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Commuter commencement : starting a Part 135 regional airline

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Commuter Commencement:
Starting a Part 135 Regional Airline

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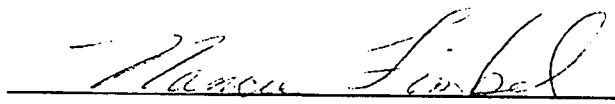

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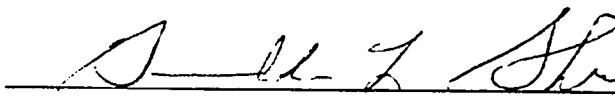

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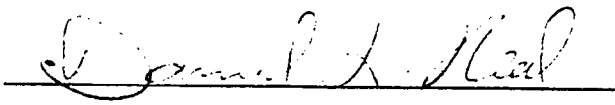

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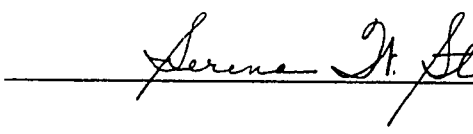

ABSTRACT

COMMUTER COMMENCEMENT

STARTING A PART 135 AIRLINE

by Daniel Joseph O'Neill

This thesis identifies and describes the six major processes involved with starting a commuter airline: incorporation, financing, certification, safety, planning, and acquisition. The goal is to design a blueprint for a management team that is endeavoring to introduce air carrier service to a defined market.

Discussions of the key tasks to be accomplished during the carrier's formation are included. The procedures and methods for completion of each are examined in relation to the schedule for completion. The paper assumes that two factors, economics and timing, are vital to the success of a startup airline.

The managers of a startup airline must be fully aware of the dynamics of the industry and marketplace. By classifying the challenges and approaching the hurdles with a coherent plan, management will be able to successfully introduce service.

To Leonore

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Chapter 1
INTRODUCTION

The purpose of this thesis is to identify and discuss the key aspects of starting an intrastate airline. The airline will be dedicated to carrying passenger traffic to regional destinations throughout a state. For the purposes of example, the state of California is used. The proposed operation will meet the criteria established by Federal Aviation Regulation Part 135.

The goal of introducing a Part 135 operation to the commercial airline market requires organization. This organization must be directed towards two key factors, the efficient use of finances and timing actions. The efficient use of capital is based upon the financing schedule of the company, the amount of capital, and the projected returns on investment. The other factor, timing, is defined as the efficient use of the funds available based upon dynamic market conditions. Effective financial preparation and complete market analysis are crucial to commencing an airline operation. Therefore, the management of the company must be continually aware of how company finances and market conditions affect their company.

The relationship between these two factors is manifested in six major processes which each airline entrant must complete. By completing each process in accordance with respect to financial analysis and timing, a company can focus its analysis and justify its worth.

The organization of this paper is based upon discussing each of the six processes as they would occur chronologically. The objective is to create a momentum towards the introduction of service by the management team using the factors of financial management (the efficient use of capital) and timing. Specific choices, including whether or not to continue the process, must be made regularly by the management team. It is not the intention of this thesis to give an example of a new carrier, but rather to give a blueprint for the process the management should follow to start a new commuter operation. This is a mid-level entry into the market in terms of size and complexity. The operation will be confined to a single state to simplify the certification and organization obstacles. The aircraft capacity will be nineteen passengers with minimal cargo. Cargo, however, may be substituted for passenger payload on scheduled flights during non-peak times. By keeping focus on the principles of timing and efficient use of finances, the most efficient and effective completion of the steps for introducing the company can be accomplished. These steps towards starting an airline can be accomplished by applying the efficient use of finances and timing principles to the six primary processes that are critical to service introduction. These processes are incorporation, financing, certification, safety, planning, and property acquisition. As each process is discussed, the two principles will be evoked. Any industry-specific terms or nomenclature used in the thesis to discuss these processes are defined in Appendix A.

The six processes that the management team must complete require varying emphasis by an adaptable company. The adaptability of the management will rely upon a flexible company structure to adapt to shifting priorities. The flexibility of the company is defined by the latitude each manager has to make

decisions. This latitude must be based upon tactics rather than strategy, since company strategy has to remain constant. Thus, the tactics vary with each dilemma, while the strategy does not. Managerial decisions must be ruthlessly analytical based on data that is collected, synthesized, and applied regularly.

Chapter 2
INCORPORATION

The Business Plan

A person or group interested in forming an airline must prepare a business plan. While the complete business plan may not be necessary for incorporation, it is certainly helpful in focusing and preparing the management for the goals of the incorporation process. A typical business plan will interweave all aspects of the venture into coherent and complete objectives. The plan contains information necessary to incorporate the company and serves as a preliminary introduction of the company to all interested parties. A basic business plan outline, sample business plan introduction, and detailed business outline for a Part 135 airline is contained in Appendix B. Analysis of aspects contained within the business plan (aircraft, facilities, etc.) are discussed later with respect the process that defines them. While the plan should describe the company in terms of prospective financing, target markets, and other means by which the company will be formed, it does not give operational specifics. These specifics are unique to each company. The purpose of the plan is to outline organization, objectives, and the financial needs of the company. This will eliminate confusion with regard to the

hierarchy of the company among the principals and insure that both internal and external communication lines are described for all participants.

Each section of the plan will be used to emphasize relevant data and stress attributes appropriate to the target audience. For example, a plan defining marketing objectives would be distributed to prospective advertising firms. Another section of the plan outlining the aircraft specifications and fleet size would be submitted to bidding manufacturers, and a section statistically analyzing projected revenues and financial criteria would be offered to lending institutions. The companies contacted then respond by submitting letters of interest and "good faith" estimates for their services as they pertain to the company's endeavor.

The business plan is used to attract venture capital and the venture capitalists will invest only in prospects that will ultimately produce sizable capital gains. The initial intent of the business plan is to convey the *company's magic* to prospective investors. This magic is substantiated by statistical data that is available in the Metropolitan Traffic Commission Air Transport Survey. This government published document is annually distributed to airport managers. Since the investments are made to unproven groups, venture capital investing has an inherently high degree of risk. Success is dependent on the financial management team (venture capitalists) working closely with the airline entrepreneurs to bring an idea to the reality of a successful introduction of service. The venture capital company must be carefully selected, since it will immediately become a fiduciary partner.

Timing for the introduction of the business plan is critical. The fresh ideas that the plan offers may be easily duplicated by established carriers. These

existing competitors may also publicly criticize the new ideas while adopting them. To benefit from the full impact of the new ideas, the company must be ready and able to proceed to scheduled operations expediently. This will minimize the time available for criticism and reduce delay within the FAA and the financial community. Since confidentiality is lost when business plans are distributed, the expedience with which flight service begins after the text is distributed is vital. The best industry climate to expedite the incorporation is during a period of increased market demand or service contraction or consolidation, away from an existing and proven demand. Evidence of these conditions can be identified by population movement reports from government census and current airline annual reports. A current list of California cities with populations of 50,000 or greater is provided in Appendix C. This list can then be correlated to passenger traffic demand from the Air Transport Survey and the viable airports within the state also listed in Appendix C.

Legal Concerns

A corporation is a legal entity created by a state through the legal drafting of the *articles of incorporation.* From a practical standpoint, incorporation is the registration of the company with the government. The specific registration requirement are provided in the Certified Air Carrier Packet from the Department of Transportation. From an economic perspective, it protects its members, owners, and managers. The separateness gives the corporation three major advantages: (1) Unlimited life. A corporation can continue after its original owners and managers are deceased. (2) Easy transferability of

ownership through stock certificates for the purpose of sale or merger. (3) Limited liability. Personal assets are not directly at risk in a corporate environment.

A scheduled, commuter air carrier should seek to incorporate itself under Subchapter S, also known as a tax-option corporation. Under this arrangement, the features of corporate (protected) and partnership (single tax) ownership are realized.

Participation in a Subchapter S corporation is normally limited to a maximum of thirty-five stockholders. The corporation's profits are not taxed at the corporate rates, but are taxed at the shareholder's rates. On an individual income tax return, each stockholder declares his or her share of the profits as personal income, and can also deduct a proportional share of corporate losses. Further, an incentive program for Subchapter S with companies having more than thirty-five stockholder members is eligible for profit-sharing programs. This program also creates advantages for specific personal tax shelters. Since it is not necessary to incorporate in the state where operations are conducted, tax benefits may also be derived from filing the necessary paperwork in states with favorable tax laws like Oregon and Delaware.

The registration of the company is accomplished pursuant to FAR Part 298. This regulation describes the conditions, requirements, limitations, and exemptions for registration. The Part 298 from the Commuter Air Carrier Packet is provided in Appendix D.

Incorporation Decisions

Incorporation is accomplished by filing the Articles of Incorporation with the Secretary of State for the state where operations are to be conducted. The two basic ingredients of the incorporation process are money and manpower. These two ingredients are inversely related. When the money supply is low, it is usually necessary for the founding principal managers to invest a substantial amount of time or "sweat equity" into the formation of the company. By contrast, a well-financed group may be able to contract services for many of the time consuming tasks. For the formation of a commuter air carrier, the process will require the consultation of a corporate law attorney. This lawyer will create the Articles of Incorporation that will outline the privileges and limitations associated with the specific carrier for each proposed operation. However, management should limit legal involvement to only those tasks that require specialized assistance. The Articles of Incorporation are filed with the secretary of state. A fee, approximately two thousand dollars, will be collected by the state for processing the articles of incorporation and recording the company name.

There will be specific data required for the incorporation and the subsequent registration of the company. The purpose of the information is to provide the state where operations are conducted and the Department of Transportation with background information on the applicant, including information on its ownership structure, the type of service to be provided, and to prove United States. citizenship. The following data will is required by the FAA:

1. The name, address, and telephone number of the applicant.

2. The form of the applicant's organization (for example, sole proprietorship, partnership, or corporation).

3. The state laws under which the applicant is organized.

4. A sworn affidavit stating that the applicant is a citizen of the United States.

5. A list of all persons (individuals or organizations) that own or control at least 10 percent of the stock of the applicant, indicating the number of voting shares and the corresponding percentage of the total shares outstanding that are held by each, along with their address, citizenship, and principal business.

6. A description of the classes or types of the applicant's stock that are authorized and the number of shares of each class or type that are issued and outstanding.

7. A list of the applicant's subsidiaries or any other company substantially engaged in the business which the applicant has a financial interest.

8. A description of the authority the applicant holds to conduct air transportation operations from the government.

9. A copy of the business plan including a narrative history of the applicant's business progress.

10. A list of the applicant's current fleet of aircraft, including the number and seating/cargo capacity of each type of aircraft and whether they are owned or leased. If the aircraft are leased, provide the identity of the lessor.

The incorporation process will identify four fundamental corporate decisions. They are (1) purpose, (2) scope, (3) objectives, and (4) strategy. Corporate purpose defines the overall mission of the firm. The purpose of an airline is to carry the public safely while producing a profit.

The corporate scope defines a firm's lines of business and geographic area of operations. There are many avenues which must be explored for viability prior to identifying the scope of the operation. For example, whether the company will carry mail, contract to rival companies for training, conduct in-house inspection and repair, and participate with travel agencies, are only some of the decisions that a new carrier will face. The company's scope should certainly utilize its strengths while limiting its vulnerability.

The purpose and scope shape the general philosophy and approach of the management group, but they do not provide managers with operational objectives. Corporate objectives are set to achieve the specific goals. These objectives include anticipated levels of profitability, operating revenue, operating expenses, return on investment, system wide load factor, route market share, and debt-to-equity ratio. These objectives are vital to the four processes yet to be discussed. They can be quantitative or qualitative in nature. Quantitative goals can be a 58 percent load factor or a $22 per stock share price, while examples of qualitative goals include an improvement in customer service and convenient ticket purchasing locations. The extent to which each factor can be defined and developed will ultimately affect a manager's ability for reaching that particular goal.

The expedience with which the proposed company begins service is important to investors. Corporate strategies set forth by the company describe how management will accomplish its objectives. Economically, the company must play to its potential strengths for realizing profits. These potential strengths must outweigh the barriers to entry and risk factors associated with the proposed operation. The principle of timing is a potential strength by virtue of

industry dynamics. A good market entry seizes available market segments that have been vacated by poorly positioned competitors. The entrant then uses the advantage of timing to save finances by capturing market share from a weaker competitor, reducing costs by negotiating contracts or otherwise lowering the barriers to entry.

With market change comes the opportunity to provide a service that is either distinct or superior to existing competition. By charging low fares and being more service oriented, the company establishes a presence in the market while building an inherent flexibility into the company. This flexibility stems from operating a lean, no frills operation predicated upon the ability of people rather than equipment. People are often more effective than computer systems. Computer hardware must be programmed for change, and therefore are less adaptable than people. Southwest airlines has demonstrated the superiority of people to computers by operating without a seat assignment system, while still maintaining one of the fastest turnaround times in the industry. This type of strategy would be ideal for commuter operations. The flexibility of this type of operation is further demonstrated by the company's ability to expand or change routing without having to change computer programs. Too many times, commuter airlines are over-developed in terms of reservation systems and computer dependence. The incorporation must clearly address the type of distinct proposal by the company and identify a structure capable of responding rapidly to the dynamic market demand.

In summary, incorporation is traditionally begun by the drafting of a business plan that demonstrates the anticipated viability of the company in the marketplace. The steps of the incorporation must be completed thoroughly and

responsibly with consideration for future growth. The company should then present the plan to the business community and begin the drafting of the Articles of Incorporation. This document is filed with the state government to formalize the formation of the company. The entrepreneurial team should incorporate the company with the aid of an attorney or law firm to insure that the company is not financially or legally exposed by an error or omission in the documents. The preparation of this document should eliminate individual exposure to lawsuit as well and precisely define the role each manager plays for implementing the business strategy. Finally, the company should also define and select the most favorable taxation status. Lead times for the order of events should be established and deadlines met to secure a smooth chain of events. Then the company can begin to implement strategies for realizing its goals.

Chapter 3
FINANCING

Background

The financing of the company is an art. It requires salesmanship and a professional presentation. While the business plan is the fundamental tool for soliciting interest in the company, the budget identifies the actual capital required and the expected return on investment. There are a number of resources that the solicitor may utilize to draft an edition of the business plan that are appropriate to the goal of gaining access to seed money. Requiring two years of operating capital, and dependent upon the scope and system capacity of the introductory operation. An initial cost summary, departmental itemization budget, and budget analysis for an airline are given in Appendix E. Of the costs associated with financing, people and aircraft require the most critical analysis. People are the biggest expense on the budget, and aircraft (due to contracts) are the least easily changed item on the list.

Financial allocation is always competitive. Currently funding is accomplished by fluctuating money markets. However, financing sources are changing constantly. It is the executive financial officer's responsibility to identify the most favorable method of funding the company. The method is based upon the terms offered by the funding institution and the needs of the

carrier. Management must resist the temptation of bringing an inadequately funded carrier to market. Therefore, a sound budget with contingency financing, anticipated return on investment (ROI), and scheduled rounds of subsequent financing must be established. Formulas for calculating anticipated cash flow and other airline financial equations was gathered from Brealey and Myers Principles of Corporate Finance. This information is provided in Appendix F.

Funds from the first and most generous round of financing are held to cover unforeseen costs. These funds must be reported to the investors. Subsequent rounds of financing required by unanticipated costs will have expensive penalties. For instance, the lender may require a greater equity share in the company or a higher interest rate on the unscheduled loan. This first round requirement of securing a high amount must be balanced against potential competition by other companies requesting initial funding. To successfully compete with other companies seeking outside funds, venture capitalist Bill Hambrecht of Hambrecht & Quist, a venture capital company, looks for the airline to achieve a four hundred percent earnings level and a minimum twenty percent rate of return on investment with profit margins that rarely exceed eight percent.

The Market of Today

From the financial formula given in Appendix F, a prospective company should calculate a cash flow statement, and a return on investment for the proposed operation. The market of today has a great demand for precision. While this demand has not replaced the requirement to be profitable, it comes a

close second. This is because lending institutions want to have confidence in the company receiving the funding. This confidence is earned by the company consistently predicting quarterly earnings on the Security and Exchange 10K reports accurately. The risk associated with new company and the volatility of the airline industry is conducive to risk loving financing institutions. The main source of funding for new airlines is the venture capital firm.

The Primary Financial Tool -- Venture Capital

Venture capital is money invested into business enterprises that generally do not have access to conventional sources of capital. Numerous regional commuter carriers have used this means for their first round of financing. The venture capital firms are best approached by a business plan presentation. Airline companies require a complex background evaluation. Their measure of the potential company is derived from an analysis that weighs the risk against the return on investment. According to Alex Wells, a published financial expert, venture capital firms currently seek anywhere from four to six times return on the initial investment depending upon the schedule for funding. Typically, venture capital groups will have an in-house legal department experienced with startup legal processes that is willing to be paid in stock shares, board positions, or promises of future client loyalty to the law firm that handles the venture capital firm.

The key ingredient to venture capital firms is an entrepreneurial team. This team, consisting of the new airline's management and the funding company's financial representatives must be willing to invest hard work into the company in

terms of their individual expertise and time. The purpose is to polish the new company's ideas for presentation to the financial community and to insure that the exciting aspects of the new company are communicated to potential investors. Depending on the scope of the operation, the venture capital firm may opt to either partially or totally finance the enterprise, or otherwise elect to present it to their investors.

The venture capital firm will be informed of all ideas and endeavors that the company will utilize to gain an advantage of over competitors. Both groups must work with equal diligence so as to prevent any erosion of confidence. This mutual effort is intended to provide a synergy that will see the operational plans come to fruition. This effort has a double benefit for the investor. While the company receives a valuable service, the venture firm will profit from the company's gain by an increase in stock awarded to it to introduce the company, or by interest accrued on a loan for seed money.

Venture firm listings are available in entrepreneurial journals and financial periodicals. In choosing a firm, the company should narrow the search to firms specializing in start-up investments as opposed to companies who prefer to participate in second and subsequent rounds of capital acquisition. Once a choice has been made to use a certain firm that is compatible with the new company, the decision is complete and total. Failure to commit to the success of the endeavor due to contractual terms will lead to the ruin of the enterprise. Thus, the venture capitalist's involvement with management is an essential element in agreeing to finance a start-up. How the company will expand and seek future financing through subsequent rounds of stock offerings should be well negotiated and defined by both the venture firm and the start-up company.

The contract should be structured to reflect the company's projected return on investment. To avoid a conflict of interest, both the company and the firm should have simultaneous and equal gains and losses. The venture capitalist should also be invited to hold a position on the board of directors. This gives the firm the ability to respond quickly to effect alternative courses of action in case business opportunities change.

The majority of venture capital investments are made by purchasing equity through stocks or debt convertible to equity (bonds) in the start-up firm. In turn, investors will focus on the company's profitability. Venture capital firms bring the experience to management of dealing with debt and equity markets such as investment banking firms, commercial banks, and possibly other airline startups.

Alternative Capital Approaches

Other sources of financing may also prove to be valuable to the fledgling company. These sources include commercial banks, finance companies, investment banks, aircraft vendor leasing companies, or even government subsidy. Arrangements with such companies usually require a long-term commitment.

Loans fall into either a short term or long term category. Commercial banks are historically short term lenders due to the source of their funds. The usual practice is to establish a line of credit. This describes the amounts and terms upon which the bank will advance funds. This credit line simplifies the financial process. This practice has been used for aircraft purchases in recent years for

the purpose of acquiring aircraft. In most cases, the aircraft are collateral for the loan.

Finance companies offer debt financing for a broader needs. The basic finance company services include equipment financing, leasing, and packages designed for long term loans. In many cases the packages are similar to banks in terms of their pricing and credit evaluation policies.

Investment bankers serve as intermediaries between investment outlets and the industry. They provide private debt placement and public equity offerings. A private debt placement is similar to a bank loan, except that the funding source of the loan is a private party.

Vendor financing may require the company to enter into an agreement specifying firm commitments to lease a specified number of airplanes. In exchange for this commitment, the company will acquire its first delivery of aircraft below market price. The vendor, in turn, will reap profits on future orders, spare parts, and maintenance.

Another tactic for financing is to secure governmental funds under the Essential Air Services Contract. Under this subsidy the government will provide funding to the company in order to secure air transportation to population sectors that would not otherwise be served. Care should be taken as to the planning of this type of endeavor to insure a profit and, essentially, that the subsidy exceeds the revenue shortage caused by the conditions of the funding for service.

The borrower should seek any reasonable resource to enhance revenues and attract investment. Information such as proposed routes of service should be classified by distance and passenger demand. This will enable the investor

to see the existing demand and accordingly calculate the new company's potential for profit. Through some analysis of the routes an optimal grouping of origins and destinations can be derived. This pairing of cities, the frequency of flights or schedule of service, and planned expansion of operations directly affects the amount and schedule of financing. By contacting the respective city councils and chambers of commerce, the company may gain concessions or actual funding from these cities. Additionally, alternate sources of revenue such as air mail, cargo, and charter contracts may enhance profit. Groups that may particularly benefit from the new services may influence major funds. For example, senior citizens may lobby for accessing a retirement fund if their population is courted properly. Every avenue should be explored. Whether financing is provided in terms of outright capital investment or lower equipment prices, favorable lease agreements, or revolving lines credit for fuel, each concession enhances the potential for positive cash flow for the company.

Creating an Interest in the Plan

The art of attracting capital involves very diverse styles, ranging from subtle to direct inquiries. The company must prepare to respond to investor interest. To do so, the management team must thoroughly prepare all aspects of the plan and be ready to defend its findings against proposed alternatives. However, as a secondary reason, any defense of the plan will decrease the possibility of embarrassment when the investing firm questions data produced by the start-up team that has not been subjected to scrutiny by the team itself, government officials, or supporting vendors.

Investors will evaluate the team's readiness based upon their ability to defend the plan and subsequently decide to invest if the company shows potential. To determine the company's potential, the investor will assess the intrinsic value of equity from capitalization. The firm's intrinsic value is the present value of the net cash flows to shareholders (capable of being produced by the company's existing assets) plus the net present value of any investments to be made in the future. This financial determination usually reveals oversights or undefined objectives by the management team. To succeed in raising capital, the team must defend or amend its plan under investor scrutiny and demonstrate readiness for conducting the operation. Any venture capitalist knows, investors do not invest in plans, they invest in people.

If the management team emerges intact from the investor's scrutiny, the investment analysts will then perform a valuation of the company. The method of valuation appropriate to a start-up commuter airline is the free cash flow approach. It starts with an estimate of the value of the firm as a whole and derives the value of the equity by subtracting the market value of all inequitable claims. The estimate of the company's value is found as the present value of cash flows, assuming all-equity financing, plus the net present value of tax shields created by using debt. The variables for the company's value are defined in the example. The formula is:

$$V\text{ø} = C/k\text{-}g$$

To understand how the free cash flow method values the company, the following contrived example is provided:

Western Pacific Airlines Corporation (a fictitious company) has a cash flow before interest and taxes of $1 million for the previous fiscal year. The expected growth (g) is 6% per year indefinitely. To accomplish this growth, the company will have to invest an amount equal to 15% of pretax cash flow each year. The tax rate is 30%. Depreciation of non-leased equipment was $100,000 in the previous year and is projected to grow at the same rate as the operating cash flow. The market capitalization rate for the non-leveraged cash flow will be set at 10% per year (k), and the firm currently has debt of $1 million for non-financed start-up costs. Now, we will determine the initial value of the company (Vø).

The free cash flow for the company's valuation is

Before-tax cash flow from operations		$1,060,000
Depreciation of Equipment	$ 106,000	
Taxable Income	$ 954,000	
Taxes (30%)	$ 286,200	
After-tax non-leveraged income		$ 667,800
After-tax cash flow	$ 773,800	
New investment (15%)		$ 159,000
Free cash flow (C)		$ 614,800

The free cash flow is the after-tax cash flow minus the new investment. This method of valuation is only valid when there is no debt financing. It ignores the interest expense on the debt, as well as any tax savings resulting from the tax deductible advantage of the interest expense. This enables the investor to determine his net return on investment. From the example, the present value of all future free cash flows (Vø) is

$$V\text{ø} = C/k\text{-}g = \$614{,}800/.1 - .06 = \$15{,}370{,}000$$

Now, the debt ($1 million) must be subtracted to yield the equity value of $14,370,000.

If the free cash flow approach is used to calculate the present value, the capitalization rate will be different. In the free cash flow approach it is the rate appropriate for non-leveraged equity. In other approaches it is the rate appropriate for the leveraged equity, which should be lower. Since leverage affects the company's stock risk as the major markets change, these two capitalization rates will be different.

This approach is similar to capital budgeting, or the valuation approach that another firm would use in assessing the company as a possible acquisition target. This approach eliminates redundancy of effort by accounting and finance and actually brings both together. Start-up airlines are almost never debt financed due to their inherent risk.

The cash flow estimate also provides a gauge for positioning the company in the market at a defensible point to avoid unwelcome buyouts and attack

strategies. The management will avoid competition with superior competitors and seek to concentrate on the two key points of concern for finance that are essential to the investment goal, profitability and borrowing capacity for growth.

The free cash flow approach is the most direct and understandable method for analyzing the funding of a new airline. It has many advantages that are directly utilized by a commuter airline start-up. The calculation provides a financial pulse for the company, enabling management to position the company through the marketing and planning stages effectively. Furthermore, it is appropriate to airlines since they are seldom financed with debt due to the intrinsic risk. It is crucial that the company be accurately valued and that estimated earnings be precise. However, the basic selling of the idea still stems from the merits and new ideas that the company can communicate to investors through its business plan and presentation.

Chapter 4
CERTIFICATION

The Entities Involved

One of the critical aspects of a new commuter airline is the interaction between management and the Federal Aviation Administration (FAA) of the Department of Transportation (DOT). The relationship is predicated upon the need to earn government authorization before providing service to the public. This relationship must be kept on the most professional level.

Under the Federal Aviation Act, the certificate applicant must obtain two separate authorizations from the Department of Transportation: "safety" authority in the form of an Air Carrier Certificate from the FAA, and "economic" authority from the Office of the Secretary of Transportation. Section 419(e) of the Act details the requirements for anyone proposing to operate scheduled passenger service to eligible city pairs as a commuter air carrier. The company must first be found "fit, willing, and able" to provide such service. This "fitness" requirement is in addition to registration, licensing, and insurance. Commuter carriers that are designated by the Department to provide "essential air service" may not begin scheduled passenger service until they have been found fit by the Department of Transportation.

The Determination of Fitness

Fitness of the applicant refers to the carrier's size, financial resources, flight equipment, strategy for conducting the proposed operations, and the management's adherence to various legal requirements. The commuter service applicant should file a registration form (OST Form 4521) indicating intent to operate such service with the DOT. Examples of preliminary application forms (Form 4521 and 8000-6) are provided in Appendix G. The registration is accompanied by a filing fee payable to the Department of Transportation. Also the evidence of current insurance coverage, which is necessary prior to commencing operations, is required. After receiving a fitness application, the Special Authorities Division of the Office of Aviation Operations reviews the proposal for content and completeness. For further information on the specifics of the application, consult Appendix H. This appendix is taken from the Certified Air Carrier packet published by the Department of Transportation. It provides the guidelines for the fitness determination.

The Department uses a three-part test to determine the fitness of a company. First, the Department examines the managerial competence of the applicant's key personnel to see whether they have sufficient business and aviation experience to operate an airline. Second, the Department reviews the applicant's operating and financial plans to see whether the applicant has a reasonable understanding of the costs of starting operations and has a realistic plan for raising the capital. This is known as economic authority and is critical to attain early in the process. Typically, the Department requires new carriers to have funding to operate for two years without income. The method by which

this authority is realized has been discussed in the Financing section of this thesis. It includes the issuing of stock through the Securities and Exchange Commission or other revenue generating method. Third, the Department looks at the applicant's compliance statement to see whether it and its key personnel have a history of safety violations or consumer fraud that would render them ineligible. Additionally, the applicant is required by Part 204 to provide the Department with proof of United States citizenship.

While DOT Authority is secured, the applicant can begin the certification process. This process is designed to demonstrate to the FAA the applicant's capacity to conduct operations safely. To begin, there are numerous filing requirements. The completion of these requirements is essential. A list of the filing requirements is given in Appendix I. Once all filings have been made, and if the applicant appears to be "fit" to conduct the proposed service, the Department will issue a "show cause" order tentatively finding the applicant fit. The Department then publicly proposes to issue commuter authority. This allows interested persons an opportunity to file comments in support or in opposition to the proposed fitness findings. If no objections are filed, an order finalizing the tentative findings will be issued. If the application subsequently raises substantive questions or controversial issues, they will be resolved either through an evidentiary hearing or by an Administrative Law Judge. If the Department issues a final decision finding the applicant fit, the applicant is eligible to hold an Air Carrier Certificate and Operations Specifications from the FAA authorizing it to conduct the proposed commuter operations.

The result of the certification process is the issuance of Operations Specifications (Ops Specs) and certificate by the FAA authorizing the operation

within the parameters established. The applicant should determine the best strategy for entering the marketplace prior to beginning the certification phase since many aspects of the Ops Specs are specific. Inspector B.C. Berns of the FAA, cites the 8400.10 Department of Transportation Handbook which states that new certification has third priority behind safety programs and inspection of existing operators. Inspectors are given a mandate with regards to the certification of new carriers based upon a demand that is derived from the existing budget, manpower available, and current public need.

In the certification process, economics and timing are critical. The certification applicant must be aware of other airlines' abilities to influence the certification process. This will afford the applicant some capacity to anticipate barriers to entry established by inspectors during the process and enable the preparation of tactics to offset the delays these barriers cause. The applicant should first consider a non-threatening operation in a market that is poorly developed in terms of service provided to the public. This will justifiably have the greatest "public necessity." Regardless of the time factor (averaging 1.5 years for certification from beginning to end at the San Jose Flight Standards District Office), the applicant should recognize that the responsibility to complete the process is the applicant's alone.

Three keys to the process that are used as a litmus test by the FAA are:

1. Leadership - The inspectors will investigate the applicant's plan for a pro-active strategy that insures safety and accountability and responsibility are never compromised.

2. Readiness - The applicant should prepare any work that may require substantial time in advance.

3. Diligence - The applicant should commit to completing the process as it is designed by the FAA.

The FAA will want to observe the applicant displaying leadership during the process. The individual pursuing the certificate must have a sincere sense of accountability and responsibility. The applicant should not display any reticence toward the completion of a required task or uncertainty about vital and available information. Inspectors delay the poorly prepared or those who attempt to circumvent steps in the process. These three keys must be used in all aspects of the airline plan and operation to insure safety. The inspector will require the company structure to reflect the performance goals of accountability and responsibility. The hierarchy of the management should therefore be clearly defined with the appropriate lines of communication. The policies set forth should explicitly display a positive attitude that seeks and disseminates information pertaining to the safety of operations and the goal of public convenience.

The second and most manageable FAA qualifier is readiness. All public information and required readings should be deciphered by the management team prior to any meetings with inspectors. Its members should understand Federal Aviation Regulations and terminology pertaining to Part 135 Commuter operations thoroughly. All appropriate reference material should be acquired. In particular, the applicant should order a copy of the 8400.10 Air Transportation Operations Inspector's Handbook, by the Department of Transportation. This

handbook combined with publications pertaining to certification available at the local Flight Standards District Office, will enable management to plan for the process.

Diligence, the third key, must be evident through every step of the application process in order to demonstrate organization and efficiency. The applicant must completely accomplish every step of the certification process in a logical and coherent way. Diligence is displayed by the completion of each step in order. Deviation from the order of events for the sake of expedience is frowned upon by the FAA. Standardization and coordination seem to be the inspector's assessment subjects. An attempt to breach the process will quite often cause a higher degree of scrutiny by the inspectors. Therefore, the applicant should always choose to adhere to the chain of events rather than to force the approval process along.

While diligence, readiness, and leadership may seem difficult to demonstrate to the FAA, the applicant should view this challenge as an opportunity to showcase specific talents and skills. The applicant can take advantage of the fact that the standards used to measure the level of commitment to the endeavor are based on many years of experience. The applicant only needs to be aware of the subtle method the FAA inspector judges the company's readiness. By accepting and absorbing information and feedback the applicant can meet FAA expectations.

The Phases of Certification

Having discussed the background of certification process and its general purpose, it is time to present the specific aspects of the process. The certification process consists of five phases. A flowchart and schedule outlining the phases are given in Appendix J. The phases *must* be completed in the following order :

1. Pre application Phase
2. Formal Application Phase
3. Document Compliance Phase
4. Demonstration Inspection Phase
5. Certification Phase

While it is vital not to present any information out of order to the FAA, advance preparation hastens the process. Advance preparation is based upon the assumption that certain tasks require a minimum, fixed amount of time to complete. By pursuing two independent goals simultaneously, the overall process can be shortened. For example, manuals required during the Document Compliance Phase should be written during the Pre application and Formal Application Phase and not after each of these preliminary phases is complete. This type of time management will expedite the application and show a high degree of readiness to the FAA inspection team.

While the Pre application Process is more formality than content, it establishes a first impression of the individuals who are proposing the operation for the FAA. Therefore, substantial research and investigation should be

completed by the applicant prior to commencing this phase. This process is initiated by a letter to the FAA outlining the proposed service. An initial meeting will take place between principal members of the FAA and the personnel forming the company. Expectations by both parties will be discussed and questions answered.

The second phase is the Formal Application. This is the second most time consuming process and is heavily affected by the management team's organization. The Formal Application Phase facilitates all subsequent phases and is the crux of the application. The process consists of six action items. The first is the Schedule of Events, which assigns milestones to actual dates in order to coordinate manpower between the FAA and the applicant. To insure a high degree of certainty for milestone dates and timely completion of tasks prior to submission of the schedule to the FAA, a computer scheduling program should be utilized. A good program is Microsoft Project. The program is relatively inexpensive and is available for most personal computers. This program will manage the schedule by generating statistical probabilities of completing a specific objective by a given deadline, thus enabling management to adjust completion dates and to optimize manpower throughout a given process. An example of a schedule output from this program is provided in Appendix K.

The second formal action is the submission of the Initial Compliance Statement. With this document the company identifies how it will specifically comply with every applicable regulation under FAR Part 135. The third submission is a letter of intent and acknowledgment that the applicant is endeavoring to secure airport and office facilities for the operation. While phases one, two, and three do not require capital expense, letters of intent

should be carefully prepared, based on research and evaluation of the company's present and future requirements. Real agreements made during this process and a high degree of detail is essential. Facility issues are discussed more thoroughly later in this thesis.

The next requirement is to draft the General Operations Manual and the Maintenance Manual. The General Operations Manual is compilation of the Management Manual, the Flight Operations Manual, and Ground and Station Operations Manual. Every policy, procedure, and duty that is necessary to operate the airline in compliance with the FARs should be contained in these manuals. Each one should be cross referenced to provide for interaction between departments and their individual and joint functions such that no duty or regulation is omitted. These manuals should be based upon a numbering system and code that allows for expansion and computer input for revision. An excerpt of a General Operations Flight Manual is given in Appendix L. This appendix describes the type of organizational codes and numbering system necessary for updates, revisions, and cross referencing as well as a completed Flight Operations portion of the General Operations Manual. The fifth submission requirement is the Management Qualification Resumés of all key personnel. The resumés from the incorporation and registration can be used for this submission.

The sixth and final submission is the initial training curriculum for personnel. For a start-up carrier it is usually advisable to contract to outside sources for this process. This will not be an excuse for not being thoroughly familiar with the aircraft and computer systems, emergency procedures, and company policies, but rather an acceptable attempt to avoid the initial expense of in-house training

and training materials. The Formal Application Phase is completed by the second meeting with the FAA investigation team. During the meeting, the FAA will resolve discrepancies and respond to inquiries with these initial submissions and finalize the Schedule of Events.

The third phase is Document Compliance. During this stage all discrepancies between proposed operations and FAA regulations are reconciled. Good communication and coordination with the appropriate FAA inspectors is vital. The Final Compliance Statement is submitted from which the FAA develops the Ops Specs. Additionally, all supporting data pertaining to the manuals must be submitted by the applicant at this time. Submissions include, but are not limited to, the Minimum Equipment List for the aircraft, the Cockpit Differences List, Performance Documents, Weight and Balance Procedures, Hazardous Materials Program, Final Training Curriculums, and Security Plans. Since it requires the selection and identification of aircraft and facilities the Document Compliance Phase is the most time consuming. It is vital that this phase be carefully planned in order to minimize lease costs for the period between equipment and facilities acquisition and their actual usage.

The fourth phase is the Demonstration and Inspection Phase. Marking the expenditure of substantial capital for the company, it is the point at which aircraft are actually leased for inspection, demonstration flights flown, and emergency evacuation demonstrations conducted. It is also the point where initial personnel are hired and trained to company standards in the company's newly leased or purchased facilities. All training programs should be operational and all required equipment must be in place to minimize the time,

and therefore expense between aircraft and gates acquisition and the first revenue flight.

Throughout the process the applicant will simulate normal and abnormal operations for the FAA Inspection Team. The FAA Certification Project Manager will specifically observe the training, maintenance procedures, airman certification, dispatch, and weather collection methods. It is vital that the applicant be ready to perform to regulation standards and subsequently meet the expectations of the consumer at the completion of this phase.

The final phase is the Certification Phase. The primary purpose of this phase is to finalize documents and manuals through the Ops Specs. The FAA will then ensure that the Operator has the appropriate DOT Economic Authority from the Secretary of Transportation. This final phase also includes devising a method for the FAA to establish a mutually acceptable post-certification surveillance program.

Substantial advantages may be realized by the proposed operation sought when the applicant knows which operational waivers to request from the FAA. By researching and preparing well in advance, the applicant may gain specific concessions in the Federal Aviation Regulations during certification. These waivers are described in the Operation Specifications which are issued by the FAA with the Certificate of Operation to complete the certification process.

Chapter 5

SAFETY

The Safety Principle

The most critical objective of any airline operation is safety. The principle of safety is guided by vigilance, determination, and judgment. Proven methods of safe operations and practices must be intertwined into the day to day job specific functions of the company. A clean safety record is the one aspect of company's performance that cannot be debated in terms of cost and profit. The aspects of the safety plan may take different shapes, but the principle to conduct safe operations must be constant.

Safety must be active consensus of the Company's personnel. From the most senior manager to the most junior employee, safety must be the singular commitment that assures the quality of the operation. With particular emphasis on operations, an airline is committed to the goal that every aspect of its operation be safe and secure for each of its employees, passengers, freight customers, and every individual associated with the company. Safety must begin with the management, but it can not stop there. A consistent record of safety requires perpetual vigilance by all personnel.

Although the company philosophy must consider pertinent economic factors important to the success of the company, these factors are secondary to the

issue of safety. Without safety there is no operation, no profitability. Procedures for safe operations must be second nature to each employee of the airline.

Safety Implementation Procedures

Procedures for implementing safety will be based upon the guidelines set by the Federal Aviation Administration in conjunction with the National Transportation Safety Board. Procedures will be derived from government policy and regulations which use time-tested methods for conducting operations. Company personnel must be trained to use the most up to date safety techniques. Currency of training will reduce the risk of any recently discovered dangers affecting the potential for safe operations.

After initially training company employees, a perpetually updated training program must be developed. The program will insure that each worker has had the most current training available. Rewards should be given to individuals who show the highest level of performance consistently, so as to foster the understanding and importance the airline places upon safety. Any individual demonstrating a lack of competency or consistency, particularly with duties pertaining to safety, must be dismissed.

Any factor compromising safety must be addressed by management immediately. All issues pertaining to safety, no matter how seemingly insignificant has to have precedence over all other factors affecting decisions. The priority for safety will eliminate the possibility of any issue being set aside and possibly becoming compounded by other factors.

Section 601(b) of the Federal Aviation Act specifies, in part, that when prescribing standards and regulations and when issuing certificates, the FAA shall give full consideration to the duty resting upon the airlines to perform their services with the highest possible degree of safety in the public interest. The FAA is charged with the responsibility for promulgating and enforcing adequate standards and regulations. At the same time, the Federal Aviation Act states that the holders of airline certificates must demonstrate the highest possible degree of safety awareness. The meaning of Section 601(b) of the Federal Aviation Act should be clearly understood. It means that this responsibility rests directly with airline managers, irrespective of any action taken or not taken by the FAA or the FAA inspectors and agents.

The FAA's objective is to make a factual and legal determination that a prospective certificate holder is willing and able to fulfill described duties as set forth by the Federal Aviation Act and to comply with the minimum standards and regulations established by the FAA. Naturally, this objective continues after certification. If at anytime a certificate holder fails to comply with the minimum standards and regulations, Section 609 of the Federal Aviation Act specifies that the FAA may re-examine any certificate holder or appliance. As a result of an inspection, a certificate may be amended, modified, suspended, or revoked, in whole or in part. Additionally, Section 605(b) provides that whenever an inspector finds that any equipment used or intended to be used by the airline for the purpose of air transportation is not in condition for safe operation, the inspector shall notify the airline certificate holder and the product shall not be used in air transportation until the FAA finds that the product has been returned to a safe and suitable condition.

Safety Standards

The following conditions or situations are condensed from the Inspector's Manual 8400.10. Each condition must not be tolerated by airline management as each indicates an unwillingness to carry out duties as set forth by the Federal Aviation Act:

- Repetitive noncompliance with minimum standards and regulations
- Insufficient training programs, instruction procedures and/or guidance
- Lack of concern or enthusiasm on the part of airline management for compliance with the Federal Aviation Act or the Federal Aviation Regulations
- Lack of operational control of aircraft
- Inability to insure the air worthiness of aircraft
- Inaccurate record keeping procedures

It shall be the responsibility of the company's Chief Pilot to check that all flight operations personnel, training, equipment, practices, and data utilized by the airline meet or exceed the standards set forth by the airline and the Federal Aviation Regulations for their specific use. Any procedure or appliance not meeting standards as set forth by company manuals, operations specifications, and Federal Aviation Regulations shall be immediately removed from service.

It shall be the responsibility of the Director of Maintenance to ensure that all maintenance personnel, training, equipment, practices, and data utilized by the

company meet or exceed the standards set forth by the airline and the Federal Aviation Regulations.

The Director of Operations shall verify that all data, procedures, policies, and practices utilized by the airline, in the operation of the airline meet or exceed all standards set forth by the Company, the operations specifications, and the Federal Aviation Regulations.

It shall be the responsibility of the Manger of Information Systems to ensure that all information required by the airline is meticulously recorded, properly analyzed, and quickly relayed to individuals or parties requiring such data. The standards for data processing shall meet or exceed all standards set forth for the airline and the Federal Aviation Regulations.

Safety relies on the individual integrity of the people employed by the airline. To this end, the company must make every effort to hire properly trained and qualified individuals who possess a keen sense of the importance and impact that their decisions and actions will have upon the airline. The company will train each individual to full understanding of company specific methods derived in the interest of safety. The company will preserve the integrity of training whenever possible by reinforcing and updating information.

Fundamentally, the company will be guided by the Ops Specs, which provide the legal basis from which operations are conducted. The contents provide direction and guidance to inspectors concerning actions necessary to generate an impeccable safety record. All information systems developed or used by the airline shall meet the basic guidelines set forth in this FAA document.

The airline will form a Safety Committee whose task it is to oversee all facets of the airline's operations. This Safety Committee should be composed of the

individuals responsible for the operations of the company. These company positions or suitable counterparts possessing the necessary authority to make and enforce policy should comprise the safety committee:

- President
- Director of Operations
- Chief Pilot
- Director of Maintenance
- Manager of Information Systems

Each company person performing a safety function must have communication access to the National Transportation Safety Board (NTSB). This access is the freedom to report to the NTSB without reprisal by company executives or the board of directors. Publications such as air worthiness directives and service bulletins (maintenance related information), board investigations, safety enforcement proceedings, and safety recommendations must be kept current. These safety recommendations are the board's end product. These recommendations need to be immediately incorporated as appropriate. With human lives involved, timeliness is essential to the flow of information. The safety recommendation document should provide meaningful information to be applied to airline operations to reduce the likelihood of air transportation accidents.

Potential investors will be particularly focused upon how the safety objective is met. Safety is met by following a system that works. This system is based upon Federal Aviation Regulations. Within the company, safety must evolve to

fit the operation. For public relations and marketing employees and contractors, safety issues should be limited to internal decisions. The effect of external discussion or press on the subject of safety would only have a negative impact since it raises the prospective customer's concerns about the inherent danger in aviation.

Chapter 6
PLANNING

The primary *function* of management is planning. There are a multitude of planning activities which can consume staff time. The key planning concerns for the start-up phase of a commuter carrier are budgeting, marketing, manpower, and fuel management. The primary variable costs for the company are manpower and fuel. With proper investigation and negotiation these two company-specific items can be optimized. The two fixed costs, aircraft and facilities, warrant in-depth evaluation. Although they could be considered planning, these acquisitions require the highest company expenditures prior to operational status and are discussed separately in the final section of this thesis.

The Method for Planning

A solid organizational structure must be established prior to any meaningful planning. To accomplish this, a chart detailing positions, responsibilities, authorities, and lines of communication needs to be developed and distributed. This will enable personnel to disseminate and communicate information in a timely and effective manner. Proper analysis is the foundation to methodical planning. From the collection and analysis of the passenger traffic data, the manager can accurately forecast the city pairs and flight frequency that the

company must support to effectively enter the marketplace. Failure to accurately forecast the air transportation demand at the time of market entry usually spells disaster for a new company.

For all planning activity, company policies and procedures must be in place. The airline's policies are broadly stated courses of action stemming from principles identified in the business plan. The policy statements provide fundamental guidelines and boundaries for decisions while procedures give the specific functions and duties to be implemented.

Policy is developed as a hierarchy. The hierarchy is used to eliminate inherent conflict arising from the goals of the company. For example, the policy to provide safe transportation and comply with government regulation is superior to the policy of providing free travel to employees. Hence, when an issue arises that pertains to passenger safety at an expressed company financial expense, the long-term benefits from a reputation for safety will have superior importance to short-term expenses of implementing a measure that enhances safety. Subsequently, subsidiary policy may then guide the introduction of company procedure and indicate the extent to which the measure is established.

There are many complex considerations generated from policies. Each consideration accounts for company and customer degrees of indifference, levels of tolerance, performance, and public perception. Within the company, managerial input should be solicited to contribute to the company approval for policy decisions. This collaboration of managers and executives can effect a change in policy. By defining the latitude and scope of the change, managers have the authority to alter existing policy provided that Federal Aviation

Regulations are not compromised by the change. Policy, the frame of the company, is based upon judgment, regulation, and the company strategy.

The procedures are the detailed methods for acting on policy. Procedures are usually defined in a step by step process in company manuals. The process should cover all possibilities for which a certain procedure may be appropriate and the optimal method for each situation. Unlike policies, procedures are not set in stone. They should be flexible and adaptable to the dynamics of the policy to which they are responding.

Company manuals are the elaboration of the planning process. These manuals include but are not limited to the organization and function of management, or the procedures for operating or maintaining aircraft. These manuals delineate the type and order of action to be performed and the responsibilities of the person who is to authorize, perform, inspect, and record the procedure for completion. The standards and measures pertaining to the proper completion are derived from policy and clearly stated in the manual. A closed loop flow chart, addressing all possible circumstances is an ideal method for developing the procedural process to be used by employees. The loop should state the rules governing the process, the latitude that is permitted in completing the task, the standard for completion, and the company officer authorized to check the completion of the task.

Critical Planning Tasks

There are four critical tasks to be planned prior to the certification of the airline: budgeting, marketing, aircraft acquisition, and facilities acquisition. Due to their critical impact upon certification, financing, and capital expenditure, aircraft and facilities acquisition are discussed in the next section. This leaves budgeting and marketing. These two tasks require the greatest advance planning.

The budget has the most direct impact upon the company's solvency. Budgets forecast anticipated financial flow and must be controlled by an experienced accountant. A basic budget outline with an initial cost summary and financial performance projection are preliminary required items. The budget establishes the guidelines for requisitioning, auditing, and measuring the impact of actions through the accounting department. The management will constantly look to the staff for feedback. From this information, management must decide on an overall objective and guideline that the company is to follow with regard to expenditures. While it is important to control expense, over control may limit managerial effectiveness. In order to make cutback or expansion decisions, managers will use information provided by company accountants. Accordingly, the accountants will receive instructions from management on how to position the company. For example, the budget controllers could structure a goal of attaining short term profits or, conversely, long term growth. Consequently, this operational/financial relationship must be diligently directed and controlled. Thus, it is management's responsibility to set

performance standards, compare actual performance, and control expenses through the disbursement of the company's funds.

The budget should be designed so that it can expand and grow with the company. It should easily provide information to authorized employees pertaining to tax preparation and financial status. The budget should also reflect the company hierarchy with respect to its control and access. For example, the level of authorization to purchase equipment should be limited to the level of management authorized to plan for the purchase. This eliminates any internal discrepancies between department managers. Furthermore, it enables departments to efficiently plan the economics of their respective missions.

An adequate start-up airline budget should define all costs, assess the impact of increases and decreases of expenditure within individual departments, assess impact on other departments, and optimize the use of capital on a daily basis. To accomplish this, an interactive computer spreadsheet should be developed. Next, data collection should be performed and analysis generated. This analysis is described in Robert Clemen's book Making Hard Decisions. Clemen describes simulation techniques (Chapter 5) for sensitivity analysis of decision problems. Complete computer analysis programs such as Sam Savage's Simulation are available at retail stores. With such programs, parameters and limits can subsequently be altered to show discrete, optimal expenditure of capital under specific conditions.

Airline marketing should be clearly defined in terms of the price, product, place, and promotion. These four elements are the common controllable marketing factors that are used to reach the target market. The planning

process will divulge the relative emphasis each receives in the marketing program.

Since the airline industry is service-oriented, customer satisfaction is a paramount consideration. The objective is to motivate the consumer to purchase a ticket in a competitive market. Historically, in this environment the greatest motivation has been price. Therefore, the company's pricing strategy is crucial. Typically the lowest priced carrier will reap the lion's share of enplaned passengers. Therefore, any effort to reduce operating costs and pass the savings along to customers stands to be well-rewarded. This supports the principle that economics drive the company and correspondingly, the industry.

The second variable is the product. The airline industry provides a unique product; a scheduled transportation service. The space on a departing flight is extraordinarily perishable. Therefore, the marketing strategy should be to maximize the total passenger revenue per revenue passenger mile, otherwise defined as yield. This is basically the price or average fare per mile flown. Hence, yield accounts for diminishing returns by dividing by the Available Seat Miles. Thus, the marketing of the product, an airline seat, is essentially the price.

The third and fourth elements of the marketing mix have equal importance and are subject to company finances and objectives for market position. While advertising medium, incentive programs, and the schedule affect the promotion, route planning and facilities acquisition (sales points) define the place. The place and promotion are mutually dependent. A promotional advertisement should be appropriate to the place of sale. For example, a freeway billboard should be located near a location where tickets may be purchased. Each

element requires company specific analysis as warranted by the proposed service.

Planning Marketing Criterion

The marketing of an airline is a balancing act. On one side, the airline wants to penetrate the target market and produce the highest possible yield. On the other side, the company does not want to attract competition. To accomplish this carriers develop a niche or specialty. The gives them the ability to focus on being the most efficient operation in a market segment for a given location. The fundamental determining characteristics will be the routes, city pairs served, the frequency and timing of the schedule, and market segments targeted. The company should plan an integrated growth strategy that takes advantage of the wide variety of reasons the public travels and capitalize on this demand by bringing the public to their niche. This strategy enables the company to defend itself as the home team rather than a visitor. For example, a company, well-known for serving gourmet food on every flight, seeks to expand its operation to a new airport. A competitor that is already operating on that route does not serve meals, but charges a lower price. The expanding company should not stop this meal service just to match the lower cost ticket of a competitor that does not provide this service. Rather, the company should seek to differentiate from the competitor by attracting passengers with their best gourmet meals. Criteria for planning and implementing ideas, based upon key company objectives, should be established with a simple marketing vehicle, decided upon at the outset.

Planning Objectives

Goals are to be established for the company as a whole, then for each administration and department according to this plan. Goals should then be prioritized according to timeliness of completion of scheduled milestones. These prioritized goals should be defined in terms of department and individual objectives as appropriate. Each planning phase should be mutually exclusive such that no department has equal authority on an issue. Concurrently, the same program must be collectively exhaustive so that all aspects of the program are accounted for on a case-specific level. A new carrier must operate by a system that parallels employee goal realization. This pro-active system, which assigns all employees well-defined, tangible goals and holds each accountable for achieving them, must be prioritized to help managers complete their duties. To achieve high quality completion of each assigned objective, an evaluation team will monitor progress. This team has three characteristics:

1. Unity - To avoid overlap or duplication of managerial duty.
2. Inspiration - To empower the manager under the guidance of the team to identify future areas of improvement.
3. Command - To define a clear-cut hierarchy and communication lines.

The evaluation team will use two indicators to track marketing success: 1) the adherence to company safety standards; 2) the resulting revenue generated. Beyond tracking success, the evaluation team may make recommendations to develop managerial efficiency and effectiveness.

This strategy should be a closed loop consisting of three events. First, the individual's record for meeting each departmental objective are reviewed with respect to that objective's relation to the overall company plan. On a daily basis, the evaluation team will create a plan for controlling activities in progress. Then, the team appraises the activities to emphasize individual effort and eliminate redundancy of duty with other employees. The loop then comes around to the manager and individual worker back to a new goal setting step. The loop will repeat until the objective is met.

During the evaluation process, feedback is provided during follow-up discussions during the period of time set for achieving the goals. Feedback protocol is established during the goal setting exercise and may be in a variety of formats. For example, a format may be as complex as data on quantitative results (such as unit costs, mechanical delays, or fuel consumption), or data pertaining to qualitative results (such as customer satisfaction, public image, industry recognition), or as simple as a memo categorizing flight delays.

Since the entire evaluation process is dependent upon people accepting responsibility for achievement of goals, the process becomes reaffirming. The evaluation process of planning future decisions based upon analysis of past events is a continuous cyclical process. It is predicated on the company's decision analysis techniques. Decision analysis is the scientific approach that management must utilize to plan the development of the airline. An example of a decision analysis problem is given in Appendix M. Decision analysis, incorporated into the planning process, will eliminate bias and emotion from the important choices that management must make.

There are two classical approaches as given by Robert Clemen in Making Hard Decisions that can be employed simultaneously are: 1) The Analytical Approach and 2) The Decision Tree. The Analytical Approach defines, qualifies, and differentiates actions and results. In this approach, a flowchart is developed stating the problem, identifying the decision to be made, and then graphing the acceptable range of results. The Decision Tree subsequently compares, selects, and adopts the potential choices of the decision and corresponding results associated with each alternative. In this approach, statistical probabilities are generated and applied to weight the effect of each decision, thereby assigning values to the range of possible outcomes. Both approaches should have variables sensitive to the economics and timing for implementation of the decisions. Now, sound decisions involving finance, capacity, manpower, and purchases are vital to remaining competitive. With the aid of computers, these problems can be solved immediately and programmed into the operations network.

All planning activity must be centralized. Any perturbation of the operation is to be constrained by cost. Alternative operational procedures need to be quantified by the effect on net quarterly income. This constraint is critical to see how the perturbation impacts the overall company profit. Fundamental goals establish the parameters of the planning activity. Then relevant data pertaining to proposed changes is to be compiled and limits established. Statistical and sensitivity analysis is then applied to each variable to locate optimal allocation and use of resources. The planning activity is then completed by setting policy and procedure to correlate, acquire, and utilize the company resources according to the analysis. This centralized planning process enables the

company to have advance awareness of how to best utilize its resources. Inexpensive computer technology is available for this planning. This use of computers for central planning is a boon for a relatively small airline operation because it enables the company to have analytical tools on a par with major carriers at minor costs.

Chapter 7
AIRCRAFT AND FACILITY ACQUISITION

Considerations

Many factors must be considered before reaching the critical decision to acquire aircraft and facilities. Since the type of aircraft and property acquired must be appropriate to the operation, the market and available property must be carefully compared. Acquiring gates and aircraft define the capacity, range, costs, markets, and image the company will establish. The effects of these decisions will determine the corporate strategy for many years. Facility and aircraft acquisitions are also unique since they require substantial capital expenditure and are vital to the certification process of the start-up in terms of timing their introduction and financing the purchases.

Many variables pertaining to costs and expected returns are considered by management prior to deciding what type of aircraft and which facilities they should acquire. For example, the two highest variable costs that an airline will face, manpower and fuel, are directly dictated by the choice of aircraft (equipment type) and facility location. Since aircraft and facility acquisition are dynamic fixed costs secured by purchase or lease, they have a enormous impact upon subsequent decisions. By looking at both aircraft type and facilities separately, managers can define and optimize manpower, fuel, and other logistical variables.

Fleet Planning

There are four points of evaluation that should be explored by a commuter operation fleet planning model: current resources, corporate objectives, projected industry environments, and marketing strategy. These points are evaluated for the operation prior to selecting any aircraft.

The carrier's current resources are its finances, the support equipment available, the cost associated with it, and financial data on aircraft orders. Financial data include acquisition cost, start-up costs (support and training), and unit operating costs (fuel etc.). Information pertaining to a manufacturer's purchase or lease incentive programs should be considered with respect to the company finance schedule as well. Any special circumstances, such as tentative agreements with labor forces pertaining to inexpensive maintenance, should be given a statistical weighting factor in the analysis. Also issues such as budgeting for advance training of maintenance and flight crews must analyzed. In short, the corporate planning unit must analyze the carrier's total resources at the selection origination point.

For a commuter operation, the main corporate objective notwithstanding safety, is clear and concise--return on investment. This must be accurately predicted and maximized at all phases of the operation. This is achieved by reducing costs, maximizing prices without inviting competition, and continually enhancing the load factor. To reduce costs, the management should select and operate only one type of aircraft. This will reduce the training requirements of flight and maintenance personnel, as well as spare parts inventory, and variety

of support equipment needed. The challenge for the manager then becomes the ability to properly match the equipment type with the prospective market to optimize the load. If one type of aircraft does not fit the proposed operation, then the operation must be changed. Consideration must be given to the potential load factor, the acceptable levels of financial liquidity, market shares on prime routes, debt-to-equity ratios, and the general guidelines regarding new-aircraft acquisition. The corporate objective is realized by the acquisition of an aircraft appropriate to the period of use in the operation.

The projected industry environment is the third area of the fleet planning process. Data collection for analyzing the industry environment should include an outlook for the national economy, the operational region, the industry, and the carrier's anticipated performance. Aircraft equipment requiring alteration or modification for the proposed operation or certification should not be selected. Management must then make agreements to acquire the aircraft at the optimum time to begin the operation.

The final area of fleet planning is marketing strategy. This is a key piece of information since it establishes the method by which the company will attract passengers. The market strategy will influence the size, speed, range, and operational factors of the aircraft. For example, the service may emphasize a mid-range route length, with twenty to thirty passenger loads, rapid turn around times, and short runways. This will quickly narrow the variety of aircraft choices.

Once the company has planned these four points of evaluation, the Director of Operation's (DO), who should possess expertise and experience in finance, marketing, line maintenance, engineering and flight operations, takes the information and identifies the type and manufacturer of possible candidates.

The company then statistically compares the viability, profitability, and general specifications of the candidates. An example of this comparative analysis is performed in Appendix N. Aircraft data should include payload-range diagrams, cruise performance charts, runway requirements, noise, fuel consumption, parts and service availability, and flight limitations.

By timing the acquisition of aircraft, the company can poise itself to benefit from periods of aircraft availability, surplus, price elasticity, future order agreements, and delivery dates. This timing is critical to keeping costs low and competitively entering the market. The expertise of the individual managers to select the best equipment type for their operation is determined by the how well the operation is defined by the four points of evaluation. The goal of each manager is to minimize operating costs, while maximizing return on investment. To accomplish this, managers time the need for aircraft to coincide with favorable industry demand. Then by correlating finances to be available the company can negotiate the best terms for their optimal choice from the vendor.

Leasing Operational Space

Securing facilities is the second major process requiring capital prior to certification. The negotiation for facilities is a complex endeavor. The limited availability and advance preparation of the premises require lead times exceeding a year. This may preclude a quick service introduction. If the

facilities, gate space, and ticket counters are available via an existing vacancy or new construction, the company should move quickly to identify and secure the specific contracts for leasing. To do so, management should possess expertise in real estate transactions and begin arrangements for occupying the proposed space at least 180 days in advance.

Airport leasing space is a specialty even in the commercial real estate business. There are numerous costs (aircraft overnight parking, landing fees, and passenger facility charges) and considerations (security, baggage handling facilities, and holding space) that vary with each proposed airport. It is critical for the company to analyze the present and projected future use of the facility. For example, if the airport is to serve as a base of operations, the ideal airport must have the facilities to maintain the aircraft and park overnight. By considering these types of concerns, the company will avoid many additional costs and disruptions in service.

Once management has determined the cities to be served, the dimensions and quantity of facilities required, and the initial schedule the airline will support, the airport authority can be contacted. A port authority, city government, or municipality typically presides over the airport. The representatives will require information identifying the type and quantity of space for the proposed operation. Then a packet detailing the costs and requirements for using the field will be prepared and presented to the prospective company. There are many regulations and restrictions unique to each airport that require advance research. This preliminary investigation should be done well in advance for such reasons. For instance, many airports require an environmental impact study to assess the impact a new operation

would have on noise and pollution in the area. This type of research may take many months to complete and will have a cost to the company. Then, if the airport may have no space presently available, the company must be placed on a waiting list. The earlier these types of potential delays and costs can be identified and taken into consideration, the better positioned the company will be to expedite the process and commence operations.

When the type and amount of space are available and identified, a letter of intent to operate must be written to the airport authority for each airport. The letter should include a schedule of proposed operations and a description of the aircraft including the maximum gross landing weights and passenger capacities. This is followed by a letter of confirmation from the company agreeing to provide passenger services, ticket counter space, security, and gate/holdroom space for operations. With this information, the airport's facility management will draft a lease stating the terms of the contract to lease the premises. The company may negotiate the costs and fees depending on the economic condition of the airport and the demand for space. Typical considerations to be addressed by management are stated in Appendix O. Prior to lease agreement, the company should complete all formal and regulatory government processes. This will minimize the expense of paying rents without the potential for income. During the completion of the lease the airport will then request proof of certification, licensing, and insurance. Each of these documents should be complete to avoid forfeiture of occupancy priority.

The primary concerns for the carrier are price, period, and priority. The maximum negotiable amount of each in relation to the other two must be set by management prior to negotiation. The price of the lease is not a trivial issue.

Typically, airports will charge a flat rate per square foot for space. However, there are numerous subsidiary and incidental charges. For example, the company must negotiate who is responsible for making improvements to the space being leased. These "tenant improvements" must not only be completed according to the applicable codes and ordinances, but must also conform to the carrier's market and image. The airport also imposes incidental charges in the form of landing fees, baggage handling, and inspection services. These factors directly affect the cost of operations and should be negotiated aggressively. Both the cost per unit area and the variable fees can be negotiated to achieve the lowest possible cost.

The second consideration of the lease is the duration. Management planning should forecast the traffic demands for double the proposed leasing period so that the company can decide if renewal of the current premises is desirable. The period of the lease ultimately affects the flexibility the company has to respond to changing passenger demand and should be minimized with respect to the third consideration, priority.

Priority is the company's place in line for space. The goal of priority is to be first in line with right of refusal with little or no cost. The dynamics of the airline business create a necessity for the airline to maintain options on leases in order to respond to demand. By maintaining top priority for the addition of space and lease renewal, the company will be more competitive by adapting to change quickly in terms of increased flights, frequency, and aircraft.

Selection of both aircraft and facilities are areas that must be considered in detail. The criteria for selecting both must be planned in advance for allocation of finances and be well timed to seize favorable market conditions. By properly

analyzing the needs of the company, the planning staff can effectively select and negotiate for the appropriate equipment.

Chapter 8

CONCLUSION

The creation and subsequent formation of a commuter operation is a formidable process. In a dynamic industry, it takes skill to accurately identify a potential market. Extraordinary management talents are required to launch the operation during the periodic windows of opportunity. These talents include quality ideas for achieving profit, expedient incorporation, diligent certification effort, the relentless pursuit of operational safety, careful planning analysis, and precise selection of equipment.

Currently, there is limited literature for approaching this new business and comprehensively completing the process. While the governmental agencies are concerned with the safety, reliability, and necessity of the operation, there is no insurance given to the financial success of a company. Meanwhile, the financing of the company will require large returns on investment without consideration to the limitations and restrictions imposed by the government. By employing the factors of finances and timing management as described in this thesis, the company will have an advantage.

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11. APPENDICES

A. Definitions

B. Business Plan Outline and Model Introduction

C. Airport Feasibility Lists

D. Part 298 Requirements

E. Financial Performance Example and Budget Outline

F. Financial Terms and Formula

G. Sample Forms

H. Application Procedures

I. Filing Requirements

J. Certification Flowchart and Schedule

K. Microsoft Project Printout

L. Company Code and Manual Examples

M. Aircraft Selection Analysis

N. San Jose Airport Information

APPENDIX A: DEFINITIONS

The following appendix defines words and terms used in this paper. The definitions pertain to the airline industry. The definitions are presented in alphabetical order on the following four pages.

DEFINITIONS

Accounts payable the unpaid balance of amounts collected for transportation, furnished by collections as agent, and other accounts payable

Acquisition costs cost of an aircraft itself plus spare parts, ground equipment needed, maintenance and flight training required, and cost of money itself

Air cargo total volume of freight, mail, and express traffic transported by air

Air carriers the commercial system of air transportation, consisting of domestic and international certificated air transportation companies

Aircraft hour, revenue an aircraft's airborne hours in revenue service, computed by the time in air

Aircraft industry the industry primarily engaged in the manufacture of aircraft and aircraft components

Aircraft operation an aircraft arrival at or departure from an airport with FAA air traffic control service

Assets property or property rights owned by the business that is valuable, either because it will be converted into cash or because it is expected to bring future benefit

Available Seat Miles (ASM) the total of the products of aircraft miles and number of seats available on each flight stage, representing the total passenger capacity offered

Balance sheet a statement of assets, liabilities, and stockholder equity as of a particular date

Barriers to entry term used in reference to an industry to denote the difficulty firms have in entering that industry

Board of directors a group of elected stockholders providing general guidance for a corporation

Capital Budgeting long-term planning for proposed capital outlays and

their financing

Certificated Air Carrier one of a class of air carriers holding certificates of public convenience and necessity issued by the DOT authorizing scheduled air transportation over specific routes

Charter the booking of the entire aircraft's capacity by an authorized tour operator

City pairs the origin and destination cities of an air trip

Commuter Air Carrier a class of non-certificated air carriers that operate small aircraft (fewer than 66 seats) and perform at least five round trips per week to two or more points

Corporate Objectives major objectives established by the board of directors and senior management

Correlation a statistical total that measures the degree of dependency between two or more variables and the average amount of change in on variable associated with a unit of increase in another

Decision-making choosing between alternate courses of action

Demand a schedule that shows the various amounts of a product or service that consumers are willing and able to purchase at various prices over a particular time period

Department of Transportation an executive department of the U.S. government for the purpose of developing national transportation policies and programs conducive to fast, safe, efficient, and convenient transportation at the lowest cost

Elastic Demand demand is elastic if a given percentage change in price results in a larger percentage change in passengers carried

Essential Air Service the threshold number departures linking a community to the nationwide air transport network

Federal Aviation Administration an independent agency of the U.S.

government charged with controlling the use of U.S. airspace to obtain maximum efficiency and safety

Federal Aviation Regulation the rules governing all aspects of air carrier operations in the United States

Fitness an applicant carrier's size, financial resources, flight equipment, strategy for conduction proposed operations, and past performance in conforming to various legal requirements

Forecasting the attempt to quantify demand in a future time period in terms of cost, volume, or revenue

Integrative growth strategy a marketing strategy that integrates related products into the marketing mix and in so doing extends the product offerings

Liquidity ability to meet current obligations with assets easily converted to cash

Load Factor the proportion of aircraft seating capacity that is actually sold and utilized

Long term debt the face value or principal amount of debt securities issued or assumed by the air carrier and held by other than associated companies, or non-transport divisions, which has not been retired or canceled and is not payable within 12 months of the balance sheet date

Management by objectives a process in which employees at all levels are given tangible, usually numerical, goals and held accountable for achieving them

Marketing the broad area of business activity that directs the flow of services provided by the firm to the consumer in order to satisfy customers and achieve company objectives

Marketing mix the types and amounts of controllable marketing decision variables that a company uses over a particular time period: product, price, place, and promotion

Organization the official relationships or the positions generally shown on

an organization chart and state in job descriptions, the business plan, and legal documents

Planning the function of management that determines what shall be done, how and why it shall be done.

Rate of return (return on investment; ROI) an overall rate of return on investment representing a return on the air carrier's total operations obtained by dividing the net income after taxes plus interest expenses on debt by the total investment in the company

Regional air carriers a class of certificated air carriers confined to a specific geographic location

Revenue passenger mile (RPM) one revenue passenger transported one mile in revenue service

Route a system of points to served by an air carrier, as indicated in its certificate of public convenience and necessity

Scheduled Service transport service operated over an air carrier's certificated routes, based on published flight schedules

Show cause order an order soliciting parties to present to the DOT reasons and considerations as to why a particular DOT order relating to the fitness of a carrier should not be put into effect

Span of Control the number of subordinates a manager can effectively supervise

Ticket a printed document that serves as evidence of payment of the fare for air transportation

Unity of Objectives the idea that each administration, department, division, section, group, and unit of a company must contribute to the accomplishment of the overall goals of the firm

Utilization average daily use of aircraft for a period of time, usually monthly or yearly. Obtained by dividing the total hours flown by the number of days for the time period

Venture capital money invested in business enterprises that generally do not have access to conventional sources of capital

Yield the transport revenue per unit of traffic carried

APPENDIX B: THE BUSINESS PLAN, SAMPLE INTRODUCTION AND DETAILED OUTLINE

The following appendix gives a business plan outline. This outline is followed by a sixteen page insert of a sample introduction and detailed outline. The detailed outline is provided to give management initial direction.

APPENDIX B
A BUSINESS PLAN OUTLINE

1. INTRODUCTION
   - a. EXECUTIVE SUMMARY
   - b. A MARKET OVERVIEW
   - c. REGIONAL CARRIERS
   - d. THE (AIRLINE NAME) APPROACH
   - e. THE VOID
   - f. THE ENTICEMENT
   - g. THE STYLE
   - h. THE LOYAL CUSTOMER
   - i. THE OPPORTUNITY

2. MISSION STATEMENT
   - a. CORPORATE OBJECTIVE
   - b. CORPORATE STRATEGY
   - c. CORPORATE IMAGE

3. MARKET ANALYSIS
   - a. MARKET ASSESSMENT
   - b. CUSTOMER BASE
   - c. COMPETITION
   - d. SYSTEM INTRODUCTION

4. EQUIPMENT DESCRIPTION
   - a. AIRCRAFT SPECIFICATIONS
   - b. EQUIPMENT FEATURES
   - c. MAINTENANCE AND OVERHAUL

5. MARKETING PLAN
   a. TARGET MARKET
   b. MARKET PENETRATION STRATEGY
   c. PRICING
   d. ADVERTISING AND PROMOTIONS
   e. MARKETING RESEARCH AND DEVELOPMENT
   f. GROWTH MANAGEMENT

6. AIRLINE PLANNING
   a. FLEET PLANNING
   b. LOGISTICS
   c. SCHEDULING
   d. EMPLOYEE STAFFING

7. MANAGEMENT REQUIREMENTS
   a. ORGANIZATION
   b. COMMUNICATION
   c. SELECTION PROCEDURES

8. OPERATIONS PLAN
   a. FLIGHT OPERATIONS
   b. GROUND OPERATIONS
   c. SYSTEM OPERATIONS CONTROL
   d. MAINTENANCE AND ENGINEERING

9. FINANCIAL ANALYSIS
   a. FUNDS AND TIMING
   b. FINANCIAL STATEMENTS
   c. PROJECTED INVESTMENT RETURNS

10. SCHEDULE

The Business Plan Introduction and Detailed Outline

Note: Once the Businsess Plan Outline is complete, the task of drafting the business plan begins. To give an example of business plan format and language, the following contrived Business Plan Introduction is given. This example provides an introduction for a fictitious company, Western Pacific, and establishes a style.

Following the Business Plan Introduction is a Detailed Outiline that identifies specific considerations of the Business Plan Outline for the Western Pacific example.

1. The Business Plan Introduction

Table of Contents for the Business Plan Introduction:

Sample Business Plan Introduction
Western Pacific Airlines

Executive Summary

Western Pacific Airlines is dedicated to serving the public transportation needs for $49 fare. The fare will be unrestricted with the exception that it must be used for the flight for which it is purchased. The airline will initially begin operations by filling the market void created by the departure of American Eagle from San Jose, Sacramento, and Santa Rosa airports. With the low priced fare however, the company will acheive affective competition with the automobile. This will be enhanced with a frequent schedule and short turn around times. With the ever-increasing problem of traffic congestion caused by geographical constraints unique to the Bay Area, there has emerged a demand for a low cost air shuttle to well-travelled points within the area. These relatively short flights offer a high return on aircraft utilization and cost. With a stream-lined, spartan-like operation. A commuter carrier can experience high load factors and excellent returns on investment.

The company will focus its efforts on a safe, affordable, method of transportation which has thus far, been overlooked by established carriers.
There is currently no market competition for this two-pronged strategy. The basis for the carrier has been to create a service that can directly compete with the automobile. Marketing strategies such as ultimate destination arrangements, and plane-pools (discounts for passengers travelling together regularly) are viable with the technology of not only today, but yesterday as well.

Western Pacific will initially operate three Fairchild Metroliner 19 passenger aircraft. The high-speed, fuel efficient, low maintenance aircraft are well-proven throughout the industry. The aircraft are pressurized for passenger comfort, and are configured for quick turn times.
The company will initially maintain one aircraft in reserve for reliability reasons. Good faith towards the public is of paramount importance to the management of

Western Pacific and this is most critical during the "first impression" period of initial operations. The aircraft has been selected without the constraints of federal regulation. In the regional market, aircraft selection is tantamount to route structuring. The 19 passenger aircraft allows for efficiency of operation with frequency and low cost per flight hour. The aircraft, by its size, is not required to have a flight attendent which saves cost especially on short stage lengths that are inappropriate for in flight services.

Western Pacific will employ advanced PC based systems for revenue collection, flight tracking, maintenance management, and systems operation control. The entire system will be networked with relevent information available in real time. These systems are available today for purchase and can be implemented for reasonable costs on short notice.

The Company's goal is to remain "niche sensitive." By maintaining a degree of awareness to public needs the company will utilize its flexibility and responsiveness to always serve the areas that exhibit the highest demand. Flexibility will also limit the growth of the company to an adequate size for appropriate market service without jeopordizing intrinsic competitive advantages. Western Pacific's tactics, like its aircraft, will remain highly maneuverable.

Fundamentally, Western Pacific will tailor its service to the public. With its common sense fare structure and flight schedules, the company will address the high priority concerns of today's flying public. The Company's image will be that of a friendly, local, company devoted to "treating people
right." With this ethos the company will secure "good will" and a loyal customer base.

A Market Overview

A useful market overview can be given by a history of airlines in the post-deregulation era. California is the seventh largest economy in the world with a 1991 population of 27,080,800 people, expecting to exceed 33 million by the end of the decade. Currently the state has no dedicated air service and the non- dedicated players in the market are improperly focused on the needs of the residential communties. The strategy employed by the existing airlines is becoming ever-more designed to "skimming the market," rather than providing a truly penetrating strategy capable of expanding markets and creating air traffic.

A brief review of airline history over the past fifteen years will give example to the cyclical nature of the industry as well as the specific circumstances causing the void that currently exists in the market. The industry has convulsed under a post regualation expansion that witnessed 227 Regional Air Carriers in 1979 down size to 179 in 1986. The trend has been for further consolidation with major airlines purchasing regionals for the purpose of becoming "feeders" to the hub and spoke system. Some California examples are WestAir, Sundance, and recently Mesa, becoming United Express, Wings West becoming American Eagle, and Skywest becoming the Delta Connection. This is a logical effect for most states. However, California's population, geography, and affluence demand a dedicated service. Furthermore, the acquisition of these companies who were summarily engulfed or driven out of the marketplace by the the contraction of the industry has proven to be nothing short of an unnecessary evil and accordingly disastrous for the major carriers. Most notably, it the example of Wings West which was purchased by American Airlines for 72 million dollars in 1986 as a thriving company. In 1993, the Eagle unable to be sustained by even mighty American Airlines, suspended operations in many Northern California cities including its hub in San Jose.

What remains in an industry where distance once determined the entity of the airline, the international carrier, the domestic carrier, and the regional, is the now amassed, centralized, consolidated, and inefficient major airline.
United Airlines, American Airlines, and Delta Airlines are each useful examples of this transformation. Consequently, the potentially unlimited amount of resources and complex economic problems associated with international business operations have created a two tier gap in the domestic side. While these would be global carrers are being initiated into the world market and endeavoring to form global alliances to compete with government-subsidized foreign-flag carriers, there has emrged a void within the United States. The first tier, the national level, has been efficiently occupied by Southwest Airlines. Southwest was the only major U.S. carrier to record a profit (~120 million) in 1992. The other tier, the regional level, has remained unfilled, particualarly in the Western United States. The only service that exists is operated as subsidiaries to the major carriers. These subsidiaries do not cater to the local flying public. Rather, they serve to connect passengers to hubs in Oakland, San Francisco, and San Jose. This grossly overlooks an untapped demand in the Bay Area particularly. Meeting in 1992, prominent Bay Area executives cited the traffic congestion as the worst problem in the Bay Area for the seventh consecutive year. There exists a great potential for the company that can alleviate this problem in an attractive manner. With decreasing costs, unprecedented availability of equipment, growing availability of a specialized

workforce, and travel times that are only 20 to 50 percent of conventional ground transportation, air travel is the answer.

Hurt by huge losses, airlines are scaling back their hub and spoke systems much like manufacturer's shedding product lines. Several smaller hubs were eliminated in 1993 including the American Airlines San Jose hub. Moreover, carriers are dropping some routes, expecially to and from the "spokes"- the smaller airports that carry passengers into and out of the much-larger "hubs." The airlines also are cuttin the frequency of flights on other routes and redeploying planes to their largest hubs, increasing the congestion at the busiest airprots. And at smaller fields, they are replacing commodious jets with more appropriately sized turboprops.

Ironically, major carriers are attempting to restore profits by squeezing regional operations. These same operations, if left autonomous to create fare structure and scheduling have yielded profits. For example, Alaska Airlines lost 90 million dollars in 1992; more money that it has made since it has come into existence. However, its commuter feeder, Horizon Airlines showed profit. The reduction in frequency and service will only create a backlash within the passenger public, lower manpower and facility utilization and diminishing revenues as the markets evaporate.
There is a great potential to tap numerous veins of demand within the state as well as a hard learned lesson for possible competitors. The highly specialized regional market cannot be centralized with any degree of efficiency.

In many instances, major airlines are overlooking the reason why the regional carrier existed in the first place- to carry regional traffic. Major airlines only see the connecting passengers as market share rather than the local traffic which has been mandated back into the automobile. This fact, has made the relatively high barriers to entry and strict competiton imposed upon entrants seem vulnerable and demure. The window of opportunity is based mainly on a withdrawl by potential competitors, but is also supported by abundant resources at bargain prices.

In the past two years of chaos within the industry-including the permanent grounding of four large carriers-at least nine new airlines have taken to the skies. This represents the largest number of startups in more than a decade.
Harold Shenton, vice-president of Avmark Corp., a consulting firm was quoted as saying "Personally, I think it's a great time to start an airline. You can get cheap aircraft and cheap crews." Startups are typically non-unionized, and do not participate in the costly reservation network. In order to dominate this market, it

is advisable to mimic Southwest Airlines-short on service, long on low prices. This customer is driven by price, first and foremost. The key is to deliver the appropriate service at the lowest possible price. This niche is available in the regional California market currently. Feeder airlines have nonsensitive high prices with schedules that do not accomodate the local traveller. While it used to be the case that the regional carrier was relegated to markets no one would serve, or relative obscurity in big markets, the climate for a startup is somewhat different.

Since Fall 1992, American Airlines has cut 47 American jet flights at San Jose. However, Southwest Airlines and Reno Air have both announced service to San Jose with a combined proposal of 53 jet flights. This demonstrates the viability of the airport and the surrounding Silicon Valley. Since the Fall 1992, American Eagle has eliminated 52 flights, 45 of which have not been replaced by any carrier. While the potential exists for United Express, Horizon Air, or Skywest to move into the market, it is not likely since each is a feeder for a major airline with a hub at either Oakland or San Francisco. The most notable markets being vacated were chronicled by the June 27, 1993 issue of the San Jose Mercury News. American Eagle's pullout will be complete by August 1, 1993 with the following result.

Fresno	-4 flights with no replacements
Klamath Falls	-3 flights with no replacements
Lake Tahoe	-4 flights with no replacements
Monterey	-4 flights with no replacements
Redding	-5 flights with no replacements
Sacramento	-7 flights with no replacements*
San Francisco	-7 flights with no replacements
San Luis Obispo	-3 flights with no replacements
Santa Barbara	-3 flights with no replacements
Santa Rosa	-7 flights with no replacements

*one of the seven flights to Sacramento Metropolitan was American jet service with no replacement by a jet or turboprop competitor.

Additionally, Western Pacific will serve nearby cities such as Modesto to maximize it return on investment by shortening stage lengths with a unilateral fare. The Company's philosophy will be to grow outward radially to the strongest markets. This will defend against potential competitor's entering market territory. Western Pacific will also structure its schedule to take advantage of peak volume to

specific weekday and weekend markets as well as the customer's sensitivity to the direction of flight in relation to comparable traffic congestion. The company's flexibility and simplicity of operations will enable it to use "guerrilla warfare strategy" to enter and customize markets rapidly.

Regional Carriers

A commuter air carrier according to the 1969 amendment to Part 298 of the Economic Regulations, was an airline that performed at least five round trips per week between two or more points and published flight schedules tat specified the times, days of the week and the airports for such flights, or a carrier that transported mail under contract with the U.S. Postal Service. The other scheduled carriers fell under Section 401. To be exempt from 401 certification, a commuter could not exceed the takeoff weight of 12,500 pounds, which effectively limited the aircraft to 19 passengers. The Fairchild Metroliner is a product of this type of this era. These passenger and load limitations have been eased over the years, from aircraft seating up to 30 passengers in 1972 to 60 passengers with airline deregulation in 1978.

Other provisions in 1978 permitted commuter airlines to receive 401 certificates of public convenience and necessity, thus enabling them to operate any size aircraft. Of course, these carriers were subject to the regulations governing certificated airlines.

The regional air carriers that have emerged in the wake of the industry consolidation have enjoyed consistent success. Annual growth is expected to 8.3 percent over the next decade with revenue passenger miles approaching 14.5 billion by 1997. Western Pacific will be classified as a medium-sized operation with annual revenues less than 10 million and average stage lengths less than 100 nautical miles (the industry average stage length is 200 nautical miles).

Horizon Air
American Eagle
United Express
Reno Air Express
SkyWest

Further analysis can be done to show relevant information to a specific operation. Some reccommended topics are:

-Expansion Consolidation & Contraction of Regional Carriers
-The Industry Viability
-The Exclusivity of Intrastate Airlines
-Viability of Existing Regionals in the U.S.

While the major carriers continue to suffer, regionals operating as partners to big airlines are flourishing. For the half dozen regionals that trade publicly, the jump in market values has been astonishing. In the past 18 months, the stock price of Mesa Airlines Inc., the nation's largest commuter carrier, has more than quintupled, to $36.

The changing shape of the airline industry is propelling the commuter to new heghts. In the past, commuters mostly served routes of less than 400 miles. Now, however, the majors have abandoned routes under 1,000 miles. This allows regionals to move in with their fleets of 19-72 passenger propeller planes.

Events are moving rapidly: In February 1993, four-year old Atlantic Coast Airlines triped it service on six routes from United's Dulles Airport hub, outside Washington. Delta has announced it will move regional partner Atlantic Southeast Airlines Inc. into eight routes it now flies out of Dallas. American Airlines, which owns its four American Eagle commuter lines, and USAir, which does not, may have similar shifts.

Regionals must be always aware of their niche and their vulnerability to major carriers. However there investment return potential is high. As a group, the country's 150 commuters carried 10% of all passengers last year and accounted for only 2% of the traffic. But small as they are, these carriers have prospered by feeding a steady flow of passengers from second tier cities into such hubs as San Jose, Fresno, and Sacramento. Profitable partnerships with dominant airlines often mean virtual monopolies at some hubs. A preponderance of business travellers allows the commuters to charge relatively steep fares. And that, combined with low wages and lower fuel costs, gives them higher margins than major airlines could ever dream of: Many commuters enjoyed double digit margins last year while their larger counterparts haven't seen profits in three years. The challenge is to make the reality palatable to the flying public, while maintaining an appropriate growth strategy. This has been proven feasible throughout the past two years. Since March 1991, the indexed stock performance price as reported by Bridge Information Systems has gone from 100 to 325, while the same indexed stock performance price of the major carriers has fluctuated between 85 and 90.

Certain advantages to being an in state operator will be delineated. First, political and governmental concessions. The company will demonstrate its ability to hire a local workforce and pay state taxes for landing fees, passenger facility charges, sales tax eventhough plans exist to incorporate in the State of Nevada. The company will foster a regional loyalty with promotions and advertisement campaigns based upon it being a locally run airline. Since Pacific Southwest Airlines and Western Airlines there has been no carrier dedicated to the needs of California. The closest current operation is Alaska which enjoys numerous benefits and incentives from its home state.

The Western Pacific Approach

Western Pacific will enjoy a simplicity of operations. The company will not hold reservations, only sell tickets. This will be accomplished by a toll free telephone number or an automated airport ticket counter. There will be no seat assignments, seating will be accomplished on a first come first served basis. Thus, the only to secure a seat is to purchase a ticket and then present it at the gate ten minutes before the flight.

Inflight services will be minimized due to the short duration of each flight (~30 minutes). Free coffee and snacks will be offered in airport holding areas to convey a hospitable attitude towards the public. All baggage will be carry-on since no connecting flights or interlining is planned. Short haul passengers typically travel with minimal possessions and checked through baggage represents unnecessary cost. Passenger will have the opportunity to leave larger luggage pieces on a baggage cart outside the gate. This luggage will have been inspected by airport security and will be stowed in the aft baggage compartment with a cargo net. Flight schedules will be printed on business cards for convenience and quick reference. They will be distributed at the airport ticket counter and the gate.

This simlicity can be maintained as long as the Company does not leave its niche. This will yield a cost effective operation that will avoid direct competition through a flexible response strategy, maintain a variable weekend schedule, and minimize overhead and ground personnel.

The company will cross utilize its employees in an appropriate capacity and contract outside services when necessary. Western Pacific will also maintain a "hire from within" strategy to secure managers and flight officers from the ranks of its personnel.

The proposed niche of Western Pacific will be its focus on competing with the automobile rather than other carriers. The Company will provide a fare that is affordable for the daily commuter as well as the occasional passenger. The cost of owning and operating an automobile coupled with the endless amount of hours spent on the freeway will more than meet the customer's indifference measures for selecting the airline. Airline travel is superior to auto travel even on uncongested freeways, but Bay Area freeways, bridges, and roadways are jammed. Western Pacific will make arrangements with local shuttle services to provide dedicated service at discount prices to participating passengers. By capitalizing on the lessons learned from failures by previous airlines like American Eagle, the company will enter the market competitively.

The Void

There is no non-interlining commuter currently serving the California market. Consequently, traffic is must pay high fares for intrastate travel.
The Company wishes to develop a flight schedule based upon frequency with low price fares between viable market pairs within the state. California's demographics (densely populated urban areas, expanding suburban growth, and congested ground transportation networks) and geographics show promise for the advantages air transportation offers.

The Enticement

Western Pacific will offer low introductory service aimed at target auto traffic. The Plane-Pool idea as opposed to a carpool will be be based upon an initial offering of two tickets for the price of one. This will serve the purpose of exposing twice as many people to the operation during the introductory phase as a mere 50% discounter ticket would allow. Further highlighted advantages will be the time savings and money savings issued that are inherent to the Company's strategy.

The Style

Western Pacific will have a modern, friendly, and clean style. The company will be truly local in its image to the public and very business compatible.
The focus will be on the simplicity of using the service. All interfacing with the public will convey this Western Pacific attitude and awareness in a current event format.

The Loyal Customer

The Company will reward the loyal customer with a free flight on every sixth trip. The back of the business card schedule will have a stamp for every flight taken. After six flights it can be redeemed for a free flight.
This will foster loyalty to patrons while encouraging and rewarding loyalty.

The Opportunity

With the current lag in the industry to take advantage of the regional market. There exists a great advantage for a newcomer. Even disregarding
the industry wide red carpet that is is being unrolled to a potential startup by the retreat of the major-carrier subsidized regionals, there exists several factors that support this endeavor.

-Equipment Availability, Cost, Technology
-Personnel Availability/Scarcity of Jobs
-Federal and Local Government Indicators
-Programs for Creating Jobs Offering Financial Assitance-Fuel Prices
-The Economy; Securing Equipment and Supplies from Declining Companies.
-Automobile Traffic Congestion

A Sample Outline for Beginning a Commuter Operation.

2. Mission Statement

a. Corporate Objective
b. Corporate Strategy
c. Corporate Image

3. Market Analysis

a. Market Assessment
-Demograghics
-Demand
-Statistics
b. Customer Base
-Market Segments

-The Target Market
c. Competition
-Identifying the Market Strengths and Weaknesses
-Advertising & Awareness
d. System Introduction
-Introductory Promotions
-Potential Areas of Expansion and Future Growth
-Weighing the Flexibility of City Selection vs Market Presence
-Frequency of Flights vs Dimishing Returns from Traffic Loss

4. Equipment Description

a. Aircraft Specifications
b. Equipment Features
c. Maintenance and Overhaul

5. Marketing Plan

a. Target Market
b. Market Penetration Strategy
c. Pricing
d. Advertising and Promotions
e. Marketing Research and Dvelopment
f.

6. Airline Planning

a. Fleet Planning
-Introductory Aircraft
-Strategy of Utilization
-Manpower Planning for Fleet Acquisition
    Staffing
    Training
    Placing
-Aircraft Ordering Parameters
    Cost of Lease
    Return on Investment
    Market Strength
    Route Structuring
-Aircraft Delivery Policy

-Locating
-Negotiating
-Inspecting
-Delivery
-Spare Parts; Rotables/Recoverables

b. Logistics

-Fuel Management
-Systems Operation Control
-Equipment Procurement
-Revenue Collection
-Accounting
-Security Procedures
-Hazardous Materials
-Ticketing Passengers
    Sales
    Promotions
    Coupon Books
    Travel Agents
    Corporate Departments
    Chambers of Commerce
    Organizations
-Uniforms

Federal Aviation Administration Certification

-Public Convenience and Necessity Determinations
-Section 419

Note: Under Section 419 of the Federal Aviation Act, commuter air carriers must be found fit to provide scheduled passenger service. Those wishing to establish a commuter air carrier service must file an application with the Special Authorities Division of the Office of Aviation Operations. The DOT will then issue a show cause order, through the DSD, stating tentative findings and allowing 15 days for objections to be filed.

c. Scheduling
-Planning
-Tracking

-Routing
-Alternate Operations
-Frequency
-Expansion
-Growth

d. Employee Staffing
-Procedures
-Policy
-Training
-Indoctrination
-Decision Analysis of Workforce Size
-Strength Complement
-Cross-utilization
-Conduct

7. Management Requirements

a. Organization
-Structure
-Hierarchy
b. Communication
-Network
-Hardware
c. Selection Procedures
-Method
-Strategy
-Qualifications

8. Operations Plan

a. Flight Operations
-Planning
-Matrix of Schedule
-Optimization
-Requirements
-Reserves
-Contingencies
-Crew Bases, Assignments, and Personnel

-Crew Bases, Allocations and Transportation
-Crew Pairing, and Qualification to Assignment
-Ground and Station Operations, Dispatch, and ATO/Security Staff
b. Ground Operations
-Ground Equipment
-Station Equimpment
-Flight Operations Support Equipment
-Ticket Counter & Gate Systems
-Communication Systems
-Data Processing and Corporate Management Systems
c. System Operations Control
-Facilities
-CEQA & Operations Plan to Planning Council
-Corporate Offices
-Airport Ticket Counters
-Operations Area
-Dispatch and Briefing Area
-Holding Area
-Gates
-Ramp Space
-Remain Over Night Space
-Maintenance Facilities
-Connecting Passengers
-Local Traffic
-Commute Traffic Flow According to Time
-Simplicity
d. Maintenance and Engineering

9. Financial Analysis

a. Funds and Timing
-Capital Expenditures and Finance
-Multi-stage Finance
-Accounting
-Revenue Collection
-Rate of Return
-Budgeting
-Taxes
b. Financial Statements
c. Projected Investment Returns

-Yield Management
-Structure
-Share Capture
-Optimization
-Echelons of Traffic

10. Schedule

-Timing for Introducing Service
-Financial Allocation for Supporting Service on Time

This outline is intended as a sample only.

APPENDIX C

AIRPORT FEASIBILITY LIST

This appendix contains two lists an for initial airport feasibility study. The first list is comprised from government census statistics from 1990 and Jeppessen Sanderson Airway Manuals. This data is shown as an example of preliminary information gathering. The data is then correlated with market research studies for destinations that prove viable (possessing sufficient population and a control tower).

California Cities with 50,000 or more people
Grouped by County

Alhambra - 82,106
Monterey Park - 60,738
Baldwin Park - 69,330
Bellflower - 61,815
Burbank - 93,643
Carsen City - 83,995
Cerritos - 53,240
Compton - 90,454
Diamond Bar - 53,672
Downey - 91,444
East Los Angeles - 126,379
El Monte - 106,209
Montebello - 59,564
Glendale - 180,038
Hacienda Heights - 52,354
Hawthorne - 71,349
Huntington Park - 56,065
Inglewood - 109,602
Lakewood - 73,557
Lancaster - 97,291
Long Beach - 429,433
Los Angeles - 3,485,398

Berkeley - 102,724
Fremont - 173,339
Hayward - 111,498
Oakland - 372,242
Pleasanton - 50,553
San Leandro - 68.223
Union City - 53,762

Antioch - 62,195
Concord - 111,348
Richmond - 87,425
Walnut Creek - 60,569

Bakersfield - 174,820

Clovis - 50,323
Fresno - 354,202

Chula Vista - 135,163
Escondido - 108,635
Oceanside - 128,398
San Diego - 1,110,549

San Francisco - 723,959

Stockton - 210,943

San Jose - 782,248
Sunnyvale - 117,229

Vallejo - 109,199

Santa Rosa - 113,313

Modesto - 164,730

Oxnard - 142,216
Thousand Oaks - 104,352
Simi Valley - 100,217

Anaheim - 266,406
Buena Park - 66,357
Costa Mesa - 96,357
El Toro - 62,685
Fullerton - 114,144
Garden Grove - 143,052
Huntington Beach - 181,519
Irvine - 110,330
Orange - 110,650
Santa Ana - 293,742

Moreno Valley - 118,779

Riverside - 226,505

Citrus Heights - 107,439

Sacramento - 369,365

Ontario - 133,179

Rancho Cucamonga - 101,409

San Bernadino - 164,164

Norwalk - 94,279
Palmdale - 68,842
Pasadena - 131,591
Santa Clarita - 110,642
Torrance - 133,107
Whittier - 77,671

Merced - 56,216

Salinas - 108,777

Napa - 61,842

Yolo County - 141,092

Tulare County - 311,921

Tower:
Burbank (BUR) -> Whitman (WHP) -> Van Nuys (VNY) ->
Bakersfield Meadows (BFL) -> Bakersfield Muni (L45)
Chico (CIC)
Concord (CCR)
Fullerton (FUL)
Livermore (LVK)
Long Beach (LGB) -> Gompton (GPM)
Los Angeles (LAX) -> Santa Monica (SMO) -> Hawthorne (HHR)
Modesto (MOD) -> Stockton (SCK)
Monterey (MRY) -> Salinas (SNS)
Napa (APC)
Oakland (AOK)
Ontario (ONT) -> Le Verne, Brackett Field (POC) -> Chino (CNO)
Oxnard (OXR)
Palm Springs (PSP) -> Rialto (L67)
Redding (RDD)
Riverside (RAL)
Sac. Exec. (SAC) -> Sac. Metro (SMF)
San Diego Int'l. Lindberg (SAN) -> San Diego Brown Field (SDM) ->
-> San Diego Gillespie Field (SEE) -> San Diego Montgomery (MYF)
San Luis Obispo (SBP)
Santa Ana John Wayne (SNA)
Santa Barbara (SBA)
Santa Rosa (STS)
Torrence (TOA)

Non-Tower:
Arcata-Eureka (ACV)
Bishop (BIH)
Fresno Chandler (FCH)
Paso Robles (PRB)
El Monte (EMT)

APPENDIX D: PART 298 REQUIREMENTS

Source:

The Department of Transprotation, How to Become a Certified Air Carrier. Office of the Secretary, Department of Transportation, Washington D.C. 1992.

This appendix contains a seventeen page, double-sided insert.

PART 298--EXEMPTIONS FOR AIR TAXI AND COMMUTER AIR CARRIER OPERATIONS

Subpart A--General

Sec.

Subpart B--Exemptions

Subpart C--Registration and Reregistration for Exemption

Subpart D--Limitations and Conditions on Exemptions and Operations

Subpart E--[Reserved]

Subpart F--Reporting Requirements

Subpart G--[Reserved]

Subpart H--Violations

AUTHORITY: 49 U.S.C. 1301, 1324, 1371, 1374, 1377, 1386, 1388, 1389.

Subpart A--General

§298.1 Applicability of part.

This part establishes a classification of air carriers known as "air taxi operators," provides certain exemptions to them from some of the economic regulatory provisions of Title IV of the Federal Aviation Act and specifies procedures by which such air carriers may obtain authority to conduct operations, and establishes rules applicable to their operations in air transportation in all States, Territories and possessions of the United States.[1] This part also establishes reporting requirements for commuter air carriers and small certificated air carriers.

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[1] Section 401(a) of the Federal Aviation Act of 1958, 49 U.S.C. 1371(a), prohibits any person from engaging in "air transportation" except to the extent that such person is authorized to do so by the Department or other Federal statute.

Air transportation is defined in the Act (see section 101(10) and (21), 49 U.S.C. 1301) to include the carriage by aircraft of persons or property as a common carrier for compensation or hire. This includes carriage by aircraft as a common carrier between places in the same State (a) through airspace outside that State (over other States or the District of Columbia or the open sea or foreign territory) or (b) where such carriage is part of the movement of the passengers or property carried, in interstate, overseas or foreign air commerce. However, operations wholly within the geographic limits of a single State are not considered "air transportation" if in those operations the carrier transports no more than a *de minimis* volume of passengers or property moving as part of a continuous journey to or from a point outside the State. For a further discussion of what constitutes air transportation see the preamble to ER-574, 34 FR 7124.

Air transportation also is defined to include "the carriage of mail by aircraft." Section 5402 of the Postal Reorganization Act, 39 U.S.C. 5402, authorizes the carriage of mail by air taxi operators in some circumstances under contract with the Postal Servce.

footnote continued --

§298.2 Definitions.

As used in this part:

(a) "Act" means the Federal Aviation Act of 1958, as amended.

(b) "Air taxi operator" means an air carrier coming within the classification of "air taxi operators" established by §298.3.

(c) "Air transportation" means interstate, overseas, or foreign air transportation or the transportation of mail by aircraft as defined by the Act.

(d) "Aircraft-hours" means the airborne hours of aircraft computed from the moment an aircraft leaves the ground until it touches the ground at the end of a flight stage.

(e) "Aircraft miles" means the miles (computed in airport-to-airport distances) for each flight stage actually completed, whether or not performed in accordance with the scheduled pattern.

(e-1) "All-cargo air service carrier" means an air carrier holding a certificate issued under section 418 of the Act.

(e-2) "Certificated carrier" means an air carrier holding a certificate issued under section 401 of the Act.

(f) "Commuter air carrier" means an air taxi operator that carries passengers on at least five round trips per week on at least one route between two or more points according to its published flight schedules that specify the times, days of the week, and places between which those flights are performed.

(g) "Departure" means takeoff from an airport.

(h) "Flight stage" means the operation of an aircraft from takeoff to landing.

(i) "Large aircraft" means any aircraft designed to have a maximum passenger capacity of more than 60 seats or a maximum payload capacity of more than 18,000 pounds.

(j) "Maximum certificated takeoff weight" means the maximum takeoff weight authorized by the terms of the aircraft airworthiness certificate.[2]

(k) "Maximum passenger capacity" means the maximum number of passenger seats for which an aircraft is configured.

(l) "Maximum payload capacity" means the maximum certificated takeoff weight of an aircraft, less the empty weight,[3] less all justifiable aircraft equipment, and

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footnote continued --

This part does not provide exemption from the safety regulatory provisions of the Act which are administered by the Department of Transportation through the Federal Aviation Administration, and air taxi operators in the conduct of their operations must observe all applicable safety standards and requirements.

[2] This weight may be found in the airplane operating record or in the airplane flight manual which is incorporated by regulation into the airworthiness certificate.

[3] Empty weight is defined in section 03 of Part 241 as follows: "the weight of the airframe, engines, propellers, and fixed equipment. Empty weight excludes the weight of the crew and payload, but includes the weight of all fixed ballast, unusable fuel supply, undrainable oil, total quantity of engine coolant, and total quantity of hydraulic fluid."

less the operating load (consisting of minimum fuel load, oil, flight crew, steward's supplies, etc.). For purposes of this part, the allowance for the weight of the crew, oil, and fuel is as follows:

(1) Crew--200 pounds per crew member required under FAA regulations,

(2) Oil--350 pounds,

(3) Fuel--the minimum weight of fuel required under FAA regulations for a flight between domestic points 200 miles apart,[4]

Provided, however, That in the case of aircraft for which a maximum zero fuel weight is prescribed by the FAA,[5] maximum payload capacity means the maximum zero fuel weight, less the empty weight, less all justifiable aircraft equipment, and less the operating load (consisting of minimum flight crew, steward's supplies, etc., but not including disposable fuel or oil).

(m) "Mile" means a statute mile, *i.e.*, 5,280 feet.

(n) "On-line origin-destination" means the points at which a passenger enters and leaves the system of an air carrier on a one-way trip or on each of the directional parts of a round, circle, or open-jaw trip, ignoring intermediate points of intra-line transfer.

(o) "Passengers carried" means passengers on board each flight stage.

(p) "Point" when used in connection with any territory or possession of the United States, or the States of Alaska and Hawaii, means any airport or place where aircraft may be landed or taken off, including the area within a 25-mile radius of such airport or place; when used in connection with the continental United States, except Alaska, it shall have the same meaning except be limited to the area within a 3-mile radius of such airport or place: *Provided,* That for the purposes of this part, West 30th Street Heliport and Pan Am Building Heliport, both located in New York City, shall be regarded as separate points.

(q) "Revenue passenger-mile" means one revenue passenger transported one mile. Revenue passenger-miles are computed by multiplying the aircraft miles flown on each flight stage by the number of revenue passengers carried on that flight stage.

(r) "Revenue seat-miles available" means the aircraft-miles flown on each flight stage multiplied by the number of seats available for sale on that flight stage.

(s) "Revenue ton-mile" means one ton of revenue traffic transported one mile. Revenue ton-miles are computed by multiplying the aircraft-miles flown on each flight stage by the number of pounds of revenue traffic carried on that flight stage and converted to ton-miles by dividing total revenue pound-miles by 2,000 pounds.

(t) "Revenue ton-miles available" means the aircraft-miles flown on each flight stage multiplied by the number of pounds of aircraft capacity available for use on that stage and converted to ton-miles by dividing total pound-miles available by 2,000 pounds.

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[4] Assumes VFR weather conditions and flights not involving extended overwater operations.

[5] The maximum zero fuel weight is the maximum permissible weight of an airplane with no disposable fuel or oil. The zero fuel weight figure may be found in the FAA's type certificate data sheets, and/or in FAA-approved flight manuals.

(u) "Scheduled service" means transport service operated over routes pursuant to published flight schedules or pursuant to mail contracts with the U.S. Postal Service.

(v) "Small aircraft" means any aircraft that is not a large aircraft, as defined in this section.

(w) "Ton" means a short ton, *i.e.*, 2,000 pounds.

(x) "Small certificated air carrier" means an air carrier holding a certificate issued under section 401 of the Act that provides scheduled passenger air service within and between only the 50 States of the United States, the District of Columbia, the Commonwealth of Puerto Rico, and the U.S. Virgin Islands with small aircraft as defined in this section.

§298.3 Classification.

(a) There is hereby established a classification of air carriers, designated as "air taxi operators," which directly engage in the air transportation of persons or property or mail or in any combination of such transportation and which:

(1) Except as provided in §298.5, do not directly or indirectly utilize large aircraft in air transportation;

(2) Except as provided in §298.5, do not hold a certificate of public convenience and necessity or economic authority issued by the Department or the CAB other than that provided by this part;

(3) Have registered with the Department in accordance with Subpart C of this part;

(4) Have and maintain in effect liability insurance coverage in compliance with the requirements set forth in part 205 of this chapter and have and maintain a current certificate of insurance evidencing such coverage on file with the Department; and

(5) If operating as a commuter air carrier or in foreign air transportation or participating in an interline agreement, have and maintain in effect and on file with the Department a signed counterpart of Agreement 18900 (OST Form 4523 or OST Form 4507) and comply with all other requirements of part 203 of this chapter.

(b) Except as provided in §298.5, a person who does not observe the conditions set forth in paragraph (a) of this section shall not be an air taxi operator or commuter air carrier within the meaning of this part with respect to any operations conducted while such conditions are not being observed, and during such periods is not entitled to any of the exemptions set forth in this part.

§298.4 Requests for statement of authority.

In any instance where an air taxi operator or commuter air carrier is required by a foreign government to produce evidence of its authority to engage in foreign air transportation under the laws of the United States, the Director, Office of Aviation Analysis, will, upon request, furnish the carrier with a written statement, outlining its

general operating privileges under this part for presentation to the proper authorities of the foreign government.

§298.5 Dual operations--air taxi or commuter air carrier and all-cargo air service.

Any person having or obtaining authority to operate as an all-cargo air service carrier shall not thereby lose, or be disqualified from obtaining, authority under this part to engage also in operations as an air taxi operator or commuter air carrier, regardless of the size of aircraft utilized in such all-cargo air service operations. The operations which such person conducts as an air taxi operator or commuter air carrier shall be subject to the conditions and entitled to the exemptions set forth in this part, and the operations which he conducts as an all-cargo air service carrier shall be subject to the conditions and entitled to the exemptions set forth in part 291 of this chapter.

Subpart B--Exemptions

§298.11 Exemption authority.

Air taxi operators and commuter air carriers are hereby relieved from the following provisions of Title IV of the Act only if and so long as they comply with the provisions of this part and the conditions imposed herein, and to the extent necessary to permit them to conduct air taxi or commuter air carrier operations:

(a) Section 401(a);

(b) Section 403; except that the requirements of that section shall apply to: (1) Tariffs for through rates, fares, and charges filed jointly by air taxi operators or commuter air carriers with certificated air carriers or with foreign air carriers subject to the tariff filing requirements of section 403 of the Act; and (2) Tariffs required to be filed by air taxi operators or commuter air carriers which embody the provisions of the counterpart to Agreement 18900 as specified in part 203 of this chapter;

(c) Section 404(a), except for the requirements that air taxi operators and commuter air carriers shall:

(1) Provide safe service, equipment, and facilities in connection with air transportation;

(2) Provide adequate service insofar as that requires them to comply with parts 252 and 382 of this chapter;

(3) Observe and enforce just and reasonable joint rates, fares, and charges, and just and reasonable classifications, rules, regulations and practices as provided in tariffs filed jointly by air taxi operators or commuter air carriers with certificated air carriers or with foreign air carriers; and

(4) Establish just, reasonable, and equitable divisions of such joint rates, fares, and charges as between air carriers participating therein which shall not unduly prefer or prejudice any of such participating air carriers;

(d) Section 404(b), except that the requirements of that subsection shall apply to through service provided pursuant to tariffs filed jointly by air taxi operators or commuter air carriers with certificated air carriers or with foreign air carriers and to transportation of the handicapped to the extent that that is required by part 382 of this chapter;

(e) Section 405(b);

(f) Sections 407(b), (c), and (d).

§298.12 [Reserved]

§298.13 Duration of exemption.

The exemption from any provisions of Title IV of the Act provided by this part shall continue in effect only until such time as the Department shall find that enforcement of that provision would be in the public interest, at which time the exemption shall terminate or be conditioned with respect to the person, class of persons, or service (*e.g.*, limited-entry foreign air transportation market) subject to the finding.

Subpart C--Registration and Reregistration for Exemption

§298.21 Filing for registration by air taxi operators and commuter air carriers.

(a) Every air taxi operator (whether or not he is also a commuter air carrier as defined in this part) who plans to commence operations under this part shall register with the Department not later than 30 days prior to the commencement of such operations, unless, upon a showing of good cause satisfactory to the Director, Office of Aviation Analysis, registration within a lesser period of time is allowed.

(b) The registration of an air taxi operator or commuter air carrier shall remain in effect until it is amended by the carrier or canceled by the Department.

(c) Registration by all commuter air carriers, and by those air taxi operators with a mailing address in any U.S. State or Territory except Alaska, shall be accomplished by filing with the Department's Office of Aviation Analysis (or with the Department's Alaska Aviation Field Office, 222 West Seventh Street, Box 27, Anchorage, Alaska 99513, for air taxi operators that are not also commuter air carriers and that have a mailing address in the State of Alaska) the following:

(1) OST Form 4507 executed in duplicate.[6] This form shall be certified by a responsible official and shall include the following information:

(i) The name of the carrier and its mailing address;

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[6] OST Form 4507 is filed as part of the original document and can be obtained from the Office of Aviation Analysis, Regulatory Analysis Division.

(ii) The carrier's principal place of business, if different from its mailing address, and its area code and telephone number;

(iii) The carrier's FAA certificate number, if any, and the address and telephone number of the carrier's local FAA office;

(iv) The type of service the carrier will offer (scheduled passenger, scheduled cargo, mail under a U.S. Postal Service contract, on-demand passenger, on-demand cargo, or other service such as air ambulance operations, fire-fighting or seasonal operations);

(v) A list of the aircraft that the carrier proposes to operate, or, in the case of an amendment to the registration, the aircraft that it is currently operating in its air taxi or commuter air carrier operations, and the aircraft type, FAA registration number and passenger capacity of each aircraft;

(vi) For initial registration, the proposed date of commencement of air taxi or commuter air carrier operations;

(vii) For amendments, whether the carrier has carried passengers in foreign air transportation during the previous 12 months;

(viii) Whether the carrier is a U.S. citizen;

(2) A certificate of insurance which is currently effective (or, in case of initial registration, is to become effective), as defined in part 205 of this chapter.

(3) An 8 (in the case of commuters, 670) dollar registration filing fee in the form of a check, draft, or postal money order payable to the Department of Transportation.

(4) For air taxi operators that (i) are commuter air carriers, (ii) engage in foreign air transportation, or (iii) participate in an interline agreement, a signed counterpart of Agreement 18900 (OST Form 4523), which may be the revised registration form (OST Form 4507), as required by part 203 of this chapter. These forms can be obtained from the Office of Aviation Analysis, Regulatory Analysis Division.

(d) No air taxi operator shall provide scheduled passenger service at an eligible point unless it has registered with the Department as a commuter air carrier and has been found by the Department to be fit, willing, and able to conduct such service.

§298.22 Processing by the Department.

After examination of the OST Form 4507 submitted by the carrier, the Department will stamp the effective date of the registration on the form and return the duplicate copy to the carrier to confirm that it has registered with the Department as required by this part. The effective date of the registration shall not be earlier than the effective date of the insurance policy or policies named in the certificate of insurance filed by the carrier under §298.21(c)(2).

§298.23 Notifications to the Department of change in operations.

(a) An air taxi operator or commuter air carrier shall submit an amendment to its registration not later than 30 days after any of the following events:

(1) A change in its name or address;

(2) A change in its type of operations (passenger, cargo, mail, scheduled, etc.);

(3) A temporary or permanent cessation of its operations; or

(4) A change in the type of aircraft operated.

(b) An amendment shall be made by resubmitting OST Form 4507 to the Department's Office of Aviation Analysis. If the air taxi operator has a mailing address in the State of Alaska, the form shall be mailed to the Department's Alaska Aviation Field Office, 222 West Seventh Avenue, Box 27, Anchorage, Alaska 99513.

§298.24 Cancellation of registration.

The registration of an air taxi operator or commuter air carrier may be canceled by the Department if any of the following occur:

(a) The operator notifies the Department that it is ceasing operations;

(b) The operator's insurance coverage changes or lapses;

(c) The operator fails to file an amended registration when required by §298.23;

(d) The operator's operating authorization is revoked by the Federal Aviation Administration;

(e) In the case of a commuter air carrier, the Department finds that the carrier is not fit, willing, and able to conduct scheduled service.

Subpart D--Limitations and Conditions on Exemptions and Operations

§298.30 Public disclosure of policy on consumer protection.

(a) Every air taxi and commuter air carrier shall cause to be displayed continuously in a conspicuous public place at each desk, station and position in the United States that is in charge of a person employed exclusively by it, or by it jointly with another person, or by any agent employed by it to sell tickets to passengers, a sign located so as to be clearly visible and readable to the traveling public, containing a statement setting forth the air taxi's or commuter air carrier's policy on baggage liability and denied boarding compensation.

(b) An air taxi or commuter air carrier shall provide a written notice on or with a passenger's ticket concerning baggage liability as provided in §254.5 of this chapter. These ticket notices are required only for passengers whose ticket includes a flight segment that uses large aircraft (more than 60 seats).

(c) If the substantive terms of the counter sign and ticket notice required by this section differ, the terms contained in the required ticket notice govern.

§298.31 Scope of service and equipment authorized.

Nothing in this part shall be construed as authorizing the operation of large aircraft in air transportation, and the exemption provided by this part to air taxi operators and commuter air carriers that register with the Department extends only to the direct operation in air transportation in accordance with the limitations and conditions of this part of aircraft designed to have a maximum passenger capacity of 60 seats or less or a maximum payload capacity of 18,000 pounds or less.

§§298.32-298.34 [Reserved]

§298.35 Limitations on carriage of mail.

An air taxi operator or commuter air carrier is not authorized to carry mail except pursuant to contract with the Postal Service entered into pursuant to section 5402 of the Postal Reorganization Act (39 U.S.C. 5402).

§298.36 Limitation on use of business name.

(a) An air taxi operator in holding out to the public and in performing its services in air transportation shall do so only in the name or names in which its air carrier certificate is issued pursuant to section 604 of the Act by the Federal Aviation Administration, and in which it is registered with the Department under this part.

(b) Slogans shall not be considered names for the purposes of this section, and their use is not restricted hereby.

(c) Commuter air carriers are subject to the provisions of part 215 of this chapter with regard to the use and change of air carrier names.

(d) Neither the provisions of this section nor the grant of a permission hereunder shall be deemed to constitute a finding for purposes other than for this section, or to effect a waiver of, or exemption from, any provisions of the Act or orders, rules or regulations issued thereunder.

§298.37 Prohibition of services not covered by insurance.

An air taxi operator or commuter air carrier shall not operate in air transportation or provide or offer to provide air transportation unless there is in effect liability insurance which covers such transportation and which is evidenced by a current certificate of insurance on file with the Department as required by part 205 of this chapter.

§298.38 Security arrangements for operating Public Charters.

When an air taxi operator or commuter air carrier performs a Public Charter under part 380 of this chapter, either:

(a) The air taxi operator or commuter air carrier shall meet the bonding or escrow requirements applicable to certificated carriers as set forth in §207.17 of this chapter; or

(b) The air taxi operator or commuter air carrier shall ensure that it does not receive any payments for the charter until after the charter has been completed. In this case, its contracts with the charter operator and the charter operator's depository bank, if any, shall state that the charter operator or bank, as applicable, shall retain control of and responsibility for all participant funds intended for payment for air transportation until after the charter has been completed, notwithstanding any provision of part 380.

Subpart F--Reporting Requirements

§298.60 General reporting instructions.

(a) Each commuter air carrier and each small certificated air carrier shall file with the Department's Research and Special Programs Administration (RSPA) the applicable schedules of RSPA Form 298-C "Report of Financial and Operating Statistics for Small Aircraft Operators" as required in this section.

(b) A single copy of the RSPA Form 298-C report shall be filed quarterly with the Office of Airline Statistics for the periods ended March 31, June 30, September 30 and December 31 of each year to be received on or before May 10, August 10, and February 10, respectively. Due dates falling on a Saturday, Sunday or national holiday will become effective on the first following working day.

(c) All reports should be addressed as follows: Data Administration Division; DAI-20, Room 4125; Office of Airline Statistics; Research and Special Programs Administration; Department of Transportation; 400 Seventh Street, SW.; Washington, DC 20590.

(d) All information included in RSPA Form 298-C schedules shall be typed or neatly printed.

(e) RSPA Form 298-C schedules can be obtained from the above address or by telephone (202) 366-9847.

§298.61 Reporting of traffic statistics for scheduled passenger operations.

(a) Each commuter air carrier and each small certificated air carrier shall file RSPA Form 298-C, Schedule A-1, "Report of Flight and Traffic Statistics in Scheduled Passenger Operations" and Schedule T-1, "Report of Revenue Traffic by On-Line Origin and Destination."

(b) Schedules A-1 and T-1 shall be filed quarterly as set forth in §298.60.

(c) Each carrier shall indicate in the space provided its full corporate name and the quarter for which the report is filed.

(d) The information included in this report shall pertain only to flights performed in scheduled passenger service during the quarter for which the report is filed.

(e) Schedule A-1 shall be used to report the total flight and traffic statistics in scheduled passenger operations by commuter air carriers and small certificated air carriers. These statistics should cover only scheduled passenger services and should be compiled in accordance with the instructions below. All statistics shall be reported in whole numbers; do not use decimals.

(f) Schedule T-1 shall show the total on-line origin and destination traffic in scheduled passenger services for the period as follows:

(1) Each pair of origin and destination airports shall appear only once, *i.e.*, no entry shall have the same origin and destination airports as another entry. For example, DAL-HOU and HOU-DAL would each appear once, but either DAL or HOU could reappear with any other point.

(2) The origin and destination data shall be for the on-line movement of traffic rather than for flight stages or flight origin and destination. For example, if a flight operates from A to B to C with 5 passengers enplaning at A, 1 deplaning and 2 enplaning at B, and 6 deplaning at C, the applicable passenger data would be reported as follows:

Origin airport	Destination airport	Number of passengers
A.....	B	1
A.....	C	4
B.....	C	2

(3) Only the ultimate origins and destinations of the traffic moving on the reporting carrier's system shall be reported. Using the example given above, the traffic report would remain the same, even if the carrier operated one flight from A to B and a different flight from B to C, as long as the passengers' on-line origins and destinations remained the same.

(4) Only one grand total shall be shown in the space provided after the final traffic entry. Do no use subtotals.

(5) Columns (1) and (2) shall show the airport codes for the movement of traffic from the point of origin to the point of destination. Carriers shall use the airport codes in the *Official Airline Guide* (OAG). If an airport cannot be found in the OAG, the carrier shall, until otherwise instructed by the Department, insert its own code for the airport in column (1) or (2) followed by an asterisk, and shall identify the airport and its location in the space provided.

(6) Column (3) shall show the total number of revenue passengers transported from the point of on-line origin to the point of on-line destination.

(7) Columns (4) and (5) shall be completed only by intra-Alaskan carriers, and shall reflect the total pounds of cargo and pounds of mail, respectively, transported from the point of on-line origin to the point of on-line destination.

(g) The information requested in RSPA Form 298-C may be submitted on any comparable form prepared on automatic data processing equipment if the substitute form has been approved by the Director, Office of Airline Statistics, Department of Transportation, Washington, DC 20590. Data in any approved format shall contain the same column headings arranged in the same sequence as in RSPA Form 298-C.

(h) Commuter air carriers serving or proposing to serve an eligible point shall comply with the applicable requirements in part 204 of this chapter.

§298.62 Reporting of financial data.

(a) Each commuter air carrier and each small certificated air carrier shall file RSPA Form 298-C, Schedule F-1 "Report of Financial Data." This report shall be filed quarterly as set forth in §298.60 of this part.

(b) Each carrier shall indicate in the space provided its full corporate name and the quarter for which the report is filed.

(c) This schedule shall be used to report financial data for the overall or system operations of the carrier. At the option of the carrier, the data may be reported in whole dollars by dropping the cents. Financial data shall be reported in the following categories:

(1) Line 1 "Total Operating Revenues" shall include gross revenues accruing from services ordinarily associated with air transportation and air transportation-related services. This category shall include revenue derived from scheduled service operations, revenue derived from nonscheduled service operations, amounts of compensation paid to the carrier under section 419 of the Federal Aviation Act and other transport-related revenue such as in-flight sales, restaurant and food service (ground), rental of property or equipment, limousine service, cargo pick-up and delivery charges, and fixed-base operations involving the selling or servicing of aircraft, flying instructions, charter flights, etc.

(2) Line 2 "Total Operating Expenses" shall include expenses of a character usually and ordinarily incurred in the performance of air transportation and air transportation services. This category shall include expenses incurred: directly in the in-flight operation of aircraft; in the holding of aircraft and aircraft personnel in readiness for assignment to an in-flight status; on the ground in controlling and protecting the in-flight movement of aircraft; landing, handling or servicing aircraft on the ground; selling transportation; servicing and handling traffic; promoting the development of traffic; and administering operations generally. This category shall also include expenses which are specifically identifiable with the repair and upkeep of property and equipment used in the performance of air transportation, all depreciation and amortization expenses applicable to property and equipment used in providing air transportation services, all expenses associated with the transport-related revenues included on line 1 of this schedule, and all other expenses not specifically mentioned which are related to transport operations. Interest expense and other nonoperating expenses attributable to financing or other activities which are extraneous to and not an integral part of air transportation or its incidental services shall not be included in this category.

(3) Line 3 "Net Income or (Loss)" shall reflect all operating and nonoperating items of profit and loss recognized during the period except for prior period adjustments.

(4) Line 4 "Passenger Revenues-Scheduled Service" shall include revenue generated from the transportation of passengers between pairs of points which are served on a regularly scheduled basis.

(d) Data reported on this form shall be withheld from public release for a period of 3 years after the close of the calendar quarter to which the report relates. Individual carrier financial data withheld from public disclosure may be disclosed by the Department to:

(1) Parties to any proceeding before the Department to the extent such material is relevant and material to the issues in the proceeding upon a determination to this effect by the administrative law judge assigned to the case or by the Department;

(2) Such persons and in such circumstances as the Department determines to be in the public interest or consistent with its regulatory functions and responsibilities; and

(3) Agencies and other components of the Federal Government for their internal use only. Aggregate data that does not identify individual carriers may be released prior to the aforementioned time.

§298.63 Reporting of aircraft operating expenses and related statistics by small certificated air carriers.

(a) Each small certificated air carrier shall file RSPA Form 298-C, Schedule F-2 "Report of Aircraft Operating Expenses and Related Statistics." This schedule shall be filed quarterly as prescribed in §298.60. Data reported on this report shall be for the overall or system operations of the air carrier.

(b) Each carrier shall indicate in the space provided its full corporate name and the quarter for which the report is filed.

(c) This schedule shall show the direct and indirect expenses incurred in aircraft operations. Direct expense data applicable to each aircraft type operated by the carrier shall be reported in separate columns of this schedule. Each aircraft type reported shall be identified at the head of each column in the space provided for "Aircraft Type." "Aircraft Type" refers to aircraft models such as Beech-18, Piper PA-32, etc. Aircraft Type designations are prescribed in the *Manual of ADP Instructions, Outputs, Codes and Related Material*, which is available from RSPA's Office of Airline Statistics. In the space provided for "Aircraft Code" carriers shall insert the three-digit code prescribed in the *Manual of ADP Instructions, Outputs, Codes and Related Material* for the reported aircraft type. (NOTE: Aircraft of the same type but different cabin configuration may be grouped into a single classification; therefore, carriers are not required to report the fourth digit of an aircraft code indicating cabin configuration.)

(d) Line 1 Direct aircraft operating expenses shall be reported in the following categories:

(1) Line 2 "Flying Operations (Less Rental)" shall be subdivided as follows:

(i) Line 3 "Pilot and Copilot" expenses shall include pilots' and copilots' salaries, and related employee benefits, pensions, payroll taxes and personnel expenses.

(ii) Line 4 "Aircraft Fuel and Oil" expense shall include the cost of fuel and oil used in flight operations and nonrefundable aircraft fuel and oil taxes.

(iii) Line 5 "Other" expenses shall include general (hull) insurance, and all other expenses incurred in the in-flight operation of aircraft and holding of aircraft and aircraft operational personnel in readiness for assignment to an in-flight status, which are not provided for otherwise on this schedule.

(2) Line 6 "Total Flying Operations (Less Rentals)" shall equal the sum of lines 3, 4 and 5.

(3) Line 7 "Maintenance-Flight Equipment" shall include the cost of labor, material and related overhead expended by the carrier to maintain flight equipment, general services purchased for flight equipment maintenance from associated or other outside companies, and provisions for flight equipment overhauls.

(4) Line 8 "Depreciation and Rental-Flight Equipment" expense shall include depreciation of flight equipment, amortization of capitalized leases for flight equipment, provision for obsolescence and deterioration of spare parts, and rental expense of flight equipment.

(5) Line 9 "Total Direct Expense" shall equal the sum of lines 6, 7 and 8.

(e) Line 10 Indirect aircraft operating expenses shall be reported only in total for all aircraft types and shall be segregated according to the following categories:

(1) Line 11 "Flight Attendant Expense" shall include flight attendants' salaries, and related employee benefits, pensions, payroll taxes and personnel expenses.

(2) Line 12 "Traffic Related Expense" shall include traffic solicitor salaries, traffic commissions, passenger food expense, traffic liability insurance, advertising and other promotion and publicity expenses, and the fringe benefit expenses related to all salaries in this classification.

(3) Line 13 "Departure Related (Station) Expense" shall include aircraft and traffic handling salaries, landing fees, clearance, customs and duties, related fringe benefit expenses and maintenance and depreciation on ground property and equipment.

(4) Line 14 "Capacity Related Expense" shall include salaries and fringe benefits for general management personnel, recordkeeping and statistical personnel, lawyers and law clerks, and purchasing personnel; legal fees and expenses; stationery; printing; uncollectible accounts; insurance purchased-general; memberships; corporate and fiscal expenses; and all other expenses which cannot be identified or allocated to some other specifically identified indirect cost category.

(f) Line 15 "Total Indirect Expense" shall equal the sum of lines 11, 12, 13 and 14.

(g) Line 16 "Total Operating Expense" shall equal the sum of lines 9 and 15.

(h) Line 17 "Total Block Hours (Revenue Service)" shall be computed from the time an aircraft first moves under its own power for the purposes of flight in revenue service until it comes to rest at the next point of landing. Data shall be reported by individual aircraft type and total.

(i) Line 18 "Total Departures (Revenue Service)" shall include total takeoffs in revenue service by individual aircraft type and total.

(j) Line 19 "Total Gallons of Fuel Issued" shall include the gallons of fuel used in flight operations related to fuel cost reported in total and by aircraft type on Line 4.

§298.64 Reporting of nonscheduled passenger enplanements by small certificated air carriers.

(a) Each small certificated air carrier shall file RSPA Form 298-C, Schedule E-1 "Report of Nonscheduled Passenger Enplanements by Small Certificated Air Carriers." This schedule shall be filed quarterly as prescribed in §298.60.

(b) Each carrier shall indicate in the space provided its full corporate name and the quarter for which the report is filed.

(c) Enplaned passenger data shall be provided for each airport served in nonscheduled service. Nonscheduled service includes charter flights and other transportation services not constituting an integral part of services performed pursuant to published flight schedules, but does not include flights performed as extra sections to published flight schedules.

(d) In column 1, carriers shall report the full name of each airport served in nonscheduled service.

(e) In column 2, carriers shall report the three-letter airport code found in the *Official Airline Guide* (OAG). If the OAG contains no three-letter code for a point served by the carrier, a three-letter code will be provided by RSPA's Office of Airline Statistics upon request.

(f) In column 3, carriers shall report the total nonscheduled passengers enplaned at each airport reported in column 1. This column shall be totaled.

§298.65 Request for extensions of time within which to file reports or for waivers from reporting requirements.

(a) If circumstances prevent he filing of RSPA Form 298-C on or before the due date, a written request for an extension may be submitted. Except in cases of emergency, the request must be delivered to RSPA's Office of Airline Statistics in writing at least three days in advance of the due date. The request must state good and sufficient reason to justify the granting of the extension and the date when the reports can be filed. If the request is denied, the air carrier remains subject to the filing requirements to the same extent as if no request for extension of time had been made.

(b) The Office of Airline Statistics may waive any reporting requirements contained in §298.61, §298.62, §298.63 and §298.64 of this part, upon its own initiative or upon written request from any air carrier if the waiver is in the public interest and the request demonstrates that:

(1) Unusual circumstances warrant such a departure;

(2) A specifically defined alternative procedure or technique will result in a substantially equivalent or more accurate portrayal; and

(3) The application of the alternative procedure will maintain or improve uniformity in reporting between air carriers.

§298.66 Reporting exemption for State collection of data.

(a) The Office of Airline Statistics may exempt a commuter air carrier from the reporting requirements of §298.61 of this part if a State government collects the information specified in that section and provides it to the Department by the dates specified. The data provided to the Department in this manner must be at least as reliable as if they were collected by the Department directly.

(b) The Office of Airline Statistics will provide assistance to any State agency interested in participating in this exemption program.

Subpart G--[Reserved]

Subpart H--Violations

§298.80 Enforcement

In case of any violation of the provisions of the Act, or this part, or any other rule, regulation, or order issued under the Act, the violator may be subject to a proceeding pursuant to sections 1002 and 1007 of the Act before the Department or a U.S. District Court, as the case may be, to compel compliance therewith; or to civil penalties pursuant to the provisions of section 901(a) of the Act; or, in the case of a willful violation, to criminal penalties pursuant to the provisions of section 902(1) of th Act; or other lawful sanctions including revocation of operating authority.

APPENDIX E: THE FINANCIAL BUDGET

Note: The Use of Proceeds summary given below represents the initial costs associated with the first year of operation for a given allotment option (exercised in full).

The subsequent pages provide a shell designed to anticipate and track ongoing expenses once the operation is established and growing. A company receiving financing for a new FAR Part 135 operation with four to six leased aircraft would anticipate allocating the funds in the following manner:

Application	Approximate Amount
Salaries	$ 860,000
Aircraft lease expenses/deposits	660,000
Training of personnel	530,000
Aircraft fuel	470,000
Maintenance (contracted and spares)	410,000
Advertising and sales promotion	220,000
Commissions and booking fees	240,000
Insurance (liability and casualty)	190,000
Gate and facility rent	170,000
Employee meals and expenses	90,000
Offices, communications, utilities	450,000
	$4,400,000

BUDGET DRAFT - STARTUP PHASE

FLIGHT OPERATIONS

Salaries

Commissions

Taxes-Payroll

Employee Benefits

Equipment

Training

TECHNICAL OPERATIONS

Salaries

Commissions

Taxes-Payroll

Employee Benefits

Equipment

Training

SYSTEM OPERATIONS

Weather Computers

Communication Equipment

Simulation Computers

GROUND OPERATIONS

Salaries

Commissions

Taxes-Payroll

Employee Benefits

Equipment

Training

Tooling

Airstairs

Loading Bridges

Auxiliary Power Units

Digital Guidance Systems

Baggage Transport Equipment

Tugs

Cargo Loaders

Pushback Tractors

Aircraft Parts

INFORMATION SYSTEMS

Salaries

Commissions

Taxes-Payroll

Employee Benefits

Equipment

Training

System Equipment

Server

Individual Nodes

Printers

Network

Terminals

Software

SALES AND SERVICE MARKETING

Salaries

Commissions

Taxes-Payroll

Employee Benefits

Equipment

Training

Advertising

Printing Costs

Sales Equipment

CORPORATE DEVELOPMENT

Salaries

Commissions

Taxes-Payroll

Employee Benefits

Equipment

Training

Uniforms

Drug Testing

FINANCE

Salaries

Commissions

Taxes-Payroll

Employee Benefits

Equipment

Training

Accounting System

Payroll System

Bank Fees

LEGAL

Salaries

Commissions

Taxes-Payroll

Employee Benefits

Equipment

Training

Incorporation Costs

Permits

Insurance

Registration

EXPENSES

Landing Fees

Holdroom Space

Baggage Handling Fee

Overnight Aircraft Parking

Passenger Facility Charges

Gate Rents

Office Space Leases

Security Deposits

Utilities

Communication Costs

CALIFORNIA AIRLINES
FINANCIAL PERFORMANCE

MONTH	NO. OF AIRCRAFT	NO. OF AIRPORTS	DAILY SEGMENTS	LOAD FACTOR	REVENUE	NET EARNING
1	2	2	18	40%	$54,432	($213,564)
2	2	2	18	41%	$178,188	($94,667)
3	5	6	45	42%	$456,336	($128,704)
4	7	8	63	43%	$654,081	($124,940)
5	10	11	90	45%	$977,862	($95,348)
6	15	16	135	45%	$1,466,794	($92,692)
7	17	17	170	45%	$1,847,073	($9,427)
8	20	20	200	45%	$2,173,028	$7,141
9	22	21	220	45%	$2,390,330	$36,673
10	24	23	264	45%	$2,868,396	$131,527
11	26	25	286	45%	$3,107,429	$154,065
12	28	26	308	45%	$3,346,462	$190,761
13	30	28	360	45%	$3,911,450	$314,273
14	32	29	384	45%	$4,172,213	$228,470
15	34	31	408	45%	$4,432,976	$213,310
16	35	32	420	45%	$4,563,358	$221,478
17	36	32	432	45%	$4,693,739	$237,433
18	37	33	444	45%	$4,824,121	$242,030
19	38	34	456	45%	$4,954,503	$250,198
20	39	35	468	45%	$5,084,884	$258,367
21	40	36	480	45%	$5,215,266	$266,535
22	41	36	492	45%	$5,345,648	$282,490
23	42	37	504	45%	$5,476,029	$290,658
24	43	38	516	45%	$5,606,411	$295,255

APPENDIX F

FINANCIAL TERMS AND FORMULAS

Source:

Brealey and Myers, Principles of Corporate Finance, 2nd ed., New York, N.Y, Random House, 1984.

SATEMENT OF CASH FLOWS

CASH FLOW FROM OPERATING ACTIVITIES
  NET EARNINGS
  ADJUSTMENTS TO RECONCILES NET EARNINGS
    TO NET CASH PROVIDED BY OPERATING ACTIVITIES
      DEPRECIATION/AMORTIZATION
      DEFERRED FEDERAL INCOME TAX
      OTHER

NET CASH PROVIDED BY OPERATING

CASH FLOW FROM INVESTING ACTIVITIES
  CAPITAL SPENDING
  PROCEEDS FROM DISPOSITION OF PROPERTY AND EQUIPMENT
  OTHER

NEST CASH PROVIDED BY (USED FOR) INVESTING ACTIVITIES

CASH FLOW FROM FINANCING ACTIVITIES
  SALE/LEASEBACK
  ISSUANCE OF CAPITAL AND COMMON STOCKS
  OTHER

NET CASH PROVIDED BY FINANCING ACTIVITIES

NET INCREASE (DECREASE) IN CASH

CASH AT THE BEGINNING OF YEAR
CASH AT END OF YEAR

SUPPLEMENTAL CASH FLOW INFORMATION
  INTEREST PAID
  INCOME TAXES PAID

ACTIVITIES NOT AFFECTING CASH

FINANCIAL PERFORMANCE ANALYSIS

* LEVERAGE RATIOS
  Summarize the financial leverage.

  - DEBT RATIO

$$\frac{\text{long-term debt + value of leases}}{\text{long-term debt + value of leases + equity}}$$

  - DEBT-EQUITY RATIO

$$\frac{\text{long-term debt + value of leases}}{\text{equity}}$$

  - TIMES INTEREST EARNED

$$\frac{\text{EBIT + depreciations}}{\text{interests}}$$

FINANCIAL PERFORMANCE ANALYSIS
(Cont'd)

* LIQUIDITY RATIOS
  Measure liquidity.

  - NETWORKING CAPITAL

    current assets - current liabilities

    Measures the potential reservoir of cash.

    $$\frac{\text{net working capital}}{\text{total assets}}$$

  - CURRENT RATIO

    $$\frac{\text{current assets}}{\text{current liabilities}}$$

  - QUICK RATIO

    $$\frac{\text{current assets - inventories}}{\text{current liabilities}}$$

FINANCIAL PERFORMANCE ANALYSIS
(Cont'd)

- CASH RATIO

$$\frac{\text{cash + marketable securities}}{\text{current liabilities}}$$

- INTERVAL MEASURE

$$\frac{\text{current assets - inventories}}{\text{average daily expenditures from operations}} = z$$

The company has sufficient liquid assets to finance operations for z days, even if it receives no further cash.

* PROFITABILITY/EFFICIENCY RATIOS

- REVENUES TO TOTAL ASSETS

$$\frac{\text{revenues}}{\text{total assets}}$$

Shows how hard the assets are being put to use.

FINANCIAL PERFORMANCE ANALYSIS
(Cont'd)

- REVENUES TO NET WORKING CAPITAL

$$\frac{\text{revenues}}{\text{net working capital}}$$

- NET PROFIT MARGIN

$$\frac{\text{EBIT - tax}}{\text{revenues}}$$

Shows what proportion of revenues find its way into profits.

- RETURN ON TOTAL ASSETS

$$\frac{\text{EBIT - tax}}{\text{total assets}}$$

Measures the firm's performance.

FINANCIAL PERFORMANCE ANALYSIS
(Cont'd)

- RETURN ON EQUITY

$$\frac{\text{earnings available for common stocks}}{\text{average equity}}$$ (Given in %)

Note: Airlines normally do not pay out dividends.

* MARKET VALUE RATIOS

- PRICE-EARNINGS RATIO

$$\text{P/E RATIO} = \frac{\text{stock price}}{\text{earnings per share}}$$

A common measure of the esteem in which the company is held by investors.

High P/E ratio may indicate:
1) investors expect high dividend growth.
2) stock has low risk, and therefore the investors are content with a low prospective return.
3) the company is expected to achieve average growth while paying out a high proportion of earnings.

FINANCIAL PERFORMANCE ANALYSIS
(Cont'd)

- MARKET-TO-BOOK RATIO

$$\frac{\text{stock price}}{\text{book value per share}} = 1.x$$

1.x means than the firm is worth only x percent more than past and present stock holders have put into it.

- TOBIN'S q:

$$q = \frac{\text{market value of assets}}{\text{estimated replacement cost}}$$

Firms have an incentive to invest when q is greater than 1. Unless! there is no scope for further profitable investment.

In general, a high market value is usually a sign that investors believe there are good opportunities in the business.

q is higher for firms with a strong competitive advantage (brand image, patent protection, etc., monopoly routes for airlines).

Low q in highly competitive and shrinking industries, e.g., low-cost airlines in early and mid '80s.

AIRLINE FINANCE

- AIRLINE CASH OUTLAY
  - Expenses
  - Capital Spending
- SOURCES OF FUNDS (CASH IN-FLOW)
  - Internal
  - External
- INTERNAL SOURCES
  - Net Earnings (Profits)
    - Retained
    - Divided (Pay Out)
  - Depreciation
  - Deferred Taxes
- EXTERNAL SOURCES
  - Debt Financing
  - Equity Financing

EXTERNAL FUNDS

- COMMERCIAL BANKS
  (Senior Debt)
  - Short-Term Loans
  - Long-Term Loans
  - Line of Credit
- EQUIPMENT TRUST FINANCING
  (Commercial and Investment Banks)
  Trustee: Commercial Banks
- FINANCE AND LIFE INSURANCE COMPANIES
- INVESTMENT BANKS
- LEASING
- VENDOR FINANCING
- VENTURE CAPITAL

CORPORATE FINANCE

- STOCK
  - Common Stock
  - Cumulative Preferred Stock
  - Convertible Cumulative Stock
- LONG-TERM DEBT
  - Sinking Fund Debentures
  - Convertible Subordinated Debentures
  - Zero Coupon Bonds
  - Secured Notes
  - Unsecured Notes
  - Revolving Credit Notes
  - Eurobonds
  - Eurodollar Revolving Credit Notes
- CORPORATE DEBT
  - Maturity
  - Repayment Provisions
  - Call (Redeemable)
  - Subordinated
  - Floating/Fixed Rates

LEASING

- TYPES
  - Operating Lease
  - Capital/Finance Lease
- FUNCTIONAL
  - Wet
  - Dry
- FINANCIAL ACCOUNTING STANDARD (FAS 13)
  Capital lease if any one of the following four applies:
  1) Asset's ownership transferred from lessor to lessee.
  2) Lessee has an option to purchase the asset at bargain price.
  3) The lease term is equal to or greater than 75% of the life of the asset.
  4) The present value of the rentals is equal to or greater than 90% of the fair value minus investment tax credit (if any).
- LEVERAGE LEASE
  - Lessee
  - Long-Term Creditor (major portion of financing)
  - Lessor (equity participant)

LEASING
EXAMPLE

Cross-Boarder Douple-Dipping Japanese Leverage Lease

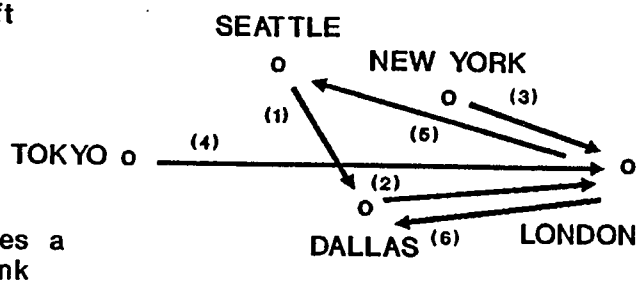
(1) Seattle manufacturer sells aircraft to airline in Dallas.

(2) Airline in Dallas sells (exports) aircraft to its fully-owned subsidiary in London.
Saving: Export tax credit.

(3) The company in London structures a
& leverage lease, equity from a bank
(4) in New York and debt from a bank in Tokyo.
Saving: Leasing benefits.

(5) The company in London pays the Seattle manufacturer for the aircraft.

(6) The company in London leases the aircraft back to the airline in Dallas.
Saving: Export tax credit and/or Depreciation.



CAN REDUCE COSTS BY AS MUCH AS 10% OF AIRCRAFT HAUL VALUE

FINANCIAL PLANNING

- Financial planning is a process of:
  1) Analyzing the interactions of the financing and investment choices open to the firm.
  2) Projecting the future consequences of present decisions, in order to avoid surprises and understand the links between present and future decisions.
  3) Deciding which alternatives to undertake.
  4) Measuring subsequent performance against the goals set in the financial plan.

- Content of Financial Plan:
  - Pro Forma Statements
  - Capital Spending and Business Strategy
  - Planned Financing

- Requirements for Effective Planning:
  - Forecasting
  - Optimization

SHORT-TERM FINANCIAL PLANNING

- WORKING CAPITAL
  - Current Assets
  - Current Liabilities
  - Net
- MATCHING MATURITIES
- PERMANENT WORKING CAPITAL REQUIREMENTS
  Financed by long-term debt.
- PROFITS AND CASH FLOW
  Cash from oprations (may not represent real $)
- CASH BUDGETING
  - In-Flow
  - Out-Flow
- SHORT-TERM INVESTMENT
  - Money Market
    - US Treasury Bills
    - Agency Securities
    - Short-term Tax Exempts
    - Certificate of Deposit
    - Eurodollars
    - Commercial Paper
    - Bankers' Acceptance
    - Repurchase Agreements
  - Floating-Rate Preferred Stock

SHORT-TERM FINANCIAL PLANNING
(Cont'd)

- SHORT-TERM BORROWING
  - Unsecured loans (line of credit)
  - Loans secured by receiveables
  - Loans secured by inventory
- TERM LOAN
  - Medium-term debt financing
    Banks: 1-8 years
    Insurance companies: longer
  - May have no payment for some period
  - May have "balloon" payment
  - Mostly unsecured

APPENDIX G

SAMPLE FORMS

Source:

United States, Dept. of Transportation. Federal Aviation Administration. Air Transportation Operations Inspector's Handbook. Washington: GPO, 1988

Form 1: Application for Air Taxi Commercial Operator 8000-6.

Form 2: Certificate of Insurance OST 4521.

No certificate may be issued unless a completed application form has been received (14 C F R 135)

US Department of Transportation
Federal Aviation Administration

APPLICATION FOR AIR TAXI COMMERCIAL OPERATOR (ATCO) CERTIFICATE UNDER FAR 135

Form Approved
O M B No 2120-0039

Submit in triplicate (3) to appropriate FAA District Office

1. APPLICATION IS HEREBY MADE FOR (*"X" applicable box*)
☐ ISSUANCE ☐ AMENDMENT OF ATCO CERTIFICATE

2. NAME, ADDRESS, AND ZIP CODE OF APPLICANT

TELEPHONE (*Include area code*)

2a. OPERATING AS
☐ INDIVIDUAL ☐ PARTNERSHIP ☐ CORPORATION
☐ OTHER (*Specify*)

	Yes	No
2b. U S. CITIZENSHIP AS DEFINED IN FAR 135		
2c. PROOF OF REGISTRATION (*CAB Part 298*)		
2d. HOLD A COMMERCIAL OPERATING CERTIFICATE (*If "Yes," state Regulation(s) under which issued*)		

3. PRINCIPAL OPERATIONS BASE (*Airport, City, State*)

4. PRINCIPAL MAINTENANCE BASE (*Airport, City, State*)

5. NAME OF ☐ DIRECTOR OF OPERATIONS ☐ CHIEF PILOT

PHONE (*Include area code*)

6. NAME OF ☐ DIRECTOR OF MAINTENANCE ☐ CHIEF MECHANIC

PHONE (*Include area code*)

7. OPERATION AUTHORIZATIONS REQUESTED (*Use separate line for each different authorization requested*)

AIRPLANE	HELICOPTER	SINGLE ENGINE LAND	SINGLE ENGINE SEA	MULTIENGINE LAND	MULTIENGINE SEA	PASSENGERS 9 OR LESS	PASSENGERS 10 TO 19	PASSENGERS 20 TO 30	JET	T PROP	RECIP	VFR	IFR	DAY	NIGHT	PASSENGER	CARGO	COMMUTER	AIRMAIL	OFF-AIRWAYS	AUTO-PILOT	RNAV	MLS

8. AREA OF OPERATION
☐ CONTINENTAL US
☐ SPECIFIC AREAS
☐ INTERNATIONAL (*List countries*)

9. AIRCRAFT TO BE USED (*List one aircraft only in each category and class*)

REGISTRATION NUMBER	MAKE	MODEL	CATEGORY AND CLASS	OWNERSHIP ("X" one) Owned	OWNERSHIP ("X" one) Agreement or Lease (*Attach copy*)	EQUIPPED FOR ("X" applicable items) VFR DAY	VFR NIGHT	IFR DAY	IFR NIGHT

10. CERTIFICATION — I certify these statements and the attachments hereto are true and correct

SIGNATURE OF APPLICANT	TITLE	DATE

RECORD OF ACTION—FOR FAA USE ONLY

11. INSPECTOR'S RECOMMENDATIONS (*If additional space is required attach 8 x 10 sheet of paper*)

12. INSPECTORS SIGNATURES	OPERATIONS	MAINTENANCE	AVIONICS

13. APPROVAL ACTION

		COMMENTS
	APPROVED CERTIFICATE NO ISSUED	
	DISAPPROVED	

SIGNATURE	TITLE	DATE

FAA Form 8000-6 (*-83)

Approved by OMB
OMB No. 2106-0031
Expires 6-30-92

AGENCY DISPLAY OF ESTIMATED BURDEN

The public reporting burden for this collection of information is estimated to average 30 minutes per response. If you wish to comment on the accuracy of the estimate or make suggestions for reducing this burden, please direct your comments to OMB and the OAA at the following addresses:

Office of Management and Budget
Office of Information and Regulatory Affairs
Attention: OMB Desk Officer for OST, RM 3208
Washington, DC 20503

and

U.S. DOT/OST/ASPIA
Office of Aviation Analysis
400 7th Street, SW
Washington, DC 20590

U.S. Department of Transportation
Office of the Secretary of Transportation

CERTIFICATE OF INSURANCE

AIR TAXI OPERATOR POLICIES OF INSURANCE FOR AIRCRAFT BODILY INJURY AND PROPERTY DAMAGE LIABILITY

NOTE: THIS FORM IS TO BE COMPLETED BY AN OFFICER OF AUTHORIZED AGENT OF THE INSURANCE COMPANY

THIS CERTIFIES THAT: _____
(Name and Address of Insurer)

has issued a policy or policies of Aircraft Liability Insurance to _____

_____
(Name and address of Insured Air Taxi Operator)

effective from _____ until ten (10) days after written notice from the insurer or carrier of the intent to terminate coverage is received by the Department of Transportation.

NOTE: Part 298 of the Department's Regulations does not allow for a predetermined termination date, and a certificate showing such a date is unacceptable.

1. The Insurer *(Check One)*:
   - ☐ is licensed to issue aircraft insurance policies in the United States.
   - ☐ is an approved surplus line insurer in the State(s) of _____

2. The insurer assumes, under the policy or policies listed below, aircraft accident liability insured to minimums at least equal to the following during operation, maintenance, or use of aircraft in "air transportation" as that term is defined in the Federal Aviation Act.

☐ Separate Coverages:

Policy No.	*Type of Liability*	*Minimum Limit*	
		Each Person	*Each Occurrence*
_____	Bodily Injury Liability (Excluding Passengers)	$75,000	$300,000
_____	Passenger Bodily Injury Liability	$75,000	$75,000 x 75% of total number of passenger seats installed in the aircraft.
_____	Property Damage		$100,000

☐ Combined Coverage: This combined coverage is a single limit of liability for each occurrence at least equal to the required minimums stated above for bodily injury excluding passengers, property damage, and passenger bodily injury

Policy No. _____ Amount of Coverage _____

OST Form 4521 (Rev. 3-9[illegible])

APPENDIX H

APPLICATION PROCEDURES

Source:

The Department of Transprotation, How to Become a Certified Air Carrier. Office of the Secretary, Department of Transportation, Washington D.C. 1992.

This appendix contains a sixteen page, double-sided insert.

HOW TO BECOME

A CERTIFICATED AIR CARRIER

Prepared by:

Air Carrier Fitness Division
Office of the Secretary
Department of Transportation
400 Seventh Street, S.W.
Washington, D.C. 20590

202-366-9721

September 1992

PART I

APPLICATION PROCEDURES AND EVIDENCE REQUIREMENTS

Under the Federal Aviation Act (the Act),[1] anyone who wants to provide air transportation service[2] as an air carrier must first obtain two separate authorizations from the Department of Transportation: "safety" authority in the form of an Air Carrier Certificate from the Federal Aviation Administration (FAA), and "economic" authority in the form of a section 401 or 418 certificate from the Office of the Secretary of Transportation (the Department).[3] Under section 401 of the Act, a certificate for interstate/overseas passenger and/or cargo and mail authority[4] may be issued after a finding by the Department that the applicant is "fit, willing, and able" to perform the service it proposes. The award of such a certificate for foreign authority must also be found to be consistent with the public convenience and necessity. Carriers proposing to operate only domestic all-cargo air service[5] may, after a finding of

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[1] Copies of the Act may be obtained directly from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

[2] Air transportation, as defined by the Act, means the carriage by aircraft of persons or property as a common carrier in interstate, overseas, or foreign commerce for compensation or hire, or the carriage of mail by aircraft.

[3] There are certain exceptions to this rule. Section 416 of the Act allows the Department to grant exemptions from the certificate requirement where it finds that such exemptions are "consistent with the public interest." Such exemptions may be granted to individual air carriers or to groups or classes of air carriers. Carriers proposing to operate only small aircraft, that is aircraft designed to configure 60 or fewer seats or with a payload capacity of less than 18,000 pounds, are exempt from the certificate requirements and may obtain authority as an air taxi operator or commuter air carrier in accordance with the provisions of Part 298 of the Department's economic rules (14 CFR 298).

[4] Overseas authority involves transportation between points in the United States and the District of Columbia, on the one hand, and points in U.S. territories or possessions, on the other, or between points in U.S. territories or possessions. For example, transportation between New York and St. Thomas, U.S. Virgin Islands, is "overseas air transportation," as is transportation between St. Thomas and San Juan, Puerto Rico. A carrier receiving interstate authority automatically receives overseas authority.

[5] Domestic all-cargo air service, as defined by the Act, means the carriage by aircraft of property or mail, or both, as a common carrier for compensation or hire, in transportation between a place in any State of the United States, or the District of Columbia, Puerto Rico, or the U.S. Virgin Islands, and any other place in those entities. This includes commerce moving partly by aircraft and partly by other forms of transportation, as well as commerce moving wholly by aircraft, and may include scheduled or charter service.

"fitness" by the Department, obtain an All-Cargo Air Service Certificate under section 418 of the Act.

This packet contains information on how to obtain section 401 and section 418 certificate authority. Information on other types of air carrier authority may be obtained from the Department as follows:

For information on air taxi authority, contact:

Regulatory Analysis Division
Department of Transportation
P-57, Room 6401
400 Seventh Street, S.W.
Washington, D.C. 20590
(202) 366-2402 or -2403

For information on commuter air carrier and other types of authority, contact:

Air Carrier Fitness Division
Department of Transportation
P-56, Room 6401
400 Seventh Street, S.W.
Washington, D.C. 20590
(202) 366-9721

For information on obtaining an Air Carrier Certificate from the FAA, contact a local FAA Flight Standards District Office in your area or:

Federal Aviation Administration
Air Transportation Division, AFS-200
800 Independence Avenue, S.W.
Washington, D.C. 20591
(202) 267-8166

APPLICATION

Reprinted in Part II of this packet is a copy of Part 201 of the Department's Regulations, which describes the rules for filing an application for certificate authority. Separate applications are required to obtain interstate/overseas authority and authority to serve foreign points.[6] A sample of each type of application is included at the end of

[6] Applications for scheduled authority are filed under section 401(d)(1) of the Act. Applications for charter authority are filed under section 401(d)(3). Applications for domestic all-cargo authority are filed under section 418 of the Act.

Part I of this packet. The fees for filing applications for section 401 certificate authority are as follows:

Interstate/overseas scheduled certificate authority	$ 850
Foreign scheduled certificate authority	$ 850
Both interstate/overseas and foreign scheduled certificate authority	$1,700
Interstate/overseas charter certificate authority	$ 850
Foreign charter certificate authority	$ 600
Both interstate/overseas and foreign charter certificate authority	$1,450
Domestic all-cargo authority	$ 670

At the time an application is filed, the supporting information that the applicant will rely on to convince the Department that it should be awarded the requested authority should be submitted. The evidentiary material required to be submitted with the application is detailed in section 204.3 of Part 204 of the Department's Regulations, a copy of which can be found in Part II of this packet. A discussion of these requirements is contained in the section below on **"Evidence Requirements."** Should the applicant wish to seek confidential treatment for any portion of this material, it should use the procedures set forth in section 302.39 of the Department's Regulations, a copy of which is included in Part II. If an applicant is seeking both section 401 interstate/overseas and foreign authority, the evidence in support of the applicant's fitness to operate need only be included with one of the applications and incorporated by reference in the other.

Applicants for section 401 and 418 authority are also required to serve their applications on persons who may have an interest in the proposed operation. A list of the persons requiring service is contained in section 302.1705(b) of the Department's Regulations, which may be found in Part II.

An original and 12 copies of each section 401 or 418 application and evidentiary material, together with the required filing fee, should be sent to:

Documentary Services Division
Department of Transportation
C-55, Room 4107
400 Seventh Street, S.W.
Washington, D.C. 20590
(202) 366-9322

APPLICATION PROCESSING PROCEDURES

Upon receipt of an application for section 401 or 418 authority, the Documentary Services Division will assign a docket number to the application and forward the material to the Air Carrier Fitness Division for review and processing.

Applications for air carrier authority are processed under Subpart Q of the Department's Procedural Regulations (14 CFR 302.1701 *et seq.*). Under Subpart Q, after an application is filed, staff of the Air Carrier Fitness Division will review it to determine whether all of the information required to be filed has been submitted. Usually, this review will be completed within 21 days after the application is filed. If the application is not complete, the Air Carrier Fitness staff will so advise the applicant and defer processing of the application until all of the required information is received. Any such subsequent filings should be submitted to the Documentary Services Division, with an original and 12 copies, referencing the docket number(s) assigned to the application. Interested parties have 28 days from the date the application (or any subsequent amendment) is filed to submit answers to the application.

Once the answer period has expired and all filings have been made, the Department will decide on the procedures it will follow in handling the application.

In cases where there appear to be no material issues of fact that cannot be resolved on the written record, the Department may choose to act on the application by use of show-cause procedures.[7] In such cases, an order will be issued tentatively finding the applicant fit and proposing to issue it a certificate authorizing the requested service. A copy of the order will be sent to the applicant, any person who has filed an answer to the application, and interested FAA offices, and a summary of the order will be published in the Federal Register. The order will allow interested persons an opportunity, usually 15 days, to file comments either in support of or in opposition to the proposed fitness findings and award of authority. If no objections are filed, an order finalizing the tentative findings will be issued. If objections are filed, the applicant will have an opportunity to reply to them before further Department action is taken. Based on these responses, the Department will then determine what further procedural steps, if any, may be warranted, such as requesting additional information from the applicant

[7] In cases where there are substantial questions about a carrier's fitness to operate, the Department may issue an order dismissing or proposing to deny the application. If an application raises substantive questions of fact, is controversial, or presents complex issues that can be resolved more appropriately through an oral evidentiary hearing, the Department will institute a fitness investigation directing that the matter be considered before an Administrative Law Judge. Once the application is assigned, the Judge will set a procedural schedule for exhibits, hearings, and briefs. After these procedures have been completed, the Judge will review the information submitted and the arguments on brief, and issue a recommended decision on the applicant's fitness to provide the air transportation it proposes. After the Judge issues a decision, the Department's Assistant Secretary for Policy and International Affairs will review that recommendation and issue a final decision on the application.

or setting the case for hearing before an Administrative Law Judge. If such further procedures are not employed, the Department will issue a final order on the merits.

If a section 401 application to provide service to a foreign point is involved, the Department's final decision to grant or deny the requested authority is subject to review by the President, who has 60 days from the date the Department sends him the decision to review the action. If the Department's decision is not disapproved by the President within 60 days, it will become final. Department actions on requests for section 401 interstate/overseas authority are not subject to review by the President, and are final at the time they are issued.

If, at the time the Department issues its final decision and award of authority, the applicant does not hold an Air Carrier Certificate and Operations Specifications from the FAA authorizing it to conduct its proposed operations, the economic authority will not become *effective* until the applicant has received the required FAA authority and presented evidence of such to the Department. Further, at the time it presents its FAA documents to the Department, the applicant also must supply certain updated fitness information and proof of insurance coverage (see the discussion below under "**Other Requirements**"), and meet any other conditions imposed by the Department in its final decision.

Under the Department's Regulations (section 201.5 reprinted in Part II), an applicant may not (1) advertise, list schedules, or accept reservations for its proposed air transportation until the Department issues its final decision on the applicant's certificate application, or (2) accept payment or issue tickets for its proposed air transportation until the certificate has been made effective by the Department. An applicant may advertise or list schedules for its proposed services between the time the Department issues its final decision on the application and the time the authority is made effective only if any such listings or advertisements prominently state "This service is subject to receipt of government operating authority."

In calculating start-up time, an applicant should anticipate that the Department will require a minimum of three months to process the application beginning from the time the Department receives a *complete* application. Additional time would be required if objections are filed or complex or unusual issues are raised by the application. This estimate does not take into account the time required to complete any necessary FAA certification work.

FITNESS EVIDENCE REQUIREMENTS

The Department uses a three-part test to determine the fitness of a company. First, the Department examines the managerial competence of the applicant's key personnel to see whether they have sufficient business and aviation experience to operate an airline, and to determine that the management team, as a whole, possesses the background and experience necessary for the kind of operations to be undertaken. Second, the

Department reviews the applicant's operating and financial plans to see whether the applicant has a reasonable understanding of the costs of starting its operations and has a plausible plan for raising the necessary capital. Before being granted effective air carrier authority, the applicant must submit third-party verification that it has acquired the necessary capital. Third, the Department looks at the applicant's compliance record to see whether it and its key personnel have a history of safety violations or consumer fraud activities that would pose a risk to the traveling public, or otherwise have a history that would lead us to believe that the applicant is unlikely to comply with government laws, rules and directives. In addition, the applicant must establish that it is a U.S. citizen. The information required by Part 204 is intended to provide the Department with a sufficient basis upon which to determine whether an applicant is qualified in each of these areas to provide the public with its proposed service.

The following pages contain a discussion of the data required by section 204.3, the rule which contains the Department's evidentiary requirements for prospective certificated air carriers. (Section 204.3 can be found in Part II of this packet.) An applicant should address each point below. If the answer to the information requested is "not applicable" or "none," please so state for each item.

Care taken by the applicant to assure that its filing is as complete as possible will reduce the likelihood that the processing of its application will be unnecessarily delayed because the Department has to request the applicant to either clarify the information provided or to supply information omitted in its original filing. If an applicant has any questions concerning the filing requirements or fitness procedures, those questions may be addressed to the staff of the Air Carrier Fitness Division (202-366-9721).

In addition, if, during the course of the Department's fitness review, any changes occur in the applicant's ownership, management team, compliance history, financial position, or service proposal so as to render inaccurate any representations of its fitness made in its application or in answers provided to subsequent information requests from the Department, the applicant must file promptly with the Department's Documentary Services Division a formal supplement to its application in the docket describing the details of any such changes.

General

The purpose of the information described below is to provide the Department with some background on the applicant, including information on its ownership structure, the type of service being provided currently as well as that proposed, and to demonstrate that the applicant is a U.S. citizen.

Data Required

1. The name, address, and telephone number of the applicant.

2. The form of the applicant's organization (for example, sole proprietorship, partnership, or corporation).

3. The state law(s) under which the applicant is organized and the date of incorporation or organization.

4. If the applicant is a corporation, a statement provided by the Office of the Secretary of State, or other agency of the state in which the applicant is incorporated, certifying that the applicant corporation is in good standing. This statement should reflect the applicant's corporate standing not more than one month prior to the date the application is filed.

5. A sworn affidavit stating that the applicant is a citizen of the United States.[8] (See Part III of this packet for a sample of the affidavit required.) If any officers, directors, owners, or other persons who have the power to influence the applicant, whether through ownership, debt, or other interest, are not U.S. citizens, state the name and citizenship of each, and describe each such person's interest in the applicant.

6. A list of all persons (individuals or organizations) that own or control at least 10 percent of the stock of the applicant, indicating the number of voting shares and the corresponding percentage of the total shares outstanding that are held by each, along with their address, citizenship, and principal business. If any such person is an organization, provide the name, address, citizenship, and principal business of the individuals who own or control at least 10 percent of the stock of the organization. If the applicant's stock is held by someone for the benefit or account of a third party, give the name, citizenship, and principal business of that person or organization. If any of these persons are related by blood or marriage or have had any financial interest in, or serve or have served as an officer or director of any other air carrier, common carrier, or person substantially engaged in the business of aeronautics or persons whose principal business (in purpose or fact) is the holding of stock in or control of any aviation-related entity, that relationship should be described.

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[8] The Act defines a "citizen of the United States" as: (1) an individual who is a citizen of the United States or one of its possessions, or (2) a partnership of which each member is such an individual, or (3) a corporation or association created or organized under the laws of the United States or any state, territory or possession of the United States, of which the president and two-thirds or more of the Board of Directors and other managing officers are such individuals, and in which at least 75 percent of the voting interest is owned by persons who are citizens of the United States or one of its possessions. In addition to meeting these specific numerical standards, we have interpreted the Act to require that a U.S. air carrier, in fact, be under the actual control of U.S. citizens.

7. A description of the classes or types of the applicant's stock that are authorized and the number of shares of each class or type that are issued and outstanding. If any person or organization holds options to convert debt to equity or one type of stock to another type, identify the person or organization and discuss the circumstances under which such conversion may occur.

8. A list of the applicant's subsidiaries, if any, or of any other company (including any air carrier, common carrier, or person substantially engaged in the business of aeronautics) in which the applicant has a financial interest. The principal business of each of these companies, and their relationship to the applicant should be discussed.

9. A description of all authority the applicant holds or has held to conduct air transportation operations from state, federal, and foreign governments. This would include, for example, a certificate from the FAA or a Canadian Transport Commission license. If additional authority is needed from the FAA in order to conduct the proposed operations, the status of any application for that authority, and the name, telephone number, and address of the FAA personnel responsible for processing that application should be provided. If no additional authority is needed, the name, address, and telephone number of the applicant's FAA principal operations inspector should be included.

10. A narrative history of the applicant, including when it was formed and by whom; the nature of the business initially and how it has changed or grown; any ownership changes; the applicant's service area and the primary markets currently being served; and the total number of employees currently employed.

11. A list of the applicant's current fleet of aircraft, including the number and seating/cargo capacity of each type of aircraft and whether they are owned or leased. If the aircraft are leased, provide the identity of the lessor. A sworn affidavit stating that each of these aircraft has been certified by the FAA and complies with all applicable FAA safety standards should also be provided by applicants that already operate aircraft. For non-operating applicants, this affidavit should be submitted at the time the company's FAA documents are submitted to the Department to make its authority effective. (See Part III of this packet for a sample of the affidavit required.)

Management Expertise and Technical Ability

The purpose of this information is to demonstrate that the applicant has a sufficient number of qualified, competent personnel directing its operations.

Data Required

The following information concerning the existing and/or prospective key management personnel[9] should be submitted:

1. The individual's position and responsibilities with the applicant and the date employed or to be employed. If an individual has been employed with the applicant for a number of years, indicate all positions held during that time, with dates. If any key person is employed or to be employed by the applicant on less than a full-time basis, state what percentage of the employee's time will be spent on the applicant's business, and provide details of his or her concurrent occupation(s).

2. A resume for each of the key personnel stating:

   a. Full name, current address, and telephone numbers.

   b. All previous employment (both aviation and non-aviation) including: name of employer, location (city, state), type of business, position held, description of responsibilities, and dates employed. If the previous employer held any aviation authority, state the type (*e.g.*, air taxi, commuter, FBO, section 401 certificate). Any periods of unemployment should be accounted for.

   c. Education and training, including names of institutions, dates attended, and any certificates or degrees received. If the person holds a certificate or license from the FAA (such as an Airline Transport Pilot or Airframe & Powerplant Mechanic license), these, including their numbers, should be listed, as well as the number of recorded hours of flying time for the Chief Pilot.

3. The citizenship of each such person.

4. The amount of stock (or other interest) held in the applicant, if any, by each.

5. A description of the officerships, directorships, stock (if 10 percent or more), or other interests each holds in any other air carrier, common carrier, or person substantially engaged in the business of aeronautics.

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9 "Key personnel" refers to the President, Chief Executive Officer, Chief Operating Officer, General Manager, Chief Financial Officer, and Vice President(s), if any, the Director of Operations, the Director of Maintenance, and the Chief Pilot, as well as the Chairman and members of the Board or other key officials who may not be involved with the day-to-day operation of the company but who are primary stockholders and/or whose influence on the policy of the applicant is, or potentially could be, substantial.

Financial Position and Operating Plans

This information will be used to assess the financial position of the applicant and the applicant's access to the capital required to commence operations.

Data Required

The following financial information about the applicant should be provided:

1. Balance sheets and income statements of the applicant and all relevant corporations,[10] together with their accompanying explanatory footnotes (including a description of the company's significant accounting policies, such as for depreciation, amortization of intangibles, overhauls, unearned revenues, and cost capitalization), for the three most recent calendar or fiscal years.[11] Current financial information, for a period ending no more than three months prior to the date of filing, should also be included. This requirement may be met by the submission of either audited or unaudited financial statements, or 10K reports filed with the Securities and Exchange Commission. The financial documents should include a statement as to who prepared them, his or her qualifications and relationship, if any, to the applicant, and whether they were prepared in accordance with Generally Accepted Accounting Principles. If an annual audit, review, or compilation by an independent CPA is performed, the name and address of the firm, and type of services provided should be listed.

2. Statements which include a description of the following:

   a. Any liens or encumbrances against any of the applicant's assets, including those pledged as collateral for any outstanding obligations.

   b. Any major commitments into which the applicant has entered during the past 6 months, or proposes to enter into during the next 6 months, including

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[10] "Relevant corporation" is defined in Part 204 as the applicant, any predecessor of the applicant (including any company in which the directors, principal officers or owners have or once had a substantial interest, or any company whose operations were acquired by, or merged with, the applicant), or any organization which has a significant financial or managerial influence on the applicant, *e.g.*, (1) a parent corporation; (2) any entity that holds more than 50 percent of the outstanding voting stock of the applicant; (3) any entity that holds between 20 and 50 percent of such stock and that also has at least a 25 percent representation on the board of directors, participates in policy-making processes, engages in substantial inter-company transactions, or has managerial personnel with common responsibilities in both companies; and (4) any subsidiary of the applicant.

[11] If an applicant has been in business less than three years, only information for as long as it has been in business is required, unless there is a predecessor company. In the latter instance, information on the predecessor company is necessary. For new companies (those without any prior operations), a pre-operating balance sheet giving a complete description of the financial resources available to mount the proposed services should be filed.

bank or other institutional financing, private financing, issuance of bonds or stock in the applicant, or major contracts to perform services.

c. Any transactions in which the applicant sold or exchanged any major assets (aircraft, land, buildings, etc.) during the past 6 months, or plans to sell or exchange within the next 6 months, including how any funds realized from those transactions were used.

d. Any liabilities more than 60 days past due at the time of the application, including the amount and the circumstances under which they are past due and will be paid.

e. Any contingent liabilities that may have an effect on the applicant's financial posture (*i.e.*, lawsuits, pending judgments), including plans to meet those obligations.

f. Any events which occurred after the preparation of the most recent financial statements which may have a significant impact on the financial position or on the operations of the applicant. If no such events have occurred, provide a statement to that effect.

3. An estimate of the amount of capital the applicant will need to commence operations which shows (1) the basis of the estimate (*e.g.*, the amounts for pre-operating costs, including aircraft deposits or leases, office and hangar space, insurance, salaries, training, preparation of FAA manuals, working capital, etc.), and (2) the proposed form and source of capital.[12]

a. If the resources of an individual or other organization would be made available to the applicant in order to sustain operations, provide a statement from the individual or organization of the amount of such available resources and the terms or conditions under which such funds will be provided. Copies of the personal or corporate financial statements of the individual or organization should also be provided. The liquidity of any assets, other than cash, should be made clear through appropriate footnotes, *e.g.*, the current market value of

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[12] Before being granted an effective certificate, an applicant for either charter or scheduled authority must provide independent, third-party verification that it has available to it resources (*e.g.*, cash, lines-of-credit, bank loans) sufficient to cover all of its pre-operating costs plus a reserve equal to the projected operating expenses for at least three months of actual flight operations as described in the applicant's service proposal. In calculating available resources, projected revenues cannot be included. This financing guideline should not be considered a "zero revenue test"; that is, an applicant should not construct an artificial three-month projection showing reduced operating costs based on the theory that if there are no revenues there will be fewer variable flight and customer-related expenses, and that a smaller capital reserve will therefore be needed.

stocks and bonds that can be readily converted to cash should be noted. Wherever possible, third-party verification of the assets and values should be provided (*e.g.*, letters from banks or stockbrokers holding liquid assets, or recent appraisals of real assets).

b. If borrowed capital or a line-of-credit is to be employed, the total amount, current balance, source, security, provisions to convert the debt to equity, and terms of repayment to the lender should be stated. Verification of this information from the lender should be provided.

c. A letter from the applicant's bank confirming the amount on deposit and bank loans and lines-of-credit, if any, should be provided.

4. The applicant's service proposal and a forecast balance sheet and profit and loss statement (broken down by month or by quarter) for the first normal year of certificated operations, including ample notes explaining the basis for the indicated amounts and whether the statements were prepared on a cash or accrual basis.

The revenue forecast should indicate:

a. For applicants for scheduled authority, the proposed markets and number of daily flights in each market; for applicants for charter authority, the types of charters to be operated (*e.g.*, public, single-entity, DOD) and the proposed geographic areas to be served.

b. The type, seating/cargo capacity, and number of the aircraft to be used.

c. The number of passengers or amount of cargo to be carried and expected load factors.

d. The fares or rates to be charged, and the resulting gross revenues.

e. The total number of revenue block hours and revenue miles expected to be flown, and the extent of any seasonal traffic peaks.

The expense data should show:

a. Detail by expense category (direct and indirect) and indicate how the amounts were computed.

b. For indirect expenses, if the applicant is engaged in other operations, expenses should be allocated on a rational basis between the proposed certificated operations and the other operations, with appropriate explanations. The applicant may choose to prepare a consolidated income statement for the entire business in such situations, with separate columns for the proposed

certificated operations and the other operations, or present only the revenues and expenses for the certificated operations.

c. If aircraft or other facilities are to be acquired to conduct the proposed services, a description of the plans for obtaining and financing those items should be provided.

5. A description of all outstanding judgments against the applicant, relevant corporations, key personnel employed by each, or any person having a substantial interest in the applicant. For judgments of more than $5,000, include a brief summary of the circumstances leading to each judgment, the amount of each judgment, the party to whom it is payable, how long it has been outstanding, and its current status. For judgments of less than $5,000, the list need only identify the company or person involved and the total amount of the judgment still owed.

Compliance Disposition

The purpose of evaluating compliance disposition is to assure that the company and the personnel running the company do and will abide by the laws, rules, and regulations governing the applicant's operations and that management will be diligent in maintaining safe operations.

Data Required

The following information about compliance by the applicant, its owners, related companies, and their key personnel with the laws, rules, and regulations governing the applicant's services should be filed:

1. A description of the current status of all pending investigations, enforcement actions, and formal complaints filed by the Department, including the FAA, involving the applicant, relevant corporations, their key personnel (employed or to be employed) or persons having a substantial (*i.e.*, 10 percent or more) interest in any of these companies, involving the Federal Aviation Act, and the rules and regulations of the Department, including the FAA.

a. If any of these persons were affiliated (as a partner, officer, director, or stockholder) with any air carrier which, at the time of such affiliation, was found to have committed knowing, willful violations of the Federal Aviation Act or any order, rule or regulation issued pursuant to that Act, such actions should be described.

b. The complaint or action should be identified, together with a brief summary of the circumstances and the current status.[13] By "actions" or "complaints," we mean those that have actually been filed with or taken by some official agency such as the Department, including the FAA, or a state, irrespective of whether the company or person believes it was or is guilty. For example, if the FAA proposed a civil penalty in an enforcement action against a company and the company made a compromise payment in settlement, that FAA action must be considered, even though the payment may not have been an admission of guilt.

2. A description of any charges (civil or criminal) within the past 10 years brought against any of the persons or companies listed above, of fraud, felony, or antitrust violations, or of unfair, anticompetitive or deceptive business practices, including their final disposition or current status.

3. A description of any aviation-related accidents or incidents which the applicant, its personnel, or any relevant corporation has had either during the year preceding the date of the application, or at any time in the past if the matter remains under investigation by the FAA, the NTSB, or by the company itself. This includes:

a. The date of the occurrence, the type of flight (Part 135, Part 121, etc.), the number of passengers on board, the extent of injuries to persons and damage to the aircraft, the name of the pilot, and any other pertinent information available. Copies of the pilot's reports, if available, should be filed.

b. The FAA and the NTSB file numbers, if known, for each accident and incident, and the findings of the NTSB and/or the FAA, including any violations cited against the company or any of its personnel, and any positive actions taken by the company as a result of the occurrence, if any were appropriate.

4. The following certification: "Pursuant to Title 18 United States Code Section 1001, I [*the individual signing the application, who shall be a principal owner, senior officer, or internal counsel of the applicant*], in my individual capacity and as the authorized representative of the applicant, have not in any manner knowingly and willfully falsified, concealed or covered up any material fact or made any false, fictitious, or fraudulent statement or knowingly used any documents which contain such statements in connection with the preparation, filing or prosecution of the application. I understand that an applicant who violates the provisions of 18 USC 1001 shall be fined not more than $10,000 or imprisoned not more than five years, or both." This

[13] Special attention should be paid to the Directors of Maintenance and Operations and the Chief Pilot, as persons holding these positions are more likely than others to be cited for FAA violations.

certification must also be included in all subsequent written submissions filed by the applicant in connection with its application.

OTHER REQUIREMENTS

Prior to conducting any operations, an air carrier must also meet the insurance requirements set forth in Part 205 of the Department's rules, and become a signatory to the Interim Agreement of carriers, which relates to higher limits of liability for international passengers. This latter requirement applies whether or not the applicant is seeking a certificate to provide foreign air transportation. (Part 205 is reprinted in Part II of this packet. Blank copies of the Certificate of Insurance (OST Form 4610) and the Interim Agreement (OST Form 4523) are in Part III of this packet. OST Form 4523 should be filed (an original plus three copies) separately, *i.e.*, not assembled as part of or an exhibit to the application.

Once a company has been found fit, it becomes subject to the requirements of section 401(r) of the Federal Aviation Act, which provides that the company must remain fit in order to continue to hold authority to provide air transportation services. If, after the commencement of air service, substantial changes occur, such as a change in ownership, a major change in the management team, a major expansion in operations (*e.g.*, going from the use of "small" to "large" aircraft), or a filing for protection from creditors under Chapter 11 of the U.S. Bankruptcy Code, the Air Carrier Fitness Division must be notified promptly so it may determine whether the company remains fit to operate. After receiving the company's description of the substantial change it has undergone, the staff of the Air Carrier Fitness Division will inform the company what additional information it must file to support its fitness to continue operating in light of the change.

In addition, if a company does not institute air transportation services within one year of being found fit by the Department to do so, its economic authority will be terminated for dormancy. On the other hand, if a company starts its air service within one year and subsequently ceases that service, its authority to operate under its economic authority is automatically suspended and it has one year from the date of cessation to resume service or that authority will be terminated.

Any carrier proposing to resume service within the one year must file with the Department, at least 45 days before the date on which service is expected to resume, a notice of such intent and the updated fitness information required by section 204.3, and must be authorized by the Department to recommence service. If the carrier wishes to resume air service in less than 45 days, it may request an exemption from the 45-day advance notice requirements of section 204.7. Any such exemption request must be filed with the Department's Documentary Services Division (an original and 12 copies) and be accompanied by a $280 filing fee.

If, however, the carrier will not be able to recommence operations before the end of one year, it may request an exemption from the revocation provisions of section 204.7. Such exemptions are not granted routinely, but only where "good cause" is shown. In showing good cause, the company would have to provide adequate evidence that it still meets the Department's fitness criteria and that it has completed nearly all of the steps to resume operations (*e.g.*, has the necessary personnel, financial resources, and aircraft, and has resolved any problems with the FAA). The exemption request must be filed before the end of the one-year dormancy period with the Department's Documentary Services Division (an original and 12 copies) and be accompanied by a $280 filing fee.

APPENDIX I

COMMUTER AIR CARRIER PACKET

Filing Requirements

Source:

United States, Dept. of Transportation. Federal Aviation Administration, Air Carrier Fitness Division. How to Become a Commuter Air Carrier. Washington: GPO, 1992

This appendix contains an eight page insert that begins on page three half way down the page.

(2) Any company (including a sole proprietorship or partnership) holding between 20 percent and 50 percent of the outstanding voting stock of the applicant or air carrier and which has significant influence over the applicant or air carrier as indicated, for example, by 25 percent representation on the board of directors, participation in policy-making processes, substantial inter-company transactions, or managerial personnel with common responsibilities in both companies.

(n) *Substantial change in operations, ownership, or management* includes, but is not limited to, the following events:

(1) changes in operations from charter to scheduled service, cargo to passenger service, short-haul to long-haul service, or (for a certificated air carrier) small-aircraft to large-aircraft operations;

(2) the filing of a petition for reorganization or a plan of reorganization under Chapter 11 of the federal bankruptcy laws;

(3) the acquisition by a new shareholder or the accumulation by an existing shareholder of beneficial control of 10 percent or more of the outstanding voting stock in the corporation; and

(4) a change in the president, chief executive officer or chief operating officer, and/or a change in at least half of the other key personnel within any 12-month period or since its latest fitness review, whichever is the more recent period.

(o) *Substantial interest* means beneficial control of 10 percent or more of the outstanding voting stock.

Subpart B--Filing Requirements

§204.3 Applicants for new certificate or commuter air carrier authority.

An applicant for a type of certificate authority it does not currently hold or for commuter air carrier authority shall file the data set forth in paragraphs (a) through (v) of this section. In addition, the Department may require an applicant to provide additional data if necessary to reach an informed judgment about its fitness. If the applicant has previously formally filed any of the required data with the Department or with another Federal agency and they are available to the Department, and those data continue to reflect the current state of the carrier's fitness, the applicant may instead identify the data and provide a citation for the date(s) and place(s) of filing. Prior to filing any data, the applicant may contact the Air Carrier Fitness Division to ascertain what data required by this section are already available to the Department and need not be included in the filing.

Note: If the applicant intends to use as evidence data it has previously filed pursuant to part 241 reporting requirements and those data contain errors, the applicant must first file corrected reports in accordance with §241.22(g).

(a) The name, address, and telephone number of the applicant.

(b) The form of the applicant's organization.

(c) The State law(s) under which the applicant is organized.

(d) If the applicant is a corporation, a statement provided by the Office of the Secretary of State, or other agent of the State in which the applicant is incorporated, certifying that the applicant corporation is in good standing.

(e) A sworn affidavit stating that the applicant is a citizen of the United States.

(f) The identity of the key personnel who would be employed by the applicant, including:

(1) Their names and addresses;

(2) The experience, expertise, and responsibilities of each;

(3) The number of shares of the applicant's voting stock held by each and the percentage of the total number of such shares issued and outstanding, and the citizenship and principal business of any person for whose account, if other than the holder, such interest is held;

(4) The citizenship of each; and

(5) A description of the officerships, directorships, shares of stock (if 10 percent or more of total voting stock outstanding), and other interests each holds or has held in any air carrier, foreign air carrier, common carrier, person substantially engaged in the business of aeronautics or persons whose principal business (in purpose or fact) is the holding of stock in or control of any air carrier, common carrier or person substantially engaged in the business of aeronautics.

(g) A list of all persons having a substantial interest in the applicant. Such list shall include:

(1) Each person's name, address and citizenship;

(2) The number of shares of the applicant's voting stock held by each such person and the corresponding percentage of the total number of such shares issued and outstanding, and the citizenship and principal business of any person for whose account, if other than the holder, such interest is held;

(3) If any two or more persons holding a substantial interest in the applicant are related by blood or marriage, such relationship(s) shall be included in the list; and

(4) If any person or subsidiary of a person having a substantial interest in the applicant is or has ever been

(i) an air carrier, a foreign air carrier, a common carrier, or

(ii) substantially engaged in the business of aeronautics, or

(iii) an officer or director of any such entity, or

(iv) a holder of 10 percent or more of total outstanding voting stock of any such entity, the list shall describe such relationship(s).

(h) A list of the applicant's subsidiaries, if any, including a description of each subsidiary's principal business and relationship to the applicant.

(i) A list of the applicant's shares of stock in, or control of, any air carrier, foreign air carrier, common carrier, or person substantially engaged in the business of aeronautics.

(j) To the extent any relevant corporation has been engaged in any business prior to the filing of the application, each applicant shall provide:

(1) copies of the 10K Annual Reports filed in the past 3 years by any relevant corporation required to file such reports with the Securities and Exchange Commission, and

(2) copies of recently filed 10Q Quarterly Reports, as necessary, in order to show the financial condition and results of operations of the enterprise current to within 3 months of the date of the filing of the application.

(k) If 10K Reports are not filed with the Securities and Exchange Commission, the following, for the 3 most recent calendar or fiscal years, reflecting the financial condition and results of operations of the enterprise current to within 3 months of the date of the filing of the application:

(1) The Balance Sheet of each relevant corporation;

(2) The Income Statement of each relevant corporation;

(3) All footnotes applicable to the financial statements, including:

(i) a statement as to whether the documents were prepared in accordance with Generally Accepted Accounting Principles, and

(ii) a description of the significant accounting policies of each relevant corporation, such as for depreciation, amortization of intangibles, overhauls, unearned revenues, and cost capitalization;

(4) A statement of significant events occurring subsequent to the most recent Balance Sheet date for each relevant corporation; and

(5) A statement identifying the person who has prepared the financial statements, his or her accounting qualifications, and any affiliation he or she has with the applicant.

(l) A list of all actions and outstanding judgments for more than $5,000 against any relevant corporation, key personnel employed (or to be employed) by any relevant corporation, or person having a substantial interest in any relevant corporation, including the amount of each judgment, the party to whom it is payable, and how long it has been outstanding.

(m) The number of actions and outstanding judgments of less than $5,000 against each relevant corporation, key personnel employed (or to be employed) by any relevant corporation, or person having a substantial interest in any relevant corporation, and the total amount owed by each on such judgments.

(n) A description of the applicant's fleet of aircraft, including:

(1) The number of each type of aircraft owned, leased and to be purchased or leased;

(2) Applicant's plans, including financing plans, for the purchase or lease of additional aircraft; and

(3) A sworn affidavit stating that each aircraft owned or leased has been certified by the FAA and currently complies with all FAA safety standards.

(o) A description of the current status of all pending investigations, enforcement actions, and formal complaints filed by the Department, including the FAA, involving the applicant or any relevant corporation, any personnel employed (or to be employed) by any relevant corporation or person having a substantial interest in any relevant corporation, regarding compliance with the Act or orders, rules, regulations, or requirements issued pursuant to the Act, and any corrective actions

taken. (If an applicant has a compliance history that warrants it, additional information may be required.)

(p) A description of all charges of unfair or deceptive or anticompetitive business practices, or of fraud, felony or antitrust violation, brought against any relevant corporation or person having a substantial interest in any relevant corporation, or member of the key personnel employed (or to be employed) by any relevant corporation in the past 10 years. Such descriptions shall include the disposition or current status of each such proceeding.

(q) A description of any aircraft accidents or incidents (as defined in the National Transportation Safety Board Regulations, 49 CFR 830.2) experienced by the applicant, its personnel, or any relevant corporation, which occurred either during the year preceding the date of application or at any time in the past and which remain under investigation by the FAA, the NTSB, or by the company itself, including:

(1) The date of the occurrence;

(2) The type of flight;

(3) The number of passengers and crew on board and an enumeration of any injuries or fatalities;

(4) A description of any damage to the aircraft;

(5) The FAA and NTSB file numbers and the status of the investigations, including any enforcement actions initiated against the carrier or any of its personnel; and

(6) Positive actions taken to prevent recurrence.

(If an applicant's history of accidents or incidents warrants it, additional information may be required.)

(r) A brief narrative history of the applicant.

(s) A description of all Federal, State and foreign authority under which the applicant has conducted or is conducting transportation operations, and the identity of the local FAA office and personnel responsible for processing an application for any additional FAA authority needed to conduct the proposed operations.

(t) A description of the service to be operated if the application is granted, including:

(1) A forecast Balance Sheet for the first normal year ending after the initially proposed operations have been incorporated, along with the assumptions underlying the accounts and amounts shown; and

(2) A forecast Income Statement, broken down by quarters, for the first year ending after the initially proposed operations are normalized, and an itemization of all pre-operating and start-up costs associated with the initiation of the proposed service. Such Income Statement shall include estimated revenue block hours (or airborne hours, for charter operators) and revenue miles by type of aircraft, number of passengers and number of tons of mail and cargo to be carried, transport revenues and an estimate of the traffic which would be generated in each market receiving the proposed service. Such statements shall also include a statement as to whether the statements were prepared on the accrual or cash basis, an explanation of how the estimated costs and revenues were developed, a description of the manner in which costs and revenues are allocated, how the underlying traffic forecasts were made, and what load factor has

been assumed for the average and peak month. Pre-operating and start-up costs should include, but are not limited to, the following: obtaining necessary government approval; establishing stations; introductory advertising; aircraft, equipment and space facility deposits and rent; training; and salaries earned prior to start-up.

(u) A signed counterpart of Agreement 18900 (OST Form 4523) as required by part 203 of this chapter.

(v) The following certification, which shall accompany the application and all subsequent written submissions filed by the applicant in connection with its application:

> Pursuant to Title 18 United States Code Section 1001, I [the individual signing the application, who shall be a principal owner, senior officer, or internal counsel of the applicant], in my individual capacity and as the authorized representative of the applicant, have not in any manner knowingly and willfully falsified, concealed or covered up any material fact or made any false, fictitious, or fraudulent statement or knowingly used any documents which contain such statements in connection with the preparation, filing or prosecution of the application. I understand that an individual who is found to have violated the provisions of 18 U.S.C. section 1001 shall be fined not more than $10,000 or imprisoned not more than five years, or both.

§204.4 Carriers proposing to provide essential air transportation.

Applicants proposing to provide essential air transportation have been divided into two categories, and are subject to differing data submission requirements as set forth in paragraphs (a) and (b) of this section. However, if a carrier has previously filed any of the required data with the Department or other Federal agency and they are available to the Department, and these data continue to reflect the current state of the carrier's fitness, the carrier may instead identify the data and provide a citation for the date and place of filing. All carriers may contact the Air Carrier Fitness Division to ascertain what information is already available to the Department and thus may not need to be resubmitted.

(a) Carriers who propose to begin or expand non-subsidized essential air service when the incumbent leaves the market must file the following information:

(1) All of the information required under §204.3 of this part.

(2) A description of the back-up aircraft available to the applicant, including:

(i) The number of each type of such aircraft;

(ii) The conditions under which such aircraft will be available to the carrier;

(iii) The carrier's plans for financing the acquisition or lease of such additional aircraft; and

(iv) A sworn affidavit stating that all such aircraft have been certified by the FAA and currently comply with all FAA safety standards.

(3) A description of the fuel available to perform the proposed essential air services and the carrier's contracts with fuel suppliers.

(4) The carrier's systemwide on-time and completion record for the preceding year and, if applicable, in the subject market(s).

(5) A list of the markets the carrier serves and the number of weekly round trips it provides in each.

(6) A description of the average number of block hours each type of aircraft is currently flown per day.

(7) An estimate of the impact the proposed essential air service would have on the carrier's utilization of its aircraft fleet.

(8) A detailed schedule of the service to be provided, including times of arrivals and departures, the aircraft to be used for each flight, and the fares to be charged.

(9) A pro-forma income statement for the proposed operation for the first annual period.

(b) Carriers filing proposals to provide subsidized service in response to an order inviting proposals shall file:

(1) All of the information required under §204.3 of this part.

(2) All of the information required under paragraph (a) of this section.

(3) A forecast Income Statement covering the operations conducted in essential air service for the first year following the initiation of the proposed essential services. Such statement shall include:

(i) Subsidy needed;

(ii) Estimated block hours and revenue miles by type of aircraft;

(iii) Total projected revenue including volumes of passengers and freight by essential air service market and the associated fares and rates;

(iv) An explanation of the derivation of estimates of operating expenses; and

(v) A description of the manner in which costs and revenues are allocated.

(4) A traffic forecast including a load factor analysis on all segments between the small community and the hub; and an estimate of the number of seats available to and from the eligible point each day.

§204.5 Certificated and commuter air carriers undergoing or proposing to undergo a substantial change in operations, ownership, or management.

(a) A certificated or commuter air carrier proposing a substantial change in operations, ownership or management shall file the data set forth in §204.3. These data must be submitted in cases where:

(1) the proposed change requires new or amended authority,

or

(2) although the carrier's existing certificate or commuter authority is adequate for the performance of its planned services, the change substantially alters the factors upon which its latest fitness finding is based. Information which a carrier has previously formally filed with the Department, or with another Federal agency where they are available to the Department, which continues to reflect the current state of the carrier's fitness may be omitted. The carrier instead should identify the data and

provide a citation for the date(s) and place(s) of filing. Prior to filing any data, the carrier may contact the Department (Air Carrier Fitness Division) to ascertain what data required by this section, if any, are already available to the Department or are not applicable to the substantial change in question and need not be included in the filing.

(b) Information filings pursuant to this section made to support an application for new or amended certificate authority shall be filed with the application and addressed to the Documentary Services Division, Department of Transportation, 400 Seventh Street, SW., Washington, DC 20590. Information filed in support of a certificated or commuter air carrier's continuing fitness to operate under its existing authority in light of substantial changes in its operations, ownership or management shall be addressed to the Chief, Air Carrier Fitness Division, Department of Transportation, 400 Seventh Street, SW., Washington, DC 20590.

§204.6 Certificated and commuter air carriers proposing a change in operations, ownership, or management which is not substantial.

Carriers proposing to make a change which would not substantially affect their operations, management, or ownership, such as certificated carriers applying for additional authority which would not substantially change their operations, will be presumed to be fit and need not file any information relating to their fitness at time of the change. However, if the Department concludes, from its own analysis or based on information submitted by third parties, that such change may bring the carrier's fitness into question, the Department may require the applicant carrier to file additional information.

§204.7 Revocation for dormancy.

(a) An air carrier that has not commenced any type of air transportation operations for which it was found fit, willing, and able within one year of the date of that finding, or an air carrier that, for any period of one year after the date of such a finding, has not provided any type of air transportation for which that kind of finding is required, is deemed no longer to continue to be fit to provide the air transportation for which it was found fit and, accordingly, its authority to provide such air transportation shall be revoked.

(b) An air carrier found fit which commences operations within one year after being found fit but then ceases operations, shall not resume operations without first filing all of the data required by §204.3 at least 45 days before it intends to provide any such air transportation. Such filings shall be addressed to the Documentary Services Division, Department of Transportation, 400 Seventh Street, SW., Washington, DC 20590. The Department will entertain requests for exemption from this 45-day advance filing requirement for good cause shown. If there has been no change in fitness data previously formally filed with the Department, the carrier shall file a sworn statement to that effect signed by one of its officers. The carrier may contact the Department (Air Carrier Fitness Division) to ascertain which data are already available to the

Department and need not be refiled. A carrier to which this paragraph applies shall not provide any air transportation for which it is required to be found fit, willing, and able until the Department decides that the carrier continues to be fit, willing, and able to perform such air transportation. During the pendency of the Department's consideration of a data submission under this paragraph, the expiration period set out in paragraph (a) of this section shall be stayed. If the decision or finding by the Department on the issue of the carrier's fitness is favorable, the date of that decision or finding shall be the date considered in applying paragraph (a) of this section.

(c) For purposes of this section, the date of a Department decision or finding shall be the service date of the Department's order containing such decision or finding, or, in cases where the Department's decision or finding is made by letter, the date of such letter.

(d) For purposes of this section, references to operations and to the providing of air transportation shall refer only to the actual performance of flight operations under an operating certificate issued to the carrier by the FAA.

APPENDIX J

CERTIFICATION FLOWCHART

This appendix contains four pages of certification flowcharts. The pages are displayed in chronological order.

Source:

United States, Dept. of Transportation. Federal Aviation Administration. Air Transportation Operations Inspector's Handbook. Washington: GPO, 1988

FIGURE 2.1.1.3
SAMPLE FORMAT FOR SCHEDULE OF EVENTS

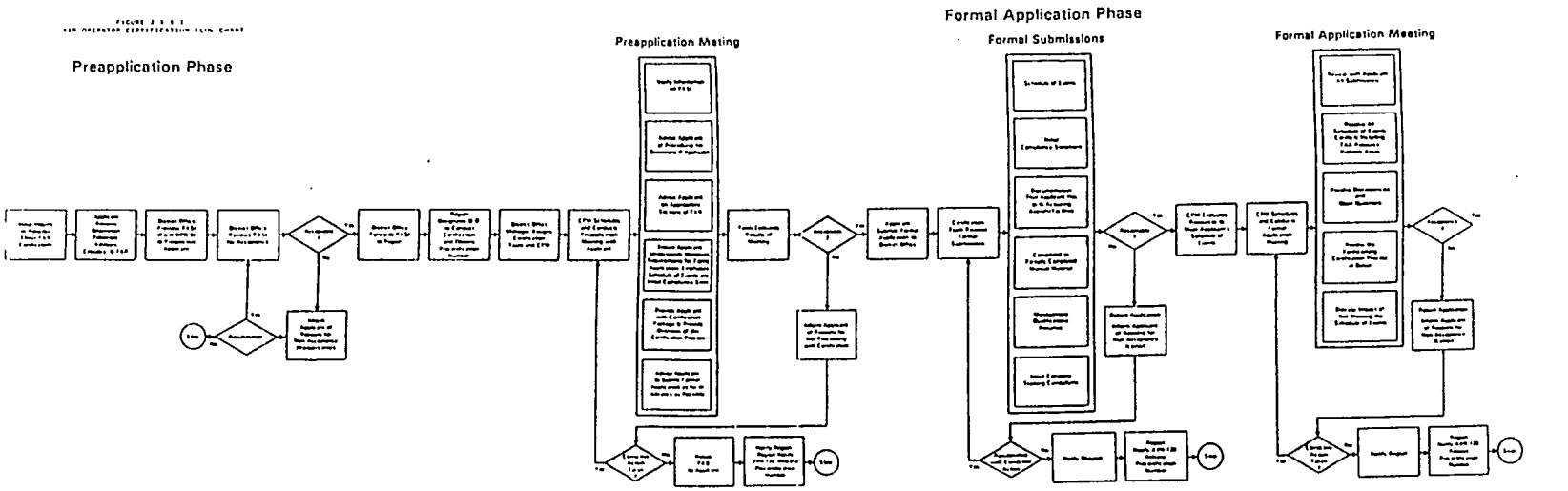
PART 121/135 SCHEDULE OF EVENTS — CERTIFICATION				
OFFICIAL NAME OF COMPANY		LOCATION ADDRESS		
MAILING ADDRESS (if different from location)		PRECERTIFICATION NO.		
Scheduled date of submission, demonstration, or inspection	FORMAL APPLICATION PHASE	Date Received/ Accomplished	Date Returned for Changes	Date Approved/ Accepted
	Formal Application Letter			
	Schedule of Events			
	Company General Operations Manual			
	Company General Maintenance Manual			
	Initial New Hire Training Curriculum (Crewmembers & Dispatchers)			
	Basic Indoctrination			
	Emergency Training			
	Ground Training			
	Flight Training			
	Documents of Purchase, Contracts, Leases, and/or Letters of Intent			
	Management Qualification Resumes			
	Initial Compliance Statement			
	DOCUMENT COMPLIANCE PHASE			
	Training Curriculums:			
	Check Airmen			
	Flight Instructor			
	Recurrent Training			
	Transition/Upgrade Training			
	Differences Training			
	Hazardous Materials			
	Security			
	Maintenance Personnel			
	Inspection Personnel			
	Ground Handling Servicing			

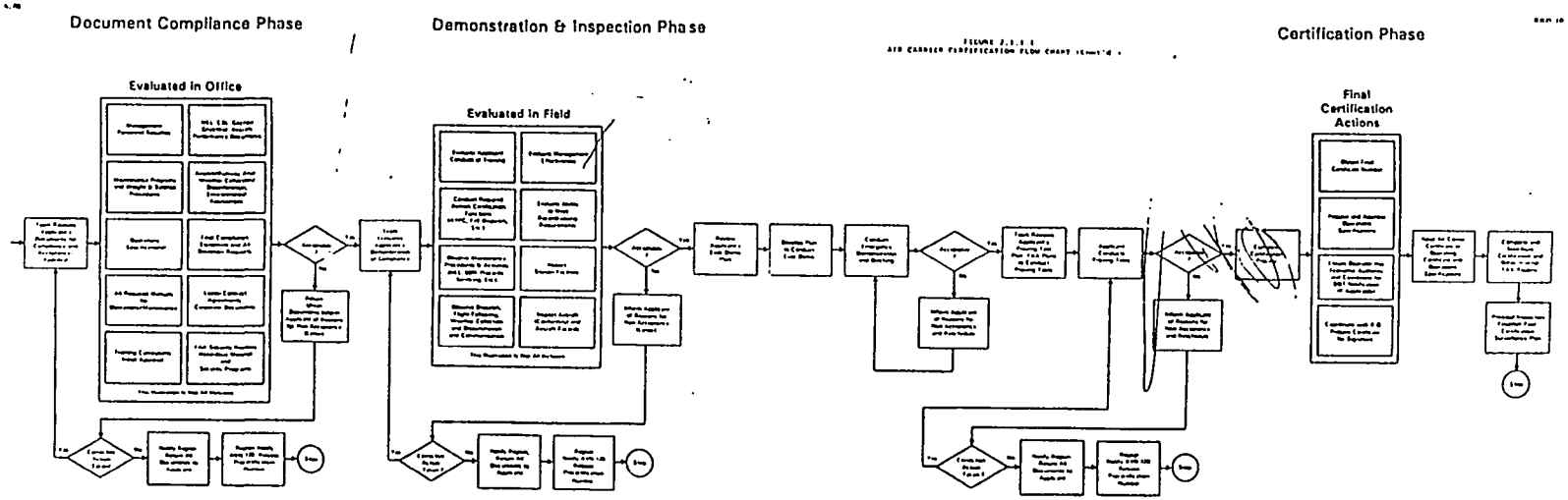
FIGURE 2.1.1.3
SAMPLE FORMAT FOR SCHEDULE OF EVENTS (CONTINUED)

ə item ɔmplished/ ɟy for , inso.	DEMONSTRATION PHASE	FOR FAA USE ONLY		
		Date Received/ Accomplished	Date Returned for Changes	Date Approved/ Accepted
	Training Facilities			
	Training Schedules:			
	Flight Crewmembers:			
	Basic Indoctrination			
	Emergency Training			
	Ground Training			
	Flight Training			
	Differences Training			
	Check Airmen			
	Cabin Crew:			
	Basic Indoctrination			
	Emergency Training			
	Ground Training			
	Dispatcher/Flight Following/Locating			
	Hazardous Materials			
	Security			
	Maintenance Training:			
	Mechanics/Repairmen			
	Inspection Personnel			
	Ground Handling/Servicing			
	Station Personnel			
	Aircraft Conformity Inspection			
	Main Operations Base			
	Main Maintenance Base			
	Line/Station Facilities			
	Dispatch/Flight Following/Locating Facilities			
	Recordkeeping:			
	Crewmember:			
	Training			
	Flight & Duty Times			
	Qualification			
	Maintenance:			
	Aircraft Records			
	Personnel Training			
	Duty Times			
	Flight/Trip Records			
	Emergency Evacuation Demonstration			
	Proving Test Plan			
	Proof of DOT Economic Authority			

FIGURE 2.1.1.3
SAMPLE FORMAT FOR SCHEDULE OF EVENTS (CONTINUED)

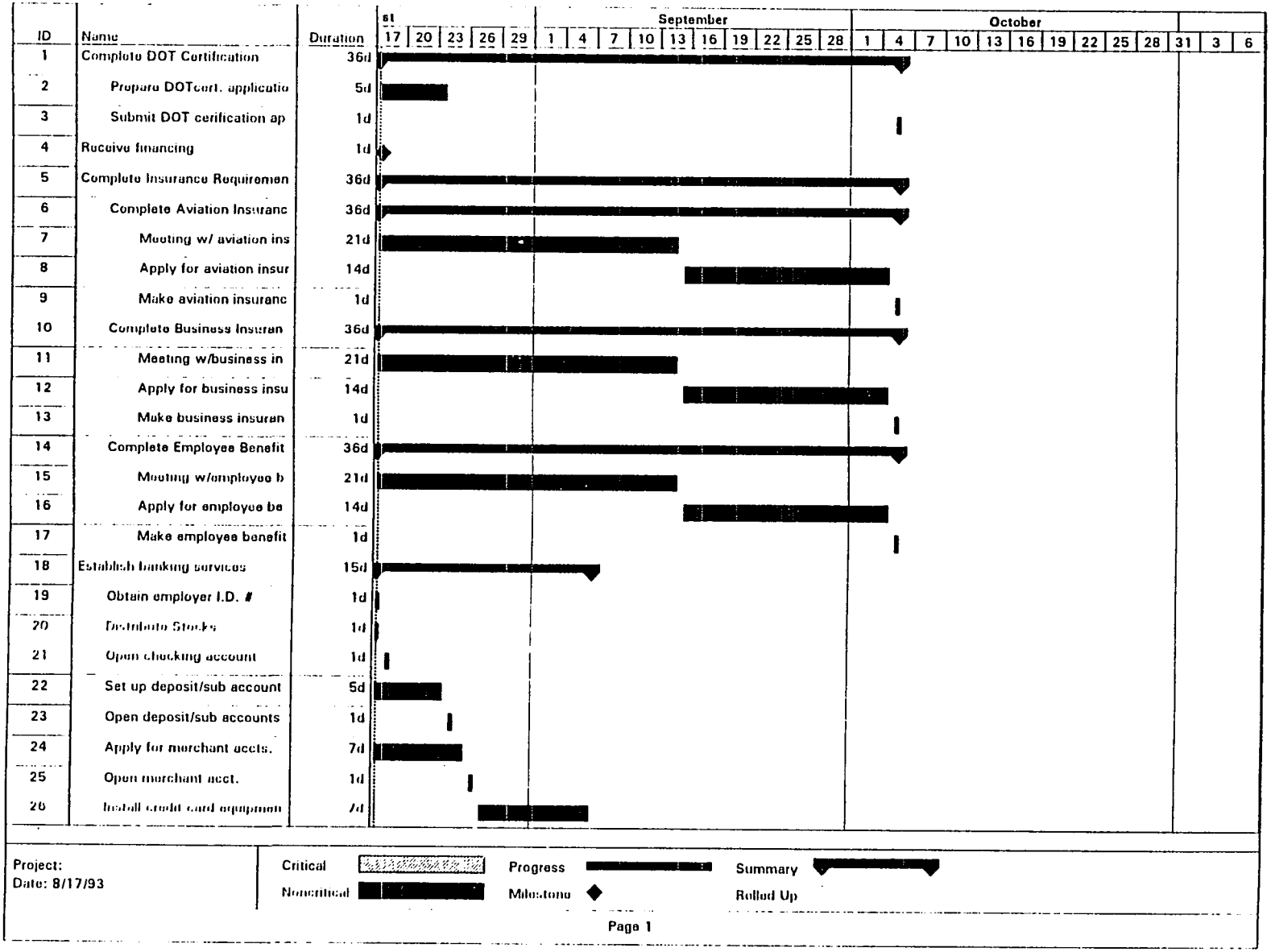
Date item accomplished/ ready for FAA insp.	DOCUMENT COMPLIANCE PHASE (CONTINUED)	FOR FAA USE ONLY		
		Date Received/ Accomplished	Date Returned for Changes	Date Approved/ Accepted
	Manuals:			
	Completed General Operations Manual			
	Completed General Maintenance Manual			
	FAA-Approved Airplane Flight Manual			
	Company Aircraft Operations Manual			
	Aircraft Checklists:			
	Normal			
	Abnormal			
	Emergency			
	Flight Attendant Manual			
	Dispatcher/Flight Following/Locating			
	Station Operations			
	Company Emergency Manual			
	Airport Data & Enroute Manual (Charts and plates)			
	Airport/Runway Analysis (Performance)			
	Minimum Equipment List			
	Configuration Deviation List			
	Maintenance Technical Manuals:			
	Airframe/Powerplant			
	Structural Repair			
	Parts Catalogue			
	Inspection Procedures			
	Manufacturer's or Vendor's Manual			
	Wiring Manual			
	Overhaul Manual			
	Fueling/Refueling/Defueling			
	Weight and Balance Control Program			
	Hazardous Materials			
	Security			
	Reliability Program			
	Continuous Airworthiness Maint. Proc.			
	Passenger Briefing Cards			
	Training Contracts			
	Maintenance Contracts/Agreements			
	Aircraft Leases			
	Environmental Assessment			
	Deviation Requests/Justification			
	Final Compliance Statement			
	Emergency Evacuation Demonstration Plan			
	Proving Test Plan			
	Operations Specification Data Sheet			

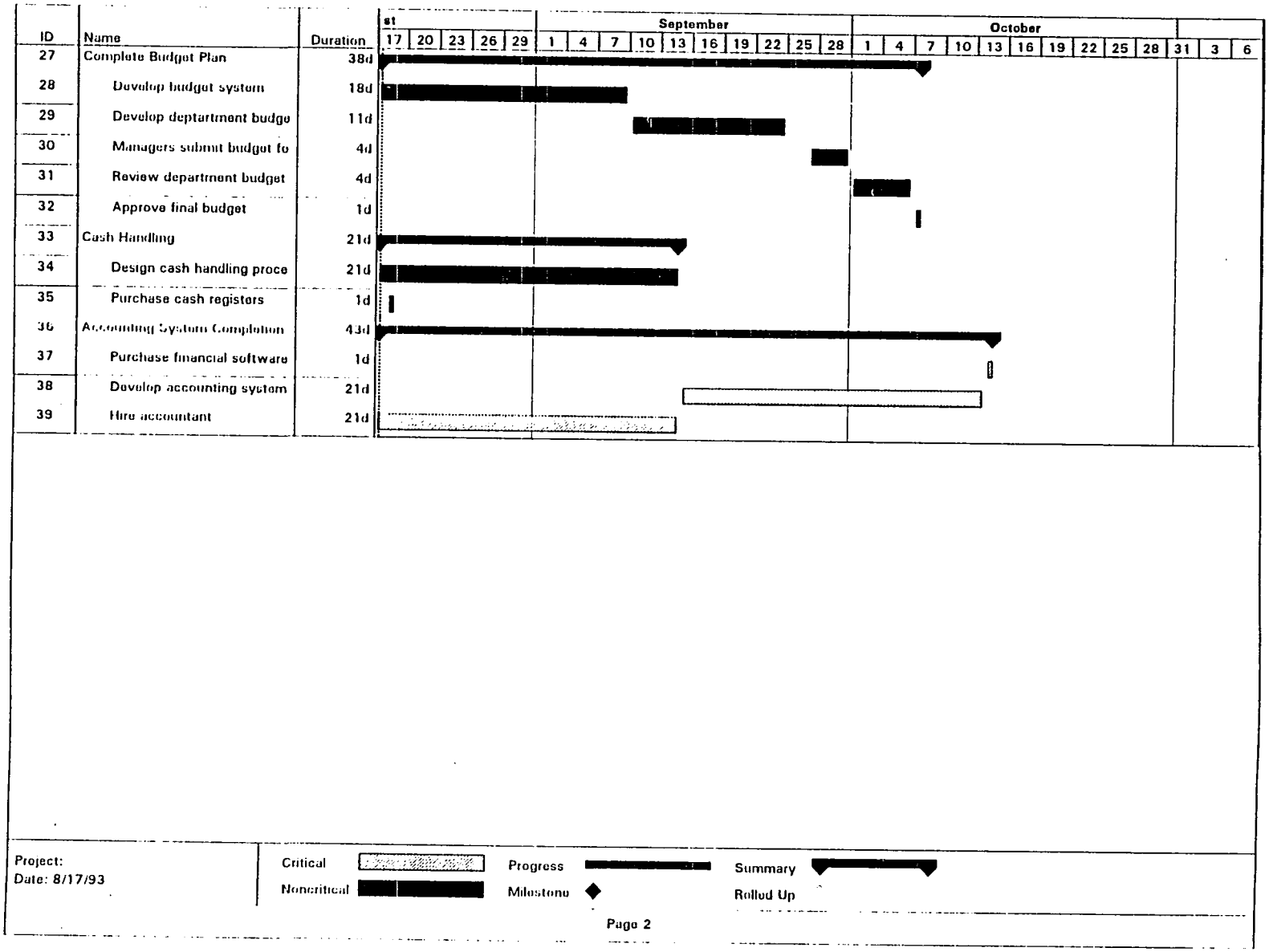

Preapplication Phase
Preapplication Meting
Formal Application Phase
Formal Submissions
Formal Application Meeting


Document Compliance Phase
Evaluated in Office
Demonstration & Inspection Phase
Evaluated in Field
Certification Phase
Final Certification Actions

APPENDIX K

This appendix is a sample printout of a Microsoft Project Program. In this printout the scheduling of the airline phases is accomplished with timelines and milestones.


ID
Name
Duration
st
17 20 23 26 29
September
1 4 7 10 13 16 19 22 25 28
October
1 4 7 10 13 16 19 22 25 28 31 3 6
1 Complete DOT Certification 36d
2 Prepare DOTcert. applicatio 5d
3 Submit DOT cerification ap 1d
4 Receive financing 1d
5 Complete Insurance Requiremen 36d
6 Complete Aviation Insuranc 36d
7 Meeting w/ aviation ins 21d
8 Apply for aviation insur 14d
9 Make aviation insuranc 1d
10 Complete Business Insuran 36d
11 Meeting w/business in 21d
12 Apply for business insu 14d
13 Make business insuran 1d
14 Complete Employee Benefit 36d
15 Meeting w/employee b 21d
16 Apply for employee be 14d
17 Make employee benefit 1d
18 Establish banking services 15d
19 Obtain employer I.D. # 1d
20 Distribute Stocks 1d
21 Open checking account 1d
22 Set up deposit/sub account 5d
23 Open deposit/sub accounts 1d
24 Apply for merchant accts. 7d
25 Open merchant acct. 1d
26 Install credit card equipmen 7d
Project:
Date: 8/17/93
Critical
Noncritical
Progress
Milestone
Summary
Rolled Up
Page 1


ID
Name
Duration
st
September
October
17 20 23 26 29 1 4 7 10 13 16 19 22 25 28 1 4 7 10 13 16 19 22 25 28 31 3 6
27 Complete Budget Plan 38d
28 Develop budget system 18d
29 Develop deptartment budge 11d
30 Managers submit budget fo 4d
31 Review department budget 4d
32 Approve final budget 1d
33 Cash Handling 21d
34 Design cash handling proce 21d
35 Purchase cash registers 1d
36 Accounting System Completion 43d
37 Purchase financial software 1d
38 Develop accounting system 21d
39 Hire accountant 21d
Project:
Date: 8/17/93
Critical
Noncritical
Progress
Milestone
Summary
Rolled Up
Page 2

APPENDIX L

COMPANY CODE AND MANUAL REQUIREMENTS

This appendix is comprised of examples of office codes and designators for a new Part 135 airline. The example used is California Airlines. There is also a Table of Contents and page from the flight operations manual to show how the organizational structure of the manual should be conducive to revision and update.

CALIFORNIA AIRLINES
ENCODING

CTR: Central Offices
041: Watts-Woodland Airport
REF: Refurbair Inc., Petersborough, ON
SJC: San Jose International Airport
SAC: Sacramento Executive Airport

CTR Index:

Accounting	AC
Advertising & Promotions	AD
Airline Finance	FN
Airport Affairs	AA
Auditing	AU
Banking	BK
Cargo	CR
Communications	CM
Consumer Affairs	CA
Corporate Planning & Development	PD
Employment	EP
Managing Offices	MO
Financial Analysis	FA
Financial Planning	FB
Fleet Planning	FP
Flight Operations	FO
Fuel Management	FM
Ground Operations	GO
Human Resources	HR
Information Systems	IS
Insurance	IN
Marketing Planning	MP
Marketing Research	MR
Materials Management	MM
Operations Research	OR
Purchasing	PG
Regulatory Affairs	RA
Sales	SL
Scheduling	SH
Security	SX
Strategic Planning	SP
System Operations Control	SC
Treasury	TY

SAC Index:

Station Operations	SO

Manual Cross Reference Table

Page	Manual Number	Manual Name	Page
CTRIR-100-25	300	Ground Operations	CTRGO-318-32

Management Manual	100-199
Flight Operations Manual	200-299
Ground and Station Operations Manual	300-499
Maintenance Manual	500-599

Manual Cross Reference Table

Page	Manual Number	Manual Name	Page
CTRHR-100-25	300	Ground Operations	CTRGO-310-32

Management Manual	100-199
Flight Operations Manual	200-299
Ground and Station Operations Manual	300-499
Maintenance Manual	500-599

ACDB: Aircraft Database

ACBD contains identification for each aircraft that California Airlines operates, which consists of the aircraft nose number and the aircraft tail number.

The data fields of ACDB are:

Field	Description
ACNN	Aircraft Nose Number
ACTN	Aircraft Tail Number

TT: Timetable

TT contains the basic information on the flights of California Airlines, just like those you find in any other timetable.

The data fileds of TT are:

Field	Description
DOW	Day of Week
FLN	Flight Number
SG	Segment
ORG	Origin
DST	Destination
SDP	Scheduled Departure Time
SAR	Scheduled Arrival Time

What follows is a basic description of FITS' operation:

FITS is responsible to generate Flight Report Sheets for each segment of every flight. For doing so, it will first go into the TT database and find out about the flight(s) for the day reports are to be generated. It will get the flight number and segment, origin and destination for that flight. This will usually be done 2-3 days earlier. It will then print a report sheet with the date of the flight and the information obtained from other tables. The sheet will be made available to the pilot prior to the flight, and collected after termination of the flight. The information will then be entered into the computer promptly so that other systems will have access to them.

The report will have the following information filled out automatically by the computer:

Date
Flight Number
Segment
Origin
Destination

Pilot In Command will then record the following information on the report sheet:

Pilot In Command ID No.
Second In Command ID No.

Aircraft Nose Number
Aircraft Tail Number

No. of passengers

Time of Gate Departure
Time of Takeoff
Time of Landing
Time of Gate Arrival

S/he will sign and turn in each report in a manner to be announced at a later time. The information gathered will be collected and entered in the computer at the end of each day, and the necessary reports will be created for the following day.

In addition, the information gathered by FITS will be used by other systems to be developed later. For example:

- The system that will manage the maintenance of the Airline will calculate Time In Service for each flight to schedule various inspections and/or services.

- The system used for marketing purposes will use the time/date of the flight and the number of passengers in each flight to perform some analysis.

- According to FAA requirements, pilots are supposed to rest a certain amount of time prior to start of their shift. The length of their rest is a somewhat involved function of many variables which could easily be programmed into the computer. The system that tracks the air-time and rest of the pilots, will indicate whether the pilots have received adequate rest prior to start of their shift or not.

If you have any questions/comments on the above, please don't hesitate to contact me.

Contents

220· Company Operations Practices

220.1 General

California Airlines conducts it's flight operations under Federal Aviation Regulations Part 135. Every aspect of it's flight operations will be conducted in strict accordance with all applicable Federal Aviation Regulations under Part 135. For information regarding compliance with specific regulations, please refer to the Company's Letter of Compliance. The Company and it's flight crew will be allowed to deviate from Part 135 regulations only in cases of emergency, in which compliance with the regulations would put the safety of the passengers, flight crew or surrounding community in danger.

220.2 Safety

California Airlines puts safety first. The safety of it's passengers, employees, and the surrounding community is the Company's foremost concern. Every effort will be taken to insure the safety of employees and the public, to the extent of sacrificing Company aircraft and meeting schedules, if need be. California Airlines trains it's employees to the highest of standards, from ground personnel, to maintenance personnel, to flight crew, to help insure that the topmost level of safety is being practiced at all times. Employees are taught and required to adopt and practice this philosophy.

220.3 Alcoholic Beverages and Intoxicants

Alcoholic beverages are not permitted to be consumed by any person aboard a California Airlines flight. Passengers will be allowed to carry alcoholic beverages on the aircraft as long as it is concealed within carry on or check in baggage, but will not be permitted to handle or consume any such beverage while aboard a California Airlines

aircraft.

Passengers who appear to be intoxicated, by either the use of alcohol or drugs, will not be permitted aboard Company aircraft, unless the purpose for that flight is for medical reasons. If that is the case, situation must be cleared first by the V.. of Operations, the Chief Pilot must be briefed, and the passenger must be accompanied by a medical physician. Passengers who appear to be intoxicated, and who are traveling for reasons other than medical ones, must be told before boarding the aircraft that will not be permitted on the flight until they uninebriated.

Employees of California Airlines will not be permitted to consume alcoholic beverages aboard any Company aircraft. Employees who appear intoxicated will not be allowed aboard any Company aircraft. Employees are required to comply with all the Federal Aviation Regulations under Parts 91.17. 135. 121, 135.249, and 135.251 that apply to intoxication and alcohol. The Company's flight crew members are required to obtain from drinking alcohol within eight hours of the time their duty begins. In addition, flight crew members will not be permitted in any way to act as a flight crew member if that employee has .04 percent by weight or more alcohol in the blood. Employees who report to work or miss work because they are intoxicated may be dismissed from the Company, may not be permitted to apply for re-employment. and if applicable, the case will be turned over to the authorities. California Airlines' employees whose job duties include one or more of the following, flight crew member duties, flight instruction or ground instruction duties, flight testing duties, aircraft dispatcher duties. aircraft maintenance or preventive maintenance duties, or aviation security or screening duties, will be tested according to the Company's Federal Aviation Administration approved drug testing program. These employees must comply with all the Federal Aviation Regulations under Part 135.249 and 135.251 in regards to the use of prohibited drugs and drug testing. Employees who refuse to be drug tested or fail a drug test given by the Company or the Federal Aviation Administration will be dismissed from the Company, will not be permitted to apply for re-employment, and if applicable, the case will be turned over to the authorities. Employees who are drug tested by the Federal Aviation Administration must inform the Company of the fact of being tested and the results as soon as possible. Employees who withhold from the Company this information may be dismissed and may not be permitted to apply for re-employment.

APPENDIX M:
AIRCRAFT SELECTION PROCESS

Source: Business & Commercial Aviation • May 1992

This is a spreadsheet Analysis on Beechcraft 1900 and Dornier 228 aircraft. The following table of data (pages 1-4 of this appendix) for regional turbo-prop aircraft is taken from Business & Commercial Aviation Magazine. The data for the Beechcraft 1900 (pages 5-6) and Dornier 228 (pages 7-8) were analyzed separately on the pages 5-8 for trips to potential destinations in Northern California. All trips originated in San Jose. Page 9 shows a cost comparison of the two aircraft.

REGIONAL AIRLINERS

TURBOPROPS

Manufacturer / Model			de Havilland Dash 8-100	Aerospatiale/ Alenia ATR 42-300	Aerospatiale/ Alenia ATR 42-320	de Havilland Dash 8-300	Fokker B.V. Fokker 50
B/CA Eqpd. Price			$9,650,000	$10,600,000	$10,800,000	$12,050,000*	$12,500,000
Characteristics		Seating	3+37	3+48	3+46	3+50.	3+50
		Seat Pitch	31.0	30.0	30.0	32.0	32.0
		Wing	hi wing	hi wing	hi wing	hi wing	hi wing
		Noise	80.8/94.8	83.1/96.7	83.1/96.7	80.1/93.2	81.0/96.7
Dimensions (ft)	External	Length	73	74.4	74.4	84.3	82.8
		Height	24.6	24.9	24.9	24.6	27.3
		Span	85	80.6	80.6	90.0	95.2
		Turn Radius	59.3	56.0	56.0	65.6	59.3
	Internal	Length	30.1	31.4	31.4	41.3	52.4
		Height	6.4	6.3	6.3	6.2	6.4
		Width	8.1	8.4	8.4	8.2	8.2
		Bag. Vol. per Pass.	9.9	8.2	8.2	8.22	7.5
Power		Engines	2 P&W PW-120A	2 P&W PW-120	2 P&W PW-121	2 P&W PW-123	2 P&WC PW-125B
		Power Output	2,000 shp ea.	1,800 shp ea.	1,900 shp ea.	2,380 shp ea.	2,500 shp ea.
		Pressurization	5.5	6.0	6.0	5.5	5.5
Weights (lb)		Max Ramp	34,700	36,861	36,861	41,300	45,900
		Max TO	34,500	36,817	36,817	41,100	45,900
		Max Land.	33,900	36,155	36,155	40,000	43,500
		Zero Fuel	31,000	33,510	33,510	37,200	41,000
		EOW	22,600	22,675	22,685	25,700	27,600
		Max Pld.	8,400	10,835	10,825	11,500	13,400
		Max Fuel	5,678	9,920	9,920	5,678	9,090
		Pld.– Max Fuel	6,422	4,266	4,256	9,922	9,210
		Fuel – Max Pld.	3,700	3,351	3,351	4,100	4,900
Takeoff		A/S SL ISA	3,090	3,527	3,412	3,500	4,430
		5,000 + 20°C	3,950*	4,839*	4,823*	4,400**	7,220*
		V_{MCA}	74	88	88	77	91
		V_{XSE}	115	130	130	NA	136
Climb	Rate (fpm)	All Eng.	1,560	1,450	1,430	1,800	2,120
		Eng. Out	450	298	298	450	NA
	Ceiling (ft)	All Eng.	25,000	25,000	25,000	25,000	25,000
		Eng. Out	15,000	11,700	13,500	13,500	12,000
Limits		V_{NE}	NA	250	250	243	227
		V_A	165	164	164	176	177
		V_{FE}	148	160	160	160	180
		V_{LO}	158	160	160	159	170
Cruise		TAS	262	270	275	271	276
		FF	985	935	966	1,116	1,273
		FL	240	250	250	250	210
B/CA Productivity Factors	150 sm Mission	Stage/Fuel	3	4	4	3	5
		No. Pass.	37	48	48	50	50
		Eng. Hours	9.11	8.86	8.82	8.74	10.23
		Total Fuel	11,020	9,626	9,623	12,424	12,691
		Total Tnps	13	13	13	13	14
		Seat Miles	72,150	93,600	93,600	97,500	105,000
		sm/hr	7,922	10,559	10,610	11,158	10,261
		sm/lb	6.55	9.72	9.73	7.85	8.27
		BS	186	191	192	193	178
		MF	848	740	740	956	906
		FL	130	150	150	160	180
	275 sm Mission	Stage/Fuel	2	2	2	3	5
		No. Pass.	37	48	48	50	50
		Eng. Hours	10.07	9.97	9.94	9.64	11.42
		Total Fuel	11,601	10,346	10,361	12,744	13,937
		Total Tnps	9	9	9	9	10
		Seat Miles	91,575	118,800	118,800	123,750	137,500
		sm/hr	9,090	11,921	11,954	12,835	12,041
		sm/lb	7.89	11.48	11.47	9.71	9.87
		BS	214	216	216	223	209
		MF	1,289	1,150	1,151	1,416	1,394
		FL	200	200	200	220	220
	400 sm Mission	Stage/Fuel	2	2	2	2	3
		No Pass.	37	48	48	50	50
		Eng. Hours	10.82	10.73	10.52	10.59	10.78
		Total Fuel	11,679	10,302	10,092	12,730	13,398
		Total Tnps	7	7	7	7	7
		Seat Miles	103,600	134,400	134,400	140,000	140,000
		sm/hr	9,577	12,522	12,773	13,222	12,982
		sm/lb	8.87	13.05	13.32	11.00	10.45
		BS	225	227	232	230	226
		MF	1,668	1,472	1,442	1,819	1,914
		FL	240	250	250	250	210
Certification Basis			FAR 25, 1984	JAR/FAR 25, 1985	JAR/FAR 25, 1985	FAR 25, 1989	JAR/FAR 25 1987
Remarks			*WAT limited to 32,300 lbs. flaps 15°.	*WAT limited to 34,612 lbs.	*WAT limited to 35,163 lbs.	*B/CA estimate. **WAT limited to 38,000 lbs., flaps 15°.	*WAT limited to 42,100 lbs.

REGIONAL AIRLINERS

TURBOPROPS

Manufacturer / Model			British Aerospace Jetstream 41 BAe 4101	Embraer Brasilia EMB-120A	Dornier 328-100 Do 328-100	Saab-Scania AB SF-340B	CASA/IPTN CN-235
B/CA Eqpd. Price			$7,095,000*	$7,800,000	$7,850,000*	$8,800,000	$9,200,00
Characteristics		Seating	3+29	3+30	3+30	3+35	3+44
		Seat Pitch	30.0	31.0	31	30.0	30.0
		Wing	low wing	low wing	hi wing	low Wing	hi wing
		Noise	NA	81.2/92.3	NA	77.0/84.0	84.0/87.0
Dimensions (ft)	External	Length	63.2	65.1	68.6	64.8	70.0
		Height	18.8	20.8	23.6	22.6	26.9
		Span	60.0	64.9	68.8	70.3	84.7
		Turn Radius	35.0	51.7	47.5	52.0	62.2
	Internal	Length	31.3	30.8	33.9	34.1	32.7
		Height	5.8	5.8	6.2	6.0	6.2
		Width	6.1	6.9	7.2	7.1	8.9
		Bag. Vol. per Pass.	7.5	7.5	9.2	6.9	5.7
Power		Engines	2 GED TPE331-14	2 P&W PW-118A	2 P&WC PW119A	2 GE CT7-9B	2 GE CT7-9C
		Power Output	1,500 shp ea.	1,800 shp ea.	1,815 shp ea.	1,750 shp ea.	1,750 shp ea.
		Pressurization	5.7	7.0	6.7	7.0	3.6
Weights (lb)		Max Ramp	23,110	25,529	27,734	28,800	34,943
		Max TO	23,000	25,353	27,558	28,500	34,833
		Max Land.	22,300	24,802	27,007	28,000	33,392
		Zero Fuel	20,700	23,148	25,629	26,000	31,085
		EOW	14,000	15,939	18,023	17,715	21,836
		Max Pld.	6,700	7,209	7,606	8,285	9,249
		Max Fuel	5,960	5,732	7,143	5,700	9,278
		Pld.– Max Fuel	3,150	3,858	2,568	5,385	3,829
		Fuel – Max Pld.	2,410	2,381	2,105	2,800	3,858
Takeoff		A/S SL ISA	4,670	4,659	3,300	4,200	4,172
		5,000 + 20°C	6,350	6,325	4,950	6,850	7,398
		V_{MCA}	NA	91	NA	98	85
		V_{XSE}	NA	136	NA	133	NA
Climb	Rate (fpm)	All Eng.	NA	2,120	2,420	1,710	1,527
		Eng. Out	NA	675	800	510	494
	Ceiling (ft)	All Eng.	25,000	29,800	35,300	25,000	25,000
		Eng. Out	13,000	17,200	18,000	11,700	15,300
Limits		V_{NE}	315	269	345	250	240
		V_A	183	185	NA	180	160
		V_{FE}	160	200	200	175	160
		V_{LO}	160	200	200	200	150
Cruise		TAS	258	312	346	269	248
		FF	637	1,075	1,113	876	1,033
		FL	210	250	250	240	180
B/CA Productivity Factors	150 sm Mission	Stage/Fuel	3	3	3	4	3
		No. Pass.	29	30	30	35	44
		Eng. Hours	8.77	8.78	9.23	9.26	10.23
		Total Fuel	7,732	9,302	9,757	8,219	9,325
		Total Trips	13	13	15	13	13
		Seat Miles	56,550	58,500	67,500	68,250	85,800
		sm/hr	6,451	6,660	7,315	7,369	8,391
		sm/lb	7.31	6.29	6.92	8.30	9.20
		BS	193	192	211	182	165
		MF	595	716	650	632	717
		FL	180	200	200	190	180
	275 sm Mission	Stage/Fuel	2	2	2	3	2
		No. Pass.	29	30	30	35	44
		Eng. Hours	10.62	10.16	9.41	10.38	9.86
		Total Fuel	9,798	11,194	9,645	8,733	9,368
		Total Trips	10	10	10	9	8
		Seat Miles	79,750	82,500	82,500	86,625	96,800
		sm/hr	7,508	8,121	8,767	8,343	9,813
		sm/lb	8.14	7.37	8.55	9.92	10.33
		BS	225	235	254	207	194
		MF	980	1,119	965	970	1,171
		FL	210	220	250	240	180
	400 sm Mission	Stage/Fuel	1	1	2	2	1
		No Pass.	29	30	30	35	44
		Eng. Hours	10.21	9.76	10.05	10.96	10.11
		Total Fuel	9,462	10,211	10,538	9,299	9,779
		Total Trips	7	7	8	7	6
		Seat Miles	81,200	84,000	96,000	98,000	105,600
		sm/hr	7,953	8,607	9,548	8,940	10,444
		sm/lb	8.58	8.23	9.11	10.54	10.80
		BS	259	250	277	222	207
		MF	1,352	1,459	1,317	1,328	1,630
		FL	210	250	250	240	180
Certification Basis			FAR 25, 1992	FAR 25, 1965	FAR 25, 1993 Amendment 25-64	JAR/FAR 25, 1989	FAR 25, 1986
Remarks			* B/CA estimate. All data preliminary.		*1991 dollars. All data preliminary.		

REGIONAL AIRLINERS

TURBOPROPS

Manufacturer / Model			Cessna Aircraft Caravan II CE-406	Pilatus B-N Turbine Islander BN2T	Dornier 228 Do 228-212	Fairchild Aircraft Metro 23 SA227-CC
B/CA Eqpd. Price			$1,650,000	$1,826,000	$3,000,000*	$3,500,000*
Characteristics		Seating	2+12	2+8	2+19	2+19
		Seat Pitch	28.0	29.0	30.0	30.0
		Wing	low wing	hi wing	hi wing	low wing
		Noise	72.0	69.5	72.3	78.2
Dimensions (ft)	External	Length	39.0	35.7	54.3	59.4
		Height	13.1	12.4	15.8	16.7
		Span	49.5	49.0	55.6	57.0
		Turn Radius	31.5	31.0	48.5	38.5
	Internal	Length	12.8	10.0	23.3	25.4
		Height	4.3	4.1	5.1	4.8
		Width	4.7	3.6	4.5	5.2
		Bag. Vol. per Pass.	7.6	5.3	6.5	10.4
Power		Engines	P&W 2 PT6A-112	2 All 250-B17C	2 GED TPE331-5A	2 GED TPE331-11U
		Power Output	500 shp ea.	320 shp ea.	776 shp ea.	1,100 shp ea.**
		Pressurization	—	—	NA	7.0
Weights (lb)		Max Ramp	9,925	7,045	14,175	16,600
		Max TO	9,850	7,000	14,109	16,500
		Max Land.	9,360	6,800	13,448	15,675
		Zero Fuel	8,500	6,600	13,095	14,500
		EOW	5,567	4,220	8,249	9,363
		Max. Pld.	2,933	2,380	4,846	5,137
		Max Fuel	3,183	1,440	4,156	4,342
		Pld.– Max Fuel	1,175	1,385	1,770	2,895
		Fuel – Max Pld.	1,425	445	1,080	2,100
Takeoff		A/S SL ISA	4,776	1,250	2,550	5,400**
		5,000 + 20°C	6,300	1,900	3,400**	5,900***
		V_{MCA}	90	47	78	91
		V_{XSE}	105	75	93	136
Climb	Rate (fpm)	All Eng.	1,750	1,050	1,870	2,150
		Eng. Out	320	215	440	490
	Ceiling (ft)	All Eng.	30,000	25,000	25,000	23,600
		Eng. Out	14,800	10,200	13,000	10,000
Limits		V_{NE}	230	152	223	246
		V_A	160	113	150	185
		V_{FE}	200	88	160	215
		V_{LO}	180	–	160	175
Cruise		TAS	236	158	233	271
		FF	609	328	720	678
		FL	100	100	100	160
B/CA Productivity Factors	75 sm Mission	Stage/Fuel	3	3	2	5
		No. Pass.	12	8	19	19
		Eng. Hours	7.82	9.22	8.14	9.91
		Total Fuel	3,921	2,757	4,721	5,768
		Total Trips	15	14	17	14
		Seat Miles	13,500	8,400	24,225	39,900
		sm/hr	1,725	912	2,976	4,027
		sm/lb	3.44	3.05	5.13	6.92
		BS	125	99	136	184
		MF	261	197	278	412
		FL	100	100	50	160
	150 sm Mission	Stage/Fuel	2	2	2	3
		No. Pass.	12	8	19	19
		Eng. Hours	9.56	9.63	9.17	10.24
		Total Fuel	5,149	2,987	5,727	4,404
		Total Trips	12	9	12	6
		Seat Miles	21,600	10,800	34,200	31,350
		sm/hr	2,258	1,122	3,728	3,061
		sm/lb	4.19	3.62	5.97	7.12
		BS	163	122	170	140
		MF	429	332	477	734
		FL	100	100	100	120
	275 sm Mission	Stage/Fuel	2	1	2	2
		No. Pass.	12	8	19	19
		Eng. Hours	10.07	10.56	9.86	10.62
		Total Fuel	5,683	3,349	6,518	6,740
		Total Trips	8	6	8	7
		Seat Miles	26,400	13,200	41,800	53,200
		sm/hr	2,621	1,250	4,241	5,010
		sm/lb	4.65	3.94	6.41	7.89
		BS	190	136	194	229
		MF	710	558	815	963
		FL	100	100	100	160
Certification Basis			SFAR 41,1986	FAR 23, 1965	FAR 23, 1963 Amendment 34	SFAR 41, B), 1981
Remarks					*B/CA estimate. **WAT limited to 13,500 lbs.	*B/CA estimate. **Wet. ***WAT limited to 14,500 lbs.

REGIONAL AIRLINERS

TURBOPROPS

Manufacturer / Model			Fairchild Aircraft Metro 23 SA227-DC	Beech Aircraft 19000 Airliner BE-19000	British Aerospace Jetstream Super 31 BAe-3201	CASA C-212-300	Embraer/FAMA Vector CBA-123
B/CA Eqpd. Price			$3,900,000*	$3,950,000*	$4,075,000*	$4,280,000	$5,500,000*
Characteristics		Seating	2+19	2+19	2+19	3+26	2+19
		Seat Pitch	30.0	30.0	30.0	29.0	31.0
		Wing	low wing	low wing	low wing	hi wing	low wing
		Noise	78.2	NA	81.0/86.0	85.9/90.9	76.1/91.6
Dimensions (ft)	External	Length	59.4	57.8	47.1	53.1	59.3
		Height	16.7	15.0	17.7	21.7	19.6
		Span	57.0	58.0	52.0	66.9	58.1
		Turn Radius	38.5	41.2	41.1	48.2	49.8
	Internal	Length	25.4	25.0	24.3	23.7	21.3
		Height	4.8	5.9	5.9	5.9	5.8
		Width	5.2	4.5	6.1	6.9	6.9
		Bag. Vol. per Pass.	10.4	11.8	7.7	4.8	9.8
Power		Engines	2 GED TPE331-12UAR	2 P&W PT6A-67D	2 GED TPE331-12	2 GED TPE331-10	2 GED TPF351-20
		Power Output	1,100 shp ea.	1,279 shp ea.	1,020 shp ea.	925 shp ea.*	1,300 shp ea.
		Pressurization	7.0	5.0	5.5	—	8.2
Weights (lb)		Max Ramp	16,600	17,060	16,314	17,086	21,032
		Max TO	16,500	16,950	16,204	16,975	20,944
		Max Land.	15,675	16,100	15,609	16,424	20,392
		Zero Fuel	14,500	15,000	14,850	15,653	18,739
		EOW	9,377	10,550	10,136	10,538	13,988
		Max Pld.	5,123	4,450	4,714	5,115	4,751
		Max Fuel	4,342	4,458	3,248	3,537	4,802
		Pld.– Max Fuel	2,881	2,052	2,930	3,011	2,242
		Fuel – Max Pld.	2,100	2,060	1,464	1,433	2,293
Takeoff		A/S SL ISA	5,400**	3,737	4,700	2,936**	4,700
		5,000 + 20°C	5,900***	4,977	5,750**	5,000	6,550
		V_{MCA}	91	92	99	85	94
		V_{XSE}	136	122	120	110	125
Climb	Rate (fpm)	All Eng.	2,300	2,625	2,080	1,629	2,350
		Eng. Out	580	675	NA	311	520
	Ceiling (ft)	All Eng.	25,000	33,000	25,000	26,000	36,000
		Eng. Out	11,600	17,500	12,000	11,100	18,000
Limits		V_{NE}	246	248	250	200	200
		V_A	185	178	180	145	190
		V_{FE}	215	188	170	135	200
		V_{LO}	175	180	160	—	200
Cruise		TAS	288	278	258	198	347
		FF	788	774	637	775	965
		FL	150	240	210	135	250
B/CA Productivity Factors	150 sm Mission	Stage/Fuel	5	2	2	1	4
		No. Pass.	19	19	19	24	19
		Eng. Hours	8.84	8.74	8.52	8.04	9.17
		Total Fuel	5,515	7,886	5,590	4,745	7,569
		Total Tnps	13	13	12	12	14
		Seat Miles	37,050	37,050	34,200	21,600	39,900
		sm/hr	4,189	4,240	4,016	2,685	4,353
		sm/lb	6.72	4.70	6.12	4.55	5.27
		BS	191	193	183	97	199
		MF	424	607	466	395	541
		FL	160	170	180	80	250
	275 sm Mission	Stage/Fuel	3	2	2	1	2
		No. Pass.	19	19	19	24	19
		Eng. Hours	10.46	10.10	10.40	9.25	9.67
		Total Fuel	7,736	8,247	6,599	5,759	8,471
		Total Tnps	10	9	9	9	10
		Seat Miles	52,250	47,025	47,025	32,400	52,250
		sm/hr	4,994	4,658	4,522	3,504	5,404
		sm/lb	6.75	5.70	7.13	5.63	6.17
		BS	228	213	207	127	247
		MF	774	916	733	640	847
		FL	140	240	210	100	250
	400 sm Mission	Stage/Fuel	2	1	1	1	1
		No. Pass.	19	19	19	22	19
		Eng. Hours	11.47	10.53	10.99	9.47	10.22
		Total Fuel	8,243	8,489	7,031	6,396	9,247
		Total Tnps	8	7	7	6	8
		Seat Miles	60,800	53,200	53,200	36,300	60,800
		sm/hr	5,301	5,051	4,840	3,835	5,946
		sm/lb	7.38	6.27	7.57	5.65	6.56
		BS	243	231	222	151	272
		MF	1,030	1,213	1,004	1,065	1,156
		FL	150	240	210	100	250
Certification Basis			FAR 23	FAR 23	FAR 23	FAR 25, 1978	FAR 25 Pending
Remarks			Commuter 1990 *B/CA estimate.**Wet. ***WAT limited to 15,800 lbs.	Commuter Rule Mar. 91 Dual EFIS std. *B/CA estimate.	Commuter 1988 *B CA estimate. ** WAT limited. to 15,150 lbs.	*APR on. **Landing weight limited.	All data preliminary. *B/CA estimate.

REGIONAL AIRLINERS

TURBOPROPS

Manufacturer / Model			Saab-Scania AB Saab 2000	Aerospatiale/ ATR 72-200	British Aerospace Adv. Turboprop BAe ATP	Aerospatiale/ Alenia ATR 72-210
B/CA Eqpd. Price			$12,900,000	$13,350,000	$13,650,000*	$13,900,000
Characteristics		Seating	3+50	4+66	4+64	4+66
		Seat Pitch	32.0	31.0	31.0	31.0
		Wing	low wing	hi wing	low wing	hi wing
		Noise	76 Avg*	86.5/94.1	79.5/95.8	86.5/94.1
Dimensions (ft)	External	Length	88.7	89.1	85.3	89.1
		Height	25.4	25.1	23.4	25.1
		Span	81.2	88.8	100.5	88.8
		Turn Radius	64.5	63.0	79.9	63.0
	Internal	Length	56.7	63.0	63.0	63.0
		Height	6.0	6.3	6.3	6.3
		Width	7.1	8.4	8.1	8.4
		Bag. Vol. per Pass.	11.4	6.1	NA	6.1
Power		Engines	2 Allison GMA 2100	2 P&W PW-124	2 P&W PW-126A	2 P&W PW-124
		Power Output	3,738 shp ea.	2,400 shp ea.	2,653 shp ea.	2,400 shp ea.
		Pressurization	7.0	6.0	5.5	6.0
Weights (lb)		Max Ramp	48,940	47,466	50,700	47,466
		Max TO	48,500	47,400	50,550	47,400
		Max Land.	47,400	47,047	49,050	47,047
		Zero Fuel	42,770	43,430	46,800	43,430
		EOW	29,770	27,337	31,593	27,447
		Max. Pld.	13,000	16,093	15,207	15,983
		Max Fuel	9,180	11,025	11,200	11,025
		Pld.– Max Fuel	9,990	9,104	7,907	8,994
		Fuel – Max Pld.	6,170	4,036	3,900	4,036
Takeoff		A/S SL ISA	4,672	4,619	4,700	3,875
		5,000 + 20°C	6,640	5,643*	6,700**	6,000*
		V_{MCA}	NA	90	92	90
		V_{XSE}	NA	138	114	138
Climb	Rate (fpm)	All Eng.	2,380	1,500	2,080	1,500
		Eng. Out	734	10,000	390	12,500
	Ceiling (ft)	All Eng.	31,000	25,000	25,000	25,000
		Eng. Out	21,700	11,500	12,000	11,500
Limits		V_{NE}	NA	250	223	250
		V_A	NA	172	176	172
		V_{FE}	165	170	177	170
		V_{LO}	220	170	168	170
Cruise		TAS	365	262	262	262.4
		FF	2,034	1,133	1,431	1,133
		FL	280	250	180	250
B/CA Productivity Factors	150 sm Mission	Stage/Fuel	6	5	3	5
		No. Pass.	50	66	64	66
		Eng. Hours	9.61	10.21	8.68	10.21
		Total Fuel	16,956	13,206	11,952	13,206
		Total Trips	16	15	12	15
		Seat Miles	120,000	148,500	115,200	148,500
		sm/hr	12,481	14,551	13,273	14,551
		sm/lb	7.08	11.25	9.64	11.25
		BS	216	191	180	191
		MF	1,060	880	996	880
		FL	240	150	120	150
	275 sm Mission	Stage/Fuel	4	3	3	3
		No. Pass.	50	66	64	66
		Eng. Hours	10.18	10.03	10.21	10.03
		Total Fuel	19,236	12,664	14,105	12,664
		Total Trips	12	9	9	9
		Seat Miles	165,000	163,350	158,400	163,350
		sm/hr	16,202	16,294	15,509	16,294
		sm/lb	8.58	12.90	11.23	12.90
		BS	282	215	211	215
		MF	1,603	1,407	1,567	1,407
		FL	250	200	170	200
	400 sm Mission	Stage/Fuel	3	3	1	2
		No Pass.	50	66	64	66
		Eng. Hours	10.81	11.35	11.00	11.35
		Total Fuel	20,572	15,003	28,306	15,003
		Total Trips	9	8	7	8
		Seat Miles	180,000	211,200	179,200	211,200
		sm/hr	16,656	18,607	16,293	18,607
		sm/lb	8.75	14.08	6.33	14.08
		BS	290	245	221	245
		MF	2,286	1,875	4,044	1,675
		FL	280	250	180	250
Notes	Cert. Basis		JAR FAR 25 pending	JAR/FAR 25	JAR FAR 25, 1986	JAR/FAR 25
Remarks			*Flight test data pending.	*WAT limited to 41,780 lbs.	*B/CA estimate. **WAT limited to 45,500 lbs.	*WAT limited to 44,860 lbs.

Beech1900

	A	B	C	D	E	F	G
1	Aircraft	Beech 1900					
2	Specifications						
3	Analysis						
4	Airport Elev.		21	33	254	238	97
5	Destination		Sacramento	Napa	Monterey	Chico	Modesto
6	Aircraft Type		Beech 1900C	Beech 1900C	Beech 1900C	Beech 1900C	Beech 1900C
7	Mx Cost/Mile		1.10259409	1.11880638	1.08947371	1.06654466	1.09336314
8	Fuel Cost/Mile		1.25400954	1.34119392	1.1752	0.97009434	1.17509669
9	Distance	From SJC	67	53	85	159	79
10	True AirSpeed		157.815153	157.751236	158.125	160.940959	158.703492
11	ETE		23.1969697	18.3939394	29.0909091	49.2727273	26.469697
12	Cruising Alt.	IFR	5000	4000	6000	6000	5000
13	Time to Climb	in minutes	6.66666667	5.33333333	8	8	6.66666667
14	Time to Descen	minutes	10	8	12	12	10
15	Max. Pax		19	19	19	19	19
16	Climb Speed		140	140	140	140	140
17	Descent Speed		165	165	165	165	165
18	Turn/Sec Time	From SJC/IFR	20	20	20	20	20
19	Ceil		14400	14400	14400	14400	14400
20	Trip Cost		209.089413	176.773955	249.588174	401.098329	233.678024
21	Trip Time		31.1969697	26.3939394	37.0909091	57.2727273	34.469697
22	Start Time	Subject to tria	3	3	3	3	3
23	Taxi Time		5	5	5	5	5
24	Crew Cost/NM		0.76413388	0.87535735	0.67165775	0.485992	0.68946984
25	Fuel Cost/NM	@136.67	1.06061937	1.1343584	0.99396364	0.82048885	0.99387626
26	Cruise Speed	NM/hr	220	220	220	220	220
27	Acc. Slow Dist.	paved runway	3762.72727	3770	3903.93939	3894.24242	3808.76788
28	Landing Dist.	wet paved	3132.2093	3139.18605	3267.67442	3258.37209	3176.39535
29	Runway length	all verified					
30	Operating Cost	Assumptions:					
31	Fuel Cost/Gal.	(delivered)	1.3	1.3	1.3	1.3	1.3
32	Fuel	100LL					
33	Crew Cost/block hour		60	60	60	60	60
34	Airframe Labor	per man hour	17	17	17	17	17
35	Man hours per block hour		1.5	1.5	1.5	1.5	1.5
36	Airframe material/block hour		132.007436	135.224154	129.426569	124.952207	130.159232
37	Engine material/ block hour		85.0632637	85.4132491	84.7576471	84.187619	84.8806593
38	Annual Utility		2145.9165	836.873333	1097.152	1588.216	1033.37267
39	Daily Roundtr.		9	4	4	4	4
40	Burn rate gph	climb	170.2	170.2	170.2	170.2	170.2
41		cruise	124.3	124.3	124.3	124.3	124.3
42							
43	Lease cost/mo.	approx.	30000	30000	30000	30000	30000
44	Useful Load		7310				
45							
46							
47							
48							

	H	I	J	K	L	M	N
1							
2							
3							
4	30	47	6	836	333	292	502
5	Stockton	Hayward	Oakland	Paso Robles	Fresno	Visalia	Redding
6	Beech 1900C	Beech 1900C	Beech 1900C	Beech 1900C	Beech 1900C	Beech 1900C	Beech 1900C
7	1.11840372	1.23209512	1.19599168	1.07397514	1.06987316	1.06414407	1.06118407
8	1.39123847	2.01307407	1.86920833	1.05798275	0.9796207	0.93339794	0.92368939
9	53	21	26	124	142	175	198
10	156.399531	156.338583	155.045249	159.268701	161.181881	161.834532	161.661608
11	19.3787879	7.6969697	10.0454545	40.7121212	43.6515152	52.6515152	59.9090909
12	5000	2000	3000	7000	5000	5000	6000
13	6.66666667	2.66666667	4	9.33333333	6.66666667	6.66666667	8
14	10	4	6	14	10	10	12
15	19	19	19	19	19	19	19
16	140	140	140	140	140	140	140
17	165	165	165	165	165	165	165
18	20	20	20	20	20	20	20
19	14400	14400	14400	14400	14400	14400	14400
20	189.389824	103.845523	117.740655	333.0749	362.679643	430.221367	480.914037
21	27.3787879	15.6969697	18.0454545	48.7121212	51.6515152	60.6515152	67.9090909
22	3	3	3	3	3	3	3
23	5	5	5	5	5	5	5
24	[illegible]939	1.6998557	1.46328671	0.55413001	0.50458813	0.4608658	0.44396531
25	1.1766852	1.7026229	1.58094376	0.89482333	0.82854608	0.78945167	0.78124036
26	220	220	220	220	220	220	220
27	3768.18182	3778.48485	3753.63636	4256.66667	3951.81818	3926.9697	4054.24242
28	3137.44186	3147.32558	3123.48837	3606.04651	3313.60465	3289.76744	3411.86047
29							
30							
31	1.3	1.3	1.3	1.3	1.3	1.3	1.3
32		1.75					
33	60	60	60	60	60	60	60
34	17	17	17	17	17	17	17
35	1.5	1.5	1.5	1.5	1.5	1.5	1.5
36	135.21734	158.598533	151.153232	126.402805	125.570465	124.482438	123.936961
37	85.3314776	86.9623938	86.464937	84.3717263	84.301631	84.1292581	84.0235341
38	860.836667	576.594667	633.738	1379.91933	1451.44067	1670.42867	1847.02
39	4	4	4	4	4	4	4
40	170.2	170.2	170.2	170.2	170.2	170.2	170.2
41	124.3	124.3	124.3	124.3	124.3	124.3	124.3
42							
43	30000	30000	30000	30000	30000	30000	30000
44							
45							
46							
47							
48							

Cal Air. Cost Analysis

	A	B	C	D	E	F	G
1	Aircraft						
2	Specifications						
3	Analysis						
4	Airport Elev.		21	33	254	238	97
5	Destination		Sacramento	Napa	Monterey	Chico	Modesto
6	Aircraft Type		Dornier 228	Dornier 228	Dornier 228	Dornier 228	Dornier 228
7	Mx Cost/Mile	165	0.89562608	0.92221797	0.87166276	0.81420677	0.87882489
8	Fuel Cost/Mile		0.97780069	1.04004955	0.92656399	0.82755022	0.93770208
9	Distance	From SJC	67	53	85	159	79
10	True AirSpeed		158.431529	158.360161	158.773585	161.61191	159.39538
11	ETE		25.3737374	20.0808081	32.1212121	59.030303	29.7373737
12	Cruising Alt.	IFR	5000	4000	6000	6000	5000
13	Time to Climb	in minutes	6.66666667	5.33333333	8	8	6.66666667
14	Time to Descen	minutes	10	8	12	12	10
15	Max. Pax		19	19	19	19	19
16	Climb Speed		140	140	140	140	140
17	Descent Speed		165	165	165	165	165
18	Turn/Sec.Time	From SJC/IFR	20	20	20	20	20
19	SSE Serv. Ceil.		13000	13000	13000	13000	13000
20	Trip Cost		178.893331	152.080987	212.970486	348.069664	201.243005
21	Trip Time		33.3737374	28.0808081	40.1212121	67.030303	37.7373737
22	Start Time	Subject to tria	3	3	3	3	3
23	Taxi Time		5	5	5	5	5
24	Crew Cost/NM		0.79662295	0.90718506	0.70730838	0.5473604	0.73085283
25	Fuel Cost/NM	@90.6 gph	0.75215438	0.80003812	0.71274153	0.63657709	0.7213093
26	Cruise Speed	NM/hr	165	165	165	165	165
27	T ' ~ Dist.	paved runway	3012.72727	3020	3153.93939	3144.24242	3058.78788
28	Landing Dist.	wet paved	3492.2093	3499.18605	3627.67442	3618.37209	3536.39535
29	Runway length	all verified					
30	Operating Cost	Assumptions:					
31	Fuel Cost/Gal.		1.3	1.3	1.3	1.3	1.3
32	Fuel	100LL					
33	Crew Cost/block hour		60	60	60	60	60
34	Airframe Labor	per man hour	17	17	17	17	17
35	Man hours per block hour		1.4155	1.4645	1.3525	1.0935	1.3735
36	Airframe material/block hour		58.2169826	61.4327745	55.6363871	51.1594988	56.3666719
37	Engine material/ block hour		65.4978208	65.8366906	65.1954683	64.5951175	65.2899358
38	Annual Utility		2265.088	877.918222	1170.88533	1825.63733	1112.88178
39	Daily Roundtr.		9	4	4	4	4
40	Burn rate gph	climb	108.8	108.8	108.8	108.8	108.8
41		cruise	90.6	90.6	90.6	90.6	90.6
42							
43	Note:						
44	All miles are in Nautical Miles						
45	All costs are in U.S. $						
46	Costs are based upon new aircraft data						
47	Costs per mile include starting and taxiing times						
48	Engines secured during turn times						

Cal Air. Cost Analysis

	H	I	J	K	L	M	N
1							
2							
3							
4	30	47	6	836	333	292	502
5	Stockton	Hayward	Oakland	Paso Robles	Fresno	Visalia	Redding
6	Dornier 228	Dornier 228	Dornier 228	Dornier 228	Dornier 228	Dornier 228	Dornier 228
7	0.92211777	1.08516828	1.03574635	0.83687704	0.82464514	0.80516512	0.79304671
8	1.04753192	1.49939586	1.36357576	0.86285011	0.83837331	0.81488577	0.80514845
9	53	21	26	124	142	175	198
10	156.782869	156.708543	155.060241	159.982624	161.834229	162.421875	162.268212
11	20.2828283	8.04040404	10.0606061	46.5050505	52.6464646	64.6464646	73.2121212
12	5000	2000	3000	7000	5000	5000	6000
13	6.66666667	2.66666667	4	9.33333333	6.66666667	6.66666667	8
14	10	4	6	14	10	10	12
15	19	19	19	19	19	19	19
16	140	140	140	140	140	140	140
17	165	165	165	165	165	165	165
18	20	20	20	20	20	20	20
19	13000	13000	13000	13000	13000	13000	13000
20	152.674262	90.3162512	100.442981	285.271217	316.795084	376.15537	417.654763
21	28.2828283	16.040404	18.0606061	54.5050505	60.6464646	72.6464646	81.2121212
22	3	3	3	3	3	3	3
23	5	5	5	5	5	5	5
24	0.91099676	1.71620972	1.46386946	0.60084718	0.56793285	0.52940837	0.51117233
25	0.80579379	1.15338143	1.04890443	0.66373086	0.64490255	0.62683521	0.61934496
26	165	165	165	165	165	165	165
27	3016.18182	3028.48485	3003.63636	3506.66667	3201.81818	3176.9697	3304.24242
28	3497.44186	3507.32558	3483.48837	3966.04651	3673.60465	3649.76744	3771.86047
29							
30							
31	1.3	1.3	1.3	1.3	1.3	1.3	1.3
32		1.75					
33	60	60	60	60	60	60	60
34	17	17	17	17	17	17	17
35	1.4645	1.5765	1.559	1.216	1.153	1.0375	0.957
36	[illegible]315027	84.8117128	77.3729995	52.6118959	51.776107	50.6888265	50.1449005
37	3214286	67.4405542	67.0221477	64.8008154	64.6893404	64.5259177	64.438806
38	[illegible]2.833778	584.951111	634.106667	1520.87289	1670.30578	1962.28978	2170.70933
39	4	4	4	4	4	4	4
40	108.8	108.8	108.8	108.8	108.8	108.8	108.8
41	90.6	90.6	90.6	90.6	90.6	90.6	90.6
42							
43							
44							
45							
46							
47							
48							

Beech.Dornier Comp.

	A	B	C	D	E
1	Aircraft Specification Comparison			Dornier 228	Beech 1900C
2					
3	Capacity		people	19	19
4	Baggage Weight		#	728	700
5	Baggage Vol./Px		ft.	6.5	4
6	Cabin Length		ft.	23.25	20
7	Max. Width		ft.	4	4.3
8	Aisle Width		ft.	1	Not reported
9	Seat Width		ft.	1.67	Not reported
10	Max. Cruise		Knots	231	236
11	Accel. Stop Dist.		ft.	2300	4050
12	Takeoff		ft.	2500	4100
13	Landing		ft.	2650	3120
14	Climb Rate		FPM	1800	2230
15	Cruise Climb		Knots	165	170
16	Max T.O. Wt.		#	13669	11300
17	Empty Wt.		#	8320	7400
18	Manhours/BH		hrs.	1.13	1
19	Material/FH		$	113.66	98.61
20	Utilization		hrs.	2400	2400
21	Fuel Burn		#	90.6	84.02
22	TBO		hrs.	Not reported	4000
23	Fuel Capacity		#	4155	2466
24	BSE		ft.	13000	14400
25	Cost /NM				
26		50NM	$	78	76
27		100NM	$	136	132
28		150NM	$	188	185
29	Note Crew Cost not included; Fuel at $1/Gallon				

APPENDIX N

FACILITY INFORMATION FOR SAN JOSE INTERNATIONAL AIRPORT

Source:

City of San Jose, Airport Authority. Procedures and Requirements for Commencement of Airline Operations at San Jose International Airport. San Jose, City Clerk, 1993.

Procedures and Requirements for Commencement of Airline Operations at San Jose International Airport

Prior to commencement of airline operations at San Jose International Airport (SJC), the following must be provided:

1) A letter of intent to operate at SJC. The letter should include a schedule of proposed operations and a description of your aircraft including the maximum gross landing weight of said aircraft and passenger capacity;

2) A letter of confirmation from a host airline wherein the host airline agrees to provide passenger services, ticket counter space and gate/holdroom space for operations at SJC or;

3) Four copies of an Airline Lease executed by Airline for lease of terminal space to be occupied;

4) Four copies of a Commercial Air Carrier Operating Agreement and Permit executed by Airline;

5) A copy of your Air Carrier Operating Certificate;

6) A certificate of insurance;

7) A business license issued by the City of San Jose;

8) Submittal of Storm Water Pollution Prevention Plan (SWPPP) form (if applicable).

9) A security deposit equivalent to a minimum of two months of operation fees. The fees include but are not limited to:

   a) Landing fee charges: $1.21/1,000 lbs. MGLW.
   b) Holdroom space secondary use fee: $.93 per enplaned passenger in Terminal C; $1.75 per enplaned passenger in Terminal A.
   c) Baggage handling fee first 6 months based on estimate weight of deplaned passengers, thereafter based on 20/80 formula: currently $.21 per deplaned passenger in Terminal C or $.57 per deplaned passenger in Terminal A.
   d) RON charges $.20/1,000 lbs. MGLW
   e) Passenger Facilities Charges (PFC's): $3.00 per enplaned passenger.
   f) Holdroom space rent: $57/sq. ft./yr. in Terminal C or $148/sq. ft./yr. in Terminal A.

g) Ticket counter space rent: $63/sq. ft./yr. in Terminal C or $164/sq. ft./yr. in Terminal A;

h) Operations space rent: $47/sq. ft./yr. in Terminal C or $123/sq. ft./year in Terminal A;

i) Bag makeup space: $22/sq. ft./yr. in Terminal C or $58/sq. ft./yr. in Terminal A;

j) Storage space: $22/sq. ft./yr. in Terminal C or $58/sq. ft./yr. in Terminal A;

k) Federal Inspection Service (FIS) fee: $7.00 per deplaned passenger.

Please note that the above amounts are subject to change, and that other charges may apply depending upon the nature of Airlines' operations.

In addition to the above requirements, Airline is required to obtain environmental clearance prior to commencing operations. The study necessary to comply with the California Environmental Quality Act (CEQA) may take 60 to 90 days to conduct. Please be advised that submitting to this process does not render acceptance.

The Airport Noise Control Program (see enclosure), adopted by the City in response to environmental and constituents' concerns, includes a curfew. The intent of this program is to reduce and regulate noise emissions. Central to the Airport's noise control program is the use of stage 3 aircraft. This practice benefits the environment and promotes good relations with the surrounding community. To this end, we strongly discourage the use of aircraft which fails to meet stage 3 requirements.