

**1-151<sup>ST</sup>**

**ATTACK RECONNAISSANCE BATTALION**

**Warrior Riders**



**ATTACK**

**"Ready to Strike"**





# AGENDA

- Experience
- Accessibility
- Training and Readiness
- Supporting the Total Force



# EXPERIENCE

- Total Flight Hours: 99,574
- Combat Flight Hours: 20,142
- Years of Experience: 713 (10 year Average)
- Instructor Pilots: 2,898 Hours/16.1 Years
- Maintenance Test Pilots: 2,513 Hours/17.9 Years
- Senior Maintainers: 23.2 Years

**South Carolina National Guard fielded the AH-64 in 1988 and has 27 years of Apache experience.**



# ACCESSABILITY

- Operation Southern Watch                      Kuwait                      1999-2000
- KFOR-5A    Kosovo                      2003-04
- Operation Iraqi Freedom                      Iraq                      2004-05
- Operation New Dawn                      Iraq                      2011
- Operation Enduring FreedomKuwait                      2011-12
- Additional Mission Support
  - Afghanistan
  - Fort Rucker
  - Bosnia
  - Desert Storm





# TRAINING AND READINESS





# DAILY FLIGHT SCHEDULE

**Wednesday, November 5, 2014**

AH-64 Aircrews				
	TAIL	PC	PI	REMARKS
A		Whitsel	Sumner	RL Progression
HHC		Parsons, B	Lapierre	ATM
B		Caruccio/Falletta	Gregory	ATM
HHC		Nance	Sarver	Stands
A		Norris/Protzman	McElveen/Wilkes	APART/PC Prep
B		Jessup	Skelly	MARSOC AWT MSN
C		Roberts	Wilkes	MARSOC AWT MSN



BS					FS					REMARKS				
LCT					LCT					LCT				
LCT	1	Loyd		Seigler										
LCT	2	Loyd		Afflick					Gooch					
LCT	3	Hamlett		Fowler										
LCT	4	Fowler		Hamlett										

UH-60 Aircrews				
	PC	PI	Crew Chief	REMARKS
	Shealy	Long		RL PROG
	Shuford	O'Handley/Fishburn		IFR
	Furr	Mayer	Kuhnert/Keenan	NVG PFE/NCM Progression
	Hughes	Fickett	Painter	
	Keller	Mckenna	Bare/Roupe	NVG
<b>AASF MISSIONS</b>				



AVCATT					PC					PI					Crew Trainer					REMARKS				
	1																							
	2																							
	3																							
	4																							
	5																							
	6																							



# MARSOC (MAG 31) & USSOCOM (160<sup>th</sup> SOAR)

## OPERATION RAVEN

Mission: 1-151 ARB is to provide attack weapons teams (AWT) support to MARSOC personnel in support of various training missions (Direct Action, Convoy Escort, Air Insertion, Close Air Support) at the following locations: McCrady, Ft. Jackson, Ft. Gordon, Charleston, Walterboro, and Columbia.

### Mission Timeframe

#### Time Line:

<u>29 Oct 2014</u>	<u>30 Oct 2014</u>	<u>3 Nov 2014</u>
-1830 Team Brief	-1830 Team Brief	-1830 Team Brief
-1945 Take Off	-1945 Take Off	-1945 Take Off
-2030 HAF	-2030 Convoy SP	-2030 HAF
-2135 Exfil	-2135 Exfil	-2135 Exfil
-2210 Land	-2210 Land	-2210 Land
-2300 AAR	-2300 AAR	-2300 AAR

<u>4 Nov 2014</u>	<u>5 Nov 2014</u>	<u>6 Nov 2014</u>
-1830 Team Brief	-1830 Team Brief	-1830 Team Brief
-2000 Take Off	-2000 Take Off	-1945 Take Off
-2030 HAF	- 2030 Convoy SP	-2030 HAF
-2135 Exfil	-2135 Exfil	-2135 Exfil
-2210 Land	-2210 Land	-2210 Land
-2300 AAR	-2300 AAR	-2300 AAR

**End state:** 1-151 ARB safely executed advanced level joint-CAS scenarios in a real-world training environment that promoted readiness and further advanced the 1-151 ARB's goal of maintaining the highest level of joint interoperability.





# 118<sup>th</sup> ASOS and 169<sup>th</sup> FW Joint CAS

**Mission:** 1-151<sup>st</sup> ARB conducts joint CAS training with 118<sup>th</sup> ASOS, 2-238 GSAB & 169<sup>th</sup> FW on April 8-10<sup>th</sup>, 2014 in the Gamecock MOA IOT sustain and improve joint CAS TTP's.

**Time Line:**

<u>8 April 2014</u>	<u>9 April 2014</u>	<u>10 April 2014</u>
-1730 Section Brief	-1730 Section Brief	-1730 Section Brief
-1830 Team Brief	-1830 Team Brief	-1830 Team Brief
-1945 Take Off	-1945 Take Off	-1945 Take Off
-2030 HAF	-2030 HAF	-2030 HAF
-2135 Exfil	-2135 Exfil	-2135 Exfil
-2210 Land	-2210 Land	-2210 Land
-2300 AAR	-2300 AAR	-2300 AAR

**Execution:** 8 pax from TF Omega departed FOB Mcentire at 2000L aboard Monster 11 (CH-47D) and proceeded to Hemingway-Stuckey airport for a simulated airfield takeover. At 2015L Mace 31/32 (2xF-16's) commenced SEAD around the objective area IOT sanitize ADA threats prior to arrival of the HAF. Checkmate 10/11 provided aerial security for Monster 11 en route and performed an LZ recon two minutes prior to arrival of the HAF. Immediately after infil Checkmate 10/11 received an IR target handover from Omega 13 (JTAC) and successfully attrited the threat. For the next hour Checkmate 10/11 executed multiple 5-line attacks (CCA) and 9-line attacks in coordination with Omega 13 and Viper 41/41 (2xF-16's). At 2120 Checkmate 10 relayed to Monster 11 that the exfil would be at 2135L. Checkmate 10/11 provided suppressive fires as Monster 11 performed the exfil and conducted aerial security back to FOB Mcentire.

**End state:** 1-151 ARB safely executed advanced level joint-CAS scenarios in a real-world training environment that promoted readiness and further advanced the 1-151 ARB's goal of maintaining the highest level of joint interoperability.





# Validation for GHWB Carrier Strike Group

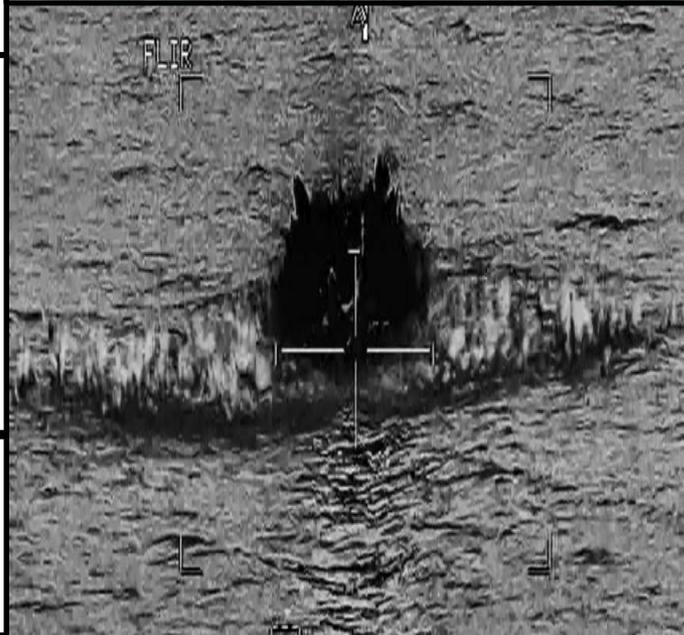
**Mission:** 1-151<sup>st</sup> ARB conducts Integrated Live Fire Exercise (ILFX) in support of GHWB CSG SUSTEX on 16-17 December in the vicinity of W-157A, in order to demonstrate the ability to find, fix, and destroy small boat targets.

**Execution:** On 16 December 4xAH64D (Guard 10,11,20,21) conducted ILFX with 3xAGM114L7, 3xAGM114F and 800rds of 30mm. On 17 December 4xAH64D (Guard 10,11,20,21) conducted ILFX with 3xAGM114F, 3xAGM114L7, and 800 rds 30mm.

**Endstate:** 2xAGM114F, 2xAGM114L7, and 400rds of 30mm were used to prosecute four targets. Range “foulers” prevented engagements for a significant portion of the mission window on both days. 2xAGM114F and 1xAGM114L7 were confirmed hits. New AGM114L7 missile software was tested for PM JAMS and TTPs for desired target affects were developed.

**Engagement Conditions:**

Altitude: 300-1000ft    Distance: .5-4.5K  
Airspeed: 40-70KTS    Direction: 056<sup>o</sup>-135<sup>o</sup>  
Sea state: 2-3ft    Winds: 170 at 15-20KTS





# 48 BCT Pre-Deployment CALFEX

**Mission:** 1-151<sup>st</sup> Attack Reconnaissance Battalion conducts Combined Arms Live Fire Exercise (CALFEX) 15Sep2013 to 20Sep2013 in support of the 48<sup>th</sup> IBCT.

**Concept of the Operation:** The 1-151<sup>st</sup> deploys six AH64D's to FSGA IOT conduct gunnery operations in support of the 48<sup>th</sup> IBCT annual training. The Combined Arms Live Fire Exercise (CALFEX) is the culminating event as the 48<sup>th</sup> IBCT prepares for their upcoming OEF deployment early FY14. The intent of conducting live fire operations is to give all Soldiers of the 48<sup>th</sup> IBCT exposure to attack helicopter operations and enhance aircrew proficiency in conducting gunnery tasks in a combined arms environment. The end state of this mission will be the safe return of all personnel, equipment and support personnel prepared to conduct follow on missions.

**Endstate:** 24 crews trained in air/ground integration while conducting live fire utilizing 30mm and 2.75 in rockets. Staff conducted planning and sand table rehearsals on the Brigade level to synchronize rotary wing, fix wing and UAS assets.





# Operation Carolina Thunder

**Mission:** F Marauder conducts maximum destruction interdiction attack, air assault and screening operations, beginning at H-Hour, in the vicinity of OBJ Wolf (MS31007400) IOT destroy Georgian Mechanized Forces and support seizure of OBJ Lion.

**Units:**

- 1-151 Attack Recon BN: 18 x AH-64D Apaches (SCARNG)
- 1-130 Attack Recon BN: 12 x AH-64D Apaches (NCARNG)
- B/2-238th GSAB: 3 x CH-47D Chinooks (SCARNG)
- A/2-149th GSAB: 3 x UH-60 Blackhawks (SCARNG)
- 48th Infantry Brigade Combat Team: HQ (GARNG)
- 1st & 4th BNs 118th Infantry Regiment: 120 Inf. Soldiers (SCARNG)
- 169th Fighter Wing: 6 x F-16 Falcons (SCANG)
- 165th ASOS: JTAC (Georgia Air National Guard)

**Execution:** An “Apache centric” multi-state, multi-component collective training mission that involves suppression of enemy air defense systems by F-16s from the Air National Guard, a simultaneous AH-64D interdiction attack (1-151st ARB & 1-130th ARB) and an air assault with 3 heavy lift aircraft including 120 infantry Soldiers. Close Air Support and Close Combat Attack will be provided throughout by Air National Guard and with Apache helicopters from the Army National Guard. Following tactical convoy operations, 3 forward arming and refueling points will be established to support all rotary wing aircraft. The 48th Infantry Brigade Combat Team will provide a higher headquarters in order to facilitate the Mission Command training objectives of each subordinate unit.

**Endstate:** ; Enemy mechanized forces in OBJ Wolf destroyed; successful seizure of OBJ Lion complete, and TF Marauder postured for follow on missions in support of the re-establishment of the International Border.





# READINESS / TRAINING

- 106 % Strength (P1)
- 100% Equipped (24 Apaches with 10 FCR's)
- 26 Table VI Gunnery qualified crews (T1)
- Minimum of one aerial gunnery event per quarter
- ≈ 9000 flight training hours in the past 30 months
- Aviators Train over 100 Days a Year
- 30 - 40 Missions Per Week + 20 Simulation Missions



**SUPPORTING  
the  
TOTAL FORCE**



# AH-64D Deck Landing Training Program

**Mission:** 1-151<sup>st</sup> Attack Reconnaissance Battalion (SCARNG) Conducts Deck Landing Requalification and Initial Deck Landing Qualification for 2 x 4-501<sup>st</sup> (US Army) Instructor Pilots from 270730JUL2014 to 311730JUL2014 at home station and NAS Oceana, VA, IOT continue to maintain overwater and littoral warfare capabilities and posture for future operations.

**Deck Landing Qualification (DLQ) Execution:**  
**22-24 JUL 14:**

- Overwater academics and Longbow Crew trainer (LCT) overwater simulator requirements completed.
- Field Deck Landing Practice (FDLP) Day, Night Vision System (NVS) and Night Vision Goggle (NVG) iterations completed at McEntire JNGB.

**29 JUL 14:**  
**1400-0200L**

- Operating from Naval Air Station (NAS) Oceana, VA, 6 x 1-151<sup>st</sup> ARB AH-64D Instructor Pilots and 2 x 4-501<sup>st</sup> Instructor Pilots each conducted five day and five NVS deck landings on LSD-51 to reset currency or gain initial DLQ qualification.

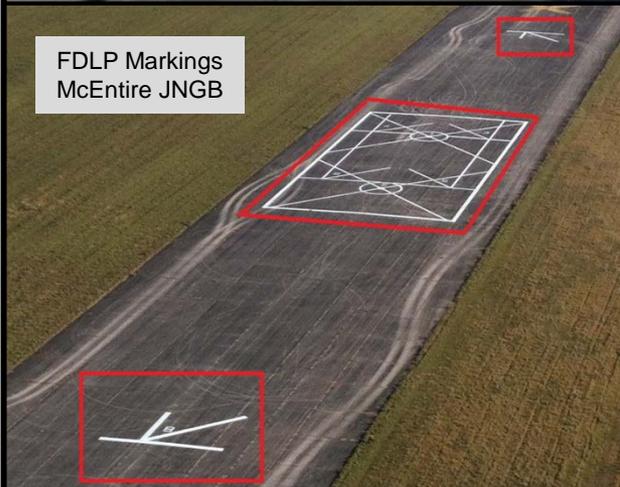
**30 JUL 14:**  
**1500-0000L**

- Two additional 1-151<sup>st</sup> ARB instructor pilots completed five day and five NVS deck landings on LSD-51 to reset currency or gain initial DLQ qualification.

**End state:** The end state for this mission was the successful requalification of 8 x 1-151<sup>st</sup> ARB (SCARNG) Instructor pilots along with the initial qualification of 2 x 4-501<sup>st</sup> ARB (US Army) instructor pilots along with all personnel and equipment safely redeployed to McEntire JNGB.



LSD 51 - USS Oak Hill



FDLP Markings  
McEntire JNGB





# SME's For ARCENT OW "Problem Set"

To date, the 1-151<sup>st</sup> ARB has trained/assisted:

- 4-2 ARB South Korea
- 4-501 ARB Academic Training in Texas
- 4-227 ARB Academic Training; weather did not allow DLQ's.
- 3-159 ARB DLQ and RIP/TOA in Kuwait
- 34<sup>th</sup> CAB Pre-PDSS ARCENT Theatre Orientation Briefings
- FORSCOM "White Paper" for Apache Shipboard Operations
- ARCENT Littoral Warfare Briefings/ SOP's/TTP's
- Fleet Forces Overwater Attack Helicopter Weapons Employment
- Other Development/Testing for PM JAMS and TCM – R/A

“ Cannot stress the value added they have been in addressing these maritime tasks. **We would not be where we are without the SCARNG and their continued support to our mission.**

- COL Robert S. Brown  
ARCENT G32



# Advancing Capability in PACOM's AOR



**Mission:** 1-151<sup>st</sup> ARB conducts deck landing qualification (DLQ) training with 4-2 ARB aboard the USS Germantown on 21 April 13 IOT increase the unit's operational capabilities, expand PACOM's AH-64D strategic employment options and ensure 4-2 ARB is ready to "Fight Tonight."

## APRIL TIMELINE:

- 14 Arrive ROK
- 15-16 Academic Training
- 17-18 Field Deck Landing Patterns
- 19 Presail conference
- 20 Weather cancelation
- 21 Deck Landing Qualification Training
- 22 AAR with 2<sup>nd</sup> CAB
- 23 Departure from ROK

## Timeline: 21 April 2013

- 1100: Aircrews receive O&I brief at 4-2 flight operations
- 1230: Aircraft depart KSG for Pohang
- 1400: Crews conduct Pre-Sail with USS Germantown
- 1800: Crews conduct day iteration
- 1930: Crews conduct night iteration
- 2200: Crews return to KSG / MC



## Concept of the Operation:

On 14 April three standardization pilots from 1-151<sup>st</sup> ARB South Carolina NG (SCNG) arrived in the ROK to restart 4-2 ARB deck landing program. On 15 and 16 April 3 x instructor pilots and 174-2 ARB conducted academic training and completed day/night iterations in the Longbow Crew Trainer (LCT). On 17 and 18 April crews conducted landings at KSG using the Field Deck Landing Pattern (FDLP). On 21 April three 4-2 ARB IPs, with a qualified and current 1-151<sup>st</sup> ARB IP in each cockpit, departed KSG for Pohang harbor IOT conduct day out night return landings on the USS Germantown. Crews returned to KSG the evening of the 21<sup>st</sup>, conducted deliberate recovery, and postured for future missions.



## Endstate:

Three 4-2 ARB instructor pilots fully qualified and current on DLQs and postured to train the remaining aviators in 3<sup>rd</sup> and 4<sup>th</sup> quarter 2013.



# CSG Validation/Joint Maritime TTP Development

**Mission:** 1-151<sup>st</sup> ARB conducts Integrated Live Fire in support of HSTSG SUSTEX 13JUN2013-15JUN2013 from NAS Jacksonville, FL to develop AH46D TTPs and validate joint interoperability.

**Concept of the Operation:** On 13 June 4xAH64D (Guard 10,11,20,21) conducted a full exercise rehearsal to gain situational awareness of targets and planned engagements. On 14 June weather would not allow targets to be employed during assigned VUL time. On 15 June 4xAH64D (Guard 10,11,20,21) conducted ILF with 6xAGM114F, 8xAMG114L, and 1000rds 30mm.

**Endstate:** 3xAGM114F, 1xAGM114L and 750rds of 30mm were used to prosecute four targets. Four of four AGM114's were confirmed hits. New engagement TTPs were captured and Joint interoperability was confirmed.

Engagement conditions:

Altitude: 300-500ft	Distance: .5-4.5K
Airspeed: 40-60KTS	Direction: 077*-117*
Sea state: 2-4ft	Winds: 090 @ 15-20KTS





# TTP's/Ballistic Advances for FIAC Threat

- **Who:** 1-151<sup>st</sup> ARB
- **What:** Overwater LFX against small craft targets
- **When:** 15 JUNE 13
- **Where:** 30 miles off the coast of Jacksonville, FL
- **Why:** Strengthen interoperability and assess efficacy against small craft targets with AH-64D and other Naval assets. Testing of new AGM-114L7 missile.
- **Composition:** 4xAH-64Ds





# Integration with Helicopter Maritime Strike Squadron

**Mission:** 1-151<sup>st</sup> ARB conducts joint SCAR training with HS-11 on 11-12 March 2014 at Pinecastle Range Complex in order to develop and refine TTPs utilized in a joint SCAR environment.

**Time Line:**

11 Mar 2014	12 Mar 2014
-1130 Section Briefs	-0730 Section Briefs
-1230 Element Brief	-0800 Element Brief
-1430 Take Off	-1030 Take-Off
-1515 Check-In	-1115 Check-In
-1720 ENDEX/RTB	-1320 ENDEX/RTB
-1800 Land	-1400 Land
-1900 AAR	-1500 AAR

**Execution:** 2XAH64D (Marauder 10/11) conducted SCAR training with 2XHH-60H (Slayer 20/21) at Pinecastle Range Complex, approximately 40 miles South of NAS Jacksonville. The goal was to identify best practices. Slayer 20 acted as the SCAR-C while Slayer 21 and Guard 10/11 were armed reconnaissance platforms. The Moving Land Target (MLT) system along with multiple target arrays were used to simulate small boat threats in the area of operation. The SCAR-C provided target tasking for unidentified tracks to be investigated, identified and prosecuted while simultaneously sequencing aircraft in the stack. All aircraft were equipped with Captive Air Training Missiles to simulate the use of AGM114 HELLFIRE missiles. Laser operations were performed to simulate autonomous and remote engagements between Slayer and Marauder aircraft. In addition to simulated ordinance delivery from each aircraft, Slayer aircraft also utilized crew served M240s for scored live fire training.

**Endstate:** 8 Crews from 1-151<sup>st</sup> ARB and HS-11 were able to asses and identify gaps in Joint Maritime Operation. Crews became more familiar with the capability and limitations of dissimilar aircraft. Joint TTPs were developed and refined.



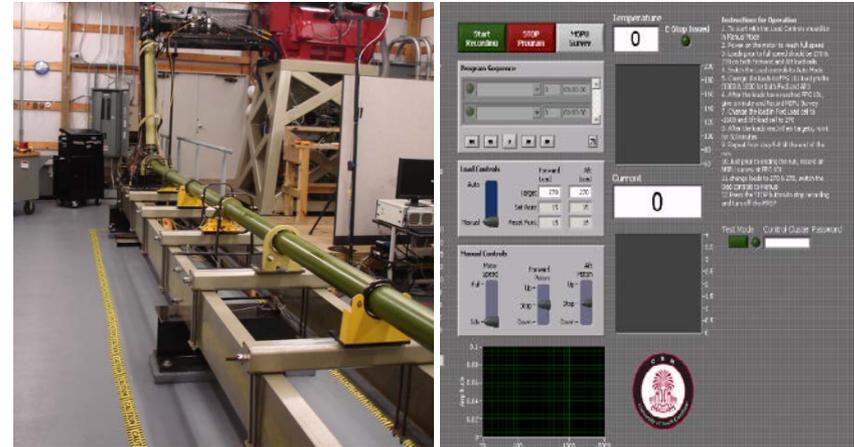


# Innovation and Development

## Filter Debris Analysis Program



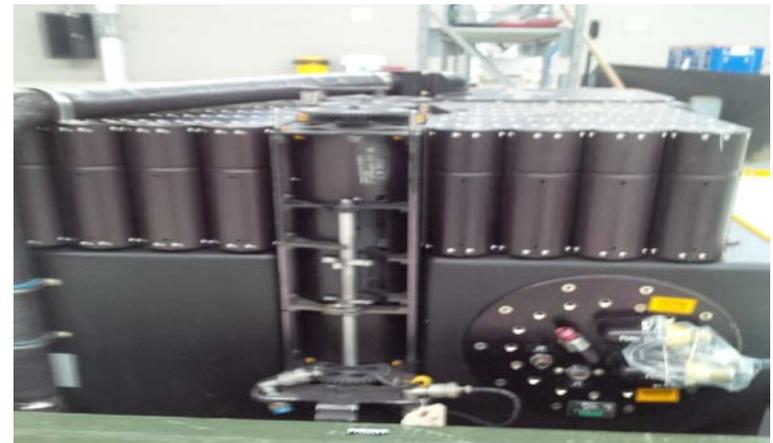
## Condition Based Maintenance



## Engine Baseline Testing



## Internal Fuel Tank





# Force Multipliers for the TOTAL FORCE

- Naval Strike and Air Warfare Center (NAS Fallon, NV)
- 3rd Special Forces Group (Ft. Bragg, NC)
- 160th Special Operations Aviation Regiment (Savannah, GA)
- George H.W. Bush Carrier Strike Group (USN)
- Harry S. Truman Carrier Strike Group (USN)
- 15th ASOS (USAF) (Ft. Stewart, GA)
- 724th Special Tactics Group (USAF) (Ft. Bragg, NC)
- 48th Brigade Combat Team (Fort Stewart, Georgia)
- 169th Fighter Wing (USAF) (McEntire, JNGB)
- MAG 31 (MARSOC) (Fort Jackson)
- Yama Sakura 63 (Japan)
- Ulchi Freedom Guardian (South Korea)
- Inspired Gambit (ARCENT/PAXMIL)
- Emerald Warrior (USSOCOM) (Eglin, Florida)



**QUESTIONS?**