

**FEMA National US&R Response System / U.S. Army Corps of Engineers**  
**Urban Search & Rescue, Structures Specialist, StS1 Training**

**Oct14**

**TENTATIVE SCHEDULE OF INSTRUCTION – 25-30Oct 2014 (arrive 24Oct by 1630hrs)**

**Course Director & Assist**

Tom Niedernhofer = TRN  
 Dustin Tellinghuisen = DT

**List of Instructors**

David Hammond = DJH  
 Peter Keating = PBK

Jeff Qunell = JQ

Michael Barker = MGB  
 B.K. Cooper = BKC

John O'Connell = JOC  
 Tom Clark = TC

<u>TIME</u>	<u>ACTIVITY</u>	<u>COMMENTS</u>	<u>INSTRUCT</u>
<b>Day 1 – Sat</b> 0715 Breakfast at Site			
0800 0900	Cause of Collapse	SS-1-1 PPT w/Manual	MGB
0910 1010	Materials & Basic Struct Sys + Bldg Characteristics	SS-1-2 PPT w/Manual	PBK
1020 1200	Structural Collapse Patterns	SS-1-3 PPT w/Manual	DJH
1200 1245	Lunch at Site		
1245 1350	Hazard I. D. + intro to Haz Assessment and Mitigation	SS-1-4 PPT & Manual	MGB
1400 1500	Monitoring Tools & Techniques	SS-1-5 PPT & Manual	PBK
1500 1600	Field Sta Misc Monitor Tools 3 –20min stations (3 Teams = 1+, 2+, & 3+)	Sta 1 WBMS Sta 2 Levels & Lasers Sta 3 Building Height Measurements	DJH PBK, JQ, TRN MGB, DT
1600 1650	Basics Tot Sta Use & Settings	SS-1-5 TS2 PPT & Manual	PBK
1700 1750	GPS Basics	SS-1-8 G1 Part 1 PPT & Manual	MGB
1800 1915	Dinner & Case Study 1	Haz Assess & Mitigate at OKC Incident	DJH
<b>Day 2 – Sun</b> 0715 Breakfast at Site Divide Class into A & B Groups			
0800 0850	USNG Basics	SS-1-8 G2 PPT & Manual	PBK
GpA 0900 1200	Tot Station & GPS Field Ex Sta 2 – 90 min stations	Sta 21 – TS Setup & Basic Ops Sta 22 – GPS Field Station –SS-1-8 G3	All Except DJH
GpB 1300 1600	(GPS starts with SS-G1 Part 2 in classroom)		
0900 0950	Group B in AM & Gp A in PM	SS-1-6 PPT, Manual & FOG	DJH, MGB
1300 1350	The Engineers Role		
1000 1100	Group B in AM & Gp A in PM	SS-1-7 PPT – Manual & intro to Forms	DJH
1400 1500	RST, Haz Assesm't & Marking		
1110 1200	Group B in AM & Gp A in PM	SS-2-0 PPT & Manual	DJH, PBK
1510 1600	Intro to Basic Timber Design		
1200 1300	Lunch & Move to Field		
1600 1650	GPS Computer Interface	SS 1-8 G4 PPT & Manual	MGB
1700 1800	Rescue Ops Strategy & Tactics	SS-1-9 PPT + HO	JOC
1800 1900	Dinner at Site		
<b>Day 3 – Mon</b> 0715 Breakfast at Site Divide Class into A & B Groups			
0800 0850	Adv Tot Sta Setup & Notes	SS-1-5 TS3 PPT & Manual	PBK
Gp A 0900 1200	Advanced Tot Sta & GPS Ex (2 - 90 min stations)	Sta 31 –TS Advanced Setup Sta 32 – GPS Routing & Tracking	All Except DJH
Gp B 1300 1600			
0900 1015	Group B in AM & Gp A in PM	SS-2-1 PPT + Manual & FOG	DJH, MGB
1245 1400	Shoring Design & Calcs		
1030 1200	Group B in AM & Gp A in PM	SS-2-2 PPT + Manual & FOG	DJH
1410 1550	FEMA Shoring Sys		
1200 1245	Lunch		
1600 1700	Shoring Construction	SS-2-3 PPT + Manual & FOG	JOC
1700 1800	Examination	Multiple choice exam	All
1800 1950	Dinner & Case Study 2 (option)	Shoring at OKC	JOC

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<b>Day 4 – Tue</b>	Divide Class into A & B Groups		
0715 0800	Breakfast & Safety Message	Safety Officer	
Gp A	Shoring Field Exercise	Sta 41 Interior Shore	TRN, DT
0800 1200	Divide Group in 3 sub-groups	Sta 42 Rakers	JOC
GpB	Start w/ cutting table	Sta 43 Laced Post	PBK, MGB
1330 1730			
1200 1245	Lunch at Site		
1245 1330	Shoring Exam Review – A & B		MGB
0800 0840	Group B in AM & Gp A in PM	SS-3-1 PPT	DJH
1330 1410	Rigging Engineering & HERS		
0850 0950	Group B in AM & Gp A in PM	SS-3-2 PPT	DJH
1420 1520	Mobile Crane Basics & Signals		
1000 1110	Group B in AM & Gp A in PM	SS-3-3 PPT	DJH
1530 1640	Introduction to Crane Charts		
1120 1200	Group B in AM & Gp A in PM	SS-3-6 PPT	DJH,MGB
1650 1730	Concrete Anchors		
1730 1800	T F Search Capabilities A & B	SS-4-0 PPT & video	DJH
1800 1845	Dinner at site		
<b>Day 5 - Wed</b>	0715 Breakfast at site Class stays in Teams 1, 2, & 3		
0745 0900	Learning from Crane Accidents & Out of Chart Operations	SS 3-4 PPT with video	BKC, DJH
0910 1010	Intro to Demolition Contractor's Operations & Helicopter Ops	SS-3-5 PPT	DJH, BKC
1020 1120	Calculating Weight & C.G.	SS-3-7 PPT + problem	MGB
1120 1215	Rigging Exam	Multiple choice exam	All
1215 1300	Lunch		
1300 1730	Rigging Field Exercise 3 x 90 min (3 Teams = 1+, 2+, & 3+)	Safety Officer	
	Station 51 (51a & 51b – 45min ea) (One Crane)	51a - Communicating w/Crane & StS Tools Exercise 51b - Calc weights & C.G.	BKC, MGB DT
	Station 52 (52a & 52b-45min ea)	52a Install Anchors 52b Test Anchors	DJH, JOC Simpson
	Station 53 (4 rigging sub-station) (One forklift)	Lifting Objects: slabs, odd slabs, pipe, groups of pipes & poles	TC, TRN, PBK
1730 1800	Cleanup & Rigging Exam Review		DJH
1800 1845	Dinner at Site		
<b>Day 6 - Thur</b>	0715 Breakfast at site		
0745 0840	US&R Strategy & Size-up	SS-4-1 PPT Lecture	PBK
0850 0930	US&R Case Study-Group A + 880	SS-4-2 1985-89 E.Q. Case Studies	DJH
0930 1020	Class Exercise #1 (231 SAA)	SS-4-3 Tabletop Problem w/model	MGB
1030 1120	Class Exercise #2 (CSN)	SS-4-3 Final Problem and Discussion	PBK
1120 1200	Case Study 3 NIH Parking Struct	Secondary collapse & Micro Cracking	DJH, PBK
1200 1245	Wrap-up followed by Lunch at site		All
1300	Transport to Lodges	Transport to San Jose Airport	