

Person Power and Safety Documentation

Todd Averett, GEn-II ERR, 22-Oct-2020

Charge 4: Are the responsibilities for carrying out each job identified, and are the manpower and other resources necessary to complete them on time in place?

Note: I consider resources to be mostly person power. We require:

- JLab: scientists, design and engineering, fabrication, mechanical installation, tech support, safety support, equipment.
- Users: Target and detector preparation, postdocs, students, techs on-site, safety documentation, installation, equipment.

Charge 8: What is the status of the specific documentation and procedures (COO, ESAD, RSAD, ERG, OSP's, operation manuals, etc.) to run the experiments?

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Users & JLab Collaborators Committed to GEn-II:

- University of Virginia: N. Liyanage, 50% postdoc, 25% research scientist (Kondo Gnanvo, thesis student (Sean Jeffas)
- University of Virginia: X. Zheng, postdoc, graduate student
- University of Virginia: G. Cates, postdoc, student, senior scientist (H. Nguyen
- Glasgow: D. Hamilton, R. Montgomery, 2 graduate students (R. Molinaro)
- Stony Brook: Jan Bernauer, postdoc (Ethan Kline)
- William & Mary: T. Averett, 50% postdoc (Bradley Yale), thesis student (Jack Jackson)
- UConn: A. Puckett, postdoc (Eric Fuchey), 2 grads
- CNU: E. Brasch, P. Monaghan, master's student, undergrads
- Temple: J. Napolitano, D. Jones, graduate student
- Hampton U: Michael Kohl, postdoc
- James Madison Univ: Ioanna and Gabriel Niculescu, undergrads

- Jefferson Lab Scientists: A. Camsonne, J.P. Chen, S. Covrig Dusa, D. Flay, D. Gaskell, O. Hansen, M. Jones, C. Keppel, S. Malace, D. Meekins, R. Michaels, B. Sawatzky, H. Szumila-Vance, B. Wojtsekhowski, S. Wood
- Jefferson Lab Postdocs: S. Barcus, A. Tadepalli,

BigBite Responsibilities

Note: The BigBite spectrometer will be commissioned and used for the previous experiment, GMn, and will not be modified for GEn-II

Equipment	Owner	Maintenance	Runtime
Magnets	Jack Segal	Jack Segal	Jack Segal
Platforms	Jessie Butler	Jessie Butler	Jessie Butler
GEMs	E. Cisbani, N. Liyanage	K. Gnanvo	GEn Collab
GRINCH	T. Averett	B. Yale	GEn Collab
Hodoscopes	R. Montgomery	GEn Collab	GEn Collab
Pre/Shower	B. Wojtsekhowski	A. Tadepalli	GEn Collab

SuperBigBite Responsibilities

Note: The SBS magnet will be commissioned and used for the previous experiment, GMn, and will not be modified for GEn-II

Equipment	Owner	Maintenance	Runtime
Magnets	Jack Segal	Jack Segal	MCC
Platforms	Jessie Butler	Jessie Butler	Jessie Butler
HCAL	B. Quinn, S. Barcus	S. Barcus	GEn collab
DAQ (BB, SBS)	M. Jones, A. Camsonne	M. Jones, A. Camsonne	GEn collab

Additional (non-target) System Responsibilities

Equipment	Owner	Maintenance	Runtime
Slow Controls	B. Sawatzky	B. Sawatzky	GEn collab.
Beamline	D. Flay	Gen collab.	GEn collab.
Simulation/ Analysis	A. Puckett	E. Fuchey	E. Fuchey/GEn collab

Anticipated on-site team

- Gordon Cates (UVa, On leave for calendar 2022)
- Todd Averett (W&M)
- Jian-Ping Chen (JLab)

- David Flay (JLab staff, roughly 20-25%)
- Huong Nguyen (UVa research scientist, roughly 20% on site)
- Vladimir Nelyubin (UVa senior research scientists, up to 20% on site).

- Anticipated additional UVa post-doc
- Todd's grad student
- Gordon's grad student
- Additional grad students?

- Arun Tadepalli (JLab postdoc, available to help).
- William Henry (JLab postdoc, available to help).

Safety Documentation

Responsibility: T. Averett

- For GMn, much work done by E. Folts and the collaboration:
 - We have documents for BigBite and SBS systems
 - These will be modified as needed for GEN-II
 - Drafts are available on this ERR website
- **Standard Hall Safety documents:**
 - COO
 - ERG-(Emergency Response Guidelines) update for new Hall A configuration
 - ESAD
 - GEN-II radiation budget was calculated
- **Non-target OSPs:**
 - BigBite Magnet
 - BigBite Detector Package
 - SBS Magnet
 - HCal and GEM veto
- **COVID-specific procedures, PPE**

Target Safety Documents and Requirements

- *T. Averett* – *Responsibility* for target safety documents
 - We have target documents from Hall C Polarized Target Run: OSP, LSOP
 - These will be the template but will require modification due to new design features and location in Hall A
- Changes for Hall A running
 - Target enclosure is possible ODH hazard-proper ventilation and entry procedures must be established
 - Try to reduce radiation contamination from aluminum foil over beam windows
- Laser safety changes include:
 - Power increase from 30 W to 50 W per laser.
 - Possibly use 200 W laser with single 1.2 mm fiber.
 - Enclosure door laser interlocks, entry/egress procedure.
 - All aspects of laser safety will need to be reviewed: operation, alignment, safety equipment, fire hazard, ..