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	Several research reports for testing of de/anti—icing technologies were produced on behalf of Transport Canada in previous winters. These are available from the Transportation Development Centre (TDC). Nine reports (including this one) were produced as part of this winter's research program. Their subject matter is outlined in the preface. This project was co-sponsored by the Federal Aviation Administration (FAA).						
16.	Abstract						
	At the request of the TDC of Transport Canada and the FAA, APS Aviation Inc. undertook a research program to compare endurance times of de/anti-icing fluids for natural and for artificial snow, and to continue to evaluate the general functionality of the modified artificial snowmaking system that was developed by the National Centre for Atmospheric Research (NCAR) under contract with the FAA In support of the objectives of the work statement the following projects were carried out: 1. Characterization of Snowfall Distribution Over The Test Plate This project encompassed eighteen artificial snow distribution trials using the snowmaking machine. The distribution trials showed similar results to those obtained in previous years. A comparison of the snowflake size distribution of artificial and natural snow was done; the size of the artificial snowflake produced by the snowmaking machine now more closely approximates that found in nature. 2. Comparison of Natural and Artificial Endurance Times This project compared the endurance time performance of several fluids under artificial and natural snow using the new						
	controlled temperature plate system. This system maintains the test plate at the ambient chamber temperature. This project focused on testing new fluids and included retesting Type II and IV fluids (from 2000-01 and 2001-02) under artificial snow using the new heated plate and comparing these tests with data from natural snow testing. Sixty-six tests were completed, thirty-one of which directly compared natural snow tests and matched icing intensity and temperature, while the remaining tests were conducted at icing intensities of 10 or 25 g/dm²/h.						
	workgroup meeting is proposed to review the results achieved and to determine the optimum plate temperature at which to						
run endurance time tests on the snowmaking machine. A series of tests is recommended to evaluate how other flui							
	on the heated test plate, and to confirm an improved plate temperature setting for this system.						
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