BY ORDER OF THE COMMANDER
354 FIGHTER WING (PACAF)

354TH FIGHTER WING MANUAL
13-212

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Nuclear, Space, Missile, Command and Control

JOINT PACIFIC ALASKA RANGE COMPLEX PLANNING AND OPERATIONS

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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(Lt Col Jay B. Doerfler)
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This manual compliments Air Force Manual (AFMAN) 13-212v1, Range Planning and Operations. It governs operations in the Joint Pacific Alaskan Range Complex (JPARC) and applies to all range users. Range users and sponsoring agencies may amplify this manual with more restrictive guidance, as necessary, to provide direction to their organizations. All applicable Air Force Instructions (AFI), Federal Aviation Administration (FAA) Orders, and Federal Aviation Regulations (FAR) apply. This manual is applicable to all military, civilian, and contractor personnel. It also applies to the Air Force Reserve Command (AFRC) and to Air National Guard (ANG) and their units. Ensure all records generated as a result of processes prescribed in this publication adhere to AFI 33-322, Records Management and Information Governance Program, and are disposed in accordance with the Air Force Records Disposition Schedule, which is located in the Air Force Records Information Management System. Refer recommended changes and questions about this publication to the office of primary responsibility (OPR) using the DAF Form 847, Recommendation for Change of Publication; route DAF Forms 847 from the field through the appropriate functional chain of command. The authorities to waive wing/unit level requirements in this publication are identified with a Tier ("T-0, T-1, T-2, T-3") number following the compliance statement. See Department of the Air Force Manual (DAFMAN) 90-161, Publishing Processes and Procedures, for a description of the authorities associated with tier numbers. Submit requests for waivers through the chain of command to the appropriate tier waiver approval authority, or alternately, to the publication OPR for non-tiered compliance items.

Chapter 1

INTRODUCTION

1.1. Overview. The contents of this manual are governed by AFMAN 13-212v1, **paragraph 2.9.16**, and establishes operations and procedures for aircrew and other users assigned to Alaska-based USAF units, USAF-hosted units, including ANG, AFRC, foreign military, DoD civilians, contractors, etc., operating in USAF managed airspace. Additionally, this guidance applies to the ranges managed by both the United States Army (USA) and USAF during daily training and exercises including, but not limited to, RED FLAG-Alaska and NORTHERN EDGE. Airspaces and ranges will henceforth be referenced as the Joint Pacific Alaska Range Complex (JPARC).

1.1.1. **Purpose.** This document supplements AFMAN 13-212v1, Range Planning and Operations, by providing processes, procedures, and restrictions unique to operating in the JPARC. Its purpose is to provide commanders, users, and support agencies guidance to manage resources and meet training requirements safely and effectively.

1.2. Guidance. Safe and optimum use of Alaskan training airspace and ranges can only be realized when AFMAN 13-212v1, Army Regulation (AR) 385-63, Department of the Army Pamphlet (DAPAM) 385-63, United States Army Ranges Alaska (USARAK) Regulation 350-2 Annexes A-C Training and Range Safety, and this supplement are actively supported. All aircrew, Range Control Officers (RCOs), and ground parties who perform duties within the boundaries of Alaskan training airspace and ranges will comply with this supplement.

1.2.1. Accompanying this supplement are two complementary documents, 11th AF Alaska Airspace Handbook, and the 11th AF Range Handbook.

1.2.1.1. The 11th AF Alaska Airspace Handbook provides the complete list of JPARC airspace and restrictions for its use. It is available at: **https://intelshare.intelink.gov/sites/354RANS** or by contacting 354 RANS/RSA, DSN 317-377-5921/5922. The source document for Special Use Airspace (SUA) is Federal Aviation Administration (FAA) Order 7400.10. The source document for Air Traffic Control Assigned Airspace (ATCAA) is The Description of Military Airspace (DOMA) Letter of Agreement (LOA) between Anchorage Air Route Traffic Control Center (ARTCC) and 11th AF.

1.2.1.2. The 11th AF Range Handbook is the sole source of information on JPARC targets. It is available, along with other range information, at: **https://wss.apan.org/public/354RANS** or by contacting 354 RANS/RSC, DSN 317-377-7010, Comm 907-377-7010.

1.3. JPARC Overview. JPARC Overview. JPARC is an operational range as defined in Title X US Code §101(f)(3). It consists of maneuver areas, impact areas, electronic scoring sites, buffer zones with restricted access, and airspace areas designated for military use in accordance with regulations and procedures prescribed by the Administrator of the Federal Aviation Administration. AFMAN13-212v1, **Attachment 2**, entitled United States Air Force Operated or Owned Ranges Governed By this Manual states – JPARC (a primary training range located in Alaska) is PACAF operated and PACAF and U.S. Army owned. It further states PACAF/A31 will designate the range operating authority for the Joint Pacific Alaska Range Complex. JPARC is composed of Restricted Areas, Army Training Areas, a Warning Area, Military Operating Areas

(MOAs), Air Traffic Control Assigned Airspace (ATCAAs), Instrument Routes (IR) and Visual Routes (VR) Military Training Routes, Air Refueling Routes, Low Altitude Training Navigation (LATN) Area, Landing Zones/Drop Zones (LZ/DZ), and TMAA associated with the military installations in Alaska: Fort Greely; Fort Wainwright; Joint Base Elmendorf-Richardson (JBER); and Eielson Air Force Base (AFB). The MOAs and Restricted Areas total approximately 77,000 square miles and the TMAA adds an additional 43,000 square miles of training space.

1.4. JPARC Airspace Overview. Complete airspace descriptions including legal description, coordinates, coordination areas, exclusion areas, adjustments and use restrictions can be found in the 11th AF Alaska Airspace Handbook. The JPARC airspace (**Figure 1**) consists of two major airspace areas:

1.4.1. Interior Airspace. Airspace scheduled by 354 OSS consists of Birch, Buffalo, Eielson, Fox 1/2/3 High/3 Low, Delta 1-5, Paxon High/Low, Viper A/B, Yukon 1/2/3A Low/3 High/3B/4/5 MOAs and their associated ATCAAs, as well as Tok, Hayes, Blair, and Yukon 6 ATCAAs. Contact info: DSN 317-377-2725/6725 or e-mail: 354 OSS/Wing Scheduling at **354OSS.WingScheduling@us.af.mil**. Day-of-execution scheduling for Eielson AFB airspace is done by Eielson Range Control (ERC) at DSN 317-377-3125.

1.4.2. Western Airspace. Airspace scheduled by 3 OSS, consists of Stony A/B, Susitna, Naknek 1/2, and Galena MOAs and associated ATCAAs, as well as Sparrevohn, Colorado, Kantishna E/W, Utopia E/W, and Sand Point ATCAAs and W-612. Contact info: DSN 317-552-2406/0410 or e-mail: 3 OSS Scheduling at **3oss.scheduling@us.af.mil**.

1.5. JPARC Restricted & Warning Area Overview. The JPARC restricted areas include R2201, R-2202, R-2205 and R-2211 (located relatively near Eielson AFB); R2203 (located next to JBER) and Warning Area W-612, located in the Gulf of Alaska.

1.5.1. 11th Airborne Division (ABN DIV) is the land management agency for R2201, R-2202, R2203, and R-2205. Air Force use of these areas is granted through a joint Memorandum of Agreement between 11th ABN DIV and 11th AF. The 11th ABN DIV G-3 establishes priority for use of these areas and establishes use restrictions. Adherence to all restrictions and procedures in this supplement will ensure compliance with the USARAK 350-2 and maintain the strong working relationship established between the two services.

1.5.1.1. R-2202. Commonly referred to as the Donnelly Training Area (DTA), it is located approximately 45 NM southeast of Eielson AFB and lies above part of the Fort Greely Military Reservation (**Figure 2**.). Air Force air to-ground ordnance delivery is conducted on targets in the Oklahoma Impact Area and the Delta Creek Live Impact Area. The Army's Mississippi and Washington Impact Areas on the eastern edge of R-2202A are occasionally used by the Air Force in direct support of Army requests for joint training exercises. R-2202 contains a class B range equipped with electronic threat emitters and Weapons Impact Scoring System (WISS) on some targets.

1.5.1.2. R2203. Located 5 NM northeast of JBER. This area is primarily used to conduct tactical airlift operations on the Malamute Drop/Landing Zone (DZ/LZ). The airspace may also be used to conduct Close Air Support (CAS) operations, but air released ordnance, except aerial door gunnery, is prohibited. Also, because of the small size of the area and congestion in the Anchorage terminal area, significant prior coordination is required with Anchorage Approach Control and Fort Richardson Range Control.

1.5.1.3. R-2205. Commonly referred to as the Yukon Training Area (YTA), it is located 2 NM east of Eielson AFB runway and lies above part of the Fort Wainwright Military Reservation (**Figure 2**.). R-2205 contains a class B range equipped with electronic threat emitters and WISS on most targets. Air Force air-to-ground ordnance delivery is conducted on targets in the Stuart Creek Impact Area and the Stuart Creek Live Impact Area. Numerous manned electronic threat emitter sites overlook the target areas.

1.5.1.4. R-2211. Commonly referred to as the Blair Lakes Range, it is located 20 NM southwest of Eielson AFB and lies above part of the Fort Wainwright Military Reservation (**Figure 2**.). R-2211 contains a class A/B range equipped with WISS on some targets. Air Force air-to-ground ordnance delivery is conducted on targets in the Blair Lakes Impact Area.

1.5.2. Warning Area.

1.5.2.1. W-612 is located approximately 100 NM southeast of JBER in the Gulf of Alaska. The 354 RANS/RSA is the management agency for W-612, and it is scheduled by 3 OSS.

1.5.2.2. Air-to-air gunnery (Dart/AGTS) is authorized for W-612. During major Navy-sponsored exercises, it may be possible to employ air-to-air missiles, air-to-ground ordnance, and strafe while operating under the Environmental Impact Statement, Record of Decision, and Gulf of Alaska Navy Training Activities. Coordination and authorization from the Navy are required.

Figure 1.1. Joint Pacific Alaska Range Complex (JPARC) Airspace.

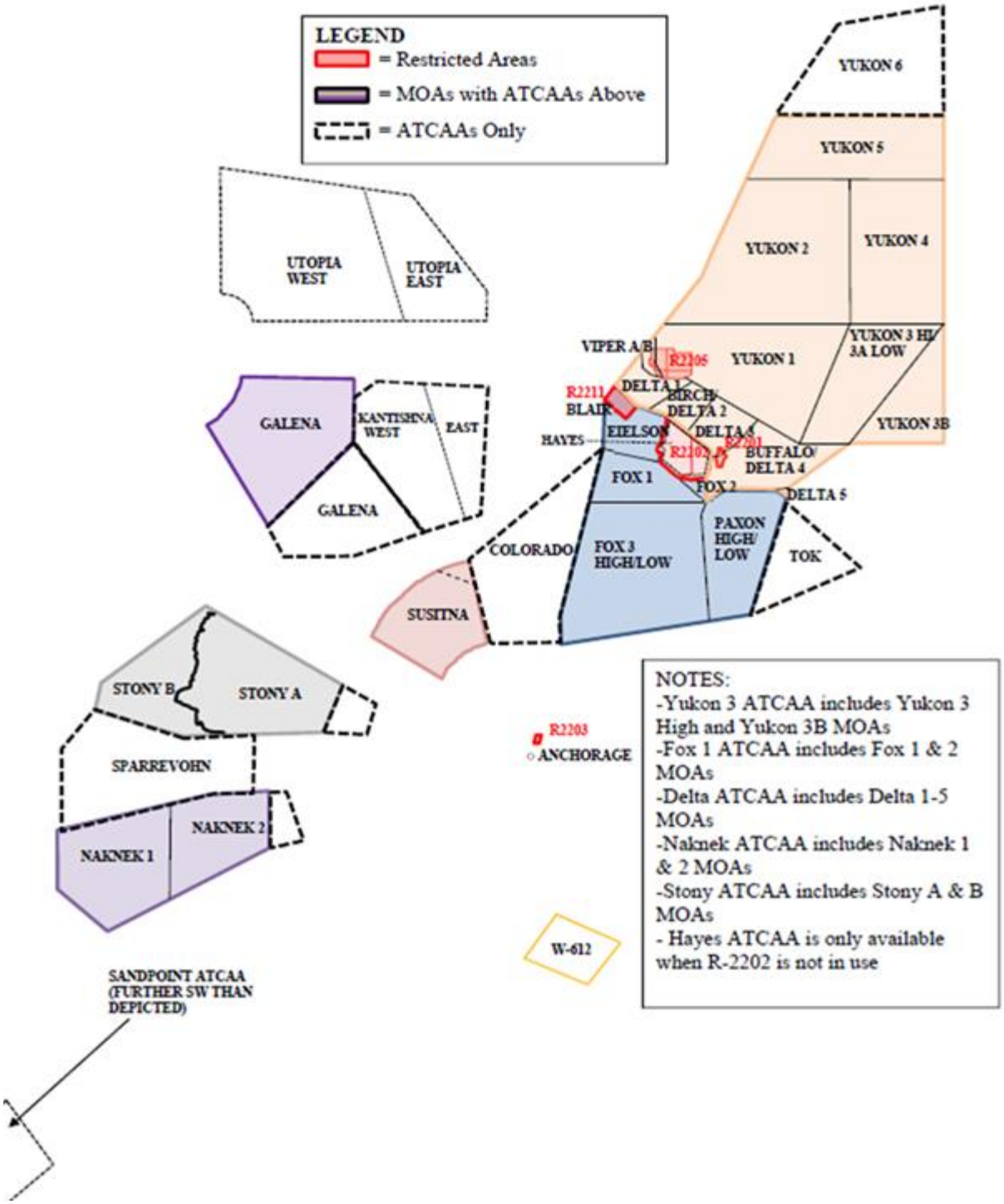
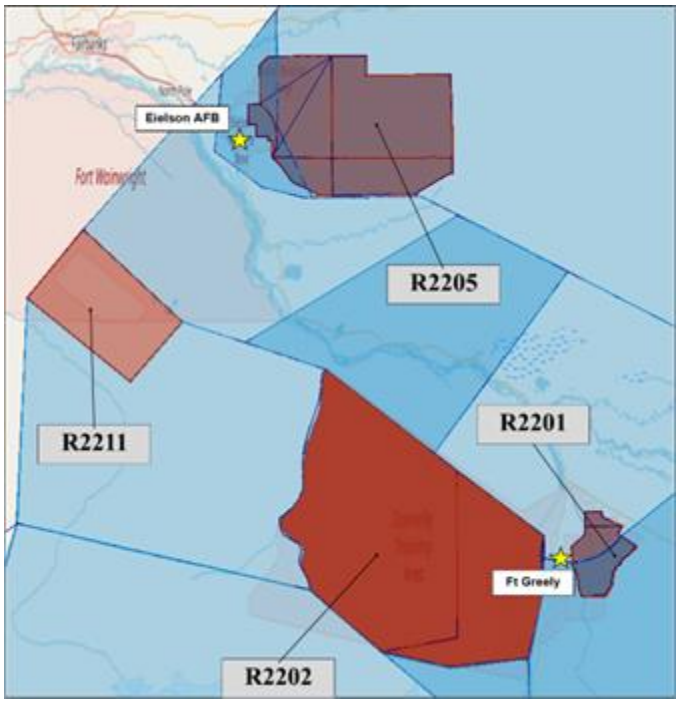


Figure 1.2. Restricted Areas.



1.6. JPARC Capabilities.

1.6.1. General. As well as supporting weapons deliveries on its ranges, the JPARC's interior airspace supports most common capabilities associated with real-time command and control (C2) and live monitoring of user aircraft with an ability to record and replay both for post-mission analysis. Additionally, there are processes for scoring weapons deliveries and an ability to provide real-time adjudicated electronic combat training. The western airspace lacks Air Combat Maneuvering Instrumentation (ACMI), but in general possess radar, Identification Friend or Foe (IFF), and Link16 capabilities.

1.6.2. Air Combat Maneuvering Instrumentation (ACMI). An aircraft-mounted transponder system, providing aircraft time-space-position-information (TSPI) in both real-time Live Monitor (tethered range mode) and/or post-mission download of the pods' flash drive recordable data recording device. P5 is the most recent version of ACMI.

1.6.3. Surveillance Radars and IFF. JPARC interior airspace is supported by two AN/TPS-77 surveillance radars. Each radar system possesses both primary (radar) and secondary (IFF) transponders. Their IFF transponders can interrogate and display Modes 2 and 3A/C. Mode 5 installation and the engineering for the display of Mode 1 are planned for FY24. The two AN/TPS-77s radar and IFF returns are multiplexed with Murphy Dome, Ft. Yukon, and Sparrevohn Alaska-NORAD (TopROCC) AN/FPS-117 radar/IFF systems into a single air picture covering the interior airspace.

1.6.4. Data Links. Data link systems in Alaska consist of two separate networks. The first is the 354 RANS-owned Link 16 Gateway system consisting of two MDS-JTRS LINK16 transceivers and two Situational Air Data Link (SADL) transceivers. These transceivers are located east of Eielson AFB in R-2205. The second network is the LINK-Alaska (LAK) system. LAK consists of LVT-II transceivers emplaced at each of TopROCC major AN/FPS-117 radar sites, connected back to TopROCC C2 facilities at Joint Base Elmendorf-Richardson. LAK is Secret – RELCAN only.

1.6.5. Command and Control (C2) Systems. The C2 systems within Alaska are categorized into training and real-world use. Training systems are based at Eielson AFB and consist of the Battlespace Command & Control Center (BC3) and Multi-Source Correlator Tracker (MSCT).

1.6.5.1. BC3 is used by blue ground control intercept (Callsign PANTHER) and Opposition Forces (OPFOR) controllers (Callsign BARON). It provides correlated tracks from interior AN/TPS-77 and AN/FPS-117 radars, and their IFF transponders.

1.6.5.2. MSCT-Lite processes the same radar/IFF tracks and is connected to the JPARC Test and Training Enabling Network Architecture (TENA), so it has full fusion with ACMI, threat and adversary surveillance and acquisition radars, threat engagement modeling, and Link 16/SADL. BC3 and 9C2 are focused on interior airspaces.

1.6.6. Interior Airspace Air-to-Ground / Ground-to-Air UHF/VHF Radio Communications. The interior airspace is supported by approximately 80 354 RANS-owned Ground-Air-Transmitter-Receivers.

1.6.6.1. Radio waveform capabilities consist of VHF-FM, VHF-AM, UHF-AM, and Have Quick-II. A single HF transceiver is located at 353 CTS building 1151 on Eielson AFB.

1.6.6.2. Radio coverage is good throughout the airspace except for some low altitude regions. The 354 RANS contractors manage radio control at Eielson AFB.

1.6.7. JPARC Frequencies. Frequencies are IAW EIELSONAFBI13-204, which can be found at **https://www.e-publishing.af.mil/**.

1.6.8. Air-to-Ground Weapons Scoring. The JPARC hosts weapon scoring capabilities via the Joint Air Weapons Scoring System (JAWSS) family of systems. Specifically, the JPARC utilizes WISS for munitions scoring; Improved Remote Strafe Scoring System (IRSSS) for forward and side-firing strafe munitions; and Laser Spot Video Scoring System (LSVRS) for aiming validation of targeting pod lasers.

1.6.9. Electronic Combat Training Assets – Emitters and Passive Detection. Interior airspace has four categories of adversary surface-to-air electronic threats. The four categories are Former Soviet Union (FSU) Surveillance and Acquisition/GCI (SA/GCI) radars; FSU threat emitters; Unmanned Threat Emitters (UMTE); and Manned Replica Simulators. No emitters are fielded in the western airspace. Threat information can be found at the following: **https://intelshare.intelink.gov/sites/354RANS/JESTR/**.

1.7. Deviations.

1.7.1. Local supplements, deviations, or waivers must have the approval of 354 OG/CC. Noncompliance with the requirements of this instruction is authorized when an emergency exists or for the protection of life. Deviations will be reported within 24 hours of occurrence to the 354 RANS/CC.

1.8. Recommend Changes.

1.8.1. Recommendations for changes to this supplement will be submitted on AF Form 847, Recommendation for Change of Publication (Flight Publications), to the 354 RANS/DO.

Chapter 2

ROLES AND RESPONSIBILITIES

2.1. 11th Air Force Commander.

2.1.1. The 11th Air Force Commander is the senior Air Force officer in Alaska. He/she is ultimately responsible for the training efficacy and safety of resident and Air Force-sponsored personnel in the JPARC.

2.1.2. Acts as the Senior Airspace Authority (SAA) in Alaska.

2.2. 11th ABN DIV Commander.

2.2.1. The 11th ABN DIV Commander is the senior Army officer in Alaska. He/she is ultimately responsible for the training efficacy of resident Army and U.S. Army-sponsored personnel, as well as the safety of all users operating on Army training lands and associated restricted airspace in the JPARC.

2.2.2. The preponderance of joint targets and emitters located in the JPARC exist on ranges managed by the Army on Congressionally approved withdrawn lands. The Army uses these same ranges for Army training and requires continual joint deconfliction by all parties.

2.2.3. 11th ABN DIV G-3. The G-3 is the execution agent for the 11th ABN DIV Commander regarding range utilization. Each Army range control agency reports to the G-3 for operations. The G-3 is the waiver authority for specific range restrictions annotated later.

2.2.4. 11th ABN DIV Installation Range Officers. The Installation Range Officers of both YTA/R-2205 and DTA/R-2202 are the 11th ABN DIV designated personnel to serve as the central point for control and coordination for all activities conducted within their respective ranges to ensure safe and unified operations.

2.3. 354th Fighter Wing Commander (354 FW/CC).

2.3.1. Designated as the Range Operating Authority (ROA) per AFMAN 13-212v1, **paragraph 2.9**, designates the 354th Operations Group commander as the ROA for R-2211 Blair Lakes Range Complex, and the scheduling authority of Interior JPARC Airspace.

2.3.2. Approve this supplement.

2.4. 354th Operations Group Commander (354 OG/CC).

2.4.1. Delegates ROA responsibilities of scheduling, operation, and maintenance of R-2211 to the 354th Range Squadron Commander.

2.4.2. Coordinates with 3 OG/CC on adjudicating 11th AF scheduling priorities in the JPARC.

2.4.3. Utilize assigned Flight Surgeons and Individual Duty Medical Augmentees to provide required medical care for all 354 RANS range maintenance missions including wintertime operations and all EOD JPARC range clearance missions IAW AFMAN 32-3001, Explosive Ordnance Disposal (EOD) Program.

2.5. 354th Range Squadron Commander (354 RANS/CC), as the ROA will:

2.5.1. The ROA is responsible for leading overall range management. This includes operating and maintaining range equipment, maintaining safety of personnel and material resources. The ROA coordinates JPARC's Special Use Airspace IAW those procedures contained in this supplement.

2.5.2. Assume primary responsibility for maintaining, scheduling, and operating JPARC training infrastructure as described in **Chapter 4**.

2.5.2.1. Will coordinate with 354 FW agencies and tenant units to establish a priority matrix for user requirements and scheduling.

2.5.3. Act as the 11th AF's liaison with 11th ABN DIV Installation Range Officers for scheduling, operations, and maintenance of JPARC training infrastructure on 11th ABN DIV managed lands.

2.5.4. Ensure compliance with Army Regulation (AR) 385-63, Department of the Army Pamphlet (DAPAM) 385-63, and United States Army Alaska (USARAK) Regulation 350-2 Annexes A-C Training and Range Safety for scheduling and execution.

2.5.4.1. Utilize the U.S Army's Range Facility Management Support System (RFMSS) scheduling tool to schedule Army restricted areas and ground spaces.

2.5.5. Assume primary responsibility for operations and maintenance of all electronic combat training systems and supporting infrastructure within the JPARC.

2.5.6. Ensure contract support personnel meet the requirements of the JPARC operations and maintenance contract.

2.5.7. Maintain the 11th AF Range Handbook and the 11th AF Alaska Airspace Handbook.

2.5.8. Range Operations Officer. The 354 RANS/CC appoints the 354 RANS/DO as the Range Operations Officer (ROO). As the ROO, they will supervise range operations, management, planning and maintenance. The DO will have the authority over all range activities that support mission readiness training and serves as the 354 RANS/CC's primary point of contact for range issues.

2.5.8.1. The ROO develops range procedures, interfaces with support agencies and flying units related to range operations, maintenance, planning and compliance.

2.5.8.2. Certify Range Control Officers and Test Area Control Officers (as applicable) in writing. The ROA will establish their education, training, experience, and affiliation (contract or government) requirement for these positions per **Attachment 7** of this document.

2.5.8.3. For ranges providing Class A service, the RCO at a minimum will have experience as a rated aircrew member, an Air Traffic Controller, Air Battle Manager, a Joint Terminal Attack Controller, a Weapons Director, or previous RCO or equivalent test experience.

2.5.8.4. Ensure all personnel appointed or assigned to the range are qualified and trained for their positions IAW **Attachment 5** of AFMAN 13-212v1 and **Attachment 5** of this publication prior to assuming duties. All training must be documented. The method of documentation is up to the ROO, however, RCO documentation will comply with **Attachment 6** and **Attachment 7** of this publication.

2.5.9. Appoint a Laser Safety Officer who manages laser hazards for operations within the interior airspace and restricted areas.

2.5.10. Coordinate with 354 Civil Engineering Squadron (354 CES) Explosive Ordnance Disposal (EOD) flight to develop an annual range clearance plan six months prior.

2.5.11. Obtain approval from YTA or DTA Installation Range Manager(s) prior to any construction, placement, or relocation of equipment or targets.

2.5.12. Provide necessary shop support/material and personnel for the construction and maintenance of targets and radar reflectors.

2.5.13. Maintain personnel qualified to rig (sling load) cargo for helicopter lift as well as train designated personnel.

2.5.14. Provide caretaker crew at Blair Lakes Range 24 hours/day, 365 days/year.

2.5.14.1. R-2211 (Blair Lakes) Caretaker Crew will:

2.5.14.1.1. Coordinate with CES Power Pro to maintain all Blair Lakes facility generators.

2.5.14.1.2. Act as the facility and fuels manager for Blair Lakes Range.

2.5.14.1.3. Act as the natural resource manager for Blair Lakes Range.

2.5.14.1.4. Maintain strafe pits and hang strafe targets at Blair Lakes Range in accordance with this regulation.

2.5.14.1.5. Act on behalf of 354 RANS/CC enforcing safety standards and protocol IAW this instruction. This includes daily operations or range build activities on R-2211.

2.5.14.1.6. In the absence of a certified RCO, ensure any TDY, CE, EOD, or contractor personnel remain clear and outside of pre-approved WDZs. This is to ensure safe operating procedures for all personnel. **NOTE:** All personnel that go TDY to R-2211 for any mission are responsible for adhering to the cleaning policies set forth by the Blair Lakes Caretaker Crew. This includes, but is not limited to, cleaning of their rooms, bathrooms, and kitchen area.

2.5.15. Draft, review, edit, and publish agreements (e.g., Intra-Service Intra-Agency, Support Agreements, etc.) IAW AFI 25-201, Intra -Service, Intra-Agency, and Interagency Support Agreements Procedures.

2.5.16. Ensure signage properly identifies hazard zones surrounding radar/electronic systems.

2.5.17. Secure funding and scheduling for range clearance and target maintenance.

2.5.18. Approval authority for deliberate risk assessments worksheets (DRAW) and management plans for 354 Range Maintenance Personnel. 354 CES/EOD DRAWs will be approved by 354 CES/CC or delegated authority, however, prior to submission to the appropriate Installation Range Officer, DRAWs will be reviewed by the ROA. ROA will review range clearance activities, range residue removal, and target construction/build efforts on delegated JPARC ranges.

2.6. 354th Operations Support Squadron Commander (354 OSS/CC) will:

2.6.1. Schedule both airspace and restricted areas with Center Scheduling Enterprise (CSE) to create a shared understanding with a commonly used platform.

2.6.2. Will coordinate with 354 RANS Range Scheduling (RSC) for any 11th ABN DIV land usage. 354 RANS/RSC will input requests into the RFMSS platform for approval.

2.6.3. Will coordinate airspace scheduling to prevent conflicts between 210th RQS and local/exercise flights to accommodate 210th RQS's airborne Seach and Rescue (SAR) requirements.

2.7. 354th Civil Engineer Squadron Commander (354 CES/CC).

2.7.1. Provide EOD teams (TDY teams if local teams are not available due to manning) to safely clear JPARC Ranges IAW AFMAN 13-212V1 and AFMAN 32-3001.

2.7.2. Act as the primary USAF point of contact for rangeland environmental issues. Coordinate with 11th ABN DIV Directorate of Public Works (DPW) prior to any activity requiring heavy machinery access to or disturbance of rangelands.

2.7.3. Provide Power Pro personnel to maintain and perform inspections on generator equipment at the R-2211 facilities.

2.7.4. EOD Flight Leadership will submit an annual budget request for lodging, PPE, equipment, vehicles, fuel, and required maintenance to 354 RANS/Range Manager.

2.7.5. All CES personnel provided to perform clearing or maintenance operations at the R-2211 facilities will defer to 354 RANS Maintenance personnel and follow their guidance and direction while TDY to the site.

2.7.6. Provide GeoBase personnel to support surveying, plotting, and updating maps and target coordinates during annual range builds in either the YTA, DTA, or Blair Lakes impact areas.

2.8. 354th Logistics Readiness Squadron Commander (354 LRS/CC) will:

2.8.1. Provide personnel at Blair Lakes Range as required to maintain 354 RANS vehicles. LRS personnel provided will follow the guidance and direction of the 354 RANS Blair Lakes Site caretaker while TDY to this site.

2.8.2. Provide authorized vehicles per unit’s MVR and vehicle maintenance support, as available, for range clearance and maintenance operations.

2.8.3. Provide personal protective equipment (PPE) to all LRS personnel required to perform range clearance and build operations.

2.8.4. Provide fuel requirements to support range clearance and build operations, as available.

2.9. 354th Communications Squadron Commander (354 CS/CC) will:

2.9.1. Will provide voice access and AFNET access for end user devices, i.e., telephones and computers.

2.9.2. Maintain Land Mobile Radios (LMR) and reliable point-to-point communication devices for all ranges.

2.10. 354th Medical Group Commander (354 MDG/CC) will:

2.10.1. Whenever assigned 354 RANS medical assets are unavailable, provide required medical support for all 354 RANS range maintenance missions including wintertime operations and all EOD JPARC range clearance missions IAW AFMAN 32-3001, Explosive Ordnance Disposal (EOD) Program.

2.10.2. If unable to provide support, the 354 MDG/CC will notify 354 RANS/CC no later than 90 days prior to range mission date in addition to requesting manning assistance through PACAF for required medical personnel.

2.11. Eielson Range Control (ERC) will:

2.11.1. Monitor airspace and restricted area activities daily from 45 minutes prior to the scheduled flying window until 15 minutes after the last aircraft departs the airspace.

2.11.2. Provide Special Use Airspace Information Service (SUAIS) in accordance with the current SUAIS Letter of Procedure (LOP).

2.11.3. Coordinate with Fort Wainwright and Donnelly Training Area Range Controls in accordance with existing agreements.

2.11.4. Ensure flying and ground safety practices are observed and maintain a log of significant events.

2.11.5. Act as alternate scheduling agency for 354 OSS/OSO and same-day scheduling agency and coordination with the FAA.

2.11.6. Provide clearance into restricted airspace for scheduled users along with additional airspace and restrictions, known traffic, and most current altimeter setting.

2.11.6.1. During Class A operations of R-2211, ERC will transfer clearance authority to the RCO in control for airspace entry and exit procedures and advise the aircrew to contract the RCO for clearance into R-2211 airspace. ERC is still responsible for passing known traffic to the aircrew.

2.11.6.2. During Class B operations of R-2211, ERC will coordinate with the R-2211 caretaker crew to determine available targets and maintenance activities for the day. ERC will restrict flights to specific targets based on maintenance activities.

2.11.7. Provide advisory information updates to aircrews operating in interior airspace and restricted areas. Additionally, relay ATC clearance requests to/from FAA controlling agencies from/to aircrew.

2.11.8. Brief RCO on range status information for Blair Lakes Range (R-2211).

2.11.9. Notify RCOs when a range period has been canceled or when ERC has relinquished R-2211 airspace back to Fairbanks Approach Control.

2.11.10. ERC is required to be "on the radios" whenever the low-MOAs surrounding Eielson AFB are active per FAA JO 7400.10. ERC is also required when R-2211 is active or when Air Force-sponsored aircraft are operating in R-2202/2205.

2.11.10.1. ERC is not required to be "on the radios" to support operations in Warrior Airspace Group, Yukon 4 and Paxon High MOAs, or any JPARC ATCAA.

2.11.11. Pass appropriate Fire Weather Index (FWI) status to unit Top 3 as information becomes available.

2.12. Blair Lakes (R-2211) RCO will:

2.12.1. RCO Opening. RCO will coordinate range opening with ERC 30 minutes prior to the first range period of the day. ERC will coordinate same-day restricted area activation and deactivation with Anchorage Center Traffic Management Unit. In addition to ERC, RCOs will coordinate with the Blair Lakes Caretaker crew and establish communication procedures.

2.12.2. Remain in contact with ERC whenever the range is open for use.

2.12.3. RCO will ensure the range is clear prior to allowing aircraft to enter the range area.

2.12.4. Restrict all aircraft employment operations if the weather deteriorates to less than a ceiling of 1,500 feet AGL or visibility less than 3 nautical miles.

2.12.4.1. **Exception:** Rotary wing operations will abide by appropriate AFI 11-214 guidance or applicable AFMAN 11-2 MDS specific guidance.

2.12.5. Be the final authority during range operations for safety items directly affecting flight operations.

2.12.6. Check the range for fires before the first mission, after completion of the last mission of the day, and prior to departing the range. Restrict operations based on the appropriate FWI passed by the Fire Chiefs at Fort Wainwright and Fort Greely.

2.12.7. Ensure the individual score sheets are complete and placed in the shared drive folder mapped to the WISS computer. Call WISS Operators in WFICC (907-377-4248/4240) and have those individuals print out the score sheet for debrief purposes as soon as possible after the flight departs but no later than the end of the day.

2.12.8. Annotate any unusual events or discrepancies on the Daily Significant Events Log. Ensure reportable incidents are promptly reported to ERC and 354 RANS/CC.

Chapter 3

SCHEDULING GUIDANCE AND PROCEDURES

3.1. General. Using agencies will schedule JPARC training airspace, ranges, and training requirements in accordance with this supplement, *11th AF Airspace Handbook*, *JPARC Range Handbook*, and established agreements.

3.2. Scheduling Responsibilities. JPARC airspace consists of two major airspace areas, the *interior airspace* and the *Western Airspace*. The 11th Air Force scheduling agency for interior airspace is the 354th OSS, while the 3rd OSS is the scheduling agency for Western Airspace.

3.2.1. Day-of-execution scheduling is done by Eielson Range Control (ERC) at DSN 317-377-3125.

3.3. JPARC Airspace.

3.3.1. *Interior airspace* MOAs and ATCAAs (**identified in paragraph 1.4.1**.).

3.3.1.1. 354 OSS/Wing Scheduling, DSN 317-377-2725/6725 or e-mail: 354 OSS/Wing Scheduling at **354OSS.WingScheduling@us.af.mil**.

3.3.1.2. 354 OSS will utilize CSE as a coordinating tool for Air Force-sponsored JPARC operations on 11th ABN DIV ranges.

3.3.1.3. 11th ABN DIV or 11th ABN DIV-sponsored operations do not use CSE for reserving or operating its ranges.

3.3.2. *Western Airspace* MOAs and ATCAAs (**identified in para. 1.4.2**.).

3.3.2.1. The 3 OSS is the scheduling agency for *Western Airspace* MOAs and ATCAAs. The 3 OSS contact info is: DSN 317-552-2406/0410 or e-mail **3oss.scheduling@us.af.mil**.

3.3.3. JPARC airspace hours of use and other restrictions are published in the *11th AF Alaska Airspace Handbook*, **https://intelshare.intelink.gov/sites/354RANS**.

3.3.3.1. The following MOAs can only be used during Major Force Exercises (MFEs):

3.3.3.1.1. Delta 1-5 MOAs, Paxon Low MOA, Yukon 3B and Yukon 5 MOAs.

3.3.3.1.2. MFEs are defined in Alaska Military Operation Areas Environmental Impact Statement (1995) as MAJCOM-level or higher exercises.

3.3.3.2. JPARC ATCAAs are generally available anytime. See *11th AF Alaska Airspace Handbook* for specific ATCAA availability and altitude structure.

3.3.3.3. For Military Training Routes (MTRs), consult Flight Information Publication (FLIP) AP/1B for the proper scheduling agency. Scheduled 354 OSS MTRs have the following additional considerations:

3.3.3.3.1. Many routes flow through MOAs which may be active. A mitigation plan, including a POC and reachable phone number, are required when scheduling a route that will transit an active MOA.

3.3.3.3.2. Alternate Entry/Exits that transit Restricted areas will not be scheduled unless ERC is present to clear aircraft into the restricted area. An exception is when the MTR is flown in direct support of Army training.

3.4. JPARC Restricted Areas and Weapon Delivery Scheduling.

3.4.1. The 354 RANS is the 11th AF Executive Agent for reserving JPARC restricted areas with 11th ABN DIV for both routine training operations and weapons employment missions.

3.4.1.1. 354 RANS/RSC can be reached at DSN: 317-377-7010/7266 or email **354RANS.RSC@us.af.mil**.

3.4.1.2. The 354 RANS will use RFMSS to reserve Air Force-sponsored operations on 11th ABN DIV ranges in restricted areas R-2202/R-2205.

3.5. JPARC Scheduling Timeline.

3.5.1. All Air Force-sponsored users of the JPARC are required to meet the following scheduling timeline:

3.5.1.1. 90 days prior to range activity, attend "Super Range Wars" meeting held by 354 OSS on the last Monday of every month. This meeting covers the following 90 days of JPARC training and is the first step in securing both airspace and range time. The 354 OSS/Wing Scheduling contact information, DSN 317-377-2725/6725.

3.5.1.2. If planning weapons employment, NLT 45 days prior to execution, contact 354 OSS/Wing Scheduling to confirm airspace. Once done, submit a JPARC Range Request Form (Attachment 2) to 354 RANS/RSC IAW the instructions on the form. For a fillable version, go to 354 RANS - Training Request (apan.org).

3.5.1.2.1. If scheduling weapons employment -44 to -32 days before execution, the Director of Operations (DO) of the scheduling unit is required to sign the JPARC Range Request Form (**Attachment 2**).

3.5.1.3. NLT 31 days prior for missions not planning a weapons employment, but still requiring the use of the range (i.e., flights within the confines of R-2202, combat laser), submission of a JPARC Range Request Form (**Attachment 2**) is required.

3.5.1.4. If scheduling within 31 days of execution, a Late Training Request (LTR) Form is required (**Attachment 3**). This form must be routed through the 354 RANS to 11th ABN DIV G3 for approval IAW USARAK Regulation 350-2 Annexes A-C. For a fillable version of the LTR, go to 354 RANS - Training Request (apan.org).

3.5.1.4.1. Scheduling 15-31 days prior to execution requires Squadron Commander signature of the scheduling unit.

3.5.1.4.2. Scheduling 3-14 days prior to execution requires Group Commander signature of the scheduling unit.

3.5.1.4.3. LTRs will not be accepted within 3 duty days prior to training.

3.5.1.5. On Mondays the week prior to execution, attend "Range Wars" meeting for a final airspace deconfliction. Contact 354 OSS/Wing Scheduling for dial in information, DSN 317-377-2725/6725.

3.5.1.6. Seven (7) days prior to execution, contact 354 RANS/RSC for WDZ restrictions and confirmation of scheduled times, DSN 317-377-7010/7266.

3.5.1.7. NLT Thursday at 1200 AKST the week prior to range execution, complete a Weekly Support Request Form for contractor support (**Attachment 4**). This form includes: WISS for weapon impact scoring/spotting, laser checks, IMC weapon drops, and ACMI debrief. For a fillable version of the form, please go to 354 RANS - Training Request (apan.org).

3.6. Training Support Scheduling.

3.6.1. Electronic Combat Training Scheduling.

3.6.1.1. The JPARC Emitter Status and Training Request (JESTR) website is the hub for weekly and daily scheduling of emitters on JPARC ranges and is located here: JESTR - Home (intelink.gov).

3.6.1.1.1. Units requesting Smokey SAM training separate from or in conjunction with threat emitters will also use the site above. Each Smokey SAM request requires a training area request from the 11th ABN DIV IRO. As such, units need to request land usage along with their Smokey SAM training request. Coordinate these requests through 354 RANS/RSC at 377-7010.

3.6.1.2. Every Thursday, NLT 1200 AKST, unit schedulers should click the “Weekly Emitter Scheduling” tab on the JESTER site to request available emitters.

3.6.1.3. For mission planning consideration, the “Emitter Mission Planning” tab has all locations and statuses of all threat emitters.

3.6.1.4. NLT 1600 AKST the day prior to training, users will contact the Electronic Warfare (EW) Operations Manager (Callsign GODFATHER) for detailed EW coordination. GODFATHER may be contacted at DSN 317-377-1718.

3.6.1.4.1. GODFATHER may also be used to provide notional roles such as real-time Intel EOB updates, SEAD “pet shots,” etc.

3.6.1.4.2. Every effort will be made to ensure maximum availability of EW threat simulators. Periodically, some sites may be unavailable. GODFATHER will attempt to contact mission POC should this situation arise. If no contact is made with mission POC, GODFATHER will send mitigation plan details to units' operations supervisor and scheduling POC (e.g. local unit Top-3 email distro, etc.). GODFATHER will substitute the closest site capable of similar capabilities to the requested site. Should a similar site not be available, GODFATHER will schedule the next closest site of similar threat type (e.g., medium-range SAM).

3.6.1.5. EW Debriefs. As a minimum, GODFATHER will e-mail an EW debrief to the unit/mission POC. Feedback will include, but not limited to, threat detections and engagements while within range. Debrief feedback can be tailored on request.

3.6.2. Laser Scheduling.

3.6.2.1. All units desiring combat laser usage in R-2202, R-2205, or R-2211 will submit their request to 354 RANS/RSC. Approval of short notice laser requests is dependent upon the location of scheduled ground personnel.

3.6.2.2. 354 RANS/RSC will submit all laser requests to the appropriate Army Range Control for approval.

3.6.3. ACMI Scheduling.

3.6.3.1. NLT COB Thursday, the week prior to execution, flying units will have their weekly turn pattern schedule input into the Patriot Excalibur (PEX) system.

3.6.3.2. NLT 1.5 hours prior to the first takeoff for each Go, flying unit Top 3/Squadron Aviation Resource Management (SARM) will update PEX with the correct flight callsign matched to the maintenance line number and Mode 3 squawk.

3.6.3.2.1. For F-35 operations, Top 3/SARM will add PSIDs into the secondary SCL column.

3.6.3.3. During each Go's execution, unit's SARM will call ACMI at DSN 317-377-1618 if there are any changes after the 1.5-hour prior update to PEX.

3.6.3.3.1. Changes requiring an update includes step to spare, ground abort, line swap, or pilot swap.

3.6.3.4. Users may confirm pod tracking by contacting ERC on UHF frequency 229.4.

3.6.4. Weapons Scoring.

3.6.4.1. Optical WISS scoring is available on certain targets in R-2202, R-2205, and R-2211. Scores are given in feet. Scorable targets can be found in the Range Handbook. **https://wss.apan.org/public/354RANS/Shared** Documents/IJRH.pdf.

3.6.4.2. A bomb score printout can be picked up in the WFCC at the WISS contractor station. Video of the bomb strike is also available, if requested.

3.6.5. Training Lands Scheduling Guidance.

3.6.5.1. Air Force and Air Force-sponsored personnel wishing to occupy the Fort Wainwright or Fort Greely training lands within the restricted areas (R-2202/R-2205) must coordinate the request with 354 RANS/RSC, who will in-turn coordinate the request with Donnelly Training Area Range Control (DTARC) or Yukon Training Area Range Control (YTARC). All ground access, to include Observation Points (Ops) and Drop Zone/Landing Zones (DZ/LZs) must be scheduled and approved prior to occupation.

3.6.6. DZ/LZ Scheduling.

3.6.6.1. Interior DZ/LZ scheduling will be coordinated through 354 RANS/RSC for R-2202, R-2205, and R-2211.

3.6.6.2. JBER Range Control will schedule R2203 DZ/LZ operations. To schedule, contact JBER Range Control at DSN 317-384-3508.

3.6.7. Operational Test and Evaluation (OT&E) Scheduling.

3.6.7.1. OT&E activities require considerable coordination among federal, state, and local agencies for required environmental assessments, permits, risk assessments, target selection, target clearance, and acquisition of special equipment before approval. Full coordination and approval normally require 24 months. Any organization wishing to conduct OT&E on Alaskan ranges must coordinate with 354 RANS/RSC as far in advance as possible.

3.6.8. Secure Video Teleconference (SVTC).

3.6.8.1. Units wishing to use the SVTC must submit scheduled requests through the 353 CTS/CSS at DSN 317-377-4243. SVTC is normally available between 0800-1600 AKST, Monday through Friday.

Chapter 4

AIRSPACE OPERATIONS

4.1. General. This chapter establishes operating procedures and restrictions applicable to the JPARC. Units assigned or attached to 354 FW, or units TDY to or operating in Alaska may, with proper coordination, use Alaskan training airspace and ranges. See the 11th AF Range Handbook and 11th AF Airspace Handbook available at 354 RANS - Home (intelink.gov) for MOA/ATCAA descriptions. In conjunction with complementary references cited within, this supplement prescribes standard operational procedures to be used by all support and using agencies. Aircrew are required to conduct live air-to-ground weapons delivery and air-to-air weapons firing IAW aircraft specific manuals, technical orders, and local instructions.

4.2. Cold Weather Operations. Cold weather operations will be conducted IAW EAFBI 13-204 Chapter 8.

4.3. Support Functions. JPARC support functions are primarily provided by contractors. Contractor support includes, but is not limited to, Eielson Range Control, threat emitters, weapons scoring (WISS) and spotting assistance, acoustics on the moving target strafe, Range Control Officer (RCO), and ACMI/debrief support.

4.3.1. Normal Range Support. Contractor support at ERC is available during the 12-hour Eielson AFB fighter flying window, Monday through Friday.

4.3.1.1. ERC must be manned and "on the radios" for the following training operations:

4.3.1.1.1. Activation of low altitude MOAs scheduled by 354 OSS.

4.3.1.1.1.1. ERC is not required to support operations in Warrior Airspace Group, Yukon 4, and Paxon High MOAs, or any JPARC ATCAA.

4.3.1.1.2. Activation of R-2211.

4.3.1.1.3. For USAF or USAF-sponsored activities over Army-owned ranges (R-2202, R-2205).

4.3.2. Non-Standard Contractor Support. If requesting contractor support outside the 12-hour flying window during Monday thru Friday, a flying window greater than 12-hours, flying on a weekend/holiday, or atypical support (e.g., RCO), advance coordination is required to ensure contractor support.

4.3.2.1. Make requests to 354 RANS/RSC utilizing the Weekly Support Worksheet, 354 RANS - Training Request apan.org, with as much advance notice as possible, meeting the following timelines as a minimum:

4.3.2.1.1. NLT 30 days prior to event for Class A RCO control.

4.3.2.1.2. NLT 21 days prior to a non-standard event.

4.3.3. Visiting Units. NLT 90 days prior to operations within the JPARC, all non-11th AF aircrew will complete a JPARC Visiting Unit Checklist, which can be found at: **https://wss.apan.org/nnc/RFAK/DF-Airspace/SitePages/Home.aspx**

4.3.3.1. For additional details, contact 354 OSS/Wing Scheduling, DSN 317-377-2725/6725 or e-mail: 354 OSS/Wing Scheduling at **354OSS.WingScheduling@us.af.mil**.

4.4. MOA/ATCAA/Warning Area Procedures.

4.4.1. MOAs, ATCAAs, and Warning Areas are activated only when Anchorage Center issues an Instrument Flight Rules (IFR) delay clearance into the airspace. To facilitate interior airspace operations, delay clearance requests and delay clearances may be relayed through ERC. Aircraft operating under Visual Flight Rules (VFR) may enter the lateral boundaries of a MOA. However, the MOA will not be active, and the airspace cannot be used for maneuvering until an IFR delay clearance is issued by Anchorage Center. Airspace vertical boundaries will be determined at the time of activation.

4.4.2. While military aircraft shall be given priority for the use of scheduled MOAs, ATCAAs, and Warning Areas, Anchorage Center may make time or altitude adjustments as traffic conditions warrant.

4.4.3. Special Use Airspace Information Service (SUAIS). SUAIS is a 24-hour service provided by ERC to civilian pilots flying in and around MOAs and restricted areas in interior Alaska. This information service is a requirement for the military use of the low-altitude interior airspace per FAA JO 7400.10. The purpose of the service is to reduce the chance of an unaware interaction between civil and military aircraft in the areas of concentrated joint use (civil/military) by exchanging near real-time location information and planned activities.

4.4.3.1. For this service to succeed, all aircraft must comply with the requirement to check-in with ERC and squawk Mode 3A/C or comply with Mode 3A/C out procedures outlined in **paragraph 4.9**.

4.4.3.2. ERC does not provide air traffic control services and cannot issue vectors.

4.4.3.3. During periods when ERC is not on duty, a pre-recorded radio and telephone message tells civil pilots the airspace status and when it will be used again. The message will be broadcasted on VHF 125.3 and 126.3 MHz.

4.4.4. General Operating Procedures.

4.4.4.1. All aircraft entering MOA/ATCAAs will set local altimeter provided by ERC when entering the airspace. ATCAA vertical boundaries are defined using a standard altimeter (29.92). Adjust floor/ceiling altitudes based on local altimeter to remain within the airspace.

4.4.4.2. For operations requiring an IFR recovery from MOAs, ATCAAs, or Warning Areas, the flight lead/aircraft commander shall coordinate the clearance request at least three minutes before the flight is estimated to exit the airspace IAW the ATC Services LOA. This clearance is required before leaving the airspace boundary.

4.4.4.3. If desiring VFR recovery, the flight lead/aircraft commander must first cancel IFR with ATC or relay cancellation through ERC before exiting the airspace.

4.4.4.3.1. ERC will forward IFR cancellation to Anchorage Center within five (5) minutes of receipt.

4.4.4.4. AWACS/TOPROCC/GCI shall not alter the heading or altitude of an aircraft prior to entering the airspace without prior approval from ATC.

4.4.4.5. Anchorage Center considers military flights filing to active MOAs, ATCAAs, or Warning Areas to be participants in the same airspace. As such, Military Assumes Responsibility for Separation of Aircraft applies per ATC Services LOA.

4.4.5. **Eielson Range Control (ERC) Operations.**

4.4.5.1. All flights will check-in with ERC on UHF 229.4 or VHF 125.3/126.3 prior to entering or exiting the JPARC confines. Notify ERC of working frequency and intentions.

4.4.5.2. For flights scheduled to work with TOPROCC, AWACS GCI, or air refueling, check-in with ERC is still required.

4.4.5.3. ERC will provide airspace users with clearance into requested restricted airspace, range, and airspace restrictions, known traffic, altimeter setting, and clearance to tactical frequency.

4.4.5.4. Flights unable to make radio contact with ERC will pass required information "in the blind," then proceed to assigned/scheduled airspace and working frequency. This does not apply for entry into Restricted Areas, which requires ERC approval.

4.4.5.4.1. Flights will continue periodic attempts to contact ERC. Flights transiting one MOA enroute to another will be responsible for real-time deconfliction with other flights on that MOA working frequency. If a MOA has been scheduled for "exclusive use," military flights will not enter unless directly approved by that airspace's scheduled user.

4.4.5.5. RED FLAG-Alaska or NORTHERN EDGE participants are not required to check-in/out with ERC if they are part of a scheduled RED FLAG-Alaska or NORTHERN EDGE VUL.

4.4.6. **Bird Hazards.**

4.4.6.1. Blair Lakes Caretaker crew within R-2211 will conduct a visual sweep of all target areas on days that the range is scheduled for use. They will report significant migratory bird activity on the range, location on the range, and proximity to the targets to ERC.

4.4.6.1.1. RCOs will utilize the United States Air Force Avian Hazard Advisory System (US AHAS) for Bird Hazard conditions on Blair Lakes Range. **https://www.usahas.com/**

4.4.6.2. Aircrew will report significant bird activity observed in i*nterior airspace* to ERC.

4.4.6.2.1. ERC will pass reports of significant bird activity to the 354 FW Supervisor of Flying (SOF), 3 WG SOF, 354 FW/SE, and advise aircraft upon check-in for entry into interior airspace.

4.5. Restricted Area Operations – Weapons Delivery Missions.

4.5.1. Restricted Area Entry. VFR and IFR entries are authorized. Random VFR entries from adjacent MOAs are authorized when cleared by ERC.

4.5.2. Radio Procedures. Unless previously coordinated and approved by ERC, aircrews planning to use R-2202, R-2205, or R-2211 must check-in and out with ERC.

4.5.3. The specific impact area must be cleared prior to ordnance expenditures. This can be done by previous flights (within 60 minutes), a dry clearing pass (within 60 minutes), scoring cameras, other flights participating in the same scenario as the employing aircraft, or ground personnel clearing the target area.

4.5.3.1. Individuals responsible for clearing the impact area will provide time and initials to ERC prior to receiving flight lead control (e.g. “Eielson Range Control, YETI 1, Army Fort target clear at 1354, JD”).

4.5.4. Aircraft are not allowed to employ ordnance until receiving “Flight Lead Control” from ERC following a clearing pass on either Class B or Class C ranges.

4.5.5. ERC will pass any updated information and direct the flight to the appropriate working/WISS frequency when the area is clear.

4.5.6. Range Departure. All departing flights must clear the restricted area with ERC. Prior to departing, report all expenditures with target numbers, any no-spots, and the existence of any fires to ERC.

4.5.7. If the restricted area is “hot” with forward air controllers (FACs), ERC will coordinate with the FAC and pass the flight to the FAC’s working frequency. If the restricted area is “hot” without a FAC present, the flight will remain clear of the restricted area until cleared in by ERC.

4.5.8. Unless coordinated and approved by the scheduled user, non-scheduled users will depart immediately when a scheduled flight checks in for the restricted area.

4.5.9. Comm-out use of the ranges will be coordinated with ERC prior to the mission by providing Time on Target (TOT), number of aircraft, and planned ordnance.

4.5.10. RED FLAG participants are not required to gain entrance approval from ERC if they are part of an exercise VUL.

4.5.11. RED FLAG familiarization flights must check-in/out with ERC.

4.5.12. All aircraft will squawk Mode 3/A and 3/C while operating within R-2202, R-2205, and R-2211.

4.5.13. FAC & JTAC Procedures:

4.5.13.1. When working with a FAC or JTAC, aircraft will coordinate restricted area entry with ERC, then proceed to the appropriate working frequency.

4.5.13.2. The FAC or JTAC will provide aircrew with safety information and restrictions and coordinate range entry.

4.5.14. R-2202.

4.5.14.1. General. R-2202 contains a Class B range with numerous tactical targets within the Oklahoma Impact Area. The range is equipped with WISS and numerous electronic threat simulators.

4.5.14.2. Restricted Area Opening. ERC will coordinate with Donnelly Training Area (DTA) Range Control 30 minutes prior to the first Air Force range period of the day.

4.5.14.3. Emergency Jettison. The designated jettison area is target 2591, in the Delta Creek Live Impact Area.

4.5.15. R-2205.

4.5.15.1. General. R-2205 contains a Class B range with numerous tactical targets within the Stuart Creek Impact Area. The range is equipped with WISS and numerous electronic threat simulators.

4.5.15.2. Restricted Area Opening. ERC will coordinate with Fort Wainwright (FWA) Range Control 30 minutes prior to the first Air Force range period of the day.

4.5.15.3. Emergency Jettison. The designated jettison target is Target 5593 in the live target area.

4.5.16. R-2211.

4.5.16.1. General. R-2211 is a Class A or Class B range. The target arrays are constructed to support conventional weapons delivery training. The range is equipped with WISS and acoustic score strafe scoring. There are no electronic threat simulators on this range.

4.5.16.2. Manning. A civilian contractor RCO shall be present on Blair Lakes Range to support Class A range operations. Requests for RCO support are outlined in **paragraph 4.3.2.1**.

4.5.16.3. Emergency Jettison. The Nuke Circle (Target 1161) is the primary jettison point for R-2211.

4.5.16.4. General R-2211 Procedures.

4.5.16.4.1. R-2211 Class A range operations. Because the physical construction of the range tower cab obstructs the RCO's view of aircraft during some events, the following restrictions to Class A operations apply:

4.5.16.4.1.1. High altitude events (greater than 20 degrees) may be under the control of the flight lead with approval from the RCO. In this case, the flight lead has responsibility for safe range operations during these events. Aircrew will make all standard radio calls but should not expect clearance from the RCO for weapons release.

4.5.16.4.2. Strafe Procedures on R-2211:

4.5.16.4.2.1. An RCO (Class A) is required for LAS (hot).

4.5.16.4.2.2. RCOs will ensure "right" or "left" traffic (as appropriate based on target) to ensure "hot" gun does not point at any manned complex.

4.5.16.4.2.3. Hot low-angle strafe passes are not authorized on any strafe pit without a strafe panel clearly visible.

4.5.16.4.2.4. Random "hot" passes are not authorized on designated strafe targets. RCO may authorize random run-in headings for "DRY" passes to facilitate training objectives if conditions and scenarios allow.

4.5.16.4.2.5. The strafe pits will be closed whenever the steady-state wind exceeds 20 knots.

4.5.16.4.2.6. Long-Range Strafe (LRS) is authorized on strafe pits 1 and 4, Targets 1171-1174, only with a maximum open-fire range of 8,000 feet.

4.5.16.4.3. Dry attack procedures without an RCO. To ensure that aircraft maintain the minimum clearances IAW AFMAN 13-212 from ground maintenance personnel that are on R-2211 consistently throughout the year, the following procedures will be adhered to by aircraft that would like to conduct dry low-altitude attacks below 3,000ft AGL:

4.5.16.4.3.1. As soon as possible, the aircrew will contact ERC with expected dry attack times and planned targets.

4.5.16.4.3.2. Before the first attack, the aircrew will conduct a clearing pass of the target area to ensure no maintenance personnel is within 3,000ft.

4.5.16.4.3.3. If ground personnel are within that distance, the aircrew will select a different target.

4.5.16.4.4. Radio Procedures for R-2211.

4.5.16.4.4.1. The South Conventional target is equipped with a VHF radio-controlled lighting system. Five VHF pulses within five seconds on frequency 125.3 at any time will illuminate the target to a dim setting. Three more pulses (8 total) will illuminate the target to full bright. Seven (7) pulses within 5 seconds at any time will turn the lights off.

4.5.16.4.4.2. The North Conventional target is equipped with target lighting. Coordination with the Blair Lakes Caretaker crew is required to turn on and turn off the lighting.

4.6. Night Operations.

4.6.1. The *Air Force Lights-out Operations in Alaskan Military Operations Areas (MOAs)* and *Air Traffic Control Assigned Airspace (ATCAA)* Letter of Agreement between Anchorage Air Route Traffic Control Center (ZAN), Fairbanks Airport Traffic Control Tower (FAI ATCT), 3rd Operations Group (3 OG), 354th Operations Group (354 OG), and the 611th Air Operations Center (611th AOC) establishes, produces and defines responsibilities for Air Force lights-out operations within JPARC airspace in compliance with FAA Exemption 7687 and FAA Exemption 7960. This handbook incorporates information from the Lights-out LOA, dated 15 Nov 2019. Contact **ALASKAMILITARYAIRSPACE@us.af.mil** for a copy of the current Lights-Out Operations LOA. FAA Exemption 7687 and FAA Exemption 7960 are available at: **http://aes.faa.gov**.

4.7. Overflight Restrictions.

4.7.1. The source document for MOA descriptions is FAA JO 7400.10G. These descriptions have been consolidated into the *11th AF Airspace Handbook*. Military aircraft flying in Alaska will comply with provisions of the *11th AF Airspace Handbook* and the 11th AF Noise/Flight Sensitive Area list found therein.

4.7.2. Manned Site Avoidance Restrictions. Pilots/Aircrew will ensure:

4.7.2.1. Manned sites listed in the *11th AF Range Handbook* will be annotated on range maps used for flight briefings.

4.7.2.2. Compliance with WDZ employment restrictions and/or *11th AF Range Handbook* restrictions to ensure the safety of personnel occupying manned sites.

4.7.3. Noise/Flight Sensitive Areas. Military aircraft flying will comply with provisions of the 11th AF Noise/Flight Sensitive Area list found in the *11th AF Airspace Handbook*.

4.7.4. Supersonic Restrictions. Military aircraft flying will comply with the Supersonic Restrictions as stated in the individual airspace descriptions within the *11th AF Airspace Handbook.*

4.8. Ordnance Restrictions.

4.8.1. Aircrew will strictly comply with the ordnance and fire index restrictions found in the *11th AF Range Handbook* (link located in **paragraph 1.3.1.2.**)**.** Due to extreme fire hazard conditions in interior Alaska, Hot-Spot BDU-33s are not authorized from 1 Jun through 30 Sep. Cold-Spot BDU-33s, MK-76, P3/14 without spotting charges, and inert heavyweight ordnance are allowed during this period. This restriction may be extended or reduced depending on specific fire threat conditions.

4.8.1.1. If the expenditure of other ordnance is desired from 1 Jun through 30 Sep, that user must first request formal approval from the 354 RANS/RSC, DSN 317-377-7010. Aircrew approved for non-standard ordnance will identify that ordnance to ERC upon initial check-in.

4.8.1.2. Tracer rounds are not authorized for use on R-2211 during any period.

4.8.2. Under no circumstance will cluster munitions or depleted uranium rounds of any kind be approved for expenditure on Alaskan ranges.

4.8.3. Ordnance expenditures during Instrument Meteorological Conditions (IMC) are approved under the following conditions.

4.8.3.1. Intended target has WISS Scoring capability listed within the Range Handbook.

4.8.3.2. On initial check-in with the Range Duty Officer (RDO), callsign RANGE ROVER, flight leads will confirm that WISS cameras are operating and on the target before employment.

4.8.4. White Phosphorous Munitions. IAW USARAK 350-2 Annexes A-C:

4.8.4.1. Munitions with phosphorus as the primary constituent will not be fired into wetlands.

4.8.4.2. When the Fire Weather Index (FWI) is **MODERATE, HIGH/VERY HIGH**, or **EXTREME** White Phosphorus munitions are **PROHIBITIED**.

4.8.5. Chaff and Flare Restrictions.

4.8.5.1. Operational constraints for the use of chaff and flare in Alaska are specified in the 1997 *Final Environmental Impact Statement Alaska Operations Areas Record of Decision* and further evaluated in the 2013 *Environmental Impact Statement for the Modernization and Enhancement of Ranges, Airspace, and Training Areas in the Joint Pacific Alaska Range Complex in Alaska.* Contact **ALASKAMILITARYAIRSPACE@us.af.mil** for a copy of the current *Alaska Annual Chaff Authorization.*

4.8.5.2. For a detailed airspace allowance or restriction to flare and chaff usage, refer to the *11th AF Range Handbook* 354 RANS - Home (intelink.gov).

4.8.5.3. IAW USARAK 350-2 Annexes A-C, when the FWI is being monitored, the following conditions apply to chaff and flare usage:

4.8.5.3.1. **LOW:** No restrictions

4.8.5.3.2. **MODERATE:** Countermeasure flares or foreign equivalent will be deployed so they burn out no lower than 1,500 feet above ground level (AGL)

4.8.5.3.3. **HIGH/VERY HIGH:** Countermeasure flares or foreign equivalent will be deployed so they burn out no lower than 5,000 feet AGL.

4.8.5.3.4. **EXTREME:** Countermeasure flares or foreign equivalent will be deployed so they burn out no lower than 5,000 feet AGL.

4.8.5.3.5. **RED FLAG WARNINGS:** All munitions are prohibited.

4.8.6. Laser Restrictions.

4.8.6.1. Class 3B and Class 4 lasers are authorized for use inside of restricted areas R-2202, R-2205, and R-2211. For specific laser authorizations, refer to the **Attachment 1** of the AFRL-RHDO reports at the following link, Laser Certs - All Documents (intelink.gov).

4.8.6.2. Combat lasers can only be used in R-2202, R-2205, and R-2211 when scheduled in accordance with this supplement, **paragraph 3.6.2**.

4.8.6.3. Combat lasers will not be used on manned sites, camera sites, range towers, or anything on the range without a target number associated with it.

4.8.6.4. The flight lead will confirm with ERC during initial check-in that combat lasers will be used.

4.8.6.5. Upon request, aircrew may pick up the recorded laser videotape from WISS control in Bldg. 1151 at Eielson AFB or call the WISS controllers (DSN 317-377-1618) for the approximate center of the spot.

4.9. Mode 3 A/C OFF Operations. Mode 3 A/C OFF operations will adhere to the following requirements:

4.9.1. All participants will adhere to the procedures contained in the current Air Force Mode 3 A/C Off Operations in Alaskan Special Activity Airspace (SAA) LOA with ZAN. Contact **ALASKAMILITARYAIRSPACE@US.AF.MIL** for the most current copy.

4.9.2. ERC will inform all aircraft on 229.4/125.3/126.3 that Mode 3A/C OFF operations are in effect.

4.9.3. During Air Force Mode 3 A/C Off Operations in Alaskan SAA, C2 will have a line of communication with Anchorage Center Watch Supervisor via phone at 907-269-1103.

4.9.4. All Mode 3 A/C OFF operations will be recorded via ANGEL by contractors and saved for 18 days.

4.10. Emergency Procedures. If a crash or other emergency occurs on the range complex, the following actions will be taken by the RCO, FAC, or flight lead, whichever is controlling the flight:

4.10.1. Aircraft will hold “high and dry” or depart the range.

4.10.2. The flight lead will initiate pre-briefed Search and Rescue procedures.

4.10.3. A participating aircraft will notify ERC.

4.10.4. ERC will notify the appropriate Army Range Control, if necessary.

4.10.5. Range personnel will aid the rescue crew as requested.

4.10.6. The range will be closed by the RCO/ERC and will remain closed until clearance to reopen the range is given by the 354 OG/CC.

4.10.7. ERC operators and ACMI personnel will immediately secure all videotapes, communications recordings, and ACMI tapes and notify 354 FW/SE when they are able for transfer.

4.11. Incident Reporting.

4.11.1. In order to ensure the safety of ground personnel on the ranges, the following shall be reported before the beginning of debrief to the 354 RANS/RSC using the Dud/No Spot worksheet located at 354 RANS - Home (apan.org).

4.11.1.1. Ordnance impacting outside the approved impact area boundaries.

4.11.1.2. Ordnance impacting within 1km of a manned site (excluding Blair Lakes)

4.11.1.3. Heavyweight ordnance (live or inert) impacting more than 1km from a designated target.

4.11.1.4. Ordnance released in violation of range closure or FCIF restrictions.

4.11.1.5. Possible damage to range equipment.

4.11.1.6. Dud live ordnance.

4.11.1.7. Live ordnance impacts outside live impact area.

4.11.1.8. Bombs on strafe targets, vice versa, or incorrect munitions.

4.11.1.9. Any ordnance impact that is not observed by aircraft or WISS cameras.

4.11.2. Incidents resulting in injury to aircrew, ground personnel, or equipment will be reported to ERC who will immediately report it to the 354 FW/Command Post.

4.11.3. Inadvertent Release. If an aircraft inadvertently releases ordnance, the aircraft Flight Lead or Aircraft Commander will notify the RDO or ERC and provide all appropriate information. The RDO/ERC will notify the Eielson Command Post, who will, in turn, notify the 354 FW/CC, 354 OG/CC, 354 OSS/CC, 354 RANS/CC, and 354 FW/SE of all inadvertent releases. Inadvertent explosive/missile releases may be reportable under AFI 91-204, Safety Investigations and Reports.

4.12. Fire Mitigation and Reporting.

4.12.1. Participating units may be financially liable for fires resulting from failure to abide by fire danger restrictions. 11th AF and 11th ABN DIV must ensure visiting units hosted by them maintain policy compliance.

4.12.2. Fire Weather Index.

4.12.2.1. To reduce the threat of forest fires, a Fire Weather Index (FWI) outlines range ordnance restrictions. Specific criteria and processes are outlined in USARAK Regulation 350-2, paragraph 4-2.. The FWI is derived and published twice per day, at 0930L and 1700L during the months of May through September by the Fire Chiefs at Ft Wainwright and Ft Greely. Each Fire Department then sends the resulting FWI to respective Army and Air Force agencies, to include 354 RANS RDO, RCO and ERC. ERC, RCO, or RDO will then pass the fire index to all flying units.

4.12.2.2. Pilots/Aircrew will strictly adhere to ordnance requirements associated with the FWI restrictions found in the *11th AF Range Handbook.*

4.12.2.3. Because the range conditions can change rapidly, units must be prepared to change targets/ordnance on short notice or go through dry. Weapon deliveries may be prohibited despite an adequate fire index.

4.12.2.4. Employment of Smokey SAMs/ Anti-Aircraft Artillery (AAA) is permitted during fire indexes Low and Moderate. Employment is prohibited when the fire index is “High” or “Extreme”.

4.12.3. FWI Waivers. The 11th ABN DIV G3 is the waiver authority from fire index restrictions.

4.12.3.1. Air Force waiver requests will be submitted to the 354 RANS/CC then forwarded to the 354 OG/CC before submission to 11th ABN DIV.

4.12.3.2. Ground units receiving waivers must carry firefighting tools (e.g., Pulaski, beaters, and portable water extinguishers with a water supply.

4.12.4. Fires.

4.12.4.1. Alaska Fire Service, Bureau of Land Management (BLM), in accordance with an interservice support agreement, has assumed fire suppression services for all range and forest wilderness fires located on Army lands. The Air Force will report all fires and, if requested by BLM, respond with available firefighting capability.

4.12.4.2. The first and last aircraft on a range will accomplish an aerial survey prior to opening/closing the range for ordnance delivery. All fires or smoke observations will be reported to the RCO or ERC.

4.12.4.3. ERC will inform the appropriate Army range control agency, Eielson Command Post, Eielson Fire Department Communication Center, and BLM Alaska Fire Service.

4.12.4.4. Unless otherwise advised or cleared, all aircraft will maintain 5,000 feet above and 5 miles away from the fire. In airborne firefighting situations, the Alaska Fire Service will designate Temporary Flight Restrictions (TFRs) through the Notice to Airman (NOTAM) system.

4.12.5. R-2211 Blair Lakes Fire Fighting. The following procedures apply to fire control on R-2211, Blair Lakes Range:

4.12.5.1. If necessary, all personnel on the range will be considered available resources for combating fires.

4.12.5.2. Civilian contract, Army, or Air Force helicopters will be used to move personnel from/to the fire, as required.

4.12.5.3. Adequate wildland fire fighting tools and equipment will be maintained by 354 RANS to meet fire suppression requirements (in accordance with BLM augmentation).

Chapter 5

RANGE MAINTENANCE AND CLEARANCE OPERATIONS

5.1. Range Clearance & Maintenance Scheduling. The ranges will close periodically for 354 RANS/Range Maintenance (354 RANS/RSM) activities or US Army scheduled maintenance activities. The 354 RANS will provide a tentative annual range maintenance/EOD clearance schedule to 354 RANS/RSC no later than 6-months prior to execution. 354 OSS/Wing Scheduling will be notified by 354 RANS/RSC of projected closure times. 354 OSS/Wing Scheduling will notify all potential users of closed range times during the quarterly and monthly scheduling process.

5.1.1. Funding by 354 RANS will be IAW the Joint Travel Regulation, **Chapter 2** of this publication, and applicable Memorandums of Agreements between 354 RANS and supporting agencies.

5.1.2. 354 RANS Range Manger (RM) will create a Comprehensive Range Plan for all Air Force utilized or owned ranges IAW AFMAN 13-212v1.

5.1.3. The Range Manager, through coordination with 354 RANS, 354 LRS, 354 CES to include the EOD and Engineering Flight (GeoBase), 354 MDG (as required), 353 CTS, 354 OG Fighter Squadrons, Army Installation Range Officers or their designated representatives, and contractor personnel will perform a deliberate range planning conference for all range builds.

5.1.3.1. Initial Planning Conferences (IPC) will be held up to 1-year prior to designated range builds. The IPC will cover, at a minimum, the intended range that construction will occur, proposed equipment, manning, and timeframes of the build cycle. Additionally, the Range Manager will work with EOD to initialize a clearance plan of the designated range. Finally, 353 CTS, OG Fighter units, and intel representatives are requested to provide any new targets to meet future exercise training requirements.

5.1.3.2. Mid-Planning Conferences (MPC) will be held up to 6 months, but no later than 4 months prior to the execution of the build. All attendees should be the same as the IPC and will be required to answer any requests for information (RFI) that were not addressed prior to the MPC. Furthermore, the MPC will begin to codify the requirements and what work will be accomplished, by whom, and the expectations of all individuals working in the impact areas. The Range Manager through coordination with the EOD flight leadership will finalize the clearance plan of the designated range.

5.1.3.3. The Final Planning Conference (FPC) will occur between 60-to-90 days prior to build execution. Statements of Work (SOW) will be finalized and sent post FPC to the appropriate Army Installation Range Officer (IRO). In addition to the SOW, any Medical Evacuation (MEDEVAC) and communications plan will be sent as well. Any further contracts between 354 RANS and supporting agencies will be codified through the SOW or applicable Memorandums of Agreement (MOA).

5.1.4. All range clearance/decontamination and target maintenance operations on 11th ABN DIV ranges will be coordinated and approved by 11th ABN DIV or the responsible U.S. Army authority through 354 RANS a minimum of 60 days prior to the start of operations.

5.1.5. 354 RANS/RM will secure personnel for range builds that require movement, refabrication, or removal of targets in the YTA, DTA, or Blair Lakes impact areas. All targets will be surveyed and mapped through coordination with 354 CES/CEN GeoBase. Target coordinates will be verified through electronic measures and will be updated in the JPARC Handbook, RFMSS, or other repositories and distributed as appropriate.

5.2. Ground Operations & Access.

5.2.1. Ground Party Access to Range Lands. All USAF-sponsored personnel (Military, Government Civilians, and Contractors) requiring access to Army-managed for official business shall coordinate with the 354 RANS/RSC to:

5.2.1.1. Receive a Range Safety briefing (if not already provided by Army Range Control).

5.2.1.2. Provide legal name and associated agency for inclusion to Army Range Control's access roster.

5.2.1.3. Issued a Land-Mobile Radio (LMR) and radio call sign.

5.2.1.4. Comply with communications requirements as briefed.

5.2.1.5. If opening a locked gate, ensure that the gate is closed and secured once the vehicle has passed through.

5.2.1.6. Adhere to posted speed limits, as written in USARAK 350-2, Annexes A-C.

5.2.1.7. Adhere to restrictions associated with Hazard Area (impact areas) boundaries.

5.2.1.8. Vehicles and personnel may not enter any impact area (marked by signs) unless specifically approved by the appropriate Army Range Control.

5.2.1.9. Vehicles and personnel are not authorized beyond Camera Site 2 during any scheduled ordnance expenditures on the Stuart Creek Impact Area (R-2205). If down-range of Camera Site 2 and notified by range control of expected ordnance expenditures on Stuart Creek Impact Area, personnel will immediately retreat to Camera Site 2 or further northwest. Exceptions to this policy will be evaluated on a case-by-case basis. Contact 354 RANS/RSC at 317-377-7010 for exceptions.

5.2.2. Communications Requirements.

5.2.2.1. Ground Party Communications with Army Range Control. Personnel accessing U.S. Army-managed training lands in R2201, R-2202, and R-2205 will ensure they maintain communications with applicable Army Range Control agencies. Communications media for USAF-sponsored ground parties will be via LMR. In the event of LMR failure, cell phones, or VHF-FM (30.30 MHz) may be used as a backup. 354 RANS/RSC will sign out LMRs to visiting groups and local contractors, as required. Communication protocol is as follows:

5.2.2.2. At the entrance to Army-managed training lands and prior to entry, personnel will call via LMR the applicable Army Range Control and state:

5.2.2.2.1. Your callsign, location, number of personnel in the party, number of vehicles, and destination.

5.2.2.2.2. After receiving approval to enter, proceed to the destination. Once at the destination, state your callsign, current location, and how long you intend to stay.

5.2.2.2.3. Upon leaving the destination, state your callsign, location, number of personnel in the party, number of vehicles, and your next destination.

5.2.2.2.4. For ground parties staying on the range for long periods, periodic reporting radio calls may be required. The typical interval is 1 hour.

5.2.3. Warning Signs. The U.S Army manages the training lands associated with R-2202, R2203, and R-2205. The U.S Army provides necessary warning signage (e.g., boundary, impact areas, Laser usage, etc.). The USAF shall post Electromagnetic Radiation Hazard signage at appropriate distances from its radar emitter systems to ensure Minimum Permissible Exposure limits are not exceeded by non-participating personnel.

5.2.4. Range Escorts. The 354 RANS will provide properly trained or briefed escorts to accompany any spectators during range demonstrations or special occasions. Escorts will provide positive control of all spectators to ensure the safety of spectators, aircrew, and range personnel. Escorts will ensure all safety protection is provided (e.g., hearing and eye protection) for spectators. Spectators will remain in designed areas while on the range.

5.2.4.1. Range escorts can be active-duty military, government civilian, and/or properly trained contractors in a direct support role. Escorts will be trained on-ground access procedures.

5.3. Range Clearance and Maintenance Safety.

5.3.1. During EOD range clearance operations on R-2202, R-2205, and R-2211, medical personnel will accompany EOD personnel but will always remain a safe distance apart from the EOD teams IAW AFMAN 32-3001 and USARAK 350-2 Annex B & C.

5.3.2. During Range maintenance operations where heavy equipment and personnel are required to perform ice-bridging operations, medical personnel will accompany RSM personnel, but remain a safe distance from those teams IAW USARAK 350-2 Appendix B, Table A-3.

5.3.3. When EOD and RSM personnel are jointly working together to conduct EOD clearance and RSM Maintenance operations, medical personnel will accompany the operation and remain a safe distance away from personnel IAW AFMAN 32-3001 and USARAK 350-2 Appendix B.

5.4. Annual 354 RANS/RSM Range Maintenance and EOD Clearance Missions.

5.4.1. General. Prior to the construction of any new target or replacement/refurbishment of existing targets, the area must be cleared of expended ordnance using normal decontamination procedures. Clearance of all impact area targets within JPARC will be preceded by a visual reconnaissance of target area surfaces. Munition items found on the surface will either be explosively blown in place (BIP) or removed to a central site for disposition. Scrap metal will be removed during decontamination operations when physically possible in accordance with the current Air Force Instructions/Air Force Manuals (AFIs/AFMANs), Inter-service Support Agreements (ISAs), and/or Memorandum of Agreements.

5.4.1.1. Prior to the annual EOD range clearance, 354 RANS/RSM range maintenance, or access into the impact areas of R-2202 and R-2205, 354 RANS is responsible to create a US Army Risk Assessment management plan (or Air Force equivalent ORM sheet), Communication Plan with DTARC or YTARC and ERC, Medical Plan, Wildfire Evacuation Plan, and a Statement of Work which will be signed by the 354 RANS/CC and submitted to respective US Army range managers. An electronic copy will be sent to the supporting EOD team.

5.4.1.2. Prior to annual EOD range clearance operations into the impact areas of R-2211, a Communication Plan and a Medical Evacuation Plan will be signed by the 354 RANS/CC and submitted to ERC. An electronic copy will be sent to the supporting EOD team.

5.4.2. During EOD operations, continuous radio communications will be maintained with DTA-RC or YTA-RC.

5.4.3. A five-year waiver has been granted by 11th AF/CC and 11th ABN DIV/CG to conduct annual EOD range clearances and 354 RANS range maintenance operations of USAF target arrays in R-2202 and R-2205 impact areas known to be or suspected of being contaminated with Improved Conventional Munitions (ICM)/sub-munitions from cluster-type bombs. Specific requirements and provisions of this waiver are available by contacting 354 RANS/RSM. All personnel entering these contaminated areas listed in the ICM waiver are responsible for complying with these waiver requirements.

5.4.4. Annual 354 RANS/RSM Range Maintenance and EOD Clearance Missions WITHOUT Snow Coverage.

5.4.4.1. Prior to snowfall, annual range clearance will be performed IAW AFMAN 13-212v1, AFMAN 32-3001, and all other applicable guidance.

5.4.4.2. Targets to be subsequently accessed will be restricted from all ordnance delivery footprints until after required maintenance is complete. Roads and trails may be used for vehicular traffic by personnel who have received range orientation training if the only ordnance delivery footprints over these roads and trails were from BDU-33s and/or target practice or ball projectiles of 30mm in size and under.

5.4.4.3. It is not advisable to perform 354 RANS/RSM range maintenance and target construction on range areas that have not received the required EOD surface range clearance. Sufficient time and EOD personnel to perform the operations must be scheduled to safely accomplish the mission prior to snow covering the ground. In Improved Conventional Munitions (ICM) identified contaminated areas on R-2205 and R-2202, no subsurface work will be permitted.

5.4.4.4. If at any time during 354 RANS/RSM range maintenance operations an unexploded ordnance item (UXO) is encountered, the item will be safely marked and the immediate area surrounding the UXO avoided until EOD can respond. EOD will be contacted to inspect item for the appropriate response to ensure safe 354 RANS/RSM operations can continue in a timely manner.

5.4.5. Annual 354 RANS/RSM Range EOD Clearance Missions WITH Snow Coverage.

5.4.5.1. To conduct maintenance operations on R-2202 with snow on the ground, the 354 RANS requires a waiver signed by COMPACAF IAW AFMAN 13-212v1. (T-1)

5.5. General Target Construction.

5.5.1. Strafe Targets.

5.5.1.1. Construct strafe beds to reduce the ricochet hazard to a minimum. An area of 30 meters (100 feet) wide, 46 meters (150 feet) in front of the target, and 61 meters (200 feet) behind the target should be filled with sandy soil or soft loam to a depth of at least 12 inches (see **Figure 5.1**.). Fine, loose sand has proven to be the best type of soil for this area; however, a soft loam or other type soil that remains soft after disk harrowing or chisel plowing is acceptable. The total strafe bed area covers 46 meters (150 feet) wide, 91 meters (300 feet) in front of the target, and 122 meters (400 feet) behind the target. This area should be cleared of all foreign objects such as rocks, stumps, and other obstructions.

5.5.1.2. Drag Chute Target. The preferred low-angle strafe target is constructed from an aircraft drag chute and MA1A barrier webbing. This target requires two utility poles mounted about 21 meters (70 feet) apart and set in the ground 10 to 15 degrees from the vertical (leaning away from the foul line). See Figure **5.2 and 5.3**. Bullseye and outer panels of the target should be painted or colored to contrast with the surrounding terrain. To ease replacing and hoisting the target in place, attach pulleys, eyes, or hooks to the rear of the poles. Route nylon rope, nylon strap, or armored cable through the pulleys, eyes, or hooks to a winch or cleat located at the rear of the poles. Support the top corner of each target with lines to separate winches or cleats. This feature provides a backup in the event one support line is shot away. This type of target may also be used for high angle strafe if the berm protecting the electronic scoring devices is modified for the higher firing angle. Due to the different configuration of the protective berm, the low and high angle acoustically scored targets cannot be interchanged.

Figure 5.1. Low Angle Conventional Range Strafe Bed Layout.

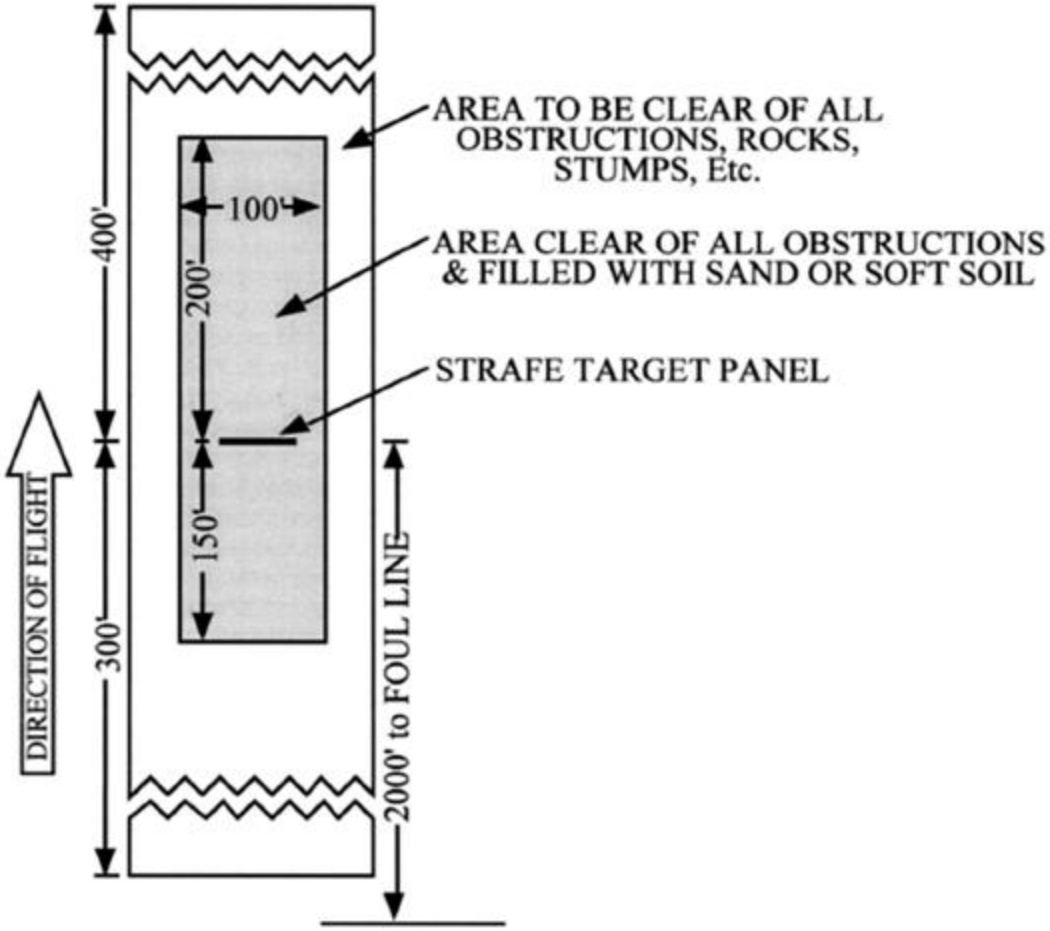


Figure 5.2. Drag Chute Target.

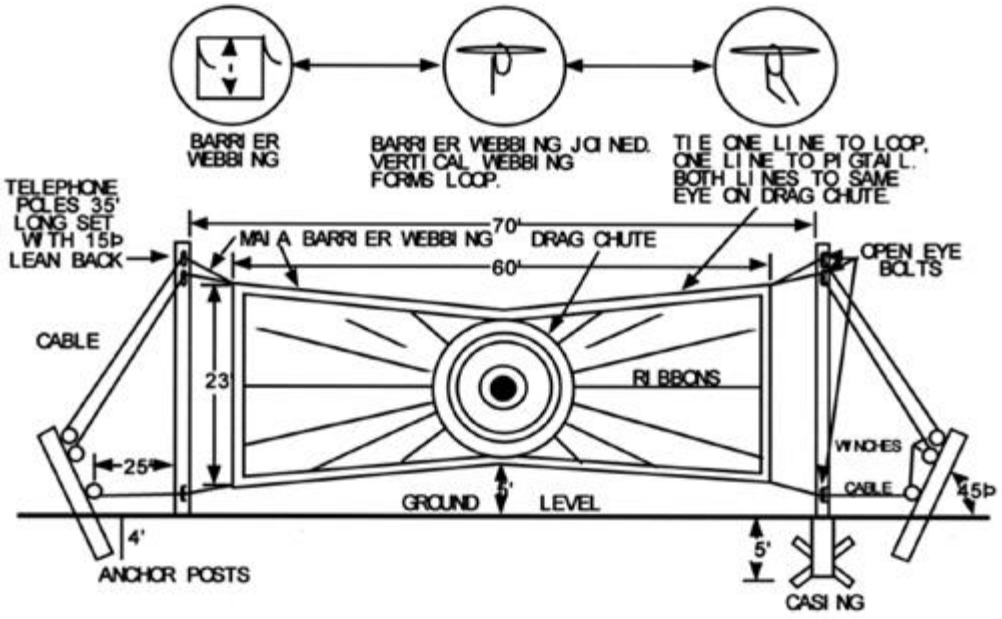
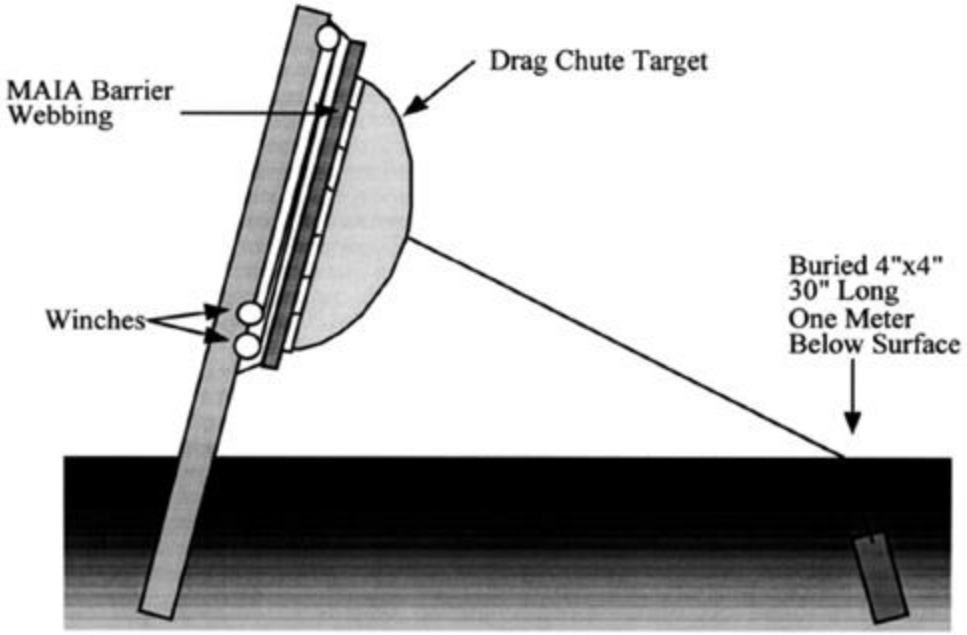


Figure 5.3. Side View of Drag Chute Target.



5.5.1.3. Other Strafe Targets**.** Panel strafe targets built of target cloth may be used for manual scoring if the electronic scoring system fails. Do not use salvaged vehicles and aircraft as strafe targes when they are scored by acoustical scoring systems because debris from the target may damage the transducers.

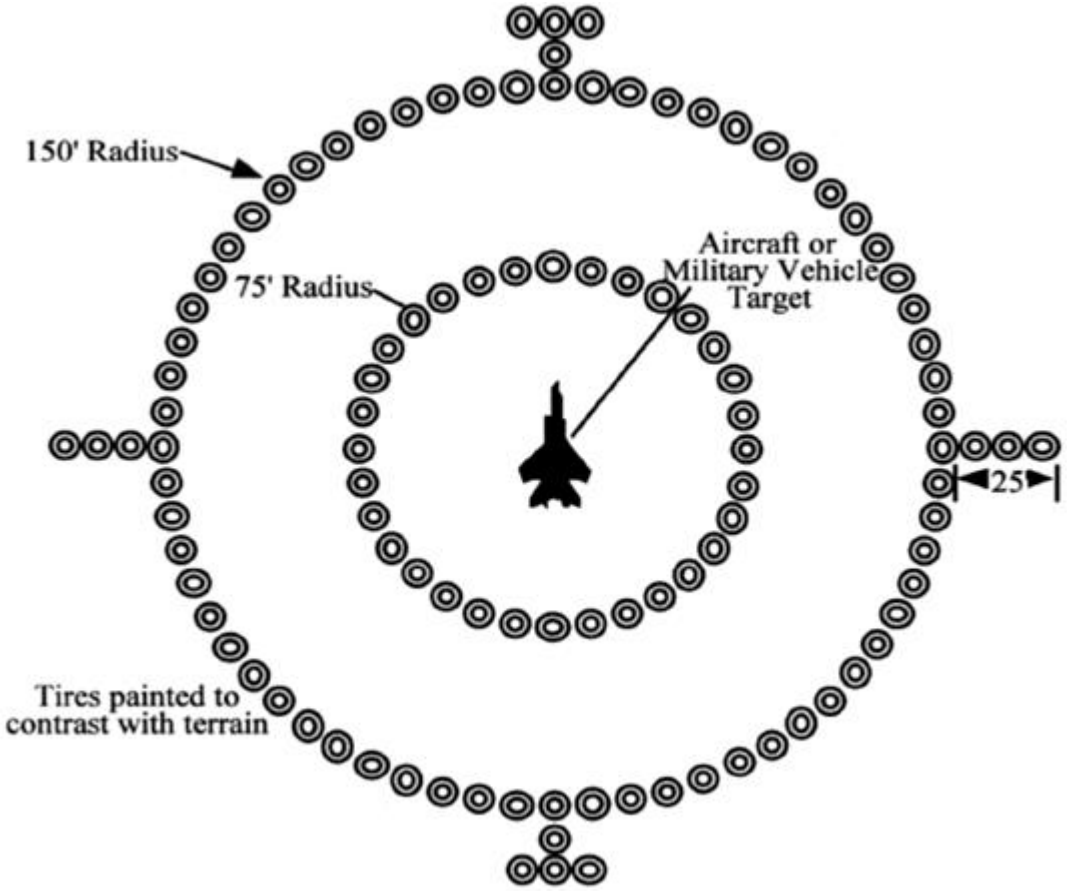
5.5.1.4. Run-in and Foul Lines. Construction techniques vary, depending on range conditions. Where practical, clearing and mowing normally provides sufficient contrast for run-in lines. If run-in lines are over a forested area, the line must be wide enough to prevent the tops of tress from subsequently merging and obscuring it. Strafe run-in may require clearing to the same width as the entire strafe bed, depending on the height of tress, since targets are only 150 feet apart. Foul lines must be of high contrast, both from the air and from the control tower. If the foul lines are mowed or graded, create a definitive line painted to contrast with terrain lines.

5.5.2. **Conventional Targets**

5.5.2.1. Layout. The placement of bomb targets on a conventional range is shown on the range layout diagrams found in this chapter. These targets can be used for dive bomb, low-angle bomb, high-angle bomb, high-angle strafe, and rocket events.

5.5.2.2. Construction. This target is normally outlined by two concentric circles constructed from large aircraft or truck tires, painted to contrast with the terrain (see **Figure 5.6**.). Reference lines of equal depth, representing 3, 6, 9, and 12 o'clock, may be added. These lines should be oriented to the aircraft flight path and extend 7.6 meters (25 feet) beyond the outer edges of the large circle. Distances can be modified to coincide with qualification criteria as stated in the aircraft specific AFMAN 11- series. The target circles may be bladed out with a bulldozer if the resulting cut affords a sufficient contrast with surrounding terrain.

Figure 5.4. Conventional Target Layout.



5.5.3. **Tactical Targets.**

5.5.3.1. Scenario Layout. Tactical ranges should be constructed using current intelligence threat data so that target arrays are realistic. Airfields, SAMs, AAA sites, industrial complexes, and Forward Edge of the Battle Area (FEBA) targets can be used in various scenarios. As appropriate, coordination should occur between 354 RANS and 353 CTS during Range Build Meetings to discuss future tactical target development.

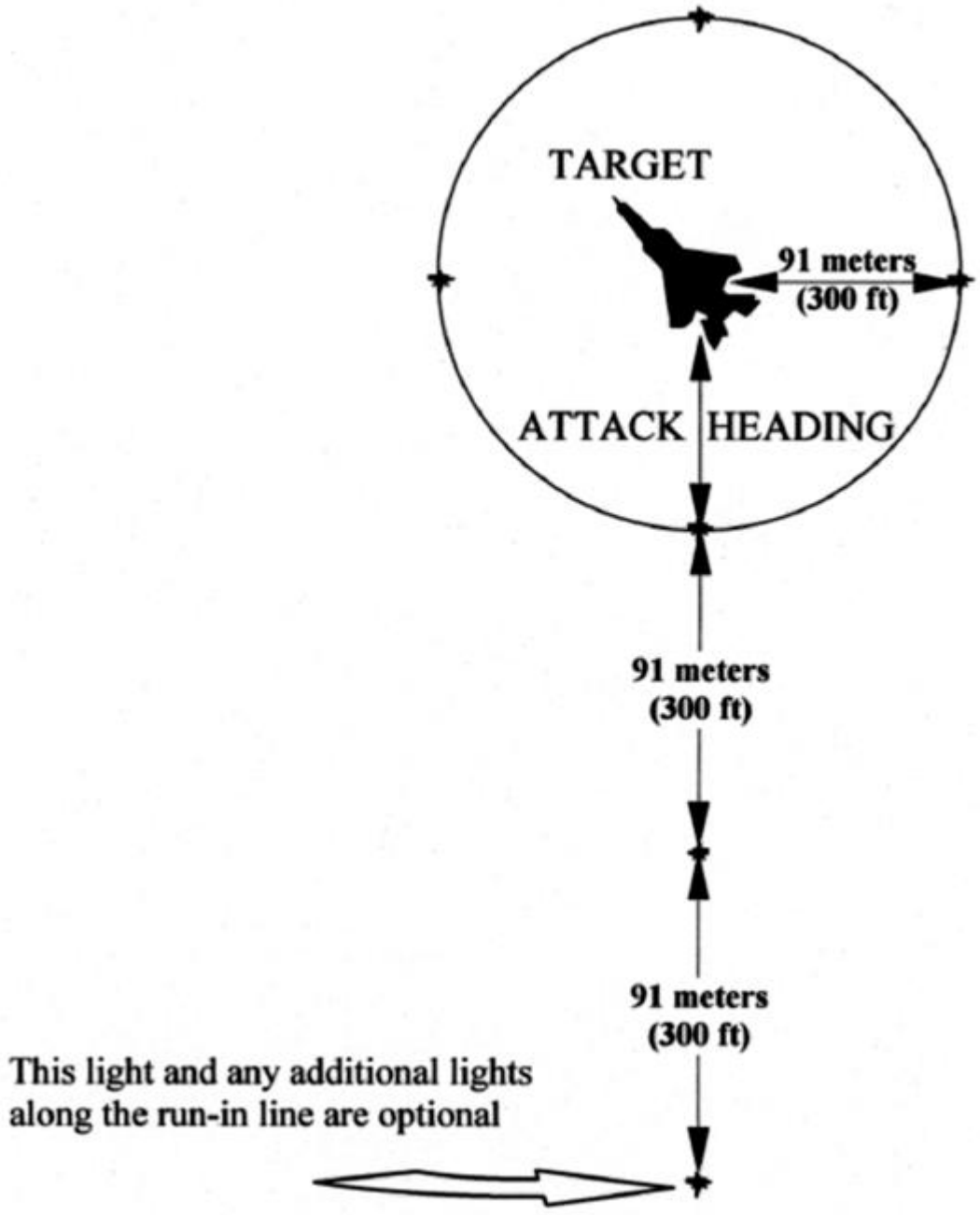
5.5.3.2. Construction. Comply with designs analyzed during EIAP. Roads and airfields are simulated by the blading action of a bulldozer or grader, or by disk harrowing. The exact mixture ratio depends on the color and consistency of the soil. Salvaged or mock aircraft will be placed in bladed revetments around the airfield, on the taxiways, and on the runways. Command posts, supply installations, POL storage areas, ammunition storage areas, and buildings may be simulated by bulldozing up mounds of earth, by using any type of available boxes, crates, or salvaged vans, or by building metal or wood frames that can be covered with old tent canvas, camouflage netting, or target cloth. Convoys may be simulated by salvaged vehicles or by constructing metal or wood-framed structures. Missiles and guns can be simulated by using wooden poles of various diameter, plywood fins, or platforms. Where possible, collocate a simulation of hostile threat environment (Smokey SAMs, simulated AAA, and communication jammers) with tactical ranges.

5.5.4. Applied Tactics Target. Another type of target found on conventional ranges is the applied tactics target. These targets are salvaged military vehicles or aircraft and are placed to provide an accurate scoring capability. The intent is to give more realistic training; therefore, no circles, run-in lines, or other markings are provided around the target, consistent with the need for fire breaks and scoring accessibility. The actual location of the applied tactics target on the range varies depending on range layout and ability to score, although the normal position is approximately 300 meters (1,000 feet) outboard of the conventional bombing circle. On dual ranges, this target could be the second conventional target if no circles, run-ins, or other unnecessary markings outline the target.

5.5.5. Laser Targets. Any object discernible from the air can be used as a laser target. Salvaged vehicles, aircraft, heavy equipment, CONEX containers, and fabricated targets are all satisfactory. Prior to installing the target, it must be despecularized by removing all reflective or refractive materials. This can be done by removing glass, chrome, and shiny metals. When removal is impractical, an alternative is to paint these surfaces with non-reflective paint. Laser targets should not be located near standing water or used if standing water is present, such as after a heavy rainfall.

5.5.6. Night Lighting. The optimum ground marker arrangement for night weapons delivery is four lights placed 46 meters (150 feet) to 91 meters (300 feet) from the target at the 3, 6, 9, and 12 o'clock positions, plus one or more lights along the run-in line at the 6 o'clock position at 91-meter intervals (see **Figure 5.8**.). Night lighting can be done with propane lanterns or incandescent lamps. Incandescent lighting systems are efficient and simple to use; however, they require line and fixture installation plus additional power requirements. Bulbs of 50 to 75 watts gives the required illumination when placed in weatherproof fixtures mounted on short posts and controlled by a rheostat.

Figure 5.5. Night Lighting.



5.6. Weapon Impact Scoring Set & Impact Remote Strafe Scoring System (WISS/IRSSS).

5.6.1. WISS General. The WISS v5 is a digital impact scoring system owned by NAVAIRSYSCOM PMA205 and is used in the training of pilots and aircrews in the JPARC. The system includes capabilities for impact detection, target identification in vision obstructed environments, and hazard identification on ranges.

5.6.2. WISS Subsystems.

5.6.3. Reference Placards. Placards are precisely surveyed points located within a field of view of each target area. Each SAP is marked by a flat bench marker to accurately position targets, calibration markers, and SAP markers.

5.6.4. Targets. Each target is assigned a number. Line targets, runways, and convoys are assigned target numbers. For YTA, targets begin with the number five "5," DTA targets begin with two "2," and for Blair Lakes, targets begin with eleven "11." The target numbers are listed in a tabular display form in the JPARC handbook along with the X-Y coordinates for each.

5.6.5. Transducer Installations for Acoustical Scoring Systems. **Figure 5.6** shows a typical setup. When the range is equipped with an acoustical scoring system, proper installation is very important for protection of the system and to obtain accurate scores. **Figure 5.7** shows a typical installation including dimensions.

Figure 5.6. WISS Camera Arrangement.

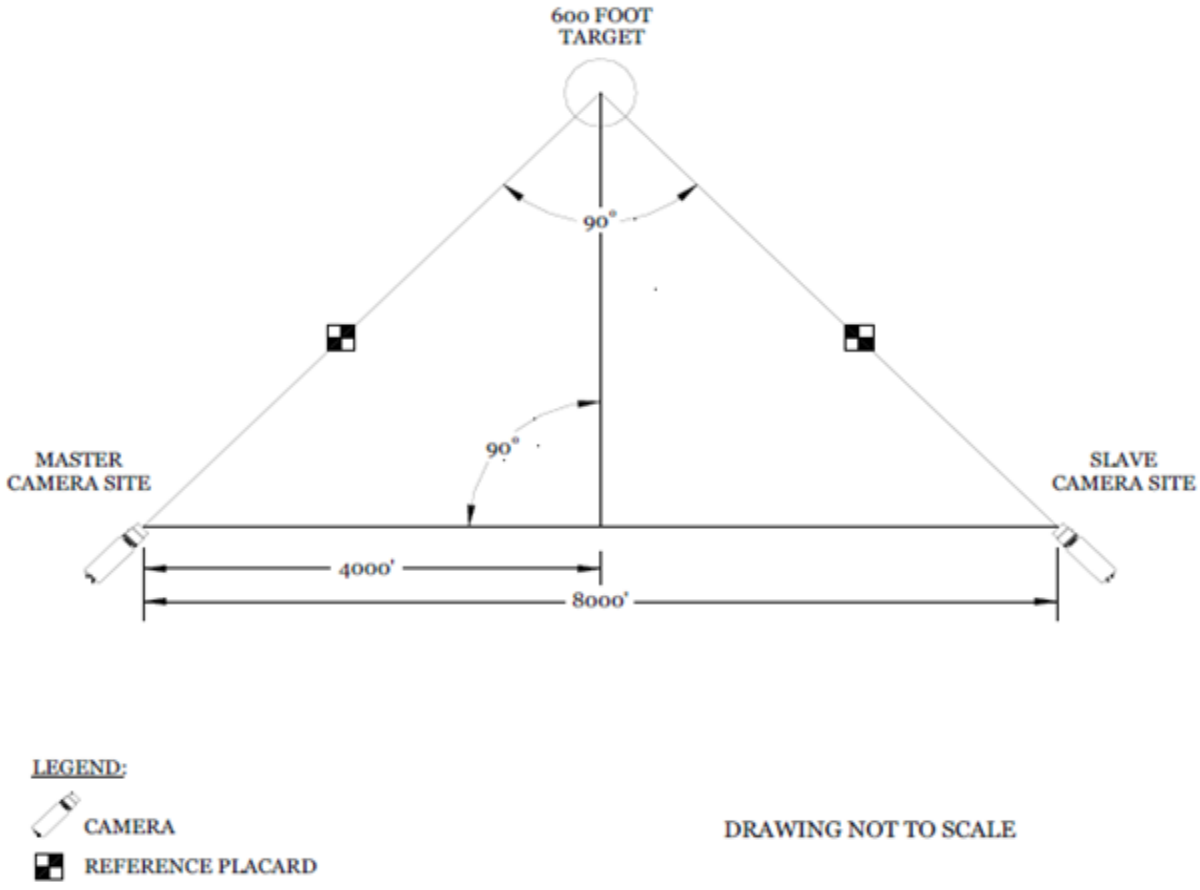
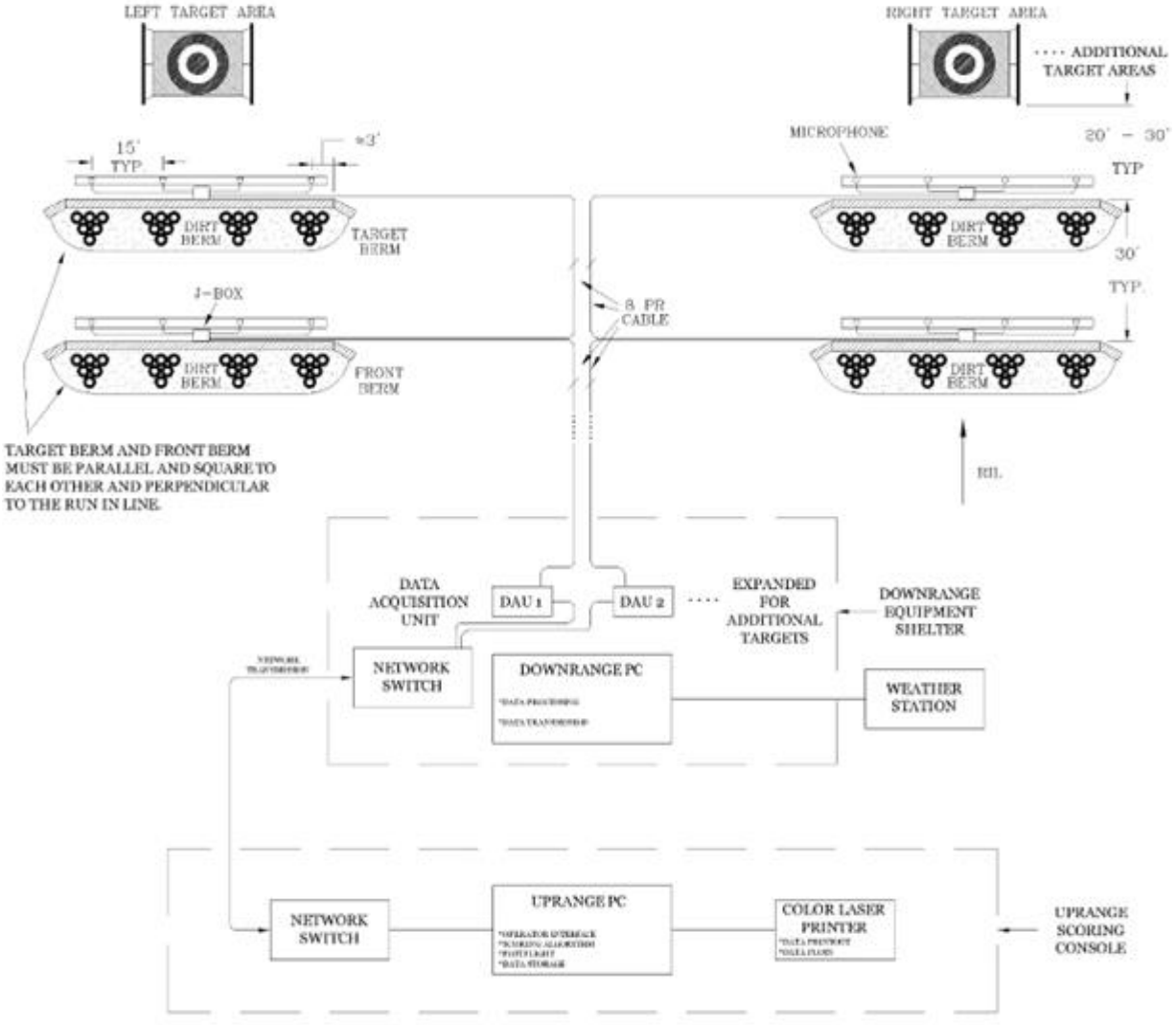


Figure 5.7. WISS Block Diagram.



5.7. Blair Lakes Inspection and Maintenance Procedures.

5.7.1. Overview. The following provides guidelines for inspections and required maintenance for Blair Lakes Range Complex. Additionally, the following guidance provides for the placement and clearing of foul lines, lead-in lines, target construction, berm maintenance, as well as safety rules and parameters. This is applicable to all personnel charged with the responsibility of inspecting or operating at the Blair Lakes Range Complex.

5.7.2. General. The adequacy of the strafe pits, clearing, and maintenance directly affects the capability of the aircrew to perform their mission. The following procedures will be strictly always adhered to.

5.7.2.1. Strafe pit maintenance, including the area around the transducers will be accomplished as required, to include removal of excess dirt and debris.

5.7.2.2. The lead-in and foul line area will be cleared of vegetation as required or requested by the 354 RANS/Range Manager (RM) or Director of Operations (DO).

5.7.2.3. Roads leading to and from the strafe pit area will be kept clear.

5.7.2.4. Transducers and down range terminal boxes, cables, and connectors will be inspected after usage by the RCO for damage prior to opening and after closing the range. Transducers will be covered and uncovered by the RCO prior to usage during Class A operations. Contractor personnel are required to perform the maintenance of the transducers with the assistance, as needed, by 354 RANS/RSM personnel.

5.7.2.5. Pre-mission checks will be performed by the RCO.

5.7.2.6. The strafe pit impact areas will be cleared of snow during the winter months, with an approved waiver in place. During the summer, the pits are required to be raked and policed as required. The use of the disk harrow, rotovator, chisel plow, or other suitable equipment will be used as required to keep the sand soft.

5.7.2.7. The strafe targets are built from aircraft drogue chutes and MA1A barrier webbing. Each strafe pit requires two utility poles 40-foot-long set in 10-foot-deep hole 70 feet apart. The utility poles will be set leaning away from the foul line a minimum of 10 to a maximum of 15 degrees from the vertical position (**Figure 5.2** and **Figure 5.3**.).

5.7.2.8. Each strafe target is supported by 1/4-inch cables routed through eye bolts and hooked to a winch located at the rear of the pole.

5.7.2.9. Chutes will be 5-feet off the ground.

5.7.3. Operational Procedures.

5.7.3.1. The strafe pits will be opened and operational by the scheduled opening time. If the strafe pits are non-operational, the RCO will notify 354 RANS/RM/DO and then ERC.

5.7.3.2. Aircraft are authorized to utilize the strafe pits from sunrise/civil twilight to sunset/civil twilight only when a RCO is on duty.

5.7.3.3. Strafing is not authorized when the strafe panels are not up and in place.

5.7.3.4. Strafe pits will be closed when head or tail winds exceed 20 knots. Head wind will be computed utilizing the steady state wind figure only. Gust factor will not be utilized to determine this figure.

5.7.3.5. At no time will personnel be allowed past the 2,000-foot foul lines when strafe pits are in a “HOT” status. Anytime the range is activated, all personnel down range will continuously monitor an intra-base radio.

5.7.4. Maintenance Procedures.

5.7.4.1. Maintenance on the strafe targets will be performed prior to opening and after closing the range on each day of operation. After four hours of utilization, an hour will be taken to inspect and perform maintenance as needed.

5.7.4.2. If the sand fails to absorb bullet penetration, additional sand will be used.

5.7.4.3. When 50% of the berm protective facing is destroyed or when adequate protection is no longer provided to the transducers, the berm will be replaced with a new one.

5.7.4.4. The guy wires will be inspected for kinks and breakage. If breakage exists, it will be repaired by the Blair Lakes Caretaker Crew. Replace the cable when either excessive splices or kinks prohibit free and easy movement of the wire.

5.7.4.5. Replace the drogue chutes when they are unusable, unrepairable, or as directed by the 354 RANS/RM/DO.

5.7.4.6. Maintenance and replacement of the utility poles will be as deterioration warrants.

5.7.5. Strafe Area Clearing Procedures.

5.7.5.1. An electromagnet or hand culling is needed to pick-up expended ordnance.

5.7.5.2. All obstructions within an area 100-foot wide to 300-foot in front of target, and 400-foot behind the target will be cleared.

5.7.5.3. The foul and lead-in line areas may be mowed or cleared with a bulldozer during the winter months.

5.7.6. Placement of Foul Lines and Lead-In Lines.

5.7.6.1. Ten lead-in line markers are placed 90-foot apart starting 12-foot from the foul line leading to the strafe targets.

5.7.6.2. There are 10 foul line markers placed 90-foot apart for each strafe pit for the 2,000-foot and the 4,000-foot foul lines.

5.7.6.3. There are four sets of lead-in lines and two sets of foul lines.

5.7.6.4. Lead-in and foul line pylons are constructed of 2-inch by 4-inch, by 12-foot lumber with an 8-foot base. Pylons are covered with plywood cut in a triangular shape 8-foot high by 8-foot wide and painted orange for visibility.

Chapter 6

RANGE CONTROL OFFICER (RCO) PROCEDURES

6.1. General.

6.1.1. RCOs are under the supervision and control of the 354 RANS/ROO. The primary RCOs for Blair Lakes (R-2211) will be USAF Contractor personnel. In certain instances, trained 354 RANS personnel may also act in an RCO capacity. In this event, 354 RANS/ROO will allow sufficient time for training and certification in accordance with this publication. RCOs are responsible for R-2211 ground and air space and the safe conduct of weapons employment operations.

6.2. Tour of Duty. Blair Lakes RCO contractors have a tour of duty of three (3) consecutive days during the week. Traditionally, those days are Tuesday thru Thursday. The normal tour of duty will be 10 hours. The maximum number of duty hours in any 3-day period will be 36 hours. Only qualified 354 RANS personnel, Officers, NCOs, or civilians (government employees or contractors) may perform RCO duties. All RCOs (military or civilian) will meet the qualification, training, certification, currency, evaluation, and recordkeeping requirements listed in Attachments **6 and 7**.

6.2.1. RCO crew rest is compulsory before performing any duties involving aircraft operations and is a minimum of 10 non-duty hours before the RCO duty period begins. Crew rest is free time and includes time for meals, transportation, and rest. This time must include an opportunity for at least 8 hours of uninterrupted sleep. The RCO crew rest period cannot begin until after the completion of official duties.

6.3. RCO Training, Checkout, and Certification.

6.3.1. General. Training and certification requirements are established in and will be conducted IAW AFMAN 13-212v1 and Attachment **5 and 6** of this publication.

6.3.2. RCO Training and Certification**.** The 354 RANS/ROO, 354 RANS/Range Manager, or a current and qualified RCO will conduct RCO training. Certification will be accomplished by the ROO, Range Manager, or by a designated RCO. RCO certification and annual recertification will be documented on an RCO Certificate for R-2211 (**Attachment 7**) and maintained by the 354 RANS.

6.3.3. RCO Currency. 354 RANS/ROO or Range Manager will ensure all RCOs maintain a 120-day currency.

6.4. Instructions, Regulations, and Manuals.

6.4.1. Blair Lakes will have a quick response checklist for items regarding backup communications, crash and emergency procedures, safety items, etc. Additionally, Blair Lakes will also have current copies of AFMAN 13-212v1, this manual, and applicable extracts from the F-16 AFMAN 11-series volume 3, F-35 AFMAN 11-series volume 3, AFMAN 11-214, and EAFBI 13-204.

6.5. Range Opening Procedures.

6.5.1. RCO Showtime. The RCO will be at the Blair Lakes Control Tower a minimum of 1 hour prior to the first scheduled Class A mission to complete range opening duties.

6.5.2. Communication to ERC. The RCO will communicate with ERC advising they have begun their RCO Inspection Checklist.

6.5.3. RCO Inspection Checklist. Prior to the first mission, the RCO will complete the Range Officer's Inspection Checklist.

6.5.4. RCO Range Status Report. No later than 15 minutes prior to the first-Class A mission, the RCO will notify ERC of range status. Upon notification, ERC will relinquish control of Blair Lakes (R-2211) air and ground space to the RCO.

6.6. Standard Operations.

6.6.1. Range Schedule. The RCO is responsible for managing the respected flight schedule. RCO will advise the flight leads when they have 5 minutes remaining in their scheduled period if another flight is scheduled immediately afterward. Flights will not be allowed to extend their period without concurrence of the inbound flight.

6.6.1.1. Summer Operations. During periods of extended daylight, RCOs will be responsible to cover during the 12-hour flying window.

6.6.1.2. Winter Operations. During the winter periods where daylight is less than 4 hours per day, RCOs may only control after sunrise and 2 hours prior to sunset. This allows for the RCO to gain transportation off the range during hours of light per local transportation agreements.

6.6.2. Communication.

6.6.2.1. Blair Lakes Range Control Tower is outfitted with a tunable UHF and VHF radio suite.

6.6.2.2. Minimum Radios. The range may be opened with one operational UHF radio (either primary or secondary; if secondary, one channel will be tuned to UHF Guard). In this instance, ERC will advise incoming flights of limited capability.

6.6.2.3. Aircraft Radio Failure. The RCO will advise other flight members when an aircraft flies past the RCO tower rocking its wings as a NORDO signal. If the aircraft remains in the traffic pattern, the RCO may attempt, with coordination with the flight lead/wingman, to contact the NORDO aircraft on the backup frequency. The mission will continue when all aircraft are in contact with the range. If the aircraft breaks out opposite traffic, and emergency is indicated—advise other flight members as appropriate.

6.6.2.4. Digital Recorder. All ground-to-air, air-to-air, and ground-to-ground communications on Blair Lakes are digitally recorded. Recordings will be held a minimum of 24 hours before reuse.

6.6.2.5. Clearance to Enter/Cross Blair Lakes.

6.6.2.5.1. Aircraft. All aircraft must be cleared on range by the RCO prior to entry (through ERC coordination if necessary). Crossing traffic may be cleared if the range is cold or after using flight coordination (altitude and/or distance deconfliction) and permission.

6.6.2.6. Weather Reporting. When weather is a factor, the RCO will obtain range weather from the Blair Lakes weather station, contacting ERC, local PIREPs, or independent weather observations; this information will be relayed to arriving flights on check in, or relayed to the flights from ERC. The RCO will close the range when PIREPs, RCO observations, or other sources indicated the weather is below minimums.

6.6.2.6.1. RCO will close R-2211 IAW **paragraph 2.1.14.4** of this publication.

6.7. Knock it Off, Fouls/Dangerous Passes, and Abnormal Range Operations.

6.7.1. Flight Terminate, "Knock-it-Off" calls, or Aircraft Emergency.

6.7.1.1. The RCO will: acknowledge the call, maintain radio silence and assist as required; visually monitor flight members to assist in safe separation; if the emergency aircraft proceeds off range to recover the aircraft/declare an emergency, advise ERC.

6.7.2. Unauthorized Airspace Incursion. RCO will call "Knock-it-Off" and then advise the flight lead of the intruding aircraft's location. If possible, assist aircraft to deconflict flight paths. If necessary, make a call on Guard to alert the aircraft of their position on the range and the best direction to leave the airspace. Report airspace violations to ERC and initiate an Incident Report.

6.7.3. Crash. Close the range and direct the using flight to either breakout/depart the range or act as On-Scene Commander. RCOs will remain in the tower and assist as required. RCO will advise ERC of status as soon as possible passing:

6.7.3.1. Call sign/flight position

6.7.3.2. Type aircraft, tail number, and home base (as required)

6.7.3.3. Exact location and time.

6.7.3.4. Status of aircrew (if known).

6.7.3.5. Ordnance on board (if known).

6.7.4. Ricochet. If an aircraft experiences an impact due to ricochet, suspension of LAS activities will occur, and RCO will provide emergency assistance to the affected aircraft, as necessary.

6.7.5. Abnormal Occurrences. On Blair Lakes, the RCO will immediately notify ERC, 354 RANS/DO, and the RCO COR of any abnormal occurrences. Documentation of any abnormal occurrences is required (e.g., round jettison, inadvertent release, range incursions, etc.) on an Incident Report and forwarded to the 354 RANS/DO by the end of the day.

6.7.6. Fouls/Dangerous Passes.

6.7.6.1. References. Assess fouls IAW AFMAN 11-MDS vol. 1, AFMAN 11-MDS vol 3 and AFMAN 11-214, to include:

6.7.6.1.1. Descending below minimum altitudes for the mission.

6.7.6.1.2. Firing inside 2,000’ during LAS delivery.

6.7.6.1.3. Double burst on LAS/LRS.

6.7.6.1.4. A lazy recovery on LAS, all recoveries not IAW T.O. -34-1.

6.7.6.1.5. Engaging targets without proper clearance.

6.7.6.1.6. A violation of range or flight safety (dangerous pass as assessed by the RCO).

6.7.6.1.6.1. A single violation of range or flight safety, as judged by the RCO or flight lead, may be considered dangerous by the RCO or flight lead, which will require the flight member to discontinue events and hold high and dry above the range.

6.7.6.2. Fouls. Advise pilots of minimums or other deviations/violations that occur. Include specific reasons for fouls. Do not clear follow-on passes of that aircraft until that pilot acknowledges the foul. Aircrew will discontinue and hold high and dry above the range after receiving a second foul.

6.7.6.3. Foul Recording. The RCO will ensure foul/dangerous pass information is recorded on the online foul report. RCOs will notify the RANS Range Safety Officer of any single dangerous pass, multiple fouls by a single aircraft or any event that requires the aircraft to cease all operations or RTB.

6.8. Weapons Delivery Scoring.

6.8.1. Bullseye Point is the center of the target.

6.8.2. Score Passing. RCOs will pass scores by miss distance and clock position, i.e., “15 at 6”. A score of 3 feet or less will be passed as a “Bull.” If warranted, a “Shack” may be passed as a direct hit on the bullseye. No score will be given over the radio or on the computer score sheet when a foul related to that pass occurs.

6.8.3. Strafe. When possible, RCOs will advise pilots of strafe impacts outside the center of the impact area.

6.9. Normal Range Closing Procedures.

6.9.1. Under normal conditions, the range may be closed through coordination with ERC.

6.9.2. RCO will ensure the Range Closing checklist is followed, any trash is removed, and equipment is turned off. RCOs will notify Blair Lakes Caretaker crew all missions are complete, so strafe rags are taken down.

Chapter 7

ENVIRONMENTAL MANAGEMENT

7.1. General. The activities guided by this regulation are designed to prevent environmental mishaps and ensure prompt reporting. Range operations involving live, and inert munitions have inherent hazards that can be safely controlled by strict adherence to sound operational procedures and applicable technical data.

7.2. Environmental Provisions.

7.2.1. Aircrew will notify ERC of any caribou herds or other animal concentrations spotted within Restricted Area boundaries. ERC will advise flights to avoid overflight of those areas below 3,000 feet AGL. This is to comply with MOA Environmental Impact Statement/Record of Decision environmental compliance.

7.2.2. For land managed by the Army, 354 CES/CC shall notify and coordinate with the 11th ABN DIV Directorate of Public Works (DPW) in cases of:

7.2.2.1. An application for permits such as water use, wetlands, air quality, landfill—that may result in environmental impacts.

7.2.3. For any negative wildlife impacts, to include subsistence, endangered species, or wildlife harassment issues, notify 354 CES and 354 RANS/RSA.

7.2.3.1. If on Army managed lands, also notify 11th ABN DIV DPW.

7.3. Detection of contamination.

7.3.1. For land managed by the Army, the Air Force will comply with all Department of Army and 11th ABN DIV publications, and with state and federal Environmental Protection Agency (EPA) regulations and requirements in the handling, storage, use, and disposal of hazardous materials and hazardous wastes.

7.3.2. The Air Force will be responsible for containing and cleaning up any spills caused by Air Force or Air Force-hosted operations.

Chapter 8

TRACKING AND REPORTING REQUIREMENTS

8.1. Reports. To support tracking of range use and weapon employments, ERC will maintain detailed monthly use records of all aircraft granted clearance into the airspace when it is active when operating as the range clearance authority.

8.1.1. All aircraft using ranges will report ordnance expenditures, including type and location of dud ordnance, to ERC prior to departing the range. This record will be provided to applicable Army Range Control upon request.

8.1.2. 354 CES EOD will forward requested information regarding EOD clearance work accomplished on JPARC ranges to 354 RANS/RSM within 30-days of completion of each EOD clearance operation. This information will be archived by 354 RANS/RSM and used in coordination with the range managers of R-2202, R-2205 and R-2211.

8.1.3. Responsible agencies will provide Restricted Area and MOA use reports to HQ PACAF and 354 RANS/RSA IAW DAFMAN 13-201.

PAUL P. TOWNSEND, Colonel, USAF
Commander

Attachment 1

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

References

FAA JO 7400.2R, *Procedures for Handling Airspace Matters*, February 20, 2025

FAA JO 7400.10G, *Special Use Airspace*, March 7, 2025

Order 7930.2T, *Notice to Air Missions (NOTAM)*, December 14, 2023

DoDD 5100.3, *Support of the Headquarters of Combatant and Subordinate Joint Commands*, November 19, 1999

DoDI 3200.16 change 1, *Operational Range Clearance*, December 4, 2017

DoDI 4715.03, *Natural Resources Conservation Program*, July 22, 2024

DoDI 5025.01, *DOD Directives Program*, October 28, 2007

DoD 5200.1-R, *Information Security Program*, January 14, 1997

DoD 5400.7-R_AFMAN 33-302, *Freedom of Information Act Program*, October 21, 2011

DoDI 6055.15, *DoD Laser Protection Program for Military Lasers*, August 25, 2023

AFTTP 3-2.6, *Multi-Service Procedures for the Joint Application of Firepower (JFIRE)*, November 28, 2023

AFI 10-101, *Format and Content of Mission Directives*, February 12, 2003

AFMAN 10-3505 Volume 1, *Joint Terminal Attack Controller (JTAC) Training Program*, November 7, 2023

AFMAN 11-214, *Air Operations Rules and Procedures*, November 29, 2022

AFMAN 11-202 Volume 3 PACAF Supplement, *Flight Operations*, August 30, 2023

EAFBI 11-211, *Distant Frontier Operations*, June 1, 2021

DAFMAN 13-201, *Airspace Management*, December 10, 2020

AFPD 13-2, *Air Traffic, Airfield, Airspace, and Range Management*, January 3, 2019

AFMAN 13-212 Volume 1, *Range Planning and Operations*, March 14, 2023

AFPD 32-30, *Explosive Ordnance Disposal*, March 20, 2023

AFMAN 32-3001, *Explosive Ordnance Disposal (EOD) Program*, April 22, 2022

EAFBI 32-7001, *Conservation and Management of Natural Resources*, May 15, 2018

AFMAN 32-7002, *Environmental Compliance and Pollution Prevention*, February 4, 2020

AFMAN 32-7003, *Environmental Conservation*, April 20, 2020

DAFI 32-7020, *Environmental Restoration Program*, March 12, 2020

AFPD 33-3, *Information Management*, September 8, 2011

AFMAN 33-326, *Preparing Official Communications*, November 1, 1999

AFI 48-139, *Laser and Optical Radiation Protection Program*, September 29, 2014

DAFI 90-160, *Publications and Forms Management*, April 14, 2022

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

AFI 90-802, *Risk Management*, March 31, 2019

DAFMAN 91-203, *Air Force Occupational Safety, Fire, and Health Standards*, March 24, 2022

EAFBI 91-212, *Eielson Air Force Base Bird and Wildlife Strike Hazard (BASH) Program*, February 26, 2019

AR 95-1, *Flight Regulations*, March 22, 2018

AR 200-1, *Environmental Protection and Enhancement*, December 13, 2007

AR 350-19, *Sustainable Range Program*, August 30, 2005

AR 385-10, *The Army Safety and Occupational Health Program*, July 24, 2024

AR 385-30, *Risk Management*, December 2, 2014

AR 385-63 {MCO3570.1C}, *Range Safety*, January 30, 2012

AR 385-64, *Ammunition and Explosive Safety Standards*, July 24, 2023

DA PAM 385-63, *Range Safety*, April 16, 2014

USARAK 350-2, *Range Safety*, July 16, 2020

Prescribed Forms

None

Adopted Forms

354 RANS *JPARC Range Request Form*

AF Form 847, *Recommendation for Change of Publication*

DAF 4437, *Deliberate Risk Assessment Worksheet (DRAW)*

Abbreviations and Acronyms

AAA—Anti-Aircraft Artillery

ACMI—Air Combat Maneuvering Instrumentation

AFB—Air Force Base

AFDPO—Air Force Departmental Publishing Office

AFI—Air Force Instruction

AFMAN—Air Force Manual

AFPD—Air Force Policy Directive

AGL—Above Ground Level

AGTS—Aerial Gunnery Target Set

ATC—Air Traffic Control

ATCAA—Air Traffic Control Assigned Airspace

AWACS—Airborne Warning and Control System

BC3—Battlespace Command & Control Center

CAS—Close Air Support

CE—Civil Engineers

CSE—Center Scheduling Enterprise

DOD—Department of Defense

DPW—Directorate of Public Works

DTARC—Donnelly Training Area Range Control

EOD—Explosive Ordnance Disposal

ERC—Eielson Range Control

EW—Electronic Warfare or Early Warning

FAA—Federal Aviation Administration

FLIP—Flight Information Publication

FSU—Former Soviet Union

FWI—Fire-Weather Index

IFF—Identification Friend or Foe

IFR—Instrument Flight Rules

IMC—Instrument Meteorological Conditions

IR—Instrument Routes

IRSSS—Improved Remote Strafe Scoring System

JAWSS—Joint Air Weapons Scoring System

JBER—Joint Base Elmendorf-Richardson

JESTR—JPARC Emitter Status and Training Request

JPARC—Joint Pacific Alaska Range Complex

JRE—Joint Range Extension

LAK— LINK—Alaska

LANTIRN—Low Altitude Navigation and Targeting Infrared for Night

LATN—Low Altitude Training Navigation

LOA—Letter of Agreement

LOP—Letter of Procedure

LRS—Long Range Strafe

LSVRS—Laser Spot Video Scoring System

LVT-II—Low-Volume-Terminal

LZ/DZ—Landing Zones/Drop Zones

MFE—Major Flying Exercise

MOA—Military Operations Area

MOU—Memorandum of Understanding

MRU—Military Radar Unit

MSCT—Multi-Source Correlator Tracker

MTR—Military Training Route

NOTAM—Notice to Airman

OPR—Office of Primary Responsibility

OT&E—Operational Test and Evaluation

PPLI—Precise Participant Location and Identification

RCO—Range Control Officer

RFMSS—Range Facility Management Support System

ROA—Range Operations Authority

ROO—Range Operations Officer

SA/GCI—Surveillance and Acquisition/ Ground Control Intercept

SAA—Special Activity Airspace

SADL—Situational Air Data Link

SAM—Surface-to-Air Missile

SUA—Special Use Airspace

SUAIS—Special Use Airspace Information Service

TENA—Training Enabling Network Architecture

TFR—Temporary Flight Restrictions

TMAA—Temporary Marine Activities Area

TOT—Time on Target

TSPI—Time-Space-Position-Information

UMTE—Unmanned Threat Emitter

USARAK—US Army Alaska

VFR—Visual Flight Rules

VR—Visual Flight Rules Military Training Route

WISS—Weapons Impact Scoring Systems

YTARC—Yukon Training Area Range Control

Office Symbols

AF/RE—Air Force Reserve

SAF/AA—The Administrative Assistant to the Secretary of the Air Force

Terms

Accountable Forms—Forms that the Air Force stringently controls, and which cannot be released to unauthorized personnel, since their misuse could jeopardize DOD security or result in fraudulent financial gain or claims against the government.

Administrative Change—Change that does not affect the subject matter content, authority, purpose, application, and/or implementation of the publication (e.g., changing the POC name, office symbol(s), fixing misspellings, etc.)

Approval Authority—Senior leader responsible for contributing to and implementing policies and guidance/procedures pertaining to his/her functional area(s) (e.g., heads of functional two-letter offices).

Authentication—Required element to verify approval of the publication; the approval official applies his/her signature block to authenticate the publication. The signature block includes the official's name, rank, and title (not signature).

Interior Airspace—airspace scheduled by 354 OSS, consists of Birch, Buffalo, Eielson, Fox 1/2/3 High/3 Low, Delta 1-5, Paxon High/Low, Viper A/B, Yukon 1/2/3A Low/ 3 High/3B/4/5 MOAs and their associated ATCAAs, as well as Tok, Hayes, and Yukon 6 ATCAAs.

Joint Pacific Alaska Range Complex (JPARC)—The JPARC consists of all the Special Use Airspaces within Alaska. This SUA encompass MOAs, ATCAA, Restricted Airspaces, and Warning Areas

Eielson Range Control—A manned facility providing control of all range activity, both air and ground, during the times the ranges (R-2202, R-2205, R-2211)/associated airspace are active for AF purposes.

Smokey SAM—LMU-24 Surface-to-Air Missile simulator.

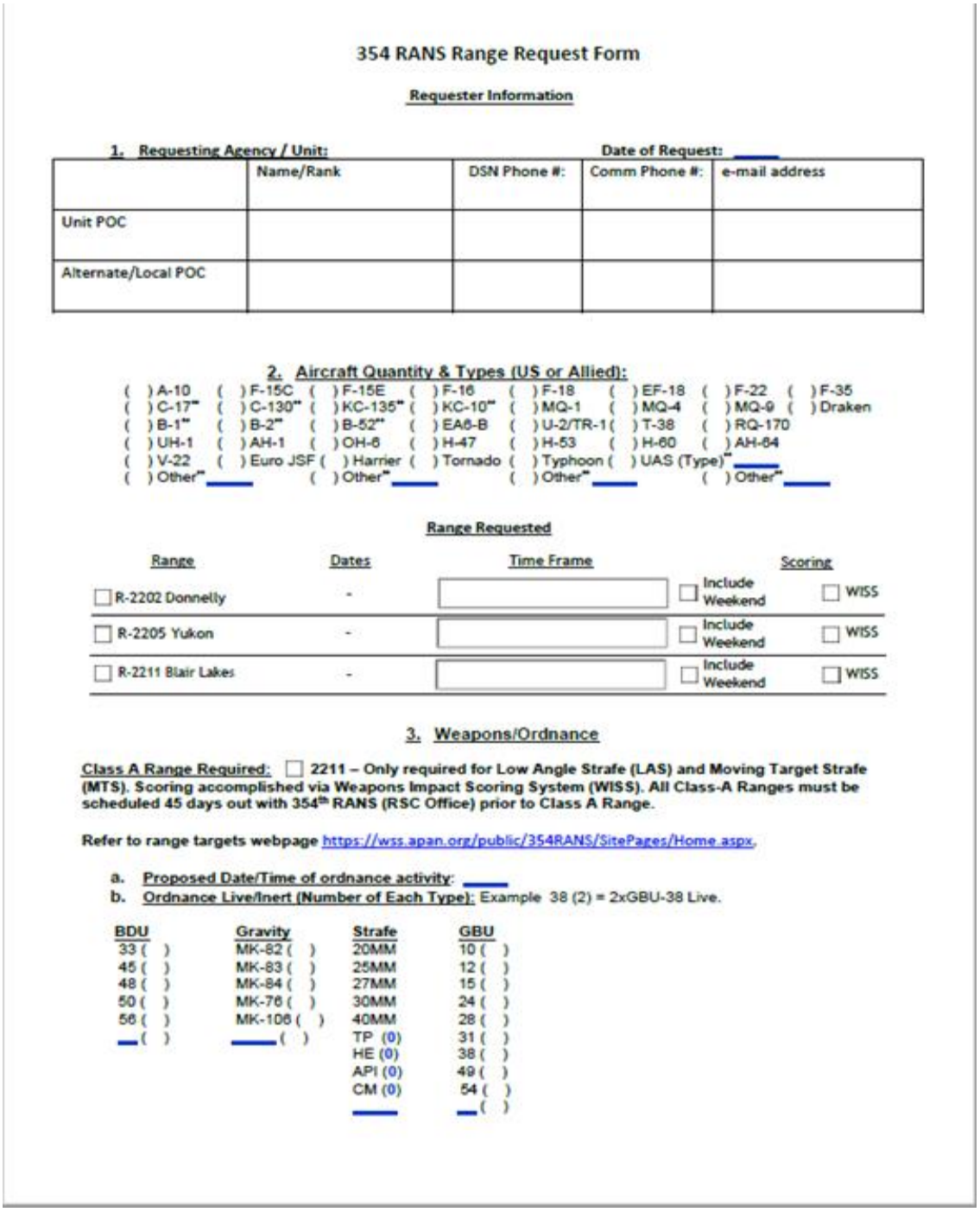
Squawk—A term that denotes the assignment of a specific IFF/SIF transponder code.

Western Airspace—airspace scheduled by 3 OSS, consists of Stony A/B, Susitna, Naknek 1/2, and Galena MOAs and associated ATCAAs, as well as Sparrevohn, Colorado, Kantishna E/W, Utopia E/W, and Sand Point ATCAAs and W-612.

Attachment 2

354 RANS JPARC RANGE REQUEST FORM

Figure A2.1. Request Form Pg 1.



354 RANS Range Request Form

Requester Information

1. Requesting Agency / Unit: Date of Request: ____

	Name/Rank	DSN Phone #:	Comm Phone #:	e-mail address
Unit POC				
Alternate/Local POC				

2. Aircraft Quantity & Types (US or Allied):

( ) A-10 ( ) F-15C ( ) F-15E ( ) F-16 ( ) F-18 ( ) EF-18 ( ) F-22 ( ) F-35
( ) C-17** ( ) C-130** ( ) KC-135** ( ) KC-10** ( ) MQ-1 ( ) MQ-4 ( ) MQ-9 ( ) Draken
( ) B-1** ( ) B-2** ( ) B-52** ( ) EA6-B ( ) U-2/TR-1 ( ) T-38 ( ) RQ-170
( ) UH-1 ( ) AH-1 ( ) OH-6 ( ) H-47 ( ) H-53 ( ) H-60 ( ) AH-64
( ) V-22 ( ) Euro JSF ( ) Harrier ( ) Tornado ( ) Typhoon ( ) UAS (Type)** ____
( ) Other** ____ ( ) Other** ____ ( ) Other** ____ ( ) Other** ____

Range Requested

Range	Dates	Time Frame		Scoring
☐ R-2202 Donnelly	-		☐ Include Weekend	☐ WISS
☐ R-2205 Yukon	-		☐ Include Weekend	☐ WISS
☐ R-2211 Blair Lakes	-		☐ Include Weekend	☐ WISS

3. Weapons/Ordnance

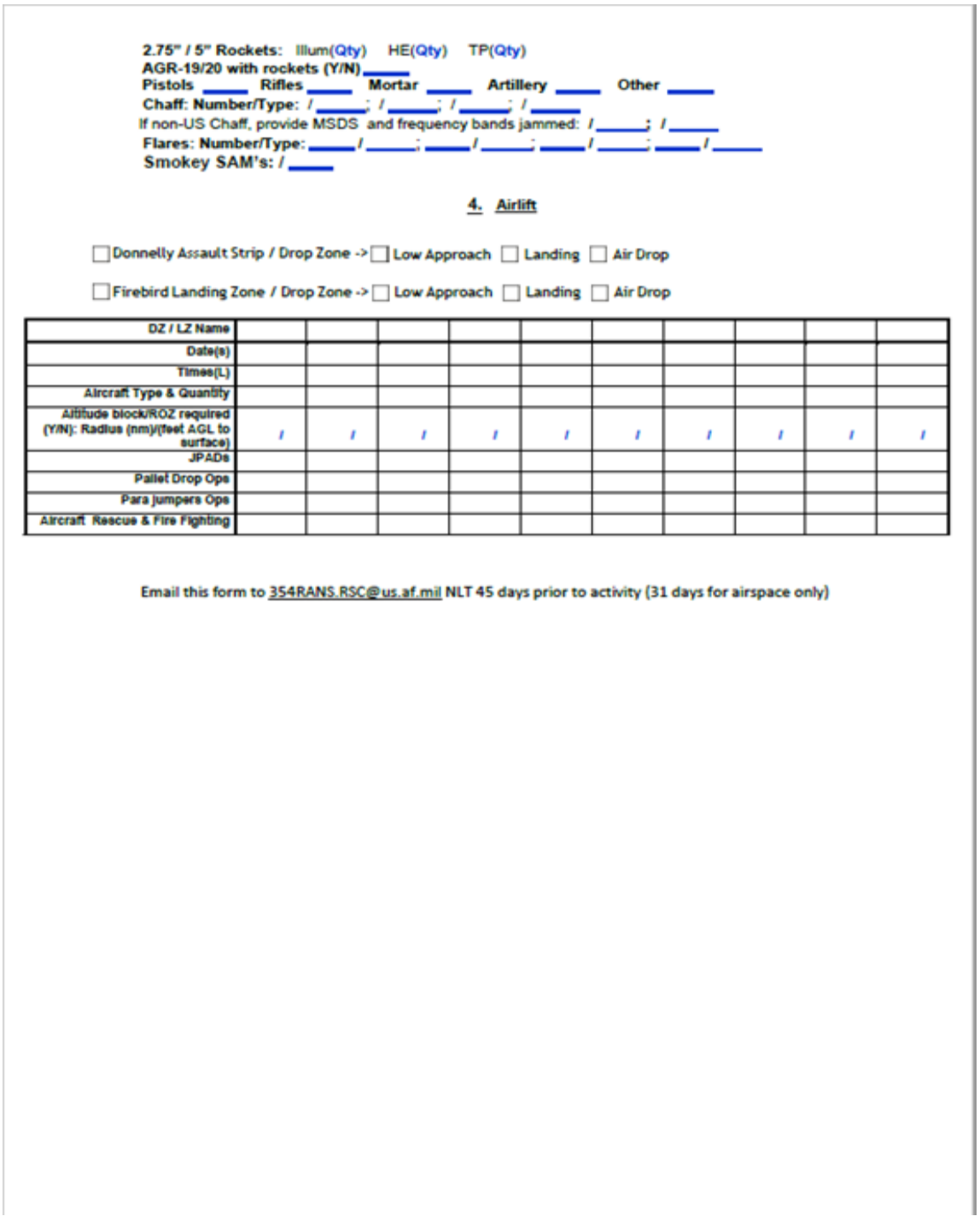
Class A Range Required: ☐ 2211 – Only required for Low Angle Strafe (LAS) and Moving Target Strafe (MTS). Scoring accomplished via Weapons Impact Scoring System (WISS). All Class-A Ranges must be scheduled 45 days out with 354th RANS (RSC Office) prior to Class A Range.

Refer to range targets webpage https://wss.apan.org/public/354RANS/SitePages/Home.aspx.

a. Proposed Date/Time of ordnance activity: ____
b. Ordnance Live/Inert (Number of Each Type): Example 38 (2) = 2xGBU-38 Live.

BDU	Gravity	Strafe	GBU
33 ( )	MK-82 ( )	20MM	10 ( )
45 ( )	MK-83 ( )	25MM	12 ( )
48 ( )	MK-84 ( )	27MM	15 ( )
50 ( )	MK-76 ( )	30MM	24 ( )
56 ( )	MK-106 ( )	40MM	28 ( )
____ ( )	____ ( )	TP (0)	31 ( )
		HE (0)	38 ( )
		API (0)	49 ( )
		CM (0)	54 ( )
		____	____ ( )

Figure A2.2. Request Form Page 2.



2.75" / 5" Rockets: Illum(Qty) HE(Qty) TP(Qty)
AGR-19/20 with rockets (Y/N) ____
Pistols ____ Rifles ____ Mortar ____ Artillery ____ Other ____
Chaff: Number/Type: / ____; / ____; / ____; / ____
If non-US Chaff, provide MSDS and frequency bands jammed: / ____; / ____
Flares: Number/Type: ____ / ____; ____ / ____; ____ / ____; ____ / ____
Smokey SAM's: / ____

4. Airlift

☐ Donnelly Assault Strip / Drop Zone -> ☐ Low Approach ☐ Landing ☐ Air Drop

☐ Firebird Landing Zone / Drop Zone -> ☐ Low Approach ☐ Landing ☐ Air Drop

DZ / LZ Name										
Date(s)										
Times(L)										
Aircraft Type & Quantity										
Altitude block/ROZ required (Y/N): Radius (nm)/(feet AGL to surface)	/	/	/	/	/	/	/	/	/	/
JPADs										
Pallet Drop Ops										
Para jumpers Ops										
Aircraft Rescue & Fire Fighting										

Email this form to 354RANS.RSC@us.af.mil NLT 45 days prior to activity (31 days for airspace only)

Attachment 3

LATE TRAINING REQUEST

Figure A3.1. LTR Page 1.

V-06092020

MEMORANDUM THRU
Brigade S3 (as required)

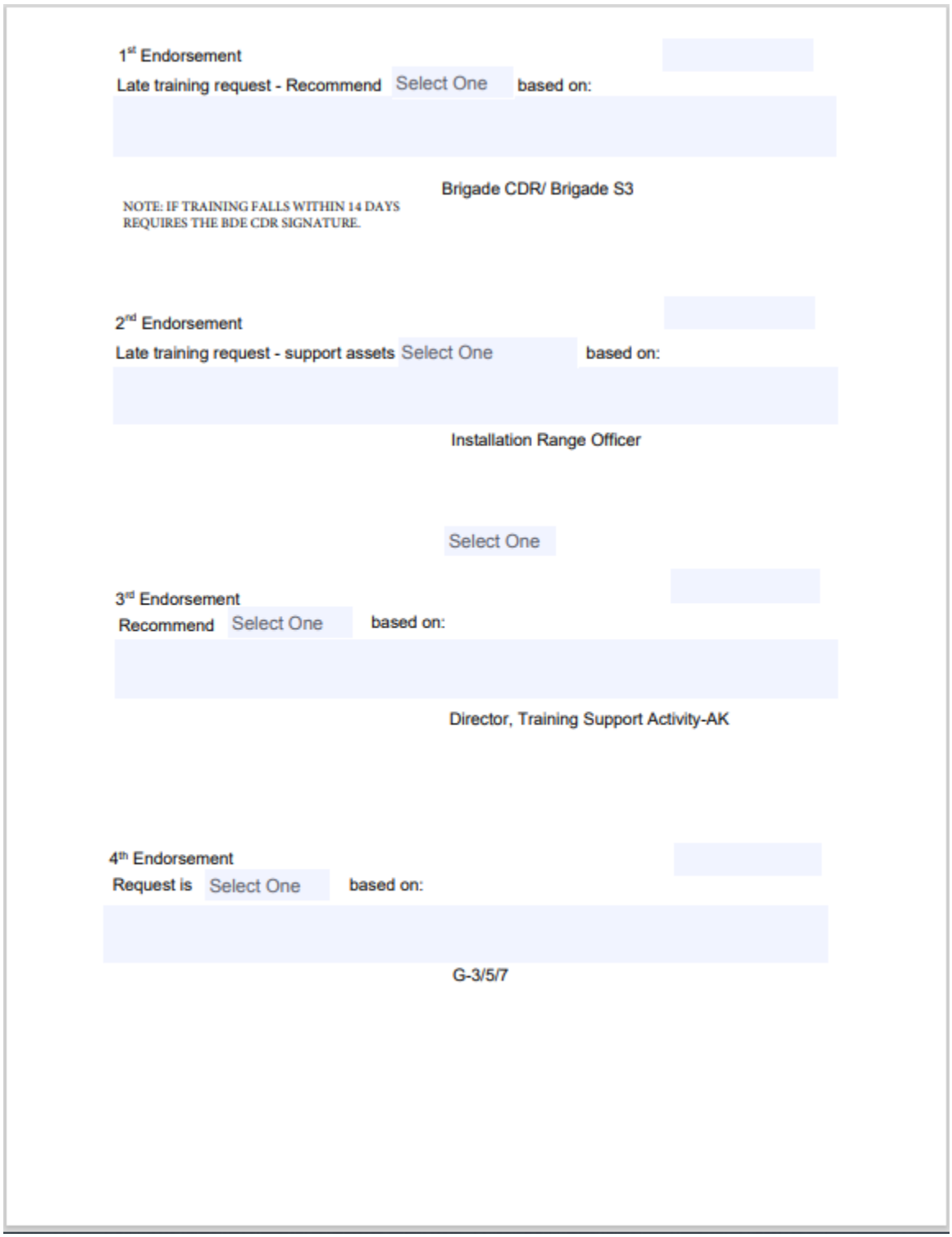
FOR USARAK G-3/5/7

SUBJECT: Late Training Request

1. Unit requesting:
   a. Date:
   b. Time: DAILY
   c. Location:
   d. Type of training:
   e. Weapon Systems:
   f. DODICs:
2. Reason for late request:
3. Impact if not conducted:
4. Point of contact for this memorandum:

LTC,
Battalion Cdr

Figure A3.2. LTR Page 2.



1st Endorsement

Late training request - Recommend Select One based on:

Brigade CDR/ Brigade S3

NOTE: IF TRAINING FALLS WITHIN 14 DAYS REQUIRES THE BDE CDR SIGNATURE.

2nd Endorsement

Late training request - support assets Select One based on:

Installation Range Officer

Select One

3rd Endorsement

Recommend Select One based on:

Director, Training Support Activity-AK

4th Endorsement

Request is Select One based on:

G-3/5/7

Attachment 4

WEEKLY SUPPORT REQUEST FORM

Figure A4.1. JPARC Training Request Form.

JPARC Training Request

Unit:		Week of:	
Name:			

1st Go Expected Vul Time:	
2nd Go Expected Vul Time:	

Complete this form NLT Thurs the week prior to execution and email to 354RANS.RSC@us.af.mil

	Mon		Tues		Wed		Thurs		Fri	
Weapon Employment										
	1GO	2GO	1GO	2GO	1GO	2GO	1GO	2GO	1GO	2GO
R-2202										
R-2205										
R-2211										
Type All Weapon Type Expenditures Expected for both Gos										
LSVRS/WISS										
	1GO	2GO	1GO	2GO	1GO	2GO	1GO	2GO	1GO	2GO
LSVRS (R-2205)										
R-2202										
R-2205										
R-2211										
Insert 'X' to mark requested support during the vul or write in a time if different.										
ACMI										
	1GO	2GO	1GO	2GO	1GO	2GO	1GO	2GO	1GO	2GO
MBR										
DDS 2 (0 RTO computer)										
DDS 3 (4 RTO computers)										
Insert 'L' for live playback and/or 'D' for debrief playback Contractors will only provide the ICADs set-up; Units are responsible for RTOs/Playback										

To request emitter support, please use the below link to fill our the JPARC Emitter Status and Training Requst (JESTR)

https://intelshare.intelink.gov/sites/354RANS/JESTR/SitePages/Home.aspx

Attachment 5

RANGE PERSONNEL TRAINING

A5.1. General Training. All personnel assigned to the range who perform some or all of their duties on the range will be trained in or demonstrate adequate knowledge of the following subjects: (T-1).

A5.1.1. Local range operating procedures.

A5.1.2. Maintenance procedures and issues.

A5.1.3. Range stewardship (environmental awareness and protection).

A5.1.4. Hazardous materials/hazardous waste and local environmental procedures.

A5.1.5. Poisonous or dangerous fauna and flora.

A5.1.6. Local weather hazards.

A5.1.7. Range fire protection/fire suppression procedures.

A5.1.8. Aircraft crash procedures.

A5.1.9. Local safety, emergency, and contingency procedures.

A5.1.10. Basic first aid procedures.

A5.1.11. Explosive and other ordnance hazards (EOD safety briefing).

A5.1.12. Range access control and security procedures.

A5.1.13. Laser safety (only for ranges that have been certified for laser operations).

A5.2. Range Operating Authority Training. As a minimum, the range operating authority will be trained in or demonstrate adequate knowledge of the following publications or subjects:

A5.2.1. National Environmental Policy Act. (T-1).

A5.2.2. Risk communication. (T-1).

A5.2.3. Public affairs. (T-1).

A5.2.4. WDZ and SDZ Program.

A5.2.5. EOD briefing on the proper handling of training munitions. (T-1).

A5.2.6. Overall range safety. (T-1).

A5.2.7. AFMAN 13-212v1, as supplemented.

A5.2.8. Intermediate command instructions and manuals applicable to range “operations.” (T-1).

A5.2.9. AFMAN 11-202, Volume 3, Flight Operations. (T-1).

A5.2.10. AFMAN 11-214. (T-1).

A5.3. Range Operations Officer Training. As a minimum, the range operations officer will be trained in or demonstrate adequate knowledge of the following publications or subjects (test sites not conducting air operations are exempt for the items indicated by *): (T-1 *exception A5.3.3.).

A5.3.1. Wing scheduling.

A5.3.2. Defense Acquisition University's Contracting Officer's Representative Course 222.

A5.3.3. Unit Level On-Scene Mishap Investigation Commander.

A5.3.4. National Environmental Policy Act.

A5.3.5. Risk communication.

A5.3.6. AFMAN 11-202, Volume 3. *

A5.3.7. AFMAN 11-214. *

A5.3.8. Aircraft specific AFMAN 11-2MDS series. *

A5.3.9. Unimproved landing zone and drop zone operations, as applicable. *

A5.3.10. Local airspace configuration.

A5.3.11. AFMAN 13-212v1, as supplemented.

A5.3.12. Approved range construction and maintenance methods.

A5.3.13. Intermediate command instructions and manuals applicable to range "operations".

A5.3.14. Range control officer authority and responsibilities.

A5.3.15. Range utilization report/range record keeping.

A5.3.16. EOD briefing on the proper handling of training munitions.

A5.3.17. Unit Safety Officer or designated Laser Safety Officer training.

A5.3.18. WDZ and SDZ Program.

A5.3.19. Proper use and handling of applicable ground launched visual threats.

A5.4. Range Control Officer / Test Area Control Officer Training. As a minimum, the range control officer/test area control officer will be trained in or demonstrate adequate knowledge of the following publications or subjects (test sites not conducting air operations are exempt for the items indicated by *): (T-1).

A5.4.1. Wing scheduling.

A5.4.1.1. Range use of CSE.

A5.4.2. Unit level on-scene mishap investigation commander.

A5.4.3. Public affairs.

A5.4.4. AFMAN 11-202, Volume 3. *

A5.4.5. AFMAN 11-214. *

A5.4.6. Aircraft specific AFMAN 11-2MDS series. *

A5.4.7. Unimproved landing zone and drop zone operations, as applicable. *

A5.4.8. Local airspace configuration.

A5.4.9. AFMAN 13-212, as supplemented.

A5.4.10. Intermediate command instructions and manuals applicable to range “operations”.

A5.4.11. Range control officer/Test Area Control Officer authority and responsibilities.

A5.4.12. Day/night aircraft ordnance delivery patterns for all aircraft using the range. *

A5.4.13. Obtain and interpret weather observations.

A5.4.14. Required weather minimums for each event.

A5.4.15. Use of the Avian Hazard Advisory System (Avian Hazard Advisory System, **http://www.usahas.com**).*

A5.4.16. Foul criteria.

A5.4.17. Communications procedures.

A5.4.18. Capabilities and limitations of range facilities.

A5.4.19. Hazard areas, pattern safety, WDZ, SDZ, and overall range safety.

A5.4.20. Range utilization report/range record keeping.

A5.4.21. EOD briefing on the proper handling of training munitions.

A5.4.22. Night operations.

A5.4.22.1. Range security.

A5.4.22.2. General aviation corridor.

A5.4.22.3. Helicopter operations.

A5.4.22.4. In-flight emergency and divert procedures.

A5.4.23. NVD training (if applicable) to include human visual system, physiological issues, NVD adjustment, care, use and limitations, disorientation, and aircrew limitations as a minimum.

A5.4.24. Proper use and handling of applicable ground launched visual threats.

A5.4.25. On-Range Training. A qualified range control officer/range operations officer will supervise on-range range control officer training. (T-1). A qualified Test Area Control Officer/range control officer/range operations officer will supervise test site Test Area Control Officer training. (T-1). The range operating authority will develop a checklist to ensure complete and professional training. (T-1). Emphasize the use of sound judgment and common sense while controlling both aircraft and personnel during range operations. The on-range training should include the following items as a minimum: (T-1).

A5.4.25.1. Range hazard areas.

A5.4.25.2. Inspection of strafe impact area impact areas. *

A5.4.25.3. Range fire protection/fire suppression procedures.

A5.4.25.4. Aircraft crash procedures. *

A5.4.25.5. First aid and evacuation of injured personnel.

A5.4.25.6. Traffic conflict with other ranges in the area.

A5.4.25.7. Range pattern spacing. *

A5.4.25.8. Minimum altitude measuring devices. *

A5.4.25.9. Cease fire distance estimation for low angle strafe. *

A5.4.25.10. Foul criteria and procedures.

A5.4.25.11. Bomb plotting and electronic strafe scoring equipment. *

A5.4.25.12. Radio, other communications, and tape recorder operation.

A5.4.25.13. Lost communications procedures.

A5.4.25.14. Overall range safety.

A5.4.25.15. Night, laser, and tactical range operations (if applicable).

A5.4.25.16. Training on WDZ and SDZ tool applications.

A5.4.25.17. Proper use and handling of applicable ground launched visual threats.

A5.4.25.18. Combat laser operations and safety procedures.

A5.4.25.19. Directed Energy Weapons procedures.

A5.4.25.20. Dive angle references.

A5.4.25.21. Generator operations.

A5.5. Range Training Officer Training. As a minimum, the Range Training Officer will be trained in or demonstrate adequate knowledge of the following publications or subjects: (T-1).

A5.5.1. AFMAN 11-202, Volume 3.

A5.5.2. AFMAN 11-214.

A5.5.3. Aircraft specific AFMAN 11-2MDS series.

A5.5.4. AFMAN 13-212, as supplemented.

A5.5.5. Intermediate command instructions and manuals applicable to range “operations”.

A5.5.6. Range Training Officer authority and responsibilities.

A5.5.7. Capabilities and limitations of Air CTS facilities and systems.

A5.6. Electronic Warfare Personnel Training. As a minimum, the electronic warfare personnel (government or contracted support) will be trained in or demonstrate adequate knowledge of the following publications or subjects: (T-1).

A5.6.1. AFMAN 11-202, Volume 3.

A5.6.2. AFMAN 11-214.

A5.6.3. Aircraft specific AFMAN 11-2MDS series.

A5.6.4. Aircraft specific RAP tasking messages or Volume 1 training requirements.

A5.6.5. AFMAN 13-212, as supplemented (applicable sections).

A5.6.6. Intermediate command instructions and manuals applicable to range “operations”.

A5.6.7. Local electronic warfare equipment operating restrictions.

A5.6.8. Capabilities and limitations of Air CTS facilities.

A5.6.9. Range safety.

A5.6.10. Electronic warfare equipment operating procedures for the applicable range equipment.

A5.6.11. Current scenarios/equipment uses, and aircrew-developed timelines as directed by the range operating authority.

Attachment 6

RCO TRAINING AND CERTIFICATION

A6.1. Training. The ROO is responsible for management of the RCO training program, ensuring standards are met and making a certification recommendation to the ROA.

A6.1.1. The RCO training program will include, but is not limited to, the applicable items listed in **Attachment 5**, **paragraph A5.4**.

A6.1.2. Academic Training. The ROO, or designated representative, will ensure RCO academic training will cover as a minimum, local policy, and procedures as well as the applicable items listed in **Attachment 5**.

A6.1.3. On-Range Training. Hands-on training on range-specific equipment and procedures will take place at the range. Training will cover range equipment, inspection/operation of scoring/target systems, and exercising operating procedures or checklists. The RCO trainee will observe a certified RCO demonstrate the proper methods and techniques for controlling aircraft during aiRto-ground operations and must observe at least four flights conducting daytime range operations.

A6.1.4. Night Training. If required, RCOs will be day-certified before upgrading to night operations. Night RCO training will consist of ground training and observation of at least two-night flights under the control of a night-certified RCO. To conduct NVD duties, an RCO must complete NVD training and be night certified.

A6.2. Certification.

A6.2.1. RCO certification requires completion of academic and on-range training as well as successful demonstration of RCO knowledge and skills through a written exam and an on-range demonstration. Training and ROA certification will be documented on an RCO Certificate (see **Attachment 7**). If an RCO is decertified, the ROO will determine any corrective academic or on-range training. If required, a representative designated by the ROA will observe the RCO in the performance of the duties which caused the loss of certification. Upon completion of training and observation the ROO will make a recommendation to the ROA to recertify the RCO. The final decision to recertify an RCO rests with the ROA.

A6.2.2. Written Examination. An open-book, written examination, consisting of 35 randomly selected, multiple-choice questions, will be administered by the ROO or a ROO designated representative. The examination will cover all academic training. A passing score is 85 percent, 100 percent correctable. RCOs must re-accomplish the entire RCO training program if they fail the written examination twice. If the RCO fails, the written examination a third time they will be dismissed from performing RCO duties.

A6.2.3. On-Range Demonstration. The on-range demonstration involves observing a qualified RCO display the proper methods and techniques for controlling aircraft during air-to-ground Class-A operations. After observing a qualified RCO control at least two flights not to exceed four flights on the range (two at night, as applicable), the upgrading RCO will control at least two flights on the range (two at night, if required) under the supervision of a qualified RCO. If four ship formations frequent the range, the upgrading RCO must also control at least one of these during the on-range demonstration.

A6.3. RCO Currency.

A6.3.1. To maintain currency, each RCO must:

A6.3.1.1. Perform RCO duty at least once every 120 days (once a year for fighter aircrew).

A6.3.1.2. Successfully complete a written exam annually IAW **paragraph A6.2.2**.

A6.3.1.3. Pass an annual physical examination IAW **paragraph A6.4**.

A6.3.2. Re-currency.

A6.3.2.1. If an RCO is non-current, for non-performance of duties, for less than 365 days the RCO must successfully complete an on-range demonstration IAW **paragraph A6.2.3**. If the RCO is non-current due to the expiration of a written examination, the RCO must successfully accomplish a written examination IAW **paragraph A6.2.2**. RCOs must re-accomplish the entire RCO training program after 365 days of non-currency. Document any re-currency actions in the RCO records.

A6.4. Annual Physical Examination.

A6.4.1. RCOs must meet the following minimum physical requirements. A comprehensive physical examination may be used to document these in the RCOs records.

A6.4.1.1. Vision correctable to 20/20 and the ability to distinguish primary colors.

A6.4.1.2. Normal depth perception.

A6.4.1.3. Full use of both hands, arms and legs.

A6.4.1.4. Normal hearing.

A6.4.1.5. Clear intelligible speaking voice

A6.4.1.6. Able to climb steps to a height of 120 feet.

A6.4.1.7. Able to maintain civilian and government driver's license.

A6.5. RCO Records.

A6.5.1. RCO records will be kept with the RCO. These records will reflect the training and qualifications of all RCOs and will be available for review as required. As a minimum, each RCO’s records will include:

A6.5.1.1. Section 1: Personnel Data (RCO Resume).

A6.5.1.2. Section 2: RCO Certification and Currency Documentation.

A6.5.1.3. Section 3: Academic, On-Range Demonstration Training.

A6.5.1.4. Section 4: Evaluations.

A6.5.1.5. Section 5: Supplemental Data.

A6.5.1.6. Section 6: Certification of Annual Physical Examination.

A6.6. Academic Training.

A6.6.1. Academic training programs for RCOs will include the following items, as applicable: (Note: On-range RCO checklists and training will also include potential traffic conflicts with

other ranges in the complex or nearby airspace and combat laser and safety procedures, as applicable.)

A6.6.1.1. Safety.

A6.6.1.2. Range security.

A6.6.1.3. RCO authority and responsibility.

A6.6.1.4. Range weather minimums.

A6.6.1.5. Communications procedures.

A6.6.1.6. Aircraft ordnance delivery patterns.

A6.6.1.7. Foul criteria.

A6.6.1.8. Range facilities.

A6.6.1.9. Pattern safety.

A6.6.1.10. Range records maintenance.

A6.6.1.11. Radio operations.

A6.6.1.12. In-flight emergency.

A6.6.1.13. Tape recorder operations.

A6.6.1.14. WISS/IRSSS operations.

A6.6.1.15. Minimum altitude measuring devices.

A6.6.1.16. Dive angle references.

A6.6.1.17. Fire control and suppression.

A6.6.1.18. Crash and rescue operations.

A6.6.1.19. Night Operations (if applicable).

A6.6.1.20. Traffic conflicts with unscheduled aircraft.

A6.6.1.21. Pattern spacing.

A6.6.1.22. Strafe impact area inspections, maintenance, berms, scoring devices.

A6.6.1.23. Helicopter operations.

A6.6.1.24. Combat laser operations and safety procedures.

A6.6.1.25. USAF Avian Hazard Advisory System (AHAS)

A6.6.1.26. USARAK 350-2 Annex B–FWA, Fire Weather Index Restrictions

A6.6.1.27. Moving Target (MAT) Operations

Attachment 7

RCO CERTIFICATION SHEET

Figure A7.1. RCO Certification Sheet.

A. _____ is qualified and recommended for training as an RCO.

_____ _____
Signature of ROA / ROO Date

Print Name of ROA / ROO _____

B. Has completed RCO academic training and the written examination on _____.

_____ _____
Signature of Certifying Official Date

Printed Name of Certifying Official _____

C. Has completed initial/re-qualification on-range demonstration.

_____ _____
Signature of Certifying Official Date

Printed Name of Certifying Official_____

D. Is authorized to perform the following duties: Day RCO_____ Night RCO_____

E. Approved

_____ _____
Signature of ROA / ROO Date

Table A7.1. Annual Recertification Sheet.

Year	Exam Score	Date	On-Range Demo	Date	Certifying Official