

Chapter Eight

in perfect condition. It also does not take into consideration that some equipment, such as radios, may not work as the battery becomes significantly discharged even before the anticipated time expires. Therefore, in this case, it is not practical to think that reducing system demand to 40 amps will guarantee one hour of use. It is always a good idea to reduce the load as much as is safely possible and to terminate the flight as soon as you can.

Developing a Load-Shedding Chart

To make intelligent decisions about what equipment to use and what to turn off, the pilot needs to do a bit of homework. One afternoon when you have the bug to fly but the weather won't be agreeable, take the electrical-system schematic to the airplane, find the current draw for each item listed, and develop an electrical-emergency load-shedding list like the one depicted in Table 8-6 for a common general-aviation single-engine aircraft. This can be done in a number of ways.

Perhaps the easiest way to develop your list is to check the CB rating for each item. While it will be higher than the actual current draw for that particular item, approximately 1.1 to 1.5 times higher, it will give you a pretty good estimate on the safe side. A more exact method, though more time-consuming, is to get the rated amperage from the data plate on each appliance. The same information can also be found on manufacturer's information sheets. Compare the differences in the CB amperage ratings shown in the

Table 8-6. Electrical Emergency Load-Shedding List

Amps	Item
20	Taxi and landing lights
20	Landing gear hydraulic-pump motor
10	Pitot heater
10	Wing-flap system
10	Flashing beacon
5	Auxiliary fuel pump
5	Avionics cooling fan and strobe lights
5	Instrument cluster
	Low voltage warning light
	Ignition switch
5	Carburetor air temperature gauge, map, compass, instrument lights and dimmers, dome and courtesy lights, post lights
5	Navigational lights
	Yoke map light
5	Turn coordinator
5	Radio 1
5	Radio 2
