

## TENTATIVE 17<sup>th</sup> ISF PAPER TITLES

Ballistic Safety Advantages of Modern Propellants in Fireworks

Automatic Translation of Effect Names from Spanish and other Languages to VDL

Determination of Measures for Safe Production Processes Depending on the Hazardous Properties of Pyrotechnic Compositions

Assessment of Hazardous Properties of Pyrotechnic Compositions and Articles for a Safe Production

Pyro safety: is it enough?

Height Estimates of Aerial Shell Bursts Using Angular Measurements Made with Inexpensive Equipment from three Reference Positions

Resisting the Impact of an Exploding 6" (150 mm) Dud Aerial Display Shell: Design and Testing of a Protective Roof Pergola

Safe use and Storage of Fireworks in The Netherlands

Fireworks Displays, Rockets, Inventions, Thunderstorms and Lightning in Tarragona, Catalonia, in the 17<sup>th</sup> and 18<sup>th</sup> Centuries

External and Internal Ballistics Study and Pressure Evaluation for the Safe Design of a 1,575 mm Mortar

The Cause of Muzzle Breaks

The Psychology of Safety in the Fireworks Industry

A Method to Produce Falling Leaves Utilizing Solvent-Activated Parlon<sup>TM</sup>/Metal-Fuel Formulae

“Secured E-Match” Revolution: How to Set a Display Safely and Fast!

Comprehensive Safety Considerations for Businesses Handling Explosives

The Art and History of Fireworks and Fireworks as a Cultural Entity

The Ongoing Developments of UK Regulation - Transport, Storage, Standards and Brexit!

America's National Fireworks Association's (NFA) Stalwart, Fact-Based Opposition to the US Consumer Product Safety Commission's (CPSC) Proposed Ban of Powdered Metals in Consumer Fireworks (1.4g) Burst Charges

Black Powder Equivalency Test for Burst Powders in Aerial Fireworks Shells

Basic Methods for Assigning Firing System Addresses

Historical Aspects of Firework Safety: The Introduction of Potassium Chlorate into Pyrotechny

Historical Aspects of Firework Safety: The Introduction of Potassium Perchlorate into Pyrotechny

Overview of ISO Standards

Study on the General Safety Standard of Firework Machinery Touching Gunpowder

Influence of PM2.5 Concentration in Ambient Air Quality

Fireworks Disaster - A Preventable Tragedy

Innovative new Military Training Pyrotechnics enhance Live Training through Immersion: Specialist Pyrotechnics for Weapon Effects Simulation

Fireworks Industry Regulation in Queensland – 20 Years from the Bray Park Tragedy

Effect of Carboxylate Coating on Degradation of Magnesium Based Fireworks

Fragile Color of Traditional Japanese Sparkler, Senko-Hanabi

Fireworks Accidents in Japan During 2016-2017

“... until someone gets hurt.”

Recognition, Assessment, and control of Electrostatic Hazards in Fireworks Manufacturing and Use

The Final Report of 16<sup>th</sup> International Symposium on Fireworks in Omagari

History of Fireworks in Mexico

Certification of Pyrotechnic Products and Procedures (LOM)