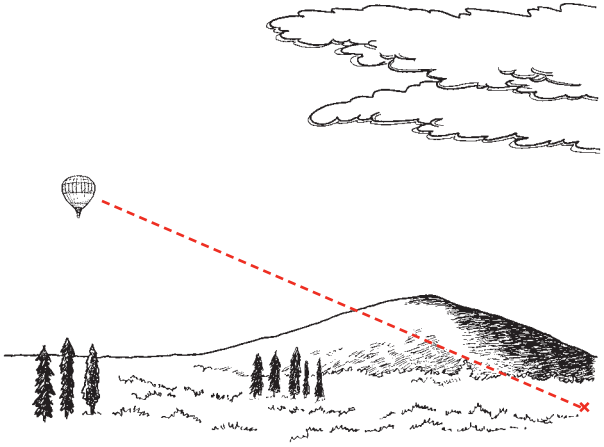
WORST-CASE SCENARIO®

HOW TO LAND A RUNAWAY HOT AIR BALLOON

1 **Use a radio to contact your chase crew.**
A chase vehicle will be following your progress from the ground, usually ready to meet the balloon when it lands. Using the pilot's two-way radio, press the talk button and explain your situation to the crew. Release the button to listen. Tell a crew member to call emergency services to meet the balloon when it touches down.

2 **Establish whether the balloon is ascending or descending.**
Look to the horizon, 90 degrees to the right or left of the direction the balloon is traveling. If the horizon is moving higher, you are descending; if it is moving lower, you are ascending.

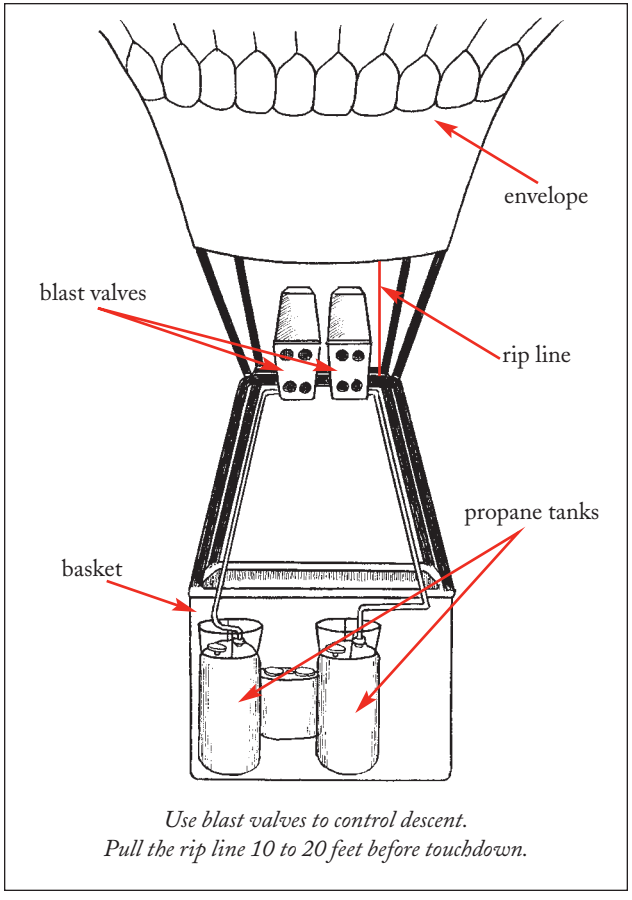
3 **Determine the balloon's farthest point of travel.**
Face in the same direction the balloon is traveling. Look for a point on the ground ahead of you that does not appear to be rising or descending. This point is the farthest the balloon will travel at its present rate of descent. If no serious hazards (power lines, buildings, people) are between you and the farthest point of travel, skip to step 5. If there are hazards ahead, continue to step 4.



The point on the ground ahead of you that is not rising or falling is the balloon's farthest point of travel.

4 **Change your flight path.**

To clear a populated area or avoid a collision, increase the balloon's altitude by adding more heat to the balloon. Locate the blast valve, a lever-type valve protruding from under the propane burner. Open the valve by rotating the handle to the vertical position, hold it open for 5 to 10 seconds, then release it. (The valve is spring-loaded to the off position. The faster you are descending, the longer you will need to leave the valve open to slow your descent.) Leave the valve closed for 10 seconds. Continue to operate the valve in this sequence until you see the balloon ascend. Do a horizon check (step 2) and check the farthest point of travel (step 3) to determine your altitude and ability to clear obstructions.



Use blast valves to control descent. Pull the rip line 10 to 20 feet before touchdown.

5 **Once all obstacles are cleared and a suitable landing site is in view within your direction of travel, begin your descent.**

If you do not open the blast valve, the balloon will slowly begin to descend. Hot air balloons are designed

so that terminal velocity (the speed at which the basket and balloon will hit the ground if the blast valve is fully closed) is only about 20 mph. At this speed, landing will be similar to landing under a parachute: a sharp bump, but survivable. Use the blast valve to slow your descent, if necessary, but be careful not to add so much hot air that you begin to ascend.

6 **Pull the rip line.**

The rip line is a red rope or strap hanging down into the basket from the envelope (the open balloon). It opens the vent at the top of the envelope, which allows hot air to escape quickly just before and right after landing. Ten to 20 feet before touchdown, pull hard on the rip line. There will be at least 20 feet of slack, perhaps more if the line is attached to pulleys to make pulling easier. Continue to pull the line until there is no more slack. Hold the line until the balloon has landed and deflated.

7 **Brace for impact.**

Bend your knees and grab the uprights or handles in the basket to avoid being thrown out upon contact with the ground. Avoid grabbing fuel lines or placing any part of your body outside the basket. Do not try to remain standing during impact: Collapse yourself into the bottom of the basket when you hit the ground.

8 **Remain in the basket until the balloon has come to a complete stop.**

The basket may bounce and skip several times before coming to a stop on the ground. The balloon should deflate and collapse in the downwind direction. If you have landed in trees, the basket should be upright, but you may need to wait for rescue.

Be Aware

- Failing to pull the rip line will result in a dangerous bouncing landing and increase the risk of the balloon hitting the ground and then floating away again.
- Though the envelope, wicker basket, and propane tanks will float, landing on water adds complications and should be considered only as a last resort.
- Hot air balloons have no mechanical steering mechanism—you can only force a balloon to climb (by opening the valve, adding propane to the envelope) or descend (by doing nothing). Steering is accomplished by harnessing wind currents at different altitudes.