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DUAL BATTERY STARTING SYSTEM FOR THE DHC-8 AIRCRAFT STC SA16-109

This modification provides better cold weather starting capability for the DHC-100/200/300 aircraft. It allows the auxiliary battery to be tied to the main battery during the engine start sequence. The system is armed using a switch on the overhead panel adjacent to the existing engine start switch. When the existing engine start switch is engaged, a high power relay closes to connect the auxiliary battery to the start bus to assist the main battery.

An annunciator in the overhead panel, adjacent to the start panel, controls the system.



The system is available on the ground, before any of the generators are on line and if ground power is not present. Otherwise, it is inactive. Once the Engine Start Switch is selected to either engine the “AVAIL” light illuminates and the system may be activated by pressing the annunciator switch. The ON light will illuminate. Once the starter drops out, the system deactivates. A safety interlock prevents the batteries from being paralleled after a start sequence begins.

The aircraft must be fitted with two Hawker 43 ampere-hour sealed lead acid batteries in accordance with STC SA04-31 to apply this modification.

The kit consists of a large power contractor, installed in the nose, four small signal relays installed in the wardrobe, a circuit breaker on the LH essential bus and the annunciator in the overhead panel. The total weight of the system, including wire, is 12 lbs.

Cost of the kit and STC Documentation is \$8,650 Canadian per aircraft, subject to US/Canadian exchange price fluctuations. The kit includes all parts except consumables, and STC documentation.