Rapheal Holder
From Platform to Service
in the Network Centric Value Chain
October 23, 2003
• Background
• Northrop Grumman Service Business Models
  – Service as primary business
  – Service growth from platform
### Leadership in Key Business Areas

#### Electronic Systems
- Airborne Radars
- C^4ISR
- Electronic Warfare
- Navigation & Guidance
- Military Space
- Homeland Security

#### Information Technology
- C^4ISR
- Government IT Infrastructure
- Science & Technology
- Information Security/Assurance
- Enterprise Solutions
- Homeland Security

#### Integrated Systems
- Tactical Aircraft
- Long Range
- Unmanned
- Airborne Early Warning & Surveillance
- Air-to-Ground Surveillance
- Airborne Jamming

#### Ship Systems/Newport News
- Naval Systems Integrator
- Aircraft Carriers
- Attack Submarines
- Surface Combatants
- Amphibious Assault Ships
- Auxiliary Ships

#### Mission Systems
- Command, Control and Intelligence
- Digitized Battlefield
- ICBM Sys. Mgmt.
- Missile Defense BMC^3
- Defense/Civil Software Application Dev.
- Information Warfare
- Homeland Security

#### Space Technology
- Intelligence, Surveillance, Reconnaissance
- Laser Weapons
- Military SATCOM
- Scientific Satellites
- Military Avionics
- Cutting-edge Micro-electronics

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A Revolution in Business Operations in Response to...
The New Northrop Grumman

1993
$5.4B Sales

2001
$13B Sales

2003E
$26B Sales

Electronic Systems
Ship Systems / Newport News
Information Technology
Integrated Systems
Mission Systems
Space Technology
Component Technologies
Challenges of Growing Service Sectors in a Product-Focused Company

- **Information Technology (IT)**
  - Grew Organically and Through Several Acquisitions Over a Decade
  - Capital Assets vs. Intellectual/Human Assets
  - Delivery to Customer as the End of the Value Chain vs. Ongoing Customer Engagement as the Entire Value Chain
  - ERP vs. CRM

- **Mission Systems (MS)**
  - A Single Recent Acquisition
  - Benefited from IT Sector Growing Pains

Northrop Grumman is Evolving a Balanced Service/Product Value Proposition
• Growing service value proposition by reducing complexity in customers’ service experience
  — Providing “one stop”
  — Common look and feel
  — Simplified/consolidated contracts
• Examples
  — Established Logistics Service Division to support our own and other customers’ product lines
  — Life Cycle Support for the Advanced Seal Delivery System (ASDS)
  — Warner Robins Regional Support Center (WRRSC)
Integrated Systems Examples

• TSSR for JSTARS
  – "Total Systems and Support Responsibility"
  – Implementation of Best Value Practices
  – Successful Partnering With the Depot

• TSSP for B-2
  – "Total Systems and Support Partnership"
  – Modeled after TSSR
  – Streamlined the support process, made one system and one authority responsible
    – AF requirements
    – NG mod and overhaul requirements
    – Flight Test requirements
• Global Hawk Services
  - Provides on-site services to deployment air vehicles.
  - Actual remote control services of the av
  - Offloading data and “feeding” it to whomever needs it.

“‘Global Hawk played an extraordinarily important role in focusing precision air power,’ an Air Force source said yesterday, estimating that it quickened the Republican Guard's defeat by several days and is responsible for scores of tank kills.”

Washington Times, 3 Apr 03
Newport News Services Supply Chain

• Maintains and overhauls a wide range of U.S. Navy nuclear and conventionally-powered ships including aircraft carriers, surface ships, and submarines as well as a variety of commercial ships.
• Also provides technical and life cycle logistics services.
• Wherever nuclear powered aircraft carriers are maintained NN has a presence.
• Newport News can mix the right talent for the best value to maintain and modernize the nuclear carrier fleet.
Services Enhancing Value in Product Oriented Market Segments

- Simplifying the Customers’ Service Experience
- Establishing a Service Business Unit within a Product Oriented Sector
- Partnering with Customers’ Depot Maintenance
- Accelerating Deployment into Missions
- Extending Stable Revenue Streams Beyond Product Development Life Cycle

Northrop Grumman has Transformed From an A&D Manufacturer to a Balanced Provider of Product and Service Solutions