

APPENDIX A: AIRPORT HEIGHT RESTRICTION ORDINANCE*

Zoning Ordinance to Limit Height of Objects Around The Wilmington International Airport

*Editor's note: Printed in this appendix is the county's airport height restriction ordinance, as adopted by the board of commissioners on July 7, 2003. Amendments to the ordinance are indicated by parenthetical history notes following amended provisions. The absence of a history note indicates that the provision remains unchanged from the original ordinance. Obvious misspellings and punctuation errors have been corrected without notation. For stylistic purposes, headings and catchlines have been made uniform and the same system of capitalization, citation to state statutes, and expression of numbers in text as appears in the Code of Ordinances has been used. Additions made for clarity are indicated by brackets.

Cross references: Aviation, ch. 8.

Preamble:

An ordinance regulating and restricting the height of structures and objects of natural growth, and otherwise regulating the use of property in the vicinity of the Wilmington International Airport by creating the appropriate zones and establishing the boundaries thereof; providing for changes in the restrictions and boundaries of such zones; defining certain terms used herein; referring to the Wilmington International Airport Height Restriction Map which is incorporated in and made a part of this Ordinance; providing for enforcement; establishing a Board of Adjustment; and imposing penalties.

Enactment:

This Ordinance is adopted pursuant to the authority conferred by G.S. 63-30--63-37. It is hereby found that an obstruction has the potential for endangering the lives and property of users of the Wilmington International Airport, and property or occupants of land in its vicinity; that an obstruction may affect existing and future instrument approach minimums of the Wilmington International Airport; and that an obstruction may reduce the size of areas available for landing, takeoff, and maneuvering of aircraft, thus tending to destroy or impair the utility of the Wilmington International Airport and the public investment therein. Accordingly, it is declared:

- (1) That the creation or establishment of an obstruction has the potential of being a public nuisance and may injure the region served by the Wilmington International Airport; and
- (2) That it is necessary in the interest of public health, public safety, and general welfare that the creation or establishment of obstructions that are a hazard to air navigation be prevented; and
- (3) That the prevention of these obstructions should be accomplished, to the extent legally possible, by the exercise of authority invested in the County.

It is further declared that the prevention of the creation or establishment of hazards to air navigation, the elimination, removal, alteration, or mitigation, of hazards to air navigation, or the marking and lighting of obstructions are public purposes for which a political subdivisions may raise and expend public funds and acquire land or interests in land.

IT IS HEREBY ORDAINED BY THE BOARD OF COUNTY COMMISSIONERS OF THE COUNTY OF NEW HANOVER, STATE OF NORTH CAROLINA, AS FOLLOWS:

Section I: Short Title

This Ordinance shall be known and may be cited as "The Wilmington International Airport Height Restriction Ordinance."

Section II: Definitions

As used in this Ordinance, unless the context otherwise requires:

- (1) Airport - The Wilmington International Airport.
- (2) Airport Authority - The New Hanover County Airport Authority and its agents, who are charged with administering the operations of the Wilmington International Airport.
- (3) Airport elevation - The highest point of an airport's usable landing area measured in feet from sea level.
- (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 set forth in Section IV of this Ordinance. In plan, the perimeter of the approach surface coincides with the perimeter of the approach zone.
- (5) Approach, Transitional, Horizontal, and Conical Zones - These zones are set forth in Section III of this Ordinance.
- (6) Board of Adjustment - A board consisting of members appointed by the Board of County Commissioners of the County of New Hanover, State of North Carolina, as provided in G.S. 63-33(c).
- (7) 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.
- (8) Hazard to Air Navigation - An obstruction determined to have a substantial adverse effect on the safe and efficient utilization of navigable airspace.
- (9) Height - For the purpose of determining the height limits in all zones set forth in this Ordinance and shown on the zoning map, the datum shall be mean sea level elevation unless otherwise specified.
- (10) 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.
- (11) Larger than Utility Runway - A runway that is constructed for and intended to be used by propeller driven aircraft of greater than 12,500 pounds maximum gross weight and jet powered aircraft.
- (12) Nonconforming Use - Any pre-existing structure, object of natural growth, or use of land which is inconsistent with the provisions of this Ordinance or an amendment thereto.
- (13) 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 procedure has been approved or planned.
- (14) Obstruction - Any structure, growth, or other object, including a mobile object, which exceeds a limiting height set forth in Section IV of this Ordinance.
- (15) Person - An individual, firm, partnership, corporation, company, association, joint stock association or governmental entity; includes a trustee, a receiver, an assignee or a similar representative of any of them.
- (16) Precision Instrument Runway - A runway having an existing instrument approach procedure utilizing an Instrument Landing System (ILS) or a Precision Approach Radar (PAR). It also means a runway for which a precision approach system is planned and is so indicated on a approved airport layout plan or any other planning document.
- (17) Primary Surface - A surface longitudinally centered on a runway. When the runway has a specially prepared hard surface, the primary surface extends 200 feet beyond each end of that runway; for military runways or when the runway has no specially prepared hard surface, or planned hard surface, the primary surface ends at the each end of that runway. The width of the primary surface is set forth in Section III of this Ordinance. The elevation of any point

on the primary surface is the same as the elevation of the nearest point on the runway centerline.

(18) Runway - A defined area on an airport prepared for landing and take-off of aircraft along its length.

(19) Structure - An object, including a mobile object, constructed or installed by man, including, but without limitation, buildings, towers, cranes, smokestacks, earth formation, and overhead transmission lines.

(20) 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.

(21) Tree - Any object of natural growth.

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

(23) Visual Runway - A runway intended solely for the operation of aircraft using visual approach procedures.

Section III: Airport Zones

In order to insure compliance with the provisions of this Ordinance, there are hereby created and established certain zones which include all of the land lying beneath the approach surfaces, transitional surfaces, horizontal surfaces, and conical surfaces as they apply to the Wilmington International Airport. Such zones are shown on the Wilmington International Airport Height Restriction Map consisting of one (1) sheet, prepared by Talbert & Bright, Inc, and dated July 7, 2003, which is attached to this Ordinance and made a part hereof. The map referred to in this section is on file in the office of the county clerk. 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:

(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 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) Transitional Zones - The transitional zones are the areas beneath the transitional surfaces.

(3) Horizontal Zone - The horizontal zone is 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.

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

Section IV: Airport Zone Height Limitations

Except as otherwise provided in this Ordinance, no structure shall be erected, altered or maintained, and no tree shall be allowed to grow in any zone created by this Ordinance to a 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:

(1) Precision Instrument Runway Approach Zone - 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. This applies to existing precision instrument Runway 35 and to existing Runways 6, 24, and 17 for a possible future precision instrument status.

Runway End Length Inner Width Outer Width Slope Runway 6 Approach 50,000 1,000 16,000 50:1 (0'-10,000')40:1 (10,000'-50,000') Runway 24 Approach 50,000 1,000 16,000 50:1 (0'-10,000')40:1 (10,000'-50,000') Runway 17 Approach 50,000 1,000 16,000 50:1 (0'-10,000')40:1 (10,000'-50,000') Runway 35 Approach 50,000 1,000 16,000 50:1 (0'-10,000')40:1 (10,000'-50,000')

(2) Transitional Zones - Slope 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 which is 182 feet above mean sea level. 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 at 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. 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 at the same elevation as the approach surface, and extending to where they intersect the conical surface.

(3) Horizontal Zone - Established at 150 feet above the airport elevation or at a height of 182 feet above mean sea level.

(4) Conical Zone - Slopes twenty (20) feet outward for each foot upward beginning at the periphery of the horizontal zone and at 150 feet above the airport elevation and extending to a height of 350 feet above the airport elevation.

Except as defined in Section V, nothing in this Ordinance shall be construed as prohibiting the construction or maintenance of any structure, or growth of any tree, to a height of fifty (50) feet above the surface of the land. Such potential obstructions are to be resolved through the purchase of property in easement, or in fee simple. In addition to the height restrictions imposed by the imaginary surfaces, no structure or natural growth shall be erected, altered, allowed to grow, or be maintained within the areas defined in Section IV at such height as would result in the increase of any minimum flight altitude, vectoring altitude, ceiling, minimum descent altitude, or landing or take-off visibility minimum for any category of aircraft as established by the Federal Aviation Administration (FAA), unless approved by the New Hanover County Board of Commissioners or staff.

Section V: Use Restrictions

Notwithstanding any other provisions of this Ordinance, no use may be made of 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 flyers 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.

Section VI: Area of Jurisdiction

Pursuant to G.S. 63-31(d), New Hanover County exercises its statutory authority as owner of the Wilmington International Airport, and in order to protect the approaches of said airport, the jurisdiction of this ordinance is extended to all areas depicted on the Wilmington International Airport Height Restriction Map, including areas within the City of Wilmington, Pender County, and Brunswick County.

Section VII: Nonconforming Uses

(A) Regulations 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 any nonconforming use. Nothing contained herein shall require any change in the construction, alteration, or intended use of any structure, the construction or alteration of which was begun prior to the effective date of this Ordinance, and is diligently prosecuted.

(B) Obstruction Marking and Lighting - Notwithstanding the preceding provision of this Section, the owner of any existing nonconforming structure or tree is hereby required to permit the installation, operation, and maintenance thereon of such markers and lights as shall be deemed necessary by the airport authority to indicate to the operators of aircraft in the vicinity of the airport, the presence of such airport obstructions. Such markers and lights shall be installed, operated, and maintained at the expense of the Board of Commissioners of New Hanover County, State of North Carolina, or the Federal Aviation Administration.

Notwithstanding any preceding provision of this section, if, by a determination of the FAA, the encroachment of any tree into regulated airspace is such that providing markers and lights is insufficient to protect the life and property of the flying public, New Hanover County shall institute steps to have such trees cut and removed at the expense of New Hanover County if requested in writing by the Airport Authority. If unsuccessful in obtaining the cooperation of the parties involved, the Airport Authority shall petition the County to institute the appropriate legal action as reasonably necessary, to insure the safety of the flying public in airspace regulated by this Ordinance.

Section VIII: Permits

(A) Future Uses - Except as specifically provided in paragraphs 1, 2, and 3 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 therefore shall have been applied for and granted. Permits for any type of construction exceeding the height restrictions in the city or county zoning ordinance may be requested by applying for a special form that may be obtained in the county building inspector's office. 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 Ordinance shall be granted unless a variance has been approved in accordance with Section VIII, D.

(1) In the area lying within the limits of the horizontal zone and the conical zone, no permit shall be required for any tree or structure less than 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.

(2) In the areas lying within the limits of the approach zones, but at a horizontal distance of not less than 4,450 feet from each end of the runways, 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.

(3) In the areas lying within the limits of the transitional 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 Ordinance except as set forth in Section IV.

(B) 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 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.

(C) Nonconforming Uses Abandoned or Destroyed - Whenever the New Hanover County Building Inspector determines that a nonconforming tree or structure has been abandoned or more than 80 percent damaged, 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.

(D) 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 Ordinance, 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 variations shall be allowed where it is duly found that a literal application or enforcement of the regulations will result in unnecessary hardship and the 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 Ordinance. Additionally, 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 furnished to the Airport Authority for advice as to aeronautical effects of the variance. If the Airport Authority does not respond to the application within fifteen (15) business days after receipt, the Board of Adjustment may act on its own to grant or deny said application.

(E) Obstruction 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 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 New Hanover County Airport Authority, at its own expense, to install, operate, and maintain the necessary markings and lights.

Section IX: Enforcement

It shall be the duty of the New Hanover County Building Inspector to administer and enforce the regulations prescribed herein. The Building Inspector shall coordinate the enforcement of this ordinance, including the issuance of permits, with the Airport Authority. It shall be the duty of the Airport Authority to advise the Building Inspector of any violations of this ordinance.

Applications for permits and variances shall be made to the New Hanover County Building Inspector's office upon a form published for that purpose. Applications required by this Ordinance to be submitted to the Building Inspector shall be promptly considered and granted or denied. Application for action by the Board of Adjustment shall be forthwith transmitted by the Building Inspector.

Whenever a tree that is conforming to the requirements of this ordinance on the effective date grows to a point that is in violation of any height herein specified, the owner of such tree shall allow the county to remove such tree to a point

that will make the tree comply with the height specified. Such removal of trees shall be done at the expense of the New Hanover County Board of Commissioners.

In order fully to effectuate the purpose of this Chapter and of the regulations adopted and orders and ruling made pursuant thereto, the political subdivision in within which the property is located may institute in any court of competent jurisdiction, any action to prevent, restrain, correct or abate any violation of this Chapter by way of injunction (which may be mandatory) or otherwise, as may be proper under all the facts and circumstances of the case.

Section X: Board of Adjustment

The Board of Adjustment is the same body provided for in article XII of the New Hanover County Zoning Ordinance [not included in this volume]. This body will hear appeals involving the regulations of this ordinance.

Cross references: Administration, ch. 2.

Section XI: Judicial Review

Any person aggrieved, or any taxpayer affected, by any decision of the Board of Adjustment, may appeal within 30 days to the Superior Court of North Carolina as provided in G.S. 63-34.

Section XII: Penalties

Each violation of this ordinance or of any regulation, order, or ruling promulgated hereunder shall constitute a misdemeanor and be punishable by a fine and/or imprisonment as authorized under G.S. 63-35; and each day a violation continues to exist shall constitute a separate offense.

Section XIII: Conflicting Regulations

When 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 limitations or requirement shall govern and prevail.

Section XIV: 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 XV: Effective Date

This ordinance shall be in full force and effect sixty (60) days from and after its passage by the New Hanover County Board of Commissioners July 7, 2003.