

# Prince George Hams Assist with Search for Joseph Andrews

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Prince George Amateur Radio Operators assisted with the search for Joseph Andrews by running the communications center.

Ten year old Joseph Andrews disappeared while float-tube rafting in a pool on the slow-moving Salmon River north of Prince George. A search involving up to 160 persons, two helicopters, RCMP dog teams, and several all terrain vehicles, ran for 8 days. Joseph Andrews was last observed on the bank of the Salmon River near the campsite at Highway 97, and although the search lasted from August 4<sup>th</sup> to 11<sup>th</sup>, no trace of the young boy or his bright yellow float-tube was found.

The search and rescue base (SAR base) was set up at the fire hall on Salmon Valley Road, about 30 km north of Prince George.

Prince George Amateur Radio Club members first became involved the morning of August 7<sup>th</sup> when Graig Pearen, VE7EAP, made the callout. Graig asked Hugh Mortimer, VE7EQV to take charge of this event. He also dispatched Frank and Diane Vanderzande, VE7AV and VE7XYL, and Don Maidment, VE7ATC.

The Ham Radio operators were tasked with running the communications center, using both commercial and Amateur radios.

When Hugh arrived on site at about 9:45 am, Frank and Diane were already on their way to the British Columbia Railroad (BCR) bridge, about 4 km downstream from the Search And Rescue (SAR) base, to provide a relay on 2 meters should it be required. Don set up on 2 meters outside the fire hall, where reception was far better than inside.

Inside the fire hall Hugh operated the SAR base radio on a PEP frequency feeding a vertical antenna taped to the wall, a handheld radio on a commercial frequency to communicate with a leased helicopter that aided the search for several days, and a handheld radio on an Amateur Radio repeater.

From the time the Amateur Radio people arrived at the SAR base on Wednesday, until the search was terminated on Sunday, Prince George Amateur Radio Club members provided virtually all the operating and logistical support for the SAR-Base radio communications. Amateur Radio not used for the search proper, however, it was invaluable for maintaining contact among the hams. We were able to coordinate our activities without tying up the search frequency or waiting for it to become available. Communications between SAR base and the searchers as well as between search teams, took place on commercial radios using a PEP VHF frequency.

Searchers worked in teams and the team leaders used VHF handheld radios to maintain contact with SAR-Base and to coordinate activities between teams. Many teams came from elsewhere in the province and the BC Forest Service supplied a lot of manpower and equipment. The added manpower was needed partly because the search was so large and partly because many Prince George SAR members had just come from two previous searches and needed to rest. Each team had a unique call sign, and some were very unique. For example, a team of BC Forest Service firefighters, all aboriginal, were "Fireinjun 4". With over 20 teams in the field at one time, it was challenging to keep track of all the teams, and their call signs and to develop suitable call sign abbreviations for the log.



## Day One, Wednesday

Communications through most of the day were on a simplex PEP VHF frequency. The search had been on for 4 days, and searchers were moving downstream beyond range of the simplex radio feeding a wire antenna taped to the inside of a concrete block wall. Lawrence Hooper, VE7DPQ, set up downstream and relayed between search teams

and base. Lawrence is from Barriere, BC and has been active with SAR for several years. Lawrence relayed numerous messages during the day and managed to keep a log that amounted to 17 pages by the time the SAR remote base arrived.

The SAR remote base radio system is a simplex VHF radio with a UHF link connecting it the Search And Rescue temporary headquarters (SAR-Base). It runs on two 6-volt gel cell batteries, is easily carried by hand, and appears to put out about 5 to 10 watts. By 17:00, it was installed on a residential outbuilding near the BCR railway and provided improved coverage between base and the teams along the river near the railway bridge. At this point we had VHF simplex for close-by communications and the remote base for more distant communications. However, both antennas were still inside the concrete building – better antennas were needed.

During the day, searchers grid-searched several areas downstream of the SAR base, dog tracking teams followed up certain tracks, the helicopters were used for aerial searching and ferrying teams back and forth, and quads were used to check various trails and old roads in the area. The communications log was closed at 20:26.

### ***Day Two, Thursday***

By Thursday (5<sup>th</sup> day of the search) search managers were becoming concerned because no real leads had been identified. Assignments for the day started very early, and by the time Hugh arrived at 05:40, Lawrence already had several pages of handwritten notes ready for the day's radio operators. The first entry in the communications log was at 06:07.

Warren Kean, VA7RC, joined our group to help solve the antenna problem. Soon, VHF simplex was operating using an antenna mast on the Prince George SAR vehicle, and a UHF beam was set up outside pointing to the remote base.

Searchers concentrated downstream near the BCR railway bridge and towards the Fraser River. Radio communications continued until 21:22, with quiet and hectic moments throughout the day.

### ***Day 3, Friday***

On Friday, several search teams started moving upstream beside the Salmon River from the Highway 97 bridge. Downstream was considered the most likely search area, but since nothing had been found

there, the search area was widened into areas considered less probable but still possible. As a result, Warren and Frank had to move the remote base, setting it up in a backyard overlooking the valley on the upstream side of the highway bridge. The batteries were also exchanged and recharged, although we found out later that the batteries should be capable of operating the repeater for many days.

Lawrence had to return to Barriere. Don Maidment, VE7ATC, is trained as a spotter, and volunteered for that function. The experience showed that SAR-Base should have 3 amateurs devoted to it: one for operating the radios, one for logging, and one to pass messages, move equipment, and fill in for the others when they needed a break. Fortunately, Don Frazer, VE7PGR, was able to assist after completing his day's work.

### ***Day 4, Saturday***

Bob McDonald, VA7VB, Graig Pearen, VE7EAP, Ben Guiliamse, VE7AUO, and Melton Hyra, VE7MDH, joined the communications team. The search continued both upstream of the Highway 97 bridge and in downstream areas. The split search area made communication difficult, but we were able to use the remote base for upstream contacts and simplex for downstream. Eventually it was necessary to move the remote base back to a downstream location near the BCR bridge, and rely on simplex for upstream and close-by contacts.

### ***Day 5, Sunday***

On Sunday, the search concentrated on areas the search managers felt needed additional attention. Teams were assigned, but since no new information became available and there were few re-assignments, radio communications dropped off. Nothing new developed and the search was called off before midday.

After checking in all teams and confirming their return to base, the communication post shut down and the log was closed at 12:30. There was a short address from search officials, and everyone started cleanup. Radios, antennas and equipment were disassembled and packed; logs and paperwork were completed and handed in. By 14:15 the communication team was finished and headed back to Prince George.

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