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**LOSS OF FUEL SYSTEM ICING INHIBITOR ADDITIVE DURING FUEL
TRANSPORT AND STORAGE**

Steven K. Shaeffer

Chemical Engineer, US Air Force Petroleum Office, , 2430 C. St., Bld 70, Area B, WPAFB, OH
45433 USA.

This paper is a description of an effort by the US Air Force to estimate the extent to which Fuel System Icing Inhibitor (FSII) additive is lost from JP-8 during the routine transport and storage of this fuel. This is a work in progress and is a subset of a larger Air Force study to determine if the current minimum FSII concentration requirement for JP-8 can be lowered without affecting the capability to inhibit the freezing of any existent free water. Loss estimates are derived from the FSII concentration data taken from 40 different Air Force bases located in a variety of geographic regions over a twelve month period of time. For each base, FSII concentration values have been collected from multiple points in the fuel logistic train stretching from the source to the point of issue. FSII loss at a particular base is evaluated in terms of the differences in the mean concentrations observed at that base. Since the loss of FSII is anticipated to be largely due to its extraction from the fuel by free water, correlations between additive loss and delivery mode, location, and local seasonal weather conditions are examined for any cause-and-effect inferences.