



Naval Strike Warfare Planning Center (NSWPC) Introduction

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WBB
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Purpose

- **To spread the word and gain support**



Overview

- **Strike planning upgrade motivation -
projected operating environment**
- **Introduction to NSWPC**
- **Conclusions**



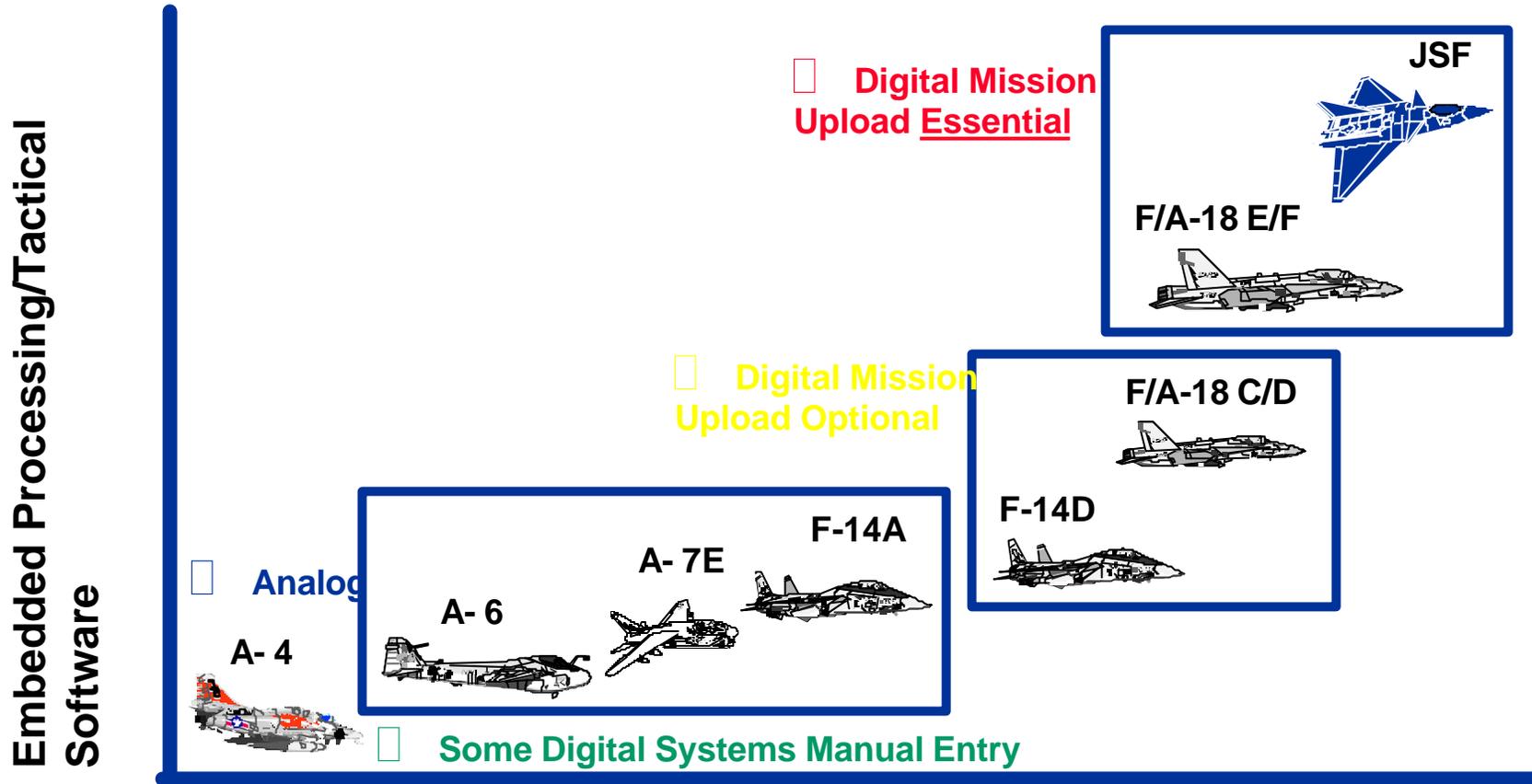
Factors Affecting Future STW

Aircraft	➔	Multi-mission/single seat, increased processing and "programmability"
Weapons	➔	Guided, standoff, pre-flight planned
Target Set	➔	Increasingly mobile
Threat	➔	Mobile and electronically agile
Force Structure	➔	Fewer platforms, weapons, and people
Operational Concepts	➔	High tempo, maneuver warfare
National Expectations	➔	Rapid, decisive victory, with minimal losses and enemy collateral damage/non-combatant casualties

All add complexity to/extend planning process



TACAIR Complexity

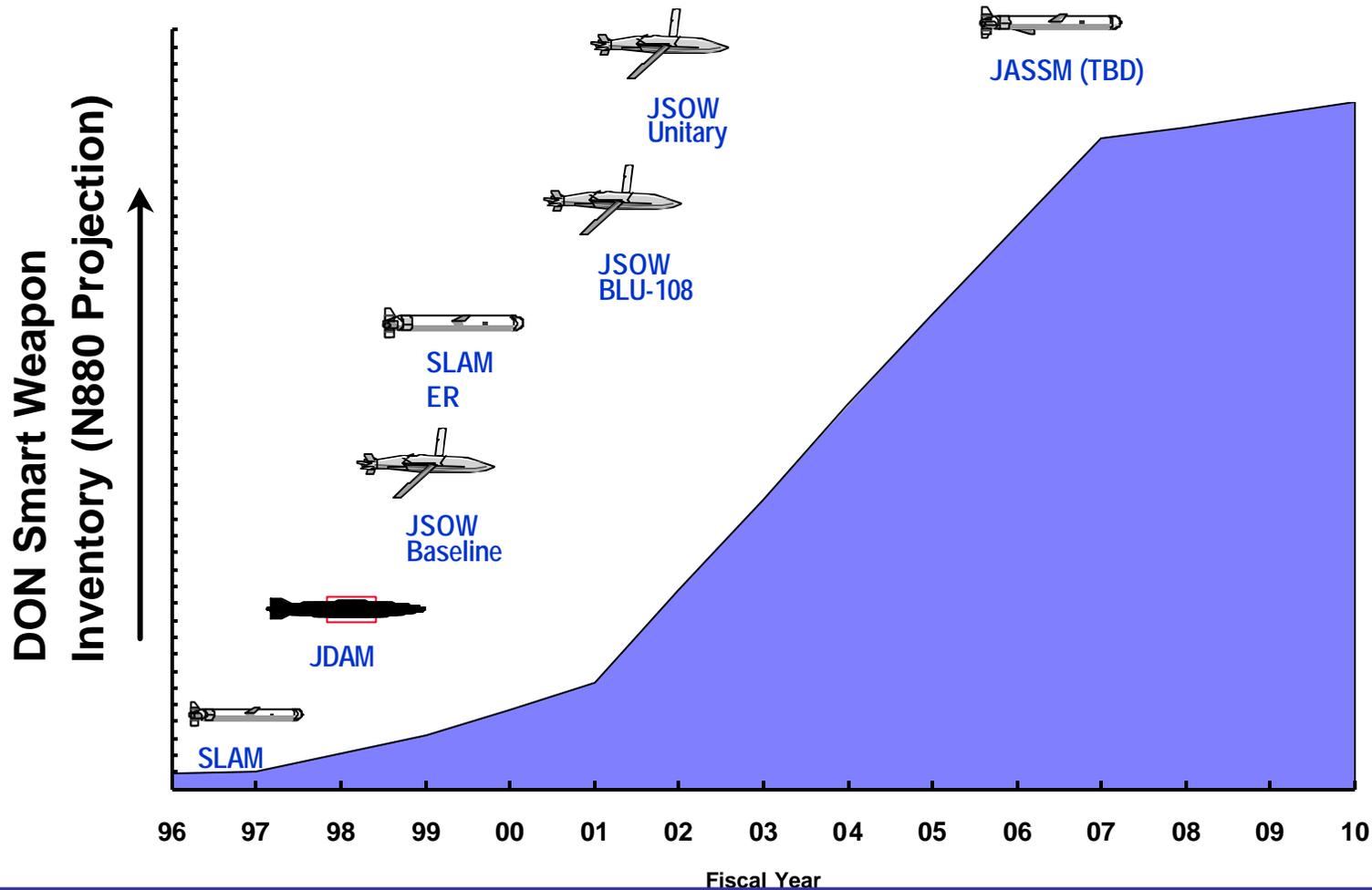


More complex multi-mission avionics & weapons demand more pre-flight planning/digital data upload



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Navy/Marine Corps Committed To Guided & Standoff Weapons



Guided weapons becoming the norm - affordability/performance of new weapons like JDAM will reinforce trend

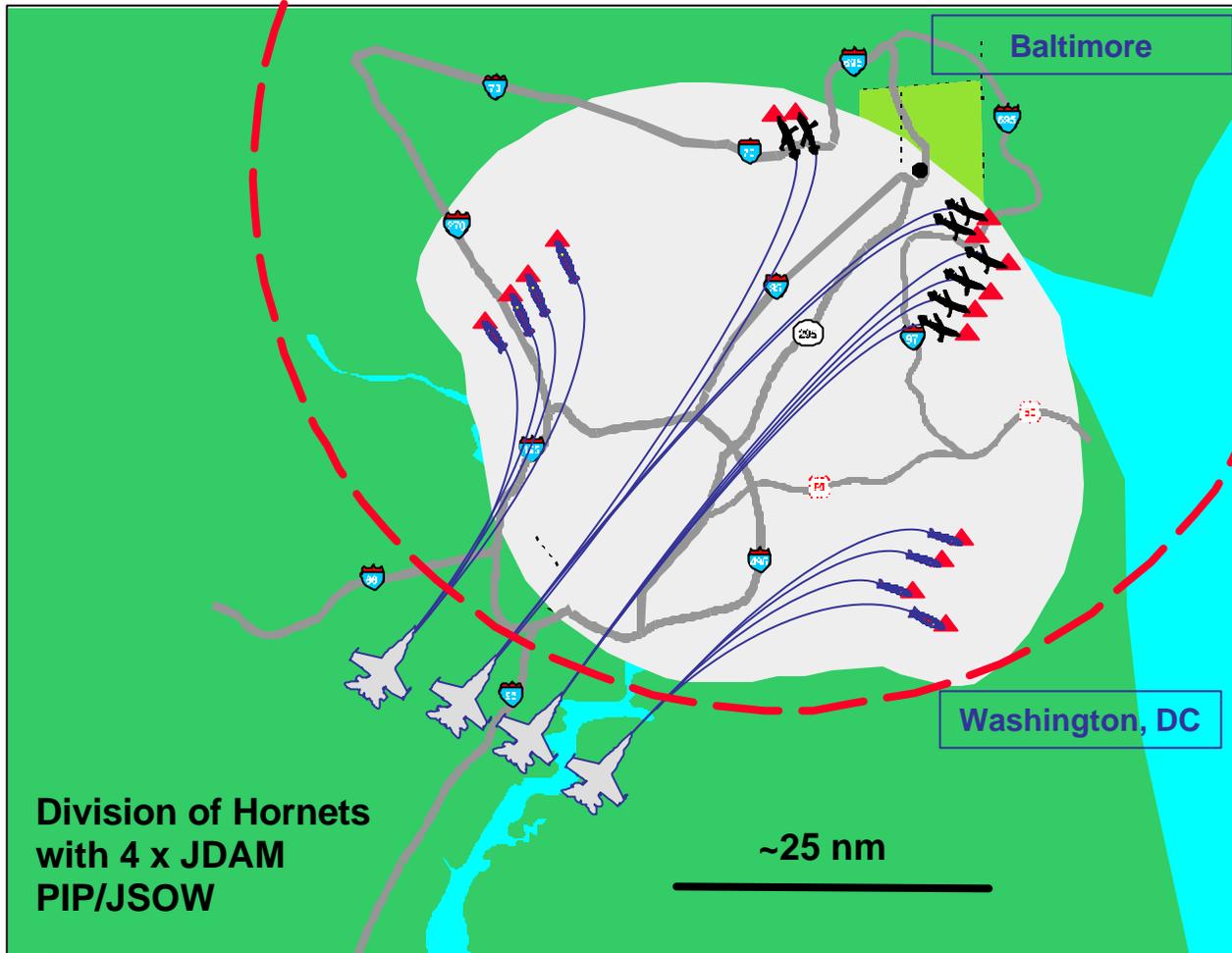
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Guided/Standoff Weapons Enhance TACAIR Firepower/Flexibility - Stress Planning/Intelligence

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- † More aim points held at risk outside point and area defenses during a rollback campaign scenario

- † Fewer aircraft at risk and fewer sorties to achieve desired level of target set destruction

- † New weapons more planning intensive - greater demands on intel collection and dissemination

Chart shows JSOW/notional JDAM PIP extended range target area coverage footprint for high altitude release

- One division - 16 separate DMPI's / 4 target areas

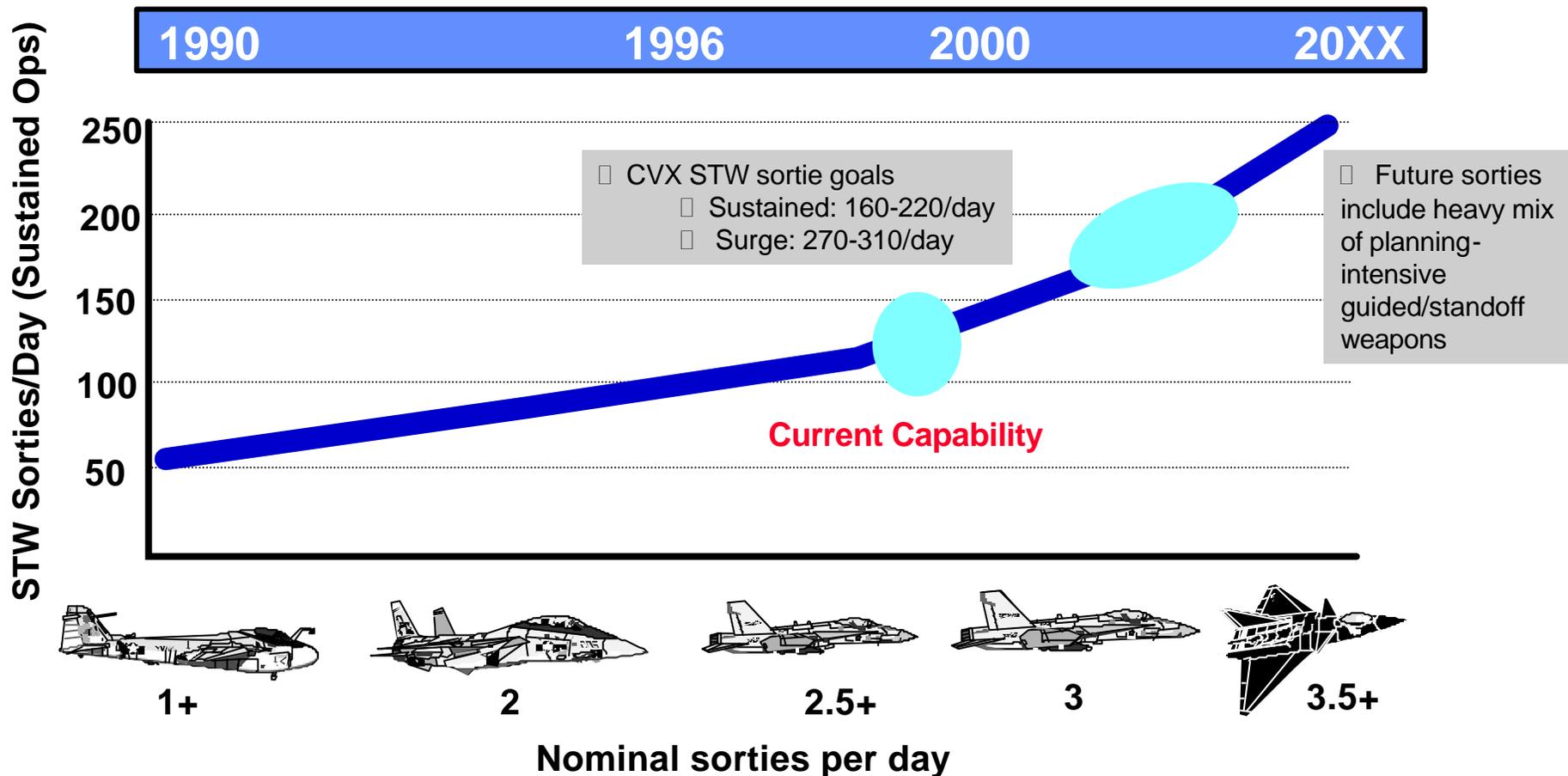
- Preflight intelligence/rapid mission planning required

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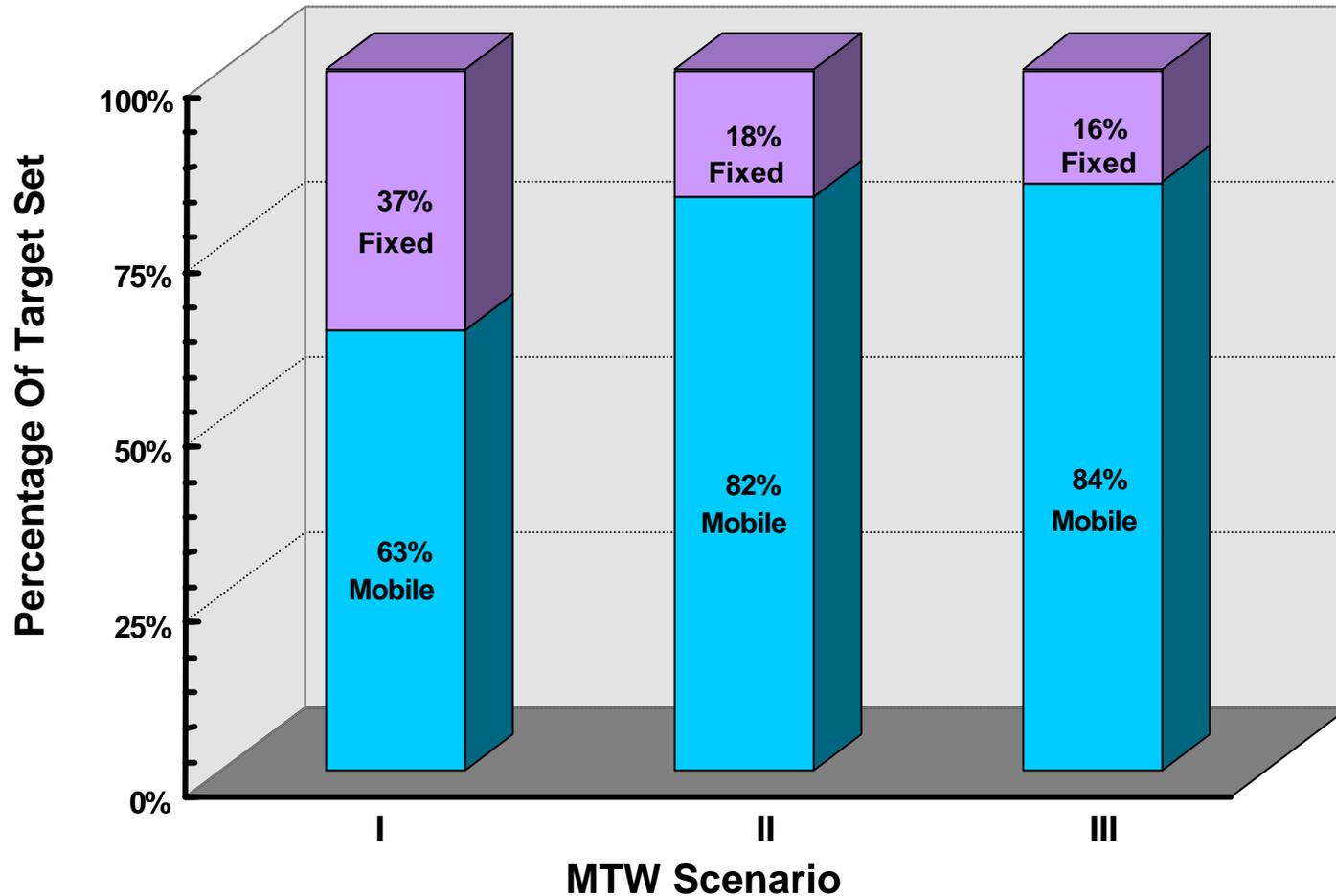
Strike Sortie Capabilities/Goals



Modern TACAIR capable of more sorties/day - all sortie generation factors - including planning - must keep pace



Fixed/Mobile Target Split By Scenario (U)



- Fixed targets can be time critical

- “Mobile” target dwell times are often short - by design

Target set mobility drives strike responsiveness and mission planning timelines



Strike Planning Process

Analyze tasking

↳ Develop strike concept

† **Strike Concept Approval**

↳ Complete detailed strike element planning

↳ Integrate strike element plans

↳ Evaluate/refine integrated strike plan

† **Strike Plan Approval**

↳ Rehearse mission/strike

Planning architecture/tools must support process built on Strike Planners Checklist



Strike Planning Today

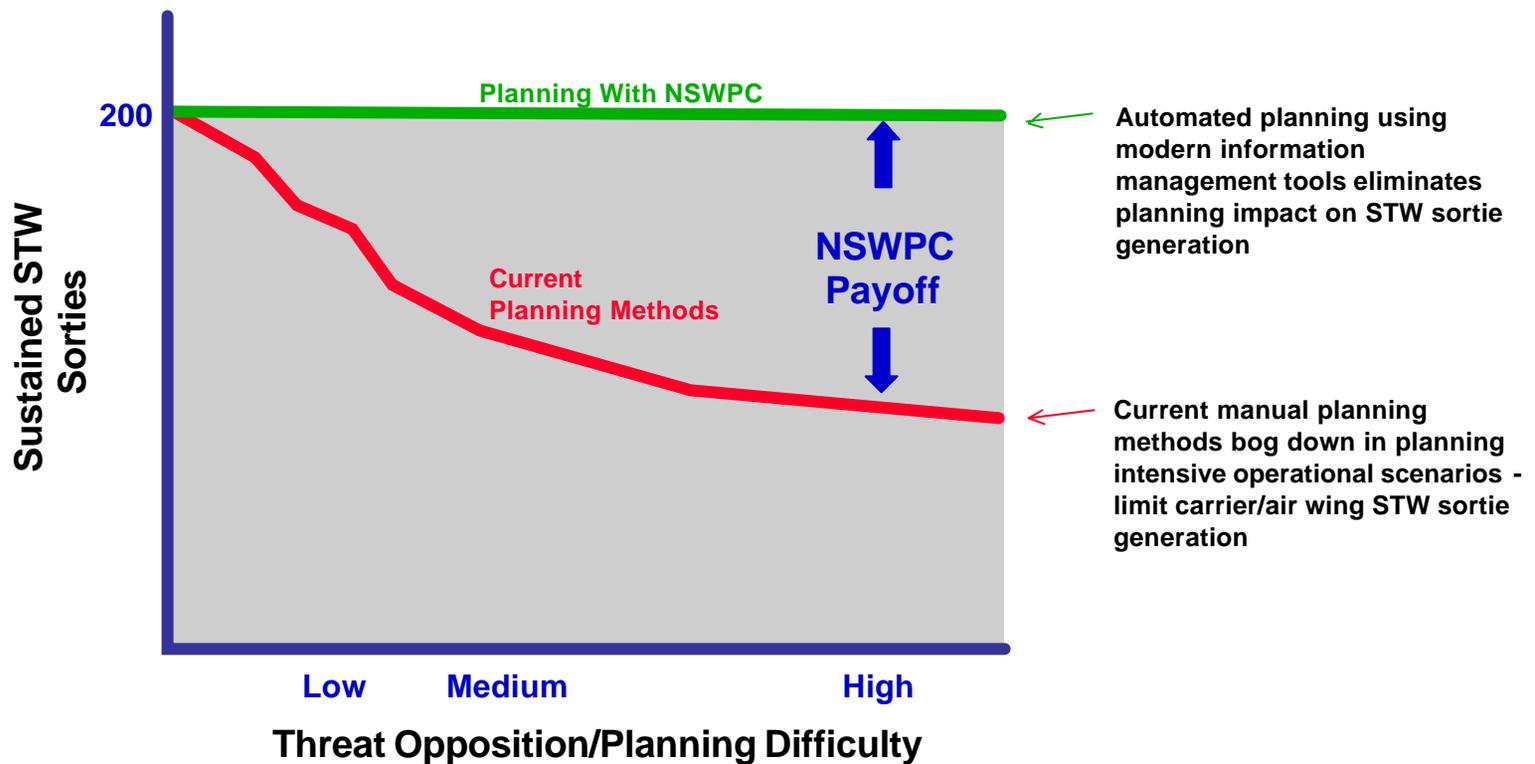
- **Mostly manual - limited automation of repetitive manual tasks**
- **Current automated tools limited:**
 - stovepiped - can't plan integrated operation
 - relatively inflexible, not user friendly
 - unique, redundant data bases
 - no "one-stop" planning
 - unresponsive to update/change
 - inadequate numbers

Future requirements make current methods obsolete - information technology can revolutionize planning/execution processes



Impact Of Strike Planning On Sortie Generation

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Automated planning methods/tools/information technology can reduce planning timelines/sustain sortie generation

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Critical NSWPC Attributes

- **Strike planning volume throughput to support sortie generation rates**
- **Strike planning responsiveness for time-critical target set**
- **Strike planning accuracy to support rigid/precise guided weapons planning requirements**

Automated planning methods/tools and information technology can help



NSWPC Component Systems



TSCM (PMA 233)

- Force level planner**
- Receive and parse ATO
- Develop concept plan
- Develop element plans



TAMPS/JMPS/
N-PFPS (PMA 233)

- Unit level planner**
- Refine individual aircraft plan
- Weapon plan
- Fuel plan
- Digital data upload



TEAMS (PMA 234)

- EA-6B Unit level planner**
- Refine EA-6B plan
- Jammer planning
- Fuel plan
- Digital data upload/download



TLAM APS
(PMA 28X)

- Tomahawk afloat planning**
- TLAM route plan
- Support CVBG TLAM shooters



TOPSCENE
(PMA 205)

- Unit level mission rehearsal**
- Individual aircraft mission fly-through



JSIPS-N (PMA 281)

- Imagery Receipt/Exploitation/Storage**
- Receive national/tactical imagery
- Exploit using DPPDB
- Support TLAM planning
- TACAIR guided weapon/mission planning



MDS (PMA 28X)

- Imagery Receipt/Exploitation/Storage**
- Receive national/tactical imagery
- Exploit using DPPDB
- Support TLAM planning
- TACAIR guided weapon/mission planning



IIEQT (PMA 241)

- F-14 TARPS Imagery Station**
- Receive imagery via UHF
- Display/exploit in real/near-real time



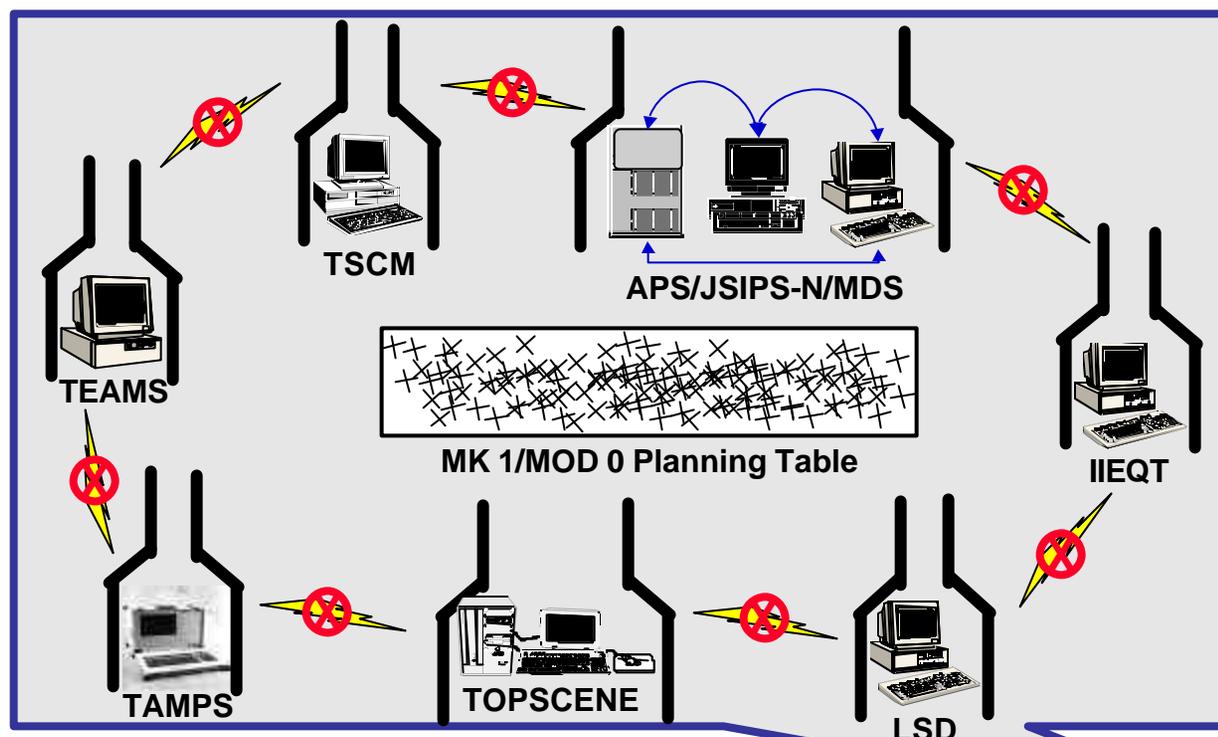
LSD (PMS XXX)

- Group collaborative planning**
- Display filterable common tactical picture
- Facilitate concept plan development
- Point/click and/or, touch sensitive
- Display screen of any NSWPC component

**Improve throughput/responsiveness/accuracy
through integration of stovepipe legacy systems**

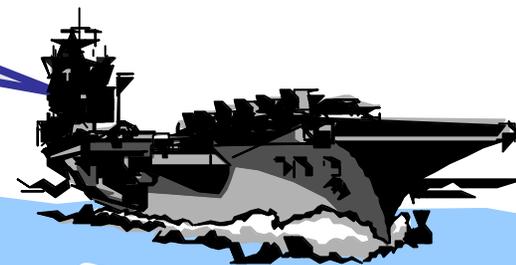


Current Automated Planning Status



- Stovepiped systems
- No interoperability
- Disjointed functionality
- Multiple planning data bases
- Multiple/conflicting tactical pictures

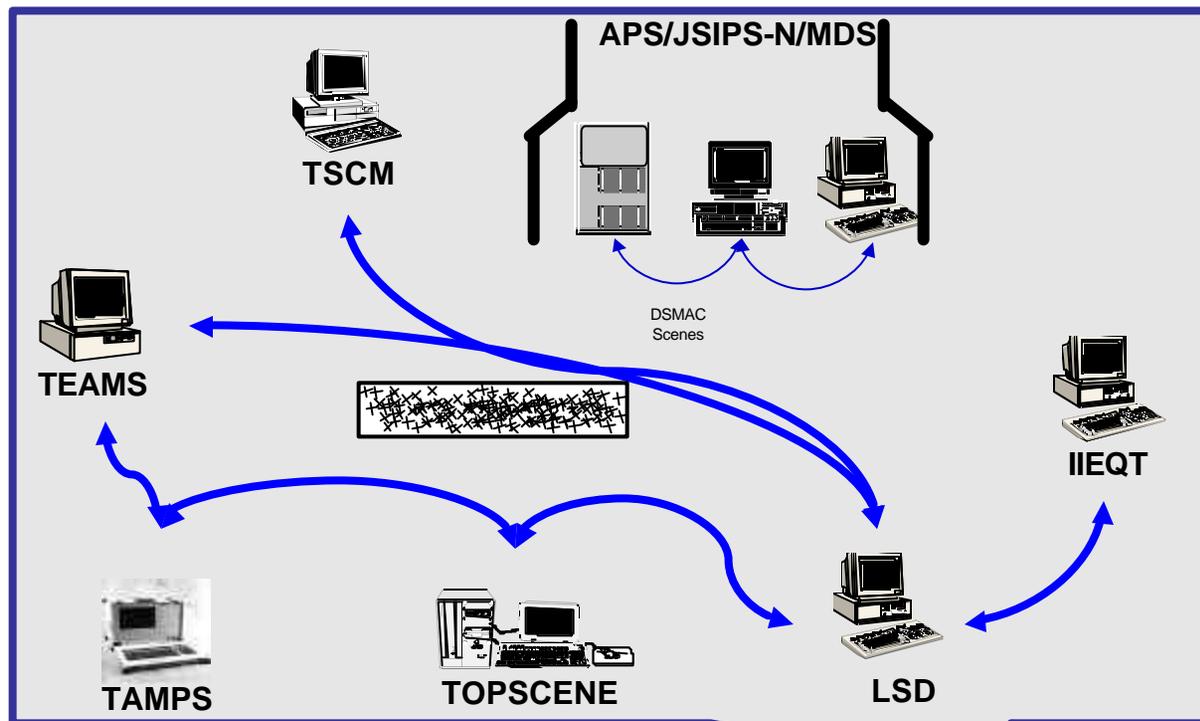
- Operators do not use
- Most/all planning done at the planning table and/or, using N-PFPS, PC's/commercial software (e.g., PPT/EXCEL)



Unique UNIX workstations - no connectivity/interoperability

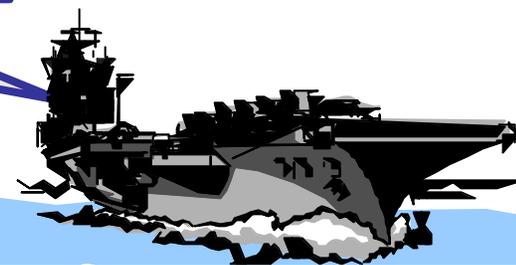


NSWPC Phase I - Nimitz



- Provide connectivity between planning systems
- Identify essential information exchange requirements
- Pattern process/information exchange requirements on NSAWC strike planning checklist
- Introduce electronic strike planning folder (SPF)

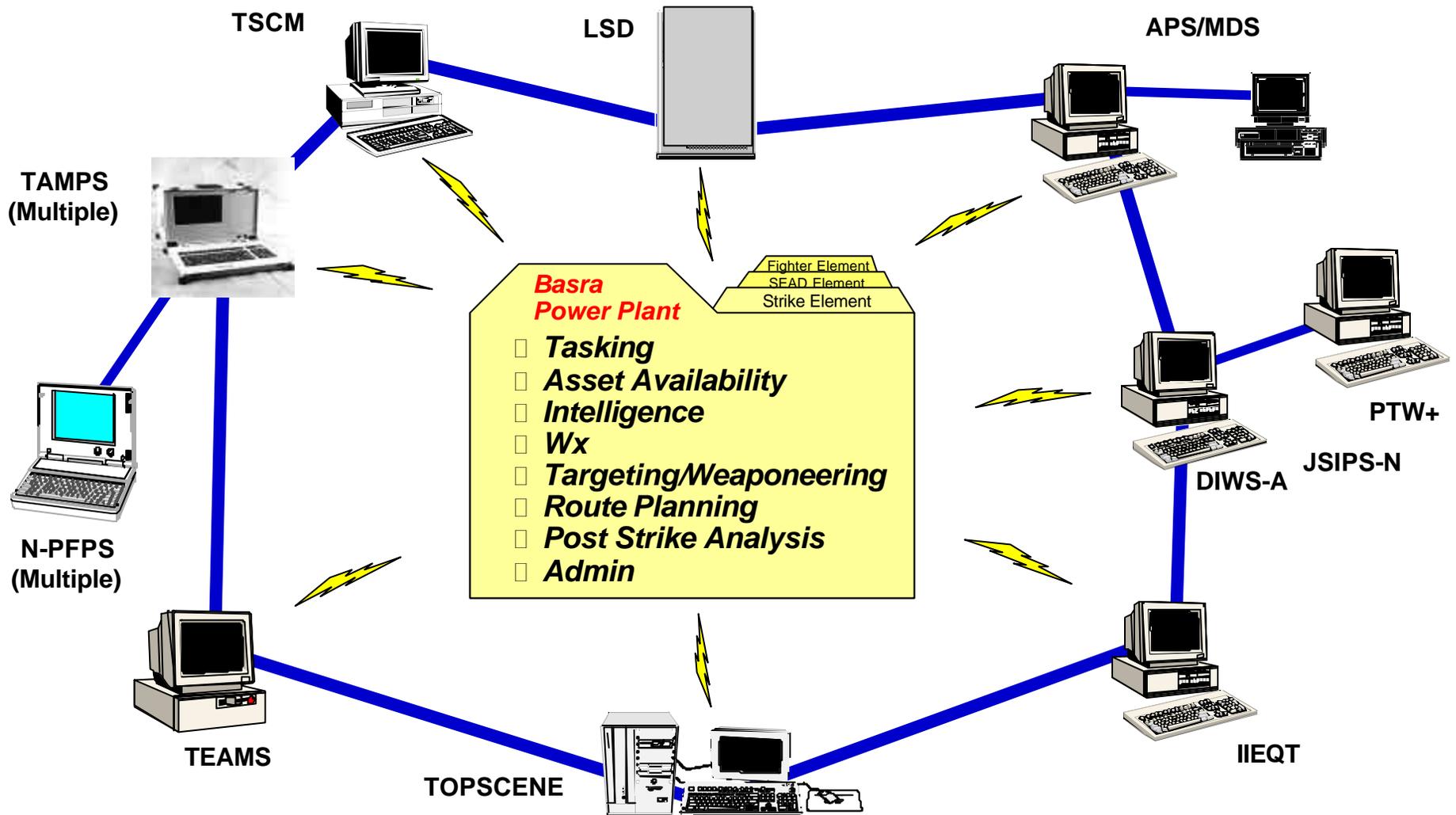
Provide Nimitz warfighters a first generation integrated strike planning capability using existing systems - begin transition to automated tools - reduce reliance on obsolete manual methods



Some connectivity and interoperability - limited access to common data bases and functions



NSWPC Phase I - Strike Planning Folder (Planned)



Single source of strike planning information/ products available to all planners from all terminals



NSWPC Phase II Offboard Planning Connectivity



Liaison and collaboration in planning improve theater force responsiveness, coordination, and effectiveness



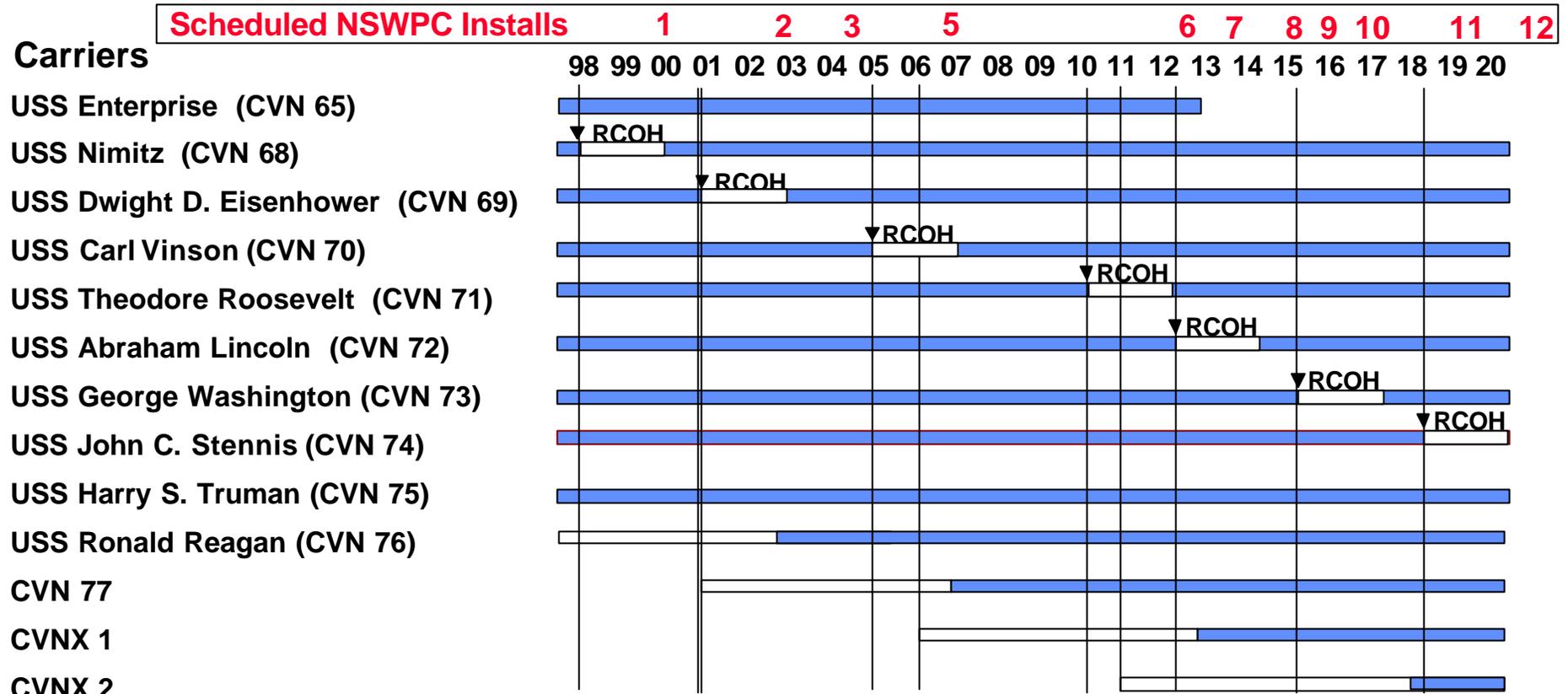
Conclusions

- **Navy must modernize strike planning - urgency is growing daily**
- **NSWPC networking existing tools - goal is 1st generation integrated strike planning capability**
- **Heavy dependence on interfaces with other systems (e.g., GCCS-M)**
- **NSWPC establishing network architecture for improved next generation planning tools**



CVN Construction & Refueling Schedule Limiting Installs

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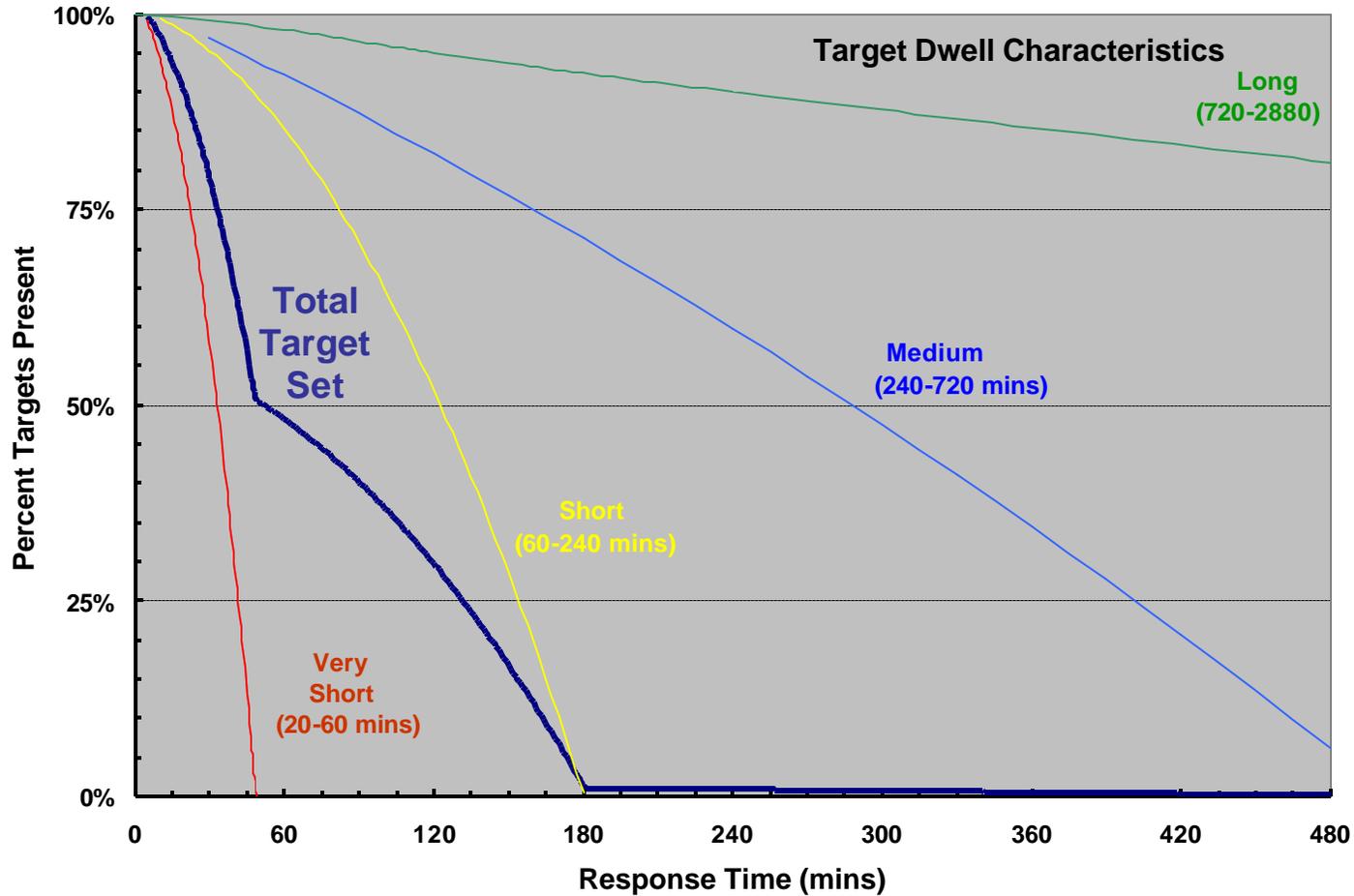


Under construction or in RCOH
 RCOH dates after CVN 70 are notional based on 23 years of commissioned service

Present approach/schedule inadequate - results in full incorporation 2020+ - acceleration required



Mobile Target Response Time



□ Heavy blue line shows overall impact of dwell times/probability of target not moving assessments applied across CINC approved mobile target sets - data provided in table below

Percent Targets Present	Maximum Response Time (mins.)
90	19
80	29
70	36
60	43
50	51
40	90
30	119
20	144
10	163

Rapid response needed to engage mobile targets