# Practical Software and Systems Measurement

A foundation for objective project management



PSM Technical Working Group Meeting Herndon, Virginia

March 29-30, 2006

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### Logistics

- Registration/Logistics see Jeannie
- Meals
  - Snacks provided
  - Lunch on your own cafeteria downstairs
- PSM Polo Shirts are available at the registration table
  - PSM Polo Shirts from previous years, are on sale for \$20.00, while they last
- After Meeting
  - Presentations and Workshop Materials Available from PSM Web Site (<u>www.psmsc.com</u>)

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### Agenda

- Wednesday
  - Presentations, 0830 1600
- Thursday
  - Workshops, 0830 1200
  - Workshops, 1300 1700

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### Workshops

- Acquisition Measurement (all day)
  - Rita Creel, Software Engineering Institute
  - Joe Dean, Tecolote Research
  - Cheryl Jones, US Army
- Rational Method Composer (RMC)/RUP Plug-In Review (all day)
  - Doug Ishigaki, IBM
- Security Measurement (Thursday morning)
  - Cheryl Jones, US Army
  - Fred Hall, Assures Engineering
- Can Performance Measurement be Improved? (Thursday afternoon)
  - Fred Hall, Assures Engineering

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### Accomplishments This Year

- New Technology Papers Completed
  - Measurement of Safety and Security
    - PSM/UK/Australia collaboration
    - Security Measurement, Version 3 released January 2006
    - Safety measurement, Version 3, released January 2006
  - Systems Engineering Technical Measures
    - PSM/INCOSE/Industry collaboration
    - Released December 2005

# Accomplishments This Year (cont)

- New Technology Papers Completed (cont.)
  - Process Improvement Measurement
    - Released September 2005
- Rational Method Composer (RMC), version
   2, released January 2006
- Work in Progress
  - Acquisition Measurement (draft)
    - Draft 0.5 released March 2005
    - Includes Guidance, ICM Table, Acquisition WBS, and Acquisition Cost Model

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### 2005 Activities - Get Involved

- Participate in workshops provide inputs and recommendations
- Review products as available
- Additional examples to support guidance -Measurement Specifications
- Experience Reports
- Case Studies and Papers

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# 2005 Activities – PSM Insight

- Plans are underway to update PSM Insight
- Focus will be on:
  - Enterprise orientation
  - Server data entry
  - Output results to intranet/internet
  - Security
  - TSP/PSP measure templates
- We are looking for additional partners for this activity – if you are interested, talk to Cheryl Jones

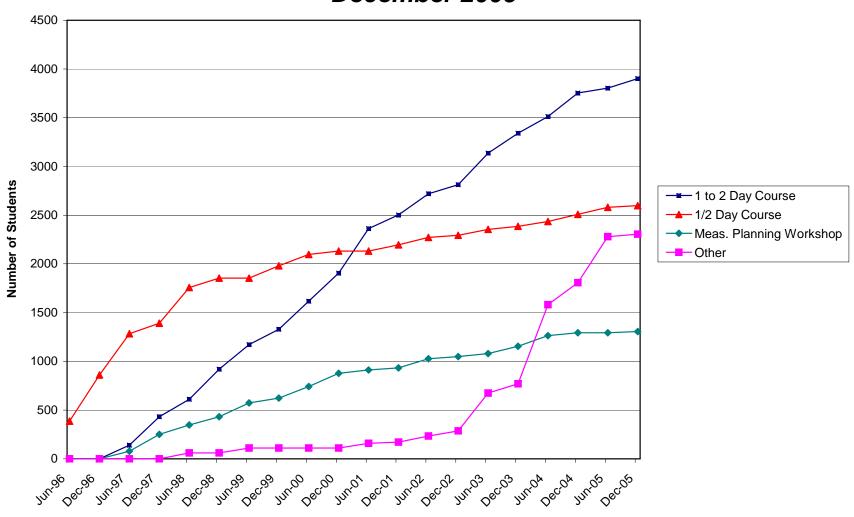
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### 2006 Schedule - Public Courses

- PSM Train-the-Trainer Course
  - 3-5 April 2006 New Jersey
- Technical Working Group Meetings
  - Users' Group Meeting 24-28 July 2006, Vail, Colorado
  - Theme: Analysis and Decision Making

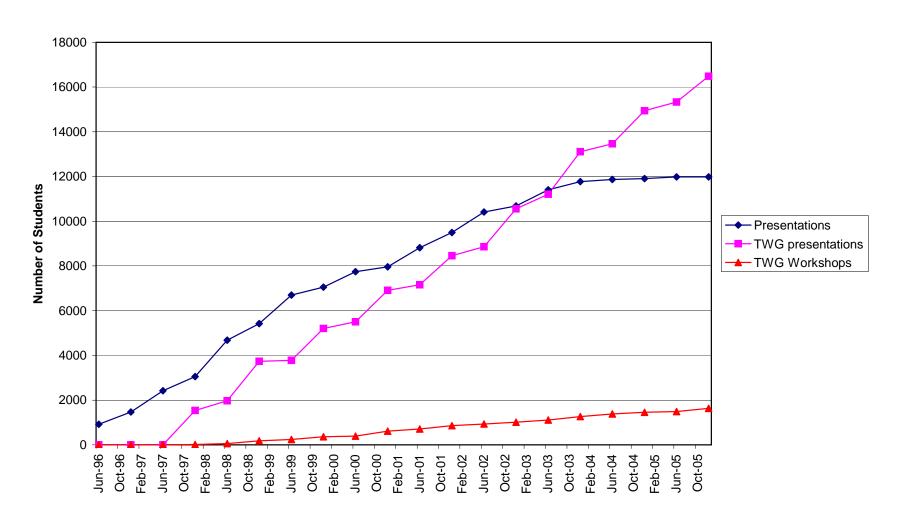
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# PSM Performance Management December 2005



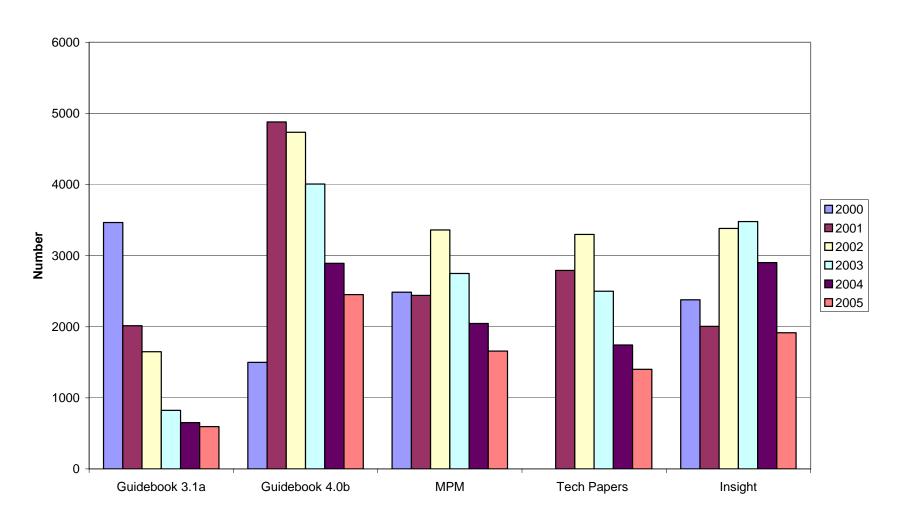
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# PSM Performance Management December 2005



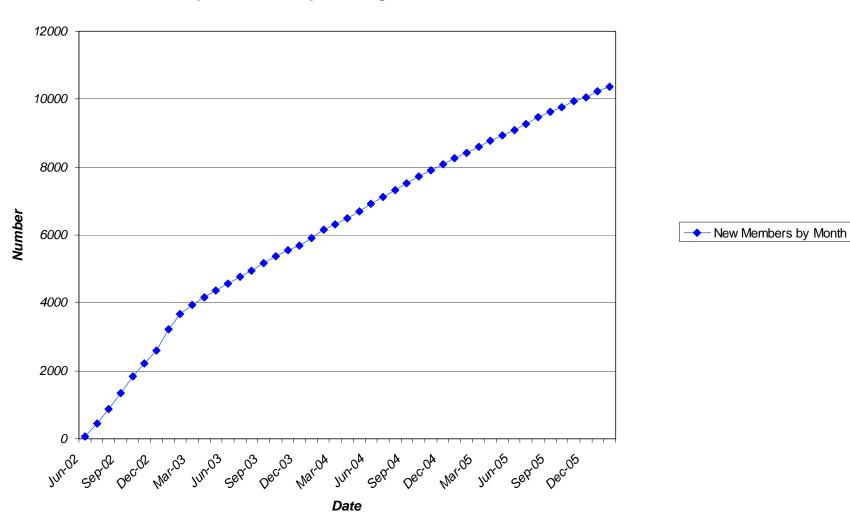
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# PSM Download Stats Dec 2005



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# Number of New Members by Month (Cumulative) through Feb 06



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# PSM Participating Organizations

#### **DoD and Government**

- US Air Force AFMC
- US Air Force SSSG
- US Air Force STRATCOM
- US Air Force STSC
- US Army CECOM
- US Army CERDEC & Engineering Ctr.
- US Army Material Command
- US Army RDECOM-ARDEC
- US Army SAALT
- US Army SMDC
- USMC MCTSSA
- US Navy AEDC
- US Navy ASN RDA
- US Navy FMSO
- US Navy NAVAIR

- US Navy NAVSEA
- US Navy NAWC
- US Navy NRL
- US Navy NSWC
- US Navy NUWC
- US Navy OPTEVFOR
- OSD NII
- OSD PA&E
- ODUSD (S&T)
- Aerospace Corp.
- Central Intelligence Agency
- Dept of Homeland Security, Customs & Border Protection

- DAU-DSMC
- DCMA
- DFAS
- DISA
- DLA
- FAA
- IDA
- MITRE Corp.
- NASA
- Sandia National Lab
- · Soc. Sec. Admin.
- Software Engineering Institute

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### PSM Participating Organizations

#### **Industry**

- ACS GSG
- · Accenture, Quality and **Process Improvement**
- Alion Science and **Technology**
- American Sys. Corp.
- Ameritrade Corporation
- Argon Engineering Assoc.
   Distributive Software
- Assurance Engineering
- BAE Systems
- Bank of America
- Bloodworth Int. Tech.
- Boeing
- Booz Allen Hamilton
- Borland TeraQuest
- Carnegie Mellon Univ.
- Center for Systems Management

- CMIS
- Computer Sciences Corp.
- Computer Technology **Associates**
- Countrywide
- David Consulting Group
- Federal Reserve Bank
- First Line Partners
- Fraunhofer Ctr. For **Experimental Software Engineering**
- GTE
- Galorath, Inc.
- General Dynamics
- General Scientific **Corporation**

- Graeme & Garland
- Hawaiian Electric
- IBM
- IEEE
- IFPUG
- IITRI
- INCOSE
- ITABHI
- Independent Engineering, Inc.
- Jacobs Sverdrup
- James Gregory Assoc.
- Kodak Health Imaging
- L3 Communications
- Lexmark International
- Lockheed Martin
- Measurement-By-Management

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### **PSM Participating Organizations**

#### **Industry** (continued)

- Nat. Renewable Energy Lab.
- Northrop Grumman
- OAO Corporation
- Pragma Systems Corporation
- PRICE Systems, LLC
- Q-Labs
- QSM
- Quality Plus Tech.
- Raytheon
- Reifer Consultants
- Robbins Gioia, LLC
- Rockwell Collins
- SAIC
- Sallie Mae

- Sentel
- SETA
- Softstar Systems
- Software Engineering Assoc., Inc.
- Software Management Solutions
- Software Metrics, Inc.
- Systems and Software Consortium, Inc
- Technomics
- Tecolote Research. Inc.
- TeraQuest Metrics
- Texas Guaranteed Student Loan Corporation
- Titan Corporation

- Tivoli
- Tybrin Corporation
- United Defense
- Univ. Southern CA
- Upsart Systems, LLC
- User Trust Network
- US West
- VisiTcch, Ltd.
- VPI State University
- West Virginia High Tech. Consortium
- West Virginia University
- Whittaker Group
- Wind River Systems
- Xcel Energy

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# PSM Participating Organizations

#### International

- ADI Limited (Australia)
- Amdocs (Israel)
- Australian Defence Force Academy (Australia)
- Australia SoC Technology Centre (Australia)
- BAE Systems (Australia)
- Centro de Investigacion en Matematicas (Mexico)
- Defence Materiel Org.-Australian DoD (Australia)
- Defense Science and Technology Labs (UK)
- Ericsson Espana SA (Spain)
- General Dynamics (Canada)
- Gov't of Israel, Ministry of Defense

- Jacobs Sverdrup Technology (Australia)
- Kozo Keikaku Engineering, Inc. (Japan) • University of York/ York
- Liveware I.SS.A. (Argentina)
- MEADS International (U.S., Germany, Italy)
- NRC (Canada)
- S-3 Consulting Pty. Ltd (Australia)
- Saab Systems Pty. Ltd. (Australia)
- Software Improvements Pty. Ltd. (Australia)
- Software Quality Institute (Australia)
- Tangram Hi-Tech Solutions (Israel)

- Tenix ESD (Australia)
- ti Metricas (Brazil)
- UK Ministry of Defense (UK)
- Metrics Ltd. (UK)

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# **Transition Organizations**

#### **DoD and Government**

- US Army RDECOM ARDEC (PSM Support Center)
- US Air Force Software Technology Support Center
- US Navy NAVAIR
- Naval Undersea Warfare Center
- Aerospace Corporation
- Defense Contract Management Agency
- Defense Acquisition University Defense Systems Management College
- Federal Aviation Administration
- MITRE Corporation
- Software Engineering Institute

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### **Transition Organizations**

#### **Industry**

- Lockheed Martin
- Borland (formerly TeraQuest)
- INCOSE
- Software Metrics, Inc.
- Q-Labs
- Systems and Software Consortium, Inc (SSCI)
- Northrop Grumman
- Distributive Software
- Quality Plus Technologies, Inc.
- Computer Sciences Corporation
- Texas Guaranteed Student Loan Center
- Argon Engineering Associates
- Center for Systems Management
- David Consulting Group
- Robbins-Gioia, LLC
- Titan Corporation

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### Transition Organizations

#### International

- Liveware I.S.S.A (Argentina)
- ADI Limited (Australia)
- Australian Defence Force Academy (Australia)
- BAE Systems (Australia)
- Defence Materiel Organisation Australian DoD (Australia)
- Jacobs Sverdrup Technology (Australia)
- S-3 Consulting Pty. Ltd. (Australia)
- Saab Systems Pty. Ltd (Australia)
- Software Improvements Pty Ltd. (Australia)
- Software Quality Institute (Australia)
- Tenix ESD (Australia)
- ti Metricas (Brazil)
- Kozo Keikaku Engineering, Inc. (Japan)
- Centro de Investigacion en Matematicas (Mexico)
- University of York/York Metrics Ltd (UK)

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