

Prelaunch Check

After the balloon is inflated and upright, the pilot should perform a pre-launch check. Ensure that loose equipment is properly stowed and secured. For balloons using multiple tanks, it may be appropriate to shut off the tank that was used for inflation, and open the tank that will be used first for flight. Some pilots make another quick check of the burner to ensure that there are no leaks or deficiencies present. The top cap should be activated to release the tabs (as necessary), and ensure that the mechanism is functioning properly. The altimeter, if not previously set, should be set to the proper barometric pressure or field elevation, and the temperature indicating system should be checked for a proper reading. If used, radios should be turned on and secured. The pilot should note the time of inflation, and quickly check the fuel level in each tank to ensure that there is sufficient fuel for the planned flight. This pre-launch check should be brief and verified through the use of a pre-launch checklist.

Launch

If carrying passengers, now is the time to invite them in the basket. Immediately compensate for the additional weight with sufficient heat to regain equilibrium. The passengers have already been briefed on the correct landing procedure. Brief them again on behavior in the basket. Advise passengers not to touch any control lines, take care of their possessions, stay within the confines of the basket, and, above all, to obey the PIC.

At least one crewmember should remain near the basket in case the pilot or passengers need assistance. This is a good time to give the crew a final briefing regarding the expected distance and length of the flight, radio channels, and other last minute instructions. If other balloons are launching from the same area, ask a crewmember to step back from the balloon to check that it is clear above.

Two or three standard burns in a row from equilibrium usually provide a slow departure from the ground. If there are no nearby, downwind obstacles to clear, a slow ascent rate is preferred to test wind direction and detect subtle wind changes. Climbing at a slow rate is the best way to avoid running into balloons above. There is an unwritten rule in ballooning (not regulatory) that the balloon below has the right of way (due to lack of visibility above). Although the balloon below has the right of way, the higher balloon needs time to climb out of the way, if necessary. Pilots must maintain awareness of other balloons operating near them, particularly in crowded or rally situations. [Figure 6-15]

A fast ascent rate from launch is only to avoid ground obstacles or to pass quickly through an adverse wind, and only when it is clear above. Should circumstances require a



Figure 6-15. *The balloon below has the right of way while ascending. The pilot of the higher balloon should, as a courtesy and in the interest of safety, yield the right of way to the ascending balloon, as that pilot is probably unable to see the balloon above.*

fast ascent rate, the pilot should set up for the lift off by having the ground crew put their weight on the basket by hanging their arms over the side, not holding on. The pilot should then heat the balloon to a temperature beyond that needed for equilibrium; 20° above the neutral buoyancy point may be a good starting point. After getting a check of possible traffic above the balloon, the pilot instructs the crew, “weight off,” and the crew responds by removing their weight from the basket. It is imperative that the crew clears the basket, and that no crewmembers are left hanging outside. The balloon then rises at a fairly rapid ascent rate. The pilot must be aware that the balloon is marginally under control at this point, and that too excessive a climb rate may result in a condition known as “floating the top.” This is a scenario where the air pressure created by the climb may push the top cap of the balloon down, causing an out-of-control descent. Maximum climb rates are specified in the operating limitations section of the balloon’s flight manual.

It is very easy to be distracted during launch and make an unintentional descent. Make sure all ground business is taken care of, such as instructing the chase crew and stowing all equipment correctly, before leaving the ground.