Panel 1: Pilot Supply & Industry Consequences Update

Darrin Greubel
*Moderator: Manager Line Ops, ExpressJet*

Nickolas D. "Dan" Macchiarella
*Panelist: Interim Dean, College of Aviation, Embry-Riddle Aeronautical University*

Darrin Greubel
*Panelist: Manager Line Ops, ExpressJet*

LaMar Haugaard
*Panelist: Director Pilot Development & Recruiting, Horizon Air*

Michael Dee
*Panelist: Director Flight Training, Republic*

*See next page for additional authors*

Follow this and additional works at: [https://commons.erau.edu/ntas](https://commons.erau.edu/ntas)

Greubel, Darrin; Macchiarella, Nickolas D. "Dan"; Greubel, Darrin; Haugaard, LaMar; Dee, Michael; Lane, Shannon; Buyer, John; Winter, Jeffrey; Ryder, Paul; Duncan, John; Davis, Carl; and Bechdolt, Stacey, "Panel 1: Pilot Supply & Industry Consequences Update" (2016). *National Training Aircraft Symposium (NTAS)*. 2.
https://commons.erau.edu/ntas/2016/monday-march-14/2

This Event is brought to you for free and open access by the Conferences at Scholarly Commons. It has been accepted for inclusion in National Training Aircraft Symposium (NTAS) by an authorized administrator of Scholarly Commons. For more information, please contact commons@erau.edu, wolfe309@erau.edu.
Presenter Information
Darrin Greubel, Nickolas D. "Dan" Macchiarella, Darrin Greubel, LaMar Haugaard, Michael Dee, Shannon Lane, John Buyer, Jeffrey Winter, Paul Ryder, John Duncan, Carl Davis, and Stacey Bechdolt

This event is available at Scholarly Commons: https://commons.erau.edu/ntas/2016/monday-march-14/2
NTAS/PS&DS 2016 Supplemental Notes

Panel 1: Pilot Supply and Industry Consequences Update

Aviation Academic Status

- Embry-Riddle Aeronautical University – Dr. Dan Macchiarella
  - See ERAU Macchiarella PowerPoint Presentation
    - The colleges are capable of delivering more professional pilots than they are now, but some assistance may be needed

Regional Airlines

- ExpressJet Airlines – Capt. Darrin Greubel (no presentation)
  - CRJ Fleet and ERJ Fleet, hiring classes every other week
  - Taking as many pilots as possible
  - Lose 70 or 80 pilots per month to the major airlines
  - Trying to keep up with attrition and expansion of fleet
  - Receive somewhere between 5, 10, or even 0 applications per day
  - A few new changes
    - 2 contracts extended for a 2 year period with increased pilot salary
    - United Airlines Pathway agreement for ERJ pilots; Saw a small spike in interest, however it has plateaued
    - We have been using all forms of social media, video development, and aggressive marketing techniques
    - Hoping to gain momentum as the word spreads about our new changes at ExpressJet
  - Future of Pilot Supply
    - Started this Pilot Supply Summit in 2010
    - Our goal is to show what the numbers are in the pilot pool and future supply
    - The number of ATP certified pilots is not an accurate depiction of available pilots in the U.S.
    - We have to filter the numbers and determine the accurate number of pilots available.
    - Historically, everything we have predicted has either been accurate or overly optimistic
    - Within the next 12 months hoping for a new update on the pilot pool

- Horizon Airlines – LaMar Hauggard
  - See Horizon Haugaard PowerPoint Presentation
  - Wholly owned subsidiary of Alaskan airlines – since 1986
  - Similar reports as ExpressJet
  - Like many other regional airlines, we’ve been spreading the same message for the pilot supply issue
  - We know the problem is here, and we need to do something about it
  - Five Year Forecast
    - Need 120 pilots per year
    - We receive about 2-3 applications a day
    - Even as a smaller carrier we are barely at a sustainable level
    - Working on mitigation plans to drive recruiting needs from AABI accredited universities – up to 70% by 2019
  - Without any changes, we will have to park airplanes
Presented numerous proposals to solve this problem

Republic Airways – Captain Michael Dee
- See Republic Dee PowerPoint Presentation
- 2 airlines under the holdings companies: Republic Airways and Shuttle America
- Fly for Delta, American, and United
- 220 airplanes, including ones parked due to a lack of pilots
- Filed bankruptcy 3 weeks ago
- Current situation
  - Signed new pilot contract in October; resulted in a spike in applications
  - Talent acquisition was seeking to find the most suitable pilot candidate, not simply any pilot available
  - Need 700 pilots by 2016 & we need them to be successful
  - We realized just because we can hire a pilot with 5000 hours, doesn’t mean they will be successful in training
- Candidate: Current, Interesting, Efficient, Standardized, Effective

Advantages of IPAD
- Learn much more on their own time rather than traditional lecturing
- Interactive presentations, adaptive coursework
- More effective for current generation of pilots
- Data is available about students progress
- Tracking similar to Disney World; can track everyone with a magic band
- Use IPADs for AQP data, Student feedback, standards checks, ASAP, LOSA, FOQA
- Evaluated for effectiveness and then used to adapt our ground school
- Changes being made due to increased data information
  - Stabilized approach criteria
  - Automation policy modified
  - Flap/Slat training modified (ERJ has abnormalities)

Allegiant Airlines – Shannon Lane
- See Allegiant Lane PowerPoint Presentation
- Low cost sector of airlines, such as Spirit or Frontier
- We staff our fleet with fewer pilots than most
- Retiring MD80s, 29 Airbus, and 757s
  - Flying MD80 6.5 hours per day, about half compared to industry
  - Increased utilization of Airbus, staffing more pilots per seat
- Low frequency model
- We have 14 bases across the country such as Sanford
- FAR 117 didn’t impact quite as severely but does impact duty time
- Attrition – fairly moderate, lose about 5% of our 700 pilots
  - Do have a number of pilots with call back rights to American
- Looking to hire 160 pilots in 2016, significant for our small size
- New Hiring Process
  - Looking closer at pilot personalities
  - Using data collection to find best pilot characteristics and will be analyzing later on (hours, education, training…)
  - Recruitment opportunities: meet and greets, college fairs, bridge program with Ameriflight (135 operations), strengthened internship program

Major Airlines
- John Buyer – United Airlines Director of Training
- See UAL Buyer PowerPoint Presentation
- Pilot Hiring Forecast
- United called back John to look at the pilot supply demand for the major airlines
- Majors aren’t seeing the shortages just yet, but it is coming
- No pilot shortage at United yet
- Retirement is coming
  - 2027 – 700+ retirements per year
  - Next 20 years – 12,000 pilots will be needed
  - Not including expansions
  - Big need for pilots in the future
  - Hiring stress possible in 3-5 years
- Applicants
  - Full ATP, no restricted ATP
  - Avg. 5,000 hours for applicants
- What are we doing?
  - Career path programs are being developed and put into place.
  - ExpressJet, Commutair, other training facilities partner
  - Trying to develop clear pathways for young people to get into the industry and know they will make it to the majors
  - Merit based, no guarantee
  - Job fit assessment done in beginning to see if applicant meets criteria
  - Panel interview is done afterwards
    - Successful interviewees are entered into the program.
    - The applicant then has to behave and have a good file
  - Once applicant meets hour requirements, administrator will recommend to the hiring board
  - Possible extension to university level, or high school level

Jeffrey Winter – Jet Blue AQP Manager (no presentation)
- Pilot sourcing
  - Pretty good right now*
    - Application windows – gives a surge period where they can look at apps and conduct interviews
    - Thousands of applications; hiring hundreds at a time
    - Digging deeper:
      - Applicants apply to more than just JetBlue
      - Masks the problem of pilot hiring
- Fleet
  - 260 airplanes
    - 130 A320s
    - 106 A321’s
    - 60 E190s
- Hiring
  - Around 200 pilots a year
  - Not because of attrition
    - Summer flying putting strain on pilot groups
    - Giving themselves a cushion in the busy months
  - Low attrition
    - Young airline (2001)
    - Not much turnover
Mostly in the junior ranks
Guys going to Delta, United, American
Older guys are too far into the payscale

7 Gateways
- 1. Street hire
- 2. Blue dart
  - Sponsorship
  - Pilot will vouch for another pilot to get the pilot an interview
- 3. Crew to cockpit
  - Ops employees with an ATP who do good jobs
  - Given opportunity to move into a pilot seat
- 4. Instructor
  - 1 year at Orlando
  - Granted interview
- 5. Absent crewmember
  - Gives time for the person to go get ATP and come back
- 6. University gateway
  - Accredited school
  - Flow through cape air
- 7. Gateway Select
  - SEE GATEWAY 7 PANEL DISCUSSION --

Is there a problem?
- Yes, but not yet
- We’re not going to let problem show up before we start trying to fix it
- By the time you recognize the problem, it is already too late

ALPA
- Capt. Paul Ryder (no presentation)
  - ALPA has acknowledged there is trouble ahead for the pilot shortage
  - There are currently enough pilots in the market and more coming, however where are they going?
  - Part of the solution is accepting the challenge of how to entice pilots to chose a profession as an airline pilot
  - 3 main issues:
    - 1. Money
      - ExpressJet has increased pay to $37-$40 an hour
      - Pilots need better compensation on the front end to make the risk acceptable
    - 2. Work Life Balance
    - 3. Career Progression
      - Pathways - Need to collaborate with regionals, majors, and universities to define a path for these pilots
      - Build partnerships
    - We have to talk about the solutions and make them sustainable
    - Can’t use short term solutions to attract students, such as bonuses; pilots will not be willing to take that risk
  - U.S. system of transportation generates 1.4 billion towards the economy
- We need to remember, if there aren’t pilots coming in we won’t see the success and sustainability of the industry
  - 140,000 ATPs
    - However, part of those ATPs don’t want to come in to the industry because of quality of work life, low compensation, and large risk
  - What do we need to do?
    - ALPA will offer facility and staff to bring forth concepts and ideas to solve the issues
    - The Pilot Supply issue is not new for ALPA, we want sustainability
    - **Collaborate & Work together**
      - Come up with a game plan to ensure the airlines can compete globally and meet the demand of the domestic system
- The challenge for regionals is a broken business model
  - Need mainline carriers, regionals, pilots, and stakeholders to come together to improve the relationship
- Study by Dr. Ken Byrnes (ERAU)
  - Students have identified pay is a major reason why they chose different carrier paths

**Air Carrier Training Aviation Rulemaking Committee**

- John Duncan *(no presentation)*
  - FAA’s view on pilot demand issue
    - It is a significant issue for the FAA
      - It has created stress, hazards and risks in the system
      - John must hire 200 people in his organization this year, so it’s not just airlines
  - Air Carrier Training ARC
    - Recommendations and best practices that work well within the industry
    - Crafting things that would work well in the industry
    - Specialized work groups
      - Part 121, 135, 142 resulted in:
        - ATP workgroup
          - Created April 2014; explore other pathways to an ATP
          - Difficult; requires potential rulemaking; legislative issues
        - Open to ways to deal with ATP cert. in a more efficient way
          - Maintain safety, provide benefits to everyone
          - Actively pursuing these ideas
  - Pilot Shortage Factors (FAA Side)
    - Flight path management
    - CRM
      - Crew relationships important for effective training and ops.
      - Need to maintain safety culture
    - Contract training
      - Important part of industry
      - Has been a challenge so far to implement effectively
      - Looking for efficient contract training; maintaining safety culture
    - Pilot professional development – “NNO”
      - Mentoring and training to stress leadership in airline operations
    - Airmen Certification standards
• Taking PTS and adding risk management to it with emphasis
• New testing will include all components to produce a good pilot
  ▪ Part 60 – Standards necessary for NNO
  ▪ Safety emphasis training
    o Recovering from full stall
    o Stick pusher training
    o Airborne icing identification and training
    o Gusting crosswind landings and bounced landings

**World Pilot Demand, Trends, Forecasts**

➢ Capt. Carl Davis – Boeing
  o *See Boeing Davis PowerPoint Presentation*
  o We’ll be focusing on 2015, 2016 numbers will be out at Oshkosh
  o Market Trends
    ▪ Emerging Economies
    ▪ Increased Diversity
    ▪ Strong replacement demand
      • Annually 200 – 250 aircraft reach 25 years
      • New airplanes capabilities (i.e. new markets)
  o 14,330 aircraft are going to Asia
  o Pilot and Technician outlook
    ▪ 558,000 pilots needed for the next 20 years (globally)
    ▪ 60,000 pilots needed for the next 20 years in North America
    ▪ Customers are now asking manufacturers to provide pilots with aircraft
  o The ability to come from accredited aviation institution is going to be the standard for the rest of the world.
    ▪ Important to provide validity of pilot training and certifications
    ▪ Start to see more countries take our qualified and trained pilots…and they don’t have 750, 1000,1250, 1500 hour restrictions.
  o Boeing collaboration with academia
    ▪ Growing training centers
    ▪ Engaging with student outreach programs
    ▪ Pilot development program
      • Consult with airlines around the world, and help them build a pipeline with flight schools
  o Training Centers across the globe
    ▪ Melbourne, Singapore, Casablanca, Shanghai…
    ▪ China is taking all of the pilots from Southeast Asia
      • 30 pilots from Korean Air resigned on same day; go to China

Q&A

Q: Jeff Kaloustian (Gaetz) - The only person that has ever to come into my classroom and talk about a partnership was AOPA, no airlines. I have to go out and search for opportunities on my own. I have never had any of my kids in a simulator but believe it would be a fantastic opportunity. Only about 2 students a year pursue an aviation degree for college. What are the high school level initiatives available that we don’t know about, it and will I ever see any representatives come into my classroom to talk about them?
A: Darrin Greubel (ExpressJet) – From ExpressJet's perspective, we host open houses at our Atlanta and Houston bases. We let kids in simulators, even down to the 8th grade level. We’re trying to spread the word and rebuild the image of how exciting the industry is.

A: Paul Ryder (ALPA) – You bring up a good point, you need to talk to Justin Dahan. ALPA has an education committee with 30 years of outreach. We have pilots that visit classrooms and we believe the elementary school level is the right age to spark interest in aviation. We would love to partner with education to introduce students to the industry. It’s tough for an educator to know where to go in this industry, and it’s our job to make it easier for you.

A: Capt. John Buyer (United) – We recognize we need to get to the high school level and have been doing personal visits. We find that 9 out of 10 pilots admit their interest in the industry started at the high school level. We want to let these kids know they can do it, and be committed to keeping our pathways open so that these kids can make it to the airlines.

A: LaMar Haugaard (Horizon) - Horizon does an outreach within the boy scout groups in the Portland and Seattle area. We have a weekend where students can come into our facilities. We had over 800 students this past year. We also partner with Alaskan and National Guard to include outreach programs.

A: Stacy Bechdolt (RAA) – High School guidance counselors don’t often have a lot of information to provide. They hold an annual conference (New Orleans July this year). We encourage airlines and industry stakeholders to attend and talk about pilot/aviation careers. We’ve been encouraging the airlines and sharing the information with ALPA, not only for just pilot careers, but all careers in aviation.

A: John Duncan (FAA) – We hold ACE camps around the country as an outreach program.

A: Dr. Dan Macchiarella – Gaetz aerospace institute: 3000 students in 72 high schools with stem education. The goal is to start the interest at the high school level and offer these students dual enrollments programs that they can bring to an aviation university.

A: Peter Morton – EAA has a great young eagles program.

A: Carl Davis - Boeing – We have a new initiative aimed at the manufacturing career interest that we are looking to expand. We focus our outreach on areas where we have training campuses. Boeing has an entire department dedicated to educational outreach.

Q: Dave Allen (ExpressJet) - I’ve been in the regional airlines for 15 years. At ExpressJet we have increased pay by 50%. If the RAA believes bonuses are here to stay, why aren’t airlines offering pay increases in the form of salary instead of bonuses.

A: Stacey (RAA) - You have to look at the negotiation on the contract, the labor partners have to work with us. If we were able to continue to increase the base pay, there may not be need for the bonus. Until we can get to a working business model, there is going to have to be something that fills that gap.