Preservation of Critical Health and Safety Information for Future Generations at the Hanford Site

Gail Splett

Richland Operations Office, Energy Employees Occupational Illness Compensation Program Act and Workers Compensation Program Manager
Other Contributors:

Cindy Lepore
President
Interactive Technologies Group, INC

Tyler Nipper
Project Manager
Interactive Technologies Group, INC
Why Are We Here:

- Need for more records storage space at Hanford site
- Project transitioned from very focused, short-duration efforts to multi-year strategic approach
- New National Archives and Records Administration regulations and retention policies

Why These Records:

- Records being processed have to do with health and safety of employees and document rights under compensation programs
- Records have long-term value to the Hanford Site and to individuals
How did we get here?

• Driven by organization immediate needs
• Physical move of contractors from one location to another
• Implement a new requirement in EEOICPA
• Federal workforce relocation
• Successful business model – effective cost/schedule/completion
• Project transitioned from very focused, short-duration efforts to multi-year strategic approach
Functionality and Funding

• General support services contractor contract directly with Richland Operations Office
• Statement of work written broadly now to cover types of records versus specific collection
• Scanning and indexing – or just indexing – whatever is needed
• Not funded by specific project but infrastructure funding
• Ability to reprioritize as needed
Cost of Records

- Relevant information from badge request – 63 cents per record
- HR file - $270 to $17 per file – time and cost savings immediate
- Dosimetry - $400 to $30 per person - not realized until completion

Significance of the savings

- 180,000 HR files digitized
  - Pulled Costs = $48,600,000
  - Digitized Costs = $3,060,000
  - Difference of $45,540,000
- Dosimetry will see the saving upon completion
Space and Utilization

• Utilize any available space
  ▪ Maximize the efficiencies in each space
• Multiple locations worked
  ▪ Understand that has it advantages and disadvantages
• Identifying large space to maximize flexibility among staff and projects
Statement of Work

- Needs to be clear and concise but offer flexibility
- Work with procurement
- Major obstacle to flexibility
Lessons Learned

• Soft start
• Clear Statement of Work
• Understand your records (Understand you still don’t know your records)
• Getting the right players involved
  ▪ IT Contractor
  ▪ Records Contractor
• Identifying the right equipment and software needs
Preservation of Critical Health and Safety Information for Future Generations at the Hanford Site

Tyler Nipper

Project Manager, Interactive Technologies Group, Inc.
Project Structure:

ITG President

Project Manager

• Dosimetry Digitization Project
  ▪ One Project Lead
  ▪ Two Work Leads
  ▪ Two Project Administrators
  ▪ Six Specialists
    ▪ Scanning
    ▪ Auditing/Output
    ▪ REX IDMS Submission Tool
  ▪ 68 Operators

• Legacy Human Resources Project
  ▪ One Project Lead
  ▪ Two Work Leads
  ▪ Two Back-up Work Leads
  ▪ 36 Operators
Our Process - Dosimetry Digitization Project

• **Scan the Fiche or Film**
  - Manipulate settings for the best possible scan
  - Document the image counts
  - Quality Check the Scan

• **Audit the Fiche or Film**
  - Separate the different images into documents for each person
  - Name each document by:
    - Reel Number or Fiche Batch
    - Name
    - SSN
    - Pay ID
    - Unique ID

• **Output the Fiche or Film**
  - Final check of the audited documents
    - Validate all images match the indexing of the PDF
    - Validate that all pencil marks and other vital information is accounted for
Our Process - Dosimetry Digitization Project

- **REX IDMS Submission Tool (RIST)**
  - This tool validates that our indexing matches the proper metadata in the REX Database
  - Submits documents that are validated into IDMS
  - Rejects invalid documents to be reviewed by MSA subject matter experts
  - Checksum validation is created for integrity of the document move
# Dosimetry Digitization Project Daily Reporting

<table>
<thead>
<tr>
<th>MONDAY</th>
<th>TUESDAY</th>
<th>WEDNESDAY</th>
<th>THURSDAY</th>
<th>MONDAY</th>
<th>TUESDAY</th>
<th>WEDNESDAY</th>
<th>THURSDAY</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AUDITED</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>AUDITED</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>REELS</td>
<td>PAGES</td>
<td>REELS</td>
<td>PAGES</td>
<td>REELS</td>
<td>PAGES</td>
<td>REELS</td>
<td>PAGES</td>
</tr>
<tr>
<td>1</td>
<td>9,330</td>
<td>7</td>
<td>11,657</td>
<td>4</td>
<td>7,948</td>
<td>4</td>
<td>7,793</td>
</tr>
<tr>
<td><strong>OUTPUT</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>OUTPUT</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>REELS</td>
<td>PAGES</td>
<td>REELS</td>
<td>PAGES</td>
<td>REELS</td>
<td>PAGES</td>
<td>REELS</td>
<td>PAGES</td>
</tr>
<tr>
<td>6</td>
<td>26,360</td>
<td>8</td>
<td>28,391</td>
<td>4</td>
<td>17,599</td>
<td>8</td>
<td>14,100</td>
</tr>
<tr>
<td><strong>AUDIT/OUTPUT TOTALS</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>AUDIT/OUTPUT TOTALS</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>REELS</td>
<td>PAGES</td>
<td>REELS</td>
<td>PAGES</td>
<td>REELS</td>
<td>PAGES</td>
<td>REELS</td>
<td>PAGES</td>
</tr>
<tr>
<td>7</td>
<td>35,690</td>
<td>15</td>
<td>40,048</td>
<td>8</td>
<td>25,547</td>
<td>12</td>
<td>21,893</td>
</tr>
</tbody>
</table>

**TOTAL PAGES SCANNED**: 7,651,644
**TOTAL NUMBER OF DOCUMENTS AUDITED**: 1,281,667
**TOTAL NUMBER OF PAGES AUDITED**: 4,503,486
**TOTAL NUMBER OF DOCUMENTS OUTPUT**: 1,013,513
**TOTAL NUMBER OF PAGES OUTPUT**: 4,070,035
**TOTAL REELS SCANNED**: 3,161
**PERCENTAGE SCANNED**: 100%
**PERCENTAGE AUDITED**: 52%
**PERCENTAGE OUTPUT**: 45%

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2018 LTS Conference
Our Process - Legacy Human Resources Project

- We pull the basic indexing from the HERE database
- Scan one file at a time
  - While each page is optimizing, the operator validates that the scan is captured and no information is missing or cutoff
  - Save the PDF file with the proper naming convention
    - Name – Last, First, Middle
    - SSN
    - Box Number
  - Mark the final count of pages and files in the box
Our Process - Legacy Human Resources Project

- Quality Check One:
  - Work Leads run a program that does the following:
    - Validates naming matches the excel entries to the PDF file name
    - Lists any error found with easy color coding
    - This program took a nine hour process and made it a 15 minute process.

- Quality Check Two - A different operator will validate:
  - The name of the PDF file matches the pages scanned
  - All images are clear and the best possible image
  - All images are verified off of the paper copy in the file
  - Validate the final file count and the pages checked
## Legacy Human Resources Project Daily Reporting

### Error Rates

<table>
<thead>
<tr>
<th>Error Rates</th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>1st Shift Avg</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1.71%</td>
<td>0.78%</td>
<td>1.13%</td>
<td>1.69%</td>
<td>1.33%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Daily Pages Created</th>
<th>1st Shift Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>13,762</td>
<td>23,794</td>
</tr>
<tr>
<td>20,615</td>
<td>72,911</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Boxes Completed In Scan</th>
<th>1st Shift Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>17</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Boxes Completed In QC3</th>
<th>1st Shift Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>2</td>
</tr>
<tr>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>21</td>
<td></td>
</tr>
</tbody>
</table>

### Error Rates

<table>
<thead>
<tr>
<th>Error Rates</th>
<th>Friday</th>
<th>Saturday</th>
<th>Sunday</th>
<th>2nd Shift Avg</th>
<th>Week Avg</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1.02%</td>
<td>1.32%</td>
<td>0.00%</td>
<td>0.78%</td>
<td>1.05%</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Daily Pages Created</th>
<th>2nd Shift Total</th>
<th>Week Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>16,332</td>
<td>9,055</td>
<td>9,198</td>
</tr>
<tr>
<td>11,989</td>
<td>37,376</td>
<td>37,376</td>
</tr>
<tr>
<td>37,376</td>
<td>110,287</td>
<td>110,287</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Boxes Completed In Scan</th>
<th>2nd Shift Total</th>
<th>Week Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>5</td>
<td>9</td>
</tr>
<tr>
<td>5</td>
<td>0</td>
<td>26</td>
</tr>
<tr>
<td>4</td>
<td>9</td>
<td>26</td>
</tr>
<tr>
<td>4</td>
<td>9</td>
<td>26</td>
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<tr>
<td>4</td>
<td>4</td>
<td>13</td>
</tr>
<tr>
<td>4</td>
<td>13</td>
<td>34</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Boxes Completed In QC3</th>
<th>2nd Shift Total</th>
<th>Week Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>5</td>
<td>9</td>
</tr>
<tr>
<td>5</td>
<td>0</td>
<td>26</td>
</tr>
<tr>
<td>5</td>
<td>9</td>
<td>26</td>
</tr>
<tr>
<td>5</td>
<td>13</td>
<td>34</td>
</tr>
</tbody>
</table>

### Total Numbers

- Total Number of Pages Created Since September 2016: 6,848,038
- Total Number of Pages Created Since June 2017: 4,835,788
- Total Number of Files Created Since 2016: 183,568
- Total Number of Files Created Since 2017: 92,542
- Total Number of Boxes Completed Since 2016: 2,503
### Legacy Human Resources Project Weekly Reporting

**Hanford Scanning Task Force HR Collection Progress Report**

<table>
<thead>
<tr>
<th>Collection</th>
<th>Completed Boxes</th>
<th>To Be Scanned</th>
<th>Total Boxes</th>
<th>% Done</th>
<th>Files Scanned</th>
<th>Est. Files in Collection</th>
<th>Est. Files Remaining Collection</th>
<th>Average Time Per File (Min)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contractor P Files</td>
<td>115</td>
<td>0</td>
<td>115</td>
<td>100.00%</td>
<td>5,178</td>
<td>5,178</td>
<td>0</td>
<td>25.32</td>
</tr>
<tr>
<td>CRAFT</td>
<td>172</td>
<td>0</td>
<td>172</td>
<td>100.00%</td>
<td>22,577</td>
<td>22,577</td>
<td>0</td>
<td>18.22</td>
</tr>
<tr>
<td>DYN CORP</td>
<td>8</td>
<td>0</td>
<td>8</td>
<td>100.00%</td>
<td>721</td>
<td>721</td>
<td>0</td>
<td>23.17</td>
</tr>
<tr>
<td>EBERLINE (Duplicate Box #1’s W/ WA Closure)</td>
<td>6</td>
<td>0</td>
<td>6</td>
<td>100.00%</td>
<td>79</td>
<td>79</td>
<td>0</td>
<td>71.36</td>
</tr>
<tr>
<td>GE</td>
<td>863</td>
<td>833</td>
<td>1,202</td>
<td>30.20%</td>
<td>39,817</td>
<td>91,674</td>
<td>52,857</td>
<td>25.87</td>
</tr>
<tr>
<td>GE (Cards), Hanford Eng Works</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0.00%</td>
<td>0</td>
<td>0</td>
<td>57</td>
<td>57</td>
</tr>
<tr>
<td>GE (Cards), Hanford Labs</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0.00%</td>
<td>0</td>
<td>0</td>
<td>48</td>
<td>48</td>
</tr>
<tr>
<td>HEFF</td>
<td>54</td>
<td>0</td>
<td>54</td>
<td>100.00%</td>
<td>1,234</td>
<td>1,234</td>
<td>0</td>
<td>39.98</td>
</tr>
<tr>
<td>ICF</td>
<td>13</td>
<td>0</td>
<td>13</td>
<td>100.00%</td>
<td>457</td>
<td>457</td>
<td>0</td>
<td>33.23</td>
</tr>
<tr>
<td>ITI/FIS</td>
<td>32</td>
<td>0</td>
<td>32</td>
<td>100.00%</td>
<td>1,653</td>
<td>1,653</td>
<td>0</td>
<td>27.02</td>
</tr>
<tr>
<td>JA JONES</td>
<td>49</td>
<td>0</td>
<td>49</td>
<td>100.00%</td>
<td>4,289</td>
<td>4,289</td>
<td>0</td>
<td>15.24</td>
</tr>
<tr>
<td>KAISER ENGINEERS</td>
<td>187</td>
<td>0</td>
<td>187</td>
<td>100.00%</td>
<td>23,380</td>
<td>23,379</td>
<td>0</td>
<td>13.70</td>
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<tr>
<td>KAISER-HUICO</td>
<td>2</td>
<td>0</td>
<td>2</td>
<td>100.00%</td>
<td>161</td>
<td>161</td>
<td>0</td>
<td>27.54</td>
</tr>
<tr>
<td>PTH Protection Technology Hanford</td>
<td>5</td>
<td>0</td>
<td>5</td>
<td>100.00%</td>
<td>161</td>
<td>161</td>
<td>0</td>
<td>27.54</td>
</tr>
<tr>
<td>RHODIAD</td>
<td>75</td>
<td>0</td>
<td>75</td>
<td>100.00%</td>
<td>3,528</td>
<td>3,528</td>
<td>0</td>
<td>4.44</td>
</tr>
<tr>
<td>RUST</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>50.00%</td>
<td>0</td>
<td>98</td>
<td>98</td>
<td>42.05</td>
</tr>
<tr>
<td>THERMO HANFORD</td>
<td>10</td>
<td>1</td>
<td>11</td>
<td>90.91%</td>
<td>100</td>
<td>438</td>
<td>313</td>
<td>42.05</td>
</tr>
<tr>
<td>UNC</td>
<td>154</td>
<td>1</td>
<td>155</td>
<td>99.35%</td>
<td>6,634</td>
<td>12,204</td>
<td>5,570</td>
<td>42.68</td>
</tr>
<tr>
<td>Vitro</td>
<td>56</td>
<td>0</td>
<td>56</td>
<td>100.00%</td>
<td>1,933</td>
<td>1,933</td>
<td>0</td>
<td>25.97</td>
</tr>
<tr>
<td>Washington Closure Hanford</td>
<td>77</td>
<td>0</td>
<td>77</td>
<td>100.00%</td>
<td>2,584</td>
<td>2,584</td>
<td>0</td>
<td>41.68</td>
</tr>
<tr>
<td>Waste Management Closeout</td>
<td>13</td>
<td>1</td>
<td>14</td>
<td>92.86%</td>
<td>783</td>
<td>693</td>
<td>-92</td>
<td>19.24</td>
</tr>
<tr>
<td>Westinghouse Hanford Co</td>
<td>828</td>
<td>0</td>
<td>828</td>
<td>100.00%</td>
<td>32,452</td>
<td>59,826</td>
<td>21,174</td>
<td>51.70</td>
</tr>
<tr>
<td>Westinghouse (Various COS)</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>100.00%</td>
<td>0</td>
<td>0</td>
<td>254</td>
<td>254</td>
</tr>
<tr>
<td>Fluor Hanford (Known Boxes To Date)</td>
<td>19</td>
<td>258</td>
<td>277</td>
<td>6.80%</td>
<td>5,839</td>
<td>82,384</td>
<td>78,545</td>
<td>15.57</td>
</tr>
<tr>
<td>DOE (Known Boxes To Date)</td>
<td>8</td>
<td>1</td>
<td>9</td>
<td>88.89%</td>
<td>15,195</td>
<td>15,195</td>
<td>0</td>
<td>0.07</td>
</tr>
<tr>
<td>AMH</td>
<td>0</td>
<td>2</td>
<td>2</td>
<td>0.00%</td>
<td>0</td>
<td>Unknown</td>
<td>0</td>
<td>0.07</td>
</tr>
<tr>
<td>CH-CH2M - CH6 - CH2M Hill (From Updated List)</td>
<td>5</td>
<td>47</td>
<td>52</td>
<td>9.62%</td>
<td>0</td>
<td>1,846</td>
<td>1,846</td>
<td>0.07</td>
</tr>
<tr>
<td>NHG Numetric Hanford Corp</td>
<td>0</td>
<td>2</td>
<td>2</td>
<td>0.00%</td>
<td>0</td>
<td>Unknown</td>
<td>0</td>
<td>0.07</td>
</tr>
</tbody>
</table>

**Totals**

<table>
<thead>
<tr>
<th>Completed Boxes</th>
<th>To Be Scanned</th>
<th>Total Boxes</th>
<th>% Done</th>
<th>Files Scanned</th>
<th>Est. Files in Collection</th>
<th>Est. Files Remaining Collection</th>
<th>Average Time Per File (Min)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2468</td>
<td>1199</td>
<td>3660</td>
<td>67.43%</td>
<td>138,567</td>
<td>348,061</td>
<td>164,495</td>
<td>31</td>
</tr>
</tbody>
</table>

2018 LTS Conference
Our Metrics:

Dosimetry Digitization Project
- Started one year ago:
  - 7.7 million pages scanned
  - 3,161 reels scanned (includes duplicates)
  - 1.2 million documents audited
  - 4.5 million pages audited
  - One million documents output
  - 4.1 million pages output

Legacy Human Resources Project
- Started in June of 2016 with a seven month pause:
  - 6.8 million pages scanned
  - 184,000 documents created
  - 2,500 boxes digitized
  - Averaging 30 boxes completed per week.
Keys to our success

• Simplify, simplify, simplify:
  ▪ Process
  ▪ Reporting
    o Similar metrics are reported from both projects
    o Page counts and document counts
  ▪ Simple and opens lines of communication with other contractors and DOE customers

• Tools:
  ▪ FlexScan 600 Microfiche and Microfilm scanners
  ▪ NextScan Auditing Software
  ▪ Fujistu 6770 paper scanners
  ▪ Adobe Acrobat Pro
  ▪ Microsoft Office 2016
Preservation of Critical Health and Safety Information for Future Generations at the Hanford Site

Cindy Lepore

President, Interactive Technologies Group, Inc.
Keys to our success - Our People

- Recruiting:
  - Almost all of our recruiting has been through the “friends and family” network
  - Recruit team members that not only meet the criteria but see this job as an opportunity to advance a personal goal
  - Currently have a waiting list of 30+ personnel
  - Employer of choice for this type of position – competitive compensation and opportunity for advancement

- Hiring:
  - Clear expectations set from the beginning
  - Articulate the pros and cons of the job to inform their decision to accept a position
  - Smooth on-boarding process
Keys to our success - Our People

• Creating a Connection with the Mission:
  ▪ Not just a “scanning job”
  ▪ Employee’s family, neighbor, friend – someone they know works/worked at DOE Hanford – **this project matters**

• Recognition/Teambuilding:
  ▪ Birthdays, Lunches, Holiday celebrations
  ▪ On the Spot Awards for significant contributions
  ▪ Team members participate in visits and demonstrations

• Retention:
  ▪ Sufficient layers of support for ongoing training and issue resolution
  ▪ Internal promotions and moves to more desirable schedule
  ▪ Flexibility with scheduling
Program Management

• Managing from 2,600 miles away:
  ▪ Right leadership structure staffed with the right people
  ▪ Empower the team – set expectations and support their decisions
  ▪ Open lines of communication
  ▪ Regular progress reports from each project
  ▪ Understanding the value of quality and quantity delivered together

Our management philosophy is to take care of the employees so they will take care of our customers – we believe this and practice it!