50-seat RJ market implodes

In late 2005, Bombardier and Embraer announced plans to suspend production of their 50-seat regional jets (RJs). Only the airliner versions of Bombardier's CRJ-200 and Embraer's ERJ 135/140/145 are affected, with corporate and military versions of both planes remaining in production. Both manufacturers also left the door open to resuming airliner production in the future, with Embraer forecasting resumed demand for aircraft in this class in the next decade.

The suspensions capped an amazing run. Over 2,000 of both aircraft types have been delivered. And the peak RJ years were quite recent: Annual production in 2000-2003 exceeded 250 planes. The rise and fall of these aircraft tells the story of U.S. legacy airlines and their unsuccessful efforts to rescue themselves from financial ruin.

ERJ 145

A wild ride

The first RJ to arrive was Bombardier's CRJ-100/200, which entered service in 1992. After a few uncertain years, it became a huge success. It was followed in 1996 by Embraer's ERJ 135/145 family, another success. This phenomenon was initially driven by turboprop and old narrowbody jet replacement and some limited new market development.

These RJs carved out an impressive market niche. They all but completely replaced turboprops in the U.S. regional market, with only the European ATR and Bombardier's Dash 8 families holding on. They also allowed a very substantial expansion of regional capacity, as a percentage of total carrier capacity. By 2003, regional carriers held an approximate 10% share of U.S. domestic RPMs (revenue passenger miles), up from approximately 3% in 1990.

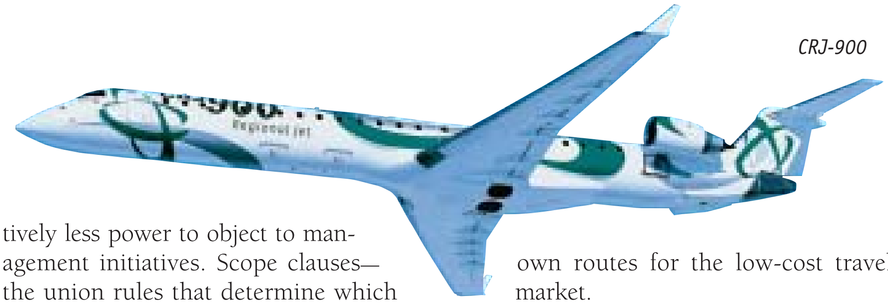
Yet over the past four years, RJs became more than a promising growth market—they came to offer salvation. Large U.S. carriers could only hope to maintain their hub-and-spoke operations, the basis for their existence, if they cut their high costs while maintaining arrival and departure frequency. Indeed, American Airlines has been increasing hub frequency, creating "rolling" hubs with smaller intervals between flights and greater rates of equipment utilization. This strategy largely depended on greater utilization of RJs.

CRJ-200

These RJs also offered the hope of higher yields through route downsizing. Not surprisingly, the active RJ fleet rose by 27% between September 2001 and early 2004, while the mainline fleet remained almost the same. Since traffic was flat in that time, this represented serious overcapacity. Legacy carriers were using RJs to preserve their networks and raid other networks, when they should have been merging to reduce capacity and costs.

Desperate airlines also needed RJs for the same reason troubled manufacturers, such as General Motors, had to outsource to survive. High-cost noncore operations needed to be passed down to regional subsidiaries, with their lower cost base. In the aftermath of its failed merger with United, US Airways announced a new strategy centered around using regional jets to control costs. This led to the carrier's 2003 order for scores of ERJs and CRJs.

Also, the unpleasant truth is that during bad times, pilot unions have rela-


CRJ-900

tively less power to object to management initiatives. Scope clauses—the union rules that determine which planes can be flown by regional affiliates of the majors—quickly disappeared as far as 50-seat jets were concerned. Where they did not go away altogether, bankruptcy declarations gave management the right to void labor contracts. The current airline business environment is not conducive to concerted union resistance. Airline route pass-downs became an accepted and necessary (if slightly painful) business practice. Again, this is just like outsourcing in the manufacturing sector.

Too much of a good thing

But as everyone climbed on the RJ bandwagon, the added excess capacity made a bad situation worse. The four majors currently in bankruptcy—United, Delta, Northwest, and US Airways—have the legal right to get out of any lease/purchase obligations, and if they do not return planes they will at least negotiate lease rates downward. Even though only 43 CRJs/ERJs were parked as of November, the threat of RJs cascading out of legacy airline service is a great reason to suspend production.

In fact, in November Northwest announced plans to reject leases on 15 CRJs that had been subleased to Pinnacle. At the same time, Bombardier removed 13 Northwest CRJ-200 orders from its backlog. On the positive side, Northwest announced plans to keep about 40 other planes.

But the big over-the-waterfall moment of the CRJ-200's life was the Independence Air debacle. Independence was the name/proclamation chosen by Atlantic Coast Airlines (ACA) after it decided not to share United's pain. Independence Air was presented as a way of preserving ACA's unnaturally high margins even as United sank deeper into red ink. Rather than just a typical fee-for-service role pumping passengers into United's route network, Independence elected to fly its own routes for the low-cost travel market.

Independence's dream of reinvention as a discount carrier might have been possible if the entire 80-something CRJ fleet had been swapped for 130-seat Airbus A319s overnight. But with a fleet of 50-seat RJs with very high seat mile costs (worsened by high oil prices), the battle was lost before it started. And of course United used other feeders to stay in the markets it lost after ACA's defection, greatly exacerbating overcapacity.

Independence also proved that 50-seat RJ economics only worked in the hothouse confines of a legacy carrier system. For the legacy majors, costs did not matter. Critical mass, route networks, market share, and business volume mattered. Trivial issues like costs and profits were for upstarts like Southwest or JetBlue. This critical-mass-based approach to the industry is not impossible, but when you have six players with the same philosophy, overcapacity rules out profits.

A cynical obituary of the 50-seat RJs would point out that these high-cost planes helped high-cost carriers survive. Then they also helped a new high-cost, low-fare startup carrier dump cheap capacity on the market, distorting it and penalizing healthy competitors.

But this cynical assessment ignores the central fact: Overcapacity is the fault of airline management, not any one aircraft type. When used wisely, as part of a conservatively managed route network with pricing discipline and strong cost controls, 50-seat RJs made a lot of sense. American Airlines and Continental Airlines are relatively healthy, by U.S. airline standards, and both have route networks that make extensive use of 30- and 50-seat RJs.

It is also worth noting that the turboprop situation is stabilizing. After a few years of looking terminal, both the Avions de Transport Regional ATR 42/72 and Bombardier's Dash 8 series now look set to pull through. Both manufacturers are ramping up production, and even North American airlines are talking about keeping turboprops in their fleet. Especially in the face of high fuel prices, efficient turboprop regional aircraft have a role to play as low-cost feeders for airlines desperate to cut costs any way they can. And the return of the turboprop is a reminder of the slightly irrational exuberance of the 50-seat RJ craze.

Moving up-market

As CRJ-200 and ERJ 145 production winds down, Embraer and Bombardier both have strategies to make up the lost revenue. Embraer has its new Phenom series of light and very light business jets.


Dash-8

ERJ 195

Bombardier has its profitable business jet unit, and its seriously troubled C-Series 110/135-seat jetliner family proposal.

But both companies, particularly Embraer, will continue to rely on RJs for a major part of their future revenue. Both the ERJ 170/190 and CRJ-700/900 families of larger regional jets are prospering, although at first the new, more efficient 70-seaters had trouble penetrating the U.S. and Canadian markets, which have historically provided over two-thirds of RJ demand. Yet progress with scope clauses means that airlines have much less of a problem introducing them into their networks. Accordingly, North American demand for the larger RJs has been growing, limited merely by the majors' ability to pay for them.

The RJ manufacturers were originally counting on initial orders from Europe to help the new large jets get off the ground. But there have been serious troubles there. Traditionally, regional airlines enjoyed a good position in Europe, largely due to the dominance of the aviation market by large flag carriers such as Lufthansa and British Airways.

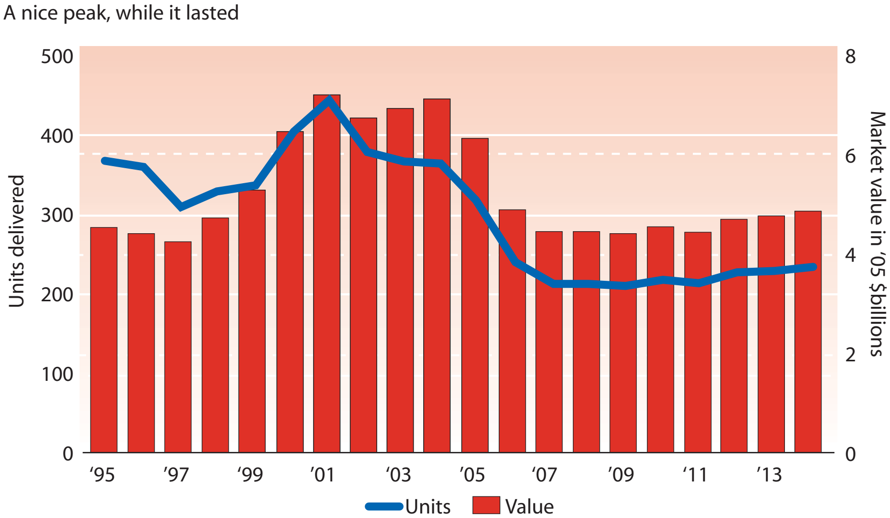
However, the new low-cost carriers, especially Ryanair and EasyJet, have had a strong impact on the market. Their growth has been fueled by a liberalized market environment, and by aggressive pricing for narrowbodies by Airbus and Boeing. And as with most of their U.S. low-cost cousins, they have no interest in RJs.

ATR 42/72

As a result, the traditional European regional carriers no longer offer a strong initial large RJ market. Lufthansa has not rushed out to replace its order for 60 Fairchild Dornier 728s, which were effectively canceled when that company went bankrupt in April 2002. Crossair, the launch customer for Embraer's ERJ 170/190, no longer exists, and Swiss International, successor to both Crossair and bankrupt flag carrier Swissair, is deferring its ERJ aircraft. However, North America is still there to take up the slack.

REGIONAL AIRCRAFT HISTORY AND FORECAST

A nice peak, while it lasted



It is difficult to see which, if either, large RJ family has a competitive advantage in this market. Bombardier's CRJ-700/900 family has the advantage of near complete commonality with the smaller CRJ-200, which will remain in service for decades. With a narrower design than its Embraer competitor, the CRJs probably retain an operating cost advantage. And most of all, given the relatively low development costs associated with these stretched derivatives, Bombardier will have considerable flexibility on pricing.

Of course, Embraer has the newer, more modern product. It is earlier in its product life cycle, which makes operators happy from a residual value standpoint. It also has greater room for growth, with the ERJ 195 getting into the low end of Airbus/Boeing territory. So far, of the three North American major airline large RJ orders, JetBlue has opted for the ERJ altogether, while US Airways has favored it by a considerable margin. Air Canada is starting to introduce ERJs, a serious blow to a former CRJ stronghold (and a blow for free trade).

Despite the success of the larger RJ families, the current outlook implies a deflating regional aircraft market. In terms of annual revenue, it will take more than 100-150 large RJ deliveries to compensate for the loss of over 250 smaller RJ deliveries. Numbers like those were effectively symptomatic of dysfunctional business practices and severe overcapacity.

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