

SAREX 2006 Survival outing

Background

Fall 2006 has been a busy Search and Rescue (SAR) season. The region has seen two major events: the national *SARSCENE* (http://www.nss.gc.ca/site/ss/workshop/2006/index_e.asp) at the Hilton Lake Leamy, and the *Quebec provincial ground training camp* (http://www.aqbrs.com/index_AQBRs_2006.htm) at the Tim Horton Youth Camp in Quyon Que.

RFC also wanted to be part of the move, by holding its first SAR exercise preceded by some classroom training.

The program

The first event was an evening theoretical *presentation* (http://www.casaraontario.ca/~ottawa1/Presentations/RFC_Search_and_Rescue_Training.ppt) on Search Flying by CASARA (<http://www.casaraontario.ca/>) to about 20 RFC members, some of which decided to pursue some training with that organization.

The second event was an afternoon *tutorial on wilderness survival* (link to Survival tutorial), where about 25 club members participated. See *pictures*. (link to Simon's pictures, see Brenda).

The third event was an *overnight stay* (link to Overnight stay) in a remote location by eight club members. A few of these wanted to share their adventure, *Miguel* (link to Miguel's), *David* (link to David), and *Mark* (link to Mark). A few *pictures* also have their part to say. (link to pictures).

The fourth event got underway shortly after the third one, and consisted in a real Search Exercise, run by CASARA, and to which some RFC trainees participated.

This exercise permitted the review of the content of the RFC *survival kits* (link to kit grid), for which maintenance instructions will be issued. There is no perfect survival kit. Any kit is a compromise between weigh, volume, costs and consequence of not having certain items, depending on the skills of a person. It is a risk management dilemma.

Albert, survival instructor.

Survival tutorial

Pilots have to adhere to a good number of safety regulations, one of which consists of “bush-worthiness” when flying beyond 25 miles from airports. The CAR’s used to give a list of things to bring along, but the latest version is rather general, putting the onus back on the pilots to ensure that they pick the right things in the right quantity and quality, for the possible challenges that they may face. However, it still does not cover any of the know-how needed.

Whatever the level of preparedness, it is very often found that in situation (and under stress), an individual remembers only a fraction of what he knows, and functions only to a fraction of his abilities.

The tutorial was meant to raise pilots’ awareness to help guide their thinking process and decision making, and covered the following aspects:

- CAR’s old and new
- Human survival needs
 - Heat
 - Water
 - Food
- Human assets needed
 - Physical
 - Mental
 - Skills
- Our environment
 - Resources
 - Hazards
- The survival kits
 - Shelter and body protection
 - Fire making
 - Water and food
 - Hygiene and first-aid
 - Signaling and orientation
 - Tools and multi-purpose items
- Techniques
 - Setting up camp
 - Shelters
 - Fire-craft
 - Water
 - Signaling

Overnight stay

A picture may be worth a thousand words, but practicing something is worth more than a thousand pictures.

Whenever I give theoretical survival training, I may say a lot of words and show many pictures and objects, which may mean different things and be remembered differently by the audience. These teachings often take a whole different level of significance and relevance during practice.

This time, it seems that the heat aspects and the activities-planning aspect have been food for (late) thoughts. The overnight temperature was minus one degree C, which was a good compromise between +30 and -30.

The group was asked to try to “survive” merely with the contents of the RFC survival kits, but to bring along any camping item as back-up in case of real need.

More experienced members gave advice to less experience ones.

One camper decided to push his limits and succeeded in using only a knife and a lighter, with no food and only the clothes he was wearing.

Everyone had a good time, and some of the campers would have stayed another 24 hours had they had the leisure.

The RFC Survival Trip was a real eye-opener for me. I have gone camping and so on before, but it was nothing like this. In camping we had tents and it took place in the warm summer with plenty of food and friends. There were 7 of us "survivors" on the trip and I chose to go by myself because I wanted to see if I actually had the ability to do things on my own. For the most part, I did alright, but I did need help when it came to making and maintaining the fire. I made a lean-to shelter with a tarp as the roof. My shelter was in somewhat of a hole, so if it rained I would not have been a happy camper. As for the psychological effects of being alone, it was only one night so I did alright. No, I did not hallucinate or cry myself to sleep. The other survivors were only 200 feet away. As soon as 7:00 pm came, it was pitch black. My fire was going and I had no idea what to do in terms of keeping myself busy. So I just went to bed in hope that the morning would come sooner. At first, I tried sleeping without a sleeping bag and just lie on my tarp, but I woke up very soon shivering, and I could not feel my toes. So off with the shoes and on with the sleeping bag. I'd say I slept half the night, while being awake, I just looked at the stars. Morning came and I still could not feel my toes. As for food, my dinner was a power bar with 24g of protein and 3 oatmeals to go. My breakfast was 1 oatmeal to go. Surprisingly, I never got thirsty once, so I did not drink any water until the next day when I forced myself to. Overall, I think it was a great trip and a positive experience for everyone. I think EVERYONE should at least try this as it was a real eye-opener and you never know when it might come in handy.

By Miguel Lazaro

On the weekend of October 21-22, RFC held an aircraft survival exercise in conjunction with an aircraft search and rescue operation. This had been preceded by a survival seminar on October 14th. The survival exercise had three main elements:

1. Selection of emergency equipment
2. Signalling search aircraft
3. Overnight survival

RFC provides a survival kit for its rental aircraft. As I own my own aircraft, I felt it made more sense for me to design and use my own kit. I spent some time comparing the RFC list with my own views of the importance/cost/weight of possible equipment choices. I then assembled a kit through a combination of scavenging from my camping supplies and visiting Mountain Equipment Coop. I felt it important that the kit be dedicated to its purpose, and not a collection of items that would be 'borrowed' for other uses and therefore not available when needed. I discovered that even a rudimentary survival kit is not cheap.

On the first day, seven of us were driven to a forested area about 45 minutes north of Ottawa. We then separated into two groups of two and three solo (including myself) to fend for ourselves for the evening. Within an hour, the first search aircraft arrived, guided by a training ELT, and attempts were made to signal them. I used a signal mirror and a handheld automobile flare; others used aerial flares and large reflective tarps. We learned later that the search aircraft had tremendous difficulty seeing any of this through the trees. It is very frustrating to see, but not be seen.

It quickly became obvious that spending all of our time waving at aircraft during the daylight hours was soon going to leave us ill prepared for the coming night. As in any emergency situation, choices need to be made about how to spend limited resources, including time. We all turned our attention to setting up camp.

I had a well equipped survival kit, I was well clothed, and I have spent many nights camping in the wilderness— perhaps something could be done to make the exercise more interesting. So I took out my knife and matches, and left the remainder of my survival kit behind. I had been taught to build shelters and fires when young, but given modern views on low impact camping, had not exercised those skills in quite some time. I chose a small hill for my shelter that would catch the last rays of the setting sun and that was close to water. There were abundant dead branches for fuel and balsam tree branches to cover a lean-to and for bedding. It took about three hours to collect enough balsam boughs for my shelter, erect it, and prepare for a fire. The shelter would not have kept me dry in a heavy rain, but would be satisfactory to retain some warmth from the fire and keep off the frost.

I must say that the surroundings were beautiful! And the weather, while chilly, was clear. I held off starting my fire until about nine o'clock to conserve fuel, and then kept the fire small. The next nine hours were spent curled around the fire in a process of dozing for fifteen minutes, waking to the cold as the fire died, and then putting on another stick. Perhaps not exactly comfortable, but survivable.

There was ice on the lake the next morning, but we all survived the night. More search aircraft arrived and seemed to ignore us (and I suppose we were ignoring them at this point). We moved on to a large clearing for a lesson in building a helicopter landing zone, and it was here that the ground search team found us. Then it was back to Ottawa for a well deserved meal after 24 hours of fasting and cold.

The experience has helped inform my choice of survival gear. I am now more likely to carry emergency supplies on flights over remote areas, and I will always carry water, a knife, and matches in my flight bag.

In truth, we were far from a real emergency situation: the weather was clear, we had survival gear at hand, and we had experienced no mental or physical trauma. Still, we each pushed our limits to some degree, learned some new skills, and in addition, we had FUN!

By David Arthurs

The apprehension was there. It had been some years since I had been in the back-country but I was real excited to hear of the survival week-end (really only a day) planned by Albert at RFC, in conjunction with CASARA - Civil Aviation Search and Rescue Association. I started my preparations by bringing my pack and sleeping bag out of retirement, sharpening my trusty Swiss Army knife and finding my "smelly hellies" - a name my brother and I called these synthetic long johns made by Helly Hanson in the mid 70's. A glance at the weather forecast caused some concern as a cold wet week-end would make the challenge that much more of a challenge.

We all (Mark S, Miguel Lazaro, Gen, Chris, David Arthurs, Ned, Albert, myself) met at RFC and soon we were off, with Albert at the wheel, headed to a destination unknown. We were encouraged to review the trip guidelines and plan our approach to the challenge. Mark S and I were lean-to mates and we became acquainted quickly. Albert gave us a quick tour of the area including the beaver pond. Mark S and I had already picked our site and quickly headed off. At 14:30, the game was on. I already had envisioned the size of the lean-to and we proceeded to position it in a relatively open area facing south to maximize sun exposure and using a large tree as one of the uprights. Finding the other uprights and cross-members went quickly and then we proceeded to assemble the frame by lashing the pieces together with parachute chord which I had brought. I like working with parachute cord as it is strong and light weight. We then draped the structure with the large blue tarp from the RFC survival kit. By this time, CASARA was already searching from overhead and we attempted to signal by reflecting the sun with an emergency blanket and at times waving a bright yellow rain jacket. We were positive that they saw us but became frustrated when we were not convinced of it. A number of planes circled overhead and each time we stopped our activity to signal. This was quite disruptive as we realized that the time was going quickly and we had much to do. We had not attempted to get a signal fire going yet as we knew that once you started a fire, you would have to continue to feed it. It took several hours to collect firewood and spruce bows for our bedding. Albert had given us some advice on checking the quality of wood as many trees were soft due to rot. Mark and I agreed that the "log cabin" won over the "teepee" approach for building the fire. With the use of ample dry kindling, the fire was off to a great start but it struggled a little with some of the larger pieces of wood which were a little green (wet). With a little more coaxing, the fire was roaring and we began to start cutting the wood into cord length. The saw included in the survival kit was great. A sharp blade makes the work quite easy; however, enough was enough and we decided to leave much of the wood in 10 to 12 foot lengths. We had planned to just feed these into the fire from both ends over the evening. The main question was "Would we have enough wood?". It was after 18:00 and darkness was evidently upon us. Having secured shelter and warmth from the fire, we began the long evening. In most normal camping situations, this is the time when much of the activity is food preparation; however, in this situation, we munched on the "trail mix" that Mark S had brought. This was a welcome break as we caught our breath after the flurry of activity. As the chill set in, I unpacked one of the emergency (space) blankets which was shaped as a cocoon to see how well it worked. Although I did feel some warmth, the constant crackling of the material and the feeling of building humidity were definite negatives. I even considered trying to sleep just in my clothes with the warmth of the fire, but the fact that the fire was about 6 feet from the edge of the lean-to (next time I would move it in a couple of feet) and the close proximity of my sleeping bag, I relented and jumped into the mummy bag. As it turned out, Mark S was diligent in tending the fire, aided by his "fire poker", and kept the fire going until after midnight when both the wood and his patience ran out.

The night was not bad (translation: cool with frosty toes). Next time: more spruce bows to cover the unmoving roots. It might have been a good idea to use the "hand warmer hot packs" in the survival kit; however, the thought did not come to me at the time. Waking on the hour to re-position and pondering the temperature of the feet do not contribute to a truly restful sleep. I must say that my cotton gloves

and balaclava kept my head and hands very comfortable. Waking to slush in my water bottle confirmed that it was rather cool that night. We all met to discuss the evening and then toured each others' sites. It was very interesting to see the different approaches. Prior to packing, Albert encouraged us to try to boil some water. Within thirty minutes, I had coaxed a fire out of the coals and had a boiled a couple of cups of water for tea. There is nothing better than a hot cup of tea in the morning by the fire. We quickly packed up and were on our way back. Albert had brought us to a site for a landing zone suitable for a Griffon helicopter and demonstrated the required signaling. At this time, two members of a CASARA ground crew appeared in search of the ELT. Back at RFC, while eagerly awaiting the pizza, the melting snow began. The week-end was a great success! I had the opportunity to test out my personal capabilities, to spend some time in the outdoors and to meet some fun people. My biggest disappointment was not being able to participate in both the survival exercise and the SAR flying with CASARA.

Thanks Albert!!!

By Mark Gerlich

Group	Item	Notes
Shelter and body protection	Tarps: One 10'X14' and one 6'X8'	
	Six Emergency Space blankets	
	One Sleeping bag	
	Two hand-warmer hot packets	Winter version
	Two pair of warm socks	
	One pair of work-gloves	
	Warm hats	Winter version
	Bug nets	Summer version
	Bug repellent	Summer version
Fire	3 Waterproof match boxes	
	Fire starter	
	Two long lasting candles	
Water and food	Two sealed plastic bags containing 125 ml water ea.	
	Water carrying bag	
	Two Protein plus power bars	
	One Sheet of thick tin foil	
	3 Aluminum bake tins	
	10 Water purification tablets	
	One 1L Nalgene bottle	
	One Stainless steel boiling-pot	
	Tea, Oxo cubes, hard-candies	
Hygiene & First aid	Purex soap	
	Hardy toilet paper	
	Towel	
	Mini first-aid	
Signaling & Orientation	One Flashlight	
	One Package red marker ties	
	One Fox 40 whistle	
	One Signal mirror	
	Compass	
Tools and multi-purpose	Bags: 1 main and grouping bags	
	One 12 hour light stick	
	Two Swiss army knives	
	One Commando wire saw	
	Foldable Wood-saw	
	One Coil of rope	
	Twine	
	Snare wire	
	Duct tape	
	Plastic 6m 3'X6'	
	Two Safety Pins	
	Ziplock Bags	
	6 orange garbage bags	
	One Survival booklet	