

# 2010 Farnborough Air Show

## GE Aviation July 2010



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This document contains "forward-looking statements" – that is, statements related to future, not past, events. In this context, forward-looking statements often address our expected future business and financial performance and financial condition, and often contain words such as "expect," "anticipate," "intend," "plan," "believe," "seek," "see," or "will." Forward-looking statements by their nature address matters that are, to different degrees, uncertain. For us, particular uncertainties that could cause our actual results to be materially different than those expressed in our forward-looking statements include: current economic and financial conditions, including volatility in interest and exchange rates, commodity and equity prices and the value of financial assets; the impact of conditions in the financial and credit markets on the availability and cost of General Electric Capital Corporation's (GECC) funding and on our ability to reduce GECC's asset levels as planned; the impact of conditions in the housing market and unemployment rates on the level of commercial and consumer credit defaults; our ability to maintain our current credit rating and the impact on our funding costs and competitive position if we do not do so; the adequacy of our cash flow and earnings and other conditions which may affect our ability to pay our quarterly dividend at the planned level; the level of demand and financial performance of the major industries we serve, including, without limitation, air and rail transportation, energy generation, network television, real estate and healthcare; the impact of regulation and regulatory, investigative and legal proceedings and legal compliance risks, including the impact of financial services regulation; strategic actions, including acquisitions and dispositions and our success in integrating acquired businesses; and numerous other matters of national, regional and global scale, including those of a political, economic, business and competitive nature. These uncertainties may cause our actual future results to be materially different than those expressed in our forward-looking statements. We do not undertake to update our forward-looking statements.



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## What's new since Paris

- Flying 787 & 747-8 under GEnx power
- COMAC selects CFM to power C919 with new LEAP-X
- AVIC and GE create global commercial aviation JV in China
- F136 program ahead of schedule for Joint Strike Fighter
- Reached 62% win rate for 787 orders...GEnx orders now 1,300
- Aviation Services backlog grew to \$58B
- Executing growth beyond engines with intelligent solutions



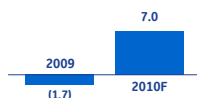
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CFM is a 50/50 JV between GE and Snecma

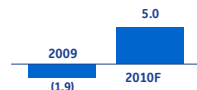
## Commercial aviation environment



**System traffic**  
(passenger kilometers growth %)



**Capacity**  
(Available seat kilometers growth %)



**Average oil prices**  
(WTI crude \$/bbl)



### GE, CFM & EA ... positioning

- ~24,400<sup>-a)</sup> commercial installed base
- ~26,700<sup>-b)</sup> military installed base
- 4,000 world wide shop visits
- Strong military business supporting warfighter
- Unprecedented number of growth opportunities

a) Includes ~15K CFM and 60 EA 2010E

b) Includes ~ 2K CFM

CFM is a 50/50 JV between GE and Snecma  
EA is a 50/50 JV GE and Pratt & Whitney



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Source: Ascend, EIA, ATA, BTS, AEA, ELFAA, AAPA, ALTA, CAAC, TCH, IATA, Milicos, Helicos, apgDot, GE analysis

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# World fleet fuel efficiency

Classification

Aircraft 2010 (Farnborough)

Retirement candidates

Total fleet

GE & CFM

(452 a/c) since Paris 2009

2,895

15% world fleet

216

7%

Redeployment candidates

+59 a/c

6,777

35% world fleet

3,946

2,169

1,777

58%

Best-in-class

+1,201 a/c

9,779

50% world fleet

7,101

5,048

2,053

73%



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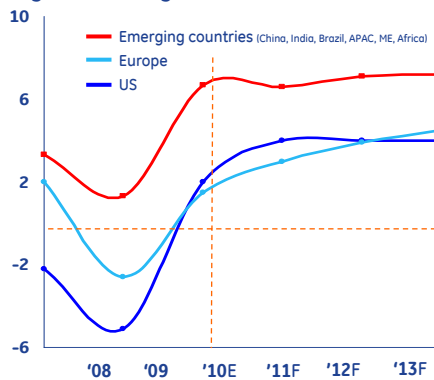
Source: Ascend, GE analysis  
CFM is a 50/50 JV between GE and Snecma

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# Pax traffic ... a two speed world

Commercial passenger traffic

Regional traffic growth (YoY %)



2010 traffic (Billion RPK)

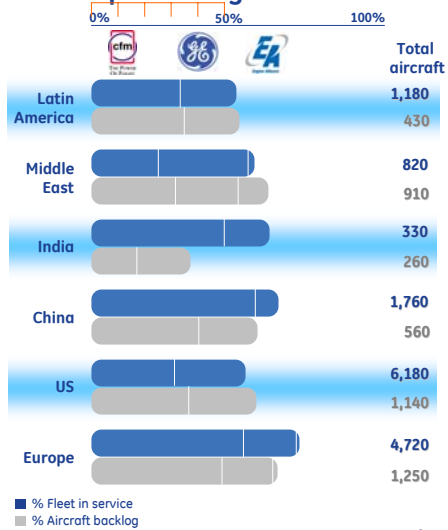
• Emerging: ~2,100 • US: ~1,700 • Europe: ~1,300



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Source: GE Aviation

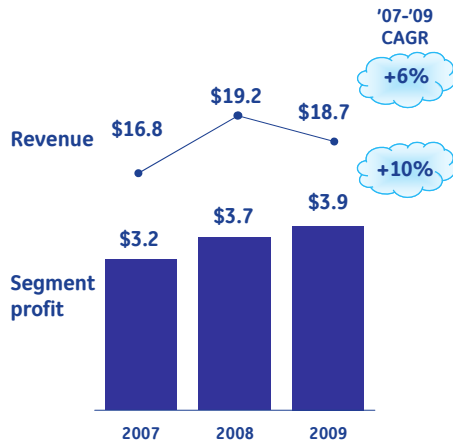
GE & JV positioning



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# GE Aviation financials

(\$ in billions)



## 2010 at a glance

### 1st Half Results

- Working capital reduced \$0.2 vs. '09
- Revenue \$8.4 (11%), Op profit \$1.7 (16%)
  - Ex deals, revenue (9%), Op profit (10%)

### Commercial engines & services

- 918\* deliveries in 1H'10... (5)%
- Spares rate growth 2% through 1H ex Aviall

### Military engines & services

- 431 deliveries in 1H'10 ... +2% to '09
- 1st half spares \$812MM, flat

### Systems

- Focused on C919 launch

**Great business**



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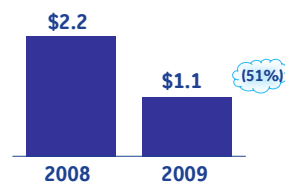
\*Includes 614 CFM & 21 EA  
CFM is a 50/50 JV between GE and Snecma  
EA is a 50/50 JV between GE and Pratt & Whitney

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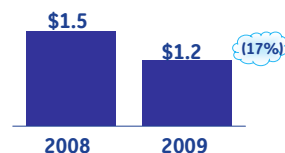
# GE Aviation cost and capital efficiency

(\$ in billions)

## Working capital performance



## Indirect operating spend



## Simplification

### Significant consolidation in sourcing & supply chain

- 24,600 heads, 74 global sites aligned
- First time yield, capital efficiency

### Restructuring: Fix, close, sell

- >10 sites sold or closed since 2008
- Global headcount (8%) since YE '08



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# GE Aviation portfolio ... \$18.7B

2009 revenues

**Commercial engines**  
\$4.1\*



**Commercial engine Services** \$7.1\*



**Military engines & services** \$4.2\*



**Systems** \$2.9



**Business & General Aviation** \$0.4



**A leading aviation technology business**



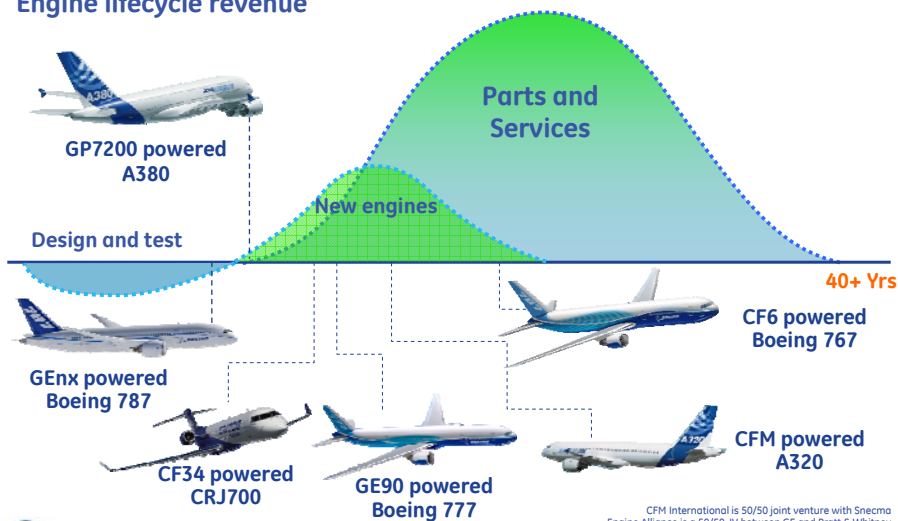
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\* Includes GE's share of revenue from CFM and EA engines  
CFM is a 50/50 JV between GE and Snecma  
EA is a 50/50 JV between GE and Pratt & Whitney  
GE Honda is a 50/50 JV between GE and Honda Aero, Inc.

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## Commercial engine life cycle

Engine lifecycle revenue

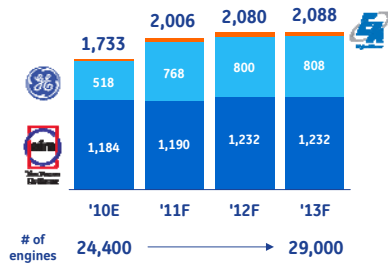


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CFM International is 50/50 joint venture with Snecma  
Engine Alliance is a 50/50 JV between GE and Pratt & Whitney  
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# Commercial business outlook

## Installed aircraft engines forecast



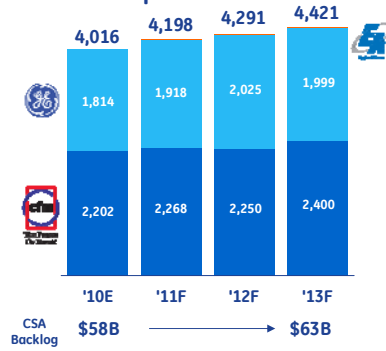
### Backlog

	CFM56	GENx	GE90	CF6	CF34	GP7000
Engines (#)	5,550	1,332	530	160	840	480
Yrs production	4	5	3	3	2	7



CFM International is a 50/50 joint company between Snecma and General Electric  
Engine Alliance is a 50/50 JV between GE and Pratt & Whitney  
EA installed forecast '10 - '13: 32, 48, 48, 48

## Services & shop visits



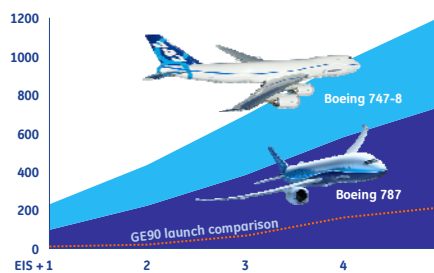
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## GENx ... fastest selling widebody engine

- 62% win rate on 787 ... 900 engines ordered
- Sole source on 747 ... 432 ordered
- Most fuel efficient engine ever built ... 15% fuel burn improvement\*



### Cumulative engine deliveries



- Terrific commercial success
- High volume in early years of program
  - ~1200 GENx deliveries in first 5 yrs vs. 200 GE90
- Investing to maintain 2% fuel burn advantage over competition

\*compared to GE engine it replaces



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# Growth in China

## Global Civil Avionics Business



- First global commercial aviation JV in China
- Global competition for next generation aircraft



## First ...

Airplane with next gen CFM power

Airplane with AVIC/GE avionics suite

Application with Nexcelle nacelle



CFM, CFM56, LEAP-X and the CFM Logo are trademarks of CFM International, a 50/50 joint company of Snecma and GE  
Nexcelle is a 50/50 JV between GE and Aircelle

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# CFM ... a proven leader

## Commitment and execution

together since  
**1974**



committed to  
**2040+**



**31**  
applications

**500**  
MILLION  
flight hours

**99.98**  
departure reliability

**21**  
THOUSAND  
engines delivered

**25**  
YEARS  
in service

## LEAP-X ...

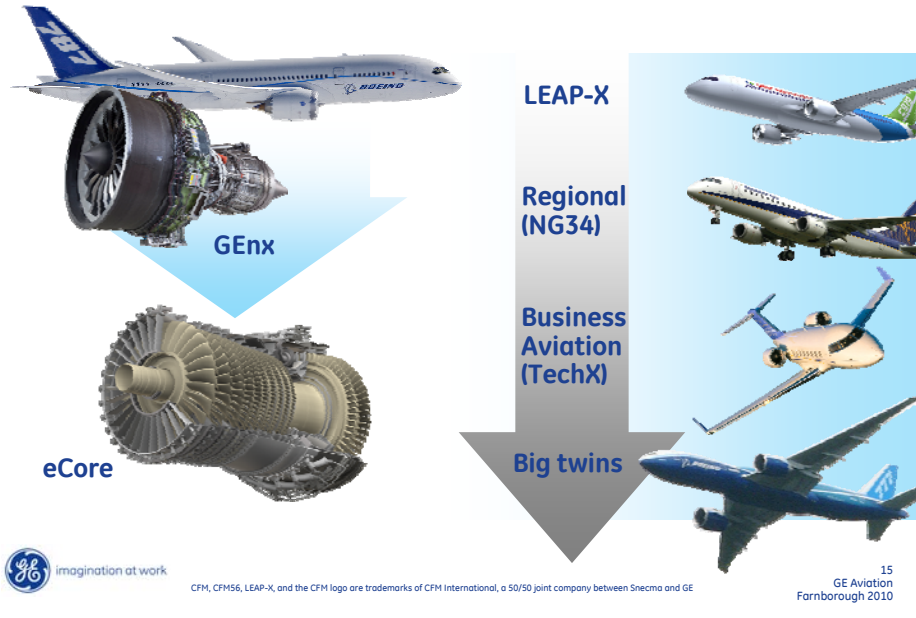
- Widebody efficiency with narrowbody reliability
- Reliable architecture
- Lowest emissions



CFM, CFM56, LEAP-X, and the CFM logo are trademarks of CFM International, a 50/50 joint company between Snecma and GE

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## eCore product portfolio status



## Business Aviation + Systems ... solutions

### Large Business Jets



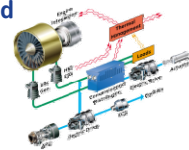
- Large Cabin Jets
- EIS 2016

### Engines



### Systems

#### Integrated power



#### Avionics



#### Integrated nacelle



### Light Business Jets



- Light jets
- EIS 2012



### Turboprops



- Ag aircraft
- Biz/utility aircraft
- Regional retrofits



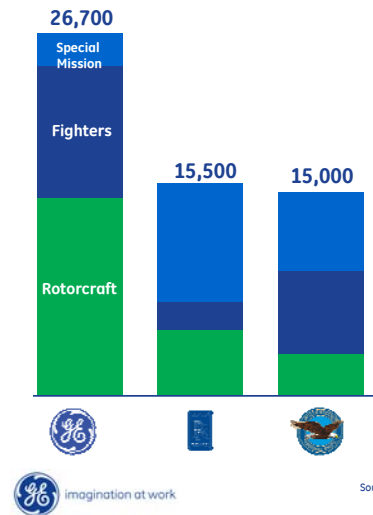
GE Honda is a 50/50 JV between GE and Honda Aero Co.

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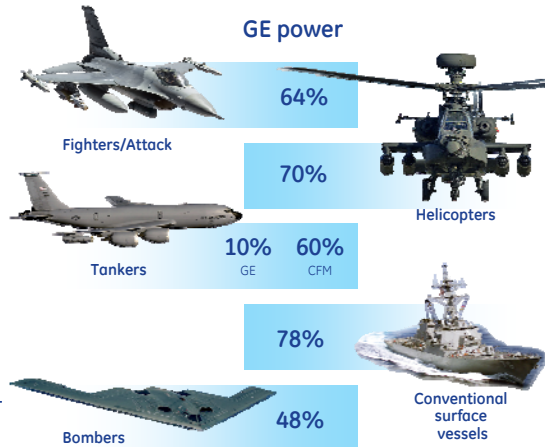


## Our military position

2009 installed fleet (engines)



Preferred power in theater ...



CFM56 - 2,100 installed base  
CFMI is a 50-50 JV between GE and Snecma

Source: Forecast International, GE analysis

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## Military development programs ...

### GE38 powered CH-53K



\$2B engine revenue

#### +\$15B segment opportunity

- 10%-20% lower fuel consumption
- 50-80% life cycle cost advantage

2009	2012	2013
1 <sup>st</sup> engine to test	1 <sup>st</sup> flight	Production deliveries

### Joint Strike Fighter



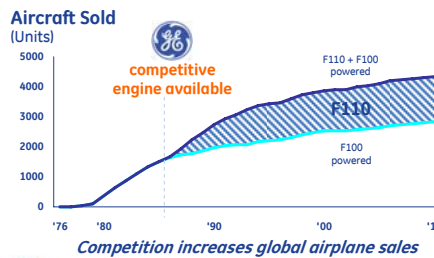
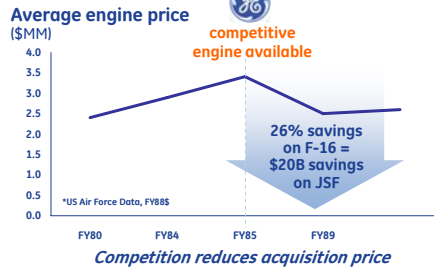
\$100B engine opportunity

#### Development program

Funding Required (\$MM)

FY 2010	FY 2011	FY 2012	FY 2013
 6 engines on ground test	 1 <sup>st</sup> Flight Dec. '11	 CTOL service initial release Dec '12	 Production deliveries

## Airplane benefits of competition ... F-16 case study



### Airplane Performance

Thrust increase <sup>1</sup>	30%
Stall reduction <sup>2</sup>	10X
Unscheduled engine removal <sup>2</sup>	2X
Time between overhaul <sup>3</sup>	3X
Aircraft losses <sup>4</sup>	2X

*Competition improves airplane capability*

1. F100, <http://www.pw.utc.com/Products/Military/F100> (9 July 2010)
2. F110, <http://www.geae.com/engines/military/f110/index.html> (9 July 2010)
3. Comm, F. 1993. The Development of the F100-PW-220 and F110-GE-100 Engines. A Case Study of Risk Assessment and Risk Management. RAND Note N-3618-AF, Pg 40, Table A.2.
4. Comm, F. 1993. The Development of the F100-PW-220 and F110-GE-100 Engines. A Case Study of Risk Assessment and Risk Management. RAND Note N-3618-AF, Pg 43.

U.S. Air Force Safety Center, 2009. F-15/F100-PW-100 Engine-Related Class A Flight Mishaps as of 31 March 2009. [www.afsc.af.mil/](http://www.afsc.af.mil/)

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## Aviation Systems growth

### Legacy

#### Component Supplier:

- Avionics
- Mechanical Systems
- Electric Power
- Engine Accessories (Unison)

**\$2.9B**

Service

Components

### Positioning for growth

**787:**  
\$1.0MM/aircraft

**A350:**  
\$1.0MM/aircraft

**A380:**  
\$1.5MM/aircraft

**F-35:**  
\$1.6-1.8MM/aircraft

**G650:**  
\$0.4MM/aircraft

### News since Paris

#### COMAC 919

Integrated Propulsion System + Integrated Avionics

**AW139**  
Health Usage & Monitoring System (HUMS)



Service

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Components

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# New intelligent customer solutions

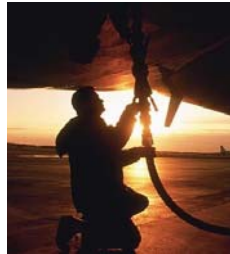
## Intelligent Services



Real time access to critical fleet data

- Manage operating costs and efficiency

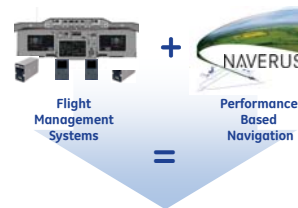
## Fuel & Carbon



Data-driven consulting and software tools

- Lower and monitor fuel usage and emissions

## Air Traffic Management



Fuel	↓	8-10%
Emissions	↓	8-10%
Noise	↓	30%

**Offering new solutions to expand GE value proposition**



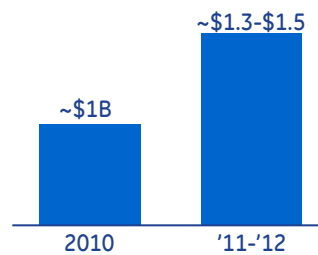
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# GE Aviation...investing for the next decade and beyond

## Platform Investments



## Annual NPI & launch programs



- New opportunities
- New segments
- New product launches

**Investments generate over \$0.5T future revenue opportunity**



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## At Farnborough



Engine orders ... \$8.2B (GE \$2B, CFM \$3.9B, EA \$2.3B)

Services orders ... \$6.2B



\$3.0B GE90 engines + services

\$4.8B GP7200 EA engines + services



\$1.2B CFM56 engines + services



\$482MM CF34 engines + services

TBA

\$1.0B CF6 services extension

TBA

\$2.0B CFM56 engines + services



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~\$1.6B of the services orders are CFM related orders  
~\$2.5B of the services orders are EA related orders  
Order values over the life of the contract  
CFM is a 50/50 JV between GE and Snecma  
EA is a 50/50 JV between GE and Pratt & Whitney  
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## Well positioned

- Preferred engine & service partner in the industry
- Winning in today's environment
- Investing in new platforms
- Securing the future



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