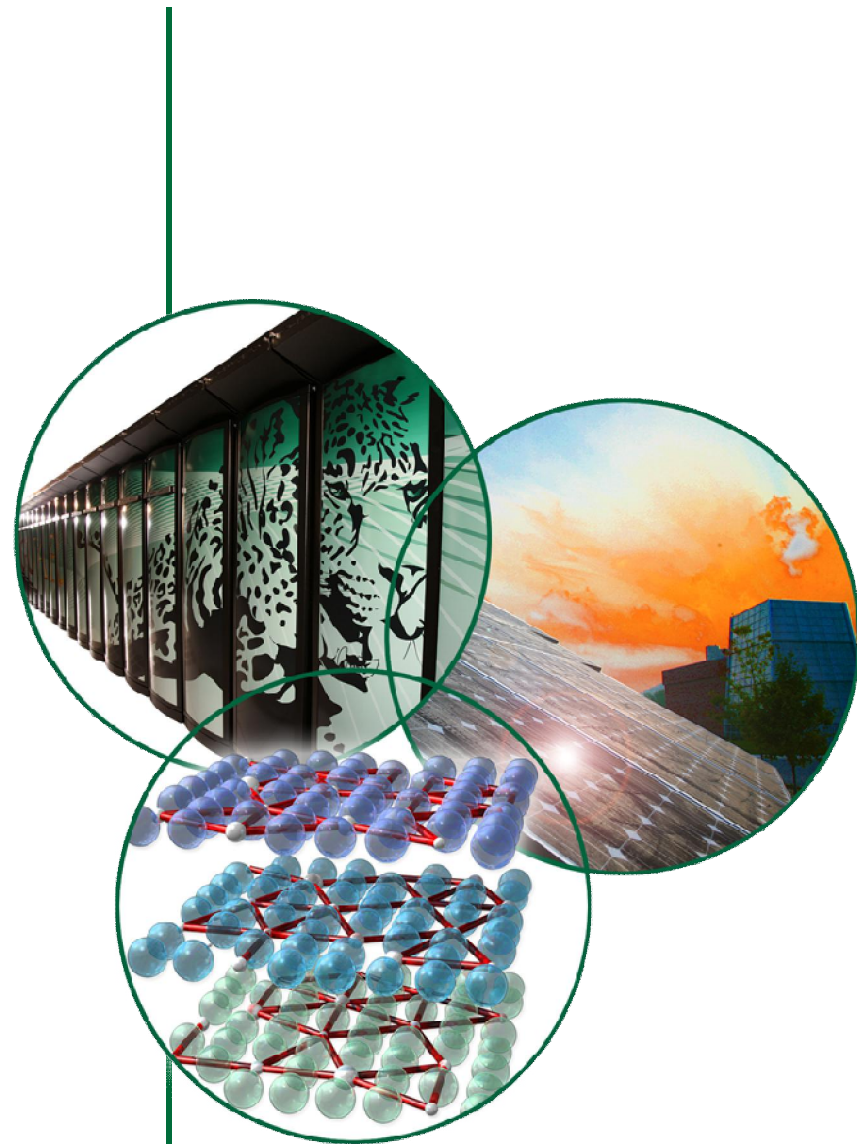


HWDB: Operations at the Spallation Neutron Source

Workshop on Accelerator Operations
August 6-10, 2012

Glen D. Johns
Accelerator Operations Manager



Outline

- Facility overview
- Organization
- Shift schedule
- Operating schedule
- Availability

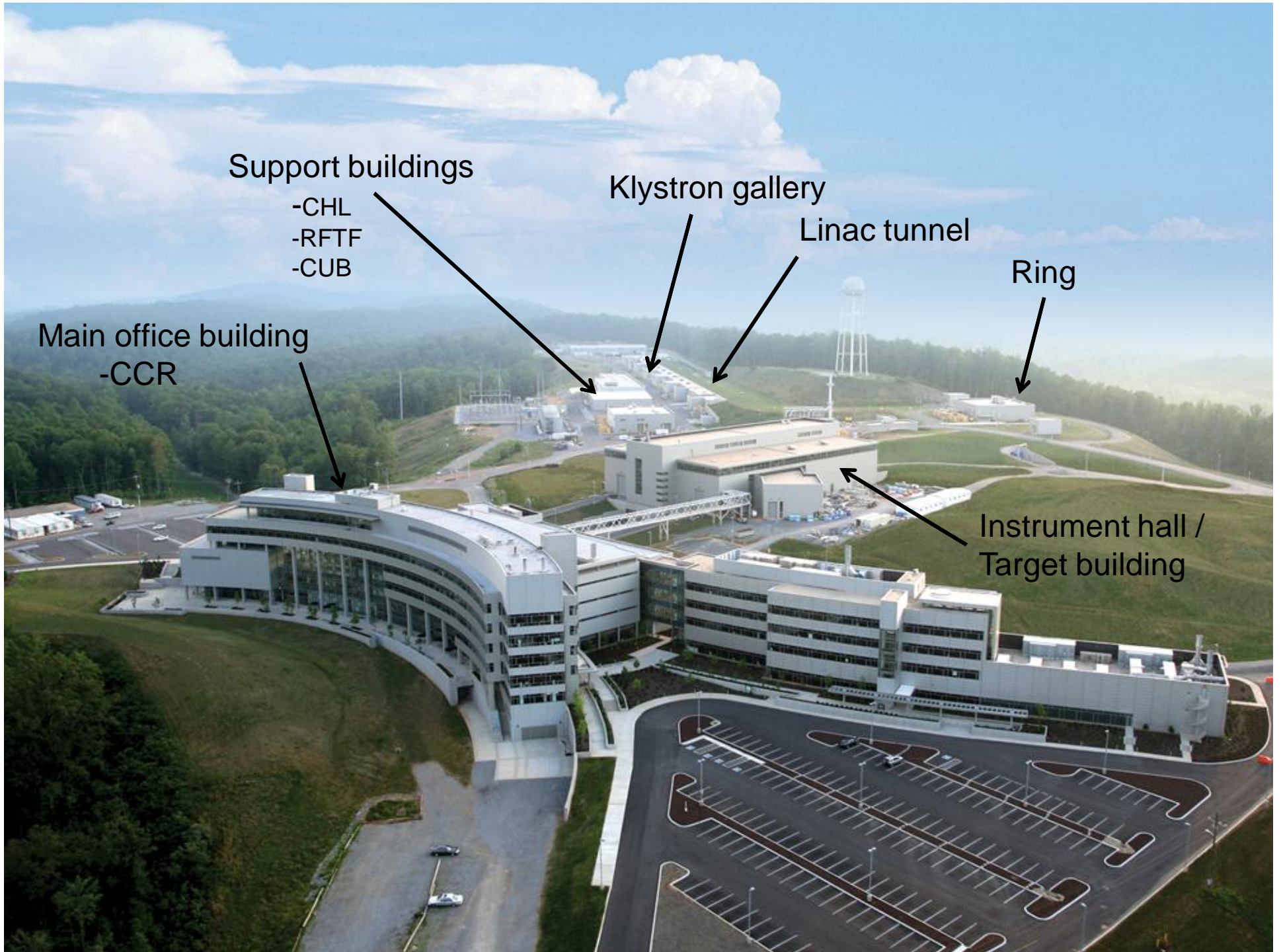
Where is SNS?

Eastern Tennessee as part of Oak Ridge National Lab



What is SNS?

- World's highest power pulsed spallation neutron source
- Consists of a 1 GeV superconducting linear accelerator, accumulator ring, and a flowing liquid mercury target
- Operates as a National User Facility for conducting neutron scattering research
 - 13 instruments in User Program
 - 6 in commissioning or under construction
- Funded by the Department of Energy's Office of Basic Energy Sciences (~\$181M/year)



Support buildings

- CHL
- RFTF
- CUB

Main office building
-CCR

Klystron gallery

Linac tunnel

Ring

Instrument hall /
Target building

SNS Accelerator Complex



SNS Accelerator Complex



SNS Accelerator Complex

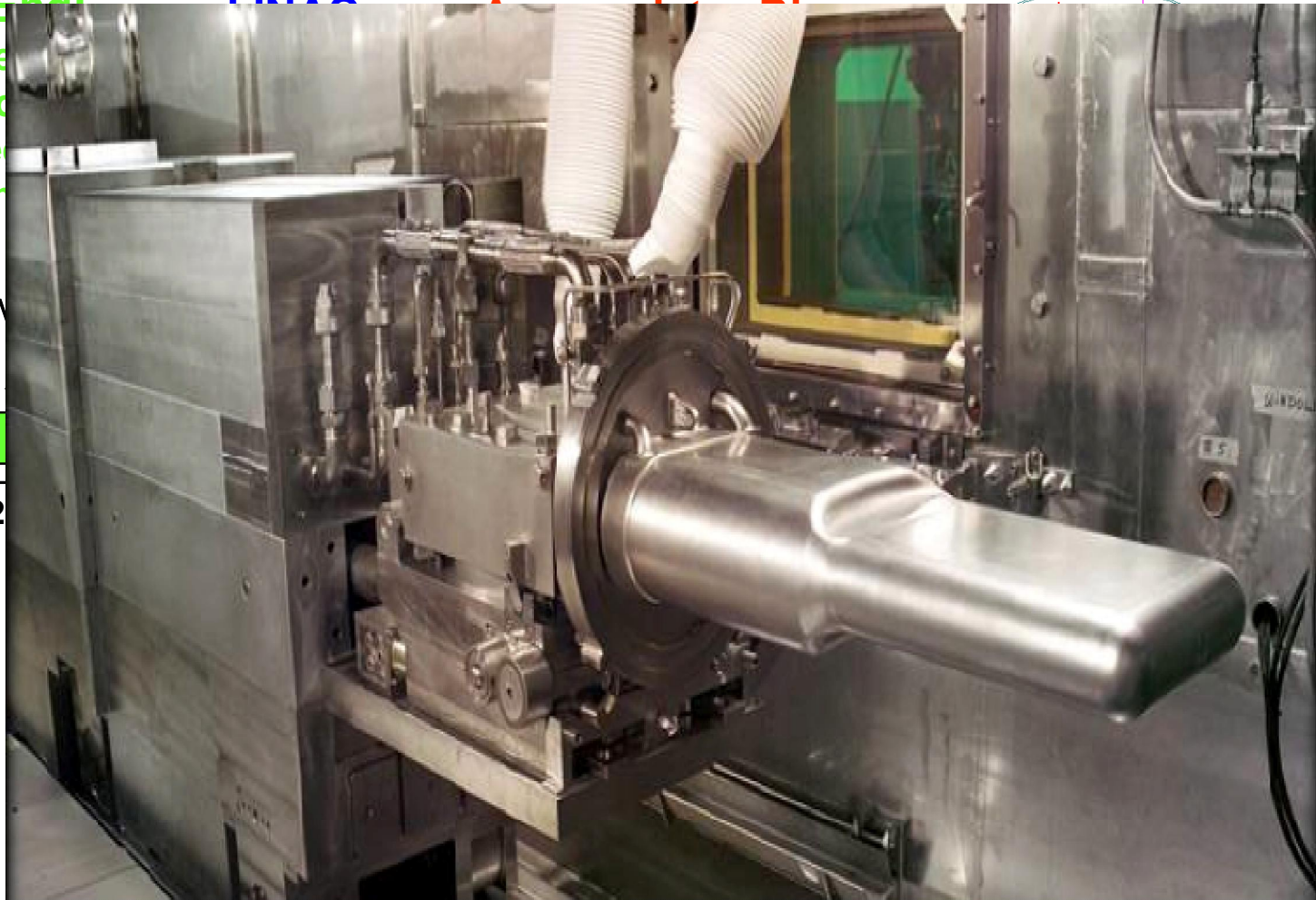
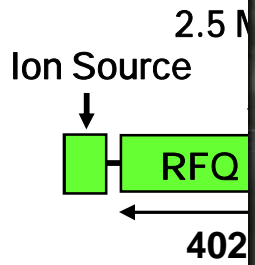


SNS Accelerator Complex

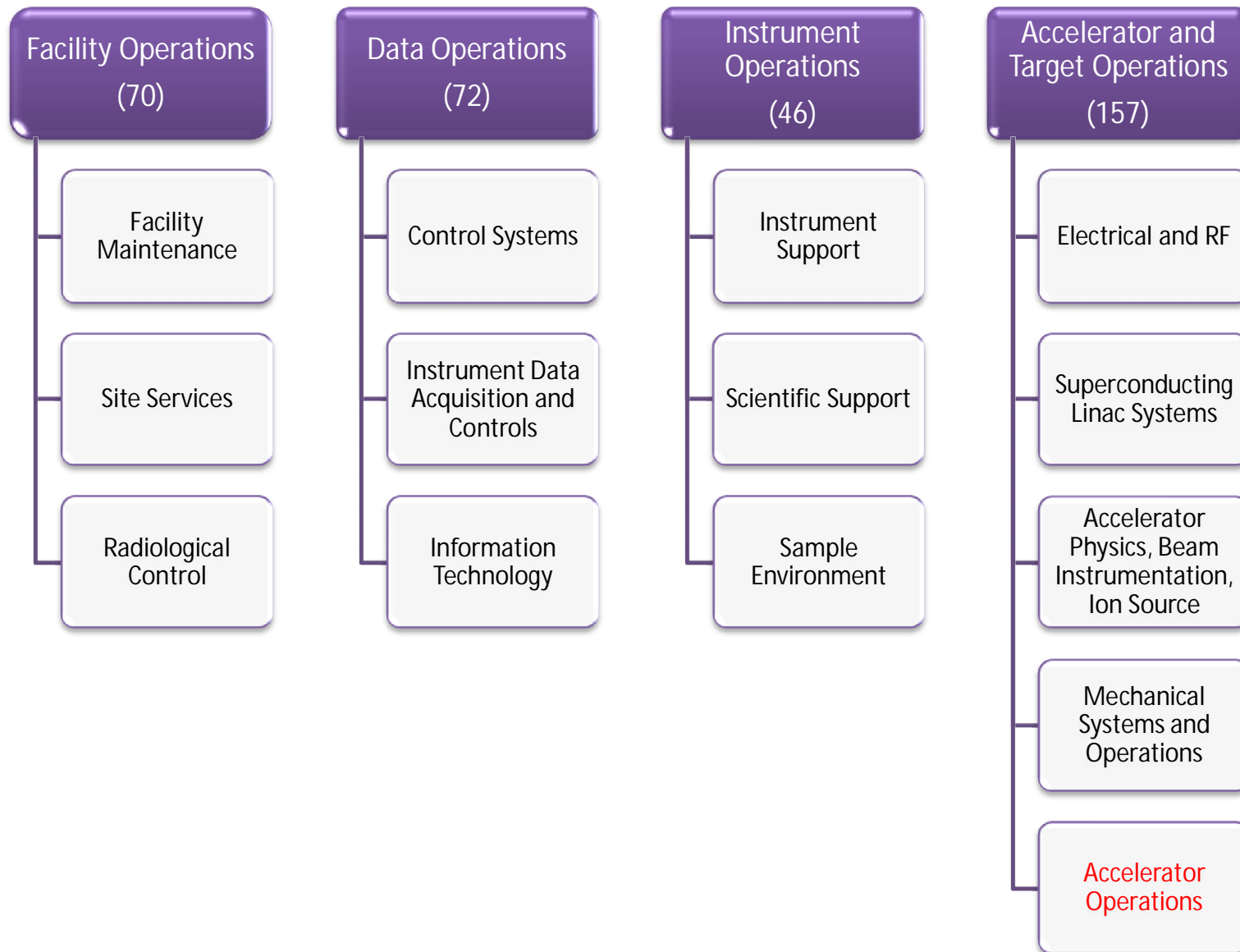


SNS Accelerator Complex

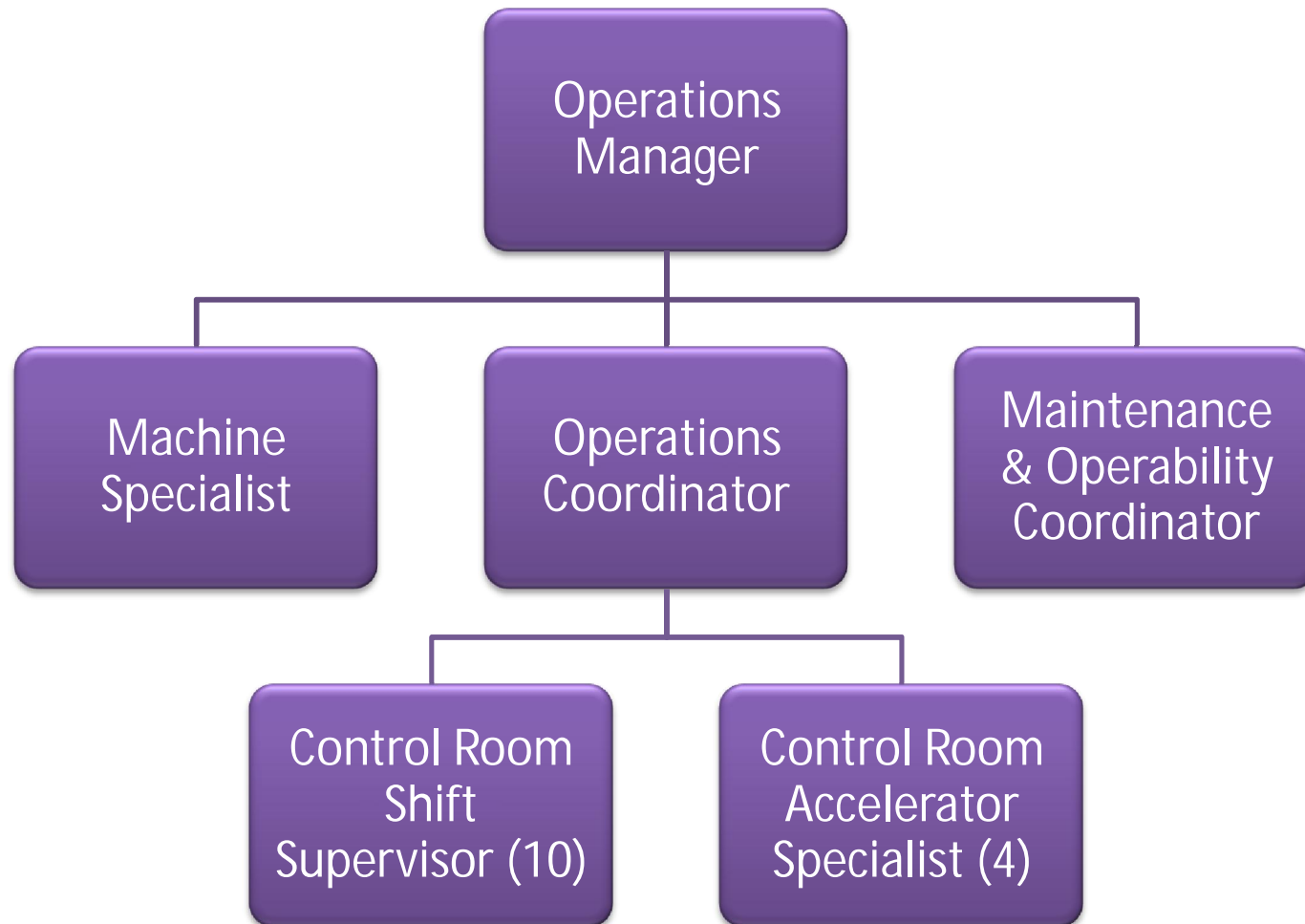
Front-End
Produce
msec lo
chopper
bear



Research Accelerator Division (~370)



Accelerator Operations Group (18)



Shift Schedules

Accelerator Operations personnel

	M	T	W	Th	F	Sa	Su	M	T	W	Th	F	Sa	Su	M	T	W	Th	F	Sa	Su	M	T	W	Th	F	Sa	Su					
CRSS		N	n			N	n	N			N	n				D	d			D	d	D			D	d	T	T	T	T			
CRSS		n	N			n	N	n			n	N				d	D			d	D	d			d	D	T	T	T	T			
CRAS		n	n			n	n	n			n	n				d	d			d	d	d			d	d	T	T	T	T			
CRSS	T	T	T	T					N	n			N	n	N				N	n			D	d			D	d					
CRSS	T	T	T	T					n	N			n	N	n				n	N			d	D			d	D					
CRAS	T	T	T	T					n	n			n	n	n				n	n			d	d			d	d					
CRSS	D			D	d			T	T	T	T				N	n			N	n	N			N	n			D	d				
CRSS	d			d	D			T	T	T	T				n	N			n	N	n			n	N			d	D				
CRAS	d			d	d			T	T	T	T				n	n			n	n	n			n	n			d	d				
CRSS		D	d			D	d	D			D	d			T	T	T	T					N	n			N	n					
CRSS		d	D			d	D	d			d	D			T	T	T	T					n	N			n	N					
CRAS		d	d			d	d	d			d	d			T	T	T	T					n	n			n	n					
CRSS	N			n	N				D	d			D	d	D				D	d			T	T	T	T			n	N			
CRSS	n			N	n				d	D			d	D	d				d	D			T	T	T	T			N	n			
CRAS	n			n	n				d	d			d	d	d				d	d			T	T	T	T			n	n			

CRSS - Control Room Shift Supervisor

CRAS - Control Room Accelerator Specialist

D - Day shift chief

N - Night shift chief

T - Training (8h)

12 - hour shifts

D - 0600-1820

N - 1800-0620

Additional on-shift support personnel

	M	T	W	Th	F	Sa	Su	M	T	W	Th	F	Sa	Su	M	T	W	Th	F	Sa	Su	M	T	W	Th	F	Sa	Su
1	D	D	D	D							N	N	N	N					D	D	D	D	D	D				
2					D	D	D	D	D	D					D	D	D	D							N	N	N	N
3	N	N	N	N							D	D	D	D					N	N	N	N	N	N				
4					N	N	N	N	N	N					N	N	N	N							D	D	D	D

RCT - Radiological Control Technician

OST - Operations Shift Technician

IHC - Instrument Hall Coordinator

12 - hour shifts

D - 0630-1900

N - 1830-0700

How are we doing?

