A COMPELLING "NATIONAL SECURITY/ BUSINESS RESTRUCTURING" MODEL IS CRITICAL TO LONG-TERM U.S. NATIONAL SECURITY

By:

James McAleese, Esq.
McAleese & Associates, P.C.

7901 Jones Branch Drive, Suite 310
McLean, VA 22102
(703) 917-8900/(703)-917-8911
jmcaleese@mcaleese.com

This Briefing has been distilled from the full 102-page Briefing Paper: "A Compelling 'National Security/Business Restructuring' Model Is Critical to Long-Term U.S. National Security." That Briefing Paper was drafted and prepared at the sole expense of McAleese & Associates, P.C. without any support or compensation from any third-party. It is an investment into the national security of the United States as the Administration undertakes its Quadrennial Defense Review. It is being circulated to the Administration, Congress, Industry and Shareholders to develop a consensus of actions to ensure a long-term aerospace & defense industrial base to protect the American population and U.S. interests abroad. Please contact McAleese & Associates, P.C. at the address above for free copies of the Briefing Paper and permission to freely distribute copies to others.

Agenda

I. **Correlation of defense industrial base to long-term U.S. National Security.**

II. **Five "epochs" of defense in 1990's.**

III. **Two major challenges facing DoD.**

IV. **"Value Investors" are critical to Bush Administration's Strategic/National Security Objectives.**

V. **Previously, DoD acquired "Federated Subsystems."**

VI. **Now, "Full Subsystem Capability" Model drives "leap-ahead" technologies for DoD, and also program workshare & Return-on-Investment for Shareholders.**

VII. **Current Defense Plan shows huge defense funding "Train Wreck" coming, and declining R&D.**

VIII. **Fiscal constraints will likely force hard decisions between: (1) current operations v. selective engagements; and (2) some platforms v. networked-sensors & "leap-ahead" technologies.**

IX. **Several defense-unique subsystem/capabilities must be consolidated to drive "leap-ahead" technologies to directly save American lives.**

X. **Antitrust evaluations must be scoped to "Full Subsystem Capability" Model, and to integrated U.S./NATO Defense Industrial Base.**

XI. **Recommendations for immediate actions to execute compelling "National Security/Business Restructuring" Model.**

I. There is a direct correlation of defense contractors' health to long-term U.S National Security

- Today, the aerospace & defense industry serves two masters:
  1) Long-term National Security, with all of its key "Stakeholders;" and
  2) Shorter-term Shareholders on Wall Street.
- Under the old "Defense-Industrial Complex" Model, contractors were captive extensions of DoD.
- Last summer's Wall Street abandonment of defense stocks is catalyst for creation of new "National Security/Business Restructuring" Model.
- That Model must integrate both long-term drivers of National Security with the shorter-term scrutiny of Shareholders.
- Bluntly speaking, those cutting-edge platforms and extraordinary strike-capabilities are produced by private defense contractors.
- Long-term U.S. national security is directly-dependent upon that industry.

- Contractors are engaged in a constant struggle for capital (whether developing new R&D expertise or financing front-end of major production).
- Contractors must raise capital by issuing stock or bonds.
- However, defense is lower-profitability and limited-growth.
- Portfolio Managers will invest in high-growth/high-risk areas, but will only invest in low-profit/modest-growth industries with controlled-risk.
- "Value Investors" are Portfolio Managers willing to commit to lower-profit/lower-growth defense companies, so long as there is strong cash-flow, reasonable profit, and "controlled-risk."
- We must advocate for more "top-line" defense funding in the face of the on-rushing "train wreck" of requirements ($290B v. $ 340B needed).
- However, due to the thousands of "constituents" in the appropriations process, eventual top-line funding will be whatever it will be.

- If top-line growth is only modest, then we must reduce performance risk to attract capital from Wall Street to partially finance that defense-funding shortfall.

- Program risk is exclusively within the prerogative of key National Security Stakeholders. (Use risk-reduction and top-line growth as variables to convert contractors into controlled-risk, like "Super T-Bills").

- We must decisively rededicate ourselves to ensure that all actions have a compelling "National Security Case" and a compelling "Business Case."

- Specifically, Key National Security "Stakeholders" must work hand-in-hand with Industry Management and Shareholders to:

    1) Complete the long-overdue consolidation of the excess capacity in the mid-tier defense industrial base; and

    2) Establish clear risk-to-reward relationships with responsive contractors, to generate reasonable RoI with controlled-risk.

II. We saw five distinct "Epochs" in defense in the 1990s

- First, the mergers of the U.S. "Big 3" were driven heavily by DoD following the defense budget "implosion" after the fall of the Berlin Wall.
- Second, Acquisition Reforms were incrementally undertaken by DoD, which had the effect of delegating program management to platform primes.
- Third, mergers and DoD's Acquisition Reforms collectively triggered "Vertical Integration" concerns. (leading to an ideological collision during the attempted Lockheed/Northrop merger).
- Fourth, DoD encouraged Trans-Atlantic defense mergers to integrate the dual directives of coalition warfare and real-time use of "smart weapons."
- Fifth, stark abandonment of historic "Military/Industrial Complex" by Wall Street last summer ultimately triggered recent action by key National Security Stakeholders for long-term preservation of defense industrial base.

III. Two major challenges face DoD and its contractors

- First, several large prime contractors encountered difficulties on key programs, which decimated the stock value of those contractors.
- Those performance crises then triggered an industry-wide crisis-of-confidence that decimated the overall market value of the defense sector.
- Second, a constant infusion of capital is critical for contractors to finance major "front-end" costs, even for production programs. (most of which will not be fully reimbursed by DoD for several years).
- Contractors' ability to raise vital capital is a direct function of investors' and lenders' perceptions of reasonable RoI, with controlled-risk.
- And, while Congress provides the annual funding from which defense contractors generate short-term profit.
- It is the consistent in-flow of fresh capital from investors that incentivizes Industry Management to drive the "leap ahead" technologies so critical to directly saving American lives on the battlefield.

IV. "Value Investors" are critical to the Bush Administration's Strategic/National Security Objectives

- Many key National Security "Stakeholders" were loathe to publicly intervene last summer because of the potential perception of an "industry bail-out."

- Others concluded that stability would return merely through increased defense spending promises made during the presidential campaign.

- Recognition that long-term health could not be salvaged merely by DoD edict was ultimately acknowledged by Dep SecDefs Hamre & De Leon in the November 2000 Defense Science Board (DSB) Recommendations.

- However, such recommendations will almost certainly be eclipsed by Administration's strategic Quadrennial Defense Review (QDR) unless two resounding messages are made clear:

1) DoD must have robust long-term defense industrial base to achieve the Administration's strategic objectives of "leap-ahead" technologies and lightning-strike expeditionary warfare in:

   a) National Missile Defense;

   b) Cost-effective, tactical air superiority, such as the F-22;

   c) Real-time, precision-strike capabilities;

   d) Deep-strike capabilities, e.g. bombers, Unmanned Combat Aerial Vehicles (UCAV), etc.;

   e) Strengthened tactical airlift (lightning-strike);

   f) Survivable, netted-C4ISR capability; and

   g) Vital special-mission aircraft for airborne surveillance and jamming, i.e., "low-density-high-demand" assets, and

2) That defense industrial base must be well-capitalized by shorter-term "value investors," who will accept a strong Cash-Flow-Return-on-Investment (CFROI™), even with limited top-line growth, so long as there is "controlled-risk."

V. Previously, DoD acquired "Federated Subsystems"

- DoD generated its own subsystem design specifications (MilSpecs) and was the *de facto* platform integrator.

- Most suppliers received prime contracts from DoD, awarded through "full and open" subsystem competitions by various Commands.

- Suppliers "worked" the Customer (using IR&D) to designate proprietary legacy products as "Government-Furnished-Equipment" (GFE).

- Suppliers had little, if any, responsibility for integration of the "black box" into the platform itself. ("place the box into the rack").

- "Frozen" MilSpec designs emphasized "produceability," and suppliers could standardly expect to "get healthy" from Engineering Change Proposals (ECPs) during production.

- Suppliers often captured sole-source life-cycle support contracts on a lucrative basis because of the proprietary nature of their legacy subsystems.

VI. "Full Subsystem Capability" Model drives "leap-ahead" technologies for DoD and program workshare & RoI for Shareholders

- Acquisition Reforms have delegated traditional DoD subsystem authority to primes under Total Systems Performance Responsibility (TSPR).
- This shift away from DoD subsystem development means subsystem selection is now "make-or-buy" decision by the platform prime.
- Suppliers' primary Customer is now no longer DoD, but platform prime.
- Shrinking R&D budgets have also driven platform primes to encourage suppliers to aggressively "invest" in the "front-end" of RDT&E programs.
- Creates enormous pressure for "black box" houses to develop "Full Subsystem Capability," to hold program workshare, let alone marketshare.
- But an overnight shift from "black box" production to Full Subsystem Capability is almost impossible to achieve through internal growth alone.

- Specifically, increased costs of "Full Subsystem Capability" include:
    1) Development cost,
    2) Integration cost,
    3) Quality assurance,
    4) Marketing, lobbying, contracts/subcontracts growth to Overhead,
    5) Production (function of hardware, electronics, or software),
    6) Life-cycle support to sustain on-board subsystems in field.

- While the primes have consolidated to two houses for most platforms, suppliers have yet to consolidate in many defense-unique subsystems.
- The irrevocable shift to two platform prime contractors per major platform has intensified competition under "winner-take-all" competitions. (JSF).
- However, for each of the two competing platforms, there is only one of each major on-board subsystem (e.g. ECM, IFF, fire control radar).
- This translates into program workshare for only two of each specific subsystem in a major program prior to final downselect at Engineering-Manufacturing-Development (EMD).
- However, in many cases, there are still four-to-six independent subsystem houses that produce each defense-unique subsystem.

- Consequently, suppliers must develop "Full Subsystem Capability" to become #1 or #2 in the World in a particular defense subsystem.
- "Full Subsystem Capability" means the ability to design, manufacture, integrate and logistically-sustain that entire defense-unique subsystem.
- Such suppliers can also manage the greater financial risks inherent in the shift from government-liable design specifications to contractor-liable performance specifications.
- The evolution to a true "Full Subsystem Capability" requires:
    1) Strong corporate resolve,
    2) A strategic plan of action,
    3) Shrewd legal fencing of financial/contractual risk, and
    4) Integrating acquisitions to create R&D critical mass and manage increased program risks at the subsystem-level.
    5) Restructuring troubled "legacy" programs to allocate additional resources to meet Customer's true long-term requirements.

- The benefits include:
    1) Ensuring the increased survivability of both platforms and American lives.

    2) Combining core subsystem capabilities to reach R&D critical mass in defense-unique subsystems.

    3) Commingling integration capabilities for entire system-suites, as historically-dedicated on-board subsystems, with separate processors, evolve into "Multi-Functional Systems."

    4) Attracting investment capital to cultivate engineering and integration expertise, with financial clout to manage technical/financial risks now routinely flowed-down by primes.

    5) Collectively, this maximizes potential to drive "leap-ahead" technologies, while providing controlled-risk for value investors.

VII. The Current Five-Year-Defense-Plan Shows a Huge Procurement "Train Wreck" Coming, and Declining R&D

- It is no secret that there has been a savage mismatch of requirements relative to funding over the past decade. (high "operations tempo" and "readiness drains" cannibalized Procurement budget).

- Current "Joint Vision 2010" commits the U.S. to "Full Spectrum Dominance," through: 1) "Dominant Maneuver;" 2) "Precision Engagement;" 3) "Full-Dimensional Protection;" and 4) "Focused Logistics."

- President Bush's election platform focused on:
    1) Restoring the morale of our Armed Forces,
    2) Insisting that deployments have well-defined objectives,
    3) Defending the American homeland with a National Missile Defense,
    4) Preparing for the information age, and
    5) "Skipping a generation of weapons" to move to light-strike land forces, deep-strike air assets, and littoral surface combatants.

NATIONAL DEFENSE BUDGET SUMMARY FY 2001 ($ MILLIONS)[1]

Unadjusted Dollars	**FY 1996**	**FY 1997**	**FY 1998**	**FY 1999**	**FY 2000**	**FY 2001**
DoD Budget Authority	$266,007	$270,298	$271,254	$292,147	$293,283	$305,421
RDT&E	**$34,971**	**$36,404**	**$37,089**	**$38,290**	**$38,356**	**$37,862**
Procurement	**$42,417**	**$42,930**	**$44,772**	**$50,920**	**$54,208**	**$60,270**

NATIONAL DEFENSE BUDGET SUMMARY FY 2001 ($ MILLIONS)[2]

Constant FY 2001 Dollars	**FY 1996**	**FY 1997**	**FY 1998**	**FY 1999**	**FY 2000**	**FY 2001**
DoD Budget Authority	$	$	$290,818	$307,004	$301,593	$305,421
RDT&E	**$**	**$**	**$38,733**	**$39,563**	**$39,024**	**$37,862**
Procurement	**$**	**$**	**$46,707**	**$52,470**	**$55,074**	**$60,270**

[1] OFFICE OF THE UNDER SECRETARY OF DEFENSE, DEP'T OF DEFENSE, NATIONAL DEFENSE BUDGET ESTIMATES FOR FY2001 1-16 (2000).
[2] OFFICE OF THE UNDER SECRETARY OF DEFENSE, DEP'T OF DEFENSE, NATIONAL DEFENSE BUDGET ESTIMATES FOR FY2001 1-16 (2000).

NATIONAL DEFENSE BUDGET-LONG RANGE FORECAST ($ BILLIONS)[3]

FY 2001	**FY 2001**	**FY 2002**	**FY 2003**	**FY 2004**	**FY 2005**
DoDBudget Authority	$305.4	$309.2	$315.6	$323.4	$331.7
RDT&E	**$37,862**	**$38,371**	**$37,563**	**$37,454**	**$36,362**
Procurement	**$60,270**	**$63,021**	**$66,710**	**$67,652**	**$70,931**

DoD's 2000 and 2001 FYDPs, by Primary Appropriation Category (total obligational authority in billions of fiscal year 2001 dollars)[4]

Appropriation Category	**FYPD**	**2001**	**2002**	**2003**	**2004**
Procurement	2000	61.4	63.7	64.9	68.9
	2001	**60.3**	**64.4**	**64.0**	**65.8**
RDT&E	2000	34.1	33.0	32.7	31.3
	2001	**37.9**	**36.3**	**35.4**	**33.7**

[3] OFFICE OF THE UNDER SECRETARY OF DEFENSE, DEP'T OF DEFENSE, NATIONAL DEFENSE BUDGET ESTIMATES FOR FY2001 1-16 (2000).
[4] OFFICE OF THE UNDER SECRETARY OF DEFENSE, DEP'T OF DEFENSE, NATIONAL DEFENSE BUDGET ESTIMATES FOR FY2001 1-16 (2000).

2. DEPARTMENT OF THE NAVY[5]

FY 1997/1998/1999/2000/2001 Budget Summary (Dollars in Millions)

DESCRIPTION	FY1997	FY1998	FY1999	FY2000	FY2001
Research, Development, Test and Evaluation, Navy	**$7,884**	**$7,879**	**$8,942**	**$9,057**	**$8,477**
Aircraft Procurement, Navy	**6,715**	**6,287**	**7,549**	**8,823**	**7,964**
Weapons Procurement, Navy	1,332	1,087	1,608	1,402	1,434
Shipbuilding and Conversion, Navy	5,466	8,085	5,937	7,017	**12,297**
Other Procurements, Navy	2,838	2,988	4,047	4,302	3,335
Procurement, Marine Corps	**580**	**473**	**857**	**1,294**	**1,172**
Procurement of Ammunition, Navy and Marine Corps	276	381	467	588	430
Totals	**25,091**	**27,180**	**29,407**	**32,483**	**35,109**

[5] OFFICIAL WEBSITE OF THE DEP'T OF THE NAVY, OFFICE OF BUDGET, BUDGET RESOURCES DIRECTORY (visited Jan. 10, 2001) <http://navweb.secnav.navy.mil/budget>.

3. DEPARTMENT OF THE AIR FORCE[6]

FY 1998/1999/2000/2001 Budget Summary (Dollars in Millions)

DESCRIPTION	FY1998	FY1999	FY2000	FY2001
Research, Development, Test and Evaluation	**$14,278**	**$13,731**	**$14,286**	**$13,685**
Aircraft Procurement	$6,112	$8,235	$8,533	**$9,539**
Missile Procurement	$2,273	$2,091	$2,200	$3,061
Other Procurement	$1,494	$1,589	$1,808	$1,865
Ammunition Procurement	$372	$411	$583	$638
Totals	**$24,529**	**$26,058**	**$27,412**	**$28,791**

[6] OFFICIAL WEBSITE OF THE DEP'T OF THE AIR FORCE, OFFICE OF THE ASSISTANT SECRETARY, AIR FORCE PRESIDENT'S BUDGET (visited Jan. 10, 2001) <http://www.saffm.hq.af.mil>.

4. DEPARTMENT OF THE ARMY[7]

FY 1997/1998/1999/2000/2001 Budget Summary (Dollars in Millions)

DESCRIPTION	FY1997	FY1998	FY1999	FY2000	FY2001
Research, Development, Test and Evaluation	**$4,916**	**$5,025**	**$5,033**	**$4,426**	**$4,751**
Aircraft Procurement	1,329	1,323	1,384	1,230	1,312
Missile Procurement	1,003	744	1,222	1,358	1,413
WTCV Procurement	1,419	1,291	1,544	1,417	1,500
Ammunition Procurement	1,143	1,020	1,013	1,141	1,257
Other Procurement	3,178	2,563	3,296	3,424	4,050
Totals	**12,988**	**11,966**	**13,492**	**12,996**	**14,283**

[7] OFFICIAL WEBSITE OF THE OFFICE OF THE UNDER SECRETARY OF DEFENSE, DEFENSE BUDGET MATERIALS (visited Jan. 10, 2001) <http://dtic.mil/comptroller>.

Several current budget trends are obvious:

1) **R&D funding has been basically flat from FY 1996 through FY 2001.**

2) **Procurement funding has finally increased from $42 billion in FY 1996 to $60 billion in FY 2001.**

3) **The FYDP forecasts DoD Procurement increasing from approximately $60 billion this year in FY 2001 to $71 billion by FY 2005.**

4) **To some extent, that FYDP projected-Procurement increase is to be funded at the expense of DoD R&D funding.**

5) **The Navy R&D has been fairly constant, with $10 billion growth in Procurement (F/A – 18E/F; V-22; CVN-77).**

6) **The U.S. Air Force has suffered from a decline in R&D since FY 1998, but that has been amply offset by Procurement growth (F-22; C-17).**

7) **And the U.S. Army has suffered from a decline in R&D in inflation adjusted-dollars and a largely-suppressed Procurement budget.**

Bush Administrations' FY2002 Preliminary Budget

- Priorities for projected $5.6 Trillion surplus over 10 years:[8]
  1) Save $2.6 Trillion Social Security surplus for Social Security;
  2) Provide $1.6 Trillion tax cut over 10 years;
  3) Reform Education (11.5% budget increase in FY 2002);
  4) Reform Medicare;
  5) Retire $2 Trillion Federal debt over 10 years;
  6) Limit appropriations growth to 4% annual inflation (current growth at 6% per year);
  7) Create $1.4 Trillion reserve for contingencies;
  8) Restore commitment to military personnel and begin 21st century force structure transition.

[8] Exec. Office of the President of the U.S, A Blueprint for New Beginnings (2001).

Bush Administration's National Defense Priorities[9]

- $14.2 Billion DoD funding increase proposed in FY2002 (from $296 Billion in FY2001 to $310.5 Billion in FY2002) for:
  1) $1.4 Billion additional military compensation/retention;
  2) $400 Million additional housing improvement;
  3) Expanded benefits for over-65 military retirees;
  4) $2.6 Billion additional R&D for information superiority; stealth; speed; precision; agility; mobility; lethality; and National Missile Defense;
- Increase R&D by $20 Billion in FY2002-2006 for "leap-ahead" technologies; laboratory improvements; counter-terrorism; and NMD.
- More BRACs due to 23% excess infrastructure

[9] Exec. Office of the President of the U.S, A Blueprint for New Beginnings (2001).

President Bush's FY2002 National Security Budget and Five-Year-Defense Plan[10]

Discretionary Budget Authority by Agency (Dollar amounts in billions)

	Actual FY1998	Actual FY1999	Actual FY2000	Estimate FY2001	Proposed FY2002	Change: 2001 to 2002	Average Growth: 1998 to 2002
Defense[11]	259.8	274.6	287.3	**296.3**	**310.5**	**14.2**	**4.6%**

Discretionary Outlays by Function (In billions of dollars)

	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006
Defense[12]	299.6	**319.1**	**321.8**	**333.1**	**347.4**	**354.4**

[10] Exec. Office of the President of the U.S, A Blueprint for New Beginnings (2001).
[11] Exec. Office of the President of the U.S, A Blueprint for New Beginnings (2001) at 190.
[12] Exec. Office of the President of the U.S, A Blueprint for New Beginnings (2001) at 198.

VIII. Fiscal constraints will likely force hard decisions between some platforms versus networked-sensors

- Three points have become clear from President Bush's campaign and from his Cabinet nominations for national security. One is:

    1) A commitment to an eventual National Missile Defense (NMD).
    2) A clear drive to defend against asymmetric attack and for a robust expeditionary capability to arrive in-theater and fight in real-time.

- Two, this creates an inevitable budget clash of both:
    1) Peacekeeping missions versus selective engagements; and
    2) Funding of imminent platforms versus "leap-ahead" technologies of networked-sensors and precision-strike warfare.

- A potential compromise of missions and platforms/capabilities would be:
    1) **"Engage More Selectively and Accelerate Transformation;"** or
    2) **"Engage More Selectively and Strengthen War Fighting Capability."**[13]

[13] MICHELE A. FLOURNEY, NATIONAL DEFENSE UNIVERSITY, REPORT OF THE NATIONAL DEFENSE UNIVERSITY QUADRENNIAL DEFENSE REVIEW 2001 WORK GROUP (2000).

- Moderate increases in top-line funding and more selective engagements -- to release R&D funding for "leap-ahead" technologies and NMD, coupled with calculated Procurement to maximize lightning-strike warfare -- is most likely in the immediate future.

Three, this creates strong indicators that there should be areas of focused defense industry growth:

1) Precision Guided Munitions. (this has been a constant of both Joint Vision 2010 and of President Bush's campaign platform).

2) Command, Control, Communications & Computers (C4). (will be at a premium to integrate those functions).

3) Intelligence, Surveillance & Reconnaissance (ISR). (will be at a premium to integrate those functions).

4) Electronic Warfare. (consistent requirements for all tactical force projection, particularly by non-stealthy strike-platforms).

5) Air Transport/Deep-Strike Assets. (transport; aerial refueling; and deep-strike assets in the form of additional bombers or UCAVs).

6) Targeting/Sensors. (netted-warfare enables the remote firing of Precision-Guided Munitions from manned or unmanned platforms).

7) Robotics/Unmanned Platforms. (strike-platforms against heavily-defended/high-risk targets and/or as long-loiter, C4ISR-platforms).

8) Communications/Navigation Subsystems. (critical for Precision-Guided Munitions, unmanned platforms, and lightning-strike).

9) Software Development and Information Warfare Subsystems. (vital to all netted-C4ISR).

10) Theater Missile Defense/National Missile Defense. (includes battle management software; hardware development; various payload vehicles; kill vehicles; and radars).

IX. Several defense-unique technologies and subsystems must be further consolidated within the mid-tier to drive "leap-ahead" technologies and sustain competition

- Only contractors that truly develop #1 or #2 in World "Full Subsystems Capability" can command program workshare and premium RoI.
- Consolidation of the defense mid-tier is entirely consistent with DoD's staunch position to maintain at least two strong suppliers for each defense-unique subsystem. (outsource non-defense-unique subsystems to commercial market under Civil/Military Integration Doctrine).
- This is vital to generate R&D critical mass to drive "leap-ahead" technologies and innovation for lightning-strike warfare.
- DoD has committed to alter Acquisition Strategies where necessary to protect vital defense-unique subsystems from the risk of Vertical Integration[14] or "Reverse Vertical Integration" (GFE, leader/follower supplier subcontracts, parallel subsystem R&D).

[14] U.S. DEP'T OF DEFENSE, DIRECTIVE 5000.2, § 4.7.1.4 (Oct. 23, 2000). *See also* Memorandum from the Principal Deputy Under Secretary of Defense, U.S. Dep't of Defense, to the Secretaries of the Military Departments on Subcontractor Competition (May 5, 1999); Memorandum from

- "Reverse Vertical Integration" is where under-utilized subsystem suppliers atrophy, ultimately resulting in "make" decisions by default at the platform-level, from loss of technical expertise and exploding Overhead.

- Those areas where a compelling National Security/Business Restructuring Case for additional mid-tier consolidation can be most strongly made are as follows:

  1) TARGETS-AIR, GROUND, SEA
  2) PROPELLANTS/MOTORS
  3) UNMANNED AERIAL VEHICLES AND DRONES
  4) COMMUNICATION/NAVIGATION
  5) SIGINT SYSTEMS
  6) ELECTRONIC COMBAT
  7) AIR DEFENSE
  8) ANTENNAS

---

the Under Secretary of Defense, U.S. Dep't of Defense, to the Secretaries of the Military Departments on Future Competition for Defense Products (Jul. 7, 2000); Memorandum from the Under Secretary of Defense, U.S. Dep't of Defense, to the Secretaries of the Military Departments on Anticompetitive Teaming (Oct. 5, 1999).

9) AUTOMATIC TEST EQUIPMENT

10) C4ISR

11) ELECTRO-OPTICS

12) GUIDANCE SYSTEMS/SEEKERS

13) IMAGE EXPLOITATION/PROCESSING SYSTEMS

14) INFRARED SYSTEMS

15) LASER SYSTEMS

16) LOW OBSERVABLES

17) SENSORS

18) SIMULATION AND MODELING

19) SPACE SUBSYSTEMS

20) DISPLAYS & INSTRUMENTS

21) ELECTRONIC WARFARE SYSTEMS

22) RADARS

23) WEAPONS CONTROL & TARGETING SYSTEMS

X. Antitrust evaluations must be scoped to support "Full Subsystem Capability" Model, and integrated U.S./NATO defense industrial base

- Either the Department of Justice (DoJ) or the Federal Trade Commission (FTC) will, in conjunction with DoD, standardly perform a five-part test to ensure that a proposed merger or acquisition will not create or enhance "market power:"
    1) Designate the "relevant markets" that will be impacted.
    2) Identify the "geographic market" (multiple DoD/State Dept. Initiatives broaden the geographic review to US/NATO).
    3) Identify "market participants" in the relevant market for that geographic area.
    4) Identify potential alternative competitors likely to enter the market in response to an exercise of "market power."
    5) Evaluate whether likely post-merger "efficiencies" outweigh potential anti-competitive risk.

- Bottom line is whether a hypothetical monopolist could raise its prices by an arbitrary 5% for at least 1-2 years without an influx of competition.
- Consistent with DoD Directives,[15] mid-tier contractors in defense-unique/R&D-intensive subsystems must be allowed to consolidate to develop true Full Subsystem Capability to drive break-throughs in "leap-ahead" technologies; defenses against WMD; and lightning-strike warfare.
- Moreover, recent DoD/State coalition warfare Initiatives compel the inclusion of strong NATO competitors such as BAE SYSTEMS, EADS, and Thales (formerly Thomson-CSF) in antitrust analysis (see, *FTC v. Imo Industries, Inc.; Grumman Corporation v. LTV Corporation*; and *AlliedSignal, Inc. v. B.F Goodrich Co.).*

[15] *See* Memorandum from the Principal Deputy Under Secretary of Defense, U.S. Dep't of Defense, to the Secretaries of the Military Departments on Subcontractor Competition (May 5, 1999); Memorandum from the Under Secretary of Defense, U.S. Dep't of Defense, to the Secretaries of the Military Departments on Future Competition for Defense Products (Jul. 7, 2000); Memorandum from the Under Secretary of Defense, U.S. Dep't of Defense, to the Secretaries of the Military Departments on Anticompetitive Teaming (Oct. 5, 1999).

National Security/Business Restructuring Model
Recommendations

1) Reassess Acquisition Strategies in on-going "winner-take-all" competitions, such as JSF, to rejuvenate the anemic industrial base.

2) Suppliers must adopt "Full Subsystem Capability" Model to guard against "Reverse Vertical Integration" in defense-unique/R&D intensive subsystems. (subsystems that are not defense-unique or are not R&D-intensive should be pushed out to commercial leaders under Civil/Military Integration Doctrine to exploit leading-edge technology and economies-of-scale).

3) Reshape antitrust evaluations to the realities of the Full Subsystem Capability Model, and to DoD's integrated U.S./NATO defense base.

4) National Security Stakeholders must work hand-in-hand with Industry Management to restructure troubled "legacy" programs to develop clear risk-to-reward relationships. Troubled legacy programs must be immediately addressed after acquisitions to ensure that additional management, technical, and financial resources are allocated to:

   (a) Recapture schedule slippages;
   (b) Restructure scope;
   (c) Negotiate "technology work-arounds" via Engineering Change Proposals (ECP) or Pre-Planned-Product-Improvements (P3I);
   (d) Convert the contract to a lower-risk type; or
   (e) Defer select functionality until after fielding through such Initiatives as Modernization-through-Spares (these are at the very heart of controlled-risk).

5) Make greater use of Public Law 85-804 to provide Extra-Ordinary Contractual Relief, particularly on programs where there is a compelling National Security case and the relief is non-monetary (e.g. allocation of sole source future support of platform that is necessary for operations, etc.).

6) Expand use of multi-year contracts to at least one per major contractor and at least three per Service, to attract critical capital since multi-year contracts create investor perception of controlled-risk.

7) Move to a two-year appropriations cycle on R&D and Procurement to stabilize programs and create an environment of controlled-risk.

8) Negotiate Capital Leases and Operating Leases for platforms, coupled with bundled Operations & Maintenance/Logistics Contracts to enable Customers to leverage shortfalls in Procurement Accounts.

9) Award "Emergency Preparedness" contracts to sustain contingency/emergency capacity in those heavy-industrial areas where crisis/war could trigger need. (but segregate "leap-ahead" subsystems for separate development from long-lead emergency-capability such as foundry, armor, etc.)

10) Revise the cost principles in Federal Acquisition Regulations (FAR) Part 31 and other regulations to maximize the profitability of R&D. (negotiate same profit as production, particularly given Administration shift to "leap-ahead" technologies; NMD; and lightning-strike warfare; where technical/schedule risks are abnormally-high, and production, if any, will be enormously-limited).

11) Revise the cost principles of FAR Part 31 to finally allow for contractor recovery of various indirect costs that are an inherent part of any business. (Such as interest, recruitment/employee retention, goodwill from corporate acquisitions of other defense contractors, etc.).

This consensus of key Stakeholders and Shareholders of the long-term National Security drivers and the shorter-term controlled-risk objectives will enable Industry Management to focus on the key issues that so deeply count, namely: program execution, operational excellence, developing Full Subsystem Capabilities, and instilling discipline for the 21st Century.