

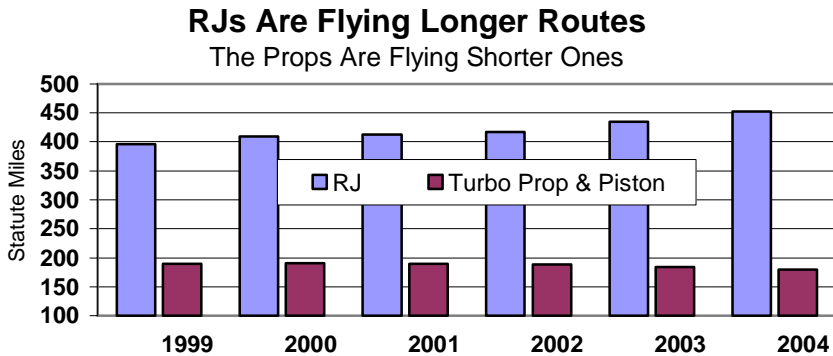
Regional Airline Data Bank – A Monthly Snapshot Report

Regional Airlines Add New RJs At Steady Pace

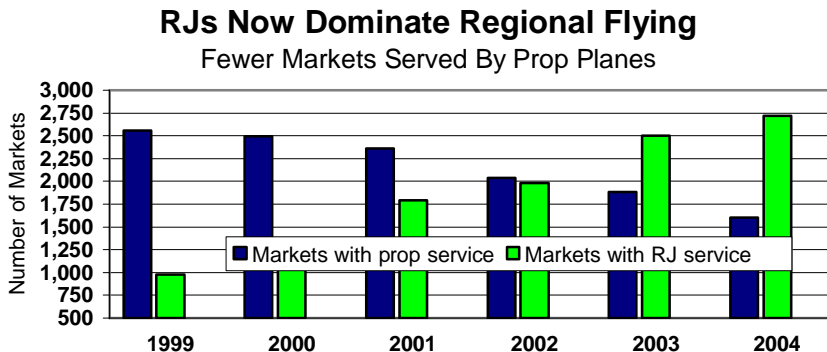
Data: One Prop Plane Retired For Every Four New RJs Placed In Service

As the regional jet (RJ) continues to play an ever-increasing role in regional aviation, the number of propeller-driven aircraft continues to decline.

Since 2000, for every four new RJs put into service there was one turboprop or piston-driven



(Prop data limited to scheduled passenger service in the lower 48 states.)



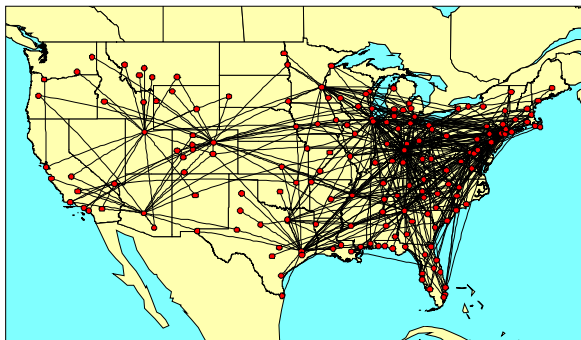
(Prop data limited to scheduled passenger service in the lower 48 states.)

aircraft retired, according to John Weber, a **Back Aviation** vice president. It is not simply that the RJs are replacing the prop-aircraft, but the RJs are also replacing narrow-body airplanes on some routes, said Fred Roe, another Back analyst. The network carriers have been employing RJs flown by their code-share partners – the regional airlines – to take over routes that could not be flown profitably with larger planes.

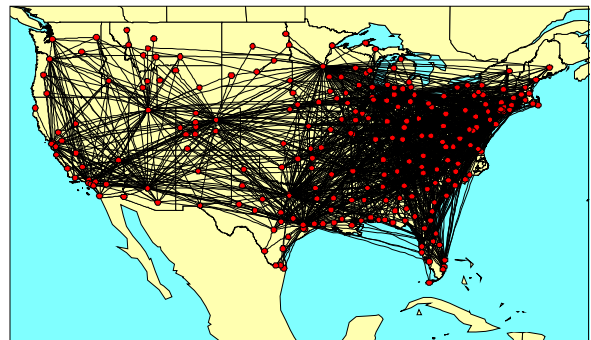
The average stage length of an RJ has been steadily increasing. Prior to 1999, the average RJ flew a route less than 400 miles long, Roe said. Now the average RJ flies a route more than 450 miles long.

As the RJs get larger – the **Bombardier** [BBD] CRJ 700s and the

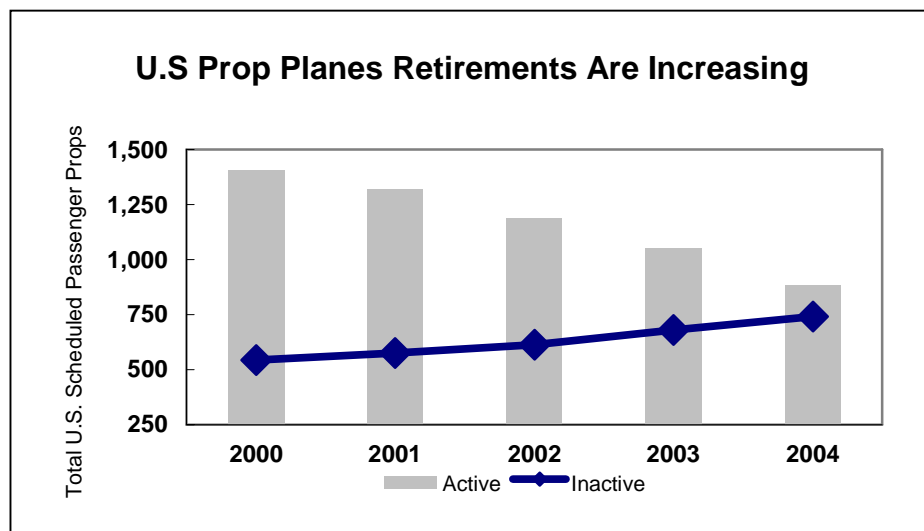
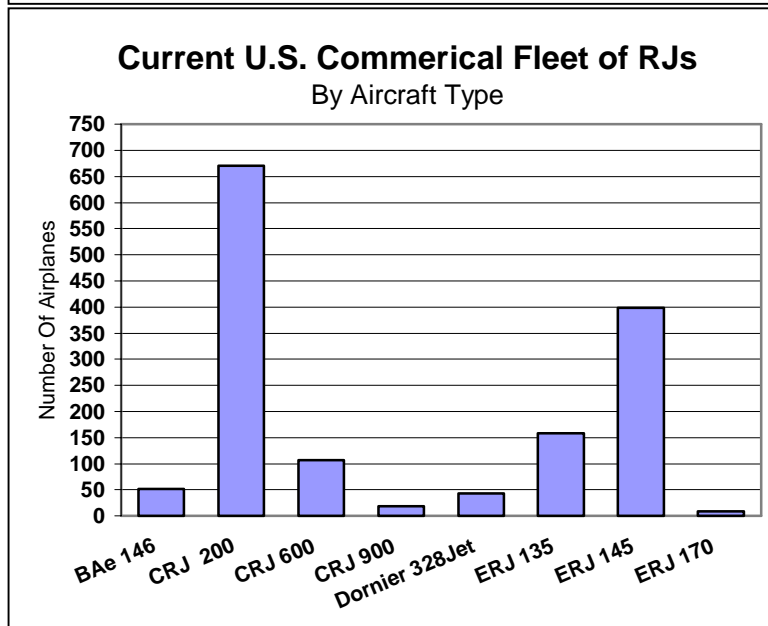
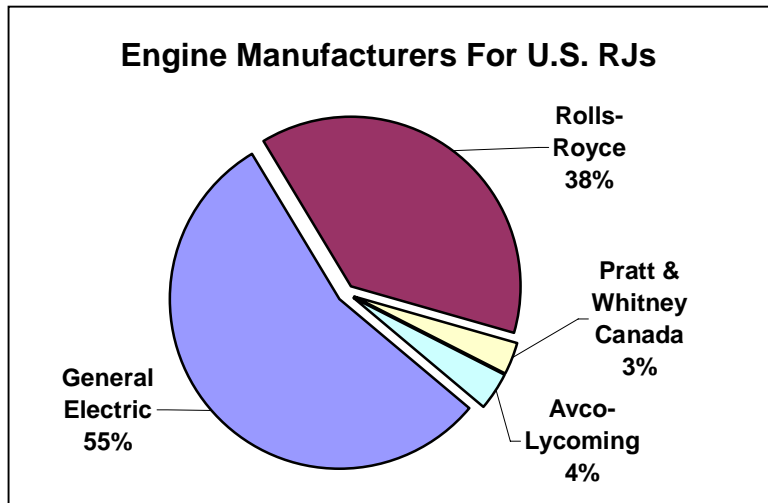
Regional Jet Routes in 1999



Regional Jet Routes in 2004



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Embraer [ERJ] 170s each carry 70 to 80 passengers – there is a tendency for the network carriers to fly longer connecting points. Some of the large hub-and-spoke carriers are using the RJs for point-to-point routes instead of feeding the network hub.

Conversely, the turboprops are flying shorter routes. The prop-driven planes flew the longest average routes in 2000 – 190 miles. Now the planes fly an average route of 179 miles.

The number of active prop-powered aircraft is now almost at parity with the total number inactive/deactivated, and the gap continues to narrow. There were 883 prop planes aircraft in use this month compared with 742 inactive planes. The trend chart (*below, left*) clearly shows the decrease in prop aircraft utilization for U.S. passenger service and is a reflection of passengers' preference for jet travel, Weber said.

The RJs now flying were built by four different manufacturers with engines built by four different engine makers. Two airframe builders have dropped out of the sales race – **BAe** and **Fokker**. Bombardier and Embraer dominate today's RJ production. Bombardier by far has sold more 50-seat RJs than any

other manufacturer – 671 planes.

According to the Back data, the only RJ that has been retired since the niche was created in the early 1990s has been the Fokker 100. Although BAe decided after the Sept. 11, 2001, terrorist attacks to stop aircraft production, there are still five U.S. regional airlines flying 52 various versions of the BAe 146. The BAe 146 is the only regional

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jet using an **Avco-Lycoming** engine.

There are two U.S. regional carriers flying the **Dornier 328Jet – Skyway**, the Midwest Connection carrier, and **Atlantic Coast Airlines [ACAI]**, on routes for **Delta Air Lines [DAL]**. Avcraft Aviation, a U.S. firm based in Virginia, is resuming production of the plane in Germany. The Dornier is the only regional jet flying with **Pratt & Whitney** engines.

While Bombardier dominates the airframe niche, **General Electric [GE]** is gaining in the engine race. GE is the primary engine supplier for all CRJs as well as the new Embraer 170 family. **Rolls-Royce** is the primary engine maker for the ERJ 135-145 product line.

>>Contact: John Weber, Frederick Roe, Back Aviation, (203) 752-2000.<<

Regional Airlines Obtain More RJs Each Year							
Aircraft Model	Airline	RJ Transactions By Year					1/1/04
		1999	2000	2001	2002	2003	Fleet
Dornier 328Jet	Atlantic Coast	0	0	30	3	0	33
Dornier 328Jet	Skyway	5	1	2	2	0	10
Dornier 328Jet	Great Plains	0	0	2	0	0	2
CRJ 100/200/440	Air Wisconsin	3	3	7	20	28	63
CRJ 100/200/440	Atlantic Southeast	13	11	23	14	14	92
CRJ 100/200/440	Comair	16	19	-11	22	19	136
CRJ 100/200/440	Skywest	0	5	33	25	36	110
CRJ 100/200/440	Mesa	12	0	0	0	13	45
CRJ 100/200/440	Atlantic Coast	10	14	19	16	14	87
CRJ 100/200/440	Pinnacle	0	0	0	51	25	76
CRJ 100/200/440	PSA	0	0	0	0	7	7
CRJ 701	Horizon Air	0	0	9	7	2	18
CRJ 701	Atlantic Southeast	0	0	0	9	7	16
CRJ 701	Comair	0	0	0	6	13	19
CRJ 701	Mesa	0	0	0	0	13	13
CRJ 701	American Eagle	0	0	1	7	11	19
CRJ 701	Freedom Airlines (Mesa)	0	0	0	6	-4	2
CRJ 705/900	Mesa	0	0	0	0	10	10
ERJ 135	American Eagle	9	24	7	0	-1	39
ERJ 135	ExpressJet	0	0	30	0	0	30
ERJ 135	Chautauqua	0	0	0	2	13	15
ERJ 140	American Eagle	0	0	15	28	16	59
ERJ 140	Chautauqua	0	0	7	8	0	15
ERJ 145	Mesa	0	12	11	9	4	36
ERJ 145	American Eagle	25	5	6	-6	2	52
ERJ 145	ExpressJet	0	0	107	51	36	194
ERJ 145	Trans States	5	2	1	6	17	35
ERJ 145	Chautauqua	4	14	20	4	11	53
Fokker F-28	Horizon Air	0	-1	-2	-13	-5	0
BAe146-100	Air Wisconsin	0	0	0	-1	0	0
BAe146-200	US Airways	2	-2	0	0	0	0
BAe146-200	Air Wisconsin	0	0	0	0	0	12
BAe146-RJ85	Mesaba	11	7	0	-1	-3	32
BAe146-300	Air Wisconsin	0	0	0	0	0	5
Totals		115	114	317	275	298	1,335