The primary objective of the 2003-04 holdover time test program was to evaluate the performance of new deicing and anti-icing fluids over the entire range of conditions encompassed by the holdover time guidelines.

The objective was met by conducting endurance time tests. The procedure for these tests consisted of pouring fluids onto clean aluminum test surfaces inclined at 10°. The onset of failure was recorded as a function of time in natural snow and artificial conditions including simulated freezing fog, freezing drizzle, light freezing rain, and rain on a cold-soaked wing. A total of 258 endurance time tests were performed by APS in natural and simulated conditions with one Type III fluid and one Type II fluid. The Type II fluid was not certified and therefore results are not discussed in detail.

Changes to the holdover time guidelines for the winter of 2004-05 included the introduction of a fluid-specific table for Octagon Max-Flight 04, the removal of the Clariant Safewing Four Type IV fluid-specific table, the placement of generic values in all fluid-specific tables (except Dow UCAR Ultra+) in the -14 to -25°C snow cell and the introduction of a new Type III fluid and a new Type III generic table. No holdover time tests were conducted with Octagon Max-Flight 04 as it was previously tested under a different name. Neither the addition of the Octagon table, nor the removal of the Clariant table affected the generic Type IV table. The changes made to the -14 to -25°C snow cell were the result of testing with artificial snowmakers. The values in the new Type III generic table were generally based on the holdover times of the new Type III fluid, Clariant Safewing MP III 2031 ECO.

No new Type I or Type II fluids were introduced this year, nor were any changes made to the generic Type II table.

It is recommended that any new Type I, Type II, Type III or Type IV fluids be evaluated over the entire range of conditions in the holdover time tables and that Type III fluid be tested in 75/25 and 50/50 dilutions.