

## EXECUTIVE SUMMARY

### Inventory of Existing Conditions

- Skyhaven Airport is designated by the Federal Aviation Administration (FAA) and the New Hampshire Department of Transportation (NHDOT) as a general aviation (GA) airport.
- Based on the existing types and levels of aircraft operating at Skyhaven Airport, the current critical design aircraft is the multi-engine piston Beech Baron, which is representative of a group of aircraft in Airport Reference Code (ARC) B-I. The airport can accommodate aircraft as large as the Beech King Air 200, Cessna Citation CJ-3, and other aircraft in ARC B-II. Skyhaven Airport meets or exceeds most of the current FAA design criteria for ARC B-I, although there are penetrations to some imaginary surfaces on and in the vicinity of the airport.
- Based aircraft have increased from 53 in 2000 to 118 in 2008, and the airport is almost at capacity in terms of accommodating based aircraft.
- Estimated aircraft operations have decreased by approximately 8% since 2000, and the sale of both 100LL aviation fuel and Jet-A fuel have also declined. Jet-A is not currently available for sale at the airport.
- Flight tracking data indicates that there were 22 documented instrument operations by turboprop and jet aircraft at Skyhaven Airport between July 1, 2007 and June 30, 2008.
- There is no fixed base operator at Skyhaven Airport. The NHDOT and the Pease Development Authority (PDA) are responsible for day-to-day airport operations and management until another fixed base operator (FBO) locates at Skyhaven Airport.

### Forecasts of Aviation Activity

- Three forecast scenarios were developed based on a variety of factors that could affect future aviation activity at Skyhaven Airport.
- Scenario A predicted that based aircraft and operations could experience modest growth through 2028. Under Scenario B, certain factors could trigger a short-term decline in based aircraft and operations through 2012, after which activity would gradually rebound. Scenario C follows FAA's forecasted aviation trends of flat growth.
- The forecasts conclude that corporate jets and turboprops could generate between 200 and 500 operations annually at Skyhaven Airport by 2028 if certain improvements were made to the airport. Providing transient parking space and Jet-A fuel would eliminate constraints to turbine powered aircraft operations, in addition to the availability of FBO services.

- The FAA’s Terminal Area Forecast (TAF) represents a balance between the two forecast scenarios, and is the recommended forecast for this AMPU (i.e., no-growth). FAA’s TAF projects that based aircraft will remain at 106<sup>1</sup>, and there will be 17,000 aircraft operations annually, or an average of 46 aircraft operations per day through 2025.
- Based on the forecasts of demand, the future role of Skyhaven Airport will remain GA. In other words, no commercial passenger or cargo airline service is projected to operate at Skyhaven through the end of the forecast period.
- The existing critical design aircraft is represented by the Beech Baron, Piper Navajo, and Cessna 402, and fall within Airport Reference Code (ARC) B-I.
- The ultimate critical design aircraft will be the Beech King Air 200, which falls within ARC B-II.

**Facility Requirements**

- There is a need for additional T-hangars. NHDOT has a waiting list of 31 aircraft owners who expressed interest in renting a hangar. Some of the demand comes from aircraft presently on tiedowns at the airport.
- A more precise instrument approach with lower instrument approach minimums to Runway 33 would increase the utility of the airport for a variety of aircraft operators.
- There is a need for paved parking apron for transient aircraft. Such an apron should provide sufficient space for 2 to 3 parking positions for aircraft the size of a Beech King Air 200 and/or Cessna Citation CJ-3, as well as 3 to 4 positions for single and multi-engine piston aircraft, such as a Beech Baron, Piper Navajo, etc. The apron should also provide sufficient space to allow for power-in, power-out maneuvering.
- The 2001 Airport Master Plan Update (AMPU) recommended extending Runway 15-33 by 1,000 feet, if the High Growth scenario were realized. However, aircraft operations have not reached that level. An analysis of runway length requirements also indicates that the existing Runway 15-33 can accommodate a large number of corporate jets currently in production. In addition, the forecasts do not anticipate that corporate jets will generate sufficient operations to justify an extension to the runway in the near term.

However, FAA’s criteria for instrument approaches with visibility minimums of ½ mile require a minimum runway length of 4,200 feet. As a result, Runway 15-33 should be extended by at least 200 feet when it is reconstructed in order to accommodate visibility minimums of ½ mile, if and when all other criteria for such procedures are met in the future.

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<sup>1</sup> FAA did not count the 12 ultralights based at the airport. Total based aircraft = 118

There is space on the airport to accommodate a longer runway, and any additional runway length would provide operational benefits for certain aircraft, specifically by allowing them to takeoff with additional payload (passengers, baggage, in addition to fuel).

- Some imaginary surfaces over and in the vicinity of the airport have penetrations, primarily vegetation, which should be removed, marked, or lighted, as determined by FAA.
- Some existing facilities, such as the based aircraft parking apron, Runway 15-33, and the auto parking lot, need rehabilitation or reconstruction in the near future.
- There is a need for improved access to the aircraft fueling facilities.

**SKYHAVEN AIRPORT MASTER PLAN UPDATE**

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Table ES-1 summarizes the existing Skyhaven Airport facilities and activity levels as they were in 2000 and compares them to current (2008) conditions.

**Table ES-1 Summary of Existing Conditions - 2008 Compared to 2000**

<b>Skyhaven Airport (DAW)</b>		
	<b>2000</b>	<b>2008</b>
Airport Reference Code (ARC)	B-II Small	B-I
Critical Design Aircraft	Beech King Air 200	Beech Baron
FAA NPIAS + NH SASP Role	General Aviation	General Aviation
Elevation above sea level	322'	322'
Mean maximum temperature	83°F	83°F
Area (acres)	195 +/-	195 +/-
Based Aircraft - Total	53	118
Single Engine Piston	47	97
Multi Engine Piston	6	6
Turboprop	0	0
Jet	0	1
Helicopter	0	2
Ultralight	0	12
Aircraft Operations Per Year (estimate)	18,592	17,000
Average Aircraft Operations Per Day (estimate)	51	46
Annual Service Volume (Operational Capacity)	230,000	230,000
Hourly Capacity - Operations	86	86
Non-precision instrument approach	Runway 33	Runway 33
Lowest instrument approach minimums	438' HAT & 1 mile	438' HAT & 1 mile
Visual Runway	Runway 15	Runway 15
Air Traffic Control Tower	No	No
Unicom Radio	Yes	Yes
Automated Surface Observing System (ASOS)	No	Yes

**Notes:**

FAA 3-letter identifier for Skyhaven Airport is DAW.

Airport Reference Code (ARC): Approach Category A = <91 knots. Design Group I = wingspan <49'.

Approach Category B = 91knots - <121 knots. Design Group II = wingspan 49' - <79'

Small = 12,500 lbs. maximum gross weight or less

FAA NPIAS = FAA National Plan of Integrated Airport Systems

NH SASP = New Hampshire State Airport System Plan

GPS = Global Positioning System

HAT = height above touchdown zone elevation (on runway)

Annual Service Volume & Hourly Capacity Source: FAA Advisory Circular 150/5060-5, Airport Capacity and Delay, Chapter 2

**Sources:**

Airport Master Plan Update, 2000/2001, Hoyle Tanner & Associates; NHDOT; FAA Airport Master Record Form 5010; FAA Airport/Facility Directory; FAA Terminal Procedures Publication; FAA Advisory Circular 150/5300-13, Airport Design; FAA Advisory Circular 150/5060-5, Airport Capacity & Delay; field/visual inspections.