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## (U) POWER PROJECTION STRATEGIC PORTFOLIO REVIEW (SPR) Final DMAG Executive Summary

Background (U)

(U) The power projection SPR was co-led by the Under Secretary of Defense for Policy (USDP) and the Director, Cost Assessment and Program Evaluation (CAPE). Services, agencies, and combatant commands actively supported the SPR with expertise, analysis, and data. The insights from the SPR are intended to directly inform the FY17 Program and Budget Review (PBR) and to complement the ongoing Advanced Capabilities and Deterrence Panel (ACDP) efforts. The SPR also informs the broader strategic guidance articulated in the FY17-21 Defense Planning Guidance (DPG).

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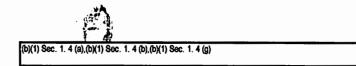
(SAF) (b)(1) Sec. 1. 4 (a),(b)(1) Sec. 1. 4 (b),(b)(1) Sec. 1. 4 (g)

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(b)(1) Sec. 1. 4 (a),(b)(1) Sec. 1. 4 (b),(b)(1) Sec. 1. 4 (g) Though each SPR subsection generated unique

insights and conclusions, one theme was pervasive: modest improvements to existing systems

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can provide operationally significant returns on investment while the DoD makes longer-term technological investments in pursuit of more expensive and riskier "leap-ahead" capabilities.

(S/NF) Potential investments to existing systems include: b)(b)(1) Sec. 1.4 (a)(b)(1) Sec. 1.4 (b)(b)(1) Sec. 1.4 (c)(b)(1) Sec

(b)(1) Sec. 1. 4 (a),(b)(1) Sec. 1. 4 (b),(b)(1) Sec. 1. 4 (g) air launched torpedo; Tactical Tomahawk

(TACTOM) with maritime strike capability; Long Range Anti-Ship Missile (LRASM)

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(SANF) Potential investments that support leap-ahead capabilities include: railgun (0,(0)(1) Sec. 1.4(0)(0)(1) Sec. 1.4(

development; (b)(1) Sec. 1. 4 (a),(b)(1) Sec. 1. 4 (b),(b)(1) Sec. 1. 4 (g)

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(U) These and other potential PBR17 issues are summarized in the table below.

# Innovative Ways to Sustain Forward Operations (U)

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(SAPP) Electro-Magnetic Railgun (EMRG): The Strateg with the Navy and others to develop a land-based railgur (b)(1) Sec. 1. 4 (a),(b)(1) Sec. 1. 4 (b),(b)(1) Sec. 1. 4 (g)	ic Capabilities Office (SCO) is working (b)(1) Sec. 1.4 (a).(b)(1) Sec. 1.4 (b).(b)(1) Sec. 1.4 (g)

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# Active Defense against Cruise Missiles (U)

(SNF) indirect Fire Protection Capability (IFPC): The Army will begin fielding IFPC for cruise missile defense in late FY19. IFPC uses a multi-mission launcher and leverages an existing and missile (b)(1) Sec. 1. 4 (a),(b)(1) Sec. 1. 4 (b),(b)(1) Sec. 1. 4 (g)

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# 13/11/17 Powdergun: SCO is developing a concept that will leverage the railgun projectile and sensor architecture on existing mobile Paladin howitzers. (b(1) Sec. 1.4 (a),(b)(1) Sec. 1.4 (b),(b)(1) Sec. 1.4 (g)

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Leveraging the Undersea Advantage (U)



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# Increasing Manued Submarine Capacity (U)

(SAVE) Increased Virginia Production: DoD could choose to increase submarine procurement

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# Maximizing the Capability of Existing and Future Virginia Class Submarines (U)

(S/NF) Virginia Payload Module (VPM): While VIR class subs are extremely capable, they have limited vertical launch capacity. (b)(1) Sec. 1. 4 (a),(b)(1) Sec. 1. 4 (b),(b)(1) Sec. 1. 4 (g)

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(SAMP) VPM significantly expands vertical launch capacity (40 Tomahawk missiles vs. 12), (b)(1) Sec. 1.4 (a),(b)(1) Sec. 1.4 (g)
PB16 plans would outfit 15 of 20 future production subs with VPM (2 within the FY17
FYDP). Outfitting five additional subs with VPM (two within the FYDP, at a cost of \$1.1B) is a
cost effective way to increase a capability and capacity. (b)(1) Sec. 1. 4 (a),(b)(1) Sec. 1. 4 (b),(b)(1) Sec. 1. 4 (g) (b)(1) Sec. 1. 4 (a),(b)(1) Sec. 1. 4 (b),(b)(1) Sec. 1. 4 (g)
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Alternative Undersea Capabilities (U) (b)(1) Sec. 1.4 (a)(b)(1) (b)(1) Sec. 1.4 (a)(b)(1) Sec. 1.4 (a)(b)(1) Sec. 1.4 (a)(b)(1) Sec. 1.4 (a)(b)(1) Sec. 1.4 (a)(b)(1)
(SANF) Sec. 1.4 (b)(b)(1) Sec. 1.4 Unmanned Undersea Vehicles (a) UUVs could perform lower
complexity missions (b)(1) Sec. 1. 4 (a),(b)(1) Sec. 1. 4 (b),(b)(1) Sec. 1. 4 (g)
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Strike Portfolio (U)

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(U) SPR analysis has identified multiple options to upgrade the capabilities of current weapons, increase integration on additional platforms, mitigate risk for leap-ahead technologies, and consider higher risk, longer-term solutions.

Maritime Strike (U)

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(SAF) Maritime Strike Canable TACTOM: Currently TACTOM is employed from all US attack subs and large surface combatants, but only has a land attack capability. There is

opportunity to upgrade TACTOM during the Navy's recertification	process (b)(1) Sec. 1. 4 (a),(b)(1) Sec. 1. 4 (b) (b)(1) Sec. 1. 4 (a)
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Land Strike (U)

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Follow-On ATACMS: The US Army just completed an analysis of alternatives to determine ATACMS replacement options. (b)(1) Sec. 1. 4 (a),(b)(1) Sec. 1. 4 (b),(b)(1) Sec. 1. 4 (g)

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### Protecting Positioning, Navigation and Timing (PNT) Capability (U)

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### Governance (U)

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### **Potential Programmatics (U)**

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### Foundational Studies (U)

(S/NF) The PNT tradespace is very complex and requires detailed analysis to identify the best combination of materiel solutions for weapon/ platform pairings. (b)(1) Sec. 1. 4 (a),(b)(1) Sec. 1. 4 (b),(b)(1) Sec. 1. 4 (g)

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