

8/4/2017

# DOT&E Ground Vehicle Survivability and Force Protection Short Course

22 – 24 August 2017

TARDEC University, Warren, Mi

## Tuesday, 22 Aug 2017

Lectures are at Classified **SECRET, NOFORN Level**

		Instructor	Time
	<b>Course Check-in</b>		0730 – 0830
1	Welcome to the Short Course & Admin / Why	Prof. Christopher Adams (NPS)	0830 – 0845
2	Keynote	Dr. Gorsich (TARDEC Chief Scientist)	0845 – 0930
	<b>Break</b>		0930 – 0945
<b>An Introduction to the Fundamentals of Ground Vehicle Survivability and Force Protection</b>			
3	Preface to Ground Vehicle Survivability	Prof. Christopher Adams	0945 – 1000
4	Introduction to Ground Vehicle Survivability	Prof. Christopher Adams	1000 – 1045
	<b>Break</b>		1045 – 1100
5	Military Ground Vehicles: Their Missions, Capabilities, and Survivability	Prof. Christopher Adams	1100 – 1145
	<b>Lunch, GVS videos</b>		1145 – 1230
6	Live Fire Test and Evaluation/Joint Live Fire for Ground Vehicle Survivability & Occupant Protection	Dr. Sandra Ugrina (Deputy Director for LFT&E)	1230 – 1330
7	History & Evolution of Combat and Tactical Vehicle Survivability	COL (ret) Chris Cardine (SURVICE)	1330 – 1415
	<b>Break</b>		1415 – 1430
8	Threat Weapons & Effects Overview / Threat Demos	Prof. Christopher Adams, Staff	1430 – 1500
9	Damage Mechanisms and Damage Processes	COL (ret) Chris Cardine	1500 – 1530
10	Historical Perspective & Combat Data (OEF/OIF) <b>Lecture is Classified SECRET, NOFORN</b>	Mr. Jeff Morgan (NGIC)	1530 – 1615
11	Problem Session and Q&A	Prof. Christopher Adams	1615 – 1630

## Wednesday, 23 Aug 2017

Lectures are at Classified **SECRET, NOFORN Level**

		Instructor	Time
	<b>Daily Check-in</b>		0730 – 0800
<b>Susceptibility &amp; Vulnerability</b>			
12	Welcome & Day One Review	Prof. Christopher Adams	0800 – 0810
13	Survivability Enhancement and Susceptibility Elements	Prof. Christopher Adams	0810 – 0845
14	Susceptibility Reduction Concepts / Application	Prof. Christopher Adams	0845 – 0930
15	Active Protection Systems & other SR systems	Dr. Doug Templeton (SURVICE) & COL (ret) Chris Cardine	0930 – 1000
	<b>Break</b>		1000 – 1015
16	Vulnerability Reduction Concepts and Applications	Dr. Doug Templeton	1015 – 1045
17	Vulnerability Reduction: Structures, V-Hulls, and Blast	Dr. Will Gardner (IDA)	1045 – 1130

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Design for Survivability, Occupant Protection and Assessment			
	<b>Lunch, GVS videos</b>		1130 – 1215
18	Armor	Dr. Doug Templeton	1215 – 1245
19	Integrated Survivability Assessment, Requirements and KPPs	Dr. Mark Couch (IDA)	1245 – 1330
	<b>Break</b>		1330 – 1345
20	Requirements Development, Technology Maturity, and Risk Management	Dr. Will Gardner (IDA)	1345 – 1430
21	Force Protection and Recoverability	Dr. Mark Couch (IDA)	1430 – 1500
22	Occupant Protection Fundamentals	Mr. Ben Soave (occupant protection team)	1500 – 1545
	<b>Break</b>		1545 – 1600
23	Susceptibility Reduction and Active Protection Panel Discussion Problem Session and Q&A	Prof. Christopher Adams	1600 – 1630

### Thursday, 24 Aug 2017

**Lectures are at Classified SECRET, NOFORN Level**

		Instructor	Time
	<b>Daily Check-in</b>		0730 – 0800
24	Welcome & Day Two Review	Prof. Christopher Adams	0800 – 0805
25	Ground Vehicle Vulnerability Assessment (Part 1)	Dr. Will Gardner (IDA)	0810 – 0900
	<b>Break</b>		0900 – 0910
26	Ground Vehicle Vulnerability Assessment (Parts 2 & 3)	Dr. Will Gardner (IDA)	0910 – 1015
27	Fire Protection	Mr. Josh Fritsch (TARDEC)	1015 – 1045
	<b>Break</b>		1045 – 1100
28	Ground Vehicle Recoverability & Rapid Repair	COL (ret) Chris Cardine (SURVICE)	1100 – 1130
	<b>Lunch, GVS videos</b>		1130 – 1215
29	Abrams Survivability Evolution <b>Lecture is Classified SECRET, NOFORN</b>	Mr. John Rowe (PD MBTS) & COL (ret) Chris Cardine (SURVICE)	1215 – 1300
30	Stryker Survivability	Mr. Tom Howie (Stryker Survivability Lead)	1300 – 1345
	<b>Break</b>		1345 – 1400
31	Armored Multi-Purpose Vehicle (AMPV) Survivability	Ms. Renee Zebron (PM AMPV)	1400 – 1445
32	Designing for Survivability	Dr. Doug Templeton, COL (ret) Chris Cardine	1445 – 1515
	<b>Break</b>		1515 – 1530
33	Ground Vehicle Survivability Design Panel Discussion	Prof. Christopher Adams, COL (ret) Chris Cardine, Dr. Doug Templeton, Dr. Will Gardner	1530 – 1600
34	Course Wrap Up	Prof. Christopher Adams	1600 – 1615