

The Understated Cost of Airline Travel

Business & Commercial Aviation 1999

*Peter v. Agur, Jr., President
The VanAllen Group, Inc.*

Most executives have no idea how truly expensive it is to use the airlines. Ask them how many passengers it takes to make a business aircraft economically effective compared to the airlines and their responses range from three or more to it cannot be done. Their estimates are much too conservative.

Trip Cost Context: Strategic versus Operational

A look at the purpose of travel can lay the foundation for its cost analysis. Companies have two reasons for travel: (1) Strategic and (2) Operational. Strategic Trips have high risk and high reward potentials. They include merger and acquisition efforts as well as critical customer or sales meetings. In other words, a Strategic Trip has a large impact on revenues or the state of the business. It is not unusual for a passenger to turn to a crewmember at the end of the Strategic Trip and say, "The airplane paid for itself today." The value of Strategic Trips is so great that the travel costs are a minor consideration.

Another perspective on Strategic Trips is the concept of Strategic Assets. Many companies consider their most senior executives Strategic Assets. These are the people who are responsible for the direction and growth of the business. Their time-place mobility has such a high benefit to the company, that any time they travel it is considered a Strategic Trip.

An aircraft being used for strategic purposes is like a fire truck. The cost of the service is not as important as its readiness and ability to perform the mission.

Operational Trips are "normal purpose" travel. These trips allow people to be face-to-face for the usual meetings associated with the business. The choice of mode, airlines or business aircraft, is often made on a "best bang for the buck" basis. Operational Trips are like delivering the mail. It is an important task, but you use the most effective resources and services available.

Most business aircraft carry passengers for both Strategic and Operational Trips. Since the Strategic mission has such a high value to the company, the fixed costs of the aircraft are considered a "sunk" investment. Yet, for most companies, Strategic Trips occur less than 20% of the time. With that in mind, they usually look at the variable costs of the aircraft operation in their "when to use it" decision processes. In other words, the hurdle rate for business aircraft use is set at the aircraft's variable or direct cost per mile.



Travel Time: The Wasted Resource

Time is a non-renewable resource. It is precious. Time can be a competitive advantage or it can be a constraint. Even so, the number of executives who do not appreciate the value of time is stunning. They routinely prove their misunderstanding by using the airlines for so many of their most important trips.

When is it more effective to use business aviation? To get a clearer answer, I compared my airline travel versus using a business jet. What I learned was surprising.

What surprised me is not how badly the airlines perform. In fact, on most days they do well. However, on some days, an airline trip can be a no-fun experience. The periodic failures of the airlines are only part of the reason business aviation has become the mode of choice for so many companies and their travelers. The airlines' "systems" were designed to move masses of paying passengers safely and cheaply. The end product is very different from what most business travelers need and want.

Intuitively, that all makes sense. But what are the facts? A little over a year ago I defined and began measuring the important elements of airline travel as they impact business travelers. The results are dramatic.

My travel takes me all over North America. During the past twenty-six years I've flown more than 2 1/2 million miles on Delta Airlines alone. In the process, I have learned to make the airline system work as well as it can.

During a recent 12-month period, I took 53 airline trips with 136 legs to 129 destinations covering nearly 98,000 miles. I kept a detailed log of all my trips. What would have been the differences if I had used mid-sized business jet instead? I measured the airlines' performance and I also calculated the block time it would have taken a jet to go between the business airports nearest my origins and destinations. Even so, my results are not what most executives would experience. My study is biased in favor of the airlines because:

- I am a Platinum Medallion flyer - giving me leverage in reservations and seating preference.
- I live near a hub city, Atlanta, so most of my flights are non-stop.
- I park in a reserved lot adjacent to the terminal. This eliminates remote parking site sojourns and the hassle of finding the in-close public lot "full".

If my experiences make a strong case for the use of business aircraft, it is sure to be even stronger for most other business travelers.

The Airline Metrics

If you do not measure it, you cannot understand it. With that in mind, I measured my trips from door-to-door - the true metrics of a trip. The airline travel data points I tracked included:

- Drive distance to the airport
- Time of arrival in the parking lot



- Bags in the belly
- Seat assignment
- Time of scheduled departure
- Departure weather conditions
- Actual time of pushback - Block out
- Scheduled time of arrival
- Arrival weather conditions
- Actual time of exiting the aircraft - Block in
- Time of baggage recovery
- Time of getting into car
- Drive distance to destination
- Ticket cost based on lowest available refundable coach fare

I made notes about additional elements important to the airline experience such as onboard baggage accommodations, seatmate issues, food, turbulence, and flight attendant and gate agent performance.

The Business Jet Metrics

Seagil Software's Bart Plan trip scheduling calculations defined the distances and times for selected airport pairs. Bart Plan's computations of typical business jet block times include taxi time, approach maneuvering time, and en route time adjusted for seasonal winds at typical altitudes. I ran the calculations using a mid-sized business jet with range enough to go non-stop from Atlanta to Seattle, my longest frequent leg. I chose business airports with at least 5,000 feet of runway that were nearest my starting and destination points. The business aircraft data points included:

- Drive distance from point of origin
- Fifteen minutes allowance from the flight department's parking lot to first aircraft movement
- Block time between business aviation airports
- Five minutes allowance from wheels in the chocks to arrival at the car
- Drive distance from the airport to the final destination

I wanted the analysis to be as accurate as practical.

The Calculations

I calculated the total time consumed during the airline experience for each trip. I added in any marginal difference in driving time (airline airport drive times minus business airport drive times). I then compared that to the time Bart Plan calculated or the business jet. The numbers alone tell a great story.

The Airlines' On Time Performance

The airlines are making a big deal out of competitive performance. One of their leading criteria is "on-time departures." There is no doubt they are improving in this category because most airlines have increased their scheduled en route time to give themselves more of a buffer for taxi, departure and other delays. As a result, reported



on time performance has improved. Passenger travel efficiency has not. "On time arrival" is more important to most passengers. That is what I focused on.

- 4%, or 1 in 25, of my airline legs arrived more than 15 minutes early. The earliest arrival was 35 minutes ahead of schedule on a winter flight from Seattle to Atlanta.
- 70% of my airline legs arrived "on time," within 15 minutes of schedule.
- 26%, or about 1 in 4, of my airline legs arrived more than 15 minutes late. The average arrival delay was 55 minutes. The worst was 3.5 hours late due to a cancelled flight.
- About half (47%) of the late arrivals were the responsibility of the airline (maintenance failures/cancellations and crew delays). The remainder of the late arrivals was attributed to weather and ATC.

In summary, three quarters of the time the airlines were relatively punctual. However, every fourth leg they were nearly an hour late. That kind of performance is tough on tight schedules. It is a level of performance that would be considered totally unsatisfactory by business aviation travelers.

Bags in the Belly

As I said, I work hard to keep my luggage with me in the cabin. Even so, 13 of my flights (10%) required I put a bag in the belly.

- The average baggage claim delay was 25 minutes. That adds up to an additional 5 hours of total travel during the year.
- One fourth of the time I put a bag in the belly there was an incident.
 - Twice my bag was misplaced. One bag was delivered to me 24 hours later and the other I found myself 36 hours later.
 - On one occasion the airline tore the handle off of a new roll-on bag. Their initial response was bag handles are not covered for repair or replacement. The airline's Customer Service representative intervened after some not-so-subtle urging by me. The bag was properly repaired within a week after additional phone calls, filling out forms, and shipment of the bag at our expense.

Even though 13 baggage adventures are not statistically significant, my experiences have reinforced my resolve to carry my luggage with me whenever possible. And so, it seems, has everyone else. There is phenomenal competition for overhead storage space. On the airlines, baggage is always an issue. On business aircraft it is an after thought.



Ground Effects on Time

The time difference between business aviation and the airlines comes in two varieties:

- Ground travel differences afforded by closer business aviation airports and
- The differences between them on
 - a. Departure - the time between when a traveler parks and when the aircraft begins to move, and
 - b. Arrival - the time between getting out of the aircraft and actually reaching the car.

On the 53 trips I took, I drove 2,000 miles further than if I had used business aviation airports. Those miles cost me an extra 50 hours of travel time (about one working week). That is only an average of 38 extra miles driven per trip. But my driving mileage is low because I start my trips in Atlanta and my destinations are usually at corporate headquarters in major cities. Most business aircraft passengers would have to do a lot more driving if they had to use the airlines.

The average time it took me to park in my reserved space next to the terminal or return my rental car, or get out of the cab, etc., until the aircraft pushed back (including security and check-in) plus the time it took from when I got out of the airliner until I reached my rental car, cab, or personal car required an average of one hour and twenty-five minutes. This is about one hour and five minutes longer than if I'd been riding in a corporate jet. That is nearly 140 hours for 129 destinations during the year.

The total ground time spent using the airlines was 190 hours more than that for business aircraft.

The En Route Experience

My total actual time en route on the airlines, scheduled departure to actual arrival, was 335 hours (including the connecting time for 7 flights) for 129 destinations. Compared to that, the business jet would have required 251 hours. Less obvious en route time costs were incurred, too. Polls of frequent executive travelers indicate they can be productive at least 40% more of the time while they travel on a business aircraft than when they are on the airlines. If I had used a business jet the additional productive time en route would have been 40% of 251 hours, or 100 hours.

The quality of the en route airline travel environment on the airlines has deteriorated during recent years. Seat pitch (the measurement between the back of one seat to the seat of the next) has been reduced on most airliners to allow the addition of another row or two of paying passengers. Unfortunately, the result is a terribly cramped seating and working environment with no privacy. Although travelers report the quality of the business aircraft work area to be much better, we did not attempt to define or quantify the differences.

However, privacy can be a very important issue when traveling. On several occasions, I observed senior executives talking loudly about confidential issues while in transit on



the airlines. Their conversations proved very interesting to several other passengers, including, in one instance, a competitor.

In the End - It Does Not All Equal Out

The totals are telling:

Airline Travel Time

Time en route	335 hours
Lost en route productive time	100 hours
Baggage claim	5 hours
Ground time	190 hours
Total Airline Time	630 hours
Total Business Jet Time	251 hours
Time Saved by Business Jet.....	379 hours

That means I lost more than seven and one half 50-hour workweeks using the airlines.

Put in terms of a more typical executive traveler,

- The airlines require at least six hours more per trip or nearly an additional three hours per leg.
- For an executive who travels an average of once each week, he or she will save at least 40 10-hour working days per year using a business aircraft.
- That same traveler is apt to save about 30 nights away from home.
- By these calculations, business aircraft provides a 16% improvement in traveler productivity (40 days saved divided by 250 working days pe year).

There are several ways to view a 16% productivity gain.

- Most companies agonize over achieving gains in productivity that amount to as little as 2 or 3%.
- Six people are able to do the work of seven.
- The cycle time of bringing a new product or service to market, getting new business, etc. can be dramatically shortened.

I have asked a number of senior executives how they would use the time business aircraft can give back to them. The answers have varied, but the majority have said about two-thirds of the time would be reinvested into their company activities to get more done. The other third would be devoted to themselves and their families. After all, when we run short of time, who do we tend to take it away from first? Those we can least afford to short change: our spouses, our kids, and ourselves. Business aircraft help us reestablish that balance.

The Payoff - Comparable Costs

Like most executives, my travel is often responsive to the needs of the business. I buy the lowest available refundable coach fare tickets. That came to \$77,000 or \$0.79 per mile direct ticket cost for the year (\$77,000 ticket cost/98,000 miles traveled = \$0.79 per mile ticket cost).



If a traveler has a salary of \$300,000 per year, a relatively low rate for most business aircraft riders, his or her total compensation cost to the company (with a allowance for 35% benefits) is \$405,000, or about \$195 per hour. The ratio of time and speed remain relatively fixed for high and low mileage travelers. Therefore, the time cost for that person to travel on the airlines instead of on a business jet is at least \$0.75 per mile (379 hours wasted * \$195/hour compensation rate/98,000 miles traveled = \$0.75/mile time cost).

If you wish to calculate the effect of other compensation rates it is proportional. For instance, a \$400,000 per year employee is getting 33% more than the \$300,000 person and their time cost of using the airlines is also 33% greater, at \$1.00 per mile.

How many passengers does it take to make a business aircraft economically effective? The direct operating cost for most mid-sized jets is less than \$3.00 per mile. The direct operating cost for most light jets is less than \$2.50 per mile.

The full airline cost for a \$300,000 per year traveler is about \$1.54 per mile (\$0.79 ticket cost plus \$0.75 time cost), without including hotel, rental car, parking and other costs. The economic hurdle rate for using business aircraft in most circumstances is only two passengers.

The Final Context

Dick Brooks, Chairman of Central and South West Services, a Dallas-based electric power company, says, "Without business aviation, everything about a trip is planned around the airlines. With business aviation, everything is planned around what you are getting done."

It is not the cost of travel that concerns him. It is the results.

Pete Agur is the founder and president of The VanAllen Group; a management consulting firm that helps corporations and their flight service providers succeed together.

How Bad Can a Trip Get? The Oslo Saga

An underlying issue in airline travel is stress. How bad can it get? Last summer I went to Oslo, Norway on business. That trip turned into a stress laboratory.

My schedule included an evening departure on a major domestic carrier with a next morning connection in Brussels. Scheduled arrival in Oslo was for late morning. At least that was the plan.

Our flight pushed back from Atlanta's International Concourse on time at 5:30pm EDT. As we turned onto the runway for departure I heard a glass break in the galley. A flight attendant had cut herself rather badly. We returned to the gate as another flight attendant applied first aid measures.



After a brief delay, the ground crew scrambled to get us re-parked at our gate. Five minutes later, someone showed up to reconnect the jet way to the aircraft. The flight attendant left to seek medical attention.

The captain told us we would have about a 15-minute wait while a reserve flight attendant was summoned. In the meantime, a technician boarded the aircraft to address a minor squawk in the cockpit. After a 20-minute wait, the replacement flight attendant arrived and the jet way was immediately withdrawn to permit a quick pushback. The technician was still onboard.

The captain and ramp crew spent five minutes trying to get someone to move the jet way back into place to allow the technician to exit the aircraft. No one came. The technician eventually left through an access door in the cockpit floor leading down into the avionics and cargo bays. The ground crew opened the cargo door and let him out. We pushed back and began to taxi again 35 minutes after our originally scheduled departure time.

As we taxied around the end of the concourse we turned towards a holding area referred to as the Penalty Box. The captain announced that a computer check had revealed a bag was in the belly without a matching passenger. Security precautions required the matter be settled prior to our departure. 20 minutes later the captain announced the bag in question had been located and confirmed it did belong to one of the passengers.

However, while they were going through the baggage search, a passenger opened a tightly packed overhead compartment and a hard-sided case fell and struck another passenger in the head. The injured passenger refused medical attention but the captain wisely delayed departure for another half an hour to make certain the injured passenger would not develop the symptoms of a concussion with the resulting need to abort the trip en route.

We finally lifted off one hour and forty-five minutes after our initial pushback. The lead flight attendant openly admitted this was the most disastrous departure she had ever experienced and wondered aloud what else could go wrong. We did, too.

We arrived in Brussels one hour and fifteen minutes late. I watched my connecting flight to Oslo depart from my window. As soon as I got into the concourse I scrambled for a seat on the next flight to Oslo on a different airline. I was assured my bags would be delivered to my hotel later that day. I arrived in Oslo only two hours late for my meeting.

36 hours and six phone calls later I had neither bag nor clothes. I went to the terminal and met with the baggage representatives from both European carriers and was assured neither of them had my bag. I contacted my American flag carrier to see if they could give me any help. They said my bag had been sent on from Brussels on the previous day.



At 10pm on the second night I decided to go back to the airport and continue the search. After all, I was out of cloths and had a meeting with the client's chairman the next morning. Both European carriers politely restated they did not have my bag or any idea where it might be. But my claim "was in the system and the bag would certainly show up on the first flight in the morning." I had heard that line of reasoning for a day and a half already.

I paid an airport porter to escort me as I personally searched both airlines' baggage storage areas. Everyone tolerated my intrusion with skepticism. Sure enough, neither airline had my bag. However, as I walked through an open area I spotted my bag in the corporate aircraft handler's storage area. It had been there since the previous day. How it got there and when it would have found me is anybody's guess. I was just glad to get my clean cloths and personal toiletry kit. Ah, the pleasures of public transportation!

Can you imagine how your executives would have been impacted by, and reacted to, such a bizarre and disrupting set of events? The stresses of corporate leadership in a competitive marketplace are stressful enough. Adding the uncertainties of airline travel to their burden is an unnecessary handicap to their ability to perform.