

Book Review

3D Fire Fighting

More than a decade after he turned the world of tactical firefighting upside down with his 'New Testament' of firefighting 'Fog Attack'. Ex London Firefighter Paul Grimwood has done it again with his latest publication 3-D Fire Fighting. The book has been written by Paul along with Battalion Chief Ed Hartin of the Gresham Fire Service in Oregon USA and John McDonagh and Shan Raffel, both Australian Firefighters in their respective brigades, New South Wales and Queensland.

This excellent Publication has over 450 pages of text & colour photographs accompanied by an interactive CD Rom that includes video explanations and demonstrations, a Presentation and various links from the book itself. Essentially split into two parts one dealing with the hazards risks and phenomena related to compartment firefighting and tactics. The other part deals with CBFT (compartment fire behaviour training) in its entirety.

In the opening chapter, Paul Grimwood looks at extreme fire behaviour; fire growth, flashover, backdraught and so on, not only does the reader get a practical real life understanding of the various phenomena but this is underpinned by factual and scientific explanation. Throughout the chapters reference is also made to incidents across the globe where certain things have actually occurred, told in such a way as you have to forgive yourself at times from thinking you are in the grips of the latest 'Can't put down' thriller.

The following chapters introduce the concept of 3-D firefighting.... Fighting the gaseous phase of the fire as well as the actual burning material. This introduction also serves to refresh the memory of the more experienced firefighter as well.

Firefighting in the gaseous phase, flow rates, compartment size up are all included.

The next chapter brings all of these lessons together and Shan Raffel then teaches us the practical application of 3-D Water fog. With reference to the CD Rom. We are able to see practical demonstrations of the various types of application; Direct, indirect, pulsing.... Do you know the difference between penciling and pulsing? When to use them and what they do? By the end of this Chapter Raffel has demonstrated this comprehensively and the visual demonstration leaves the reader/viewer in no doubt.

Finally in this first section of the book, Grimwood, A Firefighter who had the privilege of firefighting on almost every continent... who has crawled down smoky hallways from the West End of London to the Ghetto of the Bronx in 1970's New York. Leads us through the often fraught and controversial subject of Tactical Ventilation... A week one basic to the American Firefighter but a minefield of anxiety and hard to cal decisions to the UK Firefighter.

Once again, we see a mix of scientific fact, practical demonstration and case studies of where tactical ventilation assisted, caused problems or lack of it cost Firefighting teams dearly. It is fair to say that of all the varying Fire Departments in the USA the FDNY (Fire department of New York) are probably the most tactically advanced on the planet across the scope of Firefighting. We are appraised of their ventilation strategy and this is brought into focus by viewpoints from serving FDNY Firefighters. I was also privileged to be asked to submit an opinion on this subject with my own view of structural

venting tactics employed by the London Fire Brigade.

The second part of the book deals purely with CBFT. Once the principles are explained, the following chapters deal with implementing a CBFT programme into a Fire Service, the various systems that can be employed; Purpose Built container systems, acquired structure burns are all dealt with here. We go to on deal with the important health and safety aspects of the training, identifying hazards and managing risks.

In summary, this book has brought Firefighting into the twenty first century in the way that fog attack brought us out of the 'watersquirting' era of firefighting. As a student of tactical firefighting who has been fortunate enough to have a lot of exposure to inner city structural fires, the book has been a valuable revision tool and taught me things I did not know or explained things that had previously been unclear on. It matters not whether you are a wholtime Firefighter in the inner city, retained in a rural town, Military, Aviation or industrial. If you are likely to find yourself fighting a fire within a compartment or responsible for those who do, this book is for you.

The book is available through the Institution of Fire Engineers.
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