

2016 South Cooking Lake Aircraft Crash and Water Rescue

After Action Report & Plan

Iain Bushell
Fire Chief & Director

Agenda

- SCES preparation for this incident
- Incident overview
- After Action Report overview
- Strengths
- Areas of improvement
- Recommendations



Preparation for this Incident

SCES has had a dedicated Water Rescue Team in place since 2006. Team members must maintain numerous credentials including:

- Advanced swift and static water rescue technician
- Rope rescue technician
- Advanced ice rescue technician
- Watercraft operators license
- Bronze Cross lifeguard certification



The Team meets to conduct training, at a minimum, once a month on an annual basis and often participates in collaborative training with other rescue teams in the Capital Region.

Preparation for this Incident

SCES employs numerous rescue techniques and pieces of equipment to conduct water rescues. There are the two primary pieces of equipment: the airboat and the rapid deployment crafts (RDC).

The Water Rescue Team conducted a training evolution on Cooking Lake on April 4, 2016. At that time they launched the RDC and tested a new (recently acquired) transom and motor. The Team was able to maneuver the craft in the shallow water. At the time the Team had no reason to believe that access to the lake or lake conditions would present a significant challenge in the foreseeable future.

The following is an excerpt of the pre-plan prepared for Cooking Lake:



Cooking Lake Pre-Plan – identified access points

1. South Cooking Lake Airport – best access – Range Rd 221 and Twp Rd 514
2. Cooking Lake Sailing Club – Range Rd 220 North of Hwy 14
3. Range Rd 214 North of Hwy 14 – open field – no shelter
4. Twp Rd 513A and Range Rd 211 – do not use – pending maintenance of road. Good for winter boat access if lots of snow
5. Range Rd 213 South of Twp 520 – do not use – pending maintenance of road.
6. 51521 Range Rd 214 – private property – get permission from home owner. Best access to northeast corner of the lake

June 28, 2016 Incident Overview

- On the morning of June 28, 2016 a single engine Cessna float plane (using wheels) took off from Cooking Lake Airport
- Shortly after takeoff the Pilot experienced difficulties which ultimately led to a failed water landing on South Cooking Lake
- The plane ended up nose down/tail up inverted in the shallow water and the Pilot was able to extricate himself from the aircraft
- Emergency crews from SCES and the Strathcona detachment of the RCMP responded to the incident
- Members of the public independently attempted to assist with the rescue effort
- The Water Rescue Team encountered difficult conditions
- The time from 911 call to the rescue of the Pilot was 4 hours and 21 minutes

Incident Details

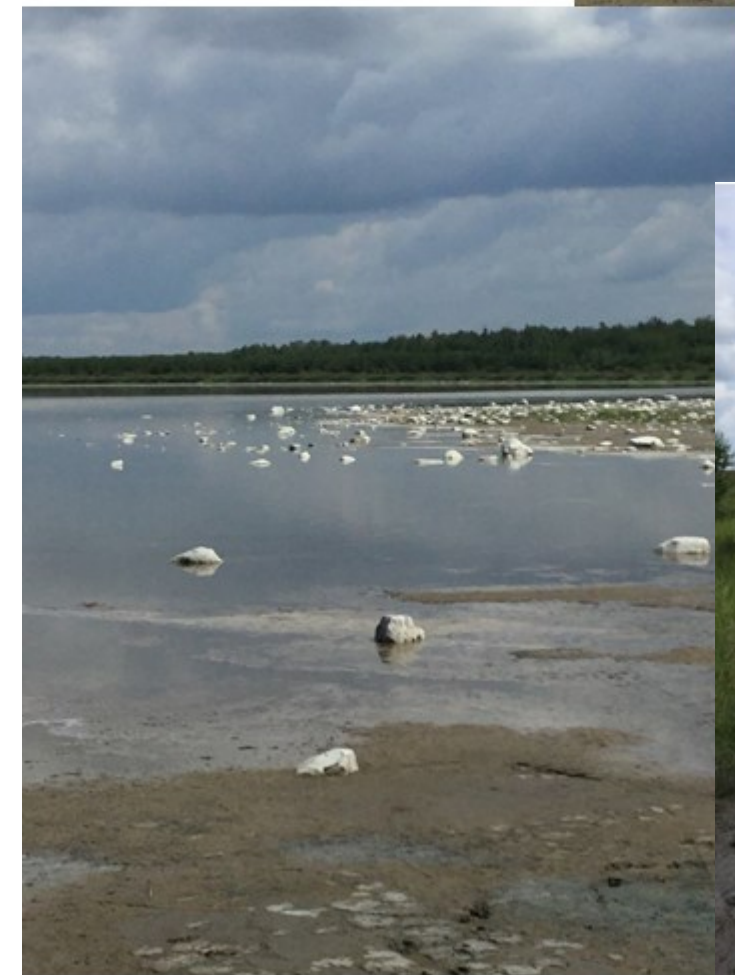
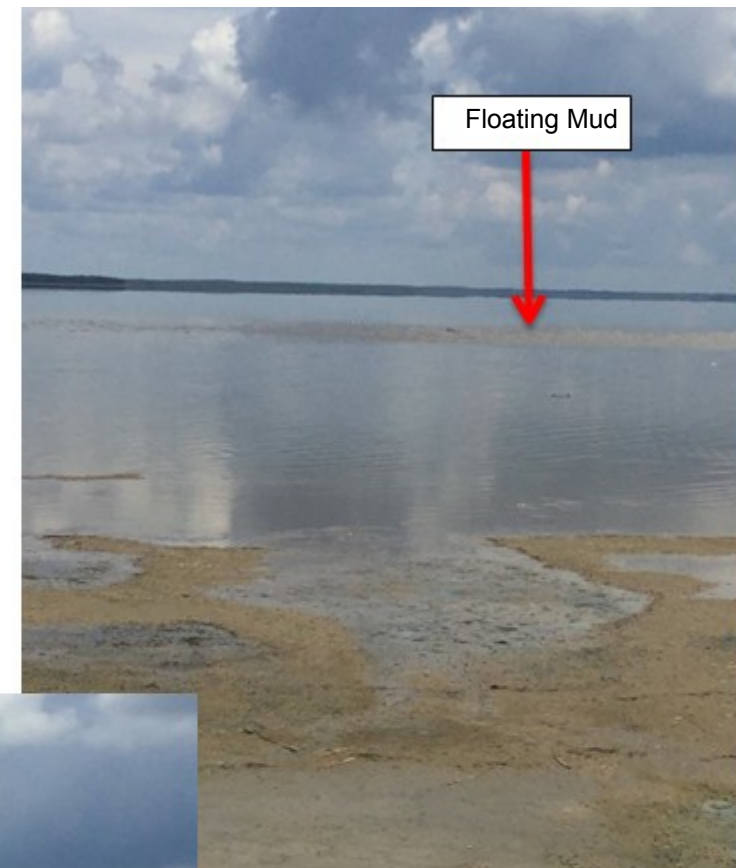
0945 hours	Initial 911 call from a South Cooking Lake resident on RR214
0950 hours	Platoon Chief, Squad 1, Engine 2, Ambulance, and RCMP dispatched
0950 hours	Water Rescue Team (special operations truck and airboat) is paged
0953 hours	First contact between RCMP and Canadian Forces Joint Rescue Coordination Centre (JRCC)
1022 hours	Squad 1 arrives at 911 caller's location
1102 hours	JRCC was advised that airboat launch was in progress
1109 hours	First airboat launch attempt
1406 hours	Patient transported by ambulance to Strathcona Community Hospital

After Action Report Overview

Challenges:

The initial 911 report of the plane's distance from shore was incorrect, indicating 200m, when it was closer to 1000m from the nearest shoreline.

Four launch sites all had varying degrees of difficulty which created inaccessible pathways to launch the airboat, due to mud and ruts.



After Action Report Overview

Launch docks were hampered by muddy shores. There was up to two feet deep of a sludgy mud which took on a thick consistency, and made moving through the area extremely slow. A significant amount of energy was expended.

Once on the lake, the RDC (yellow inflatable) was hampered by pockets of floating mud. Much of the lake was too shallow for the RDC to float with its crew.

Rocky shorelines precluded many areas along the shore from becoming launch sites for the airboats.



The Rescue

Three trips to the aircraft were made once the airboat was safely launched into the lake:



1. The boat was lightened by removing all non-essential equipment and a single rescuer deployed from shore, picked up a rescuer from the RDC and then went to the aircraft to retrieve the Pilot and the first bystander.
2. A single operator retrieved the RDC, the second SCES rescuer, and the second bystander. All three boats (the RDC, the bystanders canoe, and the inflatable kayak) were brought back to shore.
3. Escorted the Transport Canada Officer to the plane and then returned officer to shore.



Strengths

A plan was in place for lake access – responders were familiar with the area, however hampered by a change in lake conditions.

Emergency crews were deployed quickly to the event including:

- initial 1st alarm response for an aircraft emergency
- the Water Rescue Team activation
- members of the RCMP and Enforcement Services
- early contact with Canadian Forces Search and Rescue
- Early notification of Transport Canada



Rescuers worked cohesively as a team and considered many options.

Strengths continued

Good collaboration between RCMP and SCES

Early recognition of difficult access - multiple rescue operations initiated

Early identification of a stable patient – the pace of all operations was calculated based on risk and were conducted safely, with consideration given to the preservation of the patient, rescuers and equipment

Areas of Improvement

- Information flow and updates to Council, the public and county staff
- Location of crash site identified
- Frequent situational reports
- Availability and need for Canadian Forces SAR helicopter not shared effectively between RCMP and SCES
- Use of personal phones for conversations, resulting in no follow-up radio communications to maintain situational awareness

Areas of Improvement continued

- Airboat capabilities appear to have diminished over time
- Alternate consideration to the mud issues to be considered
- Responders were on the water for an extended period of time expending significant energy
- Media interviews – interpreted by civilians as a criticism to those who attempted to assist in the rescue

Recommendations

- Radio system upgrade (AFRRCS in 2017 budget)
- Airboat to be evaluated and repaired/modified to bring it back to its original capabilities (completed by Fleet)
- Additional equipment to be evaluated for consideration in future acquisitions (partially complete)
- Equipment/supplies/procedures to be evaluated and implemented to assist with difficult launches (partially completed)
- Water Rescue Team to compile a list of area resources available through mutual aid. Information will be added to the pre-plan resource book and provided to the Operations group (completed)
- Operational change to Special Operations Team deployment model (under consideration)

