

CHAPTER 5. MASTER PLAN DEVELOPMENT

5-1 General

Based on forecast needs and making the best use of existing airport land, recommendations have been made for future development of the Lincoln Regional Airport. These recommendations are presented in the Airport Layout Plan drawings, which consist of 11 sheets. The sheet titles are listed below:

Sheet 1	Title & Index
Sheet 2	Airport Layout Plan
Sheet 3	Airport Layout Plan Data Tables
Sheet 4	East Terminal Area Plan
Sheet 5	West Terminal Area Plan
Sheet 6	Airport Airspace Plan 1
Sheet 7	Airport Airspace Plan 2
Sheet 8	Inner Portion of Approach Surface Plan – Runway 15-33
Sheet 9	Inner Portion of Approach Surface Plan – Future Runway 15L-33R
Sheet 10	Off-Airport Land Use Plan
Sheet 11	Airport Property Map – Exhibit “A”

This chapter describes the proposed development of the airport.

5-2 Airfield Facilities

5-2.1 Runways

Lincoln Regional Airport has one runway, 100 feet by 6,001 feet. It is proposed to extend this runway by 1,000 feet, providing a total length of 7,001 feet. It is impractical to extend the runway to the south because of the location of Nicolaus Road and housing developments to the south of the airport. It is, therefore, proposed to extend the runway to the north to avoid conflicts with roads and development. Consideration was given to displacing the threshold on Runway 33 to the north so as to decrease noise generation in the populated area south of Nicolaus Road and provide replacement for runway length lost by displacement of the threshold by additional extension to the north. This concept was abandoned because of potential problems with the proximity of Wise Road to the north, the cost of the development, and the inconvenience to the pilots by having the runway complex moved away from the main operating and storage areas, which would increase taxi distances and time.

A parallel runway will be required in the future to increase the capacity of the airport. This parallel runway can be designed as a reliever runway in which the small airplanes are diverted from the long runway to the new parallel runway, thus providing the additional required capacity on the long runway. A 3,350-foot long by 75-foot wide runway is proposed. In order to keep this runway centered as much as possible on the

existing and future development areas and to allow sufficient distance off the end of the runway so that aircraft can taxi on the cross taxiways without interfering with approaches to the short runway, it is recommended that the runway extend from Taxiway F to Taxiway J. In order to provide simultaneous VFR operations on the two runways, and thus realize the increased capacity, it will be necessary that the centerline spacing between the two runways be established at 700 feet. This spacing was anticipated in the original 1976 Master Plan and there will be no need to adjust any of the taxiways to accommodate this runway. The parallel runway will have an ARC B I classification.

5-2.2 Heliport

The existing heliport is located on the east side of the airport between Taxiway A and the apron and near the south end of the runway. This heliport is located in an area that could be used for aircraft storage, and in the future it may be appropriate to relocate this facility to the west side of the airport. A possible location for a new heliport is shown on the Airport Layout Plan.

5-2.3 Taxiways

The existing taxiways adequately serve the existing runway and the proposed parallel runway. When the existing runway is extended 1,000 feet to the north, it will be necessary to extend Taxiway A 1,000 feet to the north and construct a new cross taxiway. The east parallel taxiway (Taxiway A Extension) should be located 400 feet centerline to centerline distance east of Runway 15-33. A taxiway at this location does not interfere with the operation of the proposed new parallel runway, allows full uninterrupted operations on the taxiway system, and eliminates the requirement to acquire additional land. A new aircraft holding apron will be required on this taxiway. All existing taxiways are 40 feet wide. For an ARC C III category airport, the taxiways should be 50 feet wide. It is, therefore, recommended that all taxiways be widened and the new taxiways be constructed with a 50-foot width.

It is proposed to develop the west side of the airport for aircraft storage and/or non-aviation development. A new parallel taxiway to the existing and extended Runway 15-33 will be required on the west side of the airport and should be located 400 feet center to center distance from the runway. Cross taxiways should be constructed to line up with the existing cross taxiways.

5-2.4 General Aviation Facilities

The existing aircraft parking apron on the east side of the airport is larger than is necessary to accommodate future transient and local tied-down aircraft. It is, therefore, proposed that a portion of this apron be abandoned and used for the development of aircraft storage hangars, a possible future jet center, and the arrival/departure building with associated automobile parking. Approximately 60 additional tee hangars can be developed on the abandoned aircraft parking apron and adjoining space. Additional tee hangars can be developed both north and south of the existing south tee hangar. There is room in these areas for approximately 250 total hangars in nested tee configuration.

Development at other airports indicates that with the introduction of business jets to the airport that there is a significant need for box hangars and large corporate hangars. The corporate hangars are generally 100 foot by 100 foot or larger. It is considered appropriate to maintain the smaller aircraft, including the propeller-driven single engine and twin engine aircraft and some of the jets, on the east side of the airport and to place the large corporate jet facilities at a separate location. These facilities could be located on the west side of the airport and would be serviced by the new taxiway on the west side of Runway 15-33. A second jet center may ultimately be necessary on this side of the airport. Fueling facilities should be planned for the west side development.

5-2.5 Land Acquisition

The Airport owns more land than is needed for forecast airport operations.

5-2.6 Surplus Land

There are areas of property on the airport that are not needed for aviation purposes. In order to make the Airport self-sufficient, it is proposed to utilize these lands for non-aviation development. On the area between Flightline Drive and Aviation Boulevard on the east of the airport there are 89.1 acres that are not accessible to the airport or needed for airport development. This land is proposed for use for non-aviation development. The development will be light industrial type development, which is not sensitive to airport operations and will form a good buffer for the airport.

At the northwest corner of the intersection of Nicolaus Road and Aviation Boulevard there are 24± acres of land that is not required for airport development and is inconvenient for access to the airport. This land will be reserved for non-aviation development, which will also be compatible with airport operations.

On the west side of the airport, provision has been made for the development of box hangars, corporate hangars, tee hangars, tie downs, and a possible jet center. This can be accommodated in 66 acres of airport-owned land. To the west of this airport development there is an additional 90 acres, which are not required for airport development and will not be accessible to the airport. This land is proposed to be used for future non-aviation development.

More space is reserved on the Airport Layout Plan for aircraft storage in the form of hangars and tie downs than is forecast or even included in the 100 percent reserve. This land should be reserved for this use until all other non-aviation areas have been developed. At that time new forecasts should be made and, if these forecasts indicate there will never be a need for airport aircraft storage facilities in this area, then portions of the area could be released for non-aviation development that requires airport access.

The location of the potential land development areas are identified on the Airport Layout Plan, Sheet No. 2, and a summary of the area of land available for aviation use and non-aviation use is shown in Table 5-1, Available Land Use by Acreage.

TABLE 5-1. AVAILABLE LAND USE BY ACREAGE

Land Use	East Side	West Side
Aviation	57	0
Aviation Reserve	7	66
Non-Aviation	113	90