



# NAVAL UCAV

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UCAV  
ADPO

## ADVANCED DEVELOPMENT PROJECT OFFICE

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ADVANCED DEVELOPMENT  
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*CHARTER*

Advocate And Explore Affordable UCAV System Concepts  
*Potentially* Leading To One Or More UCAV Acquisition  
Program(s)

*RESPONSIBILITIES*

- Investigate, Assess Current Technology & Concepts
- Identify Potential Naval Warfare Applications
- Prioritize Technologies & Study Efforts
- Advocate For And Coordinate Technology Development Funds
- Coordinate With Other Services And Industry
- Develop & Execute The Program Strategy



## *Why Should the Navy Invest In UCAVs?*

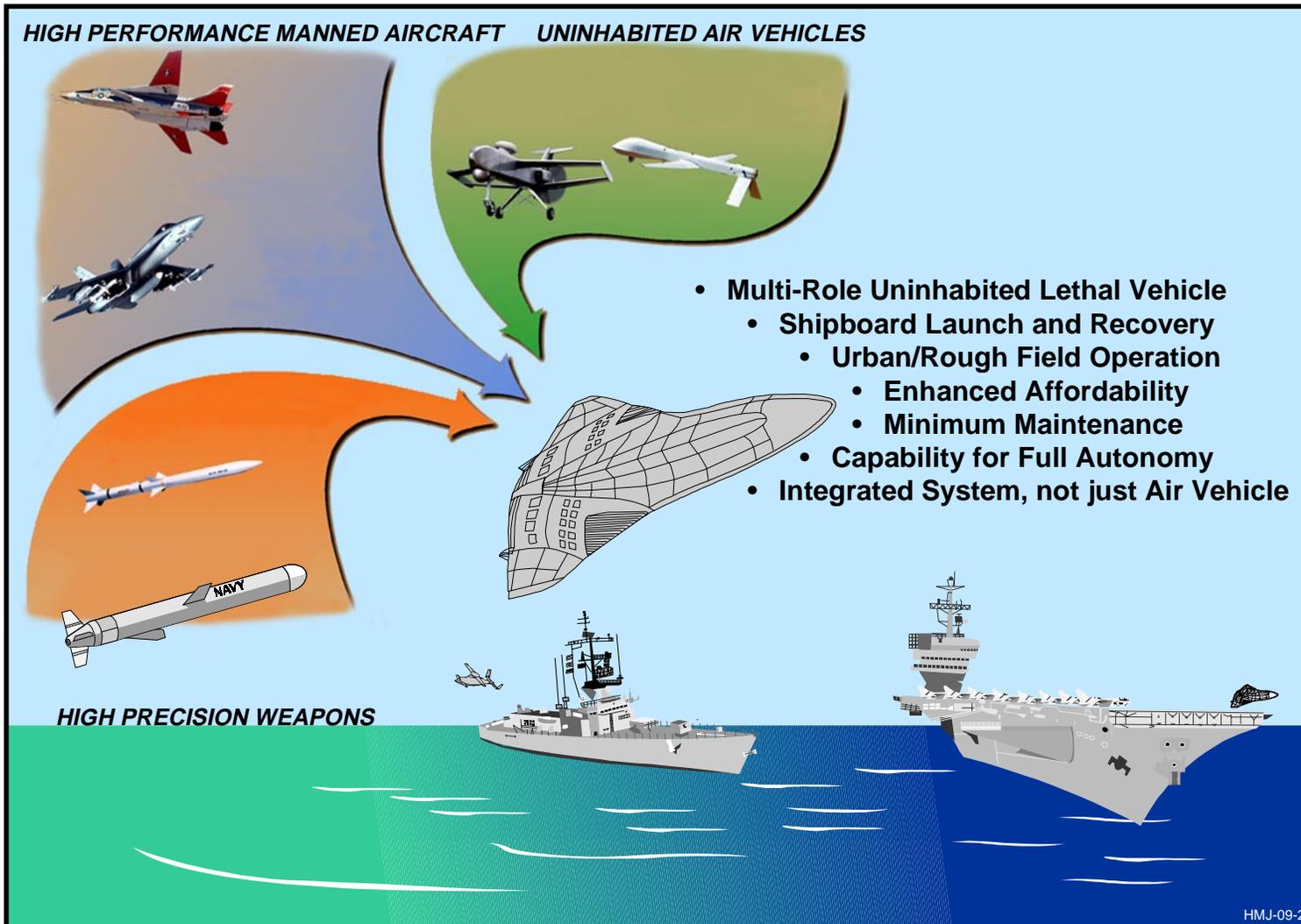
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- Drawdown in its force structure & dollars available
- An affordable alternative in acquisition & O&S costs
- State-of-the-Art computing power and flight control algorithms have us on the brink of this capability
- Potential to revolutionize Naval approach to warfighting by opening the design space:
  - Unusual attitudes & orientation
  - Operational duration & missions
  - Reduce or eliminate maintenance & training req'ts
  - Sustain higher g-forces and onset rates
  - Apply innovative manufacturing concepts
  - Expanded basing options



# NAVAL UNINHABITED COMBAT AIR VEHICLE

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**NOT A REPLACEMENT FOR MANNED AIRCRAFT**



## *Ongoing Programs & Efforts*

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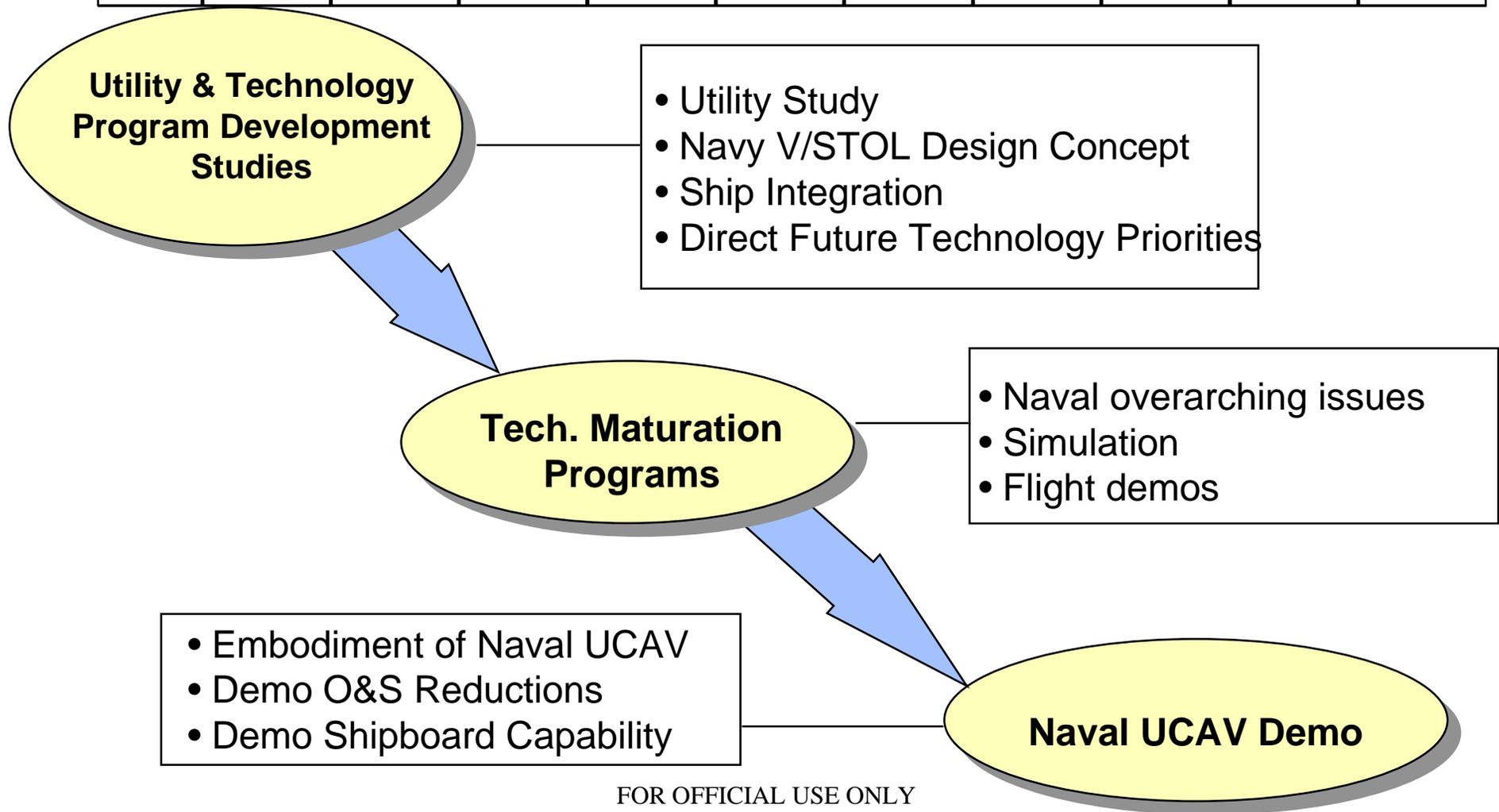
- Navy - CNO SSG UAV/UCAV XVI & XVII  
OPNAV UAV Payloads IPT  
DON UAV Workshop  
ONR UCAV Initiative
- Marine Corps - Draft MNS for Strike UAVs
- Air Force/DARPA - UCAV ATD  
Phase I contracts awarded in April '98  
Phase II will build & fly demo UCAV
- Air Force/France - Integrated Tactical A/C Control  
Devel & eval cooperative flight operations
- NASA - Sponsored design studies for UCAV concepts  
Follow-on efforts addressing hyper-agility
- England - Virtual UCAV designs for con-ops development
- TTCP - Workshop "UAV's on the Battlefield 2015"



# ONR Programmatic Plan

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98	99	00	01	02	03	04	05	06	07	08
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# NAVAL UCAV MISSIONS

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## *Joint Vision 2010 - Navy Unique, First Days of War*

### Missions Considered

- SEAD
- Close Air Support
- Mobile/Moving Targets
- ASW
- ISR
- Halt Invasion
- Combat Air Patrol
- No-Fly Zone
- ASUW
- Mining
- Chemical, Biological, Radiological
- Fixed Target
- Command & Control Centers
- Information Suppression

Navy

AF/DARPA



# *UCAV SUMMARY*

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- UCAVs Seen as Future Weapon System for Projection of Long Range, Sustainable, Lethal, Combat Power
    - Greatly reduced acquisition and O&S costs
    - Mix of manned and uninhabited systems envisioned
  - Current USAF focus on lethal SEAD and fixed target attack
  - Current UCAV ADPO focus
    - Close Air Support
    - ASW
  - Technology requirements continue to be identified
    - Many needs common with manned systems
    - Command and Control is key