SmartPlant Instrumentation Technical User Forum P2C2 (Houston SPI TUF) Meeting				**November 08, 2011 8:00 am Mustang Engineering**	
Attendees	37 Members in attendance 10 Online		**Copied To**	Houston SPI LTUF Website	
Called By	John Dressel		**Prepared By**	John Dressel with notes by Betty Alexander	

Item	Topic	Notes	Action/Due
1	Welcome to Mustang	• Robert Lauderdale, Started with a Safety Moment on "holiday kitchen safety" then proceeded to give a presentation on Mustang Engineering. Some points: • Over 5,000 employees worldwide • Over 11,000 projects for 350+ clients • Part of Wood Group PLC of Aberdeen, Scotland • Headquartered in Houston, Texas • Office Locations International » Abu Dhabi » Angola » Kuala Lumpur » London » Mumbai » Saudi Arabia United States » Birmingham, Alabama » Martinez, California » Wilmington, Delaware » Atlanta, Georgia » Greenville, South Carolina » Fort Worth, Texas » Deer Park, Texas	
2	Chairman's Notes	• John Dressel presided and thanked Mustang for Hosting this 4th Quarter SPI LTUF Meeting. • Emerson Exchange had a good representation of SPI users and a lot of interest from new and future users. • Emerson has more interfaces to SPI that any other Instrument technology supplier and is working closely with Intergraph to keep the interfaces updated. • Several new interface features for Emerson to SPI interfaces were introduces including CHARMS libraries for the Emerson electronic marshalling.	

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		• Frank Joop was there and I saw SP 3 for SPI 2009 and learned that Intergraph is going to drop the added licensing cost for existing and future interfaces. Next Houston SPI LTUF meeting: February 14, 2012 ConocoPhillips 600 N Dairy Ashford Rd Houston, Texas HEXAGON 2012 June 4-7, 2012 MGM Grand Hotel and Casino Las Vegas, Nevada	
3	Minutes	• Minutes of last meeting approved	
4	Presentation	**Advanced uses of SPI at Mustang** – Mike Antosh, Mustang • Mustang's use of external tools in conjunction with SPI • Today we will discuss tools to perform the following functions: o Export data to consumers o Mine data from current and past jobs simultaneously o Audit projects to improve quality and consistency • Most projects have at least 2 non-Instrument project groups that need SPI data to complete their tasks. • It is important to our success to be able to empower these groups with the ability to get SPI data themselves. • By allowing easy access to SPI data on-demand, there is the danger of incomplete data being used by other disciplines. • Consumers must understand that data extracted directly from SPI is often not 100% ready for use throughout the project. • Strong communication must be kept with the instrumentation project team to make sure that all parties understand the difference between published data and directly extracted data. • In order to provide easy access to SPI data, an admin must meet with the consumer and discuss the desired dataset to be exported. o This setup time is minimal and saves a large amount of time over the life of the project. o The process keeps the admin team informed of the special needs of the project. • At Mustang we strive to make heroes of each part of our project team. • When it comes to SPI data, one way we can make heroes is	

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		by increasing the availability of the data and allowing other people to excel. • Each project that uses SPI has such a large bank of information that can be used during project execution, during commissioning and startup, and later as we prepare for future projects. • Because Intergraph has allowed the underlying database to remain open, we can tap into this bank of information and improve the way we work. • The ability to gather data from multiple projects can be extremely valuable for many reasons, including: o Forecasting o Progressing o Auditing o Comparing • Instrument design lead needed to track the progress of installation details (hookups) for multiple projects. • Old-fashioned method was to open a project in SPI, open the appropriate hookup browser, get a record count, record this count, and repeat this process for each type of hookup and for each project. • New method, calculate using the Mustang SPI Dashboard • Estimated old-fashioned method – 5 minutes per project o In the example shown, this task would take 75 minutes o Using Mustang SPI Dashboard, total time < 2 minutes. SPI Data Mining – Quality Control • One of the most important things that we do with our Mustang SPI Dashboard is to perform quality control checks. A great example of these is tag / entity name mismatches. o Tag o Loop o Device Panel o Device Cable o Fieldbus Virtual Tag o CS Tagname o Specification Sheet o Process Data Sheet • We offer our projects over 100 statistics • We encourage feedback from our users and build from their requests • We do create some statistics only for specific projects	

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		• SPI Data Mining – Summary o Quick, read-only access to SPI data o Progressing and auditing capabilities o Specific functions to meet the needs of each project • Where are we headed? o Continued excellence with SPI o Continued integration with SmartPlant P&ID o Continued integration with SmartPlant Electrical • Questions? 1. One-to-one SPI User to Dashboard now ... moving toward More Dashboards. 2. Dashboard is read-only, open data for viewing and use ... NOT Editing. 3. Visual Basic .NET application (in past used PSRs _ SLOW); in-house using SQL statements into data. 4. Tracking # Tags Loaded, # Tags wired ... Not % completion. 5. Archival queried, Mustang is working toward developing standards. 6. Heading toward checking SPI Compared with SPP&ID, Procurement, etc. 7. Local & remote (Citrix) access to Dashboard & SPI 8. Statistics for Mustang on users of SPI; Not everyone needs to be trained in SPI 9. Mustang Tools doesn't allow writing back – Read only. Don't want to reverse engineer. 10. What does Mustang use that mistakes to correct the problem – On leads to correct the data 11. Ability to compare to original estimate for the project? % complete based on tags vs. forecasted values. 12. Sell the tool? No 13. Database archived? Working with Instrumentation that we wanted to archive. 14. Install SPI as local? Citrix for customers/engineers 15. Publish to Web Browsers? Later, will publish to customer	
5	Presentation	**SmartPlant Instrumentation External Editors for Specs and Process Data** - John Dressel, Fluor • SmartPlant Instrumentation External Editors for Specs and Process Data may be downloaded from the SmartPlant Instrumentation (INtools) Customer Support Website. • SmartPlant Instrumentation External Editor • SmartPlant Instrumentation External Editor enables an external party (Vendor, contractor, engineering company,	

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		and so forth) to modify specifications outside of SmartPlant Instrumentation. • The External Editor allows the user to open specification sheets that have been created in SPI and modify them as needed. • The modified specification sheets can then be import back into SmartPlant Instrumentation for further processing. • The External Editor supports .psr and .isf file formats. • Using the External Editor, users may Edit a Single-Tag Specification or Edit a Multi-Tag Specification • The External Editor is a freeware program distributed by Intergraph • Use of the External Editor starts within SPI • All Specs that need to be edited in the External Editor need to originate in SPI • Identify the Tag numbers that you wish to Edit externally and create a Spec sheet for each one • You may also create a multi-item spec sheet • The Tag number, Title block and Revision information cannot be edited with the External editor, so this data is the responsibility of the originator. • Be sure to select which fields you wish to edit in the External Editor in the Spec Data Dictionary • In the Spec Module select “Actions / Save as Files” then “Find” to select the Specs you wish to export • The ISF or PDF files will be placed in your SPI destination directory. • Edit a Single-Tag Specification • On the File menu, click Open. • From the Files of type list, do one of the following: o Select Spec files (*.isf). o Select .psr files. • Navigate to the SmartPlant Instrumentation specification file that you want to edit, and click Open. • Click inside each field that you want to edit and do one of the following, as available: o Type a new entry, or edit the existing data. o Select values from available lists. o If necessary, you can add entries to the Manufacturers list and to the Model list, and include these in your specification. • If you click the unit of measure fields, select values from the Select Unit of Measure dialog box that opens. o On the File menu, do one of the following: ▪ Click Save. This option is available only if you loaded an .isf file. ▪ Click Save As, and in the dialog box that	

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		opens, change the existing file name or type a new name, and then click Save. • Notes: o The tag number field is never enabled for editing in External Editor. o If you are editing a file with the older .psr suffix, the software automatically converts it to .isf format upon saving. • Edit a Multi-Tag Specification o Works the same as Single-Tag Editing except you have access to the Multi-Item List • Users can convert a Batch of Specification Files PSR to ISF Format • Preferences Dialog Box o General Tab ▪ Numeric field accuracy ▪ Print ISF note page ▪ Enable translation & Select language o Mark Changes Tab ▪ Mark changes ▪ Color ▪ Style - Regular, Italic, Bold, or Bold Italic ▪ Example ▪ Custom color • External Editor Issues o The vendor spec sheets must be initially created by the GEC for export to the "External Editor Folder" and then to the vendor. o The External Editor software and user interface is not very user friendly requiring vendors to spend a lot of time populating the data onto each spec form. o The export and import of over Citrix is very time consuming usually requiring the manual delivery of files using CD or FTP transfer. o Revision control is handled manually by modifying the file names of the .isf files. o The use of the External Editor adds cost to the vendor that may not be included in their estimate or bid. o Printing of Spec Sheets is one at a time from within External Editor • External Editor Aids o When first distributing the "External Editor" software to a vendor, include a "readme.txt" file with installation and user instructions.	

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		o Give the vendor specific times as to when the files are to be returned to meet the project schedule. o Since vendor spec sheets can be repetitive, allow the vendor to populate one spec form and list the Tags that it applies to in notes. This will facilitate the data loading and import into SmartPlant Instrumentation. o Carefully select the fields in the Spec Module Data Dictionary (Spec DD) that will import into the SmartPlant Instrumentation database. o Return a copy of the completed SmartPlant Instrumentation spec forms to the vendor for approval before final issue. • SPI Side of External Editor o Use of the External Editor ends within SPI o Specs that are edited in the External Editor need to imported back into SPI o Specs may be imported to different Tag Numbers as long as the Spec Form is the same o The Tag number, Title block and Revision information cannot be edited with the External editor, so this data must be edited in SPI o Use caution when importing data and check the results carefully SmartPlant Instrumentation Process Data Editor • A SPLM connection is required for the Process Data Editor! • SmartPlant Instrumentation Process Data Editor enables an external party (Vendor, contractor, engineering company, and so forth) to modify Process Data outside of SmartPlant Instrumentation. • The Process Data Editor allows the user to open Process Data that have been created in SPI and modify them as needed. • The modified Process Data can then be imported back into SmartPlant Instrumentation for further processing. • The Process Data Editor supports .ipd file formats. • Process Data exported from SPI in .ipd format can contain process data from more than one line or instrument. • The Process Data Editor does not support process data sheets for instruments that belong to the process function General or Analyzer. • Use of the Process Data Editor starts within SPI • All Process Data that need to be edited in the Process Data Editor needs to originate in SPI • Identify the Tag numbers that you wish to Export from the	

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		Actions – External Process Data • This action will create a (.ipd) data file. • The Preferences Dialog Box has the same function as the External Editor • The Print Icon will print a Detail Process Data Report • The Instrument tab displays all of the Tags in the .ipd File • The Editing area displays the data for editing • View only data shows as a shaded background • The Detail tab displays a data sheet view of the selected Tag • Use of the Process Data Editor ends within SPI • Data that are edited in the Process Data Editor need to imported back into SPI • Imported Process Data can be only be imported to the original Tag Number • The Tag number, Title block and Revision information cannot be edited with the Process Data Editor, so this data must be edited in SPI • Use caution when importing data and check the results carefully especially units of measure • Since the editing capabilities are limited and the Process Data Editor requires SPLM, I see no advantage to using it over the Process Module in SPI Questions/Answers/Comments • EE Spec Freeware, Spec DD fields access, support ONLY compatible Versions SPI<>EE Spec • EEPD has no buffer, one file format only, unknown if handles multiple cases • Fluor wants to push for EE PD to become freeware. • Note: Some process data and calculation data fields are not seen in module and can overwrite data in SPI • Can't select fields for EE process data in Spec DD Module • Versions of EE Specs and EE Process Data have to match the editors	

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6	Presentation	**Smart Wireless Solutions** - Truong Vuu, Emerson • Emerson Smart Wireless Architecture o Wireless Plant Network o Wireless Field Network o Differences of WPN and WFN • Why Choose Emerson Smart Wireless o Scalable, Reliable, Secure, Standards-based o Ease of Integration to Host Systems o Reduced Cost and Complexity o Help improve start-up and commissioning o Experience and Expertise you can rely on • Field and Plant Networks Have Different Technical Considerations • Wireless HART Field Networks o Bandwidth: Lower - Short, high priority communications o Security/Reliability: We cannot 'drop a call'…Must coexist and perform in dynamic, harsh plant environment o Power: LOW…lots of devices, widely distributed in harsh environments, batteries must last 5-10 years o Standards: Driven by Process community (WirelessHART) • Wireless Plant Networks o Bandwidth: High – Multiple applications must share the same wireless infrastructure o Security/Reliability: Industrial security and robust coexistence essential… Must pass IT muster o Power: Devices can be line powered or recharged daily o Standards: Driven by IT Community Wi-Fi (802.11) • Wireless Deployment is Driven by Customer Business Need • Wireless Field Networks o Top 11 Applications: Process ▪ Remote Process Monitoring ▪ Machinery Health ▪ Environment ▪ Asset Management ▪ Safety System Status ▪ Operator Safety	

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		▪ On/Off Valve Position ▪ Process Startup ▪ Temporary Installations ▪ Wired Alternative ▪ Disaster Recovery • Wireless Plant Networks o Top 8 Applications: Operation ▪ Field Data Backhaul ▪ Mobile Worker ▪ Bridging ▪ Video – Security ▪ Video – Process ▪ Location Tracking ▪ Safety Mustering ▪ Voice Over WLAN • Smart Wireless Enables Business Need to Drive Wireless Starting Point • Allows users to cost effectively and easily implement a solution that meets differing technical requirements of wireless field and plant networks • Start Anywhere • Go Everywhere • Need Plant Applications? o Install open, Cisco Unified Wireless coverage and add applications as necessary • Need Process Information? o Easily install and add WirelessHART devices as necessary • Redundant Smart Wireless Gateways • Features: o Redundancy o IEC 62591 (WirelessHART) o Suitable for use in Zone 2 or Class 1 Division 2 o Integrate into any host o Up to 100 devices • Applications: o Latency tolerant wireless control o High availability for critical monitoring • Emerson Advantage o Fully redundant wireless network from devices to host system o Simple installation / configuration	

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		• Make Any Device Wireless – Smart Wireless THUM Adapter
		  o Extend predictive intelligence to areas not possible due to technical or economic reasons
		  o Make any HART device wireless
		  o Gain access to advanced instrument diagnostics
		  o Efficiently gather data from multivariable devices
		  o Remove need for Tri-loop converters	

7	Presentation	**SmartPlant Explorer and SPI** - Frank Pitts, Intergraph • Web server application that handles all SmartPlant applications except SPF (examples: SPI and SPEL) • No actual SPI SEAT License is 'used' when accessed remotely but needs SPE seat • Same reports from SPI are in Explorer ~ 'a little easier to access' • Browser Views can be customized • Doesn't use SmartPlant License Manager • Cannot edit SPI data in SPE (It is a View Only Tool) • Uses SPI preferences and Settings to create ESL reports and drawings 'LIVE' • Mac VS IBM? No experience, but reassurance from Intergraph. • IPAD or Mobile Tools? Testing not yet done... ActiveX controls may be issue • Datasheets for process and specs can all be retrieved in View Only Mode • Anyone on network can connect to database • Latest data always and UDF's need to be updated • User Authentication using component servers and Windows • Are the datasheets a PDF? Yes • Does it work through Citrix? Web-based, why go through Citrix. SPE user said Yes • Generate specs in batch – No • Preferences for SPE is based on Ideal User	

8	Presentation	**SmartPlant Instrumentation Update -** Guy Masin, SPI Product Owner
		SmartPlant Instrumentation Upcoming Release Details
		• SPI 2009 SP3 released Oct 24th 2011
		  o Big Icons are Back in new SPI, with other features added
		• SPI 2009 SP4 plans shown in slides
		• SPI 2013 planned 2nd half of 2013
		  o Control Logic Diagram questions, Guy	

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		suggests no Design work done in SPI o WildCard Search in Dropdown Lists? Browser View Filter o Ability to create logic diagrams ▪ Tied to cause and effect – No ▪ Control logic diagram – Ladder logic – No	
9	Presentation	**Owner Operator Committee Report** Jim Federline, Committee Chair • The Owner Operator Committee now has: o 33 members o Representing 21 companies o And continuing to grow • Meetings held every 2 months via teleconference. • Meeting topics are suggested by Owner/Operator committee members. • Members volunteer to make presentations to share their knowledge and experience on selected subjects • Topics of Last two meetings: • July 19, 2010 o Update on Fluke calibrator interface and Infomaker utility – Zur Bar o O/O Concerns – John Dressel of Flour • September 20, 2011 o CAD Capabilities of SPI – John Dressel of Flour • Next O/O Meeting: Tuesday, December 6, 2011 from 9 – 11 AM CST via teleconference using Intergraph's facilities. o Agenda: ▪ SPI Query Tools to simplify data access by the casual user ▪ SmartPlant Explorer - Intergraph ▪ SmartPlant Foundation Web Browser – Fred Pollard of Syncrude ▪ Review of SP3 and Update of SPI Roadmap – Guy Masin of Intergraph	
10	Forum Topics	• Upgrades from SPI7 or SPI2007 TO 2009 SP3 info requested	

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		o Upgrade mechanism different. Might have to step thru SPI2009SP1 & SP2 to get to SP3 New Upgrade.exe o Oracle Issues in upgrades ... not recognizing databases. o Question if SQL upgrades. o KBR upgraded theirs in Pure Watcom Mode, and workarounds failed. • Question about DBEng7.exe - No Answer • CR posting and ranking – Is CR ranking effective for the SPI user community? o Question on Community-Turned-In SRs vs individuals ... could be done. o Status as "Built" showing Fixed CRs preferences to default o Sales pitch to promote CR ranking Site. • Using SPI 2009 Rule Base – Does the program need more documentation? • Emerging Technology – How do we document Wireless and Charms in SPI? o Many LTUF members currently Use Charms from Emerson. Saves Wiring. o Charms Connection Pattern are Issues • Open Discussion • Tricks and Tips for Claim & Merge & AsBuilt Mode • Questions on MERGER UTILITY ... o Intergraph involvement was limited and LTUF members shy from it ... o One member has alliance contract with Partner Using MERGE. o FFB not work. • Suggestions for Future Topics o Browser Wizard - Intergraph presentation o Add Claim and Merge - future presentationsality and use. (Especially SPF INTO SP3D)	
11	Close	• Next Meeting - February 14, 2012 ConocoPhillips • John Dressel closed meeting	