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E. I. DU PONT DE NEMOURS & COMPANY
INCORPORATED

GARRET MILL BUILDING
BARLEY MILL PLAZA
WILMINGTON, DELAWARE 19898

POLYMER PRODUCTS DEPARTMENT

FACSIMILE TRANSMISSION

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RECENT MEDIA COVERAGE OF KAPTON® POLYIMIDE FILM

The Fort Worth Star-Telegram newspaper featured a three-part series on safety concerns regarding the use of Kapton® polyimide film as wire insulation in aircraft and nuclear power plants. The series, titled "Wired for Disaster", appeared July 24-26. The articles alleged that Kapton® wire insulation was responsible for fires in military and commercial aircraft.

In conjunction with this coverage, ABC World News Tonight featured a news story on the same subject, on Monday evening, July 25, which was based on the Fort Worth Star-Telegram articles.

A follow-up article on the Army's plans for Kapton® appeared on the front page of the Fort Worth Star-Telegram on Saturday, July 30. A second follow-up article, which dealt with the FAA position on the use of Kapton® in commercial airliners, appeared on Sunday, August 7.

Du Pont supplies a variety of insulation materials for aerospace applications: Teflon® fluorocarbon resins are used for electronics and engine wire; Kapton® polyimide films are used to insulate general-purpose wire; and Tefzel® fluoropolymer resins are used in extruded constructions, with or without crosslinking, for general-purpose wire.

* * * * *

Kapton® has performed safely in aerospace wiring for 20 years. All branches of the military, aircraft manufacturers, civilian and government agencies, including the Federal Aviation Administration, consider Kapton® to be safe for use in today's aircraft.

However, short circuits of wire insulated with Kapton®, as well as other insulation materials, have infrequently occurred in actual flight use as a result of mechanical damage. No wire insulation system currently in use is immune to such failures.

Extensive evaluation and in-service experience has shown that Kapton® wire insulations maintain their toughness and do not melt at high temperature. These insulations give off very little smoke in electrical overloads or fires. In addition, wire insulated with Kapton® is not flammable in the elevated oxygen levels occasionally used in the space shuttle atmosphere.

BETTER THINGS FOR BETTER LIVING

Aircraft manufacturers, civilian and military agencies, and industry engineering groups have concluded that the cause of documented in-service wire problems can be traced directly to correctable practices in design, installation, or maintenance, NOT to materials or wire constructions.

Since World War II, aerospace engineers have made possible an enormous increase in flight capability while improving the safety and reliability of aerospace vehicles. This increase in capability was made possible by the development of techniques to design, install and maintain electrical wiring systems to optimize safety, reliability and performance. Success has been based on engineers' ability to balance often conflicting requirements as new designs are developed.

As these new aircraft designs have evolved, engineers have continued to scrutinize the performance of Kapton® as well as other insulation systems. Total performance engineering studies by a variety of aircraft manufacturers have found that wiring systems with Kapton® insulation offer the best balance of reliability and performance. To meet changing requirements, new wire constructions, with Kapton® as one of the materials, have been and are being developed.

Wire insulation in existing specifications and new wire systems under development must be evaluated on the basis of a number of important factors, including flammability, smoke and its effects, and resistance to mechanical damage at high temperature. If aerospace engineers determine that alternative insulation systems provide better overall safety, reliability and performance than Kapton® systems in particular applications, then it is reasonable to expect that these systems will be selected.

Du Pont is strongly committed to the aerospace industry by its continuing support of improvements in wire designs, constructions and materials, as it has for more than 40 years.

JIM HARRIS, MARKET MANAGER
AEROSPACE/DEFENSE WIRE & CABLE
302/992-3936

Teflon® is a registered trademark of E. I. du Pont de Nemours & Company, Inc., for its fluorocarbon resin.

Tefzel® is a registered trademark of E. I. du Pont de Nemours & Company, Inc., for its fluoropolymer resin.

Kapton® is a registered trademark of E. I. du Pont de Nemours & Company, Inc., for its polyimide film products.