

**Job Risk Analysis**

Name(s) of Risk Team Members: J. Maraviglia, J. DeBoer, M. Hamilton, M. Peragine				Point Value → Parameter ↓	1	2	3	4	5							
Job Title: Pressurized System Work Job Number or Job Identifier: JRA 9-08				Frequency (B)	≤once/year	≤once/month	≤once/week	≤once/shift	>once/shift							
Job Description: AC500 Back-Flushing/Cleaning of Booster D6 Septum				Severity (C)	First Aid Only	Medical Treatment	Lost Time	Partial Disability	Death or Permanent Disability							
Training and Procedures List (optional): OPM Procedure: Backflushing and Acid Flushing Approved by: E. Lessard      Date: 04/03/08      Rev. #: 0				Likelihood (D)	Extremely Unlikely	Unlikely	Possible	Probable	Multiple							
Stressors (if applicable, please list all):			Reason for Revision (if applicable):				Comments:									
				Before Additional Controls					After Additional Controls							
Job Step / Task	Hazard	Control(s)	Stressors Y/N	# of People A	Frequency B	Severity C	Likelihood D	Risk* AxBxCxD	Control(s) Added to Reduce Risk	Stressors Y/N	# of People A	Frequency B	Severity C	Likelihood D	Risk* AxBxCxD	% Risk Reduction
Isolate electrical power to the Booster D6 septum magnet	Electrical shock, flash hazard	OPM procedure, training on proper breaker/disconnect switch operation, PPE, system specialist knowledge and experience, NFPA70E	N	1	2	3	3	18								
LOTO main magnet bus work (CAS and Main Magnet Operators)	Electrical shock, flash hazard	OPM procedure, training on proper breaker/disconnect switch operation, PPE, system specialist knowledge and experience, NFPA70E. Group LOTO on token box at entrance to Booster.	N	1	3	3	3	27								
Enter Booster tunnel and proceed to area of D6 septum	Radiation (background tunnel radiation levels; beam off)	Training, personal dosimetry, radiological survey maps, Access Control System (ACS) - Tunnel Under Controlled Access Mode, Gate Watch	N	2	3	1	1	6								
Enter Booster tunnel and proceed to area of D6 septum	Electrical shock	Training, main magnet bus throughout area LOTO'd, OPM procedure, group lockout/tagout in place, bus protected/covered and clearly labeled high voltage (5000 V)	N	2	3	3	2	36								
Pre-task radiological survey of D6 septum by Health Physics Technician	Electrical shock	Training, HP Techs are instructed to maintain safe distance from beamline components with body and teletector, no contact readings, extension tool used on teletector	N	1	3	3	2	18								

