

ARTICLE I -- AIRPORT HAZARD REGULATIONS

Section 1. Short Title/Definitions

As used in this Section, unless the context otherwise requires, the following definitions apply:

- 1.1 AIRPORT - Curtis L. Brown, Jr. Field
- 1.2 AIRPORT ELEVATION - The highest point of an airport's usable landing area measured in feet from mean sea level. At Elizabethtown Municipal Airport that elevation is 133.0 feet above sea level.
- 1.3 AIRPORT HAZARD - Any structure or object of natural growth located on or in the vicinity of a public airport, or any use of land near such airport, which obstructs the airspace required for the flight of aircraft in landing or takeoff at such airport or is otherwise hazardous to such landing or takeoff of aircraft.
- 1.4 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 (E). In plan, the perimeter of the approach surface coincides with the perimeter of the approach zone.
- 1.5 APPROACH, TRANSITIONAL, HORIZONTAL, AND CONICAL ZONES - These zones apply to the area under the approach, transitional, horizontal, and conical surfaces defined on the Curtis L. Brown, Jr. Field Hazard Zoning Map.
- 1.6 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.
- 1.7 HAZARD TO AIR NAVIGATION - An obstruction determined to have a substantial adverse effect on the safe and efficient utilization of the navigable airspace.
- 1.8 HEIGHT - For the purpose of determining the height limits in all zones set forth in this Section, the datum shall be mean sea level elevation unless otherwise specified.
- 1.9 HORIZONTAL SURFACE - A horizontal plane 150 feet above the established airport elevation, the perimeter of which in plan, coincides with the perimeter of the horizontal zone. At the Curtis L. Brown, Jr. Field, this elevation is 283 feet above mean sea level.
- 1.10 LARGER THAN UTILITY RUNWAY - A runway that is constructed for and intended to be used by propeller driven or jet powered aircraft of greater than 12,500 pounds maximum gross weight.
- 1.11 NON-CONFORMING USE - Any pre-existing structure, object of natural growth, or use of land which is inconsistent with the provisions of this Section or an amendment thereto.

- 1.12 NON-PRECISION INSTRUMENT RUNWAY - A runway having an existing or planned instrument approach procedure utilizing air navigation facilities with only horizontal guidance, or area type navigation equipment, for which a straight-in non-precision instrument approach procedure has been approved or planned.
- 1.13 OBSTRUCTION - Any structure, growth, or other object, including a mobile object which exceeds a limiting height set forth in this Ordinance.
- 1.14 PERSON - An individual, firm, partnership, corporation, company, association, joint stock association or government entity; includes a trustee, a receiver, an assignee, or a similar representative of any of them.
- 1.15 PRECISION INSTRUMENT RUNWAY - A runway having an existing or planned instrument approach procedure utilizing an Instrument Landing System (ILS) or a Precision Approach Radar (PAR) providing horizontal and vertical guidance. 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.
- 1.16 PRIMARY SURFACE - A surface longitudinally centered on a runway. When the runway has a specifically prepared hard surface, the primary surface extends 200 feet beyond each end of that runway. The width of the primary surface is 1,000 feet. The elevation of any point on the primary surface is the same as the elevation of the nearest point on the runway centerline.
- 1.17 RUNWAY - A defined area on an airport prepared for landing and takeoff of aircraft along its length.
- 1.18 STRUCTURE - An object, including but not limited to, a mobile object, constructed or installed by man, including but without limitation, buildings, towers, cranes, smokestacks, earth formation, and overhead transmission lines.
- 1.19 TRANSITIONAL SURFACES - These surfaces extend outward at 90-degree angles to the runway centerline and the runway centerline extended at a slope of seven (7) feet horizontally for each 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.
- 1.20 TREE - Any object of natural growth.
- 1.21 VISUAL RUNWAY - A runway intended solely for the operation of aircraft using visual approach procedures.

Section 2. Airport Zones

In order to carry out the provisions of this Ordinance, there are hereby created and established certain zones which include all of the land lying within the approach zones, transitional zones, horizontal zones, and conical zones as they apply to a particular airport. Such zones are shown on the Curtis L. Brown, Jr. Field Hazard Zoning Map. An area located in more than one (1) 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:

- 2.1 **PRECISION INSTRUMENT RUNWAY APPROACH ZONE** - The inner edge of this approach zone coincides with the width of the primary surface and is 1,000 feet wide. The approach zone expands outward uniformly to a width of 16,000 feet at a horizontal distance of 50,000 feet from the primary surface. Its centerline is the continuation of the centerline of the runway.
- 2.2 **RUNWAY LARGER THAN UTILITY WITH A VISIBILITY MINIMUM AS LOW AS 3/4 MILE NON-PRECISION INSTRUMENT APPROACH ZONE** - The inner edge of this approach zone coincides with the width of the primary surface and is 1,000 feet wide. The approach zone expands outward uniformly to a width of 4,000 feet at a horizontal distance of 10,000 feet from the primary surface. Its centerline is the continuation of the centerline of the runway.
- 2.3 **TRANSITIONAL ZONES** - These zones are hereby established as the area beneath the transitional surfaces. These surfaces extend outward and upward beginning 500 feet each side of the runway centerline at a slope of 7:1 to the primary surface. The runway centerline extended at a slope of seven (7) feet horizontally for each foot vertically from the sides of the primary and approach surfaces to where they intersect the horizontal and conical surfaces. Transitional zones for those portions of the precision approach zones 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 zones and at 90 degree angles to the extended runway centerline.
- 2.4 **HORIZONTAL ZONE** - The horizontal zone is hereby established by swinging arcs of 10,000 feet radii 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.
- 2.5 **CONICAL ZONE** - The conical zone is hereby established as the area that commences at the periphery of the horizontal zone and extends outward there from a horizontal distance of 4,000 feet at a slope of 20:1. The conical zone does not include the precision instrument approach zones and the transitional zones.

Section 3. Airport Zone Height Limitations

Except as otherwise provided in this Ordinance, no structure or tree shall be erected, altered, allowed to grow, or be maintained in any zone created by this Ordinance to the height in excess of the applicable height limit herein established for such zone. Such applicable height limitations are hereby established for each of the zones in question as follows:

- 3.1 APPROACH ZONE (Non-Precision Instrument) - Slopes upward thirty-four (34) feet horizontally for each foot vertically 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.
- 3.2 APPROACH ZONE (Precision Instrument Runway Approach) - Slopes fifty (50) feet outward for each 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; thence slopes upward forty (40) feet horizontally for each foot vertically to an additional horizontal distance of 40,000 feet along the extended runway centerline.
- 3.3 TRANSITIONAL ZONES - Slopes seven (7) feet outward for each 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 seven (7) feet outward for each foot upward beginning at the sides of and the same elevation as the approach surface, and extending to where they intersect the conical surface. Where the precision instrument runway approach zone projects beyond the conical zone, there are established height limits sloping seven (7) feet outward for each foot upward beginning at the sides of and the same elevation as the approach surface and extending a horizontal distance of 5,000 feet measured at 90 degree angles to the extended runway centerline from the edge of the approach surface.
- 3.4 HORIZONTAL ZONE - One hundred and fifty (150) feet above the airport elevation or a height of 283 feet above mean sea level.
- 3.5 CONICAL ZONE - Slopes upward and outward twenty (20) feet horizontally for each foot vertically beginning at the periphery of the horizontal zone and at one hundred and fifty (150) feet above the airport elevation and extending to a height of 350 feet above the airport elevation, or an elevation of 483 feet above sea level.
- 3.6 EXCEPTED HEIGHT LIMITATION - Nothing in this Ordinance shall be construed as prohibiting the growth, construction, or maintenance of any tree or structure to a height that is below the limitations set forth in this Section.

Where an area is covered by more than one (1) height limitation, the more restrictive limitation shall prevail.

Section 4. Use Restrictions

Notwithstanding any other provisions of this Ordinance, no use may be made to land or water within any zone established by this Ordinance 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 or otherwise in any way create a hazard or endanger the landing, takeoff, or maneuvering of aircraft to use the airport.

Section 5. Non-conforming Uses

- 5.1 REGULATION NOT RETROACTIVE - The regulations prescribed by this Ordinance shall not be construed to require the removal, lowering, or other changes or alteration of any structure or tree not conforming to the regulations as of the effective date of this Ordinance, or otherwise interfere with the continuance of a non-conforming 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 this Ordinance, and is diligently prosecuted.
- 5.2 MARKING AND LIGHTING - Notwithstanding the preceding provision of this Section, the owner of any existing non-conforming 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 Curtis L. Brown, Jr. Field Commission, for the Curtis L. Brown, Jr. Field, to indicate to the operators of aircraft in the vicinity of the airport, the presence of such airport hazards. Such markers and lights shall be installed, operated, and maintained at the expense of the Curtis L. Brown, Jr. Field Commission if the requirement is in the vicinity of the Curtis L. Brown, Jr. Field.

Section 6. Permits

- 6.1 FUTURE USES - No material change shall be made in the use of land and no structure or tree shall be erected, altered, planted, or otherwise established in any zone hereby created unless a permit therefore shall have been applied for and granted by the Zoning Administrator upon determination that no provisions of this Section and this Ordinance are violated. Evidence that FAA Form 7460-1 (as may be revised from time to time) had been submitted and the findings approved by the FAA.
- (a) However, a permit for a tree or structure of less than 75 feet of vertical height above the ground shall not be required in the horizontal and conical zones or in any approach and transitional zones beyond a horizontal distance of 4,200 feet from each end of the runway except when such a tree or structure, because of terrain, land contour, or topographic features, would extend above the height limit prescribed for the respective zone.

- (b) Each application for a permit shall indicate the purpose for which the permit is desired with sufficient particulars to determine 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.
 - (c) Prior to Planning board hearing Planning Director shall notify the Airport/Economic Development Commission of any zoning application for structures that may violate the Airport Hazard Ordinance. Failure to comply with this section shall not void the application, so long as all other applicable requirements have been met.
- 6.2 EXISTING USES - No permit shall be granted that would allow the establishment or creation of an airport hazard or permit a non-conforming use, structure, or tree to become a greater hazard to air navigation than it was on the effective date of this Ordinance 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.
- 6.3 NON-CONFORMING USES ABANDONED OR DESTROYED - Whenever the Zoning Administrator determines that a non-conforming tree or structure has been abandoned or more than 60 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.
- 6.4 VARIANCES - Any person desiring to erect or increase the height of any structure, or permit the growth of any tree, or use his property not in accordance with the regulations prescribed in this Ordinance, may apply to the Board of Adjustment for a variance from such regulations. Such variances shall be allowed where it is duly found that a literal application or enforcement of the regulations would result in practical difficulty or unnecessary hardship and relief granted would not be contrary to the public interest but will do substantial justice and be in accordance with the spirit of this Ordinance.
- 6.5 HAZARD MARKING AND LIGHTING - Any permit or variance granted may, if such action is deemed advisable to effectuate the purpose of this Ordinance and be reasonable in the circumstances, be so conditioned as to require the owner of the structure or tree in question to permit the Elizabethtown Airport Commission to install, operate, and maintain thereon such markers and lights as may be necessary to indicate to pilots the presence of an airport hazard at the expense of the owner of the structure or tree, or if circumstances require, at the expense of the Airport Commission.

ARTICLE II -- AIRPORT NOISE REGULATIONS

Section 1. Purpose

It is the intent and purpose of this article to promote the public health, safety, and general welfare by regulating and restricting the development of structures for human occupancy within an area surrounding the Curtis L. Brown, Jr. Field.

Section 2. Definitions

- 2.1 A-WEIGHTED SOUND LEVEL (dBA) - A number in decibels, which is read from a sound-level meter, when the meter is switched to its weighting scale labeled "A". The number approximately measures the relative noisiness or annoyance level of many common sounds, including aircraft.
- 2.2 DECIBEL (dB) - Sound is measured in decibels. The zero on the decibel scale is based on the lowest sound level that the healthy, unimpaired human ear can detect. Decibels are not linear units, but representative points on a sharply rising (exponential) curve. Thus, an increase of 10 decibels represent an approximate doubling of acoustic energy.
- 2.3 DAY-NIGHT AVERAGE SOUND LEVEL (Ldn) - A measure of noise which considers the 24 hour average sound level, 365 days a year, in "A" weighted decibels. Those events occurring between 10:00 pm and 7:00 am, incur a 10 decibel penalty. This is the accepted parameter for determining the impacts of noise on people.
- 2.4 EFFECTIVE PERCEIVED NOISE LEVEL (EPNL) - A physical measure designed to estimate the effective "noisiness" of a single noise event, usually an aircraft flyover; it is derived from instantaneous Perceived Noise Level (PNL) values by applying corrections for pure tones and for the duration of the noise.
- 2.5 NOISE ABATIVE CONSTRUCTION - Includes insulation, storm windows and/or air conditioning designed to reduce interior noise due to aircraft activity. Landscaping may reduce ground noise, but has little impact on noise reduction form airborne produced noise.
- 2.6 NOISE EXPOSURE FORECAST (NEF) - A scale that has been used by the federal government in land use planning guides applied in connection with airports. In the NEF scale, the basic measure of magnitude for individual noise events is the effective perceived noise level (EPNL), in units of Effective Perceived Noise Decibels (EPNdb). This magnitude measure includes the effect of duration per event. The terms account for number of flights and for weighting by time period.
- 2.7 SOUND TRANSMISSION CLASS (STC) - A single-number rating which provides an

estimate of sound transmissions loss performance of a wall or floor as related to airborne sound generated by a limited class of household sound sources. The higher the number, the better the performance.

- 2.8 ZONE - An area abutting and completely surrounding the Curtis L. Brown, Jr. Field in which aircraft noise may occasionally interfere with certain activities of the residents. The Zones are identified as Land Use Guidance or “LUG” zones; “A”, “B”, “C”, or “D”. The zones are defined as:

Zone “A” - That area having a Day-Night Sound Level (Ldn) of 55 and less.

Zone “B” - That area having a Day-Night Sound Level (Ldn) between 55 and 65.

Zone “C” - That area having a Day-Night Sound Level (Ldn) between 65 and 75.

Zone “D” - That area having a Day-Night Sound Level (Ldn) of 75 or greater.

Section 3. Generally Permitted Uses

The following general guidelines should be used to identify suitable uses within each LUG zone. Specific uses are identified on Exhibit “C”.

- Zone “A” - Generally acceptable for all activities and land uses and no special noise considerations are required.
- Zone “B” - Few, if any, activities will be affected by aircraft sounds, although building designs for especially sound sensitive activities such as schools, churches, auditoriums, hospitals and theaters should consider sound control in areas closest to the Airport. Detailed studies are recommended for outdoor amphitheaters and similar places of public assembly for those areas closest to the airport.
- Zone “C” - Activities where uninterrupted communication is essential should consider sound exposure in design. Generally residential development is not considered a suitable use, although multi-family developments where sound control features have been incorporated in building design might be considered. Open-air activities and outdoor living and auditoriums, schools, churches, hospitals, theaters, and similar activities should be avoided.
- Zone “D” - Land should be reserved for activities that can tolerate a high level of sound exposure. Generally, land in this zone is owned by the Airport and is left vacant or for use in industrial and commercial uses where relatively high levels of sound exposure may be acceptable.

Section 4. Construction Standards

An applicant for the construction of a new building shall provide the Zoning Administrator with the necessary calculations to assure that noise levels within the proposed building will not exceed the following standards:

- 4.1 SLEEPING QUARTERS (Windows are assumed to be open unless other provisions are made for adequate ventilation).
 - a. Ldn 55 for more than an accumulation of 60 minutes in any 24 hour period, and
 - b. Ldn 45 for more than 30 minutes during night-time sleeping hours from 11 p.m. to 7 a.m., and
 - c. Ldn 45 for more than an accumulation of eight (8) hours on any 24-hour day.

- 4.2 NON-SLEEPING QUARTERS - ALL STRUCTURES (Windows are assumed to be open unless other provisions are made for adequate ventilation).
 - a. Normally Acceptable
Ldn 65 for not more than 8 hours per 24-hour period.

 - b. Acceptable
Ldn 45 for not more than 30 minutes per 24-hour period.

- 4.3 INSULATION BETWEEN DWELLING UNITS

Floor and dividing walls between attached dwelling units shall have a Sound Transmission Class (STC) of greater than 45.

Section 5. Permits

No material change shall be made in the use of land and no structure shall be erected, altered or otherwise established in Zone I unless a zoning permit therefore shall have been applied for and granted by the Zoning Administrator upon determination that no provision of this Section and this Ordinance are violated and that FAA Form 7460.1 (as may be revised from time to time) has been submitted and approved by the FAA.

Section 6. Variances

Any person desiring to erect or alter a structure or to use this property not in accordance with the regulations prescribed in this Ordinance, may apply to the Board of Adjustment for a variance from such regulations. Such variances shall be allowed where it is duly found that a literal application or enforcement of the regulations would result in practical difficulty or unnecessary hardship and relief granted would not be contrary to the public interest but will do substantial justice and be in accordance with the spirit of this Ordinance.

ARTICLE III ADMINISTRATION

Section 1.1 Administration

The Elizabethtown Planner shall be the Administrative Official for the purpose of administering this Ordinance as it relates to the Curtis L. Brown, Jr. Field. This official may be provided with assistance of such other persons as the Board of Commissioners may direct.

Section 2.1 Enforcement

If the Administrative Official shall find that any of the provisions of this Ordinance are being violated, he shall notify in writing the person responsible for the violation, specifying the nature of the violation and what corrective measures must be taken. The Administrative Official shall order discontinuance of illegal use of land, buildings, or structures; removal of illegal buildings or structures or of additions, alteration, or removal of illegal buildings or structures or of additions, alteration, or structural changes thereto; discontinuance of any illegal work being done; or shall take any other action authorized by law to insure compliance with or to prevent violation of the provisions of this Ordinance.

Section 3.1 Penalties

Any person failing to take corrective action within a reasonable time after receiving written notice from the Administrative Official shall be guilty of a misdemeanor and may be punished by a fine not to exceed fifty dollars (\$50) or imprisonment not to exceed thirty (30) days or both. Each day such violation shall be permitted to exist shall constitute a separate offense.

Section 4.1 Right To Appeal

Individuals, etc., may appeal the action of the Administrative Official to the Zoning Board of Adjustment through the Airport and Economic Development Commission. Beyond the decision of the Zoning Board of Adjustment, resources shall be to the courts as provided by law.

SECTION IV
CONFLICTING REGULATIONS

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 the height of structures or trees, and the use of land, or any other matter, the more stringent limitation or requirement shall govern and prevail.

**SECTION V
SEVERABILITY**

If any of the provisions of this Ordinance or the application thereof to any person or circumstances are 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 VI
EFFECTIVE DATE**

WHEREAS, the immediate operation of the provisions of this Ordinance is necessary for the preservation of the public health, public safety, and general welfare, an EMERGENCY is hereby declared to exist, and this Ordinance shall be in full force and effect from and after its passage by the Elizabethtown Council and publication and posting as required by law.

Adopted this the ____ day of _____, 20 _____.

APPENDICIES

Approach and Vicinity Plan/Noise Zones

Exhibit "A": illustrates an overview of the various zones described on pages 2 and 3 of the preceding ordinance.

Exhibit "B"&"C": illustrates a cross section of these same zones from two different approaches; NW and SE.

Exhibit "D": illustrates the noise contours which have been identified for the Airport, and provides a Land Use Guidance Chart suggesting guidance for land uses around the airport, based on the noise contours.

Note - Exhibits "A" through "D" may be viewed in digital format on the Elizabethtown GIS system or from the Airport Layout Plan for Curtis L. Brown Jr. field.