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Navy
- Plan Studies

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ASSESSMENT OF SEA BASED AIR PLATFORMS PROJECT REPORT



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Assessment of Sea Based Air Platforms Report

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Data Comparison Report

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VII

FINDINGS

As a result of the numerous efforts of the Project, the Assessment of Sea Based Air Platforms Project made the following findings.

I. SURFACE COMBATANTS/VSTOL

Development of suitable VSTOL aircraft types will be an extremely complex, difficult but feasible undertaking. The uncertainties and associated costs vary with the type of approach and development selected.

DDV-2 has highest cost per sea based aircraft of all carriers evaluated.

DDV-1a - The enrichment of the Spruance Class with an increased air suite (4 LAMPS III or 2 VSTOL A) makes a significant contribution to the ship's capability.

II. VULNERABILITY

Magazine mass detonation is driving factor in carrier vulnerability. Protection against it significantly reduces both ship loss and out of action probabilities.

CVN-12 and CVV have strong magazine protection.

VSS-D has more magazine protection than the VSS and is considerably less vulnerable.

When operating VSTOL aircraft, all carriers can sustain greater hit levels prior to being out of action.

Carriers in CVV and CVN size ranges are well protected against side hitting torpedoes. DDV (DDH) and VSS carriers are highly vulnerable to this threat.

All carriers studied are particularly vulnerable to underbottom torpedo attack.

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III. PLATFORM

In a comparison of individual platforms with their air wings, the CVN is, as expected, the more combat effective ship.

The VSS (and VSS-D) with VSTOL aircraft and the resulting dispersal capability showed itself highly capable in important scenarios.

Development of VSTOL aircraft will be costly and will require a major, well coordinated development effort. Carriers for the immediate future, should have the potential to operate both CTOL and VSTOL aircraft.

The CVV and CVN showed themselves relatively comparable in equal cost mixes. However, the CVN force was superior in 4 out of 6 engagement analyses.

There are potential advantages to VSTOL aircraft at sea due to their dispersal capability and increased efficiency in flight deck operations.

The potential advantage of increased numbers of less costly and capable platforms was demonstrated.

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