



**Achieve the
Mission**

**Decrease
Inventory**

**Decrease
Cycle Time**

**Improve
Reliability**

**Decrease
Operating
Expenses**

Naval Aviation AIRSpeed for Defense Standardization Conference

**Dale L. Moore
Deputy, Corporate Deployment Champion
NAVAIR AIRSpeed
8 March 2005**

NAVAIR Lines of Business

Core Products in Support of Sea Power 21 Capabilities



SEA BASED AIRCRAFT & SYSTEMS / UNMANNED AERIAL VEHICLES (UAVs)



MARITIME WEAPONS



**MISSION SYSTEMS & SENSORS
AIR ASW / ASUW**



**AIRCRAFT PLATFORM INTERFACE
SHIP & EXPEDITIONARY**



**AIRCREW / MAINTENANCE
TRAINING SYSTEMS**

SYSTEMS ACQUISITION

SUSTAINMENT

RQMTS / RISKS
FROM
FLEET / OPNAV

CONCEPT &
TECH. DEV'M'T

SYSTEM DEVELOPMENT
& DEMONSTRATION

PRODUCTION &
DEPLOYMENT

OPERATIONS &
SUPPORT

HEADQUARTERS / PEOs

WARFARE CENTERS

DEPOTS

AIR Speed Inspiration... Pay for the Naval Aviation of the Future

	FY97	FY98	FY99	FY00	FY01	FY02	FY03	FY04	FY05	FY06	FY07	FY08	FY09
PB96	44	57	79	103	133								
PB97	40	56	83	114	124								
PB98		51	71	125	144	150	164						
PB99			71	119	143	154	164						
PB00				105	140	163	183	187	201				
PB01					128	130	173	177	187				
PB02						88	92	115	119	143	155		
PB03							90	85	105	147	193		
PB04								100	100	133	191	254	302

Many Contributors Driving Major Reductions in A/C Procurements

NAVAIR'S Productivity Transformation

SUPPORTING SEA POWER 21

Vision

Provide **COST-WISE READINESS** and **DOMINANT MARITIME COMBAT POWER** to make a great Navy / Marine Corps team better

Goals

- Balance current and future readiness
 - Reduce cost of doing business
 - Improve agility
 - Ensure alignment
 - Implement fleet-driven metrics

Metrics

Inventory

Cycle
Time

Reliability

Cost

Single Fleet-Driven Metric:

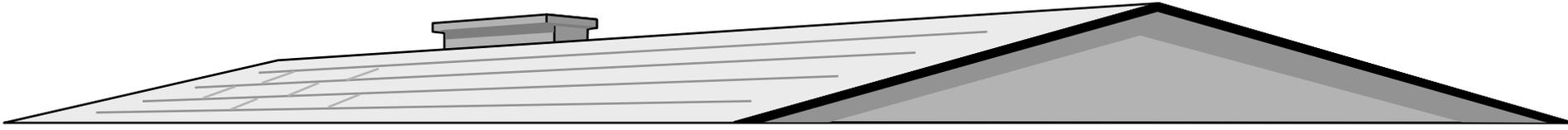
NAE resources made available to the Navy for recapitalization

The Cost of "Current State" NAE Operations

- The Cost of "Future State" NAE Operations*

= Resources made available to the Navy for recapitalization,
and A/C Ready for Tasking at Reduced Cost

Naval Aviation Enterprise AIR Speed



Depot AIR Speed

(Lean, Six Sigma, TOC)

- *Depot production processes*
- *Led by COs/AIR-6.0*
- *Rollout to 3 sites*

Enterprise AIR Speed

(Lean, Six Sigma, TOC)

- *Fleet-Wide Repair Sites & Processes*
- *Led by O-6 ESC*
- *O-I-D + Supply Chain*
- *Links to NAVRIIP*
- *AIR-3.3 Coord Office*

NAVAIR AIR Speed

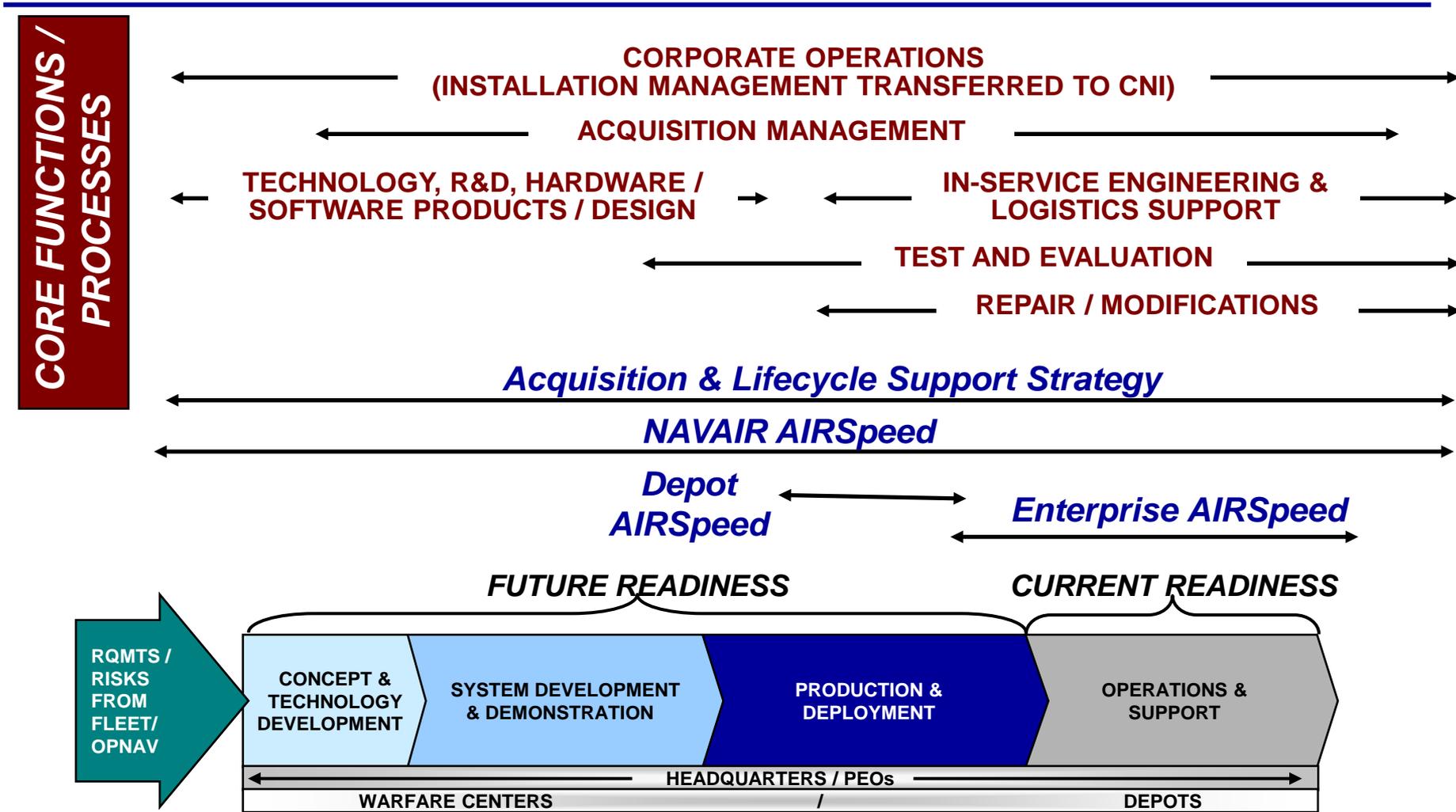
(Lean, Six Sigma, TOC)

- *Corporate/Competency Processes and Other Productivity Initiatives*
- *Led by AAG/EDB Guidance*
- *Enabled by Core Team*
- *Links with Enterprise & Depot AIR Speed*

- There are three AIRSPEED programs with One Goal and One Metric:
 - **Depot** AIRSPEED which began in 1999
 - **Enterprise** AIRSPEED which began in 2003
 - **NAVAIR** AIRSPEED which began in 2004
- All three drive productivity through process improvement using industry-proven tools, and help establish a self-sustaining culture of continuous improvement.

NAVAIR Core Processes

Part of the NAE Value Stream



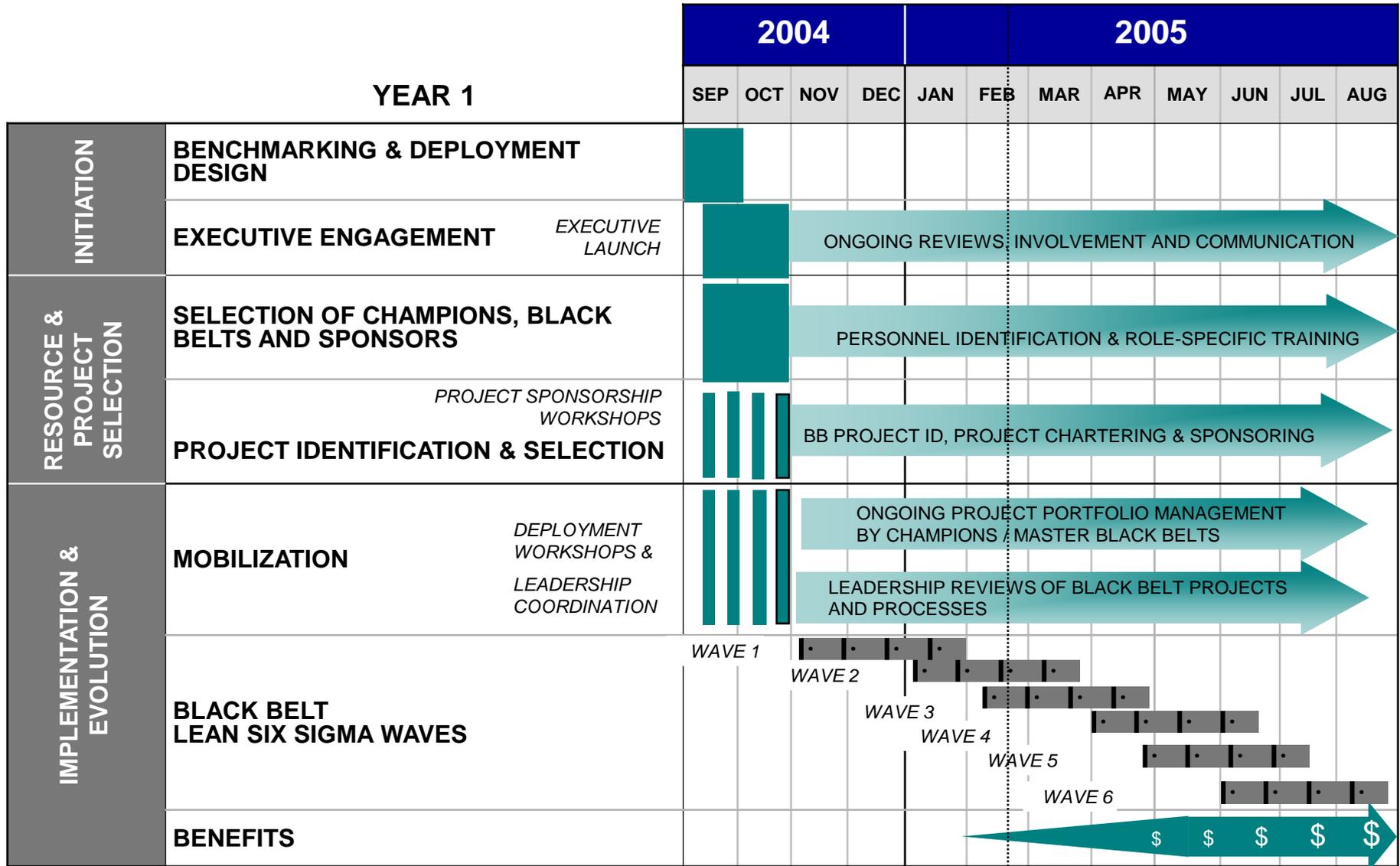
WHERE WE HAVE BEEN

- **Industry Benchmarking completed in FY04**
 - LEI/TWI, Boeing, Lockheed Martin, GE, Raytheon
 - All Promoted Top Down Approach:
 - Champion Training for Senior Leaders
 - Blackbelt/Expert Program tied to Corporate Office
 - Pick the best & brightest for Blackbelt/Expert Training
 - Train the rest as they prepare to conduct projects
- **NAVAIR EDB approved establishment of NAVAIR *AIRSpeed* Core Team on 3 May 2004**
- **Wave's 1 - 6 Executive Champion Training Sessions Complete (Top 150+)**
 - LEI/TWI: Lean Value Stream Mapping & Transformation
 - GE: Six Sigma and Change Acceleration Process
- **NAVAIR EDB approved establishment of *AIRSpeed* Advisory Board on 12 October 2004**
- **The George Group under contract to provide comprehensive NAVAIR Lean Six Sigma Deployment & Training support**
 - Executive & Project Sponsor Training Waves 1 -11 complete (350+)
 - Wave I BB Completed (X22), Waves II & III Started 1
 - Yellow Belt Team Member Training Waves 1-13 complete (~325)

WHAT WE HAVE LEARNED

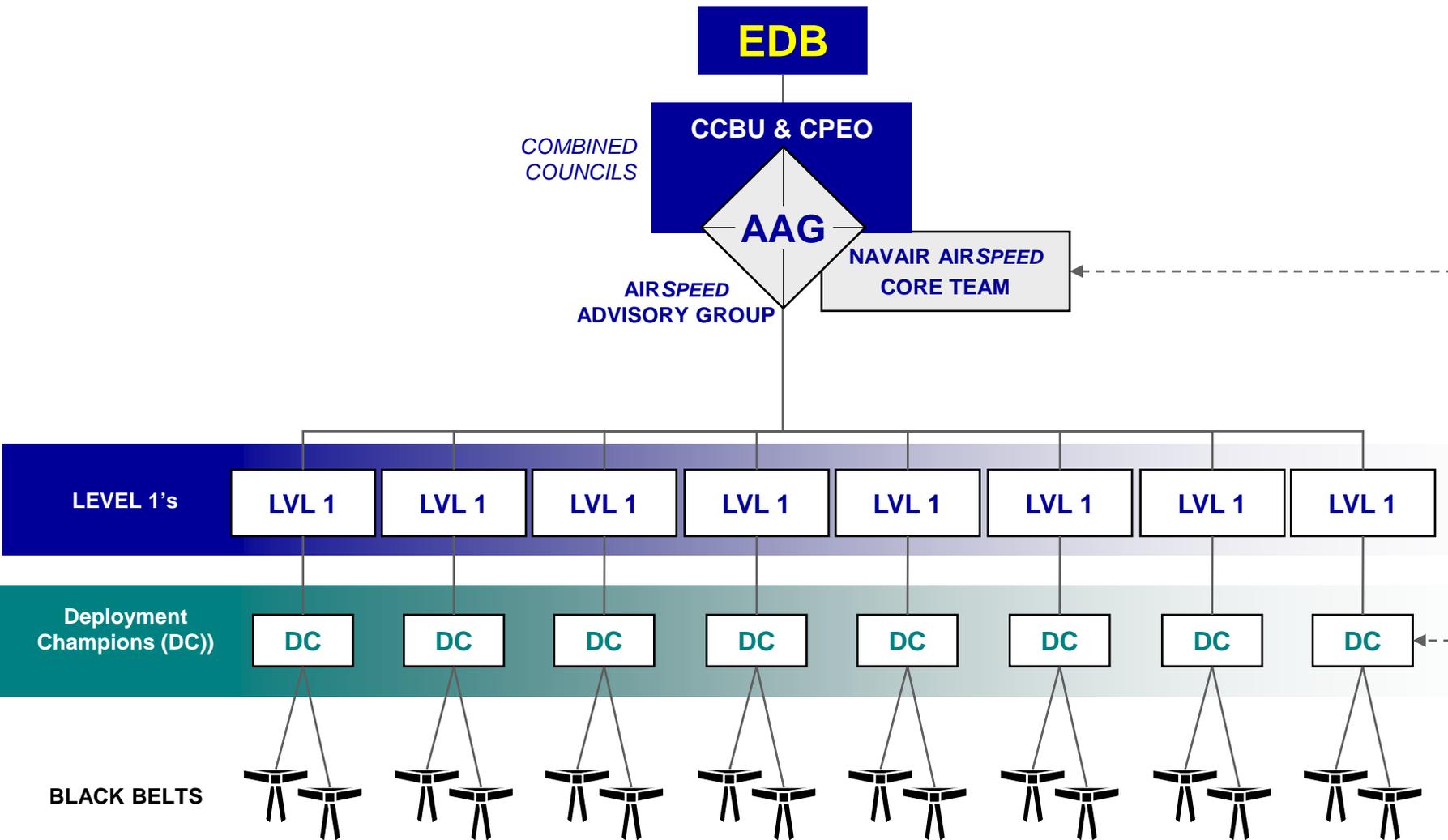
- **Naval Aviation Workforce is “Pressurized”**
 - Productivity tools essential to provide relief to meet Naval Aviation enterprise goals
- **Cultural Change is Required for Transformation**
 - Quality (or Goodness) X Acceptance = Effectiveness
- **Need to make “AIRSpeed” a Corporate Leadership Value**
 - Learning Organization, Problem Solving Culture
- **How do we institutionalize AIRSpeed?**
 - Systems & Structures Must Align to Support the Effort
 - **Award Systems**
 - **Communications**
 - **Training**
 - **IT**
- **Effective Roll-out Requires (Toffler):**
 - Clear Strategy
 - Engaged Leadership
 - Motivated Workforce
 - Effective Management Tools

NAVAIR AIR *Speed* Implementation Process

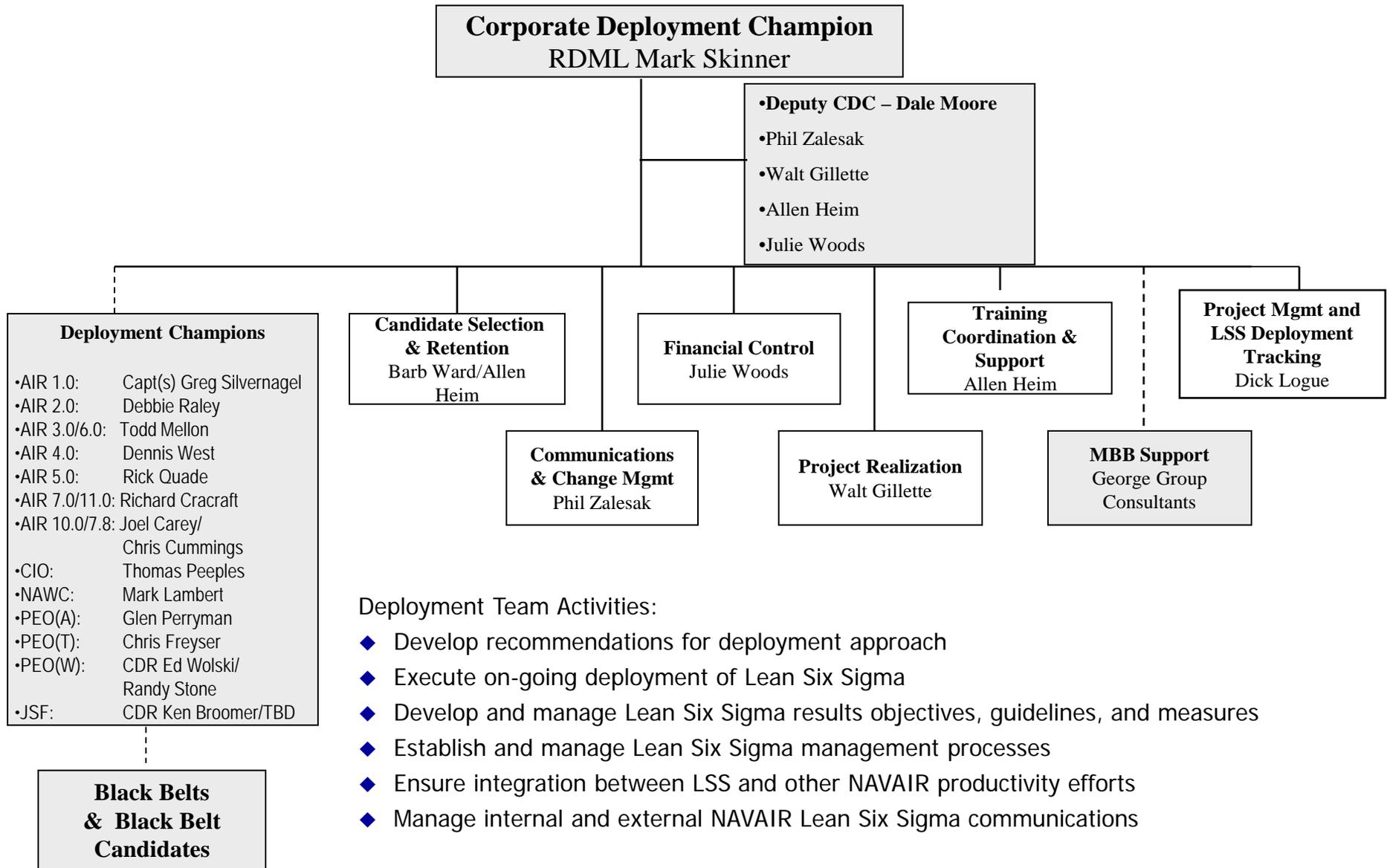


REFERENCE: LEAN SIX SIGMA, BY MICHAEL L. GEORGE

NAVAIR AIRSPEED STRUCTURE



NAVAIR AIR Speed Deployment Team



NAVAIR AIRSpeed Roles

AIRSpeed Core Team

- Enables successful deployment / execution
- Develops and reports metrics
- Coordinates training
- Leads change management and internal / external cross-communication

Executive Leadership

- Owns vision, direction, integration, business results
- Leads change

Project Sponsors

- Project owner
- Implements solutions
- Owns financial results
- Part time as part of job
- Develops Project Charter

Deployment Champions

- Lead organizational performance improvement
- Prioritize projects
- Full time assignment

All Employees

- Understand vision
- Apply concepts to their job and work area

Project Team Members

- Provide project-specific support
- Can be Yellow or Green Belt and includes Financial Representation
- Part time on projects

Master Black Belts

- Train Black Belts/Green Belts
- Coach Black Belts/Green Belts
- Lead Complex/Large projects
- Full-time position

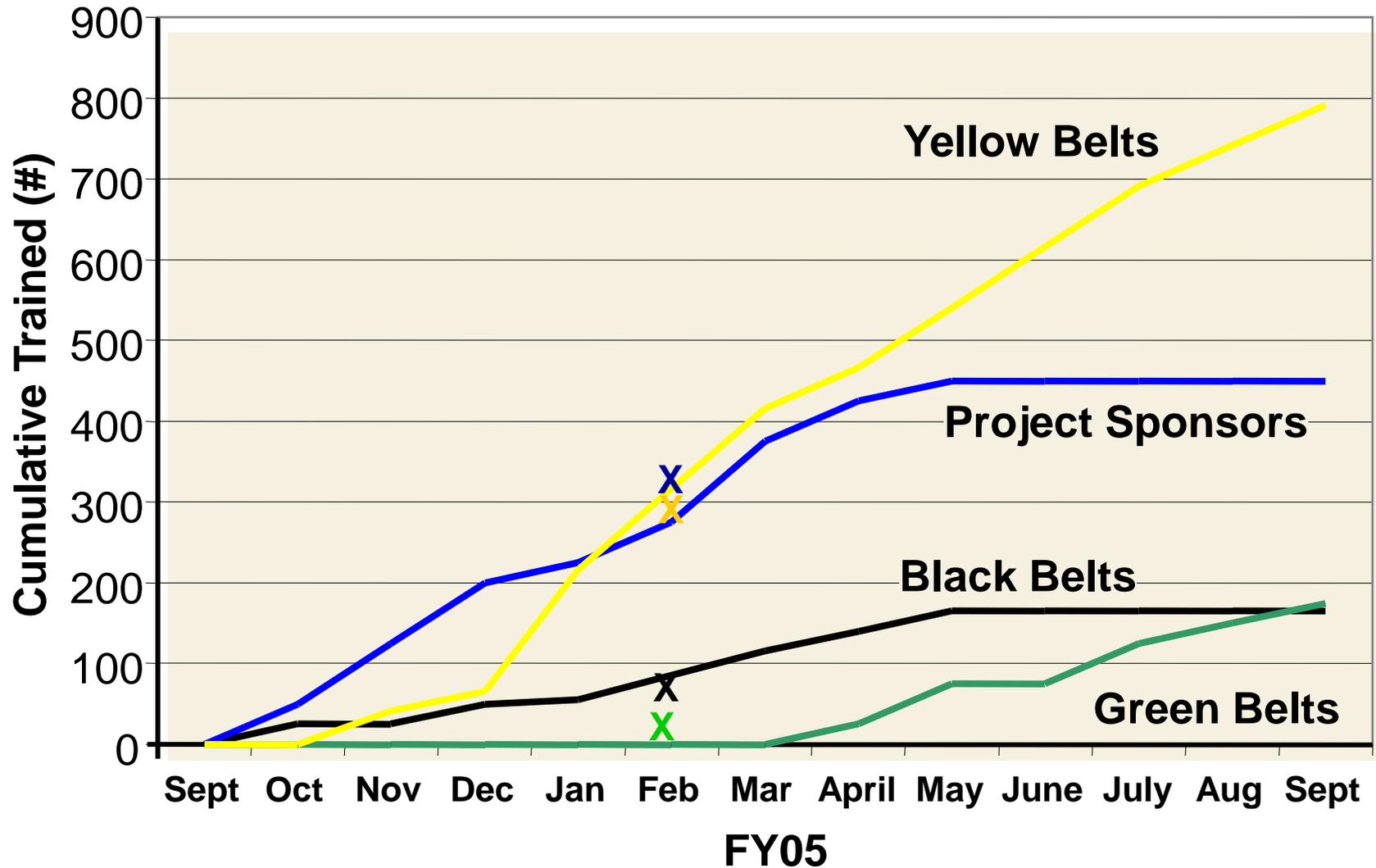
Green Belts

- Participate on Black Belt teams and/or lead projects
- Part time on projects

Black Belts

- Execute AIRSpeed projects
- Train and coach Project Teams
- Full-time assignment

NAVAIR AIR Speed Training Plan



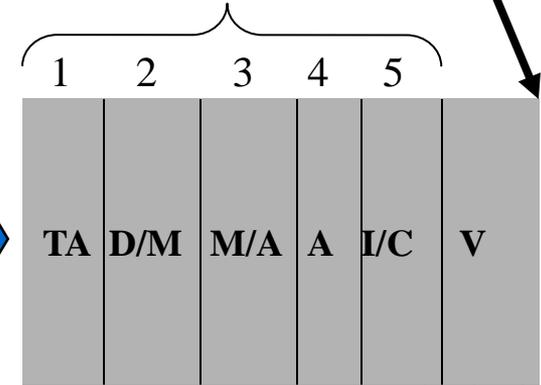
AIR Speed Project Development Process

Success Recipe: Right Project, Right Leader, Right Support and Right Resources



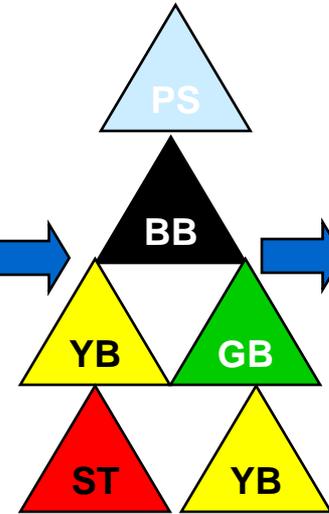
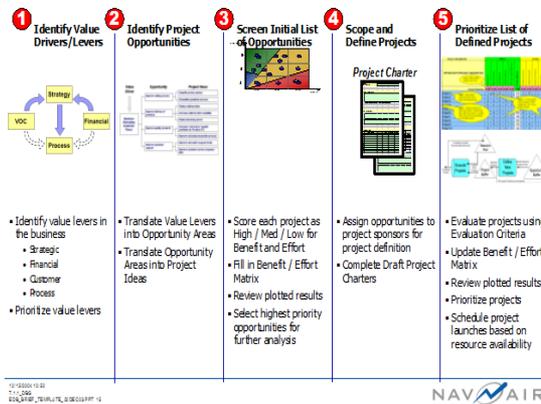
MATCHING PROJECT SELECTION W/BB (or GB) & FORMING TEAM

BLACK BELT DMAIC PROJECT TRAINING/EXECUTION



5 STEP PROJECT SELECTION PROCESS*

The Process for Identifying Opportunities and Selecting Lean Six Sigma Projects



CHARTER APPROVAL

TOLLGATES
D M A I C V

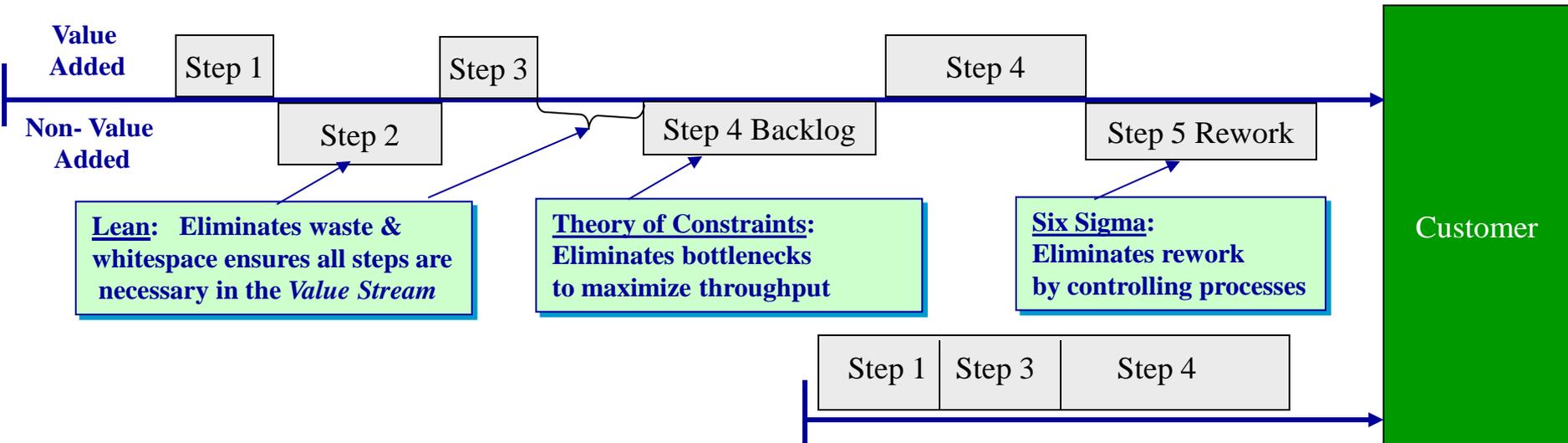
AIR Speed PROJECT INPUTS

- Value Stream Mapping
- Project ID & Selection Workshop
- Project Sponsor Training
- Grass Roots Ideas/ MyIdea Network

REFERENCE: *LEAN SIX SIGMA*, BY MICHAEL L. GEORGE

Adopting NAVAIR AIRSpeed Within the Command

NAE AIRSpeed implements proven methodologies/tools such as Lean, Six-Sigma and Theory of Constraints (TOC) to enable significant productivity improvement



NAE AIRSpeed provides enabling tools to Define, Measure, Analyze, Improve and Control processes to reduce the cost of doing business and maximize the value of delivered products and services.

Customer Value Examples

- Funding Documents
- Engineering Change Proposals
- Statements of Work
- Publication Updates
- Cost Estimates
- Flight Clearances
- POM Submittals

Top Deployment Challenges

- **Significant Upfront Decision Requirements**
 - >100 Deployment Decisions w/broad socialization required
- **Deployment Management Tracking System**
- **Financial Resources**
 - Availability & Accountability Requirements
- **Human Resources Mgmt**
- **Cultural Transformation & Change Management**
- **Process Standardization & Variation Control**
- **Process Data Availability**
- **Quantification & Institutionalization of Results**

NAVAIR AIRSpeed

- AIRSpeed is all about increasing *Productivity* to reduce our cost of doing business
- AIRSpeed deploys *New Workforce Skill Sets* in a dedicated and focused manner
- AIRSpeed has been designed and deployed to embed proven *“World Class”* concepts into the fabric of the organization to help catalyze pervasive *Cultural Transformation*
- AIRSpeed enables the extended enterprise to reduce the cost of doing business using a *“System-of-Systems”* approach.
- AIRSpeed has complete Naval Aviation Enterprise and ASN(RD&A) leadership support, direct participation and active involvement.