

PINEY MOUNTAIN AIR FORCE

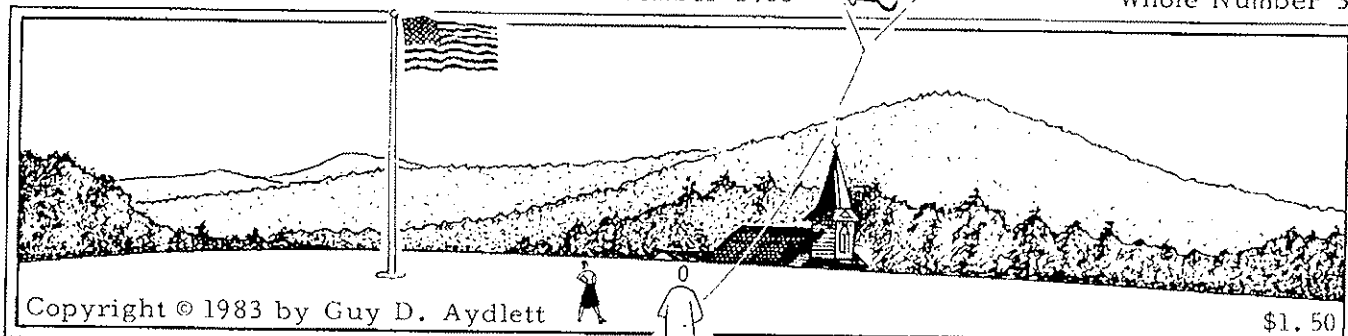
Box 7304 * Charlottesville * Virginia * 22906-7304

DATA ☆ LETTER

VOLUME III, No. 11

November 1983

Whole Number 36



NOVEMBER, The Eleventh Month, gives us 30 days and starts off handsomely by celebrating the existence of everybody: we have All Saints Day on the 1st, and All Souls Day on the 2nd. Guy Fawkes Day is on the 5th!

VETERANS DAY is on the 11th, so be sure to fly the Stars and Stripes.

SADIE HAWKINS DAY is on the 12th.

The 20th is the date for Full Moon Flying.

On 21 November in 1783, Pilâtre de Rozier and the Marquis d'Arlandes crossed Paris in the world's first free-balloon flight.

SIXTEEN ARTIFICIAL SATELLITES were in Tellurian orbit on the 26th of November, 1960.

PMAF folk have learned with deep regret that *Data Letter* subscriber Steve Edeiken, president of Rainbow Kite Company and chairman of The Kite Trade Association International, lost his life in a kite activity accident at Long Beach, Washington on the 24th of September.

ERRATUM: Beauforce Stringfellow chides us for calling out the wrong bridle length in the *Hornbeam Mark I* plan that appeared in a box on page 3 of *Data Letter* #35. The sentence that begins on line 2, paragraph 3 (under "NOTES") should have read: "Each branch should be about twelve modules (3 x H) in length." Readers who zealously maintain DL files may care to write the correction in their

copies. Mark I's will fly well with the shorter bridle length; but the better crafted specimens, if short-bridled, will tend towards in-flight collapsing when they approach zenith flight angles—90° above the horizon. . . .

Because of the printed bridle length error and the marginal quality of the printing in *Whole No. 35*, PMAF will be pleased to send an amended, clean-cut stat or velox of page 3 to any non-profit kite club that desires to print the *Hornbeam Mark I Alliflex Kite Plan* in its newsletter.

BRAD BANGEL of Norfolk, Virginia is a firm believer in the virtues of *Hornbeam Mark I*.

He writes; ". . . Master Troll of Piney Mountain, I would like to congratulate you on your virgin [?] solo ultralight flite. . . . I must say that your photos depict a rather sharp yet streamline (at least your head) aviator.

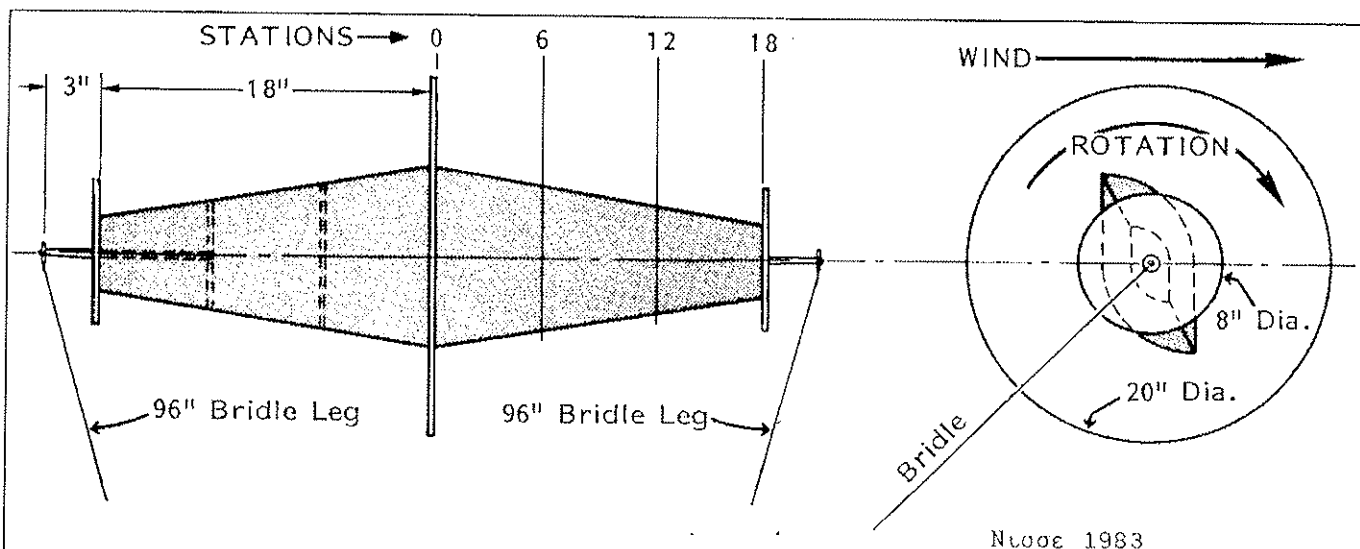
"Yesterday [18 September] was the end of a week-long 'Nightmare Turned Good Dream' with a pleasant ending. I was asked to run a booth at an outdoor carnival for the Jewish Community Center of Tidewater, selling kites and flying them for children about 2 years to 10 years old.

"I had arranged to get a bolt of Tyvek® and [dowels] from John Stubbings, Kite Kingdom, and 144 small spools of string from a local toy wholesaler. I had also made arrangements to have the logo [for the *Hornbeam Mark I*] silk-screened on the front. Well, I didn't know that in production silk-screening they must force dry the ink or use special ink.

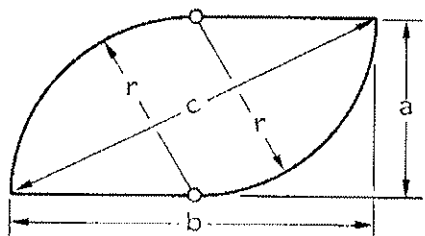
". . . I was informed six days prior to the

THE HORNBEAM "SATURN"

A High-Wind Rotor Kite by Beauforce Stringfellow*



THE 290-A AIRFOIL:



STATION	r	a	b	c
0	5	5	10	11.180
6	4	4	8	8.944
12	3	3	6	6.708
18	2	2	4	4.472

$$(c = a \times (5)^{\frac{1}{2}}, \text{ or: } c = a \times 2.236)$$

NOTES:

SATURN, nearly ten years old, has been languishing in retirement after having lived through Upstate New York gales of 25 knots or more. The original was framed almost entirely of 3/16" Foamcore® (styrofoam with paper skins on its surfaces) and covered with doped silk. The disks are simple cir-

cles cut from the sheet material. Hardwood stub-axles, 1/2" diameter, are epoxied to the ribs at Stations 12 and 18. End-pivots, 1/8" steel set into the wood, run in miniature ball bearings. The kite weighs 14 oz.

Aero modelling materials and techniques might well produce a stronger, lighter kite.

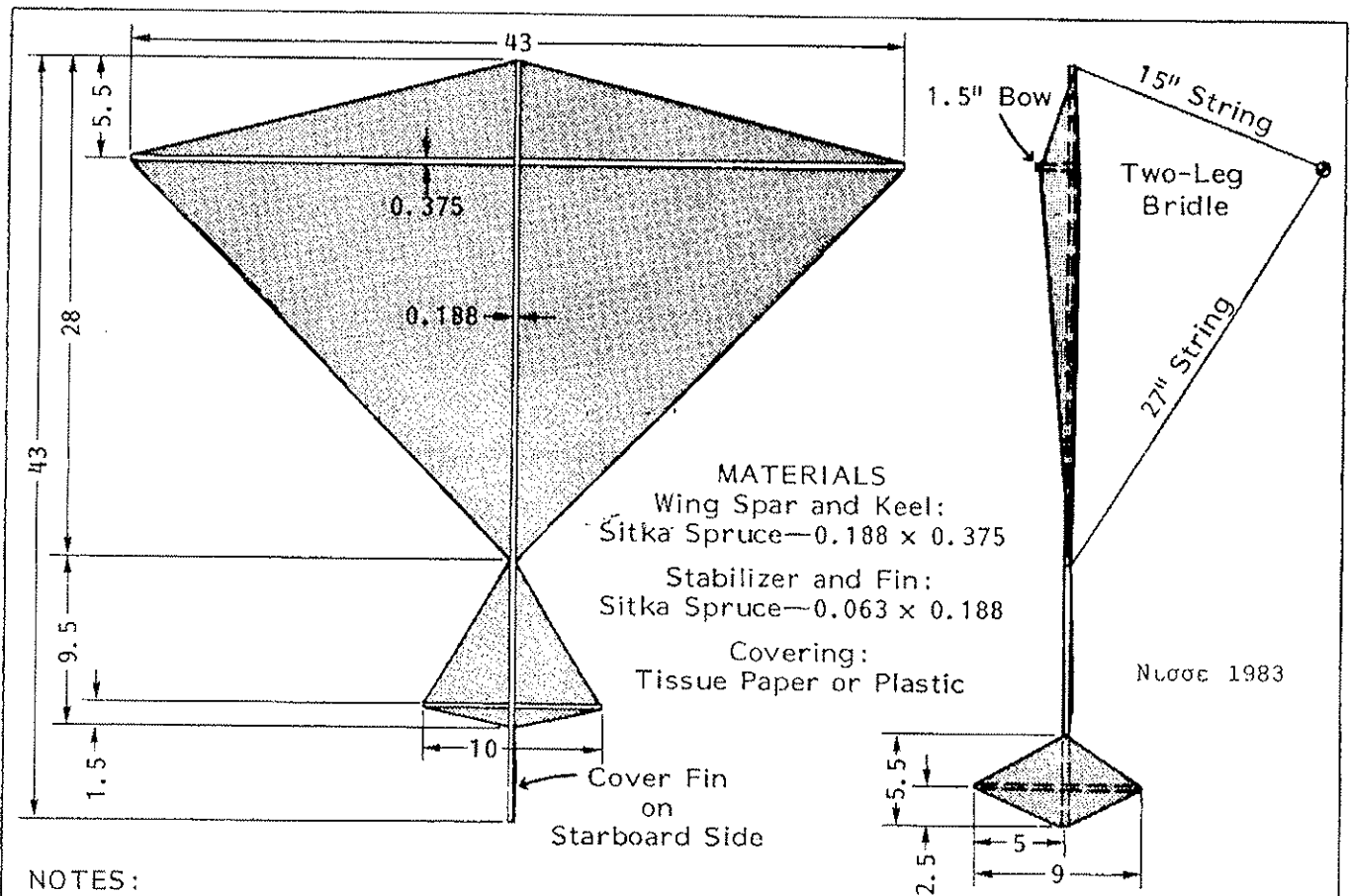
* BEAUFORCE STRINGFELLOW is one of the principal kite designers for Piney Mountain fliers. Beau's background includes shipyard welding, theoretical and practical naval architecture, sailing on Chesapeake Bay, hard-hat diving, flying with Pre-WW II Fleet Air Reserve, old-timey biplane flying, Virginia Tech mechanical engineering, state-of-the-art ordnance and optical mechanisms designing, fine arts printmaking and salon photography, gunsmithing, target shooting, photo mapping the back side of the moon with Lunar Orbiter, computing sundials, writing horological monographs, clockmaking, and flying ultralights.

(Right) Beau and "Aunt Minnie" with Fleet biplane NC8627 at Von Anger's Flying Circus.



"DAD'S KITE"

An Airplane Planform Kite After the Original Design by Jim Carnwath*



NOTES:

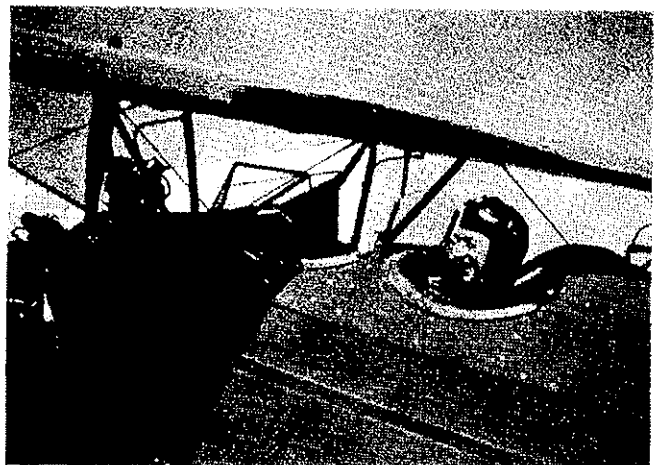
According to Jack Van Gilder, most of the Jim Carnwath kites were fabricated as semi-rigid airframes—non-demountable for transport—probably because Jim's aeronautical engineering background made him keenly sensitive to the benefits of maintaining the airframe in a fine-tuned state of rigging.

Jim likes tied-and-glued spar junctions, string perimeters glued into saw-slots, and tissue paper coverings with glued $\frac{1}{4}$ " hems.

He tells us that the kite may be lightened by tapering frame members towards their tips; and, above all, to make sure the bow curve is symmetrical about the centerline.

* JAMES ROBERT CARNWATH grew up in the Canadian Rockies and received his degree in aeronautical engineering at the University of Washington. He worked for Boeing and others in engineering/management capacities and earned for himself the honorary title, "The Kirkland Kite Man." Of especial interest to AKA members is his guiding influence on the early kitemaking efforts of AKA's Honcho of The Heights, John F. Van Gilder, who said: "Jim Carnwath taught me half of everything I know about kiteflying." [That half would be more than the aggregate knowledge of a six-pack of our Piney Mountain Trolls. —Nisse]

(Right) Jim in the catbird seat—1929 Model 7 Fleet biplane that he restored from a Model 2.



continued from p. 1:

carnival that I would have to use the ol' poster-board/aerosol spray paint technique for a minimum of 100 kites. . . .

"Sunday, September 18. . . was hot, and the wind was zero or 10 mph—never was it in-between (we all know that all-too-familiar here-again, gone-again, wind). Anyway, the kites and the carnival were an absolute success. . . .

"I am honored to donate one of the kites to the Piney Mountain Air Force Archives. Although I am confident that it will share the company of many other Hornbeam Mark I's, I would like to think it is unusual because of its logo. The Hebrew says: HA-GEE-GAH, which translates: Carnival. . . . Good winds for the Rosh Hashanah (New Year) —Brad." *

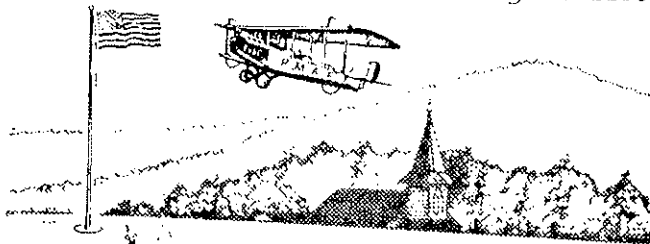
JACK VAN GILDER, AKA President Emeritus, lauds yet another PMAF kite: ". . . Have you seen/heard of all the people using the Hornbeam Mark II for kids' workshop/classes? It's a classic, now." [A Mark II plan can be found on page 5 of DATA LETTER No. 25, December 1982. The attenuated tail-stick on the centerline droops the trailing edge of the canopy in light air; acts like the flaps on an airplane; increases both lift and drag coefficients. —N.] *

THOMAS G. KOWALCHUK, The Victoria Kite Store, British Columbia, Canada, sent this:

"Sirs: Please cancel my subscription as of now. I am not into Hot Air Balloons or Ultra Lights but into tethered aircrafts known as Kites. Thanks but no thanks."

[PMAF Trolls have profound respect for one-hundred percenters. Reader Kowalchuk's DL subscription was cancelled as requested.]

PINEY MOUNTAIN AIR FORCE DATA LETTER
P.O. Box 7304*Charlottesville*Virginia 22906



NORTH AMERICAN READERS, please notice:
Commencing on 1 January 1984, the annual subscription price for PMAF DATA LETTER will increase to \$10.00 for a year of 12 issues.
Until 31 December 1983, advance renewals will be accepted at the old price of \$8.50, but renewals beyond December 1985 are invalid.

SCOTT E. SPENCER of Palmyra, New Jersey says: "I haven't written in a while [We know, we know. . .]. My curry isn't as strong as I'd like it to be or not to be.

"Trees: Blue Beech—American Hornbeam, *Carpinus caroliniana*, or Muscle-wood. Makes good handles and good cooking fuel. [Don't forget Hophornbeam, *Ostrya virginiana*, Auld Buddy. —Non-ed.] Tree books never mention what wood is good for spars [*Sitka spruce* is superb. —Nisse.]

"I just finished 2 large ***spinners 4' dia. The hemmed jib [or gore] size is 25" x 12". Each panel has a 3" to 4" orange + red band with black as the main color. The panels were assembled with stepped color bands to effect a moving spiral illusion. The spinners are contra-rotating, 12 panels each, and reinforced on leading edges with 3/16" diameter fiber glass.

Flags: If you turn the Italian [Irish?] flag around, you get the Ivory Coast.

"Gold should be used, not orange, so most Italian [Irish?] flags are incorrect. —Scott." *

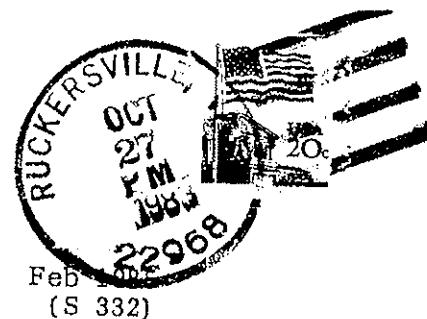
Q & A DEPARTMENT

Q: Do you recommend the hoop, or doughnut shaped kite reels? With or without cranks?

A: No. All samples we have tried have failed miserably; even ones marked "unbreakable." Ones with cranks or brakes were most fragile.

Q: What is the PMAF's policy re publishing a letter from a kiteflier or man-carrier pilot?

A: If its content is of general interest to DL subscribers, we will publish all or part of it subject to editing for clarity or brevity; if it is not too abusive, we'll try to write a reply. We are delighted to hear from all aircraft folk.



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FIRST CLASS MAIL

