

Norbert Holtkamp  
Accelerator Systems Division  
Division Director

PHONE: (865) 241-6945  
FAX: (865) 241-6739  
Cell Phone: (865) 919 1070  
E-MAIL: [holtkamp@sns.gov](mailto:holtkamp@sns.gov)

10/14/2003

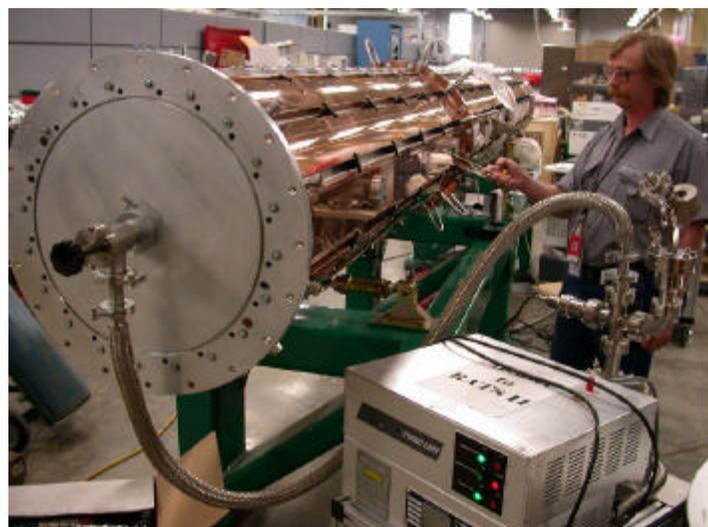
DTL 1 commissioning continues to make very good progress. Over the last two weeks we achieve 80 of our commissioning goals, with running beam currents up to 38 mA (design for 1.4 MW) and current pulse length up 1 msec (design) for several hours stably. Diagnostics checkout and hardware testing continues. The run will go through October 23<sup>rd</sup>, one week longer than originally planned. Preparations to run high average power are ongoing, but operation under those conditions will not happen until the very end because of the associated residual radiation that is generated in the enclosure.

The first DT's for DTL-4 were received at ORNL today. Fiducilization, magnet mapping, and leak testing will begin Thursday. Several shipment of DTL 4, 5 and 6 drift tubes are expected over the coming 2-3 weeks and assembly of tanks will start as soon as possible. While Tank 5 and 6 drift tubes will be delivered prior to what was originally foreseen, Tank 2 drift tubes incurred delays that accumulated to a 2-3 week slip. This potentially delays tank 1-3 commissioning in January shifting it into February.

All remaining end walls for the DTL system (i.e.: DTL-2, -4, -5, and -6) have been fiducilized in the FE building. The taut wire system and laser tracker were used to find the magnetic center of the end wall and relate it to fixed fiducials. Fiducilization of each end wall took about 1 day to complete. Leak testing of DTL-2 is complete. Installation of the cooling manifold on the frame began yesterday (9-30-03).



**DTL-2 End wall Fiducilization**



**DTL-2 Tank Leak Testing in the FE Building**

Component	Engineer	Tank 4					Tank 5					Guess
		Identifier	Quantity	Shipping Date	Delivered	Change from last week	Identifier	Quantity	Shipping Date	Delivered	Change from last week	
Drift Tubes	Gentzlinger	4A	7	29-Sep-03	0		5E	8	20-Oct-03	0		Complete Negotiating Contract Next 7 days Overdue Change
		4B	6	29-Sep-03	0		5F	7	21-Oct-03	0		
		4C	6	30-Sep-03	0		5G	8	27-Oct-03	0		
		4D	8	6-Oct-03	0							
Dummies	Gentzlinger			With DT Groups				With DT Groups				
EMDs	O'Hara		4	29-Oct-03	0		4	13-Nov-03	0			
BPMs	O'Hara		2	29-Oct-03	0		2	29-Oct-03	0			
Top hats	Rowton	1.25"	27	29-Sep-03	0		1.25"	23	20-Oct-03	0		
Shrouds	Rowton		27	29-Sep-03	0		23	20-Oct-03	0			
Endwalls	Turon		2	Complete	2		2	Complete	2			
Post Coupler Kits	Rowton		27	Bead Pull + 15	0		23	Bead Pull + 15	0			
Slug Tuners	Rowton		12	Bead Pull + 7	0		12	Bead Pull + 7	0			
Access Ports			2	7-Oct-03	0		2	10-Nov-03	0			
RF Grills			4	7-Oct-03	0		4	10-Nov-03	0			
Wave Guide-Iris	Valdiviez		1	Complete	1	0	1	Complete	1	0		
Window	Young		1	Complete	1	0	1	Complete	1	0		
Stands	Turon		1	Complete	1		1	Complete	1	0		

Milestones	Date	Date
Ready for RF	?	?
Ready for Beam	28-Feb-04	28-Feb-04
Tank Commissioning complete	1-May-04	1-May-04

Component	Engineer	Tank 6					Tank 2				
		Identifier	Quantity	Shipping Date	Delivered	Change from last week	Identifier	Quantity	Shipping Date	Delivered	Change from last week
Drift Tubes	Gentzlinger	6H	10	30-Oct-03	0		2J	12	7-Nov-03	0	
		6I	11	31-Oct-03	0		2K	12	28-Oct-03	0	
Dummies	Gentzlinger			With DT Groups			2L	11	31-Oct-03	0	
EMDs	O'Hara		4	13-Nov-03	0		2M	8	5-Nov-03	0	
BPMs	O'Hara		2	5-Nov-03	0				None	0	
Top hats	Rowton	1.25"	21	30-Oct-03	0			4	9-Oct-03	0	
Shrouds	Rowton		21	30-Oct-03	0		.75"	41	7-Nov-03	0	
Endwalls	Turon		2	Complete	2		1.00"	6	7-Nov-03	0	
Post Coupler Kits	Rowton		21	Bead Pull + 15	0			47	7-Nov-03	0	
Slug Tuners	Rowton		12	Bead Pull + 7	0			2	Complete	2	
Access Ports			2	10-Nov-03	0			27	Bead Pull + 15	0	
RF Grills			4	10-Nov-03	0			12	Bead Pull + 7	0	
Wave Guide-Iris	Valdiviez		1	25-Sep-03	0	0		1	7-Oct-03	0	
Window	Young		1	15-Oct-03	0	0		4	7-Oct-03	0	
Stands	Turon		1	Complete	1	0		1	17-Sep-03	0	
								1	15-Oct-03	1	
								1	Complete	1	

Milestones	Date	Date
Ready for RF	?	14-Nov-03
Ready for Beam	28-Feb-04	30-Jan-04
Tank Commissioning complete	1-May-04	1-May-04