

Space, Missile, Command, And Control

WEAPONS RANGES

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

AFI 13-212 Volume 1, 28 Jul 1994, *Weapons Ranges*, is supplemented to establish responsibilities, policies, and procedures for the maintenance, operation, and use of Razorback Range. It is applicable to all personnel concerned.

SUMMARY OF REVISIONS

This revision updates the target listings, safety of flight information, and expands laser operations/night procedures.

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Chapter 1

RESPONSIBILITIES

1.1. General. All users of Razorback Range will devise specific operating instructions to ensure compliance with the directives in this instruction.

1.1.1. The Commander of Detachment 1 (DET 1) is responsible for all range flying and ground operations.

1.1.2. The Range Control Officer (RCO) is the delegated authority for all activities conducted by or for Razorback Range in the absence of the Detachment Commander (DETCO)

1.2. Scheduling. The DETCO/RCO is responsible for the scheduling of Razorback Range. Please call DSN 962-8171/8191, COMM (501) 648-5171/5191 at the range (voice mail is available). FAX number is DSN 962-8351, COMM (501) 648-5351. If no contact at the range, call 188th Operations at DSN 962-8271, COMM (501) 648-5271.

1.2.1. Standard Range periods will be 20 minutes in length, and days of operation will be established by 188 FW/DET 1.

1.2.2. The Fort Chaffee Maneuver Training Center (FCMTC) requires that airspace requests be coordinated by the 20th day of the month prior. Therefore, requests for range periods must be received NLT the 15th day of the proceeding month the activity is to be scheduled. This ensures that ample time is available to resolve conflicts. Units wishing to cancel scheduled range periods are requested to do so as soon as possible to release those periods to other users. Range periods are scheduled on a first come basis. Short notice requests will be accommodated to the maximum extent possible. Normal periods available are 0900L to 1600L and as individually coordinated. Due to limited manning, night requests should be made as soon as possible to allow for planning purposes.

1.2.3. Specific requests for ORI support will be given first priority by Razorback Range. ORE or other special requests such as HHQ or unit generated exercises will receive individual consideration and be accommodated to the maximum extent possible. Contact Razorback Range as early as possible if special handling is requested.

1.2.4. Razorback Range is located on the FCMTC. Army activities may force cancellation or restrictions to Razorback utilization. Users will be notified as soon as possible of any restrictions or cancellations.

1.3. Maintenance. The DETCO/RCO is responsible for the maintenance and operation of Razorback Range property, except for the operation and maintenance of real property facilities, IAW AFI 13-212 and this supplement.

1.3.1. The 188 FW Civil Engineering Squadron will provide equipment and personnel as requested by the DETCO for real property maintenance.

1.3.2. Vehicle Maintenance (LGTM) will provide maintenance for assigned vehicular equipment.

1.3.3. Communications Flight will provide maintenance support on all radio, radar, and scoring equipment as requested by the DETCO if servicing requirements exceed range capabilities.

1.4. Decontamination and EOD Operations. Range decontamination and EOD operations will be IAW AFI 13-212 and ANG directives. Range decontamination will be accomplished annually or whenever 20,000 bombs have been dropped, whichever occurs first, pending availability of EOD personnel.

1.5. Weather. Razorback Range uses Fort Smith, AR (FSM) weather as the official observation for the range. On site observations and PIREP's will supplement FSM weather reports. Surface wind conditions and barometric pressure are available on site, along with low altitude cloud conditions using Laser Cloud Height Measuring System.

1.6. Reports. The DETCO/NCOIC is responsible for completion of the following:

1.6.1. Air National Guard Monthly Range Report.

1.6.2. FCMTTC Daily Utilization Log

1.6.3. Ft Chaffee Range Log 87.

1.6.4. 188FW Form 4, Razorback Range Weapons Record (score sheet).

1.7. Fire Fighting. General fire fighting procedures will be IAW the FCMTTC Inter Service Support Agreement.

Chapter 2

RAZORBACK BOMB/GUNNERY RANGE (R-2402)

2.1 Description. Razorback Range is a conventional non-nuclear scoreable class A air-to-ground gunnery range, operated by 188 FW/DET 1. The range is located 15NM southeast of Fort Smith, AR Regional Airport (FSM126/012), and within the confines of R-2402 (reference FLIP for exact boundaries). Range elevation is 450' MSL.

2.2. Manned Conventional Range.

2.2.1. The main tower (elevation 500' MSL) is located on the southwest corner of the range at 3515.268N 9406.004W. The flank tower is located 4,279' north of the main tower, at 3515.968N 9405.878W. All targets are located east of the north/south line between the towers.

2.2.2. Bomb Circle (Target A): Located 3,317' northeast of the main tower. The circles are 75', 150' and 300' radius with a highly visible center point target. Scoring is by computer and M-2 aiming circles. For night bombing the 3, 6, 9, and 12 o'clock positions are illuminated by lights 300' from the center. The 6 o'clock position is also illuminated 600', and 900' from the center to indicate lead-in. This target is restricted to MK-106 and BDU-33 practice bombs. The conventional pattern for this target is 084° final heading with a right hand pattern or 264° final heading with a left-hand pattern.

2.2.3. There are two strafe targets. Target #1 (right) is a highly visible cloth target which is acoustically scored. The foul line is 2000' from the target and extends due north from the main tower. The 084° lead in line is constructed of white tires, as is the foul line. This target is restricted to 20mm only unless specifically cleared by the RCO for 30mm. Target #2, (left) located north of target #1, is an acoustically scored hard target. The 3,000' cease-fire line is 1,000' west and parallel to the 2,000' foul line. This target is restricted to 30mm only. Cease-fire no closer than 3,000' from the target. Do not fly over the target, past the target 3-9 line, or closer than 500' horizontally to the target during approach and recovery. If two target strafe is required, target #1 will normally be shot first.

2.2.4. Rocket Circle: The rocket circle is located approximately 600' east of the center of the bomb circle and 300' north and east of Bravo 1. It is a 75' radius circle with a white-center aim point. It is used for inert 2.75 conventional rocket events as well as high angle strafe (HAS) for both 20MM and 30MM. Aircraft must use a 084° final attack heading for these forward firing events.

2.3. Tactical Range.

2.3.1. Airfield (targets B-1, B-2, K). These targets are southeast of the bomb circle and consists of a 150' X 3,000' dirt runway (heading approximately 320/140) with two revetments on the

northwest end of the runway. The two scoreable targets are B1 (NE) and B2 (SW) aircraft located in revetments. In addition, another aircraft (K) is located on the south end of the runway and available for scoreable attacks. These targets are restricted to a first run tactical delivery, with no additional attacks unless cleared by the RCO. Only BDU-33 or MK-106 bombs are allowed.

2.3.2. Target C is a mobile missile TEL (SA-6 type) located approximately 500' southeast of the SAM Site (Star of David) center-point and just north of Potato Hill Road. BDU-33, MK-106, and inert heavyweight ordnance up to and including 2,000 lbs are authorized on this target.

2.3.3. Armored Array (targets D, E, F, G) consist of tanks and APC type single vehicle targets located east of the runway and south of the SAM Site. BDU-33, MK-106 and inert heavyweights up to and including 2,000 lbs are authorized on all these targets.

2.3.4. Target I is an armored convoy (tanks and trucks) 300' east of the runway approximately one-third of the way down from the north end. There are four vehicles in this convoy numbered one through four starting from the northernmost. All are scoreable and aircrews must advise the RCO which vehicle I-1 (north vehicle), I-2, I-3, or I-4 (south vehicle) they wish scored. BDU-33, MK-106 and heavyweight ordnance up to and including 2,000 lbs are authorized on this target.

2.3.5. Target J is a POL staging complex approximately 1,400' south of target I-4 and is also on the eastern side of the runway. J-1 is a single large fuel truck on the access road 200' north of the POL compound. J-2 is the POL compound proper and consists of a rectangular earth revetment with two parallel fuel tanks and a pump house on the western side of the revetment. The DMPI is the pump house. Only BDU-33 and MK-106 practice bombs are allowed on J-1 and J-2. Aircraft performing events on this target must pay particular attention to avoid direct over-flight of the main tower either on final or during the pull-off.

2.3.6. Target L consists of an attack helicopter approximately 1,800' east of the south end of the runway. Due to its thin skin construction, BDU-33 and MK-106 type ordnance are the only authorized munitions.

2.3.7. Target M is a SA-10 simulator and consists of a large truck body and a vertically developed section to simulate erected missile TELs. It is located at the approximate mid-point of a north/south line drawn between targets Echo and Lima. Due to its construction, no heavyweights are allowed.

2.3.8. Target N is a motorized howitzer formation located approximately one runway length southeast of the south end of the runway. Only BDU-33/MK-106 ordnance is authorized. When attacking this target from the southwest using low angle tactics, the terrain may conceal its location. All three howitzers are scoreable.

2.3.9. Target P is a south oriented SA-3 replica missile site (Puppy Paw) approximately 700'

southeast of the south end of the runway. Only BDU 33 and MK 106 practice bombs are allowed on this target. The DMPI is the radar van just north of the missile TELS.

2.3.10. Target Q is a 6 vehicle east/west convoy located approximately 300' west of the south end of the runway. The DMPI is the center vehicle located on a small bridge. All vehicles are scoreable. BDU-33/MK-106 only.

2.3.11. Sam Site: Consists of a replica SA-2 missile site (Star of David) approximately 2,000' east north east of the bomb circle. BDU-33, MK-106 type ordnance and heavyweights (inert) up to 2,000 lbs are permitted. The radar van in the center of the target is the DMPI.

2.3.12. An assortment of vehicles are available to serve as mobile or stationary IR (HOT) maverick targets. If heated vehicles are required, flight leads must notify Razorback at least 1 hour prior to range time. Three specialized plastic targets are also available. Two are T-72 replicas and one is an APC. The maverick targets are arranged in convoy to the southwest of the airfield complex so as not to confuse them with bombing targets. Their construction of plastic and wood precludes using them for anything other than maverick practice. One T-72 replica is located in the center of a pond just southwest of the maverick convoy to facilitate IR acquisition.

2.4. General Range Restrictions.

2.4.1. Level deliveries on all targets are restricted to west-to-east headings due to bombs skipping after impact. The only exception is F-16 VLD-LD (5°) events.

2.4.2. ALL HEAVYWEIGHT DELIVERIES (CLIMBING, DIVING OR LEVEL) ON APPROVED TARGETS ARE RESTRICTED TO WEST-TO-EAST FINAL ATTACK HEADINGS DUE TO BROACHING AND CATASTROPHIC DAMAGE POTENTIAL TO MANNED SITES.

2.4.3. 084° is the reference heading for west-to-east deliveries but aircraft will satisfy the intent of this restriction by flying between the flank and main towers directly to their target so long as their final vector is not toward the town of Charleston. Non-heavyweight finals may also be south of the main tower for targets in the southern area of the target array. IAW AFI 13-212 do not over-fly manned sites during any portion of attack on Razorback Range. Comply with this paragraph for dive toss, loft, and system level deliveries as well.

2.4.4. If aircraft specific weapon footprint data is available which allows modification of these restrictions, the RCO will consider them on a case-by-case basis.

2.4.5. Flight lead control may be requested for tactics, maverick and CAS missions. These missions must be thoroughly briefed with the RCO as to type tactics, events, ordnance, and targets used and if immediate scoring is requested. If the request for flight lead control is approved, all radio transmissions, other than inter flight administrative calls, will be made on UHF.

2.4.6. RATTLESNAKE LZ/DZ LIES FOUR NM SOUTH OF RAZORBACK RANGE (JUST SOUTH OF PINNACLE MOUNTAIN) AND HAS A DIRT LANDING STRIP ORIENTED EAST-WEST—DO NOT CONFUSE WITH RAZORBACK TARGET ARRAY!!! IT HAS HAPPENED!

2.4.7. Flights are normally required to stay within the boundaries of R-2402 once cleared in by the RCO. Due to close proximity of some low altitude airways, spill-outs north of Highway 22 must be avoided. If maneuver room or multiple IP to target tactics runs are required, THE USER must ensure the appropriate HOG MOA airspace is blocked to coincide with the range period. This will provide protected airspace for southerly off range maneuvering. HOG MOA airspace is not activated in conjunction with range time and must be scheduled with the 188 FW/OG (DSN 962-8271/8272).

2.4.8. Range conventional patterns will normally be to the south, i.e. right hand pattern for 084° final and left hand pattern for 264° final. Patterns to the north will be approved on an individual basis provided the aircraft turn capability is sufficient to keep the flight inside range airspace.

2.4.9. Pinnacle Mountain rises 1,210' MSL on the southeast corner of R-2402. Caution in this area is advised. A communications tower is located on Pinnacle Mountain, which rises 75' AGL. NO guy wires are attached to this tower.

2.4.10. The towns of Bloomer, (northwest) and Charleston (northeast) of the range boundaries are to be avoided. No over-flights are permitted.

2.5. Range Routes and Holding Points.

2.5.1. All units using Razorback Range will establish corridors to and from the range.

2.5.2. Holding: All flights are encouraged to contact Razorback Range (399.8) when entering the holding pattern. Hold on the 024° radial off Rich Mountain TACAN (CH 82) between 20 DME and 30 DME, right hand patterns. Minimum altitude is 3,500' MSL. Caution: antenna 7 miles south of holding pattern (ELEVATION 2869' MSL) at 3457.78N 9422.40W.

2.6. Airspace Availability and Restrictions.

2.6.1. Razorback Range lies within restricted area R-2402, from the surface to 30,000'. The airspace will normally be reserved up to 15,000'. If aircrews need higher airspace for HARB type deliveries, they must request it at least one hour prior to range time. R-2401A is also available for longer finals or maneuvering airspace but is not scheduled unless requested.

2.6.2. Razorback Range is located within the Fort Chaffee Maneuver Training Center, and as

such, Army requirements may take priority over those of the range. Army needs may force the cancellation of range schedules and or restrictions to tactics and patterns on Razorback Range.

2.6.3. A low altitude airway runs directly over the range and every effort is made to return the airspace to the FAA as soon as possible after completion of range activity. A minimum of one-hour advance notice is required for non-scheduled flights to activate the airspace.

2.6.4. The northwest and northern boundary of R-2402 fall within the Fort Smith Regional Airport, runway 25 ILS approach buffer zone. This area is not usable during IFR operations. In VFR weather, this area can be used.

2.7. Real Estate Boundaries and Associated Restrictions. Razorback Range and all patterns and safety fans fall within Restricted Area R-2402. Weapons must not be armed until within the boundaries of the restricted area. R-2401A is available if aircrews require it for maneuvering room. It is not scheduled in conjunction with R2402 and must be requested specifically as mission requirements dictate.

Chapter 3

WEAPONS DELIVERY PROCEDURES

3.1. General. Weapon delivery procedures will be in accordance with the appropriate weapons system manual.

3.1.1. All aircraft on the range will squawk mode 3 code 4000 (special use airspace squawk) unless directed by FAA to do otherwise.

3.1.2. R2402 lies within Razorback Approach airspace and when not activated, is open to all air traffic. R2402 is also used by the Army for artillery firing. Aircraft wanting access for orientation flights may contact Fort Smith approach on 380.15 to determine status of airspace. Razorback Approach/Fort Smith Tower phone is (501) 649-2416/2415.

3.2. Range Entry and Departure. Entry—proceed outbound on the (PGO Ch 82) 024 radial to 38 DME and turn right to 084° for normal range entry and spacer pass. A minimum altitude of 3,500' MSL will be maintained until passing above the city of Greenwood (FSM Ch 41 169/011). Do not exceed the PGO 024/041 fix. Range entry will be 084° and altitude as briefed, but entry lower than 1,500' MSL must be approved by the RCO. CAUTION; antenna located one mile northwest of Greenwood ELEV 1,049' MSL. Restricted Area R-2401 southern boundary is located one mile north of Greenwood. Flight leads are advised to avoid causing any flight member to over-fly Charleston during their spacer pass (watch delayed breaks or excessive echelon spacing). Charleston is located 4 miles northeast of the range.

3.2.1. Tactical entries can be made from the HOG MOA which borders the range to the south. Entries through Big Creek Narrows (4 miles southwest of range) will normally require an offset left, right roll-in with a west-to east attack heading. Entries from the southeast over Pinnacle Mountain will normally require an offset right with a left roll-in to and east-to-west final attack heading. Aircraft are warned not to be east of Darby Lake, or north of Charleston Lake. CAUTION: 340' AGL/1160' MSL ANTENNA 3511.04N 9407.72W, SOUTH-EAST OF BIG CREEK NARROWS BEARING 190 FOR 5NM FROM THE BOMB CIRCLE AND 75' AGL/1285' MSL ANTENNA ON TOP OF PINNACLE. IN ADDITION, A 316' AGL/1154' MSL TOWER IS LOCATED ONE HALF MILE EAST OF THE SOUTHEAST CORNER OF THE RESTRICTED AREA AT 3513.6N 9401.2W. RESTRICT RUN-IN ALTITUDE TO 2,000' MSL OR HIGHER IF TOWERS NOT IN SIGHT. TOWER 120' AGL AT 3516.38N 9412.34W (APPROXIMATELY 5.5NM WEST OF BOMB CIRCLE).

3.2.2. Departing flights will exit the range when their range time expires, unless additional time is available and they are cleared to remain on the Range by the RCO. For ATC purposes, the preferred range departure is to the South.

3.2.2.1. All flights will depart the range IAW the current Joint Use Letter of Procedure for R-

2402.

3.2.2.1.1. South Exit - Proceed South VFR and contact Razorback Approach on 380.15 below 15K for IFR pickup if needed.

3.2.2.1.2. East Exit - Stay South of the FSM (CH41) 126/024, proceed East or turn North.

3.2.2.1.3. West Exit - Stay South of the FSM (CH 41) 195/015, proceed West or turn North.

3.2.2.1.4. Or as instructed by ATC.

NOTE: All flights should be aware of the HOG MOA and possible MOA traffic conflicts when departing south (see attachment 1). Announce intentions on HOA MOA frequency 305.4. IFR pickups are available from Razorback Approach on 380.15 (15,000' MSL and below) or Memphis Center (above 15,000') on 380.3 for South and West exits or 348.7 for East exit. The above exit procedures will be complied with by exiting Razorback Range south to IP Lake (FSM 137018, 3508N 9403W) then on course for east, west, and south departures. North departures should contact ATC if possible before turning northbound to preclude conflicts with Fort Smith Regional Airport departures and arrivals (see attachment 2).

3.2.2.2. All flights are required to conduct an armament safety check and confirm switches safe with the RCO prior to departing the restricted area.

3.2.2.3. Once a flight departs Restricted Area R-2402, re-entry must be approved by the RCO.

3.2.2.4. All flight members will avoid over flying the town of Charleston during re-join and departure.

3.2.2.5. If IFR pickup is desired immediately upon completion of range work for low ceilings etc. the RCO can coordinate a hand off to Razorback Approach while the flight orbits/rejoins in R-2402. The flight lead should make this request as soon as possible to facilitate coordination.

3.3. Range Clearance. All flights will contact Razorback Range for clearance to enter on UHF 399.8 or back-up 305.4. Aircraft with a VHF-AM or VHF-FM capability will either change to Razorback primary frequency (140.4) or provide the RCO with the frequency the flight is using. The purpose of this requirement is to increase the situational awareness of the RCO and reduce the chances for an incident/accident. The RCO will not transmit on VHF unless it is safety of flight or at request of aircrew. Prior to receiving clearance onto the range, the flight lead will give the flight line-up to include:

3.3.1. Call sign.

3.3.2. Pilot numbers.

3.3.3. Aircraft tail numbers

3.3.4. Type of ordnance to be expended.

3.3.5. Sequence of events and targets.

3.3.6. Whether record or practice.

3.4. Authorized Ordnance. Inert practice bombs up to a maximum of 2000 lbs, MK-106, BDU-33, 20/30mm TP, *flares, chaff (case-by-case), and inert 2.75 rockets.

***NOTE:** Flares are approved in R-2402 but the aircrews must ensure flare burnout before ground impact. In the event of high fire danger, the RCO may be more restrictive, to include the denial of flare usage.

3.5. Ordnance Procedures. All **heavyweight** bombs are restricted to west-to-east (084° reference) attack headings. **All ordnance** released in **level** profiles (other than F-16 VLD-LD 5°), **dive toss**, and **loft** must be west-to-east also.

KEEP STICK LENGTHS 300 FEET OR SHORTER WHEN DROPPING IN RIPPLE MODE DUE TO CLOSE PROXIMITY OF PERSONNEL TO TARGET AREA!!

3.6. External Stores Jettison Procedures. Aircrews will jettison external stores so that impact occurs between the assault runway in the target area and the western base of Potato Hill (See Atch 6).

3.6.1. Minimum altitude is 400' AGL on a heading of 084°.

3.6.2. Avoid over-flight of the range towers.

3.6.3. These procedures in no way deny the pilot the option of jettisoning as necessary to cope with a serious in-flight emergency.

3.7. Weather. Range minimums will be IAW AFI 11-214, Paragraph 6.3.1. A ceiling of at least 500' above the highest portion of the bombing pattern or according to 11-MDS series aircraft specific regulations, whichever is higher. Visibility of at least 3NM (5NM for night).

3.7.1. Flight leaders will be given the option of making a weather reconnaissance pass to determine working conditions as long as the RCO can ensure the range is at or above minimums (basic VFR of 1500' and 3NM visibility).

3.7.2. If above a cloud deck, Razorback Approach (380.15 UHF) may be utilized for a “let down” to VMC conditions underneath.

3.8. General Range Information and Restrictions. All events will be in accordance with appropriate weapon systems manuals.

3.8.1. No more than 4 aircraft will be in the pattern at one time. This does not preclude a FAC orbiting above or outside the delivery patterns. Larger strike packages may use the range as long as there is no intent to remain on the range and perform multiple attacks.

3.8.2. East-to-west (264°) run in headings for the conventional circle will be a left-hand pattern. West to east (084°) run in headings for the conventional circle, strafe, and the rocket circle will be a right hand pattern.

3.8.3. No simultaneous opposite direction tactical patterns will be attempted unless there is altitude, time, or lateral de-confliction between aircraft over the target area. Caution is advised as this may cause traffic conflicts south of the range.

3.8.4. Aircraft may use random attack headings provided they are performing diving events (and VLD-LD (5°) for the F-16) on the tactical targets, are **NOT CARRYING HEAVYWEIGHT ORDNANCE**, and that the aircraft have the performance capability to remain within the restricted area/MOA airspace. Bomb scores will be plotted with 084° heading unless the final attack headings of the aircraft are known with enough time to adjust the computer settings. Do not over fly range towers during any portion of the attack.

3.8.5. Smokey Sams and the Sentry Dawg Threat systems are available but must be scheduled in advance. At least one hour advance notice is required for the Sentry Dawg and one day for Smokey Sams.

3.9. Minimums and Fouls.

3.9.1. In accordance with appropriate regulations. Bombing minimums will normally be:

3.9.1.1. 100' for low angle bombs (or 1/4the altitude lost during recovery) whichever is higher

3.9.1.2. 1,000' for low drag bombs. (800' for A-10)

3.9.1.3. 1,500' for dive bomb. (1,000' for A-10)

3.9.1.4. 1,500' for HAS. (1,000' for A-10)

3.9.2. Strafe minimums will be:

3.9.2.1. Cease-fire by 2,000' from the target, (3,000' for target #2).

3.9.2.2. Altitude 75' AGL

3.9.2.3. Single bursts. (Except A-10's)

3.9.3. Lazy recovery from a strafe pass, firing or dropping without a clearance, or any pass that the RCO considers a violation of safety, will constitute a dangerous pass and require the offender to cease expending ordnance. Any pilot receiving 2 fouls will be restricted from performing further deliveries and be required to hold high and dry in the gunnery pattern.

3.9.4. Refer to AFI 11-214, Chapter 6 and 11-MDS series aircraft directives for additional information.

3.10. Emergency Procedures. Radio failure: in the event of communications difficulty on 399.8, the flight will standby for frequency change. Backup is 305.4. The flight leader will suspend ordnance delivery until radio contact is reestablished. If someone in the flight loses their UHF, the VHF frequency may be used in order to complete the mission.

3.10.1. If complete communication failure occurs on the range, the flight will hold high and dry. If contact is not re-established, the flight will depart the range.

3.10.2. Aircraft with radio failure and no other difficulty will proceed in accordance with procedures directed in appropriate aircraft series directives. In absence of action directed by 11 series publications, proceed as follows:

3.10.2.1. Aircraft with radio failure and no other difficulties will fly past the main range tower, rocking wings, break in the direction of traffic, climb and orbit at least 1,000' above the highest pattern yet to be flown.

3.10.2.2. If pilot wants an escort, he will fly by the tower, break in the opposite direction of traffic if time and conditions permit.

3.10.2.3. The RCO will notify the flight lead, maintain surveillance of signaling aircraft and restrict the range as necessary.

3.10.3. Aircraft with difficulties in addition to radio failure will, if the situation permits, fly past the range tower, rocking wings, and break in the opposite direction of traffic. The RCO will notify the flight leader, who will initiate pre-briefed procedures.

3.10.4. All ordnance deliveries will be suspended in case of ejection/aircraft crash.

3.10.4.1. The flight leader will notify Razorback Approach on Guard.

3.10.4.2. The flight leader will assist the RCO in determining the location of the downed aircraft/aircrew, and will "CAP" the scene until released or fuel state requires departure.

3.10.4.3. The remaining members of the flight will clear the range and assist as directed.

3.10.5. For emergency landing contact Razorback Approach on 380.15 or Guard, stating type of aircraft, and nature of emergency. Proceed as directed or required. The direct heading and distance to Fort Smith Regional Airport is 285° for 15NM. (see attachment 5 for field diagram and radio frequencies).

3.11. Unusual Situations.

3.11.1. Run Away gun.

3.11.1.1. Recover from delivery, keeping the aircraft pointed down range until the gun ceases to fire.

3.11.1.2. Safe all armament switches.

3.11.1.3. Depart the range.

3.11.2. Hung Ordnance.

3.11.2.1. Prior to departing the range, the aircrew will position all armament switches to OFF, SAFE or SIM. If the hung ordnance creates an asymmetrical load, the pilot may selectively jettison remaining ordnance to balance the load as coordinated between the flight leader and RCO.

3.11.2.2. At completion of the range mission, the aircraft will utilize hung ordnance procedures specified in local publications. Added caution will be exercised to avoid over-flying populated areas.

3.11.3. Off range release.

3.11.3.1. Safe up armament switches.

3.11.3.2. Determine location of impact.

3.11.3.3. Ensure the 188 FW Command Post (268.1) is advised of time and location as soon as possible.

3.11.3.4. Aircraft landing at Fort Smith Regional Airport will be impounded IAW applicable

maintenance/safety regulations unless off range release was due to pilot error.

3.11.4. Inadvertent release.

3.11.4.1. The same as off range release, except that remaining ordnance may be released on the range prior to the RTB to prevent the possibility of another inadvertent release en-route to home base.

3.11.4.2. The aircraft, after landing will be impounded IAW local directives.

3.12. Laser Operating Procedures.

3.12.1. Razorback Range is approved for most current air and ground laser designators. Users are requested to provide laser system type upon initial mission coordination.

3.12.2. Schedules for laser missions must be made as far in advance as possible to facilitate range safety procedures and proper notification of Range Control. Army activity may at times preclude use of lasers because of footprint requirements. Units are requested to notify Razorback as soon as possible of cancellations to prevent unnecessary activation of laser range safety steps.

3.12.3. If Laser Target Scoring System (LTSS) is requested, coordination is required to set the system up in the desired location. This system operates on 250.9 UHF and RCO will communicate with the flight on pre-briefed VHF. Heat augmentation of targets is available when resources permit.

3.12.4. Lasers will not be operated if standing water, ice, or snow is within the immediate target area. Required radio calls: 1. Target acquired (target is in the pod). 2. Cleared to lase (laser may be turned on and you are cleared to drop). 3. Laser off. The RCO will record the start and stop times of lasing periods on the Range Laser Usage log.

3.12.5. Do not lase non-target vehicles or buildings. The laser will only be pointed at the designated target when laser is operating. All targets on Razorback may be lased, but only those targets approved for heavyweight ordnance may be engaged by LGBs. Minimum altitude for airborne lasing is 500' AGL due to laser footprint requirements. The lasing aircraft may fly random attack headings as required for proper designation as long as laser is not fired until positive ID and tracking of target is accomplished. **AIRCRAFT RELEASING LGBS ON HOT PASSES MUST ADHERE TO HEAVYWEIGHT RESTRICTIONS AND RELEASE BOMBS ONLY ON WEST-TO-EAST FINALS.**

NOTE: All laser missions must be thoroughly briefed with the RCO prior to range time due to the complicated nature of this activity.

3.13. Manned Scoreable Range Procedures.

3.13.1. Day/Conventional and Applied Tactics.

3.13.1.1. The primary conventional pattern at Razorback is a right hand pattern, with the final attack heading of 084°. The secondary pattern is a left-hand pattern with the final attack heading of 264°.

3.13.1.2. Aircraft with adequate turn capabilities may use random attack headings as long as the requirements of this manual are complied with and they are using the applied tactics targets only. Remember the events must be 5° of dive or greater, no heavyweights, and no over-flight of manned sites. (F-16s can also do VLD-LD 5°)

3.13.1.3. Aircraft using a simulated nuclear delivery, or similar profile, are advised to stay within the boundaries of restricted area R-2402 (east of highway 96) unless R-2401A is also blocked. From highway 96 to the target area is approximately 5.5 NM.

3.13.1.4. All strafe patterns at Razorback have final attack headings of 084°. Strafe will not be attempted where standing water on frozen ground exists. A-10's may strafe under these conditions provided that they do not over-fly the target area.

3.13.2. Night/Conventional.

3.13.2.1. Night operations will be IAW AFI 11-214, Para. 2.8 and 6.5. All night missions must be briefed in advance with the RCO. Aircraft lighting must be sufficient for the RCO to see each aircraft in any part of the pattern.

3.13.2.2. Manned towers are marked with aided and unaided capabilities. The main tower is marked with an "M" and the flank tower with an "F" unaided and an "X" aided. All night missions will make at least one dry pass before expending ordnance and verbally confirm location of manned towers.

3.13.2.3. Standard conventional pattern for night operations on Razorback will be 084° final with right hand turns. The primary target is the conventional circle with artificial lighting at 12, 3, 9, and extended 6 o'clock display. The center target is also illuminated. Aircraft equipped with "see in the dark" systems may use other range targets if the flight leader determines that proper visual cues are present. Lighting requirements for missions when aircraft possess night vision equipment will be pre-briefed with the RCO.

3.13.2.4. The range is equipped with NVGs, Infrared Zoom Laser Illuminator/Designators (IZLID II), Ground Commander's Pointer, radio controlled lights (both visual and covert), warrior glo tape, and various IR strobes and spotlights to enhance aircrew training. Flight leaders must coordinate in advance for use of these training aids in their scenarios.

3.13.2.5. Flight size will be IAW AFI 11-214, Para. 6.5.1.6. Two ship flights are highly encouraged due to mission demands.

3.13.2.6. Minimum altitude for night operations is 1,000' AGL on final/1,500' AGL for downwind or the MSA, whichever is higher. The highest obstruction is Pinnacle Mountain (1210' MSL) and is located 3NM southeast of the main tower.

3.13.2.7. For night operations visibility requirements increase to 5NM in-flight.

3.13.2.8. Night tactics/random attack headings and CAS missions will only be conducted by aircraft equipped with "Night Systems" having proper target area visual cues and positive ID of ground personnel.

3.14. Tactical/Unmanned Range Procedures.

3.14.1. Razorback Range is a Class A range during normal duty hours of the 188 FW and other times as scheduled. During other periods, the airspace may be used by the Army for artillery firing or may be open for public use.

3.14.2. The range may be used as a Class C (not manned) range during daylight hours provided that the following conditions are met.

3.14.2.1. No ordnance of any type (to include chaff and flares) may be dropped.

3.14.2.2. Airspace must be scheduled in advance with Razorback Range and flights will only operate within the scheduled period.

3.14.2.3. Razorback Approach (380.15) must authorize the activity and will be contacted prior to entering the area and when exiting.

3.14.2.4. There is no separation of traffic, and aircraft must remain VFR.

3.15. Airlift Threat Training.

3.15.1. Razorback Range has limited ability to support airlift asset threat training. Units desiring Smoky Sam Systems (SSS) visual awareness/threat reaction training are requested to contact our Razorback Range as soon as requirements are known. Razorback possesses two SSS launchers that are mobile and can be set up at selected locations on the range as scenarios require. The only electronic threat simulator available at this time is the Sentry Dawg, which is of limited use.

3.15.2. When requested, R-2402 and R-2401A will be blocked up to 5,000 MSL for this activity. Higher is available if needed. Aircraft must contact RAZORBACK RANGE (call sign)

on UHF 399.8 for clearance into the restricted area.

NOTE: If mission is in conjunction with use of Ft Chaffee LZ/DZs such as Arrowhead or Rattlesnake: flights must coordinate with Range Control, DSN 962-2272; be on their UHF 242.6 or as briefed during this activity; then push to Razorback Range Frequency for the threat training portion of the flight.

3.15.3. Self defense flares and training chaff (R-188, R-112 type) may be used in R-2402 during threat reaction exercises. Aircrews will ensure that flares are dispensed high enough to achieve burnout before ground impact. Recommended minimum altitude is 500' AGL or aircraft specific regulations whichever is higher. During periods of high fire danger, the RCO may be more restrictive to include denial of flare usage. Training chaff can potentially interfere with approach radar at Fort Smith Regional Airport and will be terminated if they request.

Chapter 4

RANGE CONTROL OFFICER PROCEDURES

4.1. General.

4.1.1. Responsibilities.

4.1.1.1. The Detachment Commander/RCO will be responsible for:

4.1.1.1.1. Establishing range procedures and up-dating this regulation as required.

4.1.1.1.2. Devising weekly range schedules and resolving conflicts in requested times.

4.1.1.1.3. Coordinating range time changes with all appropriate support agencies after the weekly schedule is published.

4.1.1.1.4. Notifying FCMTC and all concerned agencies when Razorback Range is scheduled.

4.1.1.1.5. Maintaining range utilization records from data submitted by using units.

4.1.1.1.6. Compiling and submitting the Monthly Utilization Report to ANG/C4R.

4.1.1.1.7. Conducting the Range Control Officer program and ensuring that officers maintain currency.

4.1.1.1.8. Coordinating with EOD personnel for range clearing and inspection as required.

4.1.1.2. The Range NCOIC will be responsible for:

4.1.1.2.1. Supervising range crew to include training and control of personnel plotting bomb scores and scoring strafe targets.

4.1.1.2.2. Ground safety.

4.1.1.2.3. Maintaining all targets in accordance with standards established in AFI 13-212 and local target material availability.

4.1.1.2.4. Arriving 30 minutes prior to the first scheduled range period and assisting the RCO during the pre-mission check of facilities.

4.1.1.2.5. Ensuring that range score plotting personnel are in position in each tower at least 10

minutes prior to scheduled range times.

4.1.1.2.6. Advising RCO of known factors that could affect mission accomplishment or range safety.

4.1.1.2.7. Ensuring that any unusual events or circumstances and major work or range repairs are annotated.

4.1.1.2.8. Conducting a security inspection of the tower, buildings, and storage facilities prior to closing the range.

4.1.2. Scheduling.

4.1.2.1. The DETCO will ensure only qualified and current RCO's are scheduled to perform range duties.

4.1.2.2. The DETCO is responsible for soliciting temporary RCO assistance from qualified RCO's as necessary. The 188 FW Operations Group Commander will be notified if a temporary RCO cannot be located or if the scheduled RCO is unable to perform RCO duties for any reason.

4.1.3. Checkout procedures/checklist.

4.1.3.1. The RCO checkout program is conducted under the direct supervision of the 188 FW, DET 1/CC.

4.1.3.2. This program applies to all aircrew performing RCO duties at Razorback Range.

4.1.3.3. The DETCO or a current RCO will conduct the range checkout program.

4.1.4. Certification.

4.1.4.1. Aircrew selected for RCO duties must meet the requirements of AFI 13-212 and MAJCOM supplements.

4.1.4.2. Aircrew must complete the following initial training prior to being scheduled for RCO duties:

4.1.4.2.1. Attend the range ground school on range procedures/directives developed and presented by the DETCO or a current RCO.

4.1.4.2.2. Accomplish a test on information presented at the conclusion of the ground school with a minimum passing grade of 85% (corrected to 100%). The test will be administered and

controlled by the DETCO/RCO.

4.1.4.2.3. Receive a checkout of the range facilities and operating procedures under the supervision of the DETCO/RCO. The tour of duty for this checkout will be sufficient to fully familiarize the individual with all facets of Razorback Range operation. The prospective RCO will observe and control all of the missions he or she will be expected to work.

4.1.4.2.4. All Certified RCO's will successfully complete a test on range procedures/directives annually. The DETCO/RCO will administer the testing and maintain all scores by individuals for one year. RCO's must also control a weapons delivery mission annually to retain currency.

4.1.4.2.5. Notification. The DETCO will notify all RCO's when their annual re-currency is due.

4.2. Duties.

4.2.1. General. Each Range Officer is in complete command of the gunnery range.

4.2.2. Range Operations. The Range Officer has the duty to operate the range in accordance with procedures outlined in AFI 13-212 and AFI 13-212V1/188FW Sup 1.

4.2.2.1. Inspect the Range Facilities.

4.2.2.2. Check scoring of all types of weapon deliveries accomplished on the scoreable targets.

4.2.2.3. Supervise all personnel assigned to the range. All discrepancies in the performance of range personnel will be noted.

4.2.3. Opening the Range. Personnel should arrive at the range 30 minutes prior to the first TOT.

4.2.3.1. Safety inspect the range with particular emphasis on soil condition, frozen ground, or standing water in the strafe area.

4.2.3.2. Brief range personnel. Make sure range personnel understand that no one will be permitted on range without the RCO's knowledge and permission. All visitors will be escorted at all times while on the range.

4.2.3.3. Ensure all radios are in operation.

4.2.3.4. Ensure the acoustical scorer is in operation.

4.2.3.5. Ensure the access road traffic lights and west gate are operational/closed.

4.3. Aircraft Control.

- 4.3.1. The RCO will handle all radio communications with aircraft operating on the range.
- 4.3.2. The decision of the RCO on all matters pertaining to range operations is final and will not be disputed over the radio.

4.4. Restricted/Curtailed Operations. In the event of restricted operations, the RCO will notify the flight of the restrictions and receive acknowledgement from each flight member before beginning the mission. If operations are curtailed, the RCO will either have the flight RTB or hold high.

4.5. Target Utilization.

- 4.5.1. The flight leaders will generally be allowed to pick their own targets.
- 4.5.2. Since all targets at Razorback are scoreable, it is mandatory the RCO be advised of the intended target in order to set up the scoring system.

4.6. Emergency Procedures.

- 4.6.1. Provide assistance to the crew as necessary.
- 4.6.2. Notify 188 FW Command Post.
- 4.6.3. Notify appropriate aircrew's operations.
- 4.6.4. Follow appropriate Razorback Range checklists.

4.7. Scoring.

4.7.1. All ordnance deliveries will be considered record unless declared otherwise by the flight member prior to turning final. The following procedures will be used to complete the Range Score Sheet (188 FW Form 4). The original will be faxed to the unit if required.

- 4.7.1.1. Crew identification. Include both pilot and aircraft numbers.
- 4.7.1.2. Event Classification. The type event will be entered using terminology from 11-MDS series manuals.
- 4.7.1.3. 188 FW Form 4 will be filled out as designed and directed by the 188 FW/Weapons Officer.

4.7.2. Low Angle Strafe. Strafe fouls will be indicated with a circled "F" and no score in the "HITS" column for that pass and will also indicate the reason for the foul.

4.7.3. Dry Passes. Only dry passes flown prior to the end of an event will be recorded and these will be logged in sequence with hot passes.

4.8. Closing the Range.

4.8.1. Notify FCMTC Range Control of closing.

4.8.2. Release airspace back to Razorback Approach/Memphis Center.

4.8.3. Retrieve transducers.

4.8.4. Lock all locks to towers, buildings, compound, and gates.

4.8.5. Activate security alarm system.

4.9. Reports.

4.9.1. Weapons Delivery Scoring Record (188 FW Form 4). Complete and fax to unit for each flight.

4.9.2. Daily Activity Report, Range Log 87 and FCMTC Daily Utilization Log completed as required.

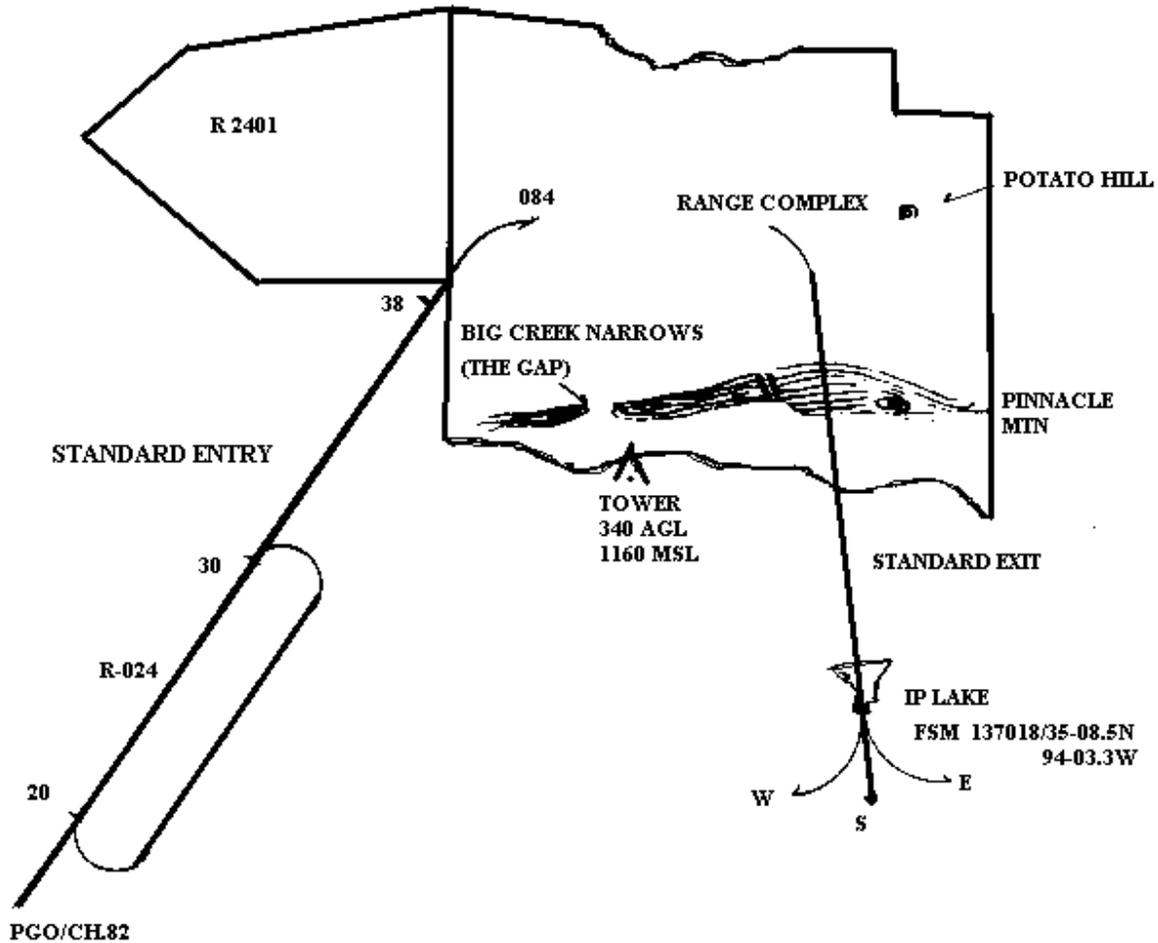
4.9.3. Daily flying activity will be faxed to Fort Smith Tower.

OFFICIAL

JOHNNY J. MCCORMICK, Lt Col, AR ANG
Support Group Commander

Attachment 2

RANGE STANDARD ENTRY AND EXIT

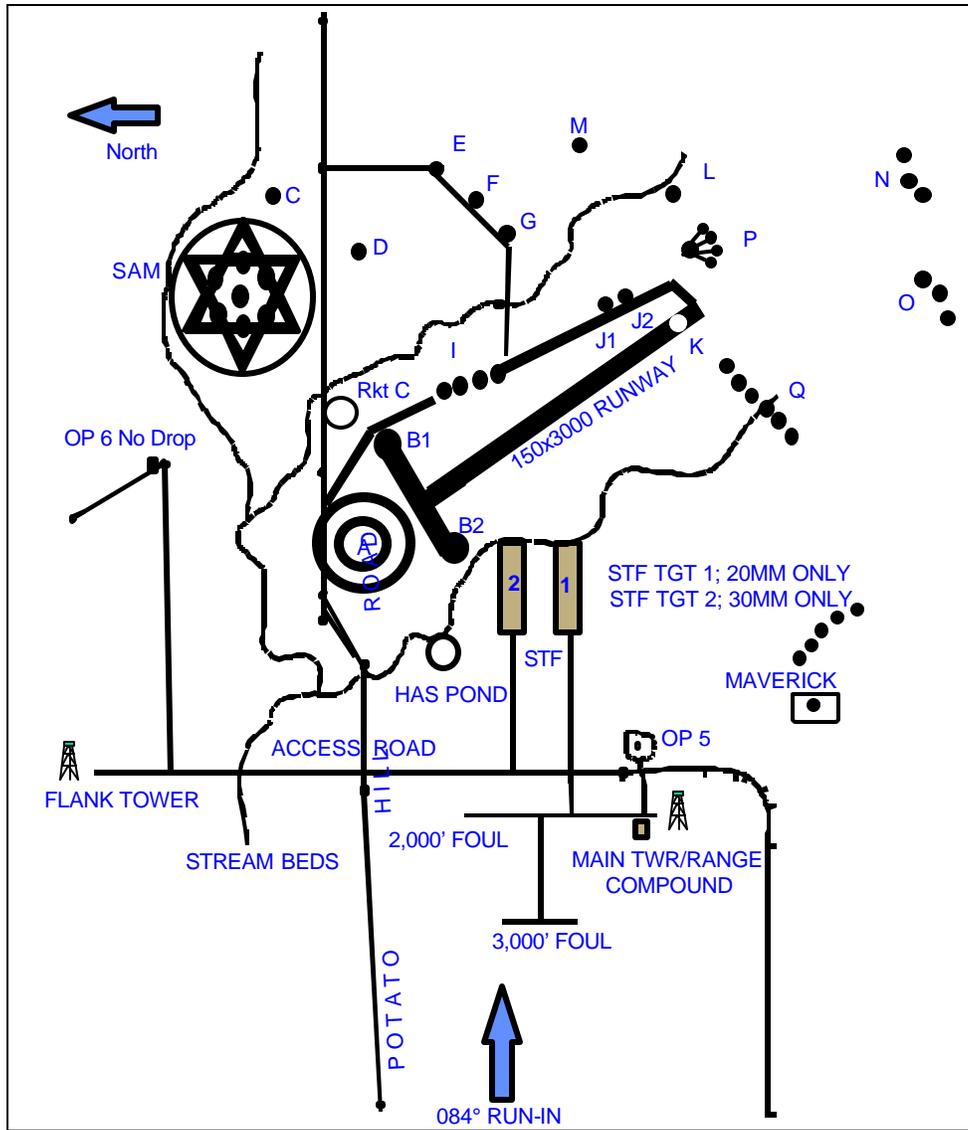


NOTE: STANDARD ENTRY--REMAIN 3500' MSL UNTIL PASSING OVER THE TOWN OF GREENWOOD, TURN RIGHT TO 084° AT 38DME (DO NOT EXCEED 41DME BEFORE MAKING TURN) CONTINUE TO RANGE COMPLEX FOR A RIGHT BREAK

STANDARD EXIT--DEPART THE RANGE SOUTH TO IP LAKE VFR AT OR ABOVE 4500' MSL IF POSSIBLE. BE AWARE OF HOG MOA. EAST, WEST, AND SOUTH DEPARTURES CONTINUE ON COURSE--NORTH DEPARTURES ARE REQUESTED TO CONTACT ATC BEFORE TURNING NORTH IN ORDER TO DECONFLICT WITH FT SMITH ARRIVALS AND DEPARTURES. IFR PICK-UPS FOR ALL ARE AVAILABLE FROM RAZORBACK APPROACH ON 380.15 (15,000' MSL AND BELOW) OR MEMPHIS CENTER ON 380.3 SOUTH/WEST EXIT/348.7 EAST (ABOVE 15,000')

Attachment 4

RAZORBACK RANGE

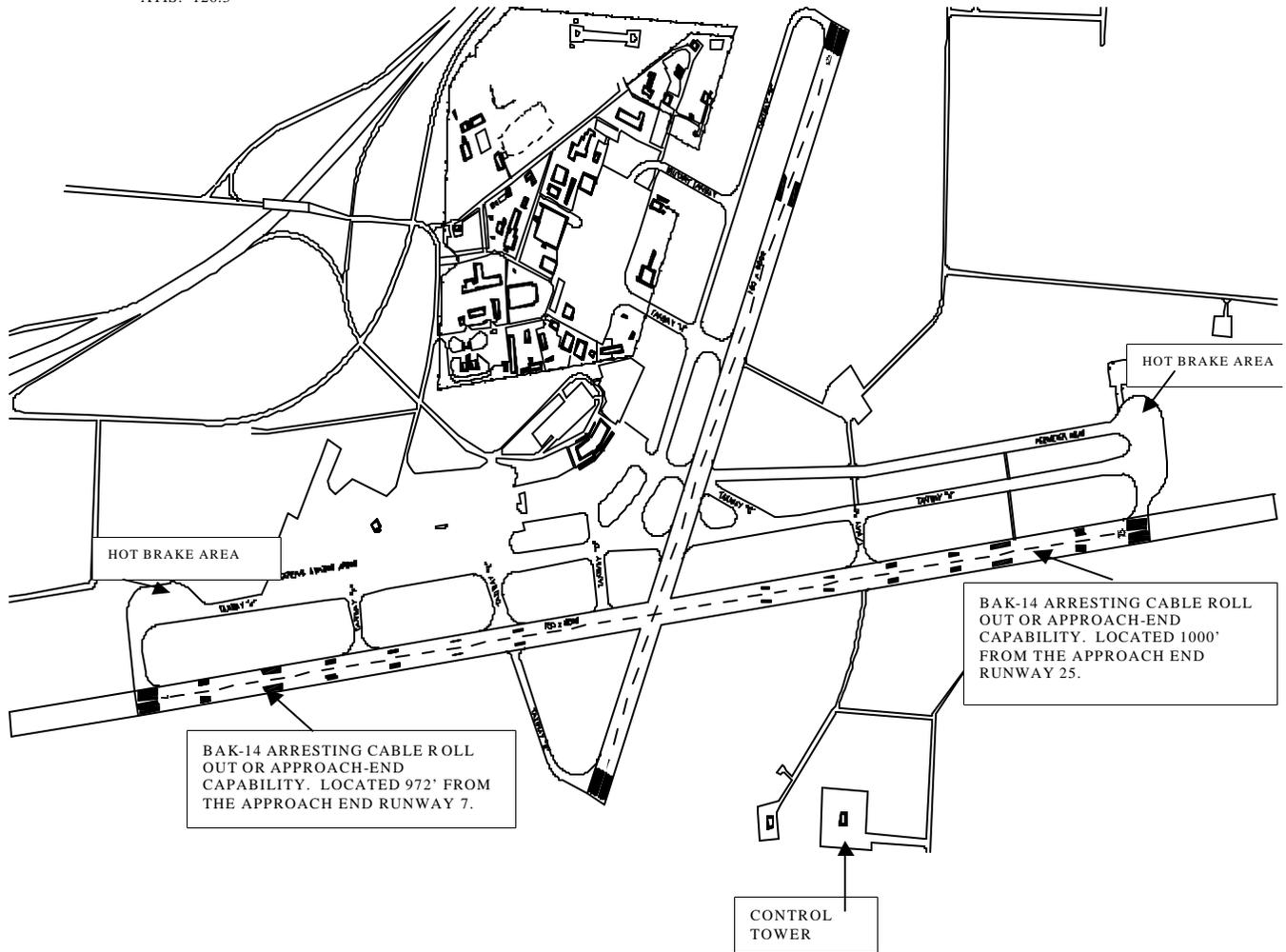


- A: CONVENTIONAL CIRCLE
- B1: REVETTED AIRCRAFT
- B2: REVETTED AIRCRAFT
- C: MISSILE TEL
- D: ARMORED VEHICLE
- E: ARMORED VEHICLE
- F: ARMORED VEHICLE
- G: ARMORED VEHICLE
- I: ARMORED CONVEY (4)
- J1: FUEL TRUCK
- J2: POL COMPOUND
- K: AIRCRAFT ON RUNWAY
- L: ATTACK HELICOPTER
- M: SA-10 SIMULATOR
- N: HOWITZER FORMATION (3)
- P: SA-3 (PUPPY PAW)
- Q: CONVOY ON BRIDGE (6)
- RC: ROCKET CIRCLE
- SAM: SA-2 MISSILE SITE
- STF 1: 20MM ONLY
- STF 2: 30MM ONLY

Attachment 5

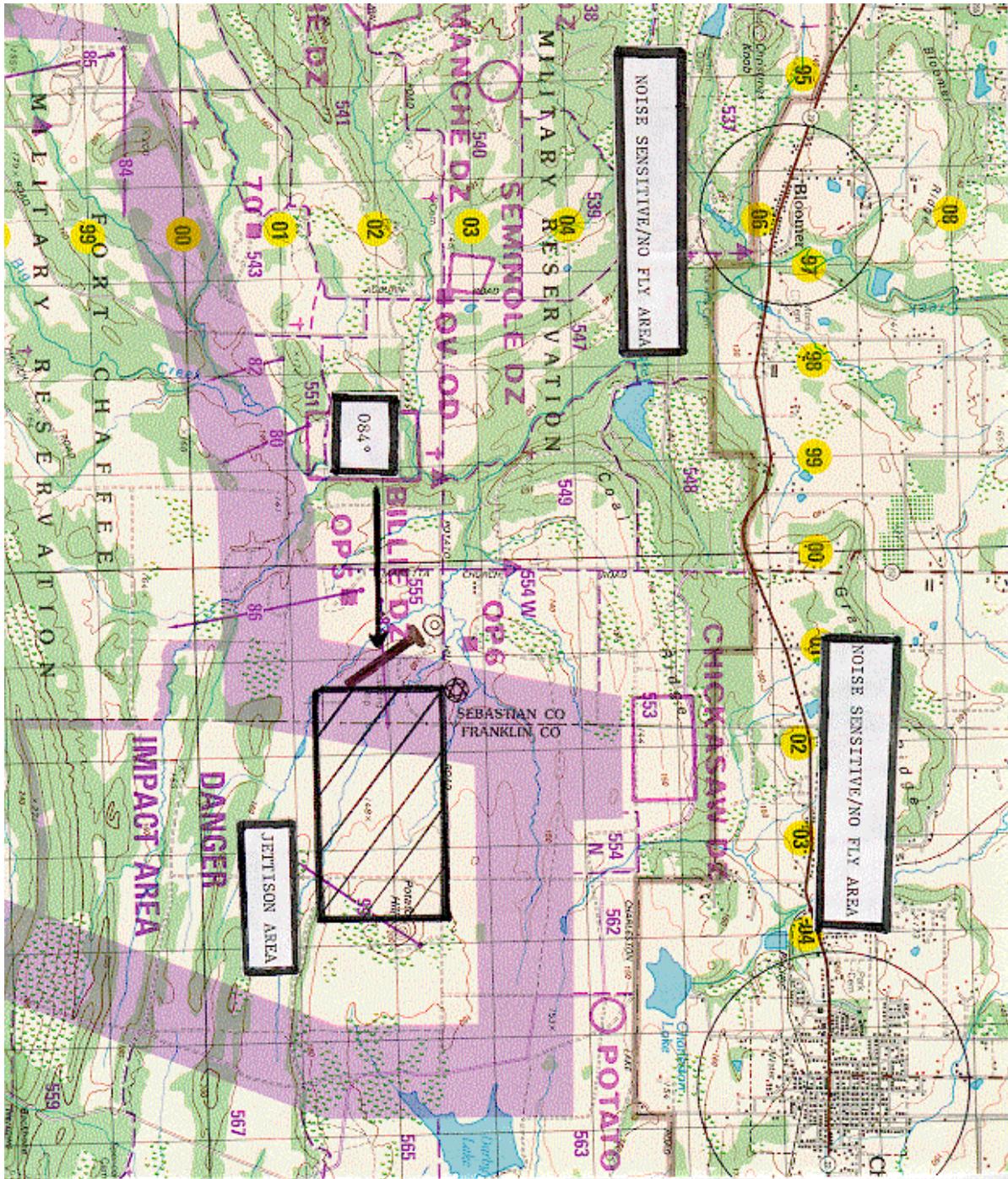
FORT SMITH AIRFIELD DIAGRAM

LOCAL FREQUENCIES
Tower: 381.6
Ground Control: 257.8
Razorback Approach: 380.15
343.75
ATIS: 126.3



Attachment 6

JETTISON/NOISE SENSITIVE AREA



Attachment 7

188FW FORM 4, RAZORBACK RANGE WEAPONS RECORD

RAZORBACK RANGE WEAPONS RECORD		CALLSIGN		UNIT		DATE		TIME ON/OFF		RANGE OFFICERS SIGNATURE			
PASSES 11-12	EVENT	1	2	3	4	5	6	7	8	9	10	11	12
	TGT												
PILOT #	MAIN TWR												
	FLANK TWR												
	SCORE												
TAIL #	CAT												
	TG SCORE												
JET SCORE	STRF HITS/PASS	TGT1	1	2	3	4	TOTAL HITS	TOTAL ROUNDS	NET ROUNDS	%	HITS + %	TG SCORE	VER # & INIT
		TGT2	1	2	3	4							
PILOT #	MAIN TWR												
	FLANK TWR												
	SCORE												
TAIL #	CAT												
	TG SCORE												
JET SCORE	STRF HITS/PASS	TGT1	1	2	3	4	TOTAL HITS	TOTAL ROUNDS	NET ROUNDS	%	HITS + %	TG SCORE	VER # & INIT
		TGT2	1	2	3	4							
PILOT #	MAIN TWR												
	FLANK TWR												
	SCORE												
TAIL #	CAT												
	TG SCORE												
JET SCORE	STRF HITS/PASS	TGT1	1	2	3	4	TOTAL HITS	TOTAL ROUNDS	NET ROUNDS	%	HITS + %	TG SCORE	VER # & INIT
		TGT2	1	2	3	4							
PILOT #	MAIN TWR												
	FLANK TWR												
	SCORE												
TAIL #	CAT												
	TG SCORE												
JET SCORE	STRF HITS/PASS	TGT1	1	2	3	4	TOTAL HITS	TOTAL ROUNDS	NET ROUNDS	%	HITS + %	TG SCORE	VER # & INIT
		TGT2	1	2	3	4							
JET SCORES		VLB	38					CATEGORIES				FOULS Initial when logged	
1 - DRIVES NAILS		LLL	40					R - RECORD				1) Safety	
		LAHD	23					N - NON-RECORD				2) Below Min Alt	
2 - WORKABLE		LALD	31					A - AIRSCORED				3) Double Burst	
		DB	26					F - FSWD				4) Past Foul Line	
3 - FIXIT		HADB	38					X - WPNS MAL				5) No Clearance	
		HARB	78										
		LAT	53										
		SLD	60										

Attachment 8

RAZORBACK RANGE AIRCREW CHECKLIST

A8.1. RANGE NAME: RAZORBACK (R-2402), R-2401A available

A8.2. RADIO FREQUENCIES.

A8.2.1. PRIMARY: 399.8

A8.2.2. SECONDARY: HOG MOA frequency-305.4 (Razorback will come up on VHF if needed)

A8.2.3. RAZORBACK APPROACH CONTROL: 380.15-Primary or 343.75-Secondary

A8.2.4. MEM CENTER: 380.3

A8.2.5. FT SMITH TOWER: 381.6

A8.2.6. ATIS: 126.3

A8.3. RANGE DATA.

A8.3.1. ALTITUDE 15K BUT MAY BE BLOCKED TO 30K IF REQUESTED

A8.3.2. RANGE ELEVATION: 450'

A8.3.3. RANGE ATTACK HEADING:

A8.3.3.1. 084°/264° (for conventional box pattern)

A8.3.3.2. Heavyweights- 084° ± 10° attack heading

A8.3.4. RANGE HOLDING: PGO CH 82 024/20-30 ABOVE 3,500 MSL

A8.3.5. RANGE ENTRY: Generally from the South (HOG MOA)

A8.3.6. RANGE DEPARTURE: SOUTH TO IP LAKE (35°10.0 N 94°06.0 W)

A8.3.7. EMERGENCY AIRFIELD: FT SMITH – SNAP VECTOR 285/15

A8.3.7.1. ELEVATION 468

A8.3.7.2. RWY 7 -25

A8.3.7.3. 8,000'

A8.3.7.4. BAK 14 EACH END

A8.3.8. HOG MOA BORDERS RANGE TO SOUTH-CONTACT OPS AT DSN 962-8271/8272 TO SCHEDULE MOA.

Attachment 9

RAZORBACK RANGE TARGET LIST

TARGET NAME	DESCRIPTION	LATITUDE/ LONGITUDE	WGS 84 (N/E)	NAD 27 (N/E)	ELV	REMARKS
ALPHA	BOMB CIRCLE	N 35 15.645	0066E	0068E	456'	
BRAVO 1	NE AIRCRAFT	N 35 15.581 W 94 05 395	0086E 0239N	0087E 0218N	461'	
BRAVO 2	SW AIRCRAFT	N 35 15.537 W 94 05 493	0071E 0231N	0072E 0210N	447'	
BUNKER	MAVERICK TARGET	N 35 15.046 W 94 05 454	0076E 0140N	0077E 0119N	423'	NO DROP
*CHARLIE	MISSILE TEL	N 35 15.709 W 94 04 940	0155E 0262N	0157E 0241N	462'	
*DELTA	TANK	N 35 15.638 W 94 04 984	0148E 0248N	0150E 0227N	462'	
*ECHO	ARMORED VEHICLE	N 35 15.574 W 94 04 846	0169E 0236N	0171E 0215N	463'	
*FOX	ARMORED VEHICLE	N 35 15.542 W 94 04 873	0165E 0231N	0166E 0210N	434'	
*GOLF	ARMORED VEHICLE	N 35 15.505 W 94 04 918	0158E 0224N	0160E 0203N	435'	
*INDIA	ARMORED CONVOY	N 35 15.471 W 94 05 282	0103E 0218N	0104E 0197N	469'	4 VEHICLES, DECLARE WHICH IS DMPI FOR SCORING PURPOSES
JULIET 1	POL TRUCK	N 35 15.281 W 94 05 147	0123E 0183N	0124E 0162N	459'	
JULIET 2	POL STORAGE	N 35 15.248 W 94 05 146	0123E 0177N	0124E 0156N	463'	DMPI IS PUMP HOUSE ON WEST SIDE OF REVETMENT
KILO	AIRCRAFT	N 35 15.155 W 94 05 099	0130E 0159N	0131E 0138N	469'	
LIMA	HELICOPTER	N 35 15.106 W 94 04 789	0177E 0150N	0178E 0129N	498'	
LTSS	LASER DESIGNATOR	N 35 15.375 W 94 05 134	0125E 0200N	0127E 0179N	445'	
MAVERICK	CONVOY	N 35 14.954 W 94 05 647	0046E 0123N	0048E 0102N	487'	NO DROP- PLASTIC ARMOR AND HEATED VEHICLES
MIKE	SA-10	N 35 15.370 W 94 04 829	0171E 0180N	0173E 0159N	452'	
NO SHOW #1	SLD TARGET	N 35 15.565 W 94 04 921	0158E 0235N	0159E 0214N	454'	
NO SHOW #2	SLD TARGET	N 35 15.413 W 94 04 904	0160E 0207N	0162E 0186N	464'	
NOVEMBER	MOTORIZED HOWITZER	N 35 14.718 W 94 04 740	0183E 0078N	0185E 0057N	471'	3 TARGETS-DMPI IS CENTER VEHICLE
PAPA	SA-3	N 35 15.045 W 94 04 888	0161E 0139N	0163E 0118N	507'	DMPI IS RADAR VAN
QUEBEC	CONVOY ON BRIDGE	N 35 15.114 W 94 05 233	0109E 0152N	0111E 0131N	473'	6 VEHICLE CONVOY. ALL SCOREABLE. VEHICLE ON BRIDGE IS DMPI
RKT CIRCLE	ROCKET CIRCLE	N 35 15.625 W 94 05 362	0091E 0247N	0092E 0226N	451'	INERT ROCKETS AND HIGH ANGLE STRAFE ONLY
*SAM	SA-2 - STAR OF DAVID	N 35 15.757 W 94 05 054	0138E 0271N	0139E 0250N	438'	DMPI IS CENTER RADAR VAN
MAIN TOWER		N 35 15.268 W 94 06 004	9993E 0182N	9994E 0161N	489'	
FLANK TOWER		N 35 15.968 W 94 05 878	0013E 0311N	0015E 0290N	505'	
* DENOTES HEAVYWEIGHT TARGET						

Attachment 10**OPENING AND CLOSING CHECKLISTS****OPENING CHECKLIST**

A10.1. BRIEF THE DAY'S SCHEDULED ACTIVITY TO ALL PERSONNEL

A10.2. ENSURE THE NORTH AND SOUTH TRAFFIC LIGHTS ARE ACTIVATED

A10.3. INSPECT THE RANGE PROPERTY

A10.3.1. Ensure that no unauthorized personnel are present

A10.3.2. Check strafe pit area for:

A10.3.2.1. Proper soil conditions

A10.3.2.2. Standing water/frozen ground (20mm)

A10.3.2.3. Condition of strafe targets, berms, and poles.

A10.3.2.4. Police area around berm daily for spent TP ammo and rocks (fist size and larger)—
Disk and run magnet weekly—weather/soil permitting

A10.4. PROCEED TO THE MAIN AND FLANK TOWERS AND HAVE THE FOLLOWING TASKS COMPLETED 10 MINUTES PRIOR TO FIRST MISSION

A10.4.1. Flank Tower

A10.4.1.1. Test transducers on DAT tester

A10.4.1.2. Install transducer mikes and do clip board check

A10.4.1.3. Ensure the west gate is closed

A10.4.1.4. Ensure the flank tower gate is closed

A10.4.1.5. Check traffic light remote switch

A10.4.1.6. Complete communications check with main tower (primary and back-up)

A10.4.1.7. Note if windows require cleaning

A10.4.1.8. Scan area for intruders (on-going)

A10.4.2. Main Tower

A10.4.2.1. Adjust air conditioning/heater for comfort

A10.4.2.2. Check traffic light remote switch (if inop a physical barrier will be used or south gate closed)

A10.4.2.3. Check all communication equipment

A10.4.2.3.1. UHF primary and back-up

A10.4.2.3.2. Key mikes and listen for reception on receiver banks(primary and guard)

A10.4.2.3.3. FM—check with 188th OPS (Hawg Control)

A10.4.2.3.4. Hot line—check with range control (#59)

CONFIRM AIRSPACE ACTIVATION AT THIS TIME

A10.4.2.3.5. Check comm with flank tower (primary and back-up)

A10.4.2.3.6. Obtain latest ATIS from Ft Smith tower (CH 7) check/set altimeter, obtain wx and wind

A10.4.2.4. Turn on strafe scoring (DA3H) and set for first type aircraft scheduled

A10.4.2.5. Scan area for intruders (on-going)

A10.4.2.6. Note if windows require cleaning

A10.4.2.7. Fill out necessary paperwork

NOTE: During periods of non-activity return the airspace to range control IAW current letter of agreement if “DEAD TIME” is 30 minutes or more—**ALWAYS REQUEST TO GO “HOT” 10 MINUTES PRIOR TO SCHEDULED AIRCRAFT ARRIVAL.**

CLOSING CHECKLIST**A10.5. Main Tower**

- A10.5.1. Complete Daily Activity and Range 87 logs (RCO)
- A10.5.2. Turn off all radios
- A10.5.3. Turn off Del-Mar acoustic scorer
- A10.5.4. Ensure that traffic light is set to “green”
- A10.5.5. De-activate (return) airspace to Range Control
- A10.5.6. Straighten up work areas
- A10.5.7. Set heating/air conditioning to off
- A10.5.8. Lock both the tower cab and tower step protective gate
- A10.5.9. Fax range score sheets to users (NCO)

A10.6. Flank Tower

- A10.6.1. Ensure that traffic light is set to “green”
- A10.6.2. Clean up work area
- A10.6.3. Set heating/air conditioning to off
- A10.6.4. Ensure that portable radio is in possession
- A10.6.5. Lock tower locks
- A10.6.6. Retrieve transducer mics

A10.7. All Personnel

- A10.7.1. Clean up office work areas as necessary
- A10.7.2. Ensure shop area and storage shed are locked and lights are off
- A10.7.3. Remove all vehicle keys and place inside

A10.7.4. Secure main office

A10.7.5. Activate Security System

A10.7.6. Lock all compound gates

A10.7.7. Turn off traffic lights at their positions

Attachment 11

DAILY REPORT FORM

DATE		Day	Year	DAILY ACTIVITY REPORT																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
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