The 520 alarm (RADARUPT not expected at this time) that was generated when the IGC DSKY CB was closed was caused by the computer hardware logic not being properly set during the turn on start.

The circuitry that governs the radar sequence is not reset during a restart. The radar sequence or radar read timing consists of the following sequence; an eighty milsec gate, a five milsec delay, 15 readout pulses at a 3200 pps repetition rate, and a radar rupt pulse. When power is applied to the LGC this circuitry may start at any point in the sequence and therefore start up with RADARUPT.

Whenever the LGC radar read routine requests data a erasable register, SAMPLIN, is set to the number of samples desired. Whenever the radar rupt is received SAMPLIN is checked and if greater than zero a normal processing sequence unsues. If a Fresh Start, or restart (hardware or software) is generated, this will set SAMPLIN to -1.

Therefore, when the rupt was generated and SAMPLIN was found to be -1 (because of the turn on restart) the routine generated a 520 alarm.

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