INDEX JAN. 1965 to DEC. 1966

ITEM	AUTHOR	ISSUE
	WAKEFIELD	
Ambird	E. Colombo	Jan. 65
Eleanor Too	D. Sutcliff	Feb. 65
Hothead	D. Mc Donald	Mar. 65
St. Polten	H. Martin	Oct. 65
Kathryn Too	R. Gildersleeve	Nov. 65
Akm	B. Johansson	Oct. 66
WF - 122	W. Wiestij	Nov. 66
	Nordic	
Osprey	H. Langevin	Feb. 65
T. Bird	D. Hutchinson	Mar. 65
L'epervier	P. Brun	Dec. 65
	Power	
Suspense	H. Spence	Jan. 65
La Cosa	A. Vela	Feb. 65
Chickitty Yackel	W. Hartill	Oct. 66
	Unlimited	
Rubber	R. Gildersleeve	Jan. 65
	Articles	
C.I.A.M. Mtg	H. Nicholls	Jan. 65
'64 Semi Finals		Feb. 65
'64 Postal Meet	M. Woodhouse	Mar. 65
'65 World Champ.		Oct - Nov. 65
Leading Edges	Van Nest/Cusick	Nov. 65
Altitude Checks	" "	Dec. 65
NW '65 Semi Finals	D. Zipoy	Dec. 65
Routing	R. Van Nest	Oct. 66
Bong Bash		Nov. 66
Committee?	E. Dolby	Dec. 66
Wing Jig	W. Bogart	Dec. 66
Starter		Dec. 66
WFFA		Dec. 66

THE

SCATTER

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THANK YOU, AND GOODNIGHT!

(Ed. Note: Since Sykora has retired from this chair leaving behind a rather spotty record at best, we felt it only right that he should be called upon, at least once more, to attempt tidying up one of his last hairbrained ideas concerned with editing this paper . . .we speak of the now infamous "Kinney and Bell November Affair". Therefore, he has been dragged, kicking and screaming, from his modeling workbench to introduce this issue.)

The November issue contained an extensive critique (by Kinney and Bell of the New England Wakefield Group) on the poor editing and the technical misinformation in past SCATTER articles. This commentary replaced our normal format of news, plans, articles, etc.

Occasionally, such an "airing of the linen" provides a refreshing change of pace. But aside from this factor, our main objectives in publishing this extensive critique were: 1) First, we felt it was only fair to air all points of view . . .especially when such comment represents extensive research by the contributor, and 2) Second, we thought these remarks might stimulate spirited counter-commentary from other readers . . . for the interest (and perhaps, information?) of the readership at large.

The counter-comments did come, and some of them are presented in this issue. Thus, we've now presented both sides of this discussion of SCATTER articles, and so leave it to the readership in general to ponder their own thoughts on the quality and value of SCATTER materials

As to the future printing of such "long-winded" academic commentary on ethics, sematics and air-chair technology; we have this to say: Now that we've started the ball rolling, we will be happy to exchange personal mailing addresses (privately, of course) among any readers who wish to continue debating with each other through the medium of personal letters to each other.

We must take this stand because we just do not have the space in SCATTER each month to print long, unedited letters of this type. Therefore, with the fond hope that we are doing the best job for the most readers, we will return to our usual format of plans, technical articles, news, and a reasonable (space-wise) portion of reader commentary.

The letters which follow were selected first because they were among the earliest to arrive (and they are still coming, from other countries, as well as the U.S.) and, second, because they seem to give a pretty good cross-section of both style and content presented in all the letters we've received.

LETTER FROM HANK COLE, Palo Alto, California

Dear Ken,

When I read the November issue with the comments of Glenn Kinney and John Bell, something did indeed "snap deep down inside". While I do not object to the Scatter publishing criticisms, it is customary in Technical Journals for the Author's Reply to be published at the same time as the readers comments. In this way, the readers can weigh the arguments and form their own opinions. Oftentimes, the critic is too hasty with his comments and has not considered the problem in as great a depth as the author, and it only takes a moment for the author to knock holes in the critic's arguments. I do not have the time or inclination to cover all points in their criticisms, and consequently, I will confine my remarks to their comments on my A/2.

My object in describing the flight of my glider in a violent ground thermal was to convey to the average model builder that the glider performs well in rough air that is often encountered in California. The fact that the glider stalled does not indicate that it was out of trim. Any airplane which is trimmed near maximum lift will stall when it encounters a strong updraft. The important thing is the manner in which it stalls. In the case of my glider, the turbulator on one side delays the stall of the outside wing. The result is that the inside wing stalls first. The sudden increase in drag and loss of lift of the inside wing then causes the glider to make a very tight turn. Consequently, the glider stays within the small area of the thermal even though it is trimmed for a much larger circle. I do not claim that my glider is the only one which will do this. Sometimes unusual warps will give a glider the same characteristic flight in turbulent air. But warps are difficult to duplicate, and the turbulator offers a more consistent way to achieve these characteristics.

The comments of Kinney and Bell are an example of how a little knowledge can be dangerous. They seem to put a premium on performance and fail to recognize that dynamic stability and handling qualities are usually more important. This is why the experienced model builder will almost always beat a model builder who is long on theory and short on practice. Consequently, I would like to suggest to critics Kinney and Bell and others who are inclined in the theoretical direction, that there is much to be learned from the builder who knows how to made a model fly even though he doesn't know what induced drag is. All in all, I must admit that the

comments were rather humorous and I got a good laugh out of the whole thing. It's too bad we can't get together in someplace like Fresno (ouch) to hash this thing out.

P.S. In my next article to Scatter, I will include a set of references.

LETTER FROM DAN HODGES, Sapulpa, Oklahoma

Dear Ken,

I propose that two national awards be presented in the newsletter publishing field - The LINT-PICKERS-of-the YEAR AWARD to Messrs. Kinney and Bell of the NEWG for their scurrilous attack on articles in Scatter, and the PRIZE BOOB-of-the-YEAR AWARD to the editors of Scatter for printing such prattle.

I quite agree with your opening statements in the November '62 issue that a publication cannot be technically responsible for articles that are contributed by readers, and well it should not be. As you say "every contributor has a right to presentation in his own words". And in so doing, various differences of opinion are bound to arise. That's fine - it's a healthy sign that readers are paying attention - but when some over-heated dissentor writes his opposing views with such an acid pen as have Kinney and Bell, you are merely hurting your own fine reputation by printing their attacks verbatun. You have made many friends with your excellent bulletin, I am sure, but I hope that some of your faithful contributors won't feel reluctant now to send in their articles for fear they will be taken apart word-by-word in a later issue by literary lint-pickers.

The point is not whether Messrs Kinney and Bell are "technically correct" and justified in pointing out the shortcominga of others - it's the ruthless way they did it that distresses me.

If I may offer a suggestion - let this Great Debate die as soon as you can. If your bulletin turns into an exchange of rebuttals by offended parties, there will be no end to it and nothing will be gained.

Thanks for hearing my gripe, the first one ever for your top-notch bulletin. Keep the plans and other articles coming (as your time will permit). I promise I won't write you a nasty letter if I read something with which I disagree.

LETTER FROM STAN CHILTON, Wichita, Kansas

Dear Ken,

CENSORED

I have just been elected to FF CB and Contest Co-ordinator for District 9 and have finally read all through the petty bickering and bitching letters and files that the previous CB and CC so kindly sent me. I am sick to my stomach of the wasted time and efforts and personal petty behavior of some of the letter writing modellers.

I am enclosing a copy of our Wichita Modellers Council Newsletter that will reveal the direction my efforts are extended in thermal seeking. I personally don't give a dam how a thermal is created or which way it happens to be rotating, just so long as I can get my model in one.

I really like your publication whether or not I agree 100% with some of the theories expounded. You are doing a good job and perhaps with time we can develop some FAI teams that can bring home the bacon year after year. Kinney and Bell offer no constructive criticism, just trying to tear down someone else's efforts and I just can't go along with that.

LETTER FROM JIM HORTON, Baltimore, Maryland

Dear John,

That was a great article by Kinney and Bell in Scatter. In checking it over, I find they are experts in Aerodynamics, Mechanics, Logic, Grammar, Psychiatry and Meteorology.

I was sure sorry to hear old Hank Cole has something snap deep down inside him whenever he picks up a pencil. I thought old Hank used his head to write with. If he's writing with his stomach, please let me know as I'm an ardent reader of his articles.

I was sure sorry to hear veteran Pete Sotich didn't even know which dihederal was superior. By the way, Kinney and Bell never did get around to telling us, I've been trying to figure this one for twenty-five years and would sure like to know.

I was sorry to hear a thermal is not a rising whirling bubble of air. I've seen leaves, paper, etc., rising and whirling on good hot summer days, but now I know this wasn't a thermal but a dustless dust devil.

I was sorry to see the passing of the coreolis force. That always sounded so technical that it is pure blaspheme to replace it with something so simple as local conditions. By the way, what are these local conditions?

I was sure sorry to hear old Hank Cole thought he hit a violent thermal at 25 feet and that he thought this caused his model to stall. Old Hank has stomach trouble and visual hallucinations. When you get Hank straightened out, drop me his doctor's address - I've hit them the same way at 10 feet.

I was sorry to hear minimum sheet was not minimum sheet, but was no sheet. I always thought zero was nothing and minimum was something.

I was sorry to hear thermals are high pressure. We better get this to the Air Force fast when they hit a thermal and start going up, their altimeters will read down - maybe this is the answer to some of those mystery crashes.

I was sorry to hear old Bill Hartill didn't even know about wing fillets, I've got this one in my 1948 Aeromodeller Annual.

I was sorry to hear that a glider gliding in a straight line only looks that way and might really be gliding in circles. K & B then state that it picks up a thermal and circles up. How do they know it is circling up, maybe it only looks that way but is really flying straight.

I was sure sorry to hear old buddy, Dave Bevan, made two fatal mistakes. He only came up with a 2% increase in performance and referred to des Flugmodel. The second act would have been enough as this book was mentioned by Ritz which automatically puts him on the list. The first one is fatal for a new writer, he should have said 20%, (and Dave is doing such good work with Schmitz at Martins).

I sure was sorry to hear rudder replacement had nothing to do with wind performance. I always thought that area (on an arm) hit by wind before the model I had a chance to accelerate to wind speed gave a rolling moment. Now, I don't know how to explain my bad launch spins (excuse me, should have said spirals).

I sure was sorry to hear there is no such thing as a thermal sensitive model. I got one hidden that sure fooled me. I coulda' swore that thing had something different. It looked like it would ride the heat off a match. But maybe it looked like it was going up when it was really coming down.

I guess I might as well get honest, I'm in the same class as old Hank, Bill, Pete, etc. Spent so much time out in the corn field flying that I let my book work slip. I put one of these modern airfoils on my old wakefield and couldn't even find the performance increase on my stop watch. Glad to see the New Breed taking over the old game, they throw L/D curves around like our gang use to throw hand launch gliders. I sure am glad these boys know all the answers; as I couldn't find nothing new in their entire article, please have them write an article for Scatter with at least one original fact in it. I'm like poor old Smith I have to refer to other peoples' work, I didn't write the L.S.A.R.A. reports like K & B did, so I can't refer to them. If I refer to des Flugal I get on the Ritz list. I don't know which way to turn. I never got out there and measured the coreolis force like these boys did. I even had the crazy idea you could have a structure that would resist bending but would still be flexible. I thought I could spread the load in about six spars in the bottom of the rib and come up with a structure that would be rigid and yet not fail but flex when subject to extreme loads.

Well that's about it, I see Spring is on the way and I'll have to try out some of these new ideas. Got to find me a local condition, make sure it isn't a dust devil, darsent look at my model flying as I can't tell what it is really doing, find some new name for all violent thermals below fifty feet as they really don't exist, measure thermals with a pressure guage, hide my thermal sensitive glider.

RECORD NORDIC A/2 GLIDER, by Hermann Andresen, Phoenix, Arizona

(Ed. Note: The drawings are self-explanatory, but a little additional description is available, filched from a letter to Dick Gildersleeve from Bill Roseberry of Phoenix. A number of our SCAT members saw this glider fly at Phoenix in mid February at their annual contest. They can vouch for its thermal riding ability. When it hits. . . it stays!)

"The enclosed glider flies differently and has beaten me consistently in the last three contests. This is in itself no measure of success. It did, however, register 12 max. flights, 4 in each contest. It is not original, taken from Hank Coles' Zaic Yearbook design, modified by Andrade and further modified by Andresen.

"It's flight characteristics are unusual. First, it's bad traits. . . nothing in dead air. . . I mean its a glider, so . . . it will take a thermal from 8:30 on, in any turbulence, at bush height and chase its tail like a dog and never lose the thermal.

"In flight it is not a beauty, aesthetically, it is a dog. It pitches, balloons, falls, circling like a whirlpool sometimes loose, sometimes tight, never leaving the thermal."

Most of the gliders are finished in sanding sealer and clear dope, any trim is done in tissue for letters, numerals and added color. The day the record was set, the Pheonix boys say they had to tie the cars down. The plain sheet balsa color was the best color against the sky.

"LIGHTNING SEVEN" FAI CANARD POWER MODEL by Doug Joyce, Reynoldsburg, Ohio

I hope the enclosed plans of my latest F.A.I. power job will be of use to you. The Nordic and Wakefield designs, so far, do not warrant consideration for publication, as much additional work is yet required.

"Lightning Seven" is the best model to date, and in its class has a performance equal to the best. So far, it places second at East Coast Semi-Finals and Illinois Model Aero Club Invitational F.A.I. contests and took a first at Youngstown, Ohio.

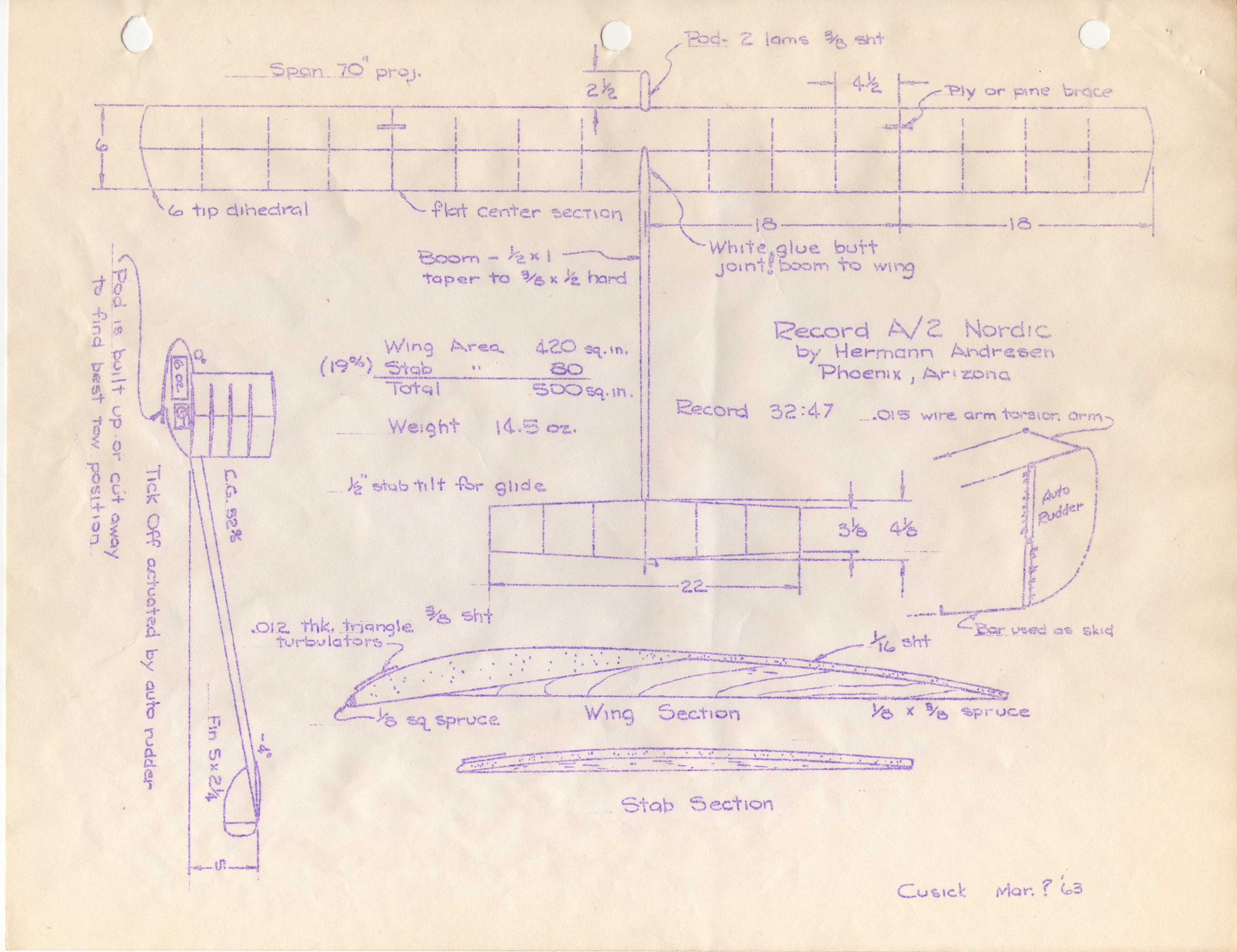
After more tuning and trimming this past fall, twenty-nine consecutive maximum flights were made. The dead-air time was established at approximately four minutes.

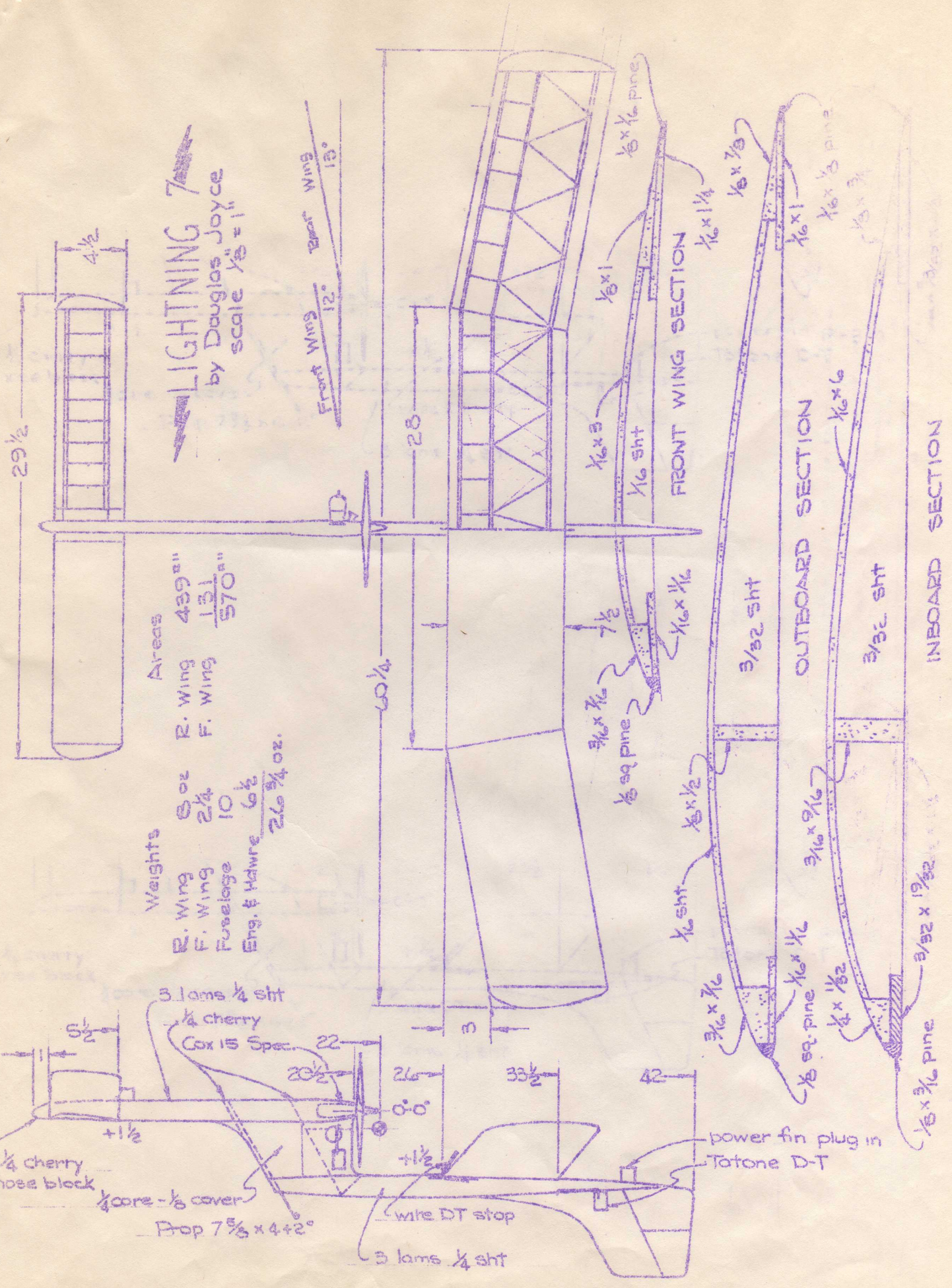
So far, obtaining a good balance of flight characteristic and a practical structure have comprised the major part of development. It was quite easy to design a canard, but to obtain high performance was an entirely different story. A suitable configuration took five years and a dozen ships, while the structure took over six years, but stability never seems to be quite solved. The outlook is brighter every year, though there is yet much to do. I believe the time is ripe for others to join this exciting development, for there is little doubt in my mind of the superiority, but it will take many, not one, to prove it.

MY APOLOGIES FIRST TO KINNEY & BELL AND ALL THE READERS WHO HAVE BEEN WAITING FOR THE SCATTER. I REALIZE THAT THE MORE WE PRINT ABOUT THE CRITIQUE AFFAIR, THE FURTHER WE DRIFT FROM THE ORIGINAL INTENT OF THIS NEWS LETTER. UNFORTUNATELY IT NOW APPEARS THAT THE SCALE OF SYMPATHY HAS TIPPED AGAINST K&B. FURTHER CORRESPONDENCE WITH K&B CONFIRMS THAT THIS WHOLE AFFAIR IS SO SCREWED UP AND ILL-CONSIDERED BY ALL OF US THAT IT HAS BECOME RIDICULOUS.

AT LAST THE PUBLISHING STRIKE IS OVER AND WE CAN CARRY ON WITH THE SCATTER. YOU WOULDN'T WANT US TO CROSS PICKET LINES WOULD YOU?

Bill


Span 70" proj.
Pod: 2 lams 3/8 sht
2½
4½
Ply or pine brace
6
6 tip dihedral
flat center section
18
18
White glue butt joint! boom to wing
Boom - ½ x 1 taper to 3/8 x ½ hard
Record A/2 Nordic
by Hermann Andresen
Phoenix, Arizona
Wing Area 420 sq. in.
(19%) Stab " 80
Total 500 sq. in.
Record 32:47
.015 wire arm torsion arm
Weight 14.5 oz.
Pod is built up or cut away to find best tow position
Tick Off actuated by auto rudder
C.G. 52%
½" stab tilt for glide
3⅛
4⅛
22
Auto Rudder
3/8 sht
.012 thk. triangle turbulators
1/16 sht
⅛ sq spruce
Wing Section
⅛ x ⅜ spruce
Fin 5 x 4½
4°
5
Bar used as skid
Stab Section
Cusick Mar. ? '63


LIGHTNING 7
by Douglas Joyce
scale 1/8" = 1"
Front Wing 12°
Rear Wing 18°
29½
4½
28
30½
3
Areas
R. Wing 439 sq in
F. Wing 131
570 sq in
Weights
R. Wing 8 oz
F. Wing 2¼
Fuselage 10 ¼
Eng. & Hdwre 4 ¾
24 oz.
FRONT WING SECTION
1/16 x 1/16 pine
1/16 x 1
1/16 x 1¼
1/16 x 3
1/16 sht
7½
1/16 x 1½
3/16 x ¾
⅛ sq pine
OUTBOARD SECTION
1/16 x 7/8
1/16 x 1
1/16 x ⅜ pine
1/16 x 6
3/32 sht
⅛ x ½
1/16 sht
3/16 x 9/16
3/16 x 7/16
1/16 x 1¼
⅛ sq. pine
INBOARD SECTION
1/4 x 1/32
3/32 x 1 9/32
1/16 x 3/16 pine
3 lams ¼ sht
¼ cherry
Cox 15 Spec.
5½
22
20½
24
33½
42
0-0°
+1½
power fin plug in
Totone D-T
¼ cherry
nose block
¼ core - ⅛ cover
Prop 7⅝ x 4+2°
wire DT stop
3 lams ¼ sht

SCATTER INDEX - JAN TO DEC 1962

MODEL	DESIGNER	MONTH
Wakefield		
Wakefield 61/63	John Malkin	January
Prop Shaft and Hub	Bob Dunham	February
"Draftee Dip"	C. Sotich	February
"Oizorar"	Marc Cheurlot	April
Record Wakefield	Any Faykan	July
"WN-120"	W. Niestoj	August
"Snafu"	Peter Seaton	December
Nordic Glider		
"Buckeye"	Andy Crisp	January
Bo Modeer's A/2	Bo Modeer	February
A/2	Knut Andersson	February
"Mixmax"	Tor Borthne	March
1961 Nordic Glider	Hank Cole	April
A/2 Nordic	Bob Wiehle	May
"Simba 6"	Asmund Skard	June
"Pendent II"	John Wordin	July
"Yearling"	Pat Curtis	August
Nordic A/2	Dick Colonna	September
Nordic A/2 West Coast Team Winner	Norm Ingersoll	October
"Geronimo"	Bill Hartill	December
F.A.I. Power		
"Django" (1961 Norwegian Team)	Birger Bulikin	January
Paul's Flood-off System	R. O. Paul	February
FAI Power Model	Dick Colonna	March
FAI Power Model	Dick Gildersleeve	April
"Silko" FAI Power Model	Ilmari Jokinen	June
FAI MPower Model	Jim Moseley	July
"Big Boy II"	Vaciav Horcicka	September
FAI Power	Durov	October
Mark II "Saturn"	Crige Cusick	December

ARTICLES

Title	Author	Month
SCAT Annual Dinner		January
New ICC Committee Men		January
Which Plane or Deliberation Upon Justification (Huh?)	Bill Bell	February
Wakefield Prop Shaft	Bob Dunham	February
Pictures, Yet		February
An Announcement	Jim Trego	February
USA Team Selection		February

ARTICLES

Title	Author	Month
Two Timers	Bob Van Nest	March
'62 Nordic Contries Champ Report	Birger Bulikin	March
Postal Contest Results		March
Some Comments on Exhaust Tuning	Bill Hartill	April
On Launching Towline Gliders	J. Wordin	April
On the Nature of Thermals and Thermal Soaring	Glenn C. Kinney	April
Stabilizer Airfoil Suggestions	Craig Cusick & Ken Sykora	April
FAI G-NO/Go Wakefield Scale		June
How to Tie Rubber	Norma Hermes	June
Prop Talk	Ed Schnakenburg	July
More on Stabilizer Airfoils	David Bevan	August
Memo from Colorado (A Critique on 1962 Q.T.)	R. Lynch & G. Batiuk	August
1963 USA FAI FF Team		August
12 Meter Wakefield		September
What Happened at the West Coast Semi-Finals	Bill Hartill	September
East Coast Semi-Finals Report	Sal Cannizzo	September
Cox Plug Prob.	Bill Hartill	September
Thoughts on FAI Power Design	Don Assel	October
Indoor FAI World Champs Report		October
Not on the Agenda	Bill Hartill	October
Comment on the Central Area Semi-Finals	Pete Sotich	October
SCAT West Coast Team Travel Fund		October
A Critique on Scatter	Glenn Kinney & John Bell	November
Comment from the FF FAI Committee Chairman	G. Ritz	December
A "Fresh" Line	Bill Bogart	December
1962 Norwegian National FF Championships	Norm Stovland	December
SCAT 1st Annual Nordic Team Challenge Cup Contest		December
Key to Photo Page		December