
NASA/Richard (Rick) M. Davis
Assistant Director for Science and Exploration
Co-Lead Mars Human Landing Sites Study

May 23, 2017
Exploration Zone Layout

Science ROI’s

Exploration Zone
-- 200 km diameter
-- Semi-Permanent Research Station

Habitation Zone

ROI = Regions of Interest

Resource ROI

Science ROI

Science ROI’s

Resource ROI
Field Station Analog-McMurdo, Antarctica

**Emplacement**

British National Antarctic Expedition 1902
R.F. Scott's “winter quarters hut” - Used for both local scientific research and as a logistical base for traverses inland.

**Consolidation**

Permanent occupation - 1955
Naval Air Facility McMurdo - Part of “Operation Deep Freeze” to support the International Geophysical Year; included a collection of semi-permanent structures (e.g., tents, Jamesway huts).

**Utilization**

McMurdo Station Today
Antarctica's largest community and a functional, modern-day science station, including a harbour, three airfields (two seasonal), a heliport, and more than 100 permanent buildings.
Potential Exploration Zones for Human Missions to the Surface of Mars

Prepared By: Lindsey Hayes, Mars Program Office
lhayes@gsfc.nasa.gov

version 12 October 16, 2015
Possible Approaches Based on Analogs

Human Exploration Zone (HEZ): Area of human surface operations

How much contamination could be allowed to reach this limit within TBD time?

Average Mars: Lower contamination permitted

LRZ: Less Restrictive Zone
SR: Special Region