# Chapter 18.76, Airport Development Zone

## 18.76.015 Definitions

The following definitions apply only to Chapter 18.76.

"Air Traffic Control Tower" means a terminal facility which, through the use of air/ground communications, visual signaling, and other devices, provides air traffic control services to airborne aircraft operating in the vicinity of an airport and to aircraft operating on the airport movement area.

“Customary and usual aviation-related activities” include, but are not limited to, takeoffs, landings, aircraft hangars, tiedowns, construction and maintenance of airport facilities, fixed-base operator facilities, a residence for an airport caretaker or security officer, and other activities incidental to the normal operation of an airport. Residential, commercial, industrial, manufacturing; and other uses, except as provided in this rule, are not customary and usual aviation-related activities and may only be authorized pursuant to OAR 660-013-0110.

“Fixed-base operator or FBO” means a commercial business granted the right by the airport sponsor to operate on an airport and provide aeronautical services such as fueling, hangaring, tie-down and parking, aircraft rental, aircraft maintenance, flight instruction, etc.

“Hangar” means an airport structure intended for the following uses:

1. Storage of active aircraft.
2. Shelter for maintenance, repair, or refurbishment of aircraft, but not the indefinite storage of nonoperational aircraft.
3. Construction of amateur-built or kit-built aircraft
4. Storage of aircraft handling equipment, e.g., tow bar, glider tow equipment, workbenches, and tools and materials used to service, maintain, repair or outfit aircraft: items related to ancillary or incidental uses that do not affect the hangars' primary use.
5. Storage of materials related to an aeronautical activity, e.g., balloon and skydiving equipment, office equipment, teaching tools, and materials related to ancillary or incidental uses that do not affect the hangars’ primary use; storage of non-aeronautical items that do not interfere with the primary aeronautical purpose of the hangar (for example, televisions, furniture).
6. A vehicle parked at the hangar while the aircraft usually stored in that hangar is flying, subject to local airport rules and regulations.
7. A hangar may include restrooms, pilot lounge, offices, briefing rooms, and crew quarters.

## 18.76.030 Uses Permitted Outright

The following uses and their accessory uses are permitted outright in all of the Airport Districts:

A. Class I and II road or street project subject to approval as part of a land partition, subdivision or subject to the standards and criteria established by DCC 18.116.230.

B. Class III road or street project.

C. Operation, maintenance, and piping of existing irrigation systems operated by an Irrigation District except as provided in DCC 18.120.050.

D. Farm use as defined in DCC Title 18.

E. Customary and usual aviation-related activities.

F. Hangars are subject to the standards and criteria established by DCC 18.76.105.

G. A single air traffic control tower in the Airport Development Zone, no higher than 115 feet in height

**18.76.050 Use Limitations**

The following limitations and standards shall apply to all permitted uses in the Airport Districts:

A. The height of any plant growth or structure or part of a structure such as chimneys, towers, antennas, power lines, etc., shall not exceed 35 feet.

B. A single air traffic control tower up to 115 feet in height shall not require a height exception or variance.

C. In approach zones beyond the clear zone areas, no meeting place designed to accommodate more than 25 persons for public or private purposes shall be permitted.

D. All parking demand created by any use permitted by DCC 18.76 shall be accommodated on the subject premises entirely off-street.

E. No use permitted by DCC 18.76 shall require the backing of traffic onto a public or private street or road right of way.

F. No power lines shall be located in clear zones.

G. No use shall be allowed which is likely to attract a large quantity of birds, particularly birds which normally fly at high altitudes.

# Chapter 18.80, Airport Safety Combining Zone

## 18.80.022 Definitions

A. Air Traffic Control Tower. A terminal facility which, through the use of air/ground communications, visual signaling, and other devices, provides air traffic control services to airborne aircraft operating in the vicinity of an airport and to aircraft operating on the airport movement area.

B. Aircraft. Helicopters and airplanes, but not hot air balloons or ultralights. (Balloons are governed by FAR Part 30, and ultralights by FAR Part 103. Ultralights are basically unregulated by the FAA.)

C. Airport. The strip of land used for taking off and landing aircraft, together with all adjacent land used in connection with the aircraft landing or taking off from the strip of land, including but not limited to land used for existing airport uses.

D. Airport Direct Impact Area. The area located within 5,000 feet of an airport runway, excluding lands within the runway protection zone and approach surface. (Redmond, Bend, and Sunriver)

E. Airport Elevation. The highest point of an airport's usable runway, measured in feet above mean sea level.

F. Airport Imaginary Surfaces (and zones). Imaginary areas in space and on the ground that are established in relation to the airport and its runways.

For the Redmond, Bend, Sunriver and Sisters airports, the imaginary surfaces are defined by the primary surface, runway protection zone, approach surface, horizontal surface, conical surface and transitional surface.

For the Cline Falls and Juniper airports, the imaginary areas are only defined by the primary surface and approach surface.

G. Airport Noise Criterion. The State criterion for airport noise is an Average Day-Night Sound Level (DNL) of 55 decibels (dBA). The Airport Noise Criterion is not designed to be a standard for imposing liability or any other legal obligation except as specifically designated pursuant to OAR 340, Division 35.

H. Airport Noise Impact Boundary. Areas located within 1,500 feet of an airport runway or within established noise contour boundaries exceeding 55 DNL.

I. Airport Safety Combining Zone (AS Zone). A Deschutes County zone intended to place additional land use conditions on land impacted by the airport while retaining the existing underlying zone. The airport imaginary surfaces, impact areas, boundaries and their use limitations comprise the AS Zone. The AS Zone may apply to either public-use or private-use airports.

J. Airport Secondary Impact Area. The area located between 5,000 and 10,000 feet from an airport runway. (Redmond, Bend, and Sunriver)

K. Airport Sponsor. The owner, manager, or other person or entity designated to represent the interests of an airport.

L. Airport Uses. Those uses described in OAR 660-013-0100 and 660-013-0110.

M. Approach Surface. A surface longitudinally centered on the extended runway centerline and extending outward and upward from each end of the primary surface.

For Redmond, Bend, Sunriver, and Sisters airports:

1. The inner edge of the approach surface is the same width as the primary surface and it expands uniformly to a width of:
    a. 1,250 feet for a utility runway having a visual approach;
    b. 1,500 feet for other than a utility runway having a visual approach;
    c. 2,000 feet for a utility runway having a non-precision instrument approach;
    d. 3,500 feet for a non-precision instrument runway, other than utility, having visibility minimums greater than three-fourths statute mile;
    e. 4,000 feet for a non-precision instrument runway, other than utility, having visibility minimums at or below three-fourths statute mile; and
    f. 16,000 feet for precision instrument runways.
2. The approach surface extends for a horizontal distance of
    a. 5,000 feet at a slope of 20 feet outward for each foot upward for all utility runways;
    b. 10,000 feet at a slope of 34 feet outward for each foot upward for all non-precision instrument runways, other than utility; and
    c. 10,000 feet at a slope of 50 feet outward for each one foot upward, with an additional 40,000 feet at slope of 40 feet outward for each one foot upward, for precision instrument runways.
3. The outer width of an approach surface will be that width prescribed in DCC 18.80.022~~(L)~~(M)(3) for the most precise approach existing or planned for that runway end.

For the Cline Falls and Juniper airports:

4. The inner edge of the approach surface is the same width as the primary surface and it expands uniformly to a width of 450 feet for that end of a private use airport with only visual approaches. The approach surface extends for a horizontal distance of 2,500 feet at a slope of 20 feet outward for each one foot upward.

N. Average Day-Night Sound Level (DNL). Average day-night sound level is the FAA standard measure for determining the cumulative exposure of individuals to noise. DNL is the equivalent of noise levels produced by aircraft operations during a 24-hour period, with a ten-decibel penalty applied to the level measured during nighttime hours (10:00 p.m. to 7:00 am).

O. Conical Surface. An element of the airport imaginary surfaces that extends outward and upward from the periphery of the horizontal surface at a slope of 20:1 for a horizontal distance of 4,000 feet and to a vertical height of 350 feet above the airport elevation.

P. Department of Aviation. The Oregon Department of Aviation, formerly the Aeronautics Division of the Oregon Department of Transportation.

Q. FAA. Federal Aviation Administration.

R. FAA's Technical Representative. As used in DCC 18.80, the federal agency providing the FAA with expertise on wildlife and bird strike hazards as they relate to airports. This may include, but is not limited to, the USDA-APHIS-Wildlife Services.

S. FAR. Regulation issued by the FAA.

T. FAR Part 77. Regulation, Part 77, "Objects Affecting Navigable Airspace," establishes standards for determining obstructions to navigable airspace.

U. Height. The highest point of a structure or tree, plant or other object of natural growth, measured from mean sea level.

V. Horizontal Surface. A horizontal plane 150 feet above the established airport elevation, the perimeter of which is constructed by swinging arcs of specified radii from the center of each end of the primary surface of each runway of each airport and connecting the adjacent arcs by lines tangent to those arcs. The radius of each arc is:

    1. 5,000 feet for all runways designated as utility.

    2. 10,000 feet for all other runways.

    3. The radius of the arc specified for each end of a runway will have the same arithmetical value. That value will be the highest determined for either end of the runway. When a 5,000-foot arc is encompassed by tangents connecting two adjacent 10,000-foot arcs, the 5,000-foot arc shall be disregarded on the construction of the perimeter of the horizontal surface.

W. Non-precision Instrument Runway. A runway having an existing instrument approach procedure utilizing air navigation facilities with only horizontal guidance, or area type navigation equipment, for which a straight-in non-precision instrument approach has been approved, or planned, and for which no precision approach facilities are planned or indicated on an FAA-approved airport layout plan or other FAA planning document.

X. Non-Towered Airport. An airport without an existing or approved control tower on June 5, 1995.

Y. Obstruction. Any structure or tree, plant or other object of natural growth that penetrates an imaginary surface.

Z. Other than Utility Runway. A runway that is constructed for and intended to be used by turbine-driven aircraft or by propeller-driven aircraft exceeding 12,500 pounds gross weight.

AA. Precision Instrument Runway. A runway having an existing instrument approach procedure utilizing air navigation facilities that provide both horizontal and vertical guidance, such as an Instrument Landing System (ILS) or Precision Approach Radar (PAR). It also means a runway for which a precision approach system is planned and is so indicated by an FAA-approved airport layout plan or other FAA planning document.

BB. Primary Surface. A surface longitudinally centered on a runway.

For the Redmond, Bend, Sunriver, and Sisters airports, when a runway has a specially prepared hard surface, the primary surface extends 200 feet beyond each end of that runway. When a runway has no specially prepared hard surface, or planned hard surface, the primary surface ends at each 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. The width of the primary surface is:

1. 250 feet for utility runways with only visual approaches,
2. 500 feet for utility runways having non-precision instrument approaches,
3. 500 feet for other than utility runways having non-precision instrument approaches with visibility minimums greater than three-fourths statute mile, and
4. 1,000 feet for non-precision instrument runways with visibility minimums at or below three-fourths statute mile, and for precision instrument runways.

For the Cline Falls and Juniper airports, the primary surface ends at each end of a runway. The elevation of any point on the primary surface is the same as the elevation of the nearest point on the runway centerline. The width of the primary surface is 200 feet.

CC. Public Assembly Facility. A permanent or temporary structure or facility, place or activity where concentrations of people gather in reasonably close quarters for purposes such as deliberation, education, worship, shopping, employment, entertainment, recreation, sporting events, or similar activities. Public assembly facilities include, but are not limited to, schools, religious institutions or assemblies, conference or convention facilities, employment and shopping centers, arenas, athletic fields, stadiums, clubhouses, museums, and similar facilities and places, but do not include parks, golf courses or similar facilities unless used in a manner where people are concentrated in reasonably close quarters. Public assembly facilities also do not include air shows, structures or uses approved by the FAA in an adopted airport master plan, or places where people congregate for short periods of time such as parking lots or bus stops.

DD. Runway. A defined area on an airport prepared for landing and takeoff of aircraft along its length.

EE. Runway Protection Zone (RPZ). An area off the runway end used to enhance the protection of people and property on the ground. The RPZ is trapezoidal in shape and centered about the extended runway centerline. The inner width of the RPZ is the same as the width of the primary

surface. The outer width of the RPZ is a function of the type of aircraft and specified approach visibility minimum associated with the runway end. The RPZ extends from each end of the primary surface for a horizontal distance of:

1. 1,000 feet for utility runways.
2. 1,700 feet for other than utility runways having non-precision instrument approaches.
3. 2,500 feet for precision instrument runways.

[NOTE: the outer width of the RPZ is specified by airport type in OAR 660, Division 13, Exhibit 4]

FF. Significant. As it relates to bird strike hazards, "significant" means a level of increased flight activity by birds across an approach surface or runway that is more than incidental or occasional, considering the existing ambient level of flight activity by birds in the vicinity.

GG. Structure. Any constructed or erected object, which requires a location on the ground or is attached to something located on the ground. Structures include but are not limited to buildings, decks, fences, signs, towers, cranes, flagpoles, antennas, smokestacks, earth formations and overhead transmission lines. Structures do not include paved areas.

HH. Transitional Surface. Those surfaces that extend upward and outward at 90 degree angles to the runway centerline and the runway centerline extended at a slope of seven feet horizontally for each foot vertically from the sides of the primary and approach surfaces to the point of intersection with 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 a 90-degree angle to the extended runway centerline.

II. Utility Runway. A runway that is constructed for and intended to be used by propeller driven aircraft of 12,500 maximum gross weight and less.

JJ. Visual Runway. A runway intended solely for the operation of aircraft using visual approach procedures, where no straight-in instrument approach procedures or instrument designations have been approved or planned, or are indicated on an FAA-approved airport layout plan or any other FAA planning document.

KK. Water Impoundment. Includes wastewater treatment settling ponds, surface mining ponds, detention and retention ponds, artificial lakes and ponds, and similar water features. A new water impoundment includes an expansion of an existing water impoundment except where such expansion was previously authorized by land use action approved prior to the effective date of this ordinance.

**18.80.028 Height Limitations**

All uses permitted by the underlying zone shall comply with the height limitations in DCC 18.80.028. When height limitations of the underlying zone are more restrictive than those of this overlay zone, the underlying zone height limitations shall control. [ORS 836.619; OAR 660-013-0070]

A. Except as provided in DCC 18.80.028(B-D), no structure or tree, plant or other object of natural growth shall penetrate an airport imaginary surface. [ORS 836.619; OAR 660-013-0070(1)]

B. For areas within airport imaginary surfaces but outside the approach and transition surfaces, where the terrain is at higher elevations than the airport runway surfaces such that existing structures and permitted development penetrate or would penetrate the airport imaginary surfaces, a local government may authorize structures up to 35 feet in height.

C. Other height exceptions or variances may be permitted when supported in writing by the airport sponsor, the Department of Aviation and the FAA. Applications for height variances shall follow the procedures for other variances and shall be subject to such conditions and terms as recommended by the Department of Aviation and the FAA (for Redmond, Bend and Sunriver.)

D. A single air traffic control tower may be up to 115 feet in height.

**18.80.044 Land Use Compatibility**

Applications for land use or building permits for properties within the boundaries of this overlay zone shall comply with the requirements of DCC 18.80 as provided herein. When compatibility issues arise, the Planning Director or Hearings Body is required to take actions that eliminate or minimize the incompatibility by choosing the most compatible location or design for the boundary or use. Where compatibility issues persist, despite actions or conditions intended to eliminate or minimize the incompatibility, the Planning Director or Hearings Body may disallow the use or expansion, except where the action results in loss of current operational levels and/or the ability of the airport to grow to meet future community needs. Reasonable conditions to protect the public safety may be imposed by the Planning Director or Hearings Body. [ORS 836.619; ORS 836.623(1); OAR 660-013-0080] An air traffic control tower, as defined in DCC 18.80.022, is not subject to this section.

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**18.80 Declaration Of Anticipated Noise**

As a condition of the grant of development approval pursuant to DCC 18.80, the undersigned, hereinafter referred to as Grantor hereby covenants and agrees that it shall not, by reason of their ownership or occupation of the following described real property, protest or bring suit or action against the _____ [Name of Airport] or Deschutes County, for aviation-related noise, including property damage or personal injury from said noise connected when such activities conform to:

1. Airport activities lawfully conducted in connection with a pre-existing airport, as that term is defined in DCC 18.80.022~~(B)~~(C), at the described airport; or 2. Airport activities that might be lawfully conducted in the future at the described airport under County or State permits or exemptions.

The real property of Grantor subject to this covenant and agreement is situated in Deschutes County, State of Oregon, and described as set forth in that certain [Statutory Warranty Deed] dated [date], as record in [the Official Records of Deschutes County as instrument number 20xx-xxxxx] OR [Volume xx, Page xx of the Deschutes County Board of Records];.

Grantor acknowledge that by virtue of such grant he/they have no remaining rights to complain or protest about the protected activities described above.

This Declaration of Anticipated Noise runs with the land and is binding upon the heirs, successors and assigns of the undersigned's interest in the described real property or any persons acquiring through he undersigned an interest in the described real property.

Deschutes County requires the execution of this covenant and agreement by the Grantor as a pre-requisite to Deschutes County approving a partition, subdivision, or issuing a building permit for Grantor's development on the above described real property, which real property is located within the noise impact boundary of the _____ [Name of Airport]. This Declaration is executed for the protection and benefit of the _____ [Name of Airport] and Deschutes County's interest in said airport and to prevent development in adjacent lands to said airport which will interfere with the continued operation existent and development of said airport.

Dates this ____ day of ____, 20_____
Grantor [Name]

[*insert notarial certificate*]