

Aerospace Products



For over thirty-five years, DNE Technologies, Inc. (DNE) has pioneered the design, development and manufacture of high technology aerospace products. Our dedication to advanced technologies has helped develop and support unique applications and operating environments including ice detectors, sensors, refueling devices and lighting controllers. Year after year, throughout the world, DNE's solid reputation in the field of quality aerospace devices spans the commercial, military and government markets.

The experience, expertise and facilities of DNE provide the unique capability of both designing and mass-producing state-of-the-art aerospace equipment that meet stringent military specifications. Our devices and systems are used aboard fighters, transports, tankers, bombers and helicopters.

DNE has the qualifications to provide innovative solutions for advanced requirement of sensing, control, power conversion and on-board processing and timing. Our 170,000 square foot headquarters facility is located on 14 acres in Wallingford, Connecticut, and contains complete engineering, manufacturing and testing capability. DNE possesses the expertise and facilities to perform in-house EMI and Environmental Testing which significantly reduces the lead time for developmental and qualification testing.

DNE

Ice Detectors



One Piece Ice Detector

DNE Technologies, Inc. (DNE) manufactures a line of highly reliable sensitive ice detectors. Currently, DNE's ice detectors are employed on the F-16, F-117, B-1, B-2, and F/A-18E/F

military aircraft and the Advanced Cruise Missile. DNE has, under development, a flush mounted ice detector intended for use on commercial aircraft.

The DNE technique utilizes the unique thermal quality of ice, where 80 calories of heat are required at 0°C to change one gram of ice into water. A nickel wire in grooves on a narrow cylindrical probe or airfoil segment forms the detection surface which is electronically pulsed every 2.5 seconds. If ice forms on the wire, the electro-thermal characteristic of the wire changes dramatically as the heat generated by

the pulse melts the ice. The ice detector senses all types of ice, and is not fooled by glycol, super cooled water, or foreign material. In certain models, built-in circuitry provides for an uninterrupted signal when there is continuous icing.

Through electronic monitoring of the pulses, ice formation is quickly recognized and a discrete signal is generated for a cockpit indication or automatically activating the ice protection system, or both. Simultaneously, a built-in heater melts the remaining ice on the probe.

DNE's self de-icing automatic ice detectors are sensitive to ice accretions of 0.005". With de-icing continuously occurring at very low levels of ice accretion, the resultant ice particle size will be virtually infinitesimal and safe enough for engine ingestion and/or contact with aircraft surfaces.



Two Piece Ice Detector

Sensors and Control Devices

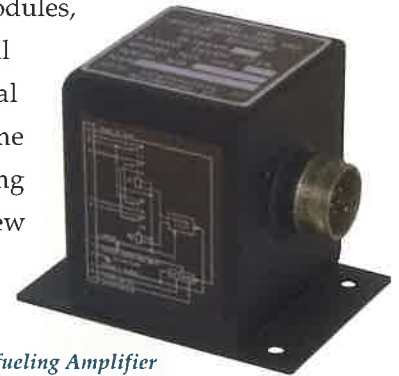
Since 1945, originally as Seaboard Electric, DNE has been developing and producing advanced sensors and control devices for aircraft. Highly specialized, these little black box controllers are on board most of the military aircraft in service today.



Flasher

DNE emphasizes reliability, small size, lightweight, quality, environmental stability and cost in our products. Our units are designed for a particular segment of an avionics system and are specified by either the aircraft manufacturer or military customer to solve a unique problem. The controllers and sensors used on today's aircraft, although similar in performance, all have dedicated characteristics and response circuitry requiring specialized functional response.

DNE's expertise in the conversion of the physical sciences to electronic controls allows us to supply products totally efficient in systems performance. These products include anti-ice controllers, solid-state dimmers, annunciators, power supplies, logic modules, power monitors, physical property sensors, signal amplifiers, audible tone generators, and lighting flashers. These are but a few of the many products that DNE manufactures.



Air Refueling Amplifier



Universal Air Refueling Test Set

Multi-Channel Light Controllers



DNE is a leading manufacturer of aircraft multi-channel lights controllers.

These highly efficient controllers can be configured for any input voltage, AC or DC, with any output voltage. The lighting controllers can control all types of lighting, incandescent or electro-illuminant, and they are compatible with night vision goggle requirements.

DNE currently supplies the AH-64 Apache and the RAH-66 Comanche Interior Lights Controllers and the AV-8B Master Caution/Annunciator Lights Controller. DNE was also the supplier for the A-12 Interior Lights Controller before that program was terminated.



Warning Lights Annunciator

Condensed Product List

AC Undervoltage Relay	Electric Chime	Power Supply
Advanced Boom Coil	Horn Keyer	Regulator Voltage
Air Refueling Control Amplifier	Intercom Control Unit	Signal Amplifier
Air Refueling Intercom Amplifier	Interval Timer	Speed Break Controller
Air Temp Thermostat	Intervalometer	Synchronizer
Aircraft Exterior Lights Flasher	Lightning Suppressor	Test Sets
Aircraft Ice Detectors	Logic Module	Time Delay Relay
Aircraft Systems Lights Flasher	Logical Switching Unit	Timer
Airport Ice Detectors	Master Warning Control	Transient Suppressor
Annunciator Lights Controller	Multi-Channel Lights Controllers	Universal Aerial Refueling Test Set
Audible Warning Signal Generators	Oil Temp Thermostat	Variable Voltage Transformer
Audio Noise Suppressor	Outside Air Temperature Sensor	Windshield Anti-Ice Controller
Count Limiter	Positive Pulse Power Relay	Windshield Temperature Controller
Current Flow Sensors	Power Detector Assembly	

DNE

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