

**CONSTRUCT DEEPWATER TEW BUILDING**  
**CG TRACEN YORKTOWN, VA**  
 BASIC FACILITY REQUIREMENTS CALCULATION

Item No.	Space Name	Personnel/ Equipment			Space Allocations			Notes
		Allot	Qty	CMDT	PH-01	PH-02	PH-03	
<b>1.000</b>	<b>FACULTY/ ADMINISTRATION</b>							
1.100	<b>FIRST PHASE</b>							
1.101	FRC & NSC ADMINISTRATION				1240			
	A. Private Offices	100	2	200				
	B. Faculty Workstations	64	10	640				
	C. Workstation Circulation	0.25	840	210				
	D. Lateral Files/ Bookcases	8	5	40				
	E. Instructor's Counseling Room	150	1	150				
1.102	GENERAL ADMINISTRATION				1205			1
	A. Office Equipment Area	150	1	150				
	B. A/V Materials Development/ Copy RM	250	1	250				
	C. Conference Room	15	20	300				
	D. Conference Room Storage	2	20	40				
	E. Instructor's Lounge	20	20	400				
	F. Administrative Storage	65	1	65				
1.200	<b>FUTURE EXPANSION (Phase 02)</b>							
1.201	OPC & EE/PCS ADMINISTRATION					1,080		2
	A. Private Offices	100	2	200				
	B. Faculty Workstations	64	8	512				
	C. Workstation Circulation	0.25	712	178				
	D. Lateral Files/ Bookcases	8	5	40				
	E. Instructor's Counseling Room	150	1	150				
2.202	VISITING FACULTY					160		2
	A. Faculty Workstations	64	2	128				
	B. Workstation Circulation	0.25	128	32				
					Faculty/ Admin NA	2,445	1,240	0
					N/G	1.25	1.25	1.25
					Faculty/ Admin GA	<b>3,056</b>	<b>1,550</b>	<b>0</b>
<b>2.000</b>	<b>TRAINING and INSTRUCTION</b>							
2.100	<b>FIRST PHASE</b>							
2.101	LABORATORY/ CLASSROOMS				5756			
	A. FRC Lab/Class/Storage	2400	1	2400				
	B. NSC Lab/Class/ Storage	2400	1	2400				
	C. General Purpose Classroom	900	1	900				
	D. General Classroom Stor.	2	28	56				
2.102	APPLIED INSTRUCTION				5200			
	A. FRC Engine Mock-Up	1500	1	1500				
	B. NSC Engine Mock-Up	1500	1	1500				
	C. Control Booths	400	2	800				
	D. Mock-Up Storage	300	2	600				
	E. Engine Battery Area	200	2	400				
	F. Battery Lab	400	1	400				
2.103	TECH. LIBRARY w/ LOG OFFICE MOCK-UP				700			

General Note:

Net Area = Minimum floor area allotment

Gross Area = Includes wall thickness, primary circulation requirements and net area adjustments.

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	<b>TRAINING &amp; INSTRUCT. (cont.)</b>							
2.200	<b>FUTURE EXPANSION (Phase 02)</b>							
2.201	LABORATORY/ CLASSROOMS					3,356		2
	A. OPC Lab/Class/ Storage	2400	1	2400				
	B. General Purpose Classroom	900	1	900				
	C. General Classroom Stor.	2	28	56				
2.202	APPLIED INSTRUCTION					6,000		2
	A. OPC Engine Mock-Up	1500	1	1500				
	B. E/PCS Mock-Up	1500	1	1500				
	C. Control Booths	400	2	800				
	D. Mock-Up Storage	300	2	600				
	E. Engine Battery Area	200	2	400				
	F. Propeller Maint. Mock-Up	1200	1	1200				
2.203	LAND BASED TRAIN'G SYSTEMS					1,672		2
	A. Training Stations	64	16	1024				
	B. Instructor's Station	64	1	64				
	C. Workstation Circulation	0.25	1088	272				
	D. Group Session Space	15	16	240				
	E. Server Cabinet	1	40	40				
	F. Storage	2	16	32				
2.204	3-D CLASSROOM					800		2
	A. Theatre-Style Seating	15	30	450				
	B. Screen Area	250	1	250				
	C. Server Cabinet	1	40	40				
	D. Storage	2	30	60				
2.300	<b>FUTURE EXPANSION (Phase 03)</b>							
2.301	NSC WEAPONS MODULE						4,956	2
	A. 57mm Bofors Gun Pltfrm	2500	1	2500				
	B. Ammo Room/ Mock-Up	1500	1	1500				
	C. Secure Classroom	900	1	900				
	D. Secure Classroom Storage	2	28	56				
2.302	LECTURE HALL	10	300	3000			3,000	
				Training/ Instruction NA	11,656	11,828	7,956	
				N/G	1.37	1.37	1.40	
				Training/ Instruction GA	<b>15,969</b>	<b>16,204</b>	<b>11,138</b>	
<b>3.000</b>	<b>PERSONNEL SUPPORT</b>							
3.001	Building Lobby (PH01)	150	1	150				
3.002	Building Lobby (PH02)	200	1	200		200		2
3.003	Student Lounge/ Break Area	10%	9,112	911				3
3.004	Vending Machines	60	6	360				
				Personnel Support NA	1,471	200	0	
				N/G	1.25	1.25	1.25	
				Personnel Support GA	<b>1,839</b>	<b>250</b>	<b>0</b>	
	<b>PARTIAL NET AREA (PNA) CALCULATION</b>							
1.000	FACULTY/ ADMINISTRATION NA				2,445	1,240	0	
2.000	TRAINING/ INSTRUCTION NA				11,656	11,828	7,956	
3.000	PERSONNEL SUPPORT NA				1,471	200	0	
				User Partial Net Area	15,572	13,268	7,956	
				Consolidated User Partial Net Area		36,796		4

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		Allot	Qty	CMDT	PH-01	PH-02	PH-03	
<b>4.000</b>	<b>FACILITY SUPPORT (OPERATIONS)</b>							
4.001	IT Server Room	300	1	300	300			4
4.002	Telecomms Equipment (PH01)	150	1	150	150			
4.003	Telecomms Equipment (PH02)	150	1	150		150		2
4.004	OM&S Storage (PH01)	100	2	200	200			
4.005	OM&S Storage (PH02)	100	2	200		200		2
4.006	General Building Storage	300	1	300	300			
4.007	General Building Storage	300	1	300		300		2
	Facility Support (Operations) NA				950	650	0	
	N/G				1.25	1.25	1.25	
	Facility Support (Operations) GA				<b>1,188</b>	<b>813</b>	<b>0</b>	
	<b>NET AREA (OPERATIONS) CALCULATION</b>							
	Partial Net Area				15,572	13,268	7,956	
	Facility Support (Operations) Net Area				950	650	0	
	<b>NET AREA (Operations)</b>				<b>16,522</b>	<b>13,918</b>	<b>7,956</b>	
	<b>GROSS AREA (OPERATIONS) CALCULATION</b>							
1.000	FACULTY/ ADMINISTRATION GA				3,056	1,550	0	
2.000	TRAINING/ INSTRUCTION GA				15,969	16,204	11,138	
3.000	PERSONNEL SUPPORT GA				1,839	250	0	
4.000	FACILITY SUPPORT GA				1,188	813	0	
	<b>GROSS AREA (Operations)</b>				<b>22,051</b>	<b>18,817</b>	<b>11,138</b>	
	<b>SAY</b>				<b>22,000</b>	<b>29,955</b>		
	FUTURE EXPANSION					<b>30,000</b>		2
	ULTIMATE BUILDING CONFIGURATION					<b>52,000</b>		2
	<b>THE GROSS AREA OF THE BUILDING WILL INCLUDE OPERATIONS PLUS THE FOLLOWING SPACES, WHICH ARE TO BE DETERMINED ACCORDING TO DEFINED SPACE CRITERIA, DESIGN CALCULATIONS, STANDARD CONSTRUCTION PRACTICES AND BUILDING CODE</b>							
	<b>BUILDING PERSONNEL SUPPORT</b>							
	Building Lobby							
	Elevator Lobbies							4
	Public/ Student Toilets (300 ppl)							4
	Public/ Staff Toilets w/shwrs (30 ppl)							4
	<b>BUILDING FACILITY SUPPORT</b>							
	Engine Lab Ventilation & Power							
	Mechanical Equipment (HVAC)							4
	Electrical Equipment							4
	Fire Suppression Equipment							4
	Telephone Equipment							4
	Building Maintenance							
	<b>BUILDING ADJUSTMENT FACTORS</b>							
	Vertical Circulation							
	Interior Masonry Partitions							
	Exterior Masonry Walls & Veneer							

- Notes:
- 1 The General Administration spaces are sized to accommodate the final faculty size.
  - 2 Shaded spaces denote future building expansion.
  - 3 Student Lounge/ Break Area is 10 sf for every 100 sf of the Laboratory/ Classroom floor area.
  - 4 This space is allocated in the first phase of construction but sized to accommodate the consolidated building population and configuration.