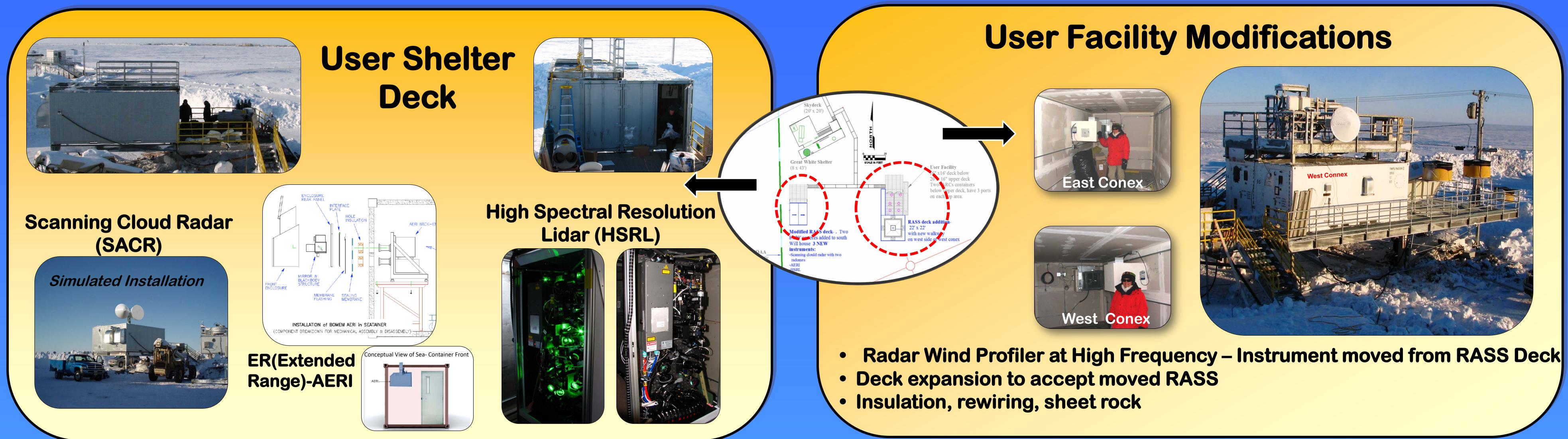


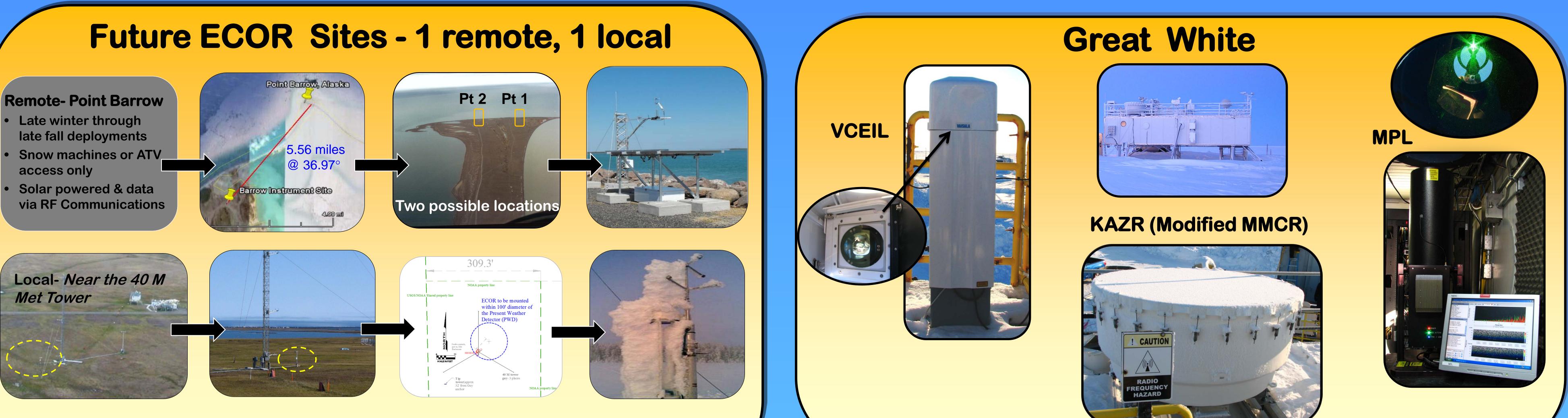
# **ARRA Upgrades on the North Slope of Alaska - Barrow**



### Mark Ivey<sup>1</sup>, Jeff Zirzow<sup>1</sup>, Fred Helsel<sup>1</sup>, Valerie Sparks<sup>1</sup>, Johannes Verlinde<sup>2</sup>, Scott Richardson<sup>2</sup>, Martin Stuefer<sup>3</sup>, Jessica Cherry<sup>3</sup>,

<sup>(1)</sup> Sandia National Laboratories, <sup>(2)</sup> Pennsylvania State University, <sup>(3)</sup> University of Alaska Fairbanks





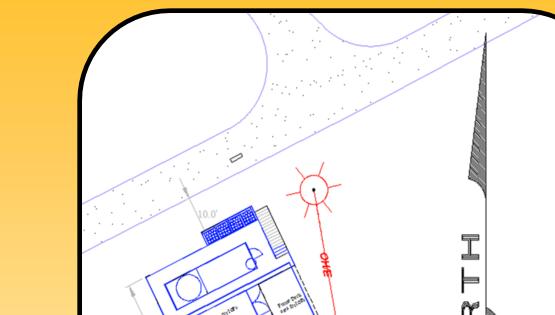


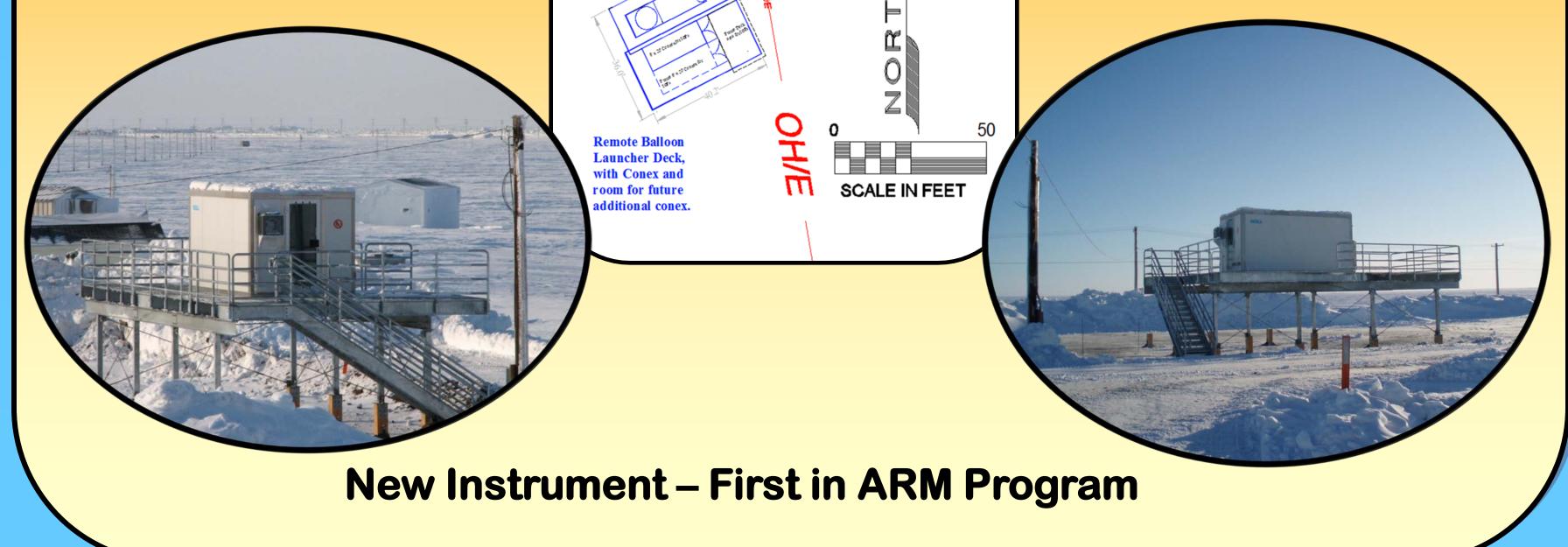
## **Barrow Arctic Research Center (BARC)**

Unit to be mounted on top of **BARC** Mezzanine



### **Remote Balloon Launcher**









### Instrument X-band Scanning ARM **Precipitation Radar (XSAPR)**

Sandia is a multiprogram laboratory operated by Sandia Corporation, a Lockheed Martin Company, for the United States Department of Energy's National Nuclear Security Administration under contract DE-AC04-94AL85000. National Nuclear Security Administration

