


JANUARY 2017

BUSINESS AVIATION

2016 REVIEW



A large commercial airplane is shown from a low angle, parked on a tarmac. The aircraft's wings, engines, and tail are visible. In the background, two men in business suits are standing near the tail of the plane, one holding a briefcase. The scene is set against a clear blue sky.

This review will look at flight activity for the overall industry, the individual industry segments & aircraft categories, and it will review top operators & other key metrics.

It will also include TRAQPak's prestigious quarterly forecast.

WHAT IS TRAQPAK?

The most targeted and sophisticated aircraft activity analysis and market intelligence reporting database in the industry. Integrating the world's largest business aviation databases, the accuracy of TRAQPak's proprietary data, and combining aircraft movement data and aircraft owner/operator contact information - you have a wealth of strategic aircraft intelligence that cannot be matched. ARGUS TRAQPak data is aircraft arrival and departure information on all IFR flights in the US (including Alaska and Hawaii) and Canada.

TRAQPak Aircraft & Operational Categories defined:

Turbo Prop: Single engine Turboprop Aircraft and Multi-Engine Turboprop Aircraft

Small Cabin Jet: Very Light Jets (VLJ) and Light Jets (LJ) - Jet aircraft with a maximum takeoff weight of less than 20,000 lbs.

Mid-Size Cabin Jet: Mid-size Jets (MJ) and Super Mid-Size Jets (SMJ) - Jet aircraft with a maximum takeoff weight of over 20,000 to 41,000 lbs.

Large Cabin Jet: Large Jets, Ultra-Long Range and Heavy Jets - Jet aircraft with maximum takeoff weight of over 41,000 lbs.

Part 135 Commercial Operator: An on-demand commercial aircraft operator and those aircraft that are listed with the FAA.

- A Part 135 operator that offers scheduled service is not considered on-demand and therefore is omitted from TRAQPak's Part 135 data.

Fractional Operator: A company that sells or leases shares of business aircraft that are listed with the FAA.

- If greater than 50% of their aircraft have shares available then they are considered Fractional

Part 91, Non-Commercial Operator: A Part 91 Non-Commercial company is any remaining business aviation operator that is not listed as a Part 135 or Fractional company.

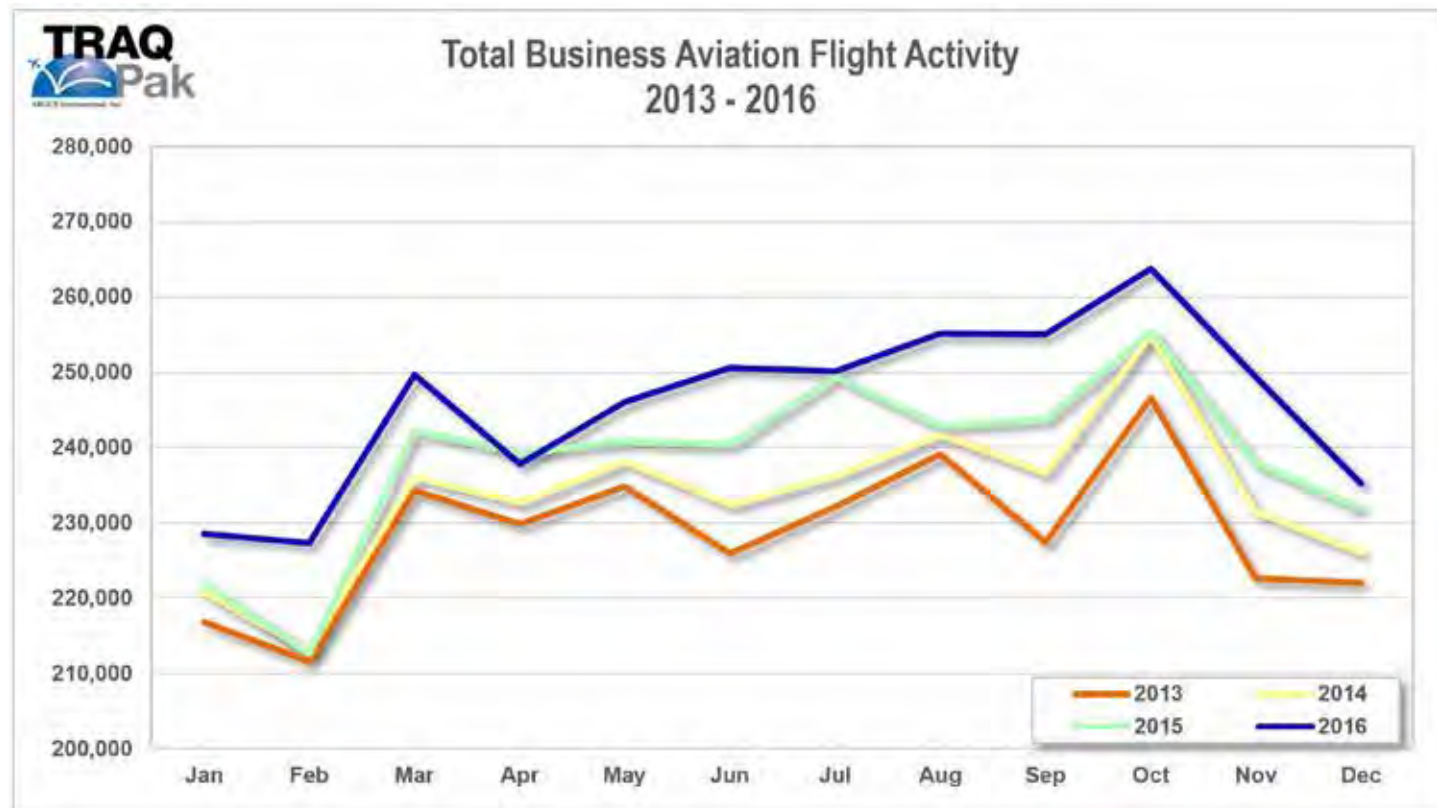
2016 BUSINESS AVIATION OVERVIEW

- 2016 is in the record books and it proved to be another banner year for business aviation. TRAQPak recorded rises in flight activity for 11 of the 12 calendar months; April recorded a slight year over year decline of 0.6%.
- 2016 flight activity rose 3.2% from 2015 while flight hours rose 3.8% for the same period.
- Flight activity stayed fairly consistent for the whole year. The 2nd half (Jul – Dec) of 2016 was up 3.3% compared to the same period in 2015, while the 1st half (Jan – Jun) was up 3.1% compared to 2015.
- Q1 2016 experienced the strongest year over year rise in flight activity, up 4.2% from Q1 2015; aided by the extra day in February. Q2, Q3 & Q4 followed with increases of 1.9%, 3.3% & 3.2% respectively.

ALSO...

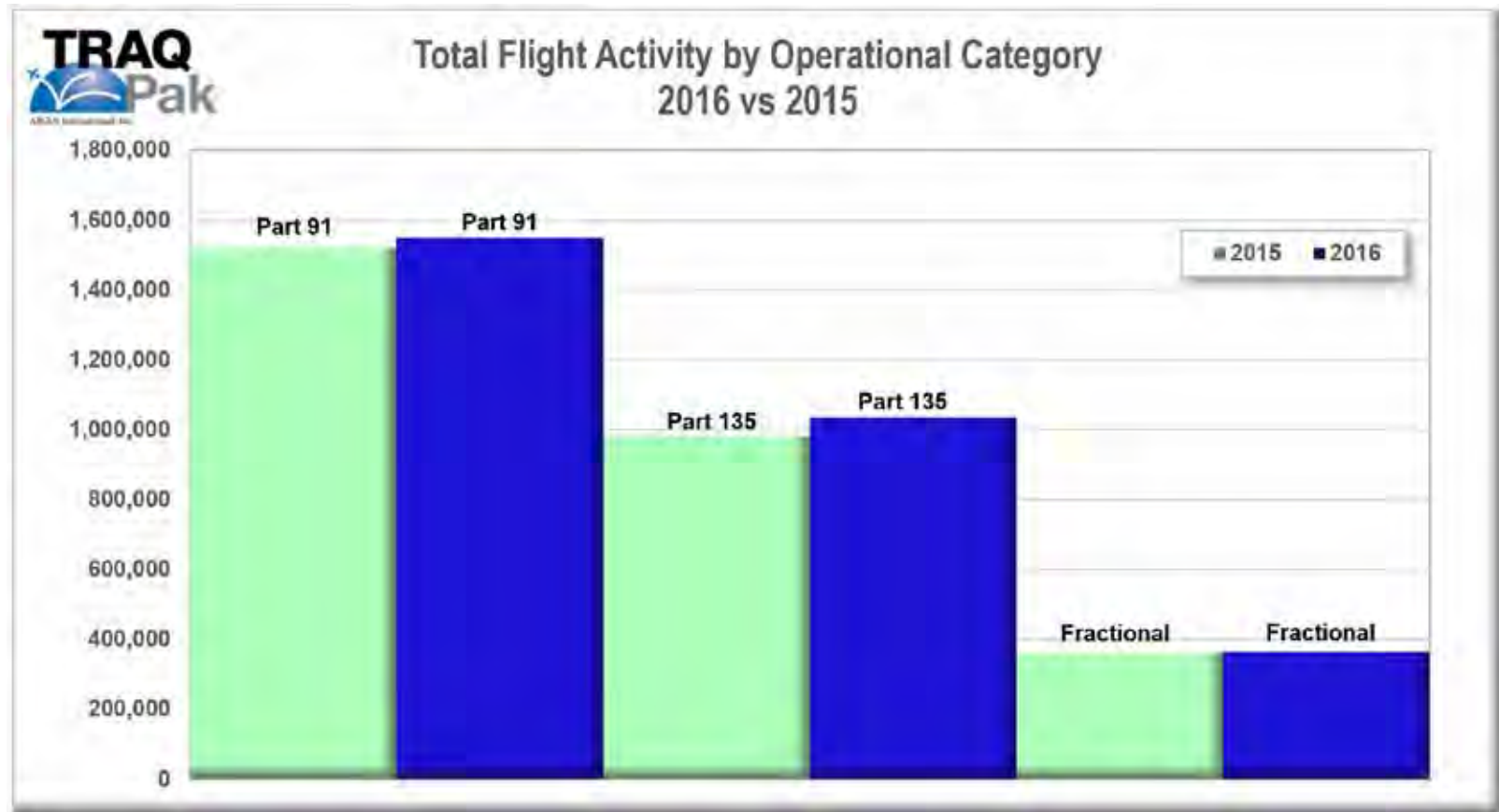
- This review will look at flight activity for the overall industry, the individual industry segments, aircraft categories & types, and we will review top operators & airports for the period.

BUSINESS AVIATION FLIGHT ACTIVITY



Flight activity for 2016 was **up 3.2%** when compared to 2015. It was **up 5.3%** when compared to 2014 and **7.5%** when compared to 2013.

FLIGHT ACTIVITY BY INDUSTRY SEGMENT

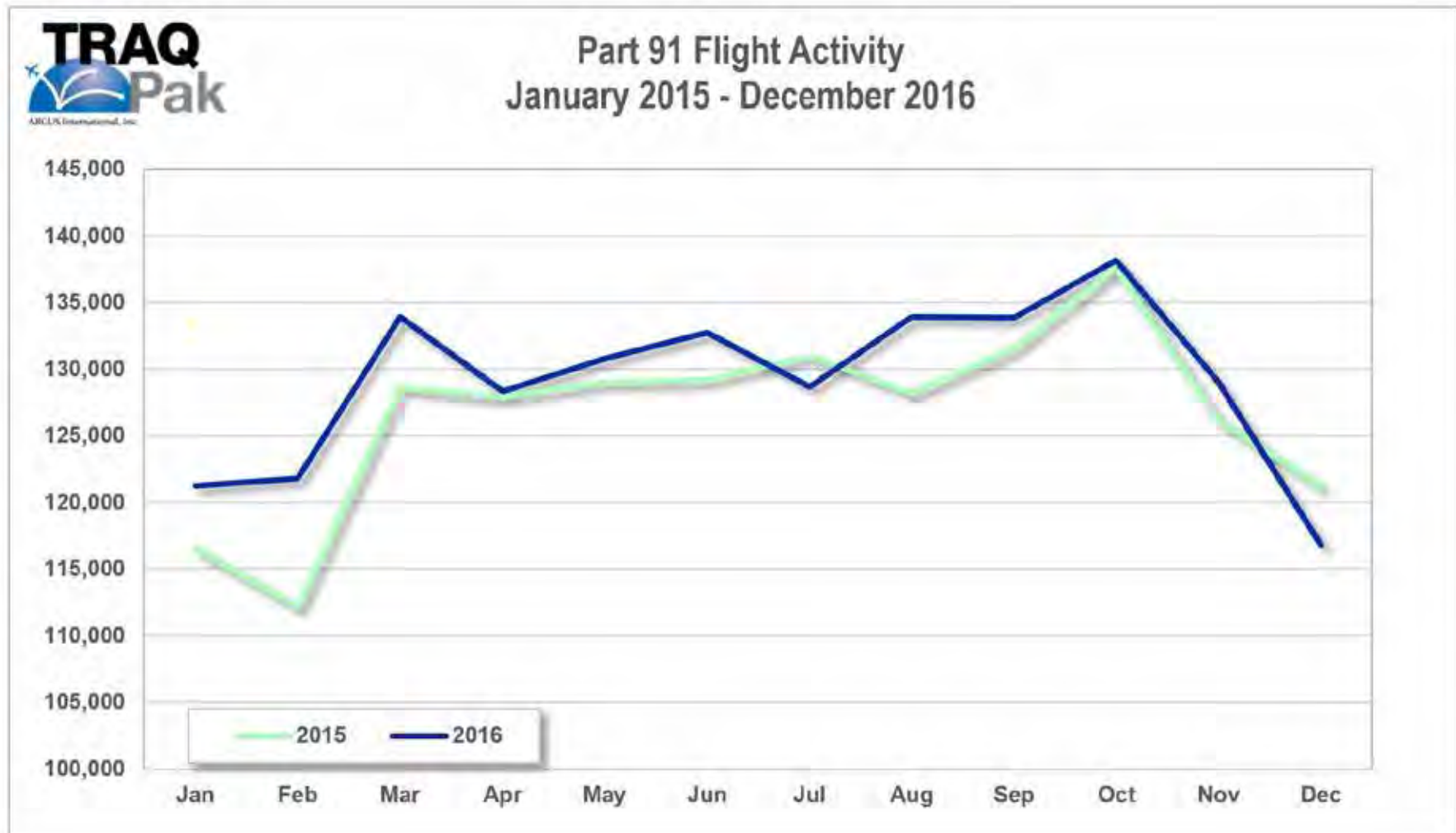


2016 VS. 2015				
	PART 91	PART 135	FRACTIONAL	TOTAL
Turbo Prop	0.0%	8.8%	7.3%	3.5%
Small Cabin Jet	3.4%	2.5%	1.8%	2.9%
Mid Size Cabin Jet	3.0%	2.6%	-2.5%	1.5%
Large Cabin Jet	2.7%	9.4%	14.4%	6.0%
Total	2.0%	5.6%	1.5%	3.2%

*Note- for purposes of this report, FAR Part 135 flight data represents all flight activity of aircraft on a Part 135 charter certificate regardless of individual flight mission (excluding cargo, scheduled Part 135, and fractional operators)

*ARGUS TRAQPak data is aircraft arrival and departure information on all IFR flights in the US (including Alaska and Hawaii) and Canada.

PART 91 FLIGHT ACTIVITY COMPARISON



*ARGUS TRAQ Pak data is aircraft arrival and departure information on all IFR flights in the US (including Alaska and Hawaii) and Canada.

PART 91 INDUSTRY TRENDS IN 2016

✈️ PART 91 ✈️

flights and flight hours grew **2.0%** & **2.9%** respectively in the past 12 months, when compared to 2015.

✈️ LARGE CABIN ✈️

Part 91 flight hours increased **4.1%** in 2016. Mid-size & small cabin Part 91 flight hours grew at a rate of **3.4%** & **4.2%** during the year.

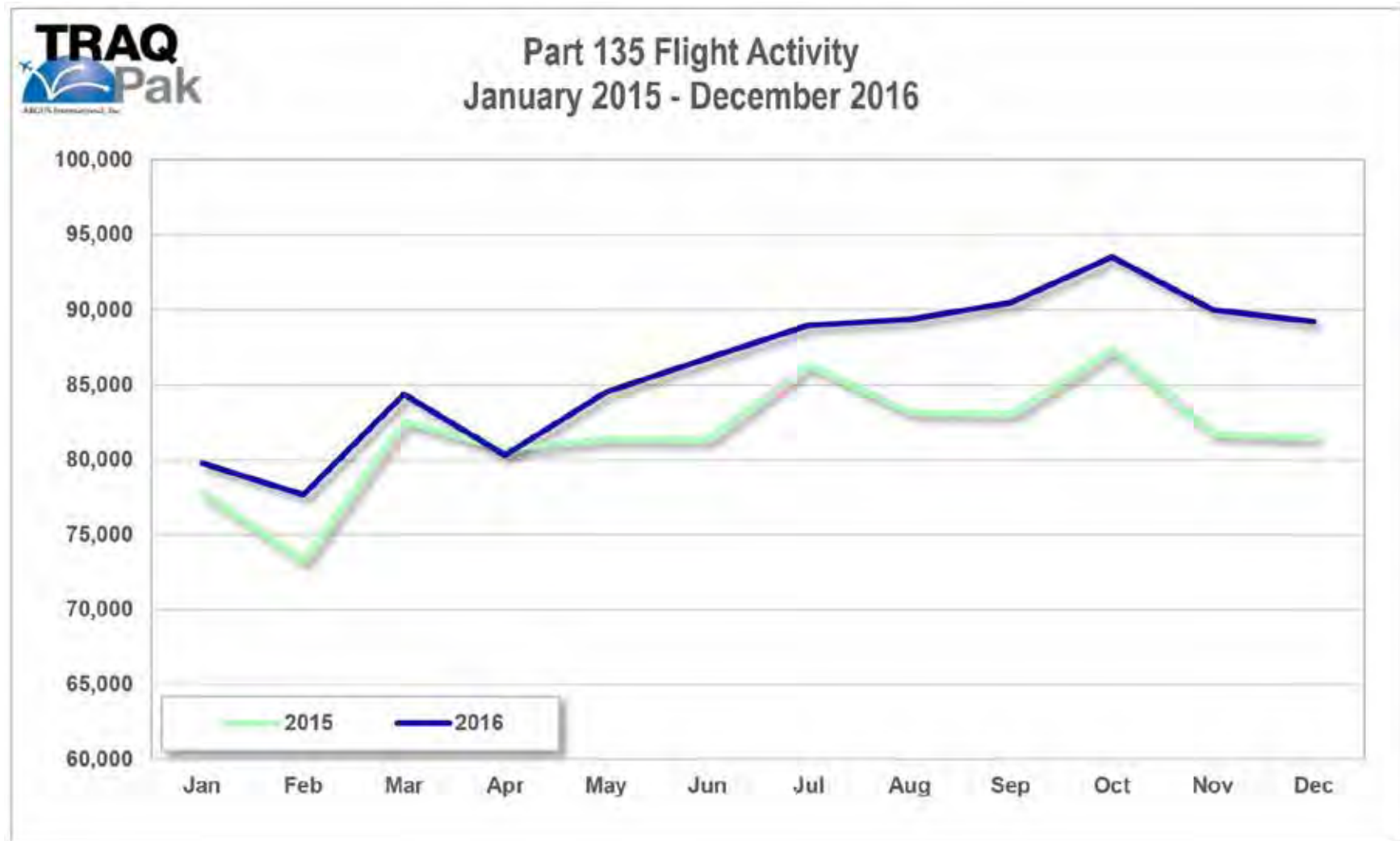
✈️ PART 91 ✈️

operators flew **2,234,979** hours over the last 12 months; that represents an upsurge of **63,159** hours over 2015.

✈️ TURBOPROP ✈️

flight hours saw a modest increase **0.9%** during 2016.

PART 135 FLIGHT ACTIVITY COMPARISON



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PART 135 INDUSTRY TRENDS IN 2016

✈️ PART 135 ✈️

on-demand charter flights & flight hours grew **5.6%** & **5.8%** respectively in the past 12 months, when compared to 2015.

✈️ LARGE CABIN ✈️

Part 135 flight hours grew **10.1%** in 2016. Mid-size Part 135 flight hours grew at a rate of **3.0%** during the year, and small cabin aircraft grew **1.8%**.

✈️ PART 135 ✈️

operators flew **1,413,870** hours over the last 12 months; that represents an increase of **77,336** hours over 2015.

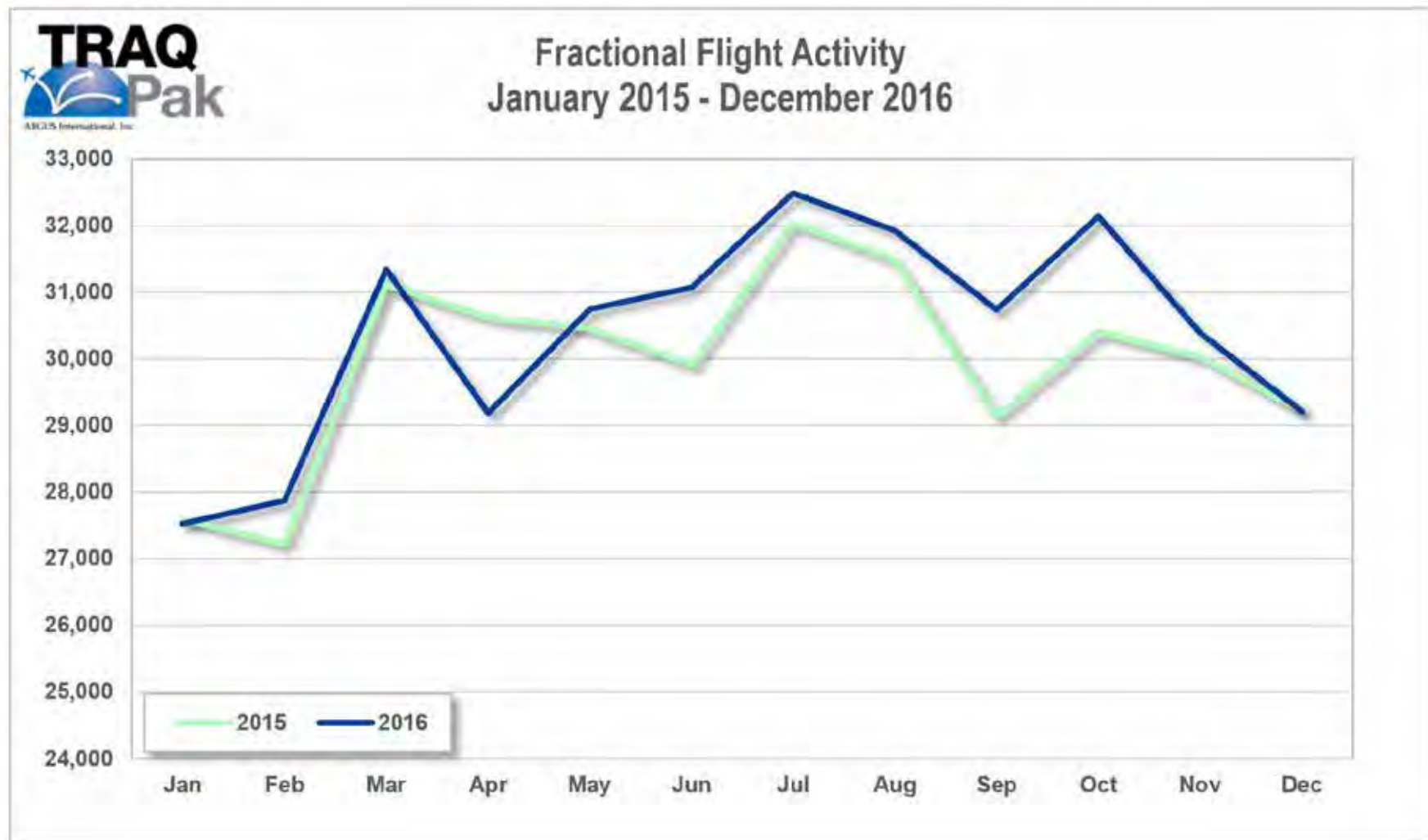
✈️ TURBOPROP ✈️

flight hours increased **9.4%** during 2016.

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FRACTIONAL FLIGHT ACTIVITY COMPARISON



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FRACTIONAL INDUSTRY TRENDS IN 2016

✈️ FRACTIONAL ✈️

flights & flight hours grew **1.5%** & **2.3%** respectively in the past 12 months, when compared to 2015.

✈️ LARGE CABIN ✈️

fractional flight hours saw an increase of **13.4%** in 2016. Mid-size flight hours declined **1.2%** while small cabin flight hours increased **2.5%** during the year.

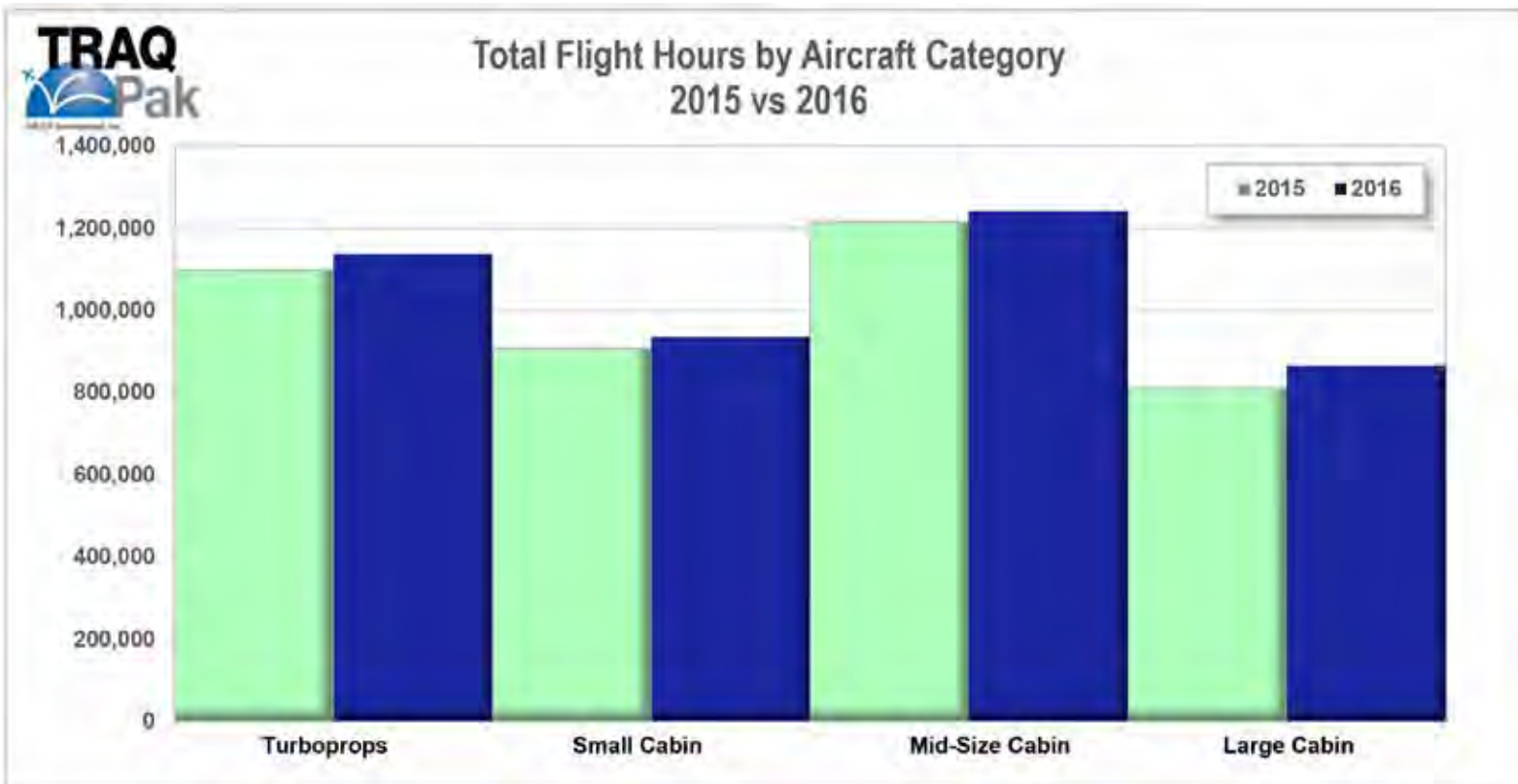
✈️ FRACTIONAL ✈️

operators flew **534,484** hours over the last 12 months; that represents an upsurge of **12,066** hours over 2015.

✈️ TURBOPROP ✈️

flight hours increased **2.5%** during 2016.

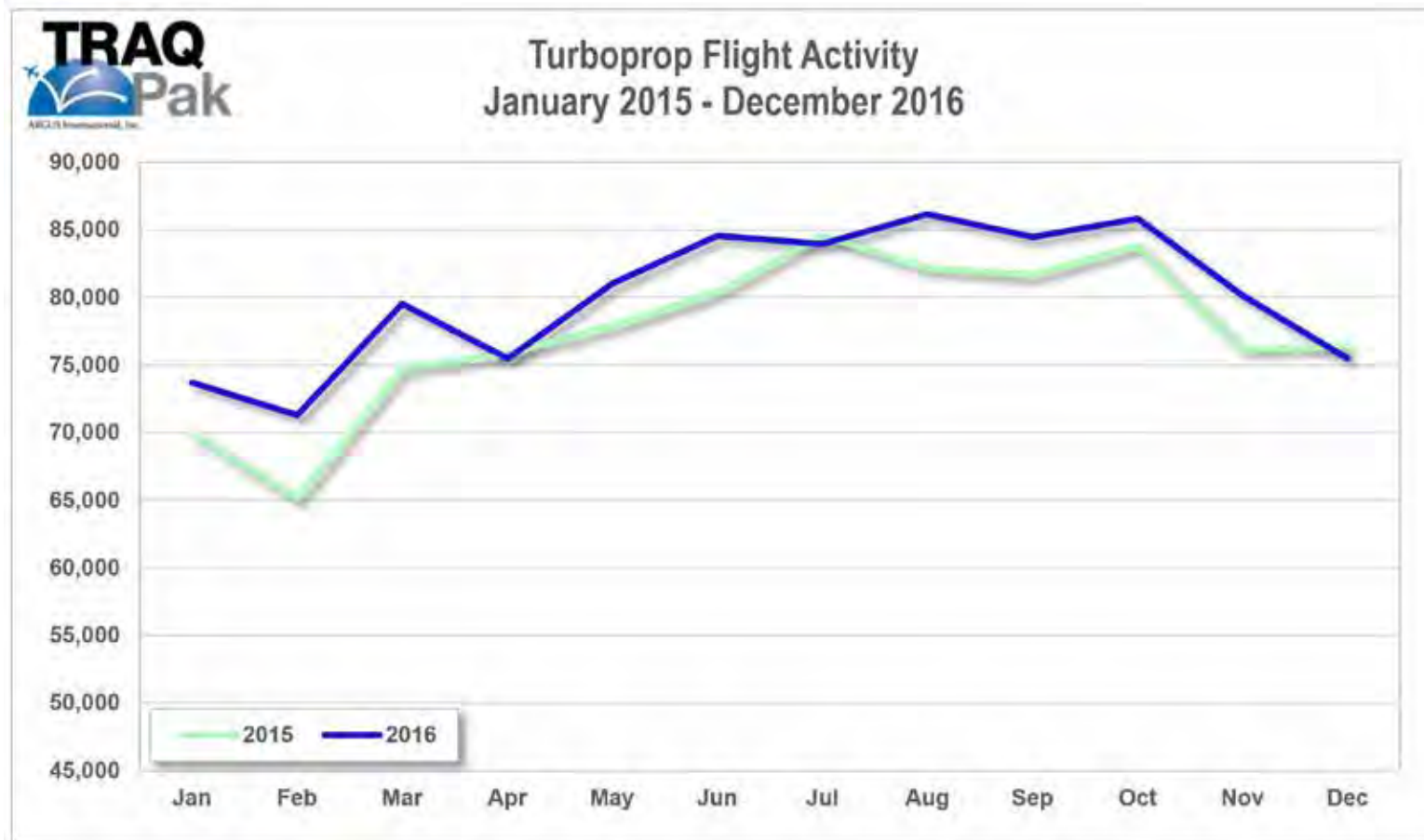
FLIGHT HOURS BY AIRCRAFT CATEGORY



FLIGHT HOURS BY AIRCRAFT CATEGORY			
AIRCRAFT CATEGORY	2015	2016	% INCREASE
Turboprop	1,097,933	1,138,148	3.7%
Small Cabin	907,380	936,310	3.2%
Mid-Size Cabin	1,216,518	1,242,775	2.2%
Large Cabin	809,084	866,239	7.1%
Total	4,030,915	4,183,472	3.8%

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TURBOPROP FLIGHT ACTIVITY COMPARISON



Q1	
Year	Flights
2015	209,791
2016	224,533
7.0%	

Q2	
Year	Flights
2015	234,110
2016	241,035
3.0%	

Q3	
Year	Flights
2015	248,337
2016	254,539
2.5%	

Q4	
Year	Flights
2015	236,405
2016	241,404
2.1%	

2016 turboprop flight activity saw an **increase of 3.5%** from 2015. Q1 2016 was the strongest period for turboprop flight activity, **up 7.0%** from Q1 2015.

SMALL CABIN FLIGHT ACTIVITY COMPARISON



Q1	
Year	Flights
2015	168,485
2016	174,876
3.8%	

Q2	
Year	Flights
2015	179,970
2016	183,639
2.0%	

Q3	
Year	Flights
2015	183,986
2016	189,037
2.7%	

Q4	
Year	Flights
2015	179,276
2016	184,940
3.2%	

2016 small cabin flight activity was **up 2.9%** from 2015. Q1 2016 was the best quarter for small cabin, **up 3.8%** from the respective quarter in 2015.

MID-SIZE CABIN FLIGHT ACTIVITY COMPARISON



Q1	
Year	Flights
2015	197,831
2016	200,149
	1.2%

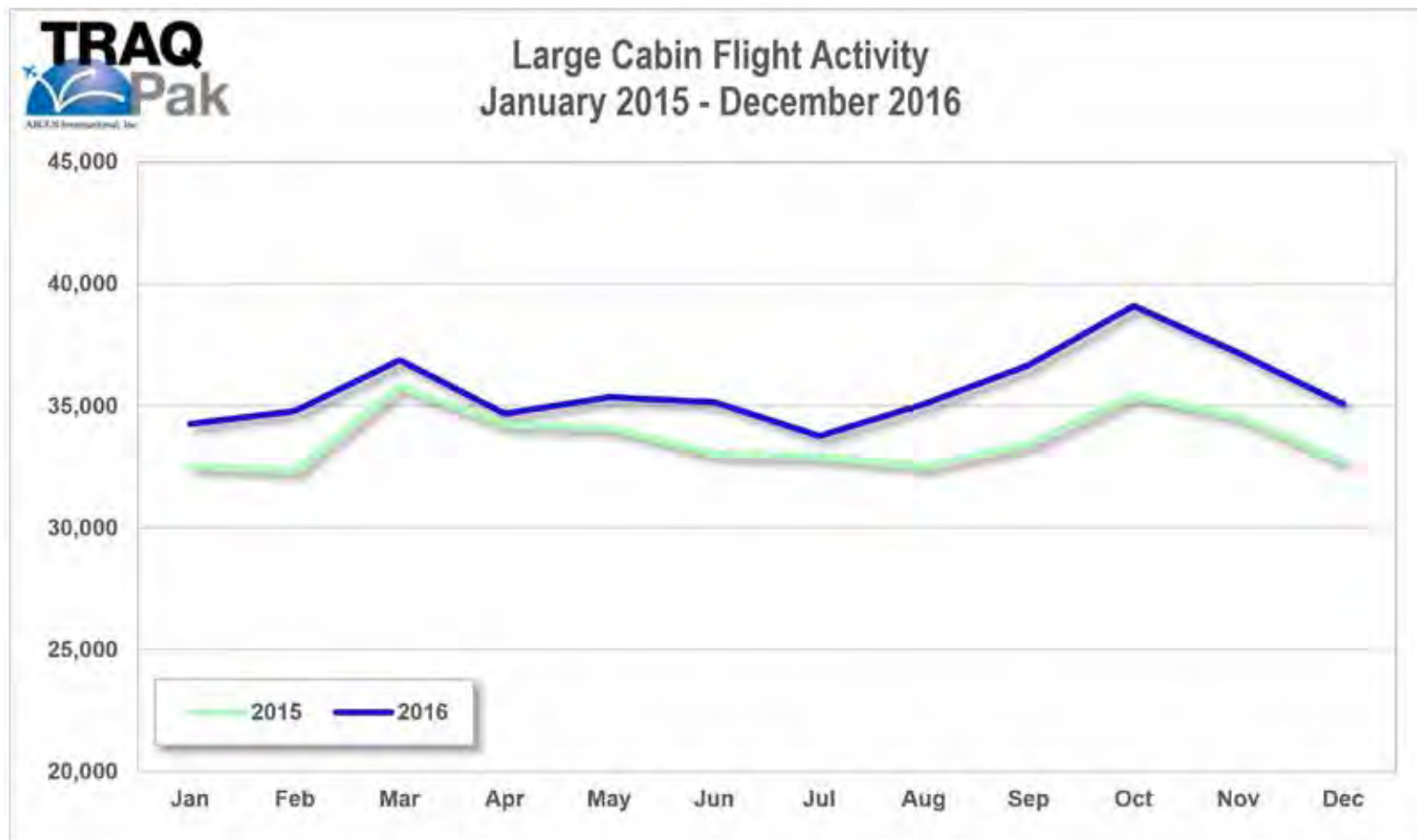
Q2	
Year	Flights
2015	205,023
2016	204,569
	-0.2%

Q3	
Year	Flights
2015	204,745
2016	211,300
	3.2%

Q4	
Year	Flights
2015	206,841
2016	210,691
	1.9%

2016 mid-size cabin flight activity **increased 1.5%** from 2015. Q3 2016 was the best performing quarter for mid-size aircraft, **up 3.2%** from Q3 2015.

LARGE CABIN FLIGHT ACTIVITY COMPARISON



Q1	
Year	Flights
2015	100,694
2016	105,936
5.2%	

Q2	
Year	Flights
2015	101,369
2016	105,189
3.8%	

Q3	
Year	Flights
2015	98,882
2016	105,512
6.7%	

Q4	
Year	Flights
2015	102,700
2016	111,359
8.4%	

Large cabin flight activity saw another year of significant increases in 2016, **up 6.0%** from 2015. Q4 2016 was the best performing quarter for large cabin aircraft, **up 8.4%** from Q4 2015.

TOP US PART 135 OPERATORS IN 2016

RANK	OPERATOR NAME	2016 HOURS	2015 HOURS	2016 FLEET SIZE	2015 FLEET SIZE
1	GAMA AVIATION	54,533	36,467	94	75
2	EXECUTIVE JET MANAGEMENT	49,218	50,275	133	132
3	XOJET	44,689	43,874	41	42
4	TRAVEL MANAGEMENT COMPANY	41,552	42,352	61	66
5	DELTA PRIVATE JETS	36,926	34,891	66	72
6	JET LINX AVIATION	23,851	19,977	81	57
7	SOLAIRUS AVIATION	19,604	15,491	48	40
8	JET EDGE	17,455	15,589	48	43
9	JETSUITE AIR	15,201	15,907	20	19
10	LANDMARK AVIATION	14,889	14,088	54	56
11	CLAY LACY AVIATION	12,988	11,462	50	46
12	JET AVIATION	12,913	12,094	36	32
13	CORPORATE FLIGHT MANAGEMENT	12,751	6,340	29	20
14	AERO AIR	10,120	9,539	22	22
15	JET SELECT	10,031	10,582	30	27
16	PRIESTER AVIATION	9,975	7,254	33	28
17	TALON AIR	9,343	8,253	23	19
18	MERIDIAN AIR CHARTER	8,117	9,135	22	20
19	ZETTA JET	8,020	3,100	20	13
20	AVJET	7,933	7,445	27	25
21	MOUNTAIN AVIATION	7,666	6,164	17	19
22	RED WING AEROPLANE CO	7,188	7,113	11	10
23	LJ ASSOCIATES	7,076	7,190	23	23
24	LYON AVIATION	6,479	4,908	19	16
25	WORLDWIDE JET CHARTER	6,432	5,974	11	9

*Note- 2016 Fleet Size based on D085 dated January 4, 2017

*Note- 2015 Fleet Size based on D085 dated January 5, 2016

*Note- Excludes Medical Flights

*Note- Landmark Aviation includes TWC Aviation & Sterling Aviation

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TOP FRACTIONAL OPERATORS IN 2016

RANK	OPERATOR NAME	2016 HOURS	2015 HOURS	% YOY CHANGE
1	NETJETS	347,375	330,482	5.1%
2	FLEXJET	72,958	63,721	14.5%
3	FLIGHT OPTIONS	40,908	54,927	-25.5%
4	PLANESENSE	33,971	29,955	13.4%
5	EXECUTIVE FLIGHT SERVICES	17,819	17,223	3.5%
6	AIRSPRINT CANADA	8,733	7,983	9.4%
7	WEST COAST CHARTERS	6,350	6,162	3.1%
8	NETJETS EUROPE	4,465	3,779	18.2%

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TOP 25 US AIRPORTS IN 2016

AIRPORT	2015 DEPARTURES	2016 DEPARTURES	% YOY CHANGE
KTEB	70,241	71,304	1.5%
KDAL	32,269	33,315	3.2%
KHPN	31,360	32,855	4.8%
KHOU	29,411	29,273	-0.5%
KPBI	28,037	28,596	2.0%
KLAS	26,741	27,884	4.3%
KIAD	26,427	26,735	1.2%
KAPA	25,770	26,196	1.7%
KPDK	24,521	25,694	4.8%
KMDW	24,037	25,300	5.3%
KVNY	23,014	24,703	7.3%
KSNA	18,044	19,009	5.3%
KSDL	17,350	18,679	7.7%
KBFI	16,571	17,781	7.3%
KBNA	16,754	17,572	4.9%
KBED	17,053	17,191	0.8%
KSAT	17,523	16,840	-3.9%
KSJC	15,241	15,772	3.5%
KAUS	15,185	15,685	3.3%
KSLC	13,382	15,100	12.8%
KFXE	14,160	14,958	5.6%
KPWK	14,254	14,577	2.3%
KBHM	14,035	14,545	3.6%
KAPF	13,897	14,538	4.6%
KOPF	14,312	14,483	1.2%

136,654 New York Area Departures

96,863 South Florida Area Departures

82,673 Los Angeles Area Departures

66,127 Dallas Area Departures

55,499 Chicago Area Departures

*Note- New York- KTEB, KMMU, KHPN, KLGA, KJFK, KEWR, KCDW, KFRG

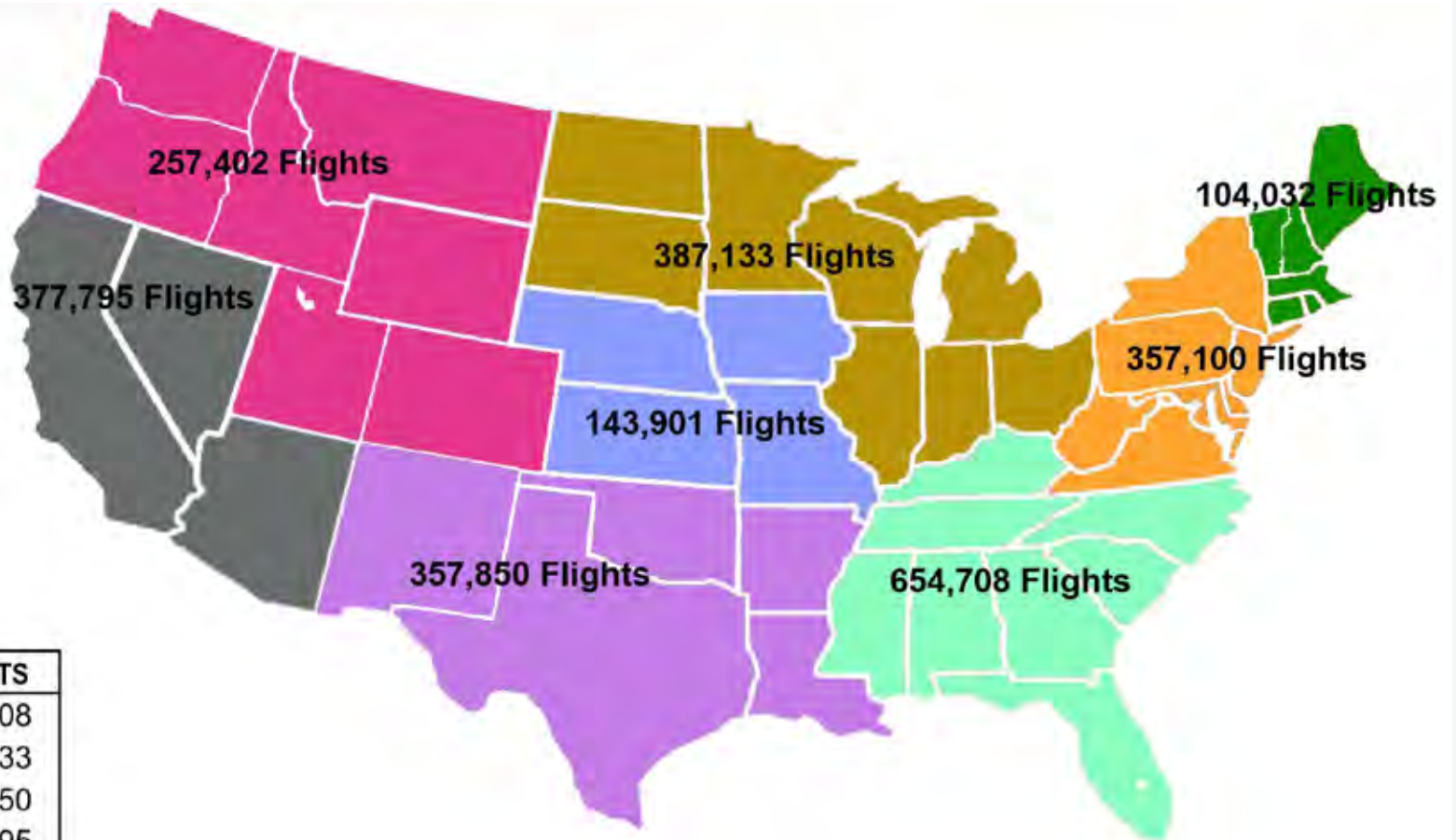
*Note- South Florida- KFLL, KFXE, KBCT, KMIA, KPBI, KPMP, KOPF, KHWO, KTMB

*Note- Los Angeles- KVNY, KLAX, KSNA, KLGB, KHHR, KSMO, KBUR, KFUL, KTOA

*Note- Dallas- KDAL, KDFW, KADS, KGKY, KFTW, KAFW, KRBD

*Note- Chicago- KPWK, KUGN, KDPA, KMDW, KORD, KGYG

DEPARTURES BY FAA REGION 1/1/2016 - 12/31/2016

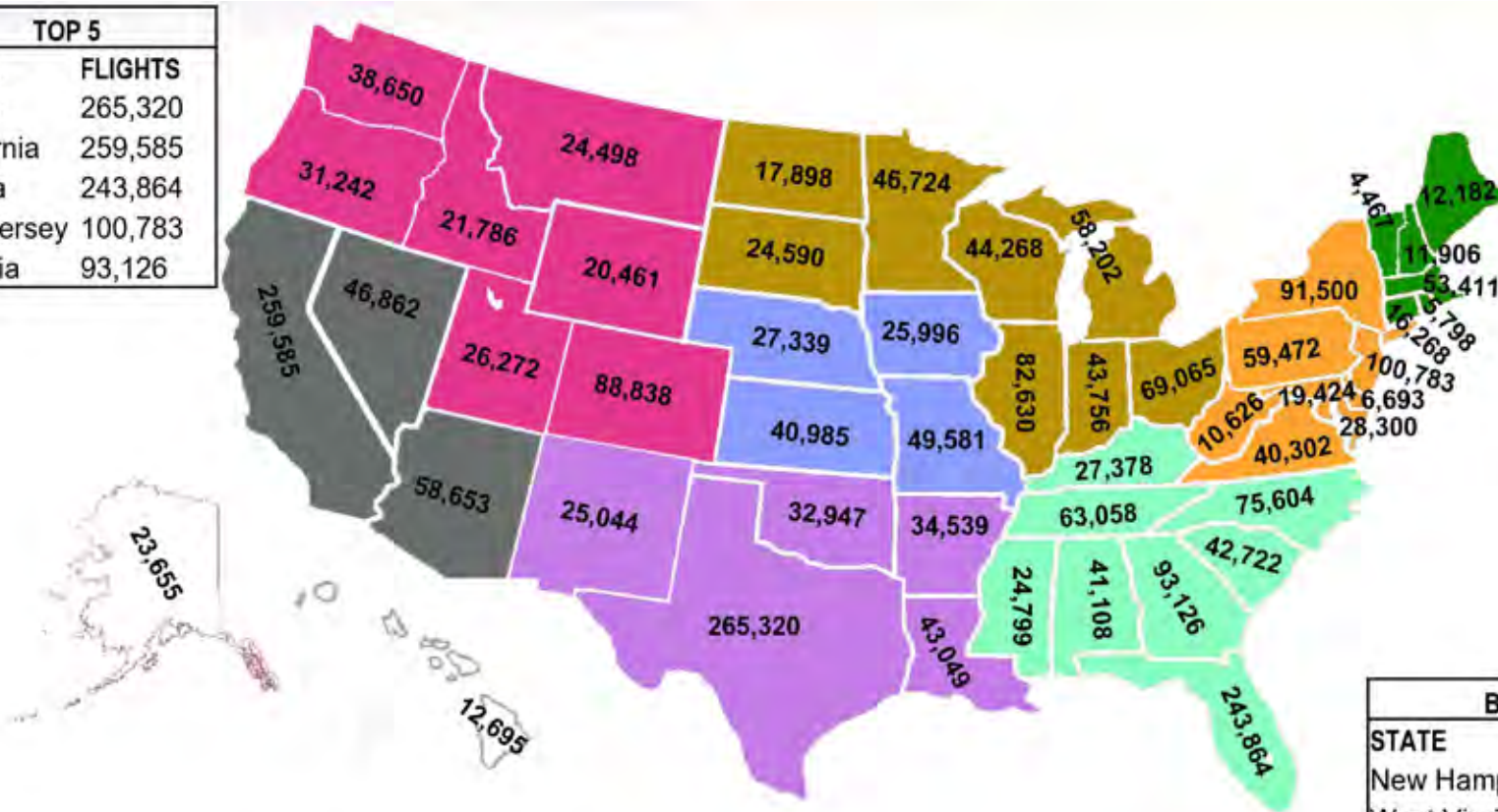


REGION	FLIGHTS
Southern	654,708
Great Lakes	387,133
Southwest	357,850
Western Pacific	377,795
Eastern	357,100
Northwest	257,402
Central	143,901
Northeast	104,032

The Western Pacific region recorded the largest year over year growth, **up 8.0%**. The Southwest region was the only region to post a decline from 2015, **down 0.4%**.

DEPARTURES BY STATE 1/1/2016 - 12/31/2016

TOP 5	
STATE	FLIGHTS
Texas	265,320
California	259,585
Florida	243,864
New Jersey	100,783
Georgia	93,126

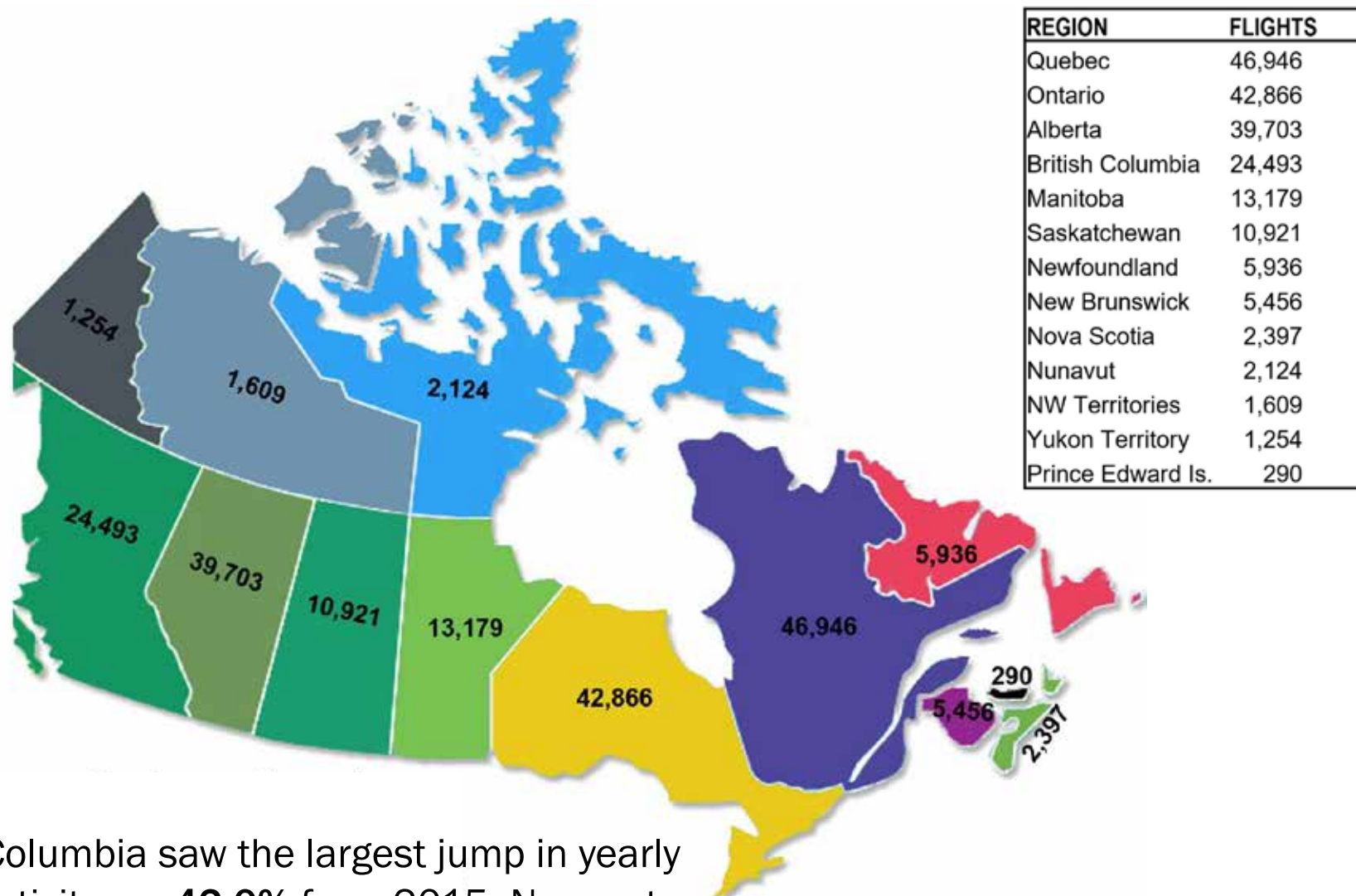


BOTTOM 5	
STATE	FLIGHTS
New Hampshire	11,906
West Virginia	10,626
Delaware	6,693
Rhode Island	5,798
Vermont	4,467

Utah recorded the largest year over year growth, up **14.3%**, while New Mexico, 1 of 10 states to report a year over year decline, posted the largest yearly decline, **down 8.4%**.

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DEPARTURES BY PROVINCES & TERRITORIES 1/1/2016 – 12/31/2016



British Columbia saw the largest jump in yearly flight activity, **up 42.0%** from 2015. Nunavut saw the largest yearly decline, **down 52.1%**.

2016 DAILY FLIGHT ACTIVITY ANALYSIS

TOP 10 DAYS	
DATE	FLIGHTS
3-Nov-16	11,099
20-Oct-16	10,656
13-Oct-16	10,539
22-Sep-16	10,434
5-May-16	10,412
30-Jun-16	10,403
12-Feb-16	10,373
27-Oct-16	10,350
15-Sep-16	10,335
17-Nov-16	10,265

9 of the Top 10 days were Thursdays. The only day that wasn't was February 12th (Friday before President's Day). Of the 24 calendar days with 10,000 or more flights, 18 of them were a Thursday.

BOTTOM 10 DAYS	
DATE	FLIGHTS
23-Apr-16	4,668
21-May-16	4,601
1-Jan-16	4,494
4-Jul-16	4,386
29-May-16	4,239
23-Jan-16	4,104
3-Jul-16	3,916
24-Dec-16	3,703
24-Nov-16	3,577
25-Dec-16	2,680

With the exception of April 23rd, May 21st & January 23rd every day on the bottom 10 was either a major holiday or part of the days leading up to a major holiday.

AVERAGE DAILY FLIGHTS-BY MONTH	
DATE	FLIGHTS
16-Jan	7,316
16-Feb	7,838
16-Mar	8,053
16-Apr	7,927
16-May	7,803
16-Jun	8,352
16-Jul	8,068
16-Aug	8,232
16-Sep	8,502
16-Oct	8,509
16-Nov	8,313
16-Dec	7,587

7 months saw an average of 8,000 or more flights per day. That is up from only 4 months in 2015.

AVERAGE FLIGHT ACTIVITY-BY DAY OF WEEK	
DAY	FLIGHTS
Mon	8,048
Tues	8,539
Wed	9,071
Thur	9,535
Fri	8,867
Sat	5,458
Sun	6,798

Thursday continues to be the busiest day of the week for Business Aviation. All 5 days of the week averaged at least 8,000 flights per day, and every day saw a year over year increase.

TOP AIRCRAFT TYPES BY FLIGHTS IN 2016

AIRCRAFT CATEGORY	TYPE	FLIGHTS
Single Engine TP	Pilatus PC-12	195,837
Multi Engine TP	King Air 200	175,895
Very Light Jet	Phenom 100	37,552
Light Jet	Citation V/Ultra/Encore/Encore+	107,827
Mid-Size Jet	Citation Excel/XLS/XLS+	163,824
Super Mid Jet	Challenger 300	90,054
Large Jet	Gulfstream G-IV/G400/G450/G300/G350	82,562
Super Long Range Jet	Gulfstream G-V/G500/G550	48,864

*Note- Chart lists the top aircraft type, in terms of flights, in each TRAQPak aircraft category.

*Note- King Air 200 represents all variants of the King Air 200

2016 FLIGHT ACTIVITY SUMMARY

- 2016 gave Business Aviation one of the best years we have seen. Growth continued in every major aircraft & operational category and we saw yearly **gains in 11 of the 12 months**.
- 2016 flight activity was **up 3.2%** and flight hours were **up 3.8%** when compared to 2015. That represents **3 straights years of growth in business aviation (2014 – 2016)**.
- The Fractional industry, which posted yearly declines during 10 of the 12 months in 2015, posted **yearly gains during 9 of the 12 months** in 2016.
- The Part 135 industry continued to lead Business Aviation's overall industry growth. The segment saw **yearly gains in 11 of the 12 months** in 2016, including a substantial **10.1% gain** in November.

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2016 INDUSTRY TRENDS

- 2016 turned out to be a year that followed the blueprint left over from 2015. We continued to see strong turboprop activity, continued growth in the large cabin segment and the Part 135 market still the leading operational category.
- The Fractional industry, which dealt with consolidation in 2015, turned around and saw positive flight activity in every segment with the exception of mid-size cabin aircraft which finished down 2.5%.
- In 2015 we saw a rapid drop in oil prices. The fall in oil led to some large drops in flight activity in the biggest oil producing states and that continued in 2016. New Mexico, which is a top oil producing state and the state that saw the largest increase in flight activity in 2015, saw the largest year over year decline in 2016. 10 states saw a year over year decline in activity (up from 6 in 2015). 5 of those states are in the top 8 for oil production: Alaska, Wyoming, North Dakota, New Mexico and Oklahoma. On the Canadian side, Alberta, which is home to one of the largest oil sand deposits in the world, saw a yearly flight activity drop of 21.2%.; which is on top of the 22.5% drop in activity in 2015.

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2016 INDUSTRY TRENDS CONTINUED

- 2016 produced year over year rises for each of the final 8 months, and 11 of 12 months in total. The top & bottom of the market produced the largest growth for the aircraft categories, but the middle market also had some bright spots..
- Part 91 flight activity finished 2016 up 2.0% from 2015 with 10 of the 12 months producing year over year increases; July & December were the only months to post a year over year decrease in activity.
- Part 135 flight activity grew at a feverish rate with 11 of the 12 months posting a year over year increase in 2016. The segment finished the year up 5.6% from 2015.
- The Fractional industry rebounded from a negative 2015 and saw yearly gains in 9 out of 12 months to post an increase of 1.5% in 2016. The only months that were negative in 2016 were January, April and December; December 2016 was only down 11 total flights from 2015 and January 2016 down 67 total flights.

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2016 INDUSTRY TRENDS CONTINUED

- 2016 produced solid flight activity gains at the top of the market, while the bottom (turboprops) and middle markets provided respectable gains as well.
- 2016 turboprop flight activity was up 3.5% from 2015 which was identical to the 3.5% year over year gain in 2015. Turboprops saw flight activity decline 1.9% in 2014 and 5.7% in 2013.
- All jet categories recorded gains in 2016 with large cabin aircraft leading the way, again, up a substantial 6.0%, small cabin activity grew 2.9% while mid-size cabin saw an increase of 1.5%.

2017 FLIGHT ACTIVITY FORECAST

- Following a robust 2016, TRAQPak analysts estimate that **the positive trend will continue through Q1 2017.**
- TRAQPak analysts estimate that flight activity in **January, February & March 2017 will rise 1.6% over the same period in 2016.**
- Analysts predict that total year over year **flight activity will rise in January & March** but it **will fall approximately 0.5% in February;** mainly due to the loss of a day from last year's leap day.
- Analysts predict Part 135 charter flight activity **will rise 6.7%** in Q1 2017. Fractional activity is predicted to **rise 0.5%** during the same period, while Part 91 flight activity is predicted to **decline 1.4%** during the period.

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Contact us today to find out how you can gain access to TRAQPak's business aviation data and industry market intelligence.

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