2009 Moody Air Force Base

Joint Land Use Study

June 2009

Prepared by:

South GA RDC
327 W. Savannah Ave
Valdosta, GA 31603

Page left blank

TABLE OF CONTENTS

	PAGE
1. Introduction	**5**
2. Study Background	**7**
3. Georgia State Law	**11**
4. Moody Air Force Base Joint Land Use Study	**13**
4.1 Study Goals	**13**
4.2 Specific Objectives	**13**
5. Moody Air Force Base Joint Land Use Study Organization	**15**
5.1 Planning Area	**15**
5.2 Stakeholders	**15**
5.3 Public Participation	**17**
6. Moody Air Force Base Technical Information	**23**
6.1 Military Mission and History	**23**
6.2 Operational Impacts (technical data)	**25**
6.3 Air Force Noise Tools	**25**
6.4 Airspace Information	**26**
7. Joint Land Use Study Existing Conditions and Analysis	**29**
7.1 Population Projections	**29**
7.2 Infrastructure	**29**
7.3 Zoning	**37**
7.4 Telecommunications and Other Tall Structures	**45**
7.5 Noise Sensitive and Community Facilities	**49**
7.6 Natural Resources	**53**
7.7 Economic Impact of Moody Air Force Base on the Region	**61**
7.8 Survey Results of perceived Issues and Opportunities	**62**
7.9 Existing Local Community and Government Efforts	**64**
8.0 Study Recommendations	**89**
Glossary	**98**

Page left blank

1. Introduction

Moody Air Force Base (AFB) is located in South Georgia approximately fifteen miles north of Valdosta, Georgia, and is home to the Air Force's 23rd Wing. The 23rd Wing consists of seven groups and its mission is to organize, train and employ combat-ready security forces. These include para-rescue men, A/OA-10, HH-60, and HC-130 forces totaling 6,100 military and civilian personnel within three geographical separated units. The 23rd Wing executes worldwide close-air support, force protection, as well as combat search and rescue operations in support of humanitarian interests, United States national security and the global war on terrorism. Moody AFB is playing a vital role in the defense of the United States and protecting the base's long-term viability is a priority of the three counties surrounding the base.

Moody AFB is also of great importance to Lowndes County, Berrien County, and Lanier County. Without the presence of Moody AFB, the economy of this region would not be what it is today. Ensuring that Moody AFB always remains an asset to this area is a major motivation for this Joint Land Use Study (JLUS).

The South Georgia Regional Development Center (SGRDC) initiated a three county JLUS in mid 2008. Berrien, Lanier, and Lowndes counties made up the study area. The SGRDC applied for funding from the Office of Economic Adjustment (OEA). OEA awarded the funding in August of 2008. The SGRDC worked closely with Moody AFB Personnel and with OEA staff to create a scope of work that would encompass all the areas of concern and the fashion in which the study would be conducted.

At the second meeting of the JLUS Technical Committee, Moody AFB staff clarified that some of the flight training patterns with 100 – 500 foot flight ceilings extended to the east into Clinch and Echols Counties. The recommendation was made from the Technical Committee to the

Policy Committee to add portions of Clinch and Echols Counties to the study area in order to assist in preventing or eliminating natural or manufactured height obstructions. The Policy Committee approved the recommendation and Clinch and Echols counties were added to the study area by resolution of those counties.

2. Study Background

When first built, most major military installations were outside of urban centers. Development because of the positive economic effects of military base operations and the trend towards growth in these areas that were previously rural, have created new challenges in land use for these installations. Increases in population and economic activity have drawn people closer to and into the noise and accident potential zones and risks generated by military installations. Military bases experience pressure to modify operations procedures because of the encroachment by more or less compatible civilian uses. The pressure to modify can have the unfortunate effect of compromising the overall mission of the installation and threaten the viability of the base.

The Department of Defense (DOD) has two major programs designed to reduce conflicts between military and civilian land uses. In 1973, the Air Installation Compatible Use Zones (AICUZ) program was established. This program provides information about installations' activities and encourages local communities to adopt land use patterns that are more compatible with base operations.

In 1985, the DOD then initiated the Joint Land Use Study (JLUS) program to create a participatory, community-based framework for compatible and proactive land use planning around military airfields.

The JLUS is a basic, proactive planning process, which is designed to a) identify encroachment issues facing both the civilian community that military operations effect and the military installations themselves, and b) to recommend strategies and plans to address the issues in the form of local comprehensive and general planning programs.

The JLUS process encourages residents, local decision makers and military representatives to study compatibility issues in an open setting, offering a balance of both military and civilian interests. The resulting recommendations are intended to guide the local governments in the implementation of appropriate land use controls around military bases.

The JLUS program does not prohibit growth. Rather, it helps to foster smart growth that will be balanced and sustainable for both the surrounding communities and the military installations. This type of growth will help to protect one of the region's biggest economic influences. The JLUS is an advisory document that will identify practices and tools to ensure compatible and successful growth around Moody.

The Moody AFB JLUS study area has experienced this trend of increasing encroachment. Growth in the area, particularly in the areas to the north and east of the base, in Berrien and Lanier Counties, has been rapid and largely residential. Growth around the base in northeastern Lowndes County consists of a mix of commercial and residential and has recently become more managed since the Lowndes County created and implemented its MAZs (Moody Activity Zone).

This report identifies incompatibilities in terms of land use and growth trends for the five county region and includes recommended policies and actions which Moody AFB and surrounding local governments should consider adopting as useful tools to manage the growth of their communities and Moody AFB in a sound and sustainable manner, ensuring the viability of all.

The existence of Moody AFB is a critical part of our nation's defense. While the base has been an integral part of the local community for many years and expects to continue for many years to come, the importance of working with the local community to sustain operations and prevent operational impact cannot be overstated. The various missions supported by Moody AFB require an abundance of training capabilities and airspace. The close proximity of such training assests to Moody is not matched by many military installations. That directly converts to efficient operations, tremendous cost savings to taxpayers, and enhances the value of Moody AFB as a critical defense asset.

Study Area Aerial Map

blank

3. Georgia State Law

The following is current Georgia State Law regulating land development around military bases. These regulations mainly address zoning and development questions adjacent to military bases and runways, but do not address compatibility issues beyond 3,000 feet. In order to encourage consistent regulations throughout the State, broader state legislation assisting local communities and military bases to address compatibility issues with regard to land use needs to be pursued.

GEORGIA CODE
Copyright 2008 by The State of Georgia
All rights reserved.

*** Current through the 2008 Regular Session ***

TITLE 36. LOCAL GOVERNMENT
PROVISIONS APPLICABLE TO COUNTIES AND MUNICIPAL CORPORATIONS
CHAPTER 66. ZONING PROCEDURES

O.C.G.A. § 36-66-6 (2008)

(a) In any local government which has established a planning department or other similar agency charged with the duty of reviewing zoning proposals, such planning department or other agency shall with respect to each proposed zoning decision involving land that is adjacent to or within 3,000 feet of any military base or military installation or within the 3,000 foot Clear Zone and Accident Prevention Zones Numbers I and II as prescribed in the definition of an Air Installation Compatible Use Zone of a military airport investigate and make a recommendation with respect to each of the matters enumerated in subsection (b) of this Code section, in addition to any other duties with which the planning department or agency is charged by the local government. The planning department or other agency shall request from the commander of such military base, military installation, or military airport a written recommendation and supporting facts relating to the use of the land being considered in the proposed zoning decision at least 30 days prior to the hearing required by subsection (a) of Code Section 36-66-4. If the base commander does not submit a response to such request by the date of the public hearing, there shall be a presumption that the proposed zoning decision will not have any adverse effect relative to the matters specified in subsection (b) of this Code section. Any such information provided shall become apart of the public record.

(b) The matters with which the planning department or agency shall be required to make such investigation and recommendation shall be:

(1) Whether the zoning proposal will permit a use that is suitable in view of the use of adjacent or nearby property within 3,000 feet of a military base, military installation, or military airport;

(2) Whether the zoning proposal will adversely affect the existing use or usability of nearby property within 3,000 feet of a military base, military installation, or military airport;

(3) Whether the property to be affected by the zoning proposal has a reasonable economic use as currently zoned;

(4) Whether the zoning proposal will result in a use which will or could cause a safety concern with respect to excessive or burdensome use of existing streets, transportation facilities, utilities, or schools due to the use of nearby property as a military base, military installation, or military airport;

(5) If the local government has an adopted land use plan, whether the zoning proposal is in conformity with the policy and intent of the landuse plan; and

(6) Whether there are other existing or changing conditions affecting the use of the nearby property as a military base, military installation, or military airport which give supporting grounds for either approval or disapproval of the zoning proposal.

HISTORY: Code 1981, § 36-66-6, enacted by Ga. L. 2003, p. 581, § 1.

4. Moody Air Force Base Joint Land Use Study

4.1 Study Goal

The Moody Air Force Base (AFB) Joint Land Use Study (JLUS) is a collaboration of the public, private, and military sectors working together to achieve an overall vision of

- *minimizing potential land use conflicts,*
- *accommodate growth,*
- *sustain the regional economy, and*
- *Ensure the continued viability and growth of Moody AFB.*

The goal of this study is not be to stop growth, but to ensure that land uses in the area surrounding Moody AFB and Grand Bay Range are compatible with the mission and military activities on the Base. All recommendations in this study will have to balance local land use requirements and needs, the local economy, and private property rights.

4.2 Study Objectives:

The overall goal of the study as stated above was divided into measurable objectives, which would then also serve as benchmarks for evaluating progress. The main study objectives of this study are:

- Gain an understanding of the economic, social, and physical relationships between Moody AFB and the study area;
- Assess any future plans or changes in military missions and their impacts on the study area;
- Identify and analyze land uses around Moody AFB and identify any land use or other potential conflicts;
- Promote land use compatibility and implementation strategies to reduce encroachment; and
- Ensure that the implementation strategies from this JLUS will be carried out and implemented to promote sustainable growth for both the communities and the Air Force Base.

Page left blank

5. Moody Air Force Base Joint Land Use Study Organization

5.1 Planning Area

Moody AFB is located ten miles north-east of Valdosta, and six miles south-west of Lakeland, Georgia in Lowndes County and Lanier County, with the majority of the base, including the entire main base, located in Lowndes County. Moody AFB owns and occupies 11,402 acres of federal land. The AFB facilities consist of the main base (5,039 acres), Grand Bay Range (5,874 acres), and the Grassy Pond Recreational Annex (489 acres). The main base (located off of Bemiss road, State Route 125) includes 1,990 improved acres, 3,018 undeveloped forested acres, and Mission Lake with a surface area of 30 acres. Easements and right-of-way make up an additional approximate 403 acres.

5.2 Stakeholders

This document is the result of a highly dedicated and collaborative planning effort by Air Force leaders, stakeholders, residents, and local officials. These individuals all shared the belief that the vitality of the target area and the success of Moody AFB operations depends highly on a close partnership between the Military and the surrounding communities. A Policy Committee and a Technical Committee were formed to make recommendations and provide support to staff in making knowledgable decisions. The Policy Committee included the chief elected officials of the local governments in the JLUS study area. Each county and municipality within the study area provided frequent input and worked directly with staff throughout the planning process. A citizens advisory committee was also established consisting of residents within the study area who have an interest in planning for the future.

Policy Committee:

The Policy Committee was responsible for the overall direction of the JLUS, preparation and approval of the study design, approval of draft and final written reports, approval of policy recommendations, and monitoring implementation of the adopted policites.

- Parker Greene, Chair, Executive Director, Moody Support Committee
- John Leonard, Executive Director, SGRDC
- Garry Gontz, Department Of Defense
- Ashley Paulk, Lowndes County Commssion Chair
- John Fretti, Mayor City of Valdosta
- Wayne Bullard, Mayor City of Hahira
- Robert Griner, Berrien County Commission Chair
- Carl Camon, Mayor Ray City
- Travis Harper, Mayor City of Nashville

- Alex Lee, Lanier County Comission Chair
- Bill Darsey, Mayor City of Lakeland
- Wayne Clifton, Clinch County Commission Chair
- Leon Zeigler, Echols County Commission Chair
- Col. Kenneth E. Todorov, Commander Moody AFB
- Col. Steven K. Lambert, 23rd MSG/CC
- Lt. Col Greg A. Williams, 23 CES/CC
- Mr. John Eunice, III, 23 CES/CD
- Mr. William S. Bryan, 23 CES/CEC
- ***** Mr. John Leigh contributed to the efforts of this study as the OEA Representative for the Department of Defense. Mr. Leigh passed away during the process of the study.

Technical Committee:

The Technical Committee included representatives from city and county management and planning staffs, Moody Air Force Base planners, and the SGRDC. The Committee is responsible for identifying and studying technical issues related to develop recommendations to the Policy Committee.

- Albert Studstill, Lanier County Administrator
- Amanda Thacker, Berrien County Zoning Administrator
- Brad Folsom, Chair, Attorney at Law
- Julia Shewchuk, SGRDC Planning Director
- Marty LeFiles, SGRDC Asst. Executive Director
- Sherry Davidson, SGRDC Community and Economic Dev. Director
- Amanda Peacock, SGRDC Jr. Planner
- Zakkiyah Osuigwe, SGRDC Comprehensive Planner
- Jason Davenport, Lowndes County Planner
- Gary Gontz, Department of Defense
- Larry Hanson, Valdosta City Manager
- Joe Pritchard, Lowndes County Manager
- Mike Martin, Valdosta/Lowndes County Inspections Director
- Diane Westberry, City of Lakeland
- Anne-Marie Wolff, Planning and Zoning Administrator, Valdosta
- Dr. Patti Clark, Executive Director Valdosta/Lowndes Airport Authority
- Jonathan Sumner, Hahira City Manager
- Elaine Shiver, Berrien County Administrator
- Mary Alice McGee, Berrien County Economic Developer
- Mady Luke, Nashville City Administrator

- Henry Yawn, City of Nashville Zoning Administrator
- Brenda Stalvey, Echols County Clerk
- Jesse Booth, Clinch County EMA
- Robert Jefferson, 23 CES/CECP Moody AFB
- Perry Tillman, 23 OSS/OSKR Moody AFB
- Thomas VanNortwick, 347 OSS/OSKR Moody AFB

The Citizen's Advisory Committee included residents from the surrounding communities who provided input from the citizen's perspective related to the issues and recommendations.

- Matt Martin, Citizen Lowndes County
- Ruth Mae, Citizen Lanier County
- Mike Hand, Citizen Berrien County
- Collin Myerson, Citizen Clinch County
- Marqueen Padgett, Citizen Echols County

5.3 Public Participation

Public Partcipation from citizens, staff, and Moody AFB personnel has been a major part of this JLUS study. Local government staff, planning officials, zoning administrators, elected officials and military personnel as well as concerned citizens were interviewed to gain insight on the perceived impact that Moody Air Force Base has on individuals in the region. Many meetings were held throughout the planning process which included: public hearings, Technical Committee member meetings, Policy Committee member meetings, and Citizens Advisory Committee meetings.

Meetings were held as follows:

August 27, 2008 – Kick-off meeting of Policy and Technical Committees, Moody AFB
September 18, 2008 - First Public Meeting, Lowndes County Commission Chambers
September 26, 2008 – Technical Committee meeting, RDC
October 30, 2008 – Technical Committee meeting, RDC
November 20, 2008 – Policy Committee meeting, RDC
January 15, 2009—Technical Committee meeting, RDC

February 9, 2009—Technical Committee meeting, RDC
February 24, 2009 – Technical Committee meeting, RDC
March 9, 2009-- Technical Committee Meeting, RDC
March 11, 2009 – Citizen Committee meeting, RDC
April 6, 2009 – Policy Committee meeting, RDC
April 23, 2009 – Public Meeting, Berrien County GA
April 30, 2009 – Public Meeting, Lanier County GA
May 13, 2009 – Joint CAC/TAC Meeting, RDC
May 19, 2009 – Policy Committee Meeting, RDC

Survey:

SGRDC staff developed a citizen/resident survey to guide the interviews. Many strong ideas and observations resulted from these interviews and have helped guide the study. A copy of the survey is included on the following page.

Website:

SGRDC staff developed a JLUS website and posted it on the SGRDC server under the following address www.sgrdc.com/JLUS. The site is updated regularly. Visitors could access PowerPoint presentations used at meetings, a copy of the survey, view membership of both Technical and Policy Committees, follow the scope of work, and view maps of the study area as well as contact staff to express comments or ask questions.

Local Newspapers:

Public Hearing dates and meetings were advertised in the local newspapers including the Berrien Press, Valdosta Daily Times, and the Lanier County News. These newspapers also published several articles on topics related to the JLUS. A selection of those articles is included in the appendix.

Circle the number that best fits your judgment.	Limited		Moderate		Significant
1. Does Moody Air Force Base have an **impact** on your quality of life?	1	2	3	4	5
2. Does Moody Air Force Base have an **impact** on the surrounding community?	1	2	3	4	5
3. Does Moody Air Force Base have an **impact** on the regional economy?	1	2	3	4	5
4. Does Moody Air Force Base have an **impact** on the local economy?	1	2	3	4	5
5. Do operations of Moody Air Force Base have an **impact** on your property value?					
6. Are you **affected** by noise associated with Moody Air Force Base?	1	2	3	4	5
7. Are you **aware** of accident potential zones surrounding Moody Air Force Base?	1	2	3	4	5
8. Do you have safety **concerns** regarding flight operations at Moody Air Force Base?	1	2	3	4	5
9. Do you have any **concerns** about Moody Air Force Base Closing?	1	2	3	4	5
10. Is the military presence within the Region a valuable **asset** to your community?	1	2	3	4	5
11. Do you **benefit** financially from Moody Air Force Base?	1	2	3	4	5
13. Are you **aware** that special land use regulations exist in some areas surrounding Moody Air Force Base?	1	2	3	4	5
14. Do you have any **concerns** regarding development near Moody Air Force Base?	1	2	3	4	5
15. Would Land Use regulations be **effective** in reducing land use conflicts between Air Base Operations and the surrounding communities?	1	2	3	4	5
16. **What** are the three main **issues** with regard to Moody Air Force Base and surrounding communities that this JLUS should address?					
17. **Where** do you see current and future land use issues?					
18. **What type** of development (commercial, residential, industrial, open space) do you see occurring around Moody Air Force Base?					

Page left blank

Study Area Map

blank

6. Moody AFB Technical Information

6.1 Military Mission and History

History:

Moody AFB was named in memory of Major Georgia Putnam Moody, an early Air Force pioneer killed in May 1941 while serving with the Beech Aircraft Company in Wichita, Kansas. At the time of his death, the Major was working on the inspection board for AT-10 transitional trainers, which were later sent to Moody.

The base had its beginning in 1940 when a group of concerned Valdosta and Lowndes County citizens began searching for a way to assist the expanding defense program. The citizens rallied interest in the War Department for a 9,300-acre tract known as the Lakeland Flatwoods Project, northeast of Valdosta. On May 14, 1941, the War Department was granted exclusive use of the land by the Agriculture Department.

On February 19, 1942, the Moody Field Advanced Pilot Training School began training 50 Army Air Corps cadets in the Beech AT-10. Following World War II, Moody was placed on inactive status in November 1947, but was reactivated in May 1951 when the Korean conflict created a need for more Air Force pilots.

The base's primary mission in its early years was to meet the requirements of the Air Force Pilot Instrument School and Instrument Flying School.

In September 1975, the 347th Tactical Fighter Wing, belonging to Tactical Air Command, relocated from Thailand to Moody.

In December 1975, the 347th TFW formally replaced the 38th Flying Training wing, flying the F-4E Phantom II.

Moody AFB won the Commander-in-Chief's Installation Excellence Award for 1991, and the 1994 Verne Orr Award, which is presented by the Air Force Association to the unit that most effectively uses human resources to accomplish its mission. In June 1997, the wing was awarded the Air Force Outstanding Unit Award for the eighth time in its history.

On July 1, 1994, the Air Force converted the 347th Fighter Wing to the 347th Wing, a force projection, air land composite wing.

On May 8, 2001, the 347th Wing converted again to the 347th Rescue Wing, becoming the Air Force's only active-duty combat search and rescue wing.

On October 1, 2003, the 347th RQW was realigned from ACC to AFSOC in an effort to bring all CSAR assets under the same command.

On April 3, 2006, the 347th RQW was realigned from AFSOC to ACC to ensure CSAR assets are directly linked to the combat air forces and the personnel they support.

On September 29, 2006, the 347th RQW was re-designated to the 23rd wing. Along with accepting the 23rd Wing designation, the base will accept the responsibility of carrying on the historic Flying Tiger's heritage.

Mission:

The 23rd Wing organizes, trains and employs combat-ready A-10, HC-130, HH-60, pararescuemen and force protection assets and personnel consisting of approximately 5,500 military and civilian personnel including geographically separated units in Nevada, Florida, Arizona and North Carolina. The wing executes worldwide close air support, force protection, and combat search and rescue operations in support of humanitarian interests, United States national security and the global war on terrorism.

The wing's aircraft include the A-10, HH-60G and HC-130P. The A-10 Thunderbolt II is the first Air Force aircraft specially designed for close air support of ground forces. The twin-engine jet aircraft can be used against all ground targets, including tanks and other armored vehicles. The HH-60G Pave Hawk helicopter provides a combat search and rescue platform for the USAF through its ability to operate in a vast array of rescue scenarios. The HC-130P flies low-level missions into hostile territory to affect rescues and to provide air refueling for our rescue helicopters.

Units

The 23rd Wing is the host unit at Moody AFB near Valdosta, Ga. The wing is comprised of six groups; five located at Moody AFB, Ga., and one at Davis-Monthan Air Force Base, Ariz.

The 23rd Mission Support and Medical Groups consist of 10 squadrons at Moody AFB, GA. The 23rd Maintenance Group consists of seven maintenance squadrons located at all three geographic locations.

The 23rd Fighter Group consists of two A-10 squadrons and an operational support squadron. The 23rd Fighter Group became part of the 23rd Wing at Moody AFB, Ga., in a ceremony on August 16, 2003.

The 347th Rescue Group is based at Moody AFB and consists of one HH-60G rescue squadron, one HC-130P rescue squadron, one pararescue squadron and one operational support squadron.

The 563rd Rescue Group is based at Davis-Monthan, Arizona, and an Operating Location at Nellis AFB, Nevada. The group consists of one HC-130 squadron, two HH-60 squadrons, two pararescue squadrons, and one operational support squadron.

6.2 Operational Impacts (technical data)

Military installations have all different types of missions and activities that create many different types of operations impacts. From noise to smoke to vibration and dust, the safety of the people around the installations and ensuring missions are successful is the main goal of the Military. Moody Air Force Base has always strived to be a good neighbor to people in the communities surrounding the base and protecting people is one way they maintain this relationship. Noise is a big concern with some of the operations and missions at Moody. Many airplanes and helicopters are extremely loud. The Air Force uses Air Installation Compatible Use Zones (AICUZ) as a planning tool for noise. Dust, smoke, and lighting are other impacts that accompany many missions. However, with the mission of Moody, noise impact is one of the bigger issues that should be addressed through compatible land use planning.

6.3 Air Force Noise Tools

APZs

The Department of Defense (DOD) has delineated Accident Potential Zones (APZs) near airfield runways where, if a problem developed, an aircraft mishap would likely occur. Studies show that most accidents occur on or near the runway or along the extended centerline of the runway. The military recommends that land uses within APZs be minimal or low density to ensure maximum protection of public health and property. The development of APZs gives local planners a tool to promote development compatible with airfield operations. There are three types of APZs. The Clear Zone (CZ) has the greatest accident potential and is an area where no structures except navigational aids (NAVAIDS) and airfield lighting are allowed. Various industrial, manufacturing, and agricultural land uses are acceptable within APZ1. The accident potential in APZ2 is low enough that low-density housing and commercial uses are compatible with flight operations. The Lowndes County MAZ does a good job of applying these accident potential zones and using them as clear planning tools. This study will apply the same tools as recommendations for creating MAZ zoning districts in other areas outside of Lowndes County.

LDn

Ldn (DNL) is a noise measure created by the Department of Defense, used to describe average aircraft noise levels over a 24-hour period, typically an average day over the course of a year. Average Day/Night Sound Level. DNL is an abbreviation for the name of the measurement and

Ldn refers to the number and type of decibels measured. This measure penalizes aircraft operations that occur between the hours of 10 p.m. and 7 a.m. by 10 decibels to account for increased annoyance when ambient noise levels are lower and people are trying to sleep. Ldn may be determined for individual locations or expressed in noise contours. This is currently the accepted measure for aircraft noise analysis.

AICUZ

The purpose of the AICUZ (Air Installation Compatible Use Zone) Program is to protect the health, safety and welfare from noise and hazards through compatible development. The program was instituted by the Department of Defense to address the problem of land development surrounding military air installations. It provides for the development and implementation of a plan to determine those land areas for which development needs to be significantly influenced by the operation of the airfield. These land areas are then designated as the AICUZ for that installation.

6.4 Airspace Information

Military Operations Area (MOA)

Airspace designated for non-hazardous military activity within the U.S. territorial airspace. Activities conducted in MOAs include, but are not limited to aerobatics, air combat tactics, formation training, and simulated air to ground deliveries. This airspace serves to segregate non-participating Instrument Flight Rules (IFR) aircraft from the activity and inform Visual Flight Rules (VFR) aircraft where these activities are being conducted.

Moody aircraft also use Moody MOA 2 North and 2 South for Search and Rescue (SAR) training. Moody based HC-130s and HH-60s also use this MOA for VFR Helicopter Air Refueling.

Moody MOA 2 North floor 500’ Above Ground Level (AGL)

Moody MOA 2 South floor 100’ AGL

Restricted Area (RA)

Designated areas established by appropriate authority where aircraft flight, while not wholly prohibited, is subject to restriction. Restricted Areas are designated rulemaking airspace, where restrictions are placed on all non-participating aircraft. This airspace is used to contain military activities that are hazardous to non-participating aircraft and lies within the territorial airspace of the U.S. The term “hazardous” implies, but is not limited to, live firing or release of weapons and /or aircraft testing.

Moody AFB has four RAs associated with Grand Bay range:

Restricted Area:

R3008A surface to 10,000'. This is the impact area where targets are located.

R3008B 100' AGL to 10,000'

R3008C 500' AGL to 10,000' (excluding that airspace below 1,500' AGL within one nautical mile of Lakeland GA.)

R3008D 10,000' up to but not including Flight Level (FL) 230.
All bombing and strafing events occur within these areas.

7. Joint Land Use Study Existing Conditions & Analysis

Land uses in the area surrounding Moody AFB primarily consist of undeveloped wetland areas to the East and South, and rural residential, agriculture and wetlands towards the West and the North. In the immediate vicinity of the base, land uses consist of sparsely populated open space and agricultural lands with several residential subdivisions south-west of the base and areas of commercial development along Bemiss Road (State Route 125).

7.1 Population Projections

The 2009 Georgia County Guide shows the following population data for the study area:

Population Data Estimates & Projections		
	2007	**2010**
Berrien County	16,722	16,991
Clinch County	6,992	7,050
Echols County	4,093	4,405
Lanier County	7,947	8,211
Lowndes County	101,790	105,575

Source: 2009 Georgia County Guide

As can be seen above, population growth is not expected to be large over the next year or two as a result of the current economic situation. This is the perfect time to enact policies for directing future incompatible growth away from Moody AFB towards more suitable areas and minimize problems before they arise.

Analysis

7.2 Infrastructure

Roads

The study area is served by several major north-south and east-west state and county highways. The location, accessibility and proximity of the study area to these roadways is important in that development tends to migrate along roadway corridors and the telecommunication industry also prefers to locate along the same corridors with consequences to compatibility of uses.

Interstate 75 travels north-south along the western boundary of the study area. It serves as a major access point into Lowndes County and the City of Valdosta for residential and commercial

traffic, however, in itself does not affect Moody AFB. The proximity of I-75 needs to be utilized to attract commercial and industrial uses for location around the Base in order to increase compatibility of uses.

US 84 traverses the study area from the south-west to the north-east. Several smaller communities such as Naylor are located along US 84 and eight (8) telecommunications towers have been constructed along this road presenting obstacles and incompatibilities to flight maneuvers within the area.

US Highways 129 and 221 traverse through the center of the study area connecting the Cities of Valdosta and Lakeland and traveling north from there.

US 441 also runs north-south through the eastern border of the study area serving as a rural connector from North Florida into Georgia. This road is also a major attractor for towers.

Other north-south roads include:

- State Road (SR) 125 on the eastern third of the study area within the urbanized area of Valdosta connecting to Ray City and Nashville in Berrien County. SR 125 within the study area alone is home to nine communication towers.
- SR 135 in the center of the study area connecting Lowndes County through Naylor to Lakeland.
- SR 187, which travels east from US 129 and then north to US 84 providing a connection to Homerville.

Other east-west roads include:

- SR 376 and 94 in the southern portion of the study area, which provide a connection from the I-75 area through Echols County eastward.
- SR 37 which provides a connection from Lakeland to US 84
- SR 122, which runs central through the study area and connects the I-75 area to Lakeland and travels on in north-easterly direction.
- SR 168, which lies in the northern third of the study area and connects Nashville in Berrien County with SR 37 and ultimately US 84.

The areas to the north and east of Moody AFB are primarily rural in nature. That feature, combined with the network of roads and other terrain features such as forest growth and sparse population provides Moody AFB airmen and special tactics personnel with the unique opportunity for low altitude and tactical/combat training within close proximity of the Base. Military personnel can simulate extended convoy and aerial protection training on roads not

heavily traveled. These factors increase effective use of time spent training while reducing the overall cost of training operations. The ability to use the surrounding airspace in conjunction with weapons delivery, electronic warfare, and drop zone training on Grand Bay Range is a tremendous asset not enjoyed at many other locations.

Railroad

The study area and especially the City of Valdosta are a crossroads for Rail Transportation as can be seen on the following map. From Florida in the south, the map shows Valdosta Southern Railroad and Norfolk Southern Corporation, which runs parallel to I-75 into central Georgia. CSX Transportation is shown following a west-east corridor through Clinch County following the US 84 corridor. The Georgia Florida Railway (GFR) has one section running from Valdosta north along Bemiss Road and passing Moody AFB towards Nashville and Willacoochee. GFR's commodity mix is quite diverse, with carload revenue split between wood pulp, agricultural commodities, limestone/aggregate and a multitude of other commodities.

The network of railroads and industrial complexes offer a level of simulated training for Moody aircrew within close proximity of the base. As mentioned above, this results in effective use of training time and a tremendous reduction of operations and fuel costs.

Valdosta Regional Airport

While the Valdosta Regional Airport is not directly located within the study area, its commercial and general aviation flight operations are directly impacted by Moody Air Force Base operations and vice versa. Valdosta Regional Airport is a public-use airport located three miles south of Valdosta. It is owned by the Valdosta-Lowndes County Airport Authority. The airport is primarily utilized for general aviation operations, but is also served by one commercial airline.

Valdosta Regional Airport covers an area of 760 acres at an elevation of 203 feet (62 m) above mean sea level. The airport infrastructure includes three asphalt paved runways: 17/35 measuring 8,002 x 150 ft., 4/22 measuring 5,598 x 100 ft), and 13/31 measuring 3,636 x 75 ft.

After the completion of runway 17/35 in the summer of 2007, Valdosta Regional Airport now has the third longest runway in the state of Georgia (excluding military bases). First is Hartsfield-Jackson Atlanta International Airport and second is the Savannah/Hilton Head International Airport.

For the 12-month period ending December 31, 2008, the airport had 24,635 aircraft operations, an average of 2,053 per month: approximately 75% general aviation, 15% military, 10% scheduled commercial. Presently 53 aircraft are based at the airport: 68% single-engine, 28% multi-engine and 4% jet.

Page left blank

Study Area Roadway Network and Airports Map

Page left blank

Railroad Map

Page left blank

7.3 Zoning:

Development surrounding Moody AFB has been a mixture of residential and commercial activity. Many subdivisions have been developed in the area around the Base in Lowndes, Lanier, and Berrien Counties. Since the adoption of the Lowndes County Unified Land Development Code (ULDC), the number of new subdivisions in Lowndes County has been reduced. However, many single family residential units are still being constructed in Lowndes County and many subdivisions are underway in Lanier and Berrien Counties. There are also various manufactured (mobile) homes and manufactured home parks in the northern portion of Lowndes County and in Berrien and Lanier County. In Lowndes County, many of these manufactured homes have become non-conforming uses since the adoption of the ULDC. However, these nonconforming uses are "grandfathered", as they existed before the ULDC went into effect.

Although every effort is made by Moody AFB to minimize aircraft noise and traffic, due to Moody's mission of organizing, training and employing combat-ready mission aircraft, pararescue, force protection assets and personnel, aircraft noise and traffic will occur and this study will offer recommendations to address existing and future non-conformities resulting from these uses specifically with regard to noise and vibration.

For purposes of zoning analysis, the study area is divided into four quadrants:

- The south-west quadrant, which includes the area outside the city limits of Valdosta and west of Moody AFB from US 84 in the south to I-75 in the west, to the Lowndes County Line in the north. This is the more urbanized part of the study area inside Lowndes County with a concentration of subdivisions and commercial development along Bemiss Road and westward into Hahira and to I-75. Growth is occurring with urban levels of services for water and sewer available from both the City of Valdosta and Lowndes County. The potential for dense residential, professional and/or commercial growth is likely. The zoning consists of Moody Activity Zones (MAZ) I, II and III. MAZs regulate activities within the vicinity of Moody AFB to ensure compatibility between uses. The remainder of the zoning is residential in the southern half and agricultural in the northern half with Commercial Districts and Conservation Districts mixed in. Industrial districts are located along SR 84 and Inner Perimeter Road.

- The north-west quadrant includes the area north of the Lowndes County Line, east of the Cook County Line and along the western Berrien County Line. The majority of the zoning in this area is agricultural with isolated residential zoning districts along some of the major roadways and a couple of industrial zoned areas south of Nashville along SR 125. A large residential zoned area lies directly north of Moody AFB within the 70 and 65 Ldn zones and underneath the flight paths. South Berrien County contains the majority of the County's subdivisions. In the past eight years, eight out of ten subdivisions have

been developed in the central and south parts of the county. This is due to the growth of Moody AFB and Lowndes County's growth towards the north. The two industrially zoned areas are Propex and S.R.I. Both the properties are located on SR 125 South. Growth has slowed down greatly lately, but even so new development has located along SR 125 South and the areas surrounding the north and west of Ray City. SGRDC staff in coordination with Berrien County and Ray City should initiate a detailed land use analysis to develop zoning districts or overlay zones to minimize land use conflicts.

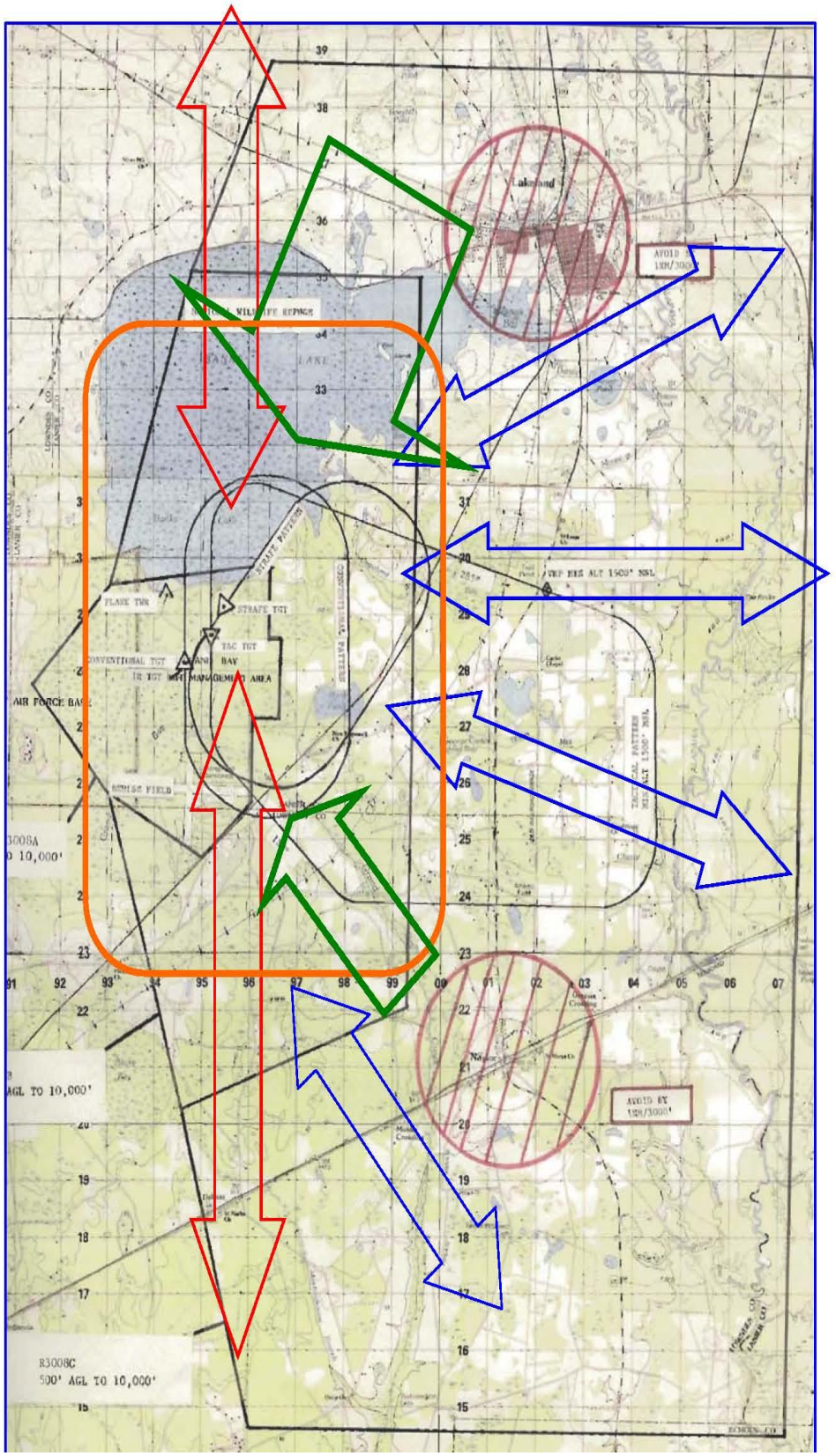
- The north-eastern quadrant includes Lanier County from the Berrien County Line east to US 221/SR 129 and south to SR 37. Lanier County has been mostly an agricultural community, but over the past five years has been transitioning to more of a bedroom community to Lowndes County. This is partly due to the cheaper land and home costs and the four lane roads, which provide fast and easy commuting routes to Lowndes and Valdosta. Lanier County has experienced tremendous growth in the several areas that are zoned PD (Planned Development) for residential uses. These areas are Palmetto Pines along SR 125 with 30 lots, Millpond Plantation on SR 37/SR 125 N with about 120 lots, Grand Bay Ridge on Boyett Road with 50 lots, Banks Lake Pointe on SR 122 with 120 lots, and Creed Plantation on Baskins Road with 30 lots. Moody AFB aircraft regularly overfly this quadrant at low altitudes during training flights to Grand Bay Range.

- The south-eastern quadrant currently ranges from SR 37 south to US 129 east and US 84 in the south and Moody AFB in the west. This area includes portions of unincorporated Lanier County and unincorporated Lowndes County. There is a residential area south of US 84 that should be included in any further research because this area will be due south of the proposed airstrip at the southern end of Grand Bay Range. The majority of the zoning districts includes agricultural with isolated locations of residential and conservation districts along the river corridors. Urban levels of services for water and sewer are found in only one location in this quadrant. This is the Lake Alapaha system. Lowndes County does intend to expand urban services to within this quadrant; however, that expansion is not currently a trop priority. The locations of residential zoning districts and subdivisions along portions of SR 135, US 221, SR 122, and US 129 in Lanier County underneath the flight training operations area may also contribute to incompatibilities. Further research is necessary to define the incompatibilities and possibly recommend zoning districts other than residential to minimize potential conflicts. The planned airstrip at the southern end of Grand Bay Range to meet critical aircrew training needs is of particular interest, since its location will require the revision of additional MAZ I and II districts because of its Accident Potential Zones I and II. Moody aircraft regularly overfly this quadrant at low altitudes during training flights to Grand Bay Range

- Clinch County has been included in the study area to minimize hazards and conflicts stemming from structures posing height obstructions to flight maneuvers and low altitude operations. Because of the rural nature of the county land use issues are not of immediate concern but should be monitored on an annual basis.

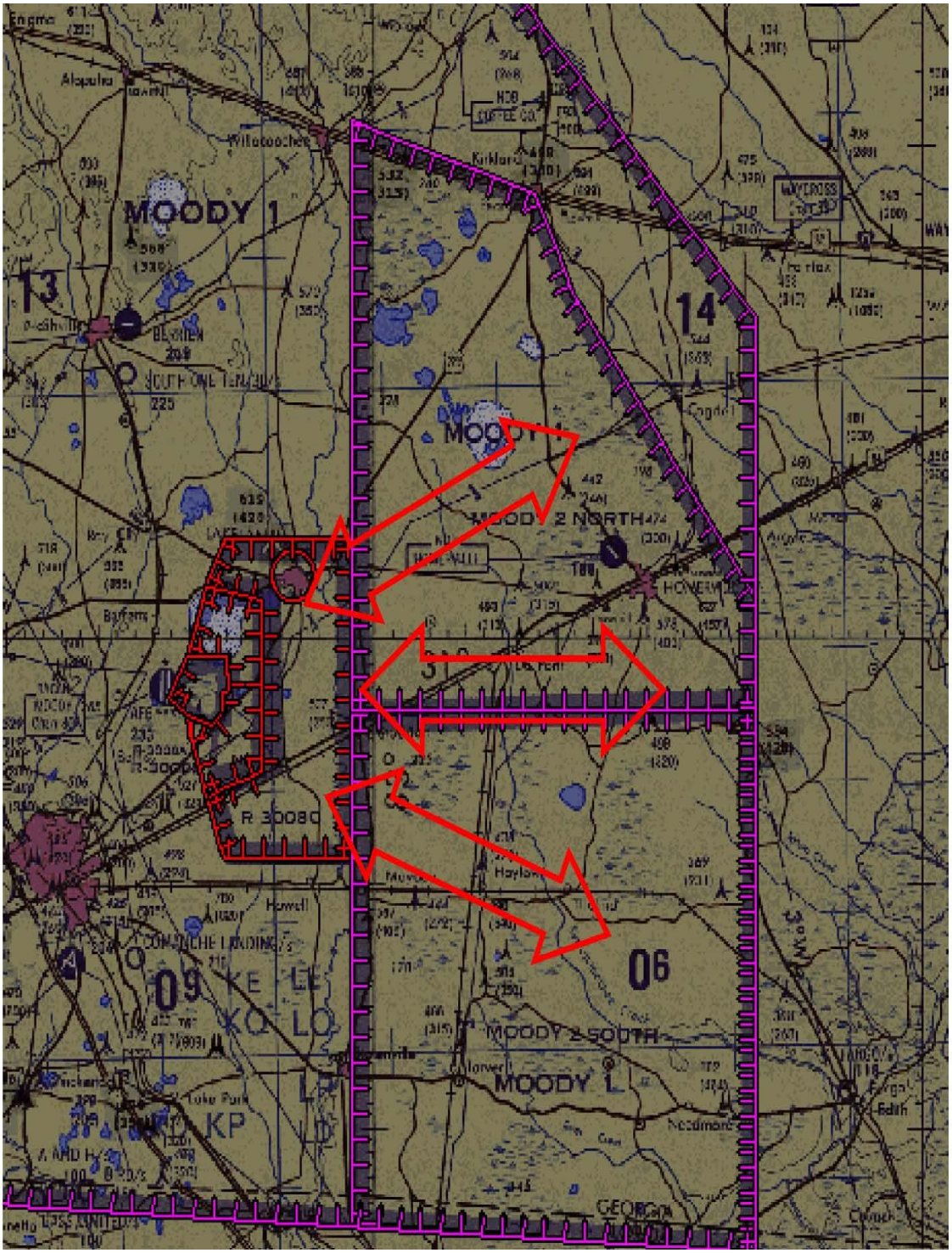
- Echols County has been included in the study area to minimize hazards and conflicts stemming from structures posing height obstructions to flight maneuvers and low altitude operations. Because of the rural nature of the county and the absence of zoning regulations, land use issues are not of immediate concern, but should be evaluated on an annual basis.

Flight Route Diagram



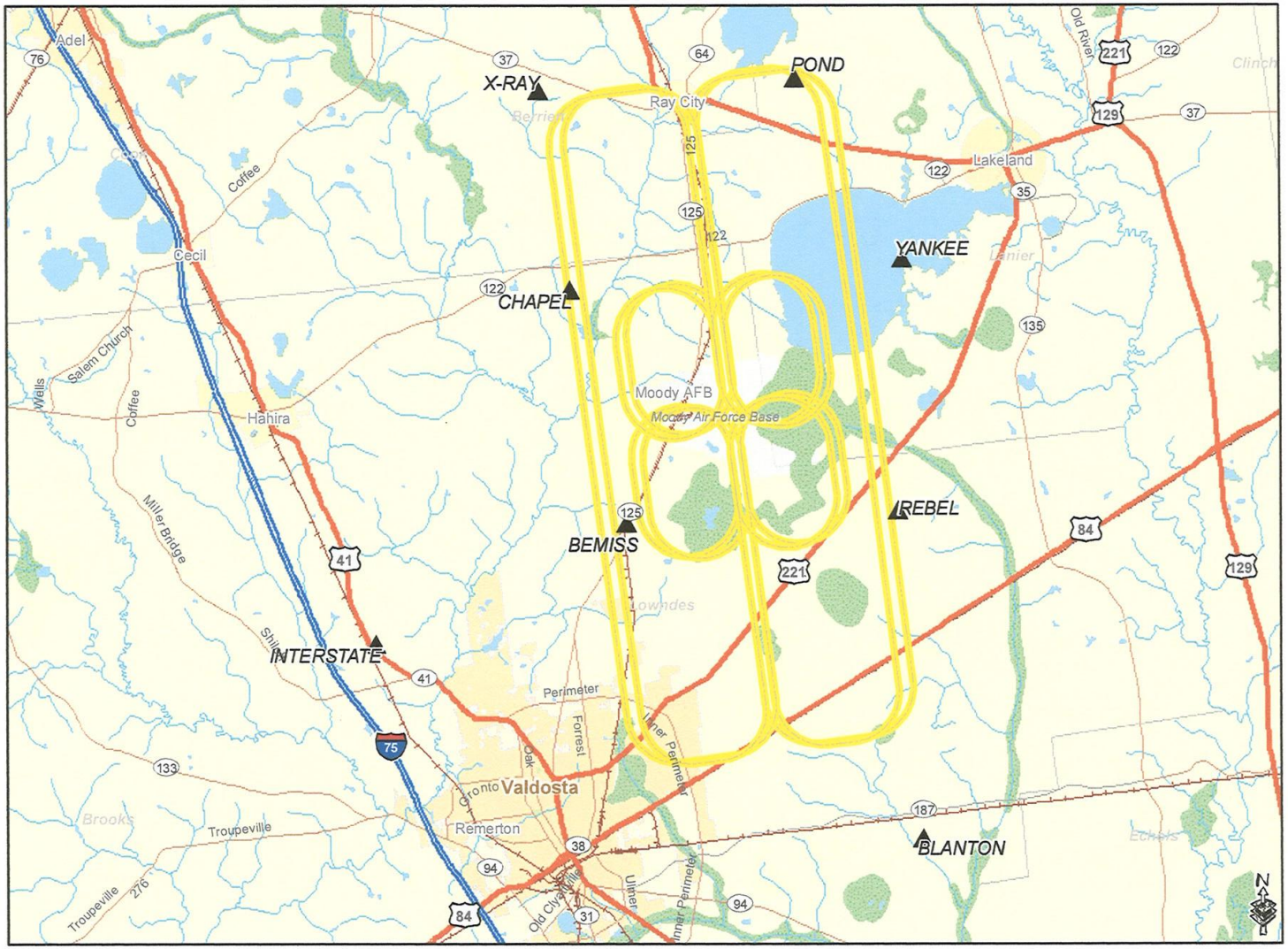
- A-10 Long Range Gunnery/Bombing/ Laser Routes
-HH-60 & A-10 Range Entry/Exit Routes From MOA 2 North/South
-HC-130 Drop Entry/Exit Routes
-Fighter/Attack Conventional Pattern & Strafe Routes
-Threat Response and Evasion Tactics (Box Area)

Flight Route Diagram, entry and exit



MOA Entry
And Exit

Approximate Location of VFR Entry Points/Traffic Patterns



5 Miles

This map is a graphic representation of features displayed and does not constitute a legal description.

Zoning Map Berrien, Lanier and Lowndes Counties

Page left blank

7.4 Telecommunications and Other Tall Structures

Tall structures are permanent or temporary in nature and include but are not limited to telecommunication towers, windmills, billboards, radio antennas, storage tanks, cranes and tall stacks. If they are located where they pose a danger to flight operations, these structures endanger the lives of Moody Air Force pilots. These structures may also impair the mission of the Base by reducing the size of the area available for safe landing, takeoff, and maneuvering of Moody aircrafts. Therefore, the structures may severely impact the utility of Moody AFB and the investment by the public into the Base.

As can be seen on the Telecommunications Tower Map, the JLUS area is already home to many telecommunications towers. Many of the towers are located along the major roadways within the study area. While the area to the east of SR 125 is not as critical due to the flight elevation of the aircraft in that area, special attention should be given to height obstructions directly north and south of the base due to takeoff and landing patterns. These flight maneuvers naturally result in lower flight elevations. This is also true for Lanier County, Clinch County, and Echols County where lower minimum flight elevations are in effect due to flight training and tactical maneuvers inside an airspace, which is specifically designated for aircrew training.

The light blue area on the map shows the area in Clinch County where the minimum flight elevation is 500 feet for flight training maneuvers. In this area alone, there are eleven (11) towers with minimum of 180 feet height and a maximum height of 460 feet.

The light green area on the map shows that portion of Echols County, where the minimum flight elevation is 100 feet for flight training maneuvers. The map here shows 13 existing towers with a minimum height of 63 feet and a maximum height of 403 feet.

Both of these portions of Clinch and Echols Counties are part of a larger "Low Altitude and Training Navigation Area" which includes much of South Georgia.

Lowndes County and the City of Valdosta currently are the only local governments, which have a Telecommunications Tower Ordinance in place to regulate the location and height of the towers.

<u>FAA Regulations</u>

It is also a concern that FAA Rules as shown below only require the notification of the FAA if a tower is proposed within 20,000 feet of a public or military airport. As a result, many of the towers, which are proposed outside the 20,000 feet, are not required to notify FAA and be reviewed for impacts on airspace. This study shows though, that military flight and training operations at elevations well below the average tower height occur far outside the 20,000 feet distance. FAA Part 77 needs to be expanded to require notification/review of towers in low

elevation (less than 500 feet) military base flight operations and training areas. This will greatly increase safety for pilots, airplanes and people on the ground.

"§ 77.13 - Any person/organization who intends to sponsor any of the following construction or alterations must notify the Administrator of the FAA:

- *Any construction or alteration exceeding 200 ft above ground level*
- *Any construction or alteration*
    - *within 20,000 ft of a public use or military airport which exceeds a 100:1 surface from any point on the runway of each airport with at least one runway more than 3,200 ft.*
    - *within 10,000 ft of a public use or military airport which exceeds a 50:1 surface from any point on the runway of each airport with its longest runway no more than 3,200 ft.*
    - *within 5,000 ft of a public use heliport which exceeds a 25:1 surface*
- *Any highway, railroad or other traverse way whose prescribed adjusted height would exceed that above noted standards*
- *When requested by the FAA*
- *Any construction or alteration located on a public use airport or heliport regardless of height or location*

Persons failing to comply with the provisions of FAR Part 77 are subject to Civil Penalty under Section 902 of the Federal Aviation Act of 1958, as amended and pursuant to 49 U.S.C. Section 46301(a)."

"It is prudent for owners to protect the airspace around their airport to prevent loss of existing approaches or other negative impacts affecting utilization of their airport." FAA Quote.

It is crucial for the safety of the military pilots and residents on the ground, that all local governments within the study area adopt local tower ordinances. These ordinances at a minimum shall require coordination with Moody Air Force Base in the review of the proposed locations. These new or revised ordinances should also require a letter of clearance from Moody Air Force Base prior to approval by the local government. Other agencies, such as Georgia Power should also coordinate with Moody AFB the location of any high voltage power lines in the Low Altitude Training and Navigation Area.

Telecommunications Tower Map

blank

7.5 Noise Sensitive Facilities and Other Community Facilities

The following map shows an inventory of noise sensitive facilities and other community facilities within the study area. These uses are generally not suitable to be located next to a military air force base or gunnery range either due to their sensitivity to noise, light pollution, attraction of birds, flight patterns, or increased risk potential in case of an accident due to large congregations of people. The noise sensitive facilities include religious facilities, hospitals and other medical facilities, public and private schools, residential developments as well as other noise sensitive uses as identified by Moody AFB. Public and private community facilities include city, county and state jails, landfills, libraries, courthouses, shopping centers and wastewater treatment facilities. The majority of these uses are located within the more urbanized areas in Lowndes County, mostly along major roadway corridors, and the incorporated areas of the study area such as Ray City, Hahira, and Lakeland. Exceptions are landfills, cemeteries and churches, which are distributed throughout the study area and residential subdivisions.

It will be important to identify those noise sensitive uses that are located in areas where aircraft maneuvers and noise can be expected. An example is the residential subdivision along CR 122 and CR 129 towards Ray City, which is located within the 70 Ldn zone, directly under the approach zone. Efforts need to be made to minimize, avoid and slowly phase out noise sensitive uses by enacting use limitations. Such efforts should include implementing noise reduction standards for new construction and regulations to limit new or replacement of noise sensitive uses and structures. These standards should be mandatory for all new construction and strongly encouraged as retrofit on existing buildings.

Page left blank.

Noise Sensitive and Community Facilities Map

Page left blank

7.6 Natural Resources

Moody AFB has diversity of habitats. The area is dominated by pines and lowland hardwoods and supports a wide array of plant life and wildlife species. Habitats included in Moody Air Force Base area are upland pine forest, pine flatwoods, gum-bay-shrub swamps, and freshwater ponds. Unimproved or wooded areas of Moody include pine flatwoods and extensive wetland acreage. The area also sits between two huge areas that are susceptible to bird attraction. These areas are Banks Lake National Wildlife Refuge and Grand Bay Wildlife Management Area. Species, which are of concern in these areas, are Turkey Vultures, Black Vultures, Sandhill Crane, Cattle Egret, and resident waders in surrounding wetland areas.

Page left blank.

Groundwater Recharge Area Map

blank

Wetlands Map

Page left blank

River Basins Map

Page left blank.

7.7 Economic Impact of Moody Air Force Base on the Region

In the most recent Economic Impact Analysis performed by Moody AFB, the impact that the base has on the surrounding communities is outstanding. The impact on the surrounding communities exceeded $337 million in FY 2006. Moody AFB employs over 4,500 military and civilian employees and has created over 2,100 secondary jobs as a direct result of base activities. Military and civilian payroll exceeds $215. It is evident that Moody AFB has a highly positive impact on the South Georgia economy through jobs and development projects, which take place annually.

Although the Base is totally self-sustaining, personnel and their dependents tend to spend their money locally, benefiting area businesses. Air Force retirees also add to the population and create a need for housing and services when they choose to retire locally in Lowndes or a surrounding county. Many air force personnel choose to retire in the area to be close to the Base's recreational and retail facilities, thus contributing even more to the local economy and tax base.

Moody AFB's substantial contracting needs are also important to the local economy. The Base produces a large amount of contract work for the private sector for maintenance, supplies, construction, equipment and other supplies including health and food services. Sometimes, defense or military related businesses also locate near military bases because their work involves activities associated with the Base.

In FY 06, there was a total expenditure of $65,544,590 for construction, services, and procurement of materials, equipment, and supplies. This number includes service contracts, which require the use of locally supplied goods and services.

Moody AFB also creates indirect jobs by there presence alone. Indirect jobs are those additional employment opportunities required by local businesses to support the presence of the base. The estimated number of indirect jobs created in FY 06 was 2,136. These jobs averaged $26,732 in pay for the local community. An estimated total of $53,100,385 is the annual dollar value of indirect jobs created.

The total annual economic impact estimate including payroll, expenditures, and jobs created is $337,822,629.

In 2008, Moody AFB saw the completion of the new Jet Engine Shop and Dormitory, Main Gate, and Youth Center Expansion with a combined total investment exceeding $34.7 million.

Each employee Moody AFB staffs, jobs it creates, expenditures invested, and project completed has a positive effect on the economy in this region. The area would not be what it is without the help of Moody AFB.

7.8 Survey Results of perceived Issues and Opportunities

A survey was distributed to elected officials and residents in the communities surrounding Moody AFB. The intent was to identify perceived issues and opportunities. The table on the following page is a summary of the responses.

Four main issues regarding Base operations and community development were identified.

- **Noise Impact:** The noise impact of flight maneuvers and various operations at Moody Air Force Base affect the residents and developments surrounding the base and areas where base missions occur. It is generally understood that the noise is an unavoidable effect of the Base, but measures should be taken to avoid noise sensitive uses in the noise zones of 65 Ldn and above and minimize noise sensitive uses in the other Ldn zones.

- **Traffic Impact:** Bemiss Road (County Road 125) is experiencing heavy traffic at higher speeds due to residential and commercial development and general growth in the area. Ingress and egress on Bemiss Road are also a concern for local traffic as well as the mix of heavy truck traffic and regular automobiles.

- **Manufactured Housing:** The prevalent use of manufactured homes in the Moody Activity Zone leads to increased incompatibilities. Manufactured homes are typically more affordable than site built homes, but are also typically less attractive, more noise sensitive and less structurally able to withstand impacts. This area has a need for affordable homes. The construction of site built affordable homes needs to be encouraged to minimize incompatible uses and serve the need for lower priced housing.

- **Encroachment on Moody AFB:** The majority of residents are concerned about encroachment of uses incompatible with the operations and missions of Moody AFB. The concern centers on the impact this may have on the future viability of the Base and how these conflicts can be avoided. Suggestions were offered for those types of development that should be used around the Base to promote smart and sustainable growth. This issue was a reflection of the wide spread positive recognition that Moody AFB represents a valuable, irreplaceable economic impact for the region and those steps need to be taken to ensure that Moody AFB remains a positive economic force for the region.

Other recurring issues included:

- **Telecommunication Towers**: The issue of communication towers is one that has been on the rise in this area over the past year. With the cellular telephone business becoming increasingly popular, more companies are trying to close the gaps in their coverage areas. Most zoning codes and ordinances have provisions requiring co-location on towers and limited other tools to decrease the number of towers, however, there are still many new towers being built every day. Residents recognize the need for more

regulations dealing with tower location and height in order to promote safety for pilots and residents alike.

- **Controlled Development around Moody Air Force Base:** many residents suggested light industrial developments as compatible uses around military installations. Open space and low density commercial were also listed as compatible uses in these noise sensitive areas.

Question	Limited		Moderate		Significant	
	1	2	3	4	5	N/A
Does Moody Air Force Base have an impact on your quality of life?	7%	10%	20%	13%	47%	3%
Does Moody Air Force Base have an impact on the surrounding community?	3%	0	8%	13%	76%	0
Does Moody Air Force Base have an impact on the regional community?	0	0	0	17%	83%	0
Does Moody Air Force Base have an impact on the local economy?	0	0	3%	3%	91%	3%
Do operations of Moody Air Force Base have an impact on your property value?	20%	3%	20%	0	20%	37%
Are you affected by noise associated with Moody Air Force Base?	67%	10%	13%	7%	3%	0
Are you aware of accident potential zones surrounding Moody Air Force Base?	17%	10%	33%	10%	27%	3%
Do you have safety concerns regarding flight operations at Moody Air Force Base?	56%	20%	8%	0	13%	3%
Do you have any concerns about Moody Air Force Base Closing?	59%	19%	10%	0	10%	3%
Is the military presence within the Region a valuable asset to your community?	3%	3%	17%	10%	63%	4%
Do you benefit financially from Moody Air Force Base?	0	0	3%	7%	90%	0
Are you aware that special land use regulations exist in some areas surrounding Moody Air Force Base?	37%	13%	16%	0	30%	4%
Do you have any concerns regarding development near Moody Air Force Base?	4%	4%	19%	5%	64%	4%
Would Land Use regulations be effective in reducing land use conflicts between Air Base Operations and the surrounding communities?	33%	11%	20%	23%	13%	0

7.9 Existing Local Community and Government Efforts

The following is an inventory of existing regulations, zoning codes or ordinances that specifically direct development in the vicinity of Moody AFB or its flight operations within the study area. Governments are listed in alphabetical order:

Berrien County, Ray City, Nashville

Berrien County and its municipalities currently have no specific zoning regulations, building codes, standards, or tower ordinances in place that directly address and regulate development in the vicinity of Moody AFB and its flight paths. However, the local government staff has begun coordinating review of communications towers with Moody AFB in an effort to minimize adverse impacts on the pilots and increase safety in flight operations for both the pilots and the residents on the ground.

Clinch County and Echols County

Unincorporated Clinch County and Echols County both currently have no tower ordinance in place that specifically addresses the location of towers in relation to Moody AFB. While numerous towers have already been constructed along the major roadways such SR 84 corridor SR 441, SR 187 and SR 129, a tower ordinance in each county could prevent the future location of towers in areas which would endanger the safety of the pilots and residents on the ground. Proposed ordinances would direct those towers into safer areas, encourage co-location, impose height restrictions if necessary, and require the removal of towers, which become non-conforming structures if they are substantially damaged and/or need to be replaced.

Lanier County, City of Lakeland

Lanier County and the City of Lakeland currently have no specific zoning regulations, building codes, standards, or tower ordinances in place that directly address and regulate development in the vicinity of Moody AFB, the Grand Bay Range, and associated flight corridors. However, local government staff has begun coordinating review of communications towers with Moody AFB in an effort to minimize adverse impacts on the pilots and increase safety in flight operations for both the pilots and the residents on the ground.

Lowndes County, City of Valdosta, Hahira

The City of Valdosta and the City of Hahira also do not have specific zoning or building code regulations for Moody AFB related issues. The City of Valdosta has a telecommunication tower ordinance, which should be revised to include the recommendations as noted later in this report. Lowndes County took the initiative to help protect Moody AFB through the adoption of the Unified Land Development Code in 2008, which included three (3) zoning districts specifically created to encourage compatibility of development surrounding Moody AFB and in response to Georgia State Law to address the impacts of the Accident Potential Zones I and II.

Following are those sections from the Lowndes County Unified Land Development Code, 2008 edition, which specifically address Moody Air Force Base:

2.01.06 – Establishment and Purpose of Zoning Districts:

The Moody Activity zoning district (MAZ) is intended to provide for uses and unique design requirements for lands adjacent to and within runway protection zones, airspace zones, and noise zones for Moody Air Force Base. Site design and other standards are necessary to protect navigable airspace and may include height limitations, smoke limitations, lighting limitations, and other standards necessary to ensure the protection of the airspace. Three districts are described for the Moody Activity Zoning District: MAZ I, MAZ II, and MAZ III. MAZ I includes all of the Moody Air Force Base property, the Clear Zones, and Accident Potential Zone I. MAZ II includes Accident Potential Zones II and all areas within the noise zone LDN 65. MAZ III includes all land outside the LDN 65 to the outer boundary of the MAZ.

2.00.01 Lowndes County UDC Table of Land Uses

Zoning Districts: **P – Permissible** **S[1] – Permissible Subject to Supplemental Standards** **Blank – Prohibited**	**E-A**	**R-A**	**CON**	**R-1**	**R-21**	**R-10**	**OI**	**C-C**	**C-G**	**C-H**	**M-1**	**M-2 (See Also Section 10.02.05(C))**	**M-3 (See Also Section 10.02.05(C))**	**MAZ-I (See Also Section 4.02.04)**	**MAZ-II (See Also Section 4.02.04)**	**MAZ-III (See Also Section 4.02.04)**	**PD (See Also Section 4.06.00)**	**IS (See Also Section 10.02.05(C))**
Land Uses:																		
Residential and Related Uses																		
Dwellings																		
Single-Family*	P	P		P	P	P									S	P		
Two-Family*					P	P										S		
Multi-Family*																	S	
Manufactured Homes*	P	P		P	P	P										S	S	
Manufactured Home Communities* (See Also Section 4.03.26)																	S	
Institutional																		

Zoning Districts: **P – Permissible** **S[1] – Permissible Subject to Supplemental Standards** **Blank – Prohibited**	**E-A**	**R-A**	**CON**	**R-1**	**R-21**	**R-10**	**OI**	**C-C**	**C-G**	**C-H**	**M-1**	**M-2 (See Also Section 10.02.05(C))**	**M-3 (See Also Section 10.02.05(C))**	**MAZ-I (See Also Section 4.02.04)**	**MAZ-II (See Also Section 4.02.04)**	**MAZ-III (See Also Section 4.02.04)**	**PD (See Also Section 4.06.00)**	**IS (See Also Section 10.02.05(C))**
Group Personal Care Homes (7-15 residents)* (See Also Section 4.03.16)	S	S		S				S								P		
Family Personal Care Homes (2-6 residents) * (See Also Section 4.03.16)	S	S		S	S	S	S	S	S	S						P		
Agricultural Uses																		
Agricultural and Farm Operations (See Also Section 4.03.02)	P	S									P	P	P	S	S	S		P
Agricultural Processing, Sales (wholesale and retail), and Outdoor Storage*. (See Also Section 4.03.02)	P	S									P	P	P			S		
Commercial Greenhouse and Plant Nurseries (See Also Section 4.03.03)	P	S						S	S	S	P	P	P		S	P		
Stables and Livestock (See Also Section 4.03.02)	P	S									P	P	P	S	S	S		
Kennel without Outdoor Run (See Also Section 4.03.01)	S	S					S	S							S	S		

Zoning Districts: **P – Permissible** **S[1] – Permissible Subject to Supplemental Standards** **Blank – Prohibited**	**E-A**	**R-A**	**CON**	**R-1**	**R-21**	**R-10**	**OI**	**C-C**	**C-G**	**C-H**	**M-1**	**M-2 (See Also Section 10.02.05(C))**	**M-3 (See Also Section 10.02.05(C))**	**MAZ-I (See Also Section 4.02.04)**	**MAZ-II (See Also Section 4.02.04)**	**MAZ-III (See Also Section 4.02.04)**	**PD (See Also Section 4.06.00)**	**IS (See Also Section 10.02.05(C))**
Kennel with Outdoor Run (See Also Section 4.03.01)	S	S							S	S	S				S	S		
Non-Residential Uses																		
Alcohol Package Store								P	P	P					S	P		
Animal Hospital or Veterinary Clinic (See Also Section 4.03.01)	S								S	P	P	P				S		
Automobile, Truck, and Other Motor Vehicle Repair (See Also Section 4.03.11)										S	P	P			S	S		
Bait and Tackle			P					P		P					S	P		
Bed and Breakfast Lodging* (See Also Section 4.03.17)	S	S		S			S	S	S							S		
Building Materials and Supply (See Also Section 4.03.05)									S	S	S	P			S	P		
Bulk Storage Yards												P	P		S	P		
Business Services such as Copying, Mailing, or Printing							P	P	P	P	P				S	P		

Zoning Districts: **P – Permissible** **S[1] – Permissible Subject to Supplemental Standards** **Blank – Prohibited**	**E-A**	**R-A**	**CON**	**R-1**	**R-21**	**R-10**	**OI**	**C-C**	**C-G**	**C-H**	**M-1**	**M-2 (See Also Section 10.02.05(C))**	**M-3 (See Also Section 10.02.05(C))**	**MAZ-I (See Also Section 4.02.04)**	**MAZ-II (See Also Section 4.02.04)**	**MAZ-III (See Also Section 4.02.04)**	**PD (See Also Section 4.06.00)**	**IS (See Also Section 10.02.05(C))**
Cemeteries (See Also Section 4.03.06)	S	S		S			S	S	S	S	S	S			S	S		
Club, Lodge, Meeting or Event Facility*									P	P						S		
Day Care																		
Center (19+ children)* (See Also Section 4.03.08)								S	P	P					S*	S		
Home (7-18 children) * (See Also Section 4.03.08)	S	S		S	S		S	P	P	P					S*	S		
Family (6 or less children) * (See Also Section 4.03.08)	P	P		P	P	P	P	S	S	S					S	P		
Detail Shop / Car Wash							P	P	P	P	P	P	P		P	P		
Essential Public Services, such as Transmission Lines and Lift Stations	P	P	P	P	P	P	P	P	P	P	P	P	P		S	P		P
Farmers Market and Outdoor Sales* (See Also Section 4.03.09)	P	S								S	S	P				S		
Financial Institutions, Banks and Credit Unions*							P		P	P	P					S		

Zoning Districts: **P – Permissible** **S[1] – Permissible Subject to Supplemental Standards** **Blank – Prohibited**	**E-A**	**R-A**	**CON**	**R-1**	**R-21**	**R-10**	**OI**	**C-C**	**C-G**	**C-H**	**M-1**	**M-2 (See Also Section 10.02.05(C))**	**M-3 (See Also Section 10.02.05(C))**	**MAZ-I (See Also Section 4.02.04)**	**MAZ-II (See Also Section 4.02.04)**	**MAZ-III (See Also Section 4.02.04)**	**PD (See Also Section 4.06.00)**	**IS (See Also Section 10.02.05(C))**
Freight and Moving Establishments										P[∞]	P	P			S	S		
Funeral Home*									P	P	P					P		
Gasoline Station, with or without a Convenience Store*								P	P	P	P	P			S	P		
Golf Course (with or without driving range) (See Also Section 4.03.10)			S				S								S	P		
Government and Civic Buildings, including Library, Museum, and Cultural Facilities*			P				P	P	P	P						S		
Grocery Store*								P	P	P					S	P		
Hospital and Nursing Homes* (See Also Section 4.03.13)							S		P	P	P					S		
Home Sales Lot, Manufactured or Site Built Display										P	P				S	P		
Hotels and Motels*									P	P					S[#]	S		
Ice Vending Machine (See Also Section 4.03.25)								S	S	S				S	S	P		
Junk and Salvage Yards (See Also Section 4.03.12)												S	S		S	S		S

Zoning Districts: **P – Permissible** **S[1] – Permissible Subject to Supplemental Standards** **Blank – Prohibited**	**E-A**	**R-A**	**CON**	**R-1**	**R-21**	**R-10**	**OI**	**C-C**	**C-G**	**C-H**	**M-1**	**M-2 (See Also Section 10.02.05(C))**	**M-3 (See Also Section 10.02.05(C))**	**MAZ-I (See Also Section 4.02.04)**	**MAZ-II (See Also Section 4.02.04)**	**MAZ-III (See Also Section 4.02.04)**	**PD (See Also Section 4.06.00)**	**IS (See Also Section 10.02.05(C))**
Landfill, Sanitary or Inert* (See Also Section 4.03.18 or 4.03.19)													S			S		~~P~~ S
Laundry, Dry Cleaning Plant											P	P				P		
Laundry, Self-Service*								P	P	P					S	P		
Lounge, Bar, and Nightclub*									P	P						S		
Manufacturing																		
Light Industry										P[∞]	P	P			S	P		
Heavy Industry												P	P			P		
Industrial Uses with Nuisance Features such as Odor, Noise, Vibration, or Hazardous Materials* (See Also Section 4.03.20)												S	S			S		S
Medical and Dental Clinics, Laboratories*							P	P	P	P						S		
Mini-Storage or Self-Storage Facility (See Also Section 4.03.21)									S	S	S				S	P		
									P	P	P	P			S	P		

Zoning Districts: **P – Permissible** **S[1] – Permissible Subject to Supplemental Standards** **Blank – Prohibited**	**E-A**	**R-A**	**CON**	**R-1**	**R-21**	**R-10**	**OI**	**C-C**	**C-G**	**C-H**	**M-1**	**M-2 (See Also Section 10.02.05(C))**	**M-3 (See Also Section 10.02.05(C))**	**MAZ-I (See Also Section 4.02.04)**	**MAZ-II (See Also Section 4.02.04)**	**MAZ-III (See Also Section 4.02.04)**	**PD (See Also Section 4.06.00)**	**IS (See Also Section 10.02.05(C))**
Parking Lots and Parking Garages																		
Personal Services Barber, Beauty, Shoe Repair, Dry Cleaning Pick-Up*							P	P	P	P					S	P		
Professional Offices*							P	P	P	P	P					S		
Radio, TV and Telecommunication Towers* (See Also Section 5.05.00)	S						S			S	S	S				S		
Recreation																		
Amusement Parks and Drive-In Theaters* (See Also Section 4.03.22)										S	S					S		
Nature Facilities, Picnic Areas, Parks, and Trails*	P	P	P	P	P	P	P	P	P	P	P	P	P	P	S	P		

Zoning Districts: **P – Permissible** **S[1] – Permissible Subject to Supplemental Standards** **Blank – Prohibited**	**E-A**	**R-A**	**CON**	**R-1**	**R-21**	**R-10**	**OI**	**C-C**	**C-G**	**C-H**	**M-1**	**M-2 (See Also Section 10.02.05(C))**	**M-3 (See Also Section 10.02.05(C))**	**MAZ-I (See Also Section 4.02.04)**	**MAZ-II (See Also Section 4.02.04)**	**MAZ-III (See Also Section 4.02.04)**	**PD (See Also Section 4.06.00)**	**IS (See Also Section 10.02.05(C))**
Indoor Recreation such as Billiard Parlors, Bowling Alleys, Game Rooms, and Skating Rinks*									P	P	P					S		
Outdoor Recreation such as Miniature Golf, Stables, Marinas, Sports Fields, and Fishing/Hunting Preserves* (See Also Section 4.03.23)	S	S	S							P	S					S		
Recreational Vehicle Park and Campground* (See Also Section 4.03.14)	S		S							S						S		
Religious Uses and Facilities* (See Also Section 4.03.15)	S	S		S	S	S	S	S	S	S						S		
Research and Experimental Laboratories												P				S		

Zoning Districts: **P – Permissible** **S[1] – Permissible Subject to Supplemental Standards** **Blank – Prohibited**	**E-A**	**R-A**	**CON**	**R-1**	**R-21**	**R-10**	**OI**	**C-C**	**C-G**	**C-H**	**M-1**	**M-2 (See Also Section 10.02.05(C))**	**M-3 (See Also Section 10.02.05(C))**	**MAZ-I (See Also Section 4.02.04)**	**MAZ-II (See Also Section 4.02.04)**	**MAZ-III (See Also Section 4.02.04)**	**PD (See Also Section 4.06.00)**	**IS (See Also Section 10.02.05(C))**
Restaurant*								P	P	P	P	P			P[#]	P		
Retail Stores*								P	P	P	P				P[#]	P		
Schools																		
Business, Commercial*									P		P							
Private K-12* (See Also Section 4.03.24)	S	S		S	S	S	P											
Private Colleges* and Universities (See Also Section 4.03.07)	S	S		P	P	S	P	P	P	P								
Trade, Industrial*										P	P	P				S		
Small Equipment or Appliance Repair Shops									P	P	P				S	P		
Specialty and Gift Shops such as Art, Antique, Jewelry, Books, or Stationers*								P	P	P					P	P		
Studios, such as Music, Dancing, Art, or Photography Schools*							P	P	P	P	P					S		

Zoning Districts: **P – Permissible** **S[1] – Permissible Subject to Supplemental Standards** **Blank – Prohibited**	**E-A**	**R-A**	**CON**	**R-1**	**R-21**	**R-10**	**OI**	**C-C**	**C-G**	**C-H**	**M-1**	**M-2 (See Also Section 10.02.05(C))**	**M-3 (See Also Section 10.02.05(C))**	**MAZ-I (See Also Section 4.02.04)**	**MAZ-II (See Also Section 4.02.04)**	**MAZ-III (See Also Section 4.02.04)**	**PD (See Also Section 4.06.00)**	**IS (See Also Section 10.02.05(C))**
Terminals for Freight by Rail or Truck												P				S		
Theaters, Movie or Performing Arts (Indoor Only)*									P	P	P					S		
Trades and Repair Services such as Electrical, Heating and Air, Mechanical, Painting, Glass and Plumbing									P	P	P	P			P	P		
Vehicle Sales, (automobile, truck, motorcycle, boat and recreational vehicles) (See Also Section 4.03.04)									S	S	P				S	P		
Warehouse, Not Including Mini-Storage										P[∞]	P	P			S	P		
Wholesale Establishments										P[∞]	P	P			S	P		

*Except for any land area within APZ II or a VLD Runway Protection Zone.

[#]When located within a Corridor Overlay as set forth in Section 4.02.01.

[∞]When the building does not exceed 30,000 sqft.

Zoning Districts: **P – Permissible as an accessory use**	**E-A**	**R-A**	**CON**	**R-1**	**R-21**	**R-10**	**OI**	**C-C**	**C-G**	**C-H**	**M-1**	**M-2 (See Also Section 4.02.04)**	**M-3 (See Also Section 4.02.04)**	**MAZ-I (See Also Section 4.02.04)**	**MAZ-II (See Also Section 4.02.04)**	**MAZ-III (See Also Section 4.02.04)**	**PD (See Also Section 4.06.00)**	**IS (See Also Section 4.02.04)**
Accessory Dwelling – Freestanding (See Also Section 5.02.01 and 5.02.02)	P	P	P	P	P						P	P				P	P	
Accessory Dwelling – within Principal Structure (See Also Section 5.02.01 and 5.02.02)	P	P		P	P										P	P	P	
Fences and Walls (See Also Section 5.02.01 and 5.02.03)	P	P	P	P	P	P	P	P	P	P	P	P	P			P	P	P
										P	P	P	P			P		P

Zoning Districts: P – Permissible as an accessory use	E-A	R-A	CON	R-1	R-21	R-10	OI	C-C	C-G	C-H	M-1	M-2 (See Also Section 4.02.04)	M-3 (See Also Section 4.02.04)	MAZ-I (See Also Section 4.02.04)	MAZ-II (See Also Section 4.02.04)	MAZ-III (See Also Section 4.02.04)	PD (See Also Section 4.06.00)	IS (See Also Section 4.02.04)
Outside Storage of Machinery and Equipment, Vehicles to be Repaired, Construction Materials, Materials held for Distribution (See Also Section 5.02.01 and 5.02.04)																		
Outdoor Storage of Machinery and Equipment for Agricultural Support (See Also Section 5.02.01 and 5.02.04)	P	S									P	P	P			P		P
Storage Sheds,	P	P	P	P	P	P	P	P	P	P	P	P	P			P	P	P

Zoning Districts: P – Permissible as an accessory use	E-A	R-A	CON	R-1	R-21	R-10	OI	C-C	C-G	C-H	M-1	M-2 (See Also Section 4.02.04)	M-3 (See Also Section 4.02.04)	MAZ-I (See Also Section 4.02.04)	MAZ-II (See Also Section 4.02.04)	MAZ-III (See Also Section 4.02.04)	PD (See Also Section 4.06.00)	IS (See Also Section 4.02.04)
Greenhouses, Equipment Sheds (See Also Section 5.02.01)																		
Dumpsters (See Also Section 5.02.01 and 5.02.05)			P				P	P	P	P	P	P	P			P	P	P
Employee Support Facilities (See Also Section 5.02.01 and 5.02.06)									P	P	P	P	P			P	P	P

Zoning Districts: P – Permissible as an accessory use	E-A	R-A	CON	R-1	R-21	R-10	OI	C-C	C-G	C-H	M-1	M-2 (See Also Section 4.02.04)	M-3 (See Also Section 4.02.04)	MAZ-I (See Also Section 4.02.04)	MAZ-II (See Also Section 4.02.04)	MAZ-III (See Also Section 4.02.04)	PD (See Also Section 4.06.00)	IS (See Also Section 4.02.04)
Lodging or Multi-family Residential Support Facilities (See Also Section 5.02.01 and 5.02.07)									P	P						P	P	
Flagpoles, Benches, Newspaper Vending Boxes, Mail and Express Mail Boxes (See Also Section 5.02.01)							P	P	P	P	P	P	P			P	P	P
Customary	P	P	P	P	P	P										P	P	

Zoning Districts: P – Permissible as an accessory use	E-A	R-A	CON	R-1	R-21	R-10	OI	C-C	C-G	C-H	M-1	M-2 (See Also Section 4.02.04)	M-3 (See Also Section 4.02.04)	MAZ-I (See Also Section 4.02.04)	MAZ-II (See Also Section 4.02.04)	MAZ-III (See Also Section 4.02.04)	PD (See Also Section 4.06.00)	IS (See Also Section 4.02.04)
Residential Accessory Structures, such as (but not limited to) Clotheslines, Recreational Equipment and Structures, Flagpoles, Statuary, Decorative Flags, Birdbaths, Planters (See Also Section 5.02.01)																		

Page left blank.

Table 4.01.01(F). Lowndes County UDC Standards for Lot Area, Width, and Impervious Surface.[1]

Zoning District	Minimum Lot Area (sq. ft.)		Minimum Lot Width (feet)		Maximum Impervious Surface Ratio (Percent
	With Individual Well Water	With Central Water System	With Individual Well Water	With Central Water System	
E-A	217,800	217,800	210	200	15
R-A	108,900	108,900	150	100	20
CON	43,560	43,560	N/A	N/A	15
R-1	43,560	43,560	120	100	30
R-21[2]	43,560	21,780	120	100	40
R-10[3]	43,560	10,000	120	80	50
OI	43,560	10,000	120	100	75
C-C	43,560	10,000	120	80	75
C-G	43,560	10,000	120	80	75
C-H	43,560	10,000	120	100	85
M-1	43,560	30,000	120	100	85
M-2	43,560	43,560	150	150	85
M-3	43,560	43,560	150	150	85
MAZ Residential	108,900	108,900	120	100	30
MAZ Non-Residential	43,560	10,000	120	80	85
IS	As established in the environmental permit.				

Table 4.01.02(E). Lowndes County UDC Standards for Building Locations and Heights.

Zoning District	Minimum Setbacks from Centerline of Street[1]			Minimum Setbacks from Property Lines		Maximum Building Height (ft.)
	Front[2] (feet)			Side (ft.)	Rear (ft.)	
	Arterial	Collector	Residential			
E-A	80	70	60	20	50	35
R-A	80	70	60	20	40	35
CON	100	80	65	20	40	35
R-1	80	70	60	20	40	35
R-21	80	70	60	10	30	35
R-10	80	70	60	10	30	35
OI	80	70	60	15	30	45
C-C	80	70	N/A	20	12	45
C-G	80	70	N/A	20	12	45
C-H	100	80	N/A	20	20	60
M-1	100	80	N/A	20	12	60
M-2	150	120	N/A	40	50	100
M-3	150	120	N/A	40	50	100
IS	150	120	N/A	40	50	100
MAZ Residential	80	70	60	10	30	35
MAZ Non-Residential	80	70	60	15	12	45

4.02.04 Site Design Standards for the Moody Activity Zoning Districts (MAZ)

A. The purpose of the Moody Activity Zoning Districts (MAZ I, MAZ II, and MAZ III) is to:
   1. Ensure safety to people and property within the MAZ;
   2. Prohibit the establishment of incompatible structures within the designated MAZ I, II and III;
   3. Protect the airspace, Military Operating Area, approach zones, inner horizontal zones, conical zones, outer horizontal zones, and transitional zones from the establishment of structures or placement of objects that interfere with the safe operation of aircraft;
   4. Limit land uses within the MAZ to those uses that are compatible with the Moody Air Force Base;
   5. Protect people and property from the potential adverse effects of aircraft noise; and aircraft crashes and
   6. Ensure the continued presence of the Moody Air Force Base in Lowndes County.

B. The following documents are hereby adopted by reference as is fully set forth within this ULDC:

1. Moody AFB Air Installation Compatible Use Zone (AICUZ) Report.
2. Moody AFB AICUZ Map (See ULDC Attachment).

C. Location of districts within the MAZ:
   1. MAZ I: Includes all Moody AFB owned property, plus Clear Zones and Accident Potential Zones (APZs) I.
   2. MAZ II: Includes APZs II and areas within noise zone LDN 65.
   3. MAZ III: Includes noise zones lower than LDN 65 to outer edge of MAZ.

D. Development standards within the MAZ Zoning Districts
   1. Within the MAZ, the following uses are prohibited:
      a. Multi-family residential development; and
      b. Single-family residential with a density of more than one (1) unit per two and one-half (2.5) acres.
   2. Buildings, structures, and objects with a height of ninety (90) feet or more are prohibited, except where Installation Commander or Representative from Moody Air Force Base specifically certifies that the proposed height is not a hazard to aircraft take-offs, landings, or flight operations.
   3. All lights used in conjunction with streets, parking, signs, and uses of land shall be arranged and operated in such a manner that they do not interfere with pilot vision during take-off, landing, or flight operations.
   4. No uses or operations of any type shall produce smoke, glare, birds or other visual interference that will present a hazard to aircraft during take-off, landing, or flight operations.
   5. No uses or operations of any type shall produce electronic interference with navigation signals or radio communication between aircraft, the airport, or the air traffic controller.
   6. A noise impact area is established to include all land within LDN 65 and extending 2,500 feet outward from LDN 65, as depicted on AICUZ Map/Plan. The following standards apply to development within the noise impact area:
      a. All work and operations shall be conducted within buildings or enclosed structures.
      b. All new development, redevelopment, and building alterations or additions permitted within the noise impact area shall be required to meet the noise attenuation requirements of AICUZ Report.
      c. Applications for the approval of development within the noise impact area shall include certification from a qualified acoustical expert that the proposed construction complies with the standards of AICUZ Report.

E. All applications for rezoning and development approval, including site plans, building permits, subdivision plats, sign permits, temporary use permits, and other permits and plans shall be subject to review by Installation Commander or Representative at Moody Air Force Base. Such review shall be limited to issues of compatibility with Moody Air Force Base and issues affecting the safety of persons and property related to aircraft take-offs, landings, and flight operations.

5.05.03 – Applicability of Telecommunications Tower Regulations

A. Except, as set forth in Section 5.05.03 (C), the requirements of Section 5.05.00 shall govern the location of all telecommunications towers and/or antennas that exceed a height of twenty-five (25) feet within the MAZ or VLD Overlay District, or exceed a height of fifty (50) feet elsewhere in unincorporated Lowndes County.
B. The provisions of Section 5.05.00 shall not apply to governmental facilities and structures.
C. For locations outside the Airport Height Restriction Area, the provisions of Section 5.05.00 shall not govern any tower or the installation of any antenna, that is seventy-five (75) feet or less in height and is owned and operated by a federally-licensed amateur radio station operator from the operator's residence, or is used exclusively as a receive-only antenna. For locations outside the MAZ or VLD Overlay District, Section 5.05.00 shall not govern any device designed for over-the-air reception-only of television broadcast signals, multi-channel multi-point distribution service or direct broadcast satellite service whose tower and/or antenna is seventy-five (75) feet or less in height.
D. Any tower or antenna for which a permit has been properly issued prior to the effective date of this ULDC shall not be required to meet the provisions of Section 5.05.00, other than the requirements of Sections 5.05.02(B) and 5.05.05(N). Any such towers or antennas shall be referred to as "pre-existing towers" or " pre-existing antennas."

5.05.04 Procedures

All wireless communication facilities shall be permissible when designed and located in compliance with the standards set forth in Section 4.05.00.

A. A letter signed and stamped by a engineer certified in the State of Georgia shall be required stating that the tower, antenna, and support structure meets or exceeds all applicable requirements set forth herein.
B. Procedures for application, review, approval, and inspection of telecommunication facilities are set forth in Chapter 10.
C. An application for any tower or tower structure within the MAZ or VLD Overlay District or any tower or tower structure that the County Manager determines as likely to interfere with the use of the aircraft traffic operations around Valdosta Regional Airport or Moody AFB, shall be submitted to the Valdosta Regional Airport Authority and/or Moody AFB for review. Recommendation from the Valdosta Regional Airport Authority and the Moody AFB shall be considered in the determination of approval for the tower or tower structure.
D. Upon the transfer of ownership of any tower, alternative tower structure, or lot upon which a structure has been erected, the permit-holder shall notify the County Manager of the transaction in writing within thirty (30) days.
E. The following uses may be approved by County Manager after conducting an administrative review:
    1. Installation of an antenna on any alternative tower structure, and further including the placement of additional buildings or other supporting equipment used in

connection with said antenna, so long as such addition does not add more than twenty (20) feet to the height of the existing structure.

2. Installation of an antenna on an existing tower of any height, including a pre-existing tower, and further including the placement of additional buildings or other supporting equipment used in connection with said antenna, so long as the addition of said antenna adds no more then twenty (20) feet to the height of said existing tower.

8.02.02 (A) – Membership of Technical Review Committee

A. The TRC shall consist of the following seven (7) members or their designee, designated by the County Manager, who shall also designate the chairperson of the TRC:
   1. County Zoning Administrator;
   2. County Engineer;
   3. County Director of Utilities;
   4. County Planner;
   5. County Fire Chief;
   6. County Director of Inspections;
   7. Executive Director of the Lowndes County Board of Health; and
   8. For applications within the MAZ zoning districts, a representative of the Moody Air Force Base.

Existing MAZ Zones Lowndes County Map

Page left blank

8.0 Study Recommendations

After a brief summary, this section provides a listing of recommendations developed for the 2009 Moody Air Force Base JLUS. Many of these recommendations will require more detailed work following this study in order to determine if and how each recommendation can best be implemented individually for each local government. These work tasks include working with each individual local government to actually develop customized zoning regulations, noise insulation standards, tall tower structure ordinances and real estate disclosure to ensure a successful implementation of this study.

Summary

The 2009 JLUS Planning Process confirmed the high level of commitment and cooperation that exists between Moody AFB and the surrounding communities. In completing the 2009 JLUS, representatives from Moody AFB and local area governments engaged in a detailed land use analysis and planning process that evaluated current conditions and land use policies with regard to the Moody AFB mission and operation requirements.

The results of the 2009 JLUS showed that where in effect, previously adopted land use regulations have been overall effective in limiting incompatible development within the Base's area of influence. Adoption of similar regulations by all surrounding communities and consistent implementation will need to continue in order to provide the protection necessary to prevent incompatible development from restraining Base operations in the future.

All participating local governments in the 2009 JLUS process have expressed a willingness to work with the recommendations as listed in the study and to incorporate them into their existing land use planning policies and regulations.

A Moody AFB Joint Land Use Study Regional Implementation Committee should be established to ensure that JLUS recommendations are carried out and to monitor the need for additional measures in the future. Members of both the Technical Advisory Committee and Policy Committee should be appointed a part of this Regional Implementation Committee in order to continue collaboration and communication on issues. The JLUS should be used as a planning tool, and the creation of this committee will ensure that this viable tool is used. This Committee should also include members of development and business community, conservation interests, as well as landowners and any other appropriate parties.

Educational information for the public will also need to be created and distributed by Moody AFB and the JLUS Regional Committee to inform citizens within the region of the importance of Moody AFB and any land use planning issues that may arise. A more informed and educated public with regard to the economic impacts and importance that Moody AFB offers to the region

and opportunities that result from compatible planning will be a public more willing to practice safe planning and be a strong force in the community on behalf of Moody AFB.

General Recommendations for All Participating Governments

- Develop procedures whereby proposed subdivisions and other residential, commercial, or industrial developments are coordinated with Moody AFB personnel for input on possible impact regarding noise and flight operations.

  Where applicable, include Moody AFB representatives in the technical review of those developments within the JLUS study area that would affect the Base. Lowndes County currently is the only local government that has official procedures to include Moody AFB representatives in their technical review of projects within the MAZ. Other local governments should adopt a similar process. By including Moody AFB in the initial review of projects, problems are eliminated at ground level. Local planning staff and Moody officials will learn from each other as they work through projects before they are too far in the approval process.

- Form a Moody JLUS Regional Implementation Committee. Continued communication beyond this study between Moody AFB officials and local boards, agencies, and authorities will help maintain the viability of Moody AFB. Strong working relationships with local Chambers of Commerce, Development Authorities, Tourism Authorities, and many others will greatly help maintain the success of Moody AFB. A joint effort by Moody Air Force Base officials and the Public, local Governments, local boards and agencies, and any other group should be made to ensure that the recommendations in this study are implemented.

- Perform a joint Traffic Impact Study for the three counties (Berrien, Lanier and Lowndes) surrounding Moody AFB. SGRDC, Valdosta-Lowndes MPO and GDOT should coordinate to gather traffic data and information on existing and future traffic generation and distribution around Moody AFB and develop operating and capacity improvements for the surrounding roadway network.

- Develop a countywide tower/tall structure ordinance regulating the location and lighting of tall structures via height obstruction zones. All local governments within the JLUS study area should contact Moody AFB and receive a "letter of clearance" before any structure in excess of 100 feet high is reviewed and acted on by the local governments, preferably within ten to fourteen days of receipt of letter. All governing bodies should agree in writing to participate in this planning tool. The letter of clearance should include one of the following three recommendations by Moody AFB:

a) No Objection - The subject construction does not exceed obstruction standards and marking/lighting is not required.

b) C**onditional Determination** - The proposed construction/alteration would be acceptable contingent upon implementing mitigating measures (Marking & Lighting, etc.).

c) Objectionable - The proposed construction/alteration is determined to be a hazard and is thus objectionable. The reasons for this determination would be outlined to the proponent.

- Develop a countywide lighting ordinance that addresses lighting requirements of towers/ tall structures and other structures or places (i.e. ball fields, billboards, subdivisions, street lights, commercial or industrial operations) where they would affect the Base's night vision flight operations. Any places or structures, which are not properly lit, pose serious risks in harming military operations. Exterior lighting and light pollution can often interfere with night vision training.

- Develop a formal procedure to require a "letter of clearance" from Moody AFB prior to any local government action with regard to a public or private landfill that contains any material attractive to birds. All governing bodies should agree in writing to participate in this planning tool. The letter of clearance should include one of the following three recommendations by Moody AFB:

  a) No Objection - The subject construction does not exceed obstruction standards and marking/lighting is not required.

  b) C**onditional Determination** - The proposed construction/alteration would be acceptable contingent upon implementing mitigating measures (Marking & Lighting, etc.).

  c) Objectionable - The proposed construction/alteration is determined to be a hazard and is thus objectionable. The reasons for this determination would be outlined to the proponent.

- Based on the most current Moody AFB Noise Contour Map, develop and adopt appropriate noise contour zones for those areas of the JLUS that are affected by noise from the Base and its flight operations. All noise contour zones established in such manner should continuously be reviewed as new missions and flight patterns are added.

- Within the defined noise contour zones adopt appropriate noise attenuation construction and location standards. Noise attenuation construction standards (guidelines for noise

insulation of inhabited structures exposed to Moody AFB aircraft operations) would include requirements to install double paned windows and/or storm doors on all new homes or as a retrofit on existing homes within noise sensitive areas. Additional construction standards would require a certain decibel reduction inside the home within specific noise zones. For example, location in a DNL 75 and above would require a 35 dB reduction. Locational standards would include permitting manufactured homes only in certain noise zones, but not in others and would limit noise sensitive uses to the outer edges of certain noise zones and not allow them at all in other noise zones.

- Amend and update local Comprehensive Plans and Land Development Codes and maps as necessary to include the noise contour zones, height obstruction zones, Moody AFB Activity Zones, or other applicable new zoning and character areas as recommended in this report.

- Research further development tools for possible development control such as Transfer of Development Rights (TDR) policies. Local governments undertake transfer of development rights (TDR) programs to use the market to implement and pay for development density and location decisions. TDR programs allow landowners to sell development rights from their properties in government-designated low-density (sending) areas, and sell them to purchasers who want to increase the density of development in (receiving) areas that local governments have selected as higher density areas.

  TDR programs appear to offer many advantages to control land use but also compensate landowners for restrictions on the development potential of their properties. TDR programs can be easier to implement than typical zoning programs; they make development more predictable and use the market to compensate landowners for lost property value. TDR programs are also more permanent than traditional zoning regulations.

  Although TDR programs appears to be a potentially powerful land use tool, few communities have had success in using these programs because of the associated challenges, i.e. determining the market value of development rights, creating development rights "banks", and even just determining who will administer the process. TDR programs do not reduce the need for zoning and can actually be more complex to administer and therefore need to be researched carefully prior to implementing.

- Pursue state legislation that would require disclosure of proximity to Military installations and training areas upon offering a property for sale. By informing buyers that the properties they may purchase are in a high noise area and at risk for accidents, disclosure requirements may serve as a deterrent for later complaints and as a deterrent for development of vacant land.

- Pursue federal legislation that would expand the notification requirement in FAA Part 77 beyond the current 20,000 feet for military installations to include other low altitude training and navigation areas.

Berrien County, Ray City, Nashville:

- Establish a formal procedure to include Moody AFB in the technical review of projects that would affect Moody AFB.
- Participate in the three county (Berrien/Lanier/Lowndes) joint Moody AFB Traffic Impact Study.
- Develop and adopt a countywide tall structure ordinance including height obstruction zones and letter of clearance requirements.
- Develop and adopt a lighting ordinance minimizing impacts on Moody AFB operations.
- Develop and adopt a procedure to adopt letter of clearance for landfills.
- Develop and adopt noise contour zones adjacent to Moody AFB and under flight paths based on the most current Moody AFB Noise Contour Map.
- Develop and adopt noise attenuation standards for those noise contour zones.
- Based on the noise contour zones and height obstruction zones, establish and adopt one or more special Airfield Compatibility Zoning Districts or zoning overlay districts to increase compatibility of proposed development with Moody AFB operations and slowly over time phase out incompatible development and uses. Such zoning districts may regulate the density of population by specifying minimum acres/lot; maximum concentrations of people in one location for events or at employment sites; setbacks; parking; prohibited and permitted uses; non-conforming uses; permits and variances.
- Require that at all real estate closings involving a property which may be affected by Moody AFB, the buyer and seller sign a Moody AFB disclosure form alerting the parties involved that the property is located in proximity to Moody AFB, training areas or flight paths; that the persons on the premises will be exposed to accident potentials and/or significant noise levels; and that certain restrictions have been placed by the government on development and use of property in the area.
- Revise and adopt the local comprehensive plans and zoning/subdivision ordinances as necessary to implement this report's recommendations.

Clinch County:

- Establish a formal procedure to include Moody AFB in the technical review of projects that would affect Moody AFB or its airspace.
- Develop and adopt a countywide tall structure ordinance including height obstruction zones and letter of clearance requirements.
- Develop and adopt a lighting ordinance minimizing impacts on Moody AFB operations.
- Develop and adopt a procedure to adopt letter of clearance for landfills.

Echols County:

- Establish a formal procedure to include Moody AFB in the technical review of projects that would affect Moody AFB or its airspace.
- Develop and adopt a countywide tall structure ordinance including height obstruction zones and letter of clearance requirements.
- Develop and adopt a lighting ordinance minimizing impacts on Moody AFB operations.
- Develop and adopt a procedure to adopt letter of clearance for landfills.

Lanier County, City of Lakeland:

- Establish a formal procedure to include Moody AFB in the technical review of projects that would affect Moody AFB or its airspace.
- Participate in the three county (Berrien/Lanier/Lowndes) joint Moody AFB Traffic Impact Study.
- Develop and adopt a countywide tall structure ordinance including height obstruction zones and letter of clearance requirements.
- Develop and adopt a lighting ordinance minimizing impacts on Moody AFB operations.
- Develop and adopt a procedure to adopt letter of clearance for landfills.
- Develop and adopt noise contour zones adjacent to Moody AFB and under flight paths based on the most current Moody AFB Noise Contour Map.
- Develop and adopt noise attenuation standards for those noise contour zones.

- Based on the noise contour zones and height obstruction zones, establish and adopt one or more special Airfield Compatibility Zoning Districts or zoning overlay districts to increase compatibility of proposed development with Moody Air Force Base operations and slowly over time phase out incompatible development and uses. Such zoning districts may regulate the density of population by specifying minimum acres/lot; maximum concentrations of people in one location for events or at employment sites; setbacks; parking; prohibited and permitted uses; non-conforming uses; permits and variances.

- Require that at all real estate closings involving a property which may be affected by Moody AFB, the buyer and seller sign a Moody AFB disclosure form alerting the parties involved that the property is located in proximity to Moody AFB, training areas, or flight paths; that the persons on the premises will be exposed to accident potentials and/or significant noise levels; and that certain restrictions have been placed by the government on development and use of property in the area.

- Revise and adopt the local comprehensive plans and zoning/subdivision ordinances as necessary to implement this report's recommendations to implement this report's recommendations.

Lowndes County, City of Valdosta, City of Hahira:

- Continue to include Moody AFB in its technical review of projects that may affect the base and its mission.

- Continue to work with the MAZ districts and monitor the location and extent of those districts on regular intervals to ensure consistency with future Moody AFB flight missions and operations.

- Amend the existing tower regulations to require a letter of clearance from Moody AFB for any telecommunication and other towers countywide prior to approval by the local government, but no later than ten to fourteen days after receipt of the request by Moody AFB.

- Develop and adopt a lighting ordinance minimizing impacts on Moody AFB operations.

- Develop and adopt a procedure to adopt letter of clearance for landfills.

- Consider developing and adopting noise contour zones adjacent to Moody AFB and under flight paths based on the most current Moody AFB Noise Contour Map.

- Consider developing and adopting noise attenuation standards for those noise contour zones.

- Participate in the three county (Berrien/Lanier/Lowndes) joint Moody AFB Traffic Impact Study.

- Require that at all real estate closings involving a property which may be affected by Moody AFB, the buyer and seller sign a Moody AFB disclosure form alerting the parties involved that the property is located in proximity to Moody AFB, training areas, or flight paths; that the persons on the premises will be exposed to accident potentials and/or significant noise levels; and that certain restrictions have been placed by the government on development and use of property in the area.

City of Valdosta:

- Continue Lowndes County MAZ districts on properties in the event that such zoned properties are annexed into the City of Valdosta.

Moody Air Force Base:

- Create and distribute educational information for the public and to inform citizens, planning staff and local officials within the region of the importance of Moody AFB and any land use planning issues that may arise.

- Discuss and establish a procedure to receive timely responses from Higher Headquarters for review requests from local governments in order to remain in compliance with established local review standards.

- Communicate new missions and construction plans to the local government staff at the earliest opportunity in order to provide sufficient time for local governments to address and mitigate any new impacts on the community. This includes the need to amend comprehensive plans as necessary, amendment of zoning maps, accident potential zones and/or noise contour zones.

- Participate in the three county (Berrien/Lanier/Lowndes) joint Moody AFB Traffic Impact Study.

- Assist in pursuing state legislation that would require disclosure of proximity to Military installations upon offering a property for sale.

- Assist in pursuing federal legislation that would expand the notification requirement in FAA Part 77 beyond the current 20,000 feet for military installations to include other low altitude training and navigation areas.

- Actively participate in local governments' "Technical Review Committees" and provide timely feedback to requests for comment (typically ten to fourteen days), including responses from Higher Headquarters.

- Explore strategies and potential funding sources to identify properties where purchase, renovation or relocation assistance from Moody AFB would encourage the replacement of incompatible uses with uses compatible to the operations and impacts of an air force base.

Common Acronyms and Abbreviations

AICUZ	**Air Installations Compatible Use Zones**
APZ	**Accident Potential Zones**
GIS	**Georgraphic Information System**
JLUS	**Joint Land Use Study**
Moody AFB	**Moody Air Force Base**
MIPD	**Military Influence Planning District**
MMC	**Maximum Mission Coutour**
OEA	**Office of Ecnomic Adjustment**
ONMP	**Operational Noise Management Program**
OSD	**Office of the Secretary of Defense**
RAICUZ	**Range Air Installations compatible Use Zones**
SGRDC	**South Georgia Regional Development Center**