



## Official Statement in response to Pieps DSP Sport and Pro switch inquiries

This statement is in response to inquiries regarding the security of the Pieps DSP Sport and Pro avalanche transceiver locking mechanism and mode switch. The recent social and conventional media coverage are the result of a social media campaign focused on the incidents described below. These inquiries do not concern the Pieps Powder BT and Pro BT avalanche transceivers

### **Background**

The follow 2 incidents represent Pieps' only records claiming that the DSP Sport or Pro switch has malfunctioned during an avalanche:

#### **Hanging Lake, British Columbia: March 4, 2017**

A 33-year-old man died after being caught and buried in an avalanche while using a PIEPS DSP Sport avalanche transceiver. The transceiver was carried in his pants' pocket, not in the harness as recommended by Pieps. The victim suffered significant trauma transceiver was found powered on and in 'search' mode. A police investigation resulted, with which Black Diamond Equipment/PIEPS cooperated. The police report concluded, based on test results from TÜV SÜD, that the victim's avalanche transceiver was working properly.

#### **Pemberton, British Columbia: March 9, 2020**

Skier Nick McNutt was caught in an avalanche, carried violently through trees and out through a narrow exit gully where he eventually was buried, while wearing a Pieps DSP Sport avalanche transceiver. McNutt suffered a severely broken arm, and additional minor injuries including chest trauma, but was rescued via a probe search. McNutt's transceiver was reported to be in its transceiver harness in the 'off' position. Skiers in the group confirmed that they did a transceiver check earlier in the day. Company representatives have been in contact with McNutt on several occasions since the March incident. Company representatives requested to see McNutt's transceiver for examination, but it was lost in route to its headquarters in SLC, UT, by the shipping carrier.



### **Analysis of Events**

Both incidents involved violent interaction with trees, rocks, and terrain resulting in severe traumatic injuries. In the first case the transceiver was not carried in the harness in contradiction of Pieps recommendations. There is no evidence in either event to confirm that the DSP Sport or Pro switch has malfunctioned during an avalanche. Further, in neither case were we able to confirm that the transceiver was in the correct mode prior to the accident

### **Investigation**

The DSP Sport and Pro meet all applicable standards for avalanche transceivers. However, in response to the events described above we have performed additional testing on specific customer transceivers in comparison to a random sample set of DSP transceivers in new condition, used DSP transceivers, damaged DSP transceivers, and competitor transceivers currently available on the market.

### **Switch Performance Testing Results**

- Testing has shown no change in switch resistance for DSP transceivers with heavy use.
- DSP transceivers that have had their switch overridden (intentionally forced between modes without depressing the lock button), show a reduction in switch resistance which is further reduced after multiple cycles. The reduction in switch resistance due to override is variable, but not as severe as lock/switch mechanisms with visibly damaged lock buttons.
- DSP transceivers with visibly damaged lock buttons showed a decrease in switch resistance of 50%-100%.

### **Competitor Evaluation Results**

Comparative evaluations were also made between the DSP lock/switch mechanism and competitor transceivers currently on the market. The purpose of this evaluation was to compare the likelihood of interference with various switching mechanisms by determining the number of independent actions required to switch the designs evaluated on/off and between modes. While all mechanisms evaluated have strengths and weaknesses, and met the applicable standards, the DSP lock/switch mechanism as found to be comparable in terms of security to other designs on the market.



### Conclusions

- In neither case were we able to confirm that the transceiver was in the correct mode prior to the accident, or that it changed modes during the accident.
- Our historical and specific testing concludes the Pieps DSP Sport switch mechanism is not defective by design and is equivalent in terms of security to competitor transceivers. Pieps will continue to investigate future claims of switch malfunction.
- Our testing concludes that DSP transceivers with visibly damaged lock buttons showed a decrease in switch resistance of 50%-100%.
- Inspect your transceiver regularly for signs of damage before, during, and after use.
- Ensure that Pieps inspections and service are performed at the recommended intervals. This inspection includes inspection of the lock/slider.
- All transceivers can be overridden and/or manually damaged. Never intentionally force a transceiver power or mode switch between positions and retire your transceiver immediately if it has been damaged.
- Perform transceiver partner checks regularly when in avalanche terrain, ensure that your transceiver is locked in the send mode, and carried in accordance with Pieps recommendation.
- Read the manual and/or contact Pieps if you have any questions regarding proper use or inspection results.

Rick Vance

A handwritten signature in black ink, appearing to read "R. Vance", with a long horizontal flourish extending to the right.

Sr. Director of Quality  
Pieps/Black Diamond