**NATIONAL TRANSPORTATION SAFETY BOARD**
Office of Aviation Safety
Washington, D.C. 20594

April 12, 2000

**Systems Group Chairman's Factual Report Addendum**

DCA-96-MA-070

## A. ACCIDENT

**Location** : East Moriches, New York

**Date** : July 17, 1996

**Time** : 2031 Eastern Daylight Time

**Airplane** : Boeing 747-131, N93119

## B. SYSTEMS GROUP

Chairman : Robert Swaim
NTSB
Washington, DC

Assistant : Scott Warren
NTSB
Washington, DC

## C. SUMMARY

On July 19, 1996, at 2031 eastern daylight time, a Boeing 747-131, N93119, crashed into the Atlantic Ocean, about 8 miles south of East Moriches, New York, shortly after takeoff from John F. Kennedy International Airport (JFK). The airplane was being operated under an instrument flight rules (IFR) flight plan under the provisions of Title 14, Code of Federal Regulations (CFR), Part 121, as a regularly scheduled flight to Charles De Gaulle International Airport (CDG), Paris, France, as Trans World Airlines (TWA) flight 800. The airplane was destroyed, and all 230 people on board were killed.

## D. DETAILS OF THE INVESTIGATION

The National Transportation Safety Board requested that the National Aeronautics and Space Administration's (NASA) Langley Research Center located in Hampton, Virginia, study two areas relating to electromagnetic interference (EMI) and the accident involving TWA flight 800. The Langley Research Center was tasked to evaluate the following effects on the airplane:

1) The effect of the electromagnetic environment through which TWA 800 was flying;
2) The effect of personal electronic devices (PED's).

Both of these tasks were designed to help determine if electromagnetic interference could have been a threat to the fuel tank wiring on the airplane. To document the results of their work, the Langley Research Center prepared two reports, a Technical Publication, 'Investigation of Electromagnetic Field Threat to Fuel Tank Wiring of a Transport Aircraft', and a Technical Memorandum, 'Some Notes on Sparks and Ignition of Fuels', both dated March, 2000.

The Langley Research Center reports have been included as appendices A and B to this addendum.

Scott Warren
Aerospace Engineer
4/12/00