

BCA Tracker 2 Delayed Until Next Year

Contributed by Craig Dostie
Monday, 12 November 2007

Backcountry Access (BCA), pioneers in the development of digital avalanche transceivers, has announced they will not be delivering their latest beacon Tracker 2 this season (2007/08) as had been planned. Bruce Edgerly, VP of sales and marketing at BCA says, "we don't want to release any product prematurely so we're holding off delivery. Our goal is 100% reliability and zero returns."

BCA claims the Tracker 2 is the next generation, three-antenna version of the market dominating Tracker DTS avalanche beacon. The Tracker DTS was the first beacon to feature two antennas and digital signal processing to provide a display with distance and direction clues. Those clues make it easier to locate buried avalanche victims.

Tracker 2 follows the market trend of adding a third antenna to reduce the tendency for dual-antenna digital beacons to give an erroneous distance reading when the searcher is within 2-3 meters of a buried beacon. The error occurs at a point when the two antennas are poorly coupled to the signal because it is orthogonal to their orientation. The third antenna is placed so that it picks up the signal when the two main antennas lose it.

The antenna configuration of the Tracker DTS is unique among digital avalanche transceivers, allowing it to process signals faster than competitive versions. Digital avy beacons display distance and direction information after comparing signals in two or three antennas. With Tracker DTS, the signals from the two internal antennas are compared instantaneously, whereas other beacons compare the signals sequentially. This is, among other reasons, because with Tracker DTS, the two antennas are the same size, but other brands have different sized antennas for each orientation.

By adding a third antenna to the mix with Tracker, the ability to instantaneously compare all three signals is lost, since the third antenna is substantially smaller in size. Thus, a complex set of software algorithms must be implemented to account for the third antenna, although, BCA claims the additional processing time is only 10 milliseconds. One of the key features of Tracker 2 is theoretically its ability to detect, process, and update the display within 40 milliseconds. Since the shortest beacon pulse is 70 milliseconds, that means Tracker 2 could possibly be able to update the display in "real time," while the transmit beacon is still on, much like analog beacons echo the signals they hear in real time.

According to Edgerly, BCA is "working on getting more consistent performance between units. Most importantly, we haven't put it through the field testing we think it needs."

As to the urgency of releasing Tracker 2, Edgerly added, "We're not in a position where we have to release Tracker 2. This season's sales of the Tracker DTS are up over the year before, and those were up from the year before that, so we aren't feeling market pressure to deliver. Furthermore, we are adamant about avoiding the need to micro-manage software upgrades from releasing a product prematurely. That shouldn't really happen with safety equipment."