

Hobby Horn

hobby specialties



E-POWER SYSTEMS & ACCESSORIES

ASTRO FLIGHT SYSTEMS:

Cobalt (4 cell) 020 Direct ..\$74.96	Geared ...\$87.96
Cobalt (5 cell) 035Direct ..\$86.96	Geared ...\$108.96
Cobalt (7 cell) 05Direct ..\$112.96	Geared ...\$134.96
Cobalt (7 cell) FAI 05Dir ..\$127.96	Geared ...\$149.96
Cobalt (12 cell) 15Direct ..\$149.96	Geared ...\$172.96
Cobalt (14 cell) 25Direct ..\$179.96	Geared ...\$202.96
Cobalt (18 cell) 40Direct ..\$209.96	Geared ...\$224.96
Cobalt (24 cell) 80Direct (Sport,Pattern or FAI)	\$299.96
Astro DC/DC Constant Amp (up to 28 cells) ...	\$87.96
Astro AC/DC Charger (current adjust)	\$59.96
Astro DC PEAK Charger (up to 12 cells)	\$74.96
Astro A/C D/C PEAK Charger (7 cells A/C) ...	\$104.96

FOLDING PROPELLORS	Sonic Tronics Folders:
Midway Model Folder	7 x 4 or 8 x 4 ..\$9.85
12 x 7	11 x 7 or 12 x 7 \$13.45
	13 x 7

SANYO "R" series BATTERY PACKS

4 cell 450mA ..\$19.50;	5 cell 450mA ...\$23.00
6 cell 800mA ..\$30.20;	7 cell 800mA ...\$34.15
6 cell 900mA ..\$31.29;	7 cell 900mA ...\$35.54
6 cell 1200mA ..\$31.29;	7 cell 1200mA ...\$35.54

*All packs wired flat. **Please specify connectors.

Individual Sanyo "R" series cells.

450 AR	\$3.50ea	800 AR ..	\$4.05 ea
900 SCR	\$4.15ea	1200 SCR ..	\$4.15 ea

BOOKS on Electric flight:

Quiet Revolution (Bob Boucher)	\$7.00
Building & Flying Electric A/C (Mitch Poling) ..	\$8.96
Hobby Horn Electric Info Book (Bob Sliff)	\$2.50

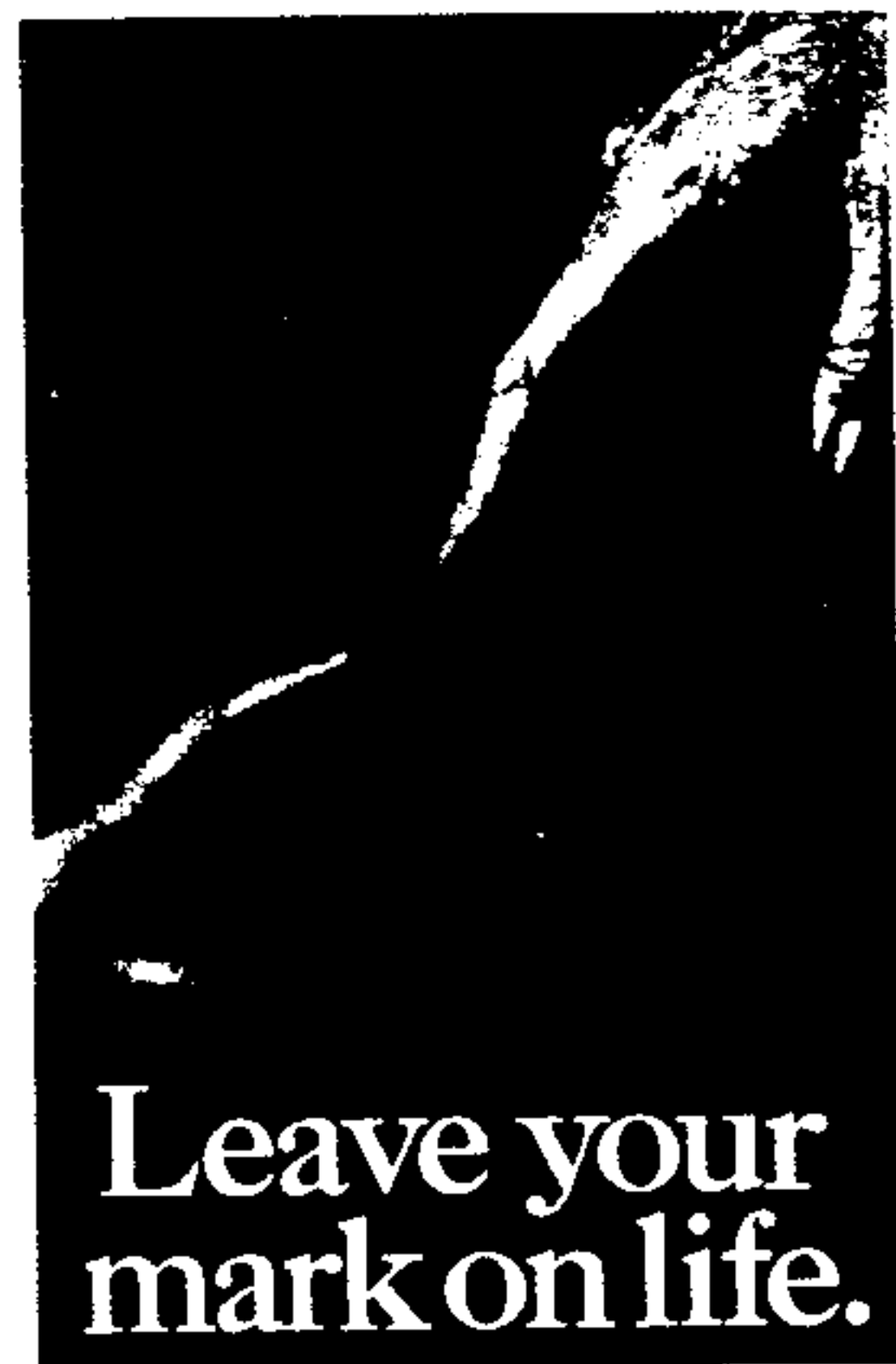
SHIPPING & HANDLING

Up to \$8.00 add \$2.00;
\$8.01 to \$20.00 add
\$2.50; \$20.01 to \$45.00
add \$3.25; \$45.01 to
\$70.00 add \$3.75; Over
\$70.00 add \$4.50
Calif. add 6.25% tax.
Send MO, VISA/MC (# &
Exp) or Check (allow up
to 30 days for clearance
on checks.)

82 Page 1990 CATALOGUE

\$2 pp/1st Class, or free when
requested on 1st order.

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To briefly summarize, we now have 50 frequencies exclusively for model airplane use. These are so close together that adjacent frequencies cannot be used with our old equipment without serious interference problems and crashed airplanes. The answers are to use narrow-band (gold sticker) transmitters and dual-conversion receivers. These improved circuits reduce or solve some of our other interference troubles as well.

Most of the radio equipment manufacturers currently have offers to update or exchange their older equipment at very reasonable costs. Look for advertisements for your brand of radio or see your dealer.

It is, and will continue to be, legal to use the older equipment, except in AMA events and contests. However, many or most clubs are passing rules which prohibit the use of non-gold-sticker transmitters, as they are apt to shoot other fliers down. You would be foolish to use an old-style receiver in a group where some fliers might have new odd-numbered channels, as they could shoot you down in some cases.

It is also probable that the managers of most public model fields, such as those in parks, will pass rules requiring the use of narrow-band equipment in the interest of safety. Rampant RC crashes (make that Radio un-Controlled crashes) don't inspire public confidence in our hobby. Unless you fly alone, and forever will fly only miles from all other modelers, a word to the wise. Francis Reynolds, 3802 127th Ave. NE., Bellevue, WA 98005-1346. SASE please. (206) 885-2647. **MB**

TOURNAMENT *Continued from page 59*

performance these guys had (I didn't say skill!), and what the heck, it only money, right?

Last, you have to mention the officiating. In one word, it was very professional. CD Phil Kraft had all the best folks. Mike and Vicky Lauman, Betty and Suzi Stream, Sue Nelson and Jackie Edwards in the scoring trailer. Dick Penrod on the line. Lou Proctor and Dick Rake processing aircraft. Doc Edwards as Chief Judge, with able assistant John Fuqua. The judges were as big a "who's who" as the pilots: Ron Chidgey, Don Lowe, Isao Matsui, Geoff Franklin, Steve Nelson, Fred Johnson, Steve Morris, Jim Parker, Tom Prosser, and Bill Thomas, with Nats Chief Judge Darlene Frederick as the alternate. There were no problems, no complaints, and no hitches. The contest ran like a German engineer's pipe dream.

All in all, it was great fun. Would I go back? Does a frog have a watertight... ah, yes, I would. Certainly. I have already marked my appointment book. See ya at the field... Rick.

WHAT THEY FLEW AND HOW THEY FINISHED

Name	Amount	Aircraft	Engine
1. C. Hyde	\$25,000	Ultimate	Sachs 4.2
2. S. Rojecki	\$15,000	Bucker R131	Twin Tartan

3. W. Matt	\$10,000	Ultimate	3W/ZG 62
4. S. Stricker	\$6,000	Ultimate	Sachs 4.2
5. B. Cunningham	\$5,500	Ultimate	Sachs 4.2
6. G. Naruke	\$5,000	Ultimate	Sachs 4.2
7. Q. Somenzini	\$4,500	Ultimate	Sachs 4.2
8. I. Kristensen	\$4,000	Ultimate	Twin Tartan
9. D. Koger	\$3,500	Extra 230	T.Tartan BD*
10. G. Hoppe	\$3,000	Bucker R131	Titan ZG 62
11. D. Weitz	\$2,750	Ultimate	Sachs 4.2
12. J. Britt	\$2,750	Skybolt	Twin Tartan
13. D. von Linsowe	\$2,750	Courtesan	3W
14. S. Helms	\$2,750	Ultimate	Sachs 4.2
15. P. Wessels	\$2,750	Extra 300	Titan ZG 62
16. G. Manning	\$2,750	Ultimate	Sachs 4.2
17. H. Hatta	\$2,750	Ultimate	Sachs 4.2
18. J. Lockwood	\$2,750	Cap 21	Zenoah G-62
19. J. Tracy	\$2,750	Sukoi 26M	Stihl
20. K. Binks	\$2,750	Extra 300	King 67cc
21. J. Beasley	\$2,750	Ultimate	3W

*belt drive.

\$3,500 Best Aircraft Award—John Britt/Scully Skybolt

3 MINUTE FREESTYLE PLACING

1. Quique Somenzini	\$5,000
2. Chip Hyde	\$2,500
3. Dave von Linsowe	\$1,000
4. Steve Rojecki	
5. George Manning	
6. John Beasley	
7. John Lockwood	
8. Hajame Hatta	

MB

CONTROL LINE *Continued from page 66*

starting. This one is for our Northwest Super Sport Race plane. On this one we have a shutoff and fastfill and the plane is powered by a K&B .35 plain bearing engine. We don't use a hot glove but have a helper attach the battery clip. The pilot shuts down and brings the plane in quickly. The pitman catches the plane and proceeds to: 1. Put bulb in fastfill opening (note, with this engine we do *not* put fuel on the head... the K&B tends to run cooler than the Fox). 2. Squeeze bulb. 3. When fuel overflows, open shutoff and keep squeezing another instant. 4. Remove bulb (helper has attached battery clip during fueling). 5. Lift plane, move prop up to compression and smack prop clockwise smartly. If it doesn't go quickly, flip forward a few times, and it will. 6. Release plane. This pit stop takes 4-6 seconds on the ground if the engine goes right away.

NEEDLE VALVE SETTINGS

I've not discussed needle settings along with starting procedures because it is in a way a separate topic that doesn't relate to either hot or cold starting. Needle settings actually are only distantly related to engine starting—prime and style of flipping are much more important. Needle setting is important after the engine fires. The urge to twist the needle to and fro frequently works against a beginning flier when other measures would be more useful in starting the engine.

First of all, it's necessary to consider whether the engine has been run before at the current setting. If it is a new engine, or you have disassembled it and put the needle

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