



GrIT  
Overview

April 5, 2012  
Polar  
Technology  
Conference

Fairlee, Vt

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# History

## Camp Century

- Army Research Camp
- Occupied from 1959 to 1966
- Supplies traversed using special “Stretch” D8’s
- CRREL

## GrIT

- Started because we wanted to move a tractor to Summit
- First attempt 2008
- One way in 2010
- 2011 first round trip

- Each trip called a “Swing”

- Emissions are the main driver



# Vision

The Greenland Inland Traverse (GrIT) will provide a multipurpose, flexible and scalable platform which will serve to deliver fuel, cargo and equipment to any operations or research locations on the Greenland Ice Sheet and to support mobile scientific experiments and data collection. GrIT will operate in a safe, low environmental impact, timely and reliable manner.

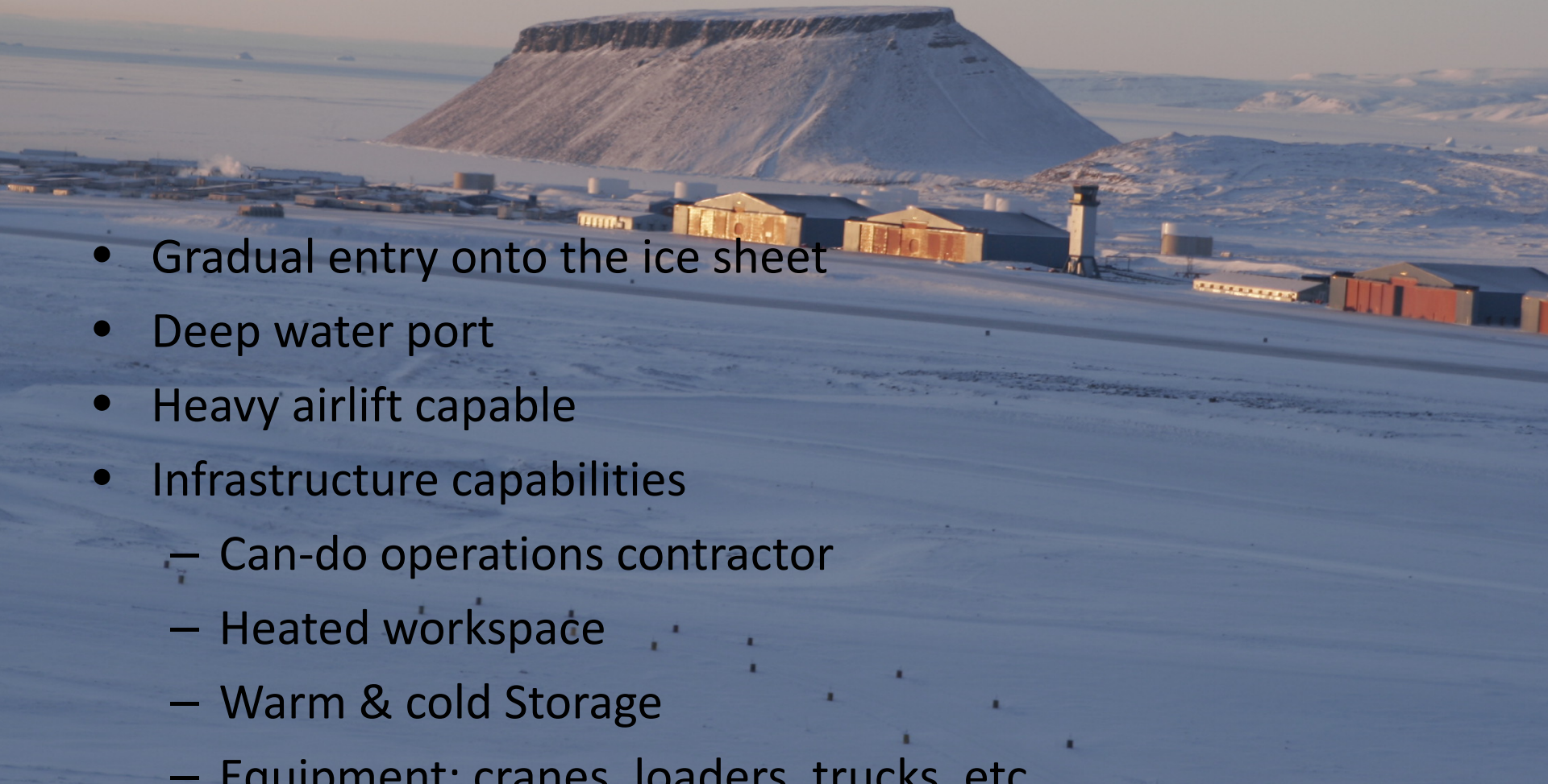


# Why Drive?

- Orders of Magnitude Lower Emissions
- Ability to move oversized cargo
- Ability to move overweight cargo
- Can be more cost effective than aircraft in certain scenarios

# Thule's got it goin' on

- Gradual entry onto the ice sheet
- Deep water port
- Heavy airlift capable
- Infrastructure capabilities
  - Can-do operations contractor
  - Heated workspace
  - Warm & cold Storage
  - Equipment: cranes loaders trucks etc



# The Route

- 734 miles one way
- 60 miles of crevassed terrain
- Up, down and side hills
- Soft snow



# The Fleet

- 2 Case Quadtrac
- 1 Case Magnum 335
- 1 Tucker Sno Cat
- 1 Kassbohrer Pisten Bully
- 4 bed Crew Quarters
- 4 Crew members
- 5 cargo decks
- 12 HMW sleds
- 3 Spreaders
- 48,000 gal capacity

2 new Quadtrac's coming in 2013



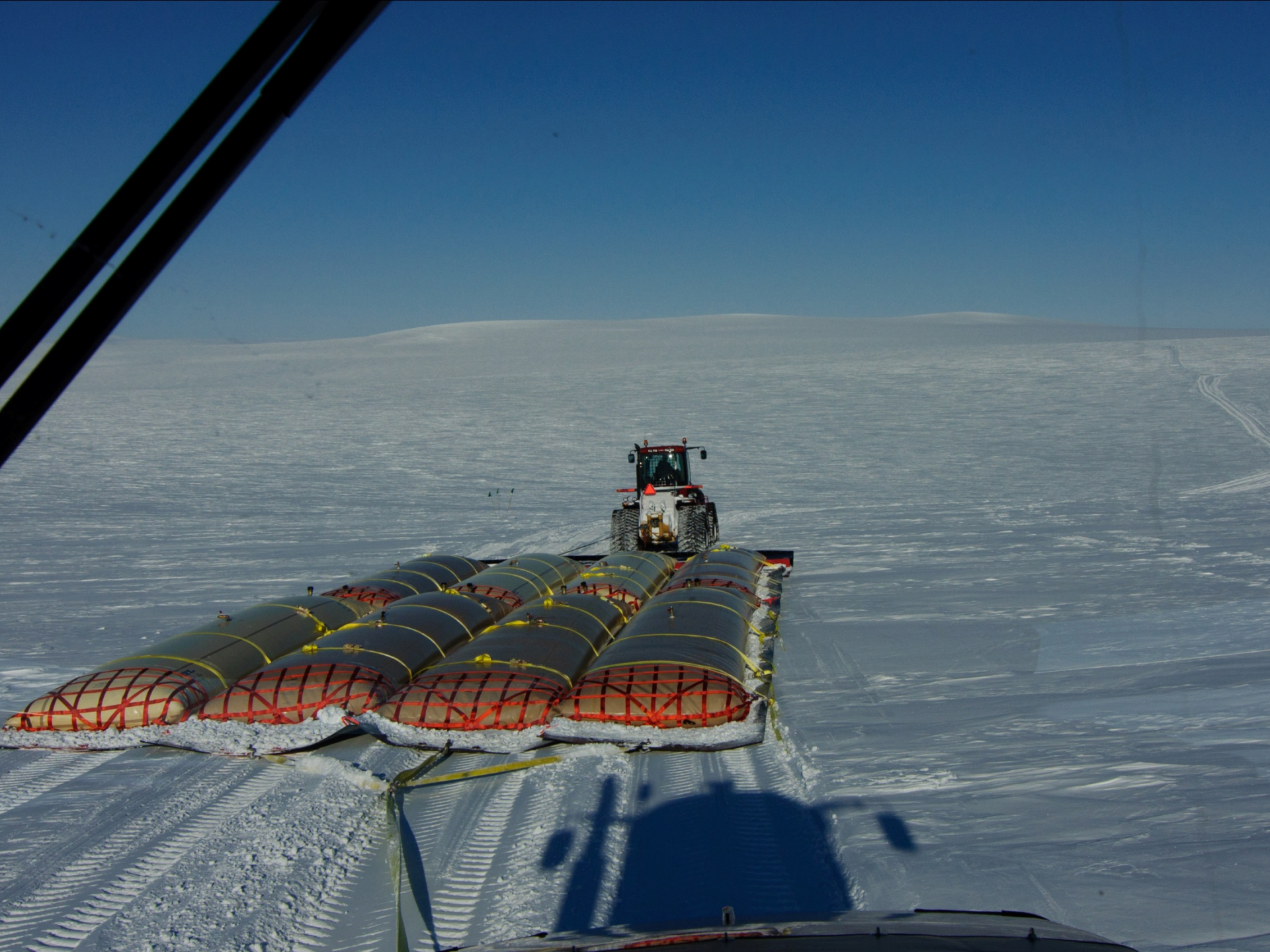
# 2011 Season in Review

- 0 recordable injuries
- 186,548 lbs of fuel delivered (27,036 gallons)
- 7000 lbs cargo delivered to Summit
- First complete round trip since inception
- 14,783 gallons consumed by 4 machines
- Average miles/ day: 42
- Top mileage in a day: 83
- Average speed: 5-7 mph

















Gotcha!





2013: Better, We Think...







03/27/2012

# Technology Improvements



# Challenges

- Transporting rigid cargo
- Plastic sled breakage
- Bladder reliability
- Trimming operational costs
- Pesky and unpredictable crevasse zone





# What's Next?

- Large cargo such as:
  - Mobile camps
  - AWO
  - Telescopes
  - Wind Turbines
  - Vehicles (cranes, etc)
- More on board science

Thanks!

