



**CTN CAREER PATH**  
(IW/EXW/SW/AW)



Cryptologic Technicians Networks (CTN). CTNs employ tactical and strategic capabilities to plan, develop, and execute offensive and defensive Cyberspace Operations; perform Cyber Defense, Digital Forensics, Network Exploitation, Research and Development, and Cyber Planning; leverage tactical and strategic signals intelligence and cryptologic functions; produce and execute cyber effects; identify and report worldwide threats in support of special operations forces, and national, fleet, and joint requirements; and control and safeguard access to classified material and information systems.

| <b>YEARS OF SERVICE</b> | <b>CAREER MILESTONES</b>       | <b>AVERAGE TIME TO PROMOTE</b>  | <b>COMMISSIONING OR OTHER SPECIAL PROGRAMS</b> | <b>SEA/ShORE FLOW</b> | <b>TYPICAL CAREER PATH DEVELOPMENT</b>   |
|-------------------------|--------------------------------|---------------------------------|--|-----------------------|--|
| 26-30                   | CTNCM                          | 21.9 Yrs                        |  | Not Defined           | 8 <sup>th</sup> CONUS/OCONUS<br><b>Billets:</b> Cyber Planner, TECHAD, NIWDC, CSEL.<br><b>Duty:</b> Cyber Mission Force, NIOC, NCDOC, NCWDG, DEVGRU, IWTC, Naval Special Warfare SEL, Fleet Staff.   |
| 23-26                   | CTNCM<br>CTNCS<br>CTNC         | 21.9 Yrs<br>15.4<br>11.1        | CSEL   | Not Defined           | 7 <sup>th</sup> CONUS/OCONUS<br><b>Billets:</b> Staff Duty (ie. 2 <sup>nd</sup> /3 <sup>rd</sup> /5 <sup>th</sup> /6 <sup>th</sup> /7 <sup>th</sup> /10 <sup>th</sup> Fleets/Echelon II/III), DIRSUP LCPO, CSEL, DEPT LCPO, Cyber Planner, Directorate SEL, TECHAD, Detailer, JCAC Manager, CTN "A" School LCPO, Cyber Planner, FIRES, NIWDC, Rate Training Lead.<br><b>Duty:</b> Cyber Mission Force, NIOC, NSA/CSS, NCDOC, DCO Afloat, Embarked Staff, IWTC, NCWDG, DEVGRU, Naval Special Warfare.<br><b>Qualification:</b> SEA, Interactive Operator Training (H13A/14A/15A/16A), SOF Operator (H17A), DNA (H11A), EA (H12A), Cyberspace Planner (H29A), DCOA (H30A), APO (H31A), ANO (H32A), STRATCOM Joint Network Attack Course (No NEC). Instructor, DCO Watch Officer (No NEC). Battle Watch Captain (No NEC). |
| 20-23                   | CTNCM<br>CTNCS<br>CTNC<br>CTN1 | 21.9 Yrs<br>15.4<br>11.1<br>7.7 | CSEL, MACO, CNO Intern Program                 | Not Defined           | 6 <sup>th</sup> CONUS/OCONUS<br><b>Billets:</b> Staff Duty (ie. 2 <sup>nd</sup> /3 <sup>rd</sup> /5 <sup>th</sup> /6 <sup>th</sup> /7 <sup>th</sup> /10 <sup>th</sup> Fleets/Echelon II/III), DIRSUP LCPO, CSEL, DEPT LCPO, Cyber Planner, Directorate SEL, TECHAD, Detailer, JCAC Manager, CTN "A" School LCPO, Cyber Planner, FIRES, NIWDC, Rate Training Lead.<br><b>Duty:</b> Cyber Mission Force, NIOC, NSA/CSS, NCDOC, DCO Afloat, Embarked Staff, IWTC, NCWDG, DEVGRU, Naval Special Warfare.<br><b>Qualification:</b> SEA, Interactive Operator Training (H13A/14A/15A/16A), SOF Operator (H17A), DNA (H11A), EA (H12A), Cyberspace Planner (H29A), DCOA (H30A), APO (H31A), ANO (H32A), STRATCOM Joint Network Attack   |



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|-------------------------|--------------------------|--------------------------------|---|-----------------------|---|
|                         |                          |                                |   |                       | Course (No NEC). Instructor, DCO Watch Officer (No NEC). Battle Watch Captain (No NEC).   |
| 16-20                   | CTNCS<br>CTNC<br>CTN1    | 15.4 Yrs<br>11.1<br>7.7        | CWO, CSEL, MACO, CNO Intern Program                                 | Not Defined           | 5 <sup>th</sup> CONUS/OCONUS<br><b>Billets:</b> Staff Duty (ie. 2 <sup>nd</sup> /3 <sup>rd</sup> /5 <sup>th</sup> /6 <sup>th</sup> /7 <sup>th</sup> /10 <sup>th</sup> Fleets/Echelon II/III), DIRSUP LCPO, CSEL, DEPT LCPO, Cyber Planner, Directorate SEL, TECHAD, Detailer, JCAC Manager, CTN "A" School LCPO, Cyber Planner, FIRES, Rate Training Lead.<br><b>Duty:</b> Cyber Mission Force, NIOC, NSA/CSS, NCDOC, DCO Afloat, Embarked Staff, IWTC, NCWDG, DEVGRU, Naval Special Warfare.<br><b>Qualification:</b> SEA, Interactive Operator Training (H13A/14A/15A/16A), SOF Operator (H17A), DNA (H11A), EA (H12A), Cyberspace Planner (H29A), DCOA (H30A), APO (H31A), ANO (H32A), STRATCOM Joint Network Attack Course (No NEC). Instructor, DCO Watch Officer (No NEC). Battle Watch Captain (No NEC). |
| 12-16                   | CTNC<br>CTN1<br>CTN2     | 11.1 Yrs<br>7.7<br>3.3         | LDO, CWO, OCS, MECP, Cyber Warrant (CWO1), MACO, CNO Intern Program | Not Defined           | 4 <sup>th</sup> CONUS/OCONUS<br><b>Billets:</b> Div LCPO, LPO, Cyber Planner, JCU and JCIE, Staff, Instructor, Joint Staff, Navy Staff.<br><b>Duty:</b> Cyber Mission Force, NIOC, NSA/CSS, NCDOC, DCO Afloat, NCWDG, DEVGRU, Naval Special Warfare, JCU and JCIE.<br><b>Qualification:</b> Interactive Operator Training (H13A/14A/15A/16A), SOF Operator (H17A), DNA (H11A), EA (H12A), Cyberspace Planner (H29A), DCOA (H30A), APO (H31A), ANO (H32A), STRATCOM Joint Network Attack Course (No NEC). Instructor, DCO Watch Officer (No NEC). Battle Watch Captain (No NEC).   |



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|-------------------------|--------------------------------------|--------------------------------|---|-----------------------|---|
| 8-12                    | CTNC<br>CTN1<br>CTN2                 | 11.1 Yrs<br>7.7<br>3.3         | LDO, Cyber Warrant (CW01), OCS, MECP, STA-21, OCS, MECP, MACO, CNO Intern Program | Not Defined           | 3 <sup>rd</sup> CONUS/OCONUS<br><b>Billets:</b> Div LCPO, LPO, Cyber Planner, JCU and JCIE, Staff, Instructor, Joint Staff, Navy Staff.<br><b>Duty:</b> Cyber Mission Force, NIOC, NSA/CSS, NCDOC, DCO Afloat, NCWDG, DEVGRU, Naval Special Warfare, JCU and JCIE.<br><b>Qualification:</b> Interactive Operator Training (H13A/14A/15A/16A), SOF Operator (H17A), DNA (H11A), EA (H12A), Cyberspace Planner (H29A), DCOA (H30A), APO (H31A), ANO (H32A), STRATCOM Joint Network Attack Course (No NEC). Instructor, DCO Watch Officer (No NEC). Battle Watch Captain (No NEC). |
| 4-8                     | CTN1<br>CTN2<br>CTN3                 | 7.7 Yrs<br>3.3<br>0.7          |   | Not Defined           | 2 <sup>nd</sup> CONUS/OCONUS<br><b>Billets:</b> JCU and JCIE, Staff, Instructor, Joint Staff, Navy Staff.<br><b>Duty:</b> Cyber Mission Force, NIOC, NSA/CSS, NCDOC, DCO Afloat, NCWDG, DEVGRU, Naval Special Warfare, JCU and JCIE.<br><b>Qualification:</b> Interactive Operator Training (H13A/14A/15A/16A), SOF Operator (H17A), DNA (H11A), EA (H12A), DCOA (H30A), APO (H31A), ANO (H32A), STRATCOM Joint Network Attack Course (No NEC). Instructor, DCO Watch Officer (No NEC).   |
| 1-4                     | CTN2<br>CTN3                         | 3.3 Yrs<br>0.7                 | Naval Academy, NROTC  | Not Defined           | 1 <sup>st</sup> CONUS<br><b>Duty:</b> Cyber Mission Force, NIOC, NSA/CSS, NCDOC, DCO Afloat, NCWDG<br><b>Qualification:</b> Interactive Operator Training (H13A/14A/15A/16A), DNA (H11A), EA (H12A), DCOA (H30A), APO (H31A), ANO (H32A).   |
| 1+/-                    | CTNSN<br>CTNSA<br>Accession Training | 9 Months                       |   |                       | Recruit Training/Student CTN "A" School (Joint Cyber Analysis Course - JCAC).   |

Notes:



## CTN CAREER PATH (IW/EXW/SW/AW)



1. Cryptologic Technicians (Networks) (CTN) plan, develop, and execute offensive and defensive Cyberspace Operations; perform Analysis, Cyber Defense, Digital Forensics, Network Exploitation, Threat Emulation, Research and Development, Direct Support Operations, and Cyber Planning in support of national, fleet, and joint requirements.
2. The CTN rating was established February 2004 and the first CTN selectees were rated October 1<sup>st</sup> 2004. CTN is an “A” School (JCAC) required rating. The “A” school JCAC was established in Oct 2009. Sailors designated as CTN prior to 2009 are designated 0000 and not required to attend JCAC.
3. CTN does NOT follow a Sea/Shore Flow (SSF) construct. CTNs can also retour in the same command due to heavy shore billet base, timing and operational priority of billets established; all CONUS tours will be 48-month tours. CTN NECs have historically reflected progressive skill sets earned as one grows from an Apprentice, Journeyman, and to a Mastery level. Typically, CTN will transfer between Cyber Mission Forces (CMF), Navy Information Operations Command (NIOC), Navy Cyber Warfare Development Group (NCWDG), Naval Computer Defense Operations Center (NCDOC), Naval Special Warfare, and DIRSUP Commands. All notes in this paragraph SHALL NOT be a limiting factor for selection / non-selection of the next higher paygrade.
4. CTN is one of seven ratings for the Information Warfare Community. Additionally, while on an operational shore tour or with Naval Special Warfare, DEVGRU, Joint Communications Unit (JCU) and Joint Communications Integration Element (JCIE), Navy Expeditionary Intelligence Command (NEIC) may accrue extensive deployment days supporting Overseas Contingency Operations and may have the opportunity to qualify EXWS.
5. NECs are: Joint Cyber Analysis Course “A” school (H10A), Digital Network Analyst (H11A), Exploitation Analyst (H12A), Interactive Operator (H13A-H16A), Special Operations Forces Offensive Cyberspace Operator (H17A), Cyberspace Planner (H29A), Defensive Cyberspace Operations Analyst (H30A), Adversarial Pursuit Operator (H31A), and Access Network Operator (H32A).
6. CTNs with NECs H13A-H16A and H17A complete a rigorous training pipeline and considered highly training Network Operators. Sailors with NECs H13A-H16A are required to complete a minimum of two consecutive Interactive On-Net (ION) Operator tours. CTNs with NEC 771B (NSW TIO Operator) are assigned to Naval Special Warfare Development Group (DEVGRU) and Special Reconnaissance Teams (SRT). Assignment as a NSW TIO Operator incurs a five (5) year commitment. Sailors completing the qualification requirements for awarding of these NECs serve in a performance-based mission area and may not support traditional opportunities due to operational requirements and shall not be a limiting factor for selection / non-selection of the next paygrade.
7. DEVGRU, SRTs, Joint Communications Integration Element (JCIE), Joint Communication Unit (JCU), White House Communications Agency (WHCA) are to be considered career enhancing tours. These special programs require CTNs to be selectively screened and detailed. Subsequent tours within these special programs should not be looked at unfavorably. Those Sailors that are re-toured are placed in leadership billets commensurate at or above their current paygrade.
8. Emphasis should be placed on Sailors in the CTN rating who have clearly demonstrated mission expertise and mission leadership in their rating under their given scope of responsibilities. A career path that has solely focused on traditional leadership positions that have not demonstrated mission impact should not be weighed as heavily.



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### **Considerations for advancement from E6 to E7**

- Should show strong documented technical and operational knowledge, as well as leadership as Team Leader, Mission Supervisor, Mission Planner, Rating Detailer, Program Manager, or Instructor
- Should have success in a high profile position for paygrade, i.e. LPO, Mission Supervisor, DCOWO, Instructor, or other key leadership positions
- Master Training Specialist / Afloat Training Specialist (MTS/ATS) and Enlisted Warfare Qualifications are expected when available at commands with extra consideration for additional warfare qualifications. Those serving in a National instructor capacity should qualify Adjunct Faculty or Faculty Certification
- Should have Command or Assistant Command Collateral Duties with successful impact to the command
- Should have FCPOA leadership or strong involvement
- Should have Sailor 360 involvement and leading a committee

### **Considerations for advancement from E7 to E8**

- Should show strong documented technical and operational knowledge and successful leadership in billet assigned
- Should have success in a high profile position for paygrade, i.e. LCPO, Instructor, or other key senior leadership command positions
- Should have documented successful impact to CTN rating (e.g. Rating Strategy Council, OCCSTDS, MPT, AERR)
- Master Training Specialist / Afloat Training Specialist (MTS/ATS) and Enlisted Warfare Qualifications are expected when available at commands with extra consideration for additional warfare qualifications. Those serving in a National instructor capacity should qualify Adjunct Faculty or Faculty Certification
- Should have Command or Assistant Command Collateral Duties with documented successful impact
- Should have CPOA leadership or strong influential involvement
- Should have Sailor 360 and CPO Initiation involvement and leading a committee

### **Considerations for advancement from E8 to E9**

- Should show strong documented technical and operational knowledge and successful leadership in billet assigned
- Should have success in a high profile position for paygrade, i.e. Directorate SEL, Team NCOIC, Department LCPO, Senior Rating Detailer, OPS Chief or other key leadership positions
- Should have documented successful impact to CTN rating (e.g. Rating Strategy Council, OCCSTDS, MPT)
- Master Training Specialist / Afloat Training Specialist (MTS/ATS) and Enlisted Warfare Qualifications are expected when available at commands with extra consideration for additional warfare qualifications. Those serving in a National instructor capacity should qualify Adjunct Faculty or Faculty Certification
- Should have Command or Assistant Command Collateral Duties with documented successful impact
- Should have CPOA leadership or strong influential involvement
- Should have Sailor 360 and CPO Initiation involvement and leading a committee