

**BY ORDER OF THE COMMANDER  
AIR COMBAT COMMAND**

**AIR COMBAT COMMAND MANUAL  
17-2TNO, VOLUME 2**



**24 MAY 2024**

**Cyberspace Operations**

**TELEPHONY NETWORK OPERATIONS (TNO)  
- STANDARDIZATION/EVALUATION  
PROGRAM**

**COMPLIANCE WITH THIS PUBLICATION IS MANDATORY**

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This publication implements DAFPD 17-2, *Cyber Warfare Operations*. It establishes the minimum AF standards for training and qualifying/certifying personnel for performing offensive cyberspace Telephony Network Operations (TNO) crewmember duties. This publication applies to all Air Combat Command (ACC) Regular Air Force, AF Reserve, Air National Guard (ANG), and third party governmental and contract support agencies in accordance with (IAW) appropriate provisions contained in memoranda, support agreements and AF contracts. This publication does not apply to the United States Space Force. ACC, as lead command for cyberspace, will conduct all lead command functions in accordance with DAFMAN 90-161, *Publishing Processes and Procedures*, and subsequent guidance. Ensure all records generated as a result of processes prescribed in this publication adhere to AFI 33-322, *Records Management and Information Governance Program*, and are disposed in accordance with the Air Force Records Disposition Schedule, which is located in the Air Force Records Information Management System. Refer recommended changes and questions about this publication on DAF Form 847, *Recommendation for Change of Publication*, through chain of command channels, to ACC Information Warfare Division (ACC/A3/2/6K). This publication may be supplemented at any level, but all Supplements must be routed to the OPR of this publication for coordination prior to certification and approval. The authorities to waive wing/unit level requirements in this publication are identified with a Tier ("T- 0, T-1, T-2, T-3") number following the compliance statement. See DAFMAN90-161, *Publishing Processes and Procedures*, for a description of the authorities associated with the Tier numbers. Waiver authority for non-tiered paragraphs remains with ACC Operations Directorate (ACC/A3). Submit requests for waivers through the chain of command to the appropriate Tier waiver approval authority.

***SUMMARY OF CHANGES***

This document has been revised and should be completely reviewed. Changes include 1) standardize the format and layout across all three volumes for readability; 2) improve the organization of chapters and content within each chapter; 3) clarify waiver authorities; 4) update position descriptions and associated duties; 5) further clarify position qualification standards; 6) update operational requirements and activities; and 7) update organizational and individual roles and responsibilities.

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## Chapter 1

### GENERAL INFORMATION

**1.1. Objectives.** The Telephony Network Operations (TNO) Crew Standardization and Evaluation (Stan/Eval) Program is the commander's tool to validate crewmember mission readiness and their effectiveness on live and simulated TNO missions, to include documentation of individual qualifications and capabilities.

**1.2. General.** This instruction establishes requirements and grading for all initial (INIT) and periodic TNO crewmember evaluations. All TNO cybercrew evaluations will be conducted IAW this publication and ACCI 17-202, Volume 2, *Cybercrew Standardization/Evaluation Program*, as supplemented. Specific areas of evaluation are prescribed to ensure an accurate assessment of the proficiency and capabilities of TNO crews. Roles and responsibilities for executing this publication are IAW ACCI 17-202V2. [**Note:** Keywords and Definitions related to this document can be found under [Attachment 1, Terms](#), of this document.]

**1.3. Waivers.** Process waivers IAW ACCI 17-202V2. Send copies of approved waivers to ACC Standards and Evaluations Branch (ACC/A3TV). Document waivers in Stan/Eval Board (SEB) minutes.

1.3.1. All waiver requests must include the following, as applicable:

1.3.1.1. Name, rank, crew position, type of evaluation, expiration date, and applicable portion of the publication (e.g., paragraph, Table).

1.3.1.2. Specific, detailed justification for waiver.

1.3.1.3. Specific, detailed unit plan of action.

**1.4. Supplements.** Units are encouraged to supplement this instruction with Stan/Eval profiles that best fit the unit's mission, equipment, and location. Operations Groups (OGs) will forward their supplements to ACC/A3TV for approval prior to publication. Units will forward one copy of each supplement to 16th Air Force Standardization and Evaluations Division (16AF/A34/7V) for prepublication review.

**1.5. Evaluation Procedures.** During the crew briefing, the evaluator will inform the crew commander of any special requirements. Stan/Eval Examiners (SEEs) will brief the examinee on the conduct, purpose, and requirements of the evaluation, as well as all applicable evaluation criteria, prior to mission execution. The examinee will accomplish all required mission planning as applicable to the position they are being evaluated on. If a Cyber Operator Planning Team accomplishes mission planning, the examinee is ultimately responsible for the accuracy and completeness of all mission-planning forms. The SEE should not occupy a primary crew position during evaluations to ensure the most comprehensive evaluation. If conditions warrant, however, the SEE may occupy a primary crew position during the evaluation if the crew is unable to complete a mission due to unforeseen complexity and crew lacks ability to complete mission. However, the SEE must ensure evaluations are given priority and only occupy a position on a mission when absolutely necessary.

1.5.1. SEEs will ensure all required training and documentation is complete prior to INIT/requalification (RQ) evaluations.

1.5.2. The examinee will be current for all event evaluations during a periodic evaluation. **(T-2)**

1.5.3. SEEs will thoroughly debrief/critique all aspects of the evaluation. During the critique, the SEE will review the examinee's overall rating, specific deviations, area/subarea grades assigned, and any additional training required.

1.5.4. All evaluations fall under the Qualification (QUAL), Mission (MSN) or Spot (SPOT) categories listed in ACCI 17-202V2.

1.5.4.1. Schedule all evaluation activities on one mission to the greatest extent possible. Performance phase requirements should be accomplished during live mission as much as possible.

1.5.4.2. During all evaluations, any events observed by the evaluator may be evaluated. If additional training is required for areas outside of the scheduled evaluation, document the training required under the appropriate area on the ACC Form 4418, *Certificate of Cybercrew Qualification*.

1.5.4.3. Written requisites and the grading criteria for various evaluations can be found at a higher classification. For copies of this material, requesters must contact the unit Security Office and unit Stav/Eval office.

1.5.4.4. Unit examiners may give evaluations outside of their organization to include administering evaluations between ACC, Air Force Reserve Command (AFRC) and ANG, provided written agreements/understandings between the affected organizations are in place. Written agreements/understandings will be reviewed and updated annually.

1.5.5. Momentary deviations from tolerances will not be considered in the grading, provided the examinee applies prompt corrective action and such deviations do not jeopardize safety or the mission, equipment, or personnel. Cumulative deviations will be considered when determining the overall grade. The SEE will state the examinee's overall rating, review with the examinee the area grades assigned, thoroughly critique specific deviations, and recommend/assign any required additional training.

1.5.6. Use evaluators as instructors for any phase of training for which they are qualified to capitalize on expertise and experience. SEEs will not evaluate students with whom they have instructed 50% of the qualification/upgrade training or those they recommend for qualification/upgrade evaluation without Squadron (SQ) Commander (CC) (SQ/CC) approval. Additionally, SEEs will not evaluate direct supervisors without SQ/CC approval.

1.5.7. All crewmembers of the mission (to include students, instructors, examinees, and evaluators) will participate in and adhere to all required mission planning, mission briefing, mission execution, and mission debriefing requirements.

**1.6. Grading Instructions.** SEEs will use the grading policies contained in ACCI 17-202 V2, as supplemented, and the evaluation criteria in this instruction for conducting all performance evaluations. All evaluations assume a stable operator station (ops station) and normal operating conditions. To ensure standard and objective evaluations, SEEs will be thoroughly familiar with prescribed evaluation criteria prior to a hands-on exam for a qualification evaluation (INIT, periodic, or RQ), members will take a written exam (close, open, or both) and must score an 80% on the written exam to pass per ACCI 17-202V2.

1.6.1. Standards and performance parameters are contained in ACCI 17-202V2 and this publication. A three-level grading system (Q/Q-/U) is used for most areas; however, a “Q-” grade will not be indicated under critical areas. The three-level grading system is part of a larger overall score. As stated in ACCI 17-202V2, crewmembers may be graded on an overall score of EQ, Q1, Q2, or Q3. Exceptionally Qualified (EQ) is given to members who have demonstrated exceptional skill in all phases of an evaluation on par with a seasoned operator. EQ examinees have also scored with a near perfect written exam missing no more than a single question. For Q1 and Q2, an examinee must have scored at least an 80% on the written exam. However, Q1 hands-on mistakes can be debriefed without additional training, while members receiving a Q2 require training in minor areas. Examinees receiving a Q3 demonstrated an unacceptable level of safety, performance, or knowledge in major or critical area. Additionally, a member receiving a score of less than 80% on the written exam will receive a Q3. Examinees scoring Q3 require significant re-training in order to be reevaluated.

#### 1.6.2. Area/Subarea Grades.

1.6.2.1. Q. “Q” indicates the examinee demonstrates both a satisfactory knowledge of all required information and performed cybercrew duties within prescribed tolerances.

1.6.2.2. Q-. “Q-” indicates the examinee is qualified to perform the assigned area/subarea tasks, but requires debriefing or additional training as determines by the SEE. Deviations must not exceed “Q-” tolerances or jeopardize safety.

1.6.2.3. U. “U” indicates that performance was outside allowable parameters, thereby compromising mission or safety.

1.6.3. Critical Areas. Critical areas require adequate accomplishment by the examinee in order to successfully and safely achieve the mission objectives and complete the evaluation. These events, if not adequately accomplished could result in mission failure, endanger human life, or cause serious injury or death. Additionally, critical areas apply to time-sensitive tasks or tasks that must be accomplished as expeditiously as possible without any intervening lower priority actions that would, in the normal sequence of events, adversely affect task performance/outcome. If an examinee receives a “U” grade in any critical area, the overall grade for the evaluation will also be unqualified, “Q3.” Critical areas are identified by “(C)” following the applicable area title.

1.6.4. Major Area. Major areas are events or tasks deemed integral to the performance of other tasks and required to sustain acceptable weapon/mission system operations and mission execution. Major areas are identified by “(M)” following the applicable area title. **(T-3)**

1.6.5. Minor Area. Minor areas are rudimentary or simple tasks to weapon/mission system operations that by themselves have little or no effect on mission execution. Minor areas are identified by “(m)” following the applicable area title.

1.6.6. If an examinee receives a “U” grade in a non-critical (major or minor) area, then the overall grade awarded will be no higher than “Q2.” An examinee receiving a “Q-” grade in any non-critical areas may still receive a “Q1” overall grade at evaluator discretion. An overall “Q3” can be awarded if, in the judgment of the SEE, there is justification based on performance in one or several areas.

1.6.7. The SEE must exercise judgment when the working of areas is subjective and when specific situations are not covered.

1.6.8. Evaluator judgment will be the final determining factor in deciding the overall qualification level.

**1.7. Evaluation Requirements.** Evaluation profiles will reflect a sampling of the unit's missions. Evaluation tables are provided to summarize evaluation areas. Areas common to all crewmembers are contained in **Table 2.1**. Instructor evaluation areas are in **Table 3.1**. Evaluation areas unique to each crew position are located in their respective chapter. Each crew position-specific chapter defines required events for that crew position. For any areas noted below, SEEs may evaluate at their discretion if observed. If required events are not observed, then the evaluation is incomplete and will be accomplished in another evaluation. If a required event cannot be accomplished, the SEE will place a restriction on the ACC Form 4418, as applicable. SQs will design and maintain evaluation profiles. Evaluation profiles will be approved by the Cyber Operation Group (COG) Stan/Eval office (OGV) and will outline the minimum number and type of events to be performed and observed in order to satisfy a complete evaluation. Evaluation profiles will incorporate requirements set in the applicable grading criteria and reflect the primary unit tasking.

1.7.1. Simulator. Training Systems will be certified by ACC/A3/2/6KO prior to use for TNO crewmember evaluations. Simulator certifications will be located on the ACC/A3/2/6KO Joint Worldwide Intelligence Communications System (JWICS) Confluence site. **(T-2)**

1.7.2. Publications Check. OGV will list all required publications for employment of TNO mission systems.

1.7.3. Written Examinations. The written examination will be accomplished prior to the performance phase unless in conjunction with a No-Notice (N/N) QUAL. **(T-3)**

1.7.4. Emergency Procedures (EP). Every Qualification evaluation, which updates an expiration date, will include EP. EP will evaluate the crewmember's knowledge and performance of EP.

1.7.5. Qualification (QUAL) Evaluations. These evaluations measure a crewmember's ability to meet graded areas listed in unit Operating Instructions (OI) IAW ACCI 17-202V2 and mission system-specific guidance. When practical, QUAL evaluations, should be combined with Instructor evaluations, as applicable for the crew position.

1.7.6. Mission (MSN) Evaluations. IAW ACCI 17-202V2 and mission system-specific guidance, the requirement for a separate MSN evaluation may be combined with the QUAL evaluation. Mission certifications will be IAW ACCI 17-202V2, this publication, and all applicable supplements and will be documented in the appropriate training folder. For crewmembers who maintain multiple mission certifications, periodic evaluations need only evaluate the primary mission events as long as currency is maintained in all other required training events. **(T-3)**

1.7.7. Instructor Evaluations. Grading areas for these evaluations are contained in this ACCMAN and must meet all requirements from ACCI 17-202V2 and mission system-specific guidance.

1.7.8. SEE Objectivity Evaluations. Grading areas for these evaluations are contained in this manual and must meet all requirements from ACCI 17-202V2 and mission system- specific guidance.

1.7.9. N/N Evaluations. The Operations Group Commander (OG/CC) will determine N/N evaluation procedures/goals.

1.7.10. SPOT Evaluations. These evaluate a specific criteria or requirement without intending to satisfy the requirements of a periodic evaluation and/or an INIT evaluation. They are most often used to re-evaluate a failed area during a MSN evaluation.

1.7.11. Alternate Method. When it is impossible to evaluate an area due to equipment malfunctions, operational requirements, scheduling restrictions, etc., the area may be evaluated via verbal examination unless noted in **Chapter 2** or the crew position-specific chapter. If in the SEE's judgment, an item cannot be adequately evaluated through verbal examination, complete the evaluation via live mission or simulator when the limiting factor is mitigated. The SEE will document in the comments section of the ACC Form 4418 which portions of the evaluation were conducted via verbal examination.

1.7.12. Additional Training. SEEs are responsible for assigning additional training, at their discretion. Document additional training and completion IAW ACCI 17-202V2.

1.7.13. Requalification (RQ). RQ should be administered by a SEE other than the one who administered the original evaluation.

1.7.14. Special Qualifications. Special qualification evaluations are administered for events that are not universal to all members in a particular crew position. Special qualification evaluations may be conducted separately or in conjunction with QUAL/MSN evaluations. There are no requisites for special mission qualifications unless specified.

## Chapter 2

### CREW POSITION EVALUATIONS AND GRADING CRITERIA

**2.1. General.** The grading criteria contained in this chapter apply to evaluations for TNO capability crew commanders, operators, and operations technicians. These criteria were derived from experience, policies, and procedures set forth in weapon/mission system manuals and other directives. Evaluators must realize that grading criteria contained herein cannot accommodate every situation. Written parameters must be tempered with mission objectives and, more importantly, mission/task accomplishment in the determination of overall cybercrew performance. Requirements for each evaluation are as follows:

#### **2.2. Qualification Evaluations.**

2.2.1. Written Examination Requisites will be detailed at the unit's discretion.

2.2.2. Emergency Procedures Evaluations (EPE) will be detailed at the unit's discretion.

2.2.3. Performance Phase: The SEE will follow a pre-planned script/scenario (evaluation profile) to evaluate a member and ensure standardization and consistency of the Evaluation Process.

2.2.4. Crew Resource Management (CRM). CRM skill will be evaluated during INIT and periodic evaluations. CRM skills are integral to successful TNO mission system employment and mission area proficiency. However, no specific area titled "CRM" exists.

2.2.4.1. CRM skills are embedded within the specific grading criteria; mission planning, situational awareness, crew coordination, communication, risk management/decision-making, task management, and debriefing, and include all of the skills listed on AF Form 4031, *CRM / TEM Skills Criteria Training/Evaluation Form*. AF Form 4031 will not be used for evaluations.

**2.3. General Crew Position Evaluation Criteria.** Areas 1 through 14 are common to all crew positions and will be used for all applicable evaluations.

#### 2.3.1. AREA 1, Mission Planning (M):

2.3.1.1. Q. Led or contributed to mission planning efforts IAW procedures prescribed in applicable guidance manuals, instructions, and directives. Planning adequately addressed mission objectives and/or tasking. Plan adequately considered intelligence information, weapon/mission system capability/operating status, and crew composition/ability with minor errors/deviations/omissions that did not negatively affect mission effectiveness. Verified review of all Cybercrew Information File (CIF) Volume 1, Part B items and complied with Go/No-Go procedures prior to mission start. Was prepared at briefing time.

2.3.1.2. Q-. Errors/deviations/omissions had minor impact on mission effectiveness or efficiencies but did not negatively affect mission accomplishment or jeopardize mission success.

2.3.1.3. U. Failed to lead mission-planning effort adequately. Failed to review CIF and/or comply with Go/No-Go procedures. Failure to comply with procedures prescribed in applicable guidance manuals, instructions, and directives contributed to significant

deficiencies in mission execution/accomplishment. Failed to lead or participate in all required briefings and/or planning meetings without appropriate approval.

#### 2.3.2. AREA 2, Positional Changeover Brief (M):

2.3.2.1. Outgoing crewmember prepared and conducted a comprehensive positional changeover briefing with the oncoming crewmember IAW checklist(s) and applicable directives. Reviewed factors, conditions, and the current operational and tactical situation for all executing packages, missions, etc., with the oncoming crewmember and ensured items necessary for the effective conduct of tasked missions were understood by the oncoming crewmember. Minor errors/deviations/omissions did not negatively affect mission effectiveness. Oncoming crewmember was attentive and asked questions as applicable to ensure mission effectiveness/accomplishment.

2.3.2.2. Q-. Outgoing crewmember prepared and conducted a positional changeover briefing with minor errors/deviations/omissions using checklist(s) and applicable directives. Changeover briefing anomalies had minor impact on mission effectiveness but did not jeopardize mission success. Oncoming crewmember's level of attentiveness during changeover led to minor mission impact but did not jeopardize overall mission success.

2.3.2.3. U. Outgoing crewmember failed to prepare and conduct an effective positional changeover briefing with the oncoming crewmember and/or failed to use appropriate checklist(s) and applicable directives. Changeover briefing contained errors/deviations/omissions that could have significantly detracted from mission effectiveness and/or jeopardized mission success. Oncoming crewmember's lack of attentiveness and/or inadequate requests for clarification could have significantly detracted from mission effectiveness and/or jeopardized mission success.

#### 2.3.3. AREA 3, Safety (C):

2.3.3.1. Q. Aware of and complied with all factors required for safe operations and mission accomplishment.

2.3.3.2. U. Was not aware of safety factors or disregarded procedures to safely operate and conduct the mission. Conducted unsafe actions that jeopardized mission accomplishment and/or put crewmembers at risk of injury or death. Operated in a manner that could or did result in damage to the weapon/mission system or equipment.

#### 2.3.4. AREA 4, Emergency Procedures and Equipment (C):

2.3.4.1. Q. Recognized emergency situations or malfunctions and immediately demonstrated and explained appropriate response actions. Demonstrated or explained thorough knowledge of location and proper use of emergency equipment. Demonstrated or explained effective coordinated emergency actions with other crewmembers without delay or confusion. Followed appropriate checklists as required. [**Note:** Crew Commander is responsible for inspecting and verifying the required contents of the emergency kit.] Minor errors did not affect efficiencies in addressing the emergency. (This area may be evaluated orally.)

2.3.4.2. U. Failed to recognize emergency situations or malfunctions. Failed to demonstrate/explain proper response actions. Failed to demonstrate or explain knowledge of location or proper use of emergency equipment or checklists. Failed to demonstrate and

explain coordinated emergency actions with other crewmembers. Checklist errors, omissions, and deviations contributed to ineffective actions or exacerbating an emergency situation or malfunction.

#### **2.3.5. AREA 5, Crew Discipline (C):**

2.3.5.1. Q. Demonstrated strict professional crew discipline throughout all phases of the mission. Led or supported (based on crew position) the planning, briefing, execution, and debriefing of the mission IAW applicable instructions and directives.

2.3.5.2. U. Failed to demonstrate strict professional crew discipline during any phase of the mission. Violated or failed to comply with applicable instructions and directives, which jeopardized safety of crewmembers or mission accomplishment.

#### **2.3.6. AREA 6, Situational Awareness (C):**

2.3.6.1. Q. Conducted the mission with a sense of understanding/comprehension and in a timely, efficient manner. Anticipated situations, which would have adversely affected the mission and made appropriate decisions based on available information. Maintained overall good situational awareness. Recognized temporary loss of situational awareness in self or others and took appropriate action to regain awareness without detracting from mission accomplishment or jeopardizing safety.

2.3.6.2. U. Decisions or lack thereof resulted in failure to accomplish the assigned mission. Demonstrated poor judgment or lost situational awareness to the extent that safety and/or mission accomplishment was compromised.

#### **2.3.7. AREA 7, Mission Checks / Checklist Procedures (M):**

2.3.7.1. Q. Performed all mission/operations checks as required. Efficiently located and accomplished checklists in a proficient and timely manner. Adequately ensured, determined, and/or verified weapon/mission system operational state and cybercrew readiness prior to on-watch period or entering tasked vulnerability period. Ensured crew understanding of most up-to-date tasking(s) prior to on-watch or vulnerability period execution. Deviated from checklists and/or omitted steps only when appropriate and was able to substantiate justification. Minor errors/deviations/omissions did not detract from mission efficiencies nor jeopardize mission success. During post-mission activities, accomplished and/or supervised timely post-mission checks, system shutdown procedures, and workstation cleanup IAW applicable checklists, guidance, and directives.

2.3.7.2. Q-. Same as qualified, except minor errors/deviations/omissions detracted from mission efficiencies but did not jeopardize overall mission success. During post-mission activities, minor deviations, errors, and/or omissions were observed, but did not adversely impact mission effectiveness, cause damage to systems/equipment, or risk safety of others.

2.3.7.3. U. Did not perform mission/operations checks or monitor systems to the degree that an emergency/unsafe condition would have developed or damage to equipment would have occurred if allowed to continue uncorrected. Failed to determine/verify weapon/mission system operational state and cybercrew readiness prior to on-watch period or entering tasked vulnerability period. Unable to locate the appropriate checklist, used incorrect checklist, or consistently omitted checklist items without substantiated justification. Excessive delay in completing required checklist and resulted in jeopardizing

mission success during the mission. During post mission activity, major deviations, errors, and/or omissions were made resulting in jeopardizing mission effectiveness, caused equipment damage, and/or endangered others.

#### **2.3.8. AREA 8, Crew Coordination (M):**

2.3.8.1. Q. Effectively coordinated with other crewmembers during all phases of the mission enabling efficient, well-coordinated actions. Demonstrated basic knowledge of other crewmembers' duties and responsibilities. Proactively provided direction and/or information to the crew; communicated in a clear and effective manner, actively sought other crewmember opinions and/or ideas, and asked for or gave constructive feedback as necessary.

2.3.8.2. Q-. Some breakdowns in communication but did not detract from overall mission success. Limited in basic knowledge of other crewmembers' duties and responsibilities. Unclear communication at times caused confusion and/or limited crew interaction. Some unnecessary prompting required from other crewmembers.

2.3.8.3. U. Severe breakdowns in coordination resulted in mission failure or jeopardized safety of crewmembers. Lacked basic knowledge of other crewmember's duties and responsibilities. Unclear/lack of communication or excessive prompting required by crewmembers put mission and/or safety of others at risk.

#### **2.3.9. AREA 9, Task Management (M):**

2.3.9.1. Q. Assured mission success by correctly identifying, prioritizing, and managing tasks based on existing and new information. Used available resources to manage workload and requested assistance when required. Effectively identified contingencies and solutions. Minor errors/omissions but did not result in inefficiencies nor jeopardize mission success.

2.3.9.2. Q-. Minor omissions and/or errors (which did not affect safety of crewmembers) led to mission inefficiencies but did not jeopardize mission accomplishment. Limited use of available resources to aid decision-making, manage workload, and/or slow to request assistance from other crewmembers when needed.

2.3.9.3. U. Failed to identify, prioritize, or manage tasks leading to possible unsafe conditions or significant risk to mission accomplishment. Inability to identify contingencies, ineffective decision-making, or errors/omissions placed mission accomplishment and/or safety of others at risk.

#### **2.3.10. AREA 10, Employment Timing (M):**

2.3.10.1. Q. Effectively met mission timing requirements. Any deviation from scheduled timings did not impact mission objectives.

2.3.10.2. Q-. Minor deviation from mission timing requirements. Deviations had minimal effect on mission objectives.

2.3.10.3. U. Major deviations from mission timing requirements. Deviations had severe impact on mission objectives.

#### **2.3.11. AREA 11, Systems Knowledge/Operations (M):**

2.3.11.1. Q. Demonstrated thorough knowledge of weapon/mission system components (e.g., equipment, console, applications, tools, and/or software), performance characteristics, employment, and operating procedures. Employed appropriate tactics, techniques, and procedures (TTPs) and made adjustments as necessary throughout all phases of the mission. Correctly identified and applied proper action(s) for system component equipment malfunctions. Followed all applicable system component operating directives, guides, manuals, checklists, etc.

2.3.11.2. Q-. Minor deficiencies or errors resulted in inefficiencies, but performance was sufficient to accomplish the mission safely. Did not damage system/components/equipment.

2.3.11.3. U. Demonstrated severe lack of knowledge of weapon/mission system components/equipment, limitations, performance characteristics, employment or operating procedures. Unable to apply TTPs to accomplish the mission adequately. Failed to identify malfunctions and/or apply corrective actions. Failed to follow system/equipment operating directives, guides, manuals, etc., resulting in unsatisfactory employment. Poor procedures/errors resulted in damage to system components/equipment or jeopardized mission failure.

#### 2.3.12. AREA 12, Communication (M):

2.3.12.1. Q. Timely and effective communication with external agencies and/or mission partners when required. Concise and accurate information passed using proper medium, terminology, format and/or brevity. Sound understanding and use of crew position relevant voice, email, chat, and collaborative tools to communicate mission essential information. Demonstrated a thorough understanding of Communications Security (COMSEC)/Operational Security (OPSEC) procedures.

2.3.12.2. Q-. Minor errors/deviations/omissions in communications with external agencies and/or mission partners that did not detract from overall mission accomplishment. Limited understanding and use of crew position-relevant voice, email, chat, and collaborative tools. Demonstrated limited understanding of COMSEC/OPSEC procedures with minor errors or deviations that did not jeopardize mission accomplishment.

2.3.12.3. U. Severe breakdowns in communication with external agencies and/or mission partners resulted in mission ineffectiveness/failure or jeopardized safety of others. Unclear/inaccurate information passed or improper/inadequate use of medium, terminology, format, and/or brevity put mission accomplishment at risk. Significant COMSEC/OPSEC errors or deviations jeopardized mission accomplishment.

#### 2.3.13. AREA 13, Risk Management/Decision-Making (M):

2.3.13.1. Q. Crewmember appropriately assessed and mitigated risk in the decision-making process. Crewmember identified, planned, briefed, and executed alternative mission activity in response to real-time contingencies in a timely manner after appropriately weighing the risk versus the mission priority.

2.3.13.2. Q-. Crewmember was slow to or made minor error in assessing and mitigating risk in the decision-making process. Inability to identify, plan, brief or execute alternative

mission activities in response to contingencies degraded mission effectiveness but did not result in mission failure.

2.3.13.3. U. Crewmember failed to assess and mitigate risk in the decision-making process. Failed to make or participate in crew decisions or withheld information that would have corrected an unsafe condition or mitigated mission failure.

**2.3.14. AREA 14, Reports/Logs/Forms (m) (This area may be evaluated orally.) :**

2.3.14.1. Q. Recognized all situations meeting reporting criteria. When required, provided timely, accurate, and correctly formatted reports (e.g., Mission Summary (MISUM)) or inputs to mission-related information management portals/collaborative information sharing environments. All required logs [e.g., Master Station Log (MSL)], media and forms were complete, accurate, legible, and accomplished on time and IAW with applicable directives, tasking, and policy. Information was provided in sufficient detail to allow accurate and timely analysis of associated data. Complied with security procedures and directives.

2.3.14.2. Q-. Minor errors/ deviations/omissions/latency on required reports, logs, media, or forms led to minor inefficiencies but did not affect conduct of the mission. Complied with security procedures and directives.

2.3.14.3. U. Failed to recognize situations meeting reporting criteria and/or failure to report events essential to mission accomplishment. Major errors/deviations/omissions/latency in accomplishing logs, reports/inputs, media, or forms precluded effective mission accomplishment or analysis of mission data. Failed to comply with security procedures and directives.

**Table 2.1. General Crew Position Requirements.**

| AREA/TITLE                                      | Category  | Crew Position |    |
|---|-----------|---------------|----|
|   | C, M, m   | CC            | CO |
| 1. Mission Planning                             | M         | R             | R  |
| 2. Positional Changeover                        | M, Note 1 | R             | R  |
| 3. Safety                                       | C         | R             | R  |
| 4. Emergency Equipment / Procedures             | C         | R             | R  |
| 5. Crew Discipline                              | C         | R             | R  |
| 6. Situational Awareness                        | C         | R             | R  |
| 7. Mission Checks/Checklist Procedures          | M         | R             | R  |
| 8. Crew Coordination                            | M         | R             | R  |
| 9. Task Management                              | M         | R             | R  |
| 10. Employment Timing                           | M         | R             | R  |
| 11. System Knowledge Operations                 | M         | R             | R  |
| 12. Communication                               | M         | R             | R  |
| 13. Risk Management/Decision-Making             | M         | R             | R  |
| 14. Reports/Logs/Forms                          | m         | R             | R  |
| C – critical; M – major; m – minor; R –Required |           |               |    |
| <b>Notes:</b>                                   |           |               |    |
| 1. Applicable for shift/crew changeovers.       |           |               |    |

**2.4. Crew Commander Specific Evaluation Criteria.** The following evaluation grading criteria are common to the Crew Commander crew positions and will be used for all applicable evaluations:

**2.4.1. AREA 15, Briefing (M):**

2.4.1.1. Q. Led or contributed to briefing effort as appropriate. Well organized and presented in a logical sequence, appropriate timeframe, and professional manner. Effectively incorporated briefing/training aids and presented all training events and effective techniques required for accomplishing the mission. [**Note:** Upgrade positions must also include briefed CIFs and crew Go/No-Go status.] Crewmembers clearly understood roles, responsibilities, and mission requirements. Minor errors/omissions/deviations did not negatively affect mission effectiveness or efficiencies.

2.4.1.2. Q-. Led or contributed to briefing effort with minor errors, omissions, or deviations. Some events out of sequence with some unnecessary redundancy. Briefing anomalies had minor impact on mission effectiveness but did not jeopardize mission success.

2.4.1.3. U. Inadequate leadership or participation in briefing development and/or presentation. Disorganized and/or confusing presentation. Ineffective use of briefing/training aids. [**Note:** Upgrade positions must also include failed to brief required topics/discussion areas prescribed in directives. Failed to present major training events. Failed to brief required and crew Go/No-Go status.] Errors/omissions/deviations affected crew ability to accomplish the mission. Absent from briefing (whole or in-part) without appropriate supervisor approval.

**2.4.2. AREA 16, Mission Management (M):**

2.4.2.1. Q. Assured mission success by accurately identifying, effectively prioritizing, and efficiently managing mission tasks based on planned and updated information. Identified contingencies, gathered data, and formulated decisions. Clearly communicated task priorities and updates to crewmembers. Used available resources necessary to manage workload, monitor crew activity, and aid in decision-making.

2.4.2.2. Q-. Minor omissions and/or errors, which did not affect safety of crewmembers or effective mission accomplishment. Limited use of available resources to aid decision-making, manage workload, and/or communicate task priorities/updates to other crewmembers.

2.4.2.3. U. Failed to identify, prioritize, or manage mission tasks leading to possible unsafe conditions or significant risk to mission accomplishment. Improperly or unable to identify contingencies, gather data, or communicate decisions putting mission accomplishment and/or safety of others at risk. Failed to communicate task priorities/updates to crewmembers or adequately monitor crew activity.

**2.4.3. AREA 17, Dynamic/Time Sensitive Targeting (M):**

2.4.3.1. Q. Effective coordination with outside agencies and timely contract execution resulted in prompt employment/engagement IAW the Rules of Engagement (ROE), given restrictions or tactical situation.

2.4.3.2. Q-. Although remaining IAW ROE, minor errors caused delayed contract execution or less than optimal coordination with outside agencies resulted in delayed employment/engagement.

2.4.3.3. U. Major errors delayed or prevented contract execution and/or resulted in employment/engagement failure. Employment/engagement was outside the ROE, given restrictions, or tactical situation.

**2.4.4. AREA 18, Debrief (M):**

2.4.4.1. Q. Thoroughly debriefed the mission and/or contributed to the briefing content to ensure it included all pertinent items. [Note: Evaluated for upgrade positions only: Reconstructed operational events, compared results with initial objectives for the mission, debriefed deviations, and provided individual crewmember feedback as appropriate. Organized IAW guidance/directives and professionally presented in a logical sequence using available briefing aids. Summarized lessons learned and ensured they were documented.] Provided crew commander/operations controller with applicable input on all required mission/crew/system-related events, including mission log/report/database information for inclusion in the crew debrief. Used applicable checklist(s) as required. Minor errors/omissions/deviations did not negatively affect mission effectiveness or efficiencies.

2.4.4.2. Q-. Led or contributed to debriefing effort with minor errors, omissions, and deviations. Some events out of sequence with some unnecessary redundancy. Briefing or input anomalies had minor impact on mission effectiveness but did not jeopardize mission success.

2.4.4.3. U. Inadequate leadership or participation in briefing development and/or presentation. [**Note:** Evaluated for upgrade positions only: Disorganized and/or confusing presentation. Ineffective use of briefing/training aids. Failed to reconstruct operational events, compare results with initial objectives for the mission, debrief deviations, and/or offer corrective guidance as appropriate.] Absent from briefing (whole or in-part) without appropriate supervisor approval. Errors, omissions, or deviations jeopardized mission success.

**Table 2.2. Crew Commander Position-Specific Requirements.**

| AREA/TITLE                        | Category |    |
|-----------------------------------|----------|----|
|                                   | C, M, m  | CC |
| 15. Briefing                      | M        | R  |
| 16. Mission Management            | M        | R  |
| 17. Dynamic/Time Sensitive Target | M        | R  |
| 18. Debrief                       | M        | R  |

## Chapter 3

### INSTRUCTOR EVALUATIONS AND GRADING CRITERIA

**3.1. General.** The instructor grading criteria apply to INIT, RQ, and periodic instructor evaluations. The examinee must demonstrate the ability to instruct in a safe and effective manner. To maintain Instructor qualification, instructors will demonstrate instructional ability on all periodic evaluations.

**3.2. Requirements.** Instructors must maintain qualification in all areas they will instruct. Instructor evaluations may be stand-alone evaluations or accomplished in conjunction with periodic evaluations. A RQ instructor evaluation is required anytime an instructor is unqualified for any reason to include commander-directed downgrades.

**3.3. Instructor Upgrade and Qualification Requisites.** Prior to an initial Instructor Evaluation, Instructor examinees must have completed all requisites for Instructor upgrade consideration, nomination and training IAW ACCI 17-202, Volume 1, *Cybercrew Training*; ACCMAN 17-2TNO, Volume 1, *Telephony Network Operations (TNO) - Cybercrew Training*, and all applicable supplemental guidance. **(T-2)**

**3.4. Instructor Qualification Evaluations.** Periodic Instructor evaluations will be combined with periodic QUAL evaluations to the greatest extent possible. **(T-3)** Instructor evaluations can only be combined with QUAL evaluations when the examinee is in their periodic QUAL eligibility period.

3.4.1. INIT Instructor evaluations should be conducted with a student occupying the applicable TNO crew position whenever possible. Recurring or periodic Instructor Evaluations may be conducted with the SEE role-playing as the student.

3.4.2. The instructor examinee will monitor all phases of the mission from an advantageous position and be prepared to demonstrate or explain any area or procedure. The SEE will particularly note the instructor's ability to recognize student difficulties and provide effective, timely instruction and/or corrective action. The SEE should also evaluate the grade assigned and the completed grade sheet or event training form for the student on all initial instructor checks.

3.4.3. The student will perform those duties prescribed by the instructor for the mission being accomplished. If an actual student is not available, the SEE will identify to the examinee (prior to the mission) the level of performance to be expected from the SEE acting as the student. If this option is utilized, at least one event or briefing must be instructed.

3.4.4. The examinee must occupy the primary duty position per the minimum requirements outlined in ACCMAN 17-2TNO, Vol 1, Paragraph 5.3.2 to demonstrate proficiency in the crew position with required qualification evaluations. All instructor evaluations will include a pre-mission and post-mission briefing.

3.4.5. Awarding a "U" in any of the Instructor Grading Criteria areas will result in a Q-3 for the overall instructor grade. The overall grade for the instructor portion of the evaluation will be no higher than the lowest overall grade awarded under QUAL.

3.4.6. Instructor Evaluation Grading Criteria. All Instructor Evaluation Criteria must be observed and graded to ensure complete evaluations. The following general evaluation grading criteria are common to all crew positions used for all applicable instructor evaluations:

**3.4.6.1. AREA 19, Instructional Ability (M):**

3.4.6.1.1. Q. Demonstrated ability to communicate effectively. Provided appropriate corrective guidance when necessary. Planned ahead and made timely decisions. Correctly analyzed student errors.

3.4.6.1.2. Q-. Minor discrepancies in the above criteria that did not adversely affect student progress.

3.4.6.1.3. U. Unable to communicate with the student effectively. Did not provide corrective action where necessary. Did not plan ahead or anticipate student problems. Incorrectly analyzed student errors. Adversely affected student progress.

**3.4.6.2. AREA 20, Instructional Briefings/Critique (M):**

3.4.6.2.1. Q. Briefings were well organized, accurate, and thorough. Reviewed student's present level of training and defined mission events to be performed. Demonstrated ability during critique to reconstruct the mission, offer mission analysis, and provide corrective guidance where appropriate. Completed all training documents according to prescribed directives. Appropriate grades awarded.

3.4.6.2.2. Q-. As above but with minor errors or omissions in briefings, critique, or training documents that did not adversely affect student progress.

3.4.6.2.3. U. Pre-mission or post-mission briefings were marginal or nonexistent. Did not review student's training folder or past performance. Failed to critique student adequately or conducted an incomplete mission analysis, which compromised learning. Student strengths or weaknesses were not identified. Adversely affected student progress. Inappropriate grades awarded. Overlooked or omitted major discrepancies.

**3.4.6.3. AREA 21, Demonstration and Performance (M):**

3.4.6.3.1. Q. Effectively demonstrated all normal and emergency procedures and techniques. Demonstrated thorough knowledge of weapon/mission system, components, procedures, and all applicable publications and regulations.

3.4.6.3.2. Q-. Minor discrepancies in the above criteria that did not adversely affect student progress.

3.4.6.3.3. U. Did not demonstrate correct procedure or technique. Insufficient depth of knowledge about weapon/mission system/components, procedures, or proper source material. Adversely affected student progress.

**Table 3.1. Instructor Grading Areas (All Crew Positions).**

| AREA/TITLE                                       | Category |
|--|----------|
|  | C, M, m  |
| 19. Instructional Ability                        | M        |
| 20. Instructional Briefings / Critique           | M        |
| 21. Demonstration and Performance                | M        |
| C – critical; M – major; m – minor; R – required |          |

**3.4.7. Instructor Evaluation Documentation.** Instructor Qualification Evaluations will be documented as a SPOT evaluation on the ACC Form 4418 and ACC Form 4420, *Individual's Record of Duties and Qualifications*. Evaluations will be maintained in the member's cybercrew qualification folder IAW ACCI 17-202V2. Applicable higher headquarters supplements and local supplemental guidance also apply. Additional Instructor Evaluation documentation are as follows:

3.4.7.1. Upon the successful completion of an Instructor Qualification Evaluation, units will ensure the crewmembers instructor status is reflected on the Letter of Certifications.

3.4.7.2. Upon the expiration of a qualification or failure of an Instructor Qualification Evaluation, units will ensure the crewmembers instructor status is reflected on the Letter of Certifications.

DAVID G SHOEMAKER, Major General, USAF  
Director of Operations

**Attachment 1****GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION*****References***

ACCI 17-202V1, *Cybercrew Training*, 12 January 2021

ACCI 17-202V2, *Cybercrew Standardization/Evaluation Program*, 12 January 2021

ACCMAN 17-2TNOV1, *Telephony Network Operations (TNO) - Cybercrew Training*, 24 May 2024

AFI 33-322, *Records Management and Information Governance Program*, 23 March 2020

DAFMAN 90-161, *Publishing Processes and Procedures*, 18 October 2023

DAFPD 17-2, *Cyberspace Warfare Operations*, 27 October 2020

***Prescribed Forms***

None

***Adopted Forms***

ACC Form 4418, *Certificate of Cybercrew Qualification*

ACC Form 4420, *Individual's Record of Duties and Qualifications*

AF Form 4031, *CRM/TEM Skills Criteria Training/Evaluation*

DAF Form 847, *Recommendation for Change of Publication*

***Abbreviations and Acronyms***

**ACC**—Air Combat Command

**ACCI**—Air Combat Command Instruction

**ACCMAN**—Air Combat Command Manual

**AFRC**—Air Force Reserve Command

**ANG**—Air National Guard

**CC**—Commander

**CCC**—Cyber Crew Commander

**CIF**—Cybercrew Information File

**COG**—Cyberspace Operations Group

**COMSEC**—Communications Security

**CRM**—Crew Resource Management

**EP**—Emergency Procedures

**EPE**—Emergency Procedures Evaluation

**EQ**—Exceptionally Qualified  
**HQ**—Headquarters  
**IAW**—In Accordance With  
**INSTR**—Instructor  
**INIT**—Initial Qualification  
**IQT**—Initial Qualification Training  
**JWICS**—Joint Worldwide Intelligence Communications System  
**MAJCOM**—Major Command  
**MISUM**—Mission Summary  
**MQT**—Mission Qualification Training  
**MSL**—Master Station Log  
**MSN**—Mission Qualification  
**N/N**—No-Notice Qualification  
**OG**—Operations Group  
**OG/CC**—Operations Group Commander  
**OGV**—Operations Group Standardization/Evaluation  
**OI**—Operating Instructions  
**ops station**—Operations Station  
**OPSEC**—Operational Security  
**QUAL**—Qualification  
**ROE**—Rules of Engagement  
**RQ**—Requalification  
**SEB**—Standardization and Evaluation Board  
**SEE**—Stan/Eval Examiner  
**SPOT**—Spot Evaluation  
**SQ**—Squadron  
**Stan/Eval**—Standardization and Evaluation  
**TTP**—Tactics, Techniques, and Procedures

*Office Symbols*

**16AF/A34/7V**—16th Air Force Standardization and Evaluations Division  
**ACC/A3/2/6K**—ACC Information Warfare Division  
**ACC/A3**—ACC Operations Directorate

ACC/A3TV—ACC Standards and Evaluations Branch

### *Terms*

**Airmanship**—A crewmember’s continuous perception of self and weapon/mission system/mission equipment in relation to the dynamic environment of operations, threats, and tasking, and the ability to forecast and execute tasks based on that perception.

**Commendable**—An observed exemplary demonstration of knowledge and/or or noteworthy ability to perform by the examinee in a particular graded area/subarea, tactic, technique, procedure, and/or task.

**Compliance Language**—Terminology defined as follows:

- Will—Indicate a mandatory requirement.
- Should—Indicates a preferred, but not mandatory, method of accomplishment.
- May—Indicates acceptable or suggested means of accomplishment.
- Normally—Indicates under normal or usual conditions, as a rule.
- Note:—Indicates operations procedures, techniques, etc., considered essential to emphasize.

**Cyber Crew Commander (CCC)**—Cyberspace operator qualified to perform crew commander duties.

**Deficiency**—Demonstrated level of knowledge or ability to perform is inadequate, insufficient, or short of meeting required or expected proficiency.

**Deviation**—Performing an action not in sequence with current procedures, directives, or regulations. Performing action(s) out of sequence due to unusual or extenuating circumstances is not considered a deviation. In some cases, momentary deviations may be acceptable; however, cumulative deviations will be considered in determining the overall qualification level.

**Discrepancy**—Any observed deviations/errors/omissions, individually or cumulative, that detracts from the examinee’s performance in obtaining a Q for a particular grading area/subarea.

**Error**—Departure from standard procedure. Performing incorrect actions or recording inaccurate information.

**Stan/Eval Examiner (SEE)**—A crewmember designated to administer evaluations.

**Inadequate**—Lack or underutilization of available crew aids or resources to make operational and tactical decisions effectively/efficiently, gain/maintain situational awareness, or accomplish a task.

**Inappropriate**—Excessive reliance on crew aids/other resources or utilizing a crew aid/ resource outside its intended use.

**Instructor**—Crewmember trained, qualified, and certified by the squadron commander as an instructor to perform crew training.

**Instructor Supervision**—When a current instructor, who is qualified in the same crew position, supervises a maneuver or training event.

**Letter of X’s**—This document serves as the commander’s tool to track specialized training. The letter of x’s is not a source document for certifications and qualifications; it is a display of information found in the source documents.

**Major (deviation/error/omission)**—Detracted from task accomplishment, adversely affected use of equipment, or violated safety.

**Minor (deviation/error/omission)**—Did not detract from task accomplishment, adversely affect use of equipment, or violate safety.

**Omission**—The leaving out of a required action or annotation.

**Supervised Training Status**—Crewmember will perform weapon/mission system duties under instructor supervision as designated by the squadron commander or evaluator.