

Direct Fire Overview Information		Demonstration
<b>Information</b>		
<b>What:</b>	Vendor Demonstration	
<b>When:</b> (estimated)	April 12-23, 2021 (tentative)	
<b>Time: Setup</b>	0800 - 1200	
<b>Time: Demo</b>	1300 - 1700	
<b>Time allotted:</b>	1 day / vendor / solution	
<b>Where:</b>	Big Oaks, Orlando, FL	
<b>Resources:</b>	Number of kits needed to support vendor demonstration	
<b>Conditions</b>	System must be running through the duration of the demonstration event	
<b>Weapon of Interest</b>	M240, M4, SLM	

Vendor may decide to demonstrate an objective rather than brief the objective if they feel they can accomplish all objectives within the allotted time.

Vendor may run the demonstration to the extent they see fit as long as they address each of the objectives for each solution they intend to present. All presentations / demonstrations must be within the capabilities of the range location provided. (Location is currently TBD)


## Direct Fire - Demonstration

Obj #	Objective	Type	Criteria description
<b>Weapon Engagements</b>			
WE001	On a hard mount, demonstrate the accuracy and precision of engagement to <b>static</b> target at near, medium, and max effective range of the weapon system	Demo	% of hits from shots fired on a static target; clear line of sight
WE002	On a hard mount, demonstrate the accuracy and precision of engagement to <b>moving</b> targets at near, medium, and max effective range of the weapon system	Demo	% of hits from shots fired on a moving target; clear line of sight
WE003	On a hard mount, demonstrate the ability to repeatably hit <b>static</b> target through obscurant and concealment	Demo	% of hits from shots fired on a static target; obscured line of sight
WE004	On a hard mount, demonstrate the ability to repeatably hit <b>moving</b> target through obscurant and concealment	Demo	% of hits from shots fired on a moving target; obscured line of sight
WE005	Demonstrate installation, initialization, and calibration / alignment - <b>Soldier</b>	Demo	Demonstrate the setup process including installation, initialization, and calibration / alignment.
WE006	Demonstrate installation, initialization, and calibration / alignment - <b>Vehicle</b>	Demo	Demonstrate the setup process including installation, initialization, and calibration / alignment.
WE007	Describe solution's requirement for re-execution of the calibration / alignment process	Demo	Describe solution's requirement for re-execution of the calibration / alignment process
WE008	Demonstrate support for automatic fire rather than single	Brief	Demonstrate ability to model each round fired from the weapon
<b>Feedback</b>			
FB001	Demonstrate realistic casualty assessment for each engagement (How is it being modeled?)	Demo	Identification of timely engagement determination and simulation of effects on players/systems
FB002	Demonstrate hit and BDA feedback to the target participants (How is it delivered to the target?)	Demo	Methods of informing the FoF participants of the damage inflicted (focused recipients of damage)
FB003	Demonstrate a sensory feedback capability to the shooter, target, and observer participants of battlefield effects to include visual, auditory, olfactory, and tactile or haptic senses. (How is it communicated?)	Demo	Battlefield and battle damage effects may include but not limited to ground splash effects, muzzle flash, smoke plume, explosions, impact craters, vehicle effects, walking rounds to target, rocket plume.
<b>Infrastructure</b>			
IN001	Demonstrate system latency to support Realtime notification of effects.	Demo	Is the timing and result of an engagement effect realistic
IN002	Demonstrate network scalability to support brigade events.	Brief	System scalability to support small and large participant counts
IN003	Demonstrate capability to provide information to support an AAR and an EXCON	Brief	Describe the data elements that are passed on to support an AAR and EXCON
IN004	Describe which legacy live training systems are compatible with the vendor's solution	Brief	Document which live training systems are functionally interactive with the solution such as I-MILES and instrumentation systems
IN005	Describe how the solution is functionally interactive with legacy live systems	Brief	Document how the solution is functionally interactive with legacy systems such as I-MILES and instrumentation systems
IN006	If required for solution, describe any terrain requirements needed for training missions.	Brief	Describe the terrain requirements and processes to provide registration between live and virtual.
<b>Soldier Feedback</b>			
SF001	Demonstrate unencumbered freedom of movement and compatibility of the instrumentation with (SWaP) - <b>Soldier focused</b>	Demo	Demonstrate ability to operate in a high-fidelity environment while displaying lethality and vulnerability capabilities
SF002	Demonstrate unencumbered freedom of movement and compatibility of the instrumentation (SWaP) - <b>Vehicle focused</b>	Demo	Demonstrate ability to operate in a high-fidelity environment while displaying lethality and vulnerability capabilities
<b>Added Value</b>			
AV001	Demonstrate your system attributes	Demo / Brief	Opportunity for vendor to demonstrate capabilities not called out from Government guidance where value added is intended

**Indirect Fire - Counter Defilade - Overview Information****Demonstration**

<b>Information</b>		
<b>What:</b>	Vendor Demonstration	
<b>When:</b>	April 12-23, 2021 (tentative)	
<b>Time: Setup</b>	0800 - 1200	
<b>Time: Demo</b>	1300 - 1700	
<b>Time allotted:</b>	1 day / vendor / solution	
<b>Where:</b>	Big Oaks, Orlando, FL	
<b>Resources:</b>	Number of kits needed to support vendor demonstration	
<b>Conditions</b>	System must be running through the duration of the demonstration event	
<b>Weapon of Interest</b>	M320 (undermount or stand alone), MK19 (vehicle mounted or ground based)	

Vendor may decide to demonstrate an objective rather than brief the objective if they feel they can accomplish all objectives within the allotted time.

Vendor may run the demonstration to the extent they see fit as long as they address each of the objectives for each solution they intend to present. All presentations / demonstrations must be within the capabilities of the range location provided. (Location is currently TBD)

**IDF - Counter defilade - Demonstration**

Obj #	Objective	Type	Criteria description
<b>Weapon Engagements</b>			
WE001	On a hard mount, demonstrate the ability to repeatably cause effect on a location with direct line of sight without adjusting the point of aim	Demo	Repeatability for rounds to land in same location; clear line of sight; demonstrating simulation stability
WE002	On a hard mount, demonstrate the ability to walk round in to cause effect on a <b>static</b> target at set location with direct line of sight	Demo	Repeatability for mortar crew to adjust rounds to the desired impact point.
WE003	Demonstrate installation, initialization, and calibration / alignment.	Demo / Brief	Demonstrate the setup process including installation, initialization, and calibration / alignment.
WE004	Describe solution's requirement for re-execution of the calibration / alignment process	Brief	Describe solution's requirement for re-execution of the calibration / alignment process
WE005	Describe the origin of the ballistic model being implemented.	Brief	Describe the origin of the ballistic model being implemented; data presented MUST remain UNCLASSIFIED.
<b>Feedback</b>			
FB001	Demonstrate a sensory feedback capability to the <b>shooter</b> participants of battlefield effects to include visual, auditory, olfactory, and tactile or haptic senses.	Demo	Battlefield and battle damage effects may include but not limited to ground splash effects, muzzle flash, smoke plume, explosions, impact craters, vehicle effects, walking rounds to target, rocket plume.
FB002	Demonstrate a sensory feedback capability to the <b>target</b> participants of battlefield effects to include visual, auditory, olfactory, and tactile or haptic senses.	Brief	Battlefield and battle damage effects may include but not limited to ground splash effects, muzzle flash, smoke plume, explosions, impact craters, vehicle effects, walking rounds to target, rocket plume.
FB003	Demonstrate a sensory feedback capability to the <b>observer</b> participants of battlefield effects to include visual, auditory, olfactory, and tactile or haptic senses.	Brief	Battlefield and battle damage effects may include but not limited to ground splash effects, muzzle flash, smoke plume, explosions, impact craters, vehicle effects, walking rounds to target, rocket plume.
FB004	Demonstrate method of communicating round effect to the shooter participants	Demo / Brief	Methods of informing the shooter participants of the shot effect
<b>Infrastructure</b>			
IN001	Describe the infrastructure is required to support your solution to the live training environment.	Brief / Demo	Exercises could be either isolated or tied into a centralized or non-centralized network or readily available/already in place network for EXCON
IN002	Describe the system latency from trigger pull to data being available to the network.	Brief / Demo	This allows for the implementation of various Government network systems
IN003	Demonstrate data packet size	Brief	Message data elements, packet size, protocols
IN004	Describe network scalability to support brigade events.	Brief	System scalability to support small and large participant counts
IN005	If required for solution, describe any terrain requirements needed for training missions.	Brief	Describe the terrain requirements and processes to provide registration between live and virtual.
<b>Soldier Feedback</b>			
SF001	Demonstrate unencumbered freedom of movement and compatibility of the instrumentation (SWaP) - <b>Soldier focused</b>	Demo	Demonstrate ability to operate in a high-fidelity environment while displaying lethality and vulnerability capabilities; opportunity to define and describe technology gaps
SF002	Demonstrate unencumbered freedom of movement and compatibility of the instrumentation (SWaP) - <b>Vehicle focused</b>	Demo / Brief	Demonstrate ability to operate in a high-fidelity environment while displaying lethality and vulnerability capabilities; opportunity to define and describe technology gaps
<b>Added Value</b>			
AV001	Demonstrate your system attributes	Demo	Opportunity for vendor to demonstrate capabilities not called out from Government guidance where value added is intended

**Indirect Fire - Mortars - Overview Information****Demonstration**

<b>Information</b>		
<b>What:</b>	Vendor Demonstration	
<b>When:</b>	April 12-23, 2021 (tentative)	
<b>Time: Setup</b>	0800 - 1200	
<b>Time: Demo</b>	1300 - 1700	
<b>Time allotted:</b>	1 day / vendor / solution	
<b>Where:</b>	Big Oaks, Orlando, FL	
<b>Resources:</b>	Number of kits needed to support vendor demonstration	
<b>Conditions</b>	System must be running through the duration of the demonstration event	
<b>Weapon of Interest</b>	81mm or 60mm Mortar	

Vendor may decide to demonstrate an objective rather than brief the objective if they feel they can accomplish all objectives within the allotted time.

Vendor may run the demonstration to the extent they see fit as long as they address each of the objectives for each solution they intend to present. All presentations / demonstrations must be within the capabilities of the range location provided. (Location is currently TBD)

## IDF - Mortar - Demonstration

Obj #	Objective	Type	Criteria description
<b>Weapon Engagements</b>			
WE001	Demonstrate the ability to repeatably cause effect on a location with direct line of sight without adjusting the point of aim	Demo	Repeatability for rounds to land in same location; clear line of sight; demonstrating simulation stability
WE002	Demonstrate the ability to walk round in to cause effect on a <b>static</b> target at set location with direct line of sight	Demo	Repeatability for mortar crew to adjust rounds to the desired impact point.
WE003	Demonstrate installation, initialization, and calibration / alignment.	Demo / Brief	Demonstrate the setup process including installation, initialization, and calibration / alignment.
WE004	Describe solution's requirement for re-execution of the calibration / alignment process	Brief	Describe solution's requirement for re-execution of the calibration / alignment process
WE005	Describe the origin of the ballistic model being implemented.	Brief	Describe the origin of the ballistic model being implemented; data presented MUST remain UNCLASSIFIED.
<b>Feedback</b>			
FB001	Demonstrate a sensory feedback capability to the <b>shooter</b> participants of battlefield effects to include visual, auditory, olfactory, and tactile or haptic senses.	Demo	Battlefield and battle damage effects may include but not limited to ground splash effects, muzzle flash, smoke plume, explosions, impact craters, vehicle effects, walking rounds to target, rocket plume.
FB002	Demonstrate a sensory feedback capability to the <b>target</b> participants of battlefield effects to include visual, auditory, olfactory, and tactile or haptic senses.	Demo / Brief	Battlefield and battle damage effects may include but not limited to ground splash effects, muzzle flash, smoke plume, explosions, impact craters, vehicle effects, walking rounds to target, rocket plume.
FB003	Demonstrate a sensory feedback capability to the <b>observer</b> participants of battlefield effects to include visual, auditory, olfactory, and tactile or haptic senses.	Demo / Brief	Battlefield and battle damage effects may include but not limited to ground splash effects, muzzle flash, smoke plume, explosions, impact craters, vehicle effects, walking rounds to target, rocket plume.
FB004	Demonstrate method of communicating round effect to the shooter participants	Demo / Brief	Methods of informing the shooter participants of the shot effect
<b>Infrastructure</b>			
IN001	Describe the infrastructure is required to support your solution to the live training environment.	Brief / Demo	Exercises could be either isolated or tied into a centralized or non-centralized network or readily available/already in place network for EXCON
IN002	Describe the system latency from trigger pull to data being available to the network.	Brief / Demo	This allows for the implementation of various Government network systems
IN003	Demonstrate data packet size	Brief	Message data elements, packet size, protocols
IN004	Describe network scalability to support brigade events.	Brief	System scalability to support small and large participant counts
IN005	If required for solution, describe any terrain requirements needed for training missions.	Brief	Describe the terrain requirements and processes to provide registration between live and virtual.
<b>Soldier Feedback</b>			
SF001	Demonstrate unencumbered freedom of movement and compatibility of the instrumentation (SWaP) - <b>Soldier focused</b>	Demo	Demonstrate ability to operate in a live indoor/outdoor environment while providing lethality and vulnerability capabilities; opportunity to define and describe technology gaps
<b>Added Value</b>			
AV001	Demonstrate your system attributes	Demo	Opportunity for vendor to demonstrate capabilities not called out from Government guidance where value added is intended