Tram Improvements on Snoqualmie Pass

Craig Wilbour¹ Kevin Marston² Lee Redden³

1 Washington State Department of Transportation, Bellevue, WA, USA; 2 Washington State Department of Transportation and Aplental, North Bend, WA, USA; 3 Washington State Department of Transportation, Seattle, WA, USA

Locally constructed explosive trams have proven safe and effective for delivering large elevated charges to inaccessible locations. There are 24 explosives trams in the Snoqualmie Pass area. Most of these have been in place for some time. Some of these trams have been damaged in various ways. Many have been improved by partially re-designing and rebuilding them.

The WSDOT avalanche crew has sixteen explosives trams, Alpental ski resort has seven. The Central Cross Country Center has one. We are dependent on the proper function of these trams. We have found we can reduce the number of problems we have with our explosives trams by use of extra care in the design and construction of more robust trams. We can reduce operational problems if we keep the tram design and operation as simple and standardized as possible. The more reliable a tram is the safer it is.