

GRANDMASTER™ KITES



Talking with the Wind

Welcome to the Grandmaster™ Kite, and to the increasing number of kite fliers who find the single-line maneuverable kite to be a thrilling new experience, a challenge everyone can enjoy.

The culmination of ancient and modern kite lore, your Grandmaster is handcrafted for exquisite responsiveness and adaptability to most wind conditions. Even without the whisper of a breeze, the Grandmaster™ Kite in the hands of a skilled flier bewilders onlookers by casually dancing its way to greater heights. But as a novice, your first goal is to keep the kite aloft, gradually learning to use hands and fingers to manipulate the subtle pulse of the kite line so that the kite performs to your will and artistry. Soon, you too will learn to "talk with the wind." Like any new language it requires patience and determination, but the rewards of mastering this skill can never be taken away.



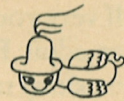
*Kite, follow a path
drawn by the Keeper of the Golden String.
Dive in dolphin play
and turn in swallowtail chase,
Tho' the feet touch the ground,
the mind dances with the wind.*

We at Grandmaster™ Kites would like to hear from you. Responses to the kite or comments that you wish to share with us are welcome. A group of people flying their Grandmasters together is a beautiful sight and an exciting event. If you are interested in joining us, we will be happy to notify you of times and places. Send your name and address to:

Grandmaster Kites

Box 276
Mifflinville, PA 18631
(Telephone: 717-759-3167)

Good winds!



me the flier

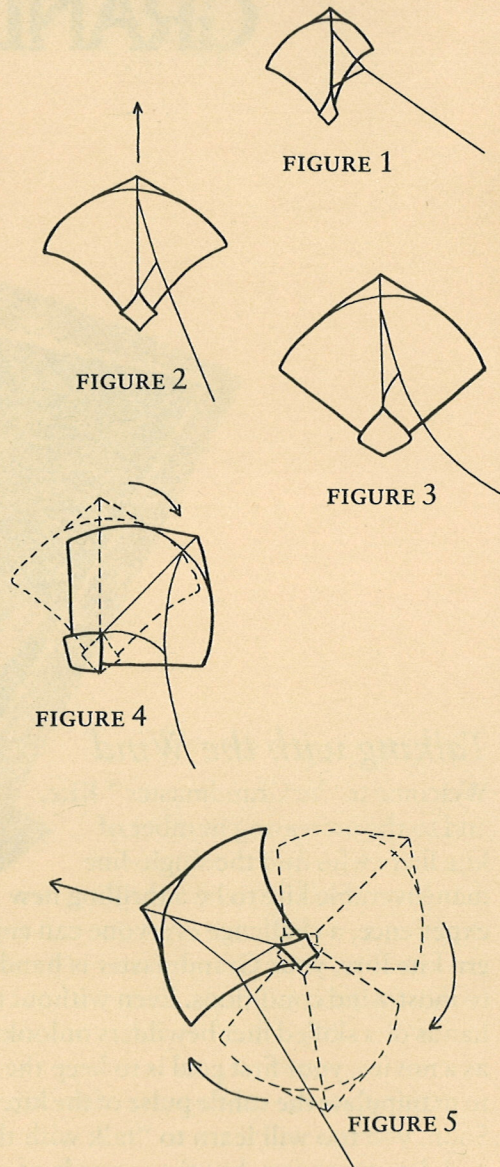
Joe Vaughan

The Design of the Grandmaster™ Kite

The Grandmaster™ Kite has improved the aerodynamics of the single-line maneuverable kite, originally developed in ancient China and India. Close examination of your Grandmaster will reveal unusual kite-making innovations accomplished with the use of modern materials, Mylar™ and acetate, the fiberglass bow, and the stiff, handcarved, curved bamboo spine. The resulting accuracy, power, and durability has never before been achieved in single-line maneuverable kites.

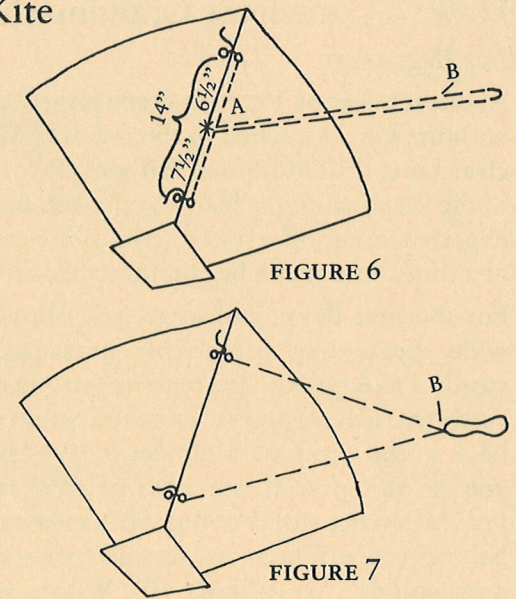
The Grandmaster's high-speed response is induced by the unstable characteristic inherent in the kite's simple form. Tension on the line shapes the kite into a dihedral angle as air pressure forces the bow back like the wings of a bird (FIGURE 1). The kite becomes conditionally stable and will move in the direction it is pointed (FIGURE 2). Releasing the tension on the line causes the fiberglass bow to relax, springing forward as the kite surface spills the air and flattens to its original form (FIGURE 3). The kite, now unstable, turns into a spin (FIGURE 4). Reapplying tension stops the kite's spinning action and makes the kite travel a straight course in the direction pointed (FIGURE 5).

The Grandmaster™ Kite is produced in two models to cover all wind conditions. The *Fast* and the *Competition* models are the same in size and appearance; only the diameter of the bow differs. The *Fast* Kite's narrow bow makes it lighter and more flexible, good for learning, and flying without wind or in light to moderate winds. The stiffness of the *Competition* Kite's thicker bow creates greater maneuverability in steady to strong winds (8-20 miles an hour).



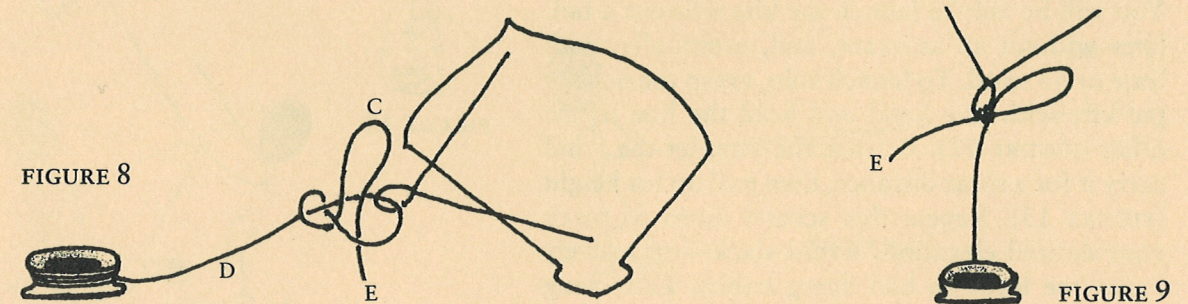
Setting the Bridle on the Grandmaster™ Kite

Your Grandmaster™ Kite's bridle is attached and set at its optimum point. However, after many hours of flying your bridle line may wear and need to be replaced. Before removing, examine the worn bridle to see how it is secured to the kite, then remove and attach a 48 inch long, 19 lb. test line (preferably your waxed linen kite line) securely to the front of the kite in the same way. Do not use a line which is too heavy or too light. Heavy line will act as a drag on the kite and light-weight line will break easily. After attaching, hold the line together at A (FIGURE 6), and extend the other hand along the lines, pulling slightly, to B. Let go of A, holding on to B. Tie a knot at B, making a loop for attaching the kite line (FIGURE 7).



Tying the Kite Line to the Bridle

The kite line can be attached securely to the bridle and be easily untied by holding the loop at C (FIGURE 8) and pulling tight at D, leaving a few inches of line at the end, E. This end is pulled to untie the line (FIGURE 9).



How to Launch the Grandmaster™ Kite For Beginners

About ten feet of 1½ inch crepe paper is enclosed with the kite. Attached to the red acetate tail with clear tape, this additional tail will slow the action of the kite during the learning period. As you gain experience, cut off a foot or two of the crepe paper at a time, until it can be eliminated entirely.

For the first flying endeavor, you should have a wide, open area (preferably grass covered), a steady 4 to 6 mile an hour breeze (strong enough to rustle tree leaves) and an assistant. Stand with your back to the wind, with 20 feet or so of line beside you on the ground, spun off of your reel. Have your assistant stand about 50 feet away, lightly balancing the kite at its outside corners with the nose pointing up (FIGURE 10). With a strong upward pull on the kite line, start the kite up and into the wind. Maintain a tension on the kite line to keep the kite stable and climbing (FIGURE 11). Allow the kite to ascend to a height of 50 feet or more, where you can practice maneuvering freely without smashing the kite into the ground.

With Experience

You will be able to launch the kite without a tail, later without an assistant, and, eventually, with little or no wind. To launch solo, grasp the nose of the kite with one hand and hold the line in the other (FIGURE 12). Release the kite, let the wind carry it for a short distance, then pull up for height (FIGURE 13). Repeat this several times to reach your desired elevation. Avoid slack—excessively loose line leads to bad flying habits. Launching alone will take practice until your reaction time develops.

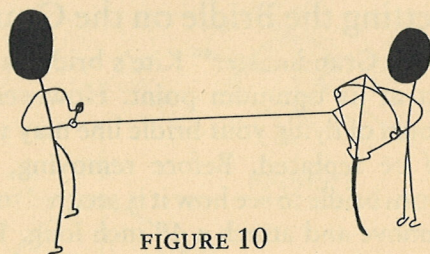


FIGURE 10

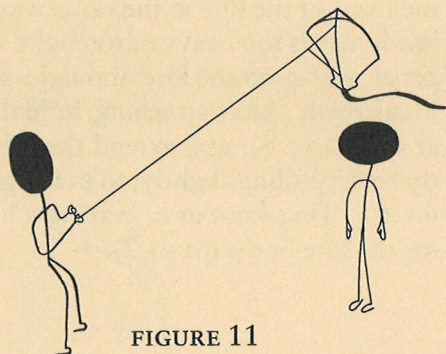


FIGURE 11

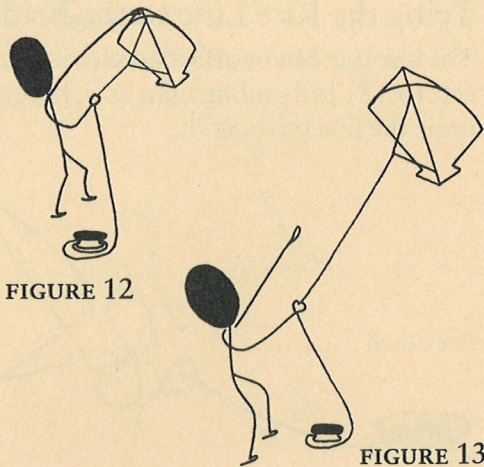


FIGURE 12

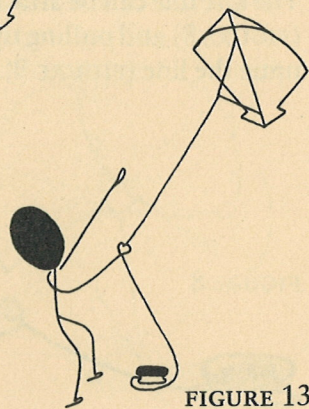


FIGURE 13

Maneuvering the Grandmaster™ Kite

When flying, stand with knees slightly bent, elbows close to the sides with hands in front of the chest. Use both hands to hold the kite line (FIGURE 14). A quick loosening of the tension on the kite line will allow the kite to become unstable, changing its direction of flight. When the kite is pointed in a desired direction, put tension on the kite line. The kite will stabilize and move in that direction. Practice left, right, and diving. Do not fly low. Your reaction time will not yet be swift enough to prevent the kite from hitting the ground. Quick, intricate maneuvering is developed through good line tension and sharp signals.

If you think the kite is going to nose dive into the ground (FIGURE 15), let out some line (FIGURE 16). Don't panic and pull on the line; that will make the kite hit harder. A hard smash could break the spine of the kite or damage the nose section. Remember, unlike a stable kite, if the maneuverable kite dives toward the ground, pulling on the line won't make it go up again—but will make the kite zoom groundward even faster. After loosening the line, tighten when the kite points up (FIGURE 17).

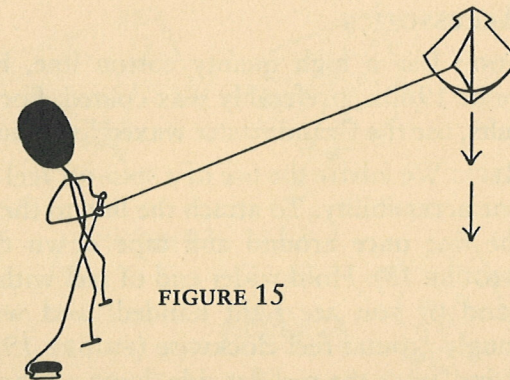


FIGURE 15

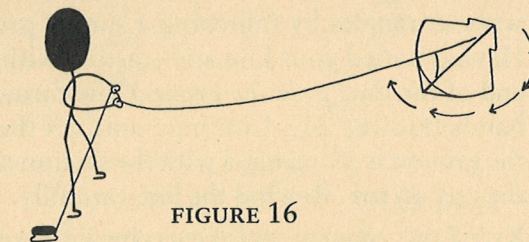


FIGURE 16

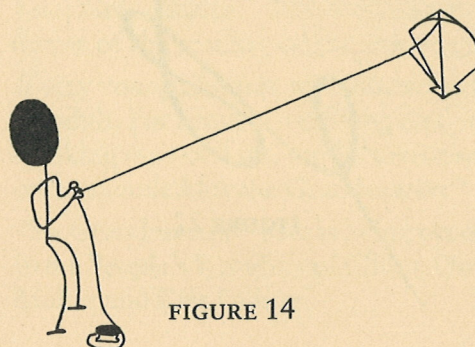


FIGURE 17

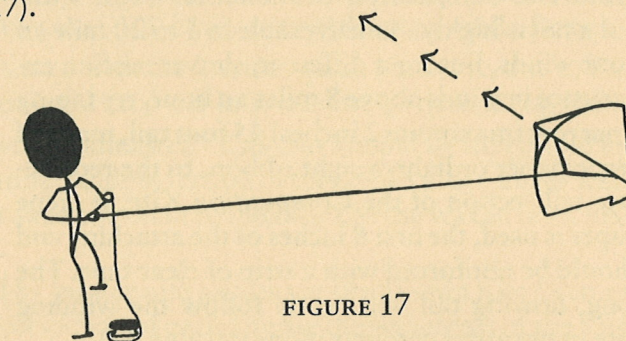


FIGURE 14

Accessories

LINE: Use a high quality cotton line, breaking point 19 lbs., preferably wax coated. For best results, use the Grandmaster waxed linen line.

REEL: We advise the use of a spin-off reel for easy line accessibility. To attach the line to the reel, tie the line once around and tape down the knot (FIGURE 18). Hold wider end of reel with the left hand (if you are right handed) and wrap line snugly around reel clockwise (FIGURE 19). When flying, leave the reel flat side down on the ground so the line can spill off freely (FIGURE 20).

After flying, the line can be rewound onto the reel without tangles by following a simple procedure. Having untied your kite and starting with the kite end of the line, pass the ground line through both hands (FIGURE 21). Continue until all the line on the ground is rearranged with the section closest to the reel on top. Rewind the line carefully.

KITE BOX: convenient for carrying kites and accessories, including clear tape and band-aids® to protect your fingers from the friction of the kite line.

TAIL: The *Competition* Grandmaster™ Kite without a tail is highly maneuverable in 5 to 20 mile an hour winds. But for a different, slower motion experience in winds above 8 miles an hour, try taping a narrow (maximum 2 inches) 45 foot tail, made of crepe paper or light-weight ribbon, to the red acetate tail section of the *Competition* Kite. If crepe paper is used, the first 8 inches of the attaching end should be reinforced with a strip of clear tape. The long, flowing tail will gently follow the winding kite in beautiful configurations (FIGURE 22).

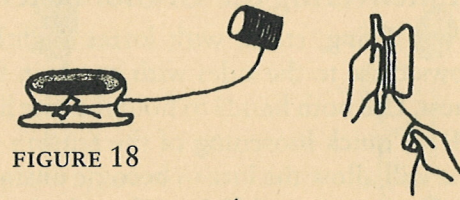


FIGURE 18

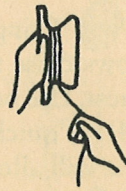


FIGURE 19

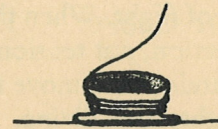


FIGURE 20

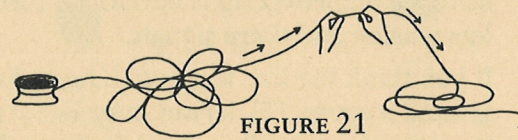


FIGURE 21

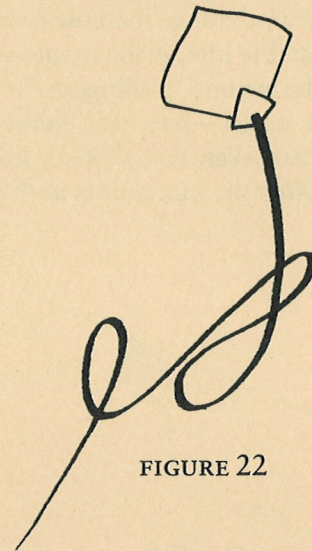


FIGURE 22

Fine Tuning the Grandmaster™ Kite

Like a musical instrument, your Grandmaster may require fine tuning. If the kite turns in one direction only, move the top bridle connection knot in the other direction. Thus, if your kite tends to the right, move the knot toward the left (FIGURE 23), or if the kite tends to the left, move the knot toward the right (FIGURE 24). Test-fly the kite as you move the knot in stages. True counterbalance can be achieved by the slightest change in the knot's position. When you find the best position secure it with clear tape without covering the knot (FIGURE 25). If this does not correct the kite's directional tendency, follow the same procedure with the bottom bridle connection knot (FIGURE 26).

Proper Care of the Grandmaster™ Kite

Do not expose the kite to extreme heat.

Do not alter the curvature of the bamboo spine.

Use good judgement when flying your kite. Avoid power lines and antennas and never fly in the rain.

Always carry clear tape and immediately repair any slight tear of the Mylar™. Hard flying of the kite will eventually cause a fraying of the trailing edges, which should similarly be repaired immediately. Your Grandmaster can be flown over 100 hours with little or no need of repair.

Your Grandmaster™ Kite has been hand painted with the finest acrylics. However, due to the flutter of the trailing edges, the acrylic paint will chip off in a random pattern along them.

If very young children are allowed to fly the Grandmaster™ Kite they should be supervised by an adult. For heavy wind flying wrap the string-holding section of the child's index finger with masking tape or band-aid®. Never use unwaxed cotton or nylon line. Use the waxed linen line recommended for the Grandmaster™ Kite.

The Grandmaster™ Kite is being produced by master kite artisans at the Tianjin Kite Factory in the People's Republic of China. On the tail section of each kite are the signatures of the Kite Maker and Kite Painter.

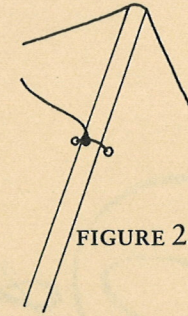


FIGURE 23

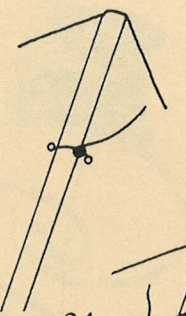


FIGURE 24

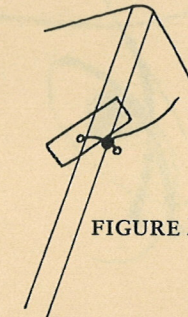


FIGURE 25

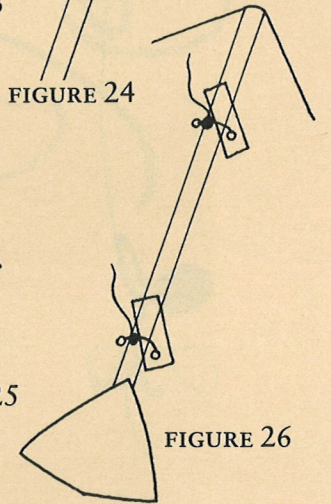


FIGURE 26