

Aircraft Combat Survivability Short Course

June 11-13, 2024

Institute for Defense Analyses

730 East Glebe Rd, Alexandria, Virginia 22305

Day 1

No.	Lesson	Instructor	Time
	Course Check-In		0715-0800
1	Instructor Welcome and Admin	Dr Rich Huffman and Dr. Mark Couch	0800-0815
2	Keynote Welcome	IDA Leadership	0815-0825
3	Introduction to Aircraft Combat Survivability	Mr. Chris Adams	0825-0930
	Break		0930-0950
4	Kill Chain; 1v1, Mission & Campaign Survivability	Dr. Mark Couch	0950-1040
5	Survivability Enhancements	Mr. Chris Adams	1040-1130
	Lunch		1130-1230
6	Survivability Test & Evaluation	Dr. Greg Ruderman	1230-1320
7	Full Spectrum Survivability Assessment	Dr. Mark Couch	1320-1410
	Break		1410-1430
8	Joint Combat Assessment Team	JCAT/ASDAT	1430-1520
9	Analysis of Aircraft Combat Data	Mr. Jim Rhoads	1520-1610
10	Day 1 Wrap-Up	Mr. Chris Adams and Dr. Mark Couch	1610-1630

Lessons in red contain classified slides that are not in the student notebooks

Day 2

Vol	Lesson	Instructor	Time
	Daily Check-In		0715-0800
11	Review of Day 1	Mr. Chris Adams and Dr. Mark Couch	0800-0820
12	Current Threats	JCAT Intel	0820-0900
13	Threat Operations	Dr. Rich Huffman	0900-0930
	Break		0930-0950
14	Overview of Susceptibility and Aircraft Signatures	Dr. Rich Huffman	0950-1040
15	Radar Fundamentals	Dr. Rich Huffman	1040-1130
	Lunch		1130-1230
16	Electromagnetic Spectrum Operations	Dr. Rich Huffman	1230-1320
17	Infrared Fundamentals (part 1)	Lt Col Dave Liu	1320-1410
	Break		1410-1430
17	Infrared Fundamentals (part 2)	Lt Col Dave Liu	1430-1520
18	IR Camera Demo	Dr. Rich Huffman and Dr. Dave Liu	1520-1540
	Break		1540-1600
19	The Kill Web	Dr. Rich Huffman	1600-1630
20	Day 2 Wrap-Up	Lt Col Dave Lui and Dr. Rich Huffman	1630-1650

Day 3

Vol	Lesson	Instructor	Time
	Daily Check-In		0715-0800
21	Review of Day 2	Lt Col Dave Liu and Dr. Rich Huffman	0800-0820
22	Threat Effects	Lt Col Dave Liu	0820-0910
23	Aircraft Cyber Combat Survivability	Dr. Bill "Data" Bryant	0910-1000
	Break		1000-1020
24	Overview of Vulnerability and Critical Components	Mr. Chris Adams	1020-1100
25	Vulnerability Assessment Methodologies and Vulnerability Modeling	Dr. Mark Couch and Lt Col Dave Liu	1100-1140
	Lunch		1140-1240
26	Vulnerability Reduction Technologies	Dr. Rich Huffman	1240-1330
27	Recoverability and Force Protection	Dr. Mark Couch	1330-1420
	Break		1420-1440
28	Aircraft Design Considerations and Combat Effectiveness	All	1440-1530
29	Course Wrap-Up	All	1530-1600