The 155mm Advanced Gun System-Lite (AGS-L) for DDG-51 Flight III
A Summary of the BAE Systems IRAD Effort

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AGS and AGS-Light Gun Mount Comparison

Current DDG-1000 Gun Mount

- Rotating Shield
- Fwd Case Eject
- Active Barrel Cooling
- 11 Large Power Drives
- Rammer (Extending Tube)
- Fixed Shield

AGS-Light Gun Mount

- Rear Case Eject
- No Fixed Shield
- 5 Large Power Drives
- Rammer (Fixed Tube)

<table>
<thead>
<tr>
<th></th>
<th>Current DDG-1000</th>
<th>AGS-Light</th>
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<tbody>
<tr>
<td>Range</td>
<td>71 nmi (155mm LRLAP)</td>
<td>71 nmi (155mm LRLAP)</td>
</tr>
<tr>
<td>ROF@ 60 degrees</td>
<td>10 RPM</td>
<td>6 RPM</td>
</tr>
<tr>
<td>Gun Mount Weight</td>
<td>106 MT</td>
<td>51 MT</td>
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AGS-Light fires 155mm LRLAP to max range, reuses production AGS assemblies and electric power drives, is half the weight of AGS, and is similar in size to a 5” Mk 45
DDG-51 Forward Mount Magazine Options

Examined different magazine arrangements:
- Manual assist loader with individual ammo containers
- Automated loader with individual ammo containers
- DDG-1000 derivative using palletized ammo

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<tr>
<th>Option</th>
<th># Rounds and ROF</th>
<th>Manning during firing</th>
</tr>
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<tbody>
<tr>
<td>AGS-Light Gun Mount</td>
<td>6 RPM</td>
<td>0</td>
</tr>
<tr>
<td>Manual Assist magazine with ready service loader (similar to Mk 45 Mod 4 with ERM)</td>
<td>180 total, fires 12 ready rounds at 6 RPM, then rest of rounds at 5 RPM</td>
<td>0 for 12 rnds 7 for the rest</td>
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<tr>
<td>Automated Loader in magazine</td>
<td>180 @ 6 RPM</td>
<td>0</td>
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Probable AGS-Light DDG-51 Installation Arrangement

- Mk 45 Loader
- Drum Room
- Sonar Control Room
- Sonar Cooling Equip
- Mk 45 Mag Space
- Ballast
- Existing Ammo Strikedown Trunk
- Power Conversion Equipment
- Centerline hoist
- Projectile Shuttle
- Projectile Storage
- Propellant Storage
- 180 Round Magazine and Automated Loader
- Main Deck
- 01 Level
- 1st Platform
- 2nd Platform
- Inner Bottom

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