

Data Bank: South American Regional Operations



Rigid Borders Restrain RJ Use In South America

The regional jet has the shallowest penetration rate in the South American regional aircraft market than any other major world market.

There are 18 regional jets in the active fleet of 261 aircraft flown by more than 50 carriers. There are only six carriers that fly RJs and **Icaro Express** has the largest fleet with four Fokker 28s. This minimal RJ activity is on the same continent where Brazil's **Embraer** [ERJ] builds its RJs.

By contrast, in both the United States and in Europe more than half of the regional fleets are composed of RJs. In Asia, about one-third (98) of the 301 airplanes flown by 16 different carriers in nine nations are RJs. There are 25 RJs on order in Asia while just one is on order in all of South America.

The regional operators are highly fragmented with more than 50 carriers – the largest being Argentina's **Lade** with 14 turboprops and two Fokker 28s (see table next page.)

Commuter carriers, not regional airlines, would be a better description of the South American market. "All the routes are short distances. They are hop, skip and a jump. There are very few long trips," said Frederick Roe, an analyst at **BACK Aviation Solutions**. BACK prepared an exclusive statistical profile of the South American market for *Regional Aviation News*. Very few of the commuter routes cross an international border, and, if they do, these routes are just into a neighboring country.

The medium trip length for South America's four piston planes and the 246 turboprops is 170 miles. The medium RJ trip stage length is 312 miles – the bottom-rung for an efficient RJ route. The RJs have not been deployed on routes

that have the best economics, Roe noted.

There are only two regional carriers are all-jet carriers serving South American cities – **Copa Airlines** and **Air Caraïbes**. Copa serves South America, but is a Panamanian airline, and Air Caraïbes is based in Pointe-a-Pitre on the Caribbean island of Guadeloupe.

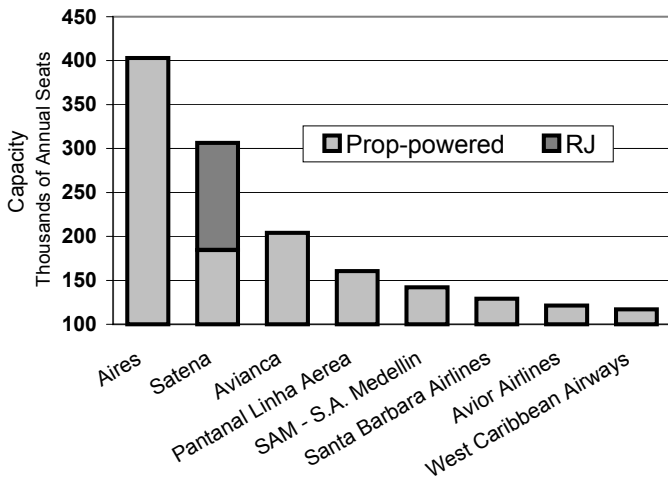
South America's topography of the Amazon and its vast rainforests and the Andes would seemingly foster air travel over highways or trains, but its air traffic growth lags behind the global average, according to a recent market analysis by **Unisys R2A**. Most countries still have national carriers for international flights. South America, with a limited number of free-trade zones, has not adopted an open border concept similar to the **European Union**. Long periods of political and economic instability created an environment that has hampered the development of the airline industry on the continent.

In some cases, Roe said, airlines are leap-frogging technological development as carriers are skipping RJs and going straight to narrow-body aircraft. In Brazil, for example, commuter carriers fly only along the Atlantic Coast and a short distance inland. However, if you were to overlay the route map for **GOL** [GOL], you can see the four-year-old low-fare carrier is flying **Boeing** [BA] 737s to numerous points, including Brasilia and far inland cities. GOL in four years has captured 29 percent of Brazil's domestic traffic.

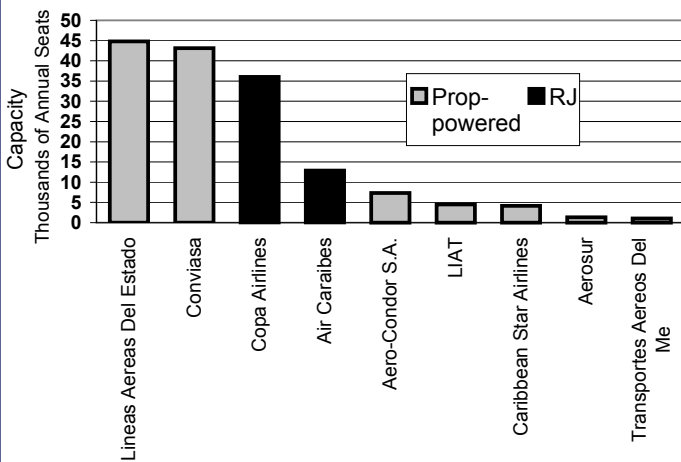
South America's regional fleet is old – and getting older. All aircraft types – piston-powered, turboprops and RJs – are older than their counterparts anywhere else in the



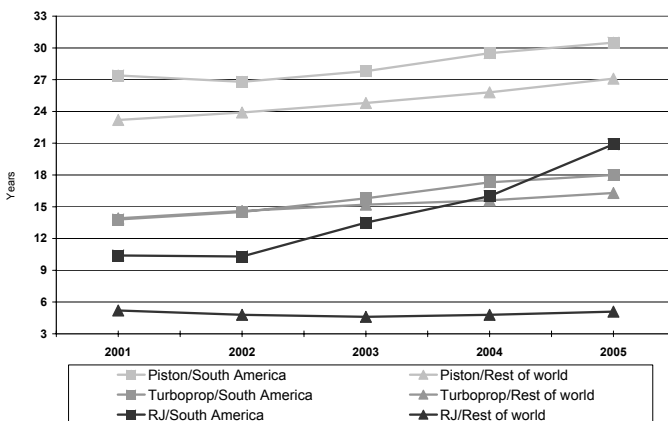
South America's Big Time Regional Operators



South America's Smaller Regional Operators



Average Age Of Regional Aircraft In Scheduled Service



world. Roe noted that in the last two years, the average fleet has aged by almost a decade as the carriers shed newer aircraft. The six operators of RJs have shed relatively new **Bombardier** [BBD] CRJs while holding onto Fokker 28s and ERJ 145s. Only two new planes are on order, an Embraer 190 for **Tame Ecuador** and a **PZL-Mielec M-28**, a turboprop, for **Air Guyane**.

Of the top 10 aircraft types flow in South America, which account for 77 percent of the fleet, only the **ATR** is still being built. ➔

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South America's Regional Fleet By Operator

Carrier/ Total Aircraft	Aircraft	In Use	Stored	On Order	Total
Piston Aircraft In Active Scheduled Service					
El Sol De America/1	BN-2A-III Trislander	1			1
Votec Servicios/1	BN-2 Islander	1			1
Regional Jets In Scheduled Service					
Icaro Express/4	Fokker F-28	4			4
Lade/2	Fokker F-28	2			2
Nuevo Continente /3	Fokker F-28	2	1		3
Rio Sul /2	ERJ 145		2		2
Satena/3	ERJ 145	3			3
Tame Ecuador/3	Embraer 190			1	1
	Fokker F-28	2			2
Turboprop Aircraft In Scheduled Service					
Abaete Linhas/4	Embraer 110	4			4
Aero Condor [Peru] /5	Cessna Grand Caravan	2			2
	Fokker 27	1	1		2
	Fokker 50	1			1
Aero Vip/4	BAe Jetstream 32	2			2
	Embraer 110	1			1
	Swearingen Metro III	1			1
Aerolinea De Antioquia/6	BAe Jetstream 32	3			3
	Twin Otter 100	3			3

Excludes carriers with only one plane and those with all aircraft of one type in storage. (Continued on next page)

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Carrier/ Total Aircraft	Aircraft	In Use	Stored	On Order	Total	Carrier/ Total Aircraft	Aircraft	In Use	Stored	On Order	Total
Turboprop Aircraft In Scheduled Service, continued						Penta/9	Cessna Grand Caravan	6			6
							Embraer 110	2			2
							Embraer 120	1			1
Aerolineas Paraguayas/3	Cessna Caravan	1			1	Puma Linhas Aereas/3	Cessna Grand Caravan	1			1
							Embraer 120	2			2
Aerosur [Bolivia] /5	Let 410	3	1		4	Rico Linhas Aereas/5	Embraer 110	3			3
	Swearingen Metro 23	1			1		Embraer 120	2			2
Aerovias Dap/3	CASA 212	1			1	Rutaca/5	Cessna Grand Caravan	4			4
	Twin Otter 100	1			1		Embraer 110	1			1
	Dash 7	1			1	Sam Colombia/4	Fokker 50	4			4
Air Guyane/7	ATR 42-300	1			1		Santa Barbara/7	ATR 42-300	4		
	ATR 42-500	1			1	Cessna Grand Caravan		3			3
	Twin Otter 100	3			3	Sarpa Colombia/2	BAe Jetstream 32	2			2
	PZL-Mielec M-28			1	1		CASA 212	3			3
	Reims-Cessna F.406	1			1	Satena/12	CASA 235	3			3
Aires Colombia/9	Dash 8-100	4			4		Dornier 328	6			6
	Dash 8-200	1			1		Searca Colombia/2	Beechcraft 1900C	2		
	Dash 8-300	4			4	BAe Jetstream 31		1			1
Avianca/6	Fokker 50	6			6	Servicio Aereo Vargas Espana/2	BAe Jetstream 32	1		1	
Avior Airlines/15	Beechcraft 1900D	11			11		Servicios Aereos Ejecutivos Saereo/4	Beechcraft 1900C	1		
	Cessna Grand Caravan	2			2	Beechcraft 1900D		1			1
	Embraer 120	2			2	Embraer 120	2			2	
Baires Fly/4	Swearingen Metro III	4			4	Star Up/4	Antonov An-24	3		3	
Blue Wing Airlines/5	PZL-Mielec M-28	5			5		Antonov An-26	1			1
Cata Linea Aerea/2	Fokker 27	2			2	Taf Linhas Aereas/6	Cessna Caravan	2			2
Conviasa/2	Dash 7	2			2		Embraer 110	3			3
	El Sol De America/5	BAe Jetstream 31	3				3	Embraer 120	1		
Let L410		2			2	Total Linhas Aereas/13	ATR 42-300	8	1		9
Gensa/2	Embraer 110	2			2		ATR 42-500	2			2
Linea Aerea Iaaca/2	ATR 72-100	2			2		ATR72-100	2			2
Linea Turistica Aereotuy/7	Cessna Grand Caravan	3			3	Transportes Aereos Nacionales De Selva/11	Twin Otter 100	6			6
	Dash 7	2	2		4		Yun Y12	5			5
Lineas Aereas Del Estado/14	Twin Otter 100	8			8	Transportes Aereos Regulares/7	Embraer 110	1	4		5
	Fokker F-27-400	3			3		Fokker F-27	2			2
	Fokker F-27-500	1			1	Trip Linhas Aereas/5	ATR 42-300	4			4
	Fokker F-27-600	1			1		Embraer 120	1			1
	Lockheed L-100-30	1			1		Venezolana Linea/4	BAe Jetstream 31	4		
Oceanair [Brazil]/10	Embraer 120	7			7	ATR 42-300			1		1
	Fokker 50	3			3	West Caribbean/2	Let L410	1			1
Pantanal Linhas/6	ATR 42-300	6			6						

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