



# BFA Hot Air Balloon Camp 2009



## Welcome

Thomas Jones  
Great Lakes Region Camp Director  
BFA Hot Air Balloon Camp



I would like to welcome you to the campus of Albion College. We are invited guests on this campus and will act with courtesy at all times. You are expected to be polite to everyone you encounter. Remember, you are the face and voice of the Balloon Federation of America.

## Camp Rules

- This is a tobacco free / alcohol free / drug free campus. NO EXCEPTIONS!
- Campus police patrols are available 24 hours a day
- Practice personal safety
- Everyone must be accompanied by an adult while on campus
- Stay with the group and don't wander away
- Keep your dorm area neat
- Let an adult know if something gets damaged or doesn't work
- We are responsible for our actions
- All presenters and chaperones are volunteering their time and resources. You are expected to treat them with respect.
- Disciplinary action may include a call to your parents. Severe infractions could result in being sent home.

These guidelines are laid down by Albion College and the Camp Director. They will be enforced for your safety.

We are here to have fun, so let's do it safely!

# Table of Contents

Balloonist's Prayer.....	4
Camp Schedule.....	5
Camp Check List.....	9
Great Lakes Region Staff.....	10
Parts of a Hot Air Balloon.....	11
Balloon Systems.....	12
Flight Planning & Execution.....	13
Wind Speed Chart.....	14
Cloud Chart.....	15
Communications.....	16
Power Line Safety.....	17
Federal Aviation Regulations (FAR).....	19
Interview Questions.....	20
Cameron Balloon.....	20
Jackson Community College School of Aviation.....	21
Fellow Camper.....	22
Journal.....	23
Brief Ballooning History.....	28
Books about Ballooning.....	30
Informative.....	30
Technical.....	30
Governmental.....	30
History.....	31
Fiction.....	31
Websites on Ballooning.....	32
Ballooning Websites.....	32
Government Websites.....	32
Weather Websites.....	33
Balloon Clubs.....	33
Balloon Manufacturers.....	34
Other Sites of Interest.....	34
Upcoming 2009 Balloon Events.....	35
Just for Fun.....	36
Balloon Terms Word Search.....	36
Phonetic Alphabet Word Search.....	37
Balloon Terms Crossword.....	38
Coloring Page.....	39

# Balloonist's Prayer

The Winds have welcomed you with softness.  
 The Sun has blessed you with its warm hands.  
 You have flown so high and so well,  
 That God has joined you in your laughter,  
 And has set you gently back  
 Into the loving arms of Mother Earth.



I've never known an industry that can get into people's blood the way aviation does.  
 - Robert Six, founder of Continental Airlines

# Camp Schedule

(Subject to Change)

## Sunday, July 19

13:00 – 14:00	Check-in & Settle in
14:00 – 15:00	Master Briefing
15:00 – 16:00	Social Activity
16:00 – 17:30	Ground School
17:30 – 18:30	Dinner
18:30 – 19:00	Downtime
19:00 – 20:30	Ground School
20:30 – 21:00	Judge Declared Goal (JDG)
21:00 – 22:00	Light 'n Variable
22:00 – 22:30	Campers in their room
22:30	Lights Out



## Monday, July 20

06:30 – 08:00	Balloon Tether (weather permitting)
08:00 – 09:00	Breakfast
09:00 – 10:00	Travel to Cameron Balloons
10:00 – 12:00	Cameron Balloons Tour
12:00 – 12:45	Lunch
12:45 – 13:45	Return to Campus
13:45 – 14:30	Downtime
14:30 – 16:30	Ground School
16:30 – 17:30	Balloonology
17:30 – 18:30	Dinner
18:30 – 19:00	Downtime
19:00 – 21:00	Tissue Paper Balloons Build
21:00 – 22:00	Light 'n Variable
22:00 – 22:30	Campers in their room
22:30	Lights Out

Once you have flown, you will walk the earth with your eyes turned skyward; for there you have been and there you long to return.

— Leonardo da Vinci

## Tuesday, July 21

06:30 – 08:00	Balloon Tether (weather permitting)
08:00 – 09:00	Breakfast
09:00 – 09:30	Leave for JCC
09:30 – 11:00	Jackson Community College School of Aviation
11:00 – 11:30	Return from JCC
11:30 – 12:30	JDG
12:30 – 13:30	Lunch
13:30 – 14:30	Downtime
14:30 – 16:30	Ground School
16:30 – 17:30	Balloonology
17:30 – 18:30	Dinner
18:30 – 19:00	Downtime
19:00 – 21:00	Tissue Paper Balloons Build
21:00 – 22:00	Light 'n Variable
22:00 – 22:45	Visit to Telescope (weather permitting)
22:45 – 23:00	Campers in their room
23:00	Lights Out

The air up there in the clouds is very pure and fine, bracing and delicious. And why shouldn't it be? —it is the same the angels breathe.

— Mark Twain, 'Roughing It,' Chapter XXII, 1886.

## Wednesday, July 22

06:30 – 08:00	Balloon Tether (weather permitting)
08:00 – 09:00	Breakfast
09:00 – 12:00	Ground School
12:00 – 12:30	Downtime
12:30 – 13:30	Lunch
13:30 – 16:30	Ground School / JDG
16:30 – 17:30	Balloonology
17:30 – 18:30	Dinner
18:30 – 19:30	Downtime
19:30 – 21:00	Tissue Paper Balloons Launch
21:00 – 22:00	Light 'n Variable
22:00 – 22:30	Campers in their room
22:30	Lights Out

## Thursday, July 23

06:30 – 08:00	Balloon Tether or Tissue Balloon Launch (alternate)
08:00 – 09:00	Breakfast
09:00 – 09:30	JDG
09:30 – 11:00	Ground School
11:00 – 12:30	Awards Ceremony
12:30 – 13:30	Lunch
13:30 – 14:00	Room / Site Clean up
14:00 – 15:00	Check-out / Depart

## Camp Check List

- Review Camp rules
- Review Schedule
- Review Logbooks
- Balloon Inflation
- Cameron Balloon Tour
- Tissue Paper Balloon
- JCC School of Aviation Tour
- Crew Safety
- Balloon Systems
- Weather
- Maps & Mapping
- Flight Planning
- Power Line Safety
- Regulations
- Competition
- Camper Interview
- Awards Ceremony

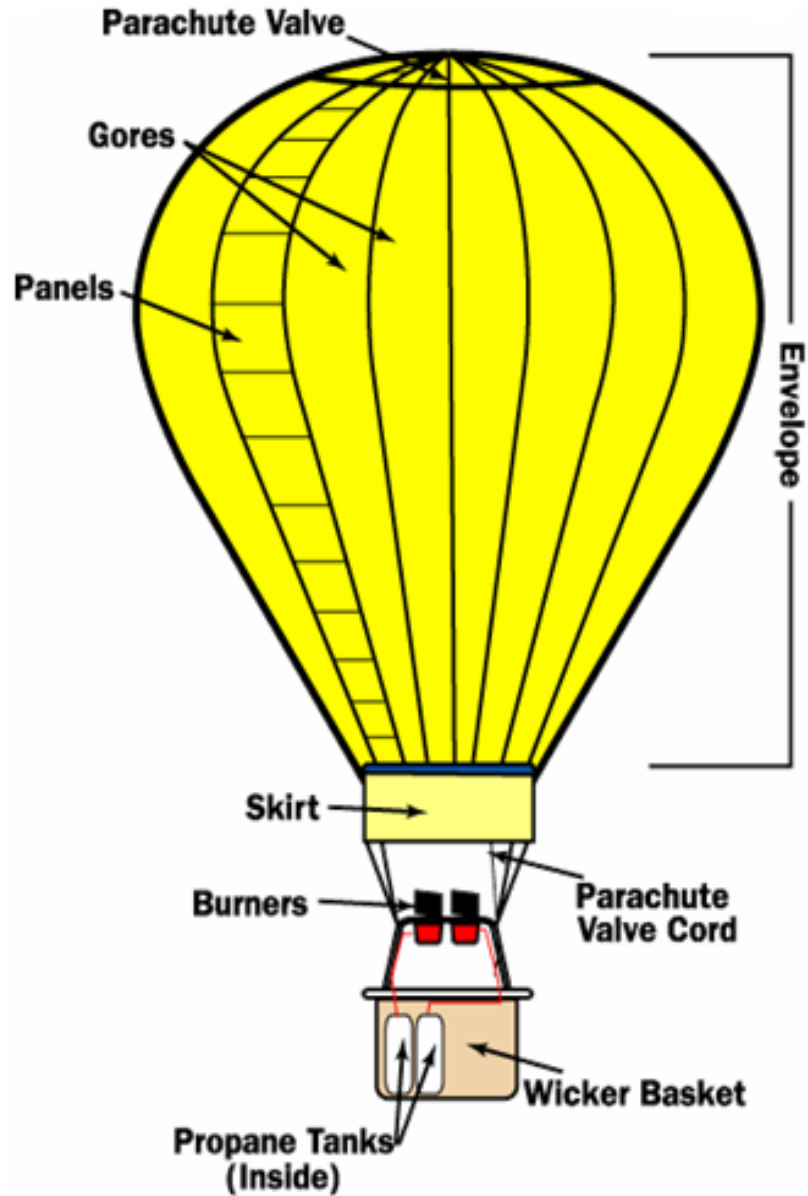
You haven't seen a tree until you've seen its shadow from the sky.  
— Amelia Earhart

## Great Lakes Region Staff

<b>Shelley Caraway</b> Tyler Texas <a href="mailto:balloonist@peoplepc.com">balloonist@peoplepc.com</a>	BFA Board Member Jr. Balloonist Director
<b>Thomas Jones</b> Climax Michigan <a href="mailto:thomas.c.jones@hotmail.com">thomas.c.jones@hotmail.com</a>	Crew / Observer Camp Director
<b>Barb Jones</b> Climax Michigan	Crew / Field Judge
<b>Bob Lane</b> Kalamazoo Michigan	Crew / Observer
<b>Dianne Lane</b> Kalamazoo Michigan	Crew / Field Judge
<b>Gene Burnstein</b> Brick New Jersey	Commercial Pilot
<b>Jeff Haliczzer</b> Reno Nevada	Commercial Pilot
<b>Kevin Knapp</b> Greenville North Carolina	Commercial Pilot

To most people, the sky is the limit. To those who love aviation, the sky is home.  
— anon.

# Parts of a Hot Air Balloon



# Balloon Systems

	System 1	System 2	System 3
Fuel Pressure Gauge			
Blast Valve			
Whisper Valve			
Envelope Connection Point			
Fuel Shut Off			
Uprights			
Fuel Lines			
Altimeter			
Temperature Indicator			
Fuel Gauge			
Drop Line			
Fire Extinguisher			
Strikers			
Fuel Tanks			
Airworthiness Certificate			
Fuel Manifold			
Burners			
Aircraft operations manual			
Sectional Chart			
Tools (wrenches, etc)			
Radio(s)			
Helmets			

# Flight Planning & Execution

## Preflight

- Obtain Weather Briefing(s)
- Determination of Flight Path, Landing Sites, Launch Sites
- Coordinate Crew & Passengers
- Equipment Check (balloon, radios, fan gas, van gas, maps, cooler & munchies)

## Launch site

- Crew Briefing and Assignments
- Brief Passengers
- Layout, Assembly, & Inflation
- Load passengers
- Re-Brief Crew & Passengers
- Launch

## During Flight

- Passenger Management
- Airspace
- Fuel Conservation
- Radio Communications
- Weather Changes
- Potential Landing sites
- Power line / Obstruction / Animal Watch
- Approach

## Landing & Recovery

- Landowner Relations
- Approaching the Basket
- Unloading Passengers
- Deflation & Packing up

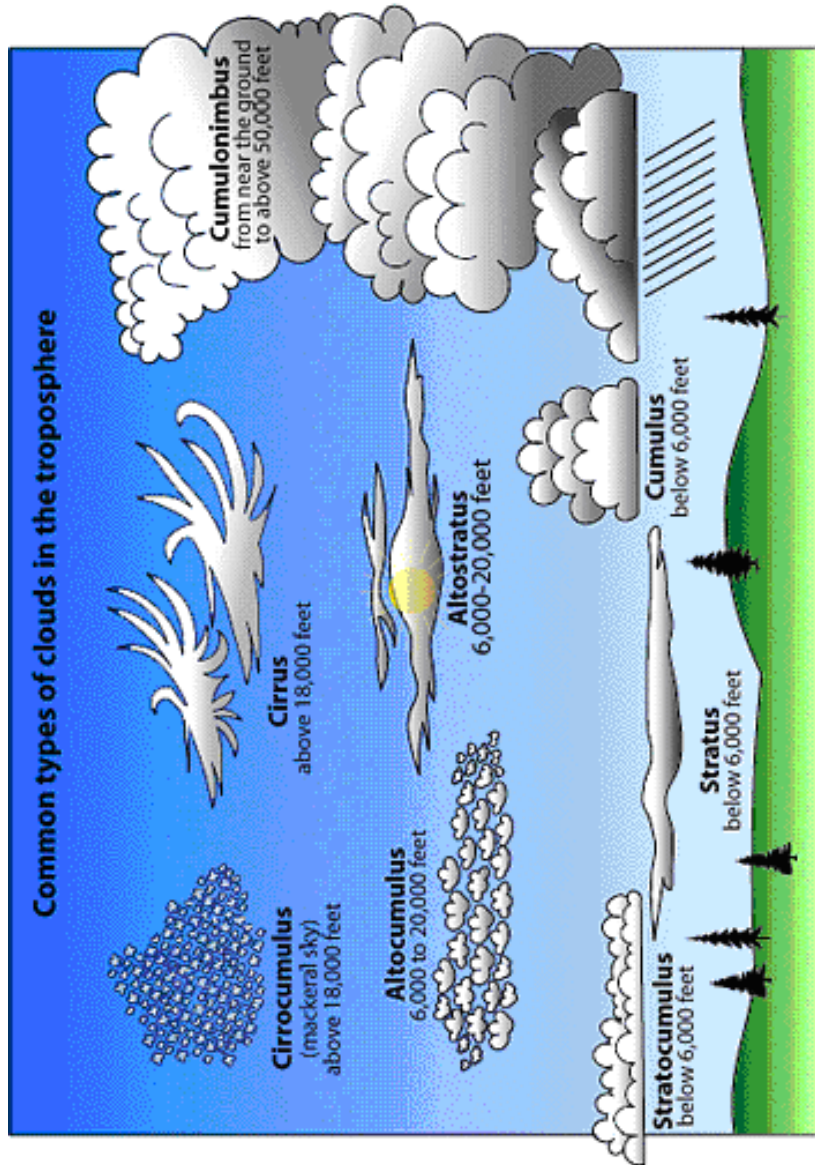
## Post Flight

- Equipment Check
- Refueling
- Clean up & Maintenance
- Crew Debrief / Flight Review
- Complete Aircraft Log
- Complete Pilot Log

# Wind Speed Chart

MPH	Knots	KPH	Beaufort Scale	Wind Type	Visible Signs
0	0	0	0	still	No movement, smoke rises vertically in a column
1-3	1-3	1-7	1	light air	Smoke drifts, branches & grass move slightly
4-7	4-6	8-11	2	slight breeze	Leaves move slightly, flags flap slowly, grass moves, smoke blows more up than flat
8-12	7-11	12-20	3	gentle breeze	Flags flap slowly, wind felt on face, smoke blows more flat
13-18	12-16	21-28	4	moderate breeze	Small branches move, flags blow extended, smoke blows flat, crops wave
19-24	17-21	29-38	5	fresh breeze	Small trees sway, wavelets on water
25-30	22-28	39-50	6	wind	Large branches move, sand blows, trees in motion
31-40	29-35	51-65	7	strong wind	Whole trees in motion

# Cloud Chart



Source: <http://eo.ucar.edu/webweather/cloud3.html>

# Communications

## Phonetic Alphabet

A Alpha	J Juliett	S Sierra	1 One
B Bravo	K Kilo	T Tango	2 Two
C Charlie	L Lima	U Uniform	3 Three
D Delta	M Mike	V Victor	4 Four
E Echo	N November	W Whiskey	5 Five
F Foxtrot	O Oscar	X Xray	6 Six
G Golf	P Papa	Y Yankee	7 Seven
H Hotel	Q Quebec	Z Zulu	8 Eight
I India	R Romeo		9 Niner
			0 Zero

Reference: Airman Information Manual, Section 4-2-7

## Vocabulary

Affirmative	Yes or Correct
Negative	No or Not Correct
Roger	Message received
Say Again	Repeat last message
Acknowledge	Let me know you received and understood the message
Go Ahead	Proceed with your message
Wilco	Message received and will comply

Most gulls don't bother to learn more than the simplest facts of flight—how to get from shore to food and back again. For most gulls, it is not flying that matters, but eating. For this gull, though, it was not eating that mattered, but flight. More than anything else, Jonathan Livingston Seagull loved to fly.

— Richard Bach, 'Jonathan Livingston Seagull'

# Power Line Safety

Hot Air Balloonists Beware

**Overhead power lines are serious and deadly hazards.**  
**Look Up. Look Down. And Stay Alive!**

**Be aware of the location of power lines at all times – when inflating, launching and landing.**

## Important Safety Facts

- Electricity travels at the speed of light and is always looking for the quickest and easiest way to get from overhead power lines to the ground.
- Power lines are not coated.
- Touching a power line can hurt, burn and even kill you.

## Preparing for Launch

- Walk the launch area before set-up and inflation work begins - look up and around for power lines. The wires may be hidden by trees and buildings. When it's dark, use a high powered portable light to look for power lines.
- Never inflate a balloon near power lines and especially if power lines are located downwind – balloons drift!
- Weather conditions vary and will directly affect the amount of lift a balloon can achieve. Know how much time and lift you'll need to clear downwind obstacles, and then give yourself extra room! Plan for a minimum of 100 feet of horizontal travel for each 1 mph of wind. But more distance is always recommended.

## While in Flight

- All passengers should maintain a constant vigil for power lines. Power lines are not easily visible from above.
- Power lines do not always follow predictable patterns such as paralleling roads and property lines. They frequently cut across open fields, parks and parking lots.
- Chase and ground crews should continually watch for power lines while balloons are traveling and while scouting out a landing area. The pilot should keep constant communication

with the crew leader using dedicated radio communications as required.

- Never land near, or upwind of, power lines!
- Follow all FAA rules.

## If your balloon touches a power line:

- Your balloon immediately becomes that power line!
- Stay calm and collect your thoughts before taking action.
- Immediately shut off all fuel tanks.
- Move everyone to the center of the gondola and away from all metal.
- Call 9-1-1 immediately.
- Keep your crew and bystanders away. Anyone on the ground who touches the balloon or any equipment that's in contact with the power line can be hurt, burned or killed!
- You're likely to be safe by staying in the gondola.
- Do not get out of the gondola until a utility worker says it's safe to do so. Only a utility worker is qualified to give you the "all clear."
- Do not touch any person who has been injured while touching the power line (or balloon equipment) and the ground. There may be electricity flowing through them.

## If you need to exit the gondola because of fire or other emergency:

- One by one everyone must JUMP free and clear of the gondola. It is critical that nobody touches the ground at the same time as the gondola, envelope, drop line or anything else touching the power lines! If you do, electricity will flow through you to the ground!
- Do not try to help people exit the gondola – don't extend them a hand. Everyone must jump clear on their own.
- Be careful, the ground may be energized! After jumping from the gondola, shuffle away with both feet close together – move at least 20 yards away; and twice that distance if the ground is wet!

Adapted from <http://www.sce.com/Safety/outdoor/balloonists.html>

I've made every mistake you can make with a balloon – so do what I do and get together with other balloonist to laugh about them, but also to learn from them.

— Ed Yost

# Federal Aviation Regulations (FAR)

Title 14 Aeronautics and Space

Part	Heading
1	Definitions and Abbreviations
31	Airworthiness Standards: Manned Free Balloons
39	Airworthiness Directives
43	Maintenance, Preventive Maintenance, Rebuilding, and Alteration
61	Certification: Pilots, Flight Instructors, and Ground Instructors
91	General Operating and Flight Rules
101	Moored Balloons, Kites, Unmanned Rockets and Unmanned Free Balloons

# Interview Questions

## *Cameron Balloon*

What items can you customize on a balloon?
What types of tests do you perform on a balloon?
How long does it take to build the different parts of the balloon?
How long do the different parts last or need replacing?
What is required to make a special shape?
What changes do you see in balloon technology over the new few years?

The exhilaration of flying is too keen, the pleasure too great, for it to be neglected as a sport.  
— Orville Wright

We who fly do so for the love of flying. We are alive in the air with this miracle that lies in our hands and beneath our feet.  
— Cecil Day Lewis

## ***Jackson Community College School of Aviation***

<b>Other than a pilot, what careers are there in aviation?</b>
<b>What subjects in school would help prepare me for flight school?</b>
<b>How have computer simulators changed pilot training?</b>
<b>What additional training is required to get a pilot license for a different type of aircraft?</b>
<b>What safety systems are built into an airplane?</b>

It was a cherished experience. I feel I got the chance to see the inner workings of the grand order of things. In the overall scheme of things, it proves that men can do about anything they want to if they work hard enough at it, and I knew that I could do it . . . and that leads, of course, to a strong suspicion that everybody else can do it if they want to.

— Scott Carpenter, recalling his 1962 Mercury 7 space flight

## ***Fellow Camper***

Camper Name:

Camper Age:

<b>What was the best thing about Camp 2009?</b>
<b>What was the worst thing about Camp 2009?</b>
<b>Would you like to know more about balloons?</b>
<b>What would you do to make the camp better?</b>
<b>What did you learn from the Ground School?</b>
<b>What did you learn that you can use in school?</b>
<b>Rank your experience at Camp (1=Low, 5=High)</b>

Aeronautics was neither an industry nor a science. It was a miracle.

— Igor Sikorsky







Date	Event
Aug 16, 1960	Altitude Record – USAF Captain Joe Kittinger rides a balloon to a height of 102,800 ft (over 19 miles), then parachute jumps safely to the ground.
Oct 10, 1960	First manned free-flight took place at Bruning NE in the Raven prototype of a modern hot air balloon by Ed Yost.
Aug 1963	First U.S. National Hot Air Balloon Championship held in Kalamazoo MI.
Jun 1967	The Balloon Federation of America was officially formed from the Sport Balloon Society (SBS) of the USA.
1971	Sid Cutter holds first Albuquerque NM balloon event.
1978	First Balloon to Cross the Atlantic Ocean. The Double Eagle II (helium) set a duration record of flight time of 137 hours.
1981	First Balloon (Double Eagle V) crosses the Pacific Ocean from Nagashimi Japan to California covering 5,768 miles in 84 hours, 31 minutes.
May 21, 1999	First Around the World flight by Richard Branson and Per Lindstrand by launching from Switzerland and landing in Africa in 19 days, 21 hours and 55 minutes.
July 1, 2002	On his sixth attempt in six years, Steve Fossett accomplishes the first Solo Around the world flight in the balloon 'Spirit of Freedom' reaching speeds of over 200 mph.

## Books about Ballooning

### *Informative*

The Great Balloon Festival Ballooning	Dick Wirth and Jerry Young
Hot Air Balloons	Christine Kalakuka and Brent Stockwell
Special Shape Rodeo	Jean-Michel Bertrand
The Joy of Ballooning	George Denniston
Images of Hot Air Balloons: Flights of Fancy and Fantasy	Ailsa Spindler
Clear to Climb	Paul Brockman

### *Technical*

Taming the Gentle Giant	Amogene Norwood
Crewing Essentials	Gordon Schwontkowski and Alyson Murray
How to Fly a Balloon	Christine Kalakuka and Brent Stockwell
Balloon Ground School Home Study Manual	Christine Kalakuka and Brent Stockwell
Balloon Builders Journal	Bob LeDoux (Editor)

### *Governmental*

FAR/AIM	Federal Aviation Administration
Aeronautical Information Manual (AIM)	Federal Aviation Administration
Balloon Flying Handbook (FAA-H-8083-11A)	Federal Aviation Administration

I was sold on flying as soon as I had a taste for it.

— John Glenn

## History

Lighter Than Air: An Illustrated History of Balloons and Airships	Tom D. Crouch
Around The World in 20 Days	Bertrand Picard and Brian Jones
America's Daredevil Balloonist	James W. Raab
Japan's World War II Balloon Bomb Attacks on North America	Robert C. Mikesh
Balloons at War: Gasbags, Flying Bombs and Cold War Secrets	John Christopher
They Sailed the Skies: U. S. Navy Balloons and the Airship Program	J. Gordon Vaeth
The Balloonists: The History of the First Aeronauts	L. T. C Rolt

## Fiction

The Little Balloonist	Linda Donn
Around the World in 80 Days	Jules Verne
Twenty-One Balloons	William Pene du Bois
Enduring Love	Ian McEwan
Balloons Can Be Murder	Connie Shelton
Murder in Thin Air	Richard Baldwin
Curious George and the Hot Air Balloon	Margret Ray
Mystery of the Hot Air Balloon (Box Car Children #47)	Gertrude Chandler Warner

I fly because it releases my mind from the tyranny of petty things . . .  
— Antoine de Saint-Exupéry

## Websites on Ballooning

### Ballooning Websites

www.bfa.net	Balloon Federation of America
hotairballoon.ning.com	Aunty Monkey (ballooning Facebook)
www.blastvalve.com	Balloon Search Engine & Directory
www.euronet.nl/users/jdewilde/index.html	Balloon Web Page Listing
www.aerostatz.com	Balloons and Equipment Classifieds
www.webexams.com	Take sample FAA Written Pilot Exam
www.mihabcs.blogspot.com	Michigan Hot Air Balloon Championship Series
www.nationalballoonmuseum.com	National Balloon Museum
www.rollingpilot.com	The First Wheel Chair Hot Air Balloon Pilot

### Government Websites

www.faa.gov	Federal Aviation Administration
www.noaa.gov	National Oceanic and Atmospheric Administration
www.usgs.gov	United States Geological Survey
easa.europa.eu	European Aviation Safety Agency
www.tc.gc.ca/air/menu.htm	Transport Canada (Air Transportation)

We want the air to unite the peoples, and not to divide them.

-- Lord Swinton

## ***Weather Websites***

<a href="http://www.noaa.gov">www.noaa.gov</a>	NOAA Weather
<a href="http://adds.aviationweather.noaa.gov">adds.aviationweather.noaa.gov</a>	Aviation Weather Center
<a href="http://www.usairnet.com">www.usairnet.com</a>	Air Sports Net
<a href="http://www.accuweather.com">www.accuweather.com</a>	AccuWeather
<a href="http://www.weather.com">www.weather.com</a>	The Weather Channel
<a href="http://www.wunderground.com">www.wunderground.com</a>	Weather Underground
<a href="http://www.intellicast.com">www.intellicast.com</a>	Intellicast Weather
<a href="http://weather.unisys.com">weather.unisys.com</a>	Unisys Weather
<a href="http://www.blastvalve.com/m/">www.blastvalve.com/m/</a>	Blast Valve weather for Mobile Phones
<a href="http://www.ryancarlton.com">www.ryancarlton.com</a>	Balloonist's Wind Forecast
<a href="http://clipaway.net/gbwx.aspx">clipaway.net/gbwx.aspx</a>	Clipaway Weather Sites

## ***Balloon Clubs***

<a href="http://www.bagiballoon.org">www.bagiballoon.org</a>	Balloon Association of Greater Illinois (BAGI)
<a href="http://www.sembaweb.com">www.sembaweb.com</a>	South Eastern Michigan Balloon Association (SEMBA)
<a href="http://www.nobpa.com">www.nobpa.com</a>	Northeast Ohio Balloon Pilot Association (NOBPA)
<a href="http://www.centralohioballoonclub.org">www.centralohioballoonclub.org</a>	Central Ohio Balloon Club
<a href="http://www.balloonindiana.com">www.balloonindiana.com</a>	Montgolfier Society of Indiana (MSI)
<a href="http://wisballoongroup.homestead.com/fIRSTpage.html">wisballoongroup.homestead.com/fIRSTpage.html</a>	Wisconsin Balloon Group (WBG)
<a href="http://www.bsok.org">www.bsok.org</a>	Balloon Society of Kentucky (BSOK)

Why fly? Simple. I'm not happy unless there's some room between me and the ground.

— Richard Bach, 'A Gift of Wings,' 1974.

## ***Balloon Manufacturers***

<a href="http://www.cameronballoons.com">www.cameronballoons.com</a>	Cameron Balloons (US)
<a href="http://www.lindstrand.com">www.lindstrand.com</a>	Lindstrand Balloons
<a href="http://www.fireflyballoons.net">www.fireflyballoons.net</a>	Fire Fly Balloons (Balloon Works)
<a href="http://home.att.net/~headballoons">home.att.net/~headballoons</a>	Head Balloons
<a href="http://www.nationalballooning.org">www.nationalballooning.org</a>	National Ballooning Ltd.
<a href="http://www.avianballoon.com">www.avianballoon.com</a>	Avian Balloon Corporation

## ***Balloon Simulators***

<a href="http://www.bfa.net/cms1/dmdocuments/Games/bullseye.swf">www.bfa.net/cms1/dmdocuments/Games/bullseye.swf</a>	Land closest to the center of the target
<a href="http://www.bfa.net/cms1/dmdocuments/Games/splash.swf">www.bfa.net/cms1/dmdocuments/Games/splash.swf</a>	Splash and Dash
<a href="http://www.balloonsimulator.com">www.balloonsimulator.com</a>	Baggie Drop

## ***Other Sites of Interest***

<a href="http://www.nasm.si.edu">www.nasm.si.edu</a>	Smithsonian National Air and Space Museum
<a href="http://www.sunrisesunset.com">www.sunrisesunset.com</a>	Sunrise / Sunset Calendar and Local Time
<a href="http://www.geocaching.com">www.geocaching.com</a>	Geocaching-The Official Global GPS Cache Hunt Site
<a href="http://www.aopa.org">www.aopa.org</a>	Aircraft Owners and Pilot Association
<a href="http://www.us.orienteering.org">www.us.orienteering.org</a>	United States Orienteering Federation
<a href="http://www.animatedknots.com">www.animatedknots.com</a>	Animated Knots by Grog

Any pilot can describe the mechanics of flying. What it can do for the spirit of man is beyond description.

— Barry M. Goldwater, US senator

# Upcoming 2009 Balloon Events

Pro Football Hall of Fame Balloon Event Canton, OH	Jul 31 – Aug 2
National Balloon Classic Indianola, IA	Jul 31 – Aug 2
Flag City Balloon Fest Findlay, OH	Aug 14 – 16
All Ohio Balloon Rally Marysville, OH	Aug 14 – 16
Centralia Balloon Fest Centralia, IL	Aug 21 – 23
<b>2009 BFA US National Championship Battle Creek, MI</b>	<b>Aug 26 - 30</b>
Lincoln Art & Balloon Festival Lincoln, IL	Aug 28 – 30
Children's Miracle Network Balloon Rally Wisconsin Rapids, WI	Aug 28 – 30
Gatineau Hot Air Balloon Festival Gatineau, ON, Canada	Sep 4 - 7
Valparaiso Kiwanis Hot Air BalloonFest Valparaiso, IN	Sep 11 – 12
Re/Max of Midland Balloon Fest Midland, MI	Sep 18 – 20
White River Balloon Fest Anderson, IN	Sep 18 – 20
Bluegrass Balloon Festival Louisville, KY	Sep 25 – 27
Albuquerque International Balloon Fiesta Albuquerque, NM	Oct 3 – 11
Shawnee Timber and Tether Festival Shawnee, PA	Oct 16 - 17

Caution: Cape does not enable user to fly.  
— Batman costume warning label, Wal-Mart, 1995.

# Just for Fun

## Balloon Terms Word Search

P U I A P U I S R E T E M O R Y P W X I  
 J S N C W M L O A D T A P E Z T O L I P  
 E Q M C W E W B S R M S W T O P E P V B  
 N S R Q N S S A P M O C S K N A T U O T  
 V D M A W S N X B U R N E R E R R W G X  
 E S P C A R A B I N E R W N W A F O S T  
 L I N S T R U M E N T S I I L C N V D E  
 O Q S S K I F F J K F L C T V H O K M K  
 P W T P R P C E P E N K I P W U O L W S  
 E F H G F N N O N O E M F Z G T L G F A  
 W N G B U Y U I I R E U I S M E L O Y B  
 P V I G D R L S H T E R L Z B P A R H L  
 Z J R M Q N N K E L M D E S E E B E L P  
 B K P V W E Z R S F B A F N W E X S M  
 Z L U O P P J Y W Z L W N X A C I T P H  
 H J R S F A S G P I P H E I R P E T A L  
 K C U X A T Q P A S U P A M F L O X M C  
 N S B E E J L G N F W C F X I O P R R D  
 X J S M Z Q V A R I O M E T E R L V P Y  
 C V P Y R E D L I N E Y S Z U L I D O N

- |             |             |                 |
|-------------|-------------|-----------------|
| Altimeter   | Gores       | Propane         |
| Balloon     | GPS         | Pyrometer       |
| Basket      | Instruments | Red Line        |
| Burner      | Load Tape   | Suspension Line |
| Carabiner   | Manifold    | Tanks           |
| Compass     | Maps        | Uprights        |
| Crown Line  | Panels      | Variometer      |
| Envelope    | Parachute   | Wicker          |
| Fuel System | Pilot       |                 |

Aviation is proof, that given the will, we have the capacity to achieve the impossible.  
— Eddie Rickenbacker

## Phonetic Alphabet Word Search

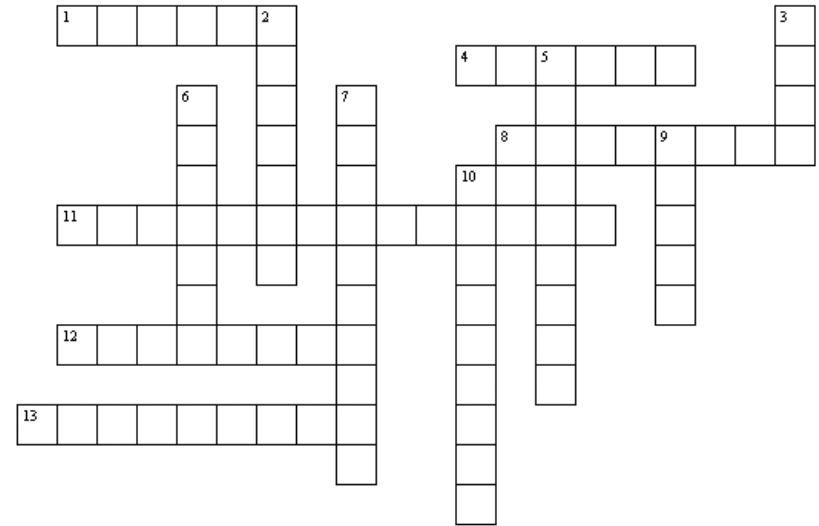
N M N R S F P O E O S W N W L I  
 B U S C O R E Z K N A I A E E N  
 V U F D N A F O U R R E N I N O  
 B D X E U F E T Y L I P S D T N  
 S S B S S O C E B E U Q O P I E  
 N O C F E P K L V C O I P E E A  
 T U F F V S F A I H P L O U L Q  
 M E E C I I T E C O E S R P K A  
 I X V H F X O E T T C Y H A G F  
 K S W A B M E R O A A A U D L Z  
 E A S R R R Z H R D E N T O G Y  
 A M I L A I A T T L I K G L S P  
 P T E I L U J V X F G E G O E H  
 A D R E B M E V O N H E L W V D  
 P J R E R S U R F D T I O T E Z  
 X R A Y O E M O R D K S Z L N L

Alpha	November	One
Bravo	Oscar	Two
Charlie	Papa	Three
Delta	Quebec	Four
Echo	Romeo	Five
Foxtrot	Sierra	Six
Golf	Tango	Seven
Hotel	Uniform	Eight
India	Victor	Niner
Juliet	Whiskey	Zero
Kilo	Xray	
Lima	Yankee	
Mike	Zulu	

Pilots take no special joy in walking. Pilots like flying.

— Neil Armstrong

## Balloon Terms Crossword



### Across

1. The equipment that provides the heat to the balloon
4. The material that is woven to make the basket
8. This carries the structural integrity of the envelope
11. The rope or cable that runs from the envelope to the basket
12. The fabric portion of the balloon
13. Located at the top of the envelope, this can be moved to allow hot air to escape

### Down

2. The rope that is used to open the parachute
3. Name for a set of panels that run from the top to the bottom of the envelope
5. The rope that is attached to the top of the balloon
6. The typical gas used in a hot air balloon
7. Shows the rate of climb or descent
9. What the propane is stored in
10. Instrument that displays the balloon's altitude

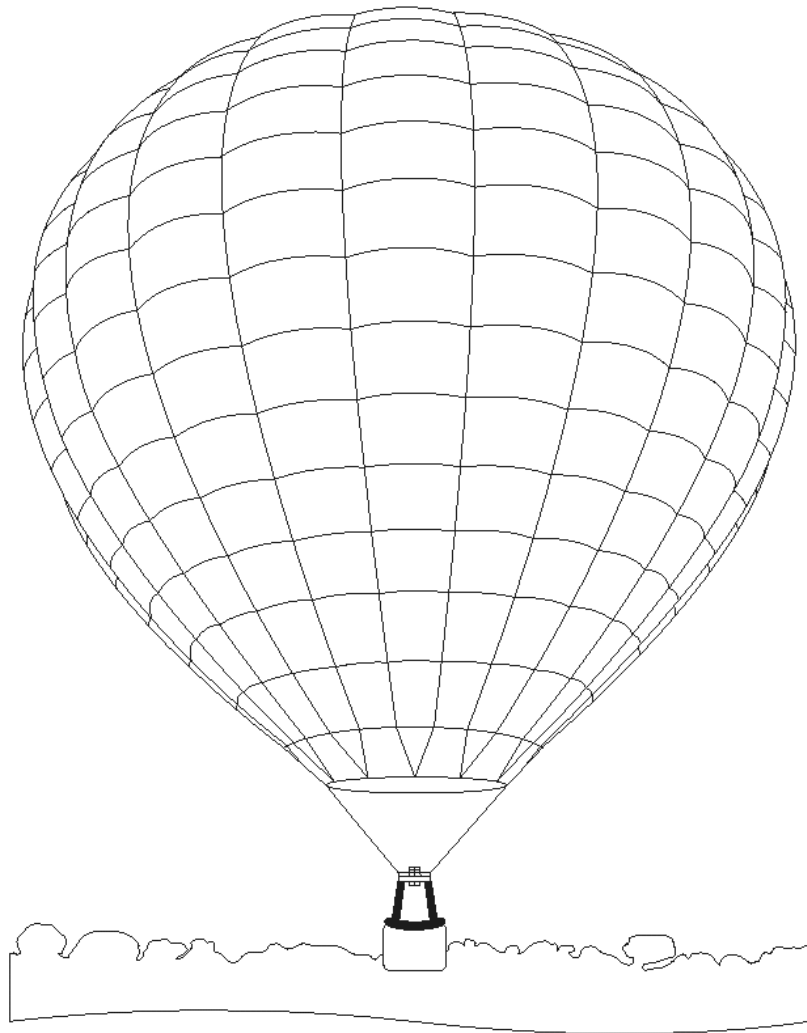
Don't let the fear of falling keep you from knowing the joy of flight.

— Lane Wallace, 'Flying' magazine, January 2001

*Coloring Page*



**Z-TYPE DESIGN CHART**  
**Z.65 - Z.105**  
**24 GORES**



**Balloon Federation of America  
Great Lakes Region  
Hot Air Balloon Camp**



**July 19 – 23, 2009  
Albion College  
Albion Michigan**