

S/K Challenge III

Participants Information

Brief



15 June 2016



U.S. Army Test and Evaluation Command





AGENDA

- Background
- Objectives
- Scope
- Testing Environment
- Dugway Multi-Use Test Range
- Projected Schedule
- Calendar
- Daily Schedule
- Planned Trials
- Release Types
- Instrumentation
- S/K Challenge Package
- Point of Contacts
- Lodging
- Questions





BACKGROUND

S/K Challenge is an annual event that provides program managers, interagency and international partners, and industry stakeholders an opportunity to test chemical and biological detection technology against simulants in an operationally realistic environment. S/K Challenge I and S/K Challenge II were two-week field tests consisting of more than 40 threat relevant releases that involved participants from eight countries, multiple U.S. Government agencies, and several private industry participants. New technologies and capabilities were discovered have helped advance requirement(s) development and support the mission of the global chemical and biological defense community.





OBJECTIVES

S/K Challenge Objectives:

- Provide participants with chemical and biological simulant releases to exercise their technology in a threat-representative environment
- Allow for cost sharing, resulting in significant savings for all participants
- Provide participants a complete referee data package that will allow them to characterize the performance of their technology
- Provide an opportunity to meet with industry, international, and government organizations throughout this event, and during the planned one-day very important person (VIP) Day
- Facilitate technology advancement and encourage innovation





SCOPE

S/K Challenge III will consist of two weeks of testing with chemical and biological simulants:

- Week 1 - Outdoor chamber testing utilizing the Joint Ambient Breeze Tunnel (JABT) and Active Standoff Chamber (ASC)
- Week 2 - Field testing at Target S in the fully instrumented Test Grid

Both the outdoor chamber testing and field testing will provide participants an opportunity to evaluate their technology in a controlled and threat-representative environment.





TESTING ENVIRONMENT

Granite Mountain
Elevation: 7080 feet

- Environmental permits
- Pristine air quality
- No encroachment (physical or electronic)
- No endangered species
- Low precipitation (<8 inches/year)



Total Area	1,252 miles ²
Mountain Terrain	59,078 acres
Mixed Desert Terrain	279,768 acres
Playa (flats)	462,180 acres

Salt Flats
Elevation: 4230 feet





DUGWAY MULTI-USE TEST RANGE

- Complex of 27 instrumented ranges, grids, test sites & impact areas
- Chemical and Biological, munitions, smoke & obscurants, and illumination testing
- Outfitted with dissemination, referee, meteorological sensors and communication technology
- Environmental permits for outdoor open air testing with all appropriate Chemical and Biological simulants
- Four major impact areas, nine drop zones, 91 artillery firing point





PROJECTED SCHEDULE

- Teleconferences: To be determined (TBD)
- Site Visit: TBD
- Customer Setup: Sunday, 14 August 2016, 0700-1730 hours (hrs), Mountain Daylight Time (MDT)
- Execution Week 1: Monday through Saturday, 15-20 August 2016, 1800-0530 hrs, MDT
- Execution Week 2: Monday through Friday, 22-26 August 2016, 1800-0530 hrs, MDT
- VIP Day: Wednesday, 24 August 2016, time TBD
- Customer Teardown: Friday, 26 August 2016, 0700-1730 hrs, MDT





CALENDAR

August 2016

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	1	2	3	4	5	6
7	8	9	10	11	12	13
	S/K Challenge Site Prep (0700-1730 hrs)					
14	15	16	17	18	19	20
Customer Arrives and Setup (0700-1730 hrs)	S/K Challenge Execution – ASC / JABT (1800-0530 hrs)					
21	22	23	24	25	26	27
Customer Arrives and Setup (0700-1730 hrs)			VIP Day		Customer Teardown & Depart (0700-1730 hrs)	
	S/K Challenge Execution – Target S (1800-0530 hrs)					
28	29	30	31			



DAILY SCHEDULE

TIME	EVENT
1800-1830 hrs	Show up at Range, Sign for Radios, Receive Test Badges
1830-1900 hrs	Safety Brief and Operational Brief
1900-2300 hrs	Daily Setup and Checks
2300-0000 hrs	Final Checks and Corrections
0000-0400 hrs	Test Operations
0400-0500 hrs	Data Collection and Daily Retrograde
0500-0530 hrs	Turn in Radios and Test Badges
0530 hrs	All Personnel Off the Range No Later Than





PLANNED TRIALS WEEK ONE

Outdoor Chamber Releases (JABT & ASC)

- 40ea Chemical Simulant Trials
 - Methyl Salicylate (MeS)
 - Acetic Acid (AA)
 - Triethyl Phosphate (TEP)
 - Sulfur Hexafluoride (SF₆)
 - Other additional simulants possible
- 40ea Biological Simulant Trials
 - Bacillus Subtilis Var Niger (BG)
 - Erwinia Herbicola (EH)
 - Male Specific Coliphage (MS2)
 - Ovalbumin (OV)



NOTE: Weather Dependent





RELEASE TYPES

Outdoor Chamber Releases (JABT & ASC)

- 40ea Chemical Simulant Trials
 - Wet Chemical Simulants
 - Dry Chemical Simulants
 - Vapor Chemical Simulants
- 40ea Biological Simulant Trials
 - Wet Biological Simulants
 - Dry Biological Simulants

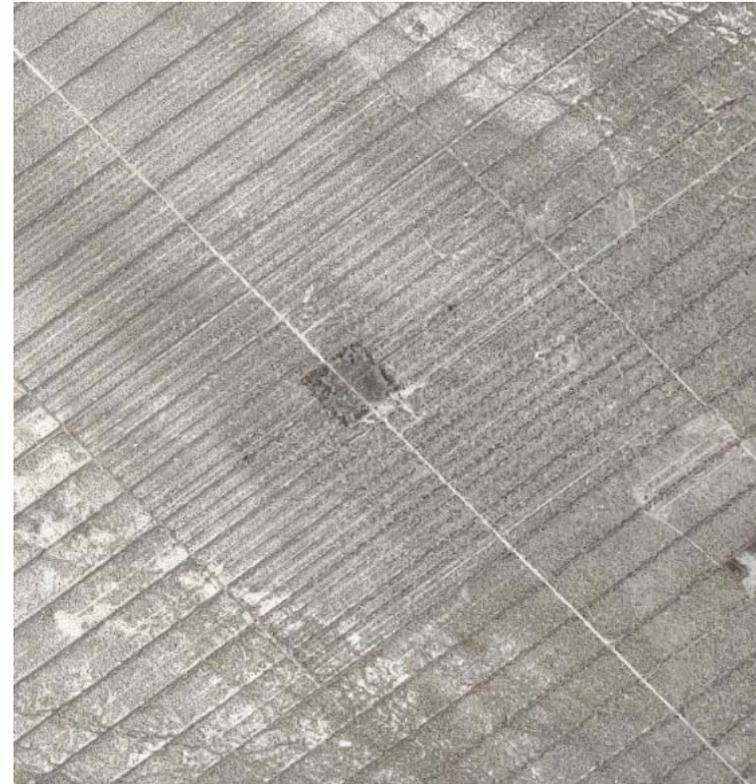




PLANNED TRIALS WEEK TWO

Outdoor Field Releases (Target S)

- 9ea Chemical Simulant Trials
 - Methyl Salicylate (MeS)
 - Acetic Acid (AA)
 - Triethyl Phosphate (TEP)
 - Sulfur Hexafluoride (SF₆)
 - Other additional simulants possible
- 9ea Biological Simulant Trials
 - Bacillus Subtilis Var Niger (BG)
 - Erwinia Herbicola (EH)
 - Male Specific Coliphage (MS2)
 - Ovalbumin (OV)



NOTE: Weather Dependent





RELEASE TYPES

Outdoor Field Releases (Target S)

- 9ea Chemical Simulant Trials
 - Wet Chemical Simulants
 - Dry Chemical Simulants
 - Vapor Chemical Simulants
 - Explosive Chemical Simulants
- 9ea Biological Simulant Trials
 - Wet Biological Simulants
 - Dry Biological Simulants





INSTRUMENTATION

- Aerosol Releases
 - Aerodynamic Particle Sizer (APS)
 - Light Detection and Ranging (LIDAR) System
- Vapor Releases
 - Gasmeter Gas Analyzer System
 - Chemical Cloud Tracking System (CCTS)
- Meteorological
 - Portable Weather Information System (PWIDS)
 - Meteorological Towers
 - Hazard Models





S/K CHALLENGE III PACKAGE

- Participation Includes
 - One system and up to seven personnel for inclusion in test activities. If planning to bring multiple systems and additional personnel, there may be a fee based on the logistic support required
 - Logistical support
 - Chemical & Biological simulant trials
 - VIP Day access
 - Complete data package that will include the DPG referee data
- Observers
 - VIP Day access
 - Ability to observe outdoor chamber and field tests





POINT OF CONTACTS

- To Speak With a Representative
 - Office: 001-435-831-2116
 - Email: usarmy.dpg.atec.mbx.sk-challenge@mail.mil
 - Webpage: www.wdtdc.army.mil





LODGING

- IHG Army Hotels/Desert Lodge
 - Phone: 001-435-831-6500
 - For more information email:
 - amerdugwaydvqreservations@ihg.com
 - <http://www.ihg.com/armyhotels/hotels/us/en/dugway/zydpa/hoteldetail>
- Driving Distance (approximately 1 hour)
 - From Tooele – approximately 45 miles
 - From Salt Lake City Airport – approximately 81 miles





S/K CHALLENGE III

15-26 August 2016

