

Summer Internship In Center 400: Surety Assessment & Engineering

Summer 2010

Shane Fullman

Summer Intern
Org: 00422
Manager: J Anthony Wingate



Sandia National Laboratories



Shane Fullman

- Hometown: Phoenix, Arizona
- Attending Texas A&M University
- Graduation: 2012 Expected B.S. in Electrical Engineering



Sandia National Laboratories

Summer Experiences

•NQT Picture Review-finding replacement pictures for NQT-400

•Data Control- getting data from QERs into Oracle to create assessment group metrics

•Monday Morning Training Analysis- looking at Monday morning training sessions for ways to improve them

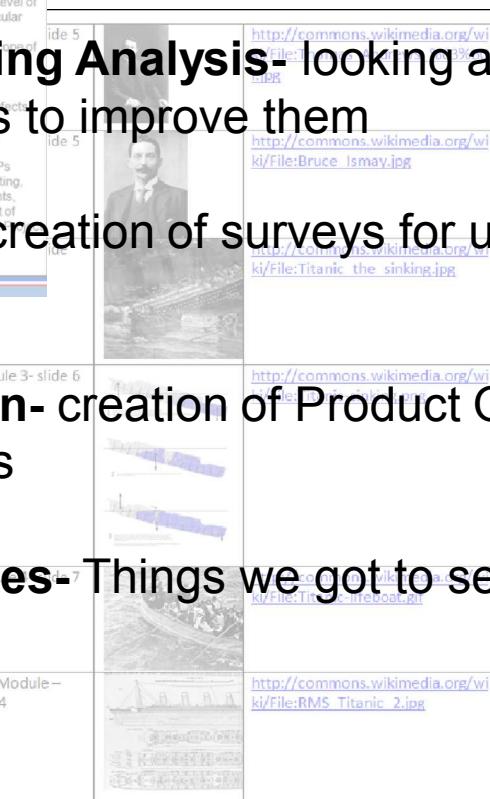
•Survey Development- creation of surveys for use in Monday training and Center 400

•Standard Work Creation- creation of Product Qualification

Monday Standard Work for Dennis Analysis and Report

•Engineering Experiences- Things we got to see and do

Shane Fullman
505-284-4417
Email: shane.fullman@nm.org
ORG: 12322

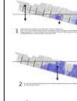
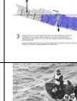


1. How useful is the information presented on the website?	5. Would a fifteen minute tutorial on the website be helpful?
2. How organized and easy to find is the information?	6. How often do you use the Center Website?
3. How amount of information presented?	7. Have you used the website SEARCH ability?
4. Do you consider the website value added to the center?	8. Is having a usable website important to you?
9. What information needs to be corrected, added, removed, or updated?	11. What is most valuable about this website?
10. What could be done to improve or enhance the website?	Submit may not work properly unless the document is opened in Adobe Reader or Pro.

NQT Picture Review

- Found pictures to replace all copyright material
- Approximately 150 pictures replaced
- Gave locations of the pictures making the documents easier to use
- Reduced the time it took to meet with creative arts

Also discussed different picture options in meetings with Creative Arts Dept.

	Module 2- slide 5		http://commons.wikimedia.org/wiki/File:Thomas_Andrews_%C3%BCli.jpg
	Module 2- slide 5		http://commons.wikimedia.org/wiki/File:Bruce_Ismay.jpg
	Module 2- slide 11		http://commons.wikimedia.org/wiki/File:Titanic_the_sinking.jpg
	Module 3- slide 6		http://commons.wikimedia.org/wiki/File:Titanic-sinking.png
	Module 4- slide 7		http://commons.wikimedia.org/wiki/File:Titanic-lifeboat.gif
	REN Module – slide 4		http://commons.wikimedia.org/wiki/File:RMS_Titanic_2.jpg

1. Any image that has an equivalent that is marked as public use is in the first table.
2. Images can be purchased are listed in the second table.
3. Images where the source is unknown or not actively for sale are in the final tables.

Pictures that have a usable equivalent (These pictures were listed as "labeled for reuse" by Google)

Original Picture (currently in presentation)	Location in ppt: Stage or module#- page or slide #	New picture to replace it	URL
Pictures that have a usable equivalent (These pictures were listed as "labeled for reuse" by Google or are from clipart) Other images from charging sites may be added as a second option			
	Original Picture (currently in presentation)	Location in ppt: Stage or module#- page or slide #	New picture to replace it
	Introduction- 15		http://www.army.mil/-images/2007/09/13/7904/army.mil-2007-09-13-115126.jpg
		With text edited	clipart
	du 18		clipart
		http://www.istockphoto.com/stock-illustration-5481947-solution-concept.php	
	du 19		Clipart
		http://www.istockphoto.com/stock-photo-6125496-.jpg	



Sandia National Laboratories

Data Control

Data searching and entry

Expected time to complete: three weeks

Actual time to complete: one week

Task: Enter data from QVRs into Oracle system

This was a one time deal, all newly entered QVR's will automatically be entered into the Oracle System
Worked with Errold Duroseau



Problem: finding documents in complicated file system takes a lot of time

Only knew where to look for one of the three file levels

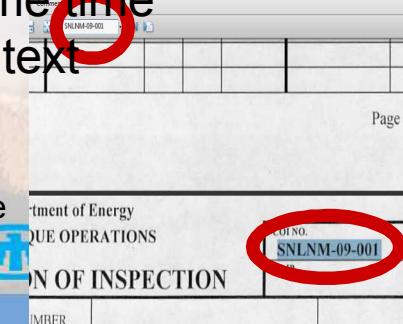


Solution: Put documents together;

- Compiled QVR's into one file and search all of them at the same time
- Used Adobe OCR to make text searchable

Automated process caught errors made by previous manual entry

This allowed me to search all 400 QVRs at the same time.



Monday Morning Training Analysis

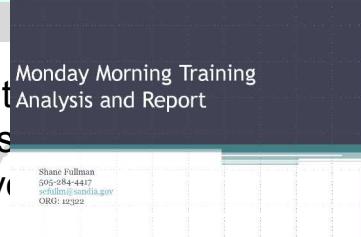
Results:
Organized Results into full report
Compiled quantifiable results
which contains:
• Data

75% of people said Results is useful in training
63% average training usefulness

Most liked course was GD&T with 13 positive responses
• Course opinions
• Suggested Topics

• Observed Issues
• Suggested Action

Question	Ever
First training session (yrs)	1.54
Time in OE (yrs)	11.7
Time @ sandia (Yrs)	13.3
Has any of the training been useful or helpful in your work?	0.75
What Percent of the sessions would you consider useful?	0.63
What Percent of the sessions have you attended?	0.50
Do you feel that the training sessions are mandatory?	0.33 0.45
If the training sessions were not mandatory, would you still go? (yes/no)(1/0)	0.45 0.52
Is the training worth the time spent? (yes/no)(1/0)	0.81 0.74



Report in powerpoint
and document form

Monday-Morning-Training-Sessions-Analysis-and-Report¶

Shane Julian
505-284-4427
sjulian@sandia.gov
ORG: 12322

Overview¶

This report is the culmination of an extensive interview and discussion process. This report includes the responses from 36 interviews, 24 are from 12322 & 12321. The remaining eleven interviews came from the group 12324, 12326 & 12324 who have attended the training. This group should account for the remaining 12 responses.

Analysis¶

The report analyzes the information gathered and reviews data base results. These results are the outcome of the survey. Each section highlights a different set of questions and attempts to summarize the results.

Conclusions¶

After presenting the data, conclusions are reached. These conclusions are refined from the responses given in the analysis and unquantifiable opinions conveyed during the interviews and discussions.

Shane Julian
505-284-4427
sjulian@sandia.gov
ORG: 12322

All information has been
Recorded at:

[https://sharepoint.sandia.gov/sites/
work400sipprojects/default.aspx](https://sharepoint.sandia.gov/sites/work400sipprojects/default.aspx)



Sandia National Laboratories

Electronic Surveys

Inside: Sandia National Laboratories

Center 400: Center 400 is a part of Sandia National Laboratories. Center 400 Website Feedback

Please take a moment to complete this evaluation form. Your feedback will help us improve the Center Website.

1. How useful is the information presented on the website?

Very useful
Somewhat useful
Neutral
Somewhat useless
Very useless

2. How organized and easy to find is the information?

High
Very good
Neutral
Needs improvement
I had no idea what was going on

3. The amount of information presented?

Very satisfied
Somewhat satisfied
Neutral
Somewhat dissatisfied
Very dissatisfied

4. Do you consider the website value added to the center?

High
Very good
Needs improvement
I had no idea what was going on

5. Would a fifteen minute tutorial on the website be helpful?

High
Very good
Neutral
Needs improvement
I had no idea what was going on

6. How often do you use the Center Website?

Daily
Weekly
Monthly
Yearly
I have no idea what website you are talking about

7. Have you used the website SEARCH ability?

Often
Sometimes
Never applicable
Never used it
What search ability; never knew the search existed

8. Is having a usable website important to you?

It is very important
Somewhat important
Not really important
Not at all important

9. What information needs to be corrected, added, removed, or updated?

10. What could be done to improve or enhance the website?

Submit may not work properly if opened in Adobe Acrobat
Submit by Email

11. What is most valuable about this website?

View Acrobat
Sort
Filter
Ad
Sort & Filter

Comparison of all the Questions

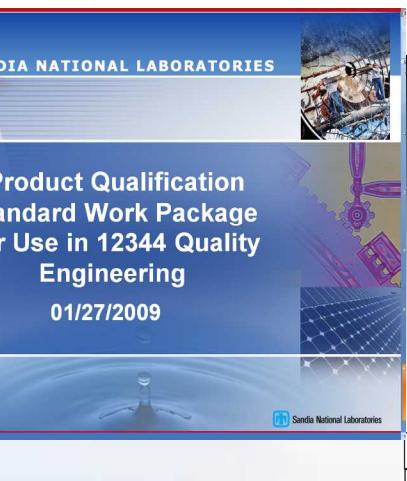
Question	Low/never/no 25	low/medium	medium	high/medium	high/often/yes 5
#1: How useful is the...	1	1	1	30	1
#2: How organized and...	1	1	1	31	1
#3: The amount of...	1	1	1	18	1
#4: Do you consider the...	1	1	1	18	1
#5: Would a fifteen...	1	1	1	37	1
#6: How often do you use...	1	1	1	15	1
#7: Have you used the...	1	1	1	15	1
#8: Is having a usable...	1	1	1	28	1

Walsh

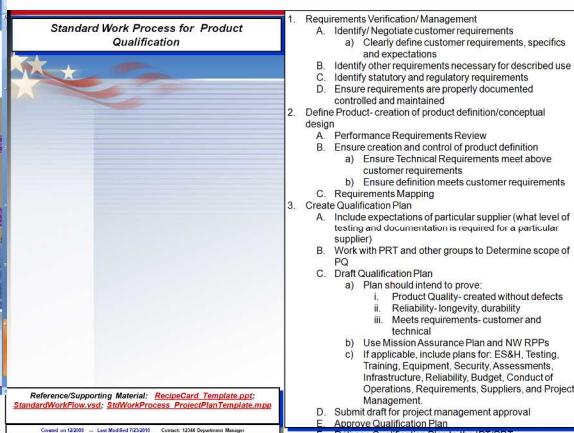


Standard Work Creation

Create Standard Work: Product Qualification
In-depth look at how product qualification
should be done in Work for Others

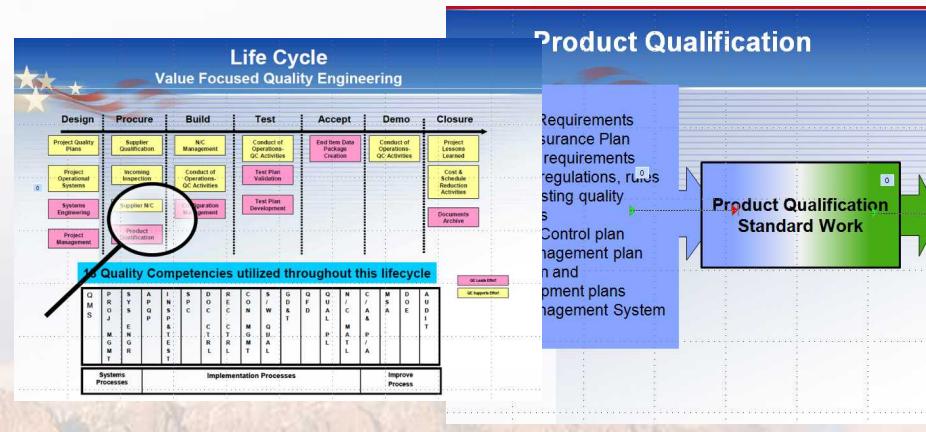
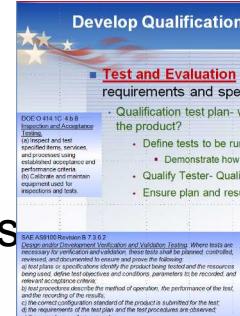


Worked With
Doug White



Researched requirements
Organized sources
Developed process structure
Organized Details and Specifics

Ongoing Process



Sandia National Laboratories



Engineering Experiences

- Demonstration of mechanical Strong-link: saw the system in action
- Tour of KCP Labs: multiple labs all one building
- Tour of RF lab: Toured lab in 890 dealing with radio frequency technology

- NQT- 200 Preparing for Successful Product Acceptance
- NQT-600 Mistake Proofing
- ESD-200 Electrostatic Discharge



Sandia National Laboratories



Lessons Learned

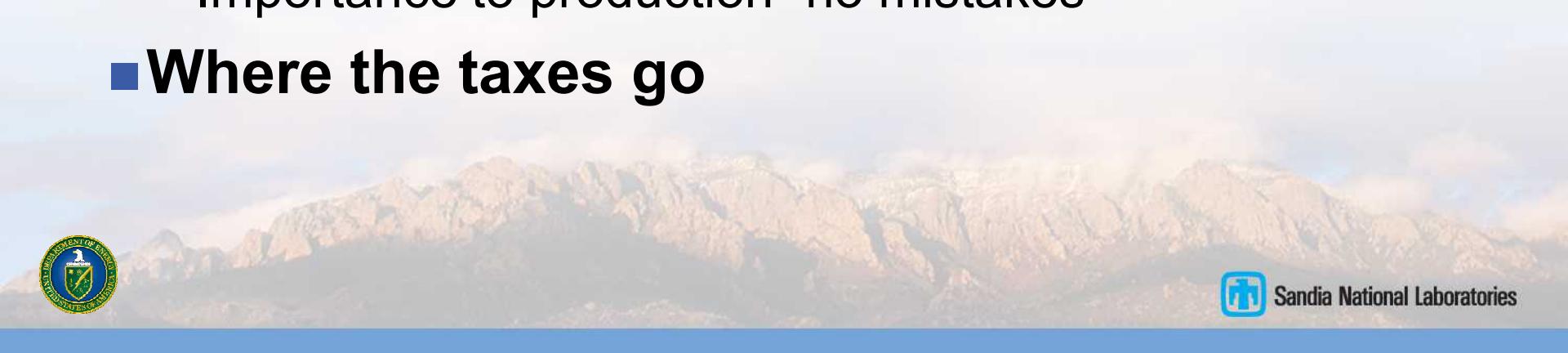
■ The internal workings of Sandia

- Business - cash flow – who controls the money
- Culture – bunch of engineers
- Production- not like commercial production
- Security – very high level, need to be followed

■ Quality Engineering

- Value added- the value in adding value
- Importance to production- no mistakes

■ Where the taxes go



Sandia National Laboratories



Thank You!

I would like to thank everyone in Center 400 who had a hand in making this summer a fun and exciting time.

I would like to thank everyone who shared advice and ideas to help me in future endeavors. I look forward to seeing you all again.



Sandia National Laboratories