

Chase Crew Page

A Guide to Crewing for Hot-Air Balloons

Welcome to the wonderful world of Ballooning! If you are interested in becoming a part of the world's first form of manned flight, this page will provide you the general resources necessary to understand being part of a chase crew.

Being part of a chase crew is great fun and not a lot of hard work. That said, all ballooning crews can use the crew training instructions listed here.

Before you get started, please note the following:

- Each balloon system is different
- Different pilots use different techniques
- Be sure to follow the pilot's instructions
- Don't forget to ask your pilot questions

General rules for balloon chase crew members:

- Pilot is in charge (crew chief is when pilot is in air)
- No smoking
- Don't be late to launch field
- No drinking until balloon is packed
- Different pilots have different plans
- Don't step on the balloon
- Only pull on the balloon by the thick load tapes
- Lift with legs & don't straddle ropes
- Wear Gloves

Getting Started in Ballooning

The Basics:

Ballooning is the oldest form of aviation, dating back to 1780's France, where the concept of using trapped hot-air as a lifting agent was first tested. Since then, ballooning has grown into a popular sport, with tens of thousands of balloonists and crew members regularly enjoying sport ballooning throughout the world. And getting into ballooning is very easy, but there are a few things you should know:

First, ballooning is typically an early morning or late afternoon activity, because the atmospheric conditions are usually at their most stable during the first and last hours of the day. Cool temperatures and calm winds are ideal for ballooning. Therefore, it's important to know that you may have a pre-dawn wakeup call to participate in ballooning. The thrill and beauty of the sport makes up for the early jolt out of bed.

Second, ballooning is a very safe form of aviation, but is only kept safe by the people who participate in it. Therefore, it is important that, whether you're a pilot or crew member, you focus on taking safety precautions while out ballooning.

Third, people will typically get started in ballooning by joining a chase crew. Chase crews help set up the balloon, prepare it for launch, chase the balloon to its final landing spot, and help pack it up. The chase crews are also responsible for being the life of the tailgate parties, which are an integral part of Wyoming ballooning. Learn more about what chase crews do.

Finally, balloons drift with the wind. Pilots can control the up and down maneuvers of the balloon...however, they cannot control which direction the wind blows. Therefore, a pilot must pay attention to different wind directions at different altitudes, adjusting to navigate. Chase crews follow the balloon during flight, meeting the pilot and passengers when they land.

Getting Started:

We recommend that, if you are brand new to ballooning and want to learn more and get involved, you should join a chase crew. There are many Wyoming-based pilots who welcome new chase crew and are happy to introduce others to the sport. Joining a chase crew allows you to experience what ballooning is all about, and gives you the opportunity to interact with the operations of a flight.

If you would like to join a chase crew, email us and we will be sure to respond and set you up with some local balloon pilots.

The Balloon Federation of America offers a Junior Balloonists Program for kids aged 13-17. More information can be found here: www.bfa.net

What to Wear

Many unforeseen things can come up during the adventure of chasing balloons. Therefore, it is important to know what to wear, so you'll be protected and comfortable. The following guidelines will help prepare you for what to wear:

Layers of clothing work best, especially for chilly mornings.

Good gloves, preferably leather or with leather palms.

Long pants are typically best.

Closed-toed shoes to protect your feet.

A hat may be helpful, as the radiant heat from the burners can be toasty.

There are also some important things to not wear:

Nylon or synthetic materials; they can catch fire and/or melt to your skin.

Drawstrings, scarves or other long clothing or accessories including jewelry that can get snagged on the balloon.

Sandals, flip-flops or high-heeled shoes.

Depending on the area and time of year you fly, it is encouraged to bring sunscreen and insect repellent.

Always remember that being comfortable is key to having fun chasing balloons

Assembly, Inflation and Launch

The assembly, inflation and launch of the balloon is the point where all the safety checks are made and the balloon is prepared for flight. Keep in mind the following:

- Safety First
- Always listen to the direction of your pilot
- Have fun!

Pilots will typically direct their crew to prepare the balloon by unloading the equipment from truck or trailer, assembling the basket, unloading and connecting the envelope (fabric portion of the balloon) and filling the balloon with cold air. During the assembly portion, the pilot will be conducting safety checks on the fuel system and basket superstructure. Therefore, it is important that crew allow the pilot to handle this portion and only assist when requested.

Once connected and tested, the balloon is ready to fill. Typically, a balloon inflation requires the following:

- 2 crew to hold open the "throat," or bottom of the balloon to allow it to fill with air.
- 1-2 crew to hold the "crown line," a rope attached to the top of the balloon. This rope stabilizes the balloon during inflation.
- 1 crew to stabilize the inflation fan. This will include shifting the speed and turning the fan off when signaled by the pilot.
- Additional crew will typically assist the pilot in inserting the deflation port, spreading the fabric and controlling bystanders.

In addition, during the inflation process, pilots will typically tie their balloon off to their chase vehicle, protecting it from being pulled when the wind is blowing. Each pilot has their own method for managing the tie off. However, please be aware of it, as it can recoil when disconnected, and can trip people walking over it if a gust of wind occurs.

Once the pilot is prepared to stand the balloon upright, they will signal the crew that they are ready. Know the following:

Those holding the throat will need to keep cables and ropes out of the way of the burner. Be sure to stand back when the burners are turned on and stay nearby the basket to put weight on it when it stands up.

Those holding the crown line will need to follow the pilots' directions to help stabilize the balloon and keep it from swinging backwards when it stands. Those attending the fan will need to move it out of the way once the blades have stopped moving.

Everyone must help hold the balloon down when it is upright. At this point, the pilot will load passengers and prepare them for launch. Once they are ready to go, typically a crewmember will walk a hundred feet out to "clear" the pilot for launch, watching for any overhead traffic.

When the pilot signals to "weigh off" for launch, be certain that you let go and do not hold on to the basket. Holding on or getting stuck on the basket is especially dangerous and can result in serious injury.

Once the balloon is airborne, it is time to pack up the remaining equipment and pursue the balloon!

The Chase!

Once the balloon has launched, the remaining equipment should be stowed securely in the chase vehicle. Double check the inflation and launch area to ensure that no equipment and personal items have been left behind.

At this point, the crew must follow the balloon to its landing spot. This is considered by many to be the most fun part of being on a chase crew.

First, most balloons will typically have a chase crew or assigned crew member to direct the ground portion of the ballooning adventure. That person is responsible for making certain the chase is safe, but each crew member is responsible for themselves as well, so make sure you're being safe.

Chase crews combine the use of ground-to-air radios, knowledge of area roads and the eyes of other crew members to watch the balloon and follow it to its landing spot. It is important that the person responsible for keeping an eye on the balloon is not the person driving. One to watch the road, the rest to watch the balloon.

Be sure to obey traffic laws. Also remember that even though you are trying to watch the balloon, others on the road may be doing the same thing. Beware and be cautious of distracted drivers and pedestrians

When the balloon is approaching a landing, the crew is responsible for a few things:

Making sure the vehicle is out of the way, not blocking main trafficways
Staying out from in front of a moving balloon...crew should always be upwind of the balloon.

Keeping an eye out for sharp objects in the deflation area so the balloon won't rip.

Managing landowner relations...crew should never enter private property without first gaining permission, even if the balloon is already on the ground. The CBC works hard to maintain relationships with area landowners, and not following rules can ruin it for other pilots who fly the same area.

When the balloon is landing, don't get in front of it. Always approach it from the sides or rear.

Keep hands and feet out from underneath the basket, and be cautious of the burners. When safe to do so, crewmembers should put weight on the basket and hold it in position. Be sure to not get tangled up with the balloon or basket. By using only your hands to secure the balloon, can always let go.

And of course, always remember to listen to and follow the direction of the pilot.

The chase can be one of the most fun and exciting parts of the ballooning experience. Always remember to be safe and listen to the direction from the pilot or crew chief.

Deflation & Packup

Upon the final landing, it will then be time to secure, deflate and pack up the balloon. A couple general rules:

- Be careful around the balloon
- Do not step on the fabric
- No smoking around the balloon
- Don't get caught underneath the fabric
- Wear gloves during the deflation and packing process
- Be safe!

Typically, upon deflation, the pilot will have crew maintain weight on the basket while shutting down the fuel and instrument systems. Once this is complete, one or more crew will be asked to man the crown line and help pull the balloon down so it can be milked of air and streamered up for packing in the envelope bag. The crown line crew is responsible for helping keep the balloon from rolling or moving too far to the sides, and keeping the balloon in the deflation area or on the tarp (if the pilot chooses to use one). Be sure to wear gloves around the balloon during the deflation and pack up.

Once on the ground, it is time for the envelope to be milked of air. Each pilot has a different method. Some pilots prefer that their balloon be milked by pulling it into their arms and slowly moving towards the top where the air empties from the deflation port. Other pilots may milk the balloon by gathering the fabric and squeezing it out on the ground with their knees. Some pilots have "squeezers," or devices that wrap around the fabric to push the air out. Regardless of the method, typically one crew will be responsible for holding open the deflation port. Be sure to wear gloves during the milking process, as some portions of the envelope can be hot from the flight. And always be sure to take direction from the pilot.

While emptying the air, be certain to not step on the fabric, as it can rip if it's pulled while there is weight on it. Also, only pull on the balloon from the load tapes, and be certain that you follow the directions of the pilot on pulling and stuffing the balloon.

Typically, the crew will load the envelope back in the bag once it is empty. This typically involves grabbing the envelope about 5 feet apart, and either bringing it to the bag or having the bag brought to you by another crew. Stuff your portion in and go back to the end of the line and grab some more. The more hands available make the work less, so if there are eager spectators, this might be a good time to invite them to help. The pilot will typically secure the basket and fuel system while the crew sneezes any remaining air out of the envelope bag, and then it is time to load back up and head back to the launch site for tailgate parties or breakfast!

Before leaving the landing site, be sure to check the area for loose equipment and always leave the space as you found it. Don't drive onto property unless you have permission and always take the time to thank any landowners for the use of their property. Some crews will offer gifts of champagne, balloon cards or other goodies to landowners. This helps secure the space as a future landing spot for other balloons.

Refueling

Most hot-air balloon systems use propane to fuel their burners. After each flight, the pilot will need to refuel the tanks for their next flight. While some pilots will wait until the day before their next flight to refuel. Most will typically do it after the morning flight and post-flight celebration.

Propane can be inherently dangerous if the proper safety precautions are not used. Below is a list of safety guidelines for crew to use if being asked to assist in the refueling process:

- NO SMOKING around the balloon
- Avoid wearing nylon or synthetic fabrics in the refueling area, remove tarps from the basket and chase flags from the refueling area, as they can sometimes create sparks
- Follow the direction of the pilot

- Leave cell phones out of the fueling area, and make sure that pilot lights and all electronics are turned off and removed from the basket
- Remove all strikers and lighters from the area
- Always follow the directions of the pilot
- Always wear gloves while participating in the refueling process

Most pilots will only allow one other crew member to assist in refueling, and most balloon festivals will require no more than 2 people in the refueling area at any time. Just be sure to stay safe and follow the directions of the pilot when involved in refueling.