CHAPTER 167

AIRPORT ZONING REGULATIONS

167.01 Definitions

167.02 Airport Zones and Airspace Height Limitations

167.03 Use Restrictions

167.04 Lighting

167.05 Permits

167.06 Variances

167.07 Obstruction Marking and Lighting

167.08 Board of Adjustment Established

167.09 Board of Adjustment

167.10 Board of Adjustment Procedures

167.11 Powers of Board of Adjustment

167.12 Vote on Variations or Orders

167.13 Judicial Review

167.14 Administrative Agency

167.15 Conflicting Regulations

167.16 Penalties

167.01 DEFINITIONS. As used in this chapter, unless the context otherwise requires:

- 1. "Airport" means the Shenandoah Municipal Airport.
- 2. "Airport elevation" means the highest point of an airport's usable landing area measured in feet above mean sea level, which elevation is established to be nine hundred seventy (970) feet.
- 3. "Airport hazard" means any structure or tree or use of land which would exceed the Federal obstruction standards as contained in fourteen (14) Code of Federal Regulations Sections 77.21, 77.23 and 77.25 and which obstructs the airspace required for the flight of aircraft and landing or takeoff at an airport or is otherwise hazardous to such landing or taking off of aircraft.
- 4. "Airport primary surface" means a surface longitudinally centered on a runway. When the runway has a specially prepared hard surface, the primary surface extends two hundred (200) feet beyond each end of that runway. The width of the primary surface of a runway will be that width prescribed in Part 77 of the Federal Aviation Regulations (FAR) for the most precise approach existing or planned for either end of that runway. The elevation of any point on the primary surface is the same as the elevation of the nearest point on the runway centerline.
- 5. "Airspace height" means for the purpose of determining the height limits in all zones set forth in this chapter and shown on the zoning map, the datum shall be mean sea level elevation unless otherwise specified.
- 6. "Control zone" means airspace extending upward from the surface of the earth which may include one or more airports and is normally a

circular area of five (5) statute miles in radius, with extensions where necessary to include instrument approach and departure paths.

- 7. "Instrument runway" means a runway having an existing instrument approach procedure utilizing air navigation facilities or area type navigation equipment, for which an instrument approach procedure has been approved or planned.
- 8. "Minimum descent altitude" means the lowest altitude expressed in feet above mean sea level, to which descent is authorized on final approach or during circle-to-land maneuvering in execution of a standard instrument approach procedure, where no electronic glide slope is provided.
- 9. "Minimum en route altitude" means the altitude in effect between radio fixes which assures acceptable navigational signal coverage and meets obstruction clearance requirements between those fixes.
- 10. "Minimum obstruction clearance altitude" means the specified altitude in effect between radio fixes on VOR airways, off-airway routes, or route segments which meets obstruction clearance requirements for the entire route segment and which assures acceptable navigational signal coverage only within twenty-two (22) miles of a VOR.
- 11. "Runway" means a defined area on an airport prepared for landing and take-off of aircraft along its length.
- 12. "Structure" means an object, including a mobile object, constructed or installed by man, including, but without limitation, buildings, towers, cranes, smoke stacks, earth formation and overhead transmission lines.
- 13. "Tree" means any object of natural growth.
- 14. "Visual runway" means a runway intended solely for the operation of aircraft using visual approach procedures with no straight-in instrument approach procedure and no instrument designation indicated on a FAA approved airport layout plan, a military services approved military airport layout plan, or by any planning document submitted to the FAA by competent authority.
- 167.02 AIRPORT ZONES AND AIRSPACE HEIGHT LIMITATIONS. In order to carry out the provisions of this section, there are hereby created and established certain zones which are depicted on the Municipal Airport Height Zoning Map. A structure located in more than one zone of the following zones

is considered to be only in the zone with the more restrictive height limitations. The various zones are hereby established and defined as follows:

- 1. Horizontal Zone. The land lying under a horizontal plane one hundred fifty (150) feet above the established elevations, the perimeter of which is constructed by:
 - A. Swinging arcs of five thousand (5,000) feet radii from the center of each end of the primary surface of runways twelve (12) and thirty (30), and connecting the adjacent arcs by lines tangent to those arcs.
 - B. Swinging arcs of ten thousand (10,000) feet radii from the center of each end of the primary surface of runways four (4) and twenty-two (22), and connecting the adjacent arcs by lines tangent to those arcs.

No structure shall exceed one hundred and fifty (150) feet above the established airport elevation in the horizontal zone, as depicted on the Municipal Airport Height Zoning Map, except that on land described as the S½, SE¼, SE¼ and the SE¼, SW¼, SE¼, of Section 34-69-40, no structure shall exceed two hundred eighty (280) feet (elevation 1,250) above the established airport elevation.

- 2. Conical Zone. The land lying under a surface extending outward and upward from the periphery of the horizontal surface at a slope of twenty (20) to one (1) for a horizontal distance of four thousand (4,000) feet. No structure shall penetrate the conical surface in the conical zone, as depicted on the Municipal Airport Height Zoning Map.
- 3. Approach Zone. The land lying under the surface longitudinally centered on the extended runway centerline and extending outward and upward from each end of the primary surface.

(Note: An approach surface is applied to each end of each runway based upon the type of approach available or planned for that runway end.)

- A. The inner edge of the approach surface is:
 - (1) Five hundred (500) feet wide for runways twelve (12) and thirty (30), runways (4) and twenty-two (22).
- B. The outer edge of the approach zone is:
 - (1) One thousand five hundred (1,500) feet for runways twelve (12) and twenty-two (22).
 - (2) Two thousand (2,000) feet for runway thirty (30).

- (3) Three thousand five hundred (3,500) feet for runway four (4).
- C. The approach zone extends for a horizontal distance of:
 - (1) Five thousand (5,000) feet at a slope of twenty (20) to one (1) for runways twelve (12), thirty (30), and twenty-two (22).
 - (2) Ten thousand (10,000) feet at a slope of thirty-four (34) to one (1) for runway four (4).

No structure shall exceed the approach surface to any runway, as depicted on the Municipal Airport Height Zoning Map.

- 4. Transitional Zone. The land lying under those surfaces extending outward and upward at right angles to the runway centerline and the runway centerline extended at a slope of seven (7) to one (1) from the sides of the primary surface and from the sides of the approach surfaces. No structures shall exceed the transitional surface, as depicted on the Municipal Airport Height Zoning Map.
- 5. Increase in Elevation of Structures. No structure shall be erected in the City or Fremont or Page County that raises the published minimum descent altitude for an instrument approach to any runway, nor shall any structure be erected that causes the minimum obstruction clearance altitude or minimum en route altitude to be increased on any Federal airway in the City or in Fremont County or Page County.
- 6. Excepted Height Limitations. Nothing in this chapter shall be construed as prohibiting the construction or maintenance of any structure, or growth of any tree to a height up to fifty (50) feet above the surface of the land.
- 167.03 USE RESTRICTIONS. Notwithstanding any other provisions of this chapter, no use may be made of land or water within any zone established by this chapter 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. The following special requirements shall apply to each permitted use:

- 1. Lighting. All lights or illumination used in conjunction with streets, parking, signs or use of land and structures shall be arranged and operated in such a manner that it is not misleading or dangerous to aircraft operating from the Municipal Airport or in the vicinity thereof.
- 2. Visual Hazards. No operation from any use shall produce smoke, glare or other visual hazards within three (3) statute miles of any usable runway of the Municipal Airport.
- 167.04 LIGHTING. Notwithstanding the provisions of 167.03, the owner of any structure over two hundred (200) feet above ground level must install on the structure lighting in accordance with Federal Aviation Administration (FAA), Advisory Circular 70-7460-1D and amendments. Additionally, any structure constructed after the effective date of this chapter and exceeding nine hundred forty-nine (949) feet above ground level, must install on that structure high intensity white obstruction lights in accordance with Chapter 6 of FAA Advisory Circular 7460-1D and amendments. Any permit or variance granted may be so conditioned as to require the owner of the structure or growth in question to permit the City at its own expense to install, operate and maintain thereto such markers or lights as may be necessary to indicate to pilots the presence of an airspace hazard.

167.05 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 hereby 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 chapter shall be granted unless a variance has been approved in accordance with Section 167.06.
 - A. In the area lying within the limits of the horizontal zone and conical zone, no permit shall be required for any tree or structure less than seventy-five (75) feet of vertical height above the ground, except when, because of terrain, land contour, or topographic 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 at a horizontal distance of not less than four thousand two hundred (4,200) feet from each end of the runway, no permit shall be required for any tree or structure less than seventy-five (75) feet of vertical height above the ground, except when such tree or structure would extend above the height limit prescribed for such approach zones.
- C. In the area 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 seventy-five (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.

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 chapter except as set forth in Section 167.02(6).

- 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 this chapter 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 City Manager determines that a nonconforming tree or structure has been abandoned or more than eighty (80) 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.
- 167.06 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 this chapter, may apply to the Board of Adjustment for a variance from such regulations. The 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 chapter. Additionally, no application for variance to the requirements of this chapter may be considered by the Board of Adjustment unless a copy of the application has been furnished to the City Manager, for advice as to the aeronautical effects of the variance. If the City Manager does not respond to the application within fifteen (15) days after receipt, the Board of Adjustment may act on its own to grant or deny said application.

167.07 OBSTRUCTION MARKING AND LIGHTING. Any permit or variance granted may, if such action is deemed advisable to effectuate the purpose of this chapter and be reasonable in the 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 Adjustment, this condition may be modified to require the owner to permit the City, at its own expense, to install, operate and maintain the necessary markings and lights.

167.08 BOARD OF ADJUSTMENT ESTABLISHED. There is hereby created a Board of Adjustment to have and exercise the following powers:

- 1. Appeals. To hear and decide appeals from any order, requirement, decision, or determination made by the City Manager in the enforcement of this chapter.
- 2. Special Exemptions. To hear and decide special exemptions to the terms of this chapter upon which such board of adjustment under such regulations may be required to pass.
- 167.09 BOARD OF ADJUSTMENT. The Board of Adjustment shall consist of two (2) members selected by the Council, two (2) members selected by the County Board of Supervisors; and, one (1) additional member to act as Chairperson and to be selected by a majority vote of the members selected by the Council and the County Board of Supervisors. Members are removable for cause by the appointing authority upon written charges, after a public hearing. Vacancies are filled for the unexpired term of any member whose office becomes vacant in the same manner in which the member was selected. The terms of the members are for five (5) years, and are staggered.

167.10 BOARD OF ADJUSTMENT PROCEDURES. The Board of Adjustment shall adopt rules for its governance and in harmony with the provisions of this chapter. Meetings of the Board shall be held at the call of the chairperson and at such other times as the Board of Adjustment may determine.

- The Chairperson, or in his or her absence the acting Chairperson may administer oaths and compel the attendance of witnesses. All meetings of the Board of Adjustment shall be open to the public. The Board of Adjustment shall keep minutes of its proceedings, showing the vote of each member upon each question, or if absent or failing to vote, indicating such fact, and shall keep records of its examinations, and other official actions, all of which shall immediately be filed in the office of the Clerk and on due cause shown.
- 167.11 POWERS OF BOARD OF ADJUSTMENT. The Board of Adjustment shall have the powers established in the Code of Iowa, Section 414.12. The Board of Adjustment shall make written findings of facts and conclusions of law giving the facts upon which it acted and its legal conclusions from such facts upon which it acted and its legal conclusions from such facts in reversing, affirming, or modifying any order, requirement, decisions, or determination which comes before it under the provisions of this chapter.
- 167.12 VOTE ON VARIATIONS OR ORDERS. The concurring vote of a majority of the members of the Board of Adjustment shall be sufficient 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 this chapter, or to effect variations of this chapter.
- 167.13 JUDICIAL REVIEW. Any person aggrieved, or any taxpayer affected, by any decision of the Board of Adjustment, may appeal to the court of record as provided in the Code of Iowa, Section 414.15.
- 167.14 ADMINISTRATIVE AGENCY. It is the duty of the City Manager to administer the regulations prescribed herein. Applications for permits and variances shall be made to City Manager upon a form furnished by the City. Applications required by this chapter to be submitted to the City Manager shall be promptly considered and granted or denied. Application for action by the Board of Adjustment shall be forthwith transmitted by the City Manager.
- 167.15 CONFLICTING REGULATIONS. Where there exists a conflict between any of the regulations or limitations prescribed in this chapter and any other regulations applicable to the same area, whether the conflict be with respect to height of structures, the use of land, or any other matter, the more stringent limitation or requirement shall govern and prevail.
- 167.16 PENALTIES. Each violation of this chapter or of any regulation, order, or ruling promulgated hereunder shall constitute a simple misdemeanor, and each day a violation continues to exist shall constitute a separate offense.