# SPADE INVESTOR



October 2008

**Defense \* Homeland Security \* AeroSpace** 

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# Inside...

- Fastest Growing Private Defense and Homeland Security Companies
- Fastest Growing Public Companies
- Global Defense Budgets Top \$1.2
  Trillion
- Chart: Historical Classified Budget
- Inside the FY 2009 Defense Budget
- Morningstar Comments on the Sector

#### Are A&D Stocks Undervalued?

Of the 55 companies in the SPADE Defense Index:

- 29 companies have a P/S < 1.0
- 18 have a PEG of < 1.0
- 35 have a PEG of < 1.25
- 33 (up from 27) have a P/E < 14
- 26 (up from 20) have a P/E < 12
- 18 (double from last month) have a P/E < 10

Yes, but market conditions are the driver, not fundamentals

# **SPADE Defense Index Statistics**

 9/30/08 Close:
 1947.93

 All-time Close:
 2747.67

 Date of all-time close:
 9 October 2007

|              | SPADE<br>Defense | S&P500   |
|--------------|------------------|----------|
| September    | [11.72%]         | [9.21%]  |
| 3rd Quarter  | [8.13%]          | [9.00%]  |
| Year to Date | [24.30%]         | [20.68%] |

#### September 2008 Rebalance

# Changes to the Index

Two companies were added to the Index:

AXSYS Technologies (AXYS): The company designs and manufactures precision optical solutions for defense, aero, homeland security, and commercial applications via its two operating segments -- Surveillance Systems Group and Imaging Systems Group.

NCI Inc. (NCIT): Provides defense, intelligence and civilian government agencies with IT services and solutions

Two companies are pending removal once their acquisition is completed:

<u>SI International</u> is set to be acquired by SERCO of the United Kingdom.

<u>DRS Technologies</u> is set to be acquired by Finmeccanica of Italy.

# Commentary

The massive global sell-off in, well everything, continues to impact investments made in the aerospace, defense, and homeland security sector. With the market operating in uncharted territories, I'm now hearing commentators refer to the Panic of 1907 as the only corollary, it is hard to near impossible to provide a commentary that the market will bear out. With gyrations that can influence prices 5%, 10%, 20% in a single day without reasons other than the fear that has entered the market, discussing the underlying fundamentals almost seems trivial. So instead, what I think would be beneficial is to answer the top things on the minds of A&D investors without delving into the market itself.

- 1. 2009 Defense Budget
- 2. Strike at Boeing
- 3. Third Quarter Reporting Expectations
- 4. Presidential Election
- 5. Afghanistan: Planning for a Surge
- 6. Tanker Contract
- 7. Global Defense Spending
- 8. Fixed Price vs. Cost Plus Contracts
- 9. Major End-of-Year Contracts Awarded
- 10. Loan Crisis/Liquidity Impact on A&D

continued on page 3

Sometimes the [market's] idea of value appears plausible and justified by business development and prospects as you know them. Often, on the other hand, Mr. Market lets his enthusiasm or his fears run away with him and the value he proposes seems to be a little short of silly.

Benjamin Graham, pioneer of what became known as value investing in his 1949 book, "The Intelligent Investor"

# Month in Review

After an August which saw more than 80% of the companies in the Index rise, September was a month to forget for almost everybody with the index declining by more than 11% and, by early October, the Index retreating to multi-year lows. Still, the SPADE Defense Index managed to outperform the S&P 500 in the 3Q08, though it declined more than 8%.

Based on market declines in early October, the Index currently has a value last seen in the third quarter of 2005.

The month did have some gainers with defense IT companies and homeland security firms posting better-than-market returns.

Taser led all companies posting a 10% gain during the month.

Defense IT companies *Stanley, NCI Information, DynCorp*, and *Mantech*, posted positive returns during the month with only *CACI* down 1.09%.

Homeland security stocks also did well with TASER, Applied Signal Technology, and OSI Systems among the month's leaders.

The bottom 10 laggards include mid- and largecap companies including *Textron*, *General Dynamics*, *Goodrich*, *Honeywell*.

A list of the top 10 leaders and laggards is on page 2. A complete list of YTD and monthly returns can be found on page 6.

## September 2008 Top Gainers

#### 1 TASER 10.00% 8.37% Stanley Inc. FLIR Systems 7.62% NCI Information 6.27% DynCorp 6.14% Applied Signal Tech 5.02% 4.54% AAR Corp OSI Systems 1.29% SAIC 0.90% 9 0.68% 10 Mantech

# September 2008 Laggards

| 1  | Esterline Tech.     | [29.92%] |
|----|---------------------|----------|
| 2  | Textron             | [28.76%] |
| 3  | Ladish              | [24.04%] |
| 4  | Precision Castparts | [23.71%] |
| 5  | Trimble Navigation  | [23.60%] |
| 6  | URS Corp.           | [23.54%] |
| 7  | General Dynamics    | [20.24%] |
| 8  | Goodrich            | [18.83%] |
| 9  | Ceradyne            | [18.64%] |
| 10 | Honeywell           | [17.18%] |

# YTD Top Gainers

| 1  | NCI Information    | 66.45% |
|----|--------------------|--------|
| 2  | AXSYS Technologies | 60.82% |
| 3  | DRS Technologies   | 41.42% |
| 4  | Mantech            | 35.30% |
| 5  | AeroVironment      | 32.02% |
| 6  | Applied Signal     | 27.98% |
| 7  | Argon ST           | 26.56% |
| 8  | FLIR Systems       | 22.75% |
| 9  | Stanley            | 15.27% |
| 10 | CACI               | 11.91% |

# YTD Laggards

| 1  | Oshkosh Truck       | [72.22%] |
|----|---------------------|----------|
| 2  | Garmin              | [65.01%] |
| 3  | Textron             | [58.93%] |
| 4  | AAR Corp            | [56.38%] |
| 5  | Ladish Co           | [53.11%] |
| 6  | Taser               | [50.31%] |
| 7  | Mercury Computer    | [44.75%] |
| 8  | Triumph Group       | [44.49%] |
| 9  | Precision Castparts | [43.20%] |
| 10 | Gencorp             | [42.20%] |

#### Largest Defense Prime Contractors

|                  | Sept     | YTD      |
|------------------|----------|----------|
| Lockheed Martin  | [5.81%]  | 4.19%    |
| Boeing           | [12.52%] | [34.43%] |
| General Dynamics | [20.24%] | [17.27%] |
| Northrop Grumman | [12.07%] | [23.02%] |
| Raytheon         | [11.85%] | [11.85%] |

# ETF Statistics (AMEX: PPA) Powershares Aerospace & Defense

Exchange / Ticker Symbol: AMEX / PPA
Fee 60 basis
Assets (9/30/08) \$177.6 M
Closing Price (9/30/08) \$ 17.08
September 08 Volume 2,556,600
3 month Avg Daily Trading Volume\*\* 94,674

# Powershares Aerospace & Defense ETF(AMEX: PPA)

Average Portfolio Market Cap\* \$13.20 Billion
Portfolio P/E\* 13.36
Portfolio P/S\* 0.93
Portfolio P/B\* 2.41
Portfolio P/Cash Flow\* 8.11
Earnings Growth Rate (ttm)\* 13.01%
source: Yahoo! Finance,
[\* 31 Aug 08] - [\*\* 4 Oct 08]

# Fastest Growing Private Defense & Homeland Security Companies in the *Inc.* 1000

|     | Company                          | Revenue (\$M) | Growth   | Notes               |
|-----|----------------------------------|---------------|----------|---------------------|
| 4   | Torres Adv. Enterprise Solutions | 66.2          | 16455.8% | Business Services   |
| 30  | Hardwire                         | 27.7          | 4405.6%  | Armor               |
| 52  | Solvern Innovations              | 9.3           | 2900.5%  | Intelligence IT     |
| 57  | LeGacy Resource                  | 13.6          | 2750.6%  | Homeland Security   |
| 88  | Analysis Group                   | 38.8          | 2078.6%  | Services            |
| 145 | Sensor Technologies              | 131.0         | 1526.2%  | Sensors             |
| 164 | Ideal Innovations                | 54.0          | 1413.7%  | Homeland Security   |
| 166 | Infoscitex                       | 14.5          | 1411.3%  | R&D                 |
| 175 | Acclaim Technical Svcs           | 39.8          | 1367.0%  | Gov't IT Staffing   |
| 181 | Mercom                           | 23.3          | 1332.5%  | IT                  |
| 200 | Integrated Wave Tech             | 8.6           | 1241.7%  | R&D                 |
| 203 | Computer System Designers        | 17.1          | 1223.7%  | Technology Transfer |
| 213 | Zebra Imaging                    | 11.5          | 1188.2%  | GIS                 |
| 236 | Insitu                           | 85.9          | 1097.9%  | UAVs                |
| 238 | Alphaport                        | 7.7           | 1084.8%  | A&D/NASA            |
| 375 | US Falcon                        | 49.5          | 800.5%   | IT Services         |
| 438 | A-T Solutions                    | 34.0          | 725.9%   | Homeland Security   |
| 441 | S4                               | 16.8          | 723.3%   | Communications      |
| 486 | Assured Info Security            | 9.8           | 643.5%   | Homeland Security   |
| 562 | Statewide Emergency Products     | 3.2           | 581.3%   | Homeland Security   |
| 578 | Addx                             | 10.2          | 560.5%   | Support             |
| 606 | Brighton Cromwell                | 8.8           | 541.8%   | Supply Chain Mgmt   |
| 619 | Echota Technologies              | 20.9          | 532.9%   | Homeland Security   |
| 689 | Alatec                           | 6.4           | 492.1%   | Consulting/Analysis |
| 696 | America Defense Sys.             | 36.3          | 488.4%   | Armor               |
| 791 | SGIS                             | 62.0          | 448.3%   | Technical Services  |

|  | Defense News Fast 50 (1Sept08) 5-Year growth, public companies |         |  |  |  |
|--|--|---------|--|--|--|
| 1  | Force Protection   | 221.28% |  |  |  |
| 2  | Agility (Kuwait)   | 156.55% |  |  |  |
| 3  | Protective Products of America                                 | 95.15%  |  |  |  |
| 4  | Mikros Systems   | 88.57%  |  |  |  |
| 5  | Ceradyne   | 65.35%  |  |  |  |
| 6  | SpaceDev   | 59.42%  |  |  |  |
| 7  | Arotech  | 55.20%  |  |  |  |
| 8  | Electro-Optical Systems<br>(Australia)                         | 54.21%  |  |  |  |
| 9  | Argon ST   | 49.53%  |  |  |  |
| 10   | Safran (France)  | 39.01%  |  |  |  |
| See the 1 September 2008 issue for complete list |  |         |  |  |  |

#### **About**

The SPADE Defense Index (AMEX: **DXS)** provides an investment benchmark for companies involved with defense, homeland security, and space.

The Index is designed to reflect the broad diversity of activities that is representative of companies involved with defense, homeland security, and space – including industrial firms that manufacture aircraft, tanks, ships, and missiles and those involved with current and next generation systems related to network centric warfare and information technology; intelligence, surveillance, and reconnaissance; satellites; border security; and defense systems that protect the lives of our servicemen and servicewomen.

# Licensed Products Exchange Traded Fund (ETF)

The Powershares Aerospace & Defense Portfolio ETF (AMEX: PPA) is designed to track the performance of the SPADE Defense Index

#### **ETF Options**

Traded by the American Stock Exchange using the underlying ticker.

#### Rules

The Index was designed to be RIC (Registered Investment Company) compliant for the purpose of enabling financial products. Companies are required to meet a variety of eligibility criteria including market valuation, liquidity, and listing on a major U.S. exchange. Full details are available on our website.

\* Market Cap: Minimum \$100M \* Share Price: Minimum \$5.00 \* Liquidity: 50,000 shares/day avg

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## Commentary (continued)

#### 1. FY 2009 Budget

President Bush signed the FY-2009 budget for the Department of Defense as part of the continuing resolution budget signed on October 1st. The legislation approved a \$612.5 billion defense authorization bill which sets policies and a spending ceiling and includes \$70 billion for Iraq and Afghanistan operations as well as a \$487.7 billion for the defense appropriations bill to fund programs. \$4 billion was cut from the president's request as part of a recent practice by Congress in which they make it up in supplements and free up spending for domestic programs. (The budget approval was no surprise). Additional details on the budget can be found on page 4.

#### 2. Strike at Boeing

Looks like this could be a long one. With the media's focus on Wall Street and the global financial crisis there has been very little attention of the strike by the national media. It is expected that companies that rely on commercial aerospace will reduce their forecasts for revenues and earnings in the coming weeks, if they haven't done so already. Boeing's stock has already dropped to multi-year lows due to delays in delivering the new 787 aircraft and the current strike costing them an estimated \$100 million in sales per day and analysts saying \$2.3 billion in the third quarter. It'll be interesting to see which side blinks first -- the union which is trying to protect itself from the reality that international sales are influenced by partnering with local manufacturers or the company that has seen its market value plummet. So far, Boeing's customers have been patient and not cancelled orders. When it starts to hit employees in the wallet, will the union members blink or will the company acquiesce knowing that major future design efforts impacting this agreement could be years away?

Note: The IAM strike fund is \$140 million and they say they can sustain a strike for up to six months. After three weeks out of work, union members are entitled to only \$150 /week in strike pay.

Note 2: Many suppliers have announced layoffs or shortened work weeks to ride out a lengthy machinist strike. Other suppliers are using the strike to shift workers to reduce order backlogs from Airbus and Bombadier.

#### 3. 3Q08 Reporting

Overall, the defense business remains strong with a defined government budget, long-term government contracts, and stable spending plans. What may impact some third quarter reports is the nondefense business lines of many firms. Example: Some analysts are concerned that General Dynamics' Gulfstream division may be affected by the existing/oncoming business recession as well as reduced demand from executives in the financial sector. Similarly, many major defense companies have some exposure to the commercial aerospace sector which has been impacted by the problems at Boeing.

#### 4. 2008 Presidential Election

Valid or not, it is widely believed that a McCain administration would offer stable defense budgets. The great unknown is what would happen in an Obama administration. Recent comments from the Obama campaign should alleviate some investors concerns. According to Richard Danzig, a U.S. Navy secretary during the Clinton administration and a leading contender to be the Secretary of Defense, stated that he doesn't see defense spending declining in the first years of an Obama administration. There are a set of demands that are very severe, very important to our national well being.

Regardless, there will be little time between the presidential winner assuming office in late January and the submission of the FY 2010 budget in February.

Among the initiatives that an Obama administration may see are: 1. a shift in the Pentagon's focus to buying greater numbers of less-sophisticated weapons systems; 2. a focus on cyber warfare and UAVs; and 3. making sure DoD doesn't become too focused on terrorists at the expense of traditional air and sea power.

In other words, this is what I've been saying -expect minimal change to the near-term budget over the next few years regardless of who wins; all that will change is how it is spent.

Obama specifics...

*Iraq*: Remove 1-2 brigades a month but with no timetable subject to military commanders input.

Afghanistan: Move 2 more brigades to the region

*Army/Marines:* Supports the drive to grow the Army by 65,000 and Marines by 27,000

*Weapons:* Unparalleled air power capabilities, modernizing current ship fleet, investing in small capable combatants, support concept of Littoral Combat Ship program.

# 5. Afghanistan Planning

An increased mobilization of activities in the Afghan region has already begun with a number of defense organizations issuing contracts and

# **Commentary (continued)**

planning for a surge in the region.

- DoD is seeking private contractors to clear landmines, build detention facilities, and provide roads for a growing presence in the region that would include 5000 additional troops. Solicitations have also been issued for 22 medium and heavy lift helicopters (Central Command).

#### 6. Tanker Contract

The \$35-\$40 billion replacement tanker contract has been put on hold by the Air Force following a request by Boeing for more time to evaluate the solicitation. The Air Force has deferred the decision to the next administration in what continues to be a politically-charged decision regardless of which way it goes.

Meanwhile while Northrop says it might support a proposal to issue a dual award in which

each firm would deliver one plane a month, Defense Secretary Robert Gates said he would recommend a presidential veto citing the added costs that come from having two companies build the same plane.

#### 7. Global Defense Spending

Continues to rise in many places in the world. In the Nordic regions spending is on the rise due to a more aggressive Russia; China is increasing its defense budget by the double digits; and the middle east and asia continue to have pockets of volatility. Overall, global defense spending has passed the \$1.2 trillion level, with the U.S. now spending less than half that amount. (See page 5 for top 10 budgets)

#### 8. Fixed Price or Cost Plus

There is a growing belief that DoD will be shifting toward fixed price contracts in order to get a handle on major cost overruns in recent years. Although it means greater risk for the companies who bid on a project, it also provides the possibility of improved margins and the incentive to stay on budget and reduce total costs

#### 9. Major end-of-year contracts issues

A 'right of passage' in the September time-frame -- see below for some contracts.

#### 10. Loan / Liquidity Crisis

I promised I wouldn't go into details here but there are a few direct relationships that bear mention (since the media keeps asking us): 1. Commercial aircraft leases are loan/debt instruments and are directly impacted by the freeze in the commercial loan markets; 2. M&A activity - Wall Street is saying that even the best deals with creditworthy customers are being bypassed and the sector's several hundred deals annually have slowed to a crawl; and 3. The rise in the dollar helps margins but makes international sales more expensive.

#### **Contracts**

**\$15.2 Billion -** Lockheed Martin - the Pentagon plans to sell up to 75 F-35 Lightning II warplanes to Israel. Israel has asked for 25 F-35A models with an option for 50 more jets, possibly including the F-35B model which has short takeoff/vertical landing capabilities.

**\$11.7 Billion** - U.S. Defense Security Cooperation Agency (DSCA) on Sept 9 announced 16 proposed weapons sales to primarily Middle East countries. \$7 billion is for Terminal High Altitude Air Defense Units for the UAE.

**\$6.5 Billion** for Taiwan with arms including Apache helicopters; Patriot III, Harpoon and Javelin missiles; upgrades for Taiwan's E-2T aircraft and spare parts for the Taiwan Air Force

**\$5.11 Billion** - Northrop Grumman to build the aircraft carrier, USS Gerald Ford, due in September 2015.

**\$5.6 Billion** - Lockheed Martin - Supply wheeled vehicle support--both tactical and non-tactical to all branches of the armed services.

**\$1.8 Billion** - Lockheed Martin - To modernize the Canadian Navy's Halifax-class frigates through 2017.

**1.36 Billion euros** - France increased 2009 defense spending to 32.02 billion euros, a gain of 5.4% from 30.38B. Equipment acquisitions rises 10% to 17 billion.

**\$437 Million** - Raytheon - 10 year contact to lead a team of companies and colleges to plan new training programs for air traffic control.

**\$250 Million each** - Raytheon & Lockheed Martin -- To develop a new airto-ground missile system to replace the Hellfire and Maverick missiles.

**\$125 Million** - Northrop Grumman, to update over 31 months, the EA-6B Prowler aircraft with radar-jamming capabilities. Initial deliveries are due in 3Q10.

## Inside the FY 2009 Budget

Some highlights include...

**\$14.1 Billion** - to the Navy for shipbuilding, a \$1 billion increase and matches the president's request to build eight ships.

**\$6.3 Billion** - to the Air Force including \$2.9 B for 14 F-35 aircraft and \$3.4 B for development

\$3.6 Billion - to fully fund the Future Combat System

**\$2.9 Billion** for 20 more F-22 fighters + \$523 M to fund long-lead purchases of additional aircraft

\$750 Million for National Guard and Reserves to fill 'equipment' needs.

**\$600** Million for advance procurement of two San Antonio-class amphibious transport docks.

\$270 Million - Additional monies for the defense health care budget

\$198 Million for 12 Army Armed Reconnaissance Helicopters

\$150 Million - for a Fourth AEHF Communications Satellite

...[I don't] see defense spending declining in the first years of an Obama administration. There are a set of demands that are very severe, very important to our national well-being

Richard Danzig, a U.S. Navy secretary under President Clinton in the October 3rd Wall Street Journal. Mr. Danzig is seen as a possible candidate for Secretary of Defense in an Obama adminsitration.

| <u>Year</u> | SPADE_   | S&P500   |
|-------------|----------|----------|
| YTD         | [24.30%] | [20.68%] |
| 2007        | 22.17%   | 3.53%    |
| 2006        | 19.33%   | 13.62%   |
| 2005        | 5.30%    | 3.00%    |
| 2004        | 20.47%   | 8.99%    |
| 2003        | 37.27%   | 26.38%   |
| 2002        | [2.87%]  | [23.37%] |
| 2001        | 0.94%    | [13.04%] |
| 2000        | 4.98%    | [10.14%] |
| 1999        | 15.31%   | 19.53%   |
| 1998        | 6.63%    | 26.67%   |

| <b>Quarter</b> | <b>SPADE</b> | S&P500   |
|----------------|--------------|----------|
| 3Q08           | [8.13%]      | [9.00%]  |
| 2Q08           | [4.69%]      | [3.23%]  |
| 1Q08           | [13.53%]     | [9.92%]  |
| 4Q07           | [4.22%]      | [3.82%]  |
| 3Q07           | [2.39%]      | [2.99%]  |
| 2Q07           | 10.76%       | 5.81%    |
| 1Q07           | 4.37%        | 0.18%    |
| 4Q06           | 8.79%        | 6.17%    |
| 3Q06           | 3.21%        | 5.17%    |
| 2Q06           | [4.03%]      | [1.91%]  |
| 1Q06           | 10.65%       | 3.73%    |
| 4Q05           | [0.47%]      | 1.59%    |
| 3Q05           | 4.44%        | 3.15%    |
| 2Q05           | 3.91%        | 0.91%    |
| 1Q05           | [2.52%]      | [2.59%]  |
| 4Q04           | 9.80%        | 8.73%    |
| 3Q04           | 2.81%        | [2.30%]  |
| 2Q04           | 6.34%        | 1.30%    |
| 1Q04           | 0.36%        | 1.29%    |
| 4Q03           | 18.97%       | 11.64%   |
| 3Q03           | 5.27%        | 2.20%    |
| 2Q03           | 19.03%       | 14.89%   |
| 1Q03           | [7.92%]      | [3.60%]  |
| 4Q02           | 3.39%        | 7.92%    |
| 3Q02           | [17.04%]     | [17.63%] |
| 2Q02           | [2.86%]      | [13.73%] |
| 1Q02           | 16.57%       | [0.06%]  |
| 4Q01           | 14.59%       | 10.29%   |
| 3Q01           | [10.40%]     | [14.29%] |
| 2Q01           | 5.91%        | 5.52%    |
| 1Q01           | [7.18%]      | [12.11%] |
| 4Q00           | [0.05%]      | [8.09%]  |
| 3Q00           | 12.14%       | [1.24%]  |
| 2Q00           | [7.11%]      | [2.93%]  |
| 1Q00           | 0.83%        | 2.00%    |
| 4Q99           | 7.57%        | 14.54%   |
| 3Q99           | [10.18%]     | [6.56%]  |
| 2Q99           | 21.39%       | 6.71%    |
| 1Q99           | [1.68%]      | 4.65%    |
| 4Q98           | 13.70%       | 20.87%   |
| 3Q98           | [16.88%]     | [10.30%] |
| 2Q98           | [1.88%]      | 2.91%    |
| 1Q98           | 14.99%       | 13.53%   |

Defense and aerospace contractors have been knocked down with the rest of the bear. But P/E ratios haven't been this cheap since the beginning of the decade.

Gary Gordon, ETF Expert Newsletter

No sector is fully immune from an economic downturn, but here is where we are looking.

Defense: Given the way things are going lately with our friends in Russia, Iran, and Afghanistan, it's probably not likely that defense spending will be cut anytime soon. Defense is one of those sectors that is traditionally a safe haven during recessionary times...lt's worth noting that I one of the cons to investing in I this sector is that defense always gets bundled with aerospace...Commercial aerospace is much more cyclical than defense, but overall, we think this fund (AMEX: PPA) is weighted more heavily toward defense and should be alright through the downturn.

Morningstar - Sept 17, 2008

# Research Follow-Up

As a follow-up to research we offered in past newsletters in which we identified a trend from the 2004-2007 timeperiod. During that time, the markets were relatively calm, negative months of the S&P500 were met with positive months of the SPADE Defense Index, and September tended to be a positive month for defense with the release of new DoD contracts. With the markets in turmoil during 2008, each of these prior year trends didn't play out but bear watching in 2009.

|                          | SPADE Defense Index |       |         |       |         |  |
|--------------------------|---------------------|-------|---------|-------|---------|--|
| 2008 2007 2006 2005 2004 |                     |       |         |       |         |  |
| June                     | [13.51%]            | 0.63% | [1.04%] | 1.34% | 3.41%   |  |
| July                     | 0.35%               | 0.60% | [0.12%] | 3.62% | [2.35%] |  |
| Aug                      | 3.70%               | 3.14% | 0.27%   | 0.46% | 0.60%   |  |
| Sept                     | [11.72%]            | 6.35% | 3.65%   | 0.33% | 4.65%   |  |

| S&P 500 |         |         |       |         |         |  |
|---------|---------|---------|-------|---------|---------|--|
|         | 2008    | 2007    | 2006  | 2005    | 2004    |  |
| June    | [8.60%] | [1.78%] | 0.01% | [0.01%] | [1.68%] |  |
| July    | [0.99%] | [3.20%] | 0.51% | 3.60%   | 1.21%   |  |
| Aug     | 1.22%   | 1.29%   | 2.13% | [1.12%] | [1.41%] |  |
| Sept    | [9.00%] | 3.57%   | 2.46% | 0.69%   | [0.88%] |  |

| Alpha Return of SPADE (vs S&P500) |         |       |         |         |         |
|-----------------------------------|---------|-------|---------|---------|---------|
| 2008 2007 2006 2005 200           |         |       |         |         |         |
| June                              | [4.91%] | 2.41% | [1.05%] | 1.35%   | 5.09%   |
| July                              | 1.34%   | 3.80% | [0.63%] | 0.02%   | [3.56%] |
| Aug                               | 2.48%   | 1.85% | [1.90%] | 1.58%   | 2.01%   |
| Sept                              | [2.72%] | 2.78% | 1.19%   | [0.36%] | 5.53%   |

# Global Defense Spending Tops \$1.2 Trillion

|                | 07 Budget | % of World | % GDP |
|----------------|-----------|------------|-------|
| United States  | \$547B    | 45%        | 4.0%  |
| United Kingdom | \$59.7B   | 5%         | 2.6%  |
| China          | \$58.3B   | 5%         | 2.1%  |
| France         | \$53.6B   | 4%         | 2.4%  |
| Japan          | \$43.6B   | 4%         | 1.0%  |
| Germany        | \$36.9B   | 3%         | 1.3%  |
| Russia         | \$35.4B   | 3%         | 3.6%  |
| Saudi Arabia   | \$33.8B   | 3%         | 8.5%  |
| Italy          | \$33.1B   | 3%         | 1.8%  |
| India          | \$24.2B   | 2%         | 2.7%  |

source: SIPRI Yearbook, 2008

note: UN reported that China's defense budget rose 17.6%

note: U.S. DoD estimate of China's defense budget: \$97-\$139 Billion

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|       | Sep-08                              |               | SPADE Def          | ense Index      |                |                    |                    | Market       | Forward        | Price/       | Price/       | PEG          |           |
|-------|-------------------------------------|---------------|--------------------|-----------------|----------------|--------------------|--------------------|--------------|----------------|--------------|--------------|--------------|-----------|
|       | Company                             | Ticker        | Float % Price Pric |                 | Price          | % Ch               | % Ch               | Сар          | P/E            | Sales        | Book         | 5 yr         | Div Yld   |
| Split | . ,                                 |               |                    | 29-Aug-08       | 30-Sep-08      | YTD                | MTD                | intraday     | (ttm)          | ttm          | mrq          | expected     | forward % |
|       | United Technologies                 | UTX           | 7.69%              | 65.59           | 60.06          | -21.53%            | -8.43%             | 57.25        | 10.86          | 1.00         | 2.64         | 1.07         | 2.30%     |
|       | Boeing Co                           | BA            | 7.57%              | 65.56           | 57.35          | -34.43%            | -12.52%            | 41.69        | 8.23           | 0.63         | 4.96         | 0.83         | 2.90%     |
|       | Lockheed Martin                     | LMT           | 7.52%              | 116.44          | 109.67         | 4.19%              | -5.81%             | 42.91        | 12.86          | 1.01         | 4.66         | 1.21         | 2.10%     |
|       | Honeywell Intl                      | HON           | 6.77%              | 50.17           | 41.55          | -32.52%            | -17.18%            | 29.45        | 9.31           | 0.85         | 3.01         | 0.99         | 2.70%     |
|       | General Dynamics                    | GD            | 6.40%              | 92.30           | 73.62          | -17.27%            | -20.24%            | 28.77        | 10.79          | 1.02         | 2.40         | 1.16         | 2.00%     |
|       | Raytheon Co                         | RTN           | 4.88%              | 59.99           | 53.51          | -11.85%            | -10.80%            | 22.41        | 11.97          | 0.99         | 1.76         | 1.07         | 2.10%     |
|       | Northrop Grumman                    | NOC           | 4.47%              | 68.85           | 60.54          | -23.02%            | -12.07%            | 19.86        | 9.49           | 0.62         | 1.14         | 0.96         | 2.60%     |
|       | Itt Indus                           | ITT           | 4.08%              | 63.75           | 55.61          | -15.79%            | -12.77%            | 10.03        | 11.85          |              | 2.31         | 1.02         | 1.30%     |
|       | L-3 Communications Hldgs            | LLL           | 4.03%              | 103.94          | 98.32          | -7.19%             | -5.41%             | 11.74        | 12.77          | 0.82         | 1.96         | 1.31         | 1.20%     |
|       | Precision Castparts                 | PCP           | 3.92%              | 103.26          | 78.78          | -43.20%            | -23.71%            | 10.51        | 8.08           | 1.56         | 2.52         | 0.57         | 0.20%     |
|       | SAIC                                | SAI           | 3.68%              | 20.05           | 20.23          | 0.55%              | 0.90%              | 8.12         | 16.60          | 0.85         | 4.51         | 1.42         |           |
|       | Rockwell Collins                    | COL           | 3.36%              | 52.59           | 48.09          | -33.18%            | -8.56%             | 7.51         | 10.59          | 1.62         | 4.87         | 0.78         | 2.10%     |
|       | Textron                             | TXT           | 3.19%              | 41.10           | 29.28          | -58.93%            | -28.76%            | 7.04         | 6.31           | 0.50         | 1.92         | 0.60         | 3.30%     |
|       | Garmin Ltd                          | GRMN          | 3.08%              | 34.76           | 33.94          | -65.01%            | -2.36%             | 6.73         | 8.15           |              | 3.10         | 0.61         | 2.20%     |
|       | Harris Corp                         | HRS           | 2.72%              | 52.36           | 46.20          | -26.29%            | -11.76%            | 6.03         | 9.94           | 1.17         | 2.71         | 0.68         | 1.80%     |
|       | Computer Sciences                   | CSC           | 2.66%              | 47.03           | 40.19          | -18.76%            | -14.54%            | 5.98         | 8.39           | 0.36         | 1.09         | 0.81         |           |
|       | Flir Systems                        | FLIR          | 2.34%              | 35.70           | 38.42          | 22.75%             | 7.62%              | 5.30         | 24.40          | 5.74         | 6.98         | 1.46         | 0.000/    |
|       | Goodrich Corp                       | GR            | 2.28%              | 51.25           | 41.60          | -41.08%            | -18.83%            | 4.99         | 7.61           | 0.76         | 1.79         | 0.56         | 2.30%     |
|       | Ball Corp                           | BLL           | 1.67%              | 45.92           | 39.49          | -12.24%            | -14.00%            | 3.72         | 9.20           | 0.50         | 2.51         | 1.03         | 1.00%     |
|       | Drs Technologies                    | DRS           | 1.39%              | 79.62           | 76.75          | 41.42%             | -3.60%             | 3.16         | 16.84          | 0.91         | 1.84         | 1.39         | 0.20%     |
|       | Trimble Navigation Ltd              | TRMB          | 1.37%              | 33.85           | 25.86          | -14.48%            | -23.60%            | 3.00         | 13.57          | 2.33         | 2.60         | 0.86         | _         |
|       | URS Corporation                     | URS<br>ATK    | 1.36%<br>1.36%     | 47.96<br>105.23 | 36.67<br>93.94 | -32.51%<br>-17.42% | -23.54%<br>-10.73% | 2.90<br>3.02 | 11.21<br>11.04 | 0.40<br>0.71 | 0.86<br>3.83 | 1.01<br>1.41 |           |
|       | Alliant Techsystems Elbit Systems   | ESLT          | 0.95%              | 55.14           | 51.67          | -17.42%            | -6.29%             | 2.18         | 14.26          | 0.71         | 3.72         | 1.70         | 1.60%     |
|       | Mantech International'a'            | MANT          | 0.93%              | 58.89           | 59.29          | 35.30%             | 0.68%              | 2.10         | 20.15          |              | 3.39         | 1.41         | 1.00 /6   |
|       | Teledyne Technologies               | TDY           | 0.89%              | 62.33           | 57.16          | 7.18%              | -8.29%             | 1.98         | 15.63          | 1.15         | 3.36         | 1.12         |           |
|       | Moog Inc.                           | MOGA          | 0.80%              | 47.40           | 42.88          | -6.40%             | -9.54%             | 1.80         | 13.29          |              | 1.90         | 1.16         |           |
|       | Caci Intl                           | CAI           | 0.66%              | 50.65           | 50.10          | 11.91%             | -1.09%             | 1.52         | 14.34          | 0.63         | 1.65         | 1.10         |           |
|       | Orbital Sciences Corp               | ORB           | 0.62%              | 26.44           | 23.97          | -2.24%             | -9.34%             | 1.41         | 23.05          | 1.18         | 3.05         | 1.27         |           |
|       | Sra International'a'                | SRX           | 0.56%              | 23.48           | 22.63          | -23.16%            | -3.62%             | 1.26         | 15.15          |              | 1.86         | 1.07         |           |
|       | L-1 Identity Solutions              | ID            | 0.52%              | 16.48           | 15.28          | -14.87%            | -7.28%             | 1.17         | 38.69          | 2.42         | 1.05         | 4.78         |           |
|       | Esterline Technologies              | ESL           | 0.51%              | 56.49           | 39.59          | -23.50%            | -29.92%            | 1.14         | 9.68           | 0.78         | 0.99         | 0.55         |           |
|       | Oshkosh Truck                       | OSK           | 0.43%              | 15.42           | 13.13          | -72.22%            | -14.85%            | 0.93         | 4.86           |              | 0.65         | 0.20         | 3.40%     |
|       | Ceradyne Inc                        | CRDN          | 0.42%              | 45.06           | 36.66          | -21.88%            | -18.64%            | 0.94         | 7.45           | 1.27         | 1.53         | 1.58         |           |
|       | DynCorp                             | DCP           | 0.42%              | 15.79           | 16.76          | -37.65%            | 6.14%              | 0.96         | 11.25          | 0.41         | 2.15         | 0.90         |           |
|       | Cogent Inc.                         | COGT          | 0.40%              | 11.00           | 10.22          | -8.34%             | -7.09%             | 0.91         | 18.58          | 9.61         | 1.85         | 1.00         |           |
|       | Stanley Inc.                        | SXE           | 0.36%              | 34.06           | 36.91          | 15.27%             | 8.37%              | 0.79         | 21.69          | 1.29         | 4.83         | 1.55         |           |
|       | Triumph Group                       | TGI           | 0.33%              | 54.74           | 45.71          | -44.49%            | -16.50%            | 0.73         | 7.34           | 0.63         | 1.04         | 0.48         | 0.30%     |
|       | Viasat Inc                          | VSAT          | 0.32%              | 26.23           | 23.58          | -31.51%            | -10.10%            | 0.71         | 12.79          | 1.21         | 1.74         | 1.08         |           |
|       | Cubic Corp                          | CUB           | 0.29%              | 27.69           | 24.59          | -37.27%            | -11.20%            | 0.65         | 12.48          | 0.76         | 1.62         | 1.13         | 0.70%     |
|       | AeroVironment                       | AVAV          | 0.29%              | 33.46           | 31.95          | 32.02%             | -4.51%             | 0.66         | 22.66          | 3.04         | 3.68         | 1.53         |           |
|       | AXSYS Technologies                  | AXYS          | 0.29%              | 67.93           | 58.94          | 60.82%             | -13.23%            | 0.67         | 22.52          | 3.12         | 3.86         | 1.38         |           |
|       | AAR Corp                            | AIR           | 0.28%              | 15.87           | 16.59          | -56.38%            | 4.54%              | 0.63         | 7.01           | 0.45         | 1.07         | 0.58         |           |
|       | American Science & Engineering      | ASEI          | 0.23%              | 66.80           | 59.73          | 5.25%              | -10.58%            | 0.53         | 18.31          | 3.24         | 3.33         | 1.23         | 1.40%     |
|       | Argon St                            | STST          | 0.22%              | 24.97           | 23.49          | 26.56%             | -5.93%             | 0.49         | 19.92          | 1.54         | 1.78         | 1.24         |           |
|       | TASER International Inc.            | TASR          | 0.19%              | 6.50            |                | -50.31%            | 10.00%             | 0.43         | 70.00          |              | 4.15         | 1            |           |
|       | Osi Systems                         | OSIS          | 0.18%              | 23.21           | 23.51          | -11.18%            | 1.29%              | 0.41         | 13.27          |              | 1.50         | 0.80         |           |
|       | Gencorp                             | GY            | 0.17%              | 7.81            | 6.74           | -42.20%            | -13.70%            | 0.37         | 9.41           |              |              |              |           |
|       | GeoEye                              | GEOY          | 0.17%              | 24.75           | 22.13          | -34.23%            | -10.59%            | 0.41         | 36.00          |              | 2.00         | 2.84         |           |
|       | Si International                    | SINT          | 0.17%              | 31.23           | 30.05          | 9.39%              | -3.78%             | 0.40         | 18.87          |              | 1.47         | 1.58         |           |
|       | NCI Information Technology          | NCIT          | 0.17%              | 26.80           | 28.48          | 66.45%             | 6.27%              | 0.36         | 19             |              | 4.31         | 1.32         |           |
|       | Ladish Co                           | LDSH          | 0.13%              | 26.66           | 20.25          | -53.11%            | -24.04%            | 0.29         | 7.67           | 0.66         | 1.34         | 1.16         |           |
|       | Ducommun                            | DCO           | 0.11%              | 26.47           | 23.88          | -37.16%            | -9.78%             | 0.24         | 9.42           |              | 1.11         |              | 1.30%     |
|       | Applied Signal Technology           | APSG          | 0.10%              | 16.55           |                | 27.98%             | 5.02%              | 0.22         | 23.19          |              | 1.81         | 1.83         | 2.90%     |
|       | Mercury Computer Sys                | MRCY          | 0.09%              | •               |                | -44.75%            | -3.78%             | 0.20         | 15.79          | 0.96         | 1.33         |              |           |
|       | Data Provided by Yahoo Finance & Ca | apitai IQ, an | a Forward P        | ''⊨ by Thon     | npson          |                    |                    |              |                | <u> </u>     |              |              |           |

# Department of Defense Classified Budget for Acquisition Programs, FY 1987 - FY 2009\*

(Total Obligational Authority in Billions of Dollars)

|                                      | 1987        | 1988        | 1989        | 1990        | 1991        | 1992        | 1993        | 1994        | 1995        | 1996        | 1997        | 1998        | 1999        | 2000        | 2001         | 2002        | 2003        | 2004        | 2005         | 2006         | 2007         | 2008        | 2009             |
|--------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|-------------|-------------|-------------|--------------|--------------|--------------|-------------|------------------|
| <b>Total DoD Weapons Acquisition</b> | 119.6       | 119.6       | 117.2       | 117.9       | 98.8        | 100.3       | 91.6        | 77.1        | 77.7        | 77.4        | 79.7        | 82.1        | 88.7        | 93.2        | 103.9        | 110.9       | 137.9       | 147.5       | 167.8        | 178.0        | 212.0        | 203.2       | 183.8            |
| Classified Acquisition               | 20.9        | 19.7        | 16.6        | 15.4        | 16.2        | 15.8        | 13.8        | 12.9        | 11.7        | 12.6        | 13.2        | 14.9        | 15.8        | 15.4        | 18.1         | 18.2        | 26.1        | 27.6        | 29.8         | 31.5         | 34.5         | 31.9        | 34.0             |
| % Classified                         | 17%         | 16%         | 14%         | 13%         | 16%         | 16%         | 15%         | 17%         | 15%         | 16%         | 17%         | 18%         | 18%         | 17%         | 17%          | 16%         | 19%         | 19%         | 18%          | 18%          | 16%          | 16%         | 19%              |
|                                      |             |             |             |             |             |             |             |             |             |             |             |             |             |             |              |             |             |             |              |              |              |             |                  |
| Procurement                          | 45.0        | 45.0        | 440         | 40.0        |             | 0.0         |             | 0.0         |             | 7.0         | 0.4         | 0.0         | 0.5         | 40.0        | 44.0         | 40.5        | 45.0        | 40.0        | 00.0         | 00.0         | 40.0         | 04.0        | 05.0             |
| Army Procurement                     | 15.6<br>0.4 | 15.2<br>0.0 | 14.8<br>0.2 | 13.9<br>0.1 | 9.0<br>0.1  | 8.6<br>0.2  | 7.4<br>0.0  | 6.9<br>0.0  | 6.7<br>0.0  | 7.6<br>0.0  | 8.1<br>0.0  | 6.8<br>0.1  | 9.5<br>0.0  | 10.3        | 11.8<br>0.0  | 10.5<br>0.0 | 15.8<br>0.0 | 16.2<br>0.0 | 26.0<br>0.0  | 28.2         | 48.8<br>0.0  | 31.6<br>0.0 | 25.0             |
| Classified Procurement % Classified  | 3%          | 0.0         | 0.2<br>1%   | 0.1         | 1%          | 3%          | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0. i<br>1%  | 0.0         | 0.0         | 0.0          | 0.0         | 0.0         | 0.0         | 0.0          | 0.0          | 0.0          | 0.0         | 0.0<br><i>0%</i> |
| 70 Gladdinga                         | 070         | 070         | 170         | 070         | 170         | 070         | 070         | 070         | 070         | 070         | 070         | 170         | 070         | 070         | 070          | 070         | 070         | 070         | 070          | 070          | 070          | 070         | 070              |
| Navy Procurement                     | 32.1        | 36.9        | 31.3        | 34.6        | 27.3        | 25.3        | 20.9        | 16.0        | 17.3        | 15.8        | 17.2        | 19.5        | 20.5        | 23.4        | 25.9         | 24.5        | 27.5        | 29.9        | 32.5         | 36.9         | 40.2         | 38.8        | 39.1             |
| Classified Procurement               | 0.3         | 0.0         | 0.2         | 0.1         | 0.1         | 0.1         | 0.1         | 0.1         | 0.1         | 0.0         | 0.1         | 0.1         | 0.1         | 0.3         | 0.0          | 0.0         | 0.0         | 0.0         | 0.0          | 0.0          | 0.0          | 0.0         | 0.0              |
| % Classified                         | 1%          | 1%          | 0%          | 1%          | 0%          | 0%          | 1%          | 0%          | 0%          | 0%          | 0%          | 0%          | 1%          | 1%          | 0%           | 0%          | 0%          | 0%          | 0%           | 0%           | 0%           | 0%          | 0%               |
| Air Force Procurement                | 33.9        | 28.0        | 31.0        | 30.1        | 22.7        | 23.6        | 21.7        | 17.8        | 15.9        | 16.7        | 14.4        | 15.3        | 18.2        | 18.6        | 22.1         | 23.6        | 31.7        | 32.4        | 36.1         | 35.8         | 39.9         | 33.1        | 35.2             |
| Classified Procurement               | 11.1        | 9.9         | 8.2         | 8.4         | 8.3         | 8.3         | 7.2         | 7.4         | 6.5         | 6.7         | 5.4         | 6.1         | 6.6         | 6.4         | 7.0          | 8.5         | 12.4        | 13.7        | 15.6         | 16.2         | 17.2         | 14.0        | 14.4             |
| % Classified                         | 33%         | 35%         | 27%         | 28%         | 36%         | 35%         | 33%         | 42%         | 41%         | 40%         | 37%         | 40%         | 36%         | 35%         | 30%          | 30%         | 39%         | 42%         | 43%          | 45%          | 43%          | 42%         | 41%              |
| Def. Agencies Procurement            | 1.4         | 1.3         | 1.3         | 1.4         | 2.4         | 2.5         | 2.1         | 1.8         | 3.4         | 2.3         | 3.5         | 3.3         | 2.4         | 2.5         | 2.2          | 3.6         | 4.7         | 4.7         | 4.0          | 4.4          | 5.5          | 22.9        | 4.8              |
| Classified Procurement               | 0.8         | 0.7         | 0.7         | 0.6         | 0.7         | 0.7         | 0.6         | 0.7         | 0.5         | 0.6         | 0.6         | 0.5         | 0.7         | 0.8         | 0.4          | 0.4         | 0.8         | 0.7         | 0.7          | 0.5          | 0.5          | 0.5         | 0.7              |
| % Classified                         | 58%         | 50%         | 54%         | 42%         | 28%         | 29%         | 28%         | 38%         | 15%         | 25%         | 17%         | 17%         | 30%         | 31%         | 20%          | 10%         | 18%         | 14%         | 16%          | 11%          | 9%           | 2%          | 14%              |
| Total DoD Procurement                | 83.7        | 82.6        | 79.7        | 81.3        | 64.3        | 62.2        | 53.8        | 42.4        | 43.2        | 42.4        | 43.2        | 44.9        | 50.6        | 54.9        | 62.2         | 62.2        | 79.6        | 83.2        | 98.5         | 105.3        | 134.4        | 126.4       | 104.2            |
| Classified Procurement               | 12.6        | 10.5        | 9.2         | 9.2         | 9.1         | 9.3         | 7.9         | 8.2         | 7.1         | 7.3         | 6.1         | 6.8         | 7.5         | 7.5         | 7.5          | 8.9         | 13.2        | 14.5        | 16.3         | 16.6         | 17.7         | 14.5        | 15.1             |
| % Classified                         | 15%         | 13%         | 12%         | 11%         | 14%         | 15%         | 15%         | 19%         | 16%         | 17%         | 14%         | 15%         | 15%         | 14%         | 10%          | 10%         | 17%         | 17%         | 17%          | 16%          | 13%          | 11%         | 14%              |
|                                      |             |             |             |             |             |             |             |             |             |             |             |             |             |             |              |             |             |             |              |              |              |             |                  |
| R&D                                  | 4 -         | 4 -         | 5.0         |             | - 4         | 0.4         | 0.4         | - 4         | - 4         | 4.0         | 4.0         | - 0         | - 0         | - 0         | 0.0          | <b>7</b> 0  | 7.0         | 40.0        | 40.0         | 44.7         |              | 40.0        | 40.5             |
| Army R&D<br>Classified R&D           | 4.7<br>0.5  | 4.7<br>0.5  | 5.2<br>0.5  | 5.3<br>0.5  | 5.4<br>0.7  | 6.4<br>0.5  | 6.1<br>0.4  | 5.4<br>0.3  | 5.4<br>0.1  | 4.8<br>0.1  | 4.9<br>0.1  | 5.0<br>0.1  | 5.0<br>0.1  | 5.2<br>0.2  | 6.2<br>0.1   | 7.0<br>0.1  | 7.6<br>0.1  | 10.2<br>0.2 | 10.6<br>0.1  | 11.7<br>0.2  | 11.4<br>0.2  | 12.0<br>0.2 | 10.5<br>0.2      |
| % Classified R&D                     | 11%         | 10%         | 10%         | 9%          | 13%         | 7%          | 6%          | 5%          | 2%          | 2%          | 3%          | 3%          | 3%          | 3%          | 3%           | 2%          | 1%          | 2%          | 1%           | 2%           | 2%           | 2%          | 2%               |
| 70 Glassifica                        | 1170        | 1070        | 1070        | 370         | 1370        | 7 70        | 070         | 370         | 2 /0        | 2 /0        | 370         | 370         | 370         | 370         | 370          | 270         | 170         | 2 /0        | 1 70         | 2 /0         | 270          | 2 /0        | 2 /0             |
| Navy R&D                             | 9.3         | 9.5         | 9.3         | 9.5         | 8.3         | 8.6         | 8.9         | 8.2         | 8.6         | 8.8         | 7.9         | 7.9         | 8.9         | 9.1         | 9.5          | 11.4        | 13.7        | 14.8        | 17.1         | 19.0         | 19.7         | 17.8        | 19.3             |
| Classified R&D                       | 1.0         | 1.7         | 2.4         | 1.4         | 1.4         | 1.4         | 1.1         | 8.0         | 0.9         | 1.0         | 1.1         | 1.3         | 1.4         | 1.3         | 1.3          | 1.5         | 1.9         | 2.0         | 2.1          | 2.3          | 2.6          | 2.4         | 2.7              |
| % Classified                         | 10%         | 18%         | 26%         | 15%         | 17%         | 16%         | 13%         | 10%         | 11%         | 12%         | 14%         | 17%         | 16%         | 15%         | 14%          | 14%         | 14%         | 13%         | 12%          | 12%          | 13%          | 13%         | 14%              |
| Air Force R&D                        | 15.1        | 15.1        | 14.7        | 13.6        | 11.7        | 13.1        | 12.9        | 12.2        | 11.6        | 13.0        | 14.1        | 14.3        | 13.7        | 14.3        | 14.3         | 14.5        | 18.9        | 20.2        | 20.5         | 22.2         | 24.5         | 26.2        | 28.1             |
| Classified R&D                       | 5.6         | 5.5         | 3.2         | 3.0         | 3.0         | 3.2         | 3.1         | 2.4         | 2.4         | 3.2         | 4.6         | 5.4         | 5.2         | 5.2         | 5.2          | 5.4         | 6.8         | 7.0         | 7.4          | 8.3          | 9.7          | 10.9        | 11.9             |
| % Classified                         | 37%         | 36%         | 22%         | 22%         | 26%         | 24%         | 24%         | 20%         | 21%         | 24%         | 33%         | 38%         | 38%         | 36%         | 36%          | 38%         | 36%         | 35%         | 36%          | 37%          | 40%          | 42%         | 42%              |
| Defense Agencies R&D                 | 6.8         | 7.6         | 8.2         | 8.0         | 8.9         | 9.7         | 9.8         | 8.9         | 8.9         | 9.8         | 9.6         | 10.0        | 10.4        | 9.7         | 11.3         | 15.7        | 18.1        | 19.2        | 21.2         | 19.8         | 22.0         | 20.8        | 21.7             |
| Classified R&D                       | 1.2         | 1.5         | 1.2         | 1.4         | 2.0         | 1.4         | 1.3         | 1.2         | 1.2         | 1.0         | 1.3         | 1.2         | 1.6         | 1.3         | 1.8          | 2.1         | 4.0         | 4.0         | 3.9          | 4.0          | 4.2          | 3.8         | 4.1              |
| % Classified                         | 18%         | 20%         | 15%         | 17%         | 23%         | 14%         | 13%         | 13%         | 14%         | 10%         | 14%         | 12%         | 15%         | 13%         | 16%          | 14%         | 22%         | 21%         | 18%          | 20%          | 19%          | 18%         | 19%              |
| Total DoD R&D                        | 05.0        | 07.0        | 07.5        | 00.0        | 04.0        | 00.4        | 07.0        | 047         | 04.5        | 05.0        | 20.5        | 07.0        | 00.4        | 20.2        | 44.7         | 40 G        | 58.3        | 64.4        | 60.2         | 70.7         | 77.6         | 76.9        | 79.6             |
|                                      | 35.9        | 37.0        | 3/5         | 36 h        | 34 6        | 38.1        | 37.8        | 34 /        | 34.5        | 35 ()       | .สก.ก       | 31/         | 38 1        |             | 41/          | 40 P        | יי סכי      |             | ר פט         | 1//          | // 17        |             |                  |
| Classified R&D                       | 35.9<br>8.2 | 37.0<br>9.1 | 37.5<br>7.4 | 36.6<br>6.2 | 34.6<br>7.2 | 38.1<br>6.4 | 37.8<br>5.9 | 34.7<br>4.7 | 34.5<br>4.6 | 35.0<br>5.3 | 36.5<br>7.2 | 37.2<br>8.1 | 38.1<br>8.3 | 38.3<br>7.9 | 41.7<br>10.6 | 48.6<br>9.3 | 12.9        | 13.2        | 69.3<br>13.5 | 72.7<br>14.8 | 77.6<br>16.7 | 17.3        | 18.9             |

<sup>\*</sup> FY 2009 figures are requested funding levels and do not include war-related funding. FY 2008 figures exclude GWOT acquistion funding still (at press time) pending before Congress. Source: Center for Strategic and Budgetary Assessments based on DoD data, May 2008.