

CHAPTER 9. FINANCE AND MANAGEMENT

This chapter will identify the financial opportunities available at Meacham and then discuss a range of management issues and procedures that could allow the City to take advantage of these opportunities.

FINANCIAL OPPORTUNITIES

Table 6-5 is a proposed 2004 through 2023 Capital Improvement Program for Meacham. Table 9-1 summarizes the levels of funding required and the source of those funds for the Short, Intermediate, and Long Term programs in Table 6-5. The required City of Fort Worth funding assumes that the match for federal Airport Improvement Program (AIP) funded projects will come from airport revenues and those projects identified as Infrastructure in Table 6-5 will be funded by other City Departments such as the City Transportation and Public Works and Water Departments (see 9-3 for a further discussion of this issue).

Table 9-1. CIP Funding Needed by Term and Source.

Timing	Costs			
	AIP Eligible Total	FAA	City of Fort Worth	
			Airport	Other Depts.
Total - Short Term (2004-2008)	\$15,372,000	\$13,834,800	\$1,537,200	\$742,000
Total - Intermediate Term (2009-2013)	\$13,848,000	\$12,463,200	\$1,384,800	\$1,074,000
Total - Long Term (2014-2023)	\$20,310,000	\$18,279,000	\$2,031,000	\$1,323,000

Airport funds required to match AIP funds in the Short and Intermediate Terms average about \$292,000 per year. About \$203,000 per year in airport funds is needed in the Long Term to match AIP funds. These annual averages will be used for the following analysis of funding available for airport operations and capital improvements. Averages are somewhat deceptive because a number of the projects, such as the Runway Safety Area reconstruction and Runway 16-34 rehabilitation, require substantially more funds than are available in one year. This suggests the Airport will need to save funds for a period of years to match a future grant. Since TxDOT has a tendency to fund large projects in annual stages, this is a reasonable strategy. This strategy can produce serious problems, however, when an unexpected project arises such as might be required if the deterioration of Runway 16-34 begins to accelerate.

ESTIMATED REVENUES AND OPERATING EXPENSES

Figure 9-2 plots Meacham revenues and expenses for the five fiscal years (the 03/04 numbers are budgeted). Through a number of cost saving measures coupled with an upturn in business flying, Meacham's revenues will exceed expenses in the 2003-04 fiscal year. The primary sources of revenues and expenditures are listed in Table 9-2.

Table 9-2. Primary Sources of Revenues and Expenditures for Meacham.*

Revenues		Expenditures	
Rent from City Owned Hangars	27%	Airport Maintenance	36%
Leases for Unimproved Land	25%	Administration	21%
Fuel Flowage Fees	24%	Airport Operations	17.5%
Terminal Rents	11.6%	Security	14%

* For Fiscal Years 99/00 through 03/04 (03/04 is approved budget).

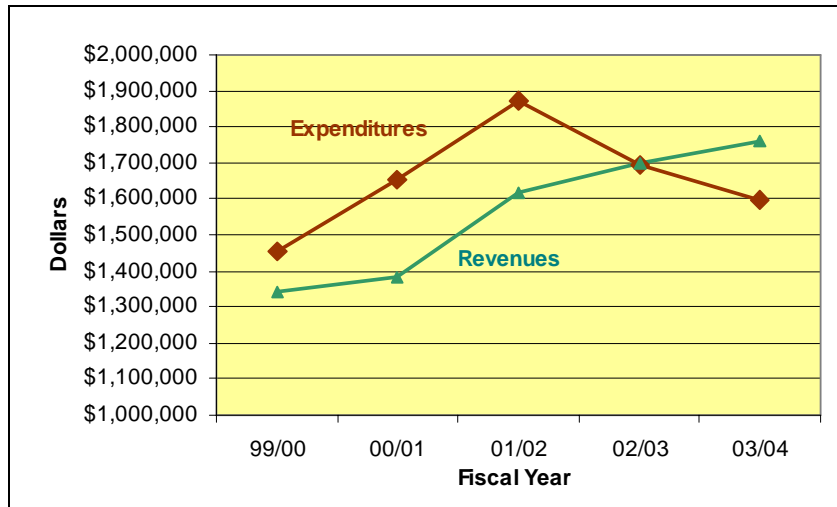


Figure 9-2. Meacham Operating Revenues and Expenses (1999-2004)

To identify the City's ability to support the Capital Improvement Program summarized in Table 9-1 with only airport resources, it is necessary to project Meacham revenues and expenditures for the 20 years of that program. Table 9-3 contains a high and low estimate of Meacham revenues and identifies the assumptions on which the estimates are based.

Table 9-3. High and Low Estimates of Meacham Revenues (2004-23).

Year	Fuel Flowage Fees ¹		Land & Hangar Leases		Terminal & Other Bldg. Leases/Rents		Remaining Categories	Total Revenues	
	Low ²	High ³	Low ⁴	High ⁵	Low ⁶	High ⁷		Low	High
1997	\$305,690		\$919,690		\$183,726		\$198,936	\$1,608,042	
1998	\$328,033		\$827,616		\$117,392		\$178,990	\$1,452,031	
1999	\$335,740		\$818,697		\$128,010		\$61,560	\$1,344,007	
2000	\$326,152		\$873,632		\$117,966		\$67,375	\$1,385,125	
2001	\$352,155		\$994,950		\$172,146		\$100,072	\$1,619,323	
2002	\$439,118		\$979,282		\$190,918		\$87,759	\$1,697,077	
2003	\$392,000		\$1,042,400		\$150,100		\$86,750	\$1,671,250	
2004	\$431,000	\$440,000	\$1,090,000	\$1,145,000	\$153,000	\$161,000	\$100,000	\$1,774,000	\$1,846,000
2005	\$458,000	\$478,000	\$1,140,000	\$1,197,000	\$157,000	\$164,000	\$100,000	\$1,854,000	\$1,940,000
2006	\$486,000	\$518,000	\$1,192,000	\$1,251,000	\$160,000	\$168,000	\$100,000	\$1,937,000	\$2,037,000
2007	\$513,000	\$559,000	\$1,246,000	\$1,309,000	\$163,000	\$171,000	\$100,000	\$2,022,000	\$2,138,000
2008	\$540,000	\$600,000	\$1,303,000	\$1,368,000	\$166,000	\$175,000	\$100,000	\$2,110,000	\$2,243,000
2013	\$678,000	\$828,000	\$1,601,000	\$2,001,000	\$182,000	\$228,000	\$100,000	\$2,561,000	\$3,157,000
2023	\$952,000	\$1,164,000	\$2,332,000	\$3,063,000	\$215,000	\$228,000	\$100,000	\$3,598,000	\$4,554,000

Notes:

1. Fuel consumption calculated by: holding AvGas sales at the 2003 level (AvGas sales have declined since 1997) and linear regression of 1999-2002 jet fuel sales (jet fuel sales increased through this period).
2. Flowage Fee remains constant at \$0.09 per gallon. (Flowage fee increased to \$0.11 per gallon in 2002 then returned to \$0.09 per gallon in 2003.)
3. Flowage Fee increased by \$0.002 (two hundredths of a cent) per year through 2013.
4. Assumes revenues grow at rate of total square footage projected in Table 5.13 (no increase in fees).
5. Assumes Table 5.13 growth rate plus 5% annual increase in lease rates through 2013.
6. Linear regression of historic revenues (a modest growth of about \$3,200 per year).
7. Linear regression of historic revenues plus 5% annual increase in lease rates through 2013.

Assuming all of the improvements in the Capital Improvement Program are implemented, the revenues produced by hangars and unimproved land should increase at about the same rate as the projections of needed hangar space in Table 5-10 plus any increase in lease rates. This is a very important point. *Land and hangar lease revenues cannot increase as shown in Table 9-3 unless the development identified in Table 6-5 is realized as dictated by demand.*

Table 9-4 contains a high and low estimate of Meacham expenditures and identifies the assumptions on which the estimates are based.

Table 9-4. High and Low Estimates of Meacham Expenditures (2004-23).

Fiscal Year	Meacham Cost Center							Total Expenditures	
	General Admin.		Airport	Airport	Airport	Electric	Debt	Low	High
	Low ¹	High ²	Ops. ³	Security ⁴	Maint. ⁵	Maint. ⁶	Service ⁷		
2000	\$299,332		\$268,307	\$233,208	\$520,848	\$99,937	\$30,393	\$1,421,632	
2001	\$328,566		\$276,356	\$240,651	\$600,169	\$99,436	\$109,313	\$1,654,491	
2002	\$374,053		\$353,842	\$224,566	\$708,869	\$105,584	\$106,288	\$1,873,202	
2003	\$389,245		\$268,026	\$221,015	\$626,271	\$83,805	\$103,263	\$1,691,625	
2004	\$338,581		\$279,585	\$244,380	\$544,168	\$87,632	\$100,238	\$1,594,584	
2005	\$349,000	\$549,000	\$280,000	\$256,000	\$566,000	\$100,000	\$105,000	\$1,656,000	\$1,856,000
2006	\$359,000	\$559,000	\$280,000	\$268,000	\$589,000	\$100,000	\$105,000	\$1,701,000	\$1,901,000
2007	\$370,000	\$570,000	\$280,000	\$280,000	\$613,000	\$100,000	\$105,000	\$1,748,000	\$1,948,000
2008	\$381,000	\$581,000	\$280,000	\$293,000	\$638,000	\$100,000	\$105,000	\$1,797,000	\$1,997,000
2013	\$438,000	\$668,000	\$280,000	\$427,000	\$766,000	\$100,000	\$105,000	\$2,116,000	\$2,346,000
2023	\$569,000	\$868,000	\$280,000	\$524,000	\$1,072,000	\$100,000		\$2,545,000	\$2,844,000

Notes:

1. Assumes 3% annual growth (inflation).
2. Assumes Cost of Marketing and Development Staff assigned to Meacham.
3. Held constant - assumes no air carrier service.
4. Assumes security costs are proportional to the amount of hangar area growth.
5. Assumes a 4% annual growth rate consistent with the additional hangar space forecast.
6. Held constant.
7. Assumes payments on existing Certificates of Obligation terminate in 2020.

The primary variable in expenditures would be the number of staff persons in General Administration. It is recommended later in this Chapter that the City of Fort Worth hire a person(s) responsible primarily for business development and marketing of the City airport system. The high General Administration column in Table 9-4 assumes the expenses for this position are bourn by the Meacham budget. It may be preferable, however, for this expenditure to be shared by all airports in the system.

FEASIBILITY OF THE CAPITAL IMPROVEMENT PROGRAM

With the estimates of revenues and expenditures in the previous section, it is now possible to discuss the feasibility of the Capital Improvement Program summarized in Table 9-1. Table 9-5 presents the CIP budget compared to two levels of Meacham revenues and expenditures.

Table 9-5. Financial Feasibility of the Capital Improvement Program Under Two Scenarios of Revenues and Expenditures.

Year	Total Revenues		Total Expenditures		Proposed CIP	Surplus or (Debt)	
	Low	High	Low	High		Hi Revenue	Low Revenue
						Low Expend.	High Expend.
2004	\$1,774,000	\$1,846,000	\$1,594,584	\$1,594,584	\$292,000	(\$40,584)	(\$112,584)
2005	\$1,854,000	\$1,940,000	\$1,656,000	\$1,856,000	\$292,000	(\$8,000)	(\$294,000)
2006	\$1,937,000	\$2,037,000	\$1,701,000	\$1,901,000	\$292,000	\$44,000	(\$256,000)
2007	\$2,022,000	\$2,138,000	\$1,748,000	\$1,948,000	\$292,000	\$98,000	(\$218,000)
2008	\$2,110,000	\$2,243,000	\$1,797,000	\$1,997,000	\$292,000	\$154,000	(\$179,000)
2013	\$2,561,000	\$3,157,000	\$2,116,000	\$2,346,000	\$292,000	\$749,000	(\$77,000)
2023	\$3,598,000	\$4,554,000	\$2,545,000	\$2,844,000	\$203,000	\$1,806,000	\$551,000

Under the best estimate of high revenues and low expenditures, Meacham would likely need to borrow money to finance the early years of the infrastructure improvements identified in Table 6-5. Under this scenario, revenues would again begin to exceed expenditures plus capital improvements around 2006.

Under the lower revenue/higher expenditure scenario, revenues would not exceed expenditures plus capital improvements until around 2015.

FINANCIAL SUMMARY

It is important to recognize that this analysis of Meacham's financial opportunities consists of estimates based on forecasts in this document and on a number of stated assumptions. The purpose of the analysis is not to identify a specific financing program but to identify the financial bounds that decision makers must consider before proceeding with the proposed Capital Improvement Program and a schedule for its implementation. This analysis does not address such opportunities as assistance by the City Transportation and Public Works and/or Water Departments to finance some of the infrastructure improvements with non-airport City funds. A number of the infrastructure improvements in Table 6-5 will support more airport related industrial development. The higher paying jobs related with this development makes it an attractive candidate for grants from the City's Economic and Community Development Department.

This analysis shows that Meacham can be developed within existing boundaries to:

- Accommodate all forecast aviation activity through 2023;
- Provide opportunities for increasing the square footage of industrial hangars by over 400 percent;
- Expand the airside of the airport to accommodate almost all business activity anticipated in the long term; and
- Return the airport to profitability optimistically by 2006 and at worst around 2015.

The challenge facing the City, then, is to create an environment that encourages development of Meacham to serve the City's business community and to create a management structure within the City's airport system able to achieve that goal.

MANAGEMENT ISSUES AND PROCEDURES

The City of Fort Worth owns and operates three unique airports in their "airport system." The fact that there are three such facilities available to the flying public provides the users of the City's airports with tremendous flexibility. The flexibility derives from the fact that local, regional and national aviation users have a choice in terms of amenities, leases and lease rates, and other services. This flexibility benefits aviation users as well as the City itself since more choices for aviation users typically equates to the ability to attract a wider variety of users and tenants.

Meacham International Airport is the "elder statesman" of the City's aviation system having been established in 1925 as described in earlier chapters.

BACKGROUND

A major component to the success of an airport is how well it's managed. As an economic enterprise, an airport should be thought of as a business and like any business, a sound management plan can determine whether or not the airport prospers. This section addresses several elements of a recommended airport management plan including operating and maintenance expense (O&M) budgeting, management organization structure, and management tools for the City of Fort Worth.

FEASIBLE O&M BUDGET AND FINANCING

A technique used to forecast maintenance and repair (M&R) budgets for airports is replacement asset valuation or RAV. RAV represents the cost in present day dollars for construction or acquisition of an asset of equal size, quality, capacity and function and includes the direct and indirect costs associated with

procurement and installation of an equal replacement. Factors that influence an asset's value are age, condition, remaining life, and how replacement of the asset will affect the airport development program.

- Capital assets at FTW consist of:
- Airside Pavements (Runways and Taxiways)
- Landside Pavements (Roadways and Parking Lots)
- Terminal Building
- Utility distribution systems (boilers, steam system, pumps, HVAC system)
- Fuel storage and distribution systems
- Airside and landside lighting
- Vehicles

RAV is used to predict an average annualized M&R cost using the function:

$$\text{Annual M\&R cost for an asset} = \text{RAV} \times \text{M\&R factor (where the M\&R factor is a percent of the asset value typically ranging between 0.1 and 4.0 percent)}^{32}$$

The M&R factor depends on several factors: (1) the level of service desired by the maintenance staff, (2) asset condition, and (3) asset age. For example, a newly paved runway requires very little maintenance. It has an M&R factor of 0.1 percent. On the other hand, the M&R factor of HVAC system components can be five or six percent. Table 9-6 displays the costs associated with airport components and the associated M&R factor for Meacham.

Table 9-6. Maintenance Forecast for Selected Capital Assets at Meacham.

Component	RAV	M&R factor	Estimated Annual M&R Costs
Airfield Lighting	\$258,000	1.2%	\$3,000
Airside Pavements	\$116,660,000	0.1%	\$104,500
Landside Pavements	\$2,540,000	0.9%	\$21,600
Terminal Building	\$17,572,500	1.1%	\$193,298
Total Selected Maintenance Budget			\$322,398.00

Applying the M&R formula to each capital asset yields a total M&R cost for the capital assets of the entire airport. The total O&M budget consists of the M&R costs plus employee salaries and other related expenses such as office equipment, allocated costs from services provided by the City, etc. The M&R analysis is part of a comprehensive evaluation of certain cost elements of the existing budget including allocated costs from downtown.

As part of the Aviation Department, FTW is financed through the City's Municipal Airport Fund. This is an Enterprise Fund meaning that it is designed to be self supporting. Historical budget data has varied between positive and negative cash flows. In the past two years Meacham has been self supporting with revenues exceeding expenditures. Approximately 55% of expenditures go toward salary and employee benefits. The remaining budget is O&M costs and debt service on Taxiway Alpha. Using these records, a feasible range for the airport O&M budget is \$450,000 to \$600,000 with an average of \$525,000. As

³² Task 7.4, "Element 7 – Airport Infrastructure Plan Airport Development Plan Update, Phase II Dallas/Fort Worth International Airport," April 1998.

shown in Table 9-4, this portion of the O&M budget will need to increase at a rate of about 4 percent per year assuming the infrastructure and hangar facilities identified in Figure 6-12 are constructed in response to demand. Table 9-7 summarizes the FTW revenues and expenses for the last five years presented previously in Table 9-3. The jump in revenues between fiscal year 2000-2001 and 2001-2002 is attributed to increased hangar and terminal building lease revenue.

Table 9-7. FTW Adopted Budget Fiscal Year 1999-2003

	FY1999-00	FY2000-01	FY2001-02	FY2002-03	FY2003-04
Expenditures	\$1,452,025	\$1,654,491	\$1,873,202	\$1,691,625	\$1,594,584
Revenue	\$1,344,007	\$1,385,125	\$1,619,263	\$1,697,077	\$1,760,934

REVENUE SOURCES

Several revenue sources are available to the City for O&M and other capital expenses

- *TxDOT RAMP* (routine airport maintenance program) – the City has already received a RAMP grant for contract (3rd party) maintenance for airfield lighting and pavement markings. This revenue source is available on an annual basis.
- *State Funding Program* – the standard block grant system
- *Alternate Funding Sources* – the City has an economic development officer with whom the Aviation Department can partner and have access to special funding sources for capital improvements related to job creation.

STAFFING REQUIREMENTS AND MANAGEMENT TOOLS

Based on discussions with Aviation Department staff and our research of industry practices, the following are recommended.

There are clearly different department staffing requirements for a multi-airport system to run the overall department administration efforts versus daily operations at Meacham Airport. This discussion will briefly address the department level staff functions, but will properly focus on staff line needs for Meacham. In other words, this discussion will differentiate between line and staff responsibilities for the City's aviation Department employees.

In a line/staff organizational structure, the line responsibilities are entirely separate and distinct from those of the staff. The staff functions are to provide advice, teaching, service and audit functions to the line. Under this structure, staff is responsible for the "how" or the "standard" to which the assigned function is to be performed, while the line is responsible for the "what" or the end results. For example, the City Aviation Director can hold a line unit head responsible for the bottom line – for services as far ranging as financial performance or level of customer service.

Staff Positions

The Aviation Department staff positions should be shared (or centralized) positions that support all the City's airports. Shared positions should include:

- *General Administrative Services Group Manager*– that oversees staff support to the line positions at each airport for general business management, leasing, utilities, insurance, grants administration, and security services.
- *Risk Manager* – who will (1) provide support for emergency preparedness and disaster recovery plans, (2) assist in minimizing insurance costs, (3) oversee workplace safety policies, (4) oversee workforce education needs, (5) assist in IT systems integrity and security, and (6) liaise with the City's Legal Counsel.

- *Budget Manager* – who will coordinate and implement budget preparation and fiscal services management activities and will successfully plan and implement the department wide budget process and related fiscal programs.
- *Marketing/Business Development Specialist* – who will be responsible for finding opportunities in the marketing of the City's airports in terms of user products and user services and programs. The mission of this position will be to successfully market the various "product lines" offered by the City's airport system.
- *Business Manager* – who would be added to the Administrative Services Group to oversee daily financial activities of the department, which include budget preparation and control, accounting, purchasing, and business planning and management; ensures compliance with applicable City policies, procedures, and state, and federal regulations.

Line Positions

The line positions recommended for Meacham include:

- *Airport Manager* – to oversee the daily functioning of the airport and manage the support from the staff positions as well as the daily work efforts of his immediate staff in the line positions.
- *Operations Coordinator and Staff* – to oversee and manage airside and landside operations and the safety of these operations. This person should also be responsible for insuring the Airport complies with new GA security guidelines released by the TSA on 17-May-04.
- *Maintenance Supervisor* – who will manage a small group of on-site technicians, but who will also rely on centralized staff to deal with all three airports.
- *Business Manager* – who will handle Meacham-specific administrative services
- *Customer Service Specialist* – to handle public relations and who can also serve as the receptionist
- Positions tied to the initiation of scheduled service, namely:
 - *Real Property and Leasing Manager* – to focus on lease and use agreements for tenant airlines and airline support tenants
 - *Security Manager* – to oversee compliance with FAR Part 39 requirements and compliance with the Air Transportation Security Act for passenger and baggage screening.
- Other skill sets – that are not covered under the centralized staff positions.

REVISE THE CURRENT LEASING STRUCTURE

A critical step for better situating FTW for improved landside development is to establish tenant leases that are compatible with the airport development plan. This provides for more efficient land use. It is recommended that the AD develop a lease restructuring strategy that balances the need to preserve the option for commercial air service with the much more pressing need for viable tenants in the terminal. More specifically, terminal tenants should be given six to 12-month lease terms. The current terminal tenants may not promote the highest and best use of the building, or more importantly from a long term perspective, the highest and best use of the terminal site. The promotional plan must balance proper leasing with maximizing the ability of FTW to identify and exploit other viable uses for the terminal site.

For business aviation, industrial, or commercial tenants – tenants who will have to invest their own capital in most cases – lease terms should be consistent with standard industry practices. These practices enable tenants to amortize their investment before the improvements revert to City ownership. Generally, these leases should have 30 to 40 year terms. The City is in the process of evaluating the present lease structure and will perform a separate rates and charges analysis.

Another part of this strategy is to have information and lease management systems. This system identifies the tenant, its premises, rental rate, rate adjustments, lease term, renewal options such as first right of refusal, insurance requirements, and any other related information. Physical inspections can be made of tenant property and the results can be input into the system to make sure the tenant is maintaining the provisions of the lease. In the event the tenant doesn't make repairs, the airport can have the right to repair the property on the tenant's behalf and invoice the tenant. Many of the existing leases are over 30 years old and contain confusing language. The leases need to be user friendly with realistic termination notices. The following is a suggested procedure for setting up leases:

1. Identification of leasing opportunity
2. Available space or property for lease. The availability of space is determined by the Airport Master Plan and/or airport manager.
3. Negotiate tentative terms and conditions with potential lessee. A status report is sent to all concerned parties including the aviation advisory board.
4. Prepare draft of lease agreement and send to city finance and legal departments
5. Incorporate changes made by the city and develop formal lease agreement.
6. Lessee review and execution of lease agreement
7. Distribute formal lease agreement to legal and finance departments, airport manager, lessee, AAB files, and other departments as required.

FTW Web Site

Lastly, the FTW airport website needs to better reflect the opportunities at Meacham. The Alliance Airport website offers a good example of the format and content that would serve this purpose.³³ The Alliance website opens with a "Facts & Figures" page that describes the available amenities and that identifies the economic contributions attributed to the airport. It then scrolls to a listing of the "Advantages of Alliance" that describes what the airport can offer prospective tenants. There is also a discussion on why Fort Worth is a "Great Place to Relocate," and a listing of the "Corporate Residents" at the airport. Those pages are applicable to FTW and offer the a good mechanism to disseminate the promotional message.

SUMMARY

This chapter identifies the opportunities available to the City for financing the recommended Capital Improvement Program for Meacham and discusses an organizational structure and management tools and strategies to help Fort Worth realize the inherent value of Meacham. Depending on the implementation schedule adopted by the City and the potential for financing some infrastructure projects with other than airport funds, the capital improvement program will likely require debt financing in the early years. If the complete capital improvement program is implemented on the recommended schedule, Meacham will reach a break even status as early as 2006 under an optimistic estimate of revenues and increased tenants. The key management recommendations are development of a marketing capability within the Aviation Director's office and restructuring of Meacham's tenant leases. The marketing plan is the key to phasing of the proposed infrastructure improvements and, importantly, to raising revenues needed for infrastructure as well as airfield improvements.

³³<http://www.alliance-worldwide.com>

Appendices:

APPENDIX A. RUNWAY 16-34 PAVEMENT DISTRESS MAPPING

APPENDIX B. AIR SERVICE ACTIVITY ESTIMATES

APPENDIX C. TAKEOFF CHARACTERISTICS - BBJ, MD-80, AND B-737

APPENDIX D. CLEARANCE REQUIREMENTS FOR TAXIWAY ALPHA AND A
PARALLEL TAXILANE