

**BY ORDER OF THE  
SECRETARY OF THE AIR FORCE**

**AIR FORCE INSTRUCTION 13-1AD VOLUME 3**

**12 JUNE 2009**

**Space, Missile, Command, and Control**

**AIR DEFENSE COMMAND AND CONTROL  
OPERATIONS**



---

**COMPLIANCE WITH THIS PUBLICATION IS MANDATORY**

---

**ACCESSIBILITY:** Publications and forms are available on the e-Publishing website at [www.e-Publishing.af.mil](http://www.e-Publishing.af.mil) for downloading or ordering.

**RELEASABILITY:** There are no releasability restrictions on this publication.

---

OPR: HQ USAF/A3O-AYO  
Supersedes: AFI 13-1AD Volume 3, 1 April 2000

Certified by: USAF/A3O (Maj Gen Gibson)  
Pages: 77

---

This instruction implements policy found in AFD 13-1, Theater Air Control System. This instruction provides guidance for the Air Defense System elements of the Continental United States (CONUS), PACOM (Korea, Japan, Alaska, and Hawaii). This instruction applies to the United States Air Force (USAF), Air National Guard (ANG), and Canadian forces assigned. This instruction does not apply to Air Force Reserve Command or Air Education Training Command (AETC) but may be used by AETC Units as reference. Reference to forms within this instruction also equates to electronic products when authorized. The reporting requirement in this directive is exempt from licensing in accordance with paragraph 2.11.1 in AFI 37-124, The Information Collections and Reports Management Program: Controlling Internal, Public, and Interagency Air Force Information Collections. Send comments and suggested improvements to this publication on AF Form 847, Recommendation for Change of Publication, through channels, to HQ ACC/A3Y, 205 Dodd Blvd, Suite 101, Langley AFB VA 23665-2789. This instruction is affected by the Paperwork Reduction Act of 1974 as Amended in 1996. Records Management. Ensure that all records created as a result of processes prescribed in this publication are maintained in accordance with AFMAN 33-363, *Management of Records*, and disposed of in accordance with the Air Force Records Disposition Schedule (RDS) located at <https://afrims.amc.af.mil/>.

**SUMMARY OF CHANGES**

This instruction has been completely revised and rewritten to reflect the evolving Air Defense Operational environment. While this instruction does not imply or infer any manpower growth, it must be completely reviewed due to numerous operational changes. Among the changes include revised crew positions, descriptions, procedures, and reporting structures. Chapters were incorporated for Korean Theater Air Control System, US Forces Japan (USFJ)-Japan Air Defense System (JADS), and Air Defense Data Reporting. The Mission, Continental United States Region Air Operations Center (CONUS RAOC). and Puerto Rico Operations Center (PROC) chapters were deleted.

**Chapter 1—INTRODUCTION 5**

1.1. General. .... 5

1.2. Threat Environment. .... 5

1.3. Purpose. .... 5

1.4. Supplements/Waiver Authority. .... 5

**Chapter 2—CONUS AIR DEFENSE SECTOR BATTLE CONTROL CENTER (BCC) 7**

2.1. Mission. .... 7

2.2. BCC Organization. .... 7

2.3. BCC Battle Staff (BS) .... 7

2.4. Battle Staff Composition. .... 7

2.5. Battle Control Center (BCC) Mission Crew. .... 10

**Chapter 3—HAWAII REGION AIR OPERATIONS CENTER (HIRAOC) 25**

3.1. Mission. .... 25

3.2. Organization. .... 25

3.3. Battle Staff .... 25

3.4. Battle Staff Composition. .... 25

3.5. Battle Control Center (BCC) Mission Crew. .... 27

3.6. Degraded Control Environment. .... 33

**Chapter 4—ALASKA BATTLE CONTROL CENTER (ABCC) 34**

4.1. Mission. .... 34

4.2. Organization .... 34

4.3. Command and Control. .... 34

4.4. Battle Control Center (BCC) Mission Crew. .... 34

**Table 4.1. Mission Crew Positions 34**

4.5. Crew Manning .... 35

4.6. Common Mission Crew Duties and Responsibilities. .... 35

4.7. Mission Crew Commander .... 35

4.8. Mission Crew Commander Technician .... 37

4.9. Emergency Action Coordinator .... 38

4.10. Weapons Section .... 38

4.11. Air Picture Management. .... 42

4.12. Simulation .... 48

4.13. ABCC Degraded Radar Procedures: .... 48

4.14.	Radar Configuration .....	48
4.15.	Radar Configuration Changes .....	48
<b>Chapter 5—The Korean Theater Air Control System</b>		<b>50</b>
5.1.	Mission .....	50
5.2.	Organization .....	50
5.3.	Information Flow/Responsibilities. ....	50
5.4.	Operational .....	51
5.5.	Manning. ....	56
<b>Table 5.1.</b>	<b>Contingency /Armistice Manning (Total assumes 3 crews) .....</b>	<b>56</b>
<b>Chapter 6—JAPAN AIR DEFENSE SYSTEM (JADS)</b>		<b>57</b>
6.1.	Mission. ....	57
6.2.	Organization. ....	57
6.3.	610th Air Control Flight (ACF). ....	57
6.4.	623 rd Air Control Flight. ....	57
<b>Table 6.1.</b>	<b>Administrative Control (ADCON)/Peacetime Chain of Command. ....</b>	<b>58</b>
6.5.	Tactical Control Operations Team. ....	58
<b>Table 6.2.</b>	<b>Operational Control (OPCON) Chain Of Command. ....</b>	<b>60</b>
6.6.	Mission Crew Commander (MCC) (13B3C). ....	60
6.7.	Mission Crew Commander Technician (MCCT) (1C571/D). ....	61
6.8.	Senior Director (SD) (13B3C). ....	61
6.9.	Senior Director Technician (SDT) (1C551/D). ....	61
6.10.	Missile Assignment Officer (MAO). ....	61
6.11.	Intelligence (IN) Support. ....	62
6.12.	Weapons Control Element (WCE). ....	62
6.13.	Weapons Director/Air Weapons Officer (WD/AWO) .....	62
6.14.	Weapon Director Technician (WDT) (1C5X1/D) .....	62
6.15.	Steady State .....	63
<b>Table 6.3.</b>	<b>TCOT/WCE Steady State Manning Requirements. ....</b>	<b>63</b>
6.16.	BADGE System Equipment. The majority of .....	63
6.17.	Communications Recording. ....	64
6.18.	Air Defense Liaison Element (ADLE). ....	64
<b>Chapter 7—DOCUMENTATION</b>		<b>66</b>
7.1.	General .....	66

7.2. Operations Instructions (OIs) ..... 66

7.3. Operations Information File (OIF). ..... 66

7.4. Logbooks: ..... 66

7.5. Voice Recording, Retrieval and Storage. .... 68

7.6. Data Recording ..... 68

7.7. COMSEC Requirements. .... 68

7.8. BCC Checklists ..... 68

7.9. Quick Reference Guides (QRG). ..... 68

7.10. Disposition of Documentation. .... 69

7.11. Prescribed and Adopted Forms. .... 69

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

## Chapter 1

### INTRODUCTION

**1.1. General.** This instruction describes the tactical-level procedures and organization for providing air defense of the North American Air Defense Command (NORAD) and Pacific Command (PACOM) areas of responsibility. Headquarters Air Combat Command (HQ ACC) organizes, trains, and equips the United States Theater Air Control System (USTACS) elements for the air defense of the Continental United States. HQ PACAF organizes, trains, equips, and supports operations for the air defense of Alaska, Hawaii, Guam, Republic of Korea, and Japan.

**1.2. Threat Environment.** America and our deployed forces confront a greater diversity of threats and challenges than ever before. The traditional, strategic nuclear threat to our deployed forces and Homeland remains, but the terrorist threat to our forces has become the preeminent threat. The air threats include long-range military strategic aviation, commercial aircraft, (airliners, charter, cargo, and business jets), unconventional aircraft (general aviation aircraft, crop dusters, unmanned aerial vehicles, and ultra lights), and cruise missiles (internally and externally carried, air and sea launched). Combatant Commanders employ Theater Air Control System (TACS) elements to combat these air threats.

**1.3. Purpose.** This instruction standardizes the structure, functions, and responsibilities for each of the ACC and PACAF TACS elements listed below.

1.3.1. CONUS Air Defense Sector (ADS). The CONUS Air Defense Sectors are Air National Guard, self-sustaining, geographically separated elements of the USTACS. The Air Defense Sectors are responsible to the NORAD Commander through the Continental NORAD Region (CONR) Commander for homeland defense, air defense, air sovereignty and aerospace warning and control of their assigned areas of operation.

1.3.2. Alaskan Battle Control Center (ABCC). The ABCC, an Air National Guard element, is responsible to the NORAD Commander through the Alaska NORAD Region (ANR) Commander for homeland defense, air defense, air sovereignty, and aerospace warning and control of their assigned area of operation.

1.3.3. Hawaii Region Air Operations Center (HIRAOC). The HIRAOC, an Air National Guard element, is responsible to the PACOM Commander through the Area Air Defense Commander (AADC) for homeland defense, air defense, air sovereignty, and aerospace warning and control of their assigned area of operation.

1.3.4. Korean Theater Air Control System (KTACS). US and Korean TACS elements are responsible to the Commander Air Component Command (CACC) for planning, directing, and coordinating the execution of military air operations throughout the Republic of Korea (ROK).

1.3.5. Japan Air Defense System (JADS). Government of Japan retains the sovereign responsibility for peacetime air defense of Japan. Agreements between the US and Japan dictate that command and control of military forces will be exercised through separate national structures. Tactical Control Operations Teams (TCOT) and the Air Defense Liaison Element (ADLE) are USAF TACS elements that collocate with key JASDF elements of the JADS to maximize bilateral contingency and wartime air operations.

**1.4. Supplements/Waiver Authority.**

1.4.1. All proposed supplements to this instruction will be submitted through channels to USAF/A3O- AYOB OPR for approval.

1.4.2. Waivers.

1.4.2.1. Waiver authority for requirements contained in this instruction rests with USAF/A3O-AYOB unless otherwise specified.

1.4.2.2. Requests for waivers must contain a complete explanation of why the waiver is required and corrective actions to be taken.

1.4.2.3. All waivers for ACC/PACAF/USAFE consideration will be forwarded through channels to the applicable MAJCOM.

## Chapter 2

### CONUS AIR DEFENSE SECTOR BATTLE CONTROL CENTER (BCC)

**2.1. Mission.** The CONUS NORAD Region (CONR) has been subdivided into two geographic air defense sectors, East and West. Tactical execution of the defensive counter-air, interdiction, and counterdrug operations missions is the responsibility of the Air Control Squadrons (ACSs) that operate the respective BCCs. The BCCs fuse all-source sensor and intelligence data into a common operational air picture and disseminate integrated tactical warning information and attack assessments. BCCs maintain the capability to assume the mission of the adjacent sector, commonly called expansion operations. Sectors support AOC Continuation of Operations when directed or required for real-time execution.

**2.2. BCC Organization.** The weapon system employed by each of the CONUS air control groups is the BCC, as described in the ACC Enabling Concept for US Theater Air Control System Battle Control Center, dated 1 January 2005. The BCC is comprised of two separate, but complimentary elements; the Battle Staff and the Mission Crew. The Battle Staff (BS) functions as the conduit for the exchange of Command and Control (C2) information between the BCC and Higher Headquarters (HHQ). The Mission Crew (MC) performs the functions of Battle Management, Weapons Control, Surveillance, Identification and Tactical data link and airspace management. This chapter details the standardized organizational structure and positional responsibilities for the Battle Control Center.

**2.3. BCC Battle Staff (BS)** . The BS is a component of the BCC and is a complimentary element to the Mission Crew. Members of the Battle Staff are not separate personnel authorizations. Battle Staff members are dual-hatted members of the operations, mission support and Commander's staff. The Battle Commander (BC) may form the Battle Staff as necessary due to changes in the threat or directed missions from HHQ. The Battle Staff may be activated for an indefinite period of time and each Battle Staff position must be capable of sustained operations. The BC may also tailor and selectively man positions within the Battle Staff for specific operations. The Battle Staff is responsible for:

2.3.1. Executing homeland defense, air defense, and air sovereignty missions.

2.3.2. Prioritizing the employment of assets under BCC tactical control.

2.3.3. Translating the AOCs Operational-level plans [Joint Air Operations Plan (JAOP), air operations directive (AOD), air defense plan (ADP), airspace control plan (ACP), airspace control order (ACO), air tasking order (ATO), ATO special instructions (SPINS), tactical operations data (TACOPDAT), and Operations Task Link (OPTASKLINK)] into tactical-level orders for Mission Crew execution.

2.3.4. Coordination with the Mission Crew.

2.3.5. Disseminating tactical-warning and attack assessment information to the AOC.

2.3.6. Performing real-time battle management in support of the Mission Crew.

**2.4. Battle Staff Composition.** The BS may be tailored by the Commander to execute the assigned mission. Based on the mission tasking, the BS consist of any combination of:

- Battle Commander (BC),
- Fighter Officer (FO),
- Intelligence Officer (IN),
- Chief, Operations Control

- Emergency Action Coordinator (EAC),
- Battle Staff Coordinator (BSC),
- Weapons and Tactics Officer,
- Airspace Management Officer,
- Joint Asset Control Officer,
- Communications and Electronics Officer,
- Antiterrorism Officer,
- Chemical, Biological, Radiological, and Nuclear (CBRN) Officer

**NOTE:** The battle staff may require augmentation from outside the ACS (i.e. the Air Control Group).

2.4.1. Battle Commander (BC). The unit commander/Director of Operations or his/her designated representative will be the BC. In the absence of the commander, the succession to the commander list will be used. The BC is responsible for executing the mission through employment of the assigned forces. The BC is operationally responsible to AFNORTH for the centralized C4 of the ACS resources. The BC will:

2.4.1.1. Implement homeland defense, air defense, air sovereignty, and aerospace warning and control through employment of the forces assigned or made available.

2.4.1.2. Coordinate tactical action with HHQ and task appropriate assets through the Battle Staff to the Mission Crew.

2.4.1.3. Identify personnel and material requirements to accomplish the assigned mission

2.4.1.4. Exercise TACON of all Battle Staff members

2.4.2. Intelligence (IN). IN is responsible for maintaining a Contingency Intelligence Network (CIN) to perform contingency/wartime functions. IN will, as a minimum:

2.4.2.1. Provide tactical intelligence for both symmetric and asymmetric threats.

2.4.2.2. Interface between HHQ intelligence sources.

2.4.2.3. Translate operational intelligence assessments into tactical applications/executions.

2.4.2.4. Review intelligence data, characteristics, and capabilities of potential threats for the Commander.

2.4.2.5. Receive and relay reports and other intelligence items to HHQ and other organizations as required.

2.4.2.6. Maintain database and/or displays of potential U.S. targets, Centers of Gravity, and Critical Infrastructure

2.4.2.7. Maintain current situation maps, warning displays, local data bases, and intelligence resources.

2.4.2.8. Provide intelligence indications and warning and event reporting for tactical warning/attack assessment on traditional strategic and non-traditional asymmetric aerospace threats.

2.4.2.9. Prepare and present tailored, time sensitive intelligence threat updates, reports, threat analysis, and Situation Briefings for Operations personnel.

2.4.3. Chief, Operations Control. The Chief of Operations Control exercises Administrative Control (ADCON) of Mission Crews.

2.4.4. Emergency Action Coordinator (EAC). The EAC is responsible to the BC when the BS is formed and the EAC function is required. The EAC will:

- 2.4.4.1. Create, receive, validate, and disseminate EAMs and QRMs IAW NI 10-4.
- 2.4.4.2. Notify MCC/BC of received EAMs/QRMs.
- 2.4.4.3. Receive, disseminate, and report Status of Action (SOA) IAW NI 10-4.
- 2.4.4.4. Ensure EA display reflects current status.
- 2.4.4.5. Establish OPREP-3 conferences for the ACGs and subordinate Units (N/A for Alaska).
- 2.4.4.6. Maintain event logs.
- 2.4.4.7. Coordinate with HHQ, internal and external agencies.
- 2.4.4.8. Respond to White Pinnacle exercises.
- 2.4.4.9. Conduct daily NORAD Alert System (NAS) checks.
- 2.4.4.10. Control and use authenticators.

2.4.5. Battle Staff Coordinator (BSC). The BSC will:

- 2.4.5.1. Coordinate efficient flow of information within the BS.
- 2.4.5.2. Assist in the preparation and conduct of BS briefings.
- 2.4.5.3. Monitor and use messaging systems.
- 2.4.5.4. Maintain a log of significant events.
- 2.4.5.5. Prepare commander's daily SITREP.
- 2.4.5.6. Assist the Communications and Electronics Officer (CEO) in monitoring COMSEC.

2.4.5.7. Coordinate physical security for the BS.

- 2.4.5.8. Provide BS administrative support.

2.4.6. Weapons and Tactics Officer. The Weapons and Tactics Officer will:

- 2.4.6.1. Ensure Operations personnel are familiar with unit mission, tasking, and expected enemy threat.
- 2.4.6.2. Provide expertise in tactical mission planning and execution.

2.4.7. Airspace Management. Airspace Management Officer will:

- 2.4.7.1. Advise the BC on Emergency Security Control of Air Traffic (ESCAT) procedures.
- 2.4.7.2. Coordinate with HHQ for Airspace Control Measures and interface with FAA ARTCCs/ FAA Service Areas/ ATCSSC.
- 2.4.7.3. Coordinate real-time and short notice airspace requests.

2.4.8. Joint Asset Control Officer (JACO). The JACO is responsible for the execution of the Battle Control Center Interface Control Center (BICC) MTN data links in support of air defense, air sovereignty, Homeland Defense, and aerospace warning and control. The JACO advises the BS on

tactical employment and integration of joint assets under BCC TACON. The JACO controls and acts as the coordinating authority for the BICC and any subordinate link participants. The JACO will:

2.4.8.1. Advise Battle Commander (BC) on tactical employment of airborne early warning aircraft (AEW) assets, Air Defense Artillery (ADA), Ground Mobile Radar (GMR), Navy and Coast Guard Assets.

2.4.8.2. Monitor tasked platform and organic sensor limitations which may adversely impact mission execution.

2.4.8.3. Assess sensor and radio problems or outages with Communications and Electronics Officer (CEO) and recommend actions to alleviate any deficiencies in coverage through use of AEW, GMR, or other assets.

2.4.8.4. Monitor status of data link connectivity.

2.4.8.5. Coordinate AEW/GMR/Asset availability and TACON with the AOC.

2.4.8.6. Provide inputs to BSC for Sector Situation Report (SITREP).

2.4.9. Communications and Electronics Officer. The Communications and Electronics Officer is responsible for providing Communications, Computer, and Information systems within ACG facilities. This includes radios, radars, C4I systems, networks, telecommunications systems, satellite systems, and automation used in multiple classified and unclassified environments.

2.4.10. Antiterrorism Officer. The Antiterrorism Officer, in conjunction with the unit intelligence officer, is responsible for assessing the terrorist threat to the unit mission, personnel and facilities. The Antiterrorism Officer will:

2.4.10.1. Advise the Battle Commander on measures to mitigate the local terrorism threat and ACG-level vulnerabilities.

2.4.10.2. Report Antiterrorism and Force Protection Condition issues affecting BCC mission accomplishment to CONR AOC and AFNORTH Antiterrorism staffs.

2.4.11. Chemical, Biological, Radiological, and Nuclear (CBRN) Officer. The CBRN Officer will:

2.4.11.1. Disseminate tactical warning and attack assessments from enemy use of CBRN, nuclear power plant hazardous emissions, toxic industrial chemical, and hazardous material releases.

2.4.11.2. Assess impact on assigned or available forces and the unit's facilities.

2.4.11.3. Utilize the NORAD CBRN Warning and Reporting System, as directed in NORAD Instruction 10-22.

**2.5. Battle Control Center (BCC) Mission Crew.** The BCC Mission Crew is the focal point for operations. Supervised by a Mission Crew Commander (MCC), the Mission Crew is tasked to execute the mission on a continuous basis and is manned by a number of personnel, tailored to meet mission requirements. Some duty positions serve as prerequisites to others and these prerequisites are located AFI 13-1AD Volume 1. The mission crew consists of the following duty positions:

- Mission Crew Commander (MCC)
- Mission Crew Commander Technician (MCCT)
- Emergency Action Coordinator (EAC)

- Senior Director (SD)
- Senior Director Technician (SDT)
- Air Weapons Officer (AWO)
- Weapons Director (WD)
- Weapons Director Technician (WDT)
- Air Surveillance Officer (ASO)
- Air Surveillance Technician (AST)
- Tracking Technician (TT)
- Identification Technician (IDT)
- Interface Control Officer (ICO)
- Interface Control Technician (ICT)

2.5.1. Common Mission Crew Duties and Responsibilities. Each duty position has specific duties and responsibilities that are outlined in this chapter. The following duties and responsibilities are common to all mission crew duty positions. All mission crew members will:

- 2.5.1.1. Have working knowledge of applicable governing directives and agreements.
- 2.5.1.2. Comply with applicable governing directives and agreements.
- 2.5.1.3. Conduct internal and external communication and coordination.
- 2.5.1.4. Attend crew changeover brief.
- 2.5.1.5. Conduct thorough positional changeover briefs.
- 2.5.1.6. Perform sound security practices.
- 2.5.1.7. Conduct mission planning.
- 2.5.1.8. Conduct expansion procedures.
- 2.5.1.9. Conduct evacuation procedures.
- 2.5.1.10. Understand system capabilities and limitations to include weapons platforms and surveillance assets; apply to mission accomplishment.
- 2.5.1.11. Adhere to COMSEC/INFOSEC/OPSEC procedures to include "OPEN LINE/SECURE CALL" procedures.
- 2.5.1.12. Conduct console and communication system check-out.
- 2.5.1.13. Report malfunctioning equipment to section supervisor who, in turn, will pass information to Air Surveillance Officer or Air Surveillance Technician.
- 2.5.1.14. Report link issues to section supervisor who will, in turn, pass information to Interface Control Officer or Interface Control Technician.
- 2.5.1.15. Comply with guidance in positional checklists
- 2.5.1.16. Read and initial local information files prior to performing operational duties

2.5.2. Mission Crew Commander (MCC) (13B). The MCC is responsible to the Battle Commander for all operations execution and reporting within the BCC. In addition to the duties and responsibilities listed in paragraph 2.5.1 above, the MCC will:

- 2.5.2.1. Conduct changeover and exercise briefings.

- 2.5.2.2. Mission plan with the battle staff.
- 2.5.2.3. Ensure shift manning requirements are met.
- 2.5.2.4. Implement Force Protection Procedures.
- 2.5.2.5. Execute battle plans and OPORDs/CONPLANS.
- 2.5.2.6. Coordinate with applicable Search and Rescue (SAR) agency and request assistance as required.
- 2.5.2.7. Oversee effective air sovereignty, drug interdiction, and contingency operations.
- 2.5.2.8. Implement ROE.
- 2.5.2.9. Monitor Emergency Action board for accuracy and status changes.
- 2.5.2.10. Implement Dangerous Military Activity (DMA) procedures.
- 2.5.2.11. Apply applicable directives to include the Air Tasking Order (ATO), Airspace Control Order (ACO), exercise instructions, CONPLAN, Operating Instructions (OIs) (BCCUB), and Special Instructions (SPINS).
- 2.5.2.12. Oversee the interface with Airborne Early Warning (AEW) and external units via voice communications and data link.
- 2.5.2.13. Enforce Air Defense Identification Zone (ADIZ) procedures.
- 2.5.2.14. Monitor status of assets (sensors, links, and aircraft).
- 2.5.2.15. Initiate recall procedures when directed.
- 2.5.2.16. Ensure personnel safety.
- 2.5.2.17. Coordinate with HHQ, internal and external agencies.
- 2.5.2.18. Ensure safety of flight during all phases of the mission.
- 2.5.2.19. Determine mission capabilities and limitations of operational equipment and approve or disapprove maintenance.
- 2.5.2.20. Interpret weather information and coordinate accordingly.
- 2.5.2.21. Identify aircraft availability and allocate alert aircraft
- 2.5.2.22. Coordinate and implement actions to be taken during fire, bomb threat, and natural disaster situations.
- 2.5.2.23. Monitor status of fire alarm systems.
- 2.5.2.24. Summon medical assistance as required.
- 2.5.2.25. Summon assistance during duress/intruder situations.
- 2.5.2.26. Direct expansion procedures.
- 2.5.2.27. Direct evacuation procedures.
- 2.5.2.28. Notify HHQ of commander's availability and responsible individual.
- 2.5.2.29. Ensure response to White Pinnacle exercises.
- 2.5.2.30. Oversee track reporting procedures.

- 2.5.2.31. Implement aerostat breakaway/derelict airborne objects procedures.
- 2.5.2.32. Implement DEFCON procedures.
- 2.5.2.33. Report missile launches.
- 2.5.2.34. Recommend amber warning/flush bases.
- 2.5.2.35. Assume BS responsibilities when BS is not formed.
- 2.5.2.36. Scramble (when the BS is not formed). If BS is formed and time permits, recommend tactical action to BC or designated representative and keeps them informed of scramble/commit status.
- 2.5.2.37. Ensure fidelity drills are coordinated with HHQ.
- 2.5.2.38. Direct reclassification of tracks.
- 2.5.2.39. Ensure SITREP requirements are met.
- 2.5.2.40. Coordinate aircraft emergency procedures.

2.5.3. Mission Crew Commander Technician (MCCT) (1C591). The MCCT is responsible to the MCC for all operations execution and reporting within the BCC. The MCCT is responsible for the operational conduct of the enlisted personnel on the operations floor and will assist the MCC in the accomplishment of duties. In addition to the duties and responsibilities listed in paragraph 2.5.1 above, the MCCT will:

- 2.5.3.1. Conduct changeover briefing with the oncoming MCCT.
- 2.5.3.2. Maintain operations logbook/records.
- 2.5.3.3. Conduct operational reporting (OPREPs, etc.).
- 2.5.3.4. Operate communications equipment.
- 2.5.3.5. Make required Public Address (PA) announcements.
- 2.5.3.6. Implement Force Protection Procedures.
- 2.5.3.7. Coordinate with applicable SAR agency and request assistance as required.
- 2.5.3.8. Monitor Emergency Action board for accuracy and status changes.
- 2.5.3.9. Monitor asset status (sensors, links, and aircraft).
- 2.5.3.10. Ensure sound security practices.
- 2.5.3.11. Initiate recall procedures when directed.
- 2.5.3.12. Coordinate with HHQ, internal and external agencies.
- 2.5.3.13. Determine mission capability/impact of operational equipment and approve or disapprove maintenance.
- 2.5.3.14. Apply applicable directives to include the Air Tasking Order (ATO), Airspace Control Order (ACO), exercise instructions, CONPLAN, OIs, and Special Instructions (SPINS) prior to sitting on position.
- 2.5.3.15. Implement fire, bomb threat, and natural disaster actions.
- 2.5.3.16. Monitor status of fire alarm systems.

- 2.5.3.17. Summon medical assistance as required.
- 2.5.3.18. Monitor status of building security systems.
- 2.5.3.19. Summon assistance during duress/intruder situations.
- 2.5.3.20. Notify HHQ of ACG changes of command.
- 2.5.3.21. Ensure response to White Pinnacle exercises.
- 2.5.3.22. Perform track reporting procedures.
- 2.5.3.23. Assist in battle plan and OPORD/CONPLAN execution.
- 2.5.3.24. Implement DEFCON procedures.
- 2.5.3.25. Report missile launches.
- 2.5.3.26. Recommend amber warning/flush bases.
- 2.5.3.27. Monitor and use messaging systems.
- 2.5.3.28. Monitor safety of flight.
- 2.5.3.29. Ensure COMSEC inventory complete.

2.5.4. Emergency Action Coordinator (EAC) (1C571). The EAC is responsible to the MCC unless otherwise directed by the BC. In addition to the duties and responsibilities listed in paragraph 2.5.1 above, the EAC will:

- 2.5.4.1. Create, receive, validate, and disseminate EAMs and QRMs IAW NI 10-4
- 2.5.4.2. Notify MCC/BC of received EAMs/QRMs.
- 2.5.4.3. Receive, disseminate, and report Status of Action (SOA) IAW NI 10-4.
- 2.5.4.4. Ensure EA display reflects current status.
- 2.5.4.5. Establish OPREP-3 conferences for the ACG and subordinate Units (N/A for Alaska).
- 2.5.4.6. Maintain event logs.
- 2.5.4.7. Coordinate with HHQ, internal and external agencies.
- 2.5.4.8. Respond to White Pinnacle exercises.
- 2.5.4.9. Conduct daily NORAD Alert System (NAS) checks.
- 2.5.4.10. Control and uses authenticators.

2.5.5. Weapons Section. The weapons section is responsible for managing and employing the assigned weapons systems to counter threats. The weapons section provides the control necessary for employment/positioning of resources IAW governing instructions. The missions conducted within the AO could include homeland defense, air defense, air sovereignty, assist aircraft in distress, flight follow, and air refueling. Weapons control procedures and techniques are contained in AFTTP 3-1, AFI 11-214 as supplemented, and local directives. Weapons positions are Senior Director (SD), Senior Director Technician (SDT), Weapon Director/Air Weapons Officer (WD/AWO), and Weapon Director Technician (WDT).

- 2.5.5.1. Senior Director (SD) (13B). The SD is responsible to the MCC for management of the weapons section, battle management, and force employment in their AO. The SD executes aircraft scrambles/commits, target selection, and weapons assignment and supervises the WD

and AWO employment of resources. The SD will be a qualified and current AWO. In addition to the duties and responsibilities listed in paragraph 2.5.1, above the SD will:

- 2.5.5.1.1. Conduct weapons portion of changeover and exercise briefings.
- 2.5.5.1.2. Know the performance and ordnance characteristics of all assigned weapons systems.
- 2.5.5.1.3. Commit air defense weapons to counter the threat.
- 2.5.5.1.4. Assign control of missions to WD and AWO.
- 2.5.5.1.5. Monitor assigned missions to ensure effective mission accomplishment and flight safety.
- 2.5.5.1.6. Assign radio frequencies and specific consoles commensurate with mission requirements.
- 2.5.5.1.7. Coordinate aircraft transfer points where control will be passed to other controlling agencies.
- 2.5.5.1.8. Apply ROE.
- 2.5.5.1.9. Coordinate aircraft scramble and airborne orders.
- 2.5.5.1.10. Ensure all missions are briefed/debriefed.
- 2.5.5.1.11. Apply applicable directives to include the Air Tasking Order (ATO), Airspace Control Order (ACO), exercise instructions, CONPLAN, OIs, and Special Instructions (SPINS) prior to sitting on position.
- 2.5.5.1.12. Ensure that all WD and AWOs are aware of existing and forecast weather conditions for their AO and recovery bases as necessary.
- 2.5.5.1.12. Coordinate weapons section actions with surveillance and identification to maintain air picture.
- 2.5.5.1.13. Monitor status of Alert assets.
- 2.5.5.1.14. Coordinate with adjacent sector SD
- 2.5.5.1.15. Perform authentication procedures.

2.5.5.2. SDT (1C571). The SDT is responsible to and will assist the SD as directed. The SDT is responsible for the operational conduct of the enlisted personnel in the weapons section and will assist the SD in the accomplishment of duties. The SDT will maintain a weapons qualification. In addition to the duties and responsibilities listed in paragraph 2.5.1 above the SDT will:

- 2.5.5.2.1. Coordinate airspace.
- 2.5.5.2.2. Know the performance and ordnance characteristics of all assigned weapons systems.
- 2.5.5.2.3. Coordinate with the WDTs and other control agencies for the transfer of mission aircraft..
- 2.5.5.2.4. Perform authentication procedures.
- 2.5.5.2.5. File airborne and scramble orders.
- 2.5.5.2.6. Ensure completion of required weapons section forms.
- 2.5.5.2.7. Manage daily flying schedule and ATO.

2.5.5.2.8. Apply applicable directives to include the Air Tasking Order (ATO), Airspace Control Order (ACO), exercise instructions, CONPLAN, OIs, and Special Instructions (SPINS) prior to sitting on position.

2.5.5.2.9. Conduct fidelity drills.

2.5.5.2.10. Monitor and update readiness posture and status of sector air defense assets.

2.5.5.2.11. Perform scramble line and voice page hotline checks.

2.5.5.2.12. Ensure safety of flight.

2.5.5.3. Air Weapons Officer (AWO) (13B3C). The AWO is responsible to the SD for the control of assigned aircraft. The AWO will direct the WDT during missions. AWO qualification is a pre-requisite for ASO, SD, and ICO. In addition to the duties and responsibilities listed in paragraph 2.5.1 above the AWO will:

2.5.5.3.1. Conduct fidelity drills.

2.5.5.3.2. Apply applicable directives to include the Air Tasking Order (ATO), Airspace Control Order (ACO), exercise instructions, CONPLAN, OIs, and Special Instructions (SPINS) prior to sitting on position.

2.5.5.3.3. Initiate Unknown Cowboy calls at appropriate DEFCON.

2.5.5.3.4. Initiate Unknown Rider calls at appropriate DEFCON

2.5.5.3.5. Perform authentication procedures.

2.5.5.3.6. Implement safe passage procedures.

2.5.5.3.7. Pre-brief and de-brief mission with aircrew to the maximum extent.

2.5.5.3.8. Pass significant weather forecasts/observations and altimeter setting to aircrew upon check-in as appropriate.

2.5.5.3.9. Pass engagement order IAW directives.

2.5.5.3.10. Ensure expeditious fighter positioning for mission tasking

2.5.5.3.11. Assist aircrews in maintaining lateral confines of airspace and airspace control measures IAW local procedures and letters of agreement as appropriate to the level of control assigned.

2.5.5.3.12. Maintain tracking of assigned aircraft and non-participating aircraft (strangers), which can potentially impact flight safety. Provide accurate and timely stranger point-outs.

2.5.5.3.13. Ensure an orderly flow of aircraft for recovery to other control agencies.

2.5.5.3.14. Inform the SD of conditions/situations that may impact mission completion or aircraft safety.

2.5.5.3.15. Know procedures for aircraft scrambles, target selection, and weapons assignment.

2.5.5.3.16. Know the capability of rapidly evaluating the air defense threat situation and taking timely defensive action.

2.5.5.3.17. Inform other AWO and WD of any actions being taken that may affect their control actions.

- 2.5.5.3.18. Provide tactical information to aircrews that may affect mission accomplishment.
  - 2.5.5.3.19. Obtain pilot weather reports (PIREP) and relay them to the SD or SDT.
  - 2.5.5.3.20. Ensure flight safety with overall mission requirements.
  - 2.5.5.3.21. Provide navigational and emergency assistance.
  - 2.5.5.3.22. Ensure completion of all appropriate logs and forms.
  - 2.5.5.3.23. Know the performance and ordnance characteristics of all assigned weapons systems.
  - 2.5.5.3.24. Know airspace management requirements and procedures.
  - 2.5.5.3.25. Use operational brevity codewords, proper radio/telephone (R/T) techniques, and communications discipline.
  - 2.5.5.3.26. Pre-brief and debrief the WDT.
- 2.5.5.4. Weapons Director (WD) (1C571D). The WD is responsible to the SD for the control of aircraft within the AO during either wartime/peacetime operations or training. The WD is responsible for the WDT during missions. In addition to the duties and responsibilities listed in paragraph 2.5.1 above, the WD will:
- 2.5.5.4.1. Apply applicable directives to include the Air Tasking Order (ATO), Airspace Control Order (ACO), exercise instructions, CONPLAN, OIs, and Special Instructions (SPINS) prior to sitting on position.
  - 2.5.5.4.2. Initiate Unknown Cowboy calls at appropriate DEFCON.
  - 2.5.5.4.3. Initiate Unknown Rider calls at appropriate DEFCON.
  - 2.5.5.4.4. Perform authentication procedures.
  - 2.5.5.4.5. Implement safe passage procedures.
  - 2.5.5.4.6. Pre-brief and de-brief mission with aircrew to the maximum extent.
  - 2.5.5.4.7. Pass significant weather forecasts/observations and altimeter setting to aircrew upon check-in as appropriate.
  - 2.5.5.4.8. Pass engagement order IAW directives.
  - 2.5.5.4.9. Ensure expeditious fighter positioning for mission tasking.
  - 2.5.5.4.10. Assist aircrews in maintaining lateral confines of airspace and airspace control measures IAW local procedures and letters of agreement as appropriate to the level of control assigned.
  - 2.5.5.4.11. Maintain tracking of assigned aircraft and non-participating aircraft (strangers), which can potentially impact flight safety. Provide accurate and timely stranger point-outs.
  - 2.5.5.4.12. Ensure an orderly flow of aircraft for recovery to other control agencies.
  - 2.5.5.4.13. Inform the SD of conditions/situations that may impact mission completion or aircraft safety.
  - 2.5.5.4.14. Know procedures for aircraft scrambles, target selection, and weapons assignment.

- 2.5.5.4.15. Know the capability of rapidly evaluating the air defense threat situation and taking timely defensive action.
- 2.5.5.4.16. Inform other AWO and WD of any actions being taken that may affect their control actions.
- 2.5.5.4.17. Provide tactical information to aircrews that may affect mission accomplishment.
- 2.5.5.4.18. Obtain pilot weather reports (PIREP) and relay them to the SD or SDT.
- 2.5.5.4.19. Ensure flight safety with overall mission requirements.
- 2.5.5.4.20. Provide navigational and emergency assistance.
- 2.5.5.4.21. Ensure completion of all appropriate logs and forms.
- 2.5.5.4.22. Know the performance and ordnance characteristics of all assigned weapons systems.
- 2.5.5.4.23. Know airspace management requirements and procedures.
- 2.5.5.4.24. Use operational brevity codewords, proper radio/telephone (R/T) techniques, and communications discipline.
- 2.5.5.4.25. Pre-brief and debrief the WDT.

2.5.5.5. WDT (1C571). The WDT is responsible to the WD, AWO, and SDT. The WDT handles all internal and external telephone coordination, all log keeping duties, and enters computer instructions for the mission. The WDT will assist WD and AWO in the completion of their duties. In addition to the duties and responsibilities listed in paragraph 2.5.1 above the WDT will:

- 2.5.5.5.1. Know the performance and ordnance characteristics of all assigned weapons systems.
- 2.5.5.5.2. Report equipment outages and malfunctions to the SDT.
- 2.5.5.5.3. Perform authentication procedures.
- 2.5.5.5.4. Inform SDT of mission status and all situations that may affect mission completion.
- 2.5.5.5.5. Ensure adequate operations support supplies are available for WD and AWO use.
- 2.5.5.5.6. Complete all required forms and logs.
- 2.5.5.5.7. Ensure flight safety with overall mission requirements.
- 2.5.5.5.8. Use operational brevity codewords, proper radio/telephone (R/T) techniques, and communications discipline.
- 2.5.5.5.9. Assist WD and AWO with situational awareness including locating tracks, monitoring tactics, air traffic, airspace borders and safe passage corridors, and conducting Mode IV checks.
- 2.5.5.5.10. Maintain accurate air picture by updating computer information to include commits/recommits, initiates/reinitiates, and track repositioning.
- 2.5.5.5.11. Coordinate with surveillance section, ATC, and control agencies as required.

2.5.5.5.12. Obtain airspace weather, significant weather forecasts, observations and altimeter setting and pass to WD and AWO prior to flight check-in.

2.5.6. Air Picture Management is comprised of the functions of surveillance, identification, and interface control. Air picture management includes detection, identification, tracking, and reporting of air surveillance data and integrating other source data into one complete air picture.

2.5.6.1. Air Surveillance Section. The Air Surveillance section is responsible to the MCC for the detection, tracking and reporting of air surveillance data. This section also directs the optimum configuration of sensors for effective radar coverage and information sharing.

2.5.6.1.1. Air Surveillance Officer (ASO) (13B). The ASO manages all operational functions within the surveillance section and fulfills the pre-requisite for MCC. The ASO is responsible to the MCC for the maintenance and quality of a single integrated air picture within the BCC's AO. In addition to the duties and responsibilities listed in paragraph 2.5.1 above the ASO will:

2.5.6.1.1.1. Conduct surveillance portion of changeover and exercise briefings.

2.5.6.1.1.2. Coordinate with interface control section.

2.5.6.1.1.3. Supervise the timely and accurate collection, display and dissemination of surveillance data.

2.5.6.1.1.4. Monitor and report equipment status through the maintenance operations center (MOC)

2.5.6.1.1.5. Ensure the Surveillance section manning is adequate to meet mission requirements.

2.5.6.1.1.6. Ensure BCC and maintenance personnel are apprised of outages or equipment degradation.

2.5.6.1.1.7. Coordinate data reduction products.

2.5.6.1.1.8. Assess and coordinate requirements for sensor augmentation/gap coverage.

2.5.6.1.1.9. Coordinate AO expansion.

2.5.6.1.1.10. Coordinate and de-conflict frequency assignments for the Surveillance section, as required.

2.5.6.1.1.11. Ensure preventive maintenance actions are de-conflicted with operational mission activities.

2.5.6.1.1.12. Manage sensor and track validation procedures.

2.5.6.1.1.13. Know radar characteristics and optimize radar presentation (error free, correct settings, etc.).

2.5.6.1.1.14. Conduct EA/EP procedures.

2.5.6.1.1.15. Coordinate radar site setting changes with FAA.

2.5.6.1.1.16. Monitor auxiliary equipment.

2.5.6.1.1.17. Perform radar correlation checks.

2.5.6.1.1.18. Perform Change Data Order function on applicable tracks

2.5.6.1.1.19. Monitor current air picture to ensure tracks are detected, updated, and reported.

2.5.6.1.1.20. Execute the OPORD/CONPLAN.

2.5.6.1.1.21. Coordinate and perform E-3 operations.

2.5.6.1.1.22. Recognize emergency aircraft and accomplish reporting procedures.

2.5.6.1.1.23. Read and interpret weather data and determine effect on radars and air picture.

2.5.6.1.1.24. Recognize and report degraded sensor performance.

2.5.6.1.1.25. Recognize and report potential node outages and any significant gaps in coverage, to include dual site outages.

2.5.6.1.2. Air Surveillance Technician (AST) (1C571). The AST is responsible to, and assists the ASO with the management of all air surveillance functions. The AST is responsible for the administrative and operational conduct of the enlisted personnel in the section and will assist the ASO in the accomplishment of the duties and responsibilities. In the absence of an ASO, the AST will perform all tasks. In addition to the duties and responsibilities listed in paragraph 2.5.1 above, the AST will:

2.5.6.1.2.1. Conduct surveillance portion of changeover and exercise briefings as required.

2.5.6.1.2.2. Set up, display, and update radar filters as required.

2.5.6.1.2.3. Monitor, update, and report radar status

2.5.6.1.2.4. Analyze and report unusual presentations (EA, weather, and transient interference) to the appropriate agencies.

2.5.6.1.2.5. Assign surveillance areas to all Tracking Technicians (TTs).

2.5.6.1.2.6. Optimize radar presentation (error free, correct settings etc.).

2.5.6.1.2.7. Supervise sensor and track validation procedures.

2.5.6.1.2.8. Conduct EA/EP procedures.

2.5.6.1.2.9. Coordinate radar site setting changes with FAA.

2.5.6.1.2.10. Conduct Mode 4 checks.

2.5.6.1.2.11. Monitor auxiliary equipment.

2.5.6.1.2.12. Coordinate AO expansion.

2.5.6.1.2.13. Perform radar correlation checks.

2.5.6.1.3. Tracking Technician (TT) (1C551). The TT is responsible to the ASO or AST for track detection, initiation (active and passive), and maintenance for all airborne objects within the assigned surveillance area. The TT is an entry level position. In addition to the duties and responsibilities listed in paragraph 2.5.1 above, the TT will:

2.5.6.1.3.1. Assist with procedural identification .

2.5.6.1.3.2. Perform passive tracking procedures.

2.5.6.1.3.3. Manually initiate symbology when required.

2.5.6.1.3.4. Maintain track continuity and drop tracks as required.

2.5.6.1.3.5. Correlate data from external sources.

2.5.6.1.3.6. Report unusual presentations (EA, anomalous propagation, weather, etc.) to the ASO or AST.

2.5.6.1.3.7. Perform voice-tell as assigned.

2.5.6.1.3.8. Report suspicious track activity.

2.5.6.1.3.9. Monitor and report track characteristics of high priority tracks.

2.5.6.1.3.10. Recognize and report emergency aircraft situations.

2.5.6.2. Identification Section. The Identification section is responsible to the MCC for the identification of all traffic IAW governing instructions, and monitoring of all Special designated tracks within the AO. This section also coordinates with appropriate air traffic control facilities and other external agencies regarding the identification of aircraft within the AO.

2.5.6.2.1. Identification Technician (IDT) (1C571). The IDT is responsible to the MCC for the identification of all traffic IAW governing instructions, and monitoring of all Special designated tracks within the AO. The IDT coordinates with the appropriate air traffic control facility and other external agencies regarding the identification of aircraft within the AO. In addition to the duties and responsibilities listed in paragraph 2.5.1 above, the IDT will:

2.5.6.2.1.1. Conduct identification portion of changeover and exercise briefings as required.

2.5.6.2.1.2. Make appropriate PA announcements.

2.5.6.2.1.3. Pursue all means available to obtain track identity.

2.5.6.2.1.4. Notify the MCC of identification investigation status

2.5.6.2.1.5. Disseminate and correlate flight plan information on specific tracks

2.5.6.2.1.6. Be responsible for adherence to identification criteria in accordance with ROE and other area defense procedures.

2.5.6.2.1.7. Change track symbology classification.

2.5.6.2.1.8. Perform authentication procedures.

2.5.6.2.1.9. Perform air control measures.

2.5.6.2.1.10. Perform Safe Passage IAW directives.

2.5.6.2.1.11. Maintain message traffic.

2.5.6.2.1.12. Manage classification of data link told-in tracks as required,

2.5.6.3. Battle Control Center (BCC) Interface Control Cell (BICC). The BICC is responsible to the MCC for developing and maintaining their assigned sector of the Multi-TADIL Network (MTN). The BCC ICO(s) coordinate with the AOC JICO for planning and execution functions that cross sector boundaries or impact the regional portion of the mission.

2.5.6.3.1. Interface Control Officer (13B) The ICO is responsible to the MCC for supervision and management of BICC operations. The ICO supervises all link management functions within the multi-TDL Network (MTN), and is responsible for the clarity, accuracy,

currency, and quality of track data displayed on the mission system. In addition to the duties and responsibilities listed in paragraph 2.5.1 above, the ICO will:

- 2.5.6.3.1.1. Conduct BICC portion of changeover and exercise briefings as required
- 2.5.6.3.1.2. Supervise Link Management and Track Data Coordination (TDC)
- 2.5.6.3.1.3. Transmit or coordinate the transmission of Change Data Orders
- 2.5.6.3.1.4. Recommend changes to surveillance based on MTN situation
- 2.5.6.3.1.5. Manage MTN participant's surveillance scheme (Track Production Area (TPA), Mutual Support, Track by exception).
- 2.5.6.3.1.6. Manage and direct the use of BCC AO filters.
- 2.5.6.3.1.7. Manage/coordinate the execution of fidelity drills.
- 2.5.6.3.1.8. Coordinate with CONR AOC JICC for TACOPDAT and the OPTASK LINK issues.
- 2.5.6.3.1.9. Manage data forwarding.
- 2.5.6.3.1.10. Assign and manage forwarding units, including standbys.
- 2.5.6.3.1.11. Supervise communications to support link and track management.
- 2.5.6.3.1.12. Designate or perform TDC.
- 2.5.6.3.1.13. Manage MTN contingency procedures for loss of part or all links.
- 2.5.6.3.1.14. Approve and direct crypto key changes.
- 2.5.6.3.1.15. Ensure all link operations comply with HHQ directives.
- 2.5.6.3.1.16. Ensure current link information is available to all BCC personnel.
- 2.5.6.3.1.17. Manage assignment of functional network roles.
- 2.5.6.3.1.18. Know content of governing military standards and HHQ directives
- 2.5.6.3.1.19. Ensure Link 16 operations are entered into the Link 16 Network deconfliction server.
- 2.5.6.3.1.20. Manage activation/deactivation of relays and changes of JTIDS Unit (JU) transmit mode
- 2.5.6.3.1.21. Manages and uses COMSEC material required for BICC operations.
- 2.5.6.3.1.22. Evaluates tactical link performance and up channels data for operational assessment.
- 2.5.6.3.1.23. Supervises changes to serial and Initial Position (IP) configurations.
- 2.5.6.3.1.24. Direct subordinate unit changes to the Data Net Control Station (DNCS) for Link 11.
- 2.5.6.3.1.25. Manage and directs subordinate unit changes to parameters for interface data links.
- 2.5.6.3.1.26. Supervise the local resolution of interface anomalies.
- 2.5.6.3.1.27. Monitor and coordinate effects of data filters.

2.5.6.3.2. Interface Control Technician (1C571) The ICT is responsible to the ICO for the accomplishment of Link Management and Track Data Coordination functions to include ensuring the clarity, accuracy, currency, and quality of track data displayed on the mission system. In the ICO's absence, the ICT may also assume the supervisory functions listed below. In addition to the duties and responsibilities listed in paragraph 2.5.1 above the ICT will perform the following functions:

2.5.6.3.2.1. Supervisory

- 2.5.6.3.2.1.1. Conduct BICC portion of changeover and exercise briefings as required.
- 2.5.6.3.2.1.2. Oversee or perform the Link Management and Track Data Coordination.
- 2.5.6.3.2.1.3. Transmit or coordinate the transmission of Change Data Orders.
- 2.5.6.3.2.1.4. Recommend changes to the surveillance based on MTN situation.
- 2.5.6.3.2.1.5. Direct MTN participant's surveillance scheme (TPA, Mutual Support, Track by exception).
- 2.5.6.3.2.1.6. Coordinate and direct the use of filters within the BCC AO.
- 2.5.6.3.2.1.7. Coordinate the execution of local Fidelity Drills.
- 2.5.6.3.2.1.8. Coordinate with CONR AOC JICC for TACOPDAT and the OPTASK LINK issues.
- 2.5.6.3.2.1.9. Manage data forwarding.
- 2.5.6.3.2.1.10. Assign and manage forwarding units.
- 2.5.6.3.2.1.11. Establish communications to support link and track management.
- 2.5.6.3.2.1.12. Implement and manage MTN contingency procedures for loss of part or all links.
- 2.5.6.3.2.1.13. Approve and direct crypto key changes.
- 2.5.6.3.2.1.14. Ensure all link operations comply with HHQ directives
- 2.5.6.3.2.1.15. Ensure current link information is available to all BCC personnel.

2.5.6.3.2.2. Link Management.

- 2.5.6.3.2.2.1. Manage assignment of functional network roles.
- 2.5.6.3.2.2.2. Recommend and implement MTN corrective actions when disruptions occur to ensure the effective and efficient exchange of information.
- 2.5.6.3.2.2.3. Ensure Link 16 operations are entered into the Link 16 Network deconfliction server.
- 2.5.6.3.2.2.4. Initiate, maintain, and terminate data links.
- 2.5.6.3.2.2.5. Manage activation/deactivation of relays and changes of JU transmit mode.
- 2.5.6.3.2.2.6. Manage and use COMSEC material required for BICC operations.

- 2.5.6.3.2.2.7. Evaluate link performance and up channels operational effectiveness.
  - 2.5.6.3.2.2.8. Perform net control station duties for data link coordination nets.
  - 2.5.6.3.2.2.9. Coordinate and perform changes to serial and IP configurations.
  - 2.5.6.3.2.2.10. Direct subordinate unit changes to the DNCS for Link 11.
  - 2.5.6.3.2.2.11. Manage and direct subordinate unit changes to parameters for interface data links.
  - 2.5.6.3.2.2.12. Coordinate changes to link configuration to meet information exchange requirements.
  - 2.5.6.3.2.2.13. Execute Link 11/11B Data Link Reference Point changes
- 2.5.6.3.2.3. Track Data Coordination:
- 2.5.6.3.2.3.1. Establish and maintain voice communications with all link participants
  - 2.5.6.3.2.3.2. Perform as Net Control Station (NCS) for track management communications when designated.
  - 2.5.6.3.2.3.3. Monitor the exchange of link messages and track data.
  - 2.5.6.3.2.3.4. Ensure the effective flow of data and clarity of the tactical picture.
  - 2.5.6.3.2.3.5. Supervise the resolution of interface anomalies.
  - 2.5.6.3.2.3.6. Supervise the resolution of dual designations.
  - 2.5.6.3.2.3.7. Supervise the resolution of duplicate tracks.
  - 2.5.6.3.2.3.8. Supervise the resolution of identification conflicts.
  - 2.5.6.3.2.3.9. Supervise the resolution of category conflicts.
  - 2.5.6.3.2.3.10. Ensure transmission of change data orders to resolve environment and ID conflicts.
  - 2.5.6.3.2.3.11. Coordinate and implement use of data filters.
  - 2.5.6.3.2.3.12. Monitor effects of data filters.
  - 2.5.6.3.2.3.13. Monitor and coordinate effects of participant/link node losses.
  - 2.5.6.3.2.3.14. Coordinate the use and transmission of reference points, lines, and areas.
  - 2.5.6.3.2.3.15. Coordinate and supervise local fidelity drills to meet mission requirements.
  - 2.5.6.3.2.3.16. Know governing military standards and HHQ directives.
  - 2.5.6.3.2.3.17. Use COMSEC material required for BICC operations.

## Chapter 3

### HAWAII REGION AIR OPERATIONS CENTER (HIRAOC)

**3.1. Mission.** The Hawaii Region Air Operations Center (HIRAOC) provides air sovereignty and air defense of the Hawaii Air Defense Region (HADR) by executing defensive counter air, interdiction, and counter drug operations in support of PACOM and under the direction of the 613<sup>th</sup> Air and Space Operations Center (613 AOC). The HIRAOC fuses all-source sensor and intelligence data into a common operational air picture and disseminates integrated tactical warning information and attack assessment. The 169<sup>th</sup> ACWS conducts the mission of the HIRAOC.

**3.2. Organization.** The HIRAOC is comprised of two separate, but complimentary elements; the Battle Staff and the Mission Crew. The Battle Staff (BS) manages the air battle and functions as the conduit for the exchange of command and control (C2) information between the HIRAOC and Higher Headquarters (HHQ). The Mission Crew (MC) performs the functions of battle management, weapons control, surveillance, identification, and tactical data link, and airspace management.

**3.3. Battle Staff .** The BS is a complimentary element to the MC. The Air Defense Director (ADD) may form the BS as necessary based on changes in the threat or directed missions from HHQ. The BS may be activated for an indefinite period of time and each BS position must be capable of sustained operations. The ADD may also tailor and selectively man positions within the BS for specific operations. The BS is responsible for:

- 3.3.1. Executing homeland defense, air defense, and air sovereignty missions.
- 3.3.2. Coordinating the employment of assigned assets with HHQ.
- 3.3.3. Translating operational-level plans into tactical-level orders for MC execution.
- 3.3.4. Coordinating with the mission crew.
- 3.3.5. Disseminating tactical-warning and attack assessment information to HHQ.
- 3.3.6. Performing real-time battle management in support of the MC.

**3.4. Battle Staff Composition.** The BS may be tailored by the ADD to accomplish the assigned mission. Based on the mission tasking, the BS can consist of any combination of:

- Air Defense Director (ADD)
- Director of Operations (DO)
- Joint Asset Control Officer (JACO)/Joint Asset Control Officer Tech (JACOT)
- Intelligence Officer (IN)/Intelligence Non Commissioned Officer (INCO)
- Emergency Action Coordinator (EAC)
- Weapons and Tactics Officer
- Fighter Officer (FO)

**NOTE:** The battle staff may require augmentation from outside the air control squadron.

3.4.1. Air Defense Director (ADD) (13B). The ADD is the senior ranking officer not lower than the rank of Lieutenant Colonel. The ADD will:

- 3.4.1.1. Coordinate and implement homeland defense, air defense, air sovereignty, and aerospace warning and control through employment of the forces assigned or made available.
- 3.4.1.2. Coordinate tactical action with HHQ and task appropriate assets through the BS to the MC.

3.4.1.3. Exercise TACON of all BS members.

3.4.2. Director of Operations (DO) (13B). The DO is responsible to the ADC for the supervision of all region operations. The DO will:

3.4.2.1. Implement HHQ policy and formulate methods and procedures for HIRAOC operations.

3.4.2.2. Maintain and analyze operational records that are required by HHQ.

3.4.2.3. Identify personnel and material requirements to accomplish the assigned mission.

3.4.2.4. Know the duties of the MCC.

3.4.3. Joint Asset Control Officer (JACO)/Joint Asset Control Officer Technician (JACOT) (13B)(1C5X1). The JACO/T is responsible to the ADD through the DO. The JACO/T will advise the ADD on assigned sensor assets and function as the sector's Ground Environment Resources Manager. The JACO/T ensures the sector's operations and contingency plans are carried out by ground environment units and provides the BS AWACS employment recommendations.

3.4.4. Intelligence Officer/Noncommissioned Officer (IN). The IN will:

3.4.4.1. Advise the ADC on the threat.

3.4.4.2. Plan and conduct training of operations personnel regarding intelligence matters.

3.4.4.3. Review intelligence data including technical reports of equipment and estimating probable courses of actions, force structures, and characteristics and capabilities of potential threats.

3.4.4.4. Maintain current situation maps, warning displays, local database, and the intelligence library.

3.4.4.5. Coordinate and integrate intelligence data from all available sources. This includes tasking intelligence collection organizations.

3.4.4.6. Conduct studies of enemy forces and prepare intelligence reports and scenarios which realistically represent those forces.

3.4.4.7. Receive and relay all reports and other intelligence items to HHQ as required.

3.4.5. The Emergency Action Coordinator (EAC) (13B/1C5X1). The EAC is the focal point for information into and out of the HIROAC. The EAC is responsible to the MCC unless the BS is formed. If the BS is formed, the EAC is responsible to the ADD. The EAC will:

3.4.5.1. Create, receive, validate, and disseminate EAMs and QRMs.

3.4.5.2. Notify MCC/ADD of received EAMs/QRMs.

3.4.5.3. Ensure EA display reflects current status. 3.4.5.4. Maintain event logs.

3.4.5.3. Coordinate with HHQ, internal and external agencies.

3.4.6. Weapons and Tactics Officer. The Weapons and Tactics Officer will:

3.4.6.1. Ensure Operations personnel are familiar with unit mission, tasking, and expected enemy threat.

3.4.6.2. Provide expertise in tactical mission planning and execution.

3.4.7. Fighter Officer (FO). The FO is responsible to the ADC through the DO for direction and recommendations for the use of assigned fighter/tanker resources, using applicable OPLANs and

ADD direction to ensure appropriate fighter/tanker employment. The FO ensures applicable operations and contingency plans are carried out by fighter/tanker units and tracks the combat readiness of assigned fighter units.

**3.5. Battle Control Center (BCC) Mission Crew.** The mission crew is the focal point for the conduct of weapons, surveillance, and identification functions in the HADR. Supervised by a mission crew commander (MCC), the mission crew is tasked to support the PACOM/PACAF mission on a continuous basis and is manned by the following duty positions tailored to mission requirements:

- Mission Crew Commander (MCC)
- Mission Crew Commander Technician (MCCT)
- Senior Director (SD)
- Senior Director Technician (SDT)
- Air Weapons Officer (AWO)
- Weapons Director (WD)
- Weapons Director Technician (WDT)
- Air Surveillance Technician (AST)
- Tracking Technician (TT)
- Interface Control Technician (ICT)
- Identification Technician (IDT)

3.5.1. Crew Manning. Crew manning will be based on the personnel assigned through the approved Unit Manning Document (UMD). Manning requirements to cover day-to-day operations, periods of increased readiness, and exercises will be determined by the 169 ACWS Director of Operations.

3.5.2. Common Mission Crew Duties and Responsibilities. Each duty position has specific duties and responsibilities that are outlined in this chapter. The following duties and responsibilities are common to all mission crew duty positions. All mission crew members will:

- 3.5.2.1. Attend crew changeover briefs.
- 3.5.2.2. Conduct thorough positional changeover briefs.
- 3.5.2.3. Conduct mission planning.
- 3.5.2.4. Conduct work station and communication systems checks.
- 3.5.2.5. Read and initial local information files prior to performing operational duties.

3.5.3. Mission Crew Commander (MCC) (13B). The MCC is responsible to the ADD for all operations execution and reporting within the HIRAOC. The MCC will:

- 3.5.3.1. Mission plan with the BS.
- 3.5.3.2. Ensure shift manning requirements are met.
- 3.5.3.3. Implement Force Protection Measures.
- 3.5.3.4. Coordinate with Rescue Coordination Center (RCC) as required.
- 3.5.3.5. Oversee effective air sovereignty, drug interdiction, and contingency operations.
- 3.5.3.6. Implement ROE.
- 3.5.3.7. Monitor Emergency Action board for accuracy and status changes.
- 3.5.3.8. Implement Dangerous Military Activity (DMA) procedures.

- 3.5.3.9. Apply and execute applicable directives to include the Air Tasking Order (ATO), Airspace Control Order (ACO), exercise instructions, CONPLAN, OPORDS, and Special Instructions (SPINS).
- 3.5.3.10. Oversee the interface with Airborne Early Warning (AEW) and external units via voice communications and data link.
- 3.5.3.11. Monitor status of assets (sensors, links, and aircraft).
- 3.5.3.12. Initiate recall procedures when directed.
- 3.5.3.13. Coordinate with HHQ, internal and external agencies.
- 3.5.3.14. Ensure safety of flight during all phases of the mission.
- 3.5.3.15. Determine mission capabilities and limitations of operational equipment and approve or disapprove maintenance requests.
- 3.5.3.16. Interpret weather information and coordinate accordingly.
- 3.5.3.17. Identify aircraft availability and allocate alert aircraft.
- 3.5.3.18. Coordinate and implement actions to be taken during fire, bomb threat, natural disaster situations.
- 3.5.3.19. Oversee track reporting procedures.
- 3.5.3.20. Implement LERTCON procedures.
- 3.5.3.21. Report and record missile launches.
- 3.5.3.22. Recommend amber warning/flush bases.
- 3.5.3.23. Assume BS responsibilities when BS is not formed.
- 3.5.3.24. Make scramble recommendations to ADD, and commit fighters (when the BS is not formed).
  - 3.5.3.25. Recommend tactical action to ADD or designated representative and keep them informed of intercept status.
  - 3.5.3.26. Recommend reclassification of tracks.
  - 3.5.3.27. Ensure operations logbook and records are maintained.
  - 3.5.3.28. Ensure operational reporting (OPREPs, etc.) is conducted.
  - 3.5.3.29. Make required Public Address (PA) announcements.
- 3.5.4. Mission Crew Commander Technician (MCCT) (1C5X1). The MCCT is responsible to the MCC for all operations execution and reporting within the HIRAOC. The MCCT is responsible for the operational conduct of the enlisted personnel on the operations floor and will assist the MCC in the accomplishment of duties.
- 3.5.5. Weapons Section. The Weapons Section is responsible for managing and employing the assigned weapons systems to counter threats. The Weapons Section provides the control necessary for employment/positioning of resources IAW governing instructions. The missions conducted within the AO include air defense, air sovereignty, assisting aircraft in distress, escort, and air refueling. Weapons control procedures and techniques are contained in AFTTP 3-1, AFI 11-214, and local directives. The Weapons Section consists of:

3.5.5.1. Senior Director (SD) (13B). The SD is responsible to the MCC for management of the Weapons Section, battle management, and force employment in the AO. The SD executes aircraft scrambles/commits, target selection, weapons assignment, and supervises the WD and AWO employment of resources. The SD will:

- 3.5.5.1.1. Know the capabilities and limitations of assigned weapons systems.
- 3.5.5.1.2. Commit air defense weapons to counter the threat.
- 3.5.5.1.3. Assign control of missions to AWO/WD.
- 3.5.5.1.4. Monitor assigned missions to ensure mission accomplishment and flight safety.
- 3.5.5.1.5. Assign radio frequencies and work stations based on mission requirements.
- 3.5.5.1.6. Coordinate aircraft transfer points where control will be passed to other controlling agencies.
- 3.5.5.1.7. Apply ROE.
- 3.5.5.1.8. Coordinate aircraft scramble and airborne orders.
- 3.5.5.1.9. Ensure all missions are briefed and debriefed.
- 3.5.5.1.10. Ensure that all AWOs and WDs are aware of existing and forecast weather conditions for their AO and recovery bases, as necessary.
- 3.5.5.1.11. Coordinate Weapons Section actions with Surveillance and Identification to maintain air picture.
- 3.5.5.1.12. Monitor status of Alert assets.

3.5.5.2. Senior Director Technician (SDT) (1C5X1). The SDT is responsible to the SD and for the operational conduct of the WDT(s). The SDT will assist the SD in the accomplishment of duties and will:

- 3.5.5.2.1. Coordinate airspace.
- 3.5.5.2.2. Coordinate with WDTs and other control agencies for the smooth transfer of mission aircraft.
- 3.5.5.2.3. Ensure completion of required Weapons section forms.
- 3.5.5.2.3. Monitor and update readiness posture and status of sector air defense assets.
- 3.5.5.2.4. Assist the SD in maintaining a current and accurate OWS\* (Operational Work Station) display for timely weapon commitments.
- 3.5.5.2.5. Assist in coordination of airborne/scramble orders and assignments tracks of interest (TOI).
- 3.5.5.2.6. Maintain SD/SDT TAC Log.

3.5.5.3. Air Weapons Officer/Weapons Director (AWO/WD) (13B/1C5X1D). The AWO/WD is responsible to the SD for the control of assigned aircraft. The AWO/WD will direct the WDT during missions. The AWO/WD will:

- 3.5.5.3.1. Pass engagement order IAW directives.
- 3.5.5.3.2. Ensure expeditious fighter positioning for mission tasking.

3.5.5.3.3. Assist aircrews in maintaining lateral confines of airspace and airspace control measures IAW local procedures and letters of agreement as appropriate to the level of control assigned.

3.5.5.3.4. Provide accurate and timely stranger point-outs.

3.5.5.3.5. Ensure an orderly flow of aircraft for recovery to other control agencies.

3.5.5.3.6. Inform the SD of conditions or situations that impact mission or aircraft safety.

3.5.5.3.7. Know procedures for aircraft scrambles, target selection, and weapons assignment.

3.5.5.3.8. Inform other AWO/WD of actions taken that may affect their control actions.

3.5.5.3.9. Obtain pilot weather reports (PIREP) and relay them to the SD and SDT.

3.5.5.3.10. Ensure flight safety.

3.5.5.3.11. Provide navigational and emergency assistance.

3.5.5.3.12. Know the capabilities and limitations of all assigned weapons systems.

3.5.5.3.13. Know airspace management requirements and procedures.

3.5.5.3.14. Brief and debrief the WDT.

3.5.5.4. Weapons Director Technician WDT (1C571). The WDT is responsible to the AWO/WD and SDT. The WDT handles all internal and external telephone coordination, all log keeping duties, and enters computer instructions for the mission. The WDT will assist AWO/WD in the completion of their duties and will:

3.5.5.4.1. Report equipment outages and malfunctions to the SDT.

3.5.5.4.2. Inform SDT of mission status and situations that may affect mission completion.

3.5.5.4.3. Maintain tracking of assigned aircraft and non-participating aircraft (strangers), which can potentially impact flight safety.

3.5.5.4.4. Ensure adequate operations support supplies are available for WD/AWO.

3.5.5.4.5. Ensure flight safety.

3.5.5.4.6. Assist AWO/WD with situational awareness including locating tracks, monitoring tactics, air traffic, airspace borders and safe passage corridors, and conducting Mode IV checks.

3.5.5.4.7. Maintain accurate air picture by updating computer information to include commits and re-commits, initiates and re-initiates, and track repositioning.

3.5.5.4.8. Coordinate with surveillance section, ATC, and control agencies as required.

3.5.5.4.9. Obtain airspace weather, significant weather forecasts, observations, and altimeter setting and pass to AWO/WD prior to flight check-in.

3.5.5.4.10. Ensure completion of all appropriate forms.

3.5.6. Surveillance Section. The Surveillance Section is responsible for the detection, tracking and reporting of air surveillance data and interfacing of other source data into one complete air picture. This Surveillance Section also directs the configuration of sensors for effective radar coverage and information sharing. The Surveillance Section consists of:

3.5.6.1. Air Surveillance Technician (AST) (1C5X1). The AST is responsible to the MCC for the maintenance and quality of a single integrated air picture within the AO. The AST manages all operational functions within the Surveillance Section. The AST will:

- 3.5.6.1.1. Supervise the timely and accurate collection, display, and dissemination of surveillance data.
- 3.5.6.1.2. Monitor and report equipment status through job control.
- 3.5.6.1.3. Ensure the Surveillance Section manning is adequate to meet mission requirements.
- 3.5.6.1.4. Ensure HIRAOC and maintenance personnel are apprised of outages or equipment degradation.
- 3.5.6.1.5. Coordinate data reduction products.
- 3.5.6.1.6. Assess and coordinate requirements for sensor augmentation and gap coverage.
- 3.5.6.1.7. Coordinate and de-conflict frequency assignments for the Surveillance Section as required.
- 3.5.6.1.8. Ensure preventive maintenance actions are de-conflicted with operational mission activities.
- 3.5.6.1.9. Manage sensor and track validation procedures.
- 3.5.6.1.10. Know radar characteristics and optimize radar presentation.
- 3.5.6.1.11. Conduct EA/EP procedures.
- 3.5.6.1.12. Conduct Mode 4 checks.
- 3.5.6.1.13. Monitor auxiliary equipment.
- 3.5.6.1.14. Perform radar correlation checks.
- 3.5.6.1.15. Monitor radar message counts.
- 3.5.6.1.16. Set up display and update radar filters as required.
- 3.5.6.1.17. Monitor, update, and report radar status.
- 3.5.6.1.18. Analyze and report unusual presentations (EA, weather, and transient interference) to the appropriate agencies.
- 3.5.6.1.19. Assign surveillance areas to Tracking Technicians (TT).

3.5.6.2. Tracking Technician (TT) (1C551). The TT is responsible to the AST for track detection, initiation (active and passive), and maintenance for all airborne objects within the assigned surveillance area. The TT will:

- 3.5.6.2.1. Assist with procedural classifications.
- 3.5.6.2.2. Perform passive tracking procedures.
- 3.5.6.2.3. Manually initiate symbology when required.
- 3.5.6.2.4. Maintain track continuity and drop tracks as required.
- 3.5.6.2.5. Correlate data from external sources.

3.5.6.2.6. Report unusual presentations (EA, anomalous propagation, weather, etc.) to the ASO or AST.

3.5.6.2.7. Perform voice-tell as assigned.

3.5.6.2.8. Report suspicious track activity.

3.5.6.2.9. Monitor and report track characteristics of high priority tracks.

3.5.6.3. Interface Control Technician (1C571). The ICT is responsible to the AST for all link management issues within the MTN, to include the clarity, accuracy, currency, and quality of track data displayed on the mission system. The ICT facilitates the resolution of dual track designation and identification conflicts. The ICT will:

3.5.6.3.1. Perform the link management and track data coordination.

3.5.6.3.2. Recommend sensor configuration changes to Surveillance section based on MTN situation.

3.5.6.3.3. Coordinate TACOPDAT and OPTASKLINK issues with 613 AOC JICC.

3.5.6.3.4. Ensure current link information is available.

3.5.6.3.5. Initiate, maintain, and terminate data links.

3.5.6.3.6. Evaluate link performance and up channel operational effectiveness.

3.5.6.3.7. Coordinate link configuration changes to meet information exchange requirements.

3.5.6.3.8. Monitor the exchange of link messages and track data.

3.5.6.3.9. Coordinate and implement use of data filters.

3.5.6.3.10. Implement MTN contingency procedures for loss of part or all links.

3.5.6.3.11. Select and operate chat and HF/UHF communications equipment for voice, secure voice, and data IAW performance capabilities, antenna configurations and limitations, mission tasking, and directives.

3.5.6.3.12. Use classified/COMSEC material, authentication devices, encryption/ decryption procedures and crypto key list IAW directives.

3.5.6.3.13. Troubleshoot data link equipment, apply diagnostic testing and implement actions to ensure effective data link and information exchange.

3.5.6.3.14. Provide a GCCS feed to the USPACOM DFC (Data Fusion Center) for inclusion in the theater COP on a continuous basis.

3.5.6.3.15. Ensure high interest tracks not reported by automated means are manually entered into the CTP (Common Tactical Picture) for inclusion in the USPACOM COP.

3.5.7. Identification Technician (IDT) (1C571). The IDT is responsible to the MCC for the identification of all traffic IAW governing instructions, and monitoring of all tracks of special interest within the AO. The IDT coordinates, with the appropriate Air Traffic Control Facilities and other external agencies regarding the identification of aircraft within the AO. The IDT will:

3.5.7.1. Make appropriate PA announcements.

3.5.7.2. Notify HIRAOC of all tracks not identified IAW established criteria.

3.5.7.3. Disseminate and correlate flight plan information on specific tracks.

3.5.7.4. Perform air control measures.

3.5.7.5. Maintain applicable message traffic.

3.5.7.6. Manage classification of data link told-in tracks as required.

3.5.8. Simulation. During exercises and crew training periods, a simulation cell is formed to simulate external participants. All duty positions within the simulation cell are unit certified.

**3.6. Degraded Control Environment.** There are three basic types of degradation to the control ability. In ascending order of severity of impact, they are: loss of radar, loss of computer, and loss of communications. The type of degradation affects both the transfer of surveillance and control to other agencies and the delegation of command authorities. Specific procedures are outlined in Standard Operating Procedures for Hawaiian Air Defense Region and local directives.

## Chapter 4

### ALASKA BATTLE CONTROL CENTER (ABCC)

**4.1. Mission.** The Alaska Battle Control Center (ABCC) provides air sovereignty and air defense of the Alaska area of operation by executing defensive counter air, interdiction and counterdrug operations in support of NORAD, NORTHCOM, and/or PACOM and under the direction of the 611<sup>th</sup> Air and Space Operations Center (611 AOC). The ABCC is subordinate to the 611 AOC and supports continuation of operations when directed or required for time critical execution. The ABCC fuses all-source sensor and intelligence data into a common operational air picture and disseminates integrated tactical warning information and attack assessment. The 176<sup>th</sup> ACS conducts the mission of the ABCC.

**4.2. Organization .** The ABCC is a weapons system as described in the ACC Enabling Concept for US Theatre Air Control System Battle Control Center, dated 1 Jan 2005. The ABCC is comprised of those elements described in the enabling concept below and including the MCC. Since the ABCC and 611 AOC are collocated, the DO and BC functions are conducted by the AOC (ref AFI13-1AOCV3). The ABCC includes operations and support functions.

4.2.1. Operations Sections: Command and Control (C2), Weapons, Identification, Surveillance, and Interface Control Sections.

4.2.2. Support Sections: Training, Standardization and Evaluation, Weapons and Tactics, and Operations Support (maintenance, personnel and facility issues).

**4.3. Command and Control.** The Mission Crew Commander (MCC) and the Chief of Combat Operations (CCO) form the primary C2 link between the ABCC and the 611 AOC.

4.3.1. When formed, 611 AOC Combat Operations (CO) directs Region air defense and air sovereignty activities. Additionally, CO directs and coordinates activities of subordinate radar units, relays instructions from senior NORAD/NORTHCOM/PACOM elements to subordinate and lateral units, and coordinates allocation and employment of air defense resources. CO is assigned or allocated air defense resources, e.g., interceptor, early warning aircraft, etc., that are necessary to defend the Alaskan AO. These resources are used by CO via the Mission Crew Commander (MCC) for the conduct of assigned responsibilities.

4.3.2. When Combat Operations are not stood up, the MCC conducts operations under the direction of the 611 AOC Director or designated representative.

**4.4. Battle Control Center (BCC) Mission Crew.** The 176 ACS is the mission crew portion of the BCC and is the focal point for Air Defense operations within the Alaska NORAD Region and is responsible for detection and surveillance and identification of any air breathing threat to the AO. Supervised by a Mission Crew Commander (MCC), the Mission Crew is tasked to support the mission on a continuous basis and is manned by the following duty positions tailored to mission requirements:

**Table 4.1. Mission Crew Positions**

MCC
MCCT
SD
SDT
WD
AWO

WDT
ASO
AST
ICO
ICT
TT
EAC
IDT

**4.5. Crew Manning** . Manning of the BCC will be based on the personnel assigned through the approved Unit Manning Document (UMD). Manning requirements will be determined by the 176 ACS Director of Operations. It will cover day-to-day operations and periods of increased readiness and exercises.

**4.6. Common Mission Crew Duties and Responsibilities.** Each duty position has specific duties and responsibilities that are outlined in this chapter. The following duties and responsibilities are common to all mission crew duty positions. All mission crew members will:

- 4.6.1. Have working knowledge of applicable governing directives and agreements.
- 4.6.2. Comply with applicable governing directives and agreements.
- 4.6.3. Conduct internal and external communication and coordination.
- 4.6.4. Attend crew changeover brief.
- 4.6.5. Conduct thorough positional changeover briefs.
- 4.6.6. Perform sound security practices.
- 4.6.7. Conduct mission planning.
- 4.6.8. Conduct evacuation procedures.
- 4.6.9. Understand system capabilities and limitations to include weapons platforms and surveillance assets; apply to mission accomplishment.
- 4.6.10. Adhere to COMSEC/INFOSEC/OPSEC procedures to include “OPEN LINE/SECURE CALL” procedures.
- 4.6.11. Conduct console and communication system check-out.
- 4.6.12. Report malfunctioning equipment to section supervisor who in turn will pass information to Air Surveillance Officer or Air Surveillance Technician.
- 4.6.13. Report link issues to section supervisor who will in turn pass information to Interface Control Officer or Interface Control Technician.
- 4.6.14. Comply with guidance in positional checklists.
- 4.6.15. Read and initial local information files prior to performing operational duties.

**4.7. Mission Crew Commander (MCC) (13B).** The MCC is responsible to the Battle Commander for all operations execution and reporting within the BCC. The MCC will:

- 4.7.1. Mission plan with the battle staff.
- 4.7.2. Ensure shift manning requirements are met.

- 4.7.3. Implement Force Protection Procedures.
- 4.7.4. Coordinate with Rescue Coordination Center (RCC) and request assistance as required.
- 4.7.5. Oversee effective air sovereignty, drug interdiction, and contingency operations
- 4.7.6. Implement ROE.
- 4.7.7. Monitor Emergency Action board for accuracy and status changes.
- 4.7.8. Implement Dangerous Military Activity (DMA) procedures.
- 4.7.9. Apply and execute applicable directives to include the Air Tasking Order (ATO), Airspace Control Order (ACO), exercise instructions, CONPLAN, OPORDS, Region Unique Book (RUB), and Special Instructions (SPINS).
- 4.7.10. Oversee the interface with Airborne Early Warning (AEW) and external units via voice communications and data link.
- 4.7.11. Monitor status of assets (sensors, links, and aircraft).
- 4.7.12. Ensure sound COMSEC practices in Operations.
- 4.7.13. Initiate recall procedures when directed.
- 4.7.14. Ensure personnel safety and cleanliness of facility.
- 4.7.15. Coordinate with HHQ, internal and external agencies.
- 4.7.16. Ensure safety of flight during all phases of the mission.
- 4.7.17. Determine mission capabilities and limitations of operational equipment and approve or disapprove maintenance.
- 4.7.18. Interpret weather information and coordinate accordingly.
- 4.7.19. Identify aircraft availability and allocate alert aircraft.
- 4.7.20. Coordinate and implement actions to be taken during fire, bomb threat, natural disaster situations.
- 4.7.21. Monitor status of fire alarm systems.
- 4.7.22. Summon medical assistance as required.
- 4.7.23. Summon assistance during duress and or intruder situations.
- 4.7.24. Conduct evacuation procedures.
- 4.7.25. Notify HHQ of commander's availability and responsible individual.
- 4.7.26. Ensure response to White Pinnacle exercises.
- 4.7.27. Oversee track reporting procedures.
- 4.7.28. Execute Derelict airborne objects procedures.
- 4.7.29. Implement DEFCON procedures.
- 4.7.30. Report and record missile launches.
- 4.7.31. Recommend amber warning/flush bases.
- 4.7.32. Assume BS responsibilities when BS is not formed.

- 4.7.33. Scramble and/or commit fighters (when the BS is not formed). If BS is formed and time permits, recommends tactical action to BC or designated representative and keeps them informed of scramble and commit status.
- 4.7.34. Ensure fidelity drills are coordinated with HHQ.
- 4.7.35. Direct reclassification of tracks.
- 4.7.36. Execute aircraft Emergency procedures.
- 4.7.37. Ensure operations logbook and records are maintained.
- 4.7.38. Ensure operational reporting (OPREPs, etc.) is conduct.
- 4.7.39. Operate and monitor communications equipment.
- 4.7.40. Make required Public Address (PA) announcements.

**4.8. Mission Crew Commander Technician (MCCT) (1C591).** The MCCT is responsible to the MCC for all operations execution and reporting within the BCC. The MCCT is responsible for the operational conduct of the enlisted personnel on the operations floor and will assist the MCC in the accomplishment of duties. The MCCT will:

- 4.8.1. Ensure shift manning requirements are met.
- 4.8.2. Implement Force Protection Procedures.
- 4.8.3. Coordinate with Rescue Coordination Center (RCC) and request assistance as required.
- 4.8.4. Oversee effective air sovereignty, drug interdiction, and contingency operations.
- 4.8.5. Implement ROE.
- 4.8.6. Monitor Emergency Action board for accuracy and status changes.
- 4.8.7. Report Dangerous Military Activity (DMA) activities.
- 4.8.8. Apply and execute applicable directives to include the Air Tasking Order (ATO), Airspace Control Order (ACO), exercise instructions, CONPLAN, OPORDS, Region Unique Book (RUB), and Special Instructions (SPINS).
- 4.8.9. Oversee the interface with Airborne Early Warning (AEW) and external units via voice communications and data link.
- 4.8.10. Monitor status of assets (sensors, links, and aircraft).
- 4.8.11. Ensure sound COMSEC practices in Operations.
- 4.8.12. Initiate recall procedures when directed.
- 4.8.13. Ensure personnel safety and cleanliness of facility.
- 4.8.14. Coordinate with HHQ, internal and external agencies.
- 4.8.15. Ensure safety of flight during all phases of the mission.
- 4.8.16. Interpret weather information and coordinate accordingly.
- 4.8.17. Identify aircraft availability.
- 4.8.18. Coordinate and implement actions to be taken during fire, bomb threat, and natural disaster situations.

- 4.8.19. Monitor status of fire alarm systems.
- 4.8.20. Summon medical assistance as required.
- 4.8.21. Summon assistance during duress and or intruder situations.
- 4.8.22. Conduct evacuation procedures.
- 4.8.23. Notify HHQ of commander's availability and responsible individual.
- 4.8.24. Ensure response to White Pinnacle exercises.
- 4.8.25. Oversee track reporting procedures.
- 4.8.26. Execute derelict airborne objects procedures.
- 4.8.27. Implement DEFCON procedures.
- 4.8.28. Report and record missile launches.
- 4.8.29. Recommend amber warning/flush bases.
- 4.8.30. Recommend scramble and or fighter commits (when the BS is not formed). If BS is formed and time permits, recommend tactical action to BC or designated representative and keeps them informed of scramble and commit status.
- 4.8.31. Ensure fidelity drills are coordinated with HHQ.
- 4.8.32. Execute aircraft Emergency procedures.
- 4.8.33. Maintain operations logbook and records.
- 4.8.34. Conduct operational reporting (OPREPs, etc.).
- 4.8.35. Operate communications equipment.
- 4.8.36. Make required Public Address (PA) announcements.
- 4.8.37. Monitor and use messaging systems.
- 4.8.38. Ensure COMSEC inventory complete.

**4.9. Emergency Action Coordinator (EAC) (1C571).** The EAC is responsible to the MCC unless otherwise directed by the BC. The EAC will:

- 4.9.1. Create, receive, validate, and disseminate EAMs and QRMs IAW NI 10-4.
- 4.9.2. Notify MCC/BC of received EAMs/QRMs.
- 4.9.3. Receive, disseminate, and report Status of Action (SOA) IAW NI 10-4.
- 4.9.4. Ensure EA display reflects current status.
- 4.9.5. Maintain event logs.
- 4.9.6. Coordinate with HHQ, internal and external agencies.
- 4.9.7. Respond to White Pinnacle exercises.
- 4.9.8. Conduct daily NORAD Alert System (NAS) checks.
- 4.9.9. Controls and uses authenticators.

**4.10. Weapons Section** . The weapons section is responsible for managing and employing the assigned weapons systems to counter threats. The weapons section provides the control necessary for

employment/positioning of resources IAW governing instructions. The missions conducted within the AO could include air defense, air sovereignty, assist aircraft in distress, flight follow, and air refueling. Weapons control procedures and techniques are contained in AFTTP 3-1, AFI 11-214 as supplemented and local directives. Weapons positions are Senior Director (SD), Senior Director Technician (SDT), Weapon Director (WD), Air Weapons Officer (AWO), and Weapon Director Technician (WDT).

4.10.1. Senior Director (SD) (13B). The SD is responsible to the MCC for management of the weapons section, battle management, and force employment in their AO. The SD executes aircraft scrambles/commits, target selection, and weapons assignment, and supervises the WD and AWO employment of resources. The SD will be a qualified and current AWO. The SD will:

- 4.10.1.1. Know the capabilities and limitations characteristics of all assigned weapons systems.
- 4.10.1.2. Commit air defense weapons to counter the threat.
- 4.10.1.3. Assign control of missions to WD and AWO.
- 4.10.1.4. Monitor assigned missions to ensure effective mission accomplishment and flight safety.
- 4.10.1.5. Assign radio frequencies and specific consoles commensurate with mission requirements.
- 4.10.1.6. Coordinate aircraft transfer points where control will be passed to other controlling agencies.
- 4.10.1.7. Apply ROE.
- 4.10.1.8. Coordinate aircraft scramble and airborne orders.
- 4.10.1.9. Ensure all missions are briefed and debriefed.
- 4.10.1.10. Apply applicable directives to include the Air Tasking Order (ATO), Airspace Control Order (ACO), exercise instructions, CONPLAN, Sector Unique Book (SUB), and Special Instructions (SPINS).
- 4.10.1.11. Ensure that all WD and AWOs are aware of existing and forecast weather conditions for their AO and recovery bases as necessary.
- 4.10.1.12. Coordinate weapons section actions with surveillance and identification to maintain air picture.
- 4.10.1.13. Monitor status of Alert assets.
- 4.10.1.14. Coordinate with adjacent sector SD.
- 4.10.1.15. Perform authentication procedures.
- 4.10.1.16. Ensure safety of flight.

4.10.2. Senior Director Technician (SDT) (1C571). The SDT is responsible to and will assist the SD as directed. The SDT is responsible for the operational conduct of the enlisted personnel in the weapons section and will assist the SD in the accomplishment of duties. The SDT will be a qualified and current WDT. CMR WD. meets prerequisite for SDT. The SDT will:

- 4.10.2.1. Monitor assigned missions to ensure effective mission accomplishment and flight safety.

- 4.10.2.2. Assign radio frequencies and specific consoles commensurate with mission requirements.
  - 4.10.2.3. Coordinate aircraft transfer points where control will be passed to other controlling agencies.
  - 4.10.2.4. Apply ROE.
  - 4.10.2.5. Ensure that all WD and AWOs are aware of existing and forecast weather conditions for their AO and recovery bases as necessary.
  - 4.10.2.6. Coordinate weapons section actions with surveillance and identification to maintain air picture.
  - 4.10.2.7. Coordinate airspace.
  - 4.10.2.8. Coordinate with the WDTs and other control agencies for the smooth transfer of mission aircraft.
  - 4.10.2.9. Perform authentication procedures.
  - 4.10.2.10. File airborne and scramble orders.
  - 4.10.2.11. Ensure completion of required weapons section forms.
  - 4.10.2.12. Manage daily flying schedule and ATO.
  - 4.10.2.13. Apply applicable directives to include the Air Tasking Order (ATO), Airspace Control Order (ACO), exercise instructions, CONPLAN, Sector Unique Book (SUB), and Special Instructions (SPINS).
  - 4.10.2.14. Conduct data link fidelity drills.
  - 4.10.2.15. Monitor and update readiness posture and status of sector air defense assets.
  - 4.10.2.16. Perform scramble line and voice page hotline checks.
  - 4.10.2.17. Ensure safety of flight.
- 4.10.3. Air Weapons Officer (AWO) (13B). The AWO is responsible to the SD for the control of assigned aircraft. The AWO will direct the WDT during missions. The AWO will:
- 4.10.3.1. AWO qualification is a pre-requisite for ASO, SD, ICO and MCC.
  - 4.10.3.2. Conduct data link fidelity drills.
  - 4.10.3.3. Apply applicable directives to include the Air Tasking Order (ATO), Airspace Control Order (ACO), exercise instructions, CONPLAN, Sector Unique Book (SUB), and Special Instructions (SPINS) prior to sitting on position.
  - 4.10.3.4. Perform authentication procedures.
  - 4.10.3.5. Implement safe passage procedures.
  - 4.10.3.6. Pre-brief and de-brief mission with aircrew to the maximum extent possible.
  - 4.10.3.7. Pass significant weather forecasts, observations, and altimeter setting to aircrew upon check-in as appropriate.
  - 4.10.3.8. Pass engagement order IAW directives.
  - 4.10.3.9. Ensure expeditious fighter positioning for mission tasking.

- 4.10.3.10. Assist aircrews in maintaining lateral confines of airspace and airspace control measures IAW local procedures and letters of agreement as appropriate to the level of control assigned.
  - 4.10.3.11. Maintain tracking of assigned aircraft and non-participating aircraft (strangers), which can potentially impact flight safety. Provide accurate and timely stranger point-outs.
  - 4.10.3.12. Ensure an orderly flow of aircraft for recovery to other control agencies.
  - 4.10.3.13. Inform the SD of conditions or situations that may impact mission completion or aircraft safety.
  - 4.10.3.14. Know procedures for aircraft scrambles, target selection, and weapons assignment.
  - 4.10.3.15. Know the capability of rapidly evaluating the air defense threat situation and taking timely defensive action.
  - 4.10.3.16. Inform other AWOs and WDs of any actions being taken that may affect their control actions.
  - 4.10.3.17. Provide tactical information to aircrews that may affect mission accomplishment.
  - 4.10.3.18. Obtain pilot weather reports (PIREP) and relay them to the SD and SDT.
  - 4.10.3.19. Ensure flight safety with overall mission requirements.
  - 4.10.3.20. Provide navigational and emergency assistance.
  - 4.10.3.21. Ensure completion of all appropriate logs and forms.
  - 4.10.3.22. Know the capabilities and limitations characteristics of all assigned weapons systems.
  - 4.10.3.23. Know airspace management requirements and procedures.
  - 4.10.3.24. Use operational brevity codewords, proper radio/telephone (R/T) techniques, and communications discipline.
  - 4.10.3.25. Pre-brief and debrief the WDT.
- 4.10.4. Weapons Director (WD) (1C571D). The WD is responsible to the SD for the control of aircraft within the AO. The WD is responsible for the WDT during missions. The WD will:
- 4.10.4.1. Apply applicable directives to include the Air Tasking Order (ATO), Airspace Control Order (ACO), exercise instructions, CONPLAN, Sector Unique Book (SUB), and Special Instructions (SPINS).
  - 4.10.4.2. Perform authentication procedures.
  - 4.10.4.3. Brief and de-brief mission with aircrew to the maximum extent possible .
  - 4.10.4.4. Pass significant weather forecasts, observations, and altimeter setting to aircrew upon check-in as appropriate.
  - 4.10.4.5. Pass engagement order IAW directives.
  - 4.10.4.6. Ensure expeditious fighter positioning for mission tasking.
  - 4.10.4.7. Assist aircrews in maintaining lateral confines of airspace and airspace control measures IAW local procedures and letters of agreement as appropriate to the level of control assigned.

- 4.10.4.8. Maintain tracking of assigned aircraft and non-participating aircraft (strangers), which can potentially impact flight safety. Provide accurate and timely stranger point-outs.
- 4.10.4.9. Ensure an orderly flow of aircraft for recovery to other control agencies.
- 4.10.4.10. Inform the SD of conditions or situations that may impact mission completion or aircraft safety.
- 4.10.4.11. Know procedures for target selection and weapons assignment.
- 4.10.4.12. Inform other AWOs and WDs of any actions being taken that may affect their control actions.
- 4.10.4.13. Provide tactical information to aircrews that may affect mission accomplishment.
- 4.10.4.14. Obtain pilot weather reports (PIREP) and relay them to the SD and SDT.
- 4.10.4.15. Ensure flight safety.
- 4.10.4.16. Provide navigational and emergency assistance.
- 4.10.4.17. Know the performance and ordnance characteristics of all assigned weapons systems.
- 4.10.4.18. Know airspace management requirements and procedures.
- 4.10.4.19. Use operational brevity codewords, proper radio/telephone (R/T) techniques, and communications discipline.
- 4.10.4.20. Brief and debrief the WDT.

4.10.5. WDT (1C571). The WDT is responsible to the WD, AWO, and SDT. The WDT handles all internal and external telephone coordination, all log keeping duties, and enters computer instructions for the mission. The WDT will assist WD and AWO in the completion of their duties. The WDT will:

- 4.10.5.1. Report equipment outages and malfunctions to the SDT.
- 4.10.5.2. Perform authentication procedures.
- 4.10.5.3. Inform SDT of mission status and all situations that may affect mission completion.
- 4.10.5.4. Ensure adequate operations support supplies are available for WD and AWO use.
- 4.10.5.5. Ensure flight safety.
- 4.10.5.6. Use operational brevity codewords, proper radio/telephone (R/T) techniques, and communications discipline.
- 4.10.5.7. Assist WD and AWO with situational awareness including locating tracks, monitoring tactics, air traffic, airspace borders and safe passage corridors, and conducting Mode IV checks.
- 4.10.5.8. Maintain accurate air picture by updating computer information to include commits and recommits, initiates and reinitiates, and track repositioning
- 4.10.5.9. Coordinate with surveillance section, ATC, and control agencies as required.
- 4.10.5.10. Obtain airspace weather, significant weather forecasts/observations and altimeter setting and pass to WD and AWO prior to flight check-in.

**4.11. Air Picture Management.** Air Picture Management is comprised of The Air Surveillance section, Identification Section, and Interface Control Section. Air picture management is the detection,

identification, tracking, and reporting of air surveillance data and interfacing with other source data into one complete air picture.

4.11.1. Surveillance Section. The Air Surveillance section is responsible for the detection, tracking, and reporting of air surveillance data and interfacing with other source data into one complete air picture. This section also directs the optimum configuration of sensors for effective radar coverage and information sharing.

4.11.1.1. Air Surveillance Officer (ASO) (13B). The ASO manages all operational functions within the surveillance section and fulfills the prerequisite for MCC. The ASO is responsible to the MCC for the maintenance and quality of a single integrated air picture within the sector's AO. The ASO will:

- 4.11.1.1.1. Coordinate with interface control section
- 4.11.1.1.2. Supervise the timely and accurate collection, display, and dissemination of surveillance data.
- 4.11.1.1.3. Monitor and report equipment status through job control.
- 4.11.1.1.4. Ensure the Surveillance section manning is adequate to meet mission requirements.
- 4.11.1.1.5. Ensure BCC and maintenance personnel are apprised of outages or equipment degradation.
- 4.11.1.1.6. Coordinate data reduction products during normal duty hours.
- 4.11.1.1.7. Produce data reduction products during periods other than normal duty hours.
- 4.11.1.1.8. Assess and coordinate requirements for sensor augmentation and gap coverage.
- 4.11.1.1.9. Coordinate and de-conflict frequency assignments for the Surveillance section as required.
- 4.11.1.1.10. Ensure preventive maintenance actions are de-conflicted with operational mission activities.
- 4.11.1.1.11. Manage sensor and track validation procedures.
- 4.11.1.1.12. Know radar characteristics and optimize radar presentation.
- 4.11.1.1.13. Conduct EA/EP procedures.
- 4.11.1.1.14. Conduct Mode 4 checks.
- 4.11.1.1.15. Monitor auxiliary equipment.
- 4.11.1.1.16. Perform radar correlation checks.

4.11.1.2. Air Surveillance Technician (AST) (1C571). The AST is responsible to, and assists the ASO with the management of all air surveillance functions. The AST is responsible for the administrative and operational conduct of the enlisted personnel in the surveillance section. In the absence of an ASO, the AST will perform all responsibilities. In addition, the AST will:

- 4.11.1.2.1. Monitor radar messages counts.
- 4.11.1.2.2. Set up, display, and update radar filters as required.
- 4.11.1.2.3. Monitor, update, and report radar status.

- 4.11.1.2.4. Analyze and report unusual presentations (EA, weather, and transient interference) to the appropriate agencies.
- 4.11.1.2.5. Assign surveillance areas to all Tracking Technician (TT).
- 4.11.1.2.6. Supervise sensor and track validation procedures
- 4.11.1.2.7. Conduct EA/EP procedures.
- 4.11.1.2.8. Conduct Mode 4 checks.
- 4.11.1.2.9. Monitor auxiliary equipment.
- 4.11.1.2.10. Perform radar correlation checks.

4.11.1.3. Tracking Technician (TT) (1C551). The TT is responsible to the ASO or AST for track detection, initiation (active and passive), and maintenance for all airborne objects within the assigned surveillance area. The TT is an entry level position. The TT will:

- 4.11.1.3.1. Assist, as directed, with procedural Classification.
- 4.11.1.3.2. Perform passive tracking procedures.
- 4.11.1.3.3. Manually initiate symbology when required.
- 4.11.1.3.4. Maintain track continuity and drop tracks as required.
- 4.11.1.3.5. Correlate data from external sources.
- 4.11.1.3.6. Report unusual presentations (EA, anomalous propagation, weather, etc.) to the ASO or AST.
- 4.11.1.3.7. Perform voice-tell as assigned.
- 4.11.1.3.8. Report suspicious track activity
- 4.11.1.3.9. Monitor and report track characteristics of high priority tracks

4.11.2. Identification Section. The Identification section is responsible to the MCC for the identification of all traffic IAW governing instructions, and monitoring of all Special designated tracks within the AO. This section also coordinates with appropriate air traffic control facilities and other external agencies regarding the identification of aircraft within the AO

4.11.2.1. Identification Technician (IDT) (1C571). The IDT is responsible to, and assists the MCC with the identification of all traffic IAW governing instructions, and monitoring of all Special tracks within the AO. The IDT is responsible for the administrative and operational conduct of the enlisted personnel in the identification section. In the absence of an IDO, the IDT will perform all responsibilities. The IDT coordinates, with the appropriate air traffic control facility and other external agencies regarding the identification of aircraft within the AO. The IDT will:

- 4.11.2.1.1. Initiate Unknown Cowboy calls at appropriate DEFCON.
- 4.11.2.1.2. Initiate Unknown Rider calls at appropriate DEFCON
- 4.11.2.1.3. Implement safe passage procedures.
- 4.11.2.1.4. Make appropriate PA announcements.
- 4.11.2.1.5. Notify BCC of all tracks not identified IAW established criteria

- 4.11.2.1.6. Pursue all means available to obtain track identity.
  - 4.11.2.1.7. Notify the MCC of Classification investigation status
  - 4.11.2.1.8. Disseminate and correlate flight plan information on specific tracks
  - 4.11.2.1.9. Be responsible for adherence to Classification criteria in accordance with ROE and other area defense procedures.
  - 4.11.2.1.10. Changes track symbology identity
  - 4.11.2.1.11. Perform authentication procedures
  - 4.11.2.1.12. Perform air control measures
  - 4.11.2.1.13. Perform Safe Passage IAW directives
  - 4.11.2.1.14. Maintain applicable message traffic
  - 4.11.2.1.15. Manage Classification of data link told-in tracks as required
- 4.11.3. Battle Control Center (BCC) Interface Control Cell (BICC). The BICC is responsible to the MCC for developing and maintaining their assigned sector of the Multi-TADIL Network (MTN). The BCC ICO(s) coordinate with the AOC JICO for planning and execution functions that cross sector boundaries or impact the regional portion of the MTN.
- 4.11.3.1. Interface Control Officer (13B). The ICO is responsible to the MCC for supervision and management of Battle Control Center Interface Control Cell (BICC) operations. The ICO supervises all link management issues within the multi-TDL Network (MTN), clarity, accuracy, currency, and quality of track data displayed on the mission system. The ICO will:
    - 4.11.3.1.1. Supervise Link Management and Track Data Coordination (TDC)
    - 4.11.3.1.2. Transmit or coordinate the transmission of Change Data Orders
    - 4.11.3.1.3. Recommend changes to surveillance based on MTN situation
    - 4.11.3.1.4. Manages MTN participant's surveillance scheme (TPA, Mutual Support, Track by exception)
    - 4.11.3.1.5. Manage and direct the use of BCC AOO filters
    - 4.11.3.1.6. Manage/coordinate the execution of fidelity drills
    - 4.11.3.1.7. Coordinate with 601st AOC JICC and 611th AOC JICC for TACOPDAT and the OPTASK LINK issues.
    - 4.11.3.1.8. Manage data forwarding
    - 4.11.3.1.9. Assign and manage forwarding units, including standbys.
    - 4.11.3.1.10. Supervise communications to support link and track management.
    - 4.11.3.1.11. Designate or perform TDC
    - 4.11.3.1.12. Manage MTN contingency procedures for loss of part or all links.
    - 4.11.3.1.13. Approve and direct crypto key changes.
    - 4.11.3.1.14. Ensure all link operations comply with HHQ directives
    - 4.11.3.1.15. Ensure current link information is available to all BCC personnel

- 4.11.3.1.16. Manage assignment of functional network roles.
  - 4.11.3.1.17. Know content of governing military standards and HHQ directives
  - 4.11.3.1.18. Ensure Link 16 operations are entered into the Link 16 Network deconfliction server
  - 4.11.3.1.19. Manage activation/deactivation of relays, and changes of JU transmit mode
  - 4.11.3.1.20. Manages and uses COMSEC material required for BICC operations
  - 4.11.3.1.21. Evaluates tactical link performance and up channels data for operational assessment.
  - 4.11.3.1.22. Supervises/performs changes to serial and IP configurations
  - 4.11.3.1.23. Directs subordinate unit changes to the DNCS for Link 11
  - 4.11.3.1.24. Manages and directs subordinate units changes to parameters for interface data links.
  - 4.11.3.1.25. Supervise the local resolution of interface anomalies
  - 4.11.3.1.26. Monitor and coordinate effects of data filters
- 4.11.3.2. Interface Control Technician (1C571). The ICT is responsible to the ICO or MCC for BICC operations. The ICT is responsible for the operational conduct of the enlisted personnel in the BICC and will assist the ICO in the accomplishment of duties. The ICT is responsible for all link management issues within the MTN, ensures the clarity, accuracy, currency, and quality of track data displayed on the mission system. ICT facilitates the resolution of dual track designation and identification conflicts. The ICT will perform the following supervisory, link management, and track data coordination roles. The ICT will perform the following functions:
- 4.11.3.2.1. **Supervisory**
    - 4.11.3.2.1.1. Oversee or perform the Link Management and Track Data Coordination
    - 4.11.3.2.1.2. Transmit or coordinate the transmission of Change Data Orders
    - 4.11.3.2.1.3. Recommend changes to the surveillance based on MTN situation
    - 4.11.3.2.1.4. Direct MTN participant's surveillance scheme (TPA, Mutual Support, and Track by exception)
    - 4.11.3.2.1.5. Coordinate and direct the use of filters within the BCC AOO
    - 4.11.3.2.1.6. Coordinate the execution of local Fidelity Drills
    - 4.11.3.2.1.7. Coordinate with 601st AOC JICC and 611th AOC JICC for TACOPDAT and the OPTASK LINK issues.
    - 4.11.3.2.1.8. Manage data forwarding
    - 4.11.3.2.1.9. Assign and manage forwarding units
    - 4.11.3.2.1.10. Establish communications to support link and track management..
    - 4.11.3.2.1.11. Implement and manage MTN contingency procedures for loss of part or all links.
    - 4.11.3.2.1.12. Approve and direct crypto key changes..

- 4.11.3.2.1.13. Ensure all link operations comply with HHQ directives
- 4.11.3.2.1.14. Ensures current link information is available to all BCC personnel.

#### 4.11.3.2.2. **Link Management**

- 4.11.3.2.2.1. Manage assignment of functional network roles.
  - 4.11.3.2.2.2. Implement MTN corrective actions when disruptions occur to ensure the effective and efficient exchange of information
  - 4.11.3.2.2.3. Ensure Link 16 operations are entered into the Link 16 Network deconfliction server
  - 4.11.3.2.2.4. Initiates, maintain, and terminate data links.
  - 4.11.3.2.2.5. Manage activation/deactivation of relays, and changes of JU transmit mode
  - 4.11.3.2.2.6. Manage and use COMSEC material required for BICC operations
  - 4.11.3.2.2.7. Evaluate link performance and up channels operational effectiveness.
  - 4.11.3.2.2.8. Perform net control station duties for data link coordination nets.
  - 4.11.3.2.2.9. Coordinate and perform changes to serial and IP configurations
  - 4.11.3.2.2.10. Direct subordinate unit changes to the DNCS for Link 11
  - 4.11.3.2.2.11. Manage and direct subordinate unit changes to parameters for interface data links.
  - 4.11.3.2.2.12. Coordinate changes to link configuration to meet information exchange requirements.
  - 4.11.3.2.2.13. Execute Link 11/11B Data Link Reference Point changes
- #### 4.11.3.2.3. Track Data Coordination
- 4.11.3.2.3.1. Establish and maintain voice communications with all link participants
  - 4.11.3.2.3.2. Perform as Net Control Station (NCS) for track management communications when designated
  - 4.11.3.2.3.3. Monitor the exchange of link messages and track data
  - 4.11.3.2.3.4. Ensure the effective flow of data and clarity of the tactical picture
  - 4.11.3.2.3.5. Supervise the resolution of interface anomalies
  - 4.11.3.2.3.6. Supervise the resolution of dual designations
  - 4.11.3.2.3.7. Supervise the resolution of duplicate tracks
  - 4.11.3.2.3.8. Supervise the resolution of identification conflicts
  - 4.11.3.2.3.9. Supervise the resolution of category conflicts
  - 4.11.3.2.3.10. Ensure transmission of change data orders to resolve environment and ID conflicts
  - 4.11.3.2.3.11. Coordinate and implement use of data filters
  - 4.11.3.2.3.12. Monitor effects of data filters

- 4.11.3.2.3.13. Monitor and coordinate effects of participant/link node loses
- 4.11.3.2.3.14. Coordinate the use and transmission of reference points, lines, and areas
- 4.11.3.2.3.15. Coordinate and supervise local fidelity drills to meet mission requirements
- 4.11.3.2.3.16. Know governing military standards and HHQ directives
- 4.11.3.2.3.17. Use COMSEC material required for BICC operations

**4.12. Simulation** . During exercises and crew training periods, an additional section is formed to simulate external participants. All duty positions within the simulation section are unit certified.

**4.13. ABCC Degraded Radar Procedures:**

4.13.1. Surveillance. When the loss of a radar picture prevents the ABCC from detecting aircraft:

4.13.1.1. TADIL-A/J link or voice tell from an AWACS will be displayed in the ABCC computer and identified using standard operating procedures. The ABCC AST will take immediate action to establish the tell required, determining priority areas of voice tell to ensure mission requirements are met. If an AWACS is on station with ADIZ coverage, its surveillance TPA will be expanded within the ADIZ without an orbit change. The ABCC AST, through the MCC, will recommend to the BC an AWACS orbit change and/or other means to reconfigure the Sector to support the active air defense mission as necessary.

4.13.1.2. An AWACS orbit may be adjusted to cover the loss of a single site's radar. The orbit change would offset the loss of ADIZ coverage without degrading overall coverage.

4.13.2. Weapons. Interceptor control would be provided solely by AWACS or the site in the area affected. The deployed WD program does not exist anymore. The extent of the radar coverage loss would dictate whether or not the Battle Commander would transition the AWACS from Level I to Level II. If the ABCC has degraded coverage in an area, AWACS should anticipate transition to Level II or Level III, depending on the air situation at the time. Command would be retained at the BC. Airborne fighters would be informed of the situation by the ABCC WD and directed to contact the AWACS, or augmenting GTACS unit as appropriate.

**4.14. Radar Configuration**

4.14.1. ADS/JSS. The ADS will develop Letters of Agreement (LOAs)/Memorandum of Understanding (MOUs) between the sector and FAA for FAA/USAF joint-use LRRs. As a minimum, these agreements will address procedures for the management of data controls and equipment malfunction reporting. The following guidelines will be used for determining the point of contact for reporting equipment malfunctions that affect operating parameters.

4.14.1.1. Equipment Malfunctions. All malfunctions will be reported and coordinated through the ADS Air Force Job Control (AFJC).

4.14.1.2. JSS Operating Parameters--Joint Use Radar Sites. For joint use radar sites, the AFJC is responsible for coordinating with the FAA National Airspace System Operation Manager (NOM) at the appropriate Air Route Traffic Control Center (ARTCC) for any changes to the basis operating parameters.

**4.15. Radar Configuration Changes** . The following procedures for configuration changes will apply, unless specifically directed otherwise by the ADS.

4.15.1. USAF LRRs. When the FAA (NOM) requires setting changes to the beacon, search radar or the common digitizer that affect both users, coordination will be accomplished with the respective sector AFJC. AFJC will coordinate with the ASO/T regarding requested changes.

4.15.2. USAF/FAA Joint Use LRRs. All radar changes at FAA/USAF joint use LRRs must be coordinated with FAA IAW established LOAs/MOUs prior to ADE. At ADE, actions taken to obtain data are considered dynamic in nature and are exempt from prior coordination. When immediate or emergency action is required, the ASO/T will be notified of the changes as soon as possible. Procedures will be developed for configuration changes requiring immediate or emergency actions. After the procedures have been coordinated and approved by the unit DO, checklists will be published and used to ensure expediency of configuration changes. When the sector ASO/T requires setting changes for live flying exercises, in-flight emergency, execution of CONPLAN 3310 or missions against an unknown target, coordination will be accomplished with the NOM through AFJC to return the feature/device change to their normal day-to-day setting at the termination of the event.

## Chapter 5

### THE KOREAN THEATER AIR CONTROL SYSTEM

**5.1. Mission** . The mission of the Korean Theater Air Control System (KTACS) is to plan, direct, and coordinate the employment of forces engaged in air operations throughout the Republic of Korea (ROK), as directed by the Commander Air Component Command (CACC).

**5.2. Organization** . KTACS provides the organization and equipment necessary to plan, direct, and control air operations as well as to coordinate and link combined, unified, and joint operations. The KTACS is based on the principles of centralized control, decentralized execution, and coordinated efforts.

5.2.1. HTACC. The focal point of the KTACS is the Hardened Theater Air Control Center (HTACC), which exercises centralized control and coordination of air operations. The HTACC monitors the execution of OPLANs in the planning and conduct of day-to-day air operations. Its primary responsibility is to provide the means for directing the detailed employment of available air efforts, through two independently staffed divisions; the 607 Combat Plans Division (CPD) and the 607 Combat Operations Division.

5.2.1.1. The CPD produces and disseminates the Air Tasking Orders (ATO). Assisted by the deputy for operations and deputy for intelligence, the CACC sets the allocation of air efforts.

5.2.1.2. The COD supervises the detailed execution of the air operations orders, ATO, and is responsible for conducting and integrating all air operations through use of the KTACS

5.2.2. MCRC. Directly subordinate to the HTACC is the Master Control and Reporting Center (MCRC). The MCRC is responsible for surveillance, identification, and weapons control. The 1<sup>st</sup> MCRC consists of two units (ROKAF callsign "WATCHMAN" and USAF 621 ACS callsign "COBRA") that perform the primary Air Defense mission in the ROK within two operations centers inside the HTACC facility. Watchman conducts operations through a pc-based system while Cobra operates the pc-based Battle Control System-Korea (BCS-K) via the Tactical Display Framework (TDF). The 2<sup>nd</sup> MCRC (Callsign "ACACIA") located in Daegu also shares in Air Defense operations. During armistice operations, Watchman assumes primary surveillance and identification for 1<sup>st</sup> MCRC as well as responsibility for control of ROKAF assets. Cobra personnel provide primary battle management and weapons control for US assets. The ROKAF Tactical Control Director (TCD) has overall responsibility for the MCRC during armistice. Working in conjunction with the TCD is the senior USAF representative, the Mission Crew Commander (MCC). The MCC performs all coordination with the TCD through the assistance of two ROKAF Coordinators attached to Cobra who serve as interpreters and are the crew's link to the ROKAF TCD and Senior Director (SD).

5.2.2.1. Cobra is the primary USAF air battle management and weapons control element in the ROK. Cobra is comprised of MCC, SD, MCCT, DST, AWO/WD, and 3CO mission teams. Cobra also coordinates, directs, and deconflicts employment of US, and occasionally ROKAF, tactical aircraft in their assigned missions.

### **5.3. Information Flow/Responsibilities.**

5.3.1. Armistice Operations

5.3.1.1. The Commander Air Component Command (CACC) is the senior person in the KTACS command structure.

- 5.3.1.2. The 607 Air and Space Operations Center (607 AOC/CC) is responsible to the CACC.
- 5.3.1.3. The Senior Operations Duty Officer (SODO) is responsible to the 607 AOC/CC.
- 5.3.1.4. The MCC is responsible to the SODO or the Airborne Command and Control (ABC2) Cell, if activated, for all KTACS operations.

#### 5.3.2. Contingency Operations

- 5.3.2.1. The CACC is the senior person in the KTACS command structure.
- 5.3.2.2. The Chief of Combat Operations (CCO) is responsible to the CACC.
- 5.3.2.3. The ABC2 Cell is responsible to the CCO.
- 5.3.2.4. The MCC is responsible to the ABC2 Cell.

### 5.4. Operational Responsibilities.

5.4.1. Mission Crew Commander (MCC): The MCC (13B) is operationally responsible for the crew on duty in the MCRC. The MCC will:

- 5.4.1.1. Interpret battle strategy as passed by the CACC or designated representative and implement this strategy through coordination with the ROKAF TCD.
- 5.4.1.2. Coordinate with ROKAF TCD, Senior Director (SD), and Air Defense Artillery Coordination Officer (ADAFCO) as necessary to integrate tactical actions and weapons assignment of US and ROKAF forces.
- 5.4.1.3. Advise and assist the ROKAF TCD, SD, and ADAFCO to ensure the MCRC and other KTACS elements maintain a current and accurate air picture and execute appropriate tactical actions.
- 5.4.1.4. During decentralized control; act as the direct representative of the CACC in matters involving the implementation of rules of engagement for US aircraft.
- 5.4.1.5. Ensure the USAF SODO or ABC2 Cell is advised of all incidents, activities, and actions taken that may be of interest to the CACC during armistice operations. Advise the ABC2 Cell during contingency operations.
- 5.4.1.6. Ensure the timely management of assigned air defense assets and deconfliction of ADA/DCA assets through coordination with ROKAF TCD. Assume scramble authority for US DCA assets during decentralized KTACS operations IAW the Air Defense Plan.
- 5.4.1.7. Exercise operational control over assets controlled by USAF personnel (MCCT, DST, and WD/AWO).
- 5.4.1.8. Coordinate airspace schedule changes/deviations with 607 COD, ABC2 Cell, USAF SODO and ROKAF Coordinators as required.
- 5.4.1.9. Assist the SD with radio and frequency management.
- 5.4.1.10. Ensure USAF weapons personnel perform the necessary actions to prevent the inadvertent over flight of non-friendly territory or prohibited airspace by US aircraft.
- 5.4.1.11. Ensure special missions receive priority attention by relaying pertinent information to the ROKAF Coordinators for dissemination to the ROKAF TCD and SD.
- 5.4.1.12. In conjunction with the USAF SD, monitor mission tasking versus equipment availability to ensure adequate consoles and radios are available.

- 5.4.1.13. Ensure accountability of all personnel. Ensure sufficient personnel are available on shift to perform all missions and tasks assigned to the 621 ACS. Coordinate anticipated shortfalls and mission saturation with the Director of Operations (DO).
  - 5.4.1.14. Develop overall execution plan to include crew objectives, crew-manning requirements, coordination plan with external C2 agencies, and crew division of labor.
  - 5.4.1.15. Ensure all required shift documentation and briefing slides are completed correctly.
  - 5.4.1.16. Conduct mission planning for exercises and contingency operations and ensure all crew personnel are briefed on tasking, objectives, requirements, rules of engagement, and special instructions.
  - 5.4.1.17. Coordinate with ADAFCO on air defense artillery (ADA) matters relating to flight operations.
  - 5.4.1.18. Coordinate with ADAFCO on matters relating to theater missile defense (TMD) and air breathing threat (ABT) roles.
  - 5.4.1.19. Coordinate with the Korean Surveillance Reconnaissance Center (KSRC) on matters relating to Sensitive Reconnaissance Operations (SRO) aircraft and the 303 Intelligence Squadron on intelligence information.
  - 5.4.1.20. Ensure the radar, communication, and overall BCS-K system status is suitable for mission use.
  - 5.4.1.21. Debrief missions.
  - 5.4.1.22. Coordinate as required with other C2 platforms (AWACS, AEGIS, JSTARS, etc.).
  - 5.4.1.23. Notify the SD of all pertinent changes to include assigned Battle Management Areas (BMA) (i.e. Kill Boxes, CAPs, HAVAA Orbits), external coordination procedures, current emission states, current alert states, ROE, and hostile declaration authority.
  - 5.4.1.24. Execute Dynamic Targeting (DT) tasks by relaying 12-line information received from the ABC2 cell to the XINT controller through the SD.
- 5.4.2. Mission Crew Commander Technician (MCCT): The MCCT (1C5) is responsible for advising and assisting the MCC on all matters concerning the operational and administrative control of MCRC and JICC operations. The MCCT will:
- 5.4.2.1. Ensure messages are encrypted, decrypted, and authenticated as required.
  - 5.4.2.2. Ensure all Battle Staff Directives (BSDs) are received, posted, disseminated, and updated as required.
  - 5.4.2.3. When changeover is complete, report name of MCC on duty to SODO.
  - 5.4.2.4. Coordinate with the ROKAF on operational matters as required.
  - 5.4.2.5. Maintain the MCCT logbook.
  - 5.4.2.6. Coordinate with the DST on operational matters as required.
  - 5.4.2.7. Log COMSEC inventory and destruction results in the MCCT logbook.
  - 5.4.2.8. Perform radar handoff coordination with external agencies such as Incheon Control, which is the primary ATC agency in the ROK.

5.4.3. Senior Director (SD). The SD (13B) is responsible to the MCC for leadership, flight safety, and mission effectiveness of the USAF weapons team within the MCRC. The SD will:

5.4.3.1. Adhere to the MCC's intent and guidance.

5.4.3.2. Coordinate missions according to priorities established in the PRE-ATO and the tactical situation. For daily operations, develop a weapons control plan for mission execution to include positional objectives, communications planning, console assignments, simulation training, and weapons team planning.

5.4.3.3. Develop and brief the weapons specific section of the daily crew brief.

5.4.3.4. Coordinate correlation and radio checks with external agencies as appropriate.

5.4.3.5. Ensure all AWO/WDs have the required resources to execute effective command and control to include ROE, ID matrix, radio frequency, A/C callsign, flight size, and mission location.

5.4.3.6. Coordinate with the MCC, as required, to ensure mission accomplishment. Ensure shift manning is sufficient to perform assigned missions and tasks.

5.4.3.7. Coordinate with MCC on all battle management decisions.

5.4.3.8. Monitor weapons team assignments and provide additional scopes and weapons team personnel when required.

5.4.3.9. Advise the MCC when assigned activities exceed, or may exceed, battle management capabilities. Report all significant events and scheduling deviations.

5.4.3.10. Perform WD/AWO duties when required; based on scheduled flying, WD/AWO availability, and SD ability/necessity to perform mission monitoring.

5.4.3.11. Prepare and present crew changeover and ACCR 60-8 briefings.

5.4.3.12. Ensure crew WD/AWOs fulfill continuation training requirements.

5.4.3.13. Quality check all flying schedules and coordinate solutions with the Current Operations section and MCC.

5.4.3.14. Coordinate with the unit exercise project officers and wing mission planning teams.

5.4.3.15. Coordinate all flying scheduling changes/deviations with the MCC.

5.4.3.16. Coordinate with other C2 agencies (AWACS, AEGIS, JSTARS, etc) and/or representatives in the HTACC for missions allocated to those agencies.

5.4.3.17. Perform all procedures listed in the SD Positional checklists and 621 ACS standards.

5.4.3.18. When mission priorities allow, ensure WD/AWOs attend face to face briefing/debriefings for 36 FS and 25 FS missions.

5.4.3.19. Manage radios and frequencies. Assign radios/frequencies to weapons teams to ensure maximum radio coverage for assigned missions.

5.4.4. Data Systems technician (DST): The DST (1C5) is responsible to the SD. The DST will:

5.4.4.1. Adhere to the MCC/SD's intent and guidance.

- 5.4.4.2. Be responsible to the SD for operational management of crew. Make recommendations to the SD regarding manning requirements and release or recall of personnel. Coordinate with the MCC/T as required.
  - 5.4.4.3. Assist the SD in managing tactical radio frequencies for assignment to control teams.
  - 5.4.4.4. Assist the SD in monitoring flying activity and mission results.
  - 5.4.4.5. Advise the SD of all weather conditions, AIRADS, equipment outages, or other activities that could affect flight safety or mission accomplishment.
  - 5.4.4.6. Coordinate all equipment and radio frequency outages with the MCC/T.
  - 5.4.4.7. Review all mission activity logs for accuracy and content.
  - 5.4.4.8. Perform radio wake up and Have Quick WOD load.
  - 5.4.4.9. Record and report all system degradations to the SD, MCC, and MCC/T.
  - 5.4.4.10. Create, maintain, edit, and distribute situational awareness enhancing overlays.
  - 5.4.4.11. Manage the SIF evaluator function by loading ATO information into the database.
  - 5.4.4.12. Update the Recognizable Air Picture (RAP) by dropping duplicate, local tracks, and associating local and data link tracks.
  - 5.4.4.13. Update and project current radio status, radio frequency assignment, and radar status.
  - 5.4.4.14. Obtain airspace altimeter settings.
  - 5.4.4.15. Ensure the digital recorder within TDF is recording all mission activities from the DST position.
  - 5.4.4.16. Transfer digital recording files to secure removable media for mission reproduction.
  - 5.4.4.17. Coordinate with the Joint Interface Control Cell (JICC) to ensure accurate data link status/architecture and BCS-K transmission in Link 16.
  - 5.4.4.18. Manage frequency change requests with ROKAF Coordinators for radios without remote access.
- 5.4.5. Weapons Director/Air Weapons Officer (WD/AWO): The primary function of the WD/AWO is to provide appropriate control to US aircraft operating within the Korean Air Area of Operations. WD/AWOs are responsible to assist in the conduct of safe air operations and will be on position IAW 621 ACS Positional Standards. The WD/AWO will:
- 5.4.5.1. Adhere to SD intent and guidance.
  - 5.4.5.2. Provide control of aircraft IAW crew and mission objectives while performing the following missions: radar monitor, ACT/DACT training missions, DCA, CAS, OCA, interdiction, air refueling, HVAA support, SRO missions, CSAR, or any other mission assigned by the SD.
  - 5.4.5.3. Ensure aircraft are positively identified when under Cobra control or radar monitor.
  - 5.4.5.4. Provide threat warning, assistance, and initiate other appropriate actions to preclude the overflight of restricted/prohibited areas and non-friendly borders.
  - 5.4.5.5. Coordinate with internal/external agencies as required for efficient transfer of aircraft control.

- 5.4.5.6. Provide necessary assistance to aircraft in emergency situations.
  - 5.4.5.7. Relay enroute and recovery base weather status as required.
  - 5.4.5.8. Solicit pilot reports (PIREPS) as directed and forward PIREPS and in-flight reports to the DST.
  - 5.4.5.9. Inform the SD and MCC as early as possible of any mission deviations that influence the overall execution plan.
  - 5.4.5.10. Attend all face briefs and debriefs unless cleared by both the crew leadership and the controlled flight lead prior to the event.
  - 5.4.5.11. Complete mission planning requirements as dictated by the SD to include reviewing Special Instructions (SPINs), the daily ATO, positional smartpacks, Mission Commander's Orders, and equipment status.
  - 5.4.5.12. Ensure all required resources are available to execute effective C2.
  - 5.4.5.13. Report any significant observations during mission execution for intelligence and mission debrief purposes.
  - 5.4.5.14. Comply with 621 ACS unit standards.
- 5.4.6. System Maintenance (3C0): The 3C0 is responsible to the MCC and will:
- 5.4.6.1. Perform system maintenance for the TDF consoles, communication panels, and support equipment.
  - 5.4.6.2. Perform BCS-K console setup to include the TDF, communication panels, and all display screens.
  - 5.4.6.3. Record and report all console, radio, and display screen degradations to the SD, MCC, and MCCT.
  - 5.4.6.4. Maintain the maintenance logs for all BCS-K systems.
  - 5.4.6.5. Troubleshoot and escalate work orders to appropriate agencies as required as well as track the status of those work orders.
  - 5.4.6.6. Execute contingency mission planning duties as assigned by the MCC.
  - 5.4.6.7. Perform shift handover with oncoming 3C0 on current system status.
  - 5.4.6.8. Brief overall weapon system status, radar preventive maintenance inspections, current radio status, and open tickets at mission brief and debrief.
  - 5.4.6.9. Synchronize BCS-K with the Naval Observatory.
  - 5.4.6.10. Ensure the MCCT knows the status of open work orders and required ops checks.
- 5.4.7. Air Defense Artillery Fire Control Officer (ADAFCO). The ADAFCO is part of the engagement chain of the theater Air Defense Plan and reports directly to the MCC. The ADAFCO will:
- 5.4.7.1. Report PATRIOT system maintenance status, readiness states, location, and weapons hold/free conditions.
  - 5.4.7.2. Issue engagement commands.

5.4.7.3. Perform track correlation between the Information and Coordination Central (ICC) and BCS-K.

5.4.7.4. Perform coordination between Cobra and the PATRIOT batteries.

5.4.7.5. Ensure all PATRIOT fan data is correctly loaded in the BCS-K database.

5.4.7.6. Ensure clear field of fire and all ROE conditions have been met.

## 5.5. Manning.

5.5.1. Contingency Manning: Contingency manning may be implemented by the 621 ACS/CC anytime. Outside augmentation may supplement crew staffing during periods of contingency operations. Augmentees will be responsible to the MCC.

5.5.2. Armistice: Armistice manning may be implemented at the discretion of the 621 ACS/DO. During periods of Armistice manning operations, manning will consist of one WD/AWO serving as check-in controller. The 621 ACS/DO may alter current Armistice manning requirements based on mission requirements.

**Table 5.1. Contingency /Armistice Manning (Total assumes 3 crews)**

<b>CREW POSITION (# per crew)</b>	<b>TOTAL AUTHORIZED</b>
MCC (1)	3
MCCT (1)	3
SD (2)	6
DST (2)	6
WD (6)	18
3CO (1)	3
Civilian Contractor (1)	1

## Chapter 6

### JAPAN AIR DEFENSE SYSTEM (JADS)

**6.1. Mission.** Japanese and US forces are tasked to conduct coordinated air operations during contingency operations and support bilateral exercises/ daily flying operations during peacetime. In situations where delays in coordination jeopardize the safety of US forces, unilateral actions will be taken with subsequent coordination accomplished.

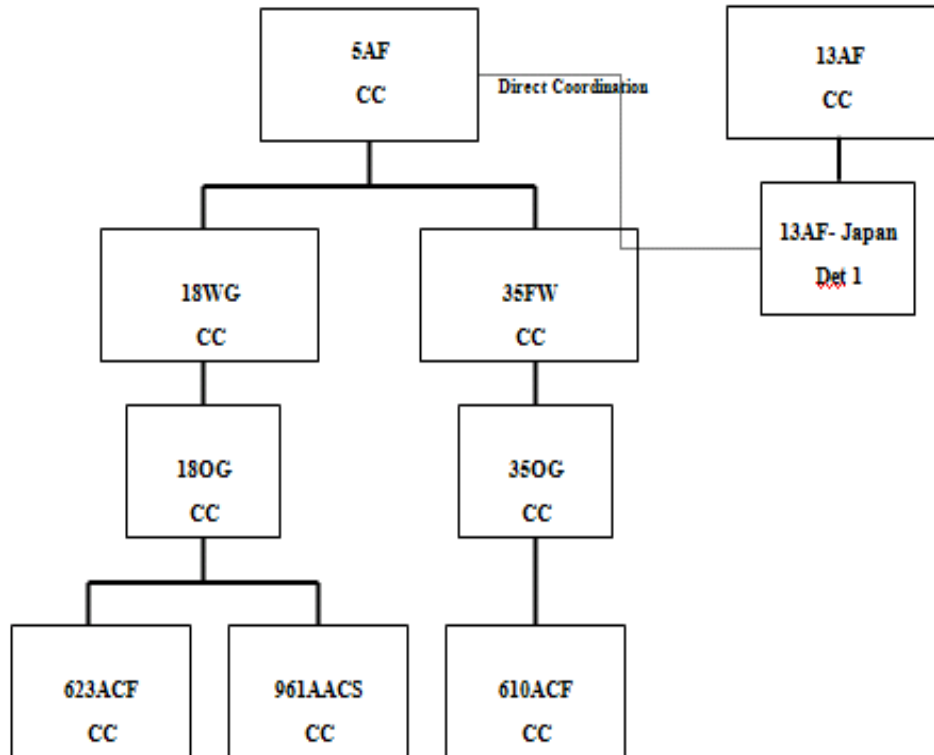
**6.2. Organization.** USAF TACS elements in Japan are OPCON to COMPACAF. During contingency operations when directed, OPCON will be transferred to the 613 AOC, and ADCON will be retained by COMPACAF through 13AF/5AF and parent wings. USAF TACS element command and control functions encompass the full spectrum of battle management, air defense, weapons control, data link operations, and exercise support.

**6.3. 610th Air Control Flight (ACF).** The 610 ACF/CC is responsible for daily Weapons Control Element (WCE) operations support for the Northern Air Defense Sector. During contingency and exercise operations, or when tasked by HHQ to form a TCOT, the 610 ACF/CC will have primary responsibility for its employment. The 610 ACF will:

- 6.3.1. Provide battle staff augmentation and WCEs to TCOTs when tasked by HHQ.
- 6.3.2. Maintain, update, and deploy, as required, deployment kits, checklists, operations procedures, publications, and other materials necessary for TCOT operations.
- 6.3.3. Coordinate with JASDF counterparts to ensure efficient operations.
- 6.3.4. Assist AWACS operations in Japan to include relaying information from 13 AF, Det 1 through the ADLE or other US C2 agencies and coordinating routine weapons control training with local fighter units and other C2 agencies.
- 6.3.5. Augment 613 AOC operations, as necessary, when unit not deployed as a TCOT.

**6.4. 623rd Air Control Flight.** The 623 ACF/CC is responsible for WCE operations support for the Southwestern Composite Air Division. During contingency and exercise operations, or when tasked by HHQ to form a TCOT, the 623 ACF/CC will have primary responsibility for its employment. The 623 ACF will:

- 6.4.1. Provide battle staff augmentation and WCEs to TCOTs when tasked by HHQ.
- 6.4.2. Maintain, update, and deploy, as required, deployment kits, checklists, operations procedures, publications, and other materials necessary for TCOT operations.
- 6.4.3. Coordinate with JASDF counterparts to ensure efficient operations.
- 6.4.4. Assist AWACS operations in Japan to include relaying information from 13AF, Det 1 through the ADLE or other US C2 agencies and coordinating routine weapons control training with local fighter units and other C2 agencies.
- 6.4.5. Augment 613 AOC operations, as necessary, when unit not deployed as a TCOT.

**Table 6.1. Administrative Control (ADCON)/Peacetime Chain of Command.**

## 6.5. Tactical

**Control Operations Team.** The TCOT is a USAF C2 element designed to provide battle management, airspace management, weapons control, and intelligence functions in support of contingency operations. The TCOT is comprised of a variety of units including the 13 AF-Japan/Det 1 staff, 610 ACF, and 623 ACF. 13 AF-Japan/Det 1 forms the senior element of the TCOT, providing senior –level host nation liaison, operational and logistics planning, and intelligence functions. The 610 ACF and 623 ACF form the sector operations element, providing battle management, sector and direction center-level host nation liaison, and weapons control.

6.5.1. Mission. The primary mission of the TCOT is to coordinate and direct US air and air defense artillery (ADA) employment within a sector of the BADGE system using the Air Tasking Order (ATO) and Airspace Control Order (ACO) developed by the Bi-lateral Air Operations Control Center (BAOCC).

6.5.2. Command Relationship. When activated by HHQ, the TCOT is operationally responsible to the Chief, Combat Operations (US) and is the senior US C2 agency within one or more sectors of the JASDF BADGE system.

6.5.3. Operations. TCOT operations are tailored to meet specific taskings. Normal operations include:

6.5.3.1. Coordinate with the JASDF Sector Commander and staff to ensure effective employment of US air and air defense assets.

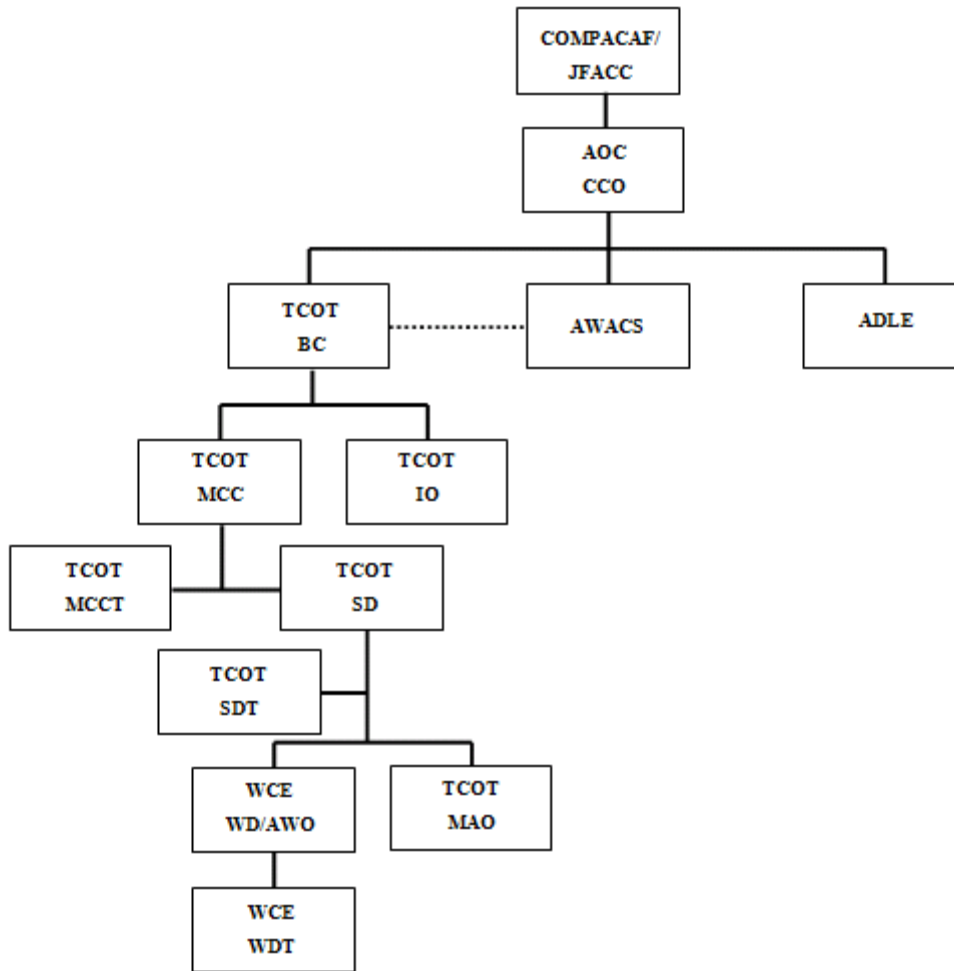
6.5.3.2. Gather and disseminate information to US C2 agencies tasked under them.

6.5.3.3. Support US airborne C2 assets by coordinating orbit area changes, radio frequencies, and weapons control responsibilities.

6.5.3.4. Provide airspace management and flight safety assistance.

6.5.3.5. Control aircraft engaged in tactical operations IAW established joint bilateral operations procedures.

6.5.4. Composition. TCOT positions include a Battle Commander (BC) (when manned, this position filled by 13 AF-Japan/Det 1), Mission Crew Commander (MCC), Senior Director (SD), Missile Assignment Officer (MAO), Weapons Director/Air Weapons Officer (WD/AWO), Mission Crew Commander Technician (MCCT), Senior Director Technician (SDT), Weapons Director Technician (WDT) and Intelligence Officer (IO). Augmentation may be required to fulfill certain positions in a multi-TCOT or extended 24-hour operation.

**Table 6.2. Operational Control (OPCON) Chain Of Command.**

**6.6. Mission Crew Commander (MCC) (13B3C).** The MCC will normally be a Lt Col or Major (610/623 ACF CC or DO) responsible to the BC for supervision of TCOT personnel. The MCC will:

- 6.6.1. Know the capabilities of the BADGE, TACS, and ADA systems.
- 6.6.2. Coordinate with the BAOCC, adjacent TCOTs, and IADS units to ensure effective air defense of Japan.
- 6.6.3. Coordinate the US ATO within the air defense sector.
- 6.6.4. Brief the BC and TCOT operations crew prior to going on duty.
- 6.6.5. Provide SD and MAO battle management and ROE guidance.
- 6.6.6. Commit or engage allocated fighters when authority has been granted by the BC.
- 6.6.7. Coordinate scramble of aircraft for TCOT and AWACS as required.

**6.7. Mission Crew Commander Technician (MCCT) (1C571/D).** The MCCT will normally be a MSgt or TSGT. However, a highly qualified SSgt may fill this position. The MCCT will assist the MCC and:

- 6.7.1. Maintain and make entries in the MCC logbook.
- 6.7.2. Keep MCC informed of any equipment limitations.
- 6.7.3. Ensure proper air picture is displayed to battle staff.

**6.8. Senior Director (SD) (13B3C).** The SD is responsible to the MCC for assignment of allocated weapons and for coordinating and directing activities of the WCEs and MAO. The SD must be a CMR AWO and operate a weapons console in the Direction Center (DC). The SD will:

- 6.8.1. Ensure ATO execution is accomplished.
- 6.8.2. Coordinate operations displays and radio frequencies with the TCOT MCC and JASDF SD, assigning control frequencies to WD/AWOs.
- 6.8.3. Ensure operational checks are made on all required equipment at the beginning of each shift and report all outages to the appropriate agencies.
- 6.8.4. Coordinate with adjacent SD to ensure targets are only engaged by one sector.
- 6.8.5. Coordinate with the JASDF weapons section Fighter Weapons Assignment Director (FWAD)/Command Weapons Director (CWD/AWO) on allocation of US fighters.
- 6.8.6. Receive and disseminate air defense fighter status reports.
- 6.8.7. Assign aircraft to TCOT WCEs and AWACS.
- 6.8.8. Commit or recommit weapons systems based on threat.
- 6.8.9. Ensure adherence to ROE.
- 6.8.10. Coordinate with the MAO or JASDF SAM Weapons Assignment Director (SWAD) aircraft engagements.
- 6.8.11. Ensure mission results are passed to the MCC.
- 6.8.12. When required, maintain communication with AWACS SD.

**6.9. Senior Director Technician (SDT) (1C551/D).** The SDT is responsible to the SD. The SDT must be a qualified CMR WDT or WD. The SDT will:

- 6.9.1. Assist the SD and MAO as required.
- 6.9.2. Extract mission data from the ATO.
- 6.9.3. Coordinate transfer of tactical mission aircraft with WDTs.
- 6.9.4. Update and disseminate air defense status reports.
- 6.9.5. Ensure tactical mission data is maintained and properly displayed.
- 6.9.6. Complete and review all logbook entries, forms, and required reports.

**6.10. Missile Assignment Officer (MAO).** A US Army officer responsible to the SD for the engagement of threats by ADA systems within the system. The MAO will be the liaison between the Commander, AD Brigade, and the TCOT MCC. If a separate scope is not available, the MAO may share a scope with the SD.

**6.11. Intelligence (IN) Support.** The Chief of Intelligence (5 AF/DOI) has overall responsibility for the intelligence element of the four TCOTs. 13 AF-Japan Det 1 will provide TCOTs with timely, collateral tippers on enemy air activity for sector commanders to effectively employ all elements of their IADS.

**6.12. Weapons Control Element (WCE).** The WCE is the basic weapons control element comprised of an AWO/WD (1C5X1D/13B) and a WDT (1C5X1). WCEs may be deployed to a DC individually, as part of a TCOT, or as an advance party during contingency deployments. WCEs provide contingency and peacetime Ground Control Intercept (GCI) support to US flight operations. WCEs may be deployed to any of the BADGE sectors during contingencies or exercises based on the tactical situation or HHQ tasking. WCEs are responsible to their respective ACF/CC during peacetime operations and to the sector BC/MCC during contingency operations. Each WCE will require the use of an operations display console and communication subsystem.

**6.13. Weapons Director/Air Weapons Officer (WD/AWO) (1C5X1D/13B3C).** The WD/AWO is responsible to the SD for control of assigned aircraft. The WD/AWO will:

- 6.13.1. Coordinate with other WD/AWOs, JASDF and US, on tactical actions which may affect other missions.
- 6.13.2. Coordinate with other air defense agencies to ensure the safe ACO execution.
- 6.13.3. Understand other services/allied C2 systems equipment capabilities/limitations.
- 6.13.4. Know performance/ordnance characteristics of assigned weapons systems.
- 6.13.5. Position fighters for intercept and/or engagement of assigned airborne targets.
- 6.13.6. Hand-off aircraft to other control agencies for recovery.
- 6.13.7. Inform the SD of conditions/situations that may affect mission or aircraft safety.
- 6.13.8. Keep aircrew advised of tactical information that may affect mission accomplishment.
- 6.13.9. Pass control instructions to aircrew and receive aircrew reports as required.
- 6.13.10. Solicit pilot reports (PIREPS) as directed and forward them to the SD/SDT.
- 6.13.11. Ensure flight safety.
- 6.13.12. Provide aircraft with necessary navigational and emergency assistance,
- 6.13.13. Complete all appropriate logs/forms.
- 6.13.14. Brief the relieving WD/AWO on the current operational situation.
- 6.13.15. Perform authentication procedures.

**6.14. Weapon Director Technician (WDT) (1C5X1/D) .** The WDT is responsible to the WD/AWO. The WDT requires access to the weapons display console and communication subsystem. The WDT will:

- 6.14.1. Input tactical action data and mission results into the BADGE system.
- 6.14.2. Complete mission logs for all assigned missions.
- 6.14.3. Execute internal and external coordination as directed by WD/AWO.
- 6.14.4. Enter data into the system, via the Manual Entry Terminal (MET).
- 6.14.5. Know capabilities/limitations of equipment and other services/allied C2 systems.

- 6.14.6. Know performance/ordnance characteristics of assigned weapons systems.
- 6.14.7. Report equipment outages/malfunctions to the SDT.
- 6.14.8. Perform authentication procedures.
- 6.14.9. Report mission results/in-flight reports to the SDT.
- 6.14.10. Ensure adequate operations support supplies are available for WCE use.
- 6.14.11. Brief the relieving WDT on the current operational situation.

**6.15. Steady State Manning Requirements.** 610/623 ACF will provide manning for the following operations positions: MCC/T, SD/T, WD/AWO/WDT. The SDT will designate a WDT to perform duties as required.

6.15.1. Manning Levels. Manning levels for 610/623 ACF are as follows:

6.15.1.1. Peacetime. One officer (MCC or SD), three WD/AWOs, and three WDTs.

6.15.1.2. Exercise and contingency. 610/623 ACF manning will be IAW unit DOC Statement or exercise/operational taskings.

6.15.1.3. The Commander, 610/623 ACF is the waiver authority for any manning requirements.

**Table 6.3. TCOT/WCE Steady State Manning Requirements.**

Positions	One Sector
BC	1 (note 1)
MCC	1
MCCT	1
SD	1
SDT	1
MAO	1 (note 2)
IO	1 (note 3)
WD/AWO	3
WDT	3

**Notes:** Configuration of TCOT/WCE may vary due to requirements established by the commander, 613 AOC. Augmentation from outside AO may be required to sustain operations in one sector or to activate multi-sector operations.

1. When manned, this position filled by 13 AF-Japan Det 1.
2. When manned, this position filled by US Army.
3. When manned, this position filled by 13 AF Japan Det 1.

**6.16. BADGE System Equipment.** The majority of equipment used by TCOT/WCE is owned by the Government of Japan (GOJ). Under the Status of Forces Agreement (SOFA), II4B Sole Use Agreements for USAF, access to JASDF C2 facilities allows US C2 unit access and use of equipment through Letters of Agreement (LOA). That equipment includes:

- 6.16.1. HMD-22 ODC

- 6.16.2. Radio Assignment System (RAS)
- 6.16.3. Manual Entry Terminal (MET)
- 6.16.4. Air Defense Command System (ADCS)
- 6.16.5. BADGE Telephone System
- 6.16.6. JASDF Toll Phone System

**6.17. Communications Recording.** Recording of live air mission activity is essential to provide necessary information concerning aircraft accidents, declared emergencies, and/or any event resulting in subsequent investigation. Recordings also provide an excellent training tool for debriefs.

6.17.1. The following voice circuits should be recorded:

- 6.17.1.1. UHF Guard channel.
- 6.17.1.2. UHF Primary frequency.
- 6.17.1.3. G/A/G frequencies in use.

6.17.2. Recordings Retention.

6.17.2.1. Normal. Routine recordings will be retained as appropriate.

6.17.2.2. Special. Recordings containing information concerning an accident of significant incident will be identified, marked and retained in a secure location indefinitely or until the incident is resolved. The MCC or higher authority may also direct recordings be retained for a specific reason. In such a case, the recording will be marked appropriately with the requester's name, rank, duty title, organization, and disposition instructions.

6.17.2.2.1. JASDF have voice tapes of each IC console. Obtain a transcribed copy of JASDF console tapes and a copy of the recording. When JASDF transcribe console tapes a USAF representative will be present to ensure proper transcription. The transcription will be delivered to the SD or MCC on duty.

**6.18. Air Defense Liaison Element (ADLE).**

6.18.1. Mission. The 13 AF Det 1 serves as an air defense liaison for the Commander of United States Forces Japan (USFJ)/5 AF and 13 AF to the Japanese Self Defense Forces for US air operations conducted within the Japanese Air Identification Zone (JADIZ). The 13 AF Det 1 through close coordination with 5 AF is directly responsible to the 13 AF-Japan, Det 1/CC for dissemination of information between 7AF, USN, USMC, and JASDF C2 agencies.

6.18.2. Positions and Responsibilities.

6.18.3. Commander (13B). The commander is responsible to the 13 AF-Japan, Det 1/CC for the overall management of operations within the 13 AF Det 1 including employment planning and coordination with US and Japanese C2 agencies. Coordinates with senior command levels to ensure the 13 AF Det 1 is manned and properly equipped.

6.18.4. Operations Superintendent (1C571). The operations superintendent is responsible to the commander for the management of operations. Supervises operations training and standards/evaluations, and maintains mission ready (MR) status as a Liaison Technician.

6.18.5. Liaison Technician (LT) (1C5X1). The ADLE is manned continuously by two technicians per shift with minimum manning being one technician. The LT will:

- 6.18.5.1. Post daily air and naval activity involving US assets in the assigned AOR.
- 6.18.5.2. Provide timely and accurate forward, lateral, and back tell to AETACS aircraft and USN, JASDF and theater C2 agencies.
- 6.18.5.3. Work coordinate with JASDF Air Operation Coordination Center (AOCC) to identify US assets working in or around the JADIZ.
- 6.18.5.4. Relay unknown and hostile track activity laterally told from KADS and USN vessels that are not in the Japan base air defense ground environment (BADGE) system.
- 6.18.5.5. Conduct mission following during Sensitive Reconnaissance Operations. Assist in aircraft identification through coordination with AOCC, sectors and Pacific Reconnaissance Operations Center (PACROC).
- 6.18.5.6. Relay to Pacific Intelligence agencies information on air defense scrambles conducted by JASDF on unknown tracks.
- 6.18.5.7. Inform the 613 AOC Pacific Rescue Coordination Center (PAC RCC) about in-flight emergencies involving US military aircraft. Also advise local command centers.
- 6.18.5.8. Review and release USN flight advisory activity messages to JASDF AOCC and resolve conflicts involving area assignment and scheduling.
- 6.18.5.9. Serve as Region Control Station for the WESTPAC Cross-tell Net. Responsible for overall net operations and discipline communications.
- 6.18.5.10. Report equipment outages to appropriate agencies and monitor status until equipment returns to full operations
- 6.18.5.11. Be familiar with ADSI operations to include, TADIL A, B, and J operations.
- 6.18.5.12. Manage and operate the theater JTIDS Bi-lateral Coordination Cell (BLCC) in conjunction with the JASDF.
- 6.18.5.13. Advise AOCC on naval vessels operating within the JADIZ.

## Chapter 7

### DOCUMENTATION

**7.1. General** . Management and control of publications, records, and required documentation is essential for the effective management of the ADS. This chapter establishes the requirements and provides guidance for the maintenance of required publications and documentation.

**7.2. Operations Instructions (OIs)** . A set of OIs will be prepared to detail the local operational policy and procedures that may not be fully explained in HHQ directives.

**7.3. Operations Information File (OIF)**. The OIF is required to ensure that information essential to the conduct of operations or emergency conditions are available in the ADS. Procedures for the OIF are contained in ACCI 13-1ADOIF/PACAF 10-601. 1 AF (AFNORTH)/Sectors submit draft supplements to ACCI 13-1ADOIF to HQ ACC/A3Y. HIRAOC/AKRAOC submits draft supplements/changes to HQ PACAF/A3Y. OIs are recommended to establish local procedures for maintenance of the OIF.

#### **7.4. Logbooks:**

7.4.1. Logbooks must be maintained at the MCC and any other position as determined by the Designated Operations Authority (DOA). Perform and log all classified inventories completed for each applicable logbook. Logbooks are official records of events that occurred during a crew's tour of duty. The purpose is to maintain an accurate and detailed record of all significant events pertaining to operations.

7.4.2. Air Defense Units may use the electronic logbook method (Dynamic Synchronized Event log (DSEL)) instead of the permanently bound book. However, the permanently bound book will be used as a back-up. In the event of a software outage or hardware equipment loss supporting the DSEL, permanently bound log books will be used during the outage and then transcribed back into DSEL when the equipment becomes available.

7.4.2.1. HQ NORAD/USNORTHCOM/J35 (N/NCJ35) will provide the necessary training, funding, and technical/software support of the DSEL application.

7.4.3. The following procedures apply for all permanently bound logbooks:

7.4.3.1. Logbooks will be maintained in a permanently bound book, such as a ledger or journal. A ledger may be obtained under GSA Stock Number 7530-00-286-8363.

7.4.3.2. Logbooks will be classified SECRET/RELCAN and releasable to appropriate individuals as they will contain information concerning actual or simulated exercise alert warnings, states of preparedness, IFF/SIF modes and codes of the day, air-to-ground frequencies, system capabilities, outages, and so forth. Logbooks will be marked, handled, and stored IAW AFI 31--401 *Information Security Program Management*.

7.4.3.3. Entries in logbooks will be made in black or blue ink. Erasures will not be made. Errors will be corrected by lining through incorrect words and will be initialed by the person making the correction. Highlighting of critical items and times is authorized.

7.4.3.4. All logbooks will be opened at 0001 or the beginning of each duty day and closed at 2400Z or the end of each duty day. All entries will be made using ZULU time.

7.4.3.5. It is not necessary to record information that has already been noted in another authorized document, unless it is deemed appropriate for clarity and understanding.

7.4.4. The following entries are required in all logbooks:

7.4.4.1. Time of each entry (ZULU).

7.4.4.2. . Classification each entry

7.4.4.3. Signature/Sign-in of the responsible individual at the beginning and end of the duty day.

7.4.4.4. COMSEC inventory complete

7.4.4.5. Call sign or name of Agency of unit to which information is passed or received.

7.4.4.6. Initials of both individual passing and receiving information to the maximum extent possible..

7.4.4.7. Verbal orders or instructions that deviate from standard operating procedures, including name, rank, organization of the authorizing party, any authentication used, and if reply was appropriate.

7.4.4.8. Requested reports from other units.

7.4.4.9. Flight on duty

7.4.5. The following entries will be logged :

7.4.5.1. All changes in alert warnings and states of preparedness. Indicate live fly exercise as applicable.

7.4.5.2. All information concerning aircraft accidents, near misses, and declared emergencies (Operations Report (OPREP) items or other items of significance to the sector).

7.4.5.3. Tactical action taken (when required) against tracks classified non-friendly.

7.4.5.4. Weather warnings.

7.4.5.5. Mandatory scramble status of assigned air bases, to include reason for mandatory status.

7.4.5.6. Start and stop times of all exercises. Separate logbooks for recording exercise information are authorized.

7.4.6. All information concerning TOI prosecution.

7.4.6.1. Status of Action

7.4.6.2. Commander availability

7.4.7. .Significant events

7.4.7.1. Link status and changes

7.4.7.2. EAM/QRM messages

7.4.8. : Configuration changes

7.4.8.1. Sensor changes

7.4.8.2. Equipment changes.

7.4.8.3. Communications changes

7.4.8.4. Applicable EA activity. spectrum interference incidents/reports, , Electronic Combat Tactical Action Reports (ECTAR), EA missions, FAA cease buzzers, and other items that may or do affect the management of the ADS.

**7.5. Voice Recording, Retrieval and Storage.** Recording of live air sovereignty mission activity is essential to provide necessary information concerning BCC events resulting in subsequent investigation.

7.5.1. All unclassified active BCC voice communication systems will be recorded. Units will develop local retrieval and storage procedures.

7.5.1.1. Normal. Voice recordings containing routine information will be retained for a minimum of 30 days.

7.5.1.2. Special. Voice recordings containing information concerning BCC events will be identified, marked and retained in a secure location indefinitely or until the incident is resolved. The MCC or higher authority may direct the media to be retained for a specific reason. In such a case, the media will be marked appropriately with the requester's name, rank, duty title, organization, and disposition instructions.

**7.6. Data Recording .** Retain data recordings for 30 days. Recording data containing information concerning accident/incident will be identified, marked, and retained until the incident is resolved or for a minimum of six months. The MCC or higher authority may direct data media be retained for a specific reason. In such a case, mark the data media appropriately with the requester's name, rank, duty title, and organization, and disposition instructions.

**7.7. COMSEC Requirements.** The unit COMSEC Responsible Officer (CRO) will ensure required COMSEC materials are available to the duty crew.

**7.8. BCC Checklists :**

7.8.1. General. BCC checklists are listing of steps that must ordinarily be taken in sequence to respond properly to a particular event. All steps in a checklist must normally be taken before the desired response is complete.

7.8.2. Administrative Requirements. BCC checklists will be maintained IAW the following administrative guidelines:

7.8.3. The first page of each binder/holder will contain a sheet showing date reviewed and the initials of the reviewer. Each unit will develop internal review procedures to ensure that only current checklists are in use. All checklists will be reviewed annually at a minimum. Signature of the reviewer signifies checklists are current. Checklists will be marked according to DOD Reg 5200.1-5/AFI 31-401 security instructions.

7.8.4. The first checklist in any binder/holder will always be the 'Aircraft Emergency' checklist.

7.8.5. If checklists are combined with other types of guides or documents such as locally developed operator handbooks, the checklists will be placed to the front and separated from other material.

**7.9. Quick Reference Guides (QRG).** Quick reference guides are similar to checklists but do not need sequential steps and can contain charts, maps, telephone listings, etc., in any format or arrangement. Both checklists and guides will list the specific reference documents upon which the procedures are based (manuals, regulations, technical orders, operations instructions, etc.). QRGs may be prepared for all duty positions. QRGs may contain the following types of information.

7.9.1. Emergency airfield data and emergency procedures.

- 7.9.2. Aircraft resources.
- 7.9.3. Air bases and aircraft units.
- 7.9.4. Radar units.
- 7.9.5. Safe passage corridors.
- 7.9.6. ROE.
- 7.9.7. Identification criteria.
- 7.9.8. Jettison/bail out areas.
- 7.9.9. IFF/SIF procedures.
- 7.9.10. Communications and frequency information.
- 7.9.11. Search and rescue procedures.
- 7.9.12. AO.
- 7.9.13. Console and communications procedures.

**7.10. Disposition of Documentation.** All forms completed during the tour of duty will be appropriately marked and filed chronologically by date.

**7.11. Prescribed and Adopted Forms.**

Air Force Form 847, Recommendation for Change of Publication

DANIEL J. DARNELL, Lt Gen USAF  
DCS, Operations. Plans and Requirements

## Attachment 1

### GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

#### *References*

CJCSM 6120.01C 1 Mar 2000 *Joint Multi-TADIL Operating Procedures*

JCS Pub 3.76, *Tactical C2 Planning Guidance and Procedures for Joint Operations*

AFPD 13-1, *Theater Air Control System*, 11 May 1995

AFTTP 3-1, *Air Force Tactics, Techniques, and Procedures*,

AFI 10-707, *Spectrum Interference Resolution Program*, 20 June 2005

AFI 11-2/TC-18 Volume 3, */TC-18 Operations Procedures*

AFI 11-214, *Aircrew, Weapons Director, and Terminal Attack Controller Procedures for Air Operations*

AFI 13-1AOC Vol. 3. *Operational Procedures—Aerospace Operations Center*

AFI 31-207, *Arming and Use of Force By Air Force Personnel*, 29 January 2009

AFI 33-201V2, *Communications Security (COMSEC) User Requirements*, 26 April 2005 (FOUO)

AFI 10-206, *Operational Reporting*, 15 October 2008

AFMAN 33-363, *Management of Records*, 1 March 2008

NORAD Instruction (NI) 10-4, *NORAD Emergency Action Procedures*

NI 10-8, (S) *NORAD E-3 Operating Procedures (U)*

NI 10-15, *Identification of Air Traffic*

NI 10-18, *NORAD Region Ground Environment System Configurations*

NI 10-19, *NORAD Aerospace Reporting Procedures*

NI 10-41, (S) *Wartime Safe Passage of Friendly Aircraft (U)*

NI 10-42, *Reporting, Scheduling and Approving Region System Downtime*

COMPLAN 3310

ACCIADOIF, *Air Defense Operations Information File*

PACAFI10-601, *Command and Control Operations Procedures*, 24 March 2009

PACAFI10-701, *Air Defense*

#### *Abbreviations and Acronyms*

**AAMDS**—Automated Air Movement Data System

**ACC**—Air Combat Command

**ACC/OAC**—Area Control Center/Oceanic Area Control

**ACCI**—Air Combat Command Instruction

**ACS**—Air Control Squadron

**ACWO**—Aircraft Control and Warning Officer  
**ADC**—Air Defense Center  
**ADCC**—Advanced Communications Protocol  
**ADCF**—Air Defense Control Facility  
**ADE**—Air Defense Emergency  
**ADIZ**—Air Defense Identification Zone  
**ADLE**—Air Defense Liaison Element  
**ADS**—Air Defense Sector  
**ADSI**—Air Defense Systems Integrator  
**AETACS**—Airborne Elements of the Theater Air Control System  
**AEW**—Airborne Early Warning  
**AICC**—Air Intercept Control Common  
**AICU**—Advanced Interface Control Unit  
**AMD**—Air Movement Data  
**AMICC**—Air Marine Interdiction Coordination Center  
**AMIS**—Air Movement Information System  
**AMS**—Air Mission System  
**ANGB**—Air National Guard Base  
**AOCAICU**—Air Operations Center AICU  
**AOC**—Air and Space Operations Center  
**AOCC**—Air Operations Control Center  
**AO**—Area of Responsibility  
**ARTCC**—Air Route Traffic Control Center  
**ASO**—Air Surveillance Officer  
**AST**—Air Surveillance Technician  
**ATDL**—Army Tactical Data Link  
**ATDS**—Airborne Tactical Data System  
**AWC**—Air Warning Center  
**AWACS**—Airborne Warning and Control System  
**AWO**—Air Weapons Officer  
**BAOCC**—Bi-lateral Air Operations Control Center  
**BC**—Battle Commander  
**BCC**—Battle Control Center

**BLCC**—Bi-lateral Coordination Cell  
**BRL**—Bomb Release Line  
**BS**—Battle Staff  
**C2**—Command and Control  
**C3**—Command, Control, and Communications  
**C3I**—Command, Control, Communications, and Intelligence  
**CAF**—Combined Air Forces  
**CANR**—Canadian ROCC  
**CAP**—Combat Air Patrol  
**CBRN**—Caribbean Basin Radar Network  
**CC**—Commander/Central Computer  
**CCT**—Communications-Computer Technician  
**CCTV**—Closed Circuit Television  
**CDS**—Combat Director System  
**CEO**—Communications and Electronics Officer  
**CF**—Canadian Forces  
**CDRUNC/CACC**—Commander, United Nations Command /Commander, Air Component Command  
**CMAFS**—Cheyenne Mountain Air Force Station  
**CMC**—Cheyenne Mountain Complex  
**COMMAFFOR**—Commander of Air Force Forces  
**COMSEC**—Communications Security  
**CONPLAN**—Contingency Plan  
**CONR**—CONUS NORAD Region  
**CONUS**—Continental United States  
**CONUS RAOC**—CONUS Region Air Operations Center  
**CP**—Command Post  
**CRC**—Control and Reporting Center  
**CSO**—Communication System Operator  
**CTPM**—Common Tactical Picture Manager  
**CW**—Continuous Wave  
**DC**—Direction Center  
**DE**—Defense Emergency  
**DEFCON**—Defense Condition

**DIRLAUTH**—Direct Liaison Authorized  
**DLRP**—Data Link Reference Point  
**DO**—Director of Operations  
**DOC**—Design Operation Capability  
**DOD**—Department of Defense  
**DOOI**—Director of Operations Operating Instruction  
**DQM**—Data Quality Monitor  
**DRPCA**—Digital Remote Programmable Conference Arranger  
**DSN**—Defense Switched Network  
**DTS**—Data Terminal Set  
**EA**—Electronic Attack  
**EAC**—Emergency Action Coordinator  
**EAM**—Emergency Action Message  
**EBS**—Extended Battle Staff  
**ECRS**—East Coast Radar System  
**ECTAR**—Electronic Combat Tactical Action Reports  
**EP**—Electronic Protection  
**EPM**—Electronic Protection Measures  
**ESR**—Equipment Status Report  
**ETRO**—Estimated Time to Return to Operation  
**FAA**—Federal Aviation Administration  
**FS**—Fighter Squadron  
**FM**—Frequency Modulated  
**FMC**—Fully Mission Capable  
**FO**—Fighter Officer  
**FOSIC**—Fleet Oceanic Surveillance and Intelligence Center  
**FPS**—Flight Path Simulator  
**G/A/G**—Ground/Air/Ground  
**GCCS**—N –Global Command and Control System-NORAD  
**GDSO**—General, Deployment and Sustainment Officer  
**GTACS**—Ground Theater Air Control System  
**HF**—High Frequency  
**HHQ**—Higher Head Quarters

**I&W**—Indications and Warning  
**IAW**—In accordance with  
**ICT**—Interface Control Technician  
**ICO**—Interface Control Officer  
**IDT**—Identification Technician  
**IFF/SIF**—Identification Friend or Foe/Selective Identification Feature  
**IJMS**—Interim JTIDS Message Specification  
**IO**—Intelligence Officer  
**IPS**—Fighter Pilot Simulator  
**ITW/AA**—Integrated Tactical Warning and Attack Assessment  
**JADS**—Japan Air Defense System  
**JCS**—Joint Chiefs of Staff  
**JASDF**—Japan Air Self Defense Forces  
**JCP**—Joint Command Post  
**JICO**—Joint Interface Control Officer  
**JOTS**—Joint Operational Tactical System  
**JSS**—Joint Surveillance System  
**JSSROC**—Joint Southern Surveillance Reconnaissance Operations Center  
**JSTARS**—Joint Surveillance Target Attack Radar System  
**JTAO**—Joint Tactical Air Operations  
**JTIDS**—Joint Tactical Information Distribution System  
**JVIDS**—Joint Visual Information Display System  
**LEA**—Law Enforcement Agency  
**LERTCON**—Alert Condition  
**LMS**—Link Monitoring System  
**LOA**—Letter of Agreement  
**LOS**—Line-of-Sight  
**LRR**—Long Range Radar  
**LSVD**—Large Screen Visual Display  
**MACCS**—Marine Air Command and Control System  
**MADIZ**—Military Air Defense Identification Zone  
**MCC**—Mission Crew Commander  
**MCCT**—Mission Crew Commander Technician

**MCE**—Modular Control Equipment  
**MCS**—Modular Control System  
**MIG**—MCE Interface Group  
**MIT**—Manual Inputs Technician  
**MOU**—Memorandum of Understanding  
**MOC**—Maintenance Operations Center  
**MRL**—Missile Release Line  
**MTR**—Minimum Training Requirements  
**MTS**—Advanced Tracking System  
**NACE**—NORAD Airborne Control Element  
**NAS**—NORAD Alert System  
**NCA**—National Command Authorities  
**NCC**—NORAD Command Center  
**NCS**—Net Control System  
**NM**—Nautical mile  
**NMC**—Non-Mission Capable  
**NOC**—NORAD Operations Center  
**NOM**—National Airspace System Operation Manager  
**NORAD**—North American Aerospace Defense Command  
**NOTAM**—Notices to Airmen  
**NSSF**—NORAD Software Support Facility  
**NTDS**—Naval Tactical Data Systems  
**NWS**—North Warning System  
**OCC**—Operations Control Center  
**ODC**—Operations Display Console  
**OG**—Operations Group  
**OI**—Operating Instructions  
**OIF**—Operations Information File  
**OM**—Operations Module  
**OPCON**—Operational Control  
**OPDAT**—Operations Data  
**OPLAN**—Operations Plan  
**OPORD**—Operations Order

**OPREP**—Operations Report  
**OTH-B**--Over-the-Horizon Backscatter  
**OTO**—Operations Training Officer  
**P/NMC**—Partially/Non-Mission Capable  
**PRIS**—Puerto Rican Radar Integration Site  
**PROC**—Puerto Rican Operations Center  
**PSO**—Program Support Office  
**PU**—Participating Unit  
**QRG**—Quick Reference Guide  
**RADIL**—RAOC/AWACS Digital Information Link  
**RAT**—Remote Access Terminal  
**RDU**—Radar Display Unit  
**RICO/SICO**—Region Interface Control Officer/Sector Interface Control Officer  
**ROE**—Rules of Engagement  
**ROTHR**—Relocatable Over-the-Horizon Radar  
**RTQC**—Real Time Quality Control  
**SADO/T**—Senior Air Defense Officer/Technician  
**SATCOM**—Satellite Communications  
**SCAT**—Security Control of Air Traffic  
**SD**—Senior Director  
**SDT**—Senior Director Technician  
**SE**—Southeast; System Engineer  
**SHF**—Super High Frequency  
**SHORAD**—Short Range Air Defense  
**SPACC**—Space Command  
**SROC**—Southern Region Operations Center  
**SRR**—Short Range Radar  
**STE**—System Training Exercise  
**STOP**—Strategic Orbit Point  
**TACON**—Tactical Control  
**TACS**—Theater Air Control System  
**TADIL**—Tactical Digital Information Link  
**TADS**—Theater Air Defense System

**TARS**—Tethered Aerostat Radar System  
**TCOT**—Tactical Control Operations Team  
**TDC**—Track Data Coordinator  
**TFA**—Temporary Free Area  
**TgM**—Target Monitor  
**TgMC**—Target Monitor Chief  
**TgMCT**—Target Monitor Chief Technician  
**TgMT**—Target Monitor Technician  
**TT**—Tracking Technician  
**TW/AA**—Threat Warning/Attack Assessment  
**UAR**—Unattended Radar  
**UHF**—Ultra High Frequency  
**USELMNORAD**—US Element NORAD  
**USACOM**—US Atlantic Command  
**USMTF**—United States Message Text Format  
**USSOUTHCOM**—US Southern Command  
**VHF**—Very High Frequency  
**WCE**—Weapons Control Element  
**WCRS**—West Coast Radar System  
**WD**—Weapons Director  
**WDT**—Weapons Director Technician  
**WO**—Weather Officer