



# Avalanche Search and Recovery

February 5-11, 2015

- Air Rescue Component
- Technical Ground Rescue Component
- Avalanche Rescue Component





Parks  
Canada

Parcs  
Canada

Canada

# Polar Circus Ice Climb

- Located in a remote part of Banff National Park in the Canadian Rocky Mountains.
- 700-metre (9-pitch) ice climb.
- Significant avalanche terrain both on and above the route.



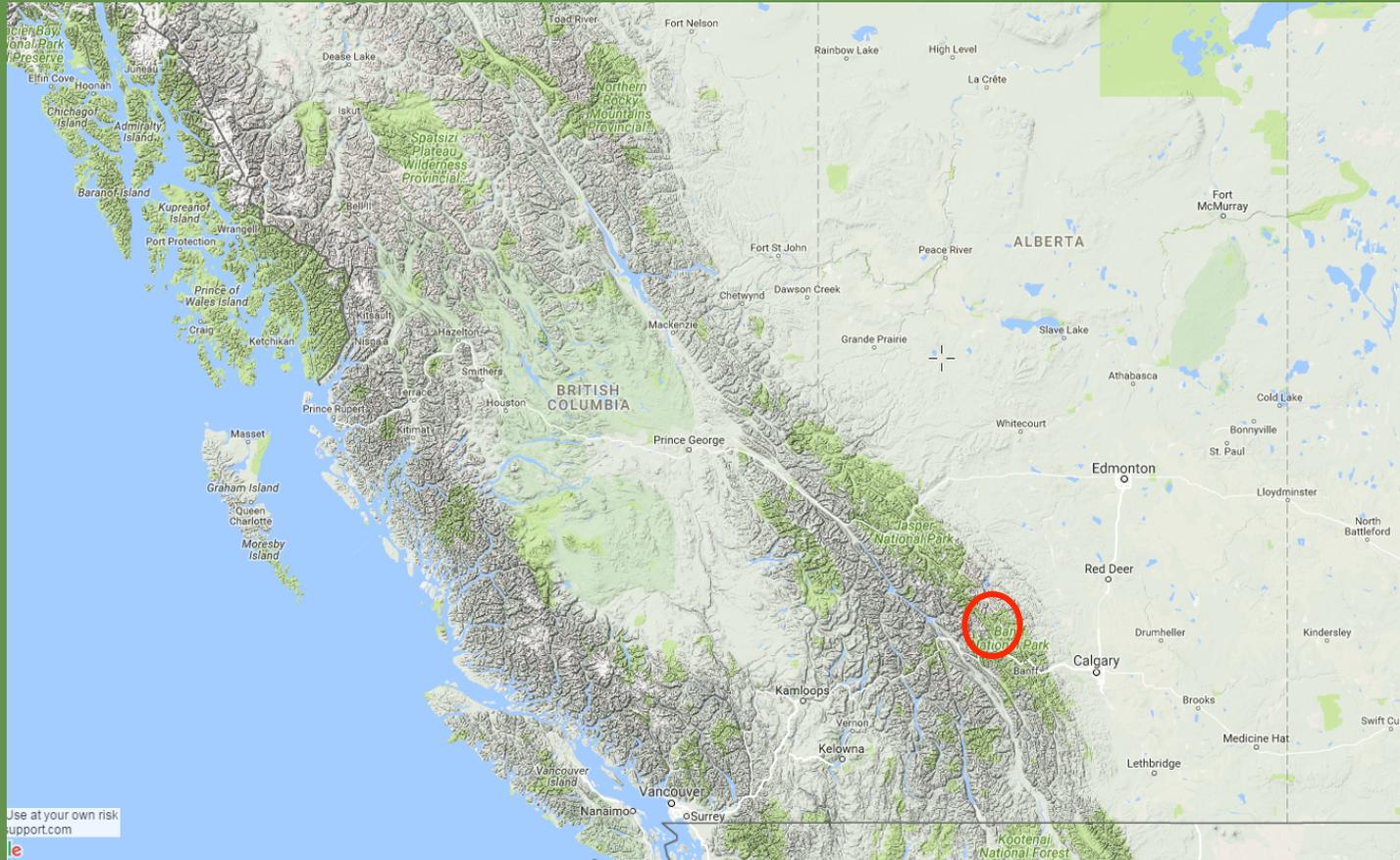


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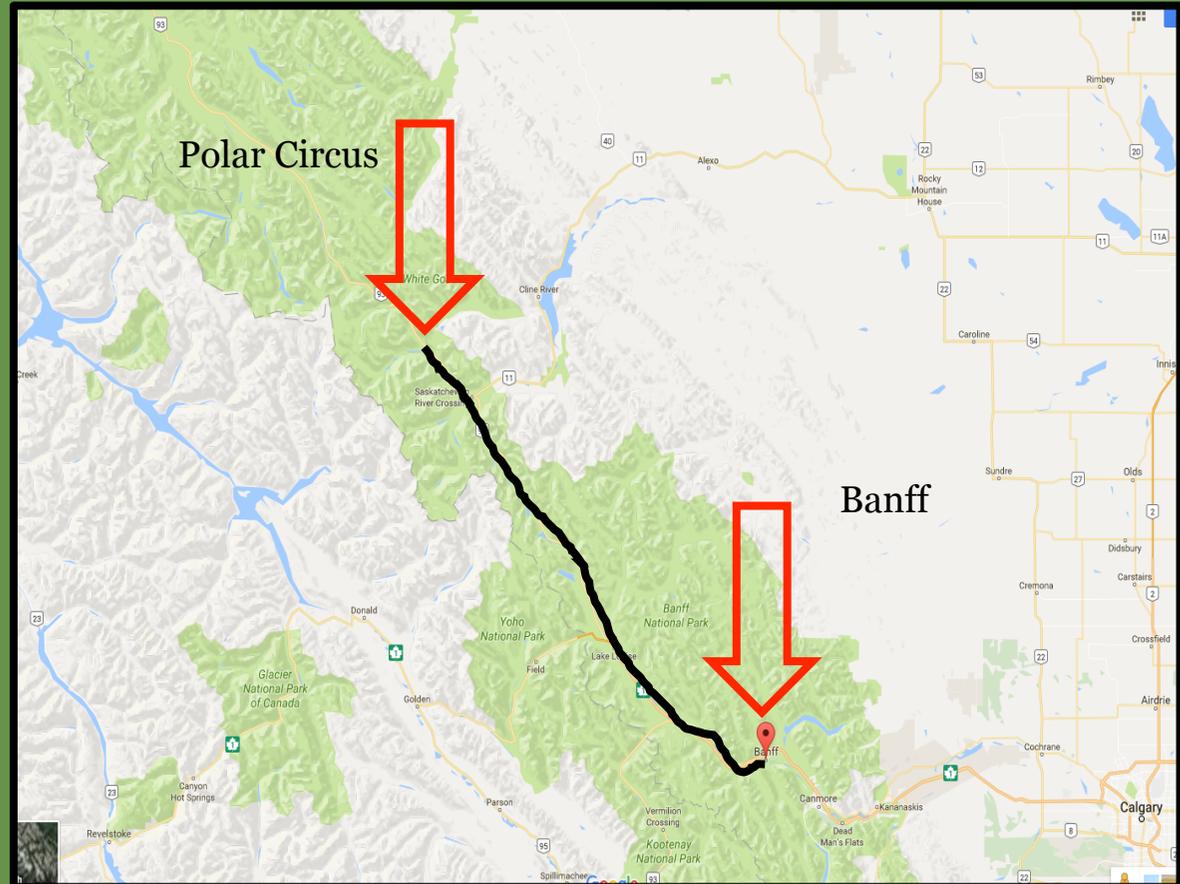




## Polar Circus Ice Climb (Location)

Distance from Banff:

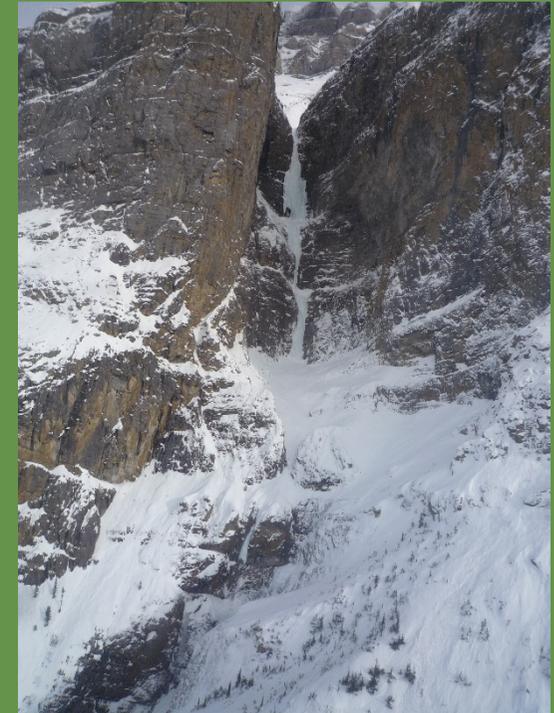
- 150 kilometres
- 2-hour drive
- 40-minute flight





# Polar Circus

- 9 pitches, grade 5 ice climb
- 700 metres long
- Significant exposure to avalanche terrain





# Avalanche Terrain Above the Route

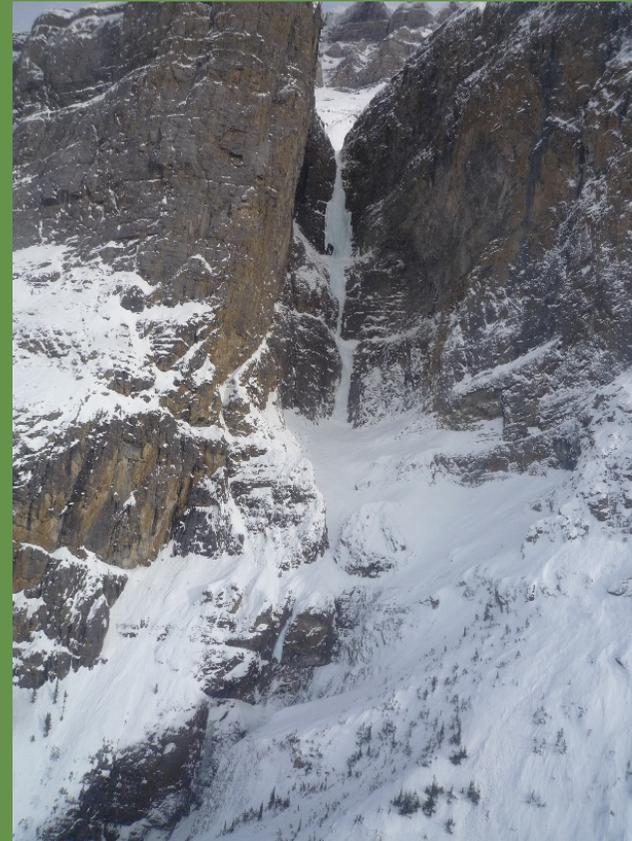




# Timeline of Events

## Day 1 (Feb.5, 2015)

- Accident occurred around 5:00 p.m.
- Parks Canada SAR staff notified at 11:30 p.m.
- Significant snowstorm began in late evening.





# Timeline of Events

## Day 2 (Feb. 6, 2015)

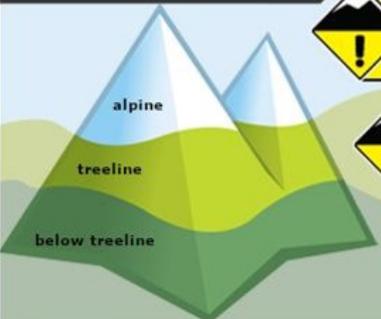
- Storm continued. Avalanche hazard rated High.
- A helicopter search was conducted in bad weather. No surface clues were located.
- Victim determined to be deceased.

**Avalanche Bulletin - Banff, Yoho and Kootenay National Parks** [CS]  
Issued Wed Feb 04, 2015 17:00 Valid Until Thu Feb 05, 2015 17:00

*“The great conditions will continue until mid-day Thursday, but then it all changes. An avalanche cycle will be in full force by Friday with up to 40 cm expected, freezing levels to 2000m and winds exceeding 110 km/hr. Head for the trees!”*

Public Avalanche Forecast Forecast Details

**Danger Ratings: Thursday**



- 2 - Moderate** (Yellow background)  
Heightened avalanche conditions on specific terrain features. Evaluate snow and terrain carefully; identify features of concern.
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- 1 - Low** (Green background)  
Generally safe avalanche conditions. Watch for unstable snow on isolated terrain features.

Forecast	Friday	Saturday
alpine	4 - High	4 - High
treeline	4 - High	4 - High
below treeline	3 - Considerable	3 - Considerable

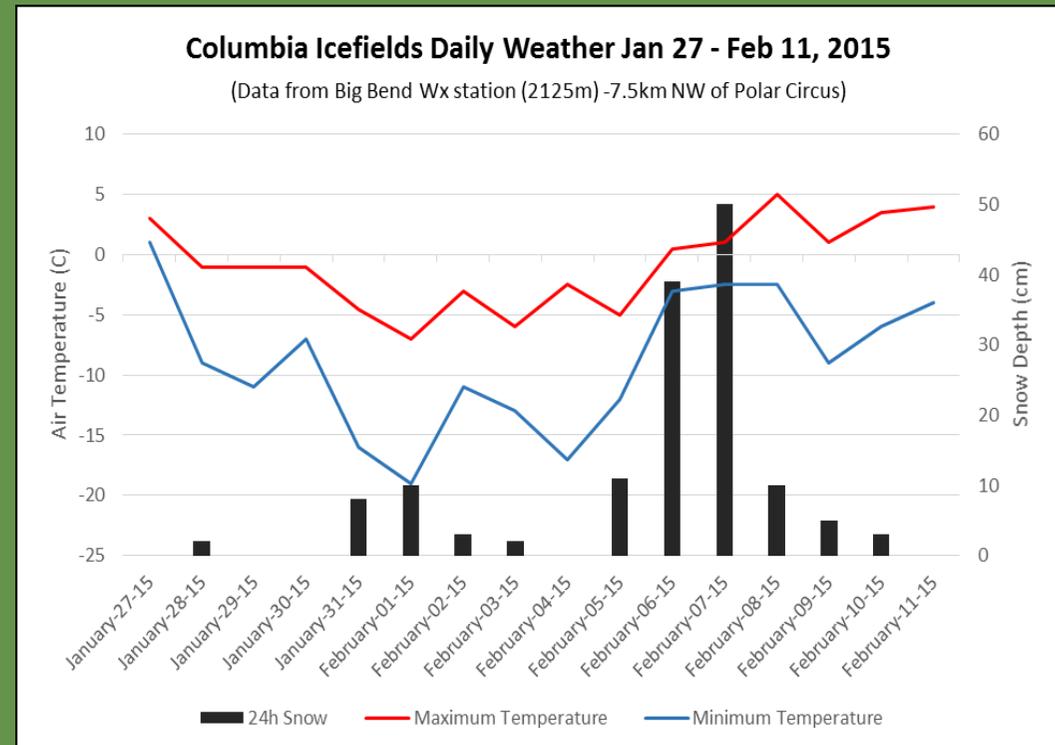
**Confidence:** Fair - Intensity of incoming weather systems is uncertain on Friday



# Timeline of Events

## Day 3 (Feb. 7, 2015)

- Storm continued. Over a metre of new snow had fallen.
- When weather permitted, avalanche control was conducted on and above route.

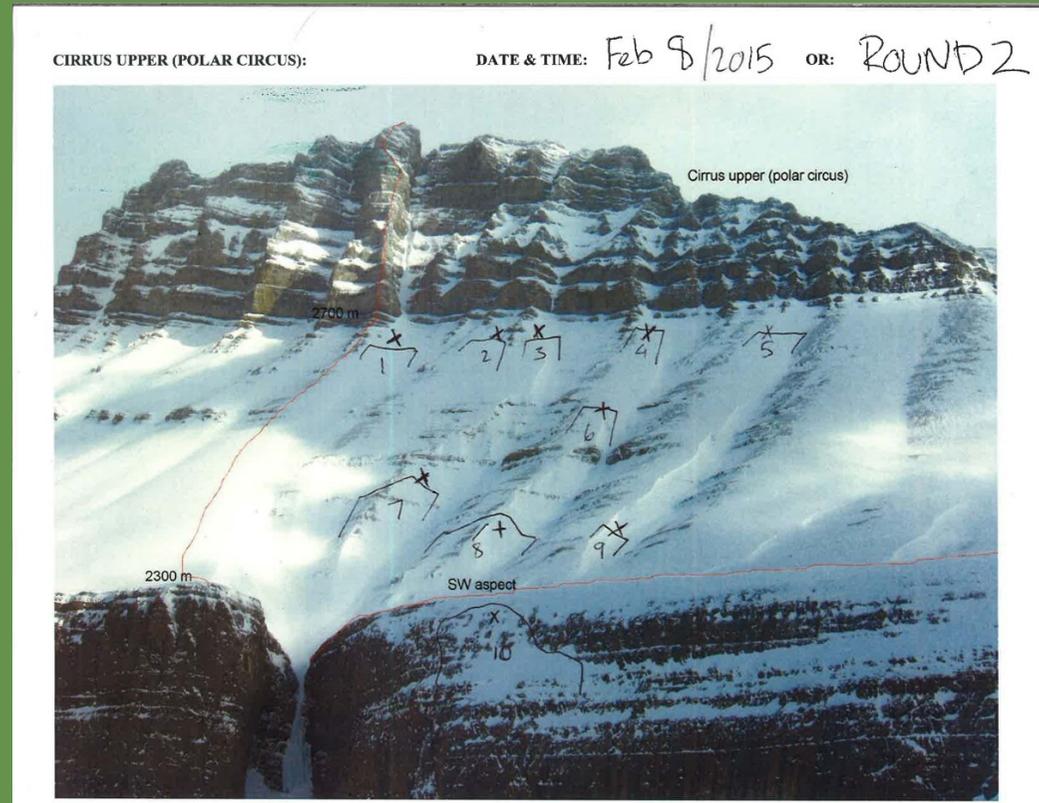




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## Day 4 (Feb. 8, 2015)

- Continued avalanche control.
- 43 explosives deployed.
- Accident site reburied 14 times by avalanches up to size 3.





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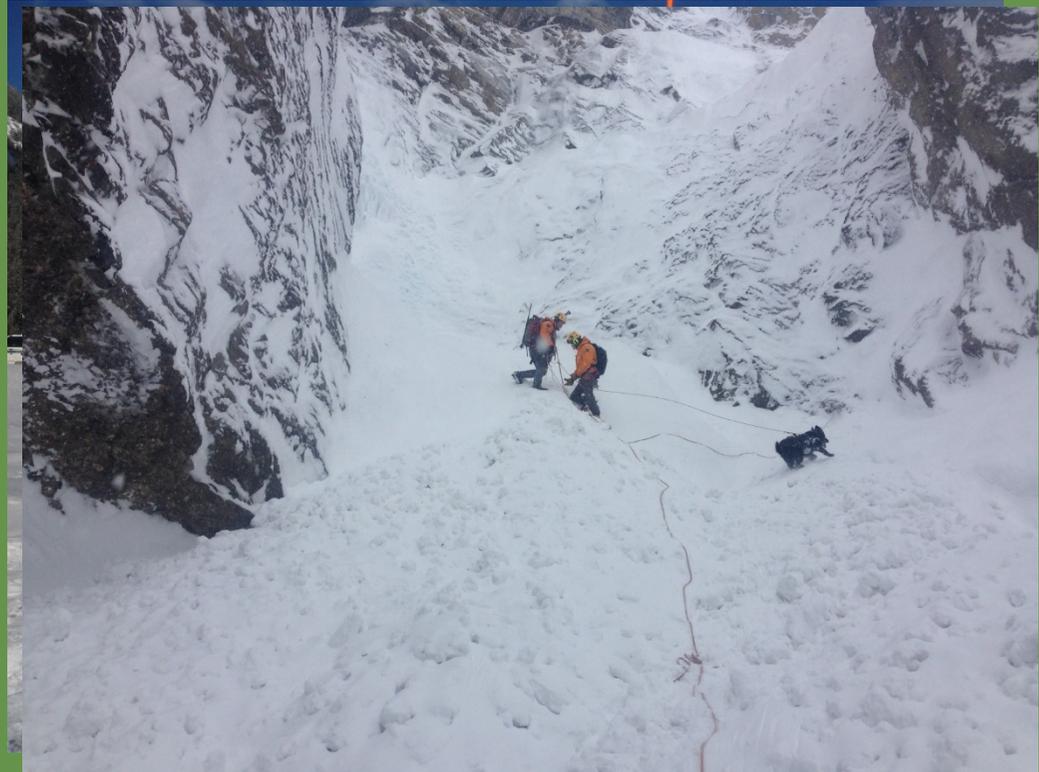




# Timeline of Events

## Day 5 (Feb. 9, 2015)

- Searchers (including 2 dogs) were slung into site.
- Exposed terrain dictated that in some cases searchers had to be put on belay.
- Late in day, a faint Recco signal was detected 200 metres below initial avalanche.





# Timeline of Events

## Day 6 (Feb. 10, 2015)

- Dog put into area where Recco signal found. Dog gave very faint indication.
- Probing located body 2.8 metres below surface.





Recco reflected off the circuitry of a Mammut headlamp in victim's pack buried 2.8 metres.





In summary, this was a difficult and time-consuming recovery in technical and very high-risk terrain.

Questions that arose as a result of this rescue:

1. How much risk do rescuers accept for a rescue, or in this case, a body recovery?
2. How much time and money does an organization spend on a body recovery?
3. Why are ice climbers not taking avalanche self-rescue gear while on ice climbs like Polar Circus?

