Putting Pilot Supply Into Numbers

Thinking About Minnesota

April 2016
Today, the issue is less noticeable because lost seats have largely been replaced.

*But that cannot go on forever*
The Regional Pilot Shortage Is Not Today’s Issue…
But it will be tomorrow’s, and tomorrow is coming quickly

• In 2014 v. 2013, the market only saw a net reduction in regional jet aircraft of 22 units
  • One reason why the pain is not being fully felt
• As the 70-seat jets are delivered, the regional sector has only seen jet aircraft reduced by 84 units since 2008
• Turboprop aircraft have been reduced by 243 units since 2008
• Since 2011, the number of city pairs being flown by regional aircraft are relatively unchanged
  • Another reason why it seems that the issue is not today’s issue, but these figures are bound to change as a result of labor supply pressures
Understanding the Scope of the Problem
Retirements and New Equipment Will Put a Strain on Labor Supply

• Between now and 2022, the Big 4 US airlines will retire 14,200 pilots that need to be replaced just to maintain the network being flown today

• Today, the regional industry has 302 70-seat aircraft on order that will also need to be staffed
  • As an example, the industry will need to park 569 smaller units just to staff the larger equipment

• Regulatory issues have already impacted the pilot supply from expanding to the degree necessary to respond to these pressures
A CRITICAL ASSUMPTION IN THE ANALYSIS:

THE REGIONAL SECTOR WILL BE THE SOLE SUPPLIER OF PILOT LABOR AND REMAINS RELATIVELY FIXED OVER TIME
Limiting Pilot Supply Could Lead To Disastrous Effects
All communities would feel the effects as the regional industry shrinks

• Suppose that the regional pilot labor force in 2014 stayed fixed over time.
  • Not an outrageous assumption, considering the new 1500-hour rule that is making it impossible for carriers to fill new classes.

• Based on replacement of retiring pilots at the mainline and aircraft being delivered to the regional industry:
  • By 2017, all turboprop aircraft would likely be retired along with 215 small jets
  • Remaining small jets likely to be retired by 2020
  • By 2022, the regional industry would be but 20 percent of its 2014 self

Let’s go to the numbers…
## Year by Year Analysis: Reduction in Regional Fleet and Pilot Workforce, 2014-2022

| Number of Pilots Needed to fill new equipment | 4,940 |
| Number of Pilots Needed to Backfill Retirements Thru 2022 | 9,338 |
| Regional Pilot Workforce in 2014 | 17,757 |
| Percent of 2014 Regional Pilots Needed to Backfill Retirements | 52.6% |
| Percent of 2014 Regional Pilots Needed to Fund New Equipment | 27.8% |
| Estimated Reduction of 2014 Regional Pilot Workforce by 2022 | 80.4% |

### Pilot Headcount

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<th>Year</th>
<th>Retirements</th>
<th>Orders</th>
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Note: Assumes that 2014 pilot supply is held constant over time
Note: Would not be sufficient pilots in 2020 to fly all Large Regional Jet Equipment.
Note: Numbers may not add due to rounding. 438 Large Regional Jet equipment flown in 2022.
Note: 431 aircraft = 3,803 pilots or 21% of 2014 regional pilot workforce.
AND THIS DOES NOT ASSUME GROWTH AT ANY OF THE BIG 4 OR JETBLUE, SPIRIT ET AL AND WE KNOW THAT THEY PLAN TO GROW
The Network Carriers are Increasingly Getting Out of the Turboprop Business.....

### Domestic Departures Performed by Turbo Aircrafts at Smaller Airports in the U.S.

- **AA+US**
- **DL**
- **UA+CO**

Note: 2nd quarter schedules only. Small airports include Small Hub airports, Nonhub airports, and EAS airports, defined by FAA.

Source: InterVISTAS analysis of Innovata schedules, via Diio online portal.
...And the Small Jet Business as Well

- All network carriers are cutting their use of 37-50 seat regional jets at smaller airports at a staggering pace: Since 2014, Delta has reduced number of departures by 21.8%; followed by American at 15.7%; and United at 13.5%

Domestic Departures Performed by 37-50 Seat RJ at Smaller Airports in the U.S.

Note: 2nd quarter schedules only. Small airports include Small Hub airports, Nonhub airports, and EAS airports, defined by FAA.

Source: InterVISTAS analysis of Innovata schedules, via Diiio online portal.
All of the Network Carriers are Shedding the Smaller Aircraft for Larger Regional Aircraft

Domestic Departures Performed by 51-76 Seat RJ at Smaller Airports in the U.S.

- AA+US - Up 25.3%
- DL - Up 17.5%
- UA+CO - Down 20.8%

Note: 2nd quarter schedules only. Small airports include Small Hub airports, Nonhub airports, and EAS airports, defined by FAA.

Source: InterVISTAS analysis of Innovata schedules, via Diio online portal.
Conclusions

• Nobody is excited today as it is only frequency cuts and not market exits
• 2015 marked the first year where it was increasingly difficult to replace lost seats at the historical level….and it only gets harder

• Fear is that 150-200 markets likely have insufficient traffic or population to support larger jet service
  • If you are on the sidelines regarding the pilot supply issue, I urge you to rethink your position
    • Regulatory change is necessary
    • Need to focus on increasing the pilot supply
  • Small RJ/Turboprop service is essential for many small communities
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