

## SECTION 2

### FINDINGS AND RECOMMENDATIONS

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The site selection and master planning analyses resulted in specific findings regarding the capability of Polacca Airport to satisfy the Tribe's long-range airport requirements. A plan was formulated that, in the opinion of the Tribe, Consultant, and other interested parties, will best satisfy these requirements. This section describes the major findings and the recommended plan. Detailed descriptions accompany the analysis presented in subsequent sections of this report.

#### 2.1 FINDINGS

Forecast analyses revealed that the demand for airport facilities and services in the Mesa area of the Hopi Indian Reservation will continue to increase throughout the next twenty years. The number of based aircraft are projected to increase from 9 in 1976 to 30 by 1997. Similarly, the number of landings and takeoffs are projected to increase from 9,800 in 1976 to 30,000 by 1997, and the number of enplaned passengers from 5,500 in 1976 to 56,000 by 1997. These estimates indicate that the Hopi's airport will have an operational role of basic utility during the short-range, and a general utility role throughout the remainder of the planning period.

Evaluation of required airport facilities identified the need for one runway throughout the planning period. This runway would need to be 75 feet wide, 7,000 feet long, and have a bearing strength of 12,500 pounds single-wheel loading. The need for a Terminal VHF Omni-range (TVOR), tee hangars, a maintenance hangar, a terminal building, and fuel storage facilities were also identified.

Investigation of Polacca Airport with regard to the calculated facility requirements resulted in the finding that the airport will not satisfy the Hopi Tribe's long-range airport needs. This determination was based primarily on the location of Polacca Wash and Wepo Wash off each end of the existing 4,000 foot runway, which makes extension to 7,000 feet uneconomical. Consequently, seven alternative airport sites including six new sites and Polacca Airport were identified.

Consideration of the seven preliminary alternative airport sites narrowed the number to four for the purposes of more detailed analysis. Comparison of the four alternative sites resulted in the finding that a new site located on top of Second Mesa would be preferable. This conclusion was reached on a comparative analysis of six evaluation criteria including cost, accessibility, airspace and aviation considerations, economic, engineering, and environmental considerations.

The findings of the site selection study were presented to the general public and the Hopi Tribal Council. After giving careful and lengthy consideration to the findings of the site selection study, and other community needs of the Hopi Tribe, the Council decided to postpone the development of a new airport until other needs considered more vital to the community are satisfied. Subsequently, it was decided to identify those improvements which would be required at Polacca Airport as an interim measure, including a no-growth alternative, and prepare typical airport plans which could be used for the development of a new airport at a later date.

## 2.2 RECOMMENDATIONS

The following recommendations are based on the abovementioned findings, and are consistent with the desires of the Hopi Indian Tribe and other interested parties.

- Reevaluate the need for a new airport in comparison to other community needs at the outset of each fiscal year. In doing so, the major users of the airport, including the BIA and Indian Health Service, should be contacted for their input.
  
- Develop a new aircraft parking apron and auto parking apron at Polacca Airport. These facilities should be constructed at a distance sufficiently removed from the runway to meet FAA design standards. The recommended improvements are graphically displayed in the Polacca Airport - General Layout Plan (Plan-1).
  
- Arrange to have fueling facilities constructed at Polacca Airport. Fuel should be made available to the general public, including transient aircraft visiting the Mesa area.
  
- Establish fees and charges for use of the airfield area and the storage of aircraft at the airport. These charges should be in the form of a fuel flowage fee stated in cents per gallon, a tiedown (parking) fee, and monthly storage fee.