

APPENDIX B INFRASTRUCTURE, AIRPORTS AND THE FRACTIONAL OWNERSHIP SCHEME OF THINGS

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Over the past thirty years, the idea of fractional ownership of business aircraft has passed from an obscure gleam in the eye of a few visionary entrepreneurs to a phenomenon now accounting for the largest new investment segment in the world's aviation industry. Executive Jet Aviation recently announced purchase orders for over \$1 billion worth of state-of-the-art business aircraft over the next five years to support their Net Jets fractional ownership program worldwide.

While this company and its few lately-arrived competitors accommodate an increasingly large share of the business aviation travel in the United States, the idea spreads like a ripple in a mill pond to Europe and Asia. As it spreads, a new body of experience is being formulated by the pilots, dispatchers, service specialists and schedulers who operate and track this new fleet of specialized air transport.

To understand the "take" of this experience on airports and infrastructure as an element of Future Aviation Activities, it is useful to look at the challenges facing the infrastructure over the next decade and then examine the interests of the fractional ownership community at the points of intersection with these challenges.

THE TEN CHALLENGES

(1) *GLOBAL POLITICAL, CULTURAL AND ECONOMIC LINKAGES* in the emerging "world-neighborhood" forum, solidify and are implemented through the airports of the world. But linkage requires a degree of cooperation and shared value sometimes difficult to assure in a context of underlying tension and mistrust between nations whose fundamental interests frequently diverge. Where linkage is clearly possible, troubling national sovereignty issues are embedded in initiatives addressing customs and immigration streamlining, currency convertibility and free trade, national security airspace and high-altitude/sub-orbital protocols.

(2) *THE PROLIFERATION OF HEAVIER, LARGER AND MORE POWERFUL AIRCRAFT* and their supporting infrastructures introduces a significant cluster of design deficiencies in existing facilities and potential shortcomings in operational protocols and procedures. Anticipated improvements will be required at major operating sites to accommodate increased

wheelbase/ wingspan/gross weight runway requirements, terminal facility expansion, wake vortex detection and avoidance, arrival and departure throughput, and the related problems associated with ground transportation on- and off-site.

(3) *UNIFORM TRAVELER SAFETY* standards are difficult to insure over the wide span of differences between industrialized and developing countries. The mechanisms for insuring uniform standards depend critically on cooperative measures taken by governments and international organizations between and among whom there are often significant controversies on other issues. Standardized approach procedures, international terminology standards, equipment performance criteria, collision avoidance/evasion, ground evacuation, crash and fire equipment, and ground traffic surveillance standards need to be addressed cooperatively between states that find cooperation in any arena difficult.

(4) *AVIATION SECURITY* in the face of unlawful interference with civil aviation is difficult to enforce without clear-cut global lines of authority and responsibility between government and industry. Baggage surveillance and clearance causes bottlenecks and delays proportional to the size and value of the target to terrorists. Checked baggage screening, freight/courier/cargo/mail security, off-terminal arrival and departure security, employee and operator documentation and identification all pose thorny jurisdictional and proprietary issues which must be addressed.

(5) *ENVIRONMENTAL CAPACITY CONSTRAINTS*, currently pressing operators to conform to costly but technically non-challenging standards in noise and emission control, are expected to increase as traffic increases over the next decade. These constraints will eventually exceed the current capacity of airports to conform and will almost surely require attention at the manufacturing source, where they become economic constraints. Non-conforming aircraft will face operational restrictions which will similarly affect revenue performance and the ability to travel unrestricted among all airports.

(6) *TRAVEL MARKET EXPANSION* to a mass transit mode will impact regulatory practices to the extent of ending special considerations for airlines and airports, at the same time that consumer choice, airline competition and hub domination introduce new

market-driven pressures on airports. Government regulation initiatives will be available to insure free competition and unrestrained access to all markets, at the same time that airports will need to assert autonomy and avoid conflict of interest between airlines and airports.

(7) *ECONOMIC SURVIVAL AND GROWTH* of the airport infrastructure depends critically on the ability of facilities to generate revenue and invest in growth. Airport landing, baggage handling, throughput, parking and other fees-for-services are legitimate costs-of-doing-business for an industry that must expect some expansion of fee as a component of operating costs. Tax incentives, government shared-ownership and tax support relieve certain financial pressures, but all involve autonomy tradeoffs which affect airport management flexibility.

(8) *EXPEDITING GROUND PROCESSING* at airports to reduce the slow and inefficient processing of passengers and their baggage, moving them between airport portals and airline gates, and processing cargo and general aviation customers is a challenge severely impacting airport image and consumer acceptance. New technology initiatives in ground transportation, machine readable travel documents, customer identification devices, automatic ticketing and other facilitation developments will require coordination, cooperation and joint stakeholding by government, airlines and the airport to reach implied potentials in the real world.

(9) *INCREASING FLIGHT CAPACITY THROUGH TECHNOLOGY* offers significant promise for the future, but the path to increasing capacity on the ground and in the air through navigational aid improvement is replete with important funding, regulation, acceptance, standardization and international cooperation factors. Satellite based navigation and air traffic management holds great promise but will involve enormous expenditures, involve huge technical quality assurance challenges, depend sharply on international cooperation and involve a difficult and lengthy period of transition.

(10) *INTEGRATED AIRPORT SYSTEMS* are developing. Such systems view the airport, its communication and information data bases and structures, its on-facility ground transit system, its off-campus connectors to local population centers, and its web of environmental, safety, security and customer support services as an operating organism. The potential for synergism is enormous, but so are the costs in political, economic and—to some extent-cultural terms. Systemization requires new forms of government/airline/airport/ community interaction, new dimensions in community planning and

organization and new approaches to previously compartmented problems now affecting the much broader community at large

OUR TEN "VITAL" INTERESTS

Fractional ownership succeeds because it makes sense. It provides all of the benefits of individual or corporate ownership with none of its disadvantages, and in nurturing its success over the last three decades, we have accumulated a substantial body of experience from a somewhat specialized viewpoint.

Our viewpoint draws from the perspectives of the General Aviation, Air Carrier, On-Demand Charter and (some would say) Bush Pilot community and from these perspectives, we can identify ten vital interests which drive and ultimately formulate the way we do our business.

The vital interests of the fractional ownership community are deeply imbedded in the various venues of the aviation government/industry relationship. They will be discussed in terms of their impact on Airports and Infrastructure in some detail, but it may be useful to list them at the outset before charting their points of intersection with the broader challenges above:

(1) *SAFETY OF FLIGHT AND GROUND OPERATIONS*, our paramount interest, the overriding mission of management and each employee.

(2) *ZERO SYSTEM-INDUCED FLIGHT AND GROUND DELAY*, no less than our second prime concern after safety.

(3) *ALL-WEATHER SAFE ACCESS TO SUITABLE AIRPORTS* characterizing the kind of flying we do and the kind of system improvement we continue to champion.

(4) *FACILITY UPGRADES AT THE SECOND-TIER, "RELIEVER" AIRPORTS* include those technical initiatives that constitute our version of the AIP.

(5) *BASIC NON-INTRUSIVE ANTI-TERRORIST PROTECTION*, in everyone's interest, no less a value to the more attractive business traveler target.

(6) *REASONABLE, NON-DISCRIMINATORY COST SHARING* needs to sustain and improve the infrastructure, achievable with intelligent dialogue.

(7) *REGULATORY ACKNOWLEDGMENT OF NICHE ISSUES AND PROBLEMS*, so we can operate in the full sunshine of a system which addresses our "differentness".

(8) *FAIRNESS EXEMPTIONS FROM*

BURDENSOME INTERNATIONAL CONSTRAINTS instituted as solutions to non-existent or irrelevant problems.

(9) *ACCESS TO RELEVANT POLICY DELIBERATION FORUMS* in our own right, to provide input as stakeholders in policy decision making.

(10) *PROVISIONS FOR ACCESS TO INTEGRATED AIRPORT SYSTEMS* as they are conceptualized, designed and instituted.

SAFETY OF OPERATIONS will always be our paramount concern, underlying all aspects of the unique ownership-operator relationship at the core of the fractional concept. We will continue to invest heavily in the safest, most capable and cost-effective equipment that the industry offers, and we expect to prioritize our investment dollar in that order—safety before capability or economy. We are intimately associated with industry initiatives to improve safe flight, and watch closely a spectrum of safety related issues affecting airport installations, particularly the second, third and fourth tier airports.

Innovation is high on our watch-list—autonomous GPS approach technology and increased approach data processing, storage and communication capabilities; advanced flight following, flight direction and flight clearance procedures, especially within the Control Zone; advances in taxiway lighting, design, and traffic control coupled with new parallel runway construction and ramp placement—these are our tomorrow. We are also concerned, however, with a number of airport safety-related issues which affect the general aviation community and with which we must deal on each of our todays.

Ideally, we would like every airport in the United States to be tower equipped with weather service, a low-minimum all-weather approach, adequate runway length and weight bearing capacity to handle any weight class business aircraft, and an obstruction-free visual approach and departure. In the real world, we must deal with far from ideal conditions routinely, rather than as the exception, and to the extent that conditions vary from the ideal, we have our work cut out for us.

Ideally, as well, we would opt for government owned, operated and financed state-of-the-art facilities with all systems in excellent repair staffed by an unhurried, safety-conscious staff primarily concerned with each and every operation as if it were unique. Ideally, we would like to be able to count on an alerted, fully manned, professionally trained crash and rescue organization with the latest equipment.

Ideally, we would like airport owners and operators to invest proactively in their (and our) future, to keep their facilities in good repair, free of Foreign Object Damage, with easily accessed, contaminant-free fuel;

with safe, secure, lighted parking; with well-marked, pothole-free taxiways and runways; and with procedures in place to provide immediate safety-related feedback from the transient flight crew to the operator.

Finally, we would like to see greater attention paid to standardizing second and third tier facilities—runway and taxiway lighting, ramp layout, obstruction marking—and far more diligence paid to getting the word out when conditions (as they must, from time to time) depart from the normal. NOTAM notification and dissemination for the short term, temporary approach plate notices for the longer term, and a real effort to repair the broken, standardize the non-standard, and replace the missing.

ZERO SYSTEM-INDUCED FLIGHT AND GROUND DELAY has been the Holy Grail of every commercial pilot since Orville Wright. It is axiomatic that as airport traffic density increases, the “system” induces delays. While a certain level of delay is accepted as the cost of getting airplanes to fly safely, to the business flyer—who has invested heavily in a personal aircraft—delay of any origin constitutes counter-productivity. En-route flight delay is rarely, if ever, attributable solely to airport management, although in the management of air traffic density, every pilot has experienced density delays without knowing clearly who to blame. In this light, the business customer is consistently better served at the less dense facility, acknowledging the tradeoff between ground-site convenience and flight management.

To the business aviation operator, this suggests that a cultural change is frequently needed in the mind of his passengers. Frequently, the attractiveness of San Jose or John Wayne or even Stewart or Bradley airports as an effective antidote to the system delay problem at the major hubs needs to be emphasized and demonstrated. As Corporate America becomes increasingly airminded, involvement in airport related issues is inevitable and airport management needs to be receptive to ways to involve this constituency, as discussed below.

To major airport management, its symbiotic partnership with the Part 121 carrier community is the fact-of-life catalyst that has done such a remarkably good job in generating current levels of airport throughput. Precise (if not split-second) gate and ramp blocks, improvements in ground control surveillance radar, dual runway allocation, and service coordination efforts involving a host of independent contractors have paid off handsomely. Late afternoon departure delays at single-runway Washington National Airport and chronic ramp holds at the gate mazes at St. Louis and Dallas-Ft. Worth are reminders of how far airport design elsewhere has improved.

But to the second and third tier operator, runway and ramp congestion are problems rarely, if ever, encountered. Without as overt and explicit a set of relationships with the Part 91 and Part 135 communities

that join the larger airports with the Part 121 operators, the smaller airport operators can often fail to take steps to eliminate or reduce system delays. In many ways, this is an attitude problem, frequently characterized by a lack of coordination in the response to service requests, a lack of cooperation between component operators, and the feeling that the airport would be a good place to work "if it weren't for the damned airplanes." In its worst characterization, we are unable to find the alert, professional, safety conscious team player we once met daily at our favorite airports.

Where smaller airport managers have gone to some effort to involve the work force, and the community in general, in an attitude adjustment effort ("Airport Days," Zero Defect campaigns, Fly-Ins, Service-With-A-Smile buttons, etc.), we, the users, have noticed differences.

ALL-WEATHER SAFE ACCESS TO SECONDARY AND TERTIARY AIRPORTS is a twin-brother interest to the elimination of system delays, and the two are intimately related. Ninety percent of air travelers fly between the largest seventy five airports. As a long term investment agenda, few big-ticket items are more important to us than instrument approach upgrades at the remaining, smaller airports around the country. We need to go into these secondary and tertiary airports because they are closest to the manufacturing sites and research parks and sub-contractor factories our owners cannot reach efficiently on an airliner.

Deurbanization, as a concept, is a new buzz word in the airport location dialogue but it has been an article of faith in the business world for years. Labor, raw material and quality-of-life issues have sparked a massive industrial move to the hinterland, where more and more of our business trips head. Similarly, the aircraft owner vacations at sites in the same hinterland, and buys an aircraft to fly to and from his vacation. To the hinterland, then, we must go, and we need a quality precision approach when we get there. We need the snow cleared in winter, the ice melted, braking action measured, and a clearly enunciated warning when these conditions have not been met. We need adequate drainage year round to eliminate the pooling and the erosion, the hydroplaning and the splash-up that comes with skimping on runway maintenance. Ramp life of reflective runway striping and rubber crack sealant is limited, and poorly striped, cracked, crumbly runways are fairly good indices of neglectful airport management.

With assured access to GPS based approach systems in the first part of the next century, our hope is that there is enough wealth around to allow sharing by the airports most in need of upgrade and improvement. Non-Directional Beacon (NDB) approaches should quickly pass into the closet in which the Red and Blue airways are stacked. We are, however, skeptical of the Wide Area Approach System initiatives we have heard

discussed, worried about the application to the mountainous terrain around the places we fly to in ski season.

Visual approach aids are an inexpensive start to tertiary airport upgrades, and given the choice, we could conceivably prefer a reliable, well-maintained VASI with a well-cleared sight line at some locations to an erratic NDB.

We prefer manned towers to do-it-yourself pattern control and we depend critically on accurate, timely, and weather data. As our aircraft grow in size and weight, we expect that tower personnel, and we hope Center personnel, are aware of and sensitive to runway weight limitations.

FACILITY UPGRADES AT SECONDARY AND TERTIARY AIRPORTS are urgent needs for the future, then, but the work that goes into these upgrades must be smart work. Hard work alone will not suffice. As a bottom line, we as an industry believe that we need more, better, smaller airports and we would question any unequivocal assertion advocating unmitigated large airport build-out. Fortunately, growth advocates have articulate enemies who quickly point out the likelihood of environmental, economic, traffic and assorted other disasters in the face of uncontrolled expansion.

The airport and facility planner should have some input to the selection, design and configuration of instrument approach and facility improvements but the fact-of-life proceedings by which such decisions are made are often complex tradeoffs involving far more factors than logic would suggest. To the extent that funding and installing a new instrument system is a major political exercise, we would hope that some experience and skill goes into the bureaucratic maneuvering that establishes the timing and precedes the award. Many facility upgrades have cleared bureaucratic logjams and gone operational thanks to the interested concern of a business aircraft patron of the facility involved. In this regard, we may need to educate that part of Corporate America using our services that there is both a real and cultural difference between Teterboro and Newark/LaGuardia, Palwaukee and O'Hare/Midway airports. The difference is now not entirely weighted on the side of the larger airports. The Corporate America business jet owner has a vested stake in doing all he or she can to improve the lot of the Teterboros and the Palwaukees and the cluster of far lesser facilities nationwide that help them minimize system delays by being where they are. The difference between what can be done (at Teterboro) and what needs to be done (at Palwaukee) is a study in the comparative exercise of Corporate influence in pursuit of that vested interest.

The ongoing controversy about America's future in airport infrastructure revolves around the relative funding burden appropriate to the government, the

airlines, business and general aviation and the community. This robust dialogue addresses the redistribution of capital to accommodate the needs of the second tier system and cross-subsidize the capital costs of major second tier airports. These "reliever" airports are of vital importance to us, and their importance is derived from an entirely different calculus than that by which the proponents of reliever cross subsidization compute value. The full system needs funding. Where their own interests are clear, airline shared-funding of capital airport improvements where their own interests are clear is legitimate, but since general aviation will never be able to meet full systems costs, airlines need to be incentivized to invest as well in the full system as a whole and its future adequacy.

BASIC NON-INTRUSIVE ANTI-TERRORIST PROTECTION is another "Holy Grail," and we are gratified and assured by efforts of the government and its industry partners to stay ahead of the complex national and international terrorism threat. As a matter of firm company policy, we cooperate to the fullest extent possible in anti-terrorist security initiatives since we must rely on airport management and government agencies to shield our owner-passengers, their aircraft and their belongings from harm or the threat of harm. We need absolute confidence in this shield and we will do whatever is needed to assure others of our complete cooperation. But we need more than assent to policy and cooperation.

We have a particular stake in insuring that our clients are safe from national, sub-national, para-national and domestic terrorist activities while engaged in any activity over which we can exercise either control, direction or assistance. As a group, our clientele represent particularly lucrative targets for the terrorist, regardless of agenda, and for the domestic criminal as well. We face this added burden in all aspects of our operation, and appreciate extra security attention when circumstances require it. We also appreciate extra consideration from airport authorities when client-initiated security precautions must be taken and consideration given to non-standard parking, ground transit and servicing requirements.

REASONABLE, NON-DISCRIMINATORY COST SHARING is a fact-of-life requirement in the day and age of rapid and expensive technological change. We, as an industry, are financially supporting the operation and maintenance of the current system as an acknowledged business cost. Re-equipping the system calls for an awesome investment of capital, with acknowledged shared responsibilities, but with honest differences of opinion on the mechanism of allocating these costs. As the debate over allocation shares proceeds within the envelope of acknowledged responsibility, we are encouraged by indications that

seem to point away from user fees toward across the board assessments via fuel, aircraft and service point-of-purchase taxation. We believe that a safe system is a system there for all to use without purchase price decision requirements, elective levels of usage or the temptation to cut corners in marginal situations. We believe that a safe system is a system that is funded in such a manner that assures resource allocation by need rather than by political or economic considerations. We fully endorse the idea that as a profitable segment of the industry, we should pay our fair share to maintain, operate and upgrade the system on which we depend. We further endorse the notion that public debt incurred to fund infrastructure is a proper pass-down to future generations, particularly in the case of airports and facilities purchased to generate future income.

At ground level, we favor public investment wherever feasible, and in some cases where conventional wisdom deems it unfeasible. We acknowledge that players in the industry, ourselves included, often have short term interests and objectives that coincide with infrastructure upgrades and when they do, sometimes remarkable things happen at airports. We also acknowledge that we need remarkable things to happen at certain airports where these interests do not yet coincide. To make this happen, we favor a concerted effort to interest states, counties and municipalities in doing what has to be done to at least help acquaint the public with their long term stake in infrastructure.

REGULATORY ACKNOWLEDGMENT OF NICHE ISSUES AND PROBLEMS probably needs to begin with the creation of a new Part in Federal Aviation Regulations to provide guidance and regulation to the fractional ownership industry. It has the potential now to soon outgrow the neither-fish-nor-fowl mind-set currently dictating that we always choose the most stringent strictures of Parts 91 and 135 to obey, and throw in a bits and pieces of other parts when at all in doubt. As fractional ownership operators, we may present a fractionated face to the market analyst, but to the federal aviation infrastructure, all of us in the business are of one mind in seeking a set of regulations tailored to our singular way of going about our business. Beginning with the issue of IRS excise taxation requirements on charter flight revenue, the need for regulatory recognition extends through other unsettled mazes into appropriate runway length restrictions, ceiling and visibility minimums, pilot training and certification frequency, record keeping and ultimately to contractual, ownership and liability definition. As a uniquely configured industry, we acknowledge our responsibilities to conform strictly to legislative and regulatory guidance. As a corollary, however, we feel that legislative and regulatory guidance should recognize the unique configuration of the industry. We are ultimately concerned not that tailored regulation will be

unduly burdensome but that untailored regulation will be so unspecific and discretionary in its strictures as to be unsafely full of cracks, through which one of us one day will fall-in spite of good intentions. Ultimately, it is the never-ending quest for a safer operation which drives our concerns and prompts our dissatisfaction with the current FAR.

FAIRNESS EXEMPTIONS FROM BURDENSOME INTERNATIONAL CONSTRAINTS will, we believe, come as the global aviation community begins to recognize and accept the differentness of fractional ownership operations. Some ICAO conventions negotiated after the end of World War II are, as anyone who has read the back of an airline ticket knows, notoriously inappropriate for the beginning of the 21st century. There is also a large cluster of customs, immigration, epidemiological and political conventions and rules that are appropriate to some operations, but not to fractional ownership. Does a fractionally owned Citation II with three holiday passengers en-route to Bimini qualify as a U.S. flag "state aircraft" subject to the same restrictions and eligible for the same privileges as a United 777 with 450 passengers en-route to Frankfurt?

There are legitimate burdens and inconveniences in international travel. International reluctance to recognize the unique status of fractional ownership, however, opens the industry to the futility of almost daily expensive and time consuming exercises in identifying, understanding and complying with written and unwritten laws designed for other purposes. As a sampling, we try to stay "up" on the ins and outs of our government's guidance and direction on things to worry about-but we should not have to worry about tricky customs, capricious taxation, cabotage and/or the implication of cabotage and scrupulous immigration cleanliness, along with policies with names like anti-terrorist, boycott, overflight, air defense, international marking, currency, fumigation, anti-snail, anti-Medfly, anti-pornography, anti-Israeli/Arab, anti-Cuban/U.S., anti-capitalist, ..the list goes on... policies that can make life unnecessarily miserable.

ACCESS TO RELEVANT POLICY DELIBERATION FORUMS constitutes the right of passage of fractional ownership operators from financial and volumetric adolescence into full fledged partnership with the rest of greater aviation. We have been bootstrapping steadily—and successfully—in this direction and as a result of the sheer goodness of our cause (some would say lobbying efficiency), we are receiving more and more media and representational attention. The National Business Aviation Association celebrates fifty years of growth in what one trade magazine this month calls "scope and sophistication." Growth provides access, and the entire aviation community is better for

the influence wielded by Business Aviation in facility and airport improvement around the country. When I was five or six, playing in the grass at Bendix Field below Hasbrouck Heights, NJ, modern Teterboro would have been impossible to imagine. Enter Business Aviation and the concerted legislative and agency pressure that accomplished its modernization and history was made, at least at Teterboro. As we grow, the future association represented in paradigm today by our Shared Ownership Association may provide us with the same access to policy formulation and design input as does NBAA and the other alphabet groups across the spectrum of the politico-industrial complex.

Fractional owners are growing in numbers, representing an increasingly greater slice of a deurbanizing business community increasingly dependent on access and movement. We hope that as the relevant indices of fractional ownership growth—miles flown, aircraft purchased, passengers embarked— increase, the ability to communicate interests and concerns to relevant policy makers increases as well.

PROVISIONS FOR ACCESS TO INTEGRATED AIRPORT SYSTEMS as they are planned is an interest shared by the general aviation community. New ways to manage and integrate air and ground operations, support auxiliary industries, interact with the broader community at large and move air travel access into the urban and suburban population centers offer exciting models for the future. Expensive models, to be sure, and likely to require staggering investments by the airlines, the community, the federal government and other economic stakeholders. Along with the rest of the general aviation community, we have an interest in making sure that the safety and convenience of our ownership is not neglected in the planning process, and that we are afforded the opportunity to contribute to the planning process as we are expected to contribute to the anticipated revenue stream. We fully expect, in return, to contribute our fair, non-discriminatory share of the cost burden and welcome inclusion in the partnerships needed to build for the future.

Fractional ownership is here to stay. We have learned how to make it work, and we welcome a future in which we participate as a fully recognized industrial partner with the rest of the aviation community. We have the same interests in safety, convenience, efficiency, cost effectiveness and growth as the rest of aviation, and our specialized niche market activity contributes in a healthy way to its vibrant growth. Note that our list of interests implies no request for concessions, no appeal for exceptions to policy or rulemaking, and no bid for tax relief. We will pay our way. We will contribute to growth and we will pay our fair share of the costs of growth.

Fractional ownership is here to stay, and it's good to be here.