



Sandia's New Review and Approval Process From Paper to Electronic

Presented by:

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Sandia National Laboratories

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Sandia is a multiprogram laboratory operated by Sandia Corporation,
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New R&A: Agenda

- Existing Process
- Why Change
- How Planned
- Status
- Projected Results



New R&A: Existing Process

- Physically based
- Electronic form
 - On the web
 - Electronic fill
 - Print and route with packet
- Minimum of seven signatures (8 if color)
 - Often more
- Physical routing is slow
 - Necessarily "linear"
 - Large number of walkthroughs (20% of total)



New R&A: How Planned

- Lean Six Sigma Processes
 - Two events
 - Value Stream Mapping
 - Kaizen
 - Small tasks in between
 - Large project afterwards



New R&A: Why Change?

- ❑ Internal Drives
 - Make process more effective (and efficient)
 - Need to track where “it” is
 - Whole process needed overhauling
 - Concern that “everything” wasn’t going through
 - Make the process seductive
 - Harder to do it wrong than right
- ❑ External Drives
 - Repeated requests to “go electronic”
 - No budget to do so
 - Ergonomic issues



Review and Approval Process VSM

August 19-21, 2002



Judy Hubbard , Linda Cusimano, Anna Nusbaum, Sheri Martinez,
Loraine McCutcheon, Sally Landenberger, Jennifer Miller, Dorothy Martin, Lorenzo Salgado,
Manny Ontiveros, Jean Plummer, Earl Conway, JoAnn Tamashiro, George Libman



Value Stream Outcome Defined

Customer Value Proposition:

By reducing the cycle time to process R&A requests, Sandia will better meet the current "need for speed" of our internal and external customers and partners with regards to the sharing of information. Tracking, reducing approvals, and automating the process are also customer needs.

Value Stream Map:

The start of the VSM occurs when the author submits a signed R&A form to his/her manager and/or ADC. The end of the VSM occurs when it is approved for release and distributed to OSTI, the author, and the library and has SAND No.

Business Case (burning platform):

- Currently, process is not consistently used.
- To maintain Sandia's reputation and adhere to contractual agreements and applicable laws, the R&A process needs to be easy enough to ensure its use.
- This is the first opportunity to take an organized critical look at the R&A process with all players participating.
- There is an increasing need for quick turnaround for approval of information released to the public - journals have a short cycle time to publication; presentations are often completed just prior to presenting; increased workloads/commitments result in minimal lead times; increased partnerships with industry require more information being shared with the public.

"Monuments" things that can not be changed:

- Contractual obligation to send scientific and technical information to OSTI.
- Infrastructure to keep Sandia from being exposed to risk of embarrassment/legal noncompliance.
- Funding available for process changes (\$20K not likely <FY03; \$20K-\$70K possibility w/FY03 year-end; \$70K+ propose for FY04 commitment).

Measurements:

- Cycle time per R&A request
- No. and rate of requests processed per day
- No. of requests rejected/reworked
- Amount of resources required
- Trackability
- Customer satisfaction

Ideal Goals:

- Review and approval to meet customer req'ts
- Automatic tracking of documents
- No inadvertent releases of information
- No rework
- 100% customer satisfaction
- People follow guidelines and standards



Accomplishments

- Mapped out current state**
 - Identified waste
 - Understood requirements
 - Got customer feedback
 - Looked at corporate vs. author perspectives
 - Gained respect for how complicated and constraining current process is
 - Gained perspective of individual components of system
- Developed Future State**
 - Streamlined and automated
 - Reduced signatures / approvals by 75%
 - Identified quick opportunities to reduce touch times and overall cycle times
 - Incorporated tracking ability, which was a high customer need
 - Reduced duplication, efforts and reviews
- Created Action Plans**
 - Assigned people and dates for completion



Review and Approval Kaizen Team

February 11 & 13, 2003



Earl Conway, Dorothy Martin, Winalee Carter, Lee Cunningham, Anna Nusbaum, Judy Hubbard, Loraine McCutcheon, Brian Scott, Julie Kesti, George Libman, Al Beradino, Jean Plummer, Holly Stryker (not pictured), Manny Ontiveros (not pictured)



Kaizen Event Scope & Outcome

Customer Value Proposition:

By reducing the cycle time to process R&A requests, Sandia will better meet the current "need for speed" of our internal and external customers and partners with regards to the public release of information. The start of the project occurs when the author initiates the electronic R&A process form on the computer. The new process is designed to be electronic and patterned after the current electronic system for web page approval. The end of the process occurs when the R&A product is approved for release and distributed to the author and the Library (who distributes to OSTI.)

Business Case:

- To maintain Sandia's reputation and adhere to contractual agreements and applicable laws, the R&A process needs to be easy enough to ensure its use.
- This is the opportunity to define the specifications for the electronic R&A process with all players participating.
- 77% reduction in cycle time. (44 days to 10 days)
- Mistake-proofed system. (elimination of rework with authors)
- Reduction in signatures, 25% reduction in CHAFF in patents, classification, and reduction of scanning.
- Elimination of duplicate data entry - 1200 hrs for R&A desk and library / year.
- Customer demand for better (electronic) system.

"Monuments" things that can not be changed:

- Contractual obligation to send scientific and technical information to OSTI.
- Infrastructure to keep Sandia from being exposed to risk of embarrassment/legal noncompliance.
- Existing web-based web page approval system to be used as the template.

Measurements:

- Cycle time per R&A request
- No. and rate of requests processed per day
- No. of requests rejected/reworked
- Amount of resources required (partners)
- Customer satisfaction
- Customer/Author's time required

Ideal Goals:

- On demand review and approval
- Automatic tracking of documents
- No inadvertent releases of information
- No rework
- 100% customer satisfaction

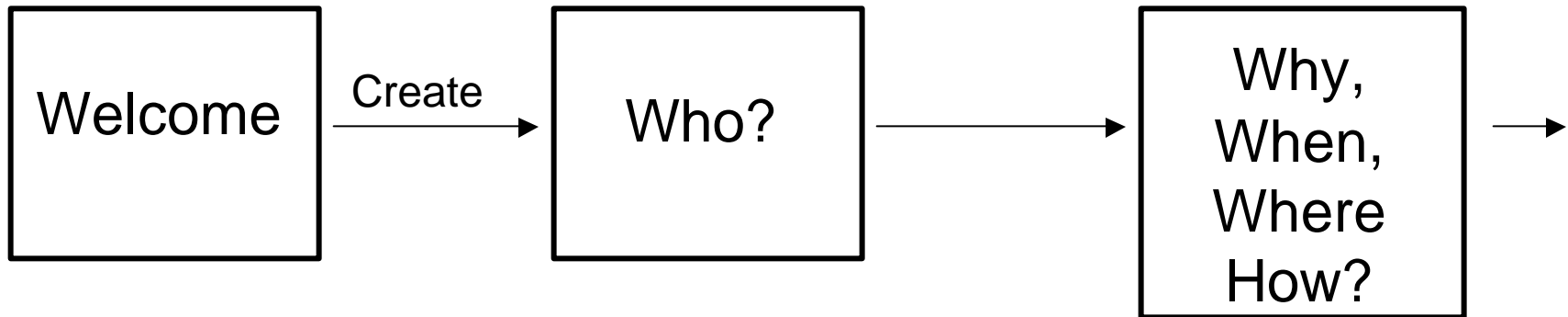


Accomplishments

- Refined R&A workflow from last August
- Process will be easy and streamlined for customer
- Created tracking capability
- Includes all sites
- New system will have much faster turnaround time
- Generated a storyboard of screens in real time
- Really focused on customer
- Eliminated duplicate data entry
 - For R&A desk, Technical Library, OSTI, and Lab Communications Team
- Giving the customer what they asked for
- Put in parallel processing
 - Reducing cycle time by 80%
 - Reducing touch time by 92%



New R&A Process Flow Diagram High Level View



User (Author or Assistant) can:
Review Pre-Release Checklist
Create a Release Request
Search for Saved Requests/
Choose a "Profile"
Run Reports
Get Help

User identifies:
Authors
Sandia Contact
(Prefilled fields/look-up tables)

User identifies the circumstances of the release:
Release Tied to Event?
Review Info Online?
How Info Distributed?
Estimated Completion Date



New R&A Process Flow Diagram High Level View

Post to WFS somewhere here



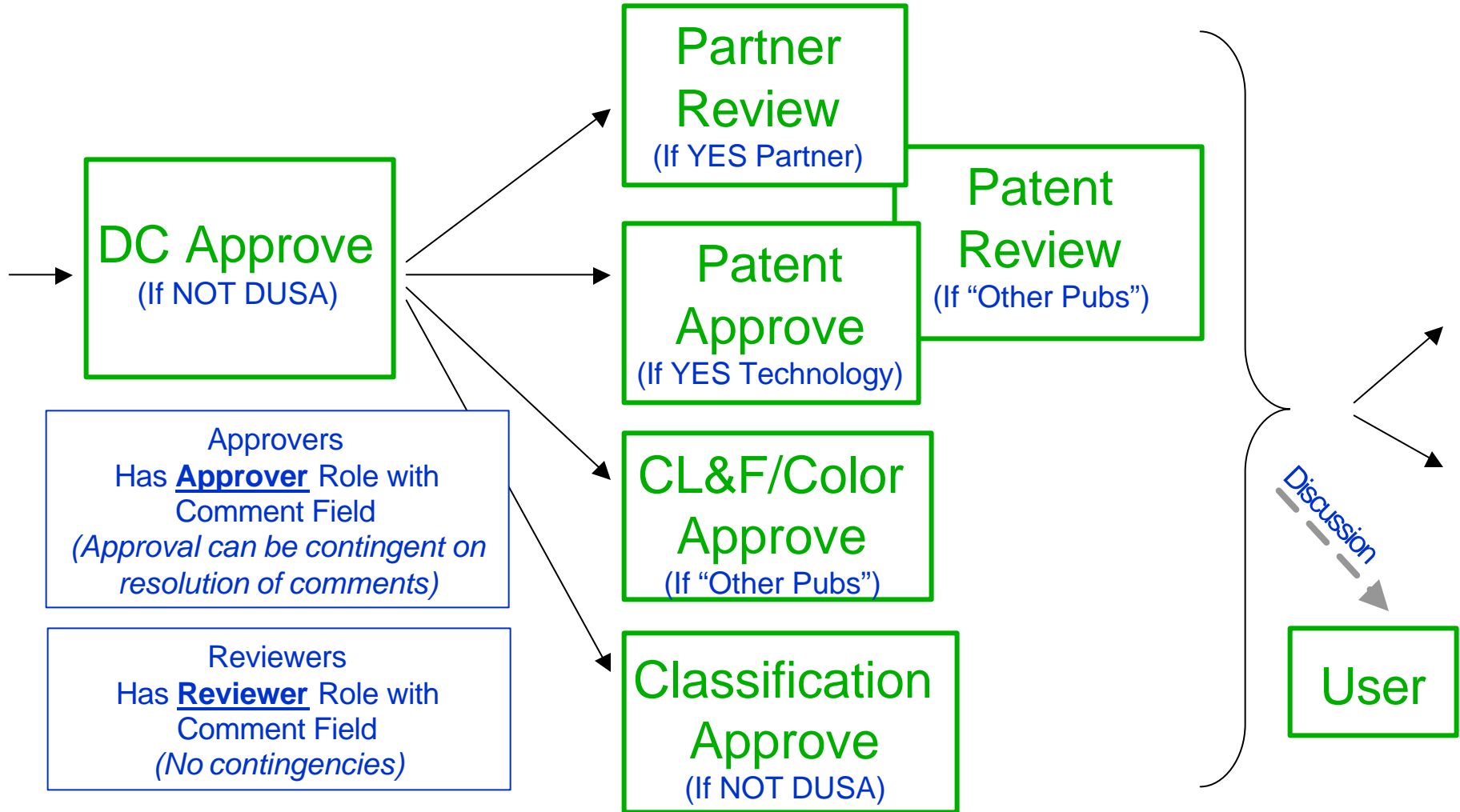
User provides data about the Information to be released:
Title
Type
Technical (is TA? Is first release?)
Partnership (Agreement?)
(Flags are set to establish approval/review routing, SAND# configuration)

User indicates sensitivity of:
Title
Information
User indicates if information part of DUSA
(if not, then DC and Class'n approval route)

User presented screen with any error messages and options to change DC and manager.
User can then:
Submit
Review
Edit
Save (to submit later)
Save (to clone)
Check on WFS submission

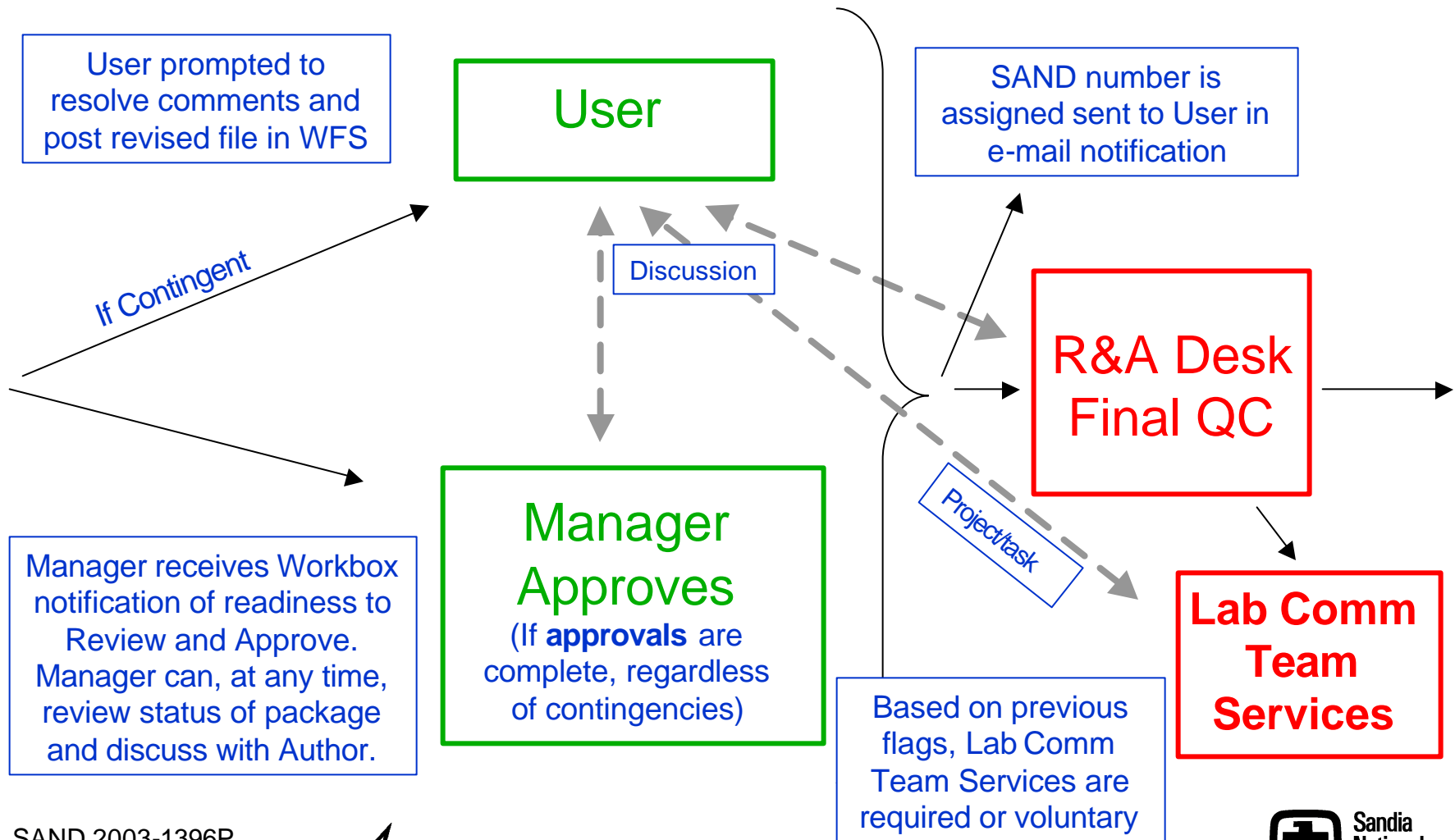


New R&A Process Flow Diagram High Level View



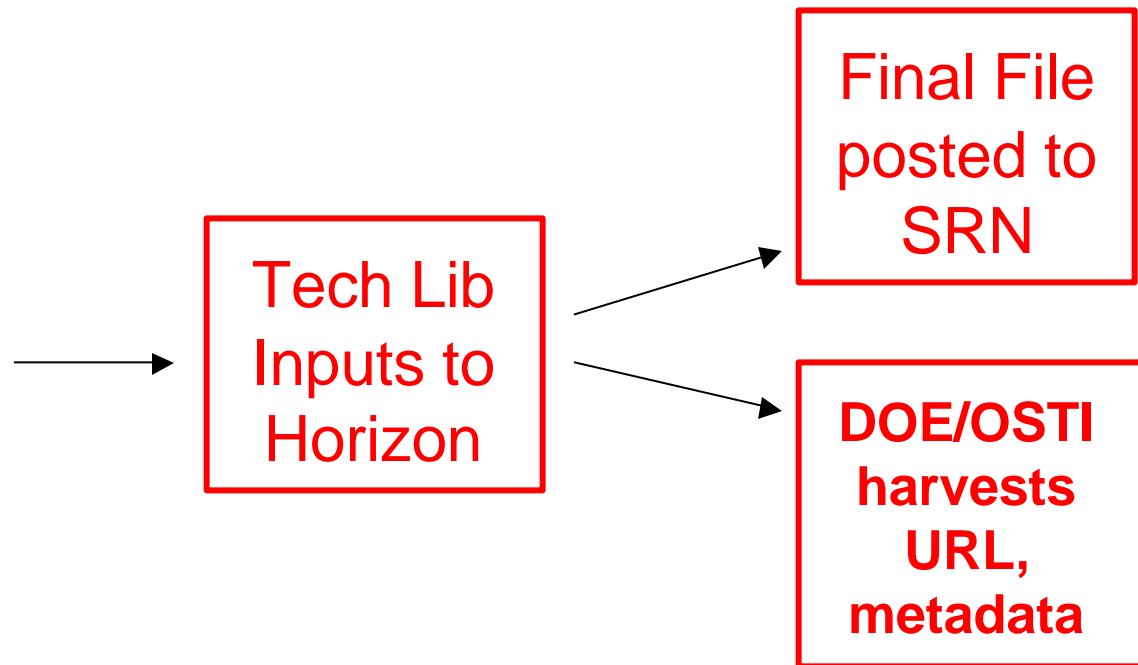


New R&A Process Flow Diagram High Level View





New R&A Process Flow Diagram High Level View





New R&A: Status

- Secured budget in January
 - Based on credible work from VSM
- Kaizen event in February
- Refined storyboard mid-Feb through mid-April
 - Assigned to programmers
 - Determined "look and feel"
- Working on all help content
 - Within application
 - Policy
 - Web pages
- Present refined storyboard to audience in May
- Pilot application in June-July
- Live by 9/30/2003



- [Create Document](#)
- [Search Documents](#)
- [Reporting Options](#)
- [Help Options](#)

Document Title : Vertical Cavity Surface Emitting Lasers
Document Number: 0000042741-000
Principal Author : Scott, Brian C

Last Modified By : Scott, Brian C
Last Modified on : 01/31/2002



Create Document

- General
- Event Schedule
- Document Basics
- Posting Details
- [Partner Approval](#)
- Technical Advance
- First Release
- Disclosure
- General Classification
- Classification Details
- Submission

Error Example: This is an example of an error and would be displayed if form data was not correct.

Note Example: Technology partner, non-Sandia info owner, or funding agency is required for most public releases.
Contact Stephanie Cotinola (NM) or Dennise Koker (CA) for assistance.

Do you have partner approval for this release?

- Yes
- Not Yet/Working on it

*If no, sets no flag and mail goes to partnerships upon manager workflow activation.
Manager is also notified of no partner approval in workflow e-mail.*

If this information is the result of CRADA, WFO, or other partnerships such as MOU, funding source, or understanding of any kind, indicate the agreement number.

XAD293

< Back

Next >





New R&A: Results

- Ability to track status
 - Author
 - R&A Desk
- Early interaction with author
 - R&A Desk
 - Lab Communications
- Manager approves last
 - Can see all approver comments
- Eliminate walkthroughs
 - Projected \$1M savings of time
- Two week turnaround (ideal) to six day (maximum)



Sandia's New R&A Process

Questions?

Comments?

Questions?
Comments?

Thank You!

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