

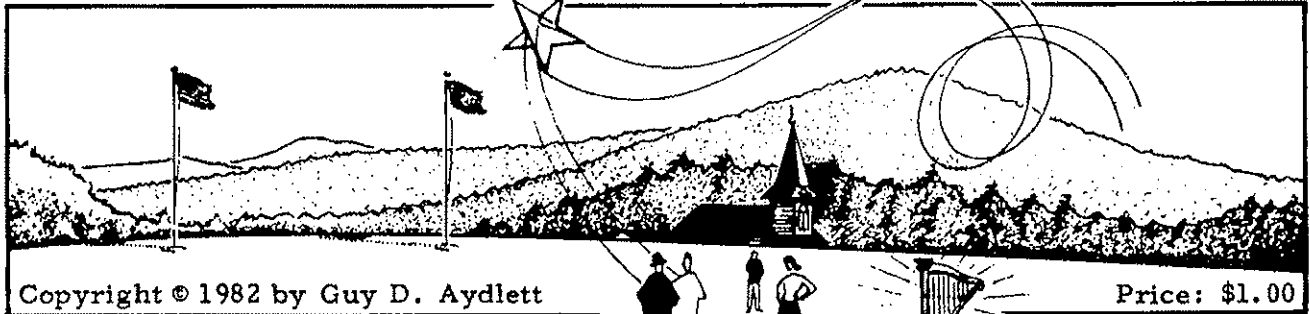
PINEY MOUNTAIN AIR FORCE

DATA - LETTER

VOLUME II, No. 3

March 1982

Whole Number 16



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Dear Kiteflier:

LEONARD CONOVER, the genial honcho of *TIGHT LINES* and the G*D*V*K*S, asks: ". . . Have I told you lately how much I enjoy the *DATA-LETTER*? It brings a ray of sunshine into an otherwise cloudy winter day. Would I lie?" [Answers in the same order: 1) You have. 2) Guess what will happen on an otherwise clear summer day? 3) You wouldn't. —Non-ed.]

STORMY WEATHERS sent a photograph of his Winged VictoryTM kite in use as a three-room tent capable of sleeping five persons. Another photo showed the enormous kite in flight, but Stormy didn't tell us what happened to its tenants. Nisse, our Fellow of Graphics, would not attempt to reproduce the pictures in this *DATA-LETTER*; says a 10½' x 18' kite covers too darn much area.

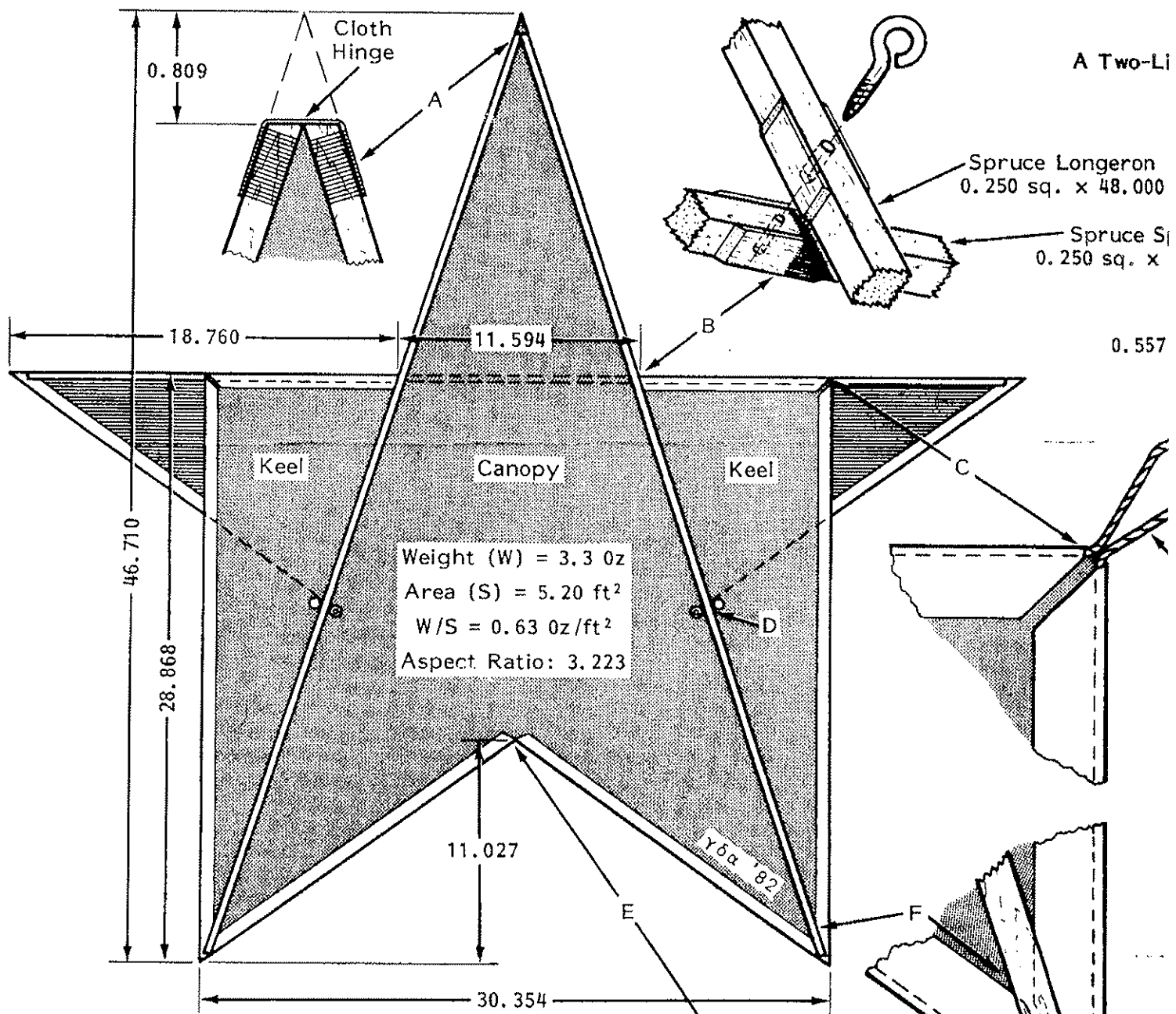
MARGARET GREGER, Richland, Washington: ". . . I do like *Alliflex* [instead of the word *sled*]. Do you think it will catch on? What can we do to promote it? Clean up our own language?" [There is little chance the coined word will catch on. Although *Alliflex* honors the late inventor William M. Allison, and is descriptive of the kite, four-letter words of one syllable tend to own disproportionately high inertia; tend to prevail in the patois of the present. We may not get far in promoting the word, but it's a good way to honor Bill Allison when we write or talk about his splendid kite-invention.]

JOHN SPENDLOVE'S *Alliflex* Ellipse was in-

formally fabricated and flown at our Piney Mountain shop and flying field under multiple handicaps.

Since construction commenced on our new darkroom, study-library, and a projection-meeting room adjacent to the shop, hosts of plasterers, joiners, shipfitters, electricians, plumbers, glaziers, and tile-setters have fanned a two-way path of wintry chill and dusty chaos through the sacred clutter of the shop; but the resident kite-maven's stubborn persistence brought out one fair copy of John's Ellipse. When the December chill topped 32° F. and the hibernian gales abated to about fifteen knots, we eased the kite into the elements and found that it flew stably; but it assumed a ludicrous peanut-shape; it flapped like Old Mother Brown's Monday wash; and it seemed to be sorely in need of clusters of lightweight battens to stiffen its perimeter. The alternative treatment was to invoke the traditional Hornbeam Remedy: *Excise Flapping Portions*, or cut away all material outboard of straight lines drawn between bridle points and longeron ends. (A study of the planform view, p. 5 of *DL* No. 13, will reveal that the trimming yields the classical shape of you-know-what—William Allison's Flexible Kite—pure *Alliflex*.)

In defense of John's design, we hasten to admit he *did* mention the option of using light battens attached to the canopy. We'd urge that battens be installed if the shape must be elliptical; is to be flown on airs of tolerable vigor. (more on p. 4)



CONSTRUCTION HINTS: 1) Bind and glue a cloth hinge to the longeron-pair apex (see Detail A). (Longerons: 1/4" sq. x 48".)

2) Measure 17.909" from the hinged ends of the longerons and make soft-pencil marks on their outboard edges. Similarly, mark the leading edge of the 48" wingspar with a pair of marks 18.203" from the ends.

3) Splay the longerons 36° apart and match the pencil marks with those marked on the wingspar. Temporarily stick the assembly together with twin-tack tape or small dots of glue. Select a pilot drill substantially

smaller than the thread of the screw eye (see Detail B) and drill through both intersections. Separate the structure and enlarge the longeron holes to clear the body diameter of the screw-eye. Glue 3/4" pieces

THE HORNBEAM ASTROBAT™

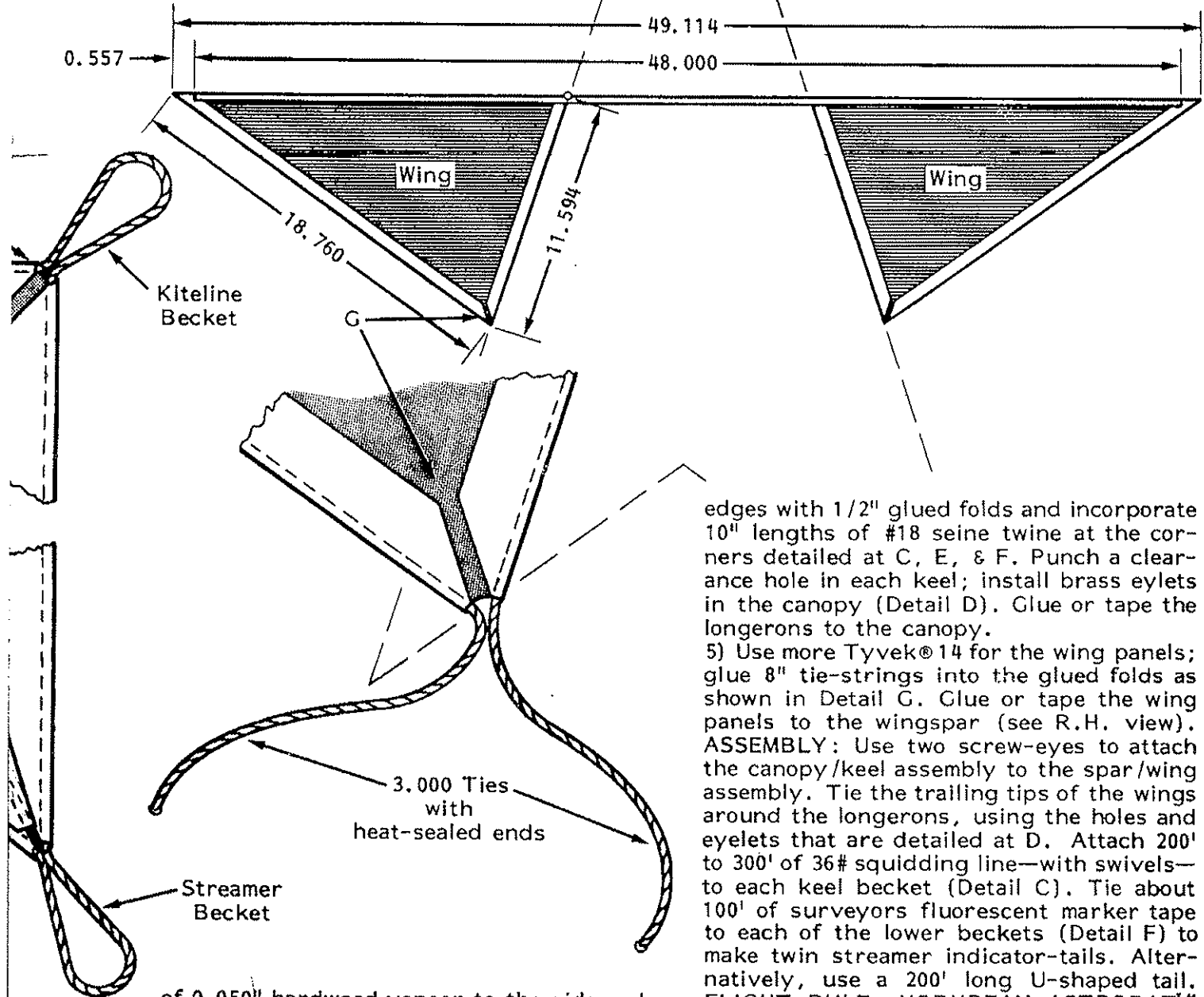
A Two-Line Control Kite by Beauforce Stringfellow

Dimensions are in inches

Longeron
x 48.000

-Spruce Spar
250 sq. x 48.000

Like This Plan?
If you like this powerful stunter, if you are a newcomer-subscriber, remember that most back issues of *DL* feature design plans that have earned international acclaim. Most issues are still available for \$1.00 per copy, postpaid, from Piney Mountain Air Force, Box 7304, Charlottesville, Virginia 22906.



edges with 1/2" glued folds and incorporate 10" lengths of #18 seine twine at the corners detailed at C, E, & F. Punch a clearance hole in each keel; install brass eyelets in the canopy (Detail D). Glue or tape the longerons to the canopy.

5) Use more Tyvek® 14 for the wing panels; glue 8" tie-strings into the glued folds as shown in Detail G. Glue or tape the wing panels to the wingspar (see R.H. view).
ASSEMBLY: Use two screw-eyes to attach the canopy/keel assembly to the spar/wing assembly. Tie the trailing tips of the wings around the longerons, using the holes and eyelets that are detailed at D. Attach 200' to 300' of 36# squidding line—with swivels—to each keel becket (Detail C). Tie about 100' of surveyors fluorescent marker tape to each of the lower beckets (Detail F) to make twin streamer indicator-tails. Alternatively, use a 200' long U-shaped tail.

of 0.050" hardwood veneer to the sides adjacent to the screw-eye holes (Detail B).
4) Make the canopy/keels assembly from a single piece of 6-mil Tyvek® 14. Reinforce

FLIGHT RULE: HORNBEAM ASTROBAT™ moves towards whichever kiteline is tensioned by the flier. (Experienced two-line fliers can fly the kite without streamers.)

WILLIAM E. RODDA, Trenton, NJ: ". . . I have been told by another kite enthusiast [Len Conover, maybe?] that a makeshift kite can be fashioned of a light-weight plastic raincoat with little or no modification of the raincoat. Successful flight of a raincoat kite, I assume, depends on proper bridling. Would you care to comment on the flying of a raincoat kite and how it might be bridled?" [Ah, the temptation to merely lay here a laconic "No comment," and be done with it! But Beauforce Stringfellow urges that we use the raincoat issue as an excuse to foment another inter-club contest. —Ed.]

ANNOUNCEMENT

KITE CLUB NEWSLETTER EDITORS, please copy: Piney Mountain Air Force challenges your members or readers to participate in a UNIVERSAL RAINCOAT-KITE CONTEST.

RULES

- 1) Each contestant shall design, construct, and fly a kite adapted from a standard commercial plastic raincoat (no poncho-Odako's shall be accepted in the contest).
- 2) Total quantity of battens, spreaders, spars, and longerons shall not exceed four in number.
- 3) Each contestant shall verify the success of his or her design by mailing a sharp, glossy, reproducible black-and-white photograph of the kite—in flight—to PMAF. Each eligible photograph shall clearly show the entire kite against a sky background; above the horizon.
- 4) PMAF reserves the right to keep and publish winning photographs. The other entries shall be returned to those competitors who include adequate return postage.
- 5) Winners (not more than two for each club or newsletter) shall each receive a six-page autographed HORNBEAM ROTOR 661 KITE PLAN.
- 6) Winners shall be selected for originality, quality of photography, faithfulness of execution (each shall be recognizable as a coat in flight), and quality of design.
- 7) Each contestant shall identify the name of the kiteletter in which this contest announcement was seen.

Page 4, PMAF DATA-LETTER—March 1982

8) Send all entries to: Piney Mountain Air Force, Box 7304, Charlottesville, VA 22906.

DEADLINE: 1st June 1982

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PAT HAMMOND, The Kite Lady of Texas: "I love it! [DATA-LETTER, natürlich....] "We just bought an Apple® Computer with graphical tablet & printer. Any suggestions for kite programing?" [Why not put that electronic sleuth to work on the flapping coat-tails, rigging, and bridling of a raincoat kite? It's a natural for you, Pat. Our PMAF folk are still mused, bemazed, and boggled by your Richmond kite show, 1981, that featured kite names such as "Of Corset Flies," and "Flyin' the Ointment". . . .]

*

PHIL SCARFE, Berks., England: ". . . I used to fly my 'Green Jeanne' [Kite Tales, Vol. 10, No. 1, pp. 15-26] quite regularly, but as my kite flying buddy and launcher became infatuated with his latest plane, I've been left in the lurch (I'm hoping to train my wife!!)" [Careful, Phil: the ladies become enamored with rotor kites, and you're likely to find yourself converted to "kite flying buddy and launcher."]

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ROBERT H. NELSON, Westfield, MA: "Congratulations for your UFO sighting. . . .

"On one occasion during the summer, I had a 30 inch Allison-Nelson sled [see DL Vol. 1, No. 6] take out 5,000 feet of 20 lb. test line to an elevation of about 20°. It was about at the limit of visibility and near the breaking point of the line.

"Keep up the good work with DL."

[Bob Nelson's altitude experiment brings into focus the fact that most of us tend to boast of high angle-of-flight as a certain virtue of our better kite designs; but that virtue, unqualified by some mention of the length, weight, and gage of the tether, is automatically suspect. As an aspiration kite, Bob's design is a handsome flier among the handful of really good designs of equivalent weight and area; all with the same length and kind of line. There's the rub. . . .]

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ERIC EISACK, Brookline, MA: ". . . I am looking forward to the ideas and information DL will be bringing me for the next two years. Not to mention the suspense while wondering what will have changed on the marquee as I am opening the envelope. . . ."