

GAMA Year-End 2005 Shipment Analysis

Incredible year ends with the healthiest delivery total since 1982. **by Mike Potts**

Wow! The record-breaking year we've been reporting on since the first quarter ended with an even more incredible record-breaking finish. All expectations were exceeded – even our most optimistic predictions were made to look conservative. Last summer we suggested that a \$14 billion dollar sales year might be possible. In the fall we revised our forecast, suggesting that \$15 billion might be within reach, and that with good luck the industry might reach 3,500 unit deliveries.

Well, the industry beat both of those totals. Total sales reached \$15.14 billion and deliveries came in at 3,580 units. That's a 27 percent increase in billings and nearly a 21 percent increase in unit deliveries over last year. In fact, it was the healthiest delivery total in 23 years – the best since 1982.

Yes, 2005 was just an incredible year. It capped an incredible recovery that has been developing steadily for more than three years. It was early in 2003 when the first signs of recovery began to stir in the piston market. Turboprops and jets were still in freefall. But the upturn since has developed steadily and consistently, with first the turboprops and then the jet market following the piston products into positive numbers.

Now, with a fourth quarter that exceeded even the most optimistic expectations, prosperity is clearly in full bloom. And as if to emphasize that point, two new companies – Adam Aircraft and Liberty Aerospace – made their shipment report debuts in the fourth quarter, each delivering a pair of new piston-powered airplanes into the market.

The General Aviation Manufacturers Association, which has taken a somewhat low-key approach to this recovery almost from the beginning, acknowledged the strong market in its year-end report: "The outstanding 2005 shipment and billing fig-

ures demonstrate that general aviation is one of the brightest and most promising sectors in manufacturing," said GAMA president and CEO Peter Bunce. "Our growth shows that general aviation continues to have a dramatic impact on the way the world does business."

GAMA's reticence in gloating over this recovery is perhaps understandable. The organization has been working hard to keep the momentum going, and was successful in preserving the accelerated depreciation provisions in the US tax code that no doubt gave a significant boost to this past year's strong finish.

This year GAMA is very concerned that the US government may convert the FAA's traditional tax-based funding to a system of user fees that could have a very negative impact on business aviation.

Perhaps the worst news about this user fee scheme is that it is originating with the Bush administration. A few years back former President Clinton was also advocating airway user fees, but many in business aviation had been hopeful that this idea would go away once the Republicans recaptured the White House. Instead the concept is back, and being pushed hard by the airlines, which are doing everything they can to shift cost away from themselves.

GAMA's leaders believe user fees represent a pivotal issue for business aviation, and don't want news of the recovery to become a distraction in what they see as a very difficult battle looming in the months ahead.

RECORD NUMBERS

In the meantime, however, we are experiencing the most dramatic recovery in business aviation in the past quarter century, and that's a story that needs to be told.

Every segment in the industry experienced strong growth in 2005. Piston deliver-

ies were up 20.2 percent over a year ago. Turboprops were up 13.7 percent. Jets were up a whopping 26.9 percent.

It was growth in the jet market that pushed billings to record highs – simply because high-end jets are so much more expensive than any of the individual market segments – rising by 27.2 percent over 2004's sales total. A year ago the idea of a \$15 billion year in 2005 seemed like an impossible dream. Today it is a reality.

The result was that billings grew by a greater percentage than any of the individual market segments – rising by 27.2 percent over 2004's sales total. A year ago the idea of a \$15 billion year in 2005 seemed like an impossible dream. Today it is a reality.

This recovery is developing faster and stronger than anyone had predicted. Both Rolls-Royce and Honeywell, which distribute the industry's most widely respected forecasts each year, were expecting the jet market to flirt with the 700-unit delivery mark by 2006, climb to the 750 range by 2008 and perhaps top 800 units by the end of the decade. Instead, we hit the 750 mark in 2005!

With jet backlogs developing strongly, and production rising cautiously to stay near to demand, we could get close to 800 units this year. Indeed, the jet total will be increased by the addition of two new jet builders this year too. Both Sino Swearingen and Eclipse Aviation have said deliveries will begin in 2006. ➤



JET MARKET: A LEVELING TIDE

In earlier reports on this recovery, we have noted that the rising tide of good fortune has not been lifting all of the boats evenly. In the jet market, for example, products at the very top and the very bottom of the scale had been lagging somewhat behind the jets in the middle segments of the market. Today that is no longer true. Both the airliner-class business jet segment and the entry-level jets showed marked improvement at the close of the year and finished 2005 ahead of their 2004 market totals.

The gain in the bizliner category had a lot to do with pushing the industry over the \$15 billion mark, with nine of the 13 units delivered coming in the second half of the year. Airbus put on a surprising performance, delivering three units in the fourth quarter and a total of nine aircraft for the year worth approximately \$450 million.

Boeing delivered four aircraft for the year, all in the second half. The total of 13 bizliners delivered in 2005 contrasts sharply with just three reported in 2004. That's an increase in the total market of more than 330 percent from 2004 to 2005. Now that's a recovery!

Elsewhere in the jet market the news was similarly positive, although there was some shifting of traditional roles in market leadership.

The leading jet maker by dollar volume in 2005 was Bombardier, with a sales total of nearly \$3.87 billion. It is the first year that Bombardier has achieved this distinction, surpassing Gulfstream, which has held a lock on the leadership position in jet dollar volume sales for the past 20 years or more.

Bombardier finished the year with 188 jet deliveries, up from 129 in 2004. That's a gain of more than 31 percent. Bombardier's billings were also up by 31 percent, indicating that its growth was pretty evenly distributed throughout its product line. The best selling model in Bombardier's line was the Challenger 300, with 50 units recorded.

Finishing narrowly behind Bombardier in the money race in 2005 was Gulfstream, with \$3.43 billion in sales. With 89 aircraft delivered last year, Gulfstream's production was up 11 units from its 2004 total of 78.

Cessna maintained its classical position as the leading manufacturer of business jets by unit volume with 247 deliveries. As with Bombardier, Cessna's leading product was a mid-size jet, the Citation XLS, with 64 units delivered in 2005. The even larger Sovereign model was in third place with 46 units, only narrowly edged by the entry-level CJ3, which recorded 48 deliveries.

These numbers clearly show the strength of the mid-size jet market, which has led the jet recovery for much of this year and played a big role in the record billing performance of the total market.

Cessna's entry-level models, the CJ1(+),



THE CHALLENGER 300 HELPED BOMBARDIER INTO POLL POSITION FOR DOLLAR VOLUME IN 2005

CJ2 and CJ3 collectively recorded a total of 89 deliveries in 2005. This represents a significant improvement over a year ago when Cessna's entries in this segment sold 53 units, which was well below the 78 units the CJ1 & CJ2 had enjoyed in 2003.

The other major entry in the entry-level segment, Raytheon's Premier I, recorded a strong fourth quarter performance, with 19 deliveries in the last three months of the year to finish with a total of 30 units. The Premier I numbers were affected by the introduction of a new model, the Premier IA, which was held up in the certification process longer than expected.

With the 30 Premier I units and Cessna's collective 89 for its CJ models for the year, the entry-level market is now responding to the recovery forces in the market, much as the other segments in the middle of the jet market did earlier in 2005.

Raytheon's other jet models, the Hawker 400XP (nee Beechjet) and the Hawker 800XP, outsold the Premier I rather substantially. Like Cessna and Bombardier, Raytheon's sales leader was the mid-size 800XP with 58 units delivered for the year. The 400XP followed closely with 53 units. Clearly, then, the strength of the jet market still lies in the mid-range products.

Elsewhere in the jet market, Dassault enjoyed good gains in the fourth quarter, delivering 21 units to bring its year-end total to 51 aircraft. The best selling Dassault product was the Falcon 2000EX EASy, which is pretty much in the middle of the company's range, although the entire Dassault line is pretty much biased towards the higher end of the jet market.

Dassault has been production limited

throughout much of the past year, although it is reporting the best sales year in its recent history and should be poised for another record performance during 2006 when production gears up. This could help push the overall 2006 jet delivery total above the 2005 level. Maybe we'll see 800 jets this year.

Embraer's Legacy Executive model, based on its successful regional airliner series, enjoyed progressively increasing sales throughout the year, going from two units in the first to four in the second; six in the third quarter, and eight in the fourth. This brought Legacy Executive deliveries to 20, up from 13 in 2004.

As a matter of fact, only one jet maker failed to record improved sales in the fourth quarter. Hapless AvCraft Aviation delivered one unit in the first quarter of 2005, but nothing since. AvCraft will probably disappear from the ranks of GAMA's jet makers during 2006.

THE TURBOS: UNIT GAINS FOR MAJOR PLAYERS

In the turboprop market, strong gains in the fourth quarter by a number of the major players in this segment helped lift the overall category to a 13.7 percent gain in unit volume for the year, up from 321 units in 2004 to 365 in 2005.

Raytheon maintained its long-standing role as the turboprop market leader, with its King Air line recording 114 deliveries for the year. That represents a gain of nearly 12 percent over a year ago, when it delivered 102 King Air models.

Cessna was the runner-up in turboprop deliveries. Its Caravan I and IB models collectively added up to 86 deliveries for the

year. Interestingly, Caravan deliveries were distributed fairly evenly throughout the year, unlike most airplane models, which tend to spike in the fourth quarter. The best quarter for Caravan deliveries in 2005 was the second quarter with 23 units, followed by the first and fourth quarters with 22 each.

Pilatus rode a strong fourth quarter to third place in the turbo market with 80 deliveries throughout the year. The delivery pattern at Pilatus was quite the opposite from Cessna's experience. Fully 32 of the 80 Pilatus airplanes – 40 percent - were delivered in the final three months of the year.

Next in the turboprop rankings was Piper, which delivered 40 of its single engine Meridian airplanes, followed by Socata, with 31 TBM 700s. Piaggio had a strong fourth quarter, delivering eight P180 Avantis and one of its new P180 Avanti II models. This brought total Avanti sales for the year to 14 units. Avanti, which recorded 16 sales in 2004, was one of the few companies whose 2005 sales total was lower than the year before.

PISTON POWER: CONTINUED STRONG RESULTS

The piston market continued to perform well during 2005, and was more than 20 percent ahead of 2004, with 2,465 piston deliveries.

Moreover, the piston market closed out 2005 with two more aircraft-producing companies than it started with. Adam Aircraft delivered its first two A500 centerline thrust twins, and Liberty Aerospace delivered two of its XL2 piston-powered trainers. Both of these milestones came in the fourth quarter.

Cessna was the runaway market leader with 822 piston-powered airplanes – all single-engine models. Indeed, the largest selling Cessna was the venerable 172/172S, but this was not the largest selling single-engine airplane.

That honor went to the Cirrus' SR22, which recorded 475 unit deliveries in 2005. A couple of years ago Cirrus was threatening to supplant Cessna as the largest maker of piston singles. Recently, however, Cessna has geared up its production capacity substantially to keep a strong hold on its leadership position.

Cirrus, by contrast, is currently running very close to its production limit, turning out 600 units for the year in 2005. This is up about eight percent from the 553 units it delivered in 2004. Cirrus expects to increase its production somewhat during 2006, but isn't expected to threaten Cessna with its 800-plus build capacity.

Cirrus recently delivered its 2,000th airplane, and is quite proud of its position as the builder of the world's best selling model. The company also reported that its sales exceeded its production capacity last year by



ADAM'S A500 WAS NEW TO THE RANKS DURING THE FOURTH QUARTER 2005

about 100 units, so look for Cirrus delivery numbers to grow again this year.

Elsewhere in the piston-engine market, prosperity continues to abound. Diamond Aircraft continued to maintain its strong third-place position in piston singles, with 261 deliveries – an exact match for the number it delivered in 2004.

Diamond's growth, however, came in the twin-engine market, where its unique TwinStar diesel scored 68 deliveries – bringing Diamond's total to 329 units for the year. The company's sales revenue was also up 46 percent for the year to almost \$88 million. As if that's not enough, Diamond is also to be found among the companies developing personal business jets.

The New Piper Aircraft, having apparently recovered from the hurricane woes it suffered in 2004, delivered 193 piston-powered aircraft during 2005, up from 163 the year before. Forty-one of Piper's piston-powered airplanes were twin-engine models.

Columbia Aircraft, formerly Lancair, delivered a good performance in 2005 with the sale of 114 of its Columbia 350 and 400 models, up from 78 a year ago.

Raytheon Aircraft delivered 99 piston-powered airplanes for the year, with a remarkable 53 of them coming in the fourth quarter. This was a result of the company introducing new models of both its Bonanza and Baron series, the G36 and G58 respectively. Certification of both models came somewhat later than expected, according to Raytheon Aircraft officials, and pushed the large number of deliveries into the fourth quarter.

A similar situation also occurred with new models of Raytheon's Premier I/IA and the King Air C90B, with the result that 46 percent of Raytheon's total aircraft deliveries - 163 out of 354 units - came in the fourth quarter.

It is typical in this industry for as much as one-third of a company's production to be

delivered in the fourth quarter, largely due to tax-inspired buying decisions, but for 46 percent of a company's deliveries to come in the fourth quarter is very unusual.

Mooney Aircraft finished 2005 with 85 deliveries, up sharply from the 37 total units it delivered in 2004. Under new management, Mooney expanded production significantly last year and is riding the recovery to market success few would have thought possible two or three years ago.

Aviat Aircraft, makers of the Husky and the Pitts S-2C, recorded 47 deliveries last year, up from 42 the year before, and Gippsland Aeronautics saw sales of its GA8 Airvan increase by 10 percent over its 2004 total, from 20 units to 22.

Socata, despite ostensibly being out of production for its piston models and apparently simply selling from inventory, delivered nine piston-powered airplanes in 2005, up from five in 2004. That's an 80-percent improvement over a year ago. Given the growing strength of the market, maybe Socata should reconsider.

One company that did reconsider and appears to be in a recovery mode is Symphony. After four straight quarters with no sales, Symphony resumed activity in the second quarter of 2005 and finished the year with 10 deliveries. That's a huge improvement over the lone airplane it last delivered in the first quarter of 2004.

A few of the players in the piston market saw good sales, but, for whatever reasons, did not match their 2004 totals. American Champion was in this category, with 89 airplanes delivered compared with 94 the year before. So was Tiger Aircraft, which had 15 deliveries in 2005 and 19 in 2004. Clearly there are always aberrations, even in the best of markets.

Overall, then, 2005 was a really outstanding year! Just think of it: \$15 billion and 3,500 airplanes... The good times are back. Enjoy them while they're happening. ■

2005 Year-End GAMA Shipment Report

MAKE & MODEL	Q1	Q2	Q3	Q4	YTD
GRAND TOTAL CIVIL SHIPMENTS	630	918	875	1110	3,580
GRAND TOTAL AIRPLANE BILLINGS	\$2,856,900,998	\$3,645,591,876	\$3,802,646,168	\$4,828,516,662	\$15,140,106,678
ADAM AIRCRAFT					
A500	0	0	0	2	2
TOTAL UNITS	0	0	0	2	2
TOTAL BILLINGS	\$0	\$0	\$0	\$2,341,507	\$2,341,507
AIRBUS ⁵					
ACJ (A319, A320, A321 VERSIONS)	2	2	2	3	9
TOTAL UNITS	2	2	2	3	9
TOTAL BILLINGS	\$100,000,000	\$100,000,000	\$100,000,000	\$150,000,000	\$450,000,000
AMERICAN CHAMPION					
ADVENTURER 7GCAA	3	1	6	2	12
AURORA 7ECA	1	1	1	0	3
SUPER DECATHALON 8KCAB	10	12	9	8	39
CITABRIA EXPLORER 7GCBC	2	9	8	7	26
SCOUT 8GCBC	3	4	1	1	9
TOTAL UNITS	19	27	25	18	89
TOTAL BILLINGS	\$2,291,100	\$3,204,300	\$2,837,500	\$2,108,200	\$10,441,100
AVCRAFT AVIATION					
DORNIER 328 JET (ENVOY3)	1	0	0	0	1
TOTAL UNITS	1	0	0	0	1
TOTAL BILLINGS	\$12,500,000	\$0	\$0	\$0	\$12,500,000
AVIAT AIRCRAFT					
HUSKY A-1B	8	12	8	13	41
HUSKY PUP	0	0	0	1	1
PITTS S-2C	2	0	2	1	5
TOTAL UNITS	10	12	10	15	47
TOTAL BILLINGS	\$1,061,920	\$1,434,336	\$1,242,097	\$2,712,621	\$6,450,974
BOEING BUSINESS JETS					
BBJ	0	0	3	0	3
BBJ 2	0	0	0	1	1
TOTAL UNITS	0	0	3	1	4
TOTAL BILLINGS	\$0	\$0	\$133,500,000	\$53,000,000	\$186,500,000
BOMBARDIER ¹					
LEARJET 40	3	4	7	7	21
LEARJET 45/XR	4	8	9	7	28
LEARJET 60	4	4	5	5	18
CHALLENGER 300	14	11	11	14	50
CHALLENGER 604	8	10	9	9	36
GLOBAL 5000	6	4	3	4	17
GLOBAL EXPRESS/XRS	2	2	4	5	13
CL850/870/890	2	2	0	1	5
TOTAL UNITS	43	45	48	52	188
TOTAL BILLINGS	\$939,563,000	\$916,107,000	\$935,037,000	\$1,078,728,000	\$3,869,435,000

MAKE & MODEL	Q1	Q2	Q3	Q4	YTD
CESSNA AIRCRAFT					
172 SKYHAWK	5	9	8	15	37
172S SKYHAWK	32	58	72	152	314
182 SKYLANE	32	67	63	79	241
182T SKYLANE	17	31	30	40	118
206 STATIONAIR	3	11	6	9	29
206T STATIONAIR	13	23	19	28	83
208 CARAVAN I	5	4	0	2	11
208B CARAVAN IB	17	19	19	20	75
525 CJ1	6	6	2	0	14
525 CJ1+	0	0	0	4	4
525A CJ2	5	6	7	5	23
525B CJ3	7	10	12	19	48
550 CITATION BRAVO	5	7	5	4	21
560 CITATION ENCORE	3	4	3	3	13
560XLS CITATION XLS	15	17	16	16	64
680 SOVEREIGN	11	11	12	12	46
750 CITATION X	1	4	5	4	14
TOTAL UNITS	177	287	279	412	1,155
TOTAL BILLINGS	\$530,137,182	\$676,975,344	\$679,351,872	\$735,048,742	\$2,621,513,140
COLUMBIA AIRCRAFT					
COLUMBIA 350	4	12	8	1	25
COLUMBIA 400	21	23	32	13	89
TOTAL UNITS	25	35	40	14	114
TOTAL BILLINGS	\$12,200,000	\$16,900,000	\$19,920,000	\$7,600,000	\$56,620,000
CIRRUS DESIGN					
CIRRUS SRV	0	7	2	0	9
CIRRUS SR20	26	25	37	28	116
CIRRUS SR22	117	120	113	125	475
TOTAL UNITS	143	152	152	153	600
TOTAL BILLINGS	\$56,322,559	\$59,608,145	\$59,181,090	\$60,972,265	\$236,084,059
DASSAULT					
FALCON 50EX	1	2	0	2	5
FALCON 900C	1	0	0	0	1
FALCON 900DX	0	0	0	2	2
FALCON 900EX EASy	1	5	3	7	16
FALCON 2000	0	1	3	2	6
FALCON 2000EX EASy	2	6	5	8	21
TOTAL UNITS	5	14	11	21	51
TOTAL BILLINGS	\$136,130,000	\$386,660,000	\$297,650,000	\$592,710,000	\$1,413,150,000
DIAMOND AIRCRAFT ¹					
DA20-C1	12	15	13	14	54
DA40	50	61	50	46	207
DA42 TWIN STAR	2	20	18	28	68
TOTAL UNITS	64	96	81	88	329
TOTAL BILLINGS	\$14,584,340	\$25,783,400	\$21,959,060	\$25,660,760	\$87,987,560
EMBRAER ¹					
LEGACY EXECUTIVE	2	4	6	8	20
TOTAL UNITS	2	4	6	8	20
TOTAL BILLINGS	\$44,900,000	\$89,800,000	\$134,700,000	\$179,600,000	\$449,400,000

MAKE & MODEL	Q1	Q2	Q3	Q4	YTD
GIPPSLAND AERONAUTICS¹					
GA8 AIRVAN	5	5	7	5	22
TOTAL UNITS	5	5	7	5	22
TOTAL BILLINGS	N/A	N/A	N/A	N/A	N/A
GULFSTREAM					
GULFSTREAM 100/150/200	6	6	7	7	26
GULFSTREAM 350/450/500/550	14	15	17	17	63
TOTAL UNITS	20	21	24	24	89
TOTAL BILLINGS	\$753,000,000	\$828,000,000	\$906,000,000	\$946,000,000	\$3,433,000,000
LIBERTY AEROSPACE					
XL2	0	0	0	2	2
TOTAL UNITS	0	0	0	2	2
TOTAL BILLINGS	\$0	\$0	\$0	\$300,000	\$300,000
MAULE AIR					
M-4-180A	0	0	1	0	1
MXT-7-180	1	0	0	1	2
MXT-7-180A	1	0	1	0	2
MX-7-180C	1	0	2	0	3
M-7-235B	0	3	3	1	7
M-7-235C	1	1	1	1	4
MT-7-235	1	1	0	0	2
M-7-260	1	0	1	0	2
MT-7-260	0	0	1	1	2
M-7-260C	0	2	0	0	2
TOTAL UNITS	6	7	10	4	27
TOTAL BILLINGS	\$707,076	\$877,487	\$1,126,681	\$486,400	\$3,197,644
MOONEY AIRCRAFT					
M20 BRAVO GX	3	8	4	5	20
M20 OVATION2 DX	1	0	0	0	1
M20 OVATION2 GX	16	15	19	14	64
TOTAL UNITS	20	23	23	19	85
TOTAL BILLINGS	\$8,100,000	\$10,054,000	\$9,350,000	\$8,991,000	\$36,495,000
PIAGGIO					
P.180 AVANTI	1	2	2	8	13
P.180 AVANTI II	0	0	0	1	1
TOTAL UNITS	1	2	2	9	14
TOTAL BILLINGS	\$6,195,000	\$12,390,000	\$12,390,000	\$55,755,000	\$86,730,000
PILATUS					
PC-12	9	20	19	32	80
TOTAL UNITS	9	20	19	32	80
TOTAL BILLINGS	\$28,575,000	\$63,500,000	\$60,325,000	\$101,600,000	\$254,000,000
RAYTHEON AIRCRAFT					
BEECH BONANZA A36/G36	9	19	4	39	71
BEECH BARON 58/G58	4	6	4	14	28
BEECH KING AIR C90B	5	7	4	19	35
BEECH KING AIR B200	4	11	10	12	37
BEECH KING AIR 350	5	9	13	15	42
PREMIER I/IA	3	6	2	19	30
HAWKER 400XP	4	16	14	19	53
HAWKER 800XP	6	13	13	26	58
TOTAL UNITS	40	87	64	163	354
TOTAL BILLINGS	\$177,948,000	\$401,414,000	\$365,388,000	\$749,232,000	\$1,693,982,000

MAKE & MODEL	Q1	Q2	Q3	Q4	YTD
SOCATA					
TB 9 TAMPICO GT	0	1	0	0	1
TB 10 TOBAGO GT	3	0	1	0	4
TB 200 TOBAGO GT	0	0	0	0	0
TB 20 TRINIDAD GT	0	1	0	0	1
TB 21 TRINIDAD GT	0	2	0	1	3
TBM 700	4	6	9	12	31
TOTAL UNITS	7	10	10	13	40
TOTAL BILLINGS	\$11,658,780	\$17,788,720	\$24,701,680	\$33,009,440	\$87,158,620
SYMPHONY AIRCRAFT					
SA 160	0	4	3	3	10
TOTAL UNITS	0	4	3	3	10
TOTAL BILLINGS	\$0	\$600,000	\$450,000	\$450,000	\$1,500,000
THE NEW PIPER AIRCRAFT					
PA-28-161 WARRIOR III	9	14	10	4	37
PA-28-181 ARCHER III	2	7	3	4	16
PA-28R-201 ARROW	2	2	2	3	9
PA-32R-301 SARATOGA II HP	1	2	3	2	8
PA-32R-301T SARATOGA II TC	3	10	13	11	37
PA-32-301FT PIPER 6X	3	5	5	5	18
PA-32-301XTC PIPER 6XT	1	4	5	6	16
PA-34-220T SENECA V	1	2	4	5	12
PA-44-180 SEMINOLE	5	15	4	5	29
PA-46-350P MALIBU MIRAGE	3	6	2	0	11
PA-46-500TP MERIDIAN	7	6	11	16	40
TOTAL UNITS	37	73	62	61	233
TOTAL BILLINGS	\$21,064,361	\$34,922,880	\$37,726,885	\$44,094,248	\$137,808,374
TIGER AIRCRAFT					
TIGER AG-5B	4	4	4	3	15
TOTAL UNITS	4	4	4	3	15
TOTAL BILLINGS	\$1,024,600	\$1,006,600	\$1,051,400	\$829,100	\$3,911,700
GRAND TOTAL CIVIL SHIPMENTS	630	918	875	1,110	3,580
GRAND TOTAL AIRPLANE BILLINGS	\$2,856,900,998	\$3,645,591,876	\$3,802,646,168	\$4,828,516,662	\$15,140,106,678

Airplane shipments Worldwide²

	Q1	Q2	Q3	Q4	YTD
SINGLE-ENGINE PISTON	422	605	573	679	2,326
MULTI-ENGINE PISTON	12	43	30	54	139
TOTAL PISTON	434	648	603	733	2,465
TURBOPROPS	57	84	87	137	365
BUSINESS JETS	139	186	185	240	750
TOTAL TURBINE	196	270	272	377	1,115
GRAND TOTAL	630	918	875	1,110	3,580

Airplane shipments US Only³

	Q1	Q2	Q3	Q4	YTD
SINGLE-ENGINE PISTON	352	516	499	610	2,024
MULTI-ENGINE PISTON	10	23	12	26	71
TOTAL PISTON	362	539	511	636	2,095
TURBOPROPS	43	56	57	84	240
BUSINESS JETS	91	131	132	168	522
TOTAL TURBINE	134	187	189	252	762
GRAND TOTAL	496	726	700	888	2,857

NOTES:

1. Company billings are not reported. Where available, GAMA estimates total billings using public information including B/CA 2005: 2. A shipment occurs when a general aviation airplane is shipped from its production facility to a customer located anywhere in the world: 3. An airplane is considered to be manufactured in the U.S. when produced under a FAA production certificate: 4. Company shipments may include deliveries to a fractional operator owned by the manufacturer: 5. Airbus deliveries include several versions of the A319, A320, A321 and ACJ product line in executive/corporate configuration.