

**Monona County Ordinance No. 53**  
**Chapter 300(b)**  
**Airport Land Use and Height Overlay Zoning Ordinance**  
**Mapleton Municipal Airport, Mapleton, Iowa**  
**Monona County, Iowa**

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## Section 1. Introduction

This ordinance shall regulate and restrict the height of structures, objects, and growth of natural vegetation, as well as land uses; otherwise regulating the use of property, within the vicinity of the Mapleton Municipal Airport (the “Airport”). Creation of appropriate zones and establishing the boundaries thereof, as well as providing for changes in the restrictions and boundaries of such zones is vested in this ordinance. The Airport Land Use & Height Zoning maps are incorporated into and made part of this ordinance. This document also provides for the enforcement of the provisions contained within this ordinance, the establishment of an Airport Zoning Board of Adjustment; and imposition of penalties related to the implementation of the ordinance. The 2014 Airport Land Use & Height Overlay Zoning Ordinance is created by the City of Mapleton and Monona County, Iowa with assistance from Siouxland Interstate Metropolitan Planning Council of Sioux City, Iowa and DGR Engineering of Rock Rapids, IA.

## Section 2. Authority

Iowa Code Section 329.3, Airport Zoning, empowers local municipalities to zone airports including dividing such area into zones, and within such zones, specify the land uses permitted, and regulate and restrict, for the purpose of preventing airport hazards, the heights to which structures and trees may be erected or permitted to grow.

## Section 3. Statement of Purpose and Findings

The Mapleton Municipal Airport is acknowledged as an essential public facility to the State of Iowa and the local community. The creation or establishment of an airport hazard is a public nuisance and poses a potential concern to the surrounding communities served by the Airport. There shall be no creation or establishment of a hazard that neither endangers public health, safety, welfare, and affects an individual’s quality of life nor prevents the safe movement of aircraft at the Airport.

For the protection of the public health, safety, and general welfare, and for the promotion of the most appropriate use of land, it is necessary to prevent the creation or establishment of airport hazards. The prevention of airport hazards shall be accomplished, to the extent legally possible, by proper exercise of the police power. The prevention of new airport hazards, and the elimination, removal, alteration, mitigation, or marking and lighting of existing airport hazards, are considered to be a public purpose for which the City of Mapleton and/or Monona County may raise and expend public funds, as an incident to the operation of airports, to acquire or property interest therein.

## Section 4. Short Title

This Ordinance shall be known and may be cited as the **Mapleton Airport Zoning Ordinance**, and it is referred to as the “Ordinance” within the following document.

## Section 5. Applicability

This ordinance encompasses a general area surrounding the Airport. Specific dimensions associated with the zoning boundary are shown in the Mapleton Airport Land Use & Height Overlay Zoning Maps. See Exhibit A.

## Section 6. Definitions

The following definitions shall be utilized for terms as appropriate to the ordinance.

### 6.1 **Airport.** (FAA FAR Sec. 152.3)

Any areas of land or water that is used, or intended for use, for the landing and takeoff of aircraft. Any appurtenant areas that are used, or intended for use, for airport buildings, other airport facilities, or rights-of-way; and all airport buildings and facilities located on the areas specified in this definition. The Airport is owned by the City of Mapleton, Iowa.

### 6.2 **Airport Elevation.** (FAA AC 150/5190-4A)

The highest point on an airport's usable landing area measured in feet from sea level.

### 6.3 **Airport Hazard.** (FAA FAR Sec. 152.3)

Any structure, tree or obstruction determined to have a substantial adverse effect on the safe and efficient utilization of the navigable airspace for the purpose of determining the height limits as may be set forth in the Monona County Code of Ordinances.

### 6.4 **Airport Layout Plan (ALP).** (FAA FAR Sec. 152.3)

The plan of an airport showing the layout of existing and proposed airport facilities.

### 6.5 **Airport Overlay Zones.**

A zone intended to place additional land use conditions on land impacted by the airport while retaining the existing underlying zone. The FAR Part 77 Surfaces and RPZs have been combined to create five airport overlay zones. The five specific zones create a comprehensive area focused on maintaining compatible land use around airports.

- **Zone A [Runway Protection Zone]** - is intended to provide a clear area that is free of above ground obstructions and structures. This zone is closest to the individual runway ends.
  - **Zone B [Approach Surface]** - is a critical overlay surface that reflects the approach and departure areas for each runway at an airport. The size of Zone B is predicated upon the type of approach (visual, non-precision, or precision) that a specific runway has and the type/size of aircraft utilizing the runway.
  - **Zone C [Transitional Surface]** - includes those areas that are parallel to the runway pavement and extend from the edge of the primary surface.
  - **Zone D [Horizontal Surface]** - is typically elliptical in shape, depending upon the runway types and configurations at an individual airport.
  - **Zone E [Conical Surface]** - is the outermost zone of the overlay areas and has the least number of land use restriction considerations. Zone E begins at the edge of the horizontal surface and is 4,000 feet in width paralleling the horizontal surface.
- 6.6 **Airport Zoning Permit.**  
Airport zoning permit allowing new development or alteration or expansion of a nonconforming use.
- 6.7 **Airspace.**  
The space lying above the earth or above a certain area of land or water that is necessary to conduct aviation operations.
- 6.8 **Airport Land Use & Height Overlay Zoning Map.**  
The airport land use & height overlay zoning map is compiled from the criteria in FAR Part 77, "Objects Affecting Navigable Airspace." It shows the area affected by the Airport Overlay Zoning Ordinance, and includes the layout of runways, airport boundaries, elevations, and area topography. Applicable height limitation areas are shown in detail.
- 6.9 **Approach Slope. (FAR Part 77)**  
The ratio of horizontal to vertical distance indicating the degree of inclination of the Approach Surface. The ratio is 20:1 for all utility and visual runways extended from the primary surface a distance of 5,000 feet.
- 6.10 **Approach Surface. (FAA AC 150/5190-4A)**  
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 this Ordinance. In plan the perimeter of the approach surface coincides with the perimeter of the approach zone.
- 6.11 **City.**  
The City of Mapleton, Iowa.
- 6.12 **Compatibility.**  
The degree to which land uses or types of development can coexist or integrate.
- 6.13 **County.**  
Monona County, Iowa.
- 6.14 **Easement. (FAA AC 5020-1)**  
The legal right of one party to use a portion of the total rights in real estate owned by another party. This may include the right of passage over, on, or below property; certain air rights above the property, including view rights; and the rights to any specified form of development or activity, as well as any other legal rights in the property that may be specified in the easement document.
- 6.15 **Federal Aviation Administration (FAA).**  
A federal agency charged with regulating air commerce to promote its safety and development; encourage and develop civil aviation, air traffic control, air navigation; and promoting the development of a national system of airports.
- 6.16 **Federal Aviation Regulations (FAR). (FAA FAR)**  
Regulations established and administered by the FAA that govern civil aviation and aviation-related activities.
- **FAR Part 36. (FAA FAR Sec. 36.1)** Regulation establishing noise standards for the civil aviation fleet.
  - **FAR Part 91. (FAA FAR Sec. 91.1)** Regulation pertaining to air traffic and general operating rules, including operating noise limits.
  - **FAR Part 150. (FAA FAR Sec. 150.1)** Regulation pertaining to airport noise compatibility planning.
  - **FAR Part 161. (FAA FAR Sec. 161.1)** Regulation pertaining to notice and approval of airport noise and access restrictions.
  - **FAR Part 77. (FAA FAR Sec. 77.1)** Objects Affecting Navigable Airspace - Part 77 (a) establishes standards for determining obstructions in navigable airspace; (b) defines the requirements for notice to the FAA

Administrator of certain proposed construction or alteration; (c) provides for aeronautical studies of obstructions to air navigation to determine their effect on the safe and efficient use of airspace; (d) provides for public hearings on the hazardous effect of proposed construction or alteration on air navigation; and (e) provides for establishing antenna farm areas.

6.17 **General Aviation Airport.**

Any airport that is not an air carrier airport or a military facility.

6.18 **Height.**

Height is utilized for the purpose of determining the height limits in all zones set forth in this Ordinance and shown on the official zoning maps; height shall be measured as the highest point of a structure, tree, or other object of natural growth, measured from the mean sea level elevation unless otherwise specified.

6.19 **Imaginary Surfaces.** (*FAA FAR Part 77.25*)

Those areas established in relation to the airport and each runway consistent with FAR Part 77 in which any object extending above these imaginary surfaces, by definition, is an obstruction.

- **Transitional surface.** The transitional surface extends outward and upward at right angles to the runway centerline and extends at a slope of seven feet horizontally for each one foot vertically (7:1) from the sides of the primary and approach surfaces. The transitional surfaces extend to the point at which they intercept the horizontal surface at a height of 150 feet above the established airport elevation.
- **Horizontal surface.** The horizontal surface is a horizontal plane located 150 feet above the established airport elevation and encompasses an area from the transitional surface to the conical surface. The perimeter is constructed by generating arcs from the center of each end of the primary surface and connecting the adjacent arcs by lines tangent to those arcs.
- **Conical surface.** The conical surface extends upward and outward from the periphery of the horizontal surface at a slope of 20 feet horizontally for every one foot vertically (20:1) for a horizontal distance of 4,000 feet.
- **Approach surface.** The approach surface is longitudinally centered on an extended runway centerline, and extends outward and upward from the end of the runway primary surface.

6.20 **Incompatible Land Use.** (*FAA FAR Sec. 150.7*)

The use of land which is normally incompatible with the aircraft and airport operations (such as, but not limited to, homes, schools, nursing homes, hospitals, and libraries).

6.21 **Land Use Compatibility.**

The coexistence of land uses surrounding the airport with airport-related activities.

6.22 **Lighting and Marking of Hazards to Air Navigation.**

Installation of appropriate lighting fixtures, painted markings or other devices to such objects or structures that constitute hazards to air navigation.

6.23 **Mitigation.**

The minimization, reduction, elimination or compensation for adverse environmental effects of a proposed action.

6.24 **Noise Impact.**

A condition that exists when the noise levels that occur in an area exceed a level identified as appropriate for the activities in that area.

6.25 **Noise Sensitive Area.** (*FAA AC 91-36D*)

Defined as an area where noise interferes with normal activities associated with the area's use. Examples of noise-sensitive areas include residential, educational, health, and religious structures and sites, and parks, recreational areas (including areas with wilderness characteristics), wildlife refuges, and cultural and historical sites where a quiet setting is a generally recognized feature or attribute.

6.26 **Non-Conforming Use.** (*FAA Web site*)

Any pre-existing structure, tree, or use of land that is inconsistent with the provisions of the local land use or airport master plans.

6.27 **Object.** (*FAA AC 150/5300-13*)

Includes, but is not limited to above ground structures, navigational aids, people, equipment, vehicles, natural growth, terrain, and parked aircraft.

6.28 **Obstacle Free Zone (OFZ).** (*FAA 150/5300-13*)

The OFZ is the airspace below 150 feet (45 m) above the established airport elevation and along the runway and extended runway centerline that is required to be clear of all objects, except for the frangible visual NAVAID's

- that need to be located in the OFZ because of their function, in order to provide clearance protection for the aircraft landing or taking off from the runway, and for missed approaches.
- 6.29 **Obstruction.** *(FAA AC 150/5190-4A)*  
Any structure, growth, or other object, including a mobile object, which exceeds a limiting height, specific to its geographic location relative to the runway/airport.
  - 6.30 **Overlay Zone.**  
A mapped zone imposing requirements in addition to those of the underlying zoning district.
  - 6.31 **Primary Surface.** *(FAA AC 150/5190-4A)*  
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; for military runways or when the runway has no specially prepared hard surface, or planned hard surface, the primary surface ends at each end of that runway. The width of the primary surface is set forth in FAR Part 77. The elevation of any point on the primary surface is the same as the elevation of the nearest point on the runway centerline.
  - 6.32 **Primary Runway.** *(FAA AC 150/5325-4B)*  
The runway used for the majority of airport operations. Large, high-activity airports may operate two or more parallel primary runways.
  - 6.33 **Public Use Airport.** *(FAA AC 150/5190-6)*  
Means either a publicly owned airport or a privately owned airport open for public use.
  - 6.34 **Runway Protection Zone (RPZ).** *(FAA AC 150/5300-13)*  
An area off the runway end designed to enhance the protection of people and property on the ground.
  - 6.35 **Structure.**  
Any object constructed or erected with a fixed location on the ground, or attached to something having a fixed location on the ground. Among other things, structures include buildings, antenna, mobile homes, billboards, poster panels, factories, sheds, cabins, factory-built homes, satellite dish antenna, storage tanks, towers and other similar uses.
  - 6.36 **Variance.**  
A modification of the specific regulations of this chapter granted by resolution of the Board of Adjustment in accordance with the terms of this chapter for the purpose of assuring that no property, because of special circumstances and hardships applicable to it, shall be deprived of privileges commonly enjoyed by other properties in the same vicinity and zoning district.
  - 6.37 **Visual Approach.**  
An approach to an airport conducted with visual reference to the terrain.
  - 6.38 **Visual Runway.** *(FAA AC 150/5300-13)*  
A runway without an existing or planned straight-in instrument approach procedure.
  - 6.39 **Wildlife Hazards.**  
Wildlife (birds, mammals, reptiles), including feral animals and uncontrolled domesticated animals associated with aircraft strike problems, and capable of causing structural damage to airport facilities or attractants to other wildlife that pose a strike hazard.

[Section 7. Air Space Obstruction Zones & Airport Overlay Zoning Maps](#)

The zones established by this ordinance is illustrated on the official Mapleton Municipal Airport Land Use & Height Overlay Zoning Map consisting of two (2) sheets, prepared by DGR Engineering, attached as Exhibit A to this Ordinance. Such Official Airport Land Use & Height Overlay Zoning Map may be amended from time to time, and all notations, references, elevations, data, zone boundaries, and other information thereon, is hereby adopted as part of this ordinance.

[Section 8. Airport Zoning Requirements](#)

In accordance with Section 329.10, Iowa Code, there are three (3) principal airport zoning requirements supported by additional information contained within the following remaining sections of this ordinance. These basic zoning requirements state:

- 1. All airport zoning regulations adopted under this chapter shall be reasonable and none shall impose any requirement or restriction that is not necessary to make effective the purposes of this ordinance.
- 2. a. Airport zoning regulations adopted under this ordinance may require the removal, lowering, or other change or alteration of any structure or tree, or a change in use, not conforming to the regulations when adopted or amended.

- b. Airport zoning regulations adopted under this ordinance may require a property owner to permit the City of Mapleton and/or Monona County to install, operate, and maintain on the property markers and lights as necessary to indicate to operators of aircraft the presence of the airport hazard, when adopted or amended.
3. All such regulations may provide that a preexisting nonconforming structure, tree, or use, shall not be replaced, rebuilt, altered, allowed to grow higher, or replanted, so as to constitute a greater airport hazard than it was when the airport zoning regulations or amendments to the regulations were adopted.

The City of Mapleton, or the City and Monona County in conjunction, will be responsible for the initial removal of trees, structures, or other natural or man-made obstructions that are not conforming to the regulations of this ordinance when adopted or amended. Any subsequent alterations or removal of any natural or man-made obstructions to the Airport or its airspace will be responsibility of the property owner.

#### Section 9. Nonconformities

It is the intent of this ordinance to permit legal nonconforming buildings, structures, or natural resources to continue until they are removed but not to encourage their continuance, unless such nonconforming use is determined by the FAA to be a hazard within one of the airport zones and must be altered or changed in accordance with FAA regulations. It is further the intent of this ordinance that nonconformities shall not be enlarged upon, expanded or extended, nor be used to add other nonconforming structures prohibited elsewhere in the defined airport zones.

In accordance with Section 329.10, Iowa Code, and stated above in Section 8. of this ordinance, any preexisting nonconforming structure, tree, or land use, shall not be replaced, rebuilt, altered, allowed to grow higher, or replanted, so as to constitute a greater airport hazard than it was when the airport zoning regulations or amendments to the regulations were adopted. With that stated, where a lawful building or structure exists prior to the effective date of adoption or amendment of this ordinance that cannot be built under the terms of this airport ordinance by reason of restrictions on height or land use compatibility, such structure may be continued so long as it remains otherwise lawful and in compliance with FAA regulations; subject to the following provisions:

1. No such nonconforming structure may be enlarged or altered in a way that increases its nonconformity. Such structure may be enlarged or altered in a way that does not increase its nonconformity.
2. Should such nonconforming structure be destroyed by any means to an extent of more than fifty percent (50%) of its replacement cost, it shall be reconstructed only in conformity with the provisions of this airport ordinance.
3. Should any nonconforming structure be moved within the boundaries of any of the five (5) airport zones for any reason or for any distance whatever, it shall thereafter conform to the regulations of this airport zoning ordinance.
4. Discontinuance. In the event a nonconforming building, structure or use is discontinued for a period of two (2) years, the height or land use compatibility shall conform thereafter to the provisions of this airport zoning ordinance.

On any nonconforming building or structure, work may be done on ordinary repairs or replacement of non-bearing walls not exceeding fifty percent (50%) of the assessed value of the building, provided the cubic content of the building shall not be increased. Nothing in this ordinance shall be deemed to prevent the strengthening or restoring to a safe condition of any building or part thereof declared to be unsafe by an official charged with protecting the public safety upon orders of such official. There may be a change of tenancy, ownership, or management of any existing nonconforming uses of land, buildings or structures.

#### Section 10. Land Use Safety Zones

FAR Part 77 Surfaces and Runway Protection Zones have been combined to create five (5) airport overlay zones. These five zones are designed to maintain compatible land uses around the Airport. The zones shall be evaluated for compatible land uses. Specific dimensions for the individual zones for each runway end are noted in the following tables and text. The Airport Land Use & Height Overlay Zoning Maps should be evaluated to determine the specific area of impact associated with each zone.

##### **Zone A – Runway Protection Zone (RPZ)**

Zone A is intended to provide a clear area that is free of above-ground obstructions and structures. Runway Protection Zones (RPZs), formerly known as clear zones, were originally established to define land areas below aircraft approach paths in order to prevent the creation of airport hazards or development of incompatible land use. As stated in the Iowa Airport Land Use Guidebook, 2008, the FAA adopted clear zones with dimensional standards to implement a recommendation from the 1952 President's Airport Commission study that identified the establishment of clear areas beyond runway ends was deemed worthy of federal management. RPZs are designed with the intent to protect people

and property on the ground. They are located at the end of each runway and should ideally be controlled by the airport. Control is preferably exercised by acquisition of sufficient property interest to achieve and maintain an area that is clear of all incompatible land uses, objects, and activities.

Table 1. Zone A - Dimensional Requirements

	Runway Ends	Approach Visibility Minimums <sub>1</sub>	Dimensions			
			Length L feet	Inner Width W <sub>1</sub> feet	Outer Width W <sub>2</sub> feet	
<b>Existing Runway</b>	<b>Runway 2</b>	<b>1-mile, non-precision</b>	<b>1,000</b>	<b>500</b>	<b>700</b>	
	<b>Runway 20</b>	<b>1-mile, non-precision</b>	<b>1,000</b>	<b>500</b>	<b>700</b>	

1. The RPZ dimensional standards are for the runway end with the specified approach visibility minimums. .

Source: FAA AC 150/5300-13, current edition, Airport Design Standards

**Zone B – Approach Surface**

Zone B is a critical airport overlay zoning surface that reflects the approach and departure areas for each runway at an airport. The size of Zone B is predicated upon the type of approach (visual, non-precision, or precision) that a specific runway has and the type/size of aircraft utilizing the runway. The approach surface is longitudinally centered on the extended runway centerline and extends outward and upward from the end of the primary surface. The inner edge of the approach surface is the same width as the primary surface and expands uniformly. Table 2 below illustrates the various sizes of Zone B based upon the specific runway criteria. A portion of Zone B is overlain by Zone A because the approach surface and RPZ overlap the entire length of the RPZ. Consequently, the length of Zone B begins at the inner edge of the RPZ.

Table 2. Airport Overlay Zones B through E Dimensional Standards

Item	Runway Dimensional Standards (Feet)	
	Runway 2	Runway 20
Primary surface width and <b>Zone B</b> inner width	<b>500</b>	<b>500</b>
<b>Zone B</b> end width	<b>2,000</b>	<b>2,000</b>
<b>Zone B</b> length	<b>5,000</b>	<b>5,000</b>
<b>Zone C</b> width	<b>1,050</b>	<b>1,050</b>
<b>Zone D</b> radius	<b>5,000</b>	<b>5,000</b>
<b>Zone E</b> width	<b>4,000</b>	<b>4,000</b>

### **Zone C – Transitional Surface**

Zone C includes those areas that are parallel to the runway pavement and extend 1,050 feet from the edge of the primary surface paralleling the runway and extended runway centerline until they reach the end of Zone A at a 90 degree angle. The specific dimensions for Zone C are based upon various options for the primary surface that is predicated upon the type of approach and critical aircraft. The transitional surface (Zone C) extends outward and upward at right angles to the runway centerline and extends at a slope of seven feet horizontally for each one-foot vertically (7:1) from the sides of the primary and approach surfaces. The transitional surfaces extend to the point at which they intercept the horizontal surface at a height of 150 feet above the established airport elevation.

### **Zone D – Horizontal Surface**

Zone D is typically elliptical in shape, depending upon the runway types and configurations at individual airports. The horizontal surface is a horizontal plane located 150 feet above the established airport elevation and encompasses an area from the transitional surface to the conical surface. The perimeter is constructed by generating arcs from the center of each end of the primary surface and connecting the adjacent arcs by lines tangent to those arcs. The radius of each arc for all runway ends designated as utility or visual airports is 5,000 feet.

### **Zone E – Conical Surface**

Zone E is the outermost zone of the airport overlay zoning areas and has the least number of land use restriction considerations. The zone begins at the edge of the horizontal surface and is 4,000 feet in width paralleling the horizontal surface. According to the Iowa Airport Land Use Guidebook, the conical surface extends upward and outward from the periphery of the horizontal surface at a slope of 20 feet horizontally for every one foot vertically (20:1) for a horizontal distance of 4,000 feet. Height limitations for the surface range from 150 feet above the airport reference elevation at the inner edge to 350 feet at the outer edge.

### **Section 11. Land Use Zone Compatibility**

The need to plan for compatible land use near airports is not a new concept. Compatible land use was recognized as early as 1952 in a document entitled *The Airport and Its Neighbors - The Report of the President's Airport Commission*. As stated in the Iowa Airport Land Use Guidebook, the incidence of incompatible land uses and impact on airport operations and development have escalated. As decisions to allow incompatible land uses near airports threaten the nation's aviation system, implementation of compatible land use controls have become an industry priority. It is important for the Mapleton Airport to maintain an obstruction-free airport and associated airspace. This includes the area that encompasses the airport, runway protection zones, approach areas, and general vicinity of the airport. While some of these areas are owned by airports, the bulk of the land beyond airport boundaries is privately owned and needs to be managed by the local municipality and/or county in which the airport jurisdiction falls. FAA criteria, such as grant assurances and design guidelines, along with aviation accident statistics, provide the foundation and the justification for compatible land uses.

*DEFINITION OF "COMPATIBLE LAND USE" - Airport compatible land uses are defined as those developments that comply with generally accepted restrictions on location, height, and activity that provide for safe aircraft movement and airport operations. Additionally, it includes the preservation of public health, safety, and welfare for those persons located in the airport's environs.*

The above stated definition, defined in the Iowa Airport Land Use Guidebook, appears vague since no specific land use types are specified. However, the vagueness is intentional because nearly every type of land use can be both compatible and incompatible depending upon the particular aspects of the land use, including management of the land use, location of the land use relative to the airport. For example, land uses typically considered to be compatible with airport operations include commercial, industrial, and agricultural activities. With that said, each of these uses may also contain aspects considered incompatible such as:

- Commercial uses may have dense concentrations of people
- Industrial uses that can generate smoke/steam that creates visual obstructions
- Agricultural operations can act as wildlife attractants in certain circumstances



The City of Mapleton and Monona County must each and collaboratively assess the compatibility of the land uses in detail as related to the Airport. Descriptions of land use issues include high concentrations of people, tall structures, visual obstructions, and wildlife and bird attractants.

Lastly, land use compatibility is critical to the Airport because certain grant assurances are required as part of a project application from airports that are eligible to request federal funds. Upon acceptance of grant money, these assurances are incorporated into and become part of the grant agreement. The airport sponsor is obligated to comply with specific assurances, which include the maintenance of compatible land use within the vicinity of the airport. Specifically, Grant Assurance 21 included in the September 1999 amendment to 49 USC 47107, requires all airports that accept federal money to take appropriate action against incompatible land uses in the immediate vicinity of the airport. Such actions include adopting zoning laws and zoning changes that will increase airport land use compatibility. This grant assurance obligates an airport sponsor to protect the federal investment through the maintenance of a safe operating environment. The development of compatible land uses near airports is supported through cooperative comprehensive planning that includes FAA standards. Land use compatibility is a requirement for eligibility to receive FAA grant money for airport improvements. Adjacent land uses that are not compatible with airports may result in the loss of federal or state funding for airports.

The following tables shall be utilized to evaluate land use compatibility for various land use classifications.

1. Uses identified as **COMPATIBLE** shall not require additional review; however, consideration should be given to the following areas of concerns: High concentrations of people, tall structures, visual obstructions, or wildlife and bird attractants.
2. Uses found to be **NOT COMPATIBLE** shall be precluded from development within the specific zones. The applicant reserves the right to apply for a variance for an incompatible use to be built within the requested airport zone and in accordance with FAA requirements. Variances will be reviewed by the Airport Board of Adjustment.
3. Uses found to require **ADDITIONAL REVIEW** shall be evaluated for general compatibility by the Mapleton Zoning Administrator for potential conflicting land uses or potential negative affects that may need to be mitigated. If the areas of concern are addressed by the applicant, the Airport Zoning Administrator shall recommend issuance of the zoning permit. If no areas of potential conflicting uses or incompatible land uses are identified, or need to be mitigated, the Airport Zoning Administrator shall proceed to recommend issuance of the zoning permit.

Mapleton Airport Zone – Land Use Chart					
	<i>C = Compatible</i>		<i>AR = Additional Review Required</i>		<i>NC = Not Compatible</i>
Land Uses	Zone A	Zone B	Zone C	Zone D	Zone E
<b>Residential Uses</b>					
<b>Single Family Detached Dwelling</b> <i>(i.e. single family, mobile or manufactured)</i>	AR	AR	C	C	C
<b>Multi-Family Uses</b> <i>(i.e. apartments, condos, townhouse, etc.)</i>	AR	AR	C	C	C
<b>Group Living Uses</b> <i>(i.e. group or nursing homes, assisted living)</i>	AR	AR	C	C	C
<b>Manufactured/Mobile Housing Parks</b>	NC	AR	C	C	C

Mapleton Airport Zone – Land Use Chart					
<i>C = Compatible</i>		<i>AR = Additional Review Required</i>		<i>NC = Not Compatible</i>	
Land Uses	Zone A	Zone B	Zone C	Zone D	Zone E
<b>Commercial Uses</b>					
<b>Retail Sales</b> <i>(i.e. convenience stores, electronics, furniture, groceries, hardware, malls, etc.)</i>	AR	AR	C	C	C
<b>Outdoor Storage and Self-Service Storage</b> <i>(i.e. storage yards, vehicles sales, landscaping, equipment sales, mini-warehousing, etc.)</i>	AR	AR	C	C	C
<b>Vehicle Repair Uses</b> <i>(i.e. repair or service shops, alignment, tire sales)</i>	AR	AR	C	C	C
<b>All Other Commercial Uses</b> <i>Any other commercial use not classified in one of the above listed categories</i>	AR	AR	C	C	C
<b>Industrial Uses</b>					
<b>Light Manufacturing</b> <i>(i.e. research, HVAC, plumbing, janitorial, engineering, assembly, warehousing, etc.)</i>	AR	AR	C	C	C
<b>*Heavy Manufacturing</b> <i>(i.e. concrete plants, packing, animal, ethanol or other facilities with excessive smoke or dust)</i>	NC	NC	AR	C	C
<b>Mining and Extraction Uses</b>	NC	AR	AR	C	C
<b>Waste Related Uses</b> <i>(i.e. recycling centers, landfills, waste transfer stations, hazardous waste collection sites, etc.)</i>	NC	NC	NC	AR	AR
<b>Salvage Operations</b> <i>(i.e. collect, store, and dismantle damaged or discarded vehicles, machinery, etc.)</i>	AR	C	C	C	C

Mapleton Airport Zone – Land Use Chart					
<i>C = Compatible</i>		<i>AR = Additional Review Required</i>		<i>NC = Not Compatible</i>	
Land Uses	Zone A	Zone B	Zone C	Zone D	Zone E
<b>Civic &amp; Public Uses</b>					

<b>Basic Utility Uses</b> <i>(i.e. utility facilities, electrical substations, water and sewer lift stations, water towers)</i>	NC	AR	AR	C	C
<b>General Community Services</b> <i>(i.e. libraries, community centers, police/fire, etc.)</i>	AR	AR	C	C	C
<b>Daycare Uses</b> <i>(i.e. daycare, preschools, after school care)</i>	AR	AR	C	C	C
<b>Educational Facilities</b> <i>(i.e. any public or private school)</i>	AR	AR	AR	C	C
<b>Hospitals</b> <i>(i.e. hospitals, medical centers)</i>	AR	AR	AR	C	C
<b>Religious Assembly or Civic Uses</b> <i>(i.e. churches, religious use or civic clubs)</i>	AR	AR	AR	C	C
<b>Infrastructure Uses</b>					
<b>Communication Uses</b> <i>(i.e. wireless, emergency towers, antennas, etc)</i>	NC	AR	AR	AR	AR
<b>Transportation and Parking Uses</b> <i>(i.e. highways, local roads, parking lots, etc.)</i>	C	C	C	C	C
<b>Utility Uses</b> <i>(i.e. solar power, wind generators, wind farms)</i>	NC	NC	AR	AR	AR
<b>Agriculture Uses</b>					
<b>Agriculture Plant-related</b> <i>(i.e. crops, vegetable, fruit, and tree farms, etc.)</i>	AR	C	C	C	C
<b>Agriculture Animal-related</b> <i>(i.e. livestock production, dairies, horse farms)</i>	AR	C	C	C	C

Mapleton Airport Zone – Land Use Chart					
<i>C = Compatible</i>		<i>AR = Additional Review Required</i>		<i>NC = Not Compatible</i>	
Land Uses	Zone A	Zone B	Zone C	Zone D	Zone E
<b>Recreation Uses</b>					
<b>Outdoor Commercial Recreation</b> <i>(i.e. camping, swimming pool, drive-in theaters, amphitheaters, fairgrounds, race tracks, etc.)</i>	AR	AR	AR	C	C
<b>Indoor Commercial Recreation</b> <i>(i.e. health clubs, bowling alleys, skating rinks, billiard halls, arcades, indoor theaters)</i>	AR	AR	C	C	C

<b>Golf Recreation</b> <i>(driving ranges, golf courses, country clubs)</i>	AR	AR	AR	C	C
<b>Parks</b> <i>(i.e. aquatic, neighborhood, school, community)</i>	AR	C	C	C	C

Regarding the land use compatibility charts on the previous pages, if a specific use of land, building or structure is proposed by an applicant and not identified on the land use compatibility charts, the Airport Zoning Administrator shall be responsible for determining the level of land use compatibility in each applicable zone. If the applicant disagrees with the decision, they may appeal the decision of the administrator and have the Airport Board of Adjustment make a determination on the proposed land use compatibility.

**Section 12. Airport Zoning Ordinance Administration**

As stated in Section 329.13, Iowa Code, all airport zoning regulations adopted under this ordinance shall provide for the administration and enforcement of such regulations by an administrative agency. For purposes of the Mapleton Airport Zoning Ordinance, the administration will be enforced by the Mapleton Zoning Administrator with consultation and cooperation from the Monona County Zoning Administrator. However, in no case, shall such administrative agency be or include any member of the airport Board of Adjustment. The duties of any administrative agency designated pursuant to the Iowa Code or this ordinance shall not include any of the powers herein delegated to the Board of Adjustment. The Mapleton Zoning Administrator will be recognized as the Airport Zoning Administrator since the operation of the Airport falls within the jurisdiction of the city. If needed, the Monona County Zoning Administrator may be called upon from time to time to consult with and/or confer with the Airport Zoning Administrator about the airport zoning ordinance regulations.

**Section 13. Airport Zoning Permit Review**

Buildings or other structures located within the Airport land use and height overlay zoning area, as defined herein, shall be reviewed in accordance with the allowable height and land use classifications accordingly. All proposed land uses, exclusive of communication uses (e.g. specifically cell towers, antennas, etc.), utility uses (e.g. specifically wind generators, wind farms) and waste related uses (e.g. specifically landfills), shall be exempted from the airport zoning review if the proposed building or structure is located within airport overlay Zones D and E and it meets the height requirements of the Mapleton Airport Zoning Ordinance and the zoning ordinance for the jurisdiction it is located within.

Furthermore, those proposed buildings or structures to be located within airport overlay zones A, B, and C of the Airport land use and height overlay zoning area, as defined herein, such proposed buildings or structures shall automatically be reviewed by the Airport Zoning Administrator in accordance with both height and land use conformance. Airport zoning permits may be reviewed and granted in conjunction with or supplemental to an Mapleton zoning permit or any zoning permit in the county or other affected communities.

It shall be the duty of the zoning administrator or reviewer in each affected jurisdiction within the boundaries of the Airport land use and height overlay zoning area to determine if such proposed building or structure meets the initial criteria for additional height and land use review or if the proposed use is exempted from additional review. If the affected jurisdiction determines an additional level of review is needed, the appropriate authority shall submit a copy of the zoning permit under review to the Airport Zoning Administrator. Upon review by the Airport Zoning Administrator, comments and a recommendation on approval, approval with conditions or denial of such permit shall be returned to the originating jurisdiction in which the proposed building or structure is located.

The Airport Zoning Administrator shall approve the permit if after evaluation, the proposed project is found to be adequately compatible. Should the proposed project be found to be incompatible after review, the Airport Zoning Administrator shall recommend denial of the permit. Should the permit be denied, the applicant shall have the right to request an appeal as prescribed in this ordinance. Any airport zoning review shall be null and void if the purpose for which the permit is issued has not commenced within one (1) year from date of issuance. Should the activity not be commenced within that time, a new airport zoning review shall be required.

**Section 14. Hazardous Markings and Lighting**

This section provides for safe aircraft operations, as well as the health, safety, and welfare of individuals on the ground within the vicinity of the airport by identifying lighting and marking requirements. Lighting and marking requirements will be determined through an FAA 7460-1 airspace analysis. The owner of any structure, object, natural vegetation, or terrain is hereby required to install, operate, and maintain such markers, lights, and other aids to navigation necessary to indicate to the aircraft operators in the vicinity of an airport the presence of an airport hazard. Hazardous

markers and lights shall be installed, operated, and maintained at the expense of the owner of such building, structure or object requiring such lighting or marking requirements within the findings of an FAA 7460-1 airspace analysis.

***Section 15. Height Limitations***

No structure, object, natural vegetation, or terrain shall be erected, altered, allowed to grow or be maintained within any airport zoning district established by this ordinance to a height in excess of the applicable height limitations set forth in this ordinance and the airport zoning map. The permitted height shall not exceed the difference between the grade elevation and the height limitation numbers illustrated on the “Official Mapleton Airport Land Use & Height Overlay Map” within the airport zoning district encompassed by this ordinance. The Airport Land Use & Height Overlay Map is located in the Mapleton city offices and the Monona County Zoning Office. An FAA 7460-1 airspace review shall provide a portion of the information necessary to evaluate potential height impacts. However, it shall not be the sole source of review. Furthermore, if the height limitations of this airport zoning ordinance and accompanying Airport Land Use & Height Overlay Map are in conflict with the underlying height limitations imposed within the City of Mapleton, Monona County or any of the adjacent cities zoning ordinances, the more restrictive height limitation shall apply.

***Section 16. Airport Board of Adjustment***

The Airport Board of Adjustment shall consist of two (2) members each from the City of Mapleton and Monona County, selected by the governing body thereof, and one (1) additional member to be selected by the Mapleton Airport Board. The two members from the City of Mapleton and Monona County will serve a dual purpose from their current placement on the city or county’s Board of Adjustment. The five (5) appointed members will select a chairperson amongst themselves. Board of Adjustment members may be removed for cause by the appointing authorities (either City of Mapleton or Monona County) upon written charges and after a public hearing. Vacancies shall be filled for the unexpired term of any member whose office becomes vacant in the same manner in which said member was selected. The terms of the board members shall be for five (5) years, except when the board is first created, one (1) of the members appointed by each participating governmental jurisdiction shall be appointed for a term of two years and one (1) for a term of four years. The Board of Adjustment will only be used if deemed necessary.

Any person, property owner, or taxpayer impacted by any decision of this ordinance, may appeal to the Board of Adjustment. According to Section 329.12, Code of Iowa, the governing body of any municipality seeking to exercise powers under Chapter 329, shall by ordinance provide for the appointment of a Board of Adjustment, as provided in section 414.7 for a city, or as provided in section 335.10 for a county. The board of adjustment has the same powers and duties, and its procedure and appeals are subject to the same provisions as established in sections 414.9 to 414.19 for a city, or sections 335.12 to 335.21 for a county. The concurring vote of a majority of the board shall be necessary to reverse any order, requirement, decision or determination of any administrative official or to decide in favor of the applicant on any matter upon which it is required to pass under any regulations adopted pursuant to this chapter or to effect any variance there from.

***Section 17. Variances***

In accordance with Section 239.11, Code of Iowa, any person desiring to erect, alter, or increase the height of any structure, object, or to permit the growth of any natural vegetation, or otherwise use the person’s property in violation of airport zoning regulations adopted under this ordinance, may apply to the Board of Adjustment for a variance from such zoning regulations. Such variances shall be allowed where a literal application or enforcement of the regulations would result in practical difficulty or unnecessary hardship and the relief granted would not be contrary to the public interest, but would do substantial justice and be in accordance with the spirit of the regulations and this chapter; provided, however, that any such variance may be allowed subject to any reasonable conditions that the Board of Adjustment may deem necessary to effectuate the purposes of this Ordinance. No application for variance to the requirements of this ordinance may be considered by the Board of Adjustment unless a copy of the application has been submitted to the Airport Zoning Administrator for an opinion as to the aeronautical effects of the variance. The variance will be filed within the correct jurisdiction.

***Section 18. Judicial Review***

This section defines the method for the judicial review process. In following a process set forth in the Mapleton Zoning Ordinance, any person or persons, or any board, taxpayer, department, board or bureau of the city aggrieved by any decision of the Board of Adjustment may seek review of such decision of the Board of Adjustment by a Court of Record in the manner provided by the laws of the State of Iowa and particularly by Section 414.15, Code of Iowa.

**Section 19. Penalties and Fines**

Any violation of this ordinance or of any regulation, order, or ruling promulgated hereunder shall constitute a municipal infraction. In accordance with existing Mapleton or Monona County zoning ordinance regulations (Chapter 100, Section 100.28 of the Monona County Code of Ordinances), any violation of the Airport Ordinance shall be subject to the same fines and penalties as a zoning violation. Each day a violation continues shall constitute a separate offense.

**Section 20. Conflicting Regulations**

In accordance with Section 329.8, Code of Iowa, where there exists a conflict between any of the regulations or limitations prescribed in this ordinance and any other regulations applicable to the same area, whether the conflict be with respect to height or structures, the use of land, or any other matter, the more stringent limitation or requirement shall govern and prevail.

**Section 21. Severability**

If any provision of this ordinance or the application thereof to any person or circumstances is held invalid, such invalidity shall not affect other provisions or applications of the ordinance, which can be given effect without the invalid provision or application, and to this end the provisions of this ordinance are declared to be severable.

**Section 22. Effective Date**

This ordinance shall be in effect from and after its adoption by the governing body and publication and posting as required by law, as provided for in Chapter 380.6 and 380.7, Iowa Code.

*(Code of Iowa, Sec. 380.6[1]; Sec. 380.7[3]; and Sec. 362.3)*

**Section 23. Adoption**

**Monona County, Iowa**

This ordinance shall be in effect after its final passage, approval and publications provided by law.

Published on July 30, 2014

Adopted on August 5, 2014

\_\_\_\_\_  
Tim Jessen, Chair  
Monona County Board of Supervisors

ATTEST:

\_\_\_\_\_  
Marilyn Kelley, Monona County Auditor

Exhibit A

Mapleton Airport Land Use & Height Overlay Zoning Map

This exhibit provides the official Mapleton Municipal Airport Land Use & Height Overlay Zoning Maps to be kept on file with the appropriate governmental entities. The maps must be amended when changes occur within the jurisdictional boundaries of the maps. The maps must be prepared and adopted concurrently with the ordinance.

/s/Timothy Jessen

TIMOTHY JESSEN, CHAIRMAN

/s/James W. Jensen

ATTEST:

/s/Marilyn M. Kelley  
MARILYN M. KELLEY

MONONA COUNTY AUDITOR

SEAL

**AUTHENTICATION**

Pursuant to Section 331.302(8) of the Code of Iowa, the undersigned Auditor of Monona County, Iowa hereby certifies that **Ordinance No. 53** was published once in the Onawa Democrat and Mapleton Press newspapers on the **30th day of July, 2014**.

/s/Marilyn M. Kelley  
MARILYN M. KELLEY  
MONONA COUNTY AUDITOR

STATE OF IOWA                    )  
  )SS:

COUNTY OF MONONA )

On this **5<sup>th</sup> day of August, 2014**, the aforementioned **Timothy Jessen**, Chairman, Monona County Board of Supervisors, and **Marilyn M. Kelley**, Monona County Auditor, subscribed and sworn to be the same and signed in their official capacity as stated above in my presence.

SEAL:

/s/Tena L. Hinkel, Recorder  
NOTARY PUBLIC,  
MONONA COUNTY, IOWA