Reasons Why They Crash

Modelers continue to crash aircraft for the same reasons. To help them set up their airplanes and avoid the common equipment preparations and piloting mistakes that often cause crashes, we at Don's Hobby Shop wrote the books *Gas Engines Giant Planes* and *Proficient Flying*.

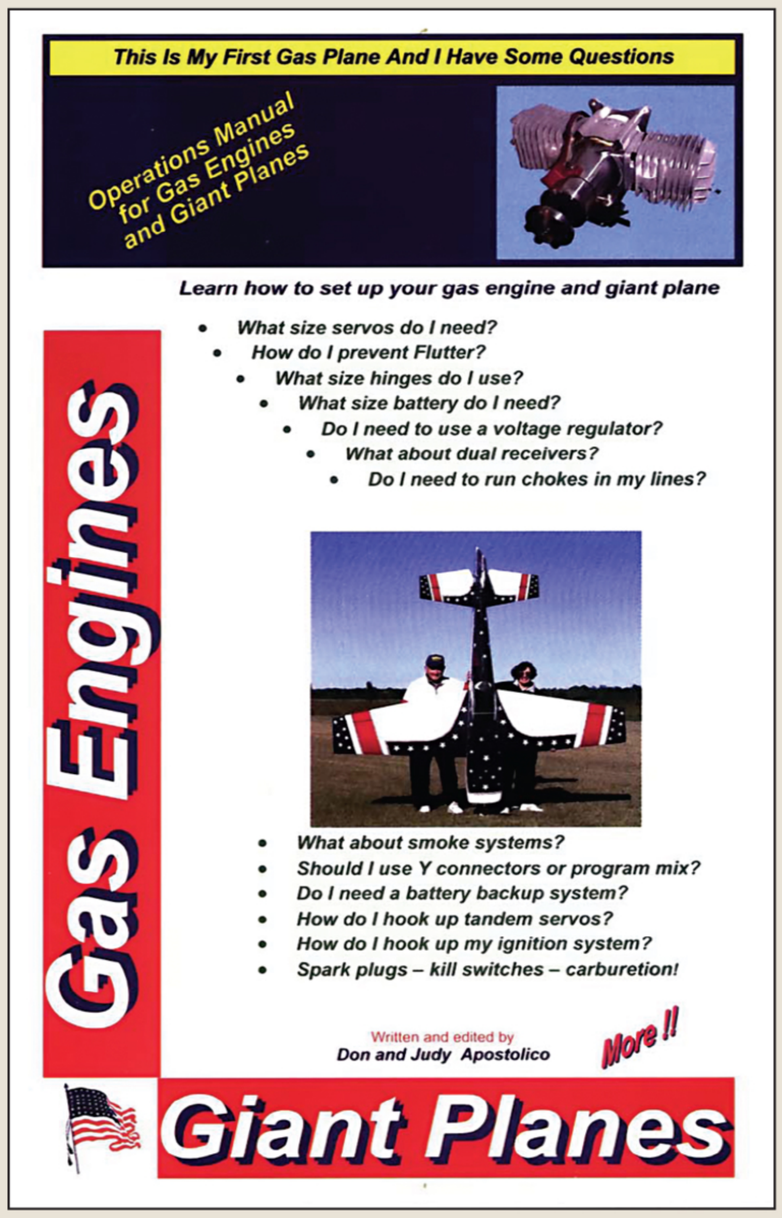
Once a modeler learns the setups that have proved to work in adverse circumstances and avoid those that are more prone to fail, he or she is far more likely to fly without issue than the pilot who doesn't have that information.

There are 30 reasons in five main categories, arguably with some overlap, why aeromodelers chronically and needlessly crash their airplanes. The accompanying chart details this information. The main categories are:

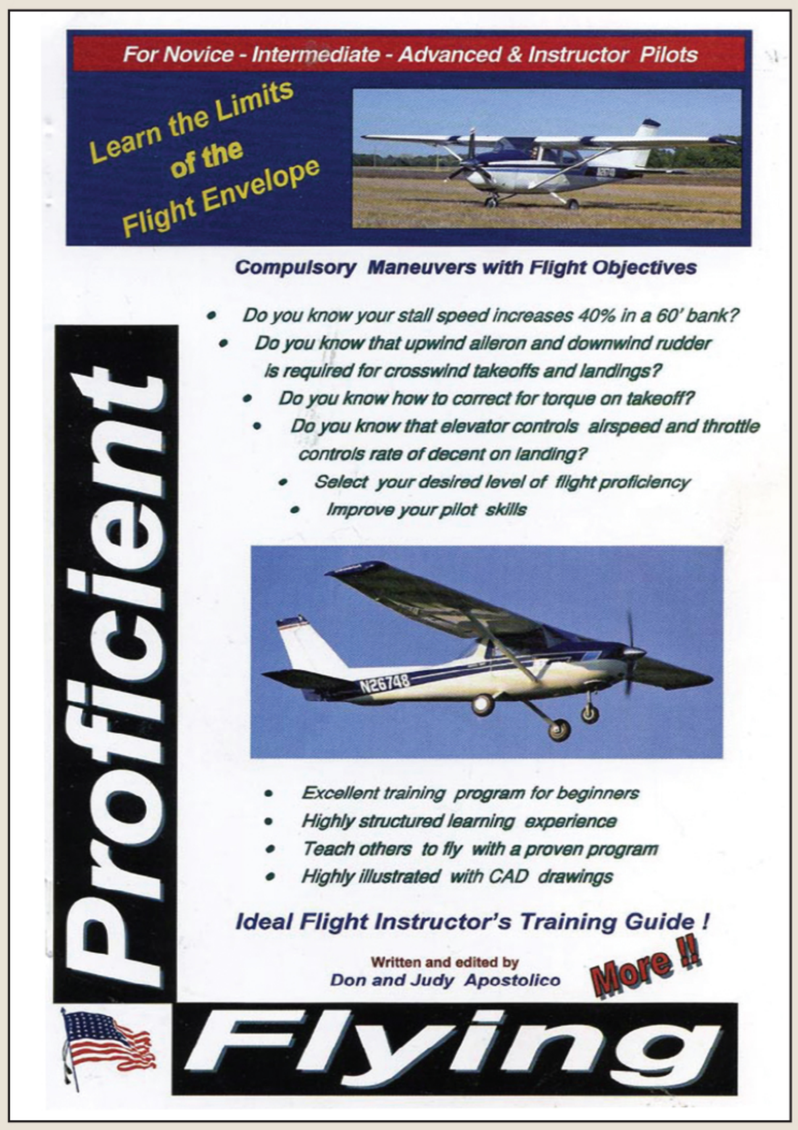
- Inadequate flying skills (pilot error).
- Improper equipment setup. (Using the right equipment and setting it up incorrectly.)
- Improper equipment choice for the intended application.
- Equipment failure (random).
- Lack of proper maintenance. (Poor preflighting and routine maintenance.) MA

—*Don Apostolico*

Item	Pilot Error	Setup Issues	Equipment Choice	Random Failure	Maintenance Preflight
Pilot Error		X			
Battery Failure		X		X	
Switch Failure		X		X	
Receiver Failure		X		X	
Burned-Out Servos		X		X	
Receiver Brownout—Reboot		X			
Hot-Running Regulators, Wires, Servos		X			
Failure to Load Test Batteries					X
Not Using 6-Volt Regulators		X			
Incorrect Propeller Setup		X			
Building in Choke Points		X			
Improper Radio Programming		X			
Improper Needle Settings		X			
Flutter		X	X		
Stripped Servo Gears		X	X		
Incorrect Linkage Geometry		X	X		
Inadequate Servo Torque		X	X		
Radio Frequency Crosstalk		X			
Improper Tank Plumbing		X			
Inadequate Fuel Filtering		X			
Improper Inlet/Exit Radios		X			
Improper Baffling		X			
Linkage Failure		X			
Loose Nuts, Bolts, Screws		X			X
Reversed Controls	X	X			X
Not Connecting Extensions	X	X			X
Vapor Lock		X			
Improper Charging					X
Incorrect CG		X			
Incorrect Travels		X			



This Giant Scale setup manual, which is in its third edition, helps a modeler transition to large models without making common setup mistakes.



Proficient Flying has been called the "Stick and Rudder of RC Flying." RC pilots who don't understand the flight envelope are doomed to continue crashing models, because they don't understand the causes and effects of their actions.