

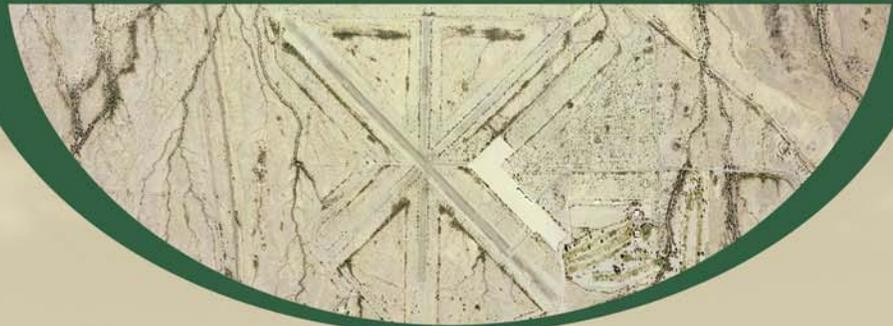


# ERIC MARCUS MUNICIPAL AIRPORT

AJO, ARIZONA



## AIRPORT MASTER PLAN



# **AIRPORT MASTER PLAN**

**for**

## **ERIC MARCUS MUNICIPAL AIRPORT Ajo, Arizona**

**Prepared for**

**PIMA COUNTY**

**by**

**Coffman Associates, Inc.**

**August 2010**

“The contents of this plan do not necessarily reflect the official views or policy of the FAA or ADOT Aeronautics. Acceptance of this document by the FAA and ADOT Aeronautics does not in any way constitute a commitment on the part of the United States or the State of Arizona to participate in any development depicted herein nor does it indicate that the proposed development is environmentally acceptable in accordance with the appropriate public laws.”



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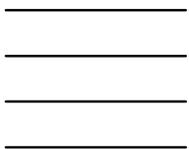
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# INTRODUCTION



# ERIC MARCUS MUNICIPAL AIRPORT

AJO, ARIZONA

AIRPORT MASTER PLAN

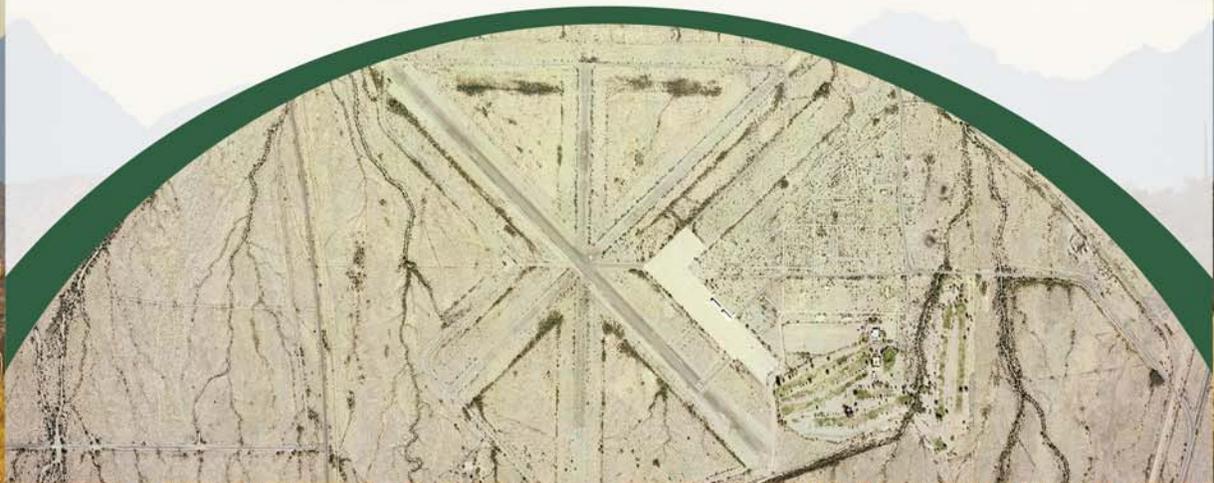
## INTRODUCTION

This update of the Eric Marcus Municipal Airport (P01) Master Plan has been undertaken to evaluate the airport's capabilities and role, to review forecasts of 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 development, operation, and ownership.

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 for the facilities. This is done to ensure that Pima County, Arizona Department of Transportation (ADOT), and the Federal

Aviation Administration (FAA) can coordinate project approvals, design, financing, and construction to avoid experiencing detrimental effects due to inadequate facilities.

The preparation of this master plan is evidence that Pima County recognizes the importance of air transportation to its region and the associated challenges inherent in providing for its unique operating and improvement needs. The cost of maintaining an airport is an investment which can yield impressive benefits to the community and the county. With a sound and realistic master plan, Eric Marcus Municipal Airport can maintain its role in the national air transportation system and maintain the existing public and private investments in its facilities.



## ***MASTER PLAN GOALS AND OBJECTIVES***

The primary objective of the master plan is to provide the community and public officials with proper guidance for future development which will address aviation demands and be wholly compatible with the environment. The accomplishment of this objective requires the evaluation of the existing airport and determination of what actions should be taken to maintain an adequate, safe, and reliable airport facility in support of those long term goals. This master plan will provide an outline of necessary development and give those responsible an advance notice of future airport funding needs so that appropriate steps can be taken to ensure that adequate funds are budgeted and planned.

Specific goals for the airport are:

- To preserve and protect public and private investments in existing airport facilities;
- To enhance the safety of aircraft operations;
- To be reflective of community and regional goals, needs, and plans;
- To ensure that future development is environmentally compatible;
- To develop a plan that is responsive to air transportation demands;
- To develop an orderly plan for use of the airport, and;

- To coordinate this master plan with local, county, state, and federal agencies.

Specific objectives of this master plan designed to help in attaining these goals include:

- Examining the projected aviation demand and identifying the facilities necessary to accommodate the demand.
- Recommending improvements that will enhance the airport's safety and capacity to the maximum extent possible.
- Evaluating the full range of airport development alternatives, including the transfer of airport ownership and/or the privatization (long term lease) of airport operation and development. Airport closure will also be evaluated as will the possibility of operating the airport "as is" with no/minimal improvements.
- Establishing a schedule of development and operation/ownership priorities and a program for the recommendations proposed in the Master Plan Update.
- Prioritizing the airport capital improvement program.
- Preparing a new Airport Layout Plan in accordance with FAA and ADOT guidelines.
- Developing active and productive public involvement throughout the planning process.

The Master Plan provides recommendations from which Pima County may take action to improve the airport and all associated services important to public needs, convenience, and economic growth. The plan benefits all residents of the area by providing a single, comprehensive plan which supports and balances aviation activity with the preservation of the surrounding environs.

## **BASELINE ASSUMPTIONS**

A study such as this requires several baseline assumptions that will be used throughout the analysis. The baseline assumptions for this study are as follows:

- Eric Marcus Municipal Airport's role as a general aviation airport will not change through the planning period.
- The general aviation industry will continue to grow positively through the planning period as forecast by the FAA in its annual Aerospace Forecasts.
- Civil aviation activity will continue to share the Arizona airspace with the military air installations and its training operations.

Both a federal program and state program will be in place through the planning period to assist in funding future capital development needs.

## **MASTER PLAN ELEMENTS AND PROCESS**

The Eric Marcus Municipal Airport Master Plan was prepared in a systematic fashion following FAA guidelines and industry-accepted principles and practices. The master plan has five chapters that are intended to assist in the discovery of future facility needs and provide the supporting rationale for their implementation.

**Chapter One - Inventory** summarizes the inventory efforts. The inventory efforts are focused on collecting and assembling relevant data pertaining to the airport and the area it serves. Information is collected on existing airport facilities and operations. Local economic and demographic data is collected to define the local growth trends. Planning studies which may have relevance to the master plan are also collected.

**Chapter Two - Forecasts** examines the potential aviation demand for aviation activity at the airport. This analysis reviews and updates the Eric Marcus Municipal Airport demand forecasts previously prepared for Pima County in the 1999 *Ajo Municipal Airport Master Plan*. The forecast effort takes into account 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 Eric Marcus Municipal Airport through the year 2028. The results of

this effort are used to determine the types and sizes of facilities which will be required to meet the projected aviation demands on the airport through the planning period.

**Chapter Three - Facility Requirements** comprises the demand/capacity and facility requirements analyses. The intent of these analyses is 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 are identified, the size and type of new facilities to accommodate the demand are identified. The airfield analysis focuses 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 examines general aviation facilities and support needs.

**Chapter Four - Alternatives** considers a variety of solutions to accommodate the projected facility needs. This element proposes various development alternatives, including transfer of ownership, minimal improvement, and facility and site plan configurations which can meet the projected facility needs. An analysis is completed to identify the strengths and weaknesses of each proposed development alternative, with the intention of determining a conceptual direction for development.

**Chapter Five - Airport Plans** provides both a graphic and narrative description of the recommended plan for the use, development, and operation of

the airport. An environmental overview is also provided. The master plan also supports the official Airport Layout Plan (ALP) and detailed technical drawings depicting related airspace, land use, and property data. These drawings are used by the FAA in determining grant eligibility and funding. A financial plan is included, which establishes the capital needs program. The capital needs program defines the schedules and costs for the recommended development projects. The plan then evaluates the potential funding sources to analyze financial strategies for successful implementation of the plan.

**Appendices** – Appendices will be included in the final Master Plan report. This includes a glossary of aviation terms used in the study, the ALP, as well as other pertinent supplements to the main report.

## ***COORDINATION***

The Eric Marcus Municipal Airport Master Plan is of interest to many within the local community. This includes local citizens, community organizations, airport users, county and state planning agencies, and aviation organizations. As the airport is a strategic component of the state and national aviation systems, the Eric Marcus Municipal Airport Master Plan is of importance to both state and federal agencies responsible for overseeing air transportation.

To assist in the development of the master plan, Pima County identified a group of community members and

aviation interest groups to act in an advisory role in the development of the master plan. Members of the Planning Advisory Committee (PAC) reviewed phase reports and provided comments throughout the study to help ensure that a realistic, viable plan was developed.

To assist in the review process, phase reports were prepared at various milestones in the planning process. The phase report process allows for timely input and review during each step within the master plan to ensure that all master plan issues are fully addressed as the recommended program develops.

A public information workshop was held as part of the plan coordination. The public information workshop is designed to allow any and all interested persons to become informed and provide input concerning the master plan. Notices of the workshop meeting time and location were advertised through the media as well as local neighborhood associations.

## ***SUMMARY AND RECOMMENDATIONS***

The proper planning of a facility of any type must consider the demand that may occur in the future. For Eric Marcus Municipal Airport, this involved updating forecasts to identify potential future aviation demand. Due to the airport's isolated location and its proximity to heavy-use military operating airspace, the airport's operational growth potential is seriously inhibited. Analysis of socioeconomic factors in the local area also indicates limited support for based aircraft and operational growth. The airport is currently used occasionally by recreational aircraft users and can serve as a valuable resource for air ambulance and emergency services operations. It is for these uses that the airport will be maintained to serve into the future. The forecast planning horizons are summarized in **Table A**.

<b>TABLE A</b>				
<b>Aviation Demand Planning Horizons</b>				
<b>Eric Marcus Municipal Airport</b>				
	<b>2008</b>	<b>Short Term</b>	<b>Intermediate Term</b>	<b>Long Term</b>
<b><i>ANNUAL OPERATIONS</i></b>				
General Aviation				
Itinerant	240	240	480	800
Local	60	60	120	200
<b>Total Operations</b>	300	300	600	1,000
<b>Based Aircraft</b>	3	3	4	5

The Airport Layout Plan set has been updated to act as a blueprint for everyday use by management, planners, programmers, and designers. These

plans were prepared on computer to help ensure their continued use as an everyday working tool for airport management.

This Master Plan is an update of the previous Eric Marcus Municipal Airport Master Plan completed in 1999. Since the completion of that plan Pima County has installed PAPI-2 approach lighting systems at both ends of the runway. At the time of the previous master plan update, it was anticipated that the open-pit mine located in Ajo would resume operations. This would have reinvigorated the local economy and brought increased activity to the airport. The mine was never reopened and activities at the airport failed to grow resulting in a lack of demand to justify many of the recommended projects. The updated Master Plan essentially maintains the existing core airport facilities “as-is” and recommends a number of improvements to enhance the safety and security of airport facilities and operations. **Exhibit IA** depicts the updated plan.

The construction of a full-length parallel taxiway is recommended to make taxiing safer and to prevent runway incursions. The installation of airfield signage is recommended to offer pilots a better sense of their location on the airfield. Perimeter security fencing is planned to be installed to serve as a physical barrier as well as a psychological deterrent to prevent airport facilities from being accessed by unauthorized individuals. Remaining recommendations involve the regular maintenance of existing airport pavements and facilities to ensure their

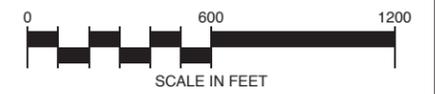
continued safe use and to satisfy state and federal grant assurances.

Detailed costs were prepared for each development item included in the program. As shown in **Table B**, complete implementation of the plan will require a total financial commitment of approximately \$2.0 million dollars. Much of the recommended program funding could be funded through state or federal grant-in-aid programs. The source for federal monies is through the Airport Improvement Program (AIP) administered by the Federal Aviation Administration (FAA) established to maintain the integrity of the air transportation system. Federal monies could come from the Aviation Trust Fund which is the depository for federal aviation taxes such as those from airline tickets, aviation fuel, aircraft registrations, and other aviation-related fees. Federal AIP funding of 95 percent can be received from the FAA for eligible projects.

The Arizona Department of Transportation (ADOT) also provides a separate state funding mechanism which receives annual funding appropriation from collection of statewide aviation related taxes. Eligible projects can receive up to 90 percent funding from ADOT for non-federally funded projects, and one-half (2.5 percent) of the local share for projects receiving federal AIP funding.



LEGEND	
	Airport Property Line
	Runway Protection Zone (RPZ)
	Runway Safety Area (RSA)
	Object Free Area (OFA)
	Perimeter Fencing
	Ultimate Airfield Pavement
	Airfield Signage



<b>TABLE B</b>	
<b>Recommended Project Cost Summary</b>	
<b>Eric Marcus Municipal Airport</b>	
<b>Project</b>	<b>Estimated Costs</b>
Runway/Taxiway Crack Seal Repair/Seal Coat	\$175,000
Install Perimeter Fencing	\$862,655
Apron Joint Seal Repair	\$25,000
Install Airfield Signage	\$39,062
Construct Parallel Taxiway	\$850,000
<b>TOTAL COSTS</b>	<b>\$1,951,717</b>

With the airport master plan completed, the most important challenge is implementation. The cost of developing and maintaining aviation facilities is an investment which yields impressive benefits for the community. This plan and associated development

program provides the tools that Pima County will require to meet the challenges of the future. By providing a safe and efficient facility, Eric Marcus Municipal Airport will continue to be a valuable asset to Ajo and the surrounding region.