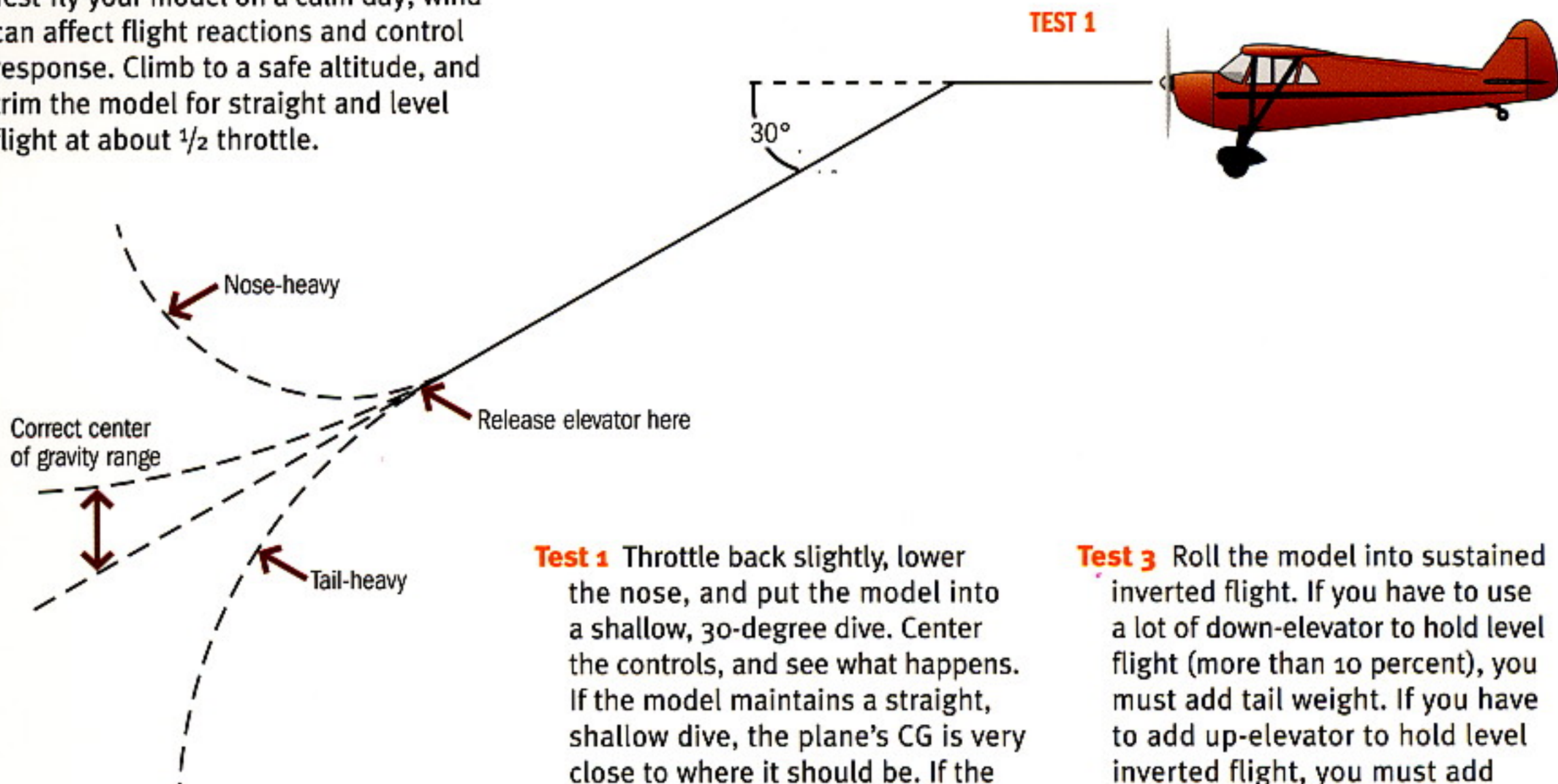


IN-FLIGHT CHECK FOR CENTER OF GRAVITY (CG)

Test-fly your model on a calm day; wind can affect flight reactions and control response. Climb to a safe altitude, and trim the model for straight and level flight at about $\frac{1}{2}$ throttle.



Test 1 Throttle back slightly, lower the nose, and put the model into a shallow, 30-degree dive. Center the controls, and see what happens. If the model maintains a straight, shallow dive, the plane's CG is very close to where it should be. If the nose rises quickly, the model is nose-heavy. If the model noses downward into a steeper dive, then it's tail-heavy.

Test 2 Roll the model into a 90-degree banked turn, and note what it does. If the nose drops, add tail weight. If the tail drops, add nose weight.

Test 3 Roll the model into sustained inverted flight. If you have to use a lot of down-elevator to hold level flight (more than 10 percent), you must add tail weight. If you have to add up-elevator to hold level inverted flight, you must add nose weight.

Land the model, and adjust the CG appropriately, adding weight in small increments. Check the balance again by performing the same maneuvers.