rapid fire spread potential, here are some of the unique challenges of large home fires:

- Large open floor plan design
- Very large void spaces created
- Concealed rooms built within attic voids
- Large and complex search areas
- Extended hose lay distances
- Limited access
- Long driveways/gates
- Lack of adequate road surfaces
- Water supply issues
- Large sections of unsupported brick veneer
- Staffing

How prepared is your department to adequately and safely respond to this unique and growing challenge?

Note: Here's a video link to a YouTube video that illustrates several of the key points of this article.
<http://www.youtube.com/watch?v=qSjP3AnrEM4>