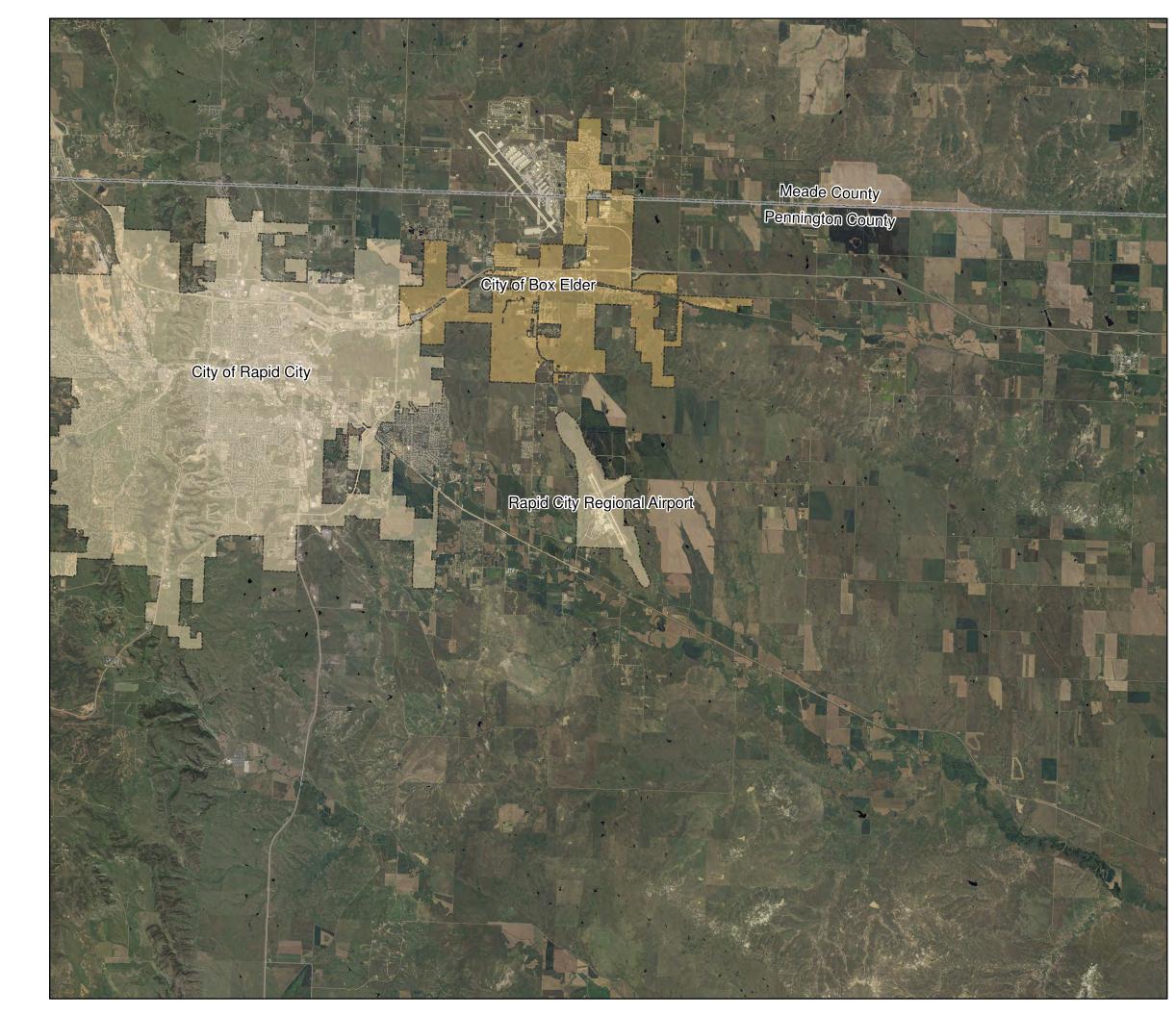
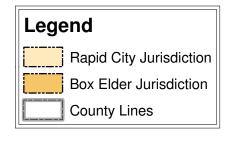
Appendix A: Jurisdiction Map





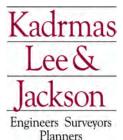
Rapid City Regional Airport Rapid City, South Dakota

Jurisdictions Overlaid on Aerial Photo





FOR PLANNING PURPOSES ONLY



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Appendix B: FAA Sponsor Assurances, Paragraphs 20 & 21



operate and maintain the airport and all facilities thereon or connected therewith, with due regard to climatic and flood conditions. Any proposal to temporarily close the airport for non-aeronautical purposes must first be approved by the Secretary.

8

In furtherance of this assurance, the sponsor will have in effect arrangements for-

 Operating the airport's aeronautical facilities whenever required;

(2) Promptly marking and lighting hazards resulting from airport conditions, including temporary conditions; and

(3) Promptly notifying airmen of any condition affecting aeronautical use of the airport.

Nothing contained herein shall be construed to require that the airport be operated for aeronautical use during temporary periods when snow, flood or other climatic conditions interfere with such operation and maintenance. Further, nothing herein shall be construed as requiring the maintenance, repair, restoration, or replacement of any structure or facility which is substantially damaged or destroyed due to an act of God or other condition or circumstance beyond the control of the sponsor.

It will suitably operate and maintain noise compatibility program items that it owns or controls upon which Federal funds have been expended.

20. Hazard Removal and Mitigation. It will take appropriate action to assure that such terminal airspace as is required to protect instrument and visual operations to the airport (including established minimum flight altitudes) will be adequately cleared and protected by removing, lowering, relocating, marking, or lighting or otherwise mitigating existing airport hazards and by preventing the establishment or creation of future airport hazards.

21. Compatible Land Use. It will take appropriate action, to the extent reasonable, including the adoption of zoning laws, to restrict the use of land adjacent to or in the immediate vicinity of the airport to activities and purposes compatible with normal airport operations, including landing and takeoff of aircraft. In addition, if the project is for noise compatibility program implementation, it will not cause or permit any change in land use, within its jurisdiction, that will reduce its compatibility, with respect to the airport, of the noise compatibility program measures upon which Federal funds have been expended.

22. Economic Nondiscrimination.

b.

a. It will make the airport available as an airport for public use on reasonable terms and without unjust discrimination to all types, kinds and classes of aeronautical activities, including commercial aeronautical activities offering services to the public at the airport.

b. In any agreement, contract, lease, or other arrangement under which a right or privilege at the airport is granted to any person, firm, or corporation to conduct or to engage in any aeronautical activity for furnishing services to the public at the airport, the sponsor will insert and enforce provisions requiring the contractor to-

(1) furnish said services on a reasonable, and not unjustly discriminatory, basis to all users thereof, and

(2) charge reasonable, and not unjustly discriminatory, prices for each unit or service, provided that the contractor may be allowed to make reasonable and nondiscriminatory discounts, rebates, or other similar types of price reductions to volume purchasers.

Appendix C: South Dakota Codified Laws

Chapter 50-10, Airport Zoning Chapter 50-9, Air Navigation Hazards



Chapter 50-10, Airport Zoning

CHAPTER 50-10

AIRPORT ZONING

Definitions. <u>50-10-1</u> 50-10-2 Airport hazards as danger to life and property. 50-10-2.1 Removal of airport hazards as public purpose--Use of public funds. Formulation of airport approach plans--Indication of hazardous structures--Permissible zone and height limits--Applicability of federal standards. 50-<u>10-3</u> 50-10-4 Considerations upon adoption or rejection of approach plan--Federal standards. 50-10-5 Local zoning enforcement of approach plan. 50-10-6 Area restrictions provided by local zoning--Conformity to commission approach plan. Incorporation of approach plan in general zoning regulations -- Local incorporation as not affecting commission authority. 50-10-7 50-10-8 Local zoning to be consistent with commission approach plan--Periodic amendment of local zoning. Preexisting nonconforming structures unaffected--Exceptions. 50-10-9 Permits for replacement or alteration of existing structures -- Conditions for grant of permit--Abandoned and deteriorated structures. 50-10-10 50-10-11 Application for variance--Circumstances under which variance may be allowed. 50-10-12 Conditions to grant of permit or variance -- Erection of obstruction markers and lights. Adoption or change of zoning regulations by local governing body--Public hearing--Notice of hearing. 50-10-13 Delegation of zoning administration and enforcement--Permissible delegation. 50-10-14 50-10-15 Board of airport zoning appeals--Powers of board. Meetings of board--Oaths and attendance of witnesses--Records of proceedings. 50-10-16 50-10-17 Appeals to board--Time for appeal--Procedure. Appeal as staying proceedings--Exceptions--Court restraining order. 50-10-18 50-10-19 Hearing of appeal--Notice of hearing. Actions of board -- Scope of review. 50-10-20 50-10-21 Board to decide by majority vote. Appeal to circuit court from board of appeals--Petition--Time for petition. 50-10-22 50-10-23 Certiorari to board of appeals--Writ as not staying proceedings--Grant of restraining order--Return to writ. Jurisdiction of court--Further proceedings by board of appeals. 50-10-24 50-10-25 Findings of fact as conclusive on court--Objections not urged before board. 50-10-26 Allowance of costs. 50-10-27 Court action against violators -- Injunction. Acquisition of nonconforming structures -- Purchase, grant, or condemnation -- Circumstances under which acquisition authorized. 50-10-28 50-10-29 Violation of regulation, order or ruling as misdemeanor. 50-10-30 Severability and saving clause. 50-10-31 Citation of chapter. 50-10-32 Definition of terms. Military airport -- Purpose. 50-10-33 50-10-34 Military airport hazard area zoning regulations.

50-10-35 Military airport compatible land use zoning regulations--Implementation of federal law or rules controlling use of adjacent lands--Statement of purpose.

50-10-1. Definitions. Terms used in this chapter mean:

(1) "Airport," any military airport or any area of land or water designed for the landing and taking-off of aircraft and utilized or to be utilized by the public as a point of arrival or departure by air;

(2) "Airport hazard," any structure, or tree, or use of land, which obstructs the aerial approaches of such an airport or is otherwise hazardous to its use for landing or taking off;

(3) "Commission," the South Dakota Aeronautics Commission;

(4) "Person," any individual, firm, copartnership, corporation, company, limited liability company, association, joint stock association or body politic, including any trustee, receiver, assignee, or other similar representative;

(5) "Publicly owned," an airport is publicly owned if the portion of the airport used for the landing and taking-off of aircraft is owned by a governmental body, political subdivision, public agency, or other public corporation;

(6) "Structure," any object constructed or installed by human action, including buildings, towers, smokestacks, and overhead transmission lines, but not including any building, or any part of any building, used or useful in serving the public;

(7) "Tree," any object of natural growth.

Source: SL 1943, ch 2, § 1; SDC Supp 1960, § 2.0501; SL 1970, ch 264, § 1; SL 1994, ch 351, § 144; SL 1996, ch 278, § 7.

50-10-2. Airport hazards as danger to life and property. It is hereby found and declared that an airport hazard endangers the lives and property of users of the airport and of occupants of land in its vicinity, and also, if of the obstruction type, in

effect reduces the size of the area available for the landing, taking off and maneuvering of aircraft, thus tending to destroy or impair the utility of the airport and the public investment therein. Accordingly it is hereby declared:

(1) That the creation or establishment of an airport hazard is a public nuisance and an injury to the community or the United States served by the airport in question;

(2) That it is therefore necessary in the interest of the public health, public safety, and general welfare that the creation or establishment of airport hazards be prevented;

(3) That this should be accomplished, to the extent legally possible, by exercise of the police powers, without compensation.

Source: SL 1943, ch 2, § 2; SDC Supp 1960, § 2.0502; SL 1970, ch 264, § 2; SL 1996, ch 278, § 5.

50-10-2.1. Removal of airport hazards as public purpose--Use of public funds. It is further declared that both the prevention of the creation or establishment of airport hazards and the elimination, removal, alteration, mitigation, or marking and lighting of existing airport hazards are public purposes for which the political subdivisions may raise and expend public funds and acquire land or property interest therein.

Source: SDCL, § 50-10-2 as added by SL 1970, ch 264, § 2.

50-10-3. Formulation of airport approach plans--Indication of hazardous structures--Permissible zone and height limits--Applicability of federal standards. The Aeronautics Commission is hereby empowered and directed to formulate and adopt, and from time to time as may be necessary revise, an airport approach plan for each publicly owned airport in the state. Each such plan shall indicate the circumstances in which structures and trees are or would be airport hazards, the area within which measures for the protection of the airport's aerial approaches should be taken, and what the height limits and other objectives of such measures should be; provided that the zone and height limits shall in no case be more exacting than is necessary to conform to the current airport approach and turning space standards of any agency of the federal government which may be concerned with the fostering of civil aeronautics.

Source: SL 1943, ch 2, § 3; SDC Supp 1960, § 2.0503.

50-10-4. Considerations upon adoption or rejection of approach plan--Federal standards. In adopting or revising any airport approach plan, the Aeronautics Commission shall consider, among other things, the character of the flying operations expected to be conducted at the airport, the nature of the terrain, the height of existing structures and trees above the level of the airport, and the possibility of lowering or removing existing obstructions, and the commission may obtain and consider the views of the agency of the federal government charged with the fostering of civil aeronautics, as to the aerial approaches necessary to safe flying operations at the airport.

Source: SL 1943, ch 2, § 3; SDC Supp 1960, § 2.0503.

50-10-5. Local zoning enforcement of approach plan. Every municipality and county or other political subdivision having within or without its territorial limits an area within which, according to an airport approach plan adopted by the Aeronautics Commission, measures should be taken for the protection of airport approaches, shall adopt, administer, and enforce, under the police power and in the manner and upon the conditions hereinafter prescribed, airport zoning regulations applicable to such area.

Source: SL 1943, ch 2, § 4 (1); SDC Supp 1960, § 2.0504; SL 1965, ch 1.

50-10-6. Area restrictions provided by local zoning--Conformity to commission approach plan. The regulations required by § 50-10-5 shall divide the area into zones, and, within such zones, specify the land uses permitted, regulate and restrict the height to which structures and trees may be erected or allowed to grow, prohibit the obstruction, by lights, smoke, electronic devices, or any other means, of the safe operation of aircraft near airports, and impose such other restrictions and requirements as may be necessary to effectuate the Aeronautics Commission's approach plan for the airport. **Source:** SL 1943, ch 2, § 4 (1); SDC Supp 1960, § 2.0504; SL 1965, ch 1; SL 1979, ch 320.

50-10-7. Incorporation of approach plan in general zoning regulations--Local incorporation as not affecting commission authority. In the event that a political subdivision has adopted, or hereafter adopts, a general zoning ordinance regulating, among other things, the height of buildings, any airport zoning regulations adopted for the same area or portion thereof under this chapter, may be incorporated in and made a part of such general zoning regulations, and be administered and enforced in connection therewith, but such general zoning regulations shall not limit the effectiveness or scope of the regulations adopted under this chapter.

Source: SL 1943, ch 2, § 4 (2); SDC Supp 1960, § 2.0505.

50-10-8. Local zoning to be consistent with commission approach plan--Periodic amendment of local zoning. Any zoning or other regulations applicable to any area within which, according to an airport approach plan adopted by the commission, measures should be taken for the protection of airport approaches, including not only any airport zoning regulations adopted under this chapter but any zoning or other regulations dealing with the same or similar matters, that have been or may be adopted under authority other than that conferred by this chapter, shall be consistent with, and conform to, the commission's approach plan for such area, and shall be amended from time to time as may be necessary to conform to any revision of the plan that may be made by the commission.

Source: SL 1943, ch 2, § 4 (3); SDC Supp 1960, § 2.0506.

50-10-9. Preexisting nonconforming structures unaffected--Exceptions. All airport zoning regulations adopted under this chapter shall be reasonable, and none shall require the removal, lowering, or other change or alteration of any structure or tree not conforming to the regulations when adopted or amended, or otherwise interfere with the continuance of any nonconforming use, except as provided in § 50-10-28. **Source:** SL 1943, ch 2, § 4 (4); SDC Supp 1960, § 2.0507.

50-10-10. Permits for replacement or alteration of existing structures--Conditions for grant of permit--Abandoned and deteriorated structures. Where advisable to facilitate the enforcement of zoning regulations adopted pursuant to this chapter, a system may be established for granting permits to establish or construct new structures and other uses and to replace existing structures and other uses or make substantial changes therein or substantial repairs thereof. In any event, before any nonconforming structure or tree may be replaced, substantially altered or repaired, rebuilt, allowed to grow higher, or replanted, a permit must be secured from the administrative agency authorized to administer and enforce the regulations, authorizing such replacement, change, or repair. No such permit shall be granted that would allow the structure or tree in question to be made higher or become a greater hazard to air navigation than it was when the applicable regulation was adopted; and whenever the administrative agency determines that a nonconforming structure or tree has been abandoned or more than eighty percent physically deteriorated, or decayed no permit shall be granted that would allow said structure or tree to exceed the applicable height limit or otherwise deviate from the zoning regulations. Except as indicated all applications for permits for replacement, change, or repair of nonconforming uses shall be granted. **Source:** SL 1943, ch 2, § 5 (1); SDC Supp 1960, § 2.0508.

50-10-11. Application for variance--Circumstances under which variance may be allowed. Any person desiring to erect any structure, or increase the height of any structure, or permit the growth of any tree, or otherwise use his property, in violation of airport zoning regulations adopted under this chapter, may apply to the board of appeals, as provided in § 50-10-15, for a variance from the zoning regulations in question. Such variances shall be allowed where a literal application or enforcement of the regulations would result in practical difficulty or unnecessary hardship and the relief granted would not be contrary to the public interest but do substantial justice and be in accordance with the spirit of the regulations. **Source:** SL 1943, ch 2, § 5 (2); SDC Supp 1960, § 2.0509.

50-10-12. Conditions to grant of permit or variance--Erection of obstruction markers and lights. In granting any permit or variance under § 50-10-10 or 50-10-11, the administrative agency or board of appeals may, if it deems such action advisable to effectuate the purposes of this chapter and reasonable in the circumstances, so condition such permit or variance as to require the owner of the structure or tree in question to permit the political subdivision, at its own expense, to provide for the installation, operation, and maintenance of suitable obstruction markers and obstruction lights thereon. **Source:** SL 1943, ch 2, § 5 (3); SDC Supp 1960, § 2.0510.

50-10-13. Adoption or change of zoning regulations by local governing body--Public hearing--Notice of hearing. No airport zoning regulations shall be adopted, amended, or changed under this chapter except by action of the governing body of the political subdivision in question after a public hearing in relation thereto, at which parties in interest and citizens shall have an opportunity to be heard. Notice of said hearing shall be given at least fifteen days prior to the date of said hearing by publication of a notice of the time and place of holding such hearing in a legal newspaper or a newspaper of general circulation published in the political subdivision or subdivisions in which is located the airport hazard to be zoned; provided that, if there be no such newspaper, or newspaper published in the said subdivision or subdivisions, said notice shall be published in the nearest legal newspaper, or newspaper of general circulation. **Source:** SL 1943, ch 2, § 6 (1); SL 1949, ch 8, § 4; SDC Supp 1960, § 2.0511.

50-10-14. Delegation of zoning administration and enforcement--Permissible delegation. The governing body of any political subdivision adopting airport zoning regulations under this chapter may delegate the duty of administering and enforcing such regulations to any administrative agency under its jurisdiction, but such administrative agency shall not be or include any member of the board of appeals. The duties of such administrative agency shall include that of hearing and deciding all permits under § 50-10-10, but such agency shall not have or exercise any of the powers delegated to the board of appeals.

Source: SL 1943, ch 2, § 6 (2); SDC Supp 1960, § 2.0512.

50-10-15. Board of airport zoning appeals--Powers of board. Airport zoning regulations adopted under this chapter shall provide for appointment of a board of appeals to have and exercise the following powers:

(1) To hear and decide appeals from any order, requirement, decision, or determination made by the administrative agency in the enforcement of this chapter or of any ordinance adopted pursuant thereto;

(2) To hear and decide special exceptions to the terms of the ordinance upon which such board may be required to pass under such ordinance;

(3) To hear and decide specific variances under § 50-10-11.

Where a zoning board of appeals or adjustment already exist, it may be appointed as the board of appeals. Otherwise, the board of appeals shall consist of five members, each to be appointed for a term of three years and to be removable for cause by the appointing authority upon written charges and after public hearing. **Source:** SL 1943, ch 2, § 6; SDC Supp 1960, § 2.0513.

50-10-16. Meetings of board--Oaths and attendance of witnesses--Records of proceedings. The board established pursuant to § 50-10-15 shall adopt rules in accordance with the provisions of any ordinance adopted under this chapter. Meetings of the board shall be held at the call of the chairman and at such other times as the board may determine. The chairman, or in his absence the acting chairman, may administer oaths and compel the attendance of witnesses. All meetings of the board shall be public. The board 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 board and shall be a public record.

Source: SL 1943, ch 2, § 6; SDC Supp 1960, § 2.0513.

50-10-17. Appeals to board--Time for appeal--Procedure. Appeals to the board established pursuant to § 50-10-15 may be taken by any person aggrieved, or by any officer, department, board, or bureau of the political subdivision affected, by any decision of the administrative agency. An appeal must be taken within a reasonable time, as provided by the rules of the board, by filing with the agency from which the appeal is taken and with the board, a notice of appeal specifying the grounds thereof. The agency from which the appeal is taken shall forthwith transmit to the board all the papers constituting the record upon which the action appealed from was taken.

Source: SL 1943, ch 2, § 6; SDC Supp 1960, § 2.0513.

50-10-18. Appeal as staying proceedings--Exceptions--Court restraining order. An appeal pursuant to § 50-10-15 shall stay all proceedings in furtherance of the action appealed from, unless the agency from which the appeal is taken certifies to the board, after the notice of appeal has been filed with it, that by reason of the facts stated in the certificate a stay would, in its opinion, cause imminent peril to life or property. In such case proceedings shall not be stayed otherwise than by a restraining order which may be granted by the board or by a court of record on application on notice to the agency from which the appeal is taken and on due cause shown.

Source: SL 1943, ch 2, § 6; SDC Supp 1960, § 2.0513.

50-10-19. Hearing of appeal--Notice of hearing. The board of appeals shall fix a reasonable time for the hearing of an appeal pursuant to § 50-10-15, give public notice and due notice to the parties in interest, and decide the same within a reasonable time. Upon the hearing any party may appear in person or by agent or by attorney. **Source:** SL 1943, ch 2, § 6; SDC Supp 1960, § 2.0513.

50-10-20. Actions of board--Scope of review. The board of appeals may, in conformity with the provisions of this chapter, reverse or affirm, wholly or partially, or modify, the order, requirement, decision, or determination appealed from and may make such order, requirement, decision, or determination as ought to be made, and to that end shall have all the powers of the administrative agency from which the appeal is taken.

Source: SL 1943, ch 2, § 6; SDC Supp 1960, § 2.0513.

50-10-21. Board to decide by majority vote. The concurring vote of a majority of the members of the board of appeals shall be sufficient to reverse any order, requirement, decision, or determination of the administrative agency, or to decide in favor of the applicant on any matter upon which it is required to pass under any such ordinance, or to effect any variation in such ordinance.

Source: SL 1943, ch 2, § 6; SDC Supp 1960, § 2.0513.

50-10-22. Appeal to circuit court from board of appeals--Petition--Time for petition. Any person aggrieved by any decision of the board of appeals, or any taxpayer, or any officer, department, board, or bureau of the political subdivision, may present to the circuit court a verified petition setting forth that the decision is illegal, in whole or in part, and specifying the grounds of the illegality. Such petition shall be presented to the court within thirty days after the decision is filed in the office of the board.

Source: SL 1943, ch 2, § 7; SDC Supp 1960, § 2.0514 (1).

50-10-23. Certiorari to board of appeals--Writ as not staying proceedings--Grant of restraining order--Return to writ. Upon presentation of a petition pursuant to § 50-10-22, the circuit court may allow a writ of certiorari directed to the board of appeals to review such decision of the board. The allowance of the writ shall not stay proceedings upon the decision appealed from, but the court may, on application, on notice to the board and on due cause shown grant a restraining order. The board of appeals shall not be required to return the original papers acted upon by it, but it shall be sufficient to return certified or sworn copies thereof or of such portions thereof as may be called for by the writ. The return shall concisely set forth such other facts as may be pertinent and material to show the grounds of the decision appealed from and shall be verified. **Source:** SL 1943, ch 2, § 7; SDC Supp 1960, § 2.0514 (2), (3).

50-10-24. Jurisdiction of court--Further proceedings by board of appeals. The circuit court shall have exclusive jurisdiction to affirm, modify, or set aside the decision brought up for review pursuant to § 50-10-23, in whole or in part, and if need be, to order further proceedings by the board of appeals. **Source:** SL 1943, ch 2, § 7; SDC Supp 1960, § 2.0514 (4).

50-10-25. Findings of fact as conclusive on court--Objections not urged before board. The findings of fact by the board of appeals, if supported by substantial evidence, shall be accepted by the circuit court as conclusive, and no objection to a decision of the board shall be considered by the court unless such objections shall have been urged before the board, or, if it was not so urged, unless there were reasonable grounds for failure to do so. **Source:** SL 1943, ch 2, § 7; SDC Supp 1960, § 2.0514 (4).

50-10-26. Allowance of costs. Costs shall not be allowed against the board of appeals unless it appears to the circuit court that it acted with gross negligence, in bad faith, or with malice, in making the decision appealed from. **Source:** SL 1943, ch 2, § 7; SDC Supp 1960, § 2.0514 (5).

50-10-27. Court action against violators--Injunction. In addition, either the political subdivision within which the property is located or the Aeronautics Commission may institute in any court of competent jurisdiction, an action to prevent, restrain, correct, or abate any violation of this chapter, or of airport zoning regulations adopted under this chapter, or of any order or ruling made in connection with their administration or enforcement, and the court shall adjudge to the plaintiff such relief, by way of injunction, which may be mandatory or otherwise, as may be proper under all the facts and circumstances of the case, in order fully to effectuate the purposes of this chapter and of the regulations adopted and orders and rulings made pursuant thereto.

Source: SL 1943, ch 2, § 8; SDC Supp 1960, § 2.0515.

50-10-28. Acquisition of nonconforming structures--Purchase, grant, or condemnation--Circumstances under which acquisition authorized. In any case in which:

(1) It is desired to remove, lower, or otherwise terminate a nonconforming use; or

(2) The approach protection necessary according to the Aeronautics Commission's airport approach plan cannot, because of constitutional limitations, be provided by airport zoning regulations under this chapter; or

(3) It appears advisable that the necessary approach protection be provided by acquisition of property rights, the political subdivision within which the property or nonconforming use is located, the political subdivision owning the airport or served by it, or the commission, shall acquire by purchase, grant, or condemnation in the manner provided by the law under which political subdivisions are authorized to acquire real property for public purposes, such an air right, easement,

or other estate or interest in the property or nonconforming use in question as may be necessary to effectuate the purposes of this chapter.

Source: SL 1943, ch 2, § 9; SDC Supp 1960, § 2.0516.

50-10-29. Violation of regulation, order or ruling as misdemeanor. A violation of any regulation, order, or ruling promulgated or made pursuant to this chapter, is a Class 1 misdemeanor. **Source:** SL 1943, ch 2, § 8; SDC Supp 1960, § 2.9908; SL 1983, ch 15, § 185.

50-10-30. Severability and saving clause. If any provision of this chapter or the application thereof to any person or circumstances is held invalid, such invalidity shall not affect other provisions or applications of the chapter which can be given effect without the valid provision or application, and to this end the provisions of this chapter are declared to be severable. **Source:** SL 1943, ch 2, § 10; SDC Supp 1960, § 2.0517.

50-10-31. Citation of chapter. This chapter shall be known and may be cited as the "Model Airport Zoning Act." **Source:** SL 1943, ch 2, § 11; SDC Supp 1960, § 2.0518.

50-10-32. Definition of terms. Terms in §§ 50-10-33 to 50-10-35, inclusive, mean:

(1) "Centerline," a line extended through the midpoint of each end of a runway;

(2) "Compatible land use," a use of land adjacent to a military airport that does not endanger the health, safety, or welfare of the owners, occupants, or users of the land because of levels of noise or vibrations or the risk of personal injury or property damage created by the operations of the military airport, including the taking off and landing of military aircraft;

(3) "Controlled compatible land use area," any area of land located outside military airport boundaries and within a rectangle bounded by lines located no farther than one and one-half statute miles from the centerline of an instrument or primary runway and lines located no farther than five statute miles from each end of the paved surface of an instrument or primary runway unless noise standards exceed these distances;

(4) "Instrument runway," any existing or planned military runway of at least three thousand two hundred feet which serves or will serve an instrument landing procedure prescribed by Federal Aviation Administration Order 8260.3B "United States Standard for Terminal Instrument Procedures";

(5) "Military airport," any area of land or water, publicly or privately owned, designed and set aside for the landing and taking off of military aircraft and used in the interest of the public for that purpose;

(6) "Military airport hazard," any structure or obstruction that obstructs the air space required for the taking off, landing, or flight of military aircraft or that interferes with visual, radar, radio, or other systems for tracking, monitoring, controlling, or acquiring data relating to military aircraft;

(7) "Military airport hazard area," an area of land or water on which a military airport hazard may exist;

(8) "Military airport zoning regulation," a military airport hazard area zoning regulation and a military airport compatible land use zoning regulation adopted under §§ 50-10-32 to 50-10-35, inclusive;

(9) "Obstruction," any structure, object of natural growth, or other object, including a mobile object, that exceeds a height established by C.F.R. 14 Federal Aviation Regulations Part 77 "Objects Affecting Navigable Airspace" or by a military airport hazard area zoning standard;

(10) "Political subdivision," any municipality or county;

(11) "Primary runway," any existing or planned paved runway, as shown on the official military airport layout plan, of at least three thousand two hundred feet on which a majority of the approaches to and departures from the military airport occur:

(12) "Runway," a defined area of a military airport prepared for the landing and taking off of military aircraft along its length.

Source: SL 1996, ch 278, § 1.

50-10-33. Military airport--Purpose. For the purposes of §§ 50-10-32 to 50-10-35, inclusive, a military airport is an airport used by the state or a political subdivision of the state, or by the United States for national defense purposes or for any federal program relating to flight.

Source: SL 1996, ch 278, § 2.

50-10-34. Military airport hazard area zoning regulations. Any political subdivision in which a military airport hazard area is located may adopt, administer, and enforce, under its police power, military airport hazard area zoning regulations for the military airport hazard area to prevent the creation of a military airport hazard. The military airport hazard area zoning regulations may divide a military airport hazard area into zones and for each zone:

(1) Specify the land uses permitted;

(2) Regulate the type and density of structures; and

(3) Restrict the height of structures and obstructions to prevent the creation of an obstruction to flight operations or air navigation.

Source: SL 1996, ch 278, § 3.

50-10-35. Military airport compatible land use zoning regulations--Implementation of federal law or rules controlling use of adjacent lands--Statement of purpose. A political subdivision may adopt, administer, and enforce, under its police power, military airport compatible land use zoning regulations for the part of a controlled compatible land use area located within the political subdivision. The political subdivision by ordinance or resolution may implement, in connection with military airport compatible land use zoning regulations, any federal law or rules controlling the use of land located adjacent to or in the immediate vicinity of the military airport. The military airport compatible land use zoning regulations shall include a statement that the military airport fulfills an essential national defense purpose. **Source:** SL 1996, ch 278, § 4.

Chapter 50-9, Air Navigation Hazards

CHAPTER 50-9

AIR NAVIGATION HAZARDS

50-9-1 Height of structures within proximity of airport--Approval of Aeronautics Commission--Certain structures within corporate limits excepted. 50-9-2 Violating structures as danger to person and property--Rules for approval of structures. Hearing on application for approval--Certain structures approvable without hearing--Notice of hearing--Cease and desist order. 50-9-3 Appeals from order of commission--Procedure. 50-9-4 Erection of unapproved structures as misdemeanor. 50-9-5 Municipal zoning regulations applicable. 50-9-6 Permit for erection of structure exceeding two hundred feet in height required--Violation as misdemeanor. 50-9-7 Erection of certain temporary buildings upon notice--Definition of temporary building. 50-9-8 Rules respecting high buildings--Marking and lighting--Court enforcement of rules. 50-9-9 50-9-10 Conflicting jurisdiction between Aeronautics Commission and local political subdivisions--Superiority of commission--Public hearing.

50-9-1. Height of structures within proximity of airport--Approval of Aeronautics Commission--Certain structures within corporate limits excepted. Any public utility, power district, or other governmental subdivision, or any person, association, corporation, limited liability company, or partnership, before engaging in the construction or alteration which extends the height, in the State of South Dakota, of any overhead line, cable, pipeline, outdoor theater, derricks, towers, or other structures within two miles from the nearest boundary of any airport which has been approved by the South Dakota Aeronautics Commission for public use by aircraft, the height of which is over ten feet above the elevation of an airport, for each five hundred feet of distance from the nearest boundary of the airport, before the alteration or construction of any such item or structure, shall file an application with and obtain the approval of the South Dakota Aeronautics Commission, for permission to enter upon and complete such construction or alteration. However, no application is needed if the construction or alteration is within the corporate limits of a municipality and is adjacent to other structures of a permanent character which are an equal or greater height than the construction or alteration proposed.

Source: SL 1953, ch 3, § 1; SDC Supp 1960, § 2.0210; SL 1992, ch 60, § 2; SL 1994, ch 351, § 142.

50-9-2. Violating structures as danger to person and property--Rules for approval of structures. The alteration or construction of overhead lines, cables, pipelines, outdoor theaters, derricks, towers, or other structures not approved by the South Dakota Aeronautics Commission within two miles from the nearest boundary of any airport which has been approved by the South Dakota Aeronautics Commission for public use by aircraft, is declared to be a danger to the public and to life, limb, property and persons in the vicinity thereof. The South Dakota Aeronautics Commission shall adopt and establish and publish reasonable rules pursuant to chapter 1-26 covering the requirements that must be met by any applicant to obtain the approval for the construction or alteration of any such overhead line, cable, pipeline, outdoor theater, derricks, towers, or other structures which is not exempt from the requirements of § 50-9-1.

Source: SL 1953, ch 3, § 2; SDC Supp 1960, § 2.0211; SL 1987, ch 356, § 13.

50-9-11

Repealed.

50-9-3. Hearing on application for approval--Certain structures approvable without hearing--Notice of hearing--Cease and desist order. The South Dakota Aeronautics Commission may in its discretion, approve the application filed, as required by § 50-9-1 without a hearing, provided that, in the event that the commission deems the erection of said structures to create a hazard to the safe use of said airports by aircraft, and a public danger, or finds the same to be in violation of any of the rules and regulations referred to in § 50-9-2 the commission shall assign said application for hearing upon reasonable notice to the applicant and may order and require applicant to cease and desist from erecting such overhead lines, cables, pipelines, outdoor

theaters, towers, or other structures except pursuant to and in conformity to plans and specifications relating to height thereof, approved by said commission.

Source: SL 1953, ch 3, § 4; SDC Supp 1960, § 2.0212.

50-9-4. Appeals from order of commission--Procedure. Any person aggrieved by any action of the Aeronautics Commission may appeal in the manner provided by law and the rules of practice and procedure adopted by the Supreme Court governing appeals from boards and commissions.

Source: SL 1953, ch 3, § 6; SDC Supp 1960, § 2.0213.

50-9-5. Erection of unapproved structures as misdemeanor. The erection or alteration of any of overhead lines, cables, pipelines, towers, outdoor theaters, derricks, or other structures within two miles of the nearest boundary of an airport not exempt from the requirements of § 50-9-1 without the approval of the South Dakota Aeronautics Commission is a Class 1 misdemeanor.

Source: SL 1953, ch 3, § 5; SDC Supp 1960, § 2.9910; SL 1983, ch 15, § 182.

50-9-6. Municipal zoning regulations applicable. Sections 50-9-1 to 50-9-5, inclusive, shall not apply to airports for which zoning regulations have been adopted by municipal, county, or other political subdivisions.

Source: SL 1953, ch 3, § 1; SDC Supp 1960, § 2.0210.

50-9-7. Permit for erection of structure exceeding two hundred feet in height required--Violation as misdemeanor. No person, firm, corporation, limited liability company, or association may erect anywhere in this state a building, structure, or tower of any kind over two hundred feet in height above the terrain, without first filing with the South Dakota Aeronautics Commission a notice and application showing the location and dimensions of the building, structure, or tower, and procuring a permit approving the location from the South Dakota Aeronautics Commission. A violation of this section, or a rule or order adopted pursuant to § 50-9-9, is a Class 1 misdemeanor.

Source: SL 1957, ch 2, § 1; SDC Supp 1960, § 2.0215; SL 1983, ch 15, § 183; SL 1989, ch 406, § 2; SL 1994, ch 351, § 143.

50-9-8. Erection of certain temporary buildings upon notice--Definition of temporary building. Notwithstanding § 50-9-7, temporary buildings or structures not located within the airways or within five miles of an airport, may be erected upon filing with the Aeronautics Commission a notice showing the location thereof without making application and procuring a permit pursuant to § 50-9-7. A temporary building, structure, or tower shall mean any building, structure or tower which shall be dismantled or removed not later than six months from the date the erection of said building or structure is commenced.

Source: SL 1957, ch 2, § 1; SDC Supp 1960, § 2.0215.

50-9-9. Rules respecting high buildings--Marking and lighting--Court enforcement of rules. The South Dakota Aeronautics Commission may, pursuant to chapter 1-26, adopt and enforce rules establishing minimum standards and criteria, including lighting, painting, and marking of any buildings, structures, towers, and hazards referred to in §§ 50-9-2, 50-9-3 and 50-9-7 in the interest of safe operation of aircraft and public safety. In adopting and enforcing rules, the Aeronautics Commission shall consider aviation safety, economic impact, financial impact on applicants applying for permits to build structures, multiple uses of airspace, federal regulations, and other relevant factors. The power and authority to enforce such rules by injunction proceedings in any court of competent jurisdiction instituted in the name of the South Dakota Aeronautics Commission, is hereby conferred.

Source: SL 1957, ch 2, § 2; SDC Supp 1960, § 2.0216; SL 1987, ch 356, § 14; SL 1989, ch 406, § 3.

50-9-10. Conflicting jurisdiction between Aeronautics Commission and local political subdivisions--Superiority of commission--Public hearing. When conflicting jurisdiction arises over the control of the erection of a building, structure, tower, or hazard in relation to an airport, airway, or air navigation facility between the State Aeronautics Commission and any political subdivision of the state, the commission may overrule, change, modify, or amend zoning rules and regulations adopted by any political subdivision or by any airport zoning board created by a political subdivision under the laws of this state, after a public hearing wherein all parties thereto have been given an opportunity to be heard.

Source: SL 1957, ch 2, § 3; SDC Supp 1960, § 2.0217.

50-9-11. Repealed by SL 1983, ch 15, § 184.

Appendix D: Supporting Information

FAA Terminal Area Forecast (TAF)

Part 77 Surfaces

- Airspace Plan
- Extended Glide Path

FAA Advisory Circular 150/5200-33B

Airport Property Map



FAA Terminal Area Forecast (TAF)

APO TERMINAL AREA FORECAST DETAIL REPORT Forecast Issued December 2009

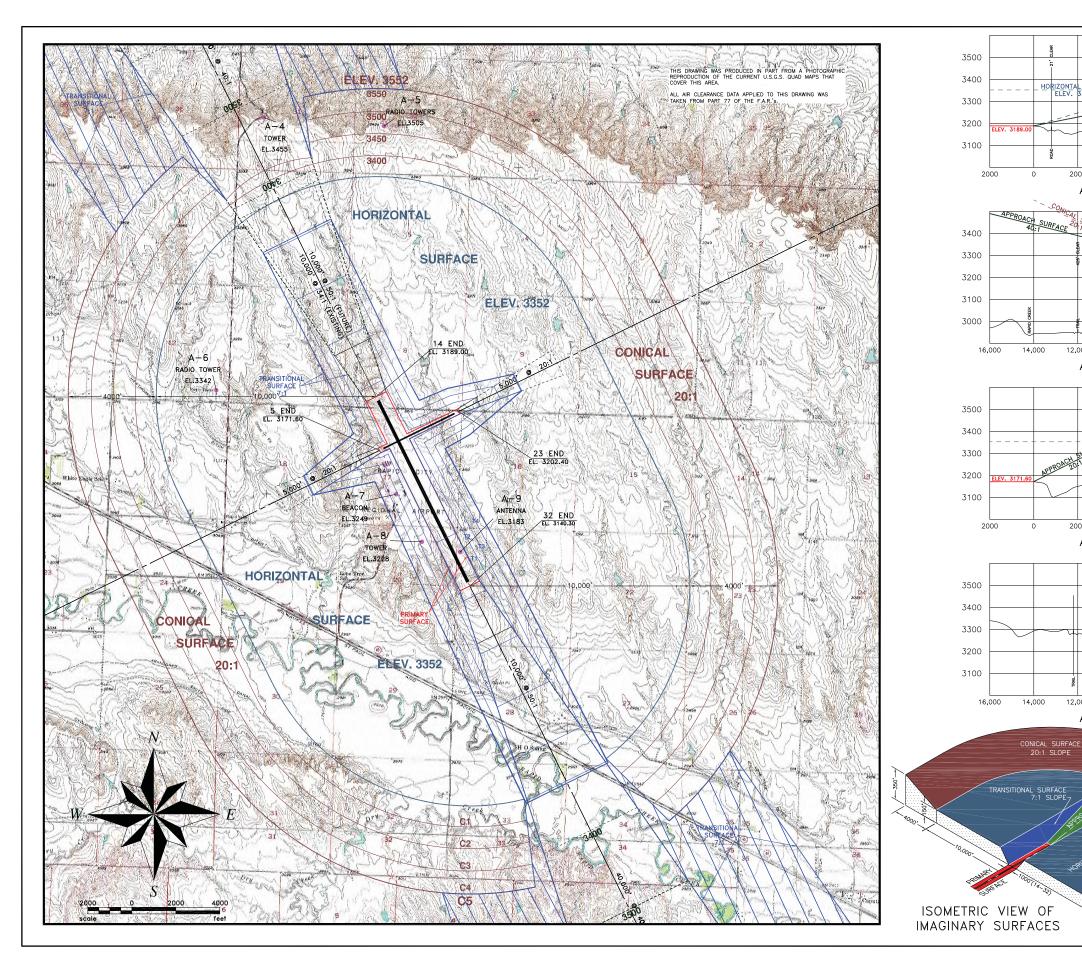
RAP

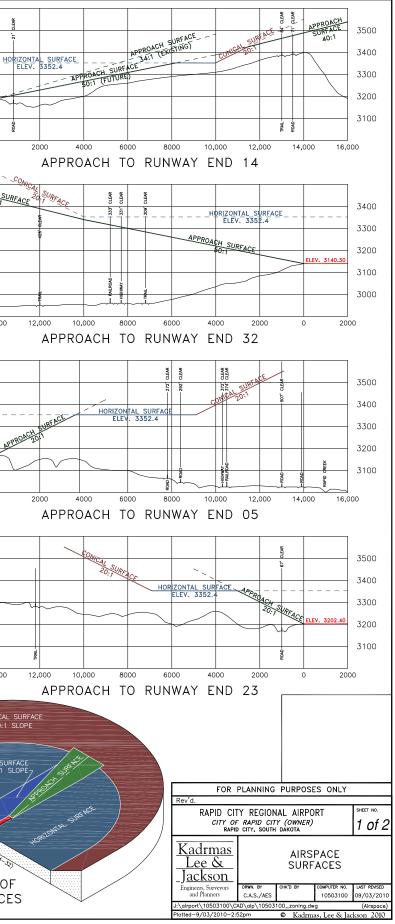
	AIRCRAFT OPERATIONS														
	Enplanements				Itinerant Operations				Local Operations						
Fiscal Year	Air Carrier	Comn	nuter	Total	Air Carrier	Air Taxi & Commuter	GA	Military	Total	Civil	Military	Total	Total Ops	Total Tracon Ops	Based Aircraft
REGIO)N:AGL	STAT	E:SD	LOCID:	RAP										
CITY:	RAPID CI	TY A	IRPOR	RT:RAPII	OCITY R	GNL									
1990	104,547		56,220	160,767	3,935	8,664	16,915	2,548	32,062	15,052	4,307	19,359	51,421	0	9
1991	100,836		67,730	168,566	5,129	12,928	20,895	2,764	41,716	19,128	6,250	25,378	67,094	0	9
1992	113,501		74,663	188,164	5,211	12,007	21,601	2,931	41,750	22,311	6,204	28,515	70,265	0	9
1993	111,702		77,648	189,350	5,275	12,328	20,712	2,407	40,722	20,016	4,737	24,753	65,475	0	9
1994	86,442		99,388	185,830	3,355	14,773	22,389	2,453	42,970	18,299	3,762	22,061	65,031	0	7
1995	77,081	1	103,376	180,457	2,218	13,275	21,993	2,404	39,890	16,801	3,216	20,017	59,907	0	7
1996	80,655	1	104,144	184,799	2,073	11,361	20,595	2,680	36,709	16,610	2,047	18,657	55,366	0	7
1997	74,239		96,260	170,499	2,312	12,110	21,739	1,973	38,134	15,359	1,416	16,775	54,909	0	11
1998	100,088		68,983	169,071	2,767	11,410	23,274	1,869	39,320	16,663	2,163	18,826	58,146	0	11
1999	152,781		42,108	194,889	3,583	12,251	21,656	2,177	39,667	17,660	1,996	19,656	59,323	0	11
2000	162,544		33,787	196,331	3,781	12,362	23,238	2,295	41,676	15,617	1,823	17,440	59,116	0	11
2001	87,844	1	105,067	192,911	3,666	11,512	22,481	2,869	40,528	14,037	2,230	16,267	56,795	0	11
2002	85,640	1	110,507	196,147	3,442	12,179	26,121	3,051	44,793	18,375	2,292	20,667	65,460	0	11
2003	81,733	1	132,011	213,744	3,382	11,626	22,986	3,523	41,517	11,690	2,610	14,300	55,817	0	11
2004	85,415	1	152,601	238,016	2,986	14,199	24,090	2,553	43,828	12,839	1,581	14,420	58,248	0	11
2005	84,869	1	158,617	243,486	3,144	12,336	21,985	2,885	40,350	11,129	1,748	12,877	53,227	0	12
2006	82,030	1	145,339	227,369	2,665	12,612	19,872	2,839	37,988	8,981	1,504	10,485	48,473	0	12
2007	88,233	1	137,871	226,104	2,085	12,752	20,136	2,965	37,938	9,037	1,264	10,301	48,239	0	12
2008	95,764	1	186,772	282,536	4,589	10,981	16,684	1,897	34,151	8,329	572	8,901	43,052	0	12
2009*	64,210		197,116	261,326	4,631	10,666	14,530	2,223	32,050	6,344	692	7,036	39,086	0	12
2010*	65,173		200,073	265,246	4,677	10,773	14,634	2,223	32,307	7,052	692	7,744	40,051	0	13
2011*	66,150	2	203,074	269,224	4,723	10,881	14,829	2,223	32,656	7,157	692	7,849	40,505	0	13
2012*	67,142	2	206,119	273,261	4,769	10,990	15,037	2,223	33,019	7,263	692	7,955	40,974	0	13
2013*	68,149		209,211	277,360	4,817	11,100	15,248	2,223	33,388	7,370	692	8,062	41,450	0	14
2014*	69,171	2	212,349	281,520	4,865	11,211	15,461	2,223	33,760	7,478	692	8,170	41,930	0	14
2015*	70,208		215,534	285,742	4,913	11,323	15,678	2,223	34,137	7,590	692	8,282	42,419	0	14
2016*	71,261		218,766	290,027	4,963	11,436	15,898	2,223	34,520	7,702	692	8,394	42,914	0	14
2017*	72,323		222,048	294,371	5,013	11,549	16,121	2,223	34,906	7,816	692	8,508	43,414	0	15
2018*	73,407		225,379	298,786	5,063	11,664	16,347	2,223	35,297	7,931	692	8,623	43,920	0	15
2019*	74,508	2	228,759	303,267	5,113	11,780	16,576	2,223	35,692	8,049	692	8,741	44,433	0	15

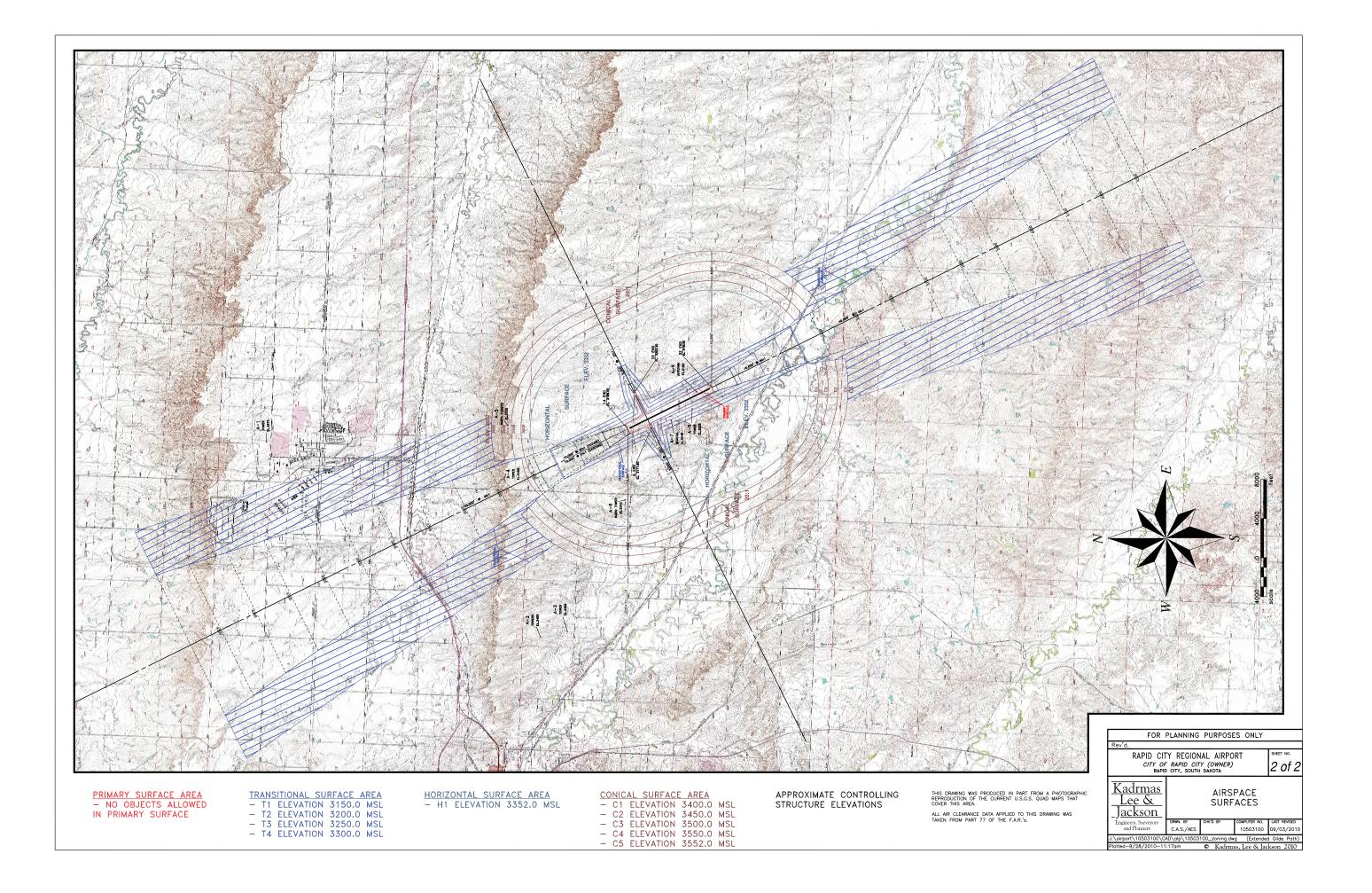
APO TERMINAL AREA FORECAST DETAIL REPORT Forecast Issued December 2009

RAP														
						AIRCR	AFT OPER	ATION	S					
	F	Enplanements			Itinerant	Operatio	ons		Lo	cal Operation	ons			
Fiscal Year	Air Carrier	Commuter	Total	Air Carrier	Air Taxi & Commuter	GA	Military	Total	Civil	Military	Total	Total Ops	Total Tracon Ops	Based Aircraft
2020*	75,625	232,191	307,816	5,163	11,897	16,809	2,223	36,092	8,167	692	8,859	44,951	0	160
2021*	76,759	235,673	312,432	5,215	12,015	17,044	2,223	36,497	8,289	692	8,981	45,478	0	164
2022*	77,910	239,207	317,117	5,265	12,135	17,283	2,223	36,906	8,412	692	9,104	46,010	0	167
2023*	79,079	242,796	321,875	5,317	12,257	17,525	2,223	37,322	8,537	692	9,229	46,551	0	169
2024*	80,264	246,437	326,701	5,372	12,379	17,770	2,223	37,744	8,662	692	9,354	47,098	0	173
2025*	81,468	250,135	331,603	5,424	12,502	18,019	2,223	38,168	8,789	692	9,481	47,649	0	176
2026*	82,691	253,887	336,578	5,477	12,626	18,271	2,223	38,597	8,918	692	9,610	48,207	0	179
2027*	83,932	257,697	341,629	5,530	12,752	18,526	2,223	39,031	9,049	692	9,741	48,772	0	182
2028*	85,191	261,563	346,754	5,584	12,879	18,785	2,223	39,471	9,183	692	9,875	49,346	0	185
2029*	86,470	265,486	351,956	5,638	13,007	19,048	2,223	39,916	9,318	692	10,010	49,926	0	188
2030*	87,767	269,468	357,235	5,693	13,136	19,315	2,223	40,367	9,456	692	10,148	50,515	0	191









FAA Advisory Circular 150/5200-33B



Federal Aviation Administration

Advisory Circular

Date: 8/28/2007 AC No: 150/5200-33B

Subject: HAZARDOUS WILDLIFE ATTRACTANTS ON OR NEAR AIRPORTS

Initiated by: AAS-300 Change:

1. PURPOSE. This Advisory Circular (AC) provides guidance on certain land uses that have the potential to attract hazardous wildlife on or near public-use airports. It also discusses airport development projects (including airport construction, expansion, and renovation) affecting aircraft movement near hazardous wildlife attractants. Appendix 1 provides definitions of terms used in this AC.

2. APPLICABILITY. The Federal Aviation Administration (FAA) recommends that public-use airport operators implement the standards and practices contained in this AC. The holders of Airport Operating Certificates issued under Title 14, Code of Federal Regulations (CFR), Part 139, Certification of Airports, Subpart D (Part 139), may use the standards, practices, and recommendations contained in this AC to comply with the wildlife hazard management requirements of Part 139. Airports that have received Federal grant-in-aid assistance must use these standards. The FAA also recommends the guidance in this AC for land-use planners, operators of non-certificated airports, and developers of projects, facilities, and activities on or near airports.

3. CANCELLATION. This AC cancels AC 150/5200-33A, *Hazardous Wildlife Attractants on or near Airports*, dated July 27, 2004.

4. PRINCIPAL CHANGES. This AC contains the following major changes, which are marked with vertical bars in the margin:

- **a.** Technical changes to paragraph references.
- **b.** Wording on storm water detention ponds.
- c. Deleted paragraph 4-3.b, Additional Coordination.

5. BACKGROUND. Information about the risks posed to aircraft by certain wildlife species has increased a great deal in recent years. Improved reporting, studies, documentation, and statistics clearly show that aircraft collisions with birds and other wildlife are a serious economic and public safety problem. While many species of wildlife can pose a threat to aircraft safety, they are not equally hazardous. Table 1

ranks the wildlife groups commonly involved in damaging strikes in the United States according to their relative hazard to aircraft. The ranking is based on the 47,212 records in the FAA National Wildlife Strike Database for the years 1990 through 2003. These hazard rankings, in conjunction with site-specific Wildlife Hazards Assessments (WHA), will help airport operators determine the relative abundance and use patterns of wildlife species and help focus hazardous wildlife management efforts on those species most likely to cause problems at an airport.

Most public-use airports have large tracts of open, undeveloped land that provide added margins of safety and noise mitigation. These areas can also present potential hazards to aviation if they encourage wildlife to enter an airport's approach or departure airspace or air operations area (AOA). Constructed or natural areas—such as poorly drained locations, detention/retention ponds, roosting habitats on buildings, landscaping, odor-causing rotting organic matter (putrescible waste) disposal operations, wastewater treatment plants, agricultural or aquaculture activities, surface mining, or wetlands—can provide wildlife with ideal locations for feeding, loafing, reproduction, and escape. Even small facilities, such as fast food restaurants, taxicab staging areas, rental car facilities, aircraft viewing areas, and public parks, can produce substantial attractions for hazardous wildlife.

During the past century, wildlife-aircraft strikes have resulted in the loss of hundreds of lives worldwide, as well as billions of dollars in aircraft damage. Hazardous wildlife attractants on and near airports can jeopardize future airport expansion, making proper community land-use planning essential. This AC provides airport operators and those parties with whom they cooperate with the guidance they need to assess and address potentially hazardous wildlife attractants when locating new facilities and implementing certain land-use practices on or near public-use airports.

6. MEMORANDUM OF AGREEMENT BETWEEN FEDERAL RESOURCE AGENCIES. The FAA, the U.S. Air Force, the U.S. Army Corps of Engineers, the U.S. Environmental Protection Agency, the U.S. Fish and Wildlife Service, and the U.S. Department of Agriculture - Wildlife Services signed a Memorandum of Agreement (MOA) in July 2003 to acknowledge their respective missions in protecting aviation from wildlife hazards. Through the MOA, the agencies established procedures necessary to coordinate their missions to address more effectively existing and future environmental conditions contributing to collisions between wildlife and aircraft (wildlife strikes) throughout the United States. These efforts are intended to minimize wildlife risks to aviation and human safety while protecting the Nation's valuable environmental resources.

Miz

DAVID L. BENNETT Director, Office of Airport Safety and Standards

Table 1. Ranking of 25 species groups as to relative hazard to aircraft (1=most hazardous) based on three criteria (damage, major damage, and effect-on-flight), a composite ranking based on all three rankings, and a relative hazard score. Data were derived from the FAA National Wildlife Strike Database, January 1990–April 2003.¹

		Ranking by crite				
Species group	Damage ⁴	Major damage⁵	Effect on flight ⁶	Composite ranking ²	Relative hazard score ³	
Deer	1	1	1	1	100	
Vultures	2	2	2	2	64	
Geese	3	3	6	3	55	
Cormorants/pelicans	4	5	3	4	54	
Cranes	7	6	4	5	47	
Eagles	6	9	7	6	41	
Ducks	5	8	10	7	39	
Osprey	8	4	8	8	39	
Turkey/pheasants	9	7	11	9	33	
Herons	11	14	9	10	27	
Hawks (buteos)	10	12	12	11	25	
Gulls	12	11	13	12	24	
Rock pigeon	13	10	14	13	23	
Owls	14	13	20	14	23	
H. lark/s. bunting	18	15	15	15	17	
Crows/ravens	15	16	16	16	16	
Coyote	16	19	5	17	14	
Mourning dove	17	17	17	18	14	
Shorebirds	19	21	18	19	10	
Blackbirds/starling	20	22	19	20	10	
American kestrel	21	18	21	21	9	
Meadowlarks	22	20	22	22	7	
Swallows	24	23	24	23	4	
Sparrows	25	24	23	24	4	
Nighthawks	23	25	25	25	1	

¹ Excerpted from the Special Report for the FAA, "Ranking the Hazard Level of Wildlife Species to Civil Aviation in the USA: Update #1, July 2, 2003". Refer to this report for additional explanations of criteria and method of ranking. ² Relative rank of each species group was expressed with the transmission of transmission of the transmission of transmission of the transmission of trans

² Relative rank of each species group was compared with every other group for the three variables, placing the species group with the greatest hazard rank for ≥ 2 of the 3 variables above the next highest ranked group, then proceeding down the list.

³ Percentage values, from Tables 3 and 4 in Footnote 1 of the *Special Report*, for the three criteria were summed and scaled down from 100, with 100 as the score for the species group with the maximum summed values and the greatest potential hazard to aircraft.

⁴ Aircraft incurred at least some damage (destroyed, substantial, minor, or unknown) from strike.

⁵ Aircraft incurred damage or structural failure, which adversely affected the structure strength, performance, or flight characteristics, and which would normally require major repair or replacement of the affected component, or the damage sustained makes it inadvisable to restore aircraft to airworthy condition.

⁶ Aborted takeoff, engine shutdown, precautionary landing, or other.

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SECTION 1.

GENERAL SEPARATION CRITERIA FOR HAZARDOUS WILDLIFE ATTRACTANTS ON OR NEAR AIRPORTS.

1-1. INTRODUCTION. When considering proposed land uses, airport operators, local planners, and developers must take into account whether the proposed land uses, including new development projects, will increase wildlife hazards. Land-use practices that attract or sustain hazardous wildlife populations on or near airports can significantly increase the potential for wildlife strikes.

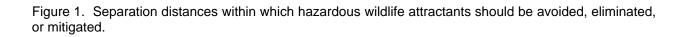
The FAA recommends the minimum separation criteria outlined below for land-use practices that attract hazardous wildlife to the vicinity of airports. Please note that FAA criteria include land uses that cause movement of hazardous wildlife onto, into, or across the airport's approach or departure airspace or air operations area (AOA). (See the discussion of the synergistic effects of surrounding land uses in Section 2-8 of this AC.)

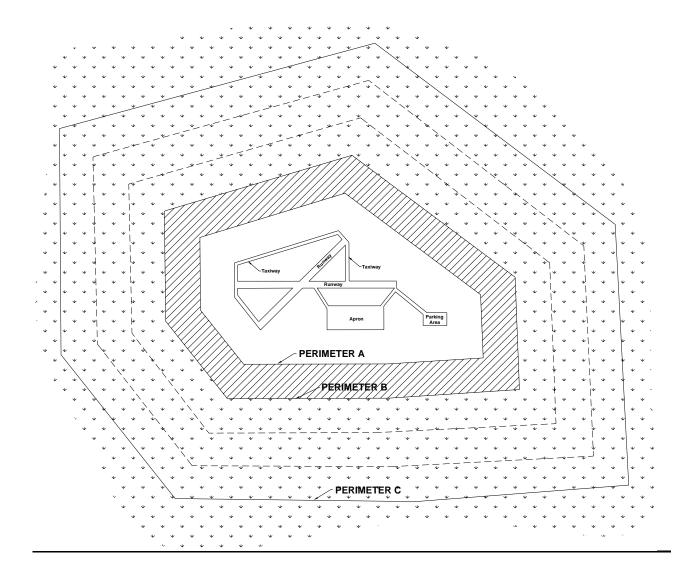
The basis for the separation criteria contained in this section can be found in existing FAA regulations. The separation distances are based on (1) flight patterns of piston-powered aircraft and turbine-powered aircraft, (2) the altitude at which most strikes happen (78 percent occur under 1,000 feet and 90 percent occur under 3,000 feet above ground level), and (3) National Transportation Safety Board (NTSB) recommendations.

1-2. AIRPORTS SERVING PISTON-POWERED AIRCRAFT. Airports that do not sell Jet-A fuel normally serve piston-powered aircraft. Notwithstanding more stringent requirements for specific land uses, the FAA recommends a separation distance of 5,000 feet at these airports for any of the hazardous wildlife attractants mentioned in Section 2 or for new airport development projects meant to accommodate aircraft movement. This distance is to be maintained between an airport's AOA and the hazardous wildlife attractant. Figure 1 depicts this separation distance measured from the nearest aircraft operations areas.

1-3. AIRPORTS SERVING TURBINE-POWERED AIRCRAFT. Airports selling Jet-A fuel normally serve turbine-powered aircraft. Notwithstanding more stringent requirements for specific land uses, the FAA recommends a separation distance of 10,000 feet at these airports for any of the hazardous wildlife attractants mentioned in Section 2 or for new airport development projects meant to accommodate aircraft movement. This distance is to be maintained between an airport's AOA and the hazardous wildlife attractant. Figure 1 depicts this separation distance from the nearest aircraft movement areas.

1-4. PROTECTION OF APPROACH, DEPARTURE, AND CIRCLING AIRSPACE. For all airports, the FAA recommends a distance of 5 statute miles between the farthest edge of the airport's AOA and the hazardous wildlife attractant if the attractant could cause hazardous wildlife movement into or across the approach or departure airspace.





PERIMETER A: For airports serving piston-powered aircraft, hazardous wildlife attractants must be 5,000 feet from the nearest air operations area.

PERIMETER B: For airports serving turbine-powered aircraft, hazardous wildlife attractants must be 10,000 feet from the nearest air operations area.

PERIMETER C: 5-mile range to protect approach, departure and circling airspace.

SECTION 2.

LAND-USE PRACTICES ON OR NEAR AIRPORTS THAT POTENTIALLY ATTRACT HAZARDOUS WILDLIFE.

2-1. GENERAL. The wildlife species and the size of the populations attracted to the airport environment vary considerably, depending on several factors, including land-use practices on or near the airport. This section discusses land-use practices having the potential to attract hazardous wildlife and threaten aviation safety. In addition to the specific considerations outlined below, airport operators should refer to *Wildlife Hazard Management at Airports,* prepared by FAA and U.S. Department of Agriculture (USDA) staff. (This manual is available in English, Spanish, and French. It can be viewed and downloaded free of charge from the FAA's wildlife hazard mitigation web site: http://wildlife-mitigation.tc.FAA.gov.). And, *Prevention and Control of Wildlife Damage,* compiled by the University of Nebraska Cooperative Extension Division. (This manual is available online in a periodically updated version at: intro web site:

2-2. WASTE DISPOSAL OPERATIONS. Municipal solid waste landfills (MSWLF) are known to attract large numbers of hazardous wildlife, particularly birds. Because of this, these operations, when located within the separations identified in the siting criteria in Sections 1-2 through 1-4, are considered incompatible with safe airport operations.

a. Siting for new municipal solid waste landfills subject to AIR 21. Section 503 of the Wendell H. Ford Aviation Investment and Reform Act for the 21st Century (Public Law 106-181) (AIR 21) prohibits the construction or establishment of a new MSWLF within 6 statute miles of certain public-use airports. Before these prohibitions apply, both the airport and the landfill must meet the very specific conditions described below. These restrictions do not apply to airports or landfills located within the state of Alaska.

The airport must (1) have received a Federal grant(s) under 49 U.S.C. § 47101, et. seq.; (2) be under control of a public agency; (3) serve some scheduled air carrier operations conducted in aircraft with less than 60 seats; and (4) have total annual enplanements consisting of at least 51 percent of scheduled air carrier enplanements conducted in aircraft with less than 60 passenger seats.

The proposed MSWLF must (1) be within 6 miles of the airport, as measured from airport property line to MSWLF property line, and (2) have started construction or establishment on or after April 5, 2001. Public Law 106-181 only limits the construction or establishment of some new MSWLF. It does not limit the expansion, either vertical or horizontal, of existing landfills.

NOTE: Consult the most recent version of AC 150/5200-34, *Construction or Establishment of Landfills Near Public Airports,* for a more detailed discussion of these restrictions.

- b. Siting for new MSWLF not subject to AIR 21. If an airport and MSWLF do not meet the restrictions of Public Law 106-181, the FAA recommends against locating MSWLF within the separation distances identified in Sections 1-2 through 1-4. The separation distances should be measured from the closest point of the airport's AOA to the closest planned MSWLF cell.
- c. Considerations for existing waste disposal facilities within the limits of separation criteria. The FAA recommends against airport development projects that would increase the number of aircraft operations or accommodate larger or faster aircraft near MSWLF operations located within the separations identified in Sections 1-2 through 1-4. In addition, in accordance with 40 CFR 258.10, owners or operators of existing MSWLF units that are located within the separations listed in Sections 1-2 through 1-4 must demonstrate that the unit is designed and operated so it does not pose a bird hazard to aircraft. (See Section 4-2(b) of this AC for a discussion of this demonstration requirement.)
- d. Enclosed trash transfer stations. Enclosed waste-handling facilities that receive garbage behind closed doors; process it via compaction, incineration, or similar manner; and remove all residue by enclosed vehicles generally are compatible with safe airport operations, provided they are not located on airport property or within the Runway Protection Zone (RPZ). These facilities should not handle or store putrescible waste outside or in a partially enclosed structure accessible to hazardous wildlife. Trash transfer facilities that are open on one or more sides; that store uncovered quantities of municipal solid waste outside, even if only for a short time; that use semi-trailers that leak or have trash clinging to the outside; or that do not control odors by ventilation and filtration systems (odor masking is not acceptable) do not meet the FAA's definition of fully enclosed trash transfer stations. The FAA considers these facilities incompatible with safe airport operations if they are located closer than the separation distances specified in Sections 1-2 through 1-4.
- e. Composting operations on or near airport property. Composting operations that accept only yard waste (e.g., leaves, lawn clippings, or branches) generally do not attract hazardous wildlife. Sewage sludge, woodchips, and similar material are not municipal solid wastes and may be used as compost bulking agents. The compost, however, must never include food or other municipal solid waste. Composting operations should not be located on airport property. Off-airport property composting operations should be located no closer than the greater of the following distances: 1,200 feet from any AOA or the distance called for by airport design requirements (see AC 150/5300-13, Airport Design). This spacing should prevent material, personnel, or equipment from penetrating any Object Free Area (OFA), Obstacle Free Zone (OFZ), Threshold Siting Surface (TSS), or Clearway. Airport operators should monitor composting operations located in proximity to the airport to ensure that steam or thermal rise does not adversely affect air traffic. On-airport disposal of compost by-products should not be conducted for the reasons stated in 2-3f.

- f. Underwater waste discharges. The FAA recommends against the underwater discharge of any food waste (e.g., fish processing offal) within the separations identified in Sections 1-2 through 1-4 because it could attract scavenging hazardous wildlife.
- **g.** Recycling centers. Recycling centers that accept previously sorted non-food items, such as glass, newspaper, cardboard, or aluminum, are, in most cases, not attractive to hazardous wildlife and are acceptable.
- h. Construction and demolition (C&D) debris facilities. C&D landfills do not generally attract hazardous wildlife and are acceptable if maintained in an orderly manner, admit no putrescible waste, and are not co-located with other waste disposal operations. However, C&D landfills have similar visual and operational characteristics to putrescible waste disposal sites. When co-located with putrescible waste disposal operations, C&D landfills are more likely to attract hazardous wildlife because of the similarities between these disposal facilities. Therefore, a C&D landfill co-located with another waste disposal operation should be located outside of the separations identified in Sections 1-2 through 1-4.
- i. Fly ash disposal. The incinerated residue from resource recovery power/heatgenerating facilities that are fired by municipal solid waste, coal, or wood is generally not a wildlife attractant because it no longer contains putrescible matter. Landfills accepting only fly ash are generally not considered to be wildlife attractants and are acceptable as long as they are maintained in an orderly manner, admit no putrescible waste of any kind, and are not co-located with other disposal operations that attract hazardous wildlife.

Since varying degrees of waste consumption are associated with general incineration (not resource recovery power/heat-generating facilities), the FAA considers the ash from general incinerators a regular waste disposal by-product and, therefore, a hazardous wildlife attractant if disposed of within the separation criteria outlined in Sections 1-2 through 1-4.

2-3. WATER MANAGEMENT FACILITIES. Drinking water intake and treatment facilities, storm water and wastewater treatment facilities, associated retention and settling ponds, ponds built for recreational use, and ponds that result from mining activities often attract large numbers of potentially hazardous wildlife. To prevent wildlife hazards, land-use developers and airport operators may need to develop management plans, in compliance with local and state regulations, to support the operation of storm water management facilities on or near all public-use airports to ensure a safe airport environment.

a. Existing storm water management facilities. On-airport storm water management facilities allow the quick removal of surface water, including discharges related to aircraft deicing, from impervious surfaces, such as pavement and terminal/hangar building roofs. Existing on-airport detention ponds collect storm water, protect water quality, and control runoff. Because they slowly release water

after storms, they create standing bodies of water that can attract hazardous wildlife. Where the airport has developed a Wildlife Hazard Management Plan (WHMP) in accordance with Part 139, the FAA requires immediate correction of any wildlife hazards arising from existing storm water facilities located on or near airports, using appropriate wildlife hazard mitigation techniques. Airport operators should develop measures to minimize hazardous wildlife attraction in consultation with a wildlife damage management biologist.

Where possible, airport operators should modify storm water detention ponds to allow a maximum 48-hour detention period for the design storm. The FAA recommends that airport operators avoid or remove retention ponds and detention ponds featuring dead storage to eliminate standing water. Detention basins should remain totally dry between rainfalls. Where constant flow of water is anticipated through the basin, or where any portion of the basin bottom may remain wet, the detention facility should include a concrete or paved pad and/or ditch/swale in the bottom to prevent vegetation that may provide nesting habitat.

When it is not possible to drain a large detention pond completely, airport operators may use physical barriers, such as bird balls, wires grids, pillows, or netting, to deter birds and other hazardous wildlife. When physical barriers are used, airport operators must evaluate their use and ensure they will not adversely affect water rescue. Before installing any physical barriers over detention ponds on Part 139 airports, airport operators must get approval from the appropriate FAA Regional Airports Division Office.

The FAA recommends that airport operators encourage off-airport storm water treatment facility operators to incorporate appropriate wildlife hazard mitigation techniques into storm water treatment facility operating practices when their facility is located within the separation criteria specified in Sections 1-2 through 1-4.

b. New storm water management facilities. The FAA strongly recommends that offairport storm water management systems located within the separations identified in Sections 1-2 through 1-4 be designed and operated so as not to create aboveground standing water. Stormwater detention ponds should be designed, engineered, constructed, and maintained for a maximum 48-hour detention period after the design storm and remain completely dry between storms. To facilitate the control of hazardous wildlife, the FAA recommends the use of steep-sided, rip-rap lined, narrow, linearly shaped water detention basins. When it is not possible to place these ponds away from an airport's AOA, airport operators should use physical barriers, such as bird balls, wires grids, pillows, or netting, to prevent access of hazardous wildlife to open water and minimize aircraft-wildlife interactions. When physical barriers are used, airport operators must evaluate their use and ensure they will not adversely affect water rescue. Before installing any physical barriers over detention ponds on Part 139 airports, airport operators must get approval from the appropriate FAA Regional Airports Division Office. All vegetation in or around detention basins that provide food or cover for hazardous wildlife should be eliminated. If soil conditions and other requirements allow, the FAA encourages

the use of underground storm water infiltration systems, such as French drains or buried rock fields, because they are less attractive to wildlife.

- c. Existing wastewater treatment facilities. The FAA strongly recommends that airport operators immediately correct any wildlife hazards arising from existing wastewater treatment facilities located on or near the airport. Where required, a WHMP developed in accordance with Part 139 will outline appropriate wildlife hazard mitigation techniques. Accordingly, airport operators should encourage wastewater treatment facility operators to incorporate measures, developed in consultation with a wildlife damage management biologist, to minimize hazardous wildlife attractants. Airport operators should also encourage those wastewater treatment facility operators to incorporate these mitigation techniques into their standard operating practices. In addition, airport operators should consider the existence of wastewater treatment facilities when evaluating proposed sites for new airport development projects and avoid such sites when practicable.
- d. New wastewater treatment facilities. The FAA strongly recommends against the construction of new wastewater treatment facilities or associated settling ponds within the separations identified in Sections 1-2 through 1-4. Appendix 1 defines wastewater treatment facility as "any devices and/or systems used to store, treat, recycle, or reclaim municipal sewage or liquid industrial wastes." The definition includes any pretreatment involving the reduction of the amount of pollutants or the elimination of pollutants prior to introducing such pollutants into a publicly owned treatment works (wastewater treatment facility). During the site-location analysis for wastewater treatment facilities, developers should consider the potential to attract hazardous wildlife if an airport is in the vicinity of the proposed site, and airport operators should voice their opposition to such facilities if they are in proximity to the airport.
- e. Artificial marshes. In warmer climates, wastewater treatment facilities sometimes employ artificial marshes and use submergent and emergent aquatic vegetation as natural filters. These artificial marshes may be used by some species of flocking birds, such as blackbirds and waterfowl, for breeding or roosting activities. The FAA strongly recommends against establishing artificial marshes within the separations identified in Sections 1-2 through 1-4.
- f. Wastewater discharge and sludge disposal. The FAA recommends against the discharge of wastewater or sludge on airport property because it may improve soil moisture and quality on unpaved areas and lead to improved turf growth that can be an attractive food source for many species of animals. Also, the turf requires more frequent mowing, which in turn may mutilate or flush insects or small animals and produce straw, both of which can attract hazardous wildlife. In addition, the improved turf may attract grazing wildlife, such as deer and geese. Problems may also occur when discharges saturate unpaved airport areas. The resultant soft, muddy conditions can severely restrict or prevent emergency vehicles from reaching accident sites in a timely manner.

2-4. WETLANDS. Wetlands provide a variety of functions and can be regulated by local, state, and Federal laws. Normally, wetlands are attractive to many types of wildlife, including many which rank high on the list of hazardous wildlife species (Table 1).

NOTE: If questions exist as to whether an area qualifies as a wetland, contact the local division of the U.S. Army Corps of Engineers, the Natural Resources Conservation Service, or a wetland consultant qualified to delineate wetlands.

- a. Existing wetlands on or near airport property. If wetlands are located on or near airport property, airport operators should be alert to any wildlife use or habitat changes in these areas that could affect safe aircraft operations. At public-use airports, the FAA recommends immediately correcting, in cooperation with local, state, and Federal regulatory agencies, any wildlife hazards arising from existing wetlands located on or near airports. Where required, a WHMP will outline appropriate wildlife hazard mitigation techniques. Accordingly, airport operators should develop measures to minimize hazardous wildlife attraction in consultation with a wildlife damage management biologist.
- **b.** New airport development. Whenever possible, the FAA recommends locating new airports using the separations from wetlands identified in Sections 1-2 through 1-4. Where alternative sites are not practicable, or when airport operators are expanding an existing airport into or near wetlands, a wildlife damage management biologist, in consultation with the U.S. Fish and Wildlife Service, the U.S. Army Corps of Engineers, and the state wildlife management agency should evaluate the wildlife hazards and prepare a WHMP that indicates methods of minimizing the hazards.
- **c. Mitigation for wetland impacts from airport projects.** Wetland mitigation may be necessary when unavoidable wetland disturbances result from new airport development projects or projects required to correct wildlife hazards from wetlands. Wetland mitigation must be designed so it does not create a wildlife hazard. The FAA recommends that wetland mitigation projects that may attract hazardous wildlife be sited outside of the separations identified in Sections 1-2 through 1-4.

(1) Onsite mitigation of wetland functions. The FAA may consider exceptions to locating mitigation activities outside the separations identified in Sections 1-2 through 1-4 if the affected wetlands provide unique ecological functions, such as critical habitat for threatened or endangered species or ground water recharge, which cannot be replicated when moved to a different location. Using existing airport property is sometimes the only feasible way to achieve the mitigation ratios mandated in regulatory orders and/or settlement agreements with the resource agencies. Conservation easements are an additional means of providing mitigation for project impacts. Typically the airport operator continues to own the property, and an easement is created stipulating that the property will be maintained as habitat for state or Federally listed species.

Mitigation must not inhibit the airport operator's ability to effectively control hazardous wildlife on or near the mitigation site or effectively maintain other aspects of safe airport operations. Enhancing such mitigation areas to attract hazardous wildlife must be avoided. The FAA will review any onsite mitigation proposals to determine compatibility with safe airport operations. A wildlife damage management biologist should evaluate any wetland mitigation projects that are needed to protect unique wetland functions and that must be located in the separation criteria in Sections 1-2 through 1-4 before the mitigation is implemented. A WHMP should be developed to reduce the wildlife hazards.

(2) Offsite mitigation of wetland functions. The FAA recommends that wetland mitigation projects that may attract hazardous wildlife be sited outside of the separations identified in Sections 1-2 through 1-4 unless they provide unique functions that must remain onsite (see 2-4c(1)). Agencies that regulate impacts to or around wetlands recognize that it may be necessary to split wetland functions in mitigation schemes. Therefore, regulatory agencies may, under certain circumstances, allow portions of mitigation to take place in different locations.

(3) Mitigation banking. Wetland mitigation banking is the creation or restoration of wetlands in order to provide mitigation credits that can be used to offset permitted wetland losses. Mitigation banking benefits wetland resources by providing advance replacement for permitted wetland losses; consolidating small projects into larger, better-designed and managed units; and encouraging integration of wetland mitigation projects with watershed planning. This last benefit is most helpful for airport projects, as wetland impacts mitigated outside of the separations identified in Sections 1-2 through 1-4 can still be located within the same watershed. Wetland mitigation banks meeting the separation criteria offer an ecologically sound approach to mitigation in these situations. Airport operators should work with local watershed management agencies or organizations to develop mitigation banking for wetland impacts on airport property.

2-5. DREDGE SPOIL CONTAINMENT AREAS. The FAA recommends against locating dredge spoil containment areas (also known as Confined Disposal Facilities) within the separations identified in Sections 1-2 through 1-4 if the containment area or the spoils contain material that would attract hazardous wildlife.

2-6. AGRICULTURAL ACTIVITIES. Because most, if not all, agricultural crops can attract hazardous wildlife during some phase of production, the FAA recommends against the used of airport property for agricultural production, including hay crops, within the separations identified in Sections 1-2 through 1-4. If the airport has no financial alternative to agricultural crops to produce income necessary to maintain the viability of the airport, then the airport shall follow the crop distance guidelines listed in the table titled "Minimum Distances between Certain Airport Features and Any On-Airport Agricultural Crops" found in AC 150/5300-13, *Airport Design*, Appendix 17. The cost of wildlife control and potential accidents should be weighed against the income produced by the on-airport crops when deciding whether to allow crops on the airport.

- a. Livestock production. Confined livestock operations (i.e., feedlots, dairy operations, hog or chicken production facilities, or egg laying operations) often attract flocking birds, such as starlings, that pose a hazard to aviation. Therefore, The FAA recommends against such facilities within the separations identified in Sections 1-2 through 1-4. Any livestock operation within these separations should have a program developed to reduce the attractiveness of the site to species that are hazardous to aviation safety. Free-ranging livestock must not be grazed on airport property because the animals may wander onto the AOA. Furthermore, livestock feed, water, and manure may attract birds.
- **b.** Aquaculture. Aquaculture activities (i.e. catfish or trout production) conducted outside of fully enclosed buildings are inherently attractive to a wide variety of birds. Existing aquaculture facilities/activities within the separations listed in Sections 1-2 through 1-4 must have a program developed to reduce the attractiveness of the sites to species that are hazardous to aviation safety. Airport operators should also oppose the establishment of new aquaculture facilities/activities within the separations listed in Sections 1-2 through 1-4.
- c. Alternative uses of agricultural land. Some airports are surrounded by vast areas of farmed land within the distances specified in Sections 1-2 through 1-4. Seasonal uses of agricultural land for activities such as hunting can create a hazardous wildlife situation. In some areas, farmers will rent their land for hunting purposes. Rice farmers, for example, flood their land during waterfowl hunting season and obtain additional revenue by renting out duck blinds. The duck hunters then use decoys and call in hundreds, if not thousands, of birds, creating a tremendous threat to aircraft safety. A wildlife damage management biologist should review, in coordination with local farmers and producers, these types of seasonal land uses and incorporate them into the WHMP.

2-7. GOLF COURSES, LANDSCAPING AND OTHER LAND-USE CONSIDERATIONS.

- a. Golf courses. The large grassy areas and open water found on most golf courses are attractive to hazardous wildlife, particularly Canada geese and some species of gulls. These species can pose a threat to aviation safety. The FAA recommends against construction of new golf courses within the separations identified in Sections 1-2 through 1-4. Existing golf courses located within these separations must develop a program to reduce the attractiveness of the sites to species that are hazardous to aviation safety. Airport operators should ensure these golf courses are monitored on a continuing basis for the presence of hazardous wildlife. If hazardous wildlife is detected, corrective actions should be immediately implemented.
- b. Landscaping and landscape maintenance. Depending on its geographic location, landscaping can attract hazardous wildlife. The FAA recommends that airport operators approach landscaping with caution and confine it to airport areas not associated with aircraft movements. A wildlife damage management biologist should review all landscaping plans. Airport operators should also monitor all landscaped areas on a continuing basis for the presence of hazardous wildlife. If

hazardous wildlife is detected, corrective actions should be immediately implemented.

Turf grass areas can be highly attractive to a variety of hazardous wildlife species. Research conducted by the USDA Wildlife Services' National Wildlife Research Center has shown that no one grass management regime will deter all species of hazardous wildlife in all situations. In cooperation with wildlife damage management biologist, airport operators should develop airport turf grass management plans on a prescription basis, depending on the airport's geographic locations and the type of hazardous wildlife likely to frequent the airport

Airport operators should ensure that plant varieties attractive to hazardous wildlife are not used on the airport. Disturbed areas or areas in need of re-vegetating should not be planted with seed mixtures containing millet or any other large-seed producing grass. For airport property already planted with seed mixtures containing millet, rye grass, or other large-seed producing grasses, the FAA recommends disking, plowing, or another suitable agricultural practice to prevent plant maturation and seed head production. Plantings should follow the specific recommendations for grass management and seed and plant selection made by the State University Cooperative Extension Service, the local office of Wildlife Services, or a qualified wildlife damage management biologist. Airport operators should also consider developing and implementing a preferred/prohibited plant species list, reviewed by a wildlife damage management biologist, which has been designed for the geographic location to reduce the attractiveness to hazardous wildlife for landscaping airport property.

- **c.** Airports surrounded by wildlife habitat. The FAA recommends that operators of airports surrounded by woodlands, water, or wetlands refer to Section 2.4 of this AC. Operators of such airports should provide for a Wildlife Hazard Assessment (WHA) conducted by a wildlife damage management biologist. This WHA is the first step in preparing a WHMP, where required.
- **d.** Other hazardous wildlife attractants. Other specific land uses or activities (e.g., sport or commercial fishing, shellfish harvesting, etc.), perhaps unique to certain regions of the country, have the potential to attract hazardous wildlife. Regardless of the source of the attraction, when hazardous wildlife is noted on a public-use airport, airport operators must take prompt remedial action(s) to protect aviation safety.

2-8. SYNERGISTIC EFFECTS OF SURROUNDING LAND USES. There may be circumstances where two (or more) different land uses that would not, by themselves, be considered hazardous wildlife attractants or that are located outside of the separations identified in Sections 1-2 through 1-4 that are in such an alignment with the airport as to create a wildlife corridor directly through the airport and/or surrounding airspace. An example of this situation may involve a lake located outside of the separation criteria on the east side of an airport and a large hayfield on the west side of an airport, land uses that together could create a flyway for Canada geese directly across the airspace of the airport. There are numerous examples of such situations;

therefore, airport operators and the wildlife damage management biologist must consider the entire surrounding landscape and community when developing the WHMP.

SECTION 3.

PROCEDURES FOR WILDLIFE HAZARD MANAGEMENT BY OPERATORS OF PUBLIC-USE AIRPORTS.

3.1. INTRODUCTION. In recognition of the increased risk of serious aircraft damage or the loss of human life that can result from a wildlife strike, the FAA may require the development of a Wildlife Hazard Management Plan (WHMP) when specific triggering events occur on or near the airport. Part 139.337 discusses the specific events that trigger a Wildlife Hazard Assessment (WHA) and the specific issues that a WHMP must address for FAA approval and inclusion in an Airport Certification Manual.

3.2. COORDINATION WITH USDA WILDLIFE SERVICES OR OTHER QUALIFIED WILDLIFE DAMAGE MANAGEMENT BIOLOGISTS. The FAA will use the Wildlife Hazard Assessment (WHA) conducted in accordance with Part 139 to determine if the airport needs a WHMP. Therefore, persons having the education, training, and expertise necessary to assess wildlife hazards must conduct the WHA. The airport operator may look to Wildlife Services or to qualified private consultants to conduct the WHA. When the services of a wildlife damage management biologist are required, the FAA recommends that land-use developers or airport operators contact a consultant specializing in wildlife damage management or the appropriate state director of Wildlife Services.

NOTE: Telephone numbers for the respective USDA Wildlife Services state offices can be obtained by contacting USDA Wildlife Services Operational Support Staff, 4700 River Road, Unit 87, Riverdale, MD, 20737-1234, Telephone (301) 734-7921, Fax (301) 734-5157 (<u>http://www.aphis.usda.gov/ws/</u>).

3-3. WILDLIFE HAZARD MANAGEMENT AT AIRPORTS: A MANUAL FOR AIRPORT PERSONNEL. This manual, prepared by FAA and USDA Wildlife Services staff, contains a compilation of information to assist airport personnel in the development, implementation, and evaluation of WHMPs at airports. The manual includes specific information on the nature of wildlife strikes, legal authority, regulations, wildlife management techniques, WHAs, WHMPs, and sources of help and information. The manual is available in three languages: English, Spanish, and French. It can be viewed and downloaded free of charge from the FAA's wildlife hazard mitigation web site: <u>http://wildlife-mitigation.tc.FAA.gov/</u>. This manual only provides a starting point for addressing wildlife hazard issues at airports. Hazardous wildlife management is a complex discipline and conditions vary widely across the United States. Therefore, qualified wildlife damage management biologists must direct the development of a WHMP and the implementation of management actions by airport personnel.

There are many other resources complementary to this manual for use in developing and implementing WHMPs. Several are listed in the manual's bibliography.

3-4. WILDLIFE HAZARD ASSESSMENTS, TITLE 14, CODE OF FEDERAL REGULATIONS, PART 139. Part 139.337(b) requires airport operators to conduct a Wildlife Hazard Assessment (WHA) when certain events occur on or near the airport.

Part 139.337 (c) provides specific guidance as to what facts must be addressed in a WHA.

3-5. WILDLIFE HAZARD MANAGEMENT PLAN (WHMP). The FAA will consider the results of the WHA, along with the aeronautical activity at the airport and the views of the airport operator and airport users, in determining whether a formal WHMP is needed, in accordance with Part 139.337. If the FAA determines that a WHMP is needed, the airport operator must formulate and implement a WHMP, using the WHA as the basis for the plan.

The goal of an airport's Wildlife Hazard Management Plan is to minimize the risk to aviation safety, airport structures or equipment, or human health posed by populations of hazardous wildlife on and around the airport.

The WHMP must identify hazardous wildlife attractants on or near the airport and the appropriate wildlife damage management techniques to minimize the wildlife hazard. It must also prioritize the management measures.

3-6. LOCAL COORDINATION. The establishment of a Wildlife Hazards Working Group (WHWG) will facilitate the communication, cooperation, and coordination of the airport and its surrounding community necessary to ensure the effectiveness of the WHMP. The cooperation of the airport community is also necessary when new projects are considered. Whether on or off the airport, the input from all involved parties must be considered when a potentially hazardous wildlife attractant is being proposed. Airport operators should also incorporate public education activities with the local coordination efforts because some activities in the vicinity of your airport, while harmless under normal leisure conditions, can attract wildlife and present a danger to aircraft. For example, if public trails are planned near wetlands or in parks adjoining airport property, the public should know that feeding birds and other wildlife in the area may pose a risk to aircraft.

Airport operators should work with local and regional planning and zoning boards so as to be aware of proposed land-use changes, or modification of existing land uses, that could create hazardous wildlife attractants within the separations identified in Sections 1-2 through 1-4. Pay particular attention to proposed land uses involving creation or expansion of waste water treatment facilities, development of wetland mitigation sites, or development or expansion of dredge spoil containment areas. At the very least, airport operators must ensure they are on the notification list of the local planning board or equivalent review entity for all communities located within 5 miles of the airport, so they will receive notification of any proposed project and have the opportunity to review it for attractiveness to hazardous wildlife.

3-7 COORDINATION/NOTIFICATION OF AIRMEN OF WILDLIFE HAZARDS. If an existing land-use practice creates a wildlife hazard and the land-use practice or wildlife hazard cannot be immediately eliminated, airport operators must issue a Notice to Airmen (NOTAM) and encourage the land–owner or manager to take steps to control the wildlife hazard and minimize further attraction.

SECTION 4.

FAA NOTIFICATION AND REVIEW OF PROPOSED LAND-USE PRACTICE CHANGES IN THE VICINITY OF PUBLIC-USE AIRPORTS

4-1. FAA REVIEW OF PROPOSED LAND-USE PRACTICE CHANGES IN THE VICINITY OF PUBLIC-USE AIRPORTS.

- **a.** The FAA discourages the development of waste disposal and other facilities, discussed in Section 2, located within the 5,000/10,000-foot criteria specified in Sections 1-2 through 1-4.
- b. For projects that are located outside the 5,000/10,000-foot criteria but within 5 statute miles of the airport's AOA, the FAA may review development plans, proposed land-use changes, operational changes, or wetland mitigation plans to determine if such changes present potential wildlife hazards to aircraft operations. The FAA considers sensitive airport areas as those that lie under or next to approach or departure airspace. This brief examination should indicate if further investigation is warranted.
- **c.** Where a wildlife damage management biologist has conducted a further study to evaluate a site's compatibility with airport operations, the FAA may use the study results to make a determination.

4-2. WASTE MANAGEMENT FACILITIES.

a. Notification of new/expanded project proposal. Section 503 of the Wendell H. Ford Aviation Investment and Reform Act for the 21st Century (Public Law 106-181) limits the construction or establishment of new MSWLF within 6 statute miles of certain public-use airports, when both the airport and the landfill meet very specific conditions. See Section 2-2 of this AC and AC 150/5200-34 for a more detailed discussion of these restrictions.

The Environmental Protection Agency (EPA) requires any MSWLF operator proposing a new or expanded waste disposal operation within 5 statute miles of a runway end to notify the appropriate FAA Regional Airports Division Office and the airport operator of the proposal (40 CFR 258, *Criteria for Municipal Solid Waste Landfills*, Section 258.10, *Airport Safety*). The EPA also requires owners or operators of new MSWLF units, or lateral expansions of existing MSWLF units, that are located within 10,000 feet of any airport runway end used by turbojet aircraft, or within 5,000 feet of any airport runway end used only by piston-type aircraft, to demonstrate successfully that such units are not hazards to aircraft. (See 4-2.b below.)

When new or expanded MSWLF are being proposed near airports, MSWLF operators must notify the airport operator and the FAA of the proposal as early as possible pursuant to 40 CFR 258.

- b. Waste handling facilities within separations identified in Sections 1-2 through 1-4. To claim successfully that a waste-handling facility sited within the separations identified in Sections 1-2 through 1-4 does not attract hazardous wildlife and does not threaten aviation, the developer must establish convincingly that the facility will not handle putrescible material other than that as outlined in 2-2.d. The FAA strongly recommends against any facility other than that as outlined in 2-2.d (enclosed transfer stations). The FAA will use this information to determine if the facility will be a hazard to aviation.
- **c.** Putrescible-Waste Facilities. In their effort to satisfy the EPA requirement, some putrescible-waste facility proponents may offer to undertake experimental measures to demonstrate that their proposed facility will not be a hazard to aircraft. To date, no such facility has been able to demonstrate an ability to reduce and sustain hazardous wildlife to levels that existed before the putrescible-waste landfill began operating. For this reason, demonstrations of experimental wildlife control measures may not be conducted within the separation identified in Sections 1-2 through 1-4.

4-3. OTHER LAND-USE PRACTICE CHANGES. As a matter of policy, the FAA encourages operators of public-use airports who become aware of proposed land use practice changes that may attract hazardous wildlife within 5 statute miles of their airports to promptly notify the FAA. The FAA also encourages proponents of such land use changes to notify the FAA as early in the planning process as possible. Advanced notice affords the FAA an opportunity (1) to evaluate the effect of a particular land-use change on aviation safety and (2) to support efforts by the airport sponsor to restrict the use of land next to or near the airport to uses that are compatible with the airport.

The airport operator, project proponent, or land-use operator may use FAA Form 7460-1, *Notice of Proposed Construction or Alteration*, or other suitable documents similar to FAA Form 7460-1 to notify the appropriate FAA Regional Airports Division Office. Project proponents can contact the appropriate FAA Regional Airports Division Office for assistance with the notification process.

It is helpful if the notification includes a 15-minute quadrangle map of the area identifying the location of the proposed activity. The land-use operator or project proponent should also forward specific details of the proposed land-use change or operational change or expansion. In the case of solid waste landfills, the information should include the type of waste to be handled, how the waste will be processed, and final disposal methods.

a. Airports that have received Federal grant-in-aid assistance. Airports that have received Federal grant-in-aid assistance are required by their grant assurances to take appropriate actions to restrict the use of land next to or near the airport to uses that are compatible with normal airport operations. The FAA recommends that airport operators to the extent practicable oppose off-airport land-use changes or practices within the separations identified in Sections 1-2 through 1-4 that may attract hazardous wildlife. Failure to do so may lead to noncompliance with applicable grant assurances. The FAA will not approve the placement of airport

development projects pertaining to aircraft movement in the vicinity of hazardous wildlife attractants without appropriate mitigating measures. Increasing the intensity of wildlife control efforts is not a substitute for eliminating or reducing a proposed wildlife hazard. Airport operators should identify hazardous wildlife attractants and any associated wildlife hazards during any planning process for new airport development projects.

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APPENDIX 1. DEFINITIONS OF TERMS USED IN THIS ADVISORY CIRCULAR.

- **1. GENERAL.** This appendix provides definitions of terms used throughout this AC.
 - 1. Air operations area. Any area of an airport used or intended to be used for landing, takeoff, or surface maneuvering of aircraft. An air operations area includes such paved areas or unpaved areas that are used or intended to be used for the unobstructed movement of aircraft in addition to its associated runway, taxiways, or apron.
 - **2. Airport operator.** The operator (private or public) or sponsor of a public-use airport.
 - **3. Approach or departure airspace.** The airspace, within 5 statute miles of an airport, through which aircraft move during landing or takeoff.
 - **4. Bird balls.** High-density plastic floating balls that can be used to cover ponds and prevent birds from using the sites.
 - 5. Certificate holder. The holder of an Airport Operating Certificate issued under Title 14, Code of Federal Regulations, Part 139.
 - 6. Construct a new MSWLF. To begin to excavate, grade land, or raise structures to prepare a municipal solid waste landfill as permitted by the appropriate regulatory or permitting agency.
 - 7. Detention ponds. Storm water management ponds that hold storm water for short periods of time, a few hours to a few days.
 - 8. Establish a new MSWLF. When the first load of putrescible waste is received on-site for placement in a prepared municipal solid waste landfill.
 - **9.** Fly ash. The fine, sand-like residue resulting from the complete incineration of an organic fuel source. Fly ash typically results from the combustion of coal or waste used to operate a power generating plant.
 - **10. General aviation aircraft.** Any civil aviation aircraft not operating under 14 CFR Part 119, Certification: Air Carriers and Commercial Operators.
 - **11. Hazardous wildlife.** Species of wildlife (birds, mammals, reptiles), including feral animals and domesticated animals not under control, that are associated with aircraft strike problems, are capable of causing structural damage to airport facilities, or act as attractants to other wildlife that pose a strike hazard
 - 12. Municipal Solid Waste Landfill (MSWLF). A publicly or privately owned discrete area of land or an excavation that receives household waste and that is not a land application unit, surface impoundment, injection well, or waste pile, as those terms are defined under 40 CFR § 257.2. An MSWLF may receive

other types wastes, such as commercial solid waste, non-hazardous sludge, small-quantity generator waste, and industrial solid waste, as defined under 40 CFR § 258.2. An MSWLF can consist of either a stand alone unit or several cells that receive household waste.

- **13. New MSWLF.** A municipal solid waste landfill that was established or constructed after April 5, 2001.
- 14. Piston-powered aircraft. Fixed-wing aircraft powered by piston engines.
- **15. Piston-use airport.** Any airport that does not sell Jet-A fuel for fixed-wing turbine-powered aircraft, and primarily serves fixed-wing, piston-powered aircraft. Incidental use of the airport by turbine-powered, fixed-wing aircraft would not affect this designation. However, such aircraft should not be based at the airport.
- **16. Public agency.** A State or political subdivision of a State, a tax-supported organization, or an Indian tribe or pueblo (49 U.S.C. § 47102(19)).
- **17. Public airport.** An airport used or intended to be used for public purposes that is under the control of a public agency; and of which the area used or intended to be used for landing, taking off, or surface maneuvering of aircraft is publicly owned (49 U.S.C. § 47102(20)).
- 18. Public-use airport. An airport used or intended to be used for public purposes, and of which the area used or intended to be used for landing, taking off, or surface maneuvering of aircraft may be under the control of a public agency or privately owned and used for public purposes (49 U.S.C. § 47102(21)).
- **19. Putrescible waste.** Solid waste that contains organic matter capable of being decomposed by micro-organisms and of such a character and proportion as to be capable of attracting or providing food for birds (40 CFR §257.3-8).
- **20.** Putrescible-waste disposal operation. Landfills, garbage dumps, underwater waste discharges, or similar facilities where activities include processing, burying, storing, or otherwise disposing of putrescible material, trash, and refuse.
- **21. Retention ponds.** Storm water management ponds that hold water for several months.
- 22. Runway protection zone (RPZ). An area off the runway end to enhance the protection of people and property on the ground (see AC 150/5300-13). The dimensions of this zone vary with the airport design, aircraft, type of operation, and visibility minimum.
- 23. Scheduled air carrier operation. Any common carriage passenger-carrying operation for compensation or hire conducted by an air carrier or commercial

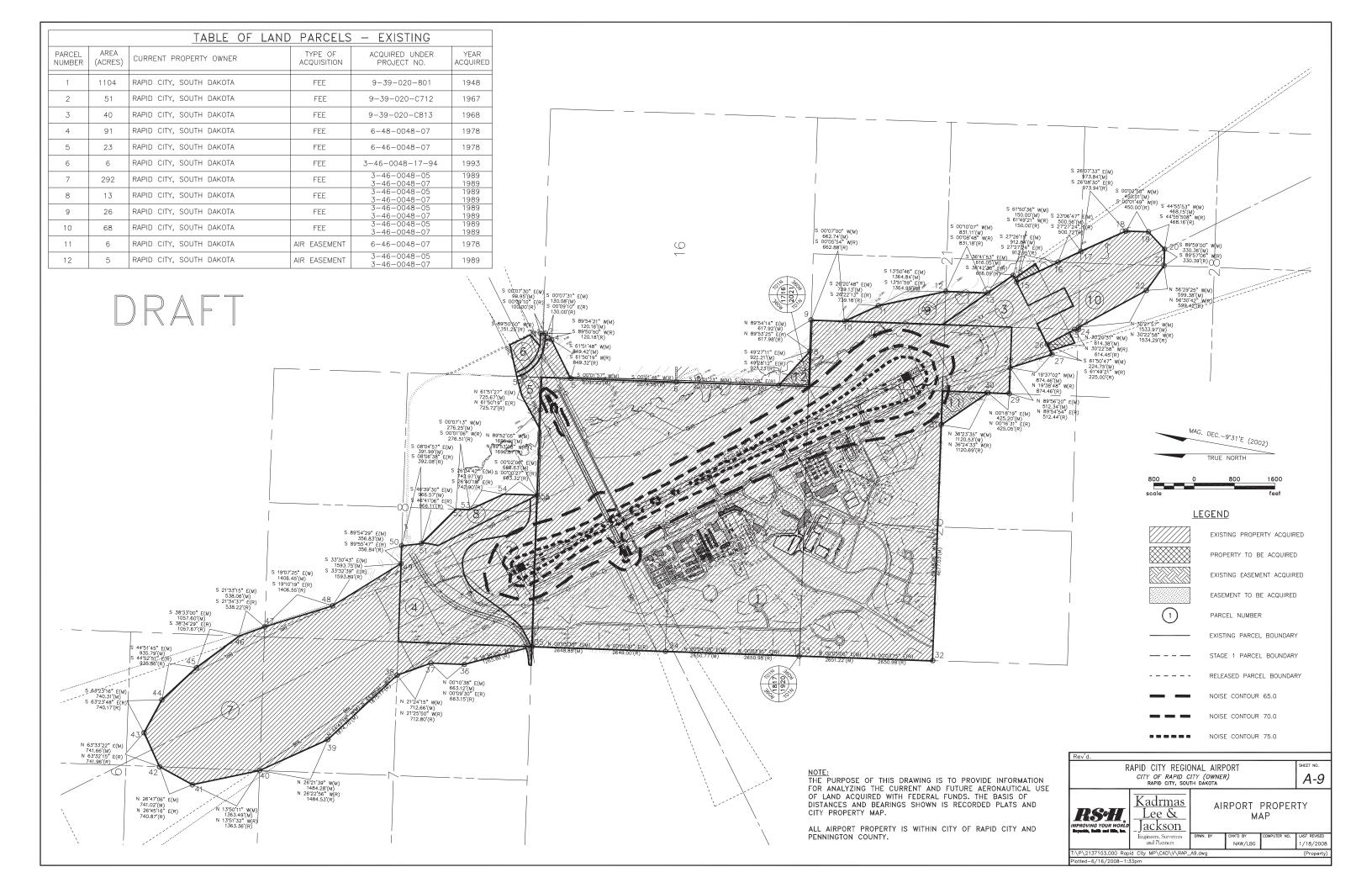
operator for which the air carrier, commercial operator, or their representative offers in advance the departure location, departure time, and arrival location. It does not include any operation that is conducted as a supplemental operation under 14 CFR Part 119 or as a public charter operation under 14 CFR Part 380 (14 CFR § 119.3).

- 24. Sewage sludge. Any solid, semi-solid, or liquid residue generated during the treatment of domestic sewage in a treatment works. Sewage sludge includes, but is not limited to, domestic septage; scum or solids removed in primary, secondary, or advanced wastewater treatment process; and a material derived from sewage sludge. Sewage does not include ash generated during the firing of sewage sludge in a sewage sludge incinerator or grit and screenings generated during preliminary treatment of domestic sewage in a treatment works. (40 CFR 257.2)
- **25. Sludge.** Any solid, semi-solid, or liquid waste generated form a municipal, commercial or industrial wastewater treatment plant, water supply treatment plant, or air pollution control facility or any other such waste having similar characteristics and effect. (40 CFR 257.2)
- 26. Solid waste. Any garbage, refuse, sludge, from a waste treatment plant, water supply treatment plant or air pollution control facility and other discarded material, including, solid liquid, semisolid, or contained gaseous material resulting from industrial, commercial, mining, and agricultural operations, and from community activities, but does not include solid or dissolved materials in domestic sewage, or solid or dissolved material in irrigation return flows or industrial discharges which are point sources subject to permits under section 402 of the Federal Water Pollution Control Act, as amended (86 Stat. 880), or source, special nuclear, or by product material as defined by the Atomic Energy Act of 1954, as amended, (68 Stat. 923). (40 CFR 257.2)
- **27. Turbine-powered aircraft.** Aircraft powered by turbine engines including turbojets and turboprops but excluding turbo-shaft rotary-wing aircraft.
- **28. Turbine-use airport.** Any airport that sells Jet-A fuel for fixed-wing turbine-powered aircraft.
- **29. Wastewater treatment facility.** Any devices and/or systems used to store, treat, recycle, or reclaim municipal sewage or liquid industrial wastes, including Publicly Owned Treatment Works (POTW), as defined by Section 212 of the Federal Water Pollution Control Act (P.L. 92-500) as amended by the Clean Water Act of 1977 (P.L. 95-576) and the Water Quality Act of 1987 (P.L. 100-4). This definition includes any pretreatment involving the reduction of the amount of pollutants, the elimination of pollutants, or the alteration of the nature of pollutant properties in wastewater prior to or in lieu of discharging or otherwise introducing such pollutants into a POTW. (See 40 CFR Section 403.3 (q), (r), & (s)).

- 30. Wildlife. Any wild animal, including without limitation any wild mammal, bird, reptile, fish, amphibian, mollusk, crustacean, arthropod, coelenterate, or other invertebrate, including any part, product, egg, or offspring thereof (50 CFR 10.12, *Taking, Possession, Transportation, Sale, Purchase, Barter, Exportation, and Importation of Wildlife and Plants*). As used in this AC, wildlife includes feral animals and domestic animals out of the control of their owners (14 CFR Part 139, Certification of Airports).
- **31. Wildlife attractants.** Any human-made structure, land-use practice, or humanmade or natural geographic feature that can attract or sustain hazardous wildlife within the landing or departure airspace or the airport's AOA. These attractants can include architectural features, landscaping, waste disposal sites, wastewater treatment facilities, agricultural or aquaculture activities, surface mining, or wetlands.
- **32.** Wildlife hazard. A potential for a damaging aircraft collision with wildlife on or near an airport.
- **33.** Wildlife strike. A wildlife strike is deemed to have occurred when:
 - a. A pilot reports striking 1 or more birds or other wildlife;
 - **b.** Aircraft maintenance personnel identify aircraft damage as having been caused by a wildlife strike;
 - **c.** Personnel on the ground report seeing an aircraft strike 1 or more birds or other wildlife;
 - **d.** Bird or other wildlife remains, whether in whole or in part, are found within 200 feet of a runway centerline, unless another reason for the animal's death is identified;
 - e. The animal's presence on the airport had a significant negative effect on a flight (i.e., aborted takeoff, aborted landing, high-speed emergency stop, aircraft left pavement area to avoid collision with animal) (Transport Canada, Airports Group, *Wildlife Control Procedures Manual*, Technical Publication 11500E, 1994).

2. RESERVED.

Airport Property Map



Appendix E: Airport Ordinances

Pennington County Zoning Ordinance, Section 301, Airport Height and Hazard Zoning

Rapid City Municipal Code Chapter 17.58, Airport Zoning District



Pennington County Zoning Ordinance, Section 301, Airport Height and Hazard Zoning

- d. Copies of any special agreements, conveyances, restrictions, or covenants which shall govern the use, maintenance, and continued protection of the Planned Unit Development and any of its common area
- 3. The developer and developers shall submit proof to the Planning Commission that all parks and open spaces shall be dedicated to the Homeowners Association and a performance bond equal to the cost of the improvements shall be posted prior to the final plat being filed.

SECTION 214 - FP FLOODPLAIN ORDINANCE

Floodplain considerations for any lands lying within the area of jurisdiction of the Pennington County Flood Damage Prevention Ordinance shall be regulated according to the provisions of said Ordinance.

SECTION 300 - SUPPLEMENTARY REGULATIONS

In order to accomplish the general purpose of these Zoning Ordinances, it is necessary to give special consideration to certain uses because they are unique in nature, require large land areas, are potentially incompatible with existing development, or because the effects of such uses cannot definitely be foreseen.

SECTION 301 – AIRPORT HEIGHT AND HAZARD ZONING

A. Intent:

To regulate and restrict the height of structures and objects of natural growth and otherwise regulate the use of property, in the vicinity of the Rapid City Regional Airport, by creating the appropriate zones and establishing the boundaries thereof.

B. General:

It is hereby found that an obstruction has the potential for endangering the lives and property of users of Rapid City Regional Airport and property or occupants of land in its vicinity; that an obstruction may affect existing and future instrument approach minimums of Rapid City Regional Airport; that an obstruction may reduce the size of areas available for the landing, takeoff, and maneuvering of aircraft, thus, tending to destroy or impair the utility of Rapid City Regional 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 Rapid City Airport;
- 2. That it is necessary in the interest of the 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 the police power without compensation.

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 marking and lighting of obstructions are public purposes for which a political subdivision may raise and expend public funds and acquire land or interests in land.

C. 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 beneath the approach surfaces, transitional surfaces, horizontal surfaces, and conical surfaces as they apply to Rapid City Regional Airport. Such zones are shown on Rapid City Regional Airport Zoning Map consisting of two sheets, dated October 15, 2003, which is attached as an adjunct hereof. An area located in more than one 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. Utility Runway Visual Approach Zone

The inner edge of this approach zone coincides with the width of the primary surface and is 250 feet wide. The approach zone expands outward uniformly to a width of 1,250 feet at a horizontal distance of 5,000 feet from the primary surface. Its centerline is the continuation of the centerline of the runway.

2. Utility Runway Nonprecision Instrument Approach Zone

The inner edge of this approach zone coincides with the width of the primary surface and is 500 feet wide. The approach zone expands outward uniformly to a width of 2,000 feet at a horizontal distance 5,000 feet from the primary surface. Its centerline is the continuation of the centerline of the runway.

3. Runway Larger Than Utility Visual Approach Zone

The inner edge of this approach zone coincides with the width of the primary surface and is 500 feet wide. The approach zone expands outward uniformly to a width of 1,500 feet at a horizontal distance of 5,000 feet from the primary surface. Its centerline is the continuation of the centerline of the runway.

4. Runway Larger Than Utility With A Visibility Minimum Greater Than 3/4 Mile Nonprecision Instrument Approach Zone

The inner edge of this approach zone coincides with the width of the primary surface and is 500 feet wide. The approach zone expands outward uniformly to a width of 3,500 feet at a horizontal distance of 10,000 feet from the primary surface. Its centerline is the continuation of the centerline of the runway.

5. Runway Larger Than Utility With A Visibility Minimum As Low As 3/4 Mile Nonprecision 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.

6. 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.

7. Transitional Zones

The transitional zones are the areas beneath the transitional surfaces.

8. Horizontal Zone

The horizontal zone is established by swinging arcs of 5,000 feet radii for all runways designated utility or visual and 10,000 feet for all others 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.

9. Conical Zone

The conical zone is 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.

D. 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 herein established for such zone. Such applicable height limitations are hereby established for each of the zones in question as follows:

1. Utility Runway Visual Approach Zone

Slopes twenty (20) 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 5,000 feet along the extended runway centerline.

2. Utility Runway Nonprecision Instrument Approach Zone

Slopes twenty (20) 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 5,000 feet along the extended runway centerline.

3. Runway Larger Than Utility Visual Approach Zone

Slopes twenty (20) 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 5,000 feet along the extended runway centerline.

4. Runway Larger Than Utility With A Visibility Minimum Greater Than 3/4 Mile Nonprecision Instrument Approach Zone

Slopes thirty-four (34) 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.

5. Runway Larger Than Utility With A Visibility Minimum As Low As 3/4 Mile Nonprecision Instrument Approach Zone

Slopes thirty-four (34) 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.

6. 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.

7. 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 100 feet above mean sea level. 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.

8. Horizontal Zone

Established at 150 feet above the airport elevation or at a height of 250 feet above mean sea level.

9. 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.

10. Excepted Height Limitations

Nothing in this Ordinance 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.

E. Use Restriction:

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 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.

- F. Nonconforming Uses:
 - 1. Regulations Not Retroactive

The regulations prescribed in this Ordinance shall not be construed to require the removal, lowering, or other change or alteration of any structure or tree not conforming to the regulations as the effective date of this Ordinance, or otherwise interfere with the continuance of a 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.

2. 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 Manager to indicate to the operators of aircraft in the vicinity of the airport the presence of such airport obstruction. Such markers and lights shall be installed, operated, and maintained at the expense of the City of Rapid City.

- G. Permits:
 - 1. Future Uses

Except as specifically provided in a, b, and c hereunder, 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. 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 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 301.G.4.

- 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 fifty (50) 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 4,200 feet from each end of the runway, no permit shall be required for any tree or structure less than fifty (50) 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 areas 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 fifty (50) 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 301.D.10.

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 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.

3. Nonconforming Uses Abandoned or Destroyed

Whenever the Pennington County Planning Director determines that a nonconforming tree or structure has been abandoned or more than 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 these zoning regulations.

4. 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 variances shall be allowed where it is dully 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 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 Manager for advice as to the aeronautical effects of the variance. If the Airport Manager does not provide a written response to the application within fifteen (15) days after receipt, the Board of Adjustment may act on its own to grant or deny said application.

5. Obstruction Marking and Lighting

Any permit or variance granted, if such action is deemed advisable to effectuate the purpose of this Ordinance and be reasonable in the circumstances, may 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 of Rapid City, at its own expense, to install, operate, and maintain the necessary markings and lights.

H. Enforcement:

It shall be the duty of the Pennington County Planning Director to administer and enforce the regulations prescribed herein. Applications for permits and variances shall be made to the Pennington County Planning Director upon a form published for that purpose. Applications required by this Ordinance to be submitted to the Pennington County Planning Director shall either be granted or denied. Application for action by the Board of Adjustment shall be forthwith transmitted by the Pennington County Planning Director.

- I. Appeals:
 - 1. Any person aggrieved or any taxpayer affected by any decision of the Pennington County Planning Director, made in the administration of the Ordinance, may appeal to the Board of Adjustment.
 - 2. All appeals hereunder must be taken within a reasonable time as provided by the rules of the Board of Adjustment, by filing with the Pennington County Planning Director a notice of appeal specifying the grounds thereof. The Pennington County Planning Director shall forthwith

transmit to the Board of Adjustment all the papers constituting the record upon which the action appealed from was taken.

- 3. An appeal shall stay all proceedings in furtherance of the action appealed from unless the Pennington County Planning Director certifies to the Board of Adjustment, after the notice of appeal has been filed with it, that by reason of the facts stated in the certificate a stay would in the opinion of the Pennington County Planning Director cause imminent peril to life or property. In such case, proceedings shall not be stayed except by order of the Board of Adjustment or notice to the Pennington County Planning Director and on due cause shown.
- 4. The Board of Adjustment shall fix a reasonable time for hearing appeals, give public notice and due notice to the parties in interest, and decide the same within a reasonable time. Upon the hearing, any party may appear in person, by agent, or by attorney.
- 5. The Board of Adjustment may, in conformity with the provisions of this Ordinance, reverse or affirm, in whole or in part, or modify the order, requirement, decision, or determination appealed from and may make such order; requirement; decision; or determination as may be appropriate under the circumstances.
- J. Judicial Review:

Any person aggrieved, or any taxpayer affected, by any decision of the Board of Adjustment, may appeal to the Circuit Court as provided in SDCL 11-2-61.

K. 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 is 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.

L. 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 302 - NEIGHBORHOOD COMMERCIAL

A. Intent:

To establish areas for those commercial facilities which are especially useful in close proximity to residential areas, while minimizing any undesirable impact of such uses on the neighborhoods which they service.

Rapid City Municipal Code Chapter 17.58, Airport Zoning District

CHAPTER 17.58: AIRPORT ZONING DISTRICT

Section

<u>17.58.010</u>	General description.
<u>17.58.020</u>	Permitted uses.
<u>17.58.030</u>	Conditional uses.
<u>17.58.040</u>	Area regulations.
<u>17.58.050</u>	Off-street parking.
<u>17.58.060</u>	Nonconforming uses.
<u>17.58.070</u>	Airport encroachment area
<u>17.58.080</u>	Height regulations.
<u>17.58.090</u>	Use regulations.

Cross-reference:

Rapid City Regional Airport Board, see Ch. 2.72

17.58.010 General description.

This district is intended to provide regulations for the safe operation of aircraft into and out of the Rapid City Regional Airport.

(Ord. 5066 (part), 2005)

17.58.020 Permitted uses.

Property and buildings in the airport zoning district shall be used only for the following purposes:

- A. Agriculture;
- B. Airport terminals and hangers;
- C. Airport runways, including approach-departure areas, and helipads;

- D. Fire stations;
- E. Transportation and utility easements and rights-of-way;
- F. Accessory uses and buildings, provided such uses are incidental to the principal use;
- G. On-premise signs as regulated by Chapter 15.28 of this code;
- H. Government buildings and uses incidental to the principal use;
- I. Private terminals and accessory buildings;
- J. Car rental and accessory car washing and detailing;
- K. Commercial parking lots;
- L. South Dakota Air National Guard and accessory uses;
- M. Crew quarters necessary for airport and emergency operations;
- N. Wholesale and distribution centers;
- O. Retail business within airport terminal;
- P. Seasonal retail business within airport terminal;
- Q. Restaurant within airport terminal;
- R. Manufacturing;
- S. Commercial Aeronautical activities.

(Ord. 5517 (part), 2009; Ord. 5066 (part), 2005)

17.58.030 Conditional uses.

- A. Planned commercial developments as regulated in \$ <u>17.50.050</u> through <u>17.50.100</u> of this code;
- B. Retail business or structure located outside the airport terminal;
- C. Seasonal retail business or structure located outside the airport terminal;

D. Off-premise signs as regulated by <u>Chapter 15.28</u> and in accordance with the requirements of § <u>17.50.380</u>.

- E. Restaurant with on-sale liquor;
- F. On-sale liquor establishments.

G. Hotel and Motel.

(Ord. 5517 (part), 2009; Ord. 5066 (part), 2005)

17.58.040 Area regulations.

The following shall apply to all uses permitted in this district:

A. *Front yard*. All buildings shall set back a minimum of 25 feet from the front property line of the exterior boundaries of the airport property and not from the internal lease boundaries.

B. *Side yard*. No side yard is required, except that the width of a side yard which abuts a residential district shall not be less than 25 feet.

C. *Rear yard.* Where a commercial building is to be serviced from the rear, there shall be provided an alleyway, service court, rear yard, or combination thereof of, not less than 30 feet in depth. The depth of a rear yard which abuts a residential district shall be not less than 15 feet. In all other cases, no rear yard is required.

D. *Setback from section lines.* Principal and accessory buildings and structures shall be set back no less than 58 feet from any section line. No setback is required from any legally vacated section line; however, if the vacated section line forms a property line, the applicable side, rear or front yard setbacks shall be observed.

(Ord. 5517 (part), 2009; Ord. 5066 (part), 2005)

17.58.050 Off-street parking.

As regulated in § <u>17.50.270</u>.

(Ord. 5066 (part), 2005)

17.58.060 Nonconforming uses.

No preexisting nonconforming structure, tree or use shall be replaced, rebuilt, altered, allowed to grow higher or replanted so as to constitute a greater airport hazard than it was on the date the ordinance from which this article derives was adopted.

(Ord. 5066 (part), 2005)

17.58.070 Airport encroachment area.

There is hereby created an airport encroachment area, which consists of runway area zones, approach-departure zones, transition zones, a horizontal zone and a conical zone, which are adopted by the Airport Improvement Plan and defined in the Federal Aviation Regulation Part 77.25, and includes the following zones:

A. *Runway area zones*. Runway area zones are established along the runways.

B. *Approach-departure zones*. Approach-departure zones are established beyond and outward from the landing thresholds and departure limits of the runways.

C. *Transition zones*. Transition zones are established along both sides of all runways and approach-departure zones.

D. *Horizontal zone*. A horizontal zone is established which has as its outer boundary a line beyond the airport property line.

E. *Conical zone*. A conical zone is established as the land lying under the approach surface. The conical zone commences at the periphery of the horizontal zone, and extends outward and upward at a slope of 20 to 1 for a horizontal distance of 4,000 feet, as set forth in Section 77.25 of the Federal Aviation Regulations.

(Ord. 5066 (part), 2005)

17.58.080 Height regulations.

No structure, tree or other use of land shall be permitted which exceeds the height limit established by each of the encroachment zones.

(Ord. 5066 (part), 2005)

17.58.090 Use regulations.

Notwithstanding any other provisions of this article, no use may be made of any land within any runway area zone, approach-departure zone, horizontal zone, conical zone or transition zone in any manner as to create electrical interference with the radio or radar communication or navigation aids between the airport and aircraft; make it difficult for air crews to distinguish between airport lights and others; result in glare in the eyes of air crews using the airport; impair visibility in the vicinity of the airport; or otherwise endanger the landing, taking off or maneuvering of aircraft within these zones.

(Ord. 5066 (part), 2005)

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