

The ACU adjusts the field current to maintain the alternator output S+ - S- at 28.4V.

The ACU (alternator control unit a.k.a. voltage regulator) also controls the "low voltage" light.

The light goes on if:

a) the alternator output voltage S+ - S- drops to low (insufficient alternator power output)

OR

b) if the alternator output voltage goes high (potentially damaging to avionics, lights etc.), the light goes on AND a relay trips in the field circuit, shutting down the alternator. This relay resets by cycling both the alternator and master switches. If the excursion was just a transient, the light will go off and the alternator will resume charging.