INNOVATION SYMPOSIUM

2018

July 24-26

Marine Corps University
MCB Quantico, Virginia
<table>
<thead>
<tr>
<th>Section</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overview</td>
<td>Page 2</td>
</tr>
<tr>
<td>Schedule</td>
<td>Page 3</td>
</tr>
<tr>
<td>Illuminate Thinkshop</td>
<td>Page 4</td>
</tr>
<tr>
<td>Presenters</td>
<td>Pages 5-14</td>
</tr>
<tr>
<td>Sponsor</td>
<td>Page 15</td>
</tr>
<tr>
<td>Host Organizations</td>
<td>Page 16</td>
</tr>
<tr>
<td>FAB LAB</td>
<td>Page 17</td>
</tr>
<tr>
<td>Lunch</td>
<td>Page 18</td>
</tr>
<tr>
<td>Maps</td>
<td>Pages 19-20</td>
</tr>
<tr>
<td>Notes</td>
<td>Pages 21-25</td>
</tr>
<tr>
<td>Survey</td>
<td>Pages 26-27</td>
</tr>
</tbody>
</table>
The Deputy Commandant for Combat Development and Integration sponsors the Annual Marine Corps Innovation Symposium to bring together individuals from across the service to address challenges and to inform senior leaders of alternative approaches to enable organizational change.

This year, the 3rd Annual Marine Corps Innovation Symposium will be co-hosted by the Marine Corps Warfighting Laboratory and the Next Generation Logistics (NEXLOG) Innovation Cell. During this year’s innovation symposium, we will explore how to instill innovation as part of our service culture and processes. Participants from across the Marine Corps will come together in Quantico, VA from 24-26 July 2018 to educate the force, promote organizational transformation, and identify actionable recommendations and actions to make innovation part of the Marine Corps culture and processes.
Day 1 (Tuesday, July 24)

0630-0730: Event Check-in & Registration
0730-0845: Plenary Session 1: Welcome & Marine Corps Innovation History
0845-0900: Break
0900-1015: Plenary Session 2: Symposium Overview*
1015-1030: Transition to Working Groups
1030-1215: Working Groups I
1215-1315: Lunch
1315-1515: Working Groups II
1515-1600: Displays
1600-1700: Plenary Session 3: Awards & CMC’s Innovation
1700-1830: No-Host Social

Day 2 (Wednesday, July 25)

0730-0915: Plenary Session 4: Technical Innovation I
0915-0930: Break
0930-1200: Plenary Session 5: Technical Innovation II*
1200-1300: Lunch
1300-1600: Working Groups III
1600-1630: Displays
1630-1730: Plenary Session 6: Fleet Innovation

Day 3 (Thursday, July 26)

0730-0845: Plenary Session 7: Department of Defense Innovation
0845-0915: Transition to Working Groups
0915-1215: Working Groups IV
1215-1315: Lunch / FabLab Robot Wars
1315-1645: Plenary Session 8: Working Group Recommendations / Closing

*Government ONLY during MCIA brief

NOTE: Display presenters will be at their displays during lunches and designated display periods for questions and conversation.
We are the Illuminate Team. We help break through silos of communication and collaboration. Our efforts unleash the tremendous untapped potential of our people to drive ownership, improvement, and problem solving at every level.

Our approach is to set a collaborative environment to encourage fast learning and adaptation of individuals and teams. By leveraging powerful mental tools, we promote empowerment, excitement, and creativity. We have delivered Thinkshops to thousands of people around the world of all ranks, ages, and affiliation.

Our method is unconventional and resonates with all levels of an organization. We are not a mandated program - there is no instruction, no directive, and no order. Rather, it is a grassroots effort - developed and delivered by passionate service members. We help organizations break down institutionalized barriers and leverage the tacit knowledge of their people.

We provide tailored Thinkshops that are adaptable and scalable for any audience and rank, including senior leaders.
Gen Robert B. Neller
37th Commandant
United States Marine Corps
Speaker: “CMC’s Remarks”/ Plenary Session 3

LtGen Michael G. Dana
Director
Marine Corps Staff
Speaker: Co-Presenting: “Innovation In Context: Where the Marine Corps Sits Today”/ Plenary Session 4

LtGen Robert S. Walsh
Deputy Commandant
Combat Development and Integration
Speaker: “Closing Remarks”/ Plenary Session 8

BGen Christian F. Wortman
Commanding General
Marine Corps Warfighting Laboratory
Speaker: “Opening Remarks”/ Plenary Session 1
Dr. Thomas X Hammes  
Distinguished Research Fellow  
*Institute for National Strategic Studies, National Defense University*  
Keynote Speaker

Dr. Niki Glassmire  
Associate Partner  
*IBM Global Business Services*  
Speaker: IBM Panel/ Plenary Session 4

Dr. David McQueeney  
Vice President  
*Corporate Technology, IBM Corporation*  
Speaker: IBM Panel/ Plenary Session 4

Balaji Iyer  
Professional Service Consultant  
*Amazon Web Services*  
Speaker: “Culture of Innovation at Amazon”/ Plenary Session 5

*Full biographies available on the Symposium website (Page 1)*
Joshua Marcuse  
Executive Director  
Defense Innovation Board  

Speaker: “The Forge of Hephaestus: Lethality in the Age of Algorithms” / Plenary Session 7

Morgan C. Plummer  
Managing Director  
MD5 National Security Technology Accelerator  

Speaker: “Innovation as a Strategic Hedge” / Plenary Session 7

Christopher W. Brunett  
Senior Military Advisor  
Defense Innovation Board  

Speaker: “Recommendation Kickoff: Illuminate Approach” / Plenary Session 7

David R. Markov  
Project Leader  
Institute for Defense Analyses  

Speaker: “2018 Consumer Electronics Show Observations” / Plenary Session 5
Andrew C. Roberts
Command Element Developer/ Integrator
*Command and Staff College, Marine Corps Warfighting Laboratory*

Speaker: “Marine Culture”/ Working Group Lead

David W. Pinion
Faculty Advisor
*Command and Staff College, Marine Corps University*

Speaker: “Marine Air Ground Task Force Culture”/ Working Group Lead

Brian Kiviart
Deputy Director
*Expeditionary Energy Office, Capabilities Development Directorate*

Speaker: “Capability Process”/ Working Group Lead

Mark D. McCarroll
Branch Head
*Manpower Management Division, Manpower and Reserve Affairs*

Speaker: “Manpower Process”/ Working Group Lead
Christopher Wood
Innovation Lead
Office of the Director, Marine Corps Staff
Speaker: Co-Presenting: “Innovation in Context: Where the Marine Corps Sits Today” / Plenary Session 4

Conor T. Bender
Innovation Officer
2d Marine Logistics Group
Speaker: “Grassroots Innovation Program” / Plenary Session 6

Christopher A. Mershon
H&S Company Executive Officer
2d Battalion, 1st Marines
Speaker: “Team of Teams” / Plenary Session 6
Display: Signature Management Action Plan

Daniel H. Whitt
Innovation Cell
Marine Corps Logistics Command
Speaker: “Augmented Reality: Optimizing Maintenance Activities” / Plenary Session 6
Display: Optical Character Recognition
Daniel C. Pines
Chief Innovation Officer
NSWC Indian Head EOD Technology Division
Speaker: “Velocity Lab” / Plenary Session 6

Sean C. Flores
Utilities Officer
III Marine Expeditionary Force
Speaker: “Phase Zero” / Plenary Session 6

Steven R. Davic
NCO Fellow
Marine Corps Warfighting Laboratory
Speaker: “NCO Fellowship” / Plenary Session 6
Display: NCO Fellowship

Alexander V. Long
Ammunition Logistics Focus Team Chief
Marine Corps Systems Command
Speaker: “Personal Combat and Reporting Device (PCARD)” / Plenary Session 6
Display: NEXLOG
John W. Hawley  
Innovation Officer  
*US Fleet Forces Command*

Speaker: Co-Presenting: “Illuminate ThinkShop”/  
Plenary Session 2

---

Meghan R. Wilkens  
Innovation Officer  
*US Fleet Forces Command*

Speaker: Co-Presenting: “Illuminate ThinkShop”/  
Plenary Session 2

---

Kenneth A. Tarr  
Company Commander  
*2d Battalion, 25th Marines*

Speaker: “A Legacy of Leadership”/ Plenary Session 2

---

Jared J. Maxwell  
Training Chief  
*3rd Battalion, 23rd Marines*

Display: Urban Warfare Center of Excellence
Jacob A. Rittenhouse
Law Enforcement Integration Officer
2d Marine Air Wing

CMC Innovation Challenge Winner
Display: Total Force Translation (1st Quarter Winner)

“Personal Real-Time Translation” - Introducing an automated capability with wide proliferation could significantly increase the ability of a unit operating in the urban environment to develop interpersonal relationships with the local population, increase cohesion and coordination with local security forces, and give instructions to civilians during kinetic engagements to mitigate collateral damage and civilian casualties.

Walker D. Mills
Weapons Platoon Commander
2d Battalion, 1st Marines

CMC Innovation Challenge Winner
Display: EW Spoofing Pod (2nd Quarter Winner)
Maps on Demand for Small Unit Leaders (3rd Quarter Winner)

“Electronic Warfare Spoofing Pod” - The Marine Corps requires the capability to conduct information operations in support of maneuver forces at the tactical edge. This innovative idea would proliferate this capability for use by all elements of the MAGTF.

“Maps on Demand for Small Unit Leaders” - Access to common maps and mapping capabilities needs to available for tactical units at the company level or below as well as the MAGTF and operational level commands. The creation of a digital map database and on the demand access to this data with limited barrier to entry will enable forces to operate more effectively.
Anthony S. Molnar
Project Officer
*Marine Corps Systems Command*

Display: Reclaimed Polymetric Feedstock for Mobile Manufacturing

Dr. Nicole E. Zander
Research Chemist
*U.S. Army Research Laboratory*

Display: Reclaimed Polymetric Feedstock for Mobile Manufacturing

Nate Hughes
Student
*Georgetown University*

Display: Hacking for Defense

Kinjal Parekh
Student
*Georgetown University*

Display: Hacking for Defense
Masco R. Settles  
Deputy Director  
*Marine Corps Rapid Capabilities Office*

Display: MRCO

Daniel A. Schmitt  
Chief Executive Officer  
*Guard Unit*

Display: Adaptive Threat Force

Milad Afkhami  
Foreign Area Officer  
*Marine Corps Training Mission-United Arab Emirates*

Display: Phase Zero

Walter D. Wright  
User Experience Designer  
*Georgia Technical Research Institute*

Display: Augmented Reality and Virtual Reality
National Security Technology Accelerator

MD5 is accelerating the dissemination of innovation knowledge and methods throughout the DoD workforce. We are building new communities of innovators to create a novel capacity for national security problem solving. We help generate and increase the number and viability of dual-use ventures that serve the needs of our warfighters.
The Marine Corps Warfighting Laboratory/Futures Directorate identifies future challenges and opportunities, develops warfighting concepts, and comprehensively explores options in order to inform the combat development process to meet the challenges of the future operating environment.

NEXLOG is supporting innovation in the fleet by giving Marines access to knowledge and tools that they would rarely get to use otherwise. Empowering Marine innate creativity to see what kinds of solutions they can create for the problems and challenges they work through every day. Continuing education on many fronts is the key to unlocking a whole world of potential in each Marine, and finding the next innovative solution to the problems of the day. The challenges of the 21st century require innovation at all levels, and that requires a force that is ready to innovate.
The Fab Lab, run by Building Momentum, will be hosted on site by NEXLOG for the duration of the symposium. Each day Marines from the local area will participate in a battle bot challenge. They will be taught basic coding and 3D printing applications in order to build and program robots. On the third day of the symposium there will be a bot battle during lunch.
Lunch will be about an hour each day of the symposium. Food will be available at the Marine Corps University Café located in Warner Hall, and a food truck will be located at the Breckinridge Hall parking lot each day. There are establishments in the town of Quantico, however we ask that you are back to the symposium and your working groups by the end of the hour.

Days 1, 2 & 3

Marine Corps University Café
Subs & Sandwiches
Outside Warner Auditorium (0700-1400)

Day 1 (Tuesday, July 24)

Soulific Seafood
Southern Fare
Breckinridge Hall Parking Lot

Day 2 (Wednesday, July 25)

UFO: The Ultimate Food Operation
Sliders & Tacos
Breckinridge Hall Parking Lot

Day 3 (Thursday, July 26)

Balsamo’s Pizza
Pizza & Salad
Breckinridge Hall Parking Lot
1) Please rank your overall satisfaction with the 2018 Innovation Symposium?
   - Highly Satisfied
   - Satisfied
   - Neutral
   - Dissatisfied
   - Very Dissatisfied

2) What part of the 2018 Innovation Symposium had the largest impact?
   - Plenary Sessions
   - Illuminate Thinkshop/Working Groups
   - Displays
   - Networking
   - Please specify:

3) How satisfied were you with the Illuminate Thinkshop/Working Group?
   - Highly Satisfied
   - Satisfied
   - Neutral
   - Dissatisfied
   - Very Dissatisfied

Comments or Suggestions:

4) How satisfied were you with the Symposium Plenary Sessions?
   - Highly Satisfied
   - Satisfied
   - Neutral
   - Dissatisfied
   - Very Dissatisfied

Comments or Suggestions:

5) How likely will you recommend 2018 Innovation Symposium to your colleagues?
   - Very Likely
   - Likely
   - Neutral
   - Unlikely
   - Very Unlikely
6) How likely are you to attend a future Innovation Symposium?
   - Very Likely
   - Likely
   - Neutral
   - Unlikely
   - Very Unlikely

7) Please provide any recommendations for future topics and/or speakers?

8) What was your biggest take away from the 2018 Innovation Symposium?

9) Additional Comments:

Take the survey online: https://goo.gl/fsMV