

Accelerator Advisory Committee

Ronald A. Crone, ISDD Director
May 7, 2013





Ronald A. Crone Research Reactors Division Director

Nuclear Engineer

Davis-Besse Nuclear Power Station

Yankee Rowe Nuclear Power Station

High Flux Isotope Reactor – 21 years

ISDD – January 2013



ISDD Mission

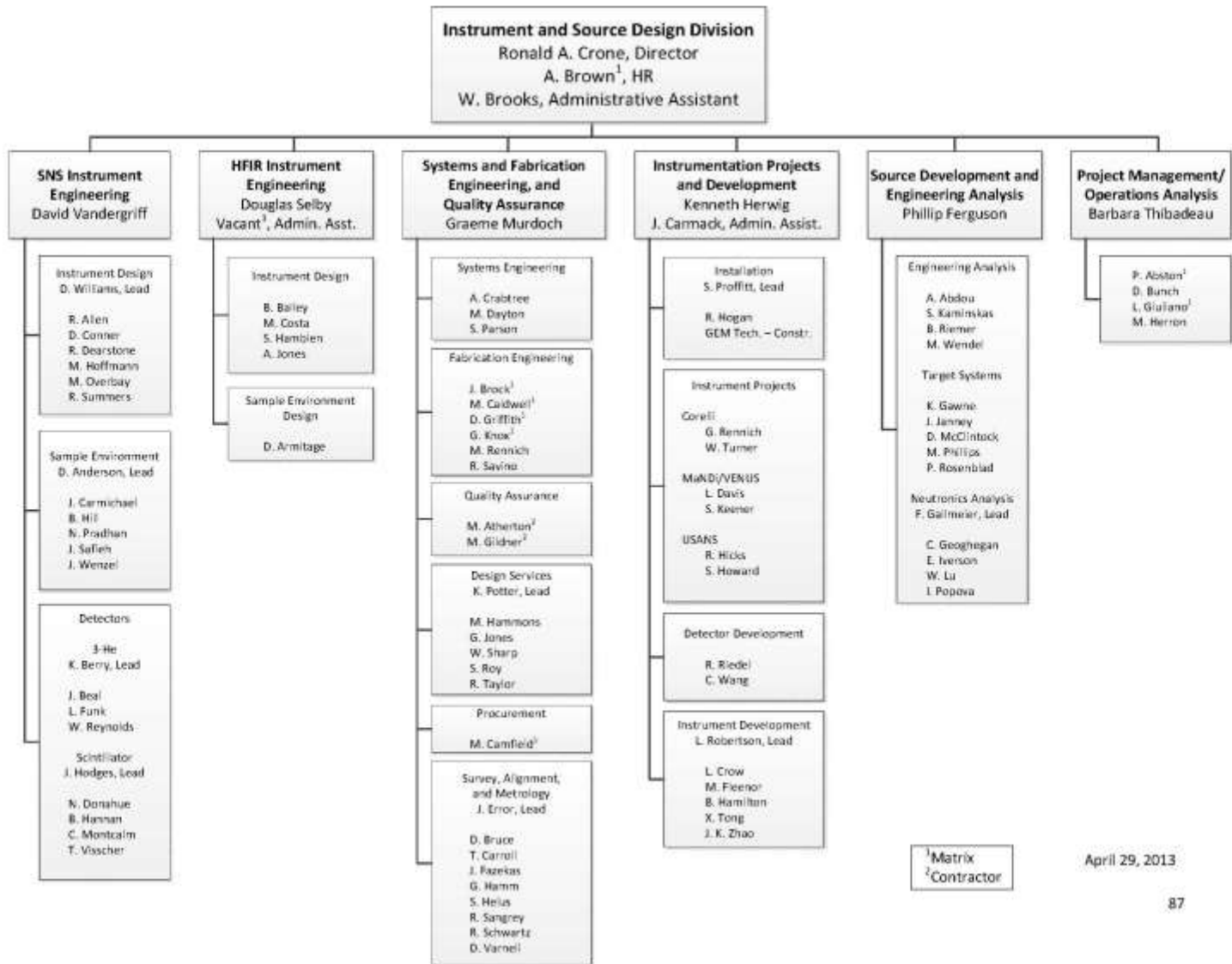
- *Improve HFIR/SNS Source Performance, Neutron Scattering Instruments, and Scientific Output*



High Flux Isotope Reactor

Spallation Neutron Source

ISDD Organization



SNS & HFIR Instrument Engineering



SNS Instrument Engineering David Vandergriff

Instrument Design D. Williams, Lead

R. Allen
D. Conner
R. Dearstone
M. Hoffmann
M. Overbay
R. Summers

Sample Environment D. Anderson, Lead

J. Carmichael
B. Hill
N. Pradhan
J. Safieh
J. Wenzel

Detectors

³-He
K. Berry, Lead

J. Beal
L. Funk
W. Reynolds

Scintillator J. Hodges, Lead

N. Donahue
B. Hannan
C. Montcalm
T. Visscher

HFIR Instrument Engineering Douglas Selby Vacant¹, Admin. Asst.

Instrument Design

B. Bailey
M. Costa
S. Hambien
A. Jones

Sample Environment Design

D. Armistage

Introducing a systems approach to instruments

Integrated work flow

Improving Configuration Management (instruments, detectors, sample environment, data)

***GOAL: Better integration of Operations, Engineering, and Science to
IMPROVE INSTRUMENT OUTPUT***

Systems and Fabrication Engineering, and Quality Assurance



Systems and Fabrication Engineering, and Quality Assurance
Graeme Murdoch

Systems Engineering

A. Crabtree
M. Dayton
S. Parson

Fabrication Engineering

J. Brock¹
M. Caldwell¹
D. Griffith¹
G. Knox¹
M. Remick
R. Savino

Quality Assurance

M. Atherton¹
M. Glidier²

Design Services

K. Potter, Lead

M. Hammons
G. Jones
W. Sharp
S. Roy
R. Taylor

Procurement

M. Camfield¹

Survey, Alignment, and Metrology

J. Error, Lead

D. Bruce
T. Carnell
J. Fazelan
G. Hamm
S. Helus
R. Sangrey
R. Schwartz
D. Varrell

Systems engineering, survey and alignment support to accelerator

Design support for instruments

Fabrication and QA for instruments and accelerator

GOAL: Fabricate perfect & provide high quality technical support for SNS

Instrument Projects & Development



Instrumentation Projects
and Development
Kenneth Herwig
J. Carmack, Admin. Assist.

Installation
S. Proffit, Lead

R. Hogan
GEM Tech. - Constr.

Instrument Projects

Corell
G. Rensch
W. Turner

MaNDI/VENUS
L. Davis
S. Keener

USANS
R. Hicks
S. Howard

Detector Development

R. Rieder
C. Wang

Instrument Development
L. Robertson, Lead

L. Crow
M. Feenor
B. Hamilton
X. Tong
J. K. Zhao

Instrument development that aligns with science strategy

Technical oversight of instrument projects

GOAL: Deliver development & design projects that make SNS & HFIR world's best facilities for scattering



Source Development & Engineering Analysis

Source Development and
Engineering Analysis
Phillip Ferguson

Engineering Analysis

A. Abdou
S. Kaminski
B. Kiener
M. Wendel

Target Systems

K. Gawne
J. Jimmy
D. McClintock
M. Phillips
P. Rosenblad

Neutronics Analysis
F. Galmeier, Lead

C. Georghagan
E. Iverson
W. Lu
I. Popova

Engineering and neutronics analysis of accelerator, reactor, and instrument systems

Technical and design support for target systems

GOAL: OPTIMIZE source performance to improve scientific output



Project Management/
Operations Analysis
Barbara Thibadeau

F. Abston¹
D. Burch
L. Giuliano¹
M. Herron

Project Management/Operations Analysis

Project management to meet DOE O 413

Operations systems development (procedures, training, budget, assessment, reporting)

GOAL: Implement project and operations management systems which improve efficiency & effectiveness of NScD

Questions?

