

## Why the Discussion Panel is Here

To build horizontal connections ...

between two communities ...

trying to achieve the same thing ...

through communications and understanding!



# **An Effort to Generate Community Awareness**

As part of the SEI Partner Advisory
Board (PAB) the CMMI-TSP Horizontal
Working Group started with the
following mission

Work inside and outside of the SEI to emphasize the need to bring together the CMMI and TSP communities in their common goal of making process improvement happen





### **CMMI-TSP** Issues

- CMMI and TSP communities need to understand each other better
  - CMMI community often unaware of TSP
    - Have been ~91,000 people trained in CMMI w/o TSP hardly mentioned!
  - TSP seen as competing with CMMI when it actually supports CMMI
  - Important terminology differences
- Two stovepipes in two places
  - Inside the SEI between the CMMI and TSP teams
  - Outside the SEI between CMMI and TSP partners and user communities
- Bidirectional gap analysis needs further exploration
  - Both communities can learn from each other







## Process Improvement at NAVAIR: Capability Maturity Models and Team Software Process Together

Jeff Schwalb
Naval Air Systems Command

**CMMI Conference 2009** 





## What is NAVAIR?

- NAVAIR is the Naval Air Systems Command
- Develop, acquire, and support the aircraft and related weapons systems used by U.S. Navy and Marine Corps
- Our goal is to provide the fleet with quality products that are both affordable and available when most needed
- Our support extends across the entire life span of a product, including all upgrades and modifications to that product





## Where is NAVAIR?



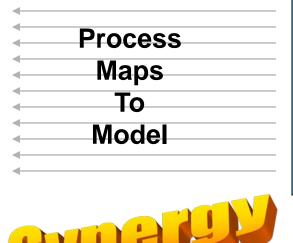


#### **NAVAIR Process Resource Team**

## Improvement Activities

Best Practice Models (e.g. CMMI)

- Train best practices
- Identify gaps
- PI Coaching



Process
Replication
(e.g. TSP)

- Train processes
- Launch projects
- Coach projects





# We Have Experience with CMMI and TSP Working Well Together

- NAVAIR already has a great track record with TSP:
  - Cost avoidance demonstrated on many software projects
  - More teams requesting training on PSP with plans to do TSP
  - Moving forward to address other systems engineering issues with same TSP principles









## NAVAIR TSP Success Return on Investment

 From AV-8B and P-3C's first TSP project efforts:

– Gross savings: \$ 3,782,153

Net TSP investment: - \$ 556,547

– Return on Investment: \$ 3,225,606

 These organizations, along with many others in NAVAIR, have standardized on TSP for all projects and have ongoing return from initial investment



## NAVAIR CMM/TSP Status (as of Nov.

Organization	Period of use	Team Size
E-2C Hawkeye (CMM ML- 4 in 18 mos)	<b>2000 - present</b>	29
AV-8B Harrier (CMM ML- 4 in 30 mos)	<b>2001 - present</b>	27
P-3C Orion (CMM ML- 4 in 29 mos)	2001 - present	21
H-1 Cobra	2002 - present	6
SPIKE R&D Project	2002 - present	8
F-14 Tomcat (CMM ML- 2 in 18 months)	2003 - 2005	10
<b>F/A-18</b> (SEPG prep for CMM 5 assessment)	2003 - 2005	8
North Island Helo Support	2003 - 2004	4
PRT (Process Resource Team)	2005 - present	7
<b>WSMP</b> (ARM, ITALD mission planning s/w)	<b>2005 - present</b>	9
Assorted Armies of One (individuals)	2005 - present	4
JWS (JMEM Weaponeering System)	2008 - present	6
Total		139



## **Summary of CMMI+TSP at NAVAIR**

- Several organizations in NAVAIR that have integrated the use of the TSP® framework and the CMMI® best practices have progressed from Maturity Level 1 to Maturity Level 4 in 30 months or less!
  - Less than half of the average time taken by other organizations
- SEI case study describes process improvement efforts in two of our NAVAIR organizations\*\*



<sup>\*\* &</sup>quot;Accelerating Process Improvement by Integrating the TSP and CMMI", CMU/SEI-2007-TR-013