



**SLAADD Thoughts for OPNAV
plus
Ideas for Future NDIA SLAADD
Studies for Our Navy Sponsors**

***Strike, Land Attack, and Air Defense
Division (SLAADD)***

9 January 2006

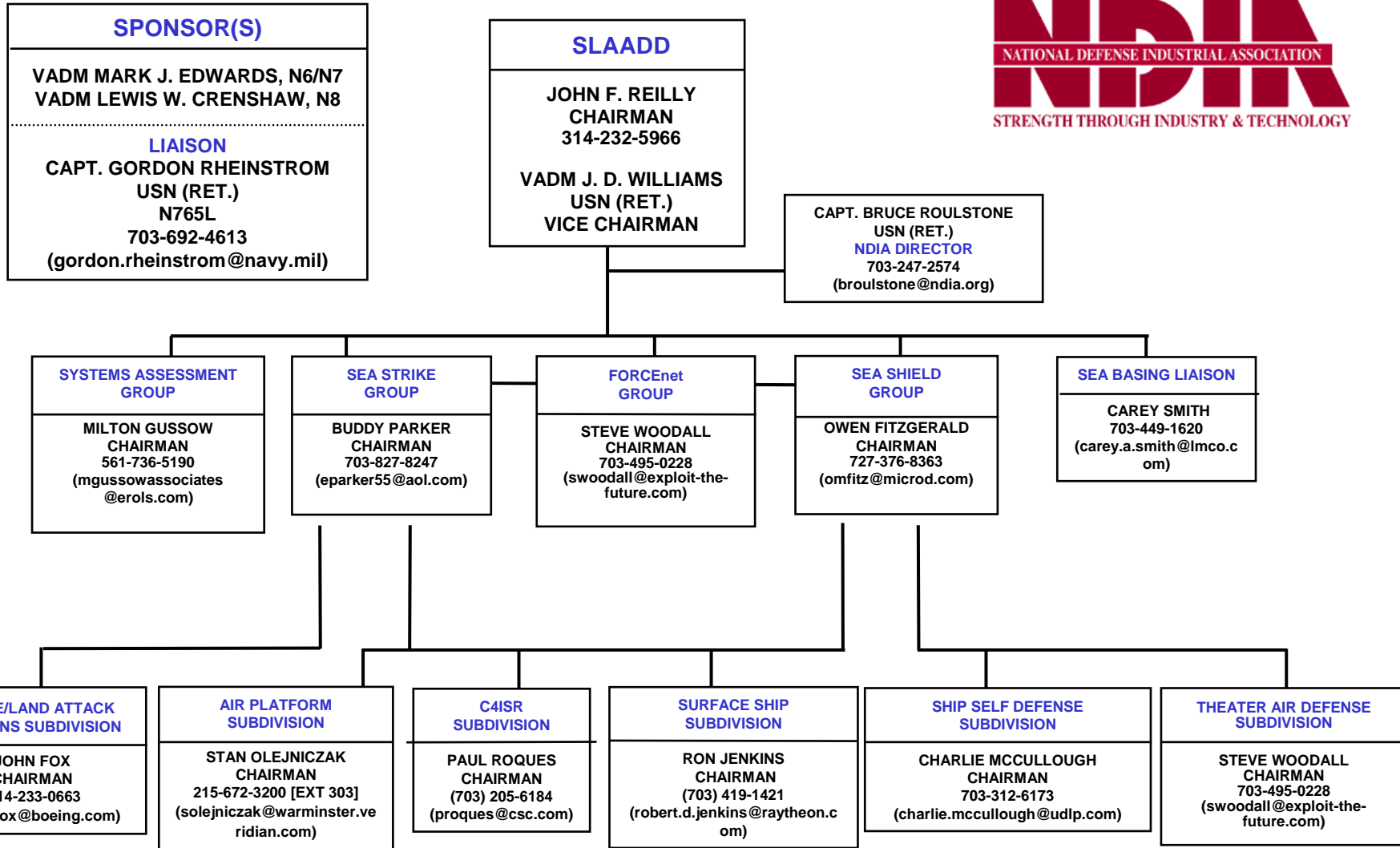
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- **The SLAAD Division provides an open and objective channel of communication for, and builds partnerships among, the US Navy, the Department of Defense, and industry to address strike, land attack, and air defense issues of threat, operational concept, combat architecture, system technology, and manpower**
- **The SLAAD Division OPNAV sponsors have been N6/N7 and N8**
 - *The division consists of the strike/land attack, air defense, and system assessment groups and the strike/land attack weapons, air platform, C4ISR, surface ship, ship self-defense, and theater air defense subcommittees*
- **The major focus of the SLAAD Division is the conduct and reporting of studies related to strike, land attack, and air defense**
 - *Studies are conducted at the request of a Department of Defense sponsor who focuses the effort on providing useful and timely results*
 - *Studies are undertaken by subcommittees according to their area of expertise*
 - *Study participation by both industry and government is voluntary*
 - *Study results are briefed to the sponsors, and reports are prepared and distributed to government and industry. Our study reports have helped the Navy articulate and resolve a broad range of strike, land attack, and air defense-related issues. A technical report bibliography including an abstract of all published reports is available upon request*

- **The SLAAD Division holds quarterly meetings at an industry or government site. The two and a half-day meeting format includes one day of subcommittee meetings for study work, a half-day general division meeting, a half day of host briefings, and a half day of government briefings. These gatherings are excellent forums for technical and programmatic exchange among the government and industry participants**
- **Members of the SLADD Division, in partnership with the Undersea Warfare (USW) Division, visit the Fleet commands each year in the Fall, alternating each year between the Atlantic and Pacific Fleets. These visits enable us to gain first hand knowledge of operating fleet issues and to incorporate Navy concerns into our studies**
- **The division conducts an annual symposium in the Washington, D.C., area on timely strike, land attack, and air defense subjects**
 - *The theme for our 2006 Symposium is “The Navy's Role in the 21st Century.” This symposium will be held April 25-26, 2006 at the Johns Hopkins University Applied Physics Laboratory*

- **NDIA has over 30 different Divisions, and many additional special committees and focus groups**
- **NDIA Divisions other than SLAADD of interest to the Navy and Marine Corps include, among others:**
 - *Undersea Warfare (USW) Division*
 - *Expeditionary Warfare (EXW) Division*
 - *Missile Defense (MD) Division*
 - *Systems Engineering (SE) Division*
 - *C4ISR Division*
 - *Homeland Defense (HLD) Division*
- **You can find out more about SLAADD and each of these other Divisions on the NDIA web page, at: <http://www.ndia.org>**

NDIA Strike, Land Attack, and Air Defense Division (SLAADD) --- Organization Chart



- **SURFACE WARFARE STUDY, PHASE 2**

- *Focus on development of Capabilities Development Document (CDD) that addresses the capabilities and deficiencies of the Surface Forces*
- *Sponsor: RADM Edwards, N76*
- *Published Spring 2005*
- *OPNAV approval given to post UNCLAS Executive Summary on NDIA website. Here is the link to the study.*

http://www.ndia.org/Content/ContentGroups/Divisions1/Strike_Land

[Attack and Air Defense/SUW Phase II Executive Summary.pdf](#)

- *OPNAV posting SECRET report on SIPRNET via SWDG website*
- *Any additional requests can be directed to LT Mike Cole at (703)604-7661 / joseph.cole@navy.mil*

- **THE FUTURE OF THE NAVY IN JOINT INTEGRATED AIR AND MISSILE DEFENSE [JIAMD] STUDY**

- *Focus on vision and CONOPS for the future of the Navy in JIAMD with specific recommendations to be made for platforms/systems/sensors and related FORCEnet/JBMC2 capabilities*
- *Sponsors: VADM Sestak, N6/N7 and VADM Crenshaw, N8*
- *Published 25 March 2005*



Ideas for Future NDIA SLAADD Studies for Our Navy Sponsors

***Strike, Land Attack, and Air Defense
Division (SLAADD)***

As Delivered to N6/N7 and N8 on 17 June 2005

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- **Total Defense of the Sea Base**
- **OCA, TCS and IO in JIAMD**
- **Catastrophic Terrorism**
- **Maritime Domain Awareness**
- **Surface Warfare in 2020**
- **SUW Phase II --- Solutions**
- **Ship Vulnerability Analysis**
- **Review of Studies and Publications**

- **Backup Slides**
 - *Study Idea Template*
 - *NDIA SLAADD Study Input, Process, and Output Approach*
 - *NDIA SLAADD Organization Chart*
 - *JIAMD Study Recommendations regarding Priority Studies*

- **Develop an Approach to Total (Multi-Dimensional) Defense of the Sea Base**
 - *Review the threat to the Sea Base*
 - *Sub-surface, Surface, Air, Space, Cyberspace*
 - *Develop CONOPS for at least 2 stressing scenarios*
 - *Build a framework for defense capabilities*
 - *Build a framework for battle management capabilities for defenses*
 - *Specific recommendations*
 - *Sensors, weapons, systems, and platforms*
 - *Command and Control, Battle Management*

- **Examine the value and potential roles of offensive counter-air, time-critical strike and information operations in support of Joint Integrated Air and Missile Defense (JIAMD)**
- **Examine the cost benefits and trade space in JIAMD to include:**
 - *OCA to eliminate or diminish the effectiveness of enemy air and cruise missile attack capabilities*
 - *TCS to deny initial launch / follow-on launches*
 - *EA / CNA / IO to diminish or eliminate enemy capabilities*

- **Develop an approach to understand and deal with the threats presented by “catastrophic terrorism”**
 - *“Catastrophic terrorism” to be understood as terrorism employing either conventional or asymmetric means to deliver weapons of mass destruction against selected targets of interest to them*
- **The analysis to include approaches to:**
 - *Intelligence and identification of threats*
 - *Maritime, air, space, ground system, man-portable, and other means of delivery*
 - *Dealing with threats*
 - *Political and military approaches*
 - *Capabilities required*
 - *Investments required to achieve the capabilities*

- **Achieving Maritime Domain Awareness**
 - *Describe the Navy's and NORTHCOM's Role in Maritime Domain Awareness*
 - *There is a need to identify and address dangerous seaborne threats long before they get close to U.S. shores*
 - *Ninety-five percent of overseas trade arrives through 361 U.S. sea ports across 26,000 miles of commercially navigable waterways, and 9 million shipping containers enter the nation each year*
 - *The Maritime Domain facilitates a unique freedom of movement and flow of goods while allowing people, cargo and conveyances to transit with anonymity not generally available over land or air movement*
 - *Conduct Gap Analysis between what capabilities exist today and total required capabilities*
 - *Analyze alternatives and propose capabilities required to improve, integrate and field a capability for attaining and sustaining Maritime Domain Awareness*
 - *Provide recommendations to close the gaps*

- **Surface Warfare in Year 2020 (SUW Ph III?)**
 - *Threats and Capabilities in 2020*
 - *Use updated NSS Model (incl. Threats to 2020)*
 - *Add new capabilities not IOC for Phase II*
 - *Netfires/PAM, AWS, SPS, SEARAM, Sea Spike, LOGIR, APKWS*
 - *Realistic Scenarios for 2020*
 - *Keep similar AOR of PhII with projected scenarios*
 - *Be more inclusive of assets*
 - *More complete look at C4ISR elements*
 - *Technology Investment Roadmap – Output*
 - *ID anticipated gaps for year 2020*
 - *Recommend areas of investment to Sponsor*

- **SUW Phase II --- Solutions: analyze and propose applications of technology to resolve and correct gaps in capability identified in SUW Phase II**
 - *Improved OTH Capabilities*
 - *Detect, Identify, Determine Intent, Target, Engage, Assess*
 - *Ship Defense Zone Saturation*
 - *How much is too much?*
 - *Small OTH Weapon Systems*
 - *Systems characteristics vs. technologically achievable*
 - *Small ITH Weapon Systems*
 - *Systems characteristics vs. technologically achievable*

- **Study individual ship vulnerability versus current ship self-defense capabilities**
 - *Where?*
 - *At anchor, At port, Restricted maneuvering areas (not high seas)*
 - *What?*
 - *Airborne, Surface, Subsurface against all afloat US assets (USN, USCG, USNS, Merchant Ship (High Value Vessel) etc)*
 - *Study:*
 - *Evaluate environments (conditions, locations, ROE)*
 - *Understand threats in these environments (ONI, DIA etc)*
 - *Review and evaluate current capabilities*
 - *Match technologies to counter threats*

Ships need a 360° “Bubble of Protection”

- **NDIA Strike, Land Attack & Air Defense Division (SLAADD) could serve as a resource to the Navy and Joint community by reviewing and evaluating studies and publications in development or revision**
- **The technical and operational talent of SLADD could be offered to the Navy, the other Services, or Joint organizations for objective review and evaluation of Navy & Joint studies and publications**
 - *One current example for such a review by SLAADD is the Joint Staff's Joint Publication 3-01, Countering Air and Missile Threats, now under revision*

JIAMD Study Recommendations Regarding Priority Studies (1)

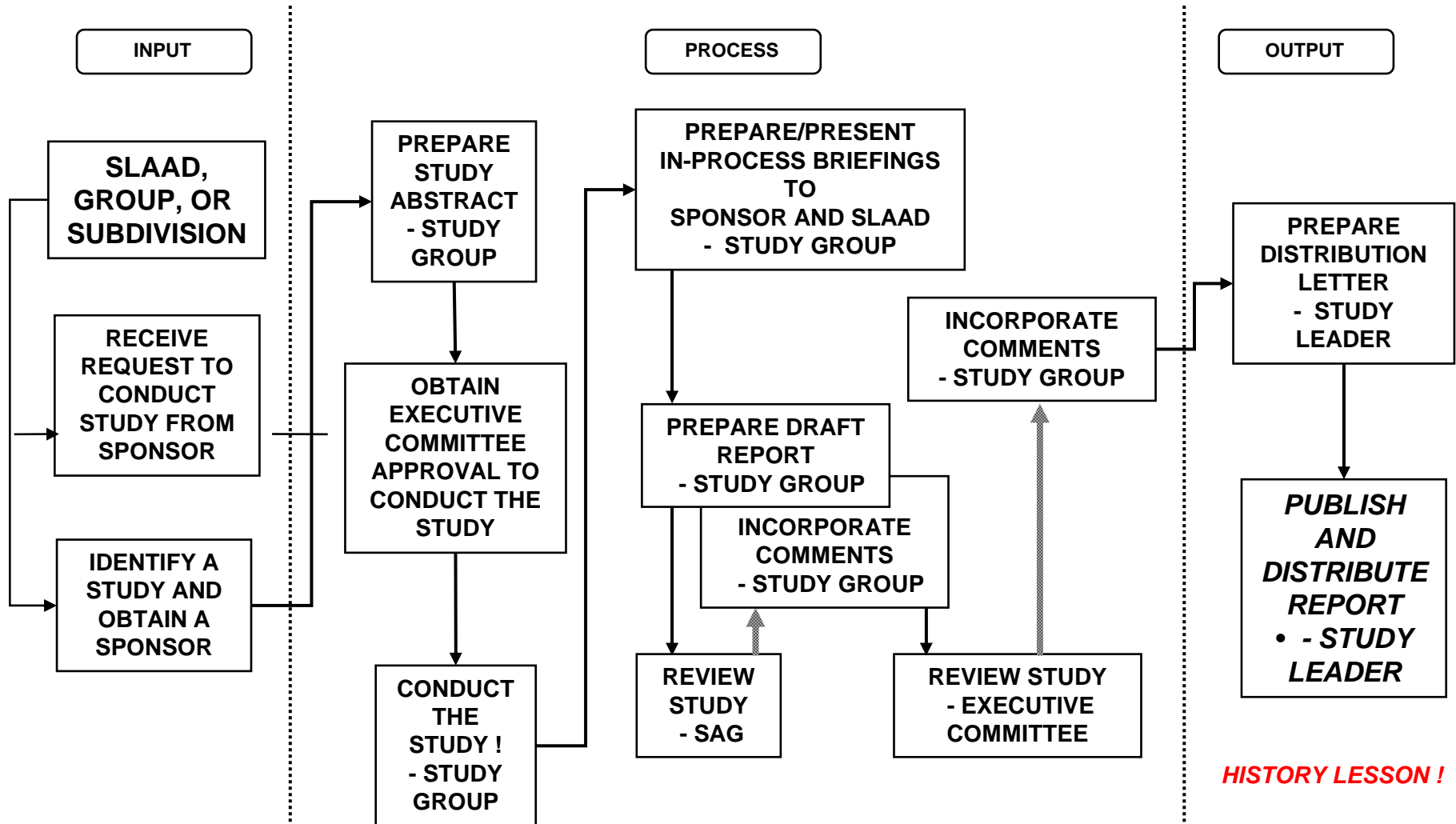
- **Charter Navy study to examine its roles for deployable missile defense throughout the world and the interoperability with MDA BMDS --- leading to a follow-on Joint study**
 - *Include consideration of CONOPS for integration of Allied capability*
- **Examine what is required to completely defend the Sea Base --- in all dimensions**
- **Building on this (NDIA SLAADD) study's efforts, perform high fidelity analyses on identified architecture gaps and candidate systems solutions and technologies**
 - *AAW / CMD / BMD*
 - *CONOPS / RoE for Sea Base Defense / Tactics*
- **Examine integrated role of offense / strike in support of missile defense**
 - *TCS to deny initial launch / follow-on launches*
 - *EA / CNA / IO*
- **Fully assess trade space for sea basing of boost / ascent phase intercept capability**

JIAMD Study Recommendations Regarding Priority Studies (2)

- **Conduct JIAMD sensor resource and missile load-out study for ESG / CSG**
 - *Determine missile and combat system capacities sufficient for potential concentrated threats / high density raids*
- **Evaluate approaches for persistent wide-area detection and tracking of low-altitude threats**
- **Navy extend recent MDA Asymmetric Threat studies to all air defense threats**
- **Conduct cost-benefit analysis to determine proper balance investments between TCS and IO with inventories of defensive missiles**
- ***Electronic and Electromagnetic Vulnerability***
 - *EMP, EMI, EA, ...*

Study Input, Process, and Output Approach

NDIA Strike, Land Attack, and Air Defense Division (SLAADD)



- **Proposed Study Title**
 - *Study element 1*
 - *Sub-element*
 - *Study element 2*
 - *Study element 3*