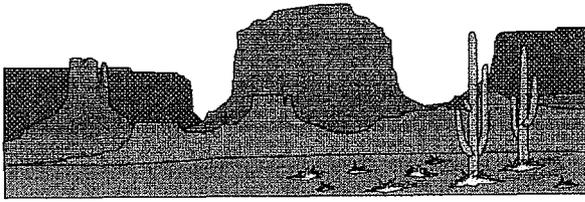


CONCLUSIONS AND RECOMMENDATIONS



DOUGLAS MUNICIPAL AIRPORT MASTER PLAN

CHAPTER I: CONCLUSIONS AND RECOMMENDATIONS

1.0 INTRODUCTION

The City of Douglas, Arizona, as the Airport Sponsor, is continuing its effort to plan for future development of the Douglas Municipal Airport. This development is designed to enhance air and ground operations, improve safety, provide better airport services, and stimulate the local economy through business growth potential.

1.1 PURPOSE AND NEED

The Airport Master Plan is the planner's concept of the long-term development of an airport. It provides a conceptual picture of the airport development through the use of the Airport Layout Plan drawing set. Airport Master Plans are prepared to support modernization of existing airports, regardless of size, complexity, or role.

The Airport Master Plan for the Douglas Municipal Airport was developed with this purpose in mind. The Douglas Municipal Airport has many facets requiring analysis to determine whether or not FAA standards are met. These elements include, but are not limited to, runway length and width requirements, apron space criteria, and hangar space specifications.

Operations which have become important to the Douglas Municipal Airport include business type operations, international traffic, military and U.S. customs operations, flight training activity, and air taxi flights. Improvements to the Douglas Municipal Airport would enable these organizations to use larger aircraft for these operations and may increase the number of times they use the Douglas Municipal Airport instead of other area airports with longer runways or more hangar space.

An increasing number of businesses are using general aviation aircraft as a more efficient mode of transportation. Air travel is more convenient,

less time consuming, and more productive for these businesses. The Douglas Municipal Airport can provide an excellent access point to the region if future development occurs as recommended in this study. This will become even more evident as the effects of NAFTA (North American Free Trade Agreement) become more visible. Already Douglas Municipal Airport has seen an increase in international traffic and more frequent U.S. Customs inspections. The business operations are conducted by aircraft such as Cessna 441's and Citation II's, Beechcraft 35's and King Air E90's and 100's, and Gates Learjet 25's and 35's.

By studying the types of aircraft which frequently use the Douglas Municipal Airport, it was determined that aircraft having an Airport Reference Code (ARC) of B-II weighing 12,500 pounds or less are considered to be the design aircraft for this airport. However, because of the significant amount of operations by large aircraft in the B-II category (those weighing more than 12,500 pounds) and the increased operations that these aircraft are anticipated to have at the Douglas Municipal Airport, future development should be according to a design aircraft of B-II weighing less than 25,000 pounds.

1.2 GOALS AND OBJECTIVES

The overall objective of this Airport Master Plan is to evaluate alternatives for the ultimate development of the airport and to assess the compatibility of such development with the environment, the goals of the City of Douglas and Cochise County, and the surrounding service area of the airport. Specific objectives of this study were defined as follows:

- An inventory of existing air operations and facilities.
- A forecast of aviation demand based on socioeconomic and population information and available historical air traffic data.
- Determine current types of aircraft which use the Douglas Municipal Airport and from there, whether or not the current facilities are adequate for this traffic.
- Requirements for new or expanded airport facilities, such as runway extensions, taxiways, aircraft parking aprons, hangars, lighting systems, navigational aids, ground access, and overall land needs to assure airport expansion as needed and future long-term land use compatibility. These facilities were also examined in terms of meeting FAA design criteria.

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- An Alternative analysis of new facilities and/or reconfiguration of existing facilities that will be required, and a proposed development schedule, including cost estimates.
 - Preparation of a new Airport Layout Plan Drawing Set.

1.3 FORECASTS

Numerous sources of information including area and regional socioeconomic characteristics, the Arizona Land Use Compatibility Study, and the Cochise County Airport System Plan led to the development of forecast scenarios which reflect various regional policy inputs geared toward balancing the State and Regional systems. The selected planning forecasts expect approximately 16,600 total annual operations and approximately 34 based aircraft by the year 2014 at the Douglas Municipal Airport.

Estimates of aircraft fleet mix were also developed to aid in determining the airport's existing and future Airport Reference Code (ARC) and facility requirements. Single engine operations account for approximately 95 percent of the total annual operations at Douglas Municipal Airport, while multi-engine operations comprise three percent, and helicopter and turbo-prop/turbojet operations make up the remaining two percent.

1.4 FACILITY REQUIREMENTS

By using FAA criteria and various other airport planning formulas, Armstrong Consultants has developed numerous recommendations to alleviate any deficiencies to the current facilities at the Douglas Municipal Airport. For example, the existing width and length of Runway 3/21 are less than the recommendations of the FAA for facilities serving aircraft which have an ARC of B-II. The runway should be 5,760 feet long and 75 feet wide to meet future conditions expected at the airport. A crosswind runway is also recommended to meet the 95 percent wind coverage standard as set by the FAA. Other recommendations include an apron expansion, conventional hangar construction, extension of the parallel taxiway to meet the full length of Runway 3/21 to increase safety and capacity at the airport, and several visual aids such as Runway End Identifier Lights and runway lighting.

1.5 SUMMARY AND RECOMMENDATIONS

The Airport Master Plan for the Douglas Municipal Airport has examined the airport's potential impacts to the City of Douglas, Cochise County, and the surrounding service area, as well as continuing to be an important and integral part of the system of airports in the State of Arizona. As a result, several capital improvements have been identified for implementation over the next twenty years which will allow the airport to serve its users both safely and efficiently in its anticipated role.

Several specific recommendations are made throughout the text of the Master Plan which address, in detail, the individual aspects of the airport's development. Equally important, however, are those recommendations which address the operation and management of the facility which is believed to have strong growth potential over the next twenty years. The following recommendations pertain to the more general aspects of the airport's management and development:

- The two most important factors influencing the sponsor's decision to carry out recommendations of the Airport Master Plan are timing and airport activity. Both of these factors can be used as references in plan implementation. While it is necessary for scheduling and budgeting purposes to focus on the timing of airport development, the actual need for facilities is in fact established by levels of activity. Proper Master Plan implementation suggests the use of airport activity rather than time as guidance in development and scheduling.
- It is strongly recommended that the City of Douglas and Cochise County continue to operate and maintain the airport on a day-to-day basis in accordance with federal regulations and standards. Operational maintenance would include but would not necessarily be limited to, periodic inspections of pavement and lighting, control of natural growth and obstructions to air navigation, maintenance of pavement markings and surfaces, and implementation and control of a storm water pollution prevention plan.
- It is recommended that the City of Douglas continue to strive to include the Douglas Municipal Airport in the National Plan of Integrated Airport Systems (NPIAS). The

Douglas Municipal Airport should continue to develop its facilities to meet FAA standards, so as not to jeopardize any future funding possibilities.

- The City of Douglas and Cochise County should review all proposed construction projects near the airport environs to assure that no structures are built which would violate Federal Aviation Regulation Part 77, "Obstructions Affecting Navigable Airspace", and also maintain the area so that no structures, terrain, or vegetation in the area is penetrating these surfaces.