August 16, 2010

NUT TREE AIRPORT
Solano County

Nut Tree Airport

Master Plan *Stakeholders Input Group*

THE **Barnard Dunkelberg** » **Company** TEAM

Agenda

- Self-Introductions by Work Group Members
- Review of Airport Planning Process
- Schedule/Timeline
- Presentation of Working Paper Two
  - Chapter D – Capacity Analysis and Facility Requirements
- Questions, Comments, Discussion
- Adjournment

Consulting Team

- **Barnard Dunkelberg & Company/**Denver, CO/Tulsa, OK
  - **Peter Van Pelt**/Project Manager
  - **Mark McFarland**/Consultant Coordinator
  - **Ryan Hayes**/Lead Technical Planner
- **Craig Communications/**Pinole, CA
  - **Tracy Craig**/Outreach Coordinator
  - **Marie Rainwater**/Facilitator

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Planning Process

- Inventories
- Forecast of Aviation Activity
- Capacity & Facility Requirements Determination
- Alternatives and Conceptual Plan
  - Airfield
  - Landside
- Implementation Plan
- Financial Implementation Plan

Meeting/ Presentations

- Chartering Session
- Stakeholders Interviews
- Stakeholders Input Group Meetings
  - 4 Total, 2 completed including this meeting
- Public Information Meetings
  - 4 Total, 2 completed including tonight's meeting
- Officials Briefing/Presentation of Recommendations
- Progress Meetings

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Public Outreach Process

- Multiple calls and/or emails to all stakeholders
- Multiple calls and/or emails all community member attendees
- Emailed invitations to 24 past attendees & to distribution list (59 individuals/organizations); requested posting and sending out via e-trees, where appropriate
- Emailed invitations to local civic organizations with request to send out to e-trees (Rotary, Lions, Toastmaters, etc.)
- Ordered, picked up, and distributed 2,700 flyers through local elementary schools
- Delivered batches of flyers to Library/Cultural Center, two city hall offices and posted in multiple locations, as appropriate
- Posted flyer in local grocery stores
- Ordered, picked up, delivered signs including new location signs
- Contacted The Reporter three times with request for coverage on community meetings

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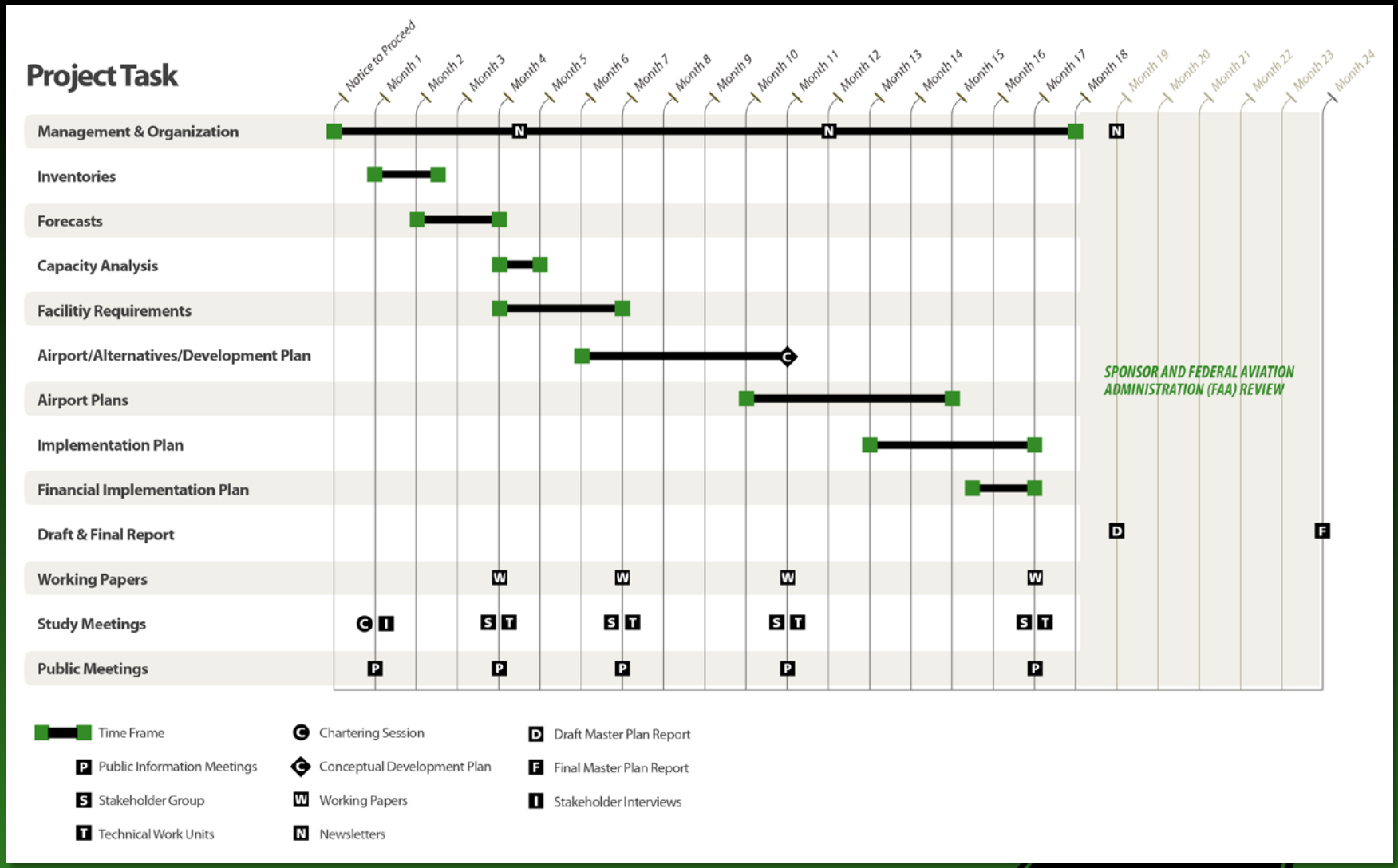
Project Schedule



Chapter A. Introduction & Vision
Nut Tree Airport . . .

- **Expressed in Present Tense: *Desired End State***
  - Is Strategically Located
  - Is a Full-Service General Aviation Airport
  - Is a Gateway to the Area
  - Has a Storied History and is part of the Local Community
  - Is Sustained by Supportive Intergovernmental Relationships
  - Benefits from Consistent and Seamless On-Airport Property Development
  - Is Compatible with and Valued by the Surrounding Community
  - Respect the Importance of Travis AFB

Working Paper Two (WP2)

- Chapter D.
  Capacity Analysis and Facility Requirements

  - Purpose is to understand the potential facility needs

  - Next Step (subject of next meeting) is Alternatives Analysis

Capacity Analysis

- **Conclusions**
  - Orientation of Runway
  - Number of Runways
  - Roadway Access

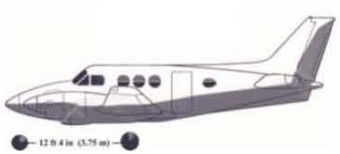
Airside Facility Requirements

- Airport Reference Code (ARC)/Design Aircraft Analysis
- Dimensional Requirements
- Runway Length, Width and Strength
- Taxiways
- Instrument Approach Procedures

Representative Aircraft by ARC Designation

- Maintain Current ARC

ARC A-I
Single-Engine Aircraft - 2 to 6 seats
Beech Bonanza
Beech Baron B55
Cessna-150



ARC B-I
Twin-Piston Aircraft - 4 to 10 seats
Beech King Air B100
Piper 31-310 Navajo
Beech Baron 58

ARC B-I
Very Light Jet/Small Cabin 4-6 seats
Eclipse 500
Citation Mustang
Adam Aircraft A700

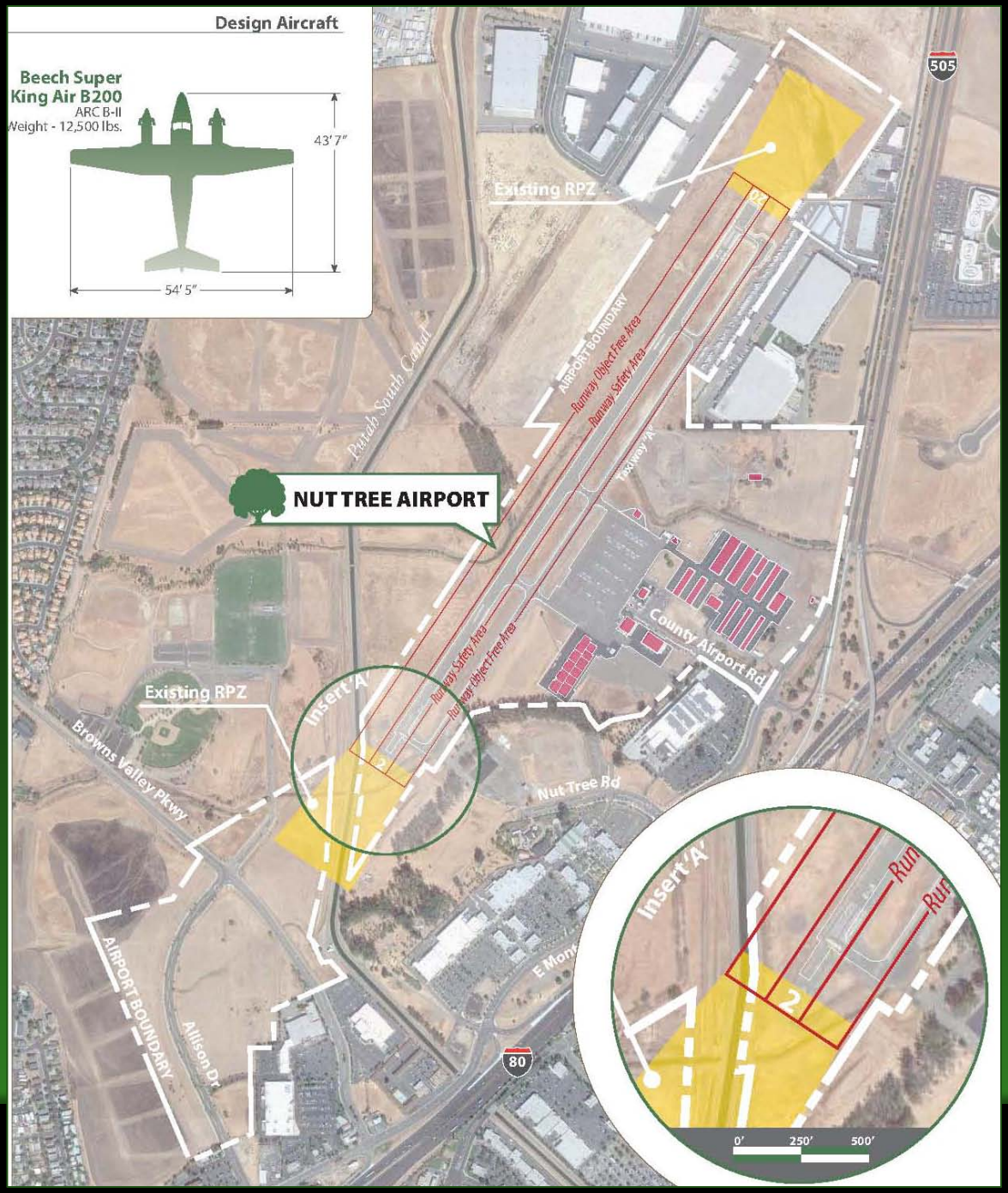
ARC B-II
Twin-Turboprop Aircraft - 6 to 10 seats
Includes most commercial turboprop aircraft.
Beech Super King Air B200
Cessna 441 Conquest
Grumman Gulfstream I

ARC B-II
Business Jet/Small Cabin - 6 to 12 seats
Dassault Falcon 900
Dassault Falcon 50
Cessna Citation II/III/VII

Source: Aircraft Ground Service Guide, 2002 and Aircraft Manufacturer.
Note: Representative Aircraft not to scale.

ARC B-II Dimensional Criteria

(not lower than ¾-mile visibility minimum)



Runway Length

- **Considerations**
  - Airport elevation
  - Mean maximum daily temperature of the hottest month
  - Runway gradient
  - Family grouping of critical aircraft
  - Stage length of the longest nonstop trip destination
- **Methods**
  - FAA Airport Design Program
  - FAA AC 150/5325-4B Runway Length Requirements for Airport Design
  - Aircraft specific analysis

Method 1
FAA Airport Design Program

	Runway 2/20 Takeoff Length (Feet)	
	Dry Pavement	Wet Pavement
Existing Condition		
Runway 2/20	4,700	4,700
Small Aircraft with less than 10 seats [1]		
75% of Small Aircraft	2,590	2,590
95% of Small Aircraft	3,160	3,160
100% of Small Aircraft	3,750	3,750
Small Aircraft with more than 10 seats	4,370	4,370
Large Aircraft less than 60,000 pounds		
75% of fleet/60% useful load	4,750	5,340
100% of fleet/60% useful load	5,680	5,680
75% of fleet/90% useful load	7,140	7,140
100% of fleet/90% useful load	9,060	9,060

Notes: Runway lengths based on 116 feet AMSL, 95.0°F, and maximum difference in runway end elevation of 3 feet. [1] The majority of aircraft operating at the Airport are contained within the Small Aircraft Category (i.e. < 12,500 pounds.

Method 2
FAA AC 150/5325-4B

- A five step process for determining recommended runway length
- Based on a family grouping of critical aircraft
- Utilizes tables in Appendix B
- Recommended runway length of 7,130 feet

Method 3
Aircraft Specific Analysis

	General Runway Length Recommendations for "Critical" Aircraft Types	
	FAA Takeoff Field Length (ft.) at Sea Level	FAA Takeoff Field Length (ft.) Adjusted(1)
Airplanes greater than 12,500 pounds and less than 60,000 pounds		
Dassault Falcon 50EX	4,890	5,857
Dassault Falcon 900DX	4,890	5,857

Source: Aviation Week & Space Technology, Aerospace Source Book 2009
Notes: Runway lengths based on takeoff distance of a 50 ft. obstacle (1) Adjusted runway lengths consider airport elevation, temperature, and runway gradient (116 feet AMSL, 95.0°F, and maximum difference in runway end elevation of 3 feet).

- **Both of these aircraft are currently based at Nut Tree Airport**

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Landside Facility Requirements

- **General Aviation Requirements**
  - Apron Space/Based Aircraft
  - Apron Space/Itinerant Aircraft
  - Aircraft Storage
- **Support Facilities**
- **Access Roadways**
- **Potential Land Acquisition**

Facility Requirements Summary

- **Airside**
  - Correct non-standard Runway Object Free Area (OFA) on south end of runway
  - Correct non-standard Taxiway Object Free Area (OFA) near the approach end of Runway 20
  - Evaluate runway length, width and strength needs
  - Evaluate instrument approach improvements
  - Evaluate potential land acquisition to support airside needs

Facility Requirements Summary cont.

- **Landside**
  - Evaluate additional aircraft parking apron
  - Evaluate additional hangar area in accordance with based aircraft demand
  - Evaluate land acquisition to support aviation and/or aviation related development
  - Evaluate additional access roadways to support future aircraft parking and hangar development areas

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Questions, Comments, Discussion?

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Next Steps

- Write and post responses to Working Paper 2 comments
- Production of Working Paper Three
  - Development Alternatives Analysis
  - Conceptual Development Plan
- Stakeholder Group & Public Information Meetings (mid-November)
- Discussion of Potential Meeting Dates/Times

Project Contact Information

- **Andy Swanson, Airport Manager**
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  - AJSwanson@SolanoCounty.com
- **www.solanocounty.com/airportmasterplan**

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Thank You!

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