Regression Coefficients and Equations used to Develop the Winter 2010-11 Aircraft Ground Deicing Holdover Time Tables

Several research reports for testing of de/anti-icing technologies were produced for previous winters on behalf of Transport Canada. These are available from the Transportation Development Centre (TDC). Several reports 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.

Transport Canada is required to publish the regression equations and related coefficients used in the development of the holdover time guidelines each winter. Since the winter of 2009-10, this information has been published in two documents:

- an online document published on the Transport Canada Holdover Time (HOT) Guidelines website (http://www.tc.gc.ca/CivilAviation/commerce/HoldoverTime/menu.htm), which provides users with the regression information for the current winter’s HOT Guidelines in a timely manner in a user friendly format; and
- this TP report, which documents the source of the regression information and how it was obtained.

For the 2010-11 HOT guidelines, regression data was generated for the generic Type I HOT table, eight Type II fluid-specific tables, one Type III fluid-specific table, and sixteen Type IV fluid-specific tables. In addition, regression data was required for Clariant Safewing MP II 1951 and the grandfathered fluid data set in support of the generic Type II HOT Table. The data was predominantly obtained from holdover time testing conducted over the winters of 1996-97 to 2009-10. Much of the data had been documented in a previous Transport Canada report and was therefore collected from that report. Additional data was collected from the results of holdover time testing conducted in the winter of 2009-10.

It is recommended both regression information publications be updated in one year to reflect any changes made to the holdover time guidelines for the winter of 2011-12.