Aircraft Hangar Development Guide

A Valuable Airport Resource

AOPA AIRPORT SUPPORT NETWORK

CONTENTS

The AOPA Airport Support Network program was introduced in 1997 in order to assist members in preserving general aviation airports throughout the United States. Today, AOPA works with some 1700 Airport Support Network volunteers to promote, protect and defend America's community airports.

This Aircraft Hangar Development Guide is another in a series of publications AOPA has created in order to help individual volunteers keep their airport healthy, vibrant and growing.

For more information on the Airport Support Network program, please contact us at

AOPA Airport Support Network
421 Aviation Way
Frederick, Maryland 21701
301-695-2200
asn@aopa.org

Or log onto www.aopa.org/asn

© Copyright 2005 Aircraft Owners and Pilots Association

Aircraft Hangar Development Guide
Version 1

APPENDIX I

AIRPORT REVENUE AND EXPENSE FINANCIAL ANALYSIS

The financial analysis is nothing more than a balance of the airport's revenues and expenses—think of it as balancing the airport's checkbook—and much of the information can be obtained from the airport owner's finance department. What follows are some of the principal elements that make up the airport's revenues, expenses, and other financial items. Whether a private developer or the airport owner builds and operates the hangars, most of these financial elements will apply to the typical GA airport.

Revenue

- Fuel sales: revenue from 100LL, Jet A, auto, oil, etc.
- Hangar rent: revenue from owner-operated/-built operated/built hangars
- Tiedown rent: revenue from tiedowns, including transients
- Ground rent/land leases: revenue from airport land leases for FBOs, charter operators, private hangar development, etc.
- Interest earnings: revenue from bonds and bank accounts
- Miscellaneous revenue: property tax returned to airport, penalty payments, etc.

Expense

- Salaries and benefits for full- and part-time employees
- Fuel purchases: wholesale purchases of fuel for sale (applies to airport owner-operated fuel system)
- Fuel flowage fees: cents per gallon of fuel sold payable to airport owner (privately-owned and -operated fuel system or large operator has its own fuel supply)
- Professional and contract services: standing engineering consultant fees, contract employee fees, and other consultants
- Utilities: payments for electric, water, sewer, heating
- Bank fees and lab services: bank fees for credit card purchases, ground water/runoff testing for environmental compliance, underground fuel system tests
- Telecommunications: telephone, computer services, etc.
- Office supplies: postage, paper, pencils, computer, interior areas and other supplies
- Repair supplies: parts to maintain airport vehicles, hangars, fuel system, etc.
- Repairs and maintenance: services for equipment repair, hangar maintenance, fuel system repairs, etc.
- Miscellaneous: travel, memberships, advertising
- Overhead allocations: secretarial staff, finance staff, management. This can be allocated based on a standardized method used for charging other departments of owner operations, or it can be direct actual costs. The FAA requires whatever method used be consistent for all departments and enterprise funds.
- Insurance: general liability and damage coverage
- Taxes: local, county, state
- Bad debt write-offs

Other items

- Loan payments: principle and interest
- Federal grants received
- State grants received
- Capital project expenses
- Fixed-asset depreciation

Use the financial analysis to build your credibility as a knowledgeable airport proponent. In a situation where there has been little analysis, this information also will help influence key stakeholders to support the project. If the airport's financial situation is not currently satisfactory, rectify this situation before proceeding with the hangar project. By tabulating the airport's annual financial results and tracking its current fiscal year performance quarterly or monthly, you will learn quickly about its financial health.

Sample Airport Operating and Expense Summary

REVENUE	BUDGET	ACTUAL	1QR	2QR	3QR	4QR
Fuel sales	460,000	480,000	110,000	130,000	140,000	100,000
Hangar rent	420,000	450,000	105,000	105,000	120,000	120,000
Tiedown rent	15,000	17,800	4,400	4,400	4,500	4,500
Ground rent	90,000	93,000	22,500	22,500	24,000	24,000
Interest earnings	46,000	48,000	12,000	12,000	12,000	12,000
Property tax return	48,000	45,000	0	0	45,000	0
Miscellaneous	12,000	11,500	4,000	2,500	3,000	2,000
TOTAL	**1,091,000**	**1,145,300**	**257,901**	**276,402**	**348,503**	**262,504**

EXPENSES	BUDGET	ACTUAL	1QR	2QR	3QR	4QR
Salaries, benefits	32,000	32,000	8,000	8,000	8,000	8,000
Fuel purchases	360,000	370,000	90,000	80,000	100,000	100,000
Contract services	82,000	90,000	20,000	30,000	20,000	20,000
Utilities	55,000	56,500	14,000	14,000	15,000	13,500
Bank/lab fees	12,000	12,500	3,000	3,200	3,500	2,800
Telecommunications	2,500	2,500	600	600	700	600
Office supplies	2,500	2,700	600	600	800	700
Repair: parts	15,000	20,500	5,000	3,000	6,000	6,500
Repair: maintenance	20,000	24,000	6,000	4,000	7,000	7,000
Miscellaneous	9,500	10,500	3,000	2,500	2,000	3,000
Overhead	85,000	86,000	21,500	21,500	21,500	21,500
Insurance	6,000	6,000	1,500	1,500	1,500	1,500
Taxes	4,000	4,000	1,000	1,000	1,000	1,000
Bad debt	1,500	1,300	500	300	400	100
TOTAL	**702,000**	**718,500**	**174,701**	**170,202**	**187,403**	**186,204**

OTHER	BUDGET	ACTUAL	1QR	2QR	3QR	4QR
Loan: principle	(82,000)	(82,000)	0	(41,000)	0	(41,000)
Loan: interest	(355,000)	(355,000)	0	(178,000)	0	(177,000)
Federal grants	150,000	150,000	0	150,000	0	0
State grants	0	0	0	0	0	0
Capital project expenses	(160,000)	(181,000)	0	(169,000)	(12,000)	0
Depreciation	(85,000)	(85,000)	0	0	0	(85,000)
TOTAL	**(450,000)**	**(471,000)**	**0**	**(169,000)**	**(12,000)**	**(262,000)**

In this example there is a budgeted loss of $61,000, compared to an accumulated year-end loss of $59,200. Since this loss can be attributed to depreciation charges, $85,000, (see comments about depreciation in "Project Planning — Step One"), there is actually a small surplus when depreciation is excluded from the review.

To summarize

	BUDGET	ACTUAL
Revenue:	1,091,000	1,145,300
Expenses:	702,000	733,500
Other:	(450,000)	(471,000)
TOTAL	**(61,000)**	**(59,200)**

APPENDIX II

HANGAR PROJECT PROFORMA

The financial project *proforma* is a detailed projection of the impact of your hangar project on the financial health of the airport. To create this *proforma,* take the year-by-year financial review as outlined in Appendix I and make some assumptions based on the scope of your hangar project. The financial institutions that will be providing the money for your project will probably want to see the analysis. The airport owner's financial staff might be able and willing to do this for you; if not, it is not difficult. Remember, it will demonstrate the true value of your project to the airport over time. This *proforma* will be useful when influencing the key decision makers and stakeholders to support the project. If you can prove that your hangar project could make the airport self-supporting (without the need for supplemental funds from the local tax base), you'll find them much more supportive.

The first task is to complete the annual financial analysis in Appendix I. Then list the project scope assumptions. Identify the scope items in the project that will impact the airport's revenue, expenses, and loan payments after the hangars are completed and generating revenue. Take a look at these assumptions for the example airport financial analysis used in Appendix I.

- Current airport hangar space rented: 124,000 square feet.
- New hangar space for rent: 30,000 square feet (30 new hangars, 24-percent increase in rentable hangar space). You will have to estimate the cost of the hangar project and use a loan calculator to estimate the interest and principle payments. The design engineering consultant should be able to create a project cost estimate.
- Utilities increase with the increase in hangars (24-percent).
- Increase the current rental rate of $0.27 per square feet per month as appropriate (assume 3 percent annual inflation).
- Additional fuel sales: There are currently 200 aircraft, and you will be adding 30 new hangars. Assume that 50 percent of the hangar occupants are new to the airport (i.e., 15 new aircraft). This means a 7.5-percent increase in aircraft based at the airport [(200+15)/200 = 1.075 or 7.5%]. Therefore, fuel sales also should increase 7.5 percent. The rest of the hangars would be occupied by current tiedown renters ($480,000+7.5%= $516,000).
- Current hangar rent: $450,000 (124,000 square feet) + $99,000 for the new hangars (30,000 square feet x $0.275/mo) = $549,000.
- Increase operating expenses 3 percent per year for inflation.
- Increase fuel purchases 7.5 percent.
- Increase miscellaneous revenues and expenses by 7.5 percent related to aircraft on field.

Now that the assumptions are in place, set up the projections. Consolidate some of the revenue and expense numbers such as those that are not impacted by the increase in aircraft based on the field. Exclude grants, depreciation, and capital project expenses because you want to project only the ongoing operating revenues and expenses to see if you can afford the hangar project.

The yearly projected total is the total revenue minus the expenses and loan payments. "Year 0" is the current financial state of the airport. "Year 1" assumes the hangar project is complete and generating revenue. This airport example would include the 7.5-percent increase in fuel sales and

purchases and 3 percent inflation increases in rental rates (3 percent inflation for following years as well). You could do these projections without considering inflation, or you could use a figure other than 3 percent, but don't forget the impact of rent increases on revenue. You can continue the projections through to the end of the loan term, but only the first 10 years are shown in this example. The numbers on the chart below have been rounded to thousands of dollars.)

After the project is complete and begins to generate revenue and attract new aircraft to your airport, thereby increasing fuel sales, you will see the net end-of-year financial picture start to improve. Inflation will continue to drive up costs and expenses, but your financing cost is constant, so you'll see an improvement in your airport financial picture.

If the airport does not own the major sources of revenue, like the fuel system and hangars, the viability of your hangar project could be significantly affected. This is why a careful review of the airport's financial situation is vital. Working all of these issues into your business plan is critical if you are going to build the support needed to execute your project effectively.

REVENUE	YR 0	YR 1	YR 2	YR 3	YR 4	YR 5	YR 6	YR 7	YR 8	YR 9	YR 10
Fuel	480	530	547	563	580	597	615	634	653	672	691
Hangar rent	450	549	565	582	600	618	636	655	675	695	715
Other rent	110	113	116	119	122	126	130	134	138	142	146
Property tax	45	50	51	53	54	56	58	59	61	63	65
Other	60	62	64	66	68	70	72	74	76	79	82
SUBTOTAL	1145	1329	1345	1386	1428	1472	1517	1563	1611	1660	1709
EXPENSES											
Salaries/benefits	32	33	34	35	36	37	38	39	40	42	43
Fuel purchase	370	398	409	422	435	447	461	475	489	504	519
Utilities	57	71	73	75	78	80	82	85	87	90	93
Other exp	162	167	172	177	182	188	193	199	205	211	217
Overhead	86	89	91	94	97	100	103	106	109	113	117
Other exp	11	11	12	12	12	13	13	14	14	15	16
SUBTOTAL	718	769	791	805	840	865	890	918	944	965	1005
OTHER											
Loan principle	82	84	86	88	90	92	94	96	98	100	102
Loan interest	355	353	351	349	347	345	343	341	339	337	335
New loan principle		20	21	22	23	24	25	26	27	28	29
New loan interest		86	85	84	83	82	81	80	79	78	77
SUBTOTAL	437	543	543	543	543	543	543	543	543	543	543
TOTAL	**(10)**	**17**	**11**	**38**	**45**	**64**	**84**	**102**	**124**	**152**	**161**

APPENDIX III

IS YOUR BUSINESS CASE COMPELLING?

For your project to be successful it must be compelling to the key decision makers and stakeholders. There are four key phases to create and integrate a compelling business case for your hangar project.

Phase One: Develop the business case
Phase Two: Check with stakeholders to ensure the business case is compelling
Phase Three: Develop a basic presentation
Phase Four: Feed the business case into your communications plan

Depending on the requirements of your project and the demands of decision makers and key stakeholders, you might not need to go through all of this detail. However, it is beneficial to go through these phases to ensure the project will be successful even when faced with resistance.

Phase One: Develop the business case

Review the questions listed in Phase One and brainstorm other questions that will capture the five aspects of a compelling business case. It is important to document the business case, even parts that seem obvious, because it gives everyone the same point of reference for communication.

Parts of a Compelling Business Case	Questions to Ask to Develop Each Part of the Business Case
PART ONE: Description of the project	■ What is the current situation? Describe what will be targeted in the project. ■ What is currently going well that can be built on? ■ What has been done to confirm the need for new hangars? ■ Who authorized/initiated the project?
PART TWO: Description of the project importance	■ Why are the hangars needed? ■ What is the motivation of airport users for new hangars? Do they perceive: • An opportunity – a situation leading to future success? • A need – a current shortage of hangar space? • A discomfort – an existing problem requiring a solution? • Pain – a severe problem requiring immediate response? ■ What situation demonstrated the current need?
PART THREE: Description of benefits of the new hangars	■ How will stakeholders benefit in the short run? ■ How will stakeholders benefit in the long run? ■ How will the airport, local community and owner benefit in the short/long run? ■ What are the consequences of not doing the project? ■ What resources will be available to complete the project?

Parts of a Compelling Business Case	Questions to Ask to Develop Each Part of the Business Case
PART FOUR: Description of the costs associated with the project	■ What will it cost in terms of money, time, and effort? ■ How will stakeholders be impacted by these costs? ■ What is the cost/benefit analysis (project *proforma*)?
PART FIVE: Measures for success	■ How will success be measured? What is the monitoring system? ■ What does success look like? ■ How will stakeholders recognize success?

PhaseTwo: Check with stakeholders to ensure business case is compelling

In Phase Two, evaluate how compelling the business case is to key stakeholders. Review these questions, and check your business case against them.

The Stakeholder will ask:	The Stakeholder really wants to know:
PART ONE: What does the project look like?	■ Is the project going to impact my business or daily work?
PART TWO: Why is this project important?	■ What's in it for me? ■ Who cares? ■ So what? ■ Is it going to negatively impact me?
PART THREE: Is it good for business?	■ How will the project help my business? ■ How will the project make my job easier/harder? ■ How will the project make me look good/bad?
PART FOUR: What will this cost me?	■ How will the project impact my budget, people, and time? ■ What do I have to give up if the project goes forward? ■ What additional workload will I have?
PART FIVE: When will this be successful?	■ How do I know I'm done with this and can go back to my "real work?" ■ How will I know there is a positive impact on my business?

Phase Three: Develop a basic presentation

Once the business case has been drafted into your plan and checked with a sample of stakeholders, develop a presentation that can be used for communication about the project. For example, Microsoft PowerPoint can be a helpful tool to organize and deliver your presentation. Adjust the format to match the audience to which you are speaking.

Phase Four: Feed the business case into your communication plan

Be sure that the communication plan you have developed to gain the support of key stakeholders includes a discussion of the business case. Also, keep in mind that the business case will change as the project progresses. Revisit the business case frequently as conditions and situations change, such as project cost increases.

AOPA Airport Support Network
Frederick, Maryland 21701 • 301-695-2200 • asn@aopa.org