

# V-, U- Or L-Shape Recovery?

Flying through turbulent economic times.

by Michael Chase & Marj DeLong

**I**t is a fact that the world is currently in a Global Recession. The big unknown is what will be the shape of the recovery. Will it be V-shaped, U-shaped, or L-shaped?

Whatever the shape of the recovery, the sharp reality is that in March 2008 pre-owned Full Sales aircraft transactions started to decline compared to the previous year, and that trend has continued along with a huge build-up of business jet aircraft inventory for sale. This combination of industry indicators has always meant a downturn for our market.

New aircraft orders are based on the successful sale of existing aircraft in the pre-owned market. **Chart A** (top right) shows NEW business jet deliveries historically from 1964 through 2008 along with United States recessionary periods. As indicated, 2008 was a record year containing 1,315 new aircraft deliveries that included 264 aircraft from the new VLJ market segment.

**Note:** Of the 264 VLJ aircraft deliveries in 2008, sixty percent (60%) came from Eclipse Aviation, which has filed for bankruptcy and stopped production of the Eclipse 500 aircraft.

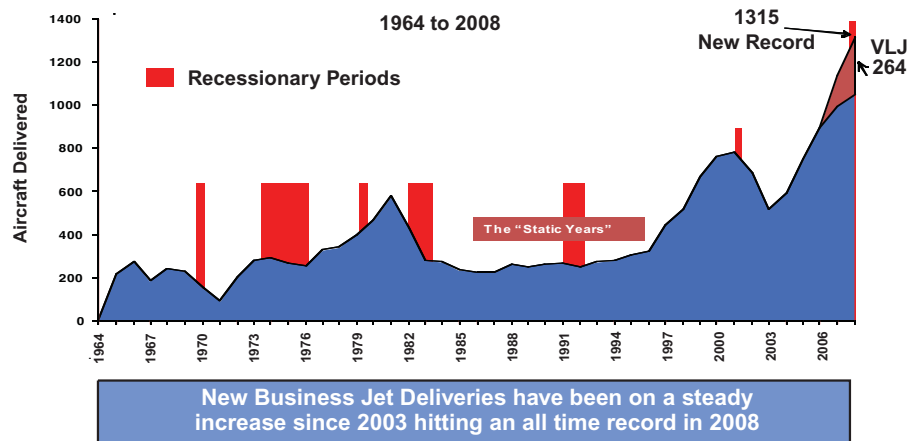
Typically the NEW business jet deliveries lag behind in a recession mostly as a result of the backlog in orders. Historical deliveries have taken an L-Shaped recovery as noted in the years from 1983 to 1995 (the "Static Years") as shown in the chart.

However, we have seen similar cycles in 2001 and 2003 that were relatively short lived (V-Shaped) and business aviation bounced back even stronger than before, so we hope that this decline proves short lived too!

## EXPANSIONS AND CONTRACTIONS

Historically the U.S. economy has seen 32 business cycles since 1854. The United States economy has come off the 5th longest expansion cycle in history at 73 months from 2001 to 2007. Just prior to this

CHART A - NEW BUSINESS JET DELIVERIES



Source: Bus Av Wk; GAMA; Analysis and presentation by Chase & Associates

TABLE A

U.S. Economy Cycle History From 1854 (32 Cycles)		
Rank	Longest Expansions	Months
1	1991-2001	120
2	1961-1969	106
3	1982-1990	92
4	1938-1945	80
5	2001-2007	73

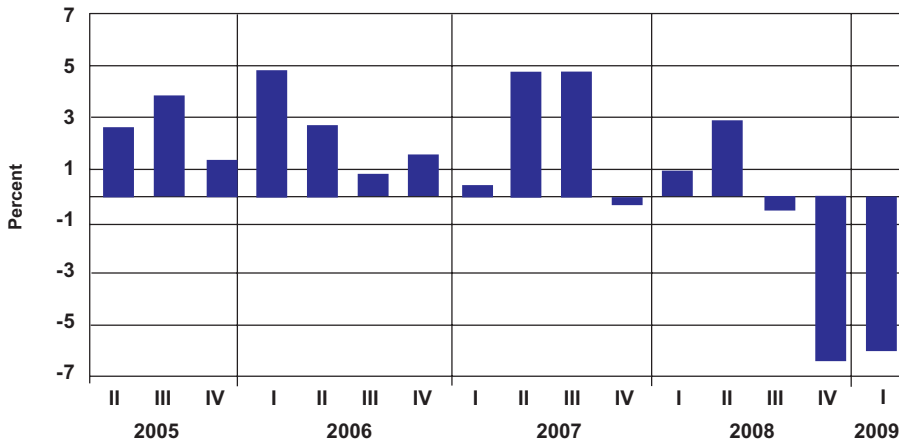
Source: AVITAS - A. Pilarski

TABLE B

Average Months		
Years	Expansions	Contractions
1854 - 2001	38	17
1954 - 2001	57	10

Source: AVITAS - A. Pilarski

CHART B - US GROSS DOMESTIC PRODUCT (GDP) GRAPH (QUARTER-TO-QUARTER GROWTH IN REAL GDP)



Real GDP growth is measured at seasonally adjusted annual rates.

U.S. Bureau of Economic Analysis

TABLE C

YEAR	ALL JETS, FIRST QTR			JAN - MAR TOTAL SALES	NO. OF TRANSACTIONS				JAN - APR TOTAL SALES
	# FOR SALE	# IN OPS	% FOR SALE		JAN	FEB	MAR	APR	
2009	2,857	16,480	17.3%	337	123	127	127	103	408
2008	1,674	15,378	10.9%	553	186	196	171	152	705
TOTAL	70.7%	7.2%	6.45 pts	-39.1%	-33.9%	-35.2%	-25.7%	-32.2%	-31.9%

Source: JETNET STAR REPORTS

expansion was the single longest expansion cycle in history of 120 months from 1991 to 2001, as shown in Table A (previous page).

Economic contractions have averaged 17 months, and only 10 months since 1945 (as shown in Table B, left). Another big unknown that we are currently facing is how long this recession will last?

**GROSS DOMESTIC PRODUCT (GDP)**

Recession is identified as a period when a country's GDP falls (negative real economic growth) for at least two consecutive quarters. As shown in the Chart B (left) compiled quarterly from the United States Bureau of Economic Analysis (BEA), the fourth quarter of 2008 and the first quarter of 2009 have shown two consecutive quarters of decline in the US. A severe (GDP down by 10%) or prolonged recession (three or four years) is referred to as an economic depression.

**CRUDE OIL PRICES**

Crude oil prices from May 2008-09 have witnessed a sharp downturn as the prices have plunged from the July 11 record high of \$147.27 per barrel. At the beginning of May 2009 Crude oil prices were at \$52.61 per barrel.

In April 2009 Jet-A fuel prices as reported by a Conklin and de Decker's survey of 30 major U.S. general aviation airports was at \$4.64 per gallon compared to \$6.46 per gallon in April 2008 - that represents a decrease of 28%.

**PRE-OWNED BUSINESS JETS**

The first quarter 2009 results for Pre-Owned business jet aircraft for sale have increased considerably, and the full sale transactions are down by -39.1% compared to the same period in 2008 (Table C, left).

Table C also shows the number of Pre-Owned business aircraft "For Sale" increased by 70.7% or to 2,857 aircraft in 1Q 2009 compared to 2008 as reported by JETNET STAR REPORTS. The total percentage of aircraft for sale is at 17.3% compared to 10.9% last year during the same period.

Finally, Table C also details the monthly sales comparisons through April. Perhaps there is a bit of good news to be obtained from expanding the comparison to a four month analysis.

We have noticed a modest improvement in the percentage decline from January to April 2008 and 2009 (-31.9%) compared to that shown just by comparing the first three months of 2009 with 2008 (-39.1%) - a 7.2 percent improvement.

**AVERAGE AGE OF PRE-OWNED JETS FOR SALE**

Table D (top right) shows the average age of the pre-owned business jets broken into five-year categories. All of the five-year groupings

show more than 10% of their respective fleets are for sale and the youngest group (0- 5 years) unsurprisingly has the lowest percentage for sale (10.7%). Each age grouping progressively has a greater percentage for sale until you reach the 30-plus age group. The groupings 21 plus years of age are averaging nearly one out of every four aircraft, or 24.2% of the fleet for sale.

**SUMMARY**

Our conclusion is that starting in March 2008, pre-owned Full Sales transactions began to decline compared to the previous year month over month. This trend has continued now for thirteen months. Clearly we are in a 'Buyer's Market' with all aircraft types having greater than 10% available for sale (see **Table E**, right).

We anticipate a downturn in new aircraft deliveries this year (GAMA's 1Q 2009 Shipment Report certainly supports that expectation), coupled with a substantial reduction in the manufacturer backlogs. The OEMs have already taken steps to counter this, including making an aggregate 17,750 layoffs, and announcing a -25% decline in production plans for 2009, from a planned production of 1,323 aircraft to a revised plan of 994 aircraft.

**Chart C** (right) shows an estimated backlog history since 2000. It was a two year period of decline from a book-to-build ratio of 3.44 years in 2001 to 2.33 years before the steady increase set in and continued through 2007. We have estimated the book to build ratio in 2007 was 4.32 years, however, we are uncertain as to the backlog currently.

**ADVICE TO WEATHER THE STORM**

*"The stock market is down, banks are failing, and people are running scared. The prudent business owner should be cutting costs and scaling back operations, right? Wrong! There are always opportunities for success in a down-market, we just have to keep selling – only harder.*

*"Studies have shown that a buyer will view, review, and reconsider a purchase an average of seven times before making a decision. In contrast, most sales people quit after attempting to close the sale one time, and a few will try as many as three closes before giving up. That's not good enough in the best of times, much less in a bad economy. Sell harder. Ask for the business more often. Be more persuasive and see more prospects."*

- Source: Action Coach

Business Aviation is and will continue to be an integral part of the Global Market. We will keep you aware of any changes in the pre-owned market and the recovery cycle in future articles. ■

**TABLE D**

AVERAGE AGE * (YEARS)	FROM / TO	ACTIVE FLEET	FOR SALE	% FOR SALE
0-5	2009 to 2005	4,112	440	10.7%
6-10	2004 to 2000	3,412	462	13.5%
11-15	1999 to 1995	2,173	375	17.3%
16-20	1994 to 1990	1,265	249	19.7%
21-25	1989 to 1985	1,161	270	23.3%
26-30	1984 to 1980	1,973	520	26.4%
30+	1979 Back	2,451	564	23.0%
Total		16,547	2,880	17.4%

\* AT APRIL 30, 2009

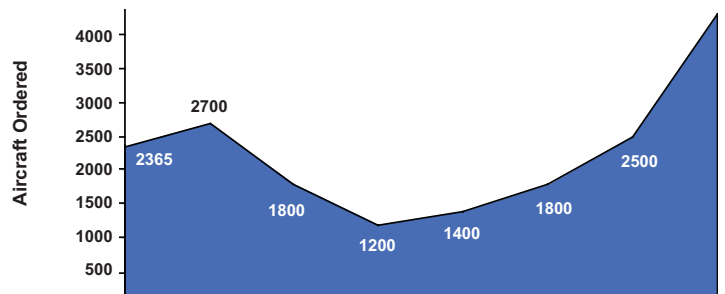
Source: JETNET STAR REPORTS

**TABLE E**

TYPE	NUMBER	FOR SALE	% FOR SALE
Business Jets	16,563	2,878	17.4%
Turboprops	12,276	1,454	11.8%
VIP Airliners	374	57	15.2%

Source: JETNET

**CHART C**



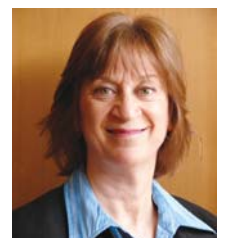
YEAR	2000	2001	2002	2003	2004	2005	2006	2007
NEW Deliveries w/o VLJ	758	784	689	517	512	746	896	995
BACKLOG (No VLJ)	2365	2700	1800	1200	1400	1800	2500	4300
Ratio (Yrs.)	3.12	3.44	2.61	2.32	2.73	2.41	2.79	4.32
% of Backlog Fractional	n/a	n/a	50%~	n/a	40%~	n/a	n/a	20%
Pre-owned Sales Trans.	2324	1941	2157	2159	2238	2412	2399	2537

➤ For more information:

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