Countering the PLA missile threat

Bryan Clark

Senior Fellow, Center for Strategic and Budgetary Assessments
Deployed Pacific defenses inadequate

U.S. forces need to more defensive capacity per unit vs. missiles
PLA complements missiles w/aircraft

Payload = 2,600 kg+

Payload = 2,400 kg

1 Day of PLAAF Air Raids
- 240 x Su-27/Su-30/J-11
  - (50% strike aircraft)
  - 2/3r of 2014 fleet
- 76 x JH-7
  - (75% strike aircraft)
  - 3/4 of 2014 JH-7 fleet
- Assumes 4 hr turnaround time, 70% availability rate

Total strike payload of PLA(N)
- 2020 estimates, using missiles carried on board (most do not have VLS)
  - 30 DDG
  - 40 FFG
  - 70 FFL
  - 6 SSN/SSGN
  - 63 SSK/SSP

Enables PLA “paralyze, then annihilate” strategy
Should use LR defenses vs. platforms...

Separating “archers” from “arrows” to reduce salvo sizes
New air defense concept would increase defensive AAW capacity
## Resulting increase in defensive capacity

<table>
<thead>
<tr>
<th>Mission</th>
<th>Current Missile</th>
<th>Number</th>
<th>Future Missile</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Offensive AAW</td>
<td>SM-6</td>
<td>16</td>
<td>SM-6</td>
<td>42</td>
</tr>
<tr>
<td>Defensive AAW</td>
<td>SM-2</td>
<td>32</td>
<td>ESSM Blk II</td>
<td>96 (24 cells)</td>
</tr>
<tr>
<td></td>
<td>ESSM</td>
<td>32 (8 cells)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BMD</td>
<td>SM-3</td>
<td>6</td>
<td>SM-3</td>
<td>4</td>
</tr>
<tr>
<td>Strike</td>
<td>Tomahawk</td>
<td>24</td>
<td>LRASM</td>
<td>18</td>
</tr>
<tr>
<td>SUW</td>
<td>Harpoon</td>
<td>8 non-VLS</td>
<td>LRASM / SM</td>
<td>18/42</td>
</tr>
<tr>
<td>ASW</td>
<td>VLA</td>
<td>10</td>
<td>New ASW Missile</td>
<td>8</td>
</tr>
</tbody>
</table>

- **Multi-mission LRASM**
- **Long-range ASROC**
- **SM-6 for offense**
- **ESSM for defense**
Cruiser phased modernization needed for offensive sea control, air defense

Iwakuni Naval Air Station
Sasebo Naval Base
Yokosuka Naval Base
Misawa Air Base

Aegis Ashore Sites (provide regional BMD)
THAAD Batteries
PAC-3 Batteries
Tokyo

Shore-based BMD systems should replace BMD ships in defense of fixed locations overseas
Only 15 CG/DDG available for escort unless new SSC has area air defense capability
Naval Strike Missile range from IHS Jane’s Navy International. All other ranges from IHS Jane’s Defence: Weapons database.

* RGM-84L, a Harpoon Block II variant, is the only variant in service with the U.S. Navy.

** Extended-range Harpoon Block I variant previously in U.S. and foreign service.