1,000 feet Over heavily populated areas. 500 feet Over open

areas.







Northern winds

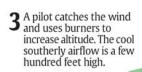
Wind speed usually increases at higher altitudes.

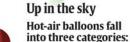
Ballooning inside the box

There's no flight plan for a balloon ride. But a predictable pattern of winds known as the "Albuquerque box" lets balloonists take off over the Rio Grande Valley, backtrack and land near their launch site.

2 Air flows the valley at about 10 mph.

southward down





Standard **Bulb-shaped balloons**

are the lightest and easiest to fly.

Appendage Standard balloon with shapes attached.

Special shapes

Range from the cartoon characters to the space shuttle. These are the most difficult to fly; they can twist like a weather vane in the wind.



Air close to the ground is cool at dawn and dusk. It flows from higher elevations into the Rio Grande Valley.



A balloon moves horizontally by changing its altitude.

Balloon spectaculars

The Albuquerque International Balloon Fiesta runs today to Oct. 9. For more information, call 505-228-9874 or visit aibf.org. If you can't make it to Albuquerque, here are upcoming festivals around the nation.

The Shenandoah Valley Wells Fargo Hot Air **Balloon & Wine Festival** Winchester, Va. Oct. 14-16

Great Mississippi River Balloon Race Natchez, Miss. Oct. 14-16

Thunderbird **Balloon Classic** Glendale, Ariz. Oct. 28-30

Black Canyon **Balloon Classic** Montrose, Colo. Nov. 24-26

Holiday **Balloon Fest** Battle Creek, Mich. Dec. 2-4

Red Rock **Balloon Rally** Gallup, N.M. Dec. 2-4



Southern winds

different directions

at different heights.

Wind blows in

Capacity: 280 cubic feet Weight: 1,450 pounds Gross lift: 3,940 pounds

Sources: FireFly Balloons; howstuffworks.com; Albuquerque International Balloon Fiesta

115

feet

Reporting by April Umminger; graphic by Frank Pompa, USA TODAY