

#### KINGMAN AIRPORT Kingman, Arizona

# AIRPORT MASTER PLAN

### FINAL TECHNICAL REPORT

Prepared By Coffman Associates Airport Consultants And Z&H Engineering

As Approved by the Kingman Airport Authority February 19, 2006



Cover photo courtesy of John Berghian, P.E.



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# Airport Master Plan Final Technical Report

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# **INTRODUCTION**

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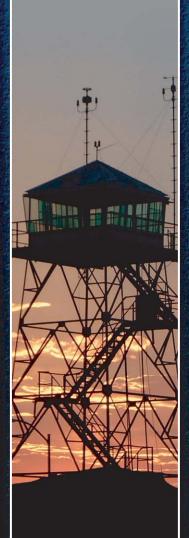
The Kingman Airport Master Plan Update was undertaken to evaluate the airport's capabilities and role, to forecast future aviation demand, and to plan for the timely development of new or expanded facilities that may be required to meet that demand. The ultimate goal of the Master Plan is to provide systematic guidelines for the airport's overall maintenance, development, and operation.

The Master Plan is intended to be a proactive document which identifies and then plans for future facility needs well in advance of the actual need. This is done to ensure that the Kingman Airport Authority (KAA) can coordinate project approvals, design, financing, and construction in a timely manner, prior to experiencing the detrimental effects of inadequate facilities.

An important result of the Master Plan is reserving sufficient areas for future facility needs. This protects development areas and ensures they will be readily available when required to meet future needs. The intended result is a detailed land use concept which outlines specific uses for all areas of airport property.

The preparation of this Master Plan is evidence that the KAA recognizes the importance of air transportation to the community and the associated challenges inherent in providing for its unique operating and improvement needs. The cost of maintaining an airport is an investment which yields impressive benefits to the community. With a sound and realistic Master Plan, Kingman Airport can maintain its role as an important link to the national air transportation system for





the community and maintain the existing public and private investments in its facilities.

#### MASTER PLAN OBJECTIVES

The primary objective of the Kingman Airport Master Plan is to develop and maintain a financially feasible, long term development program which will satisfy aviation demand and be compatible with community development, other transportation modes, and the environment. The accomplishment of this objective requires the evaluation of the existing airport and a determination of what actions should be taken to maintain an adequate, safe, and reliable airport facility to meet the air transportation needs of the area. The completed Master Plan will provide an outline of the necessary development and give responsible officials advance notice of future needs to aid in planning, scheduling, and budgeting.

Specific objectives of the Kingman Airport Master Plan are:

#### & Preserve Public and Private Investments

The KAA, United States Government (through the Federal Aviation Administration [FAA]), and State of Arizona (through the Department of Transportation – Aeronautics Division [ADOT]) have made considerable investments in the airport's infrastructure. Private individuals and businesses have made investments in buildings and other facilities. The Master Plan will provide for continued maintenance and necessary improvements to the airport's infrastructure to ensure maximum utility of the private facilities at Kingman Airport and ensure the continued use of publiclyfunded facilities.

#### & Be Reflective of Community Goals and Objectives

The Kingman Airport is a public facility serving the needs of the local residents and businesses. The Master Plan needs to be reflective of the desires and visions the local communities have for quality of life, business and development, and land use. The Master Plan will consider existing community planning documents for surrounding communities and the County in the ultimate design and use of the airport.

#### & Maintain Safety

Safety is an essential consideration in the planning and development at the airport. The Master Plan will focus on maintaining the highest levels of safety for airport users, visitors, employees, and surrounding communities.

#### & **Preserve the Environment**

Protection and preservation of the local environment are essential concerns in the Master Plan. Any improvements called for in the Master Plan will be mindful of environmental requirements.

#### **& Attract Public Participation**

To ensure that the Master Plan reflects the concerns of the public, the local communities, airport tenants, airport users, and businesses throughout the region, the Master Plan process will include an active public outreach program to solicit comments and suggestions and include them in the final Master Plan, to the extent possible.

#### & Strengthen the Economy

In continuing support of the area's strong economy, the Master Plan is aimed at retaining and increasing jobs and revenue for the region and its businesses.

The Master Plan will accomplish these objectives by carrying out the follow-ing:

- % Determining projected needs of airport users through the year 2023.
- % Identifying existing and future facility needs.
- % Evaluating future airport facility development alternatives which will optimize airport capacity and aircraft safety.
- % Developing a realistic, commonsense plan for the use and/or expansion of the airport.
- % Developing land use strategies for the use of airport property.
- % Developing compatible land use strategies.
- % Establishing a schedule of development priorities and a program for improvements.

- % Analyzing the airport's financial requirements for capital improvement needs and grant options.
- % Coordinating this Master Plan with local, regional, state, and federal agencies.
- % Conducting active and productive public involvement through the planning process.

#### MASTER PLAN ELEMENTS AND PROCESS

The Kingman Airport Master Plan Update is being prepared in a systematic fashion following FAA guidelines and industry-accepted principles and practices. The Master Plan update for Kingman Airport has six general elements that are intended to assist in the discovery of future facility needs and provide the supporting rationale for their implementation. **Exhibit IA** provides a graphical depiction of the process and elements involved in the Kingman Airport Master Plan Update.

Element One encompasses the inventory efforts. The inventory efforts were focused on collecting and assembling relevant data pertaining to the airport and the area it serves. Information was collected on existing airport facilities and operations. Local economic and demographic data was collected to define the local growth trends. Planning studies which may have relevance to the Master Plan were also collected. Information collected during the inventory efforts are summarized in Chapter One, Inventory.

Element Two examines the potential aviation demand for aviation activity at the airport. This analysis utilizes local socioeconomic information, as well as national air transportation trends to quantify the levels of aviation activity which can reasonably be expected to occur at Kingman Airport though the year 2023. This includes commercial air passengers, general aviation based aircraft, and annual aircraft operations by type. The results of this effort were used to determine the types and sizes of facilities which will be required to meet the projected aviation demands for the airport through the planning period. The results of this analysis are presented in Chapter Two, Aviation Demand Forecasts.

Element Three comprises the facility requirements analysis. The intent of this analysis was to compare the existing facility capacities to forecast aviation demand and determine where deficiencies in capacities (as well as excess capacities) may exist. Where deficiencies were identified, the size and type of new facilities to accommodate the demand are identified. The airfield analysis focused on improvements needed to serve the type of aircraft expected to operate at the airport in the future, as well as navigational aids to increase the safety and efficiency of operations. This element also examined the air carrier terminal, aircraft storage hangars, and apron needs. The findings of this analysis are presented in Chapter Three, Facility Requirements.

Element Four considers a variety of solutions to accommodate the pro-

jected facility needs. This element proposes various facility and site plan configurations to efficiently and effectively use the available airport property. A thorough analysis was completed to identify the strengths and weaknesses of each proposed development alternative, with the intention of determining a single direction for development. These results are presented in Chapter Four, Airport Development Alternatives.

Element Five comprises two independent, yet interrelated work efforts: a recommended development plan and an environmental overview. Chapter Five, Airport Plans, presents a graphic and narrative description of the recommended plan for the use, development, and operation of the airport, and a review of federal environmental requirements applicable to Kingman The official Airport Layout Airport. Plan (ALP) drawings used by the FAA and the ADOT in determining grant eligibility and funding are included as Appendix E to the Master Plan.

Element Six focuses on the capital needs program. This program defines the schedules, costs, and funding sources for the recommended development projects. The Capital Improvement Program is included in Chapter Six.

An Economic Benefit Study of Kingman Airport is included as Appendix C to the Master Plan. The Economic Benefit Study details the benefit of the airport to the community in total jobs supported, total payroll, and total revenues. An economic impact study of the Kingman Airport Industrial Park is included in Appendix D. 03MP10-IA-5/7/04

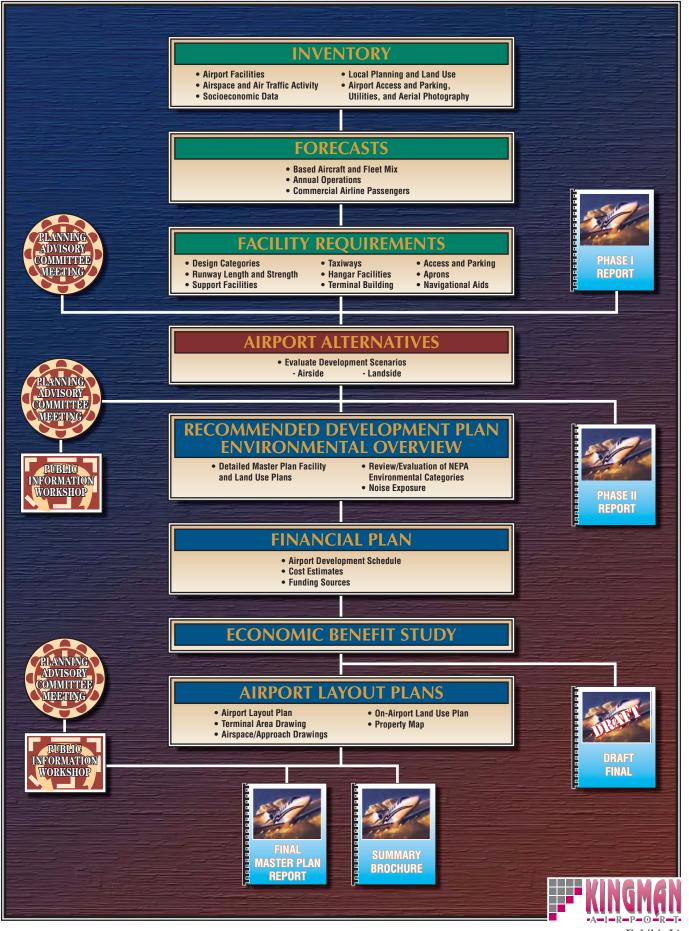


Exhibit IA MASTER PLAN PROCESS

#### COORDINATION

The Kingman Airport Master Plan Update was of interest to many within the local community. This includes local citizens, community organizations, airport users, airport tenants, area-wide planning agencies, and aviation organizations. As an important component of the regional, state, and national aviation systems, the Master Plan Update is of importance to both state and federal agencies responsible for overseeing air transportation.

To assist in the development of the Kingman Airport Master Plan Update, the KAA identified a cross-section of community members and interested persons to act in an advisory role in the development of the Master Plan. As members of the Planning Advisory Committee (PAC), the committee members reviewed phase reports and provided comments throughout the study to help ensure that a realistic, viable plan is developed.

To assist in the review process, draft phase reports were prepared at three milestones in the planning process as shown on **Exhibit IA**. The draft phase report process allowed for input and review during each step of the Master Plan process to ensure that all Master Plan issues are fully addressed as the recommended program was developed.

Two public information workshops were also included as part of the plan coordination. The public information workshops allowed the public to provide input and learn about general information concerning the Master Plan.