

AIDS TO NAVIGATION STRUCTURE CLIMBER PERSONNEL QUALIFICATION STANDARDS (PQS) MANUAL

COMDTINST M16500.14A

DEC 2019



Commandant United States Coast Guard US Coast Guard Stop 7418 2703 Martin Luther King Jr Ave SE Washington, DC 20593-7418 Staff Symbol: CG-NAV Phone: (202) 372-1548 Fax: (202) 372-1992

COMDTINST M16500.14A 03 DEC 2019

COMMANDANT INSTRUCTION M16500.14A

AIDS TO NAVIGATION STRUCTURE CLIMBER PERSONNEL QUALIFICATION Subj: STANDARDS (PQS) MANUAL

Ref: (a) Aids to Navigation Manual - Structures, COMDTINST M16500.25 (series)

- (b) American National Standards Institute (ANSI) Z359 Fall Protection Code
- (c) Occupation Safety and Health (OSHA) 29 CFR 1926.5 subpart "M"
- (d) U.S. Coast Guard Boat Operations and Training (BOAT) Manual, Volume I, COMDTINST M16114.32 (series)
- (e) U.S. Coast Guard Boat Operations and Training (BOAT) Manual, Volume II, COMDTINST M16114.33 (series)
- (f) Fall Protection Program Tactics, Techniques, and Procedures, CGTTP 4-11-15
- (g) Safety and Environmental Health Manual, COMDTINST M5100.47 (series)
- 1. PURPOSE. This Manual establishes policies, procedures and criteria and provides standard performance objectives and guidance for training and certifying personnel as Aids to Navigation (ATON) Structure Climbers to the level of training required by References (a), (b), (c), (f) and (g).
- 2. ACTION. All Coast Guard unit Commanders, Commanding Officers, Officers-in-Charge, Deputy/Assistant Commandants, and Chiefs of Headquarters staff elements must comply with the provisions of this Manual. Internet release is authorized.
- 3. <u>DIRECTIVES AFFECTED</u>. Aids to Navigation Structure Climber Personnel Qualification Standards, COMDTINST M16500.14 is cancelled.
- 4. DISCLAIMER. This guidance is not a substitute for applicable legal requirements, nor is it itself a rule. It is intended to provide operational guidance for Coast Guard personnel and is not intended to nor does it impose legally-binding requirements on any party outside the Coast Guard.

	D	ISTR	RIBUT	ION	- SE	DL No	. 170)																		
	а	b	С	d	е	f	g	h	i	j	k	- 1	m	n	0	р	q	r	s	t	u	٧	w	Х	у	Z
Α												X	X	X	X	X	X		X							
В	X	X	X											X												
С				X			X		X														X		X	
D																										
Е				X														X								
F																										
G																										
Н				X																						

NON-STANDARD DISTRIBUTION:

- 5. MAJOR CHANGES. Created new Advanced Safety Observer competency, established requirement that current CEU qualified climbers must requalify using this PQS, specified that members attending NATON Structure Climber course (ANC-ASC 501850) must at a minimum be Basic level climber qualified, added requirement that members that climb trees as part of their ATON duties must be qualified as Basic or Advanced level climbers and complete a unit Job Qualification Standard (JQS), provided a list of specific Competent Person duties, clarified recertification requirements, removed commercial climbing courses as an alternative to NATON Structure Climber course (ANC-ASC 501850), added first aid qualification and currency maintenance for Advanced and Rescue level climbers, required all climbing equipment to be ANSI, ASME, EN, or NFPA certified, and specified topics to be considered during risk assessment process.
- 6. <u>IMPACT ASSESSMENT</u>. A resource impact assessment has been conducted. See Appendix A.

7. ENVIRONMENTAL ASPECT AND IMPACT CONSIDERATIONS.

- a. The development of Manual and the general policies contained within it have been thoroughly reviewed by the originating office in conjunction with the Office of Environmental Management, Commandant (CG-47). This Manual is categorically excluded under current Department of Homeland Security (DHS) categorical exclusion DHS (CATEX) A3 from further environmental analysis in accordance with the U.S. Coast Guard Environmental Planning Policy, COMDTINST 5090.1 and the Environmental Planning (EP) Implementing Procedures (IP).
- b. This Manual will not have any of the following: significant cumulative impacts on the human environment; substantial controversy or substantial change to existing environmental conditions; or inconsistencies with any Federal, State, or local laws or administrative determinations relating to the environment. All future specific actions resulting from the general policy in this Manual must be individually evaluated for compliance with the National Environmental Policy Act (NEPA) and Environmental Effects Abroad of Major Federal Actions, Executive Order 12114, Department of Homeland Security (DHS) NEPA policy, Coast Guard Environmental Planning policy, and compliance with all other applicable environmental mandates.
- 8. <u>DISTRIBUTION</u>. No paper distribution will be made of this Manual. An electronic version will be located on the following Commandant (CG-612) web sites. Internet: http://www.dcms.uscg.mil/directives/, and CGPortal: https://cg.portal.uscg.mil/library/directives/SitePages/Home.aspx.
- 9. <u>RECORDS MANAGEMENT CONSIDERATIONS</u>. This Manual has been thoroughly reviewed during the Directives clearance process. There are no further records scheduling requirements in accordance with the Federal Records Act, 44 U.S.C. 3101 et seq., NARA requirements, and Information and Life Cycle Management Manual, COMDTINST M5212.12 (series). This policy does not create significant or substantial change to existing records management requirements.
- 10. <u>FORMS/ REPORTS</u>. The forms Referenced in the Manual area are available in USCG Electronic Forms on the Standard Workstation or on the Internet:

 https://dcms.uscg.afpims.mil/Our-Organization/Assistant-Commandant-for-C4IT-CG-6/The-Office-of-Information-Management-CG-61/Forms-Management/CG-Forms/

11. <u>REQUEST FOR CHANGES</u>. Complete the enclosed Change Request Form mail to:

Commandant (CG-NAV-1)
United States Coast Guard Stop 7418
2703 Martin Luther King Jr Ave SE
Washington, DC 20593-7418

M.D. EMERSON /s/ Director, Marine Transportation Systems U.S. Coast Guard

	RECORD O	F CHANGES			
Change Number	Date of Change	Date Change Entered	Individual Entering Change		

CHANGE RECOMMENDATION					
PUBLICATION:		DATE:			
TYPE OF CHANGE:	ADD:	DELETE:	MODIFY:		
EXACT CHANGES RECOMM	ENDED:				
RATIONALE:					
SUBMITTED BY:(ORIGI					
(ORIGI	NATING COMMAND)				
POINT OF CONTACT:		PHONE NUMBER:			
HQ ACTION:	ACCEPTED:	MODIFIED:	REJECTED:		
(HQ DIV)					
REMARKS:					

TABLE OF CONTENTS

	Page
CHAPTER 1. INTRODUCTION	1-1
Basic Climber	
Advanced Climber	
Advanced Climber Safety Observer	
Rescue Climber/Competent Person	
Determining Structure Height	
Designating ATON Structures.	
Required number of Climbers by Structure Designation	
Section A. Qualification Requirements to Climb ATON Structures	
A.1. Qualification Requirements	
A.2. Initial Qualification ATON Structure Climber – Rescue	
A.3. Certification	
A.4. CEU Qualified Climbers.	
A.5. Tree Climbing Requirements	
A.6 First Aid Requirements	
Section B. Unit Climber Requirements	
B.1. Rescue Climber Duties	
B.2. Required Number of Climbers	
B.3. Insufficient Number of Certified Climbers	
Section C. Currency Maintenance Requirements	
C.1. Currency Requirements	
C.2. Command Designated Requirements	
C.3. Currency Periods and Tasks	
Section D. Recertification	
D.1. Recertification Requirements	
D.2. ATON Unit to Unit PCS Transfer	
D.3. Rescue Climber: ATON unit to ATON unit PCS Transfer	
D.4 Basic, Advanced, or Advanced Safety Observer with break in ATON service	
D.5. Rescue Climber with break in ATON service	1-9
D.6. Tracking in TMT	
Section E. Trainer Guidance	
E.1. Introduction.	
E.2. Provide the PQS to the Trainee	
E.3. Assign the Task	
E.4. Confirm comprehension of information	
E.5. Demonstrate the task	
E.6. Walk the Trainee through the task	
E.7. Monitor the Trainee's performance	1-11
E.8. Verify the Trainee's performance	
E.9. Sign Off the Task	
E.10. Maintain Record of Training	1-12
E.11. Schedule Trainee for Qualification Board	1-12
E.12. Recommend Certification	1-12
E.13. Trainer Requirements	1-12
Section F. Trainee Guidance	1-13
F.1. Introduction	1-13
F.2. Use references and ask questions	1-13
F.3. Pay attention during demonstrations	
F.4. Complete walk-through with instructor	
F.5. Practice the skill	
F.6. Certification process	1-13

COMDTINST M16500.14A

Section G. Certification Guidance	
G.1. Introduction	1-14
G.2. Certification Process	1-14
CHAPTER 2. ATON STRUCTURE CLIMBER - BASIC	2-1
Section A. Task Accomplishment Record for ATON Structure Climber - Basic	2-2
Section B. Qualification Tasks – ATON Structure Climber - Basic	
B.1. Introduction	2-4
B.2. Requirements	2-4
B.3. NATON Training Prerequisite	2-4
B.4. Required Training Climbs	2-4
B.5. Objectives	
B.6. Tasks	2-5
BC-01 First Aid and CPR Responsibility	2-6
BC-02 Fall Protection Regulations and Standards	
BC-03 Fall Protection/Fall Arrest Terminology	
BC-04 Fall Protection/Fall Arrest Equipment Use and Inspection	
BC-05 Calculate Fall Clearances	
BC-06 Don Climber Safety Ensemble	
BC-07 Rescue Planning and Terminology	
BC-08 Scope Work	
BC-09 Inspect ATON Structures	
BC-10 Perform Pre-Climb Checks	
BC-11 Climb ATON Structures	
BC-12 Hoist and Lower ATON Gear	
Section A. Task Accomplishment Record for ATON Structure Climber - Advanced Section B. Task Accomplishment Record for ATON Structure Climber - Advanced -	
Safety Observer	3-4
Section C. Qualification Tasks – ATON Structure Climber – Advanced and ATON	
Structure Climber Advanced – Safety Observer	
C.1. Introduction.	
C.2. Requirements	
C.3. Authorized Training Sources	
C.4. Required Training Climbs	
C.5. Advanced Level Climber Objectives	3-6
C.6. Advanced Level Climber Safety Observer Objectives	
C.7. Advanced Climber Tasks	
C.8. Advanced Climber Safety Observer Tasks	
AC-01 Fall Protection/Fall Arrest Terminology, Equipment and Inspection	
AC-02 Climbing/Rescue Ropes and Knots	
AC-03 Climb an ATON Structure Equipped with an Installed Ladder Safety Syste	
AC-04 Rig a Vertical Lifeline as a Ladder Safety System/Fall Arrest System	
AC-05 Rig a Descent Rope for Rope Access on an ATON Structure	
AC-06 Rescue Planning and Execution of Self-Rescue from a Suspended Position	3-13
CHAPTER 4. ATON STRUCTURE CLIMBER - RESCUE	4-1
Section A. Task Accomplishment Record for ATON Structure Climber - Rescue	
Section B. Recertification Tasks – ATON Structure Climber - Rescue	
	4-3
B.1. Introduction	4-3 4-3

COMDTINST M16500.14A

B.3. Authorized Training Sources	.4-3
B.4. Required Training Rescues	
B.5. Objectives	4-4
B.6. Tasks	
RC-01 Competent Person	4-5
RC-02 Safety Observer	4-6
RC-03 Rescue Equipment and Terminology	.4-7
RC-04 Rescue Planning and Execution Assisted Rescue (conscious or unconscious)	4-8
RC-05 Rescue Planning and Execution Suspended Rescue (conscious or unconscious)	4-9
APPENDIX A. IMPACT ASSESSMENT	A-1

Chapter 1 – INTRODUCTION

Introduction

ATON structure climbers require thorough training to function as a safe and effective team. To ensure ATON structure climbers develop and maintain a high standard of proficiency, the Commanding Officer/Officer in Charge (CO/OIC) will ensure completion of PQS training as described in this Manual. The tasks in this tiered qualification program only represent the minimum elements of skill and knowledge necessary to safely climb aids to navigation structures. The CO/OIC may require additional training beyond the minimum training specified herein as necessary to qualify and maintain proficiency.

Basic Climber

ATON Structure Climber – Basic PQS tasks must be completed by personnel who anticipate climbing ATON structures with a height of less than 20 feet.

Advanced Climber

ATON Structure Climber – Advanced PQS tasks will be completed by personnel who anticipate climbing ATON structures with a height of 20 feet or greater or any structure specifically designated by the command. Personnel must complete ATON Structure Climber – Basic PQS before starting the ATON Structure Climber – Advanced PQS.

Advanced Climber -Safety Observer

ATON Structure Climber - Advanced Safety Observer must be a certified Advanced level climber, have completed task RC-02, and be certified by the CO/OIC as a Safety Observer. These personnel are only authorized to serve as a safety observer for structures less than 20 feet and designated by the CO/OIC in USAIMS as a Basic level structure.

Rescue Climber/ Competent Person

ATON Structure Climber – Rescue PQS, Competent Person Rescue climber must meet the requirements of Chapter 1, Section A. of this PQS. Competent Person - The term competent person in Reference (f) is synonymous with the Fall Protection Program Manager (FPPM). In accordance with Reference (f), the unit must train and designate a competent person to manage the unit Fall Protection Program (FPP). This competent person must have the knowledge and understanding needed to identify all fall hazards and must have thorough understanding of all fall protection systems.

- 1. Initial qualification can only be obtained by completing NATON's ATON Structure Climber Course (ANC-ASC, 501850) and being certified by the unit CO/OIC.
- 2. Unit Competent Person must be designated in writing by the unit CO/OIC per Reference (g) and must follow the guidelines in Reference (f) when establishing unit programs and plans.

Determining Structure Height

The height of a structure is determined by measuring the vertical distance from the highest point on the structure that personnel would stand to service the ATON signal to the point that a person would land should they fall from the structure without fall protection.

Designating ATON Structures

Units will designate in USAIMS/IATONIS the minimum level of climber certification (Basic or Advanced) required for each ATON structure that they are responsible for maintaining. The CO/OIC will consider in addition to the structure height:

- 1. The complexity of the structure.
- 2. Its location.
- 3. The proximity to cliffs or steep terrain.
- 4. Any special conditions that could affect the safety of personnel climbing the structure when determining the climber certification level for an ATON structure.

Required Number of Climbers by Structure Designation

Type of ATON Structure	Minimum number of ATON Climbers required
Less than 20 feet and designated Basic level structure by CO/OIC	One certified Basic or Advanced climber and one certified Advanced – Safety Observer or certified Rescue climber. The Advanced Safety Observer or Rescue climber will not be the primary climber but will instead serve as the dedicated on-the-ground safety observer.
20 feet or greater and designated Advanced level structure by CO/OIC	One certified Advanced climber and one certified Rescue climber. The Rescue climber will not be the primary climber but will instead serve as the dedicated ground safety observer. Structures greater than 150 feet require an additional Rescue Climber stationed on the tower.

Section A. Qualification Requirements to Climb ATON Structures

A.1 Qualification Requirements

The member must be a responsible volunteer and physically capable of climbing. Personnel may qualify as Basic and Advanced ATON structure climbers upon the completion of the appropriate PQS or formal training, and approval of the CO/OIC.

A.2. Initial Qualification ATON Structure Climber Rescue

Initial Qualification for ATON Structure Climber – Rescue, requires a signed certificate of completion of the ATON Structure Climber Course (ANS-ASC, 501850) from the National Aids to Navigation (NATON) School Chief before the CO/OIC is authorized to certify their NATON graduate as a Rescue Climber. CO/OIC may require additional training or evaluation before this certification. A copy of this certificate must be kept in the members training record. Recommend members verify that Direct Access reflects course completion and that the member make an electronic copy of this certificate for safe keeping

A.3. Certification

Final approval in TMT from the CO/OIC is required for all climber designations. Final certification is the official statement of the CO/OIC that the member has demonstrated:

- 1. The minimum required knowledge and skill for the position designation as evidenced by:
 - a. A completed PQS or formal training
 - b. Practical evaluation
 - c. The recommendation of the qualification examining board.
- 2. The judgment and maturity required to:
 - a. Act responsibly.
 - b. Perform assigned duties in the manner prescribed by Coast Guard Directives and regulations.
 - c. Function as a team member.

A.4. CEU Qualified Climbers

Climbers qualified through the old CEU structure climber training program must requalify as Basic or Advanced level climbers in accordance with the requirements of this PQS. Former CEU trained Rescue or Train the Trainer qualified climbers must attend the ATON Structure Climber Course (ANC ASC, 501850) to regualify as a Rescue level climber.

A.5. Tree Climbing Requirements

Units with a requirement to climb trees to attach dayboards must certify their members at a minimum of Basic level climber for trees less than 20 feet or Advanced level climber if the heights climbed are greater than 20 feet, develop

specific unit tree climbing Job Qualification Standards (JQS), and qualify their members to climb trees using the same. Specialized tree climbing equipment must meet ANSI, ASME, EN or NFPA certification standards. Units must assign a designated Competent Person in writing as per Reference (g). Member must attend the ATON Structure Course (ANC-ASC, 501850) to obtain qualification.

A.5. First Aid Requirements

Initial Certification: First aid requirements for all climbers must match the requirements found in Reference (d). Completion of initial certification for boat crew positions concurrently meets the initial certification requirement for ATON structure climbers.

Currency Maintenance: The annual first aid currency maintenance requirement is required for all levels of ATON structure climber. First aid currency requirements must match those found in Reference (c). Completion of this annual currency maintenance for boat crew positions concurrently meets the currency maintenance requirements for all levels of ATON structure climber.

Section B. Unit Climber Requirements

B.1. Rescue Climber Duties

ATON units engaged in ATON structure climbing must maintain a minimum of one (1) certified ATON Structure Climber – Rescue who will be designated in writing by the CO/OIC to:

- 1. Develop the unit's climber training program.
- 2. Assist command with the unit's Working at Heights program.
- 3. Serve as the unit's Competent Person in accordance with References (f) and (g). Duties must include: Supervise, implement, and monitor the FPP.
 - a. Identify hazardous and dangerous conditions in the workplace and take prompt corrective measures as needed.
 - b. Inspect and use approved fall protection systems.
 - c. Implement and ensure compliance with the FPP.
 - d. Ensure authorized persons using fall protection equipment are appropriately trained.
 - e. Understand fall protection systems and equipment.
 - f. Understand fall protection regulations and standards.
 - g. Supervise the authorized person in the performance of work in areas where fall protection is used.
 - h. Conduct hazard assessments, inspections, and accident investigations.
 - i. Ensure inspection, maintenance, storage, and care of equipment is per manufacturer's instructions.
 - j. Inspect fall protection and fall rescue equipment on a regular basis (not to exceed one year). Inspections can be made more frequently if it is required by the manufacturer's instructions. Inspections are conducted by the Competent Person and or Certified Rescue Climber, as appropriate, to verify that the equipment is safe for use. Document all inspections.
 - k. Ensure manufacturer's instructions and recommendations on the use, inspection, maintenance, storage, and care of equipment is accessible for review. Authorized members who use, inspect, maintain, or store the equipment access to these instructions as needed.
 - 1. Keep written or electronic records of inspections on file for the service life of the equipment.
 - m. Document all inspections conducted by the Competent Person and/or certified Rescue climber, as appropriate, to verify equipment is safe to use.
- 4. Climb ATON structures of any height.
- 5. Train and sign off on Basic, Advanced, and Advanced Safety Observer PQS tasks for members assigned to their unit.
- 6. Manage recertification of climbers per part D of this chapter.
- 7. Assist unit training officer with the unit's structure climber currency maintenance program.

- 8. Evaluate Basic, Advanced, and Advanced Safety Observer candidates and provide feedback and recommendations to the CO/OIC.
- 9. Develop unit rescue plans. Provide unit training on implementing the unit's ATON rescue plans. Include the role of on scene personnel not certified as climbers.
- 10. Coordinate and perform ATON structure climber rescues.
- 11. Serve as the safety observer for unit climbing evolutions including all training climbs. Advanced level climbers having completed task RC-02 and certified as a safety observer by the CO/OIC may serve as safety observer in place of a Rescue climber for structures under 20 feet and designated by the command as Basic level structures. Rescue climbers must serve as the safety observer for all structures greater than 20 feet or designated by the command as Advanced level structures.

B.2. Required Number of Climbers

CO/OICs will encourage and facilitate the training, qualification, and certification of as many ATON structure climbers (Basic, Advanced, Advanced Safety Observer, and Rescue) as required to maximize unit efficiency. Units must maintain a minimum of one (1) certified ATON Structure Climber Rescue/Competent Person (FPPM) designated in writing by the unit CO/OIC.

B.3. Insufficient Number of Certified Climbers

ATON units, who, due to uncontrollable circumstances, find themselves with an insufficient number of certified climbers, must seek assistance from other units with certified ATON structure climbers. This may include the dpw ATON Training Team. This assistance can include scheduled ATON servicing, discrepancy correction, and with the approval and designation of the CO/OIC, unit training. Under no circumstance will the CO/OIC waive these requirements and allow unqualified or uncertified climbers to climb ATON structures, unless in a designated training environment.

Section C. Currency Maintenance Requirements

C.1. Currency Requirements

In order to maintain certification as a Basic, Advanced, Advanced Safety Observer, or Rescue climber, personnel must continue to demonstrate proficiency at the level to which they are certified. Should an ATON structure climber fail to meet these currency maintenance requirements, their certification will lapse and they will be required to recertify by completing the appropriate level of this PQS. Units are reminded that Basic, Advanced, Advanced Safety Observer, and Rescue currency climbs can be completed in the course of normal operational climbs and will not require the dedicated training days required for initial ATON Structure Climber qualification. Rescue climber currency rescues must be completed in a training environment.

C.2. Command Designated Requirements

The requirements presented in this section represent the minimum semiannual and annual currency maintenance for all certified ATON Structure Climbers. Due to unique mission needs, the unit CO/OIC may impose additional task completion requirements.

C.3. Currency Periods and Tasks

Each crewmember's currency period normally commences upon the effective date of certification or recertification. However, due to the complexity of managing individual currency maintenance cycles, currency will be tracked through the periods 01 January to 30 June and 01 July through 31 December.

Personnel need only maintain currency in the most senior climber position held.

Qualification Level	Currency Maintenance Task	Time Period
ALL	First Aid/CPR	Annual
Basic	Safely climb 5 structures	Semi-Annual
Advanced	Safely climb 5 structures	Semi-Annual
Advanced Safety Observer	Serve as Safety Observer for 5 climbs	Semi-Annual
Rescue	Safely climb 3 structures Conduct two (2) training rescues	Semi-Annual

NOTE

Rescue Climber currency requirements for two (2) rescues SHALL be conducted in a training environment.

Section D. Recertification

D.1.Recertification Requirements

ATON Structure Climber recertification is required when:

A currently certified Basic, Advanced, Advanced Safety Observer, or Rescue climber fails to meet currency requirements. Recertification will at a minimum require completion of the currency maintenance tasks for the qualification held. The CO/OIC may add additional requirements.

D.2. ATON unit to ATON unit PCS transfer

A previously certified Basic, Advanced, or Advance Safety Observer climber transfers directly to another ATON unit. Recertification will at a minimum require completion of the currency maintenance tasks for the qualification held. The CO/OIC may add additional requirements.

D.3. Rescue Climber: ATON unit to ATON unit PCS Transfer

A previously certified Rescue climber transfers directly from an ATON unit to another ATON unit. Recertification as a Rescue climber at the new unit will require completion of the currency maintenance tasks and Rescue PQS in chapter 4. If member is required to assume the duties of the new unit's competent person, the unit commander must designate the member in writing.

D.4. Basic, Advanced, or Advanced Safety Observer with break in ATON service

A previously certified Basic, Advanced, or Advanced Safety Observer climber who has had a break in serving at an ATON unit returns back to the ATON community (e.g. left an ATON unit for a non-ATON unit and returns to an ATON unit). Recertification will at a minimum require completion of the qualification tasks for the applicable level of recertification.

D.5. Rescue Climber with break in ATON service

A previously certified Rescue climber who has had a break in serving at an ATON unit returns back to the ATON community (e.g. left an ATON unit for a non-ATON unit and returns to an ATON unit) and is required to recertify as Rescue must re-attend the NATON School ATON Structure Climber course (ANC-ASC 501850).

A previously certified Rescue climber may be recertified to the Basic or Advanced level by the unit Rescue climber. Recertification will at a minimum require completion of the qualification tasks for the applicable level of recertification.

D.6. Tracking in TMT

ATON structure climber training, currency, and recertification will be documented and tracked in the Training Management Tool (TMT), mapped to Direct Access, and tracked in CGBI.

Section E. Trainer Guidance

E.1. Introduction

Tasks are meant to be learned through constant practice under the trainer's guidance. This is accomplished by following the procedural steps listed below. NATON designated references and ANSI Standards can be obtained at the NATON Portal site under Resources.

E.2. Provide the PQS to the Trainee

Ensure the trainee has access to the listed references and understands the need to review all tasks in order to gain a full understanding of the material covered.

E.3. Assign the task

Tasks should normally be accomplished in consecutive order.

E.4. Confirm comprehension of information

Clarify any misunderstandings the trainee might have about the material.

E.5. Demonstrate the task

Demonstrate the steps required to complete the task. During the demonstration, the trainer should narrate the procedures. If the task is one of the few that does not require demonstration, proceed to the next step.

E.6. Walk the Trainee through the task

In order to ensure that the trainee understands the task, the trainer should walk the trainee through the steps more than once. There is no limit to the number of times the trainer can perform the walk-through; however, the trainee's understanding must be ensured before continuing to the next task.

E.7. Monitor the Trainee's performance

Trainee performance should be monitored during both training and operations. Qualification does not end with the first successful completion of the task. It is an ongoing process that ends only when successful task completion can be met consistently.

E.8. Verify the Trainee's performance

Verify that the trainee's performance meets the standard. This includes two parts:

- 1. The trainee must be able to perform the task subject to established conditions and standards delineated for the task.
- 2. The trainee must be able to perform the task with no assistance.

The trainee is expected to perform each task on a consistent basis in accordance with the established standards and conditions.

E.9. Sign Off the task

The trainer signs the task at the bottom of the page when he/she is confident that the trainee can perform the task consistently, while unsupervised.

E.10. Maintain Record of Training

A record of the training accomplished will be kept using the Task Accomplishment Record provided in each chapter of this Manual. The trainer is responsible for keeping the trainee's Task Accomplishment Record and the qualification tasks correct and current at all times.

E.11. Schedule Trainee for Qualification Board

Inform the unit CO/OIC when all tasks in this Manual are completed. When the trainee has completed all of the required tasks for the position, the qualification process is complete. The trainer should inform the Qualification Examining Board and schedule the trainee for an oral board and certification climb.

E.12. Recommend Certification

When the Qualification Examining Board is satisfied with the trainee's performance and abilities, they may recommend to the unit CO/OIC that the trainee be certified.

E.13. Trainer Requirements

The minimum requirement to be a climber trainer is a rescue climber certification. The rescue climbers must have obtained their qualifications from the NATON Structure Climber course (ANC-ASC 501850). Certifications as Rescue Climber DOES NOT in itself designate that person as an ATON Structure Climber trainer or unit competent person. Unit commands must designate, in writing, those rescue climbers who possess the competence, judgment, and skills necessary to safely conduct ATON Structure Climber training and recommend personnel for the ATON Structure Climber.

Section F. Trainee Guidance

F.1. Introduction

It is the trainee's responsibility to proficiently perform the tasks in accordance with the established standards. There are four parts to this learning process:

- 1. Read the references and ask questions.
- 2. Pay attention during demonstrations.
- 3. Complete required walk-throughs with the trainer.
- 4. Practice the skill.

F.2. Use references and ask questions

The trainee must become familiar with each task. All references must be read carefully. The trainee should seek guidance from the trainer to clear up any uncertainties.

F.3. Pay attention during demonstrations

While the task is being demonstrated by the trainer, the trainee must pay close attention.

F.4. Complete walk-through with instructor

The trainee will complete the task the first time with the trainer walking the trainee through the steps.

F.5. Practice the skill

The trainee must practice the skill for consistent success at the task. The trainer will not sign off any task as complete until the trainee can consistently and correctly complete the task unsupervised.

F.6 Certification process

Once all required qualifications are completed, the certification process can begin.

Section G. Certification Guidance

G.1. Introduction

The CO/OIC will ensure qualification requirements are completed in a timely manner. Personnel will not be allowed to remain in the qualification program without satisfactory progress for extended periods as determined by the CO/OIC.

G.2. Certification Process

The certification process will be as follows:

- 1. Qualification Examining Board to review completed PQS.
- 2. Trainee to conduct certification climb.
- 3. Qualification Examining Board to conduct oral board.
- 4. Qualification Examining Board to make recommendations for approval in TMT for the qualification/certification of the trainee to the CO/OIC.
- 5. Upon successful completion of the certification climb, and oral board, and recommendation from the Qualification Examining Board, the CO/OIC will approve the trainee in TMT.

Chapter 2 - ATON STRUCTURE CLIMBER - BASIC

Introduction

This Chapter contains a collection of tasks which must be learned, practiced, and performed by the trainee. These tasks represent the minimum elements of skill and knowledge necessary to safely climb aids to navigation structures less than 20 feet. The CO/OIC may require additional training beyond the minimum training specified herein as necessary to qualify and maintain proficiency.

This chapter consists of the following sections:

Section	Title	Page
A	Task Accomplishment Record for ATON Structure Climber – Basic	2-2
В	Qualification Tasks - ATON Structure Climber – Basic	2-4

WARNING!

Climbing is an inherently dangerous operation regardless of the structure being climbed or its height.

All applicable safety precautions must be utilized when training or otherwise demonstrating these climbing procedures

Section A. Task Accomplishment Record for ATON Structure Climber – Basic

NOTE <i>⊕</i> ∕	Once completed, trainer should place this section in the trainee's training record.		
TRAINEE NAME:	RATE:		
TRAINER NAME:RATE:			
COMPETENCY CODE	TO BE TRAINED FOR: ATNSCB		
NOTE⊕∕	Trainers should add any additional tasks assigned by the CO/OIC.		

Task	Date Started	Date Completed	Trainer's Signature	
BC-01				
BC-02				
BC-03				
BC-04				
BC-05				
BC-06				
BC-07				
BC-08				
BC-09				
BC-10				
BC-11				
BC-12				

BC-13 Safely Climb Five (5) Structures (Initial Qualification – Basic)

Date	Aid Name and Light List Number	Type of Structure/Structure Height	Trainer's Signature

Section B. Qualification Tasks – ATON Structure Climber – Basic

B.1 Introduction

The instructions for this section are as follows:

- 1. The purpose of this section is to provide guidance on the trainee's progress throughout the qualification process.
- 2. Requires the trainer to present the tasks to the trainee in a logical order.
- 3. When the trainer is satisfied that the trainee can consistently perform a task in accordance with all standards and conditions, the trainer should sign and date the appropriate task.

B.2. Requirements

Completion of this section requires the unit Rescue certified ATON Structure Climber/Competent Person, designated in writing by the CO/OIC, to train and sign off all of the member's ATON Structure Climber – Basic PQS tasks.

B.3. NATON Training Prerequisite

Members wishing to attend NATON's ATON Structure Climber course (ANC-ASC 501850) must be certified as a Basic level climber prior to attendance.

B.4. Required Training Climbs

ATON Structure Climber – Basic trainees must safely climb a minimum of five (5) ATON structures while under instruction, preferably of different types and styles, before certification. The date of climb, aid name, Light List number, structure type, height, and trainer's name will be documented on the Accomplishment Record (page 2-3). Once certified, an ATON Structure Climber – Basic is authorized to climb ATON structures less than 20 feet in height.

B.5. Objectives

The following are objectives of this section:

- 1. The trainee must demonstrate an understanding of first aid, as well as fall protection/fall arrest regulations, standards, terminology, and equipment.
- 2. The trainee must demonstrate an understanding of rescue planning and terminology.
- 3. The trainee must don a climber safety ensemble.
- 4. The trainee must demonstrate that he or she can determine the scope of work to be performed on an ATON structure.
- 5. The trainee must demonstrate that he or she can properly inspect an ATON structure prior to climbing.
- 6. The trainee must perform pre-climb checks.
- 7. The trainee must safely climb an ATON structure.

8. The trainee must demonstrate that he or she can safely hoist and lower ATON equipment.

NOTE*⊕*✓

Trainers must ensure that trainees reassess risk at appropriate intervals during climbing evolutions, and that they use the results to modify the evolution as appropriate.

B.6. Tasks

This section contains the following tasks:

Task Number	Task	Page
BC-01	First Aid and CPR Responsibility	2-6
BC-02	Fall Protection Regulations and Standards	2-7
BC-03	Fall Protection/Fall Arrest Terminology	2-8
BC-04	Fall Protection/Fall Arrest Equipment Use and Inspection	2-9
BC-05	Calculate Fall Clearances	2-10
BC-06	Don Climber Safety Ensemble	2-11
BC-07	Rescue Planning and Terminology	2-12
BC-08	Scope Work	2-13
BC-09	Inspect ATON Structures	2-14
BC-10	Perform Pre-Climb Checks	2-15
BC-11	Climb ATON Structures	2-16
BC-12	Hoist and Lower ATON Gear	2-17

ASK BC-01 First-Aid and CPR Responsibility				
Reference	(a) U.S. Coast Guard Boat Operations and Training (BOAT) Manual, Volume II, COMDTINST M16114.33 (series)			
	(b) Certifying Organization's Training Manual as listed in the star below.	ndards shown		
Conditions	Task should be performed at any time, at facilities available to the unit. accomplish task without prompting or use of a reference.	Trainee must		
Standards	Trainee must complete the American Red Cross, National Safety Council, American Heart Association or American Safety and Health Institute First-Aid Course to receive certification.			
Performance Criteria		Completed (Initials)		
1. First-Aid Certification Typ	pe and Date course completed.			
Course:	Date://			
2. CPR Certification Type an	d Date course completed.			
Course:	Date:/			
Trainer Date				
Comments	Comments			

TASK BC-02	Fall Protection Regulations and Standards	
Reference	 (a) Aids to Navigation Manual - Structures, COMDTINST M16500.25 (series) (b) Occupation Safety and Health Administration Website – 29 CFR 1926.500 Subpart M 	
	(c) ANSI Z359 Fall Protection Code – NATON Portal site - Resources	
Conditions	Task must be completed under the supervision of a designated climber trainer. Job aids and references are authorized for final qualification. When conducting these tasks, personnel will comply with the current and applicable OSHA regulations.	
Standards	Trainee must demonstrate a working knowledge of the applicable regulations and standards governing fall protection.	

Per	Performance Criteria		
1.	1. Read and comprehend Reference (a)		
2.	 Read References (b) and (c) and discuss the roles of the following organizations relating to fall protection. a. Occupational Safety and Health Administration (OSHA) b. American National Standards Institute (ANSI) 		
Trainer Date			

(11.52)		
Trainer	Date	
Comments		
		_

TASK BC-03	Fall Protection/Fall Arrest Terminology	
Reference	(a) Aids to Navigation Manual - Structures, COMDTINST M16500.25 (series)	
	(b) Aids to Navigation Structure Climber Course Student Guide	
	(c) 29 CFR 1926.500 Subpart M	
	(d) ANSI Z359.0 – NATON Portal site - Resources	
Conditions	Task must be completed under the supervision of a designated climber trainer. Job aids and references are not authorized for final qualification. When conducting these tasks, personnel will comply with the current and applicable OSHA regulations.	
Standards	Trainee must demonstrate a working knowledge of the applicable terms associated with fall protection/fall arrest.	

					Completed (Initials)
3.	Def	ine the following fall protection/fall arrest terms ar	d acro	onyms.	
	a.	ABCD of Fall Protection	p.	Lanyard	
	b.	Anchorage	q.	Lanyard Ring	
	c.	ANSI	r.	PFAS	
	d	ASME	s.	PPE	
	e.	EN	t.	Rollout	
	f.	NFPA	u.	Energy Absorbing Lanyards	
	d.	Arresting Force	v.	Suspension Trauma (Orthostatic	
	e.	Connector		Intolerance)	
	f.	Connecting Device	w.	Swing Zone	
	g.	D-Ring	х.	Tie-Off	
	h.	Deceleration Device	y.	Fall Clearance	
	i.	Deceleration Distance	z.	Total Fall Distance	
	j.	Drop Zone	aa.	Work Positioning System	
	k.	Fall Arrest System	ab.	Rigid Rail System	
	1.	Fall Restraint System	ac.	Cable Grab System	
	m.	Free Fall			
	n.	Free Fall Distance			
	o.	Primary and Secondary Fall Protection			

Trainer	Date
Comments	
·	

TASK BC-04	Fall Protection/Fal	ll Arrest Equipment Use and Inspection	
Reference Conditions Standards	(a) Aids to No (b) Aids to No (c) Manufacto (d) 29 CFR 19 (e) ANSI Z35 Task must be compaids and references tasks, personnel with the comparest equipment.	avigation Manual - Structures, COMDTINST M165 avigation Structure Climber Course Student Guide urer's Instructions 926.500 Subpart M 59.0, Z359.1 and Z359.2 – NATON Portal site - Respleted under the supervision of a designated climber are not authorized for final qualification. When could comply with the current and applicable OSHA responstrate a working knowledge of the applicable fall funits may be using several different styles of each the sees will be qualified on the equipment used at their uses	trainer. Job nducting these gulations. protection/fall ype of climbing
Performance Criteria			Completed (Initials)
Identify the following fall protection/fall arrest equiagencies and demonstrate its operation. ANSI Approved Double-Locking Carabineer ANSI Approved Double-Locking Snap Hook Connecting Hardware d. Fall Arrest Lanyard		e. Full Body Harness f. Tether Line g. Work Positioning Lanyard h. ASC PPE Approved Equipment: • ANSI • ASME • EN • NFPA	
2. Define the two significant aspects of fall protection/fall arrest equipment that must be evaluated prior to each use.			
3. Define the significant defects that will require the equipment listed in Performance Criteria 1 to be immediately removed from service.			
4. Explain the disposal procedures for fall protection/fall arrest equipment that has been removed from service.			
5. Define how often and who is responsible for inspecting fall protection/fall arrest equipment.			
6. Identify the sources for the recommended use, inspection, care, and maintenance criteria of fall protection/fall arrest equipment.			
7. Describe the procedures for inspecting the equipment listed in Performance Criteria 1.			
8. Explain the procedures for recording fall protection/fall arrest equipment inspections.			
9. Inspect the equipment listed in Performance Criteria 1.			
Trainer Date			
Comments			

TASK BC-05	Calculate Fall Clearances
Reference	 (a) Aids to Navigation Manual - Structures, COMDTINST M16500.25 (series) (b) Aids to Navigation Structure Climber Course Student Guide (c) NATON Calculating Fall Clearances Job Aid - Can be viewed at the
	NATON Portal site - Resources
Conditions	Task must be completed under the supervision of a designated climber trainer. Job aids and references are authorized for final qualification.
Standards	Trainee must demonstrate a working knowledge of how to calculate clearances in the event of a fall and deployment of arresting equipment.

		Performance Criteria	Completed (Initials)
1.	Def	ine the following terms and numerical values as applicable:	
	a.	Maximum Free Fall (FF) allowed	
	b.	Harness stretch	
	c.	Lanyard deployment length	
	d.	Safety factor	
	e.	Climber height	
	f.	Distance from dorsal D-ring	
	g.	Rope stretch	
2.	Dis	cuss the 3 feasibility factors to review once clearance is calculated:	
	a.	Absorber length compared to the FF distance	
	b.	Weight of climber and gear	
	c.	Remainder of clearance once system deploys	
3.	Calculate clearances for the following three points:		
	a.	From the climber's feet	
	b.	From the climber's Dorsal D-ring	
	c.	From the anchor point	
4.	Dis	cuss action to take when fall will exceed available clearance, FF or Absorber.	

Trainer	Date
Comments	

TASK BC-06	Don Climber Safety Ensemble
Reference	(a) Aids to Navigation Manual - Structures, COMDTINST M16500.25 (series)
	(b) Aids to Navigation Structure Climber Course Student Guide
	(c) Manufacturer's Instructions
Conditions	Task must be completed under the supervision of a designated climber trainer. Job aids and references are not authorized for final qualification.
Standards	Trainee must demonstrate the ability to don the climber safety ensemble.

Performance Criteria		Completed (Initials)
1.	Don appropriate personal protective equipment (PPE).	
	a. Hard Hat/Helmet with Chin Strap	
	b. Safety Boots (Composite/reinforced toe and recommend shank)	
	c. Gloves	
	d. Safety Glasses	
	e. Personal Flotation Device (PFD) when working over water	
2.	Don and properly adjust the full body harness.	
3.	3. Attach work positioning lanyard to full body harness.	
4.	4. Attach fall arrest lanyard (Y-Lanyard or equivalent) to full body harness.	
5.	Inspect climbing partner's safety ensemble once donned to ensure proper wear; ensure own safety ensemble is properly donned, and pass inspection of fellow climbing partner	

Trainer	Date	
Comments		

TASK BC-07	Rescue Planning and Terminology	
Reference	 (a) Aids to Navigation Manual - Structures, COMDTINST M16500.25 (series) (b) Aids to Navigation Structure Climber Course Student Guide (c) ANSI Z359.1 and ANSI Z359.4 – NATON Portal site - Resources 	
Conditions	Task may be performed at any time. Job aids and references are not authorized for final qualification.	
Standards	Trainee must demonstrate a working knowledge of a proper Rescue Plan and the applicable terms associated with High Angle Rescue on ATON structures.	

		Performance Criteria	Completed (Initials)
1.	Define t	he following terms pertaining to high angle rescue.	
	a.	Rescue Plan	
	b.	Suspension Trauma (Orthostatic Intolerance)	
2.	Describ	e each of the following rescue methods:	
	a.	Rescue Prevention	
	b.	Self-Rescue	
	c.	Assisted Rescue	
	d.	Suspended Rescue	
	e.	Outside Services	
3.	Describ	e advantages and/or hazards associated with each of the methods listed in Performance Criteria 2 above.	
4.	Review maintena	unit rescue plan and ensure all proper procedures are followed prior to conducting training or ance.	
Trainer		Date	
Co	nments		

2.	Describe	e each of the following rescue methods:	
	a.	Rescue Prevention	
	b.	Self-Rescue	
	c.	Assisted Rescue	
	d.	Suspended Rescue	
	e.	Outside Services	
3.	Describe	e advantages and/or hazards associated with each of the methods listed in Performance Criteria 2 above.	
4.	Review maintena	unit rescue plan and ensure all proper procedures are followed prior to conducting training or ance.	
Trainer Date			
Co	mments		
			

	Performance Criteria	Completed
Standards	Trainee must demonstrate a working knowledge of the preparate servicing an aid to navigation.	tion required prior to
Conditions	Task must be completed under the supervision of a designated and references are authorized for final qualification.	climber trainer. Job aid
	(c) Aids to Navigation Structure Climber Course Student	Guide
	(b) Short Range Aids to Navigation Servicing Guide, COI (series)	MDTINST M16500.19
Reference	(a) Aids to Navigation Manual - Structures, COMDTINS	T M16500.25 (series)
TASK BC-08	Scope Work	

	Performance Criteria	(Initials)
1.	Review aid record prior to leaving the unit.	
2.	Review scope of work and ensure all tools and equipment needed to complete the task are on hand.	
Trainer		
Co	mments	

TASK BC-09	Inspect ATON Structures
Reference	(a) Aids to Navigation Manual - Structures, COMDTINST M16500.25 (series)(b) Aids to Navigation Structure Climber Course Student Guide
Conditions	Task must be completed under the supervision of a designated climber trainer. Job aids and references are authorized for final qualification.
Standards	Trainee must demonstrate a working knowledge of the aids to navigation structure inspection procedure.

	Performance Criteria	Completed (Initials)
1.	Perform Field Unit Maintenance Inspection on an ATON structure in accordance with Reference (a).	
2.	Complete inspection documentation using the ATON Structure Inspection, Form CG-6042. Properly route documentation per unit SOP.	
Tra	ainer Date	

Trainer	Date
Comments	

WARNING!

In addition to the platform inspection instructions listed on Form CG-6042, climbers should pay particular attention to the structure's platform mounting hardware. All platforms should either be welded, or in the case of wood, secured with all-thread or through-bolts with nuts and washers, or lag bolts. Any platform secured with nails, including nails from a nail gun, will be considered unsafe and SHALL NOT be accessed by the climber until such time as the platform has been secured using the approved securing methods discussed above.

NOTE

The ATON program has suffered from numerous structure failure MISHAPs that have included injuries to ATON personnel. Most of these MISHAPs have been attributed to improper methods of securing the platform or the victim standing on A-frame. A-frames are designed to hold batteries and equipment, not technicians.

TASK BC-10	Perform Pre-Climb Checks
Reference	 (a) Aids to Navigation Manual - Structures, COMDTINST M16500.25 (series) (b) Aids to Navigation Structure Climber Course Student Guide (c) Risk Management, COMDTINST 3500.3 (series) (d) Safety and Environmental Health Manual, COMDTINST M5100.47 (series)
Conditions	Task must be performed under the supervision of a designated climber trainer. Job aids and references are not authorized for final qualification with the exception of Performance Criteria 8.
Standards	Trainee must demonstrate the correct pre-climb procedures prior to accessing an aid to navigation.

	Performance Criteria	Completed (Initials)
1.	Conduct pre-climb safety ensemble inspection.	
2.	Don climber safety ensemble.	
3.	Check climbing partner to ensure his/her equipment is donned properly.	
4.	Stage rescue and first aid equipment.	
5.	Complete pre-climb checklist.	
6.	Check communications equipment.	
7.	Check all equipment before ascending structure. Ensure all tools and equipment to perform the task are present and attached to a safety lanyard.	
8.	Conduct pre-climb safety brief in accordance with Unit 2 of Reference (b), and References (c) and (d)	
Tra	niner Date	
Co	mments	

WARNING!

A pre-climb safety check must be completed before climbing any ATON structure. The pre-climb safety check MUST include the completion of a documented risk assessment to consider all risks, including weather, crew fitness, crew qualifications, structure inspection results, and other hazards such as, but not limited to, dangerous insects, wildlife, and poisonous plants. The risk assessment should include a discussion on mitigating strategies to overcome any identified or unwarranted risks. If risks cannot be adequately abated, provisions must be provided for the execution of a "go/no go" decision. This go/no go decision is the responsibility of the on scene safety observer/competent person. This decision must be defendable by a documented risk assessment.

Descend structure using proper climbing mechanics.
 Conduct under instruction post-climb debrief.
 Conduct post-climb safety ensemble inspection.

TASK BC-11	Climb ATON Structures				
Reference	(a) Aids to Navigation Manual - Structures, COMDTINST M16500.25 (series)(b) Aids to Navigation Structure Climber Course Student Guide				
Conditions	Task must be performed under the supervision of a designated climber trainer. Trainee must be dressed out in the appropriate climber's safety ensemble and conduct all preclimb inspections/checklists/briefs prior to performing this task. Job aids and references are not authorized for final qualification with the exception of Performance Criteria 8.				
Standards	Trainee must demonstrate the ability to safely climb aids to navigation straining 100% fall protection.	ructures while			
	Performance Criteria	Completed (Initials)			
Ascend structure using	proper climbing mechanics.				
2. Select sound anchoring	g points during ascent, descent, and work positioning.				
3. Maintain fall space an	d swing zone (if applicable).				
4. Demonstrate proper us	4. Demonstrate proper use of the work positioning lanyard and shock absorbing Y lanyard.				
5. Connect to structure once work position has been reached.					
6. Maintain 100% fall protection.					

10. Properly stow all climbing equipment.		
Trainer	Date	
Comments		

TASK BC-12	TASK BC-12 Hoist and Lower ATON Gear					
Reference	00.25 (series) 6500.21 (series)					
Conditions Task must be performed under the supervision of a designated climber trainer. T will be dressed out in appropriate climber's safety ensemble, and conduct all preinspections/checklists/briefs prior to performing this task. Job aids and reference not authorized for final qualification.						
Standards Trainee must demonstrate the ability to safely hoist and lower aids to navigation from/to lower level working position. Trainee will complete this task from both lower level as well as the working position while maintaining 100% fall protects.						
	Performance Criteria	Completed (Initials)				
1. Inspect installed hois	ting system (if applicable).					
2. Inspect equipment (b	locks, line, etc.) to be used for lifting.					
3. Demonstrate accepte	d rigging practices for overhead lifting.					
4. Hoist and lower equip	4. Hoist and lower equipment from/to lower level work position.					
Trainer	Date					
Comments						

This page is intentionally blank

Chapter 3 – ATON Structure Climber – Advanced and Advanced Safety Observer

Introduction

This chapter contains a collection of tasks which must be learned, practiced, and performed by the trainee. These tasks represent the minimum elements of skill and knowledge necessary to safely climb aids to navigation structures 20 feet or greater in height. The CO/OIC may require additional training beyond the minimum training specified here in as necessary to qualify and maintain proficiency.

This chapter contains the following Sections:

Section	Title	Page
A	Task Accomplishment Record for ATON Structure Climber – Advanced.	3-2
В	Task Accomplishment Record for ATON Structure Climber Advanced – Safety Observer	3-4
С	Qualification Tasks - ATON Structure Climber – Advanced	3-5

NOTE

Climbers must complete **Structure Climber – Basic PQS** before starting **Structure Climber – Advanced PQS** tasks.

WARNING!

Climbing is an inherently dangerous operation regardless of the structure being climbed or its height.

All applicable safety precautions must be utilized when training or otherwise demonstrating these climbing procedures.

Section A. Task Accomplishment Record for ATON Structure Climber – Advanced

NOTE		Once completed, the unit the trainee's training rec		g officer/petty of	officer mus	t place this section in
TRAINE	EE NAME:			RA	ATE:	
TRAINE	ER NAME:			R	ATE:	
COMPE	TENCY CODE	TO BE TRAINED FOR: A	TNSCA			
NOTE⊕∕		Trainers should add any	addition	al tasks assigne	ed by the C	O/OIC.
	Task	Date Started	Date	e Completed	Trainer's	Signature
	AC-01					
	AC-02					
	AC-03					
	AC-04					
	AC-05					
	AC-06					
		AC-07 Safely Climb Five ((5) Structu	res (Initial Qual	ification – A	dvanced)
	Date	Aid Name and Light List N	Jumber	Type of Structure/Struct	of ture Height	Trainer's Signature

COMDTINST M16500.14A

Section B. Task Accomplishment Record for ATON Structure Climber – Advanced Safety Observer

			e completed, the un rainee's training rec		g officer/petty	y officer mus	st place th	nis section in
ΓRAINΕ	EE NAME:					RATE:		
ΓRAINΕ	ER NAME:					RATE:		
COMPE	TENCY CODE	ТО ВЕ	TRAINED FOR: A	TNSCASO)			
NOTE	GS.	Train	ners should add any	addition	al tasks assig	gned by the C	CO/OIC.	
	Task		Date Started	Date (Completed	Trainer's Si	ignature	
	RC-02							
	ACSO-0	1						
			uction Safely Observe alification – Advanced				ıbs under	the supervision
	Date	Aid	l Name and Light List N	Number		e of ucture Height	Traine	er's Signature

Section C. Qualification Tasks – ATON Structure Climber – Advanced and ATON Structure Climber Advanced – Safety Observer

C.1. Introduction

The instructions for this section are as follows:

- 1. The purpose of this section is to provide guidance on the trainee's progress throughout the qualification process.
- 2. The trainer must present the tasks to the trainee in a logical order.
- 3. When the trainer is satisfied that the trainee can consistently perform a task in accordance with all standards and conditions, the trainer should sign and date the appropriate PQS task.

C.2. Requirements

Satisfactory completion of ATON Structure Climber – Basic qualification tasks, is a prerequisite for Advanced climber training.

Completion of this section may be met in one of two ways

- 1. Attending and satisfactorily completing authorized formal training and receiving course completion documentation.
- 2. Unit Rescue Certified ATON Structure Climber/Competent Person, designated in writing by the CO/OIC trains and signs ATON Structure Climber Advanced PQS tasks.

C.3. Authorized Training Sources

NATON's ATON Structure Climber course (ANC-ASC 501850) is the only authorized formal training course for ATON Structure Climber – Advanced. Member must be certified as a Basic level climber prior to attending.

C.4. Required Training Climbs

ATON Structure Climber – Advanced trainees must safety climb a minimum of five (5) ATON structures while under instruction; preferably of different types and styles before certification. The date of climb, aid name, Light List number, structure type, height, and trainer's name will be documented on the Accomplishment Record (page 3-3). Once certified, an ATON Structure Climber – Advanced is authorized to climb ATON structures 20 feet or greater in height

C.5. Advanced Level Climber Objectives

The following are the section objectives for Advanced level climbers:

- 1. Demonstrate an understanding of fall protection/fall arrest terminology and equipment.
- 2. Demonstrate an understanding of climbing rope and knots.

COMDTINST M16500.14A

- 3. Climb an aid to navigation structure equipped with an installed ladder safety system.
- 4. Rig a vertical lifeline as a ladder safety system.
- 5. Rig a vertical lifeline as a back-up fall arrest system.
- 6. Rig a descent rope for rope access on an aid to navigation structure.
- 7. Access a work area on rope.

NOTE

Trainers must ensure that trainees reassess risk at appropriate intervals during climbing evolutions, and that they use the results to modify the evolution as appropriate.

C.6. Advanced Level Climber Safety Observer Objectives

The following are the section objectives for Advance Level Climbers serving as Safety Observer.

- 1. Currently certified Advanced level climbers may serve as the required on scene Safety Observer for unit level climbs less than 20 feet in height and designated as Basic level climber structures by the CO/OIC.
- 2. To serve in this capacity, the certified Advanced level climber must complete Rescue Climber PQS Task RC-02, Safety Observer, Task ACSO-01; serve as Safety Observer under instruction of the unit Rescue climber for five (5) climbs, and be certified by the unit CO/OIC as a Safety Observer. Certification includes the competency code designation ASCASO. The completion of these tasks must be entered into TMT or its next generation replacement.

NOTE A

Only certified Rescue level climbers must serve as the mandated on scene Safety Observers for ATON structures greater than 20 feet and/or designated as Advanced level climber structures by the unit CO/OIC.

C.7. Advanced Climber Tasks

This section contains the following tasks:

Task Number	Task	Page
AC-01	Fall Protection/Fall Arrest Terminology, Equipment, and Inspection	3-6
AC-02	Climbing/Rescue Rope and Knots.	3-7
AC-03	Climb an ATON Structure Equipped with an Installed Ladder Safety System.	3-8
AC-04	Rig a Vertical Lifeline as a Ladder Safety System/Fall Arrest System.	3-9
AC-05	Rig a Descent Rope for Rope Access on an ATON Structure.	3-10
AC-06	Rescue Planning and Execution of Self-Rescue from a Suspended Position.	3-11

C.8. Advanced Climber Safety Observer Tasks

Task	Task	Page
Number		
RC-02		4-6
ASCSO-01	Serve as Safety Observer under instruction of unit Rescue certified climber for five (5) climbs	3-4

TASK AC-01	Fall Protection/Fall Arrest Terminology, Equipment and Inspection
Reference	(a) Aids to Navigation Manual - Structures, COMDTINST M16500.25 (series)
	(b) Aids to Navigation Structure Climber Course Student Guide
	(c) 29 CFR 1926.500 Subpart M
	(d) ANSI Z359.0, Z359.1 and Z359.2 - NATON Portal site - Resources
Conditions	Task must be completed under the supervision of a designated climber trainer. Job aids and references are not authorized for final qualification. When conducting these tasks, personnel will comply with the current and applicable OSHA regulations.
Standards	Trainee must demonstrate a working knowledge of the applicable fall protection/fall arrest equipment. Units may be using several different styles of each type of climbing equipment. Trainees will be qualified on the equipment used at their unit.

	Performance Criteria	Completed (Initials)
1.	Identify and Define the following fall protection/fall arrest terminology and equipment, state its purpose, and demonstrate its operation.	
	a. Approved Anchor Points (Certified/Non-certified) b. Anchor Devices/Straps c. Fixed Ladder Safety System (Cable/Rigid Rail) d. Ascent Devices (ISC/Knots) e. Descent Devices (Fisk/Industrial Descender (I'D)) f. Rope Grab (Fall arrestors) g. Rope Termination Plate h. Self-Retracting Device (SRD) i. Short-Haul system/Block & Tackle j. Vertical Lifeline k. Rope Clamp	
2.	Define the two aspects of fall protection/fall arrest equipment that must be evaluated prior to each use.	
3.	Define the significant defects that will require the equipment listed in Performance Criteria 1 to be immediately removed from service.	
4.	Explain the disposal procedures for fall protection/fall arrest equipment that has been removed from service.	
5.	Define how often and who is responsible for inspecting fall protection/fall arrest equipment.	
6.	Identify the sources for the recommended use, inspection, care, and maintenance criteria of fall protection/fall arrest equipment.	
7.	Describe the procedures for inspecting the equipment listed in Performance Criteria 1.	
8.	Explain the procedures for recording fall protection/fall arrest equipment inspections.	
9.	Inspect the equipment listed in Performance Criteria 1.	
Тис	ninar Nota	

1 rainer	1	Date
Comments		

TASK AC-02	Climbing/Rescue Rope and Knots
Reference	(a) Aids to Navigation Manual - Structures, COMDTINST M16500.25 (series)(b) Aids to Navigation Structure Climber Course Student Guide
Conditions	Task must be completed under the supervision of a designated climber trainer. Job aids and references are not authorized for final qualification.
Standards	Trainee must identify various types of climbing/rescue rope and demonstrate the ability to tie, dress, set, and state the purpose of each type of knot associated with climbing/rescue.

	Performance Criteria	Completed (Initials)
1.	Identify the primary types of rope used to climb aids to navigation structures and their purpose.	
	a. Kernmantle Rope	
	b. Laid Rope	
2.	Explain the procedure and frequency that climbing/rescue rope will be inspected.	
3.	Define the significant defects that will require climbing/rescue rope to be immediately removed from service.	
4.	Demonstrate the ability to tie, dress, and set each of the following knots.	
	a. Prusik Knot	
	b. Double Figure-Eight Knot	
	c. Butterfly Knot	
5.	State the purpose for each of the knots in Performance Criteria 4.	
6.	State the efficiency of each of the knots in Performance Criteria 4.	
7.	Demonstrate the ability to rig a rope termination plate.	
Tr	niner Date	•

Trainer	Date
Comments	

TASK AC-03 Climb an ATON Structure Equipped with an Installed Ladder Safety System (a) Aids to Navigation Manual - Structures, COMDTINST M16500.25 (series) Reference (b) Aids to Navigation Structure Climber Course Student Guide (c) Manufacturer's Instructions **Conditions** Task must be performed under the supervision of a designated climber trainer. Trainee will be dressed out in appropriate climber's safety ensemble, and conduct all pre-climb inspections/checklists/briefs prior to performing this task. Job aids and references are not authorized for final qualification. Trainee must demonstrate the ability to safely climb an aids to navigation structure that Standards is equipped with an installed ladder safety system, while maintaining 100% fall protection, proper fall space, and swing zone. If the unit has different types of installed ladder safety systems (rigid rail, flexible cable, etc.) within their AOR, then the trainee must complete this task at least once for each different type of installed system. Completed

	Performance Criteria	Completed (Initials)
1.	Attach ladder safety climbing device to body harness.	
2.	Engage ladder safety climbing device to installed ladder safety system on structure.	
3.	Test installed ladder safety system for proper operation.	
4.	Ascend structure to a point designated by a trainer on the installed ladder safety system.	
5.	Disengage from the installed ladder safety system. Traverse to work area, maintaining 100% fall protection while utilizing shock absorbing Y lanyard. Once in position, attach work positioning lanyard.	
6.	Return to installed ladder safety system and engage ladder safety climbing device.	
7.	Descend structure using proper climbing mechanics.	
Tra	niner Date	
Co	mments	

WARNING!

A pre-climb safety check must be completed before climbing any ATON structure. The pre-climb safety check MUST include the completion of a documented risk assessment to consider all risks, including weather, crew fitness, crew qualifications, structure inspection results, and other hazards such as, but not limited to, dangerous insects, wildlife, and poisonous plants. The risk assessment should include a discussion on mitigating strategies to overcome any identified or unwarranted risks. If risks cannot be adequately abated, provisions must be provided for the execution of a "go/no go" decision. This go/no go decision is the responsibility of the on scene safety observer/competent person. This decision must be defendable by a documented risk assessment.

TASK AC-04	Rig a Vertical Lifeline as a Ladder Safety System/Fall Arrest System
Reference	(a) Aids to Navigation Manual - Structures, COMDTINST M16500.25 (series)(b) Aids to Navigation Structure Climber Course Student Guide
Conditions	Task must be performed under the supervision of a designated climber trainer. Trainee will be dressed out in appropriate climber's safety ensemble, and conduct all pre-climb inspections/checklists/briefs prior to performing this task. Job aids and references are not authorized for final qualification.
Standards	Trainee must demonstrate the ability to properly rig a vertical lifeline to perform as a ladder safety system, while maintaining 100% fall protection, proper fall space, and swing zone.

	Performance Criteria	Completed (Initials)
1.	Inspect anchoring connection hardware, vertical lifeline, and rope grab.	
2.	Ascend the structure using proper climbing mechanics.	
3.	Connect to structure with work positioning lanyard once work location has been reached.	
4.	Rig anchoring connection hardware to suitable anchorage point and attach vertical lifeline.	
5.	Engage rope grab to vertical lifeline and test for proper operation.	
6.	Descend structure using vertical lifeline as the personal fall arrest system.	
Tra	niner Date	•

Trainer	Date	
Comments		

Comments

TA	SK AC-05	Rig a Descent Rope for Rope Access on an ATON Structure	
Ref	ference	 (a) Aids to Navigation Manual - Structures, COMDTINST M1650 (b) Aids to Navigation Structure Climber Course Student Guide (c) Manufacturer's Instructions 	00.25 (series)
Con	nditions	Task must be performed under the supervision of a designated climber t will be dressed out in appropriate climber's safety ensemble, and conductine inspections/checklists/briefs prior to performing this task. Job aids and not authorized for final qualification.	ct all pre-climb
Sta	ndards	Trainee must demonstrate the ability to safely rig a descent rope for accearea on aids to navigation structures that must be reached by rope, while 100% fall protection, proper fall space, and swing zone.	
\ \ \ \ \	4 D.U.LO.	A vertical lifeline fall arrest system must be rigged and utiliz	ed at all
VV	ARNING!	times when performing any work using a descent rope.	
VV	ARNING!	times when performing any work using a descent rope. Performance Criteria	Completed (Initials)
1.			Completed
	Inspect anchoring condevice.	Performance Criteria	Completed
1.	Inspect anchoring condevice. Ascend the structure us	Performance Criteria nection hardware, termination plate, 45kn carabineers, descent rope, and descent	Completed
1.	Inspect anchoring condevice. Ascend the structure us Connect to structure w	Performance Criteria nection hardware, termination plate, 45kn carabineers, descent rope, and descent sing proper climbing mechanics.	Completed
1. 2. 3.	Inspect anchoring condevice. Ascend the structure we Connect to structure we Rig anchoring connects	Performance Criteria nection hardware, termination plate, 45kn carabineers, descent rope, and descent sing proper climbing mechanics. ith work positioning lanyard once work location has been reached.	Completed
1. 2. 3. 4.	Inspect anchoring condevice. Ascend the structure us Connect to structure w Rig anchoring connecti Engage descent device	Performance Criteria nection hardware, termination plate, 45kn carabineers, descent rope, and descent sing proper climbing mechanics. ith work positioning lanyard once work location has been reached. ion hardware to suitable anchorage point and attach descent rope system.	Completed

TASK AC - 06	TASK AC - 06 Rescue Planning and Execution of Self-Rescue from a Suspended Position				
Reference	 (a) Aids to Navigation Manual - Structures, COMDTINST M1650 (b) Aids to Navigation Structure Climber Course Student Guide (c) ANSI Z359.4 – NATON Portal site - Resources 	0.25 (series)			
Conditions	Task must be performed under the supervision of a designated climber trainer. Trainee will be dressed out in appropriate climber's safety ensemble, and conduct all pre-climb inspections/checklists/briefs prior to performing this task. Job aids and references are not authorized for final qualification.				
Standards	Utilize available equipment (ascenders/knots) to perform a self-rescue. This task may be performed near ground level on a kernmantle rigged on a structure, overhead, or on any other secure point that allows the trainee to demonstrate proper technique.				
WARNING!	A vertical lifeline fall arrest system must be rigged and utilized at all times when performing any work using a descent rope.				
	Performance Criteria	Completed (Initials)			
1. Discuss what knots/equ	ripment will be utilized for self-rescue. (lanyards/ascenders/carabineers /pulleys)				
2. Utilizing ascending tech	hniques ascend from suspended position on a descent rope.				
Trainer	Date				
Comments					

This page is intentionally blank

Chapter 4 - ATON Structure Climber - Rescue

Introduction

This chapter is intended for use in recertifying a Rescue Climber who has transferred from one ATON unit directly to another ATON unit. Task RC-02 is also for use in qualifying an Advanced Safety Observer

NOTE

A previously certified Rescue climber who has had a break in service at ATON units (i.e. from ATON to Non-ATON, then back to ATON) must attend formal training (ANC-ASC 501850) to requalify/recertify.

This chapter contains a collection of tasks which must be learned, practiced, and performed by the trainee. These tasks represent the minimum elements of skill and knowledge necessary to safely act as the unit's Competent Person and Safety Observer. The CO/OIC may require additional training beyond the minimum specified to qualify and maintain proficiency.

This chapter contains the following Sections:

Section	Title	Page
A	Task Accomplishment Record for ATON Structure Climber – Rescue.	4-3
В	Recertification Tasks - ATON Structure Climber – Rescue	4-4

Structure Climber – Rescue PQS tasks will be completed by personnel who anticipate being assigned as the unit's Competent Person and/or Safety Observer, designated by the command. These tasks will also be completed by personnel who will be responsible for developing, providing training for, and implementing ATON Structure Climber unit rescue plans and/or coordinating and performing actual ATON Structure Climber rescues.

WARNING!

Climbing is an inherently dangerous operation regardless of the structure being climbed or its height.

All applicable safety precautions will be utilized when training or otherwise demonstrating these climbing procedures.

Section A. Task Accomplishment Record for ATON Structure Climber – Rescue

NOTE	<i>6</i> -\$	Once	e completed	d, trainer s	hould pla	ace this secti	on in the	trainee's training
ΓRAINΕ	EE NAME:_					R	ATE:	
ΓRAINΕ	ER NAME:_					R	ATE:	
СОМРЕ	TENCY CO	DE TO BE	TRAINED F	OR: AT	NSCR			
NOTE	<i>6</i> -\$	Train	ners will ad	ld any addi	itional ta	sks assigned	by the C	CO/OIC.
	Ta	ask	Date S	tarted	Date	Completed	Train	er's Signature
	RC	C-01						
	RC	C-02						
	RC	C-03						
	RC	C-04						
	RC	C-05						
	RC-06 S	afely execu	te 2 rescues	under the su Qualificat			Rescue T	rainer (Initial
	Date		e and Light Number	Type Structure/S Heig	Structure	Type of Re	escue	Trainer's Signature
Г						-		

Section B. Recertification Tasks – ATON Structure Climber – Rescue

B.1. Introduction

The instructions for this section are as follows:

- 1. The purpose of this section is to provide guidance on the trainee's progress throughout the recertification process.
- 2. The trainer must present the tasks to the trainee in a logical order.
- 3. When the trainer is satisfied that the trainee can consistently perform a task in accordance with all standards and conditions, the trainer should sign and date the appropriate task.

B.2. Requirements

Only a Unit Rescue climber designated in writing by the CO/OIC to train and sign off Rescue PQS for recertification will sign off on this PQS.

B.3. Authorized Training Sources

Initial qualification cannot be obtained at the unit level. Initial qualification can only be obtained through formal training. NATON's ATON Structure Climber course (ANC-ASC 501850) is the only authorized formal training course for ATON Structure Climber – Rescue. Member must be certified as a Basic level climber prior to attending.

B.4. Required Training Rescues

ATON Structure Climber – Rescue trainees must safely execute two (2) rescues while under instruction, preferably of different types and styles, before certification. The date of climb, aid name and Light List number, structure type and height, type of rescue used and trainers name will be documented on the Accomplishment Record (page 4-2). Once certified, an ATON Structure Climber – Rescue is authorized to act as the Safety Observer, be designated as the unit "Competent Person," responsible for providing unit climber training, implementing ATON Structure Climber unit rescue plans, and coordinating and performing actual ATON Structure Climber rescues.

B.5. Objectives

The following are objectives of this section:

- 1. Demonstrate an understanding of the roles and responsibilities of the Competent Person and Safety Observer.
- 2. Demonstrate an understanding of climbing rescue terminology, equipment, planning, and methods.
- 3. Plan and execute an assisted rescue (conscious and unconscious).
- 4. Plan and execute a suspended rescue. (conscious and unconscious)

NOTE

Trainers must ensure that trainees reassess risk at appropriate intervals during climbing evolutions, and that they use the results to modify the evolution as appropriate.

B.6. Tasks

This section contains the following tasks:

Task Number	Task	Page
RC-01	Competent Person	4-5
RC-02	Safety Observer (task is also used for qualification as Advanced Climber – Safety Observer)	4-6
RC-03	Rescue Equipment and Terminology	4-7
RC-04	Rescue Planning and Execution Assisted Rescue (conscious and unconscious)	4-8
RC-05	Rescue Planning and Execution Suspended Rescue (conscious and unconscious)	4-9

TASK RC-01	Competent Person
Reference	 (a) Aids to Navigation Manual - Structures, COMDTINST M16500.25 (series) (b) Aids to Navigation Structure Climber Course Student Guide (c) ANSI Z359.2 - NATON Portal site - Resources
Conditions	Task must be performed under the supervision of a designated climber trainer. Job aids are authorized for final qualification.
Standards	Trainee must demonstrate a working knowledge of the unit climbing program to include immediate supervision, implementation and monitoring of the program, and maintaining/inspecting the unit's fall protection equipment.

	Performance Criteria	Completed (Initials)
1.	Provide the requirements to be a Competent Person.	
2.	State the roles and responsibilities of the Competent Person per your unit's policies.	
3.	Demonstrate the ability to properly inspect fall protection equipment in accordance with manufacturer's instructions.	
4.	Demonstrate the ability to properly document formal inspection findings in the unit climbing gear inspection log and applicable equipment inspection tag.	
5.	State the actions to take for equipment that fails inspection.	

z. zuwe me wene	and to the equipment that map determine		
		Date	
Trainer			
Comments			
			_

TASK RC-02	Safety Observer		
Reference	 (a) Aids to Navigation Manual - Structures, COMDTINST M16500.25 (series) (b) Aids to Navigation Structure Climber Course Student Guide 		
Conditions	Task must be performed under the supervision of a designated climber trainer. Job aids are authorized for final qualification. Trainee will be dressed out in appropriate climber's safety ensemble, and conduct all pre-climb inspections/checklists/briefs prior to performing this task.		
Standards	Given an ATON Structure and certified climbers, develop a climbing plan and preclimb checklist in accordance with reference (b). Ensure proper safety/rescue equipment is available, including a first aid kit on station and ready for immediate use. Ensure climbing plan contains a list of emergency contacts, weather conditions for the duration of the climb, communications plan, work to be completed and qualification of climbers. Complete a thorough risk assessment to include structure inspection and crev fitness. Monitor all personnel for proper use of climbing equipment, climber's mental, emotional and physical condition.		
	Performance Criteria	Completed (Initials)	
1. State the requirements	of a qualified Safety Observer.		
2. State the responsibilities	es of the Safety Observer.		
3. State the location of the	e Safety Observer with respect to the Climber(s).		
4. Demonstrate the ability	y to monitor the climbing evolution.		
Trainer Date			
Comments			

TASK RC-03	Rescue Equipment and Terminology
Reference	(a) Aids to Navigation Manual - Structures, COMDTINST M16500.25 (series)
	(b) Aids to Navigation Structure Climber Course Student Guide
	(c) 29 CFR 1926.500 Subpart M
	(d) ANSI Z359.0, Z359.1 and Z359.4 - NATON Portal site - Resources
Conditions	Task must be performed under the supervision of a designated climber trainer. Task may be performed at any time. Job aids and references are not authorized for final qualification. When conducting these tasks, personnel will comply with the current and applicable OSHA regulations.
Standards	Trainee must demonstrate a working knowledge of the applicable rescue equipment and terms associated with High Angle Rescue on ATON structures.

	Performance Criteria			Completed (Initials)	
1.	Identify and Define the following rescue equipment, state its purpose, and demonstrate its operation.				
	a. b. c.	Approved Anchor Points (Certified/Non-certified) Anchor Devices/Straps Fixed Ladder Safety System (Cable/Rigid Rail)	 f. Rope Grab (Fall Arrestors) g. Rope Termination Plate h. Self-Retracting Device (SRD) i. Short-Haul system/Block & Tackle j. Vertical Lifeline 		
	d. e.	Ascent Devices (Rope Clamp/ISC/Knots) Descent Devices (Fisk/Industrial Descender (I'D))	j. Verdedi Zilerine		
2.	Define the following terms pertaining to high angle rescue.				
	a.	Hierarchy of Rescue			
	b.	Suspension Trauma (Orthostatic Intolerance)			
	c.	Rescue Plan			
3.	Describe	e each of the following rescue methods:			
	a.	Rescue Prevention			
	b.	Self-Rescue			
	c.	Assisted Rescue			
	d.	Suspended Rescue			
4.	Describe above.	e advantages and/or hazards associated with each of	f the methods listed in Performance Criteria 3		

Trainer	Date
Comments	
•	

Comments

TASK RC-04 Rescue Planning and Execution Assisted Rescue (conscious or unconscious) (d) Aids to Navigation Manual - Structures, COMDTINST M16500.25 (series) Reference (e) Aids to Navigation Structure Climber Course Student Guide (f) ANSI Z359.4 - NATON Portal site - Resources **Conditions** Task must be performed under the supervision of a designated climber trainer. Job aids and references are not authorized for final qualification. The Rescuer will not be suspended, but instead will work from the structure maintaining 100% fall protection. Trainee must be dressed out in appropriate climber's safety ensemble, and conduct all pre-climb inspections/checklists/briefs prior to performing this task. Standards Utilize a certified climber or a training mannequin positioned on the structure. Trainee must plan the rescue and articulate each step of the rescue plan to the supervising climbing trainer. Trainee will then execute the rescue bringing the victim to safety while maintaining 100 percent fall protection. Anytime a certified climber serves as the "victim" in a training environment, a vertical lifeline and rope grab, or a fall safety device, WARNING! must be rigged on the structure on a separate anchor point to protect this person from falls while being lowered by the trainee. Completed **Performance Criteria** (Initials) **Plan** the rescue addressing the following: Required equipment Anchorages Method/Location of attaching rescue line to victim Route to anchorage Route to lower victim to safety Working decent line from above victim or base of structure. Medical needs/First Aid Route to victim 2. Lay out rescue equipment. 3. **Ascend** the structure. Maneuver to victim. 5. Rig descent device and rescue line above victim. Attach victim to rescue line and transfer weight. **Disconnect** victim's lanyard(s). Manipulate descent device and lower victim to safety. Date Trainer

TASK RC-05	Rescue Planning and Execution Suspended Rescue (conscious or unconscious)		
Reference	 (g) Aids to Navigation Manual - Structures, COMDTINST M16500.25 (series) (h) Aids to Navigation Structure Climber Course Student Guide (i) ANSI Z359.4 – NATON Portal site - Resources 		
Conditions	Task must be performed under the supervision of a designated climber trainer. Job aids and references are not authorized for final qualification. The Rescuer conducts a controlled decent to the victim using an authorized decent device and properly rigged life line. Trainee must be dressed out in appropriate climber's safety ensemble, and conduct all pre-climb inspections/checklists/briefs prior to performing this task.		
Standards	Utilize a certified climber or a training mannequin positioned on the structure. Trainee must plan the rescue and articulate each step of the rescue plan to the supervising climbing trainer. Trainee will then execute the rescue bringing the victim to safety while maintaining 100 percent fall protection.		
WARNING!	Anytime a certified climber serves as the "victim" in a training environment, a vertical lifeline and rope grab, or a fall safety device must be rigged on the structure on a separate anchor point to protect this person from falls while being lowered by the trainee.		

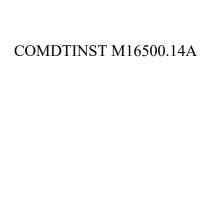
Performance Criteria				Completed (Initials)
1.	Plan the rescue addressing the following:			
	a. Required equipment	e.	Route to victim	
	b. Anchoragesc. Notify Command & EMS	f.	Method of attaching rescue equipment to victim	
	d. Route to anchorage	g.	Route of victim while lowered to safety	
	C	h.	Medical needs/First Aid	
2. Lay out rescue equipment.				
3.	 Ascend the structure and rig descent rope and vertical lifelines as close to directly above victim as possible. 			
4.	Descend to victim.			
5.	Attach victim to your descent device, disconnect victim's lanyards and transfer weight.			
6.	Manipulate descent device to lower self and victim to	o safety	7.	

	Date
Trainer	
Comments	

This page is intentionally blank

APPENDIX A - IMPACT ASSESSMENT

- 1. PERSONNEL RESOURCES REQUIRED. This new task will require the designation of at least one unit rescue climber at the junior or senior petty officer level to manage the unit's PQS program and serve as the unit's competent person per ref. (b). Each CG operational command with an Aids to Navigation (ATON) structure climbing mission should assign at least one such petty officer and be designated in writing. The required number of basic or advanced level climbers per unit will depend on several factors. These include but are not limited to the number of personnel and ATONs assigned to a unit, the height of a unit's ATON structures, the number of crewmembers willing to work at heights, and the preference of the unit's commanding officer or officer in charge. At a minimum, and depending on the structure's height, each ATON structure being climbed requires one basic or advanced level climber and one rescue level climber or advanced climber safety observer. ATON structure climbing is a long established mission, and as such, no new resources are being provided for this task.
- 2. TRAINING REQUIRED. The member(s) that a unit deems competent to serve the roles of a rescue climber or the unit's competent person will attend the National Aids to Navigation School (NATON) ATON Structure Climber course, ANC-ASC, Course Code 501850. Units that don't perform ATON missions but provide support (i.e. CEU, WOPL, and District's) must work directly with CG-NAV-1 for a waiver to attend outside training and approval before their command certifies a member to climb ATON Structures. Unit level basic and advance level climbers will be qualified utilizing this PQS. The certifications contained in this PQS include a six month currency maintenance program that must be completed by each member in order to maintain their current assigned level of certification. It is intended that the currency maintenance program for basic, advanced, advanced safety observers, and rescue level currency climbs be completed in the course of normal operations and as such should not add additional work days to the typical ATON operational unit. Currency maintenance requirements for the unit's rescue climbers include actual rescues of either another certified climber or an appropriately weighted manikin. Given the level of risk when performing rescues from heights, rescue climber currency maintenance requirements must be completed in a training environment. It would be expected that the rescue climber currency maintenance requirements would add 2 to 3 additional work days per year to a unit's schedule.
- 3. <u>FUNDING</u>. Funding needed to complete this new task is expected to be insignificant and will be absorbed within existing funding bases. This is a one-time expense.



This page is intentionally blank