



U.S. DEPARTMENT OF
ENERGY Office of
Science

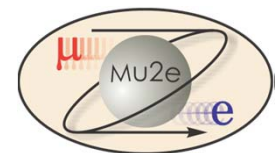
Mu2e Grounding & Shielding Review Charge & Logistics

Gary Drake

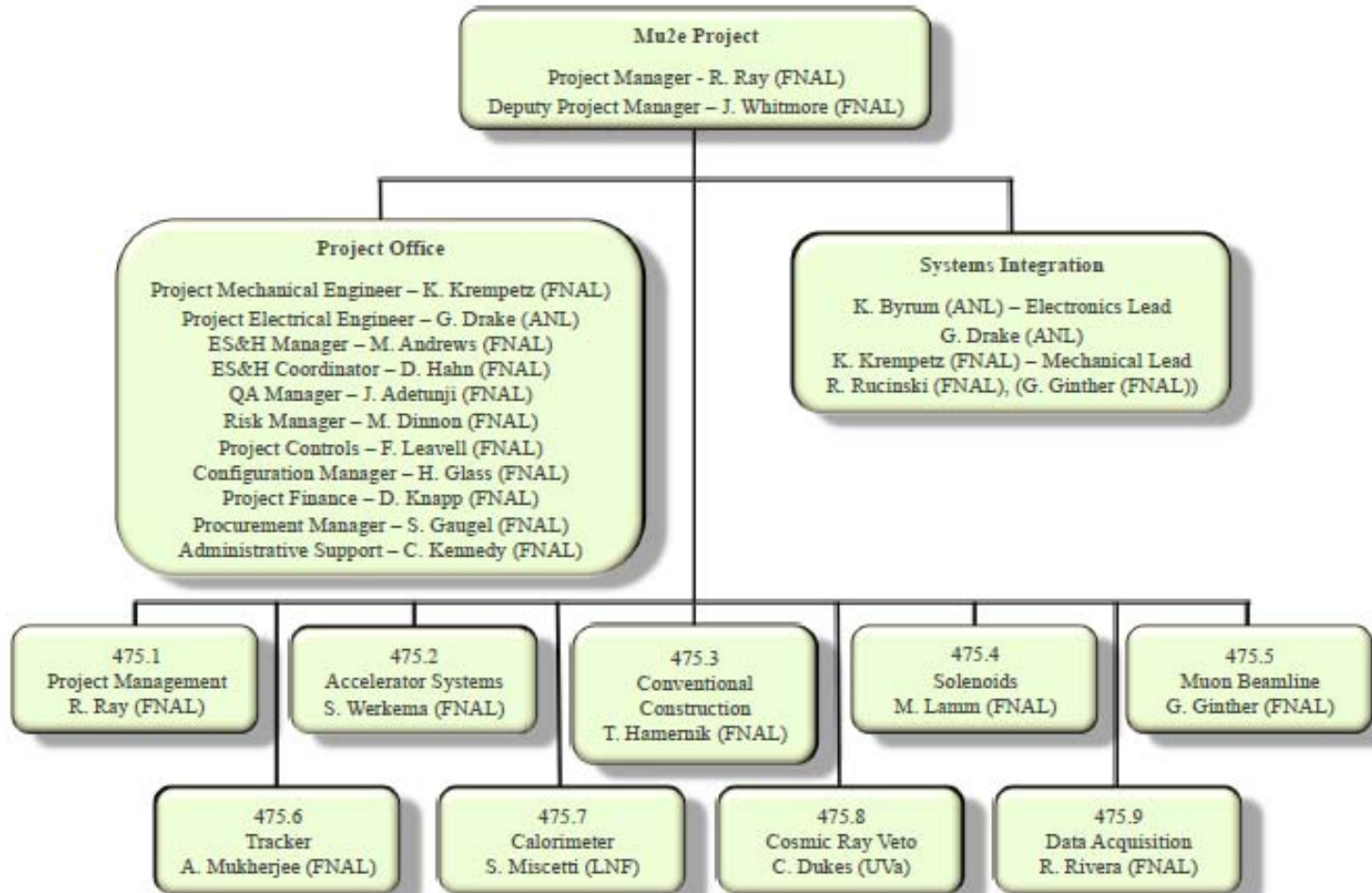
Mu2e Electronics Integration Engineer

For the Mu2e Integration Team

May 10, 2016



Project Organization



Review Logistics

- Review Indico page:
 - <https://indico.fnal.gov/conferenceDisplay.py?confId=12067>
- Basis for the Review:
 - Mu2e-doc-7254
Mu2e Electrical Grounding and Shielding Policy
Version 1.4
- Reviewers:
 - Steve Chappa
 - Marvin Johnson *
 - Rick Van Berg

* Chair

Review Logistics

- The Mu2e Review Process
 - All Mu2e subsystems undergo an external peer review, leading to the CD-3c Review & Construction Readiness Reviews
- Current Status of the Mu2e Grounding & Shielding Plan
 - Overall plan is in place
 - However, the design of the subsystems is not complete
 - Many construction details not yet complete
- This Review
 - We ask that you review the overall plan, and as much of the details that are described
- Subsequent Review
 - We envisage that there will be a final review of the Grounding & Shielding Plan once the final subsystem designs are complete

Review Charge

- Charge Preamble
 - The purpose of this review is to evaluate and assess the soundness of the overall plan, and to provide the integration team and project management with any suggestions or concerns that you might identify. Because the designs for the detectors are generally not complete as yet, please note that there remain implementation details for the subsystems that are not yet fully worked out or documented. ***As such, the scope of this review is to evaluate the soundness of the overall plan and philosophy for the experiment, identify any technical issues or risks, and to evaluate how safety is integrated into the plan.*** We will have a final review of the system before the construction readiness reviews of the detector subsystems, at which time we expect to have all implementation details described.

Review Charge (Cont.)

- Charge Questions

1. Does the overall plan for the grounding & shielding of the Mu2e experiment adequately address the likely or potential noise problems that the experiment might encounter? Is it likely that the grounding & shielding plan will allow the experiment to achieve the required noise performance for each subsystem?
2. Is the technical design of the grounding & shielding technically sound? Have all the principal issues been addressed in the design? Aside from implementation details that remain to be worked out and documented, are there any outstanding concerns that need to be addressed?
3. Are there any significant risks in the grounding & shielding design? Have mitigation plans been adequately developed?
4. Has electrical safety been adequately addressed and included in the design? Are there any outstanding safety concerns or issues?

Review Timetable

Tuesday, May 10, 2016

08:00 - 08:30	Executive Session (Closed Session) 30' Speaker: Gary Drake (Argonne National Laboratory)
08:30 - 09:10	Overview & Introduction 40' Speaker: Gary Drake (Argonne National Laboratory)
09:10 - 09:30	Tracker 20' Speaker: Dave Huffman (Fermilab) Material: Slides 
09:30 - 09:50	Calorimeter 20' Speaker: Ivano Sarra (INFN) Material: Slides  
09:50 - 10:10	Cosmic Ray Veto 20' Speaker: Sten Hansen (Fermilab) Material: Slides 
10:10 - 10:30	Coffee Break
10:30 - 10:50	Solenoids 20' Speaker: Dr. Andy Hocker (FNAL) Material: Slides 
10:50 - 11:10	Stopping Target Monitor 20' Speaker: George Ginther (University of Rochester)
11:10 - 11:30	Extinction Monitor 20' Speaker: Peter Kasper (Fermilab) Material: Slides 
11:30 - 11:50	TDAQ 20' Speaker: Mr. Ryan Rivera (FNAL) Material: Slides   
11:50 - 12:10	Detector Controls & Monitoring 20' Speaker: Glenn Horton-Smith (KSU) Material: Slides 
12:10 - 12:30	Facilities & Safety 20' Speaker: Mr. David Mertz (Fermi National Accelerator Laboratory) Material: Slides 
12:30 - 13:30	Lunch
13:30 - 16:00	Executive Session (Closed Session) 2h30'
16:00 - 16:20	Closeout 20'

Mu2e

Mu2e Grounding & Shielding

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