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**POSTER**

**REDUCING THE ARMY'S DEPENDENCE ON OIL: FUELING TACTICAL GROUND  
VEHICLES WITH AN "ASSURED FUEL" ALTERNATIVE TO JP-8**

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JP-8 / JP-5 aviation kerosene-type fuel is the bulk fuel used in all Army, Air Force, and Navy tactical fleets; JP-8 / JP-5 fuel is in essence the same as the predominate fuel, Jet A-1, in use by the commercial aviation industry worldwide. The U.S. Army Tank Automotive Research, Development and Engineering Center (TARDEC) is actively engaged in a drive to develop freely interchangeable fueling alternatives to JP-8 / JP-5. This drive is part of a larger campaign in the U.S. Military, and an even larger effort throughout the U.S., to reduce dependence on petroleum crude oil. When it comes to fuels critical to the mobility of the military, industrial, and civilian sectors, aviation kerosene fuel, (a.k.a., jet fuel) is one of the most critical. Commercial large-scale production of jet fuel in the U.S. from domestic, non-petroleum resources can play a significant part in "kicking our addiction to oil" and creating an "assured fuels" supply. The Army has 39 Forts located within the Continental United States (CONUS), at which tactical vehicles, of various types and numbers, are fueled with JP-8. These vehicles must be ready at all times for use in national defense and worldwide deployments. Not just any fuel will suffice to ensure these vehicles, most powered by heavy-duty diesel engines, can meet demanding readiness requirements and mission profiles. One type of fuel with good high-performance diesel properties and potential to become an "assured fuel" alternative to JP-8 is Fischer-Tropsch (FT) Iso-Paraffinic Kerosene (IPK). A realistic implementation path is to convert to the use of blends of FT IPK with JP-8 in tactical vehicles at CONUS Forts. A recent study by TARDEC looks at a subset of the Army's Forts in CONUS based on JP-8 fuel usage and distribution among the five CONUS Petroleum Administration for Defense Districts (PADDs). Five Forts were selected, one in each PADD, that use comparatively significant volumes of JP-8. The study examines the commercial potential for production of FT IPK in each PADD, the nature of the current JP-8 fuel supplied to each Fort, and the nature of the fuel produced by blending each Fort's JP-8 supply with FT IPK.