

TYRRELL COUNTY
Military Compatibility Area Overlay District

SECTION 1 - MILITARY COMPATIBILITY AREA OVERLAY DISTRICT (MCAOD)

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1.01 PURPOSE AND INTENT

The Military Compatibility Area Overlay District (MCAOD) implements and codifies the recommendations of the Seymour Johnson Air Force Base (AFB) and Dare County Range Joint Land Use Study (JLUS). The purpose of these regulations is to protect the public health, safety, and welfare of the community and to preserve and maintain existing and future operational capabilities of the Dare County Range.

1.02 APPLICABILITY

This Section establishes regulations applicable to all land located within the boundary of the Military Compatibility Overlay District (MCAOD), as adopted and depicted on the official Zoning Map for Tyrrell County.

1.03 EXEMPTIONS

The following uses are exempt from the MCAOD regulations.

A. Existing Structures. This regulation shall not restrict or limit the use of legally established, existing land uses and structures as of the effective date of these regulations.

1.04 RELATIONSHIP OF MCAOD TO UNDERLYING ZONING

The MCAOD is a zoning overlay, with underlying zoning entitlements in place and in effect. The MCAOD regulations established herein supplement, modify, and where indicated, supersede the regulations of the underlying zoning district. All definitions, references, requirements, and other land use controls not specifically defined or modified by the regulations herein shall conform to provisions of this MCAOD applicable to the underlying zoning district.

1.05 CONFLICTING PROVISIONS

The general provisions, zoning district regulations and all other development standards established within all other Sections of this Zoning Code are applicable within the MCAOD to the extent such regulations within the MCAOD establish a less restrictive standards(s) covering the same subject matter. Whenever a provision of the MCAOD contains a specific standard(s) covering the same subject matter as this overlay, the more restrictive requirement(s) shall control.

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1.06 ESTABLISHMENT – MCAOD AND MAA BOUNDARIES

The MCAOD and component parts – Noise Awareness Area (MAA) and Vertical Obstruction MAA, are hereby established as depicted on the official Zoning Map for Tyrrell County and are described as follows:

MCAOD

The MCAOD is the total geospatial area of the Vertical Obstruction MAA. The boundary of the MCAOD and Vertical Obstruction MAA are depicted on the Tyrrell County official Zoning Map. The MCAOD is shown in Figure 1.

Noise MAA

Establishes land use restrictions and design standards for new noise-sensitive land uses within noise contours greater than 65 dB. The Noise MAA is shown in Figure 2.

Vertical Obstruction MAA

Establishes height limitations for structures to protect navigable airspace for aircraft using the Dare County Range. The Vertical Obstruction MAA is shown in Figure 3.

1.07 MCAOD DEVELOPMENT STANDARDS

This Section establishes regulations applicable the overall MCAOD boundary and applies to all land within the combined and consolidated boundary of the Noise MAA and Vertical Obstruction MAA.

1.08 Noise MAA Development Standards.

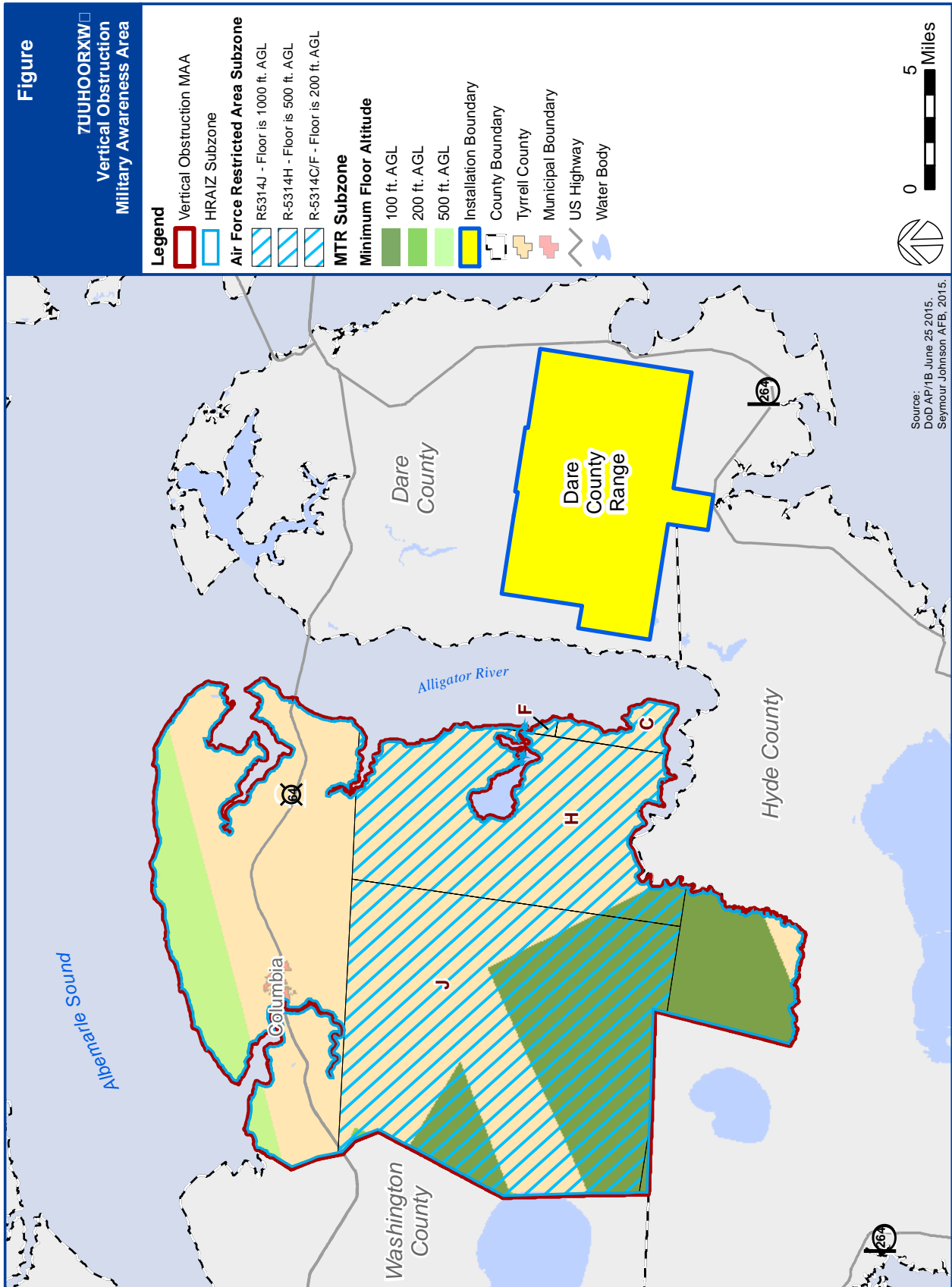
A. Sound Attenuation Building Standards for New Construction.

1. **Noise Sensitive Land Uses.** For the purposes of this section, the term Noise Sensitive Land Use includes any residential, medical, elder care facilities, schools, and places of worship, or other uses that are substantially similar in character and located within the 65 dB or greater noise contours.
2. **Minimum Required Sound Attenuation Measures for New Construction.** Proposed plans shall reflect compliance with the following minimum sound attenuation measures:
 - a. The minimum Sound Transmission Class (STC) rating of structure components shall be in compliance with the following table:

dB LDN	Minimum STC of Exterior Walls and Roof Ceiling	Minimum STC of Doors and Windows
65-69	39	25
70-74	44	33
>75	49	38

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- b. **Alternative Compliance.** As an alternative to the requirements in the table in subsection a. above, structures may be permitted by Tyrrell County to be designed and constructed to limit the interior noise level to no greater than 45 dB DNL. Exterior structures, terrain, and permanent plantings shall be permitted to be included as part of an alternative design. The alternative design shall be certified by an acoustical engineer at the expense of the applicant. The certification requirement may be waived if the proposed alternative design conforms with accepted acoustical engineering standards.
- c. All plans subject to the requirements herein shall be designed to meet accredited acoustical engineering standards accepted by Tyrrell County as meeting the purpose and intent of these requirements and accepted industry building construction methods to achieve sound attenuation of buildings. Tyrrell County may administratively adopt building construction methods which are acceptable in meeting the standards herein.

1.09 Vertical Obstruction MAA Development Standards

A. Purpose and Intent. The purpose and intent of the Vertical Obstruction MAA is to establish the geography and regulations to protect important flight areas for aircraft using the Dare County Range. These requirements establish maximum buildable heights for structures to promote compatible renewable energy development within the High Risk of Adverse Impact Zone (HRAIZ) and development within areas of low-level flight for military aircraft within Military Training Routes and Special Use Airspace.

B. Renewable Energy.

- 1. **Purpose.** The purpose of this Section is to establish regulations for utility-scale (generating 10 or more megawatts) Alternative Energy facilities and structures to ensure impacts to military and aviation operations are minimized.
- 2. **Applicability.** The requirements of this Section shall apply to any application for municipal approval for the erection and maintenance of the following utility-scale Alternative Energy facilities and structures within the HRAIZ subzone of the MCAOD:
 - a. Wind Energy Facility; and
 - b. Other similar uses which involve the production, storage and distribution of energy resources and involve vertical structures or other impacts to aircraft using the Dare County Range.
- 3. **Renewable Energy Development Standards.**
 - a. Applications for energy development projects shall include a mission compatibility evaluation from the DoD Military Aviation and Installation Assurance Siting Clearinghouse.

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- b. Applications for energy development projects shall include details related to the siting of facilities, energy capacity output, height of structures and facilities, and construction technology.
- 4. The information in subsections 3 a-b shall be reviewed and considered before any decision is rendered to approve an application for an energy development project.

C. Vertical Development Standards.

- 1. **Purpose.** The purpose of this Section is to establish regulations for the maximum buildable height of structures to minimize impacts to military and aviation operations.
- 2. **Applicability.** The FAA has established minimum flight altitudes for military aircraft within Military Training Routes and military Special Use Airspace. The standards of this section shall apply to structures within the following areas of Tyrrell County:
 - a. Military Training Routes: Minimum flight altitude of 100 ft. AGL
 - b. Special Use Airspace: Restricted Areas:
 - o R-5314 B/H: Minimum flight altitude of 500 feet AGL
 - o R-5314 C: Minimum flight altitude of 200 feet AGL
- 3. **Exemptions.** An application for development that exceeds the maximum structure height established in Section 4 below, is exempt from the requirements of this Section provided the application includes a mission compatibility evaluation from the DoD Military Aviation and Installation Assurance Siting Clearinghouse indicating no adverse impact on military operations and readiness, and the maximum structure height does not exceed the permitted height for that zoning district.
- 4. **Development Standards.** Structures shall be limited to the following heights:
 - a. Military Training Routes:
 - i. Structures shall be limited to a maximum height of 100 ft. AGL.
 - b. Special Use Airspace: Restricted Areas:
 - i. R-5314 B/H: Structures shall be limited to a maximum height of 500 feet AGL.
 - ii. R-5314 C: Structures shall be limited to a maximum height of 200 feet AGL.

1.10 DEFINITIONS

The following words and phrases applicable to the MCAOD, unless the context clearly indicates a different meaning or construction, shall mean:

- A. **FAA.** The Federal Aviation Administration.
- B. **DoD.** Department of Defense.

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- C. Height.** The highest point of a structure or tree, plant or other object of natural growth or ground, measured from ground level.
- D. High Risk of Adverse Impact Zone (HRAIZ).** The HRAIZ is a geographic area that depicts the Air Force area of interest for Dare County Range operations. Wind turbines built within the radio frequency line of sight can create adverse impacts to training activities depending on vertical height, electromagnetic sensitivity, and distance from military activities.
- E. Joint Land Use Study.** A Joint Land Use Study (JLUS) is a collaborative planning process accomplished through the efforts of a military installation and/or airport and surrounding jurisdictions to identify and establish compatible land uses, enhanced communication procedures, and growth management guidelines for new development and other community activities in the vicinity of air operations. The overarching goal of a JLUS to identify compatible land uses and growth management guidelines to reduce incompatibilities.
- F. Military Awareness Area (MAA).** In compatibility planning, the term “Military Awareness Area” (MAA) is used to formally designate a geographic area where military operations may impact local communities and, conversely, where local activities may affect the military’s ability to conduct its mission.
- 1. Noise MAA.** The Noise MAA includes all land within Tyrrell County that is within the 65 dB or greater noise contours. The Noise MAA is where regulations protect noise sensitive land uses from experiencing high noise levels from low flying military aircraft. The Noise MAA and its contour subzones are depicted on the Tyrrell County MCAOD Map on the official Zoning Map.
 - 2. Vertical Obstruction MAA.** The Vertical Obstruction MAA includes all land within Tyrrell County that is within the HRAIZ, Military Training Routes, and Special Use Airspace (Restricted Areas). The Vertical Obstruction MAA is the area where regulations apply to prevent vertical obstructions from occurring within important flight areas for aircraft operating at the Dare County Range. The Vertical Obstruction MAA is depicted on the Tyrrell County MCAOD Map on the official Zoning Map.
- G. Military Compatibility Area Overlay District (MCAOD).** The MCAOD is a comprehensive zoning overlay district including regulations applicable to the Noise MAA and Vertical Obstruction MAA for the Dare County Range. The MCAOD is defined by the outer extent of the combined Noise MAA and Vertical Obstruction MAA and represents the compatibility area that should be considered when planning future growth and development in the region.
- H. Military Training Route.** Aerial corridors where military aircraft conduct low-altitude, high-speed military flight training.
- I. Noise Sensitive Land Use.** Any use that is sensitive to noise, including residential, medical, elder care facilities, schools, and places of worship, or other uses that are substantially similar in character and located within the 65 dB noise contour.

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- J. Obstruction.** Any structure or tree, plant or other object of natural growth that penetrates an imaginary surface, or an object that is determined to interfere with the established traffic pattern, even if that object does not penetrate an imaginary surface.
- K. Restricted Area.** A type of Special Use Airspace where the existence of unusual, often invisible, hazards to aircraft occur, such as artillery firing or aerial gunnery. Penetration of restricted areas without authorization from the using or controlling agency may be extremely hazardous.
- L. Special Use Airspace (Restricted Area).** A designated area of airspace by the FAA and DoD where activities must be confined because of their nature, or wherein limitations are imposed upon aircraft operations that are not a part of those activities, or both. Special Use Airspace areas are depicted on aeronautical charts, except for controlled firing areas (CFA), temporary military operations areas (MOA), and temporary restricted areas.
- M. Renewable Energy.** The term renewable energy is applied broadly to energy derived from renewable sources (e.g., solar, hydroelectric, wind).