

SECTION 9

PLAN IMPLEMENTATION

Plan implementation in this context refers to the actions or steps that must be undertaken to achieve the goals set forth in the preceding sections of this report. As such, this implementation plan is largely financially oriented. The discussion herein identifies what development is recommended and how much it will cost, the method of financing this development, and the feasibility of undertaking this development.

9.1 IMPLEMENTATION PLAN SUMMARY

The master plan recommends two major phases of development, the first is improvement of Polacca Airport, and the second is development of a new airport. The improvements recommended for Polacca Airport are estimated to cost approximately \$40,000, and the development of a new airport is estimated to cost about \$2.4 million. There appears to be financial assistance available from either the Economic Development Administration or the Bureau of Indian Affairs, for the development of Polacca Airport. These two agencies are expected to fund 100 percent of the recommended development. There is also financial assistance available from the Federal Aviation Administration for the development of a new airport. The FAA will fund up to 91.06 percent of this cost.

Investigation of revenue sources resulted in the identification of two such sources: airfield use fees and apron area use fees. Charging for the use of the apron area could start immediately; charging for the use of the airfield would have to wait until fueling facilities are constructed.

Consideration of development costs, the sources and amount of federal financial assistance available and potential revenues generated from

airport user fees, resulted in the conclusion that the recommended master plan program appears financially feasible from the Hopi Tribe's standpoint. It is, therefore, recommended that the master plan be implemented. The following actions are presented as a guide to implementation:

- Establish tie down and monthly storage fees for use of the apron area;
- Obtain approval from the appropriate Village to allow the BIA to construct fueling facilities;
- Establish a fuel flowage fee for use of the airfield;
- Obtain approval from the appropriate Village to permit improvement of Polacca Airport;
- Apply for construction or funding of improvements to the BIA or EDA, respectively, for the Polacca Airport improvements.

9.2 CAPITAL BUDGET

The capital budgets presented herein describe the recommended purchase, construction, and improvement of facilities, equipment, and other long-lived assets. There are two budgets presented; the first is a budget for the improvement of Polacca Airport, and the second is for the development of a new airport.

In preparing the capital budgets, estimates of cost were developed for planned facility improvements by analyzing data gathered from the Bureau of Indian Affairs, the Federal Aviation Administration, trade publications, and similar studies. Unit costs for appropriate items include the average cost of associated work such as grading, drainage, and utilities. These costs were further increased by 20 percent to provide for engineering and contingencies.

Exhibit 9-1 presents the capital budget for Polacca Airport. The budget is for a total of \$40,000 in capital expenditures. The most expensive item budgeted is a new aircraft parking apron, which is designed to meet the FAA's standard for separation from the runway.

The capital budget for development of a new airport is presented in Exhibit 9-2. The estimated cost of development is summarized for each service segment (cost center) of the airport, and by anticipated source of funding. The total estimated cost of developing a new airport is \$2,435,000. Nearly half of the total development cost is associated with the airfield area, comprised of the runway, taxiways, and approach aids. Similarly, approximately 50 percent of the federal assistance will be expenditures for the airfield area. In contrast, the major portion of expenditures by the Hopi Tribe will be for hangar area development. The latter is due to the large investment required for aircraft maintenance and storage facilities which are not eligible for federal funding. The total estimated cost to the Hopi Tribe for developing a new airport is approximately \$714,000.

9.3 SOURCES OF FUNDING

There are two sources of financial assistance available for the improvement of Polacca Airport as described in the capital budget. These are: the Economic Development Administration and the Bureau of Indian Affairs. In the case of the former, it appears that a 100 percent grant could be obtained as a part of the annual Overall Economic Development Program of the Hopi Tribe. The BIA constructed Polacca Airport and has made improvements since that time. Discussions with representatives of the BIA indicate the agency may undertake the recommended improvements at no cost to the Hopi Tribe, if approval is given to proceed.

EXHIBIT 9-1
POLACCA AIRPORT
CAPITAL BUDGET

<u>Development Item</u>	<u>Estimated Cost</u>
Aircraft Parking Apron 3,500 square yards @ \$9.60/S.Y.	\$ 34,000
Taxiway Extension 350 square yards @ \$9.60/S.Y.	3,000
Automobile Parking Apron 450 square yards @ \$6.00/S.Y.	<u>3,000</u>
<u>TOTAL DEVELOPMENT COST</u>	<u>\$ 40,000</u>

Source: PRC-R. Dixon Speas Associates
March 1978

EXHIBIT 9-2
NEW AIRPORT
CAPITAL BUDGET

SERVICE SEGMENT	COST ESTIMATES		
	TOTAL	FEDERAL	LOCAL
<u>Airfield Area</u>			
Runway including grading-7,000LF @ \$77	\$ 539,000	\$ 485,100	\$ 53,900
Runway Marking-7,000LF @ \$0.40	3,000	2,700	300
Taxiway Construction-7,700LF @ \$41.00	316,000	284,400	31,600
Taxiway Marking-7,700LF @ \$0.40	2,000	1,800	200
Runway Lighting-7,000LF @ \$10.00	70,000	63,000	7,000
VASI-2Box, Beacon, & Segmented Circle	23,000	20,700	2,300
Itinerant Apron - 120,000SF @ \$0.75	90,000	81,000	9,000
Apron Lighting-4 Units @ \$2,000	8,000	7,200	800
TOTAL AIRFIELD AREA	\$1,051,000	\$ 945,900	\$ 105,100
<u>Hangar Area</u>			
Tee Hangars-21 units @ \$10,000	\$ 210,000	-	210,000
Maintenance Hangar-10,000SF @ \$25	250,000	-	250,000
Hangar Aprons-245,000SF @ \$0.75	184,000	165,600	18,400
TOTAL HANGAR AREA	\$ 644,000	\$ 165,600	\$ 478,400
<u>General & Administration</u>			
Land Acquisition-300 acres @ \$1,500	\$ 450,000	405,000	45,000
Terminal Building-1,800SF @ \$25	47,000	-	47,000
Entrance Road	75,000	67,500	7,500
Site Preparation-300 acres @ \$100	30,000	27,000	3,000
Auto Parking - 21,000SF @ \$0.75	16,000	-	16,000
Water Well - 1,000ft depth @ \$50	50,000	45,000	5,000
Utilities - water	10,000	9,000	1,000
Fencing - 41,000LF @ \$1.50	62,000	55,800	6,200
TOTAL GENERAL & ADMINISTRATION	\$ 740,000	609,300	130,700
<u>TOTAL DEVELOPMENT COST</u>	<u>\$2,435,000</u>	<u>\$1,720,800</u>	<u>\$ 714,200</u>

Financial assistance will most likely be available from the Federal Aviation Administration for development of a new airport. Participation in airport development projects by the FAA is outlined in the Airport and Airways Development Act of 1970, as amended. The amendments enacted in 1976 set the maximum allowable federal share for projects in the State of Arizona at 91.06 percent of the total cost. Items eligible for federal aid include land acquisition, runways, taxiways, aircraft parking aprons, runway lights, and approach aids. Items such as hangars, auto parking, and revenue producing facilities are not eligible. According to the Act there is \$75 million available in FY 1978, \$80 million in FY 1979, and \$85 million available in FY 1980 from the Airport Development Aid Program for projects involving general aviation airports such as Polacca or its replacement. These funds are allocated on a discretionary basis by the Secretary of the Department of Transportation. Funding the development of a new airport is phased because of the large demand for these funds by airports located throughout the nation. The findings of recent planning studies suggest that as a general guide \$500,000 of FAA funding should be assumed as an annual maximum.

Exhibit 9-2 shows that the Hopi Tribe's share of developing a new airport will be approximately \$700,000. This amount could be substantially reduced by contribution of the required land in lieu of cash. The remaining amount could be phased by forestalling the construction of maintenance and/or tee hangars, or be eliminated by allowing individuals to construct these facilities.

9.4 FINANCIAL FEASIBILITY

The recommended improvement of Polacca Airport and the initial development of a new airport have been shown to require no cash outlay by the Hopi Tribe. The only cash cost, therefore, is the cost of operation and maintenance. These costs include utilities and lighting, replacement of

worn or broken improvements, and periodic maintenance of paved surfaces. Polacca Airport is maintained by the Bureau of Indian Affairs at no cost to the Hopi Tribe. The new airport, however, will require an expenditure of resources by the Hopi Tribe for the purpose of operation and maintenance.

There are two primary sources of revenue capable of being generated to offset the cost of operating and maintaining a new airport, and for developing a fund for the Hopi share of constructing new facilities. These revenues can be generated by assessing fees for the use of the airfield and apron areas. Revenues from use of the apron area can be generated by charging a monthly storage fee to aircraft owners who store their aircraft on an extended basis, and by charging a tie down fee to transient aircraft visiting the reservation. A monthly rental of \$15 and a tie down fee of \$2.00 is recommended. Revenues from use of the airfield can be generated by charging a fuel flowage fee stated in cents per gallon for all aviation fuel brought onto the airport. A fuel flowage fee of 7 cents is recommended. It should be noted that approval for the BIA to construct fueling facilities, or construction of the facilities by the Hopi Tribe, will be required prior to the generation of any revenues.

It appears that sufficient revenues could be generated by charging for the use of the airfield and apron area to offset the required operating and maintenance expenditures. Therefore, the development of Polacca Airport and a new airport could be considered financially feasible from the standpoint of the Hopi Tribe.