



THE UNDER SECRETARY OF DEFENSE

WASHINGTON, DC 20301-3000

ACQUISITION

July 12, 1993

MEMORANDUM FOR ASSISTANT SECRETARY OF THE NAVY FOR RESEARCH,
DEVELOPMENT & ACQUISITION

SUBJECT: ENDURANCE UNMANNED AERIAL VEHICLE (UAV) PROGRAM

Current national, theater and tactical intelligence collection assets are insufficient to provide for urgently needed, critical, worldwide, releasable near real time intelligence information on mobile targets for the in-theater Commander-in-Chief (CINC), the National Command Authority (NCA) or the Joint Force Commander (JFC). No system exists which can provide continuous all-weather coverage of world wide targets. National Sensors cannot provide long dwell coverage of small mobile targets. Existing theater airborne assets are limited by endurance of less than 8-12 hours, limited numbers, and possible loss of aircrew over hostile areas. There is no endurance UAV currently funded. No long range endurance UAV will be available to military commanders until the year 2000. Ground based systems cannot operate in denied and/or hostile areas without the possibility of loss/capture of personnel.

In order to meet the above requirement, the Joint Staff has identified an urgent need for the capability of an Endurance Unmanned Aerial Vehicle (UAV) system. The characteristics of this system are attached.

It is requested that the Program Executive Office for the Cruise Missiles Project and Unmanned Aerial Vehicles Joint Project, PEO(CU), expeditiously contract for an endurance UAV to satisfy the need described above.

Attachment a/s

A handwritten signature in black ink, appearing to read "John M. Deutch", is written over the typed name.

John M. Deutch

ENDURANCE UAV CHARACTERISTICS

The endurance UAV system needs the capability to fly 500 nautical miles or greater from its launch point and remain on station at that distance for twenty four (24) hours or greater. The nominal altitude for the vehicle on station will be 15,000 ft to 25,000 ft. The payload capacity of the air vehicle will be between 400 and 500 lbs. A key element of this system is an Electro-optical/Infrared sensor system with the capability of an IIRS 6 image resolution or greater at 15,000 ft and capable of integrating a Synthetic Aperture Radar (SAR) system with one (1) foot resolution at 15,000 ft. Additionally, a satellite communication system capable of transmitting, via narrow or wide band, data from the onboard sensor plus air vehicle command and control is required. This UAV system must be demonstrated within six (6) months and a fieldable prototype of that system consisting of three (3) air vehicles and one (1) ground control station delivered to the government within twelve (12) months. This will be followed by a deployable UAV system in twenty four (24) months consisting of an additional seven (7) air vehicles and two (2) ground control stations plus an upgrade of the original three (3) air vehicles and one (1) ground control station for a total of ten (10) air vehicles and three (3) ground control stations. In thirty (30) months the full integration of the SAR sensor into the UAV system is to be demonstrated and available for deployment.