ARTICLE 5  "AO" AIRPORT OVERLAY DISTRICT REGULATIONS

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5-101 Purpose: The regulations set forth in this Article, or set forth elsewhere in these Regulations when referred to in this Article, are the regulations in the "AO" Airport Overlay District. The Airport Overlay District is designed to establish an airport zone surrounding Freeman Field Municipal Airport and Marshall Army Airfield in Geary County and to protect those using the airports from hazards that might be erected or constructed on surrounding properties. To this end, the District establishes additional restrictions on uses of property that may be more strict than those of the underlying district. When this occurs, the more strict requirements apply.

5-102 Definitions: As used in this Article, unless the context otherwise requires, the following words or phrases shall have the meanings herein defined:

1. AIRPORT: Freeman Field Municipal Airport and Marshall Army Airfield.

2. AIRPORT ELEVATION: An elevation of one thousand one hundred one (1,101) feet above mean sea level for Freeman Field Municipal Airport. An elevation of one thousand and sixty-six (1,066) feet above mean sea level for Marshall Army Airfield.

3. AIRPORT HAZARD: Any structure, tree, or use of land which obstructs the airspace required for the flight of aircraft in landing and taking off at any airport, or is otherwise hazardous to such landing or taking off of aircraft.

4. APPROACH SURFACE: A surface longitudinally centered on the extended runway centerline, extending outward and upward from the end of the primary surface and at the same slope as the approach zone height limitation slope set forth in Section 5-104 hereof. The perimeter of the approach surface coincides with the perimeter of the approach zone.

5. APPROACH, TRANSITIONAL, HORIZONTAL, AND CONICAL ZONES: The zones established in this article.

6. CONICAL SURFACE: A surface extending outward and upward from the periphery of the horizontal surface at a slope of 20 to 1 for a horizontal distance of 4,000 feet.

7. HAZARD TO AIR NAVIGATION: An obstruction determined to have a substantial adverse effect on the safe and efficient utilization of the navigable airspace.

8. HEIGHT: For the purpose of determining the height limits in all zones set forth in this Article and shown on the Airport Zoning Maps, the datum shall be mean sea level elevation unless otherwise specified.
9. **HORIZONTAL SURFACE:** A horizontal plane 150 feet above the established airport elevation, the perimeter of which coincides with the perimeter of the horizontal zone.

10. **LARGER THAN UTILITY RUNWAY:** A runway that is constructed for and intended to be used by propeller-driven aircraft of greater than 12,500 pounds maximum gross weight, and jet-powered aircraft.

11. **NONCONFORMING USE:** Any pre-existing structure, object of natural growth, or use of land which is inconsistent with the provisions of this Article, or any amendment thereto.

12. **NONPRECISION INSTRUMENT RUNWAY:** A runway having an existing instrument approach procedure utilizing air navigation facilities with only horizontal guidance, or area-type navigation equipment, for which a straight-in nonprecision instrument approach procedure has been approved or planned.

13. **OBSTRUCTION:** Any structure, growth, or other object, including a mobile object, which exceeds a limiting height set forth in Section 5-104 hereof.

14. **PERSON:** Any individual, firm, copartnership, company, association, joint stock association, or government entity, and includes any trustee, receiver, assignee, or other similar representative thereof.

15. **PRECISION INSTRUMENT RUNWAY:** A runway having an existing instrument approach procedure utilizing an Instrument Landing System (ILS) or a Precision Approach Radar (PAR). It also means a runway for which a precision approach system is planned and is so indicated on an approved airport layout plan or any other planning document.

16. **PRIMARY SURFACE:** A surface longitudinally centered on a runway. When the runway has a specially prepared hard surface, the primary surface extends 200 feet beyond each end of that runway. The width of the primary surface is set forth in Section 5-103 hereof. The elevation of any point on the primary surface is the same as the elevation of the nearest point on the runway centerline.

17. **RUNWAY:** A defined area on an airport prepared for landing and taking off of aircraft along its length.

18. **STRUCTURE:** Any object, including a mobile object, constructed or installed by man, including, but without limitation, buildings, towers, tanks, cranes, smokestacks, earth formation, and overhead transmission lines.

19. **TRANSITIONAL SURFACES:** These surfaces extend outward at 90 degree angles to the runway centerline and the runway centerline extended at a slope of 7 feet horizontally for each 1 foot vertically from the sides of the primary and approach surfaces to where they intersect the horizontal and conical surfaces. Transitional surfaces for those portions of the precision approach surfaces, which project through and beyond the limits of the conical surface, extend a distance of 5,000 feet measured horizontally from the edge of the approach surface and at 90 degree angles to the extended runway centerline.

20. **TREE:** Any object of natural growth.
21. **UTILITY RUNWAY**: A runway that is constructed for and intended to be used by propeller-driven aircraft of 12,500 pounds maximum gross weight and less.

22. **VISUAL RUNWAY**: A runway intended solely for the operation of aircraft using visual approach procedures.

5-103 **Establishment of Airport Zones**: In order to carry out the provisions of this section, there are hereby created and established certain zones which include all of the land lying beneath the approach surfaces, transitional surfaces, horizontal surfaces, and conical surfaces as they apply to Freeman Field Municipal Airport and Marshall Army Airfield. Such zones are shown on the Geary County Airport Zoning Maps which are hereby made a part of these Regulations. An area located in more than one of the following zones is considered to be only in the zone with the more restrictive height limitation. The various zones are hereby established and defined as follows:

1. **Utility Runway Visual Approach Zone**: The inner edge of this approach zone coincides with the width of the primary surface and is 250 feet wide. The approach zone expands outward uniformly to a width of 1,250 feet at a horizontal distance of 5,000 feet from the primary surface. Its centerline is the continuation of the centerline of the runway. (This zone applies to airport runways 5-23 and 13-31 at Freeman Field Municipal Airport and to runway 04-22 at Marshall Army Airfield.)

2. **Utility Runway Nonprecision Instrument Approach Zone**: The inner edge of this approach zone coincides with the width of the primary surface and is 500 feet wide. The approach zone expands outward uniformly to a width of 3,500 feet at a horizontal distance of 10,000 feet from the primary surface. Its centerline is the continuation of the centerline of the runway. (This zone applies to Runway 18-36 at Freeman Field Municipal Airport and to runway 04-22 at Marshall Army Airfield.)

3. **Transitional Zones**: The transitional zones are the areas beneath the transitional surfaces.

4. **Horizontal Zone**: The horizontal zone is established by swinging arcs of 10,000 feet radii for all runways measured from the center of each end of the primary surface of each runway and connecting the adjacent arcs by drawing lines tangent to those arcs. The horizontal zone does not include the approach and transitional zones.

5. **Conical Zone**: The conical zone is established as the area that commences at the periphery of the horizontal zone and extends outward therefrom a horizontal distance of 4,000 feet.

5-104 **Airport Zone Height Limitations**: Except as otherwise provided in this Article, no structure shall be erected, altered, or maintained, and no tree shall be allowed to grow in any zone created by this Article to a height in excess of the applicable height herein established for such zone. Such applicable height limitations are hereby established for each of the zones in question as follows:

1. **Utility Runway Nonprecision Instrument Approach Zone**: Slopes 34 feet outward for each 1 foot upward beginning at the end of, and at the same elevation as, the primary surface and extending to a horizontal distance of 10,000 feet along the extended runway centerline.

2. **Transitional Zones**: Slopes 7 feet outward for each 1 foot upward beginning at the sides of, and at the same elevation as, the primary surface and the approach surface, and extending to a height of 150 feet above the airport elevation. In addition to the foregoing, there are established height limits sloping 7 feet outward for each 1 foot upward beginning at the sides of, and the same elevation as, the approach surface and extending to where they intersect the conical surface or horizontal surface.
3. **Horizontal Zone**: Established at 150 feet above the airport elevation.

4. **Conical Zone**: Slopes 20 feet outward for each 1 foot upward beginning at the periphery of the horizontal zone and at 150 feet above the airport elevation, and extending to a height of 350 feet above the airport elevation.

5. **Excepted Height Limitations**: Except in the Approach Zones, nothing in this Article shall be construed as prohibiting the construction or maintenance of any structure, or growth of any tree, to a height up to 50 feet above the surface of the land.

5-105 **Use Restrictions**: Notwithstanding any other provisions of this Article, no use may be made of land or water within any zone established by this Article in such a manner as to create electrical interference with navigational signals or radio communication between the airport and aircraft, make it difficult for pilots to distinguish between airport lights and others, result in glare in the eyes of pilots using the airport, impair visibility in the vicinity of the airport, create bird strike hazards, or otherwise in any way endanger or interfere with the landing, takeoff or maneuvering of aircraft intending to use the airport. No sanitary landfill may be established, operated, or maintained within 2 miles of any airport boundary.

5-106 **Plan Approval Guidelines**: The Plan Approval Guidelines, including site plan submission and content requirements, are contained in Article 11 of these Regulations.

5-107 **Nonconforming Uses**:

1. **Regulations Not Retroactive**: The regulations prescribed in this Article shall not be construed to require the removal, lowering, or other change or alteration of any structure or tree not conforming to the regulations at the effective date of these Regulations, or otherwise interfere with the continuation of a nonconforming use. Nothing contained herein shall require any change in the construction, alteration, or intended use of any structure, the construction or alteration of which was begun prior to the effective date of these Regulations and is diligently pursued.

2. **Marking and Lighting**: Notwithstanding the preceding provision of this Article, the owner of any existing nonconforming structure or tree is hereby required to permit the installation, operation, and maintenance thereon of such markers and lights as shall be deemed necessary by the Zoning Administrator to indicate the presence of such airport obstruction. Such markers and lights shall be installed, operated, and maintained at the expense of the airport owner.

5-108 **Permits**:

1. **Future Uses**: Except as specifically provided in (A.), (B.), and (C.) hereunder, no material change shall be made in the use of land, no structure shall be erected or otherwise established, and no tree shall be planted in any zone herein created unless a permit therefor shall have been applied for and granted. Each application for a permit shall indicate the purpose for which the permit is desired, with sufficient particularity to permit it to be determined whether the resulting use, structure, or tree would conform to the regulations herein prescribed. If such determination is in the affirmative, the permit shall be granted. No permit for a use inconsistent with the provisions of this Article shall be granted unless a variance has been approved in accordance with Section 5-108 (4.) hereof.

   Nothing contained in any of the foregoing exceptions shall be construed as permitting or intending to permit any construction, or alteration of any structure, or growth of any tree in excess of any of the height limits established by this Article, except as set forth in Section 5-104 (5.).
A. In the area lying within the limits of the horizontal zone and the conical zone, no permit shall be required for any tree or structure less than 75 feet of vertical height above the ground; except when, because of terrain, land contour, or topographical features, such tree or structure would extend above the height limits prescribed for such zones.

B. In areas lying within the limits of the approach zones but a horizontal distance of not less than 4,200 feet from each end of the runway, no permit shall be required for any tree or structure less than 75 feet height above the ground; except when such tree or structure would extend above the height limit prescribed for such approach zone.

C. In the areas lying within the limits of the transition zones beyond the perimeter of the horizontal zone, no permit shall be required for any tree or structure less than 75 feet of vertical height above the ground; except when such tree or structure, because of terrain, land contour, or topographic features, would extend above the height limit prescribed for such transition zones.

2. **Existing Uses:** No permit shall be granted that would allow the establishment or creation of an obstruction or permit a nonconforming use, structure, or tree to become a greater hazard to air navigation than it was on the effective date of these Regulations or any amendments thereto, or than it is when the application for a permit is made. Except as indicated, all applications for such a permit shall be granted.

3. **Nonconforming Uses Abandoned or Destroyed:** Whenever the Zoning Administrator determines that a nonconforming tree or structure has been abandoned or more than 50 percent torn down, physically deteriorated, or decayed, no permit shall be granted that would allow such structure or tree to exceed the applicable height limit or otherwise deviate from the Zoning Regulations.

4. **Variances:** Any person desiring to erect or increase the height of any structure, or permit the growth of any tree, or use property not in accordance with the regulations prescribed in the Article, may apply to the Board of Zoning Appeals for a variance from such regulations. Each application for variance shall be accompanied by a determination from the Federal Aviation Administration as to the effect of the proposal on the operation of air navigation facilities and the safe, efficient use of navigable airspace. Such variances shall be allowed where it is duly found that a literal application or enforcement of the regulations will result in unnecessary hardship, and relief granted will not be contrary to the public interest, will not create a hazard to air navigation, will do substantial justice, and will be in accordance with the spirit of this Article. Additionally, no application for variance to the requirements of this Article may be considered by the Board of Zoning Appeals unless a copy of the application has been furnished to the airport owner for advice as to the aeronautical effects of the variance. If the airport owner does not respond to the application within 30 days after receipt, the Board of Zoning Appeals may act on its own to grant or deny said application.

5. **Obstruction Marking and Lighting:** Any permit or variance granted may, if such action is deemed advisable to effectuate the purpose of this Article and be reasonable in circumstances, be so conditioned as to require the owner of the structure or tree in question to install, operate, and maintain, at the owner’s expense, such markings and lights as may be necessary. If deemed proper by the Board of Zoning Appeals and approved by the Governing Body, this condition may be modified to require the owner to permit the Airport owner, at its own expense, to install, operate, and maintain the necessary markings and lights.
5-109  **Enforcement:** It shall be the duty of the Zoning Administrator to administer and enforce the regulations prescribed in this Article. Applications for permits and variances shall be made to the Zoning Administrator upon a form published for that purpose. Applications required by this Article to be submitted to the Zoning Administrator shall be promptly considered and granted or denied. Application for action by the Board of Zoning Appeals shall be forthwith transmitted by the Zoning Administrator.

5-110  **Conflicting Regulations:** Where there exists a conflict between any of the regulations or limitations prescribed in this Article and any other regulations applicable to the same area, whether the conflict be with respect to the height of structures or trees, the use of land, or any other matter, the more stringent limitation or requirement shall govern and prevail.