

PILOT WORKFORCE RETENTION EXPLORATORY STUDY *INITIAL DATA AND OBSERVATIONS*

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Overview

- Reasons for the Study
- Study Methodology
- Data Breakdown and Preparation
- Observations
- Points to Consider
- Next Steps

Reasons for the Study

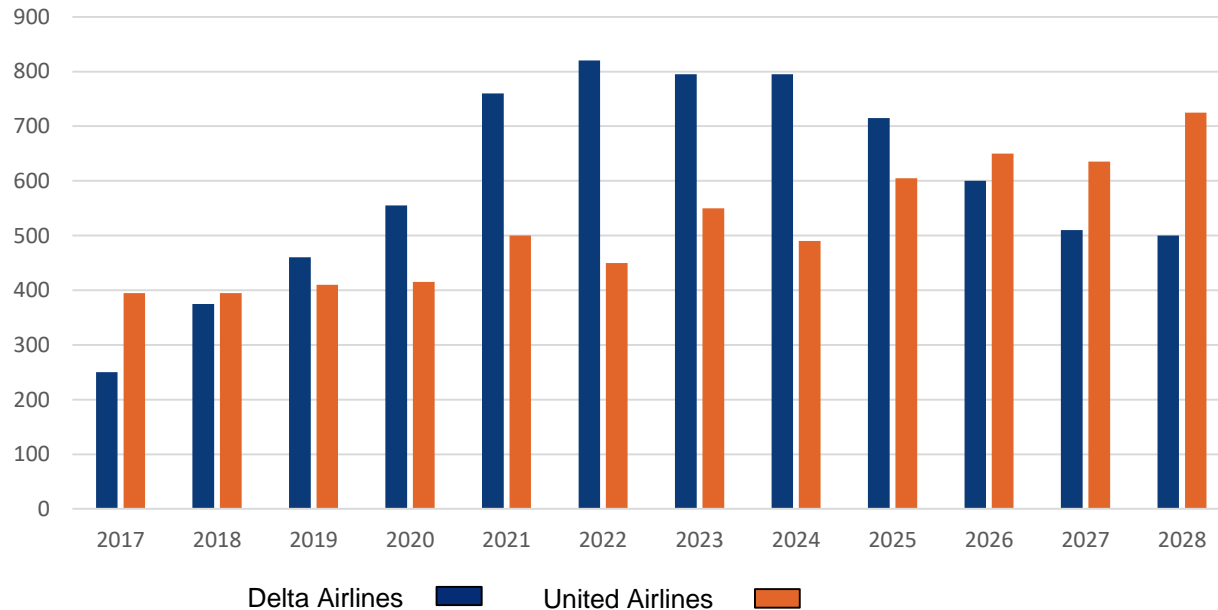
- This isn't your father's aviation industry any more . . .
- Today's aviation hiring environment is different – the times have changed
- Boeing Pilot and Technician Outlook (2016):
 - Global economies are expanding and airlines will take delivery of *tens of thousands* of new commercial jetliners over the next 20 years;
 - Between now and 2035, the aviation industry will need to supply more than two million new commercial airline personnel
 - 617,000 commercial pilots will be required – 112,000 in North American alone

“This is fundamentally different than anything you have seen in history. This is a strong, long-term growth market.”

- Dennis Muilenburg, Boeing Chairman, CEO and President

Reasons for the Study – 2

United and Delta Retirement Trends



Reasons for the Study - 3

- Major Airlines are hiring
 - 3429 pilots in 2015
 - 4113 pilots in 2016
 - 3130 pilots through July of 2017, on track for over 5,000 for the year
- Airlines are targeting business aviation pilots
- Business aviation pilots are leaving the industry for the airlines
- Business aviation industry leaders need to understand the problem better so that we can:
 - Know why pilots are leaving and
 - Know what we might do to prevent pilots' departure

Study Methodology

Survey Instrument Construction and Dissemination

- Business Aviation Management Committee (BAMC) members interviewed former BA pilots who left for the airlines to understand pilots' rationale
- Using rationale, survey was developed to query larger audience
- 26-question survey dispersed in July and completed in August 2017
- 11,980 survey links dispersed
- 1,600 responses received
 - 13.4% response rate
 - Average NBAA survey sees 10% response rate

Study Methodology - 2

Survey Instrument Questions

26 questions total

1. Respondent's organization type – 3 questions
2. Respondent demographics – 3 questions
3. Respondent organization number of aircraft and crew ratio – 2 questions
4. Respondent – employer relationship – 5 questions
5. Respondent perceptions about predictable schedule and compensation – 2 questions
6. Respondent is or is not considering transitioning to airlines – 2 questions
7. Respondent rationale for transition to airlines – 6 questions
8. Respondent rationale for remaining in business aviation – 3 questions

Data Breakdown and Preparation

Respondent Analysis and Selection

- 1600 Total Responses
 - Pilots were the overwhelming majority
- "Other" organizations removed – not enough of each group to be statistically significant
 - Repair centers, flight schools, non-operational organizations
- Non-pilot respondents removed – not enough of each group to be statistically significant
 - Technicians, flight attendants, schedulers, management
- Final number of pilot respondents = 1365

Data Breakdown and Preparation - 2

Response Coding

- Job Level coded
 1. Top Management (Vice President, Director of Aviation)
 2. Mid-level Management (Chief Pilot, Safety Manager, Standards Captain)
 3. Line personnel (Line captains and first officers)
- Age coded
 1. 30 or younger
 2. 31 – 40
 3. 41 – 50
 4. 51 – 60
 5. 61 or older
- Years with Company coded
 1. Less than 1 year
 2. 1 – 5 years
 3. 6 – 10 years
 4. 11 – 20 years
 5. 21 or more years

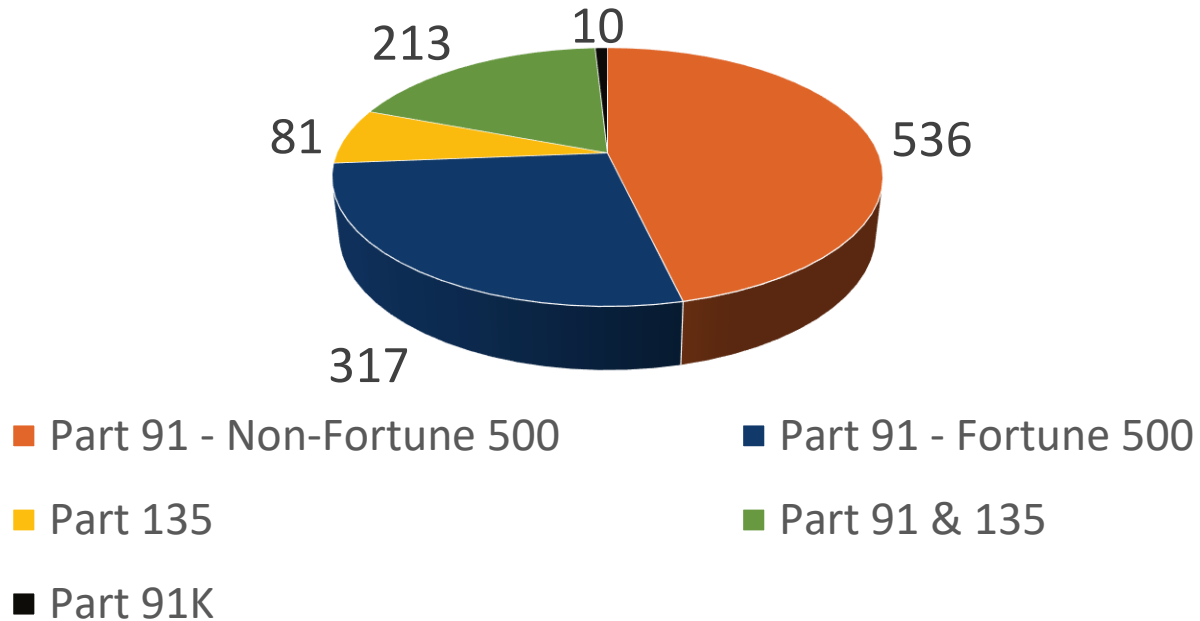
Data Breakdown and Preparation - 3

Dataset Refinement

- Focused on Airline Transition questions
- Split data set to into two groups
 - Those who were “on the fence, were considering or had considered the airlines” = “Pro-Airlines”
 - Those who had never considered or were not considering the airlines = “Anti-Airlines”
- After removing inconsistent respondents, 1157 remained
 - 642 Pro-Airlines Pilots
 - 515 Anti-airlines Pilots

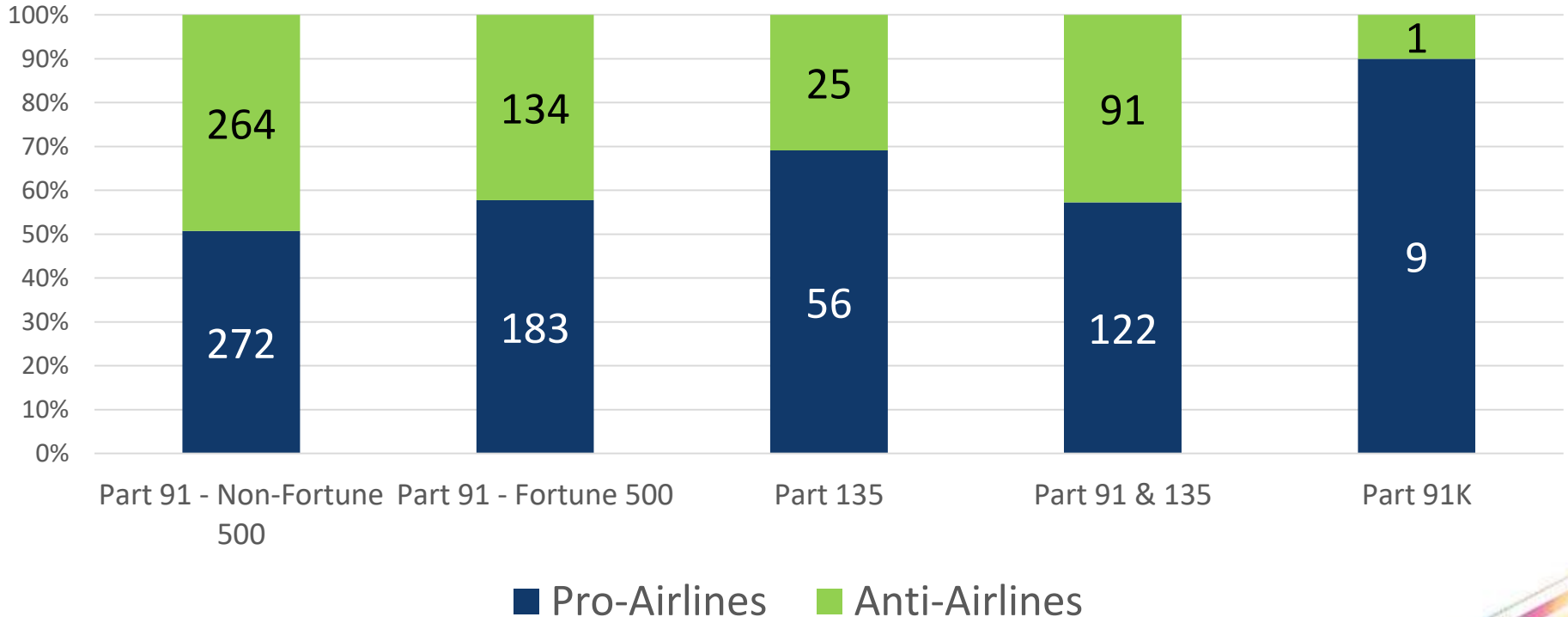
Observations - 1

Operator Type for All Pilots



Observations - 2

Operator Type By Pilot Group



Observations - 3

Pilot Group Demographics

- Pilot Age

- Pro-Airlines Mean Age = 2.71
- Anti-Airlines Mean Age = 3.78

1 <= 30	2 31 - 40	3 41 - 50	4 51-60	5 >60
	X			
		X		

- Pilot Years With Company

- Pro-Airlines Mean Years = 2.47
- Anti-Airlines Mean Years = 3.22

1 < 1	2 1 - 5	3 6 - 10	4 11 - 20	5 >20
	X			
		X		

- Pilot Job Level

- Pro-Airlines Mean Job Level = 2.47
- Anti-Airlines Mean Job Level = 1.94

3 Line Pilots	2 Mid Mgt	1 Top Mgt
	X	
		X

All of these means are statistically different from each other to a significance level of $p = .000$

Observations – 4

Pilot Group Quality of Life

- Organization cares about my quality of life
 - Pro-Airlines Mean = 3.28
 - Anti-Airlines Mean = 4.04
- Schedule allows for me to maintain adequate quality of life
 - Pro-Airlines Mean = 3.15
 - Anti-Airlines Mean = 3.88
- A predictable schedule is important to my quality of life
 - Pro-Airlines Mean = 4.56
 - Anti-Airlines Mean = 4.10

1 Strongly Disagree	2 Disagree	3 Neutral	4 Agree	5 Strongly Agree
		X		
			X	
		X		
			X	
				X
				X

All of these means are statistically different from each other to a significance level of $p = .000$

Observations – 5

Pilot Group Staffing

- Organization has enough pilots
 - Pro-Airlines Mean = 2.7
 - Anti-Airlines Mean = 3.31
- Org willing to hire contract pilots to provide off time for pilots
 - Pro-Airlines Mean = 2.86
 - Anti-Airlines Mean = 3.41
- Org could hire contract pilots but doesn't to save money
 - Pro-Airlines Mean = 3.38
 - Anti-Airlines Mean = 2.53

1 Strongly Disagree	2 Disagree	3 Neutral	4 Agree	5 Strongly Agree
	X			
		X		
	X			
		X		
		X		
	X			

*All of these means are statistically different from each other to a significance level of $p = .000$
 BUT means for pilot to aircraft ratio were statistically similar*

Observations – 6

Pilot Group Compensation

- I feel that I am compensated adequately compared to peers in the aviation industry
 - Pro-Airlines Mean = 2.53
 - Anti-Airlines Mean = 3.53

1 Strongly Disagree	2 Disagree	3 Neutral	4 Agree	5 Strongly Agree
	X			
		X		

These means are statistically different from each other to a significance level of $p = .000$

Observations – 7

Business Aviation Interest

- Increased compensation would make me more likely to stay in business aviation
 - Pro Airlines Mean = 4.37
 - Anti-Airlines Mean = 4.11
- A more predictable schedule would make me more likely to stay in business aviation
 - Pro-Airlines Mean = 4.32
 - Anti-Airlines Mean = 3.82
- I find a career in business aviation to be more rewarding than a career in the airlines
 - Pro-Airlines Mean = 3.42
 - Anti-Airlines Mean = 4.38

1 Strongly Disagree	2 Disagree	3 Neutral	4 Agree	5 Strongly Agree
			X	
			X	
			X	
		X		
		X		
			X	

These means are statistically different from each other to a significance level of $p = .000$

Observations – 8

Airline Transition Rationale

- For Pro-Airlines Pilots, measured strength of consideration for airline transition due to...

Ranking	Reason	Correlation (R)	Percent of Variance R ²	Significance P (<.05)
1	Predictability of Schedule	.317	10%	.000
2	Compensation	.254	6%	.000
3	Retirement Benefits	.222	5%	.000
4	Job Stability	.156	2%	.000
5	Career Enhancement	.097	<1%	.013
	Enjoyment of Job	.043	.000	.277

Points to Consider

- Pro-Airlines Pilots constitute the majority in every type of aviation organization we surveyed
- Pro-Airlines pilots are younger, have less tenure with the companies they work for and are in lower positions in their departments
- Pro-Airlines pilots are **statistically discrete** from and **think differently** than their Anti-Airlines counterparts
- Compared to their counterparts, Pro-Airlines pilots are more likely to think:
 - They aren't compensated fairly
 - They don't have a predictable schedule
 - The company doesn't care about their quality of life
- Compared to their counterparts, Pro-Airlines pilots are less likely to think:
 - Business aviation is a rewarding career in and of itself

Points to Consider - 2

- Pro-Airlines Pilots are looking to the airlines to:
 1. Improve their quality of life
 2. Increase their compensation
 3. Fund their retirement better
 4. Stabilize their career / job situation
- Pro-Airlines Pilots are NOT looking to the airlines for:
 1. Career enhancement
 2. Enjoyment of the job

Next Steps

- We must acknowledge the reality – it’s a different world
 - Pilots have more choices now than any time in recent history
 - The days of the one-aircraft, two-pilot, “days-off-are-the-days-you-didn’t-fly” flight department are over
- We must motivate pilots to stay in business aviation because what they do matters – we must inspire them to see the meaning in their jobs
 - They make a difference in the success of the company – they’re a name, not a number
- Flight departments are facing or will face a critical choice
 - Hire enough pilots to ensure quality of life and pay them competitively
 - Or
 - Lose pilots to the airlines
- Further research into this problem is required to understand it better
 - Need to use a better assessment instrument



Survey Questions - 1

Survey Instrument Respondent Demographic Questions

1. What type of organization are you employed by?
 - a. Part 91
 - b. Part 135
 - c. Part 91 and 135
 - d. Part 91K
 - e. Other
2. If you chose “other,” what kind of organization is your employer?
3. Is your employer a Fortune 500 company?
 - a. Yes
 - b. No

Survey Questions - 2

Survey Instrument Respondent Demographic Questions

24. What is your job title?
25. What is your age?
26. How many years have you been with your current employer?

Survey Questions - 3

Survey Instrument Organization Size Questions

4. How many aircraft are in your organization?
 - a. 0 – Contract Pilot
 - b. 1 -2
 - c. 3 -4
 - d. 5 -6
 - e. 7 or more

5. For the aircraft you fly, what is the approximate ratio of pilots to aircraft?
 - a. Less than 1:1
 - b. 1:1
 - c. Greater than 1:1 but less than 2:1
 - d. 2:1
 - e. Greater than 2:1

Survey Questions - 4

Survey Instrument Organization-Employee Relationship Questions

6. My organization employs enough pilots to provide me a predictable schedule.
7. My organization is willing to hire contract pilots to provide time off for full-time pilots when they need it.
8. My organization could hire more people or use contractors, but doesn't in order to save money.
9. My organization cares about my quality of life.
10. My schedule allows me to maintain an adequate quality of life.

Questions answered via Likert Scale:

A = Strongly disagree, B = disagree, C = neutral, D = agree, E = strongly agree

Survey Questions - 5

Survey Instrument Employee Perception Questions

11. A predictable schedule is important to my quality of life.
12. I feel that I am compensated adequately compared to peers in the aviation industry.

Questions answered via Likert Scale:

A = Strongly disagree, B = disagree, C = neutral, D = agree, E = strongly agree

Survey Questions - 6

Survey Instrument Airline Transition Likelihood Questions

13. I have considered or am currently considering transitioning from business aviation to commercial airlines.
22. I am not currently interested in transitioning from business aviation to the airlines.

Questions answered via Likert Scale:

A = Strongly disagree, B = disagree, C = neutral, D = agree, E = strongly agree

Survey Questions – 7

Survey Instrument Airline Transition Rationale Questions

If I were to transition from business aviation to the airlines _____ would be a significant factor in that decision.

14. Predictability of the schedule
15. Compensation
16. Retirement benefits
17. Career stability
18. Prospects for career advancement
19. Enjoyment of my job

Questions answered via Likert Scale:

A = Strongly disagree, B = disagree, C = neutral, D = agree, E = strongly agree

Survey Questions - 8

Survey Instrument Stay in Business Aviation Rationale Questions

20. Increased compensation would make me more likely to stay in business aviation.

21. A more predictable schedule would make me more likely to stay in business aviation.

23. I find a career in business aviation to be more rewarding than a career in the airlines.

Questions answered via Likert Scale:

A = Strongly disagree, B = disagree, C = neutral, D = agree, E = strongly agree