



Commentary

We Again End the Year Near All Time Highs

Last year's end of year report started with the following:

What a year! You could probably count on one hand (and they'd be lying) the number of people who thought the aerospace and defense sector would gain 48.27% in 2013. Even the most optimistic did not see this coming."

And like 2013, 2014 ended the year with **new historic highs**. The SPADE Defense Index and its constituents involved with defense, national security, aerospace, and space surged higher during the fourth quarter and once again provided investors with another year of outperformance vs. the broader market.

What Fueled the Sector in 2014?

Large caps dominated again, a surprise after leading the sector for the past several years but mirroring the trend of the broader market where investment analysts have been calling for a return to large caps. In the case of defense, it never really left. The large defense primes -- General Dynamics +44.03%: Lockheed +29.54%, Northrop Grumman +28.60%, and Raytheon +19.26%. -- fueled the benchmark SPADE Defense Index higher. Only Boeing, after a nearly 84% gain in 2013 failed to beat the S&P500, declining 4.77%.

Investors overweight in the large primes have outperformed the benchmark in recent years but with higher valuations, the possibility that the cycle will shift to the pattern seen in the early 2000s is gaining traction.

The year's biggest winner was TASER which topped the list after a massive 71.5% gain in 4Q14 following several fatal incidents between police and the public put a spotlight on the firm and had the public and police groups calling for wearables to monitor interactions.

The big decliners on the year were a mix of firms with no clear correlation or theme--defense, cyber, imaging, communications, and aerospace manufacturing.

Best of 2014:

- 1. TASER 66.75%
- 2. SAIC 49.77%
- 3. General Dynamics 44.03%

SPADE Defense Index Statistics

12/31/14 Close:	3987.52
12/31/13 Close:	3567.72
All-time High:	4072.44
All-time Close:	4060.01
	26 December 2014

	SPADE Defense	S&P500
2014	11.77%	11.39%
4Q14	7.44%	4.39%

- 4. Booz Allen 38.54%
- 5. OSI Systems 33.25%

Two big trends cited over the past few years continue; namely, (1) gains in commercial aerospace (which is in the midst of a multi-year run for manufacturers) and (2) that growing international defense sales would offset anticipated defense budget cuts in the near term. Our opinion is that unlike the previous downturn following the end of the Cold War when Lockheed and Northrop almost had to merge, defense companies had plenty of time to prepare for the backside of the budget peak; get their balance sheets in order, divest slow growth divisions, and acquire small positions that were better to maintain sales and growth in a downward cycle. This continues to be correct. The one wildcard has been Congress and could it stabilize sequestration cuts and provide a stable budget environment. To date, this has proved true.

What We Expect for 2015

- 1. Aerospace and defense stocks will continue to be a stable place for investors. In an environment with a strong U.S. economy, rising dollar, anticipated rise in U.S. interest rates, and global economic concerns in Europe, Japan, and China, the defense sector has a lower correlation with these economic issues than other sectors.
- 2. Continued international growth for defense products. Congress has shown a willingness for approving sales and relaxing export licensing rules. The world remains volatile—especially in the Middle East, Asia, and Africa (which is nothing really new). With the **2015 Paris Air Show** taking place this summer, a new round of major

2014 Results

1	TASER	66.75%	29	Harris Corp	2.88%
2	SAIC	49.77%	30	Gencorp	1.55%
3	General Dynamics	44.03%	31	Sparton	1.40%
4	Booz Allen	38.54%	32	United Technologies	1.05%
5	OSI Systems	33.25%	33	Mantech	1.00%
6	Ball Corp	31.96%	34	Kaman	0.91%
7	Lockheed Martin	29.54%	35	Viasat	0.61%
8	Northrop Grumman	28.60%	36	Comtech	0.03%
9	Engility	28.14%	37	Cubic	-0.04%
10	Mercury Computer	27.12%	38	AAR Corp	-0.82%
11	Huntington Ingalls	24.94%	39	Oshkosh Truck	-3.43%
12	Vectrus	24.55%	40	LMI Aerospace	-4.34%
13	Transdigm	21.94%	41	Alliant Techsystems	-4.46%
14	Raytheon	19.26%	42	Boeing	-4.77%
15	L-3 Comm.	18.11%	43	Leidos	-6.39%
16	CACI	17.70%	44	Aerovironment	-6.49%
17	Orbital Sciences	15.41%	45	Hexcel	-7.16%
18	Textron	14.55%	46	Exelis	-8.03%
19	Rockwell Collins	14.29%	47	Precision Castparts	-10.55%
20	Curtiss Wright	13.43%	48	Triumph Group	-11.63%
21	Computer Sciences	12.83%	49	Ducommun	-15.20%
22	Teledyne Tech	11.84%	50	Key W Holdings	-22.77%
23	Honeywell	9.36%	51	Intelsat	-22.98%
24	Moog	8.96%	52	Digital Globe	-24.74%
25	Woodward	7.94%	53	FireEye	-27.59%
26	Esterline Tech	7.57%	54	American Science	-27.83%
27	FLIR Systems	7.34%	55	Kratos Defense	-34.64%
28	Heico	4.23%			

announcements are expected to take place.

3. A budget for FY-2015 has provided some near-term stability and enables the Department of Defense to make cuts with a scalpel vs. the hatchet of sequestration. It is expected that the new Republican-controlled Congress will resolve sequestration issues for 2016-2019.

4. M&A: Although statistically there were a few hundred, mostly small deals with private companies in 2014, it is expected that the current year will see a rise in dollar volume of M&A.

5. Cyber will once again remain a dominant focus area. Money will continue to flow into cyber security initiatives

6. Small and mid-cap non-industrial firms may start to lead instead of lag as they did in the early 2000s.

7. Problems around the globe will continue. ISIS, Russia, China, and North Korea will continue to garner headlines as will Iran's nuclear program. "Arab Spring" events are likely as low oil prices lead to government cutbacks and highlight the wealth disparity in oil-producing countries--not just in the Middle East but possibly in nations such as Russia or Venezuela.

8. Significant inflows into fund products (PPA more than doubled in size during 2014) as investors shifted allocations from individual companies toward the diversity offered by publicly traded funds. Exposure to small and mid-cap firms, and into non-industrial areas like cyber, communications, surveillance, and security are all areas we see as benefiting in the current environment. As such, we expect inflows into the varied ETF products to continue. Of the three ETFs focused on the sector, only the Powershares Defense ETF (PPA) has exposure to non-manufacturing areas such as cyber and has the liquidity required by most investors.

Although 2013's two biggest laggards were among the best of 2014, no "dogs of defense" strategy is evident.

ETF Statistics (NYSE: PPA)

Powershares Aerospace & Defense

Exchange / Ticker Symbol:	NYSE / PPA
Assets (12/31/14)	\$214 M (up 132%)
Closing Price (12/31/14)	\$34.75
Yield (12-Month Yield)	0.60%
2014 Volume	8,805,800 (up 37%)
Turnover	15%

source: Yahoo Finance

Portfolio Price / Earnings*	17.30
Portfolio Price / Book*	1.85
Portfolio Price / Sales*	1.24
Portfolio Price / Cash Flow*	12.10
Earnings Growth Rate*	10.91%
Beta (3 year)*	0.72
Alpha (3 year)*	13.48
R-squared (3 year)*	51.63

Yahoo Finance - 11/31/14*

Performance (ex div)

	SPADE Defense Index	S&P500
2014	11.77%	11.39%
2013	48.27%	29.60%
2012	16.30%	13.41%
2011	[2.75%]	[0.00%]
2010	9.62%	12.78%
2009	21.71%	23.45%
2008	[38.03%]	[38.49%]
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%

About the SPADE Defense Index

The SPADE Defense Index (NYSE: DXS) provides an investment benchmark for the value that the market ascribes to 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 the sector – 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.

SPADE Indexes specializes in designing and managing equity benchmarks for ETF and other products.

Licensed Products**Exchange Traded Fund - ETF**

Licensed to Invesco Powershares, the Powershares Aerospace & Defense Portfolio ETF (NYSE: PPA) is designed to track the performance of the SPADE Defense Index.

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

* Sufficient Liquidity

Legal & Disclaimers

© 2015 ISBC LLC -- SPADE, the SPADE icon, and "The SPADE Investor" newsletter are registered trademarks of the ISBC. The ISBC is the owner of the trademark, service marks, and copyrights related to its indices. This newsletter does not constitute an offer of an investment product. The ISBC makes no representation regarding the advisability of investing in vehicles based on the SPADE Defense Index. All information is provided 'as is' for informational purposes only and is not intended for trading purposes or advice. Neither the ISBC nor any related party is liable for any informational error, incompleteness or for any actions taken based on information contained herein.

Contact Information

SPADE Indexes
1725 'I' Street, NW, Suite 300
Washington, DC 20006
Tel: (202) 349-3917
info@spadeindex.com
http://www.spadeindex.com
Scott Sacknoff: Index Manager

Jan-15		SPADEFense Index					Market		Forward	Price/	Price/	PEG	
Company	Ticker	Float %	Price	Price	% Ch	% Ch	Cap	P/E	Sales	Book	5 yr	Div Yld	
		31-Dec-14	30-Sep-14	31-Dec-14	2014	4Q14	intraday	ttm	ttm	mrq	expected	forward %	
AAR Corp	AIR	0.39%	24.19	27.78	-0.82%	14.84%	1.08	13.42	0.55	1.09	1.40	1.10%	
American Science & Engineering	ASEI	0.14%	55.38	51.90	-27.83%	-6.28%	0.41	50.39	2.53	2.16	-0.94	4.10%	
Alliant Techsystems	ATK	1.31%	127.64	116.25	-4.46%	-8.92%	3.71	9.47	0.73	1.87	0.75	1.20%	
AeroVironment	AVAV	0.22%	30.07	27.25	-6.49%	-9.38%	0.62	57.98	2.59	1.89	144.90		
Boeing Co	BA	6.42%	127.38	129.98	-4.77%	2.04%	92.67	15.10	1.04	6.49	1.45	2.30%	
Booz Allen & Hamilton	BAH	1.41%	23.40	26.53	38.54%	13.38%	3.95	15.89	0.76	24.44	1.66	1.70%	
Ball Corp	BLL	3.29%	63.27	68.17	31.96%	7.74%	9.33	16.79	1.11	7.88	1.77	0.80%	
Caci Intl	CACI	0.72%	71.27	86.18	17.70%	20.92%	2.05	15.53	0.59	1.50	1.64		
Comtech	CMTL	0.18%	37.15	31.52	0.03%	-15.15%	0.51	15.45	1.51	2.47	1.07	3.40%	
Rockwell Collins	COL	3.96%	78.5	84.48	14.29%	7.62%	11.23	15.06	2.28	6.08	1.39	1.40%	
Computer Sciences	CSC	3.12%	61.15	63.05	12.83%	3.11%	8.86	12.49	0.70	2.45	1.71	1.50%	
Cubic Corp	CUB	0.50%	46.80	52.64	-0.04%	12.48%	1.41	15.86	1.03	1.83	2.14	0.50%	
Curtiss Wright	CW	1.19%	65.92	70.59	13.43%	7.08%	3.39	17.47	1.30	2.16	1.68	0.70%	
Ducommun	DCO	0.10%	27.41	25.28	-15.20%	-7.77%	0.28	13.66	0.38	1.10	2.46		
Digital Globe	DGI	0.82%	28.50	30.97	-24.74%	8.67%	2.33	129.04	3.66	1.68	908.76		
Engility	EGL	0.27%	31.17	42.8	28.14%	37.31%	0.75	15.62	0.55	1.60			
Esterline Technologies	ESL	1.23%	111.27	109.68	7.57%	-1.43%	3.50	14.66	1.68	1.77	1.71		
FireEye	FEYE	1.67%	30.56	31.58	-27.59%	3.34%	4.75		14.34	3.76	-0.27		
Flir Systems	FLIR	1.60%	31.34	32.31	7.34%	3.10%	4.55	19.23	3.09	2.85	1.73	1.20%	
General Dynamics	GD	5.83%	127.09	137.62	44.03%	8.29%	45.66	16.48	1.50	3.56	2.09	1.80%	
Gencorp	GY	0.38%	15.97	18.30	1.55%	14.59%	1.08	30.00	0.66		-1.17		
Heico	HEI	1.42%	46.70	60.40	4.23%	29.34%	4.02	26.96	3.66	6.13	2.07	0.20%	
Huntington Ingalls	HII	1.91%	104.21	112.46	24.94%	7.92%	5.43	13.5	0.79	3.34	0.66	1.50%	
Honeywell Intl	HON	6.37%	93.12	99.92	9.36%	7.30%	78.22	16.35	1.95	4.16	1.77	2.10%	
Harris Corp	HRS	2.65%	66.40	71.82	2.88%	8.16%	7.51	14.25	1.53	4.24	5.00	2.70%	
Hexcel	HXL	1.39%	39.70	41.49	-7.16%	4.51%	3.96	17.07	2.22	3.56	1.57		
Intelsat	I	0.64%	17.14	17.36	-22.98%	1.28%	1.85	7.36	0.74		3.56		
Kaman	KAMN	0.38%	39.30	40.09	0.91%	2.01%	1.09	14.79	0.62	1.99	1.16	1.60%	
KEY W Holding	KEYW	0.14%	11.07	10.38	-22.77%	-6.23%	0.38	38.26	1.30	1.21	-1.46		
Kratos Defense & Security	KTOS	0.10%	6.56	5.02	-34.64%	-23.48%	0.29	10.48	0.34	1.29	6.47		
Leidos	LDOS	1.14%	34.33	43.52	-6.39%	26.77%	3.22	17.27	0.63	3.34	2.40	3.00%	
L-3 Communications Hldgs	LLL	3.78%	118.92	126.21	18.11%	6.13%	10.74	16.52	0.90	1.85	5.15	2.00%	
LMI Aerospace	LMIA	0.06%	12.80	14.10	-4.34%	10.16%	0.18	23.5	0.46	1.29	4.48		
Lockheed Martin	LMT	6.37%	182.78	192.57	29.54%	5.36%	60.47	16.72	1.38	13.42	1.77	3.20%	
Mantech International'a'	MANT	0.40%	26.95	30.23	1.00%	12.17%	1.13	19.89	0.61	0.99	3.00	2.90%	
Moog Inc.	MOGA	1.08%	68.40	74.03	8.96%	8.23%	3.01	15.23	1.15	2.30	1.59		
Mercury Computer Sys	MRCY	0.17%	11.01	13.92	27.12%	26.43%	0.47	30.26	2.22	1.35	4.99		
Northrop Grumman	NOC	4.44%	131.76	147.39	28.60%	11.86%	29.77	16.27	1.27	3.10	2.34	1.90%	
Orbital Sciences Corp	ORB	0.58%	27.80	26.89	15.41%	-3.27%	1.64	20.68	1.22	1.94	1.45		
OSI Systems	OSIS	0.49%	63.48	70.77	33.25%	11.48%	1.40	18.43	1.55	2.72	2.51		
Oshkosh Truck	OSK	1.34%	44.15	48.65	-3.43%	10.19%	3.88	10.60	0.58	1.97	0.96	1.50%	
Precision Castparts	PCP	4.58%	236.88	240.88	-10.55%	1.69%	34.33	15.35	3.45	2.96	1.31	0.10%	
Raytheon Co	RTN	4.47%	101.62	108.17	19.26%	6.45%	33.36	15.52	1.50	2.87	1.70	2.30%	
SAIC	SAIC	0.80%	44.23	49.53	49.77%	11.98%	2.26	15.38	0.59	6.81	3.57	2.20%	
Spartan	SPA	0.10%	24.65	28.34	1.40%	14.97%	0.28	13.96	0.82	2.53	1.27		
TASER International Inc.	TASR	0.49%	15.44	26.48	66.75%	71.50%	1.39	55.17	8.93	11.93	2.36		
Transdigm	TDG	3.63%	184.33	196.35	21.94%	6.52%	10.30	20.31	4.37		2.05		
Teledyne Technologies	TDY	1.32%	94.01	102.74	11.84%	9.29%	3.76	18.02	1.61	2.55	1.85		
Triumph Group	TGI	1.20%	65.05	67.22	-11.63%	3.34%	3.43	10.22	0.92	1.46	2.90	0.20%	
Textron	TXT	3.98%	35.99	42.11	14.55%	17.00%	11.62	16.45	0.89	2.58	0.98	0.20%	
United Technologies	UTX	6.39%	105.60	115.00	1.05%	8.90%	104.84	15.97	1.63	3.11	1.60	2.10%	
Vectrus	VEC	0.10%	19.53	27.40	24.55%	40.30%	0.29	9.86	0.23	4.16			
Viasat Inc	VSAT	1.04%	55.12	63.03	0.61%	14.35%	2.95	35.02	2.18	2.97	1.11		
Woodward	WWD	1.13%	47.62	49.23	7.94%	3.38%	3.23	15.58	1.63	3.13	1.81	0.60%	
ITT Exelis	XLS	1.15%	16.54	17.53	-8.03%	5.99%	3.27	13.59	0.74	1.86	-2.48	2.50%	