



**Mountain View Technologies, Inc.**

*Snowmaking System Design \* Research & Development \* Investigations \* Web Based Mountain Information*

## **Aquatrols Snowmaking Additive**

### **Snowmaking Test Program Report**

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## **1. Scope**

Conduct a short-term snowmaking test program on the Killington test stand to provide preliminary data on the impact of the Aquatrol snow additive (ACA 1735) on snow gun performance at various temperatures and with one type of snow gun. This data will provide Aquatrol with baseline information for evaluating the potential of the additive product for further business development in the snowmaking market.

## **2. Results**

The results of the five additive snowmaking tests at Killington (February 2001) using the Aquatrols ACA 1735 additive indicate that this product does produce a positive gain in snow gun water throughput and does improve snow quality for a given wet bulb (F) operating temperature.

The actual water flow improvement with ACA 1735 appears to be an increase of about 3%-5% using the testing methodology outlined in this report. This increase can also be translated into a 1 or 2 degree (F) gain in wet bulb temperature for a given snow quality. Quantitative test work and measurements in this percentage of improvement range are very close to the ambient noise level, and therefore, require a larger test sample size conducted under good snowmaking conditions. The impact of this product on maximum temperature snowmaking performance was not evaluated.

From a qualitative standpoint this test sample demonstrated that the addition of the Aquatrols ACA 1735 to the snowmaking water in the specified concentration yields a positive gain in snow product quality in the majority of instances.

These results are applicable to tower mounted snow guns of the "Avalanche" type that produce a relatively small snow particle. The gains with other types of air-water snow guns may be different.