Quick Reference Sheet

Valdosta Approach Control
- 126.6 / 132.375 Low
- 125.475 High

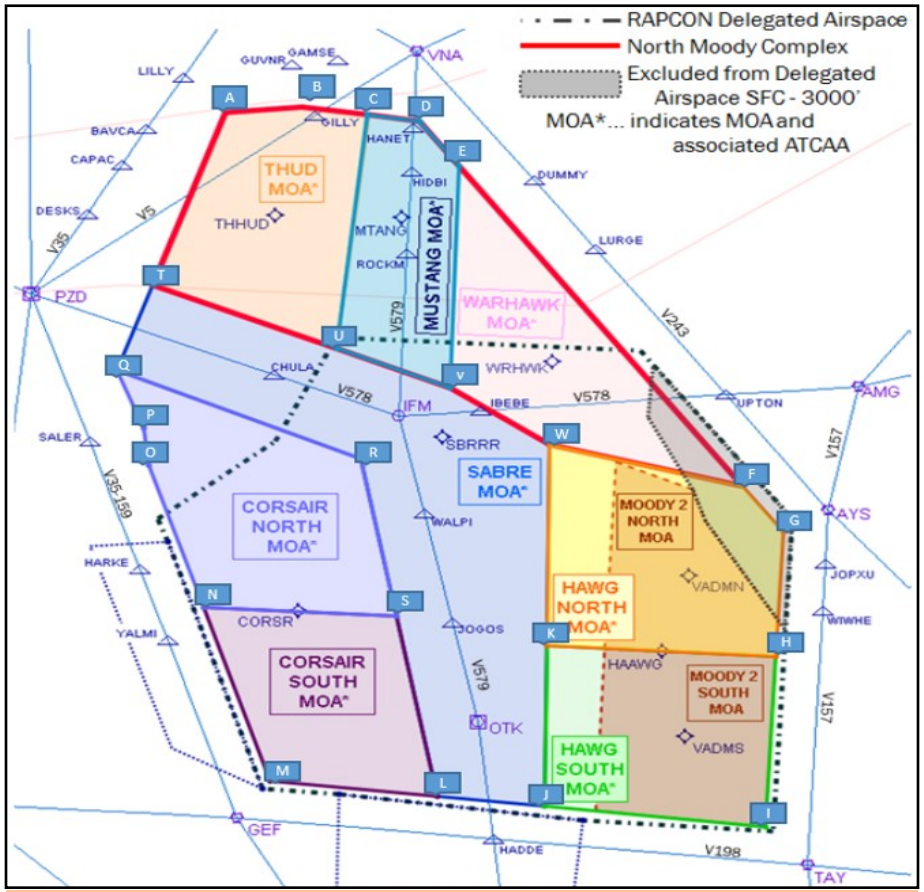
Valdosta Regional (KVLD)
- 126.225 ASOS
- 120.9 Tower

Valdosta VOR
- 114.8 (Ch 95) OTK

Moody AFB (KVAD)
- 273.5 ATIS
- 128.45 Tower

Moody TACAN
- Ch 80 (113.3) VAD

Flight Service Station
- 122.2 At OTK



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23d WING
MACA HANDBOOK

MID-AIR COLLISION AVOIDANCE (MACA) HANDBOOK

23d WING
MOODY AFB, GEORGIA
2020

Flying Safety in South Georgia

Fellow Aviators,

We provide this handbook to you with the hope that the information it contains will be useful as you fly the skies over South Georgia, home of Moody AFB. The potential for mid-air and near mid-air collisions has increased significantly throughout the United States in recent years and this trend will likely continue. As airspace becomes more congested, we must all make a personal and professional commitment to flight safety. All pilots, military and civilian alike, must understand the potential dangers, vigilantly apply the "see and avoid" concept, and practice solid flight discipline at all times. The 23d Wing at Moody AFB, home of the Flying Tigers of WWII fame, operates the A-10C, HC-130J, and HH-60G aircraft, and hosts a tenant unit of A-29 aircraft. This handbook includes basic information about the 23d Wing local training areas, special use airspace, Valdosta Radar Approach Control (RAPCON), and 23d Wing assigned aircraft. Please take a few moments to read the information in this handbook and be familiar with its contents. If you have any questions or comments, or would like to receive an electronic copy of this handbook, please call or e-mail us. Thank you for sharing our interest in flight safety.

23d WING FLIGHT SAFETY

23 Flying Tiger Way, Suite 221
Moody AFB, Georgia 31699
COMMERCIAL: (229) 257-1999/2641
FAX: (229) 257-3718
DSN: 460-1999/2641
E-mail: 23.WG.Safety@us.af.mil

Moody AFB Airport Identifier: KVAD

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Unmanned Aircraft Near Moody

RQ-11 Raven

Wingspan: 55 inches
Length: 36 inches
Weight: 4.8 lbs
Climb rate: 800 ft/sec
Cruise speed: 26 kts
Dash speed: 43 kts
Flight duration: up to 90 mins
Range: up to 10 kilometers
Max wind speed: 20 kts
Max altitude: 10,500 ft MSL
Typical altitude: 150-1000 ft AGL

Check NOTAMs for area and time of flights.

For additional information contact William Lentz @ 229-257-2615

Unmanned Aircraft

The **FAA** Small UAS Rule (Part 107), including all pilot and operating rules, is in effect as of 12:01 a.m. EDT on **August 29, 2016**.

SUMMARY OF SMALL UNMANNED AIRCRAFT RULE (PART 107)

- Unmanned aircraft must weigh less than 55 lbs. (25 kg).
- **Visual line-of-sight (VLOS) only**; the unmanned aircraft must remain within VLOS of the remote pilot in command and the person manipulating the flight controls of the small UAS. Alternatively, the unmanned aircraft must remain within VLOS of the visual observer.
- At all times the small unmanned aircraft must remain close enough to the remote pilot in command and the person manipulating the flight controls of the small UAS for those people to be capable of seeing the aircraft with vision unaided by any device other than corrective lenses.
- Small unmanned aircraft may not operate over any persons not directly participating in the operation, not under a covered structure, and not inside a covered stationary vehicle.
- Daylight-only operations, or civil twilight (30 minutes before official sunrise to 30 minutes after official sunset, local time) with appropriate anti-collision lighting.
- Must yield right of way to other aircraft.
- May use visual observer (VO) but not required.
- First-person view camera cannot satisfy "see-and-avoid" requirement but can be used as long as requirement is satisfied in other ways.
- Maximum groundspeed of 100 mph (87 knots).
- Maximum altitude of 400 feet above ground level (AGL) or, if higher than 400 feet AGL, remain within 400 feet of a structure.
- Minimum weather visibility of 3 miles from control station.
- **Operations in Class B, C, D and E airspace are allowed with the required ATC permission.**
- Operations in Class G airspace are allowed without ATC permission.
- No person may act as a remote pilot in command or VO for more than one unmanned aircraft operation at one time.
- No operations from a moving aircraft.
- No operations from a moving vehicle unless the operation is over a sparsely populated area.
- No careless or reckless operations.
- No carriage of hazardous materials.

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The Mid-Air Collision Potential

Despite numerous advances in air traffic rules and separation devices, the potential for a mid-air will always be present. Research shows that the most critical times for mid-air collisions are the first three minutes after take-off and the last eight minutes before landing. Mid-airs usually occur on clear days (more people flying), near airports (higher density traffic at similar altitudes), and between aircraft going in the same direction (different airspeeds during same phase of flight).

The See and Avoid Concept

The number one cause of mid-air collisions is the failure to properly adhere to the **"see and avoid"** concept. In accordance with FAR Part 91, this concept requires that vigilance shall be maintained at all times, by each person operating an aircraft, regardless of whether the operation is conducted under IFR or VFR. Pilots must divide their attention between aircraft instrumentation and clearing for traffic. They should also encourage other occupants of the aircraft to assist with looking out for conflicting air traffic. Keep your eyes open, listen to your radio, and clear outside your aircraft.

For more information, please see the following FAA references:
<https://www.faa.gov/regulations_policies/handbooks_manuals/aviation/airplane_handbook/media/09_afh_ch7.pdf>
<https://www.faasafety.gov/gslac/ALC/libview_normal.aspx?id=6851>

Collision Avoidance Tips

Studies on mid-air collisions show most accidents occur below 8,000 feet AGL and near airports, NAVAIDS, and other high-density traffic areas. Here are some ideas to help reduce your mid-air collision potential:

1. Know areas of high-density traffic.
2. Fly as high as practical.
3. Obtain an IFR clearance or participate in radar advisory services, "Flight Following," whenever possible, and continue to practice **"see and avoid"** at all times.
4. Use landing lights at lower altitudes, especially when near airports.
5. Announce your intentions on Unicom and use standard traffic pattern procedures at uncontrolled, non-towered fields.
6. Use your transponder (upgrade it with an altitude reporting capability) to the maximum extent practical.
7. Use the appropriate hemispheric altitudes when VFR above 3,000 ft AGL.
8. Constantly scan for other aircraft. The most critical areas to scan are 60 degrees to the left and right of your central visual area and 10 degrees up and down from your flight altitude. Remember if you see one military aircraft, look for more. We often fly in formations.
9. Keep your windscreen and windows clean and clear. A bug on the windscreen can obstruct and disrupt your visual lookout.
10. CFIs need to continue visually clearing during instruction. It's easy to let instructing, especially during instrument flying, distract you from this duty.
11. If another aircraft appears to have no relative motion in your windscreen but is increasing in size, it is on a direct collision course with you.

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Moody AFB Aircraft

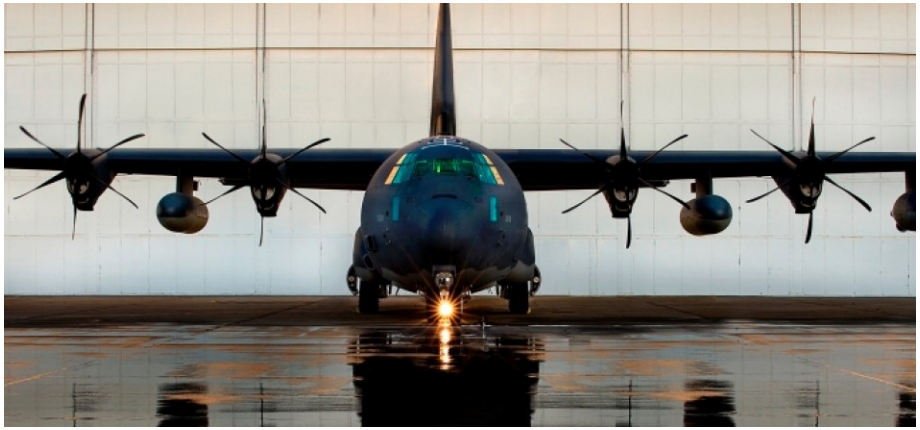
HH-60G Pave Hawk

- **Typical departure climb:** 500 - 1000 fpm at 80 - 120 KIAS
- **Normal cruise speed:** 120 KIAS, typically at altitudes at or below 500 ft AGL
- **Typical approach speed:** 90 - 120 KIAS
- **Traffic avoidance system:** See and avoid, 4 crewmembers scanning, often operates in formations of 2 aircraft.

Moody AFB Aircraft

HC-130J Combat King II

- **Typical departure climb:** 1500 fpm at 160 - 180 KIAS
- **Normal cruise speed:** 210 - 240 KIAS
- **Typical approach speed:** 120 - 140 KIAS
- **Traffic avoidance system:** Equipped with TCAS (uses Mode 3A, 3C and 3S transponder returns to provide crew with the bearing and altitude of other traffic and traffic/ resolution advisories), 2 crewmembers scanning, often conducts helicopter refueling operations.



Moody Air Force Base

Moody AFB is located 9 miles NE of Valdosta, GA. It has two parallel runways (18/36L & R). You may see aircraft performing instrument approaches to these runways up to 20 miles out on final at altitudes up to 7,000' MSL. Both VFR and IFR vectors are typically to the west of base, especially when R-3008 (Grand Bay Range) is active on the East side of base.

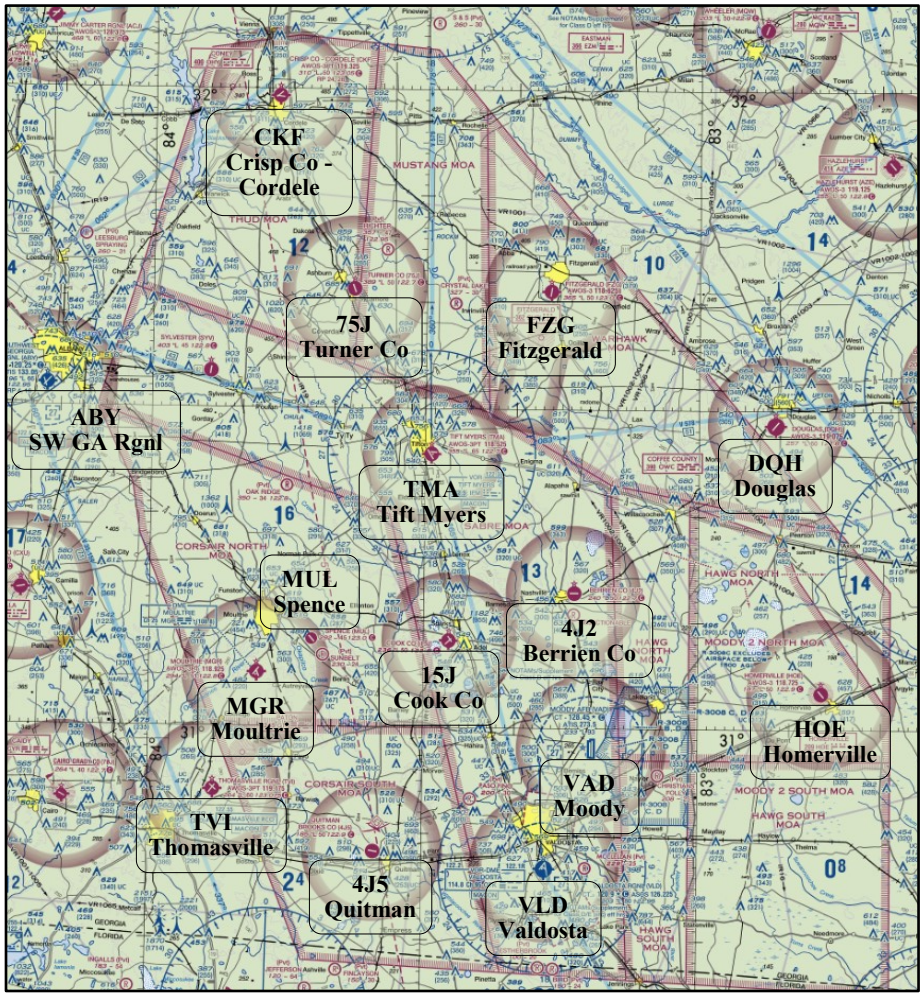
In addition to operations within the normal Class D airspace, A-10 and HC-130 aircraft also conduct tactical recovery procedures from as high as 10,000' over the base prior to landing. Aircraft flying in and around Moody AFB will use both UFH and VHF frequencies to communicate with outside agencies.

Due to the hazards associated with live weapons employment, flight through Grand Bay Range is prohibited for civilian aircraft. It is also highly advisable to avoid the Moody 2 North and South and overlying Hawg North and South Military Operating Areas (MOAs). At any given time, as many as a dozen aircraft may be using this airspace for tactical military training. Training occurs throughout the day and until approximately midnight every night, to include some weekends. Moody assigned aircraft are authorized to conduct training without lighted aircraft position lights within all Moody MOAs. NOTAMs will be issued 48 hours in advance of lights out training. Contact Valdosta Approach Control to obtain the status of the MOAs.

Generally, aircraft remaining west of Interstate 75 and below 8,000' MSL will be clear of the Moody AFB traffic pattern and MOAs.

We strongly recommend that anyone flying near Moody AFB to contact Valdosta Approach Control to obtain traffic advisories.

Airspace Near Moody AFB



MOAs and Associated ATCAAs			
Thud	8000’ M - FL 230	Moody 2 North	500’ A - 7999’ M
Mustang	8000’ M - FL 230	Moody 2 South	100’ A - 7999’ M
Warhawk	8000’ M - FL 230	Hawg North / South	8000’ M - FL 230
Corsair North / South	8000’ M - FL 230	R-3008 (Grand Bay) (See Pg 10)	SFC - FL 230
Sabre	8000’ M - FL 230		

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Moody AFB Aircraft

A-29 Super Tucano

- **Typical departure climb:** 1500 fpm at 150 KIAS
- **Normal cruise speed:** 200 KIAS
- **Typical approach speed:** 115 KIAS
- **Traffic avoidance system:** See and avoid, 1 or 2 crew-members scanning, often operates in formations of 2 aircraft.

Moody AFB Aircraft

A-10C Thunderbolt II

- **Typical departure climb:** 1500 fpm at 180 - 200 KIAS
- **Normal cruise speed:** up to 300 KIAS down to 100 ft AGL, 250 KIAS in the traffic pattern
- **Typical approach speed:** 130 - 160 KIAS
- **Traffic avoidance system:** See and avoid, 1 crewmember scanning, operates in formations of 2 - 4 aircraft.

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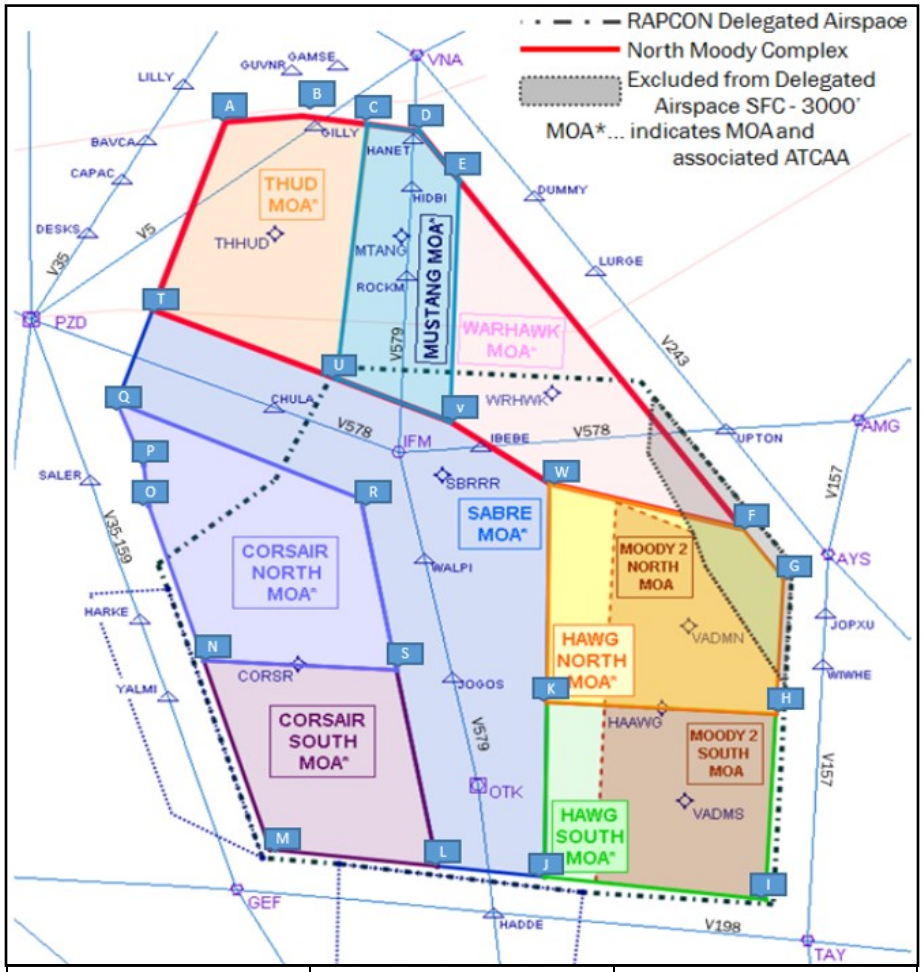
Airspace Near Moody AFB



A: N 32°03'46"; W 083°54'00"	B: N 32°05'01"; W 083°44'15"	C: N 32°04'19"; W 083°35'40"
D: N 32°03'46"; W 083°29'00"	E: N 31°58'19"; W 083°23'38"	F: N 31°18'41"; W 082°44'35"
G: N 31°13'01"; W 082°39'00"	H: N 30°57'01"; W 082°39'00"	I: N 30°57'01"; W 083°08'29"
J: N 30°36'21"; W 083°07'32"	K: N 30°57'01"; W 083°08'29"	L: N 30°37'00"; W 083°21'20"
M: N 30°38'01"; W 083°43'00"	N: N 31°00'00"; W 083°52'59"	O: N 31°18'01"; W 084°01'10"
P: N 31°22'46"; W 084°02'00"	Q: N 31°30'01"; W 084°06'00"	R: N 31°20'00"; W 083°33'50"
S: N 31°00'00"; W 083°28'01"	T: N 31°41'15"; W 084°02'00"	U: N 31°34'06"; W 083°37'55"
V: N 31°29'40"; W 083°23'00"	W: N 31°18'41"; W 082°44'35"	

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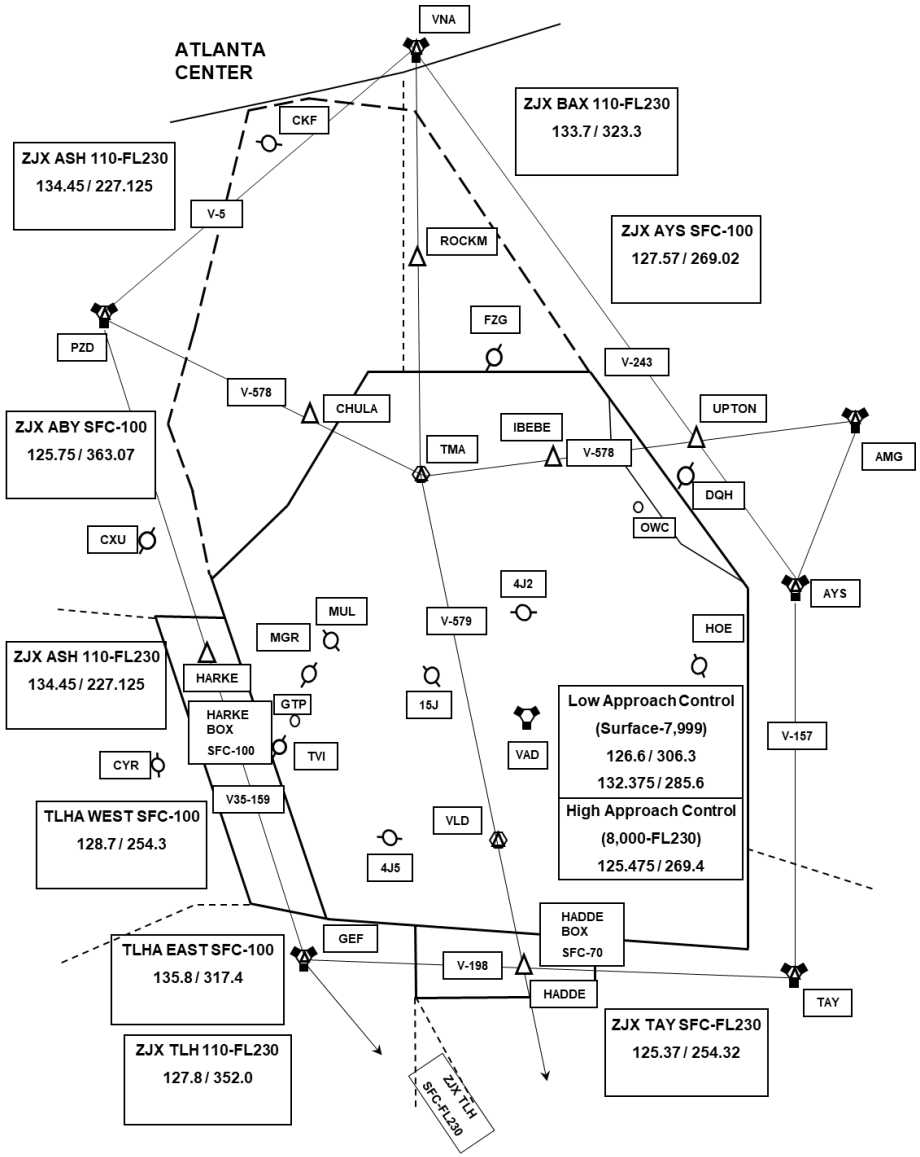
Approach / MOA Freqs



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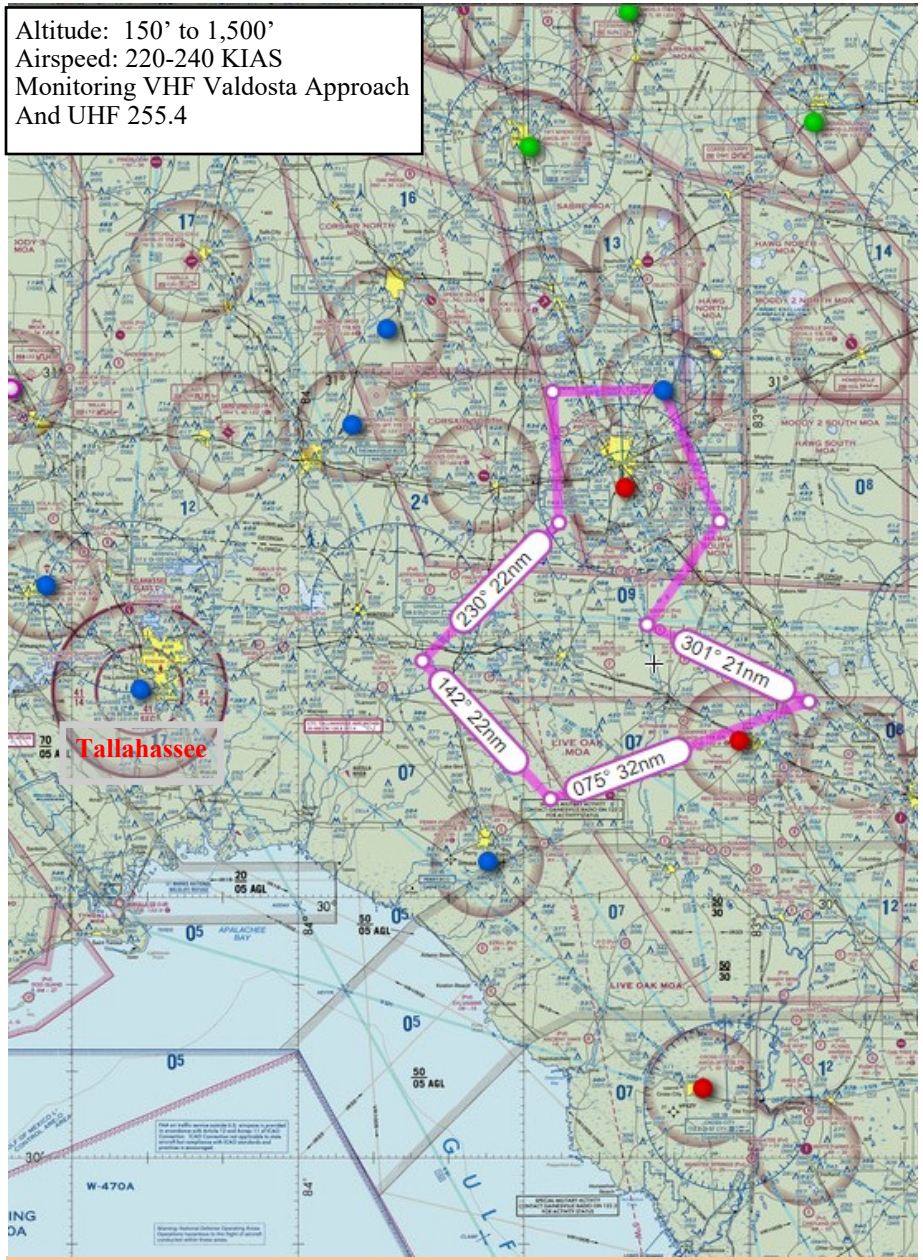
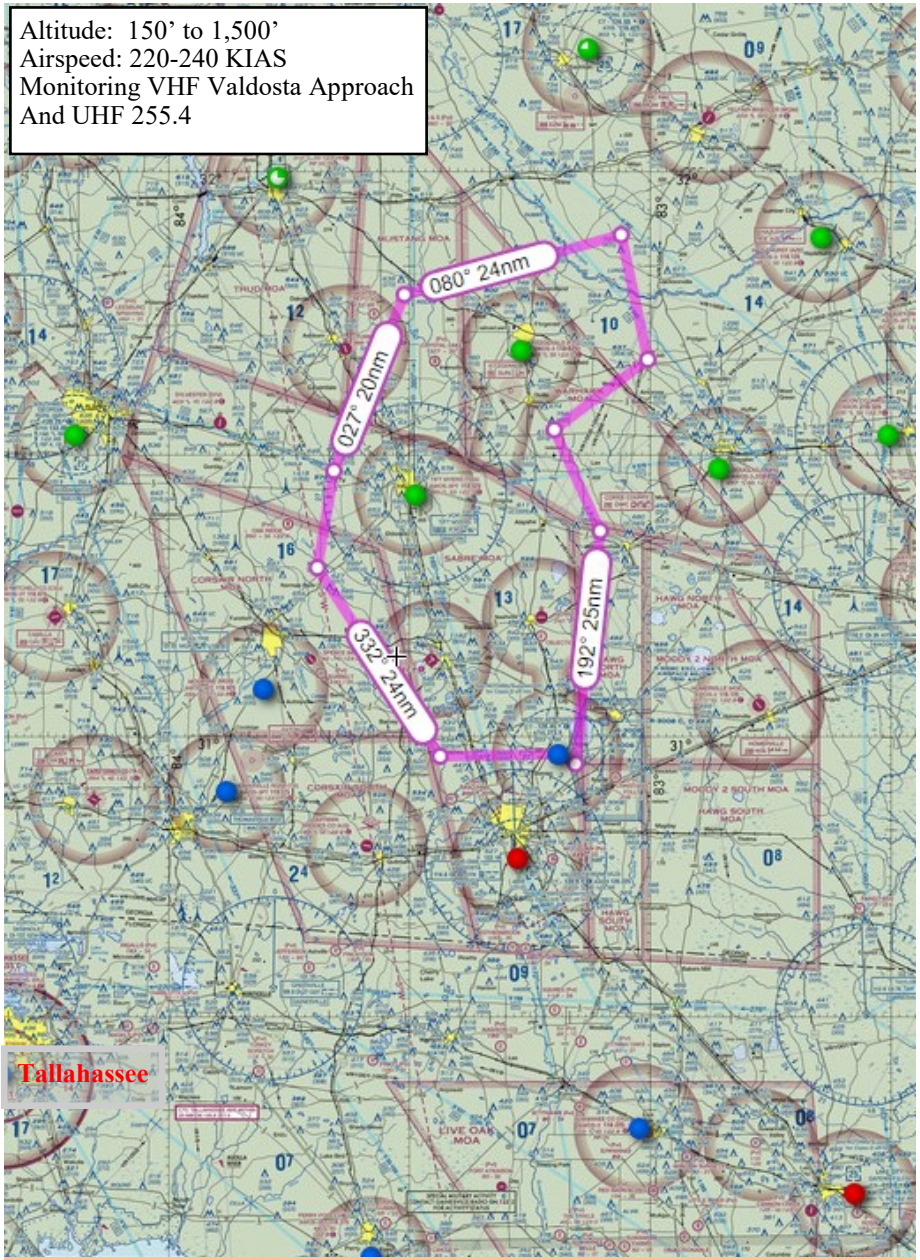
HC-130 Low-Level Routes (South)

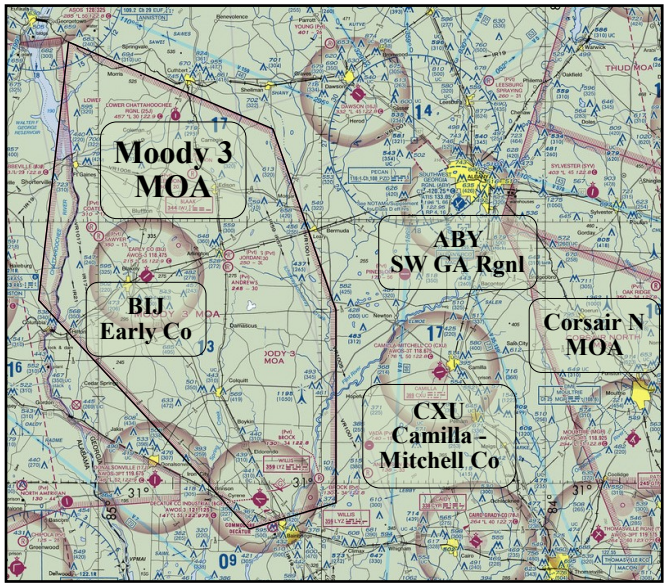
Altitude: 150’ to 1,500’
Airspeed: 220-240 KIAS
Monitoring VHF Valdosta Approach
And UHF 255.4



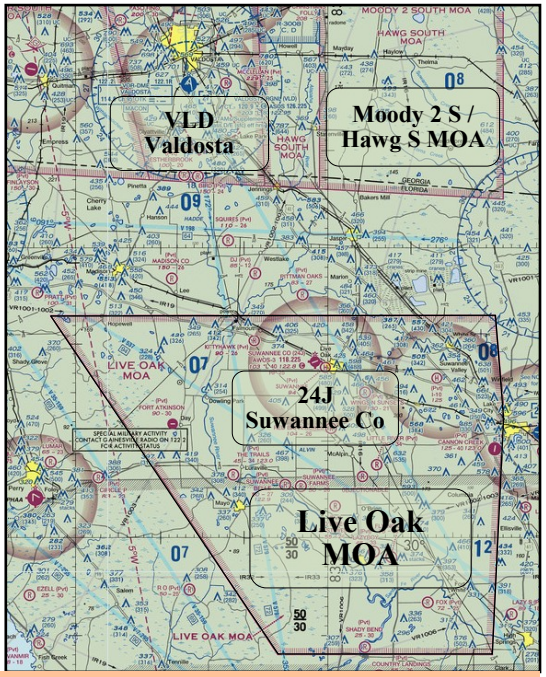
HC-130 Low-Level Routes (North)



Outlying Moody MOAs

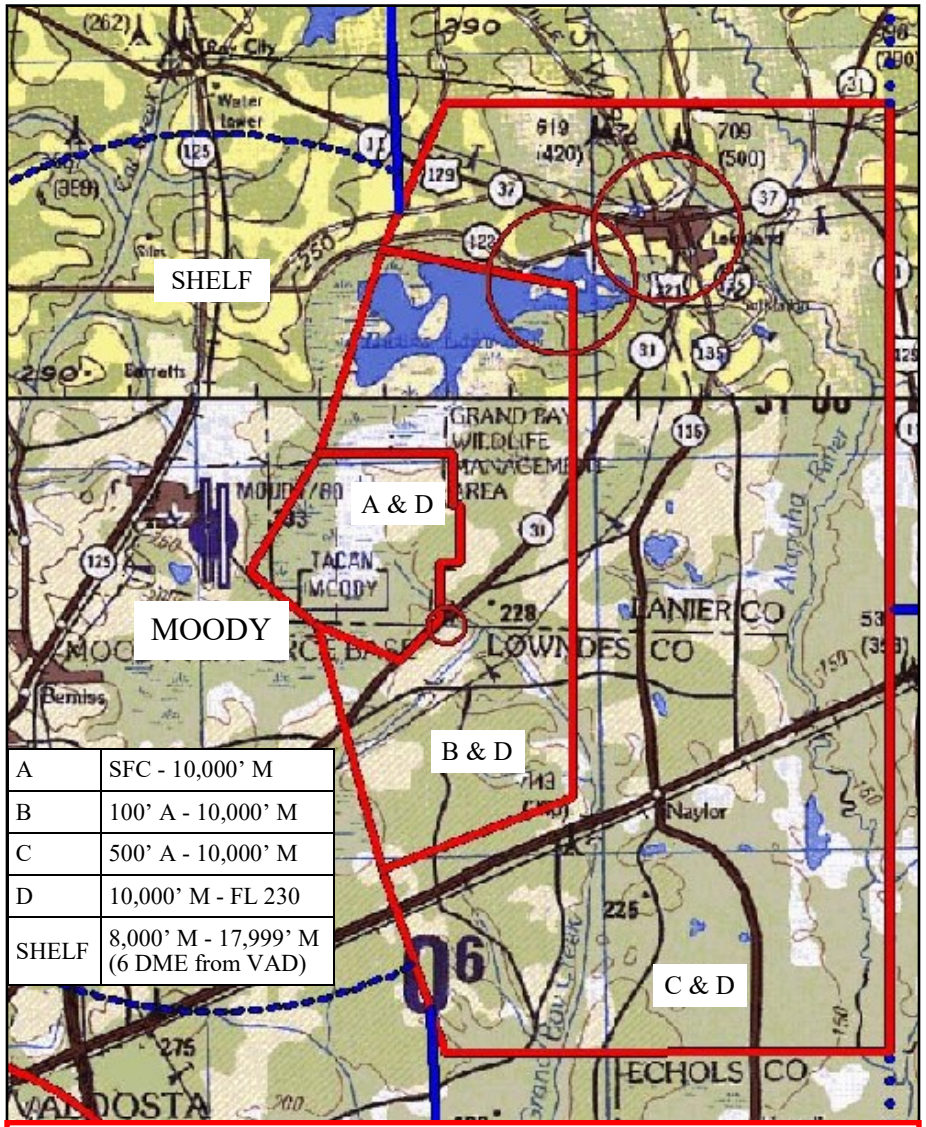


Moody 3 MOA
8000’ M - FL 230



Live Oak MOA
8000’ M - FL 230

R-3008, Grand Bay Range



A	SFC - 10,000' M
B	100' A - 10,000' M
C	500' A - 10,000' M
D	10,000' M - FL 230
SHELF	8,000' M - 17,999' M (6 DME from VAD)

WARNING: Due to the hazards associated with live weapons employment, flight through the Grand Bay bombing range is PROHIBITED when active. Generally, Grand Bay is continuously active from 0700 - 2200, Monday - Friday. Contact Valdosta Approach Control for the status of the range and clearance to transit.

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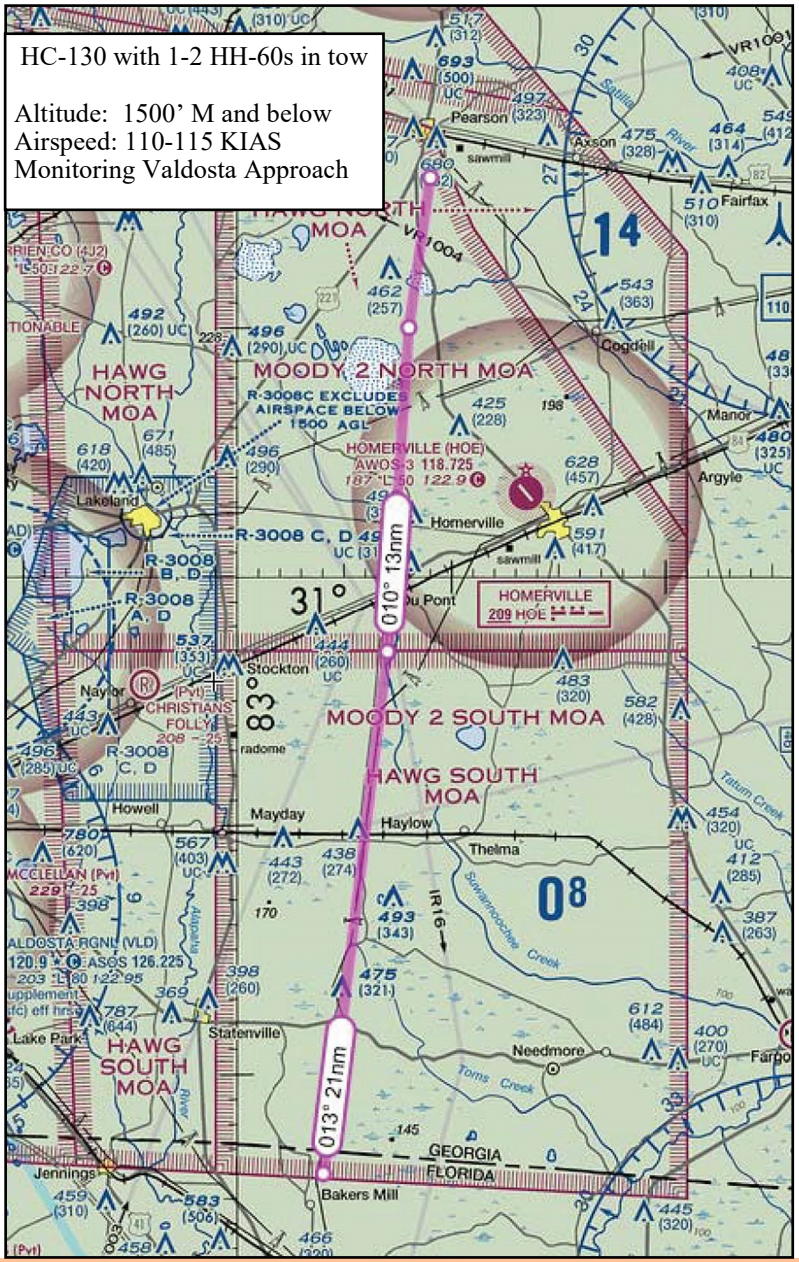
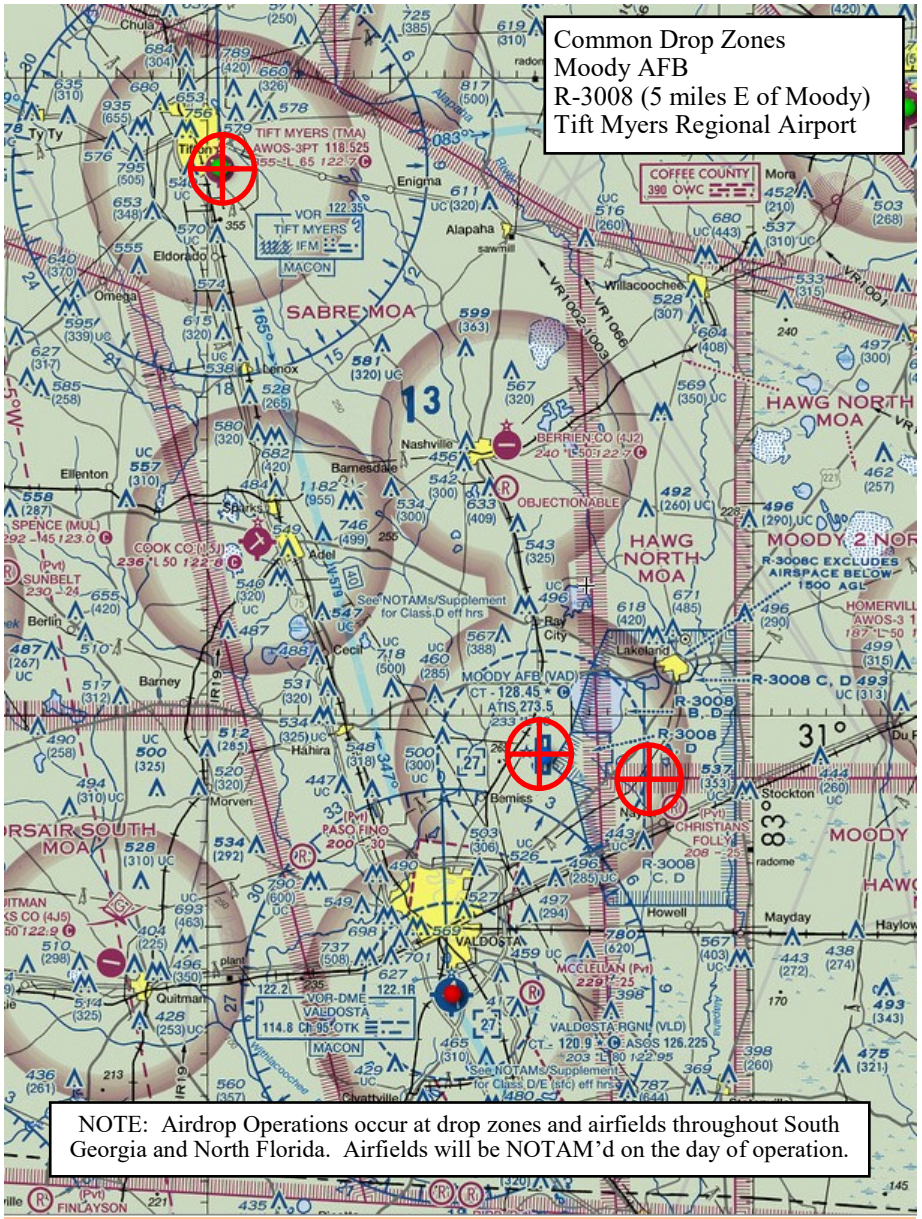
Helicopter Refueling Track

HC-130 with 1-2 HH-60s in tow

Altitude: 1500' M and below
Airspeed: 110-115 KIAS
Monitoring Valdosta Approach

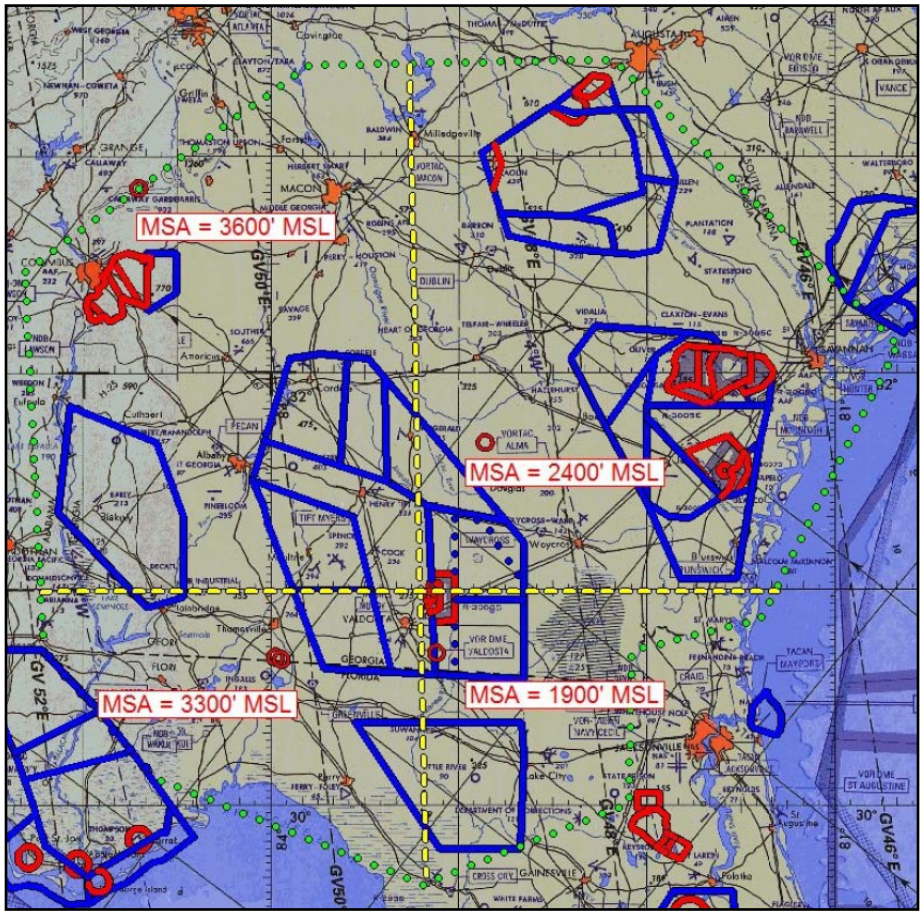


Parachute Operations



NOTE: Airdrop Operations occur at drop zones and airfields throughout South Georgia and North Florida. Airfields will be NOTAM'd on the day of operation.

LATN Area

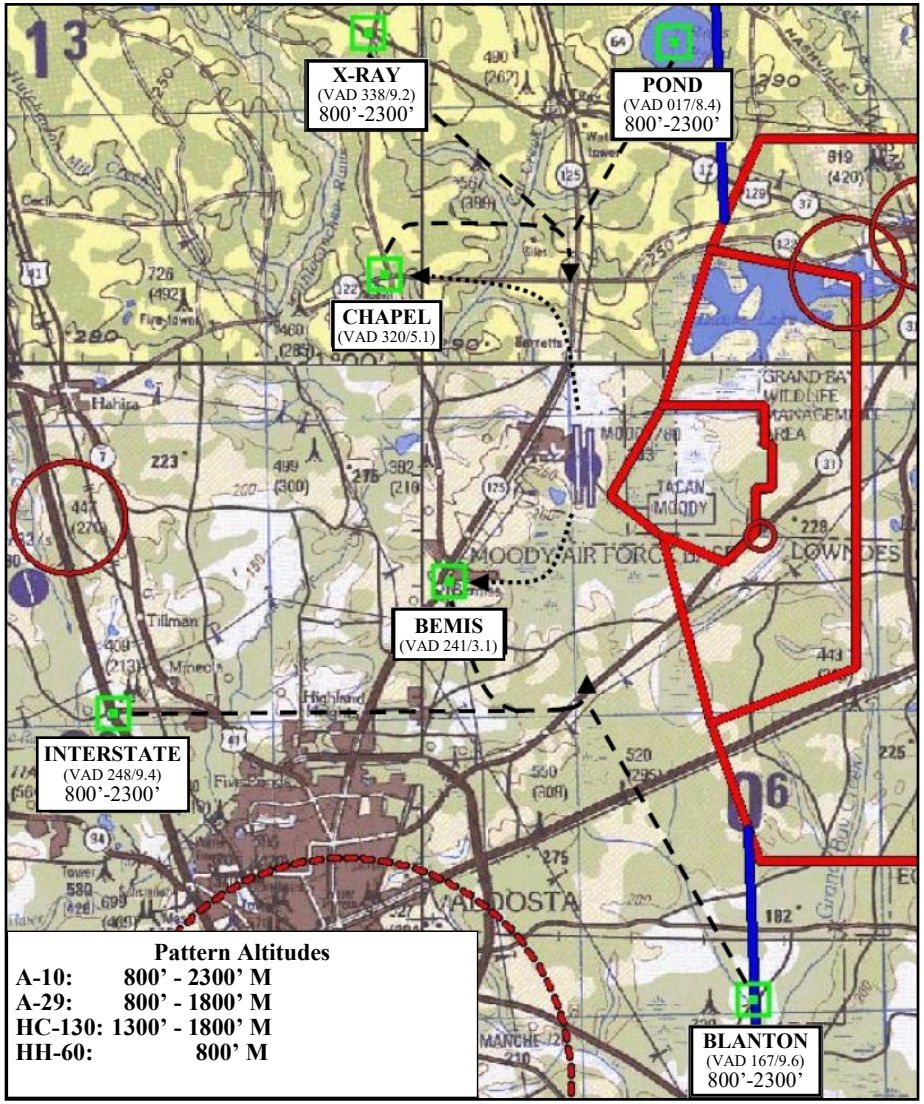


• • • • • • • • • • Low Altitude Tactical Navigation (LATN) Area Outline
Controlling obstacle for each quadrant indicated by red circle with associated MSA

Area authorized for low altitude training, is NOT special use airspace
Area extends from 100' AGL - 1500' AGL
Moody pilots are to:

- Be vigilant for other VFR traffic
- Maintain flight following to the max extent
- Fly 250 kts to the max extent
- Avoid flight through Class D/E airspace without proper clearance

VFR Reporting Points & Traffic Pattern



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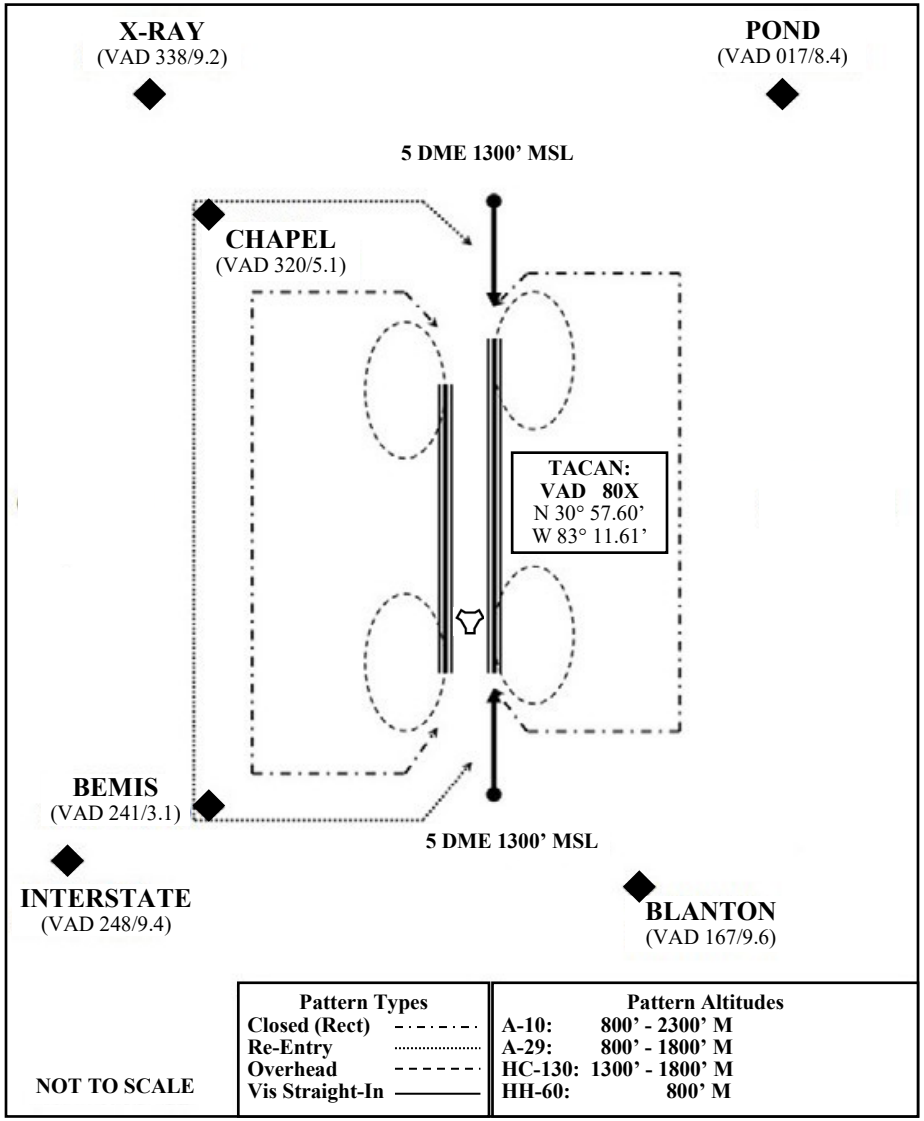
VFR Reporting Points & Traffic Pattern



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