# Supersonic Aircraft Workshop



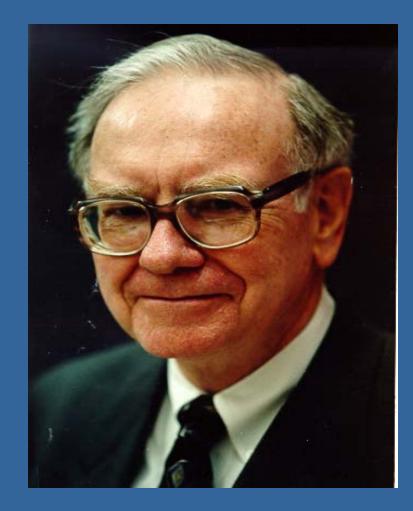


Richard G. Smith, III Thursday, November 13, 2003

#### (Brief) History of Executive Jet / NETJETS

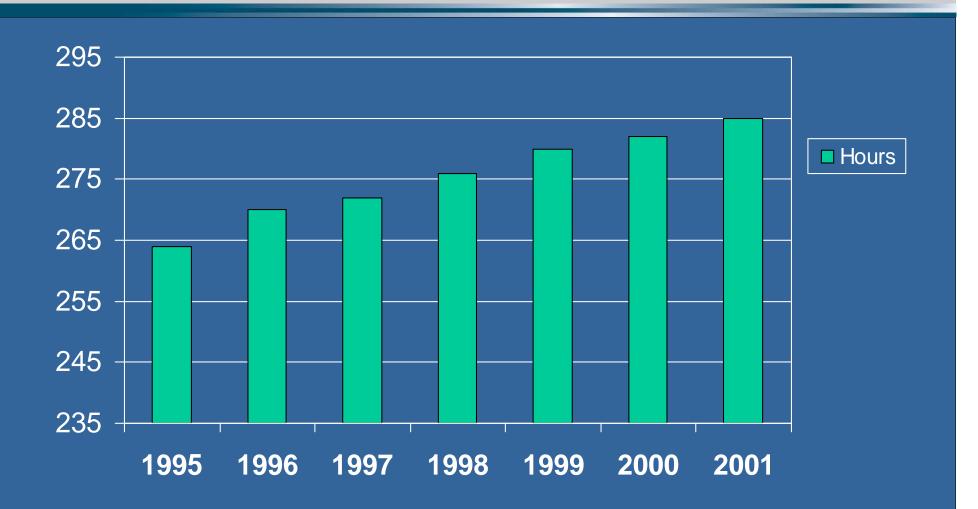
- Founded in 1964 by General O.F. "Dick" Lassiter
- Purchased in 1984 by RTS Capital
  - Richard Santulli
- Fractional jet ownership program, NETJETS, launched in 1986

# Warren E. Buffett



- Chairman and CEO of Berkshire Hathaway (BRK)
- Joined the NETJETS program in 1995
- Purchased FlightSafety International in 1996
- Purchased Executive Jet (NETJETS) in 1998

### Business Jet Aircraft Usage NBAA Fleet - Occupied hrs./yr.



# Fractional Ownership Niche

Marquis Jet / Charter < 50 Hours Flight Hours per Year

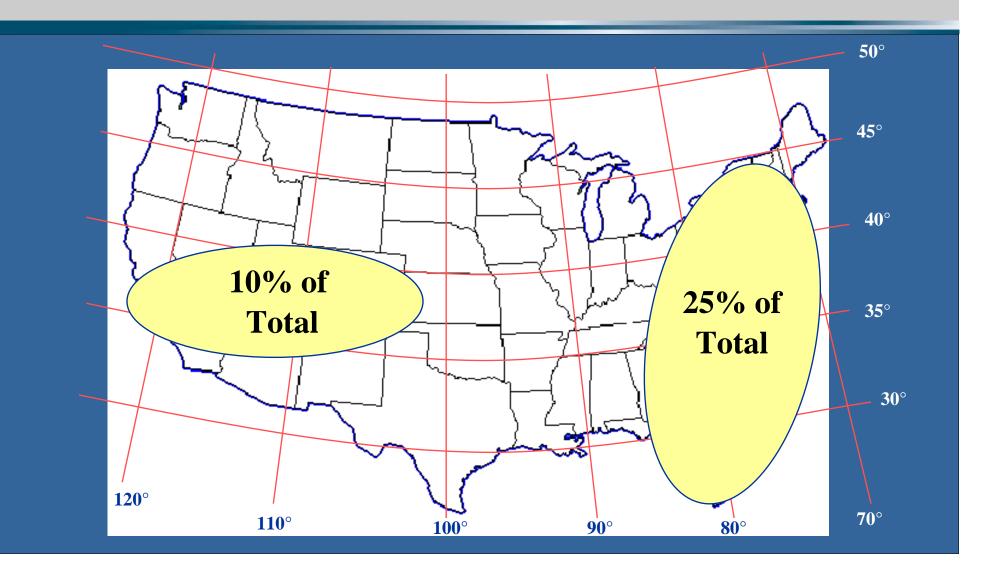
Fractional Ownership 50 - 400 Flight Hours per Year Aircraft Ownership > 400 Flight Hours per Year

# **NETJETS Owner Profile**

Wealthy Individuals / Entrepreneurs	20%
Private Companies	50%
Fortune 1000 Companies	30%

>70% of new NETJETS Owners Became NETJETS Owners Via "Word Of Mouth."

#### High Density Owner - Occupied Flight Corridors 06/01/03 – 08/31/03



# Top Ten U.S. Airports 03/01/03 – 05/31/03

ID	City	% of NJ Operations	# of NJ Operations	Avg. Daily NJ Operations	High
TEB	Teterboro, NJ	6.6%	3,753	41	67
PBI	West Palm Beach	3.3%	1,863	20	63
HPN	White Plains	3.3%	1,855	20	42
IAD	Washington DC	3.1%	1,736	19	42
LAS	Las Vegas	1.6%	908	10	25
SJC	San Jose	1.6%	891	10	20
SFO	San Francisco	1.5%	877	10	19
MDW	Chicago Midway	1.5%	854	9	22
BED	Bedford, MA	1.4%	789	9	18
PDK	Atlanta Peachtree	1.4%	774	8	21

## Selected Operational Details of NetJets Fleet

Aircraft	Avg. Pax Load	Max Pax	Avg / Max (%)	HSC Range @ Avg Pax Load (n.m.)
CE-560	2.8	8	35%	1,346
CE-560E	2.8	8	35%	1,397
CE-560XL	3.0	7	43%	1,496
CE-650	2.8	8	35%	1,713
BAE-800XP	3.0	8	38%	2,280
BAE-1000A	4.0	9	44%	2,597
CE-750	3.4	8	43%	2,342
G-200	4.3	9	48%	2,889
MD-2000	5.0	11	45%	2,762
GIV-SP	5.5	13	42%	3,960
GV	5.5	14	39%	5,682
BBJ	9.3	18	52%	5,139

# The Trickle Down Effect

#### ■ In 2002, NETJETS...

- Performed over 98,000 owner flights.
- Flew over 260,000 flight hours.
- Purchased over 11,000 hours of charter time.
- Consumed over 85 million gallons of jet fuel.
- Spent over \$14 million on catering.
- ✤ Arranged more than 65,000 cars/limos.
- ✤ Landed at over 1,250 airports in the U.S.
- Spent \$32 million on pilot training.
- Required over 450,000 maintenance man-hours.
- Purchased \$50 million airline tickets for flight crew movements.
- Purchased \$50 million hotel rooms for flight crew RON's.

## Total Firm NETJETS Orders Worldwide to Date

- \* 100 CitationJet 3's
- \* 78 Citation V Ultras
- 93 Citation Excels (+7 Options)
- \* 17 Citation VIIs
- 62 Hawker 800XPs (+9 options)
- \* 27 Hawker 1000s
- **50 Citation Sovereigns** (+50 options)

- 50 Hawker Horizons (+50 options)
- \* **50 G-150's** (+50 Options)
- ✤ 50 G-200s (+50 options)
- \* 74 Falcon 2000s
- \* 25 Falcon 2000EXs (+25 options)
- S Gulfstream IVs
   S
- 33 Gulfstream Vs

# What Does this Mean?

#### ( 365+ J.S. NETJETS Aircraft Delivered Through 06/30/2003

- Total Orders Worth in Excess of \$21 Billion
- Over 800 Additional NETJETS Aircraft Orders

#### **World's Top Airline Fleets\***

1)	American Airlines	806
2)	United Airlines	557
3)	Delta Airlines	548
4)	Northwest Airlines	446
5)	Southwest Airlines	375
6)	Continental Airlines	358
7)	FedEx	324
8)	USAirways	263
9)	Air France	253
10)	British Airways	237

\* Air Transport World, July 2003

# NETJETS QSJ



# Quiet Supersonic Jet

# **QSJ Market**

- Total market is estimated to be at least 250 aircraft (Gulfstream Aerospace)
- Fractionally owned (Estimate is at least 50 a/c worldwide)
- Wholly owned
  - Corporate
  - (Extremely) wealthy individuals
- Government
  - Evacuations
  - Diplomatic missions
  - Military
- Medevac
  - Organ runs

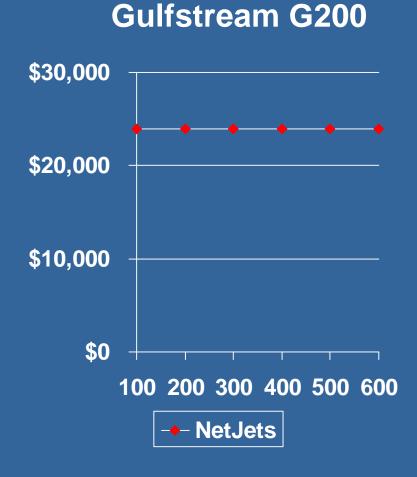
# Who Needs to Participate?

- Potentially requires a unique risk-sharing consortium
  - Government (?)
    - Precedent exists for NASA to take equity position (Space Shuttle)
  - Airframe Manufacturer
  - Engine Manufacturer
  - Marketer
  - Training Vendor
  - End User
    - NETJETS?

## Guaranteed Costs - NETJETS Fractional Ownership

- Retail A/C Share Purchase Price
  - Guaranteed buy-back at fair market value
- Five Year Management Agreement
  - 1/8<sup>th</sup> share grants 100 billed flight hours per year
  - Multiple simultaneous aircraft with multiple shares
  - Interchange between fleets allowed
  - Monthly Management Fee for 60 months
- Occupied Hourly Flight Fee

# 1/8 Share of a QSJ



-	Acquisition*	\$ 10,000,000
•	MMF	\$ 58,214
•	OHF	\$ 7,347
•	<b>Total Annual Costs</b> (100 hours per year)	\$ 2,393,268
•	Cost per hour	\$ 23,933
-	1/4 Share of a G200	
-	<b>Total Annual Costs</b> (200 hours per year)	\$ 4,786,536
•	Cost per hour	\$ 23,933

\* assumes 80% residual, cost of money = 6%

# Compared to a Full Ownership of a QSJ

\*



•	Full ownership Acquisition*	\$ 8	0,000,000
•	Annual Fixed Costs**	\$ 2	2,392,601
•	DOC's per hour**	\$	4,190
•	Annual Op Costs – 200 hrs.	<b>\$</b> 1(	0,910,601
•	Cost per hour - 200 hrs.	\$	54,553

- assumes 80% residual, cost of money = 8%
- \*\* Cost Data NETJETS Estimate

# Speed and Range Rule

Cessna Citation X extremely popular in NETJETS program

- Four hours West Coast to East Coast
- Four and one-half hours East Coast to West Coast
- Owners will not accept GIVSP / GV "upgrades"
- NETJETS feels non-stop trans-Pacific range (4,750 n.m.) is a must
  - Citation X-size cabin vs. a larger biz-jet cabin might make this scenario more likely
  - Gulfstream cabin much more comfortable on long-haul flights,but evidence exists that the Citation X cabin is sufficient for flights of less than five hours
  - Several long-time NETJETS owners, when asked, indicated extreme interest in purchasing a QSJ 1/8th share at \$10,000,000 for a Mach 1.8 jet with 5,000 n.m range and Citation X cabin

# **Potential Routes** (Data from 5/1/03 – 8/31/03)

- International routes over 2,000 n.m.
  - 481 NetJets flight segments
    - Average of 4.0 flight segments per day with a high of 8
- New York metro area to South Florida and vice versa
  - 861 NetJets flight segments from May
    - Average of 7.2 flight segments per day with a high of 17
- New Your metro area to Southern California / Nevada and vice versa
  - 1,219 NetJets flight segments
    - Average of 10.2 flight segments per day with a high of 23

## Quiet Supersonic Jet (QSJ)

- A NETJETS requirement for the QSJ program is sustained supersonic cruise over land.
- Biggest air traffic management issue will be how to handle departures and arrivals such that maximum benefit can be obtained from these aircraft
  - For example, not slowing down 250 n.m. out when flying into New York Center airspace

# By appreciation, we make excellence in others our own property.

