

2.3 PROTOCOL FOR SAFETY IN SAMPLING FROM BOATS AND AIRCRAFT

Overview

When sampling from aircraft, the pilot has final say regarding operational details such as loading of equipment, weather conditions under which the trip can be performed safely, safety information and deplaning procedures. A personal flotation device (PFD) should always be used. When sampling from a boat or aircraft, you should perform a visual inspection of the surroundings paying close attention to wave height and direction. Individuals should move within the boat using slow, calculating motions, thereby minimizing risk and should not stand in the boat to obtain the water sample. The boat must be maintained in a safe condition and aircraft safety and maintenance records should be inspected.

Sources

Alberta Environment (2006 a), Environment Canada (1999 Draft), Environment Canada (2001), EMAN-N (2005)

At a glance

*boat and
aircraft
positioning*

1 Prior to collecting a sample, it must be ensured that the anchor is secure and the boat is pointed into the wind. For aircraft, it must be ensured that the rotors and engines are still and the aircraft is pointed into the wind. Do not go forward from the red line on the float.

boat safety

2 When sampling from a boat, be aware of other boat traffic and natural hazards. All power-driven vessels must yield the right-of-way to those not operating under power such as canoes. Two paddles, a bailer and an anchor must be on board. All Transport Canada regulations regarding equipment required relative to the type/size of boat being used should be adhered to.

*moving
within the
boat*

3 Samplers should position themselves securely on the floor of the boat or on one of the seats. Move within the boat using slow, calculating motions, thereby minimizing risk to oneself as well as others in the boat. Do not stand in the boat to obtain the water sample. Position yourself securely on the floor of the boat or on one of the seats. Prior to collecting a sample, the other crew members in the boat should be informed that a sample is going to be collected and they should counter balance the boat by positioning themselves on the opposite side to which the sample will be collected.

*link between
pilot and
sampler*

4 The rear door of fixed-wing aircraft (e.g., the Cessna 206, with its long, broad tail section) should be tied open. Direct or headphone communication with the pilot is essential. The pilot may need to communicate the difficulty of keeping the aircraft stable on the water, or the fact that wind, wave or fog conditions are making it too dangerous to continue with the sampling. It is much safer to have a third person to help with communication

between the sampler and the pilot. Relatively busy “air traffic” in popular lake areas may mean additional safety risks, forcing workers to work quickly and efficiently.

*footing on
pontoons*

5 Ensure that footing is secure on aircraft if sampling from pontoons. Pontoons become wet and possibly slippery when landing. Samplers on pontoons should be tethered to the aircraft and should be wearing a PFD as well as rubber boots. The PFD should not be worn in the aircraft unless it is the manual inflation type.

*leaving a
helicopter*

6 For helicopters, never leave from the rear of the helicopter as the tail rotors are dangerous. If it is absolutely necessary to depart a helicopter with the engine running such as during winter sampling, leave the helicopter in a crouched position.

7 After the sample has been collected, the crew members should return to their regular positions in the boat or aircraft.