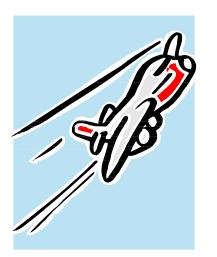
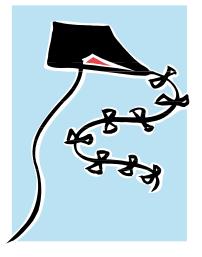
Soaring to New Heights



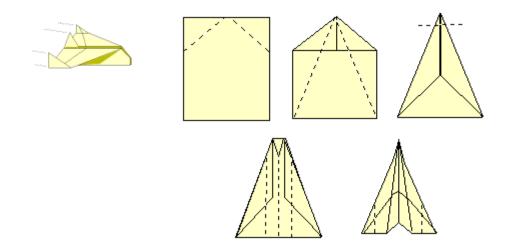




September 2003

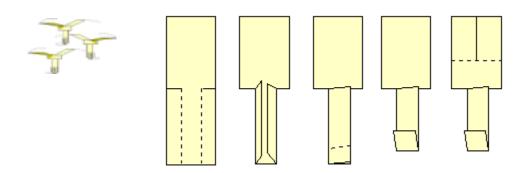
Flying Paper Wing

Find some scrap paper, and try to fold this paper airplane. Remember to recycle the paper when you are done.



Paper Copter

Construct this paper helicopter from colored card stock (80 lb. paper). To make the copter snip faster, attach a large paper clip to the bottom flap or tape on a penny.



Opening

Would you like to ride in a starship or a planet hopper, to walk on the moon or float through space, or be part of a space station crew? We may be doing some of these things one day. We can't be sure, but one thing is certain, the world will need good men and women in the future. And we can be sure we will fill that need if we remember to follow the Cub Scout Promise. Let's give this some thought as we stand and say the Promise together.

Closing

Astronaut Frank Borman's Prayer

Have Cub Scouts and their families form a large circle. Cubmaster explains that he will be reading a prayer, which was broadcast to earth by U.S. Astronaut Frank Borman, while on a moon-orbiting mission in December, 1968.

"Give us, O God, the vision which can see the love in the world, in spite of our failure. Give us the faith to trust Thy goodness in spite of our ignorance and weakness. Give us the knowledge that we may continue to pray with understanding hearts, and show us what each one of us can do to set forward the spirit of universal peace."

Advancement

Flying Saucers

You need several Frisbees.

Tape badges rank, arrow points, and other awards to them.

Have a leader who is good at sailing Frisbees stand some distance from the awards table, preferably behind the audience.

When the Cubmaster or a Webelos den leader has called forward boys and their parents to receive their badges, he then calls for the appropriate awards from "outer space." The assistant then sails a "flying saucer" to the front.

Kite Advancement Ceremony

Make a large diamond shaped kite out of paper and wooden sticks. Draw or paste pictures of the Cub Scout badges onto the kite. Attach a wide ribbon on the kite for tail. Make the tail long enough to attach the badges onto the ribbon. Suspend the kite to the ceiling (or a tree branch if outdoors) and let the ribbon hang down. Attach the badges onto the ribbon with pins, starting with the Tiger Cub badge at the bottom of the ribbon and working up to the Webelos and Arrow of Light badges at the top.

As you call the boys (and parents) up to receive their badges, remove their badge from the ribbon. You can also snip off a piece of the ribbon as a memento.

CUBMASTER'S MINUTE

Reach for the Stars

Col. Edwin 'Buzz' Aldrin, the second man to walk on the moon, told a group of Eagle Scouts that man's exploration of space is as old as man himself. He has explored, conquered, and studied the secrets of the jungles, mountains and oceans. He urged them to obtain a well-rounded background in many fields of knowledge, then to select one field and strive for excellence in it. "Set your goals high and settle for nothing less than accomplishment," he said.

Aim for the Stars

The words, "Aim for the Stars" have an important meaning to Cub Scouts. Think of Thomas Edison who tried and failed hundreds of times before he perfected the electric light bulb. He never quit trying. A Cub Scout, who tries to do his best and keeps trying, is preparing himself for greater responsibilities when he becomes a man. What you do and how well you do it becomes your launching pad to "Aim for the Stars."

Children Are Like Kites

You spend years trying to get them off the ground.

You run with them until you are both breathless. They crash ... they hit the roof ... you patch, comfort and assure them that someday they will fly.

Finally, they are airborne.

They need more string, and you keep letting it out. They tug, and with each twist of the twine, there is sadness that goes with joy.

The kite becomes more distant, and you know it won't be long before that beautiful creature will snap the lifeline that binds you together and will soar as meant to soar ... free and alone.

Only then do you know that you have done your job.

Audience Participation

Wings, Wheels, Rudders

WHEELS	Turn hands like bike pedals, saying "Whrrr, whrrr"
WINGS	Move arms up and down, saying "Flap, flap"
RUDDERS	Hold hands together like a swimming fish, saying "Swish, swish"

Cub Scout Tommy was a real wheeler-dealer. He had some things with WHEELS and other things without WHEELS. He had things with RUDDERS, but even more without RUDDERS. Tommy was missing one thing—he didn't have anything with WINGS! WHEELS made things go; RUDDERS guided things in water; and WINGS were needed to fly. Tommy couldn't fly without WINGS.

Tommy fixed his bike WHEELS so he could ride to the river. He used a boat with a RUDDER to go fishing. He watched the birds fly with their WINGS, and wished he had WINGS to fly, too. One day, he found a real deal. He traded some of his things with WHEELS and some of his things that didn't have WHEELS and two things with RUDDERS for a very special plane that had WINGS. He was the happiest boy ever, for now he had something with WINGS, something with WHEELS and something with RUDDERS!

Run-Ons

- Cub #1: How many balls of string would it take to reach the moon?
- Cub #2: One, if it were long enough!
- Cub #1: What do astronauts eat off?
- Cub #2: Flying saucers.
- Cub #1: What is an astronaut's favorite meal?
- Cub #2: Launch.
- Cub #1: How do you put an astronaut to sleep?
- Cub #2: You rock-et.
- Cub #1: What monster flies his kite in a rainstorm?
- Cub #2: Benjamin Frankenstein.
- Cub #1: What's the purpose of the propeller on an airplane?
- Cub #2: To keep the pilot cool. If you don't think so, just stop it and watch him sweat!

Instructor: We all know what a "good landing" is.

- Student: One that you can walk away from.
- Instructor: Do you know what a "great landing" is?

Student: One where you can use the airplane again!

- Cessna: Jones Tower, Cessna 12345, student pilot, I am out of fuel.
- Tower: Roger, Cessna 12345, reduce airspeed to best glide! Do you have the airfield in sight?
- Cessna: Uh, tower, I am on the south ramp; I just want to know where the fuel truck is.

Poems

Kite Days (by Mark Sawyer)

A kite, a sky, and a good firm breeze, And acres of ground away from trees, And one hundred yards of clean, strong string – O Boy, O Boy! I call that Spring!

My Boomerang

My Boomerang won't come back, As I throw it swirling in the air. My boomerang won't come back. It's not fair. It's not fair. A boomerang is honed from spiritual wood. It will come back only if your heart is good.

It's history and origin goes back many days, To an innocent age with it's simpler ways Your Boomerang won't come back. Your Boomerang won't come back.

Because that's not a boomerang - you doofus And that's why it's stuck on the roofus!

World Records

- <u>Longest Flight by a Paper Airplane:</u> Ken Blackburn flew a paper plane for 27.6 sec. at the Georgia Dome, Atlanta, on Oct 8, 1998.
- <u>Longest Kite Flown</u>: On Nov. 18, 1990, Michel Trouillet flew a 3,394-ft. long kite at Nimes, France.
- <u>Biggest Kite Flown</u>: The largest kite ever flown is the Megabite, which is 210 ft. long (including tails) and 72 ft. wide, Designed by Peter Lynn of New Zealand.

It was flown for 22 min. 57 sec. at the Bristol Kite Festival, England on Sept. 7, 1997.

- Scene: Student pilot and instructor are on a dual night cross-country flight. Instructor wants to test student on his night flying.
- Instructor: (*Turns down the panel lights*) OK, you've just lost your lights, what are you going to do?
- Student: (*Pulls out a flashlight*) I'd get out my flashlight.
- Instructor: The batteries are dead, now what are you going to do?
- Student: (*Pulls out another flashlight*) I'd get out my other flashlight.
- Instructor: (Grabs the flashlight) The bulb is burned out on this one, now what?
- Student: (*Pulls out a third flashlight*) I use this flashlight.
- Instructor: (Instructor grabs this light too) ALL your flashlights are dead, now what?
- Student: I use this glow stick.
- Instructor: Sighhhhhh, just fly the plane without any lights, OK?

Go Fly A Kite (Sung by Bing Crosby)

Go fly a kite and tie your troubles to the tail They'll be blown away by a merry gale, Go fly a kite and toss your worries to the wind And they won't come back; they'll be too chagrined. Go on make friends with the sky Have a talk with the sun It's the bright way to live, if you'll pardon the pun Go fly a kite and you'll imagine you're a king Cause you've got your world on a piece of string.

My Kite (Tune: Farmer in the Dell)

My kite is up so high, My kite is up so high, Oh my - - just watch it fly My kite is up so high.

My kite is falling down, My kite is falling down, Oh no - - it's down so low My kite is falling down.

The wind has caught my kite, The wind has caught my kite, What fun - - I'm on the run The wind has caught my kite.

My kite is up so high, My kite is up so high, Oh my - - just watch it fly My kite is up so high. How many ways can you make a kite?

- If you cut the inside section out of a paper plate, glue tissue paper streamers to it, then tie on a string, it will fly.
- A kite string tied to a plastic grocery sack will fly as high as a real kite on a windy day.
- You can also make a kite by cutting a 2" circle out of the bottom of a lunch sack. Tie an 18" piece of string to the top of the bag, then attach a kite string.
- Challenge the children and their parents to "invent" their own homemade kites.

KITE DERBY

A pack kite derby can be one of your best spring or summer activities. It may include various kite contests, followed by a picnic or barbecue. Some kite derbies are held just for fun with no special contests or prizes. Others include contests with prizes for each.

The kite derby plan should be developed far enough in advance so the boys and their families will know the types of events and rules for each before they begin making kites. The *Wolf Cub Scout Book* contains some kite plans. The den meetings leading up to the derby would be a good time to discuss kite flying safety rules with the boys.

Sample Kite Derby Schedule:

- Registration / Exhibit period
 - Display of Kites
 - Judging of Kites
- Opening ceremony
- Kite contests
- Picnic / Barbecue
- Recognition / Awards
- Closing Ceremony

Classification of Kites

Kites can be divided into the following groups for competition:

- Bow or tailless kites
- Flat kites or those with tails
- Box kites or combination kites
- Homemade v.s. Store-bought

Recommended Rules & Guidelines:

Here are some recommended rules and guidelines for running the kite derby; adjust them to suit your event. Agree on the rules beforehand.

- All kites must be parent-son made.
- Each kite should be identified by number or a name.
- Each boy may have an adult to help him get the kite into the air and help catch it when it comes down.
- No restrictions on materials used in construction of kites, except that no fighting kites are allowed. (Glass, razor blades, and metal are not permitted.)
- No wire flight lines are permitted.
- Kites may be adjusted and modified any time during the derby.
- One way to determine the height of the kites is to provide kite cords that are pre-marked at 100 feet intervals.

Establishing a point system for judging will make it easier to determine the winners of some of the awards. Awards can be ribbons or prizes (or both). Preflight judging can be done for design and workmanship, and prizes could be awarded for: Smallest, largest, funniest, prettiest, most colorful, most unique, most original, best craftsmanship. In-flight awards can be presented for: First kite in the air, highest after 5 minutes, highest after 15 minutes, most stable flying, most graceful, best sportsmanship, most persistent scout.

Kite Flying Safety:

Always follow safe practices while flying a kite.

- Always fly a kite far from electric or power lines, transmission towers, TV and radio antennas, and ponds.
- Fly a kite on days when there is no rain. Never fly a kite in a thunderstorm.
- Use wood, fabric, paper, or plastic in the kite. Never use metal in making a kite.
- Always use dry string. Never use wire for a kite line.
- When flying a kite, avoid public streets, highways, or railroad rights-of-way.
- If your kite gets snagged in a power line, treetop, roof, or on a high pole, never try to remove it.

Ring Glider

Materials: Paper, tape, straws, scissors, cardboard boxes (optional)

Directions:

- 1. Cut two strips of paper about an inch wide. One strip 7' long, the other 10" long.
- 2. Tape each strip into loops.
- 3. Tape the loops onto the straw, one in the front and the other in the back.
- 4. Hold the straw with the small loop in front and launch the glider.

The boys can have glider races, or try to hit designated targets. Create a tunnel out of large cardboard boxes, and try to fly the gliders through the openings. Other contests can be based on flight time, speed, height or aerobatics.

Balloon Prints

Pour three or four different colors of tempera paint into separate aluminum pie tins. Partially blow up a small balloon that matches each paint color. Then have the children dip the balloons into the matching colored paint and press them on sheets of white construction paper to create balloon prints. (*Variation*: Use just one color of paint and matching colored balloons.)

Airplane Blitz

Bring a stack of copier paper or scratch paper and let the kids make lots and lots of paper airplanes. Then you need some way to clearly divide the room in half. (The taller the divider the better.) A couch works, but even better was a rolling chalkboard. Put half the kids on each side of the divider. Put half the paper airplanes on each side of the divider. Explain that they can only throw ONE plane at a time and they must stop when the leader says "stop". Say "Go". They throw the airplanes over the divider as fast as they can. Planes are flying in both directions. Let them go about 3 minutes. Give them a ten second warning and then say "stop". Count the airplanes on each side of the divider. The team with the least number of planes wins. Repeat it a number of times, keeping track of the wins to get the champions.

Air Mail

One person is blindfolded. The others all take the names of cities around the world, except one player who is chosen as "postmaster" and has a list of all the selected cities. The postmaster calls out, "The mail is going from London to New York," naming two of the cities on the list. The players whose cities were called must then fly to each other's airports (i.e., exchange seats), while the blindfolded player tries to tag one as they move; if he succeeds, he trades places with the pilot. Sometimes the postmaster calls out "general post" and all must change seats, with the player left standing getting the blindfold.

Space Shuttle Relay

A traditional running race. Teams line up in adjacent rows. First player races to a given point (the moon?) and back (to earth?) to tag next player on his team, who then takes off running. Race until first person is tagged by last player on team.

Stunt Pilot Race

Form trios, with 1 boy facing forward, 2 facing backward, all linked at their elbows. Trios race to the "moon" with the one player facing forward, and back—with the two players facing forward (i.e., without turning around).

Balloons on the Wall

This game can be played either on a team or or' an individual basis. A large pile of balloons is assembled in the center of the room and each player or team is allocated an area of wall. On the word 'Go!' each player takes a balloon, rubs it on his or her clothing to create a static charge and attempts to stick it on his or her area of wall. If the balloon

sticks then the player can try it with another one. After a certain period of time the game is stopped and the team or player with the most balloons on its patch of wall is the winner.

Balloon Tag

A circle is formed leaving one person on the outside. A balloon or a ball is passed around the circle in either direction and the person on the outside has to try to 'tag' the person who has the balloon. If successful they change places.

Nose Balloon - Elbow Balloon - Balloon Race

The balloon is pushed along from start to finish using noses only, or elbows only, or anything except hands.

KITE GAMES

100-Yard Dash

On a signal the boys may launch their kites in any manner. Kites must be flown to the end of a 100-yard cord and then wound back to the hand of the flier. An assistant may remain under the kite as it is wound in to catch it before it falls to the ground. The race ends when the flier has rewound all his cord. At the finish, the flier must be on the starting line with his wound kite in his hand.

Altitude Race

Fliers start on signal and run out from the flying line, working the kite up to its highest possible altitude. At the end of 5 minutes, all fliers return to the starting line. The kites at the lowest elevation are then ordered down. The judges determine which kite is flying the highest.

Paper Message Race

All players send their kites up to a specific length of line-about 50 yards. A paper message is attached to the flying lines and allowed to blow up the kite. The boy whose message first reaches his kite wins the race.

GLIDER DERBY

A glider or plane derby can be a very enjoyable pack event when the rules are kept simple and uncomplicated. In a glider or plane derby, the object is to keep the craft in the air as long as possible. The most important official is the timer, who must be equipped with a stopwatch. If the pack is large, you may wish to have two or three timers so that several planes can be in the air at the same time. A simple derby involves only one type of glider or plane. Kits for balsa gliders and rubber-band-powered planes are available at any hobby or variety store. They are put together with the boy, with help from an adult, and flown without modification of parts, other than the shifting or bending of wings. The derby committee may wish to purchase all kits at the same time to save trouble and expense and distribute them to the boys before the derby.

Recommended Rules & Guidelines:

Here are some recommended rules and guidelines for running the glider or plane derby; adjust them to suit your event. Agree on the rules beforehand.

- Each glider should be identified by number or a name.
- Timing begins the instant the model is released for flight. Time ends when the model touches the ground, hits an obstruction, or passes from the sight of the timer. The timer may move in any direction (not more than 200 feet) from the take-off point to keep the model in sight, so long as he remains on the ground.
- All boys must launch their own models. The model shall not be launched from a height greater than the flier's normal reach from the ground.
- Specify the number of rubber bands permitted for each plane.
- Specify if lubrication of rubber bands is permitted.
- It is suggested, if time permits, that the flier's score be the total elapsed time of three best flights out of five, or the best two out of three.

Glider Flying Tips:

- A glider should be thrown it as if it were a baseball, except the hand should be well over the head on release. The glider's fuselage is held firmly with thumb and forefinger. The glider should be held so that the wings are banked 45 degrees or more. This will put it into a right turn (if launched by a right-hander). The nose should be pointed up at a 45 to 60-degree angle. Rudder should be set for a left turn.
- After launching, the glider should start a right-climbing turn. The turn decreases as it climbs, until finally at the top it levels off. Then left-turn adjustments take over, and the model should glide down in a smooth left circle.
- Increasing the arch in the wings can increase lifting power. Hold the wing close to the mouth and exhale heavily upon the wood, bending it gently at the same time. This adds moisture to the balsa wood and keeps the arch in the wings.
- If the glider dives, slide the wing toward the nose.
- If the glider dips, slide the wing toward the tail.
- The rudder can be bent in the same way as the wings by moistening the wood with your breath.

Graham Cracker Kite

Frost half of a graham cracker. One options is to use red string licorice and make a kite shape around the edges and middle of the cracker. Decorate your kite. Another option is to not use the licorice and use a decorating set and decorate it any way you like. You can put colored sugar, sprinkles, other fancy things you buy in the store, raisins, chocolate chips, etc. on your kite.

Kite Toast

For each color, take 1 tablespoon milk (rice, soy, or cow's) and 1/4 to 1/2 teaspoon sugar and mix it. This makes quite a few pieces of toast.

Cut the bread to be a shape of a kite. Place some of the milk mixture in small jars, glasses, small margarine containers, or other containers. Add food coloring to each container. Paint the bread using different colors. Put the bread in the oven or a toaster oven. Take it out when it is lightly brown.