

Time	Monday, 21 October	Tuesday, 22 October			Wednesday, 23 October			Thursday, 24 October			Friday, 25 October		
0700-0800		Registration											
		Ballroom AB	Ballroom EF	Spanish Moss NATO/MOUT	Ballroom AB	Ballroom EF	Spanish Moss NATO/MOUT	Ballroom AB	Ballroom EF	Spanish Moss NATO/MOUT	Ballroom AB	Ballroom EF	Spanish Moss NATO/MOUT
0800-0940		Opening Ceremony; Welcome, Singer Keynote			Blast,M&S,Load Response,Penetration	Protec-Mat Prop	MOUT Penetration	Shock/SR	Risk Mgmt	SHIELDS 1	SR-Columns/RC Col/ UHPC/Model Approach		NATO- Localized,Protec, Risk Mgmt,Tool
0940-1000		Break			Break			Break			Break		
1000-1140		Blast 1	Protec-Blast	Overview	Penetration/Combined	Protec-Mat Prop 2	NATO-Blast	SR	Tool	SHIELDS 2	Closing Session + Adjourn		
1140-1300		Lunch			Lunch			Lunch					
1300-1440	Registration	Blast 2	Protec-Blast 2	MOUT-Blast	Load Buses for Tour 1300-1330			SR-M&S	Penetration	SHIELDS 3			
1440-1500		Break			Arrive at Tyndal 1430 Tour 1430-1630 Load buses to leave 1630-1700 arrive at hotel 1800			Break					
1500-1640		Blast 3	Protec-Blast 3	MOUT-M&S				TBD	Protec-Soil/Tool/ Overburden/Mun Storage	NATO- Blast,Protec, Multi Det			
					Load Buses for Capt'n Anderson's Tour 1640								
1800-1930	Reception on St. Andrews Pavillion				Banquet Dinner; Speaker TBD			Captain Andersons Tour 1700-2000					
1930-2100													

Monday, October 21, 2019			
13:00-16:30	Registration		
17:00-21:00	Reception on St. Andrews Pavilion		
Tuesday, October 22, 2019			
7:00-8:00	Registration		
8:00-9:40	Opening Ceremony, Singer Keynote		
9:40-10:00	Coffee Break		
Location	Ballroom AB	Ballroom EF	Spanish Moss
Session	Blast 1	Protec-Blast	MOUT Overview
10:00-10:20	Pope, D.J. Predicting Near-Field Specific Impulse Distributions Using Machine Learning	Jonet, Arnaud Blast Mitigation Using Mineral Foam As Sacrificial Claddings	Staubs, Ernest Overview Of Joint Weapon Effects Research
10:20-10:40	Gran, Jim Effects Of Elevated Ambient Pressure On Explosive Blast In A Sealed Pipe	Maazoun, Azer New Technique To Protect Rc Slabs Against Explosions Using Cfrp As Externally Bonded Reinforcement	Rohen, Karl 3D Measurement (As Built Measurement) And Surface Model Of The Entire "Bunker Ladeburg" Complex
abass10:40-11:00	Stewart, Joel Explosively Driven Shock Tube Investigations	Eytan, Reuben Practical Experience In The Optimal Implementation Of "Invisible" Hardening Measures In Buildings	Doerr, Andreas Experimental Explosive Crater Analysis With Cast
11:00-11:20	Trélat, Sophie Reduced-Scale High Explosive Charges: A Joint Experimental Work To Study Free-Field Blast Effects	Ichino, Hiroyoshi An Experimental Study On Blast Mitigation Layers Composed Of EPS Plate And Soil	
11:20-11:40	Chiarito, Vincent Armored Designs For Reinforced Concrete Bridge Towers To Mitigate Close-In Detonations	Blanc, Ludovic Experimental And Numerical Investigation On Load Impulse Reduction With A Sandwich Add-On Armour	
11:40-13:00	Lunch		
Session	Blast 2	Protec-Blast 2	MOUT- Blast

13:00-13:20	Edri, Idan E. Equivalency Of Different Explosives In A Confined Space	Consulting, Prostruct Blast Resistance Of Reinforced Concrete And Masonry Elements Retrofitted Using A New Quick Application Glass Fibre Reinforced Polymer System	Ohrt, Alan Observed Casing Effects From A Heavily-Cased Explosive Cylinder
13:20-13:40	Clutter, Keith Strategy For Modeling Non-Ideal Explosives	Chee, Min Hui Reinforced Concrete Panels Retrofitted With Fibre Reinforced Polymers And Subjected To Near-Field Blast And Fragmentation Effects	Bewick, Bryan Response Of Adobe Structures Subjected To Internal Blast Loads
13:40-14:00	Clutter, Keith Near-Field Dynamics Affecting Loading From Ideal Explosives	Rebello, Hugo 3D Printed Pla Sacrificial Honeycomb Cladding Blast Mitigation	Davis, Roosevelt Airblast Influences Of Doors In A Multi-Room Structure
14:00-14:20	Ng, Chor Boon Urban Canyon Explosive Testing To Investigate Glazing Response And Blast Propagation	Baum, Joseph Blast Wave Attenuation Through A Cloud Of Droplets	Rossberg, Daniel Comparison Of Fast Running Simulations With Regard To Blast
14:20-14:40	Remennikov, Alex Performance Characterisation And Further Development With NFPBS' Advanced Blast Simulator	Hall, Elise Optical Diagnostics for Cased Explosive Model Validation and Fragment Measurements	Froechtenicht, Maik Validation Of Apollo CFD-Code Using Small Scale Tests Of Internal Detonations
14:40-15:00	Coffee Break		
Session	Blast 3	Protec-Blast 3	MOUT- M&S
15:00-15:20	Langran-Wheeler, Christian Reflected Blast Loads From Long Cylinders In The Near-Field	Mourão, Rodrigo Experimental Assessment Of Concrete With Bonded Frp Under Contact Explosion	Scarborough, Eric A Comparison Of Simulating Multiple Fragment Impacts
15:20-15:40	Clutter, Keith Prediction Of Blast Pressure From Explosions With Aluminum Powder	Dalenius, Rolf The Influence Of Height Of Charge On Blast Loads Behind A Shielding Wall	Rohen, Karl Precision 2D Assessment System Of Fragment Holes In Witness Plates

15:40-16:00	Wholey, Will CFD Investigation Of Blast Pressure Ingress And Interior Distribution In Structures Subjected To External Blast Loading And Development Of Improved Simplified Calculation Parameters For Assessment Of Blast Injury And Calculation Of Interior Structural Des	Zircher, Tobias Investigations On The Use Of Fibre Concrete For Infrastructure Protection	Minkoff, Sarah Modeling Complex Structural Environments Using Petra
16:00-16:20	Bogosian, David Consequences Of Applying Objective Methods For Selecting Peak Pressure From Experimental Data	Pezzola, Genevieve Prototype Testing Of The Expedient Retrofit For Existing Buildings (Ereb) System	Froechtenicht, Maik Calculating The Volume Changes Of A Detonation Room Using Paraview
16:20-16:40	Ritzel, Dave Advances in Blast Simulator Technology	Langdon, Genevieve Influence Of Venting Configuration On The Deformation And Rupture Of A Scaled Aircraft Luggage Container Subjected To Internal Blast Loading	Staub, Ernest Research Into Secondary Debris And Its Potentially Damaging Effects
Wednesday, October 23, 2019			
7:00-8:00	Registration		
Session	Blast, M&S, Load Response, Penetration	Protec- Mat Prop	MOUT Penetration
8:00-8:20	Dalenius, Rolf Diffraction Effects Of Blast Waves Around Corners	Esquilin-Mangual, Omar Experimental Evaluation Of The Impulse Reduction By Plywood And Insulated Foam Panels As Triggering Materials And Implementation On A Fast-Running Tool	Danielson, Kent Deformable Fragment And Projectile Penetration Modeling With Resistance Functions
8:20-8:40	Klomfass, Arno A Universal Co-Simulation Interface For Blast-Loading Of Structures	Kilmenko, Jessica Effect Of Adhesion Level On The Post-Fracture Response Of Laminated Glazing Systems Subjected To Blast Loads	Greulich, Stefan Recent Developments In Penetration Methodologies – An Update

8:40-9:00	Astarlioglu, Serdar Influence Of Load Waveform On Pressure-Impulse Diagrams Of Normal And High-Strength Concrete Panels	Li Piani, Tiziano Dynamic Increase Factors For Adobe: Predicting The Dynamic Strength In Compression For Earthen Materials	Sauer, Christoph Modelling The Penetration Into UHPC And FRC – Force Law Development Based On Hydrocode Simulations
9:00-9:20	Vankirk, George The Effects Of Concrete Damage On Projectile Penetration: A Computational Study Using The HRB Model and The Epic Hydrocode	Tan, Kai Qi Blast Effects On Pavement Sections	Bongartz, Albrecht More Joint Effect Testing For Shoulder-Fired Weapons Against Infrastructure Targets
9:20-9:40	Ritzel, Dave Further Development and Applications of the PVCG Blast-Source Model	Fryman, Brandon Hazardous Fragment Distance and Maximum Throw Comparison	Bailey, Keri; Sarrach, Thorsten; Bucksch, Martin Us/Ge Joint Penetration Experiments Against Advanced Strength Concretes
9:40-10:00	Coffee Break		
Session	Penetration/Combined	Protec-Mat prop 2	NATO-Blast
10:00-10:20	Rouquand, Alain A Methodology To Simulate Combined Blast And Fragment Effects On Reinforced Concrete Structures	Pereira, Luis A Numerical Study Of Ballistic Impacts On Normal And High-Performance Concrete	Vorgert, Sarah Experiments Investigating External Venting Of Internal Detonations In A Small Scale Structure
10:20-10:40	Agrawal, Ankit Designing for Combined Effects Of Air-Blast, Fragments, And Fire	Magallanes, Joe High Strain-Rate Behaviors And Modeling Of Structural Steels For Protective Structures	Vorgert, Sarah Pressure Ratio Analysis Of External Venting In A Small Scale Structure
10:40-11:00	Soto, Orlando Numerical Modeling Of Fragment And Blast Loaded Concrete Structures Using Massively-Parallel Coupled Cfd-Csd Techniques	Stephens, Catherine Effects Of Masonry-Mortar Bond Strength On The Blast Load Response Of Masonry Walls	Vorgert, Sarah Experimental Investigation Of Simultaneous Versus Independent Detonations Of Distributed Explosive Charges
11:00-11:20			Turton, James Blast In A Multi-Room Structure
11:20-11:40			Petrovitch, Christopher Blast Propagation Through Rapidly Breached Rc Walls

11:40-13:00	Lunch		
13:00-18:00	Load Buses for Tour- Leave at 13:30 Tyndall Tour- 14:30-16:30 Load Buses to Leave- 16:30-17:00 Arrive at Hotel- 18:00		
18:00-21:00	Banquet Dinner		
Thursday, October 24, 2019			
7:00-8:00	Registration		
Session	Shock/SR	Risk Mgmt	SHIELDS 1
8:00-8:20	Stone, Michael An Energy Flow Approach For Assessing NSC And UHPC Cylinders Under Static And Impact Loads	Hagen, Stephen The Contribution Of Research Products To The Command And Control Process Regarding Structural Protection In Deployed Operations	Knutson, Tor And Foi/Fmv Shield Management Summary/ Shield Test Execution Summary
8:20-8:40	Edri, Idan E. Dynamic Response Characteristics Of Arching Masonry Walls Under Blast Loading	Ornai, David Protective Cable Net Structure Against Drones And Munitions	CHE Che Passive Modular Protection System For Peace Support Missions Exposed To Very Large Air Blast
8:40-9:00	Schmitt, Daniel Investigations On Soil Filled Perimeter Walls Under Blast Loading	Johnsson, Fredrik Explosive Remnants – A Multifaceted Risk Problem	CHE Whole-Body Displacement Due To Blast Loads
9:00-9:20		Ingier, Petter Toensberg Stacked Fragmenting Casings	CHE Behaviour Of Swiss Brick Walls Subjected To Blast Loads
9:20-9:40		Turgyan, Scott Effects of Weaponized Commercial Unmanned Aerial Vehicles (UAVs) on Structures, and Comparison of Analysis Methods	DEU Effect Of A Heavy Improvised Explosive Loading On Blast Protection Walls
9:40-10:00	Break		
Session	SR	Tool	SHIELD 2

10:00-10:20	Gebbeken, Norbert Explosions Against Full Scale Conventional And Hardened Houses Made Of Masonry, Reinforced Concrete And Steel	Susi, Bryan Scalable Fidelity Cfd Simulations For Decision Support Applications	DEU Effect Of A Super Heavy Improvised Explosive Loading On Wall Systems And Accommodation
10:20-10:40	Fischer, Kai Dynamic Bearing Capacity Of Reinforced Concrete Plates Subjected To Blast Loading,	Brewer, Tim Employment Of The Open-Source Airblast Solver (Blastfoam) To Support The Super Heavy Improvised Explosive Loading Demonstration (Shield) Test Program	DEU Effect Of A Super Heavy Improvised Explosive Loading On Reinforced Concrete Emplacements
10:40-11:00	Puryear, John Validation Of A Cold-Formed Steel Stud Wall Finite Element Model Against Blast Test Measurements	Tu, Huan Damage Prediction Tool Based On Artificial Neural Network Technique For Reinforced Concrete Walls Strengthened With Carbon Fiber Reinforced Polymer Layers Under Close-In Blast Effect	Dalenius, Rolf Impact of Different Charge Configurations
11:00-11:20	Hadjoannou, Michalis Full Scale Blast Tests Of A Three-Story Steel Frame Building With Hardened Curtainwall Façade		Johansson, Erik Seismic and Infrasound Measurements at SHIELD
11:20-11:40			Persson, Anders Effects of Blast on Anthropometric Test Devices
11:40-13:00	Lunch		
Session	SR-M&S	Penetration	SHIELDS 3
13:00-13:20	Caçoilo, Andreia Pressure-Impulse Blast Response Of Steel Iso Containers	Atoui, Oussama <u>Numerical Investigation Of High Strength Aluminum Alloy Subjected To High Velocity Impact By A Rigid Spherical Projectile</u>	Grue, Tormond Triple-layered Laminated Glass Panes Exposed to Blast Loading

13:20-13:40	Rakvåg, Knut Reaction Forces Of Dynamically Loaded Beams	Beppu, Masuhiro A Study On Perforation Failure Of Steel Plates Subjected To Impact	Heggelund, Solveig Global Response Of A Four-Story Concrete Structure Exposed To Blast Loading – Preliminary Results
13:40-14:00	Luna, Arturo Determining The Effect Of Weak Horizontal Shear Planes On Composite Flexural Systems Subjected To Blast Loading Using Fundamental Structural Analysis	Remennikov, Alex An Experimental Investigation Of The Penetration Of Multiple Spaced Hybrid Panels By Explosively Formed Projectiles	USA Reflected Pressures On A Barrier Wall
14:00-14:20	Weaver, Mark Modeling The Residual Capacity Of Blast-Damaged Reinforced Concrete Columns	Schwer, Len The Simulation Of Aluminum-LDPE Barriers For Protection Against Explosively Formed Projectiles	USA Shield Free-Field Overpressure Measurements
14:20-14:40	Foglar, Marek Heterogeneous Concrete-Based Bridge Decks Response to Near Field Explosion	Sielicki, Piotr Experimental Study Of Flying Debris Accelerated By Explosive	USA Comparison Of Measured Nskusta Pressures On Shield To Small-Scale Results
14:40-15:00	Break		
Session	TBD	Protec-Soil/Tool/Overburden/Mun storage	NATO- Blast, Protec, Multi Det
15:00-15:20	Swanson, Mark The Intersection of Antiterrorism and Explosives Safety M&S, Part 1: IMESAFR for Antiterrorism	Dupont, Vincent Design And Optimization Of Operational Munition Storage	Rios-Estremera, Daniel Evaluation Of Scaled Range Dependency Of The Tnt Equivalence For Anfo
15:20-15:40	Kewaisy, Tarek Advanced Modeling of High-Velocity Normal Impact of Rigid Projectiles on Reinforced Concrete Slabs	Williams, Neil Numerical Simulations To Evaluate Effects Of Earth Cover On An ECM	Stephens, Catherine Effects Of Charge Shape On Blast Loading And An Empirical Model
15:40-16:00	Berger, Kyle Software Tool To Predict Injuries From Debris Resulting From Structural Failure	Durant, Bradley Determining The Effect Of Soil Cover On The Dynamic Response Of A Concrete Roof Slab Subjected To Blast Loading Using High-Fidelity Simulation	Gomes, Gabriel Blast Energy-Absorption Connectors In Protection Of Infrastructures

16:00-16:20	Oswald, Chuck An Improved Methodology to Calculate Vented Shock Loads	Payne, Joshua Evaluation Of Effect Of Earth-Cover Thickness On Ecm Loading: Phase 1 Results	Davis, Roosevelt Multiple Charge Experiments Against A Surrogate Steel Door In A One Room Structure
16:20-16:40		Schmitt, Daniel RAFOB-RAM, A Risk Analysis Software Tool For Forward Operating Bases	Bogosian, David Predictive Metrics For Response Of A Hardened Steel Door To
16:40-20:00	Load buses for Capt'n Anderson's Tour- 16:40 Tour- 17:00-20:00		
Friday, October 25, 2019			
7:00-8:00	Registration		
Session	SR-Columns/RCCol/UHPC /Model Approach		NATO-Localized, Protec, Risk Mgmt, Tool
8:00-8:20	Krauthammer, Theodor An Energy Flow Based Approach For Structural Response Assessment		Bogosian, David Experimentally-Derived Equivalent Explosive Weights For Non-Ideal Charges
8:20-8:40	Dua, Alok Influence Of Axial Load Ratio On The Response Of RC Columns Subjected To Contact Explosion Effects		Huntley, Shelley Blast Testing Of Modified Shipping Containers Intended For Use As Screening Facilities
8:40-9:00	Stone, Michael Normal Strength Concrete And Ultra-High-Performance Concrete Beams Under Impact		Zohrabyan, Vahan The Residual Load Bearing Capacity Of Reinforced Concrete As Well As Steel Fiber Reinforced Concrete Components After Contact Detonation
9:00-9:20	Krauthammer, Theodor Considerations Of Longitudinal And Shear Reinforcements For Uhpfrc Beams		Roller, Christoph Ballistic Performance Of Various Steel Materials At Elevated And Reduced Temperature
9:20-9:40			Sibeaud, Jean-Marc Model Scale Experiments Of Concrete Slabs Penetration At Supersonic Impact Velocity And Code Validation

9:40-10:00	Break
10:00-11:20	Closing Session