

EFCOG SQA Monthly Meeting Notes and Attendance September 15, 2021

Notes are by Agenda item for meeting.

**See presentation deck for each Agenda item information shared/reviewed with group.

Safety/Security Moment

- Teri Vincent of CNS provided a safety moment regarding the importance of having a questioning attitude in regard to Software Quality Assurance (SQA).

Announcements, Updates, and Dates to Remember:

- Next EFCOG SQA WebEx October 20, 2021.
- EFCOG ISM & QA Fall Meeting November 1-4, 2021.

Software Disasters and the Importance of Proper Testing, by Christy Renner of PORTS

- The purpose of testing is to try to break the software, find the holes in it.
- Testing for what the software is supposed to do is half the battle, the other half is for what the software is not supposed to do.
- Test with intent of finding errors, for undiscovered errors.
- Included in presentation deck, 50 Ways To Improve Your Testing, such as start with good requirements which will make it much easier to create good test cases. Linda Westfall of the Software Excellence Academy, in one of her free weekly SQA seminars recently, described a method to create software requirements by answering key questions about the software.
- Tom Bundy of ORNL mentioned that he had a booth at a Software Expo, where he discussed software disasters similar to what was described in Christy's presentation.
- Carol Olijar of ANL asked Christy was the presentation she did a product of request from her site? Christy responded she has always thought software testing is fascinating, for the proper testing. Christy had recently providing SQA training to users where she described this software disasters subject area.
- Dave Thoman of Amentum, did a presentation on failed software testing at the Spring EFCOG conference. Dave noted you need to look at every aspect of how you test the software, not necessarily just at the requirements.
- Sid Ailes of Atkins stated that for Area 5 software for area boosters exceeded the capacity of the spaceship, no one evaluated this requirement in testing.
- Barbara Hill of ICP noted that off the shelf software such as Excel for Hanford was thought to not need testing. Equation they were using was wrong for two months. This software was used to calculate how much waste is removed. The cost of this error was around \$1 million. People didn't think they had to test it because it was Excel, something they use every day.
- Christy noted that at a local DOE site a scan produced 9 million spreadsheets.
- It is important to think about how users are using the spreadsheets to determine if safety software spreadsheets.
- Carol mentioned that at ANL, a user questioned where it states they have to perform testing and document their results. It is in NQA-1 Subpart 2.7, Req 3.
- Diana Marquez of WRPS, stated in chat, "Sounds like all these scenarios didn't have tests for safe failures!".
- Tom Bundy of ORNL, stated in chat, "I used the Arien 5 video for the Software Expo. The explosion catches attention.", and this link: https://www.youtube.com/watch?v=PK_yguLapgA

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Discussion of Fall Meeting Agenda:

- We need people to volunteer for presentations, or as moderators or panelists for panel discussions.
- Panel discussions are informal, people discussing how the topic pertains to their site, and the sharing of best practices.
- Sid suggested to change the topic “Software Gone Wrong” to “Software Spreadsheets Gone Wrong”. Teri concurred with Sid’s suggestion. Teri suggested adding more questions for this topic too. Christy said she could work on these questions with Carol, who is one of the people volunteered for this group discussion.
- Laura Cook of LLNL asked “what is role of mediator, and panelists for panel discussions?”. Teri responded the role of moderator is to ask questions of panelists, and coordinate the discussion topic.
- Diana Marquez of WRP, stated in chat, “What happened to the one about SQA qualifications?”.
- Tom Bundy of ORNL, requested of Teri, “Please send us the current draft agenda.”, or just today’s presentation. I didn’t get it.”. Carol checked into this, and found the email from 9/8, and from 9/15 were both sent to Tom’s email address. Perhaps the email is not going through ORNL email system properly, being blocked. Carol responded to Tom to please check into this.

Subtask Updates:

- Software Standards and Orders – Christy stated, she is down to the last couple documents for NASA and NIST. She needs help with the white paper, she would like to start working on the white paper with volunteers at the fall meeting. Dave said he should have something for Christy in the next couple weeks.
- Cloud-based Hosting Software – Russell Swannack of PNNL, said that the white paper is currently under review. Teri responded she did not recall receiving the white paper, she will follow up with Vicki on this.

Next Steps

Accessing EFCOG SQA Website, Box, and the DOE OrgEx Forums

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Attendance:

If anyone attended this meeting but does not see their name on the list on next page, please contact Vicki Pope (pope13@llnl.gov).

Chair: Vicki Pope (pope13@llnl.gov)

Vice Chair: Teri Vincent (teri.vincent@cns.doe.gov)

Secretary: Carol Olijar (cschultz@anl.gov)

37 Attendees.

#	First Name	Last Name	Site
1	Phone 7408****16 Rich	Rhoads	???
2	Lance	Abbott	SRS
3	Sidney	Ailes	Atkins
4	Todd	Billings	DOE-Hanford
5	Sorin	Blaj	BNL
6	Tom	Bundy	ORNL
7	Colby	Carter	WIPP
8	Evgueni	Chnyrenkov	Y-12
9	Laura	Cook	LLNL
10	Bryan	Coonfield	WRPS
11	Mary	Curtis	FNAL
12	Yevonne	Deaton	DOE-EM
13	Denise	Fast	WRPS
14	Orlando	Ferrer	RL
15	Cliff	Glantz	PNNL
16	Sarah	Hartson	DOE-LFO
17	Barbara	Hill	ICP
18	James	Hylko	ORNL
19	Valentino	Jefferson	ORNL
20	Jonathan	Keklak	SRS
21	David	Louie	SNL
22	Steven	Mahnesmith	SNL
23	Diana	Marquez	WRPS
24	Stella	McKirdy	INL
25	Jenna	Neal	NNSS
26	Carol	Olijar	ANL
27	Christian	Palay	DOE-AU-32

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28	Phillip	Pfeiffer	ANL
29	Christy	Renner	PORTS
30	Lucy	Richards	CNS
31	Donna	Riggs	Riggs Consulting
32	Michael	Russell	ORNL
33	Terry	Scoggins	ORNL
34	Dave	Thoman	Amentum
35	Teri	Vincent	CNS
36	Marlene	Underwood	PORTS
37	Al	Zuckero	DOE-SRS

*Sorted by Last Name, First Name.