Written by Nick Sanders Monday, 08 October 2012 00:00



It's been awhile since we last discussed the state of the defense industrial base—the "industrial" part of the "military-industrial complex"—if you will. From our perspective, the industrial base is buzzing like a beehive. It seems that the more gloomy the future fiscal outlook, the more companies seek to secure their business base through corporate maneuvers. These are certainly exciting times for the transaction advisors and due diligence types--acquisitions are starting to pick up, companies (such as EADS and BAE) are considering mergers, and other companies (such as Hawker Beechcraft Defense) are looking at financial ruin.

That's not all, of course. Off the top of the head: ITT Corporation split into three companies, SAIC is splitting into two companies, 3M is in the process of acquiring Cerradyne, and UTC/Pratt & Whitney sold its Rocketdyne unit to GenCorp (Aerojet) in order to help pay for its \$18.4 billion acquisition of The Goodrich Corporation.

Interestingly, as defense prospects dim, the commercial aviation space looks primed for a rebound. We base that assessment on comments made in the recently released annual "Top 100 Aerospace Manufacturers Report" put together by Flight International Magazine and PricewatershouseCoopers. (Link: <u>here</u>.) The writers at Flight International wrote—

At companies whose business is balanced between civil and defence, rising civil sales are typically more than offsetting declines on the defence side, and programmes such as the

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Boeing 787 and 737, or Airbus A320 and—soon—A350 are starting to drive revenue growth along their supply chains. But for those heavily reliant on defence, the response to this market schizophrenia is going to be the defining story of the aerospace industry for the next several years.

The authors also discussed M&A activity and noted that cybersecurity has been, and should continue to be, attractive to the larger system integrators looking to solidify market share in a shrinking defense market. However, they were also cautious regarding the ability of "bureaucratic, process-driven" defense companies to successfully integrate the smaller, more entrepreneurial cybersecurity firms. They wrote, "So perhaps more than at any time in the past decade, management quality matters."

We noted that Boeing is back as the Number One aerospace manufacturer in the world, regaining the place it had <u>briefly ceded</u> to EADS. The Flight International report stated that, while Boeing edged EADS in total revenue (\$68.7 billion versus \$65.1 billion), the outcome was driven by the strength of Boeing's defense business. Looking strictly at commercial aviation, the Report stated that Airbus' \$41 billion of annual sales dwarfed the \$36 billion annual revenue of Boeing Commercial Aviation. The forecasted near-term decline in the defense market compels our prediction that Boeing had better enjoy its Number One position while it can—because we believe it will soon fall back to Number Two. If the rumored EADS/BAE merger happens, it's a lock.

1. Boeing 2. EADS 3. Lockheed Martin 4.

The 2011 Top 10 A&D manufacturers were (in order)-

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General Dynamics

5.

United Technologies (we expect UTC to move past GD next year, when Goodrich's sales are added to its totals)

6.
Northrop Grumman
7.
Raytheon
8.
Finmeccanica
9.
General Electric
10.

Safran

The U.S. DOD is not completely unaware of the impact of looming defense budget cuts on its industrial base. Indeed, the (former) Industrial Policy Directorate recently issued its annual report to Congress on Industrial Capabilities. We have written about the IP Directorate before

, without (quite candidly) much enthusiasm and

# without much optimism

for its ability to actually analyze the industrial base it is charged with understanding. We discussed the new "S2T2" analytical framework used to gain that understanding. We thought—and still think—that it's a back-office type approach to doing what is really needed,

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which is to have every single prime contractor map individual program supply chains via a common format, and then aggregate those program supply chains in a secure database.

And so perhaps you'll be unsurprised that we reacted to the latest Industrial Capability Report to Congress with much the same feeling of tolerant bemusement, a combination of interest in what the analysis might have been, and boredom for what it was.

The Report made the point that the "defense industrial base" is far from the megalithic entity that it appears to be from the outside and is, instead, a "market serviced by a diverse selection of companies that span, and often reflect, the greater global economy for goods and services ... Simply put, the base upon which the Department relies is more global, commercial, and financially complex than at any time in our Nation's history." Okay, that may well be true—but *s o what* 

?

In our view, such a statement simply serves to lower expectations about the depth of analysis that was performed. Yes, the defense industrial base is complex—that fact just makes it more important (not less) the that the (former) Industrial Policy Directorate actually analyze the DOD supply chains so that appropriate policy decisions can be made with some modicum of insight. The difficulty of the tasking is more than offset by its importance; so we wonder *what is taking so long?* 

(Could it be that the S2T2 approach was simply flawed from inception?)

There's much more of the same excuses for nonperformance sprinkled throughout the Report. For example, on Page 3, the Report stated—

Assessing the defense industrial base is a monumental task. Defense acquisition investment is never evenly spread across sectors and systems, and the levels of investment required to sustain and enhance industrial base capabilities vary from niche to niche. Moreover, defense systems are extremely complex, incorporating many different components produced by lower-tier suppliers that actually connect the supply chains of seemingly unrelated programs – for example, ground vehicles and unmanned aerial systems (UASs) may rely on the same parts producers for motors or electronics. The lower-tier suppliers also connect the defense products to the commercial industrial base, helping the Department take advantage of the innovative strength of the American economy and helping the Department share the resource burden of supporting the defense industrial base with highly productive commercial markets. ... Implementing a systematic process to identify such critical and fragile niches and to

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integrate that information into budgetary and programmatic decision-making is one of the Department's priority initiatives in the current era of constrained budgets.

[Cue violins.]

Yeah, it's (quite rightly) one of the "priority initiatives" but *where's the output?* If it's so important, why hasn't it been completed yet?

\*\* Sigh \*\*

The actual S2T2 analysis is discussed starting on Page 9. The Report stated-

This effort is not a study, but rather a comprehensive process to categorize, identify, and monitor the vast and complex base upon which our Warfighters rely, from the shoestrings on their boots to the ships they sail. This effort seeks to better understand and quantify the complexity of the defense industrial base, which encompasses tremendous variation: some defense-unique parts of the base develop brand-new, emerging technologies, while others manufacture and update very mature products; some products and services incorporated into the defense supply chain are widely available in commercial markets, while others are uniquely useful to the military; some niches have significant backlogs of work and reservoirs of capital earned in a recent production surge, while others currently operate at or below their minimum sustaining rate and are financially fragile. In some parts of the defense industry, all of the intellectual capital resides in a few key companies that interact directly with the Department and rely on build-to-print subcontractors, while in other areas the key design capability and production skills are diffused through the extensive layers of the supply chain. ... The S2T2 project collects data, prepares analyses, and guides the DoD investments and policy choices to recognize the complexity of the industrial base. The project will assist the Department in indentifying current and emerging sectors of the defense industrial base critical to the Nation"s security.

Did you notice that we italicized two words in the paragraph above that explain the exact status of the S2T2 "comprehensive process"? Did you see those two words and the tense in which they were written? Go look again; we'll wait right here for you.

Yeah. *Future tense*. That's where the (former) IP Directorate is right now; it's writing about a *fu ture outcome* 

which has not yet come to pass. It has not yet come to pass because it's not finished yet. It's

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not finished yet because ... well, the Report doesn't say. We assert it's not finished yet and may never be finished —because it's not the right approach.

Or because it's not in the best interest of the (former) IP Directorate to actually complete the initiative. (More on that thought in a bit.)

We could keep going, but why bother? The fact of the matter is that, by the time the S2T2 process is completed, it will be far too late to affect decisions that will need to be made in 2013 and 2014. Nice job, folks.

Looking to accentuate the positive, the big accomplishments for FY 2011 seemed to be -(1) development of a S2T2 "screening template" by which to input S2T2 data when it ever becomes available, and (2) reorganization and renaming of the (former) IP Directorate into something that's now called "DASD (MIBP)".

So what was formerly the Industrial Policy Directorate is now the Deputy Assistant Secretary for Defense (DASD) for Manufacturing and Industrial Base Policy (MIBP). The office has been promoted up in the <u>DOD hierarchy</u>, the office lead has been promoted, and the "realigned" organization now has a long-term "priority" mission that it can use to drive funding requests.

This, readers, is what success looks like at the DOD.

The fact that the DOD bureaucracy is growing in a time of budget cut-backs, and that there is no tangible output from this long-term "comprehensive process" for identifying weak points in the defense industrial supply chain—and, indeed, *that no S2T2 completion date has even been set*—should not be used to judge these individuals. They are winning by their own applicable criteria.

And if they ever do issue a comprehensive S2T2 analysis, their importance in the Pentagon foodchain will diminish. Which is, perhaps, one reason that the initiative may not ever make as much progress as we think it should.

So while the DOD bureaucrats are reorganizing, so is the industrial base they are supposed to be analyzing. The industrial base is reorganizing and evolving quickly, in response to the endemic forces of the marketplace. In contrast to the nimble movements of the market, the bureaucrats are progressing far more slowly than we think they should be. And they are perhaps sauntering down the wrong path.

What's interesting to contemplate is the impact of the market reorganizations on the S2T2 analysis. By the time DOD gets the S2T2 data input into the database (using the approved template), we predict that data is going to be largely obsolete, overtaken by real-life events such as mergers, acquisitions, divestitures, spin-offs, and bankruptcies. By the time the S2T2 analysis is completed—if it ever is—it will describe an industrial base that no longer exists.

But that's okay.

We're quite sure that the good folks at DASD (MIBP) will be willing to undertake a new S2T2 analysis, if more resources and funding can only be made available to them.