CHAPTER XVI. AIRPORT PLANS

The planning studies were conducted in compliance with FAA Circular AC 150/5070.6A Airport Master Plans. There are a series of plans specified in this document and required as products of the planning study. In this chapter, the specified plans are reproduced (reduced in size from the originals). They incorporate the recommendations made for airport development in previous chapters of the report. Presented with each plan are a series of notes which identify particular features of the plan.
1. AIRPORT LAYOUT PLAN (ALP)

This is the only plan requiring formal FAA approval. It is the most important product of the planning program, being the plan representation of the developments recommended in the program. It becomes the "blueprint" for future airport development and the basis for FAA evaluation of City applications for federal financial participation in airport development projects.

Features of the plan (scale 400 feet = 1 inch):

- Proposed airfield facilities including the proposed new parallel runway 8N-26N with associated taxiways;
- Four "cross-taxiways" connecting the north side and the south side of the airport;
- Hold pads on all runway ends;
- 8-concourse Terminal 4 and 3-concourse Terminal 3, with the removal of Terminals 1 (1991) and 2 (1997-2002);
- Expansion of the cargo area to the west;
- Reservation of the area between the existing cargo area and Terminal 3 for future terminal or cargo development;
- Realignment of 24th Street and Buckeye Road at the west end;
- Configuration of new on-airport and off-airport highways and access roads at the east end;
- Realignment of internal roadways between 24th Street and Terminal 3; and
- Acquisition of property.
2. TERMINAL AREA PLAN

This is a plan showing the anticipated 2007 configuration of the air carrier passenger terminal area, at a scale of 200 feet = 1 inch.

Features of the plan:

- 3-concourse Terminal 3, with the third concourse located on the south-west corner of the terminal. The existing (temporary) America West terminal in this location will be removed in 1991. The need to construct this replacement concourse will depend upon airline demand, but it is represented on the plan to ensure that the option is kept open, if and when it is needed. The 3-concourse option would provide 29-35 gates.

- The south concourses of Terminal 3 may be retained (or developed) to the extent shown until full two-way taxiway capability is required to Taxiway CC, at which time the 3 outermost gates would be removed from each concourse.

- 8-concourse Terminal 4, with 7 concourses constructed in the planning period; the extreme south-west concourse would not be constructed before 2007 unless demands exceed the projections developed in this planning program. The 7-concourse option would provide approximately 80 gates.

- International gates and international arrival facilities (Federal Inspection Facilities) located in the north-east concourse of Terminal 4.

- A future commuter airline facility is recommended at the location of the existing International Terminal; it does not appear on the plan since it would be removed when Terminal 2 is demolished post-2000.
3. GENERAL AVIATION AREA PLAN

Two general aviation areas are shown, a north area located on the north and south sides of the west end of Runway 8L-26R, and a south area, The Cutter facility, located in the south-west corner of the airport.

Features of the plan:

North - Removal of T-hangars adjacent to the 8L runway end to accommodate the hold pad.

- Maintaining existing FBO buildings (JIMSAIR and Sawyer), the Executive Terminal and the city-owned T-hangars and corporate hangars currently in place. Given the anticipated reduction in light aircraft general aviation activity levels, no new facilities are planned.

- TRACON is represented in its current location but there is potential for consolidation into new FAA facility.

South - Maintain existing FBO buildings. (Cutter)

- No major expansion proposed, but unanticipated demand could expand FBO area to west within the BRL.
4. FAR PART 77 SURFACES

Federal Aviation Regulations, Part 77 defines the standards used for determining obstructions to navigable airspace around the airport. The surfaces represented on the plan include:

- approach surfaces, off the ends of the runways
- primary surfaces, along the runway
- horizontal surfaces, 150 feet above the airport elevation
- conical surfaces, beyond the horizontal surfaces.
- transition surfaces

These surfaces are represented on the plan.

Features of the plan:

- Surfaces are included for the proposed third parallel runway;
- These protect airspace for a potential 9,500-foot runway even though the recommendation is for a 7,800-foot runway, and there is currently no justification for extension to 9,500 feet; and
- The surfaces are designed to protect the airspace for a potential westward extension of Runway 8L-26R by 1,000 feet. This is not currently recommended but the option for extension should be protected.
5. RUNWAYS 18L AND 26R APPROACH PLANS AND PROFILES

The drawing shows the runway clear zones and approach zones, indicating the controlling structures and their elevations. The location and elevation of obstructions are indicated.

Features of the plan:

- On the 8L approach, there are 8 obstructions, the most significant of which is a light standard on the northern edge of the approach surface.

- The airspace required to protect the potential 1,000-foot extension to Runway 8L is provided.

- On the 26R approach, there are also 8 obstructions, none of which intrude into the 34:1 non-precision approach surface.
The preparation of this document was financed in part through an Airport Master Planning Grant from the Department of Transportation, Federal Aviation Administration (FAA), under provisions of the Airport and Airway Improvement Act of 1982, and with the financial support of the city of Phoenix.

Legend

Funding Acknowledgement

Revision

Phoenix Sky Harbor International Airport

Part 77 Surfaces

Howard Needles Tammen & Bergendoff

September 1989

Sheet 6 of 11
6. RUNWAYS 8R AND 26L APPROACH PLANS AND PROFILES

This plan shows the clear zones and approach zones for the existing south parallel runway.

Features of the plan:

- There are 5 structures listed for the approach from the west, none of which intrude into the 50:1 precision approach surface.

- Two obstructions occur on the approach from the east, both of them in the Salt River Channel.
7. RUNWAYS 8N AND 26N APPROACH PLANS AND PROFILES

These drawings show the clear zones and approach zones, for the proposed new runway.

Features of the plan:

- The surfaces protect the eventual extension of the runway to 9,500 feet should this be required. Currently, there is no justification for extension beyond 7,800 feet.

- The runway ends are clear of known obstructions except for a light standard on I-10 at the western approach; this obstruction occurs at the southern edge of the approach zone.
Legend

Funding Acknowledgement

Phoenix Sky Harbor International Airport
Runways 8N & 26N Approach
Plans & Profiles (New)

Howard Needles Tammen & Bergendoff  September, 1989  Sheet 9 of 11