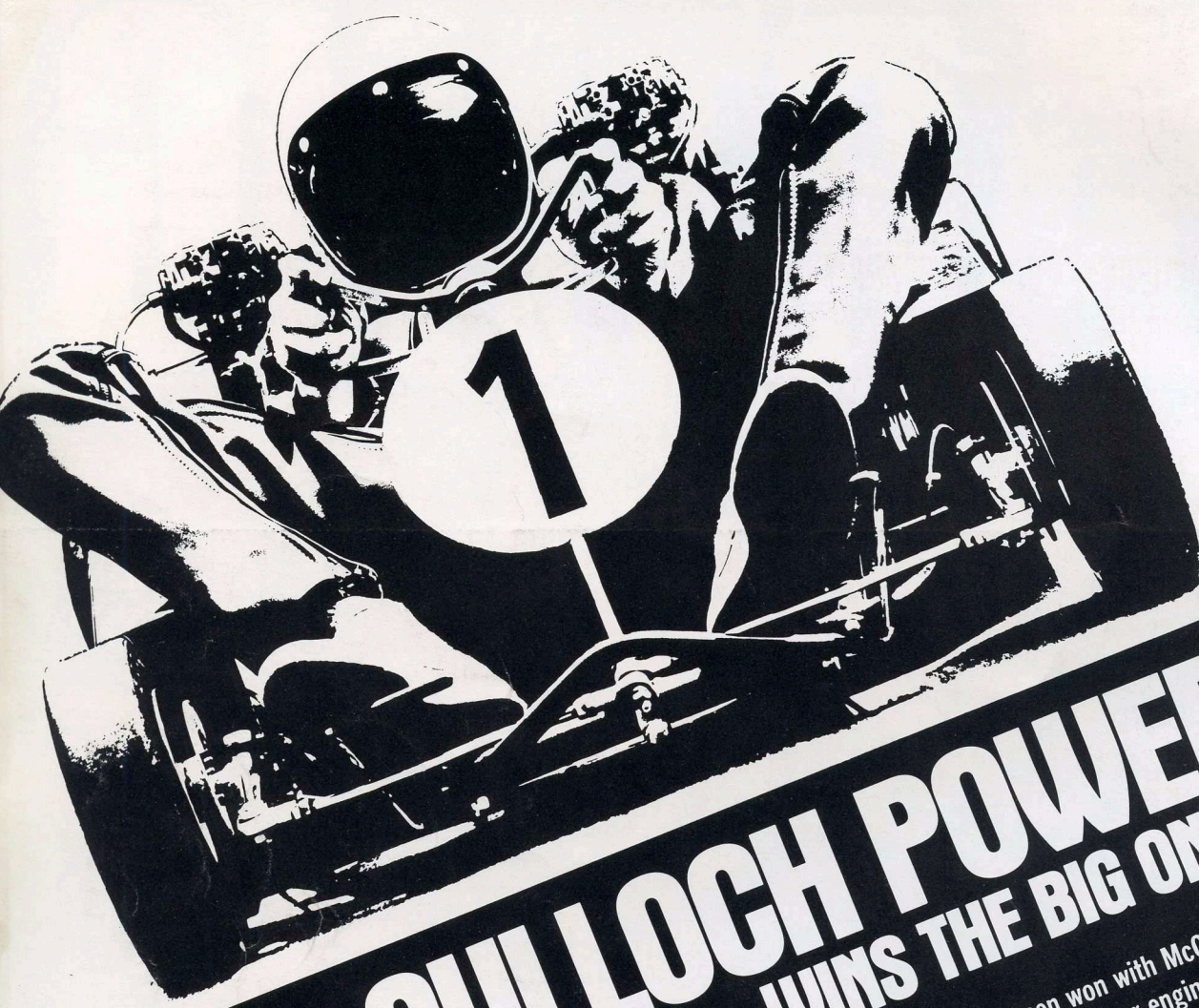


OCTOBER 1969 - SEVENTY FIVE CENTS

MODERN KARTING

1969 SPRINT NATIONALS





MCCULLOCH POWER WINS THE BIG ONES!

More races have been won with McCulloch power
than with any other engine in the world!

ENDURO NATIONALS
Indianapolis, Indiana

CHUCK PITTENGER
winner, C-Open
Merit Kart with
twin MC-101's.

SPRINT GRAND NATIONALS
Camden, Ohio

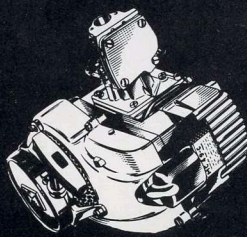
KEN BURDEN
winner, C-Open
Dart Kart with
twin MC-101's.

JACK NELSON
2nd place, C-Open
Dart Kart with
twin MC-101's.

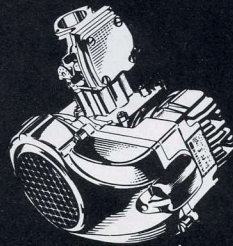
1969 Jr. Grand National Champion
DONNY POMEROY
Rookie Class
MC-49C powered

Congratulations, also, to all the other McCulloch powered 1969 national winners.
Write for free literature and information on McCulloch kart engines, tuned-muffler, decals, patches, T-shirt.

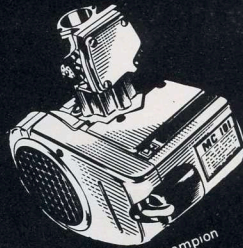
MCCULLOCH CORPORATION
6101 West Century Blvd., Los Angeles, Calif. 90045



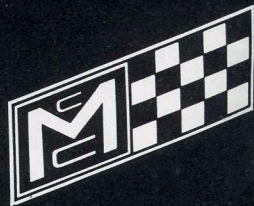
MC-49C
The mini bike favorite



MC-91A
Super successor to MC-91



MC-101
Powerful lightweight champion



MODERN KARTING

CONTENTS / OCTOBER 1969 . VOLUME 2 . NUMBER 3



"Kart number 69, this is El Segundo tower. Radar shows hazardous bales and curbs in the area. Cleared for landing on runway 9, over and out."

EDITORIAL 4 *Now that the Nationals are over...*

LETTERS 6 *Let us hear from you*

RACING ROUNDUP 8 *More racing action*

1969 SPRINT NATIONALS 15 *564 karters hit Camden for some racing!*

THE EL SEGUNDO GRAN PRIX 31 *Kiwanians sponsor the annual street race*

TECHNICAL: 34 *Port timing methods for all engines*

FORMULA FIVES AT WISCONSIN 36 *The State Fair crowd really dug the scene*

MID-OHIO RACEWAY ENDURO 38 *The Dart Kart Club hosts*

THE TOP TEN IN FORMULA FIVE 40 *These are the F/5 hotshoes*

NEW PRODUCTS 43 *Some new things*

JACK PELZER, *Publisher* — **RONALD D. BLACK**, *Editor* — **CHRIS MOSSMAN**, *Art/Production Director*
ORMEL DUKE, *Technical Editor* — **DICK BUSHE**, *Photo Editor* — **JIM TANJI**, **RANDY DELUCA**, *Staff Photographers*
DAVE SEVERSON, *Contributing Editor* — **JOHN BARBER**, *Race Assistant* — **PAM McCLUNG**, *Circulation Manager*

MODERN KARTING is published monthly, except June and July, by Twentieth Century Publications, Inc., 6432 Bolsa Ave., P.O. Box 1880, Huntington Beach, California 92647, Phone (714) 893-8583. Reprinting in whole or part is expressly forbidden except by permission of the Publishers. Second class postage paid at Los Angeles, California. Subscription rates: \$7.00 one year; \$14.00 two years; \$20.00 three years in U.S. and U.S. possessions. Canada and foreign subscribers add \$1.00 per year. Single copy price 75 cents. Entire contents Copyright Twentieth Century Publications, Inc.

SUBSCRIPTION SERVICE: All subscriptions and subscription correspondence should be addressed to MODERN KARTING, Circulation Dept., Box 1880, Huntington Beach, California, 92648. Please allow at least three weeks for change of address. Include your old address as well as new. Enclose, if possible, an address label from a recent issue.

EDITORIAL CONTRIBUTIONS are welcome and should be addressed to the Editor, Modern Karting Magazine, Box 1880, Huntington Beach, California 92648, accompanied by return postage. All material will be handled with care, however, the Publisher assumes no responsibility for return or safety of artwork, photographs or manuscripts.

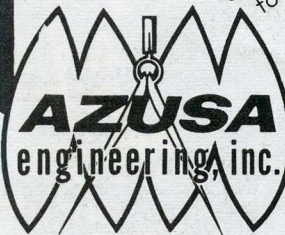
**NEW!
NEW!**

**FOR TRAIL BIKES, SCRAMBLERS,
SNOWMOBILES, ENDURO KARTS, OR ANY
STEERING SYSTEM THAT FIGHTS YOU.**



AZUSA'S 1706-SS STEERING STABILIZER
The LIMS (Lapped Inter Module Stabilizer), with two patented features, is truly one of the great developments solving impossible steering problems. Gone are the flutters. Gone are the shimmys. AND when that jolt comes up from nowhere, the LIMS takes over — automatically — to keep you on the straight. Its patented usage of space-age material keeps a constant dampening load and its patented, ceramic covered swivel ball relieves all major stresses through its 36° movement arc. The piston rod is lapped and piston walls are of specially treated steel to insure microscopic fit. A great product!

See your dealer. Order Part 1706-SS.
List Price \$9.95. You'll love it!
Distributor and dealer inquiries invited.



16256 Arrow Highway, Azusa, California 91702

NEW ON THE SCENE IN FLORIDA

JETO

KARTS AND PARTS

852 CASSAT AVENUE JACKSONVILLE, FLORIDA 32205

DISTRIBUTOR FOR

RUPP KARTS KOMET ENGINES

PLUS: AIRHEART BRAKES — AZUSA PRODUCTS — BENDIX BRAKES
BYSTROM GAUGES — GEM PRODUCTS — HEGAR 4 — HORSTMAN — MAX
TORQUE — McCULLOCH — SPECIAL FORMULA — WISECO — ENDURO
JACKETS — C.A.L. TIMING EQUIPMENT — ELIMINATOR — CARLISLE

ANY KART SHOP IN THE SOUTHEAST IS JUST OVERNIGHT FROM JETO

EDITORIAL

by RON BLACK

You all should be proud. The sport is doing well, very well indeed. The sport is you, you know. The Sprint Nationals served to confirm this as being the greatest year ever for karting. There were five-hundred-sixty-four entries at Camden, Ohio, and it is fair to say that it was probably the best Sprint Nationals ever. The total number of entries in the IKF Nationals Program came to 1339. This figure includes both Enduro Nationals and Sprint Nationals entries. The thing that can be pointed to that is most significant, though, is the fact that there was only one enduro machine entered in the Sprint Nationals. There doesn't seem to be much crossover between sprinters and enduro racers. This, in essence, means that there was actually thirteen-hundred plus separate entries. It is not just the same few doing all of the racing, our circle of participants is touching more and more people all the time.

IKF must be given the credit for molding a program and member-organization that would turn out this huge number of entries. This is not to say that IKF is or has done everything exactly right. Quite the contrary, there seems to be many griperers in the ranks and sometimes they are more in the right on a certain point than IKF is.

But IKF must be given credit for doing most of the right things for most of its members, otherwise their results would not be so spectacular. I believe that IKF has tried to do the right thing in every instance, but there are always differences of opinions, and it is impossible for IKF to go two different directions at once. This is no sin, but some people expect something more—what, who knows?

IKF happens to operate on the same principle as does our government, that is, majority rule. When a rule change or etc. is suggested by a responsible party, the Board of Governors asks for advice from the membership on which way to vote, or what their thoughts are. When a clear indication that the membership wants something different is received, the Board will act according to the response to their opinion poll taken of the membership. If you didn't answer the opinion poll, I guess the board will have to act on the basis of other than your opinion, won't it? Think of it this way, if you never voted for anybody or anything, you are not entitled to gripe if things don't suit you. If you are simply outvoted

Continued on Page 46



**CARLISLE
GO-KART
TIRES** have
tested out safe at
more than double
average track speeds

You may never race that fast, but it's assuring to know Carlisle tires are dependable . . . even at top speeds. If your kart can take it, Carlisle tires can.

Once your kart jumps off the grid, your only concern is winning. That's why winners specify Carlisle Tires. These tough tread tires give you extra traction action and maximum racing wear. You can expect many hard racing miles to a set. Carlisle Go-Kart Tires are constructed of synthetic rubber compound to give body and sidewalls more racing tire life, too.

Carlisle Karting Slick features such bonuses as the tread depth indicator that shows you tire wear at a glance . . . and has direction of rotation arrows to show correct tire mounting. No testing or extra tire changes are necessary. **Carlisle Go-Kart Tires. Built for people concerned with speed.**



CARLISLE
TIRE & RUBBER DIVISION

Carlisle Corporation/Carlisle, Penna. 17013



VEGA VIC ENGINE

I would like to inquire about the Vega Vic water cooled engine shown on page 35 of your Sept. issue.

I can not seem to get any information on this engine from anybody.

I would like to have full specs on engine w/dimension sheets, water pump information, and radiator information.

I would settle for the address of the manufacturer, so I can contact them.

Dick Arnold
Indianapolis, Ind. 46241

We're very glad to hear from you and answer your question concerning the Vega Vic watercooled engine. The best information that we have concerning this engine was published in the April 1969 issue, on pages 40 and 41.

NO BETTER SPORT

I have been karting for about nine years now and must admit there isn't any better sport that pertains to good

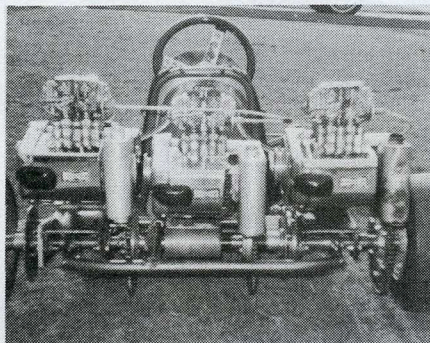
fun. I was started in karting by an automobile owner named Casey Kosimire who has been racing ten years now and is sixty years old and still runs in C Open.

I enjoy your magazine completely - keep up the tech articles, pictures, race results, etc.

Robert E. Thompson
Port Gamble, Washington

ENDURO SPRINTER

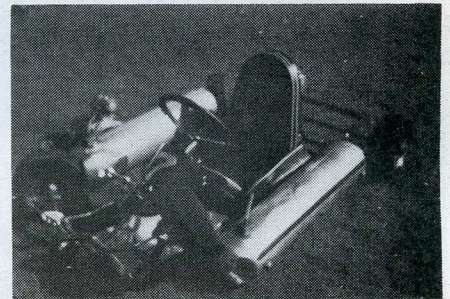
These pictures were taken at the sprint tracks, it is an Enduro kart but I take the tanks off and run it on the sprint track once in a while. I have run in two Enduros so far with very little problem, except handling the front end. I put



tread type tires on with weighted spacers which helped a lot. I am running

three Moc 101's. Three more are being set up in this area now. I would like for you to put these pictures in the magazine so that people who might be interested can see them.

This other picture was taken at Vacaville two weeks ago in practice. B. limited class, doing between 90 and 100 miles per. It was one of my karts but I



was breaking in a new driver. This is what happens when you take your eyes off of the track, and hook a tire. Two hundred and ten feet from first roll till it stopped. Five rolls, four end over ends. The driver stayed in the first 4 rolls, he came out with just a few scratches. The kart was completely wrecked along with the motor. The only thing I could save was 4 tires, 1 wheel and the brakes. (I was following behind and saw the whole thing)

Dick Henthorn
Colina, Calif.

ATTENTION FLORIDA KARTERS

MICHEL'S KARTWAY, INC. IS NOW DISTRIBUTOR OF
HORNET KARTS

Also Distributors of Komet Kart Engines

Hornet Cycles
Dart Karts
G.E.M. Products
West Bend Engines
McCulloch Engines
Carlisle Tires
Eliminator Tires
Azusa Products
Nitro Joe's Products
Max Torque Clutches

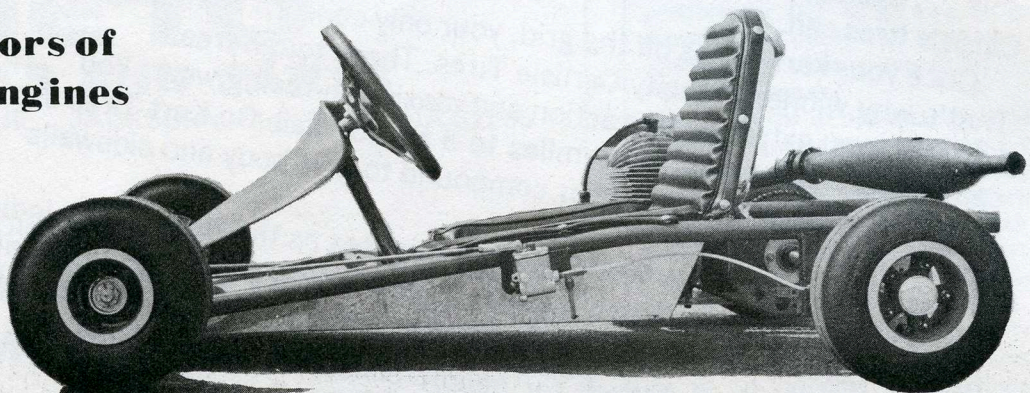
And all other major Karting Accessories

Dealer inquiries invited.

MICHEL'S KART WAY, INC.

6001 N.W. 74th Avenue, Miami, Florida

MAIL ORDER SPECIALISTS
ALL ORDERS SHIPPED SAME DAY



KOMET • LAUSON • LINK BELT • LOCTITE • MARINE TEX • MARGAY • MAX TORQUE • MCCULLOCH • MCHAL • NITRO JOES • PARILLA • PATT • PRO • RED DEVIL • REED • RUPP • RUTTMAN • SAETTA • SPECIAL FORMULA • TACO • TECNO KART • TECO • TEX CON • TILLOTSON • WEST BEND • WESTACH • WICO • WISECO • CHRYSLER W. B. AAA • STERLING CYCLE

KOMET



still the star!

LET THE RECORD AT THE INDIANAPOLIS 1969 ENDURO NATIONALS SPEAK FOR ITSELF!

ENGINE	NUMBER OF WINS	CLASSES WON
KOMET	SIX	STOCK LIGHT "A" MODIFIED HEAVY STOCK JR. "B" STOCK "A" MODIFIED LIGHT "B" OPEN
MC-91	TWO	JR. AMERICAN REED SR. AMERICAN REED
PARILLA	ONE	FKE-1
SAETTA	ONE	STOCK HEAVY
B BOMB	ONE	FKE-II
MC-101	ONE	"C" OPEN
WB-820	ONE	"B" LIMITED
KAWASAKI	ONE	FKE-III

RUSSELL

KARTING SPECIALTIES

P. O. BOX 9602
KANSAS CITY, MISSOURI 64134
AREA CODE 816 761-0660



Kart Owners and Drivers Association Kerman Kartways Presents



FIRST ANNUAL PEPSI-COLA SWEEPSTAKES

October 12, 1969

Track open 7 am — registration and practice
10 am — qualifying
12 noon — first race

October 11, 1969

Track open 10 am to 5 pm, practice & registration
Entry Fee: \$6.00 driver & 1 pit man

IKF Rules and Classes

TROPHIES to 5th place, one for every two karts

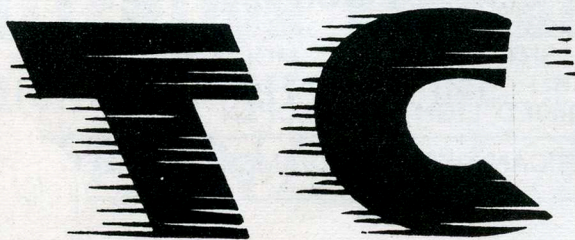
\$65.00 retail value trophy, 29" high to be given to karter that travels the greatest distance to this race.

Donated by Frontier Chevrolet

FOR INFORMATION: Call Jake Kevorkian Fresno 209-229-4143

1st Place Trophies compliments of Pepsi Cola Bottling Co. of Fresno, California

PEPSI-COLA Bottling Company of Fresno



The Engineered Lubricant

6 OF 12 WINNERS AT THE SPRINT NATIONALS WON WITH T-C

1st — AMERICAN REED — TONY ADKINS

1st — ROOKIE — DONNIE POMEROY

1st — B-OPEN — JACK NELSON

1st — B-LIMITED — LINDA EMMICK

1st — STOCK LITE — JOE VERRA

1st — B-STOCK — RICKIE TATE

T-C IS A CHEMICAL LUBRICANT WHICH IS FORTIFIED WITH ADDITIVES TO PROVIDE OXIDATION STABILITY, ANTI-CORROSION PROPERTIES AND "FILM STRENGTH". THE E.P. (EXTREME PRESSURE) ADDITIVES HAVE A GREAT AFFINITY FOR METAL SURFACES AND POSSESS TREMENDOUS SHEAR STRENGTH PROPERTIES. IN A FALEX LUBRICITY TEST WHERE A LOAD IS APPLIED CONTINUOUSLY UNTIL FAILURE, T-C CARRIED A LOAD OF 3200 POUNDS, CASTOR OIL, 1800 POUNDS AND PETROLEUM OIL, 500 POUNDS. TO MY KNOWLEDGE, ONLY ONE ENGINE FAILED THAT WAS RUNNING T-C AND THAT WAS A HOLE BLOWN IN THE PISTON DUE TO PRE-IGNITION DETONATION AND THAT PISTON DID NOT STICK.

— YOU PUT THEM TOGETHER AND T-C KEEPS THEM TOGETHER —

— JOIN THE HOT DOGS — DON'T BLOW IT — USE T-C —

FRANCHISED DEALERSHIPS AVAILABLE IN SELECTED AREAS

T-C LUBRICANT 4300 SKYLARK DRIVE ENGLEWOOD, OHIO 45322

Racing Roundup

SACANDAGA KART CLUB

The skies cleared long enough for the Sacandaga Go Kart Club to hold the once postponed Regional race on July 20th. The crowd was not what we would have expected if the race had been held as originally planned, but those that did come saw some pretty good action. The results are as follows :

Rookie: 1. Mike McGuire, Monsey, N.Y. 2. Kevin Pollock, Monsey, N.Y. Amer. Reed Jr. 1. Bob Ball, Ballston Spa, N.Y. 2. Bill Gormley, Ramsey, N.J. 3. Ray Entwistle, Herkimer, N.Y. A-Stock Jr. 1. Bill Gormley, Ramsey, N.J. Amer. Reed Sr. 1. Steve Ball, Ballston Spa, N.Y. 2. Bill Swanson, Ilion, N.Y. 3. Phil Ball, Ballston Spa, N.Y. A-Stock, Lt. Wt. Sr. 1. Mike Arminio, Fultonville, N.Y. 2. Charles Bellotti, N.Y.C., N.Y. 3. Tom McCann, Huntington Sta., L.I., N.Y. A-Stock, Hvy Wt. 1. Fred Michel, Sr., New Paltz, N.Y. 2. Dan Cunningham, Danbury, Conn. A-Open Lt. Wt. 1. Steve Ball, Ballston Spa, N.Y. 2. Paul Dunham, Lake Pleasant, N.Y. A-Open Hvy. Wt. 1. Thereon More, Herkimer, N.Y. 2. Edward Schultz, Frankfort, N.Y. B Limited 1. Carl Codello, Piermont, N.Y. 2. Bob Sweet, Bennington, Vt. B Stock 1. Lou Smiley, Nyack, N.Y. 2. Robert Haught, Monsey, N.Y. 3. Art Michel, New Paltz, N.Y. C Open 1. Carl Codello, Piermont, N.Y. 2. Jack Tinera, Katonah, N.Y.

Carl Codello in the B Limited and the C Open was about the hottest set of wheels to ever turn our tight track at Plateau. It was a real sight to see Carl keep those machines revved up and handle so well on those tight turns. A week later, he proved that it was no accident by repeating it at the Divisional Race at Avon, N.Y.

Only 3 of the Plateau regulars made an appearance at the Divisional at Avon, N.Y. on July 27th. The rain -shortened event was run with about 120 karters entered but many more were expected if the weather had stayed good. This event was about the last chance for karters to get their three marks for their preferred starting positions at the Grand Nationals, and all those there wanted to run in spite of the weather.

Ray Entwistle and Theron Moore went to Camden, Ohio, home of the Grand Nationals this year, on Sunday, Aug. 2 and 3, to test their skills at Pre-National Regional Championships. Sarge reported that there were more than 200 karters

Continued on Page 10

CHAMPION'S CHOICE!

★ ★

JOIN THE LIST OF
IKF NATIONAL CHAMPIONS

WHO USED

WISECO RACING PISTONS

TO IMPROVE PERFORMANCE AND DURABILITY:

CLASS	DRIVER	
ENDURO:		
American Reed Junior	Rod Whorton	WISECO equipped MC 91A
Stock Junior	Dave Knapp	WISECO equipped KOMET
A Stock Lightweight	Ed Hundley	WISECO equipped KOMET
A Open Lightweight	Ed Hundley	WISECO equipped KOMET
A Open Heavyweight	Chuck Pittenger	WISECO equipped KOMET
B Limited	Jim Akkerman	WISECO equipped WEST BEND
C Open	Chuck Pittenger	WISECO equipped MC 101's
SPRINT:		
American Reed Junior	Tony Adkins	WISECO equipped MC 91A
American Reed Senior	Jerry Vaughn	WISECO equipped MC 91A
A Open Lightweight	Pete Michel	WISECO equipped KOMET
A Open Heavyweight	Jack Stickney	WISECO equipped KOMET
B Open	Jack Nelson	WISECO equipped MC 91's
C Open	Ken Burden	WISECO equipped MC 101's

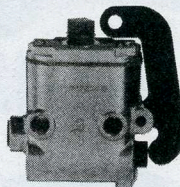


30200 LAKELAND BLVD.
WICKLIFFE, OHIO
44092

TELEPHONE
AREA CODE 216
944-7600

new heavy duty discs

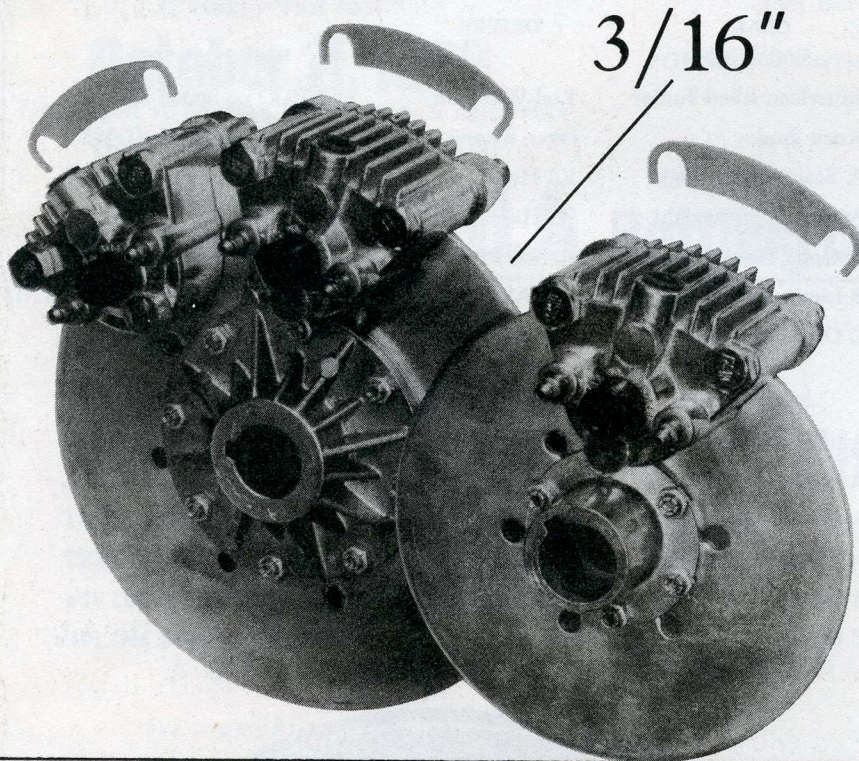
The new 3/16 inch thick discs for karts are now available in popular 6 or 7-3/4 inch diameters. Hurst/Airheart heavy duty discs run cooler, resist warping, extend pad life, eliminate puck breakage, increase reliability. Bolt right to standard hub and mounting brackets. Spacers used in calipers to compensate for extra thickness. Both discs and spacers may be ordered separately or in complete single or dual caliper brake kits from your local Hurst/Airheart dealer. Add that extra measure of stopping power now.



HURST/AIRHEART PRODUCTS INCORPORATED

*15540 Lanark Street, Van Nuys, California 91406 213-782-9170

ANTI-SKID AND SAFETY DISC BRAKE SYSTEMS



Racing Roundup

Continued from Page 9

there, with several of the California drivers already on hand.

Approximately 8 of the regular Club drivers will be attending the Grand Nationals on Aug. 16 & 17. If the weather is right they are expecting over 600 karters to test their skills and a chance at National glory. They are preparing for consolation and semi-consolation races in some of the classes, such as Amer. Reed and B Stock. The McCulloch engine is still the most popular form of power.

NORTH TEXAS KART CLUB

July the 4th may have been the big day for the USA, but July 26th and 27th was the big one for the "Greatest Kart Club" in the Southwest. It takes people to make a club and we have the finest.

The Division 4 Championship came right on the heels of our regional. When the club worked so hard the month before, you just would not believe how everyone came through for this one.

Jimmie Kirby, a fine president, asked the members for one more effort and they gave it! This is how it went:

JUNIOR AMERICAN REED

1. Charles Tarwater
2. Leroy Wilkerson
3. Lloyd McCaffity

AMERICAN REED SENIOR

1. Jimbo Eggleston
2. Clayton Walker
3. Jimmy Kirby

A OPEN LIGHT

1. Larry Harrison
2. Pat Parrish
3. Kay Curry

B STOCK

1. DuWayne Hastings
2. Bobby Wilkerson
3. Wilson Boatwright

B OPEN

1. Sam Drum

A STOCK JUNIOR

1. Ricky Grego
2. Bobby Peck
3. John Montgomery

A STOCK HEAVY

1. Franklin Parsons

A legal racing car when equipped with seat belts and roll bar

FKE

Supertight fiberglass, airflow design. 92" long (adjustable). 23 1/2" wide. 24" high. Fits 1/4, 1/2, 3/4 midgets, karts.
Body shell only. \$50 with order, balance C.O.D. **\$159.95** f.o.b.

LARGEST STOCK ON THE EAST COAST!

Everything for **MINI-BIKE or KART**
Shipped promptly!

National Financing available

54 Years of friendly service

NEW Giant Catalog with plans \$1.00

BROWN'S MOTORSPORTS

19 Central St., Worcester, Mass., Tel. 617-756-0718

A STOCK LIGHT

1. Ken Montgomery
2. Clint Proctor
3. Wm. J. Price

A OPEN HEAVY

1. Lee Christian

B LIMITED

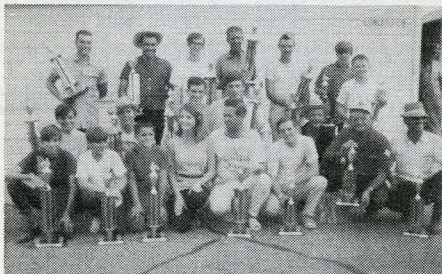
1. Jack Golden
2. Bobby Helpinstill
3. Gene Harper

C OPEN

1. Carl Sayles
2. Bobby Wilkerson

After the races for the day were ended, it was time for the gold. Miss Linda Montgomery, "almost Miss Texas", again gave out the trophies.

As I was saying, this was the big one. Some had been racing all year for the IKF plaque. Joe Renegar, our governor and "a man who has done as much for karting in this area as any man could", seemed very pleased to present the Division 4 champions their IKF plaques. Plaques were presented to Kay Curry, Sam Drum, Gene Harper, Jimmie Kirby, Franklin Parsons, Ken Montgomery, John Montgomery and Charles Tarwater.



The club has grown by several families this year and some of the new members have become very active. This is what it takes to build a bigger and better club, like the NORTH TEXAS KARTERS, Inc. Too many helped to list all the names, but when we say "thanks" it is to you personally.

KEEP "AHEAD" with a proven winner

DAYTONA HELMETS

Send \$.50 for TWO Reflective Daytona
Decals and Descriptive Brochure

DAYTONA SPORTS CO.

7030 Darby Ave., P.O. Box 668,
Reseda, Calif. 91335



INGLEWOOD KART SHOP

*the home
of the champions...*

YOUR ONE  KARTING SUPPLY

DISTRIBUTOR FOR ALL MAJOR BRANDS OF KARTING EQUIPMENT.

NOW - BURCO 9 & 10 TOOTH OILER ADAPTERS IN STOCK.

NEW BC 206 BURCO - FOR KOMET, PARILLA AND SAETTA -
RUN A COMPLETELY SEALED CLUTCH - START ENGINE OFF
OF THE NUT UNDER THE CARB. FASTER, EASIER AND ELIMINATES
TROUBLESOME STARTER BELT. COMPLETE WITH INSTRUCTIONS.
FOR CONVERTING YOUR STARTER.

INGLEWOOD KART SHOP



1307 N. LA BREA AVE. INGLEWOOD, CALIFORNIA 90302

Phone 213 678-6811 213 678-5079

ASK FOR: WALLY BAYNES OR JOHN JULIS

CONNECTICUT KART CLUB

By CHRIS BROWN

With the East Coast racing scene constantly growing, efficient organization on the club level is becoming more important. One of the most influential and active clubs on the East coast is the Connecticut Kart Club. In its relatively short life this body has accomplished some surprising feats.

The club was formed under the guidance of ex-Homelite engineer, Mr. Harold Moore, back in 1966. The first year was a rough one and many organi-

zational hurdles had to be overcome. After a suitable constitution was formulated the club sought incorporation. Finally, in the spring of 1967 this was accomplished and the club really started to function. Today the club has approximately 40 members and covers a four state area comprised of New York, New Jersey, Rhode Island and, of course, Connecticut. The membership participates in virtually every IKF class, including FKE I, II and III, where Hodaka and Suzuki machines are run. Among its 1968 membership the club is fortunate in having four IKF governors: Angelo Dimonte, Connecticut; Lou Smiley, New York; Lyle Ferguson, greater New England; and Jack Faber, Maryland.

Recognizing the need for newcomers to our sport and public education about karting, the club has launched an extensive public relations program. Several members write articles on karting for newspapers in their areas and local radio stations announce each monthly meeting to over three million people in the four state area. The club is also planning to stage a mock race/demonstration at the Barnum Festival in Bridgeport, Connecticut. This festival is a week long celebration which commemorates the residence of "the great showman" P. T. Barnum in the city of Bridgeport. At last year's festival an Air Show, Antique Auto Show and Theatre-in-the-Round which featured Johnny Carson was staged. This year the CKC intends to add karting to the agenda and thereby render a great service to the sport. Each of the above events had over 100,000 spectators last year.

Public relations is not the only place where the CKC is active. Since the whole idea of the sport is racing, the CKC with Alex Lansberg as race director decided last year to "sponsor a few." When the choice of a track was pondered, it was decided to use what is probably the most famous sports car track in the U.S., the Bridgehampton Circuit. No karts had ever run here before and the club had a real challenge on its hands. After the track was secured for two dates, one in May and one in September, and the IKF sanctions received, the process of recruiting help for the 14 flag stations along the 2.85 mile course was undertaken. A CKC representative attended a local sports car club meeting where he asked for and found enthusiastic volunteers. The volunteers had their admission to the race paid by the club and both groups camped out together at the track overnight in a gay party atmosphere. Many new friends were made and even a few karting recruits too. Viewing its success with its past two Bridgehampton events, the CKC decided to hold three events this year. Again the two Bridgehampton events will be run and now a third at Bryar Motor Sport Park in New Hampshire is planned. The New Hampshire event is the Divisional I Championship and promises to be very exciting. A Canadian-American Challenge Cup series is still in the planning stage for the '69 season. Here, two of the CKC's races would count towards overall points of a four race series. The other two races would be staged in Canada by Canadians, probably at Mosport and St. Jovite. These would complete the four race series. Overall point winners in each IKF class would receive trophies for the series, as well as each individual race.

In order to keep interest and enthusiasm high the club tries to make each meeting offer something for everyone. Usually after the business portion is over, a technical seminar on some phase



MAX-TORQUE CLUTCHES are engineered to help you get around the track faster. Forget about oiling clutches or making them rev higher—Max-Torque engages your engine to the drive train at the one rpm range where your engine is putting out its maximum torque, not just out of the hole, but every time you get back on the loud pedal. If you want to win races—run a Max-Torque clutch.

MAX-TORQUE, INC., 7300 Monticello Ave., Skokie, Illinois 60076

of karting is held; after the seminar one or two movies are offered. Work periods on the club project are also scheduled during the meeting. (The project is an enduro kart to be used by new members or possible members who have not yet acquired their own machinery.) With all of this activity there's hardly enough time to stop for the coffee and doughnuts which are always on hand.

In the weeks between meetings the members are kept informed by the monthly newsletter. This tabloid features race schedules, race reports, for sales, and a bit of gossip, and is published once each month and sent to all club members and interested parties.

This, then, is a look at a young, healthy, active Kart Club, a club which feels public relations is as important as racing on the karting scene today. Under wise leadership like that of Mr. Marty Cairo, President '68 and Mr. Derek Corbett, President '69, the club hopes to achieve for karting a respectable place in the motor sports scene on the East Coast, a place which it so rightly deserves.

CULVER CITY GRAND PRIX
October 26, 1969

One of the fastest growing segments of karting seems to be the street race. A few years back, street races were the big thing, but this form of competition hasn't been too popular for a number of years. However, the new life that seems evident in karting has also been felt by various civic clubs, and there is rarely a better show that can be found for their effort.

The street race has several things going for it in that it can be expected to draw a sizeable crowd if publicity is sufficient, and there are always a ready group of competitors to enter and provide racing action. The spectator can come out to the race area and bring along a picnic lunch for the kids. The competitor gains a new place to test his skill, and at this stage, there are generally too few tracks still running regular race programs, so the competitors welcome a change of pace in new surroundings.

The Culver City Grand Prix, slated for October 26th, is a prime example of the beginning of an annual affair that provides all of the necessary ingredients for a great day of racing. The Culver City Lions Club is presenting this event and will be run over little used streets in a beautiful industrial park.

The course is a seven-turn, one mile long layout with one straight of 1240 feet and one other of 1320 feet. The organizers of the event want to empha-

Continued on next page

MINI-BIKES

Taco-Chris
(Willier)

Rupp-Roma

WE CARRY ALL

STEEN'S

KART & MINI-BIKE
CATALOG PARTS
BRIDGESTONE SALES

PIT BIKES

CUSTOM
BIKES
MADE TO ORDER

FINANCING
AVAILABLE



DELTA PIT STOP
7141 WOODLEY AVE
at SHERMAN WAY
VAN NUYS, CALIF. 213/989-1480
Call or come in today!

IN THE CLUTCH

**THERE IS ONLY ONE
WAY TO GO!**

THE HORSTMAN TORK-MATIC

We're not blowing soap bubbles...13 out of 14 Class Winners at the Nationals used Horstman clutches!

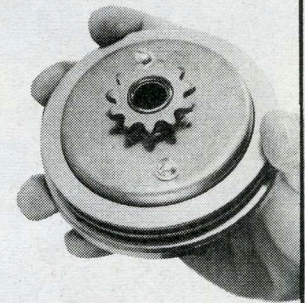
If you are going to slip ahead of the pack, get with the Horstman TORK-MATIC Oil Bath Clutch. It's the answer to the "no low range" problem in 2-cycle engines...keeps the engine "on the pipe" at all times - at the start, in the tight corners! Designed to meet I.K.F. specs - Sprint or Enduro. Oil bath not only provides slippage - it aids cooling, insures long clutch life. Special Hi-Temp oil is supplied with each clutch.

In August we introduced the new Horstman Reinforcement Ring for the TORK-MATIC Clutch. We repeat our original opinion: this is a "must" for the serious karter! The machined steel ring fits snugly over drum to prevent expansion from excessive heat caused by slippage. Simple bolt-on installation to replace existing ring on any TORK-MATIC Clutch. Models TMF-24 & TMA-22.

We also showed you the new Heavy Duty Spring for REV-GRIP and TORK-MATIC Clutches. Special temper .063 stainless steel wire (.007 heavier than standard)...designed for higher RPM engagement...same O. D. as standard spring so fits easily on clutch. For goers, this is worth a second look!

Ask for the "silver spring"... \$2.50

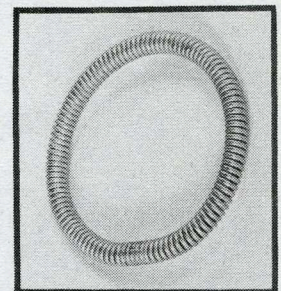
And ask about our other great karting specialties: Mufflers, Throttle Linkage Kits, Motor Mounts, Crankshafts. Join the Winners - use Horstman products!



Model (shown) for
Foreign engines \$54.95

McCulloch engines
model (9-18 teeth) . . . 42.95

Foreign Model (shown)
Part Number TMF-24 \$ 8.95
McCulloch Model
Part Number TMA-22 10.95



HORSTMAN

730 E. Huntington Dr.



MFG. CO., Inc.

Monrovia, California 91016

Ph. (213) 359-2578

PETITE-Carts

OREGON AND WASHINGTON DISTRIBUTORS

DART KARTS by RUPP □ MARGAY GEARBOXES

KARTING SUPPLIES, PARTS, ACCESSORIES.

SERVICE: ENGINE BORING, MODIFICATIONS



RETAIL SALES, SERVICE, ENGINE HONING, MODIFICATIONS on HODAKA and BRIDGESTONE motorcycles, RUPP and ROMA minicycles and RUPP SNOSPORTS and accessories for all the above.

Retail and Wholesale Mail Orders Filled Promptly!

5228 S.E. FOSTER ROAD, PORTLAND, OREGON

PHONE 503/777-2294

ZIP CODE 97206

SUBSCRIBE TO MODERN KARTING

EMMICK ENTERPRISES

GRAND NATIONAL CHAMPION

4 Fast Times

AT SPRINT NATIONALS

ALL FOREIGN ENGINE MODIFICATIONS

INQUIRIES INVITED — Call GARY

CALIFORNIA DISTRIBUTOR OF



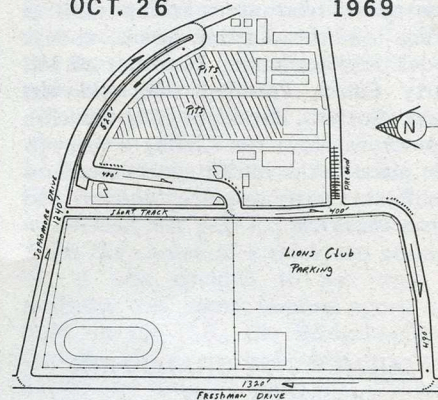
2550 MARDELL WAY,
MOUNTAIN VIEW, CALIF.
415/968-3340

PRODUCTS

Racing Roundup

Continued from Page 13

CULVER CITY LIONS
PRESENTS
CULVER CITY
GRAND PRIX
OCT. 26 1969



size that although this will be run as a sprint event, enduro machines are welcome and will be competitive on the course. The Culver City Kart Club is working with the Lions to make this one of the best and biggest events of the year.

Trophies will be awarded to the top five in each class, and the trophies will be "large extravagant size". IKF rules will prevail, and two tech inspectors plus two scales will be provided to help the "standing in line" problems. All turns will be manned by turn marshals with walkie-talkie communications.

Sign-in will begin with six registrars at 6:30 am, practice begins at 8:30 and the racing action at 11:00. The drivers will be getting a welcome "extra" with a free pancake breakfast. That's what you call a nice touch, eh?

The spectators will enjoy the various static displays and refreshments available for their pleasure.

How do you get there? Take the San Diego Freeway (Interstate 405) to the Jefferson Blvd. east exit. Go east on Jefferson Blvd. to Overland, south on Overland and turn left on Freshman Drive. Go straight ahead to the course, which is behind Metro-Goldwyn-Mayer's lot three.

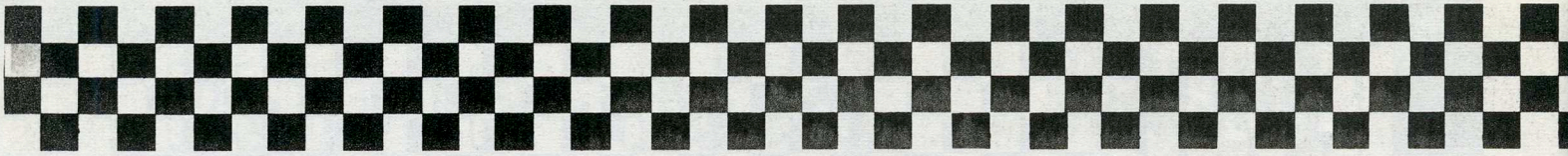
The Lions and the Culver City Kart Club are working hard to put on a great show for both the karters and the spectators.

1969

SPRINT

NATIONALS





Camden, Ohio never saw anything quite like it. The whole town was running rife with "foreign" license plates, and strange faces were at every turn. In a rural town such as Camden, things like this are a bit more than unusual, they are quite an event. Thus, the whole town became caught up in the IKF 1969 Sprint Nationals, held at G & J Kartways. The track is located northeast of Camden, on Barnets Mill Road. This is really picturesque country. For instance, Barnets Mill Road is a narrow strip of blacktop that seems to meander off across the hills in an uncertain manner. It's not really uncertain, you see, because it simply follows the route of a footpath that was worn in pre-automobile days, and just goes from farm to farm. The traffic situation on Barnets Mill Road is usually hardly worth considering, but this serenity was invaded on a grand scale when the karters came to race.

Five-hundred-sixty-four entries were recorded. This was the largest Sprint Nationals ever held, and when we say "came to race" do not mistake the statement for exaggeration.

The action started early in the year, when Bill Gregg began to get ready for the Nationals. The first thing was to lengthen the existing track and incorporate the now-famous Monza turn. The Monza is a 180 degree left hander that is banked at 35 degrees. Suffice it to say that it is a bank that starts nearly flat at the inside edge, and steepens at an increasing rate until it is so steep that it is impossible to stand on the track surface. The uninitiated stared in horror when they first saw the steepness, but after some practice and studying the styles of the locals who were used to it, everybody seemed to rather like it.

After the lengthening of the track was completed, additional grandstands were erected, a second snack bar was built, more toilets added, lights went up just in case things ran a bit overtime, and finally, the pits were enlarged.

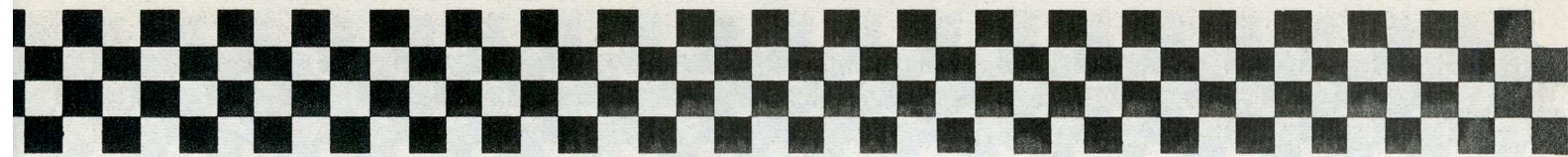
A pre-nationals race was held one week before these Nationals, just to see if "all systems were 'Go'." As luck would have it, the track surface began breaking up on several of the turns, and the repair of the surface had the host clubs repaving for several nights until 3 a.m. Needless to say, everybody in the sport should appreciate the extreme efforts put forth by the Greggs and the Ohio Valley/Dart Kart clubs to make the event enjoyable for everyone in attendance.



This was the scene of action when viewed from the top of the "Monza" curve.



The now famous "Monza" curve.



The IKF Nationals program this year must go down in history as real evidence of the "resurgence" taking place in the sport of karting. The total number of entries in the Nationals Program for 1969 was 1339. We're touching a lot of people!

Qualifications started Thursday and continued over into Friday afternoon. The threatening weather forecasts for the weekend due to the effects of hurricane Camille had prompted the running of the Semi-Mains for Rookie Jr, Am Reed Jr, Stk. Heavy, Open Lite, and B-Limited on Thursday. Since this was not the original schedule and MODERN KARTING had no way of knowing about the change, we're sorry to say we missed the Semi's for these classes. However, see the results for the top ten places elsewhere in this issue.

American Reed Sr. again proved its popularity by being the class that had the largest number of entries with 77. The number of entries made a consolation race necessary before the semi-main could be run. Since the consy was sort of a "do-or-die affair", it was a rough and tumble start. Nobody was afraid to bend the rules a bit and after several abortive attempts at a start, the whole pack was black flagged. After being roundly chewed out by the officials, the Reed Seniors were relegated to running their consy after the Stock Jr. Semi-Main.

The flag dropped on the Stock Juniors, and Bill Elkins jumped out to a big lead, but unfortunately, he encountered difficulties and had to park it. William Truckey and Rod Whorton were then left to fight over first place. Whorton got past Truckey on the sixth lap, and really put his "foot to the wood" to stretch out a long lead and hold on till the flag dropped. Tim Moore clawed his way up to third, but his machinery quit after a great effort. The final showed Whorton 1st, Truckey 2nd, John Montgomery a very distant 3rd, P. Gunnar Brolinson 4th, and Steve Rockcastle 5th. The first ten finishers of the semi-mains were awarded grid positions at the back of the pack in the main event.

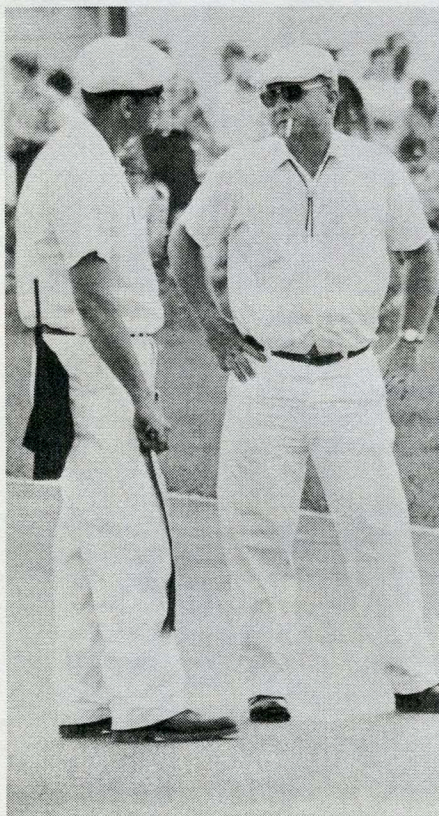
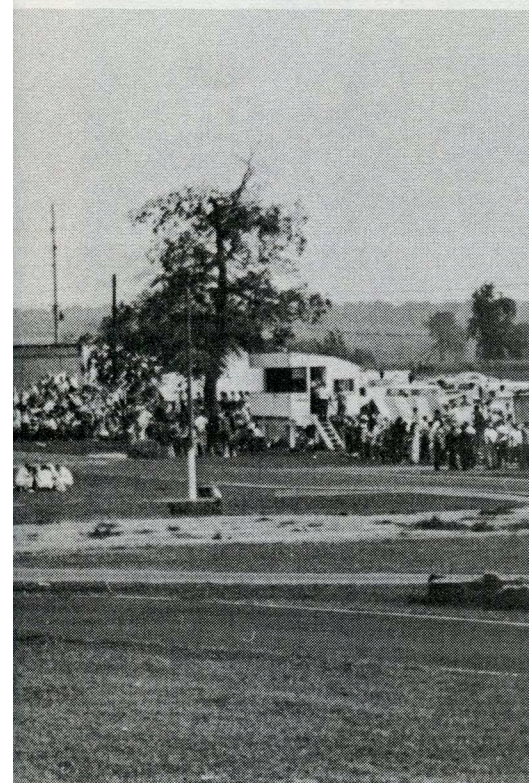
The Reed Seniors went out to try once more to get started in their Consolation race. This time they were successful in getting started, and Thomas Poore headed out for open track space in the lead spot. Poore pulled out quite a lead over Tim Myers and Myers, in turn, had quite a good lead over 3rd. Third place was quite another matter with Sandy

Emrick, Richard Hussong, Wayne Hubbert and Melford Fitzgerald trying to occupy third place all at once. Emrick was able to hold on in third spot by just a hair, but Hussong was right on top of him all the way. Hubbert and Fitzgerald fell back just a bit, but they were holding a war of their own over fifth. Hubbert had barely held off Fitzgerald when his machine went afoul and his ride ended in misery. Everybody pretty much stayed in place for the remaining two laps, and it ended Poore, Myers, Emrick, Hussong, and Fitzgerald. There was a batch of real racing going on with 35 karts on the half-mile all at once!

Stock Lite went out to perform their Semi-Main mayhem, and again it turned into a big mess when all 34 of them tried to get through the first corner at the same time. The result was a chain reaction that cleaned out the whole rear half of the pack and left a tremendous pile of humanity, helmets, karts, and thoroughly disgusted officials in the middle of the track. Nobody was hurt, but it was a mighty mess. A few thousand burning words were delivered to the errant Stock Lite pilots, and the racing was brought to a halt for Friday.

Saturday's racing opened with the Am. Reed Sr. Semi-Main affair. Leslie Tudor stormed into the lead from the pole position and second was haggled over by Skip Shaw and Steve Gronbach. Gronbach finally got loose from Shaw and turned on the heat for the lead. Tudor had all he could handle holding Gronbach off, and another battle was in progress between Shaw and Runt Denson, Jr. Gronbach finally got past Tudor on the sixth lap, and began to stretch out his lead. Tudor's spot was then swiped by Shaw, and then Denson, to leave him in fourth place. The finish was Gronbach, Shaw, Denson, Tudor, and fifth went to William Johnson.

Next out was the Stock Light Semi-Main. Charles Acton took a commanding lead, but it wasn't enough to stave off the charge that Jeff Miner was about to put on. Miner screamed through from the eighth spot and took second on the third lap. The space began to shrink between first and second, and Miner walked by Acton two laps later for the lead. Nobody could come close to matching the pace that Miner was setting, and the first five places were pretty well spread out. Canadian Colm O'Higgins was putting on quite a show of "quickness". He didn't seem to be at all impressed by the sixteenth starting position at the beginning of the race,



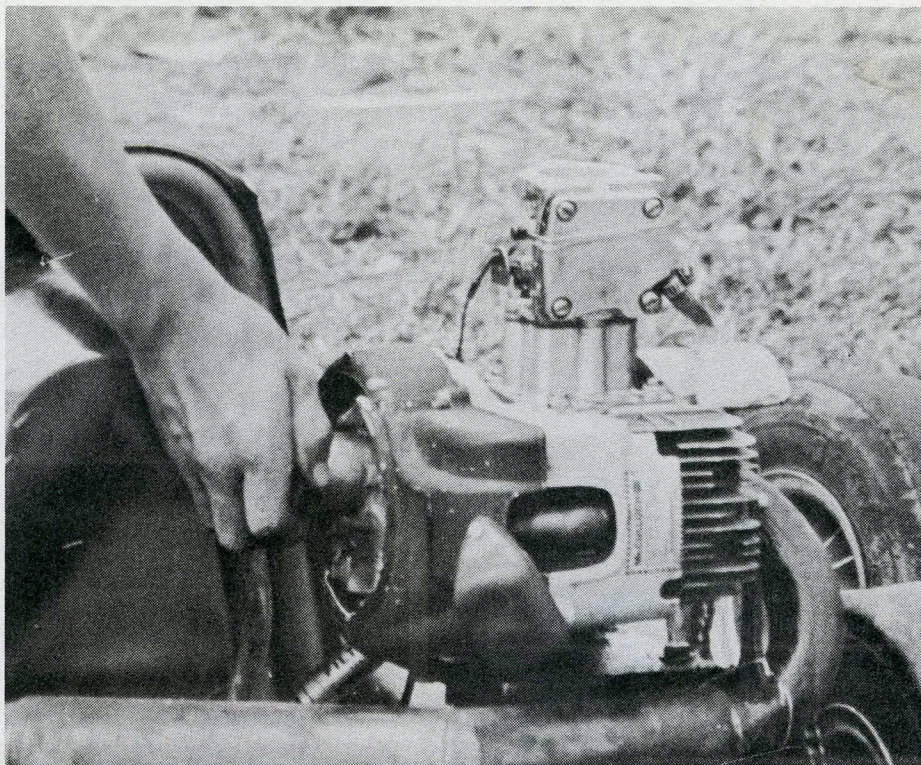
Flagmen Bob Feitshans and Jim Warner

and had scrambled up through the pack to take fourth away from Jeff Graves on the Monza curve. The last lap had Miner 1st, Acton 2nd, Mike Schernow 3rd, O'Higgins 4th, and Graves 5th.

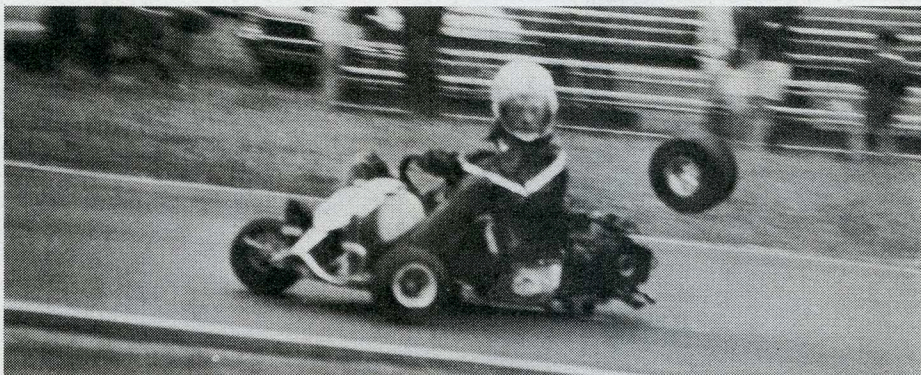
Open Heavy went out and became the attrition champ for the Nationals. Only 20 karts led off and Ronnie Heath pulled off an immediate lead, with Rowland Buzza charging hard in second. Lynn Haddock was doing a tremendous job, coming from 16th on the grid into third on the fourth lap. However, his effort went "down the tube" when things came apart on the fifth lap. Greg Trimmer also had some good things going and had come from nineteenth to fifth. Buzza decided to make his big move and began to eat up on Heath. Heath might have been experiencing some problems because Buzza zapped him for the lead next time around. Trimmer moved up into fourth and Eugene Rice took a good hold on fifth. Everything went to the devil on lap eight. Leader Buzza disappeared into the boondocks, 3rd spot was vacated when Lee Buckman went out, and only five machines were circulating the track. Final standings were: Heath 1st, Trimmer 2nd, Rice 3rd, Jeffrey Schmidt 4th, Dennis Vogeler 5th, and Buzza got 6th by default.

B Stocks had some exciting action next. Gary Rockcastle took a short lead, but Reuben Serrano was right on top of him, and finally took the lead just off the Monza banking. Rockcastle overcooked it a bit by trying to hold Serrano and spun. He rejoined the race out of contention, but his hard luck continued when one of his chains went into orbit. Gary Smith had been holding down second with Patrick Willey right behind, but Willey nipped under Smith on the last lap to cop second. Jim Grindell and Jack McNeese were 4th and 5th respectively.

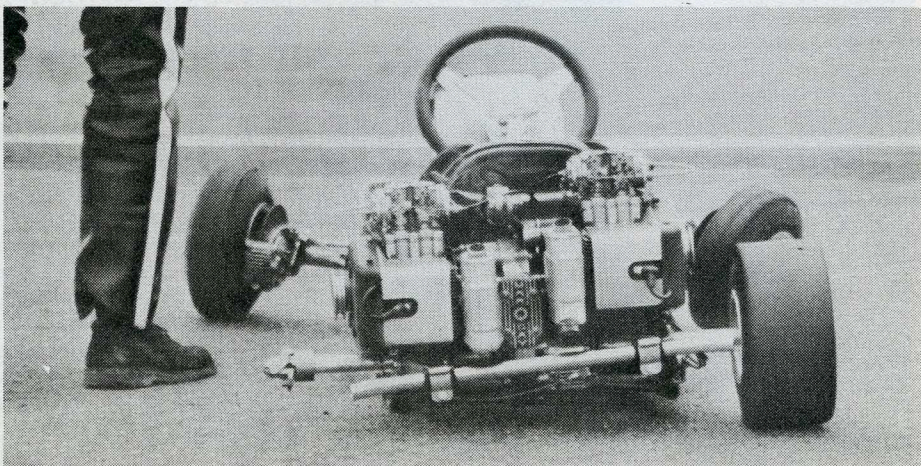
Sixteen C-Open hotshoes went out for their Semi-Main—the last of the day. Otto Pruitt, George Kugler, and Richard Mullin disputed over the lead. Kugler and Pruitt both spun in the south turn, Pruitt's potent machine powering straight into the bales at quite a considerable speed. Kugler rejoined the race, and rescuers tried to pry Pruitt out of the middle of a bale of hay. Luckily, he wasn't hurt, but the kart wasn't feeling too healthy. Mullin was ill fated also, and wound up staring his left rear tire in the eye when it decided to detach itself from his race and find a path of its own. Butch Stewart ran off with the lead after Mullin's misfortunes, and the finish was Stewart, Greg Curzon, Larry



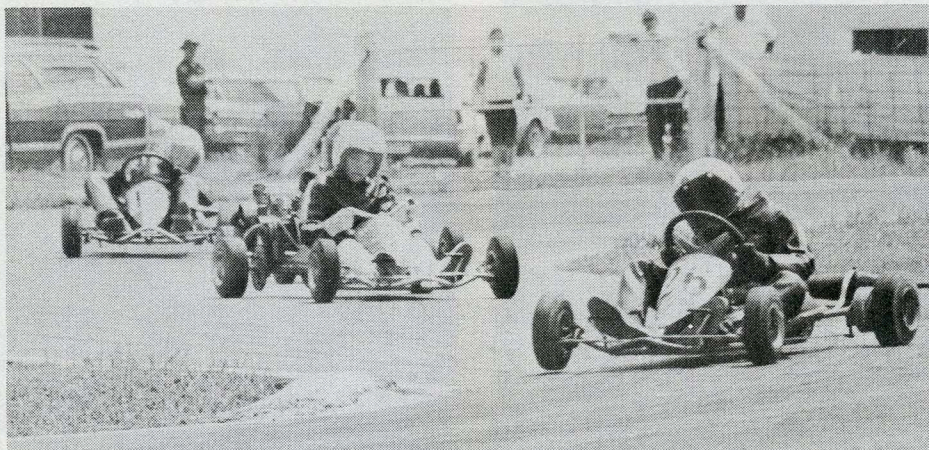
LeRoy Stanton's Mac didn't appreciate all those high RPM's.



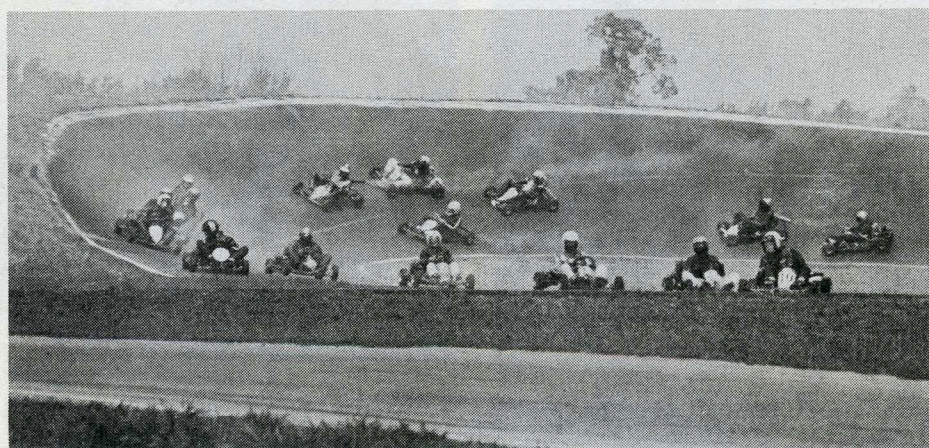
Richard Mullin eyeballs his own rear tire at unexpected close range.



Mullin's C Open Machine "after the fact".



Rookie Junior Class winner Donny Pomeroy leads Rick Pollock and R.C. Wilson.



B Limited steams around the Monza with Linda Emmick in the lead spot (of course!)

Piper, Kugler and Jerry Medley.

The leadoff of the Main events was the Rookie Jr. first heat. Bill Norris led the first lap and be it here known that this was the only lap that was denied to the eventual Grand National Champ Donny Pomeroy's campaign. Starting from the second lap on, through this heat, start-to-finish in the second heat and start-to-finish in the third heat, the lead was held by Donny. There was never a serious challenge to him. Quite a tribute to his skill at the wheel and his mechanic wouldn't you say?

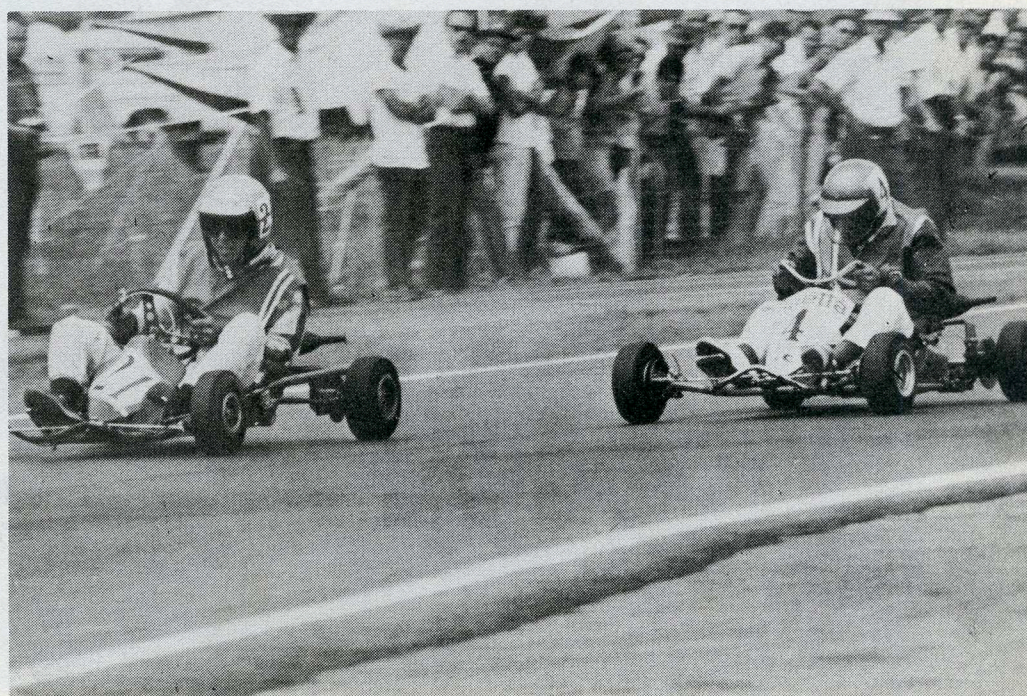
The race settled down into a pretty straightforward affair with Rick Pollock in second, Teresa Gammons in third, Charles Young in fourth and polesitter Bill Norris in fifth.

American Reed Jr. went out for their first heat under slightly threatening skies. LeRoy Stanton put some light between himself and second place at the outset. His Mac seemed to be geared lower than some of the others and the engine fairly screamed down the straight. Rod Whorton and Tony Adkins followed a ways

back. Stanton's Mac didn't seem to like being wound so tight, and the crank let go—on the flywheel side, ending a really fine drive. Whorton had a pretty fair lead over Adkins, and Adkins was keeping as much space as possible between himself and Jim Stevenson, in third place. Everybody held on where they were to the flag, with fourth going to Louis Muskopf just ahead of Randy Kugler in fifth.

Jeff Brown dominated the first heat in Stk. Heavy with Don Turpenen chasing him all the way. Steve Johnson was pushing for Mark Shepard in third when his steed gave up the chase and put Rick Niehous into fourth. Roger Winterbotham settled into fifth, and the order didn't change during the last six laps.

Open Lite was out next, and Jody Smith took the lead, but Pete Michel and Joe Vera pressed her mightily. Jody held them until she got bounced in the heat of the fray. Michel and Vera steamed on, locked in a bitter debate over the ownership of first place. Jody lost a few places in her re-entry and kept at the pace. Her haste was again impeded when she slipped off the edge of the track, hitting a large lump of blacktop. Her machine spun in the air and she almost was thrown out of the kart. It landed with a resounding bash—on its wheels, though, and so Jody just stuck her foot in the carburetor and went back into the race! By all rights it should've broken her kart, various and sundry bones and her spirit, but she's a



Pete Michel and Joe Vera rubbed wheels mightily over the lead in Stock Lite.

plucky gal.

John Stebbens was holding down third nicely when somebody turned Frank Harbin loose. Harbin sliced up behind Stebbens and took away third shortly thereafter. Meantime, Michel and Vera were still rubbing slicks over the lead. This, friends, was a battle royal, and Michel had to use everything he had to stave Vera off. When the checker fell, less than half a kart-length was the winning margin! Harbin was third some distance back from Vera, Stebbens was fourth, and Rick Tate cornered fifth. Jody Smith had fought her way back up to a very respectable sixth!

B Limited followed quickly, and Ken Burden sprinted out for a very narrow lead over pole sitter Linda Emmick, whereupon his ignition decided to go on strike. You don't have to offer twice to Linda, and she immediately grabbed off the lead and headed for home. In fact, nobody ever saw first place again in any of the three B-Limited heats. She and her B Bomb put the Grand National Championship in her pocket from that point on! Butch Stewart ran a very fine second to Linda until his machinery went on the fritz, to hand Bill Miller the second spot. Pete Berlt made some headway into fifth before he had to park it. Pat Blackley, Utah's only banner-bearer at the Nationals, ran like

a freight train to the third spot. Fourth was Ernie Buchacher Jr. and fifth went to Ed Hardgrove.

The last of Saturday's first heats was the B-Open thing. B-Open was the smallest class at the Nationals with only twenty entries, but Jack Nelson made up for the lack of quantity with a rather huge dose of quality. Jack had come all the way from California to do just one thing—win. Let's just say he succeeded. There is just very little you can say more than he led all ten laps of each of the three heats, and that is a considerable feat. He missed being named Grand National Champ because he was unable to break the existing track record for his class. Since first place was nonexistent to Nelson's competitors, they did a very creditable job of mixing it up behind him. Second place changed hands three times in the ten laps. First by Bob Meli, who lost it when he suspected a problem in his mechanics, next by Manuel Lopez, who had to give it up to Pete Berlt when Berlt became so insistent that Lopez couldn't hold him off. The final was Nelson (of course), Berlt, Lopez, Lake Speed, and John Wardell.

The second round of heats began with another straightforward Rookie Jr. race. Donny Pomeroy led every lap, Teresa Gammons ran second on every lap, Charles Young ran third on every lap



Jack Nelson "doing his thing".



Linda Emmick- Grand National Champion, Winner of all three heats in B Limited, and a great young lady.

and Russ Thompson snatched fourth on the third lap and kept it thereafter. Dean Turner broke into the top five on the seventh lap and garnered fifth for his effort.

Am. Reed Jr. continued where it left off in the first heat, with Rod Whorton in the lead and Tony Adkins right behind him. Adkins overhauled Whorton on the third lap, and found Whorton unwilling to leave it at that. Whorton finally unhinged Adkins to regain the lead, but all came to naught when Whorton's throttle return spring left its appointed place. With his roughest competitor out, Adkins cruised on to win, with Jim Stevenson second, Randy Kugler third after a hard run, and Dave Knapp nosed out Dean Quarterly in the last corner to take fourth.

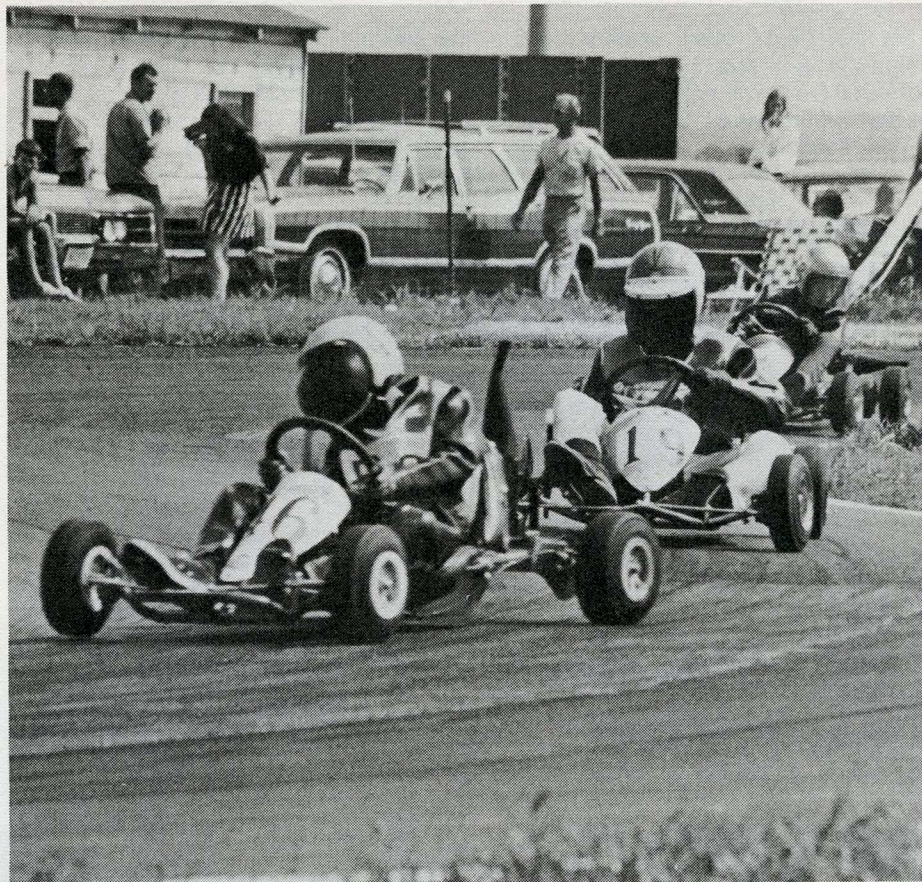
Stock Heavy went out and got a start, but not everybody got through the first turn, so a restart was attempted. Only attempted, because they couldn't seem to get realigned, and the whole bunch was black flagged.

Open Lite was sent out and Pete Michel returned himself to the lead, but Frank Harbin was on the loose again, and Michel couldn't get away from him. John Stebbens was right amongst 'em and the fray got so wild between the three that they all tried to occupy identical track space at once and it was "spinsville central". Harbin and Michel got going once again, but Stebbens was thrown completely out of his kart. John was ok, but couldn't rejoin the race. Rick Tate came through the mess and took over second, but Michel wasn't about to let that situation continue, and took it back. Jody Smith and Joe Vera were at it once again. Joe finally took fourth and left Jody in fifth.

B Limited went out and the officials were getting a bit gun shy on the lineups. Anyway, the pack was black flagged for not lining up properly. As it turned out, the racers knew where they were supposed to be, and the officialdom was at fault. Everybody stood still for their apology.

B Open did theirs once more, with Jack Nelson doing his winning "thing". Manuel Lopez kept in sight of Nelson just to keep him honest for a steady second, and Pete Berlt kept Lopez honest for third. John Wardell beat out Andrew Childers for fourth after quite a dice.

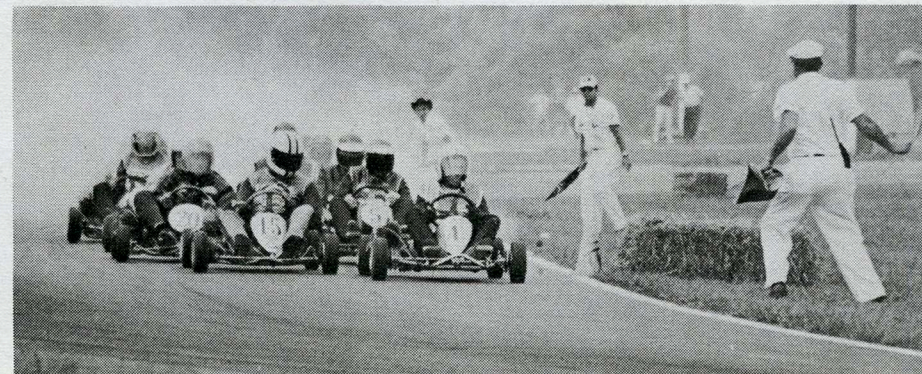
The second heat for Stock Heavy was tried once again and Jeff Brown cruised to a win just ahead of Rick Niehaus who put the word on Mark Sheperd for second. Fourth spot seemed to have been tied down by Terry Traeder, but his kart contracted something detri-



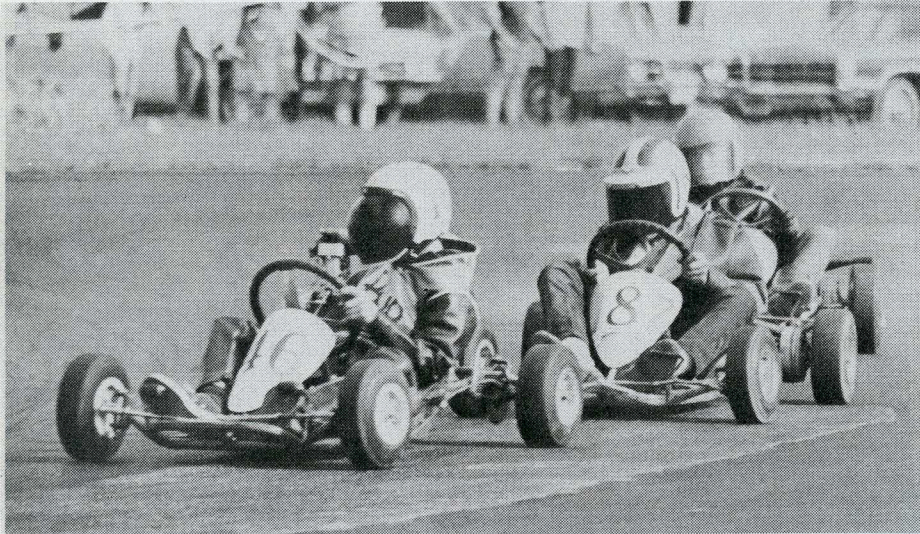
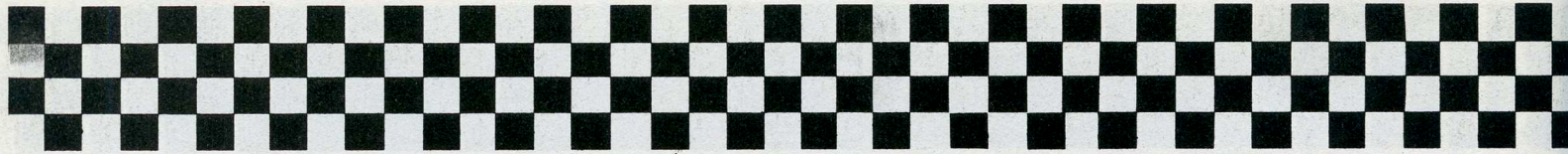
Tony Adkins leads Rod Whorton in quest of the Am. Reed Jr. championship.



American Reed Jr. action was thick and heavy...



The Stock Heavy pack takes the green.



Tony Adkins uses the manual "choke" to stay ahead of LeRoy Stanton in Am. Reed Jr.



A very effective advertisement, eh?



Jack Nelson leads Manuel Lopez on his way to the B Open National Championship.

mental and gave Don Turpenen fourth ahead of Walt Myers.

B Limited set off for the finale to the second round of heats. Again, Linda Emmick played "finders keepers" on the lead, while Bill Miller followed suit for second. So as not to be too different, Pat Blackley hung onto third for the duration ahead of a scrap over fourth between Jimmy Mann and Carl Codello. Mann finally decided fourth was his and left Codello in 5th.

The 3rd and final round of heats for Saturday started abortively when the Rookie Jr. pack couldn't get lined up to start, but the Am. Reed Jr. class set off in their absence and got right with the program. Tony Adkins reassumed the lead with Jim Stevenson in second. It looked like Rusty White that went into orbit over the top of the Monza, but we couldn't seem to confirm it, anyway, he wasn't hurt. A new competitor began to show up in third about this time. His name had a familiar ring to it, as a matter of fact! Kyle Adkins was really screaming up through the pack so that he could get a crack at the leader—who just happened to be his brother! Pure determination put Kyle past Stevenson into second, and Tony got set for a real tussle for his lead. Kyle put the heat on right away, and on the last lap of the race won the drag to the checker to win! Hell hath no fury like the determination of two brothers on the same racetrack. Tony took second and LeRoy Stanton, who did a great job since breaking his engine while leading the first heat, stormed into third just ahead of a faltering Jim Stevenson. Randy Kugler sacked away fifth.

Jeff Brown resumed his lead in the third Stock Heavy heat, and Walt Myers gained the crown of "wheelstander par excellence" when he pulled a wheelie for about 150 feet down the back straightaway! Mark Shepard couldn't seem to catch Brown, and played 2nd "fiddle" until the next to last lap when Jeff's ride ended quite abruptly. Shepard inherited the win with Don Turpenen 2nd, Roger Winterbotham 3rd, Walt Myers fourth and Bob Stevenson fifth.

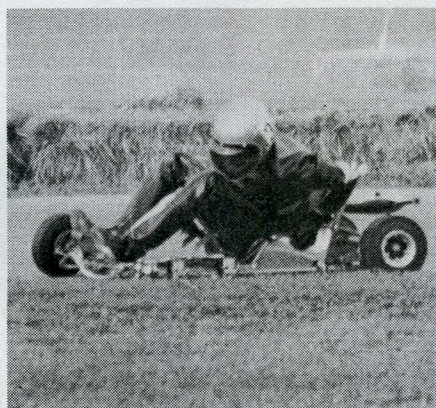
Open Lite did their final next and Frank Harbin found Pete Michel harder to deal with. Pete took the lead beifly, but Joe Vera decided that he had had a bellyful of exhaust smoke for one day and proceeded to hand Michel second, Harbin third, and take first for himself. Rick Tate and Jody Smith were playing tag once again, and Jody nipped under Rick to take fourth on the last lap.

The third heat in B Limited found

(guess who) Linda Emmick blowing off all challengers. Bill Miller's engine went sour so that Jimmy Mann carried in on Miller's usual second place with Pat Blackley on Mann's heels. Jim Wical hung onto fourth and Carl Codello fifth at the checker.

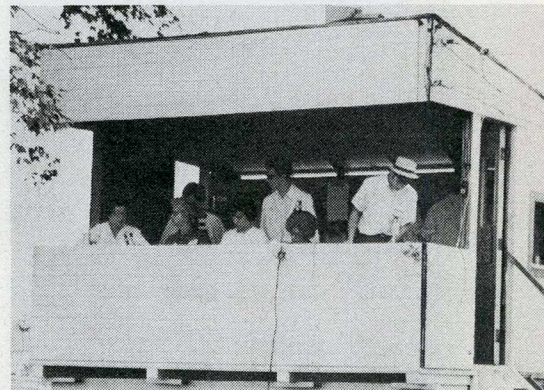
B Open was up next and there was the usual fella out front with a big lead (...think his name was Nelson or something like that...) but Manuel Lopez and Pete Bertl started to chew up on him just a bit. Jack wasn't about to have anything happen to his lead at this point and put his foot more firmly on the loud pedal and stretched out a more comfortable lead. The final ended with a well qualified Jack Nelson taking the National Championship, Lopez 2nd, Bertl 3rd, Dwain Lieber 4th, and Bob Meli 5th.

The Rookies went out to try once more to start their third and final heat. However, though they got started, everybody overcooked it going into the Monza, and two went over the top, two smacked on another and slid down the incline, and the race was stopped to allow the ambulances to get down there. After some time, it was determined that nobody was hurt, and everybody walked back to their pits. After a drivers' meeting with all the youngsters present, the the Rookies restarted. Donny Pomeroy, Teresa Gammons and Charles Young kept 1st, 2nd and 3rd all to themselves respectively, and Dean Turner took 4th after an early tussle with Russ Thompson. Gunnar Brolinson broke into the top five to wind things up.



Well, hurricane Camille did her stuff Saturday night, causing rain in Ohio, and everybody was greeted with mud, water, and a wet track for the scheduled morning practice sessions. It was slicker than a greased pig's toenails while the track surface was wet, and practice was impossible. Nobody dared hardly to

move quickly, being afraid it might be construed as a rain dance! Just to entertain, the p.a. system blared forth with "The bluest skies you've ever seen are in Seattle...", "Sunshine Wine", and "Sunshine Came Softly". Meantime everybody "cooled their heels" and got better acquainted.



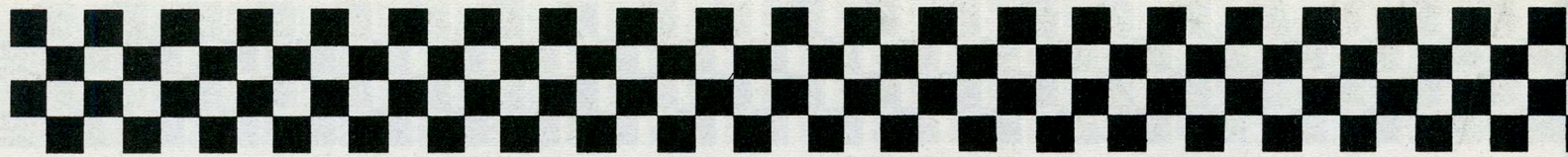
The P.A./Scoring stand at G&J Kartways.

Finally, about 3:00, the first heat races got started with the Am. Reed Sr. affair, and Jerry Vaughn led the whole shebang from flag to flag. Dennis Gerber ran a parallel race to Vaughn with a flag to flag second spot. Walt Myers had to find a fairly dry spot to park while running third, and Peter Preschern found third a suitable place to finish. Ronald Skien took fourth ahead of Dave Fisher.

Stk. Jr. was up next and Kyle Adkins was in his element. To prove it he ran wire-to-wire in first place. John Stewart came on strong to take 2nd at the midpoint when he and LeRoy Stanton shook Dave Knapp loose..Dave was relegated to fourth while Stewart and Stanton were 2nd and 3rd respectively, with James Kasprzak 5th.

The very gray skies were threatening to open again at any time and the Stock Lite crew went out to do battle before it had a chance to rain. Linda Emmick continued the string of start-to-finish first place drives by first holding off Joe Vera and then Frank Harbin when Vera couldn't contain the hard charging Harbin. Pete Michel finally got past Vera as well. The final standings for this heat were Emmick 1st, Harbin 2nd, Michel 3rd, Vera 4th and Terry Traeder 5th.

Next heat was the Open Heavy thingamajig. By now, you should expect the eventual winner in each of the heats in this round to lead from the green flag to the checker, and that is exactly what happened. Whoever led the first lap seemed to automatically win his heat. When you consider all of the variables



Kyle Adkins leads the Stock Junior heat race.

involved, that is quite a coincidence!

The first-lap-leader-and-winner of the Open Heavy heat was Rich Burton. Stephen Clark ran a beautiful race in second while being harried by Jack Stickney. Jack wasn't to be denied, and won the argument over second by just letting it all hang out in the Monza, and Clark had to settle for third. Fourth spot was a real ding-dong battle among Robert Dempsey, Jim Fry and Terry Traeder. Dempsey seemed to have it all wrapped up, but unfortunately he had not consulted his mechanics on their state of health, and had to give up the chase just two laps from paydirt. Traeder volunteered to assume the fourth spot a bit quicker than did Fry and they finished in that order. There was some real racing in that one!

Rick Tate paraded the B Opens out and showed what National Champions were made of when he made a shamble of the competition and lead every lap. Not only just in this heat, but in the final two as well. Rick didn't let anybody else see the light of leading the pack, but John Stebbens didn't exactly loaf about either, and he motored quite briskly in second place for the duration of this heat. Bob Iba cruised along unperturbed in third until somebody

named Chuck Piornack came blasting through the pack like a wheeled missile. The gap between third and fourth was eaten up at a prodigious rate and Piornack pried Iba loose to take third in the last twenty feet. Art Lipp, Jr. found fifth to his liking a ways back from Iba. Again, we'll go out on a limb and guess at the identity of the driver that was initiated into the "Top of the Monza Skydiving Club" during this heat of B Stock. It looked like Pearl Gamble, but we couldn't be too sure since they always seemed to disappear rather quickly when things got out of hand on the Monza. Again, no one was hurt.

C-Open rounded out the first edition of Sunday's heats. Gary Emmick lead every lap, but by only the barest of leads as Gary contracted a bad case of Ken Burden on his tail. This was really a close one, and Gary earned the win with his considerable skill at the wheel. Pete Michel's 10-day-old C-Open machine was proving its worth in third when an engine lunched itself, ending his bid for glory. Dwain Lieber moved up into third when Michel gave out, passing Jimmy Mann in the process. Jack Nelson then got in on the action by passing Mann into fourth. Mann gave out just after that and Jim Whitehead received



Gary Emmick leads Ken Burden under Gary Curzon with the pack steaming through the Monza behind them.

fifth place. The finish was Emmick, Burden, Lieber, Nelson and Whitehead.

The second round of heats were very seriously threatened by the rain that was over our heads, but hadn't chosen to make the trip to the ground as yet. Am. Reed Sr. flagged off with some haste to beat the inevitable rain. Jerry Vaughn set off determinedly to repeat his win of the first race. However, his engine decided to play silly games and first Peter Preschorn, then Ronald Skien, Dave Fisher, Ron Coleman, Larry Gioe and Ken Caudron all got past Vaughn. Skien had his engine go all sour and Fisher took over in second behind Preshern for the remainder of the race. Third went to Coleman, fourth to Gioe and fifth to Vaughn.

Out next was the Stock Jr. race. Kyle Adkins resumed the lead, with John Stewart and Dave Knapp fighting over second. The battles were just beginning to shape up when the heavens opened and a light spray rain slickened the track. The Juniors began to slip and slide and the race was called when five karts in a row played follow-the-leader into the south turn boonies. The rain only stayed at it for about five minutes, but the track required almost an hour before it was dry enough to try again. The ruling on the partially completed Stock Junior heat was that it would be restarted on the fifth lap.

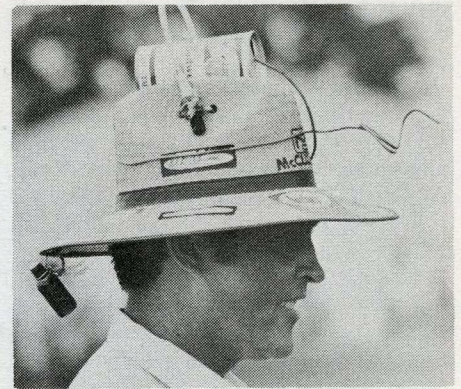
Since there was still some chance of slick spots on the course, the Stock Lite second heat went out next so the Juniors would not be playing the guinea pig. Linda Emmick took over the lead where she left off, but Frank Harbin was giving her all the competition she could handle. Pete Michel and Joe Vera were at it again, and Joe took third away from Pete on the third lap. Linda Emmick's luck gave out when her drive chain decided to misplace itself on the Monza. Harbin gladly took the lead, but Joe Vera had screwed down his carb a tad and began to push Harbin for all he was worth. These two fellows put on a really great show of sheer racing action. Vera was never able to get enough of the lead away from Harbin to take it and the checker saw the first photo-finish of the whole meet. Harbin was declared the winner by half a tie-rod. Michel was cruising in third place when some misfortune struck and Pete Michel parked it. Jeff Miner and Kurt Hoffman were tussling over third and finished in that order just ahead of Terry Traeder in fifth, who had to work extremely hard to beat out John Dies.

The Open Heavies departed next and put on a fairly straightforward race, with Rich Burton in first all the way

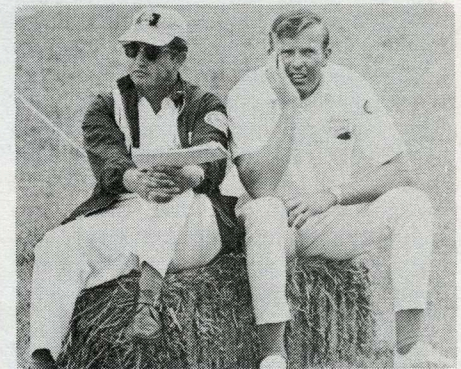
and Jack Stickney right behind from start to finish. Marty Fletcher made his presence known by swiping third place and not giving it up for anybody. Jim Fry and Terry Traeder disputed over fourth but Traeder had a tire go flat and dropped way back. George Dominic and Robert Dempsey fought back and forth racelong, and Dominic nosed out Dempsey for fifth.

The Rick Tate scene (otherwise known as B Stock) had Tate with the lead in his pocket while John Stebbens and Bob Iba both attempted to lay claim to second. Stebbens' machine got a serious case of the slows, and Iba, then John Bernardi got past him. Chuck Piornack had hard luck all the way around when he first went out with minor problems, reentered, and caught a really bad deal when a crankshaft let go. The checker got Tate 1st, Iba 2nd, Bernardi 3rd, Stebbens 4th, and Greg Johns 5th.

C-Open out next and Gary Emmick had a strong hold on first place with Ken Burden behind. On lap six, Emmick's ride ground to a halt with a blown clutch. Bill Pomeroy put on quite a show with his entry into the Monza Skydiving Club when his machine spun the center out of the right rear wheel



Fine racing millinery—Jerry Wogoman style!



Ken Eaton and Bob Allman await a dry track.



A very interesting track-drying ritual was performed. Then it rained again.



Rick Tate made a shambles of his competition by leading every lap.

just as he entered the Monza. They just don't seem to handle very predictably on three wheels!

Ken Burden went on to win unchallenged, with Michael Yarlett in second, after surviving a great mess of people spinning and going off course shortly after Pomeroy went for his flight. Carl Codello was third, Ralph Hines fourth and Jack Nelson fifth.

The final heat for American Reed Sr. followed next, and Pete Preschern found that leading this heat was going to be kinda tough because Jerry Vaughn came blasting up from fifth position to challenge him. There was no way Preschern could hold Vaughn, and Jerry snatched the lead and ran for home. Preschern settled for second and Larry Gioe carved himself out a place in third. H. E. Bowlen was sitting fourth when Walt Myers stormed in from the back "country" and overhauled him for fourth. Walt wasn't satisfied with that though, and lit out after Gioe. Gioe couldn't hold him off and Myers captured the third spot in the last ten feet before the flag. Gioe and Bowlen followed in 4th and 5th.

The Stock Jr. 2nd heat was restarted on the fifth lap and finished next. Kyle Adkins held on and took first ahead of hard pressing Dave Knapp who got past Tony Adkins three laps from the flag. LeRoy Stanton came on extremely strong in the last few laps to garner fourth ahead of Rod Whorton.

After the Juniors finished, the Stock Lite final heat took off. Frank Harbin had almost everything his way in the previous two heats, but he was unable to complete the first lap in this race, and Jeff Miner took the lead. His lead was short lived, however, as Joe Vera passed Miner and was never headed from that point on. Miner retained second, and Kurt Hoffman third to the flag. Linda Emmick had been relegated to the back of grid due to the DNF in the second heat, but it was a real treat to see her carve away at the pack in this heat. Linda displayed her driving talents, which are considerable, but the best thing about it was watching her face through the facemask of her helmet as she was doing it. There was a big grin on it all the way - she was having the time of her life! Her drive was rewarded with fourth place, which isn't bad at all when coming from the rear of the pack! Benny Buchacher chased Linda and took fifth for his trouble.

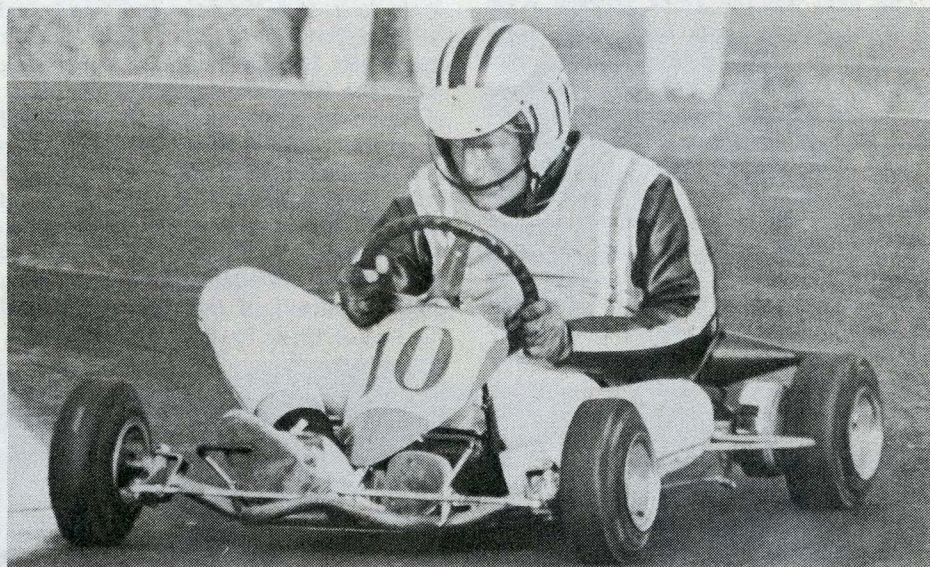
Open Heavy took off next and Jack Stickney took the lead, but was pushed very hard by Rich Burton. Burton really gave it all he had, but just couldn't quite get around Stickney, and George Domi-



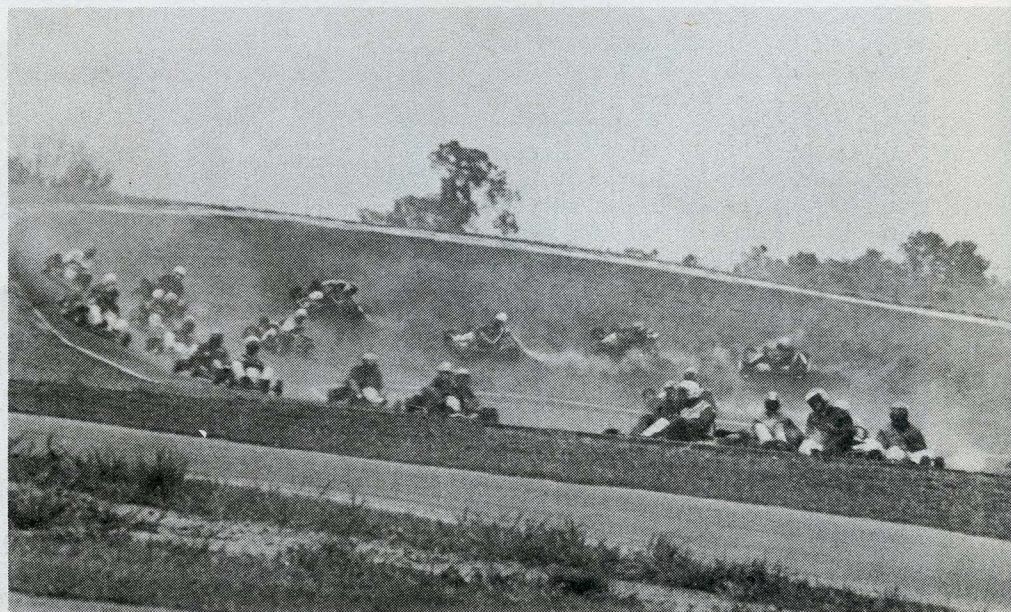
Bill Pomeroy joined the "Monza Skydivers".



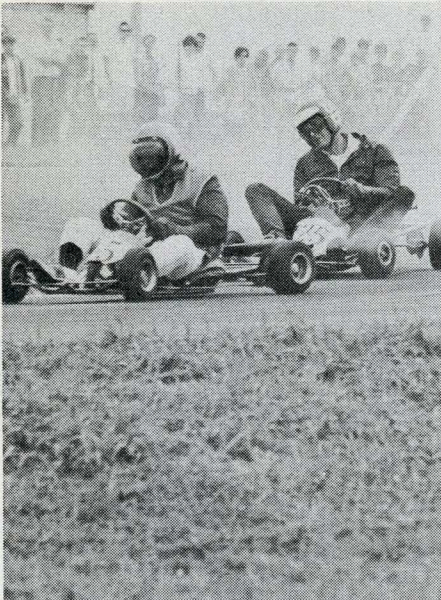
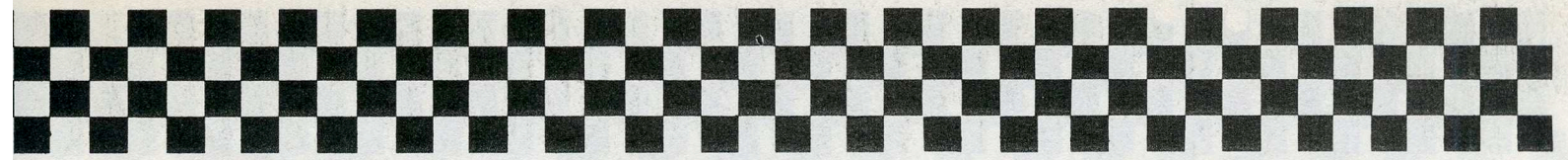
Linda Emmick really enjoys herself on the racetrack.



Jerry Vaughn showed all of the Am. Reed drivers how with a National Championship win.



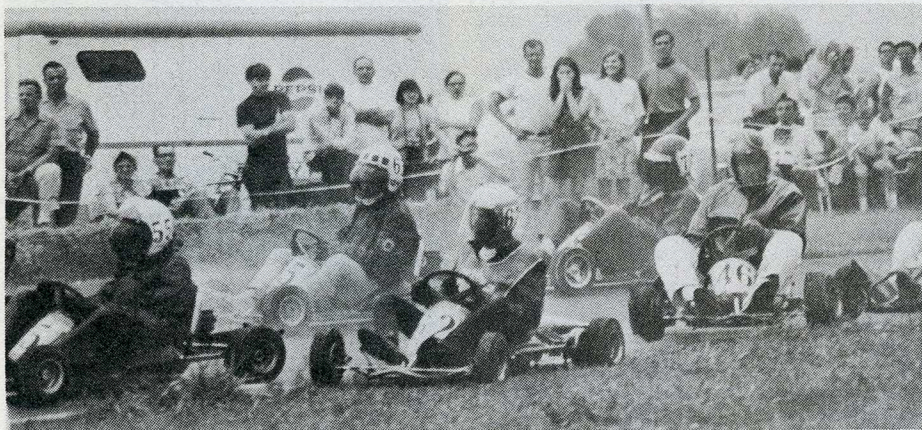
Rich Burton leads the Open Heavy pack out of the Monza curve.



Jack Stickney sets up to pass Stephen Clark.



Walt Myers earned the name "Wheelstander par Excellence"



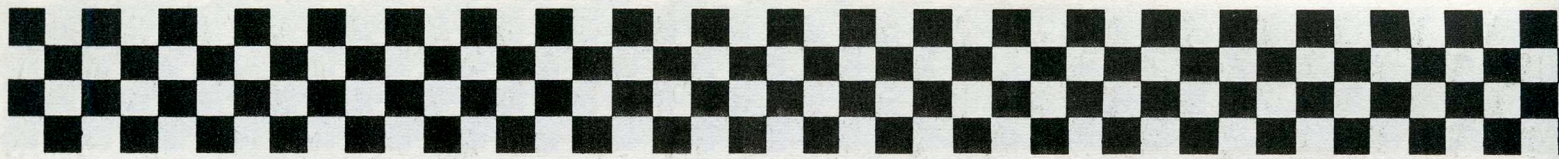
American Reed Seniors gave the crowd lots of action—even on the pace laps!



Frank Harbin, Pete Michel and Joe Vera dice.



The Stock Junior pack heads for the Monza curve.



nic had third all sewn up ahead of Lee Christian in fourth. Burton, after winning both of the two previous heats watched the Championship slip away from him when his clutch drum broke under the stress. Stickney could clinch the Championship by winning this heat with Burton DNF'd. Dominic moved up gradually to challenge Stickney, but Jack hung on for the win. Lee Christian took third ahead of Theron Moore in 4th and Gary May in 5th.

B-Stockers were up for their final heat, and Rick Tate did his wire-to-wire tricks for a well deserved National Championship. Bob Iba and John Stebbens got back together so they could finish the dicing they started in the other two heats. Iba was able to hold Stebbens for the duration, but Stebbens made him work to get his second. Stebbens was third and John Lawhorn fourth, after inheriting the position from Greg Johns who fell out after five laps. Pearl Gamble clambered up into the top five on the next to last lap, and held onto fifth till the checker fell.

Ken Burden took the big C's out and showed them the way home to decide the National Championship in his favor. Jack Nelson followed Burden and took second ahead of Bob Iba who had fought mightily with Michael Yarlett. Yarlett stayed with it for fourth and steady Carl Codello took fifth. Gary Emmick clawed his way up from the tail of the pack into seventh behind Ralph Hines.

The last race of the Nationals was the 3rd heat for the Stock Junior Championship. The green was waved and there was an immediate pileup in the middle of turn one. Again, nobody was hurt, but one of the leaders, LeRoy Stanton wound up in the infield with his clutch shoes heat welded to the clutch drum. After much pounding, rolling, kicking and cussing at the errant clutch, Mr. Stanton gave up and gave the whole kart a mighty heave. The machine hit with a resounding thud, and the clutch popped loose. The Stantonos were so surprised that they did a double take and then ran for the starter. Alas, the rest of the field had lined up and was waved off at just that time. LeRoy left the grid area one-half lap behind.

Kyle Adkins once again assumed the reins of leadership, but his great Championship effort came to naught when his machine gasped its last on the third lap. It was a heartbreak for Kyle because he had led every lap that he had been in in the Stock Junior Championship, but Dave Knapp went on to win the third heat and that, coupled with his previous fourth and second place fin-

ishes let Dave outpoint Kyle for the class Championship. John Stewart ran second to Knapp until Rod Whorton sneaked under him to make off with the second spot, leaving Stewart in third. Stewart and Whorton gave Knapp a good run as well. Tony Adkins made off with fourth and Gunnar Brolinson fifth.

The awards banquet was held in the Camden High School Gymnasium and was necessarily a "come-as-you-are" banquet, since it was to begin at 8:00 and the last race was finished at 7:45. The Ohio "specialty of the house" was ham, and there was some healthy 'ol eating going on for the next hour or so. Trophy queen Judy Jones presided over the presentations to the deserving recipients. Ohio's Bill Hall won the Rupp Mini-bike donated by Rupp for fund raising at the Nationals.

Rupp Manufacturing had quite a display set up inside one of the barns, and the center of interest was his Snowmobile dragster. Can you imagine a 400 horsepower snowmobile? Not me, buddy! It was a beautiful thing and the karters appreciated the support that Rupp put forth in behalf of the sport.

In another corner of the barn, Nitro Joe had a display of his line of horsepower-breeding products, and it consisted of a neatly arranged pile of plastic bottles. There must have been no less than five hundred bottles in the stack, and one wondered just what would happen "if I just pulled that one bottle out down there at the bottom...!" There was also a very complete kart supply shop set up by the 741 Kart Supply of Ohio. There was just about anything you could ask for on hand, including kart frames, helmets, pistons, engines....the list was almost endless.

Bug karts (K & P manufacturing) awarded Tony Adkins two-hundred dollars for winning a National Championship on a Bug kart, and Faye (Lady Bug) Pierson presented Tony with a check at the start of the equipment awards. The McCulloch Corporation as usual, had Chuck Hammond and their perennial maintenance tent on hand to help all who needed assistance. They also donated new Mac's to Donny Pomeroy, Tony Adkins, Jerry Vaughn, Jack Nelson and Ken Burden. All of these champs used McCullochs to power them to victories.

Michael Yarlett was awarded a new Margay gearbox for being the highest finishing Canadian, by Don Goodyear of Don's Kart Shop in Toronto, Canada. Yarlett was the third place winner in C-Open class.

Seven new track records were set and



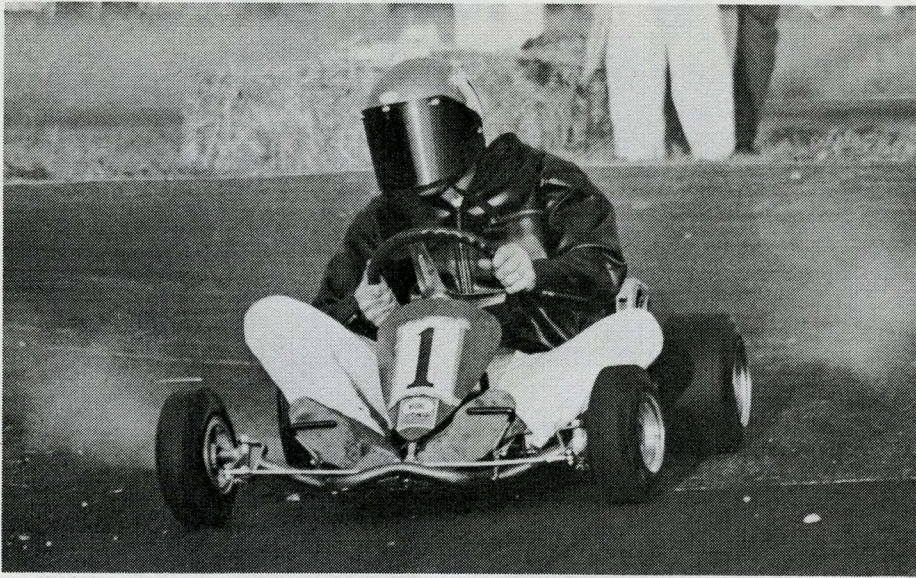
Joe Vera, the Stock Lite National Champion.



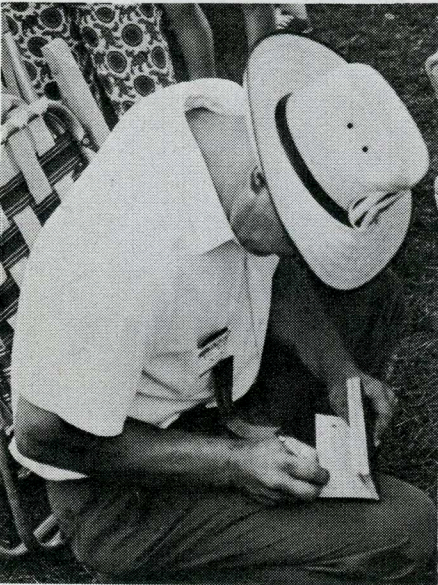
Vera to Emmick—the Grand Natl. Trophy.



Jack Stickney, warhooping to the checker.



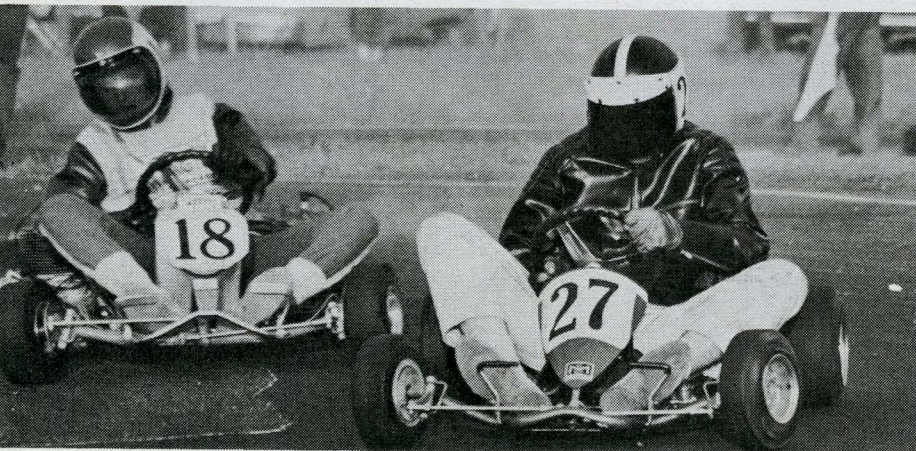
Ken Burden cruises to a well deserved National Championship in C Open.



Official weighmaster Jim Deaton, doing what you should do—buying a subscription to MK.



Jerry Vaughn bet a picture of his girl and his crew he'd win Reed Sr.—MK's editor lost.

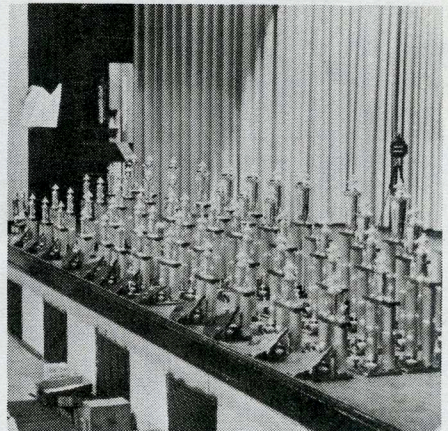


Canadian Michael Yarlett tries to duck under Jack Nelson in C Open.

the fast time plaques were awarded next, commemorating the quickest sprint drivers in the U. S. Gary Emmick's C-Open machine carried him quickest of all to break the overall track record with a 32.458 clocking. The class Championship awards were next and the proud recipients received their silver to prove to the world that they were the hot ones!

Last, but not least, the Grand National awards went to Donny Pomeroy in the Junior classes, and Linda Emmick in the Senior classes. These two did just about everything that could be done to win the Grand National Championship, including winning every heat for their class, and setting new track records for their classes besides. They were very deserving karters. The Canadian contingent of karters that came to the Nationals was recognized and presented with a trophy for making the event a truly international race program. Each day's races began with the Star Spangled Banner, and then the playing of the Canadian National Anthem to the Canadian flag flying high over the pits.

Oh, yes, there was one more award. Ron Withrow, the Race Director was presented with a three-inch high statue of a person throwing a bull...you can figure that one out for yourself! Ron



did a really outstanding job as Race Director; he worked himself almost to death doing it. His dedication to trying to give everyone a fair shake was the greatest. We ought to have more Ron Withrows around. From the whole sport, Ron.....Thanks!

So, that was the Sprint Nationals. We at MODERN KARTING would like to congratulate the National Champions in both the Enduro division as well as the Sprint division for their accomplishments...and may we also add that we are proud to be a part of the Sport, especially in this, the greatest year in Karting history!

1969 SPRINT NATIONALS

RESULTS

JUNIOR GRAND NATIONAL CHAMPION
DONNY POMEROY Columbus, Ohio
 (Rookie Junior)

1. 1200 points (Won all three heats of class.)
2. Qualified at 38.684 (.004 second off track record of 38.680)

SENIOR GRAND NATIONAL CHAMPION
LINDA EMMICK Mountain View, Calif.
 (B Limited)

1. 1200 points (Won all three heats of class.)
2. Qualified at 34.227 to establish new track record for class.

NATIONAL CHAMPIONSHIP WINNERS

ROOKIE JUNIOR

- 1) Pomeroy, Donny (Ohio)
- 2) Gammons, Teresa (Tenn.)
- 3) Young, Charles (Ohio)
- 4) Turner, Dean (Ill.)
- 5) Pollock, Rick (Calif.)
- 6) Brolinson, Per Gunnar (Mo.)
- 7) Thompson, Russ (Tenn.)
- 8) Shaw, William (Calif.)
- 9) Norris, Bill (Calif.)
- 10) Mike Hickey (Ind.)

JUNIOR STOCK

- 1) Knapp, Dave (Calif.)
- 2) Adkins, Kyle (Calif.)
- 3) Stewart, John (Calif.)
- 4) Whorton, Rod (Calif.)
- 5) Stanton, Jr., LeRoy (Calif.)
- 6) Bowen, Joey (Fla.)
- 7) Adkins, Tony (Calif.)
- 8) Brolinson, Per Gunnar (Mo.)
- 9) Pantaleo, Albert (Mich.)
- 10) Kasprzak, James (Wisc.)

STOCK HEAVY

- 1) Shepard, Mark (Calif.)
- 2) Brown, Jeff (Mich.)
- 3) Turpenen, Don (Calif.)
- 4) Miehaus, Rick (Ill.)
- 5) Winterbotham, R. (Ohio)
- 6) Meyers, Walt (Calif.)
- 7) Stevenson, Bob (Can.)
- 8) Traeder, Terry (Ill.)
- 9) Stickney, Jack (Fla.)
- 10) Gay, Jim (Ga.)

OPEN LIGHT

- 1) Michel, Pierre (Fla.)
- 2) Vera, Joe (Calif.)
- 3) Harbin, Frank (Calif.)
- 4) Tate, Rick (Calif.)
- 5) Smith, Jody (Mich.)
- 6) Stebbins, John (Calif.)
- 7) Lovullo, Angelo (N.Y.)
- 8) Hensley, Wayne (Ohio)
- 9) Buchacher, Benny (Fla.)
- 10) Sloan, Bill (Tenn.)

AMERICAN REED JUNIOR

- 1) Adkins, Tony (Calif.)
- 2) Stevenson, Jim (Ohio)
- 3) Kugler, Randy (Ohio)
- 4) Whorton, Rod (Calif.)
- 5) Adkins, Kyle (Calif.)
- 6) Quarterly, Dean (Mass.)
- 7) Stanton, Jr., LeRoy (Calif.)
- 8) Muskopf, Louis (Ohio)
- 9) Knapp, Dave (Calif.)
- 10) Sauder, Paul (Ohio)

AMERICAN REED SENIOR

- 1) Vaughn, Jerry (Ohio)
- 2) Preschern, Peter (Ill.)
- 3) Fisher, Jim (Ohio)
- 4) Coleman, Ron (Ohio)
- 5) Gioe, Larry (Ind.)
- 6) Gerber, Dennis (Ohio)
- 7) Meyers, Walt (Calif.)
- 8) Dowlen, H. (Tenn.)
- 9) Skien, Ronald (Tenn.)
- 10) Hardgrove, Tom (Ohio)

STOCK LIGHT

- 1) Vera, Joe (Calif.)
- 2) Harbin, Frank (Calif.)
- 3) Emmick, Linda (Calif.)
- 4) Miner, Jeffrey (Ind.)
- 5) Hoffman, Kurt (Calif.)
- 6) Michel, Pierre (Fla.)
- 7) Traeder, Terry (Ill.)
- 8) Buchacher, Benny (Fla.)
- 9) Dies, John (Tenn.)
- 10) Graves, Jeff (Ind.)

OPEN HEAVY

- 1) Stickney, Jack (Fla.)
- 2) Burton, Rich (Calif.)
- 3) Damanic, George (Ohio)
- 4) Fletcher, Marty (Tenn.)
- 5) Christian, Lee (Tex.)
- 6) Fry, Jim (Ind.)
- 7) Clark, Stephen (W. Va.)
- 8) May, Gary (Ohio)
- 9) Moore, Thereon (N.Y.)
- 10) Traeder, Terry (Ill.)

B LIMITED

- 1) Emmick, Linda (Calif.)
- 2) Blackley, Pat (Utah)
- 3) Miller, Bill (Ohio)
- 4) Mann, Jimmy (Wisc.)
- 5) Codello, Carl (N.Y.)
- 6) Wical, Jim (Ohio)
- 7) Pollock, George (Ohio)
- 8) Buchacher, E., Jr. (Fla.)
- 9) Hardgrove, Ed (Ohio)
- 10) Prioto, (Fla.)

B STOCK

- 1) Tate, Rick (Calif.)
- 2) Iba, Robert, Jr. (Fla.)
- 3) Stebbins, John (Calif.)
- 4) Bernardi, John (Mass.)
- 5) Lawhorn, John (Ohio)
- 6) Piornack, Chuck (Fla.)
- 7) Lipp, Art, Jr. (N.Y.)
- 8) Johns, Greg (Mich.)
- 9) Gamble, Pearl (Ohio)
- 10) Ables, Bill (Ohio)

B OPEN

- 1) Nelson, Jack (Calif.)
- 2) Lopez, Manuel (Calif.)
- 3) Bert, Pete (W. Va.)
- 4) Wardell, John (Mich.)
- 5) Speed, Lake (Miss.)
- 6) Meli, Bob (Calif.)
- 7) Chilers, Andrew (Mich.)
- 8) Leiber, Dwain (Ohio)
- 9) Winegardner, Jere (Ohio)
- 10) Snelling, R. K. (Ind.)

C OPEN

- 1) Burden, Ken (Ohio)
- 2) Nelson, Jack (Calif.)
- 3) Yarlett, Michael (Can.)
- 4) Emmick, Gary (Calif.)
- 5) Codello, Carl (N.Y.)
- 6) Iba, Robert, Jr. (Fla.)
- 7) Hines, Ralph (Mass.)
- 8) Leiber, Dwain (Ohio)
- 9) Meli, Bob (Calif.)
- 10) Whitehead, Jim (Ohio)

IKF FAST TIME AWARDS

ROOKIE	38.525*	Bill Norris	Santa Clara, Calif.
AM. REED JR.	35.367*	LeRoy Stanton, Jr.	Hayward, Calif.
STOCK JR.	34.723	Kyle Adkins	Rowland Heights, Cali.
AM. REED SR.	36.836	Jerry Vaughn	Miamisburg, Ohio
STOCK LIGHT	34.608*	Linda Emmick	Mountain View, Calif.
STOCK HEAVY	35.668*	Jeff Brown	Dearborn, Mich.
OPEN LIGHT	34.988	Jody Smith	Marine City, Mich.
OPEN HEAVY	35.466*	Rick Burton	San Jose, Calif.
B LIMITED	34.227*	Linda Emmick	Mountain View, Calif.
B STOCK	33.595	Rick Tate	Lynwood, Calif.
B OPEN	33.883	Jack Nelson	El Monte, Calif.
C OPEN	32.458*	Gary Emmick	Mountain View, Calif.

*NEW TRACK RECORD



story by Betty Barugh

The El Segundo Street Race got off to a bang up start with close to 300 karters coming from all over. I'd hate to guess how many spectators were covering the sidelines of this third annual event held by the Kiwanis.

All these fine people should have a big hand, as they really had everything ready for this excellent kart race. Many hours of hard work were spent by these men to see that we karters had one heck of a good time. The officials in our karter field did a bang up job getting everything ready to the last detail. There was a problem about getting the karters thru the gate in the morning, but Race Director Skip Shaw saw the mistake and said it would be corrected next year.

Starting off the program were the American Reed Jr's. With 26 ready and willing young drivers, the race began with George Semchak starting on pole. By the time the karts got to the start-finish line, George Ito was the man in that very important spot, going till the 4th lap when Tony Adkins took it. Tony went all the way with George second. Second heat: Tony went all the way again, but Forest Saylor jumped into second, and George third. Forest, drawing 50th spot, had the upper hand on George when it came to total points, as George had drawn 7th. The points were very close, but Forest got enough points to take second.

Stock Heavy: 25 karters made every move count when that green flag dropped on the pole kart (Mark Shepard). Mark held it all the way, with Rick Gifford second, Ed Mitchell third. Second heat: Mark had a little problem and Rick took the lead to the finish, with Ed second and Mark third.

Open Lite: 23 starters, with William Hernandez on pole, but Don Moormeister took the lead at the very start and held it till Rod Whorton decided he wanted to lead and drove it home. Joe Vera saw his chance and took second, with Nick Adams third. Second heat: Rod again liked to be in front and held it again. Joe took second ahead of Lee Ewert in third.

Next up the mighty little Rookies: Craig Irwin was on pole, but Phillip Stillwell took the lead for two laps when James Vantassel stole it from him. Billy Shaw jumped into second with no problem and Jerry Kutumiam came across the line third. Second heat: James went all the way, and Jerry took second away from Billy. Billy held onto third. Again, the drawing of positions made the difference in points, giving Billy enough points to take second in the trophy line.

Stock Lite: 23 strong, and John Griffin was on pole. Rick Gifford was in front till the last lap. Rod Whorton had been nipping at his tail and finally took the win. Rick was second and Frankie Or-

mande third. Second heat: Rod went all the way, Frankie took second, and put Rick into third.

Next up was American Reed Sr.: The class had 66 entries signed in, so we had to split the class - not just for the karters' sakes...but also for the poor scorekeepers. By this time their eyeballs were spinning in their sockets anyway. George Bryson was sitting on pole of this fine heat, but Chuck Pittenger took it for one lap, then Walter Baynes flew thru into first to the finish. Chuck was second, John Beaver third. Second heat: Walter - again all the way. Chuck, having problems, dropped back to give way to John. Third place was eaten up by Graydon Gaines.

The second half of the American Reed Class found Bob Allman on the pole at the beginning and the end of this first heat. Wally Baynes crossed second and Rod Whorton third. Second heat: Allman had troubles after the first lap, and let Rod have first for one lap, till Wally decided he wanted it. Wally took it across the line first, Ruben Serrano took over second and Rod had to settle for third.

B Stock: Gil Laird was on pole, but Ken Yagi took the lead on the first lap and held it to next to the last lap. Kim Gregory took the lead and the win. Ken was second and Wayne Zufall third. Second heat: Ken Yagi took the lead and went all the way - putting Wayne in second and Kim into third.

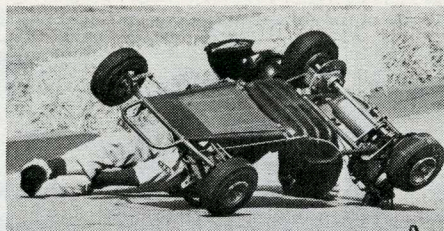
Race Eight...The Stock Jr's lined up with Dan Bowen on pole. Bill Dietz took the lead on the third lap for a first place. Brian Iohertz was second, Steve Coumas third. Second heat: Kyle Adkins jumped into the lead for a very nice first across the line, Bill second and Brian third.

B Limited: John Key drew the pole, but Linda Emmick was high flying lady for the first place honors in this heat. Don McDonald was second and Diane Kanemoto third. Second heat: George McNee, who had finished 6th in the first heat, came thru like gang busters and took the lead when Linda dropped out. George went all the way with Jim Reifu in second. Lloyd Kiefstard was third.

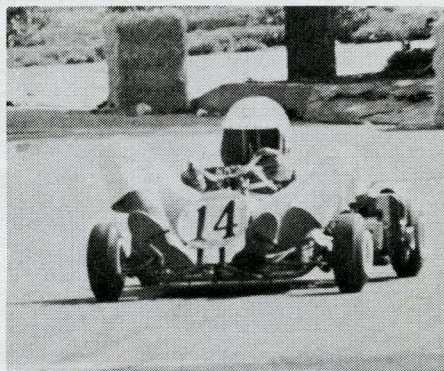
Time ran short and it started getting dark so they had to call the races before C Open, Open Heavy, B Open and FKE could run their second heats. The trophies were handed out by the way they finished in the first heats.

C Open: Theron Ives started on pole, but Bob Meli took over that spot for one lap before Gary Emmick walked past. Bob finished second and Dick Yeates third.

Open Heavy: John Dillingham on pole, but he had his problems. Chet Vettters made his move and was long gone - but on the last lap Chet disappeared (via a blown engine) and Joe Pacheco came around for the checkered flag first. Dale



An irresistible force meets an old immovable...



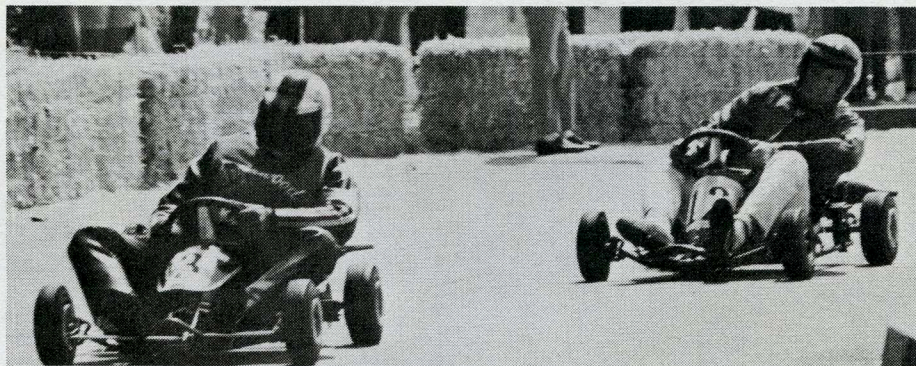
Walter Baynes won his Am. Reed Sr. race easily.



Bill Dietz gets away from the hassle in Stock Jr.



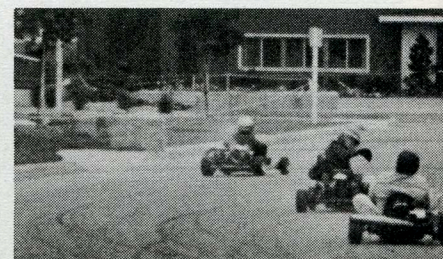
C Open winner Gary Emmick.



Ed Mitchell chases Ed Hundley through the east turn.



Stock Heavy gets the green flag and blast off.

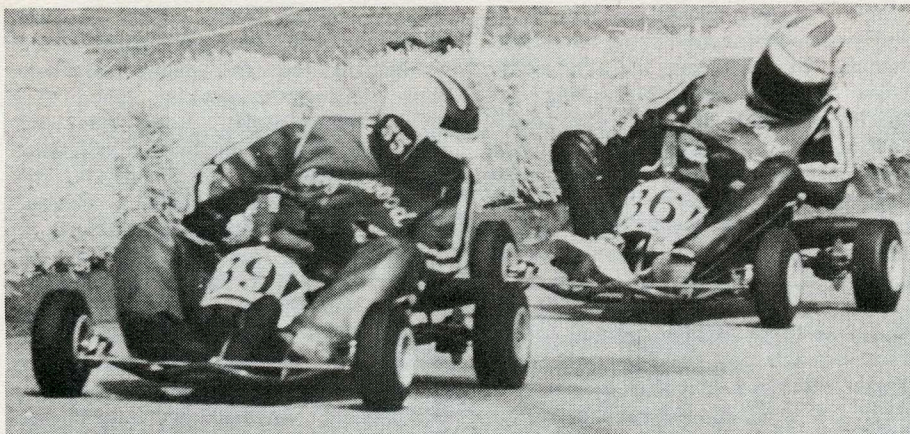


Competition was fierce, even during the practice.

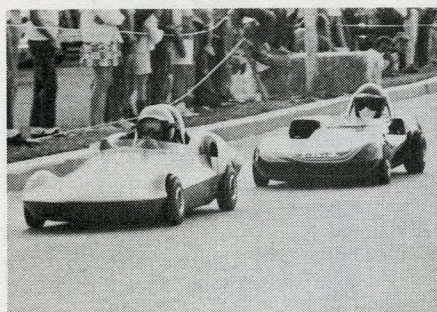
Grose was second and Jeff Druck third. B Open: Dave Hadley on pole, but Manuel Lopez was the fast man and across the line first, Jack Nelson second and John Stebbens third.

F.K.E.: James Haney Jr. was on pole at the drop of the green flag, but that mighty man from Inglewood Kart Shop, John Julis, took the lead on the second lap for a first place ride. James was second and Greggroy third.

It would be mighty hard to give a rundown on all the people who made this event go so well, but special thanks must go to Race Director Skip Shaw and the scorekeepers. Jeanne Keeley, Chuck Adams, Tim Adams and Betty Barugh "manned the charts" and capably too! Also, we must mention that Chuck Hammond and Dewitt Adams did a great job keeping the crowd informed and commenting while handling the microphone. To everyone else-a great big "THANKS" for helping to make the event the greatest streetrace in Southern California.



Bob Allman tries to keep an eye on Wally Baynes.



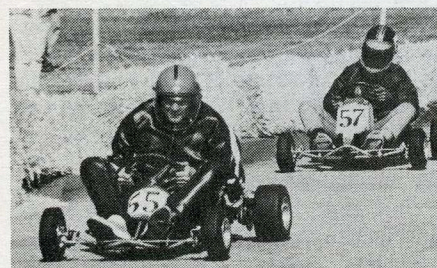
FKE exhibition—Julis sets up to pass Haney.



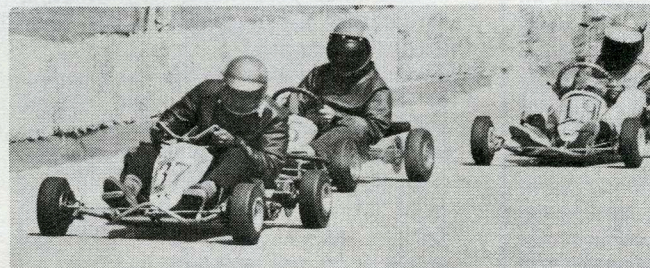
B Open winner Manuel Lopez.



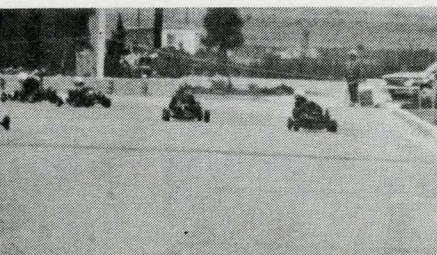
The Stock Lite pack motors through the east hairpin on the pace lap.



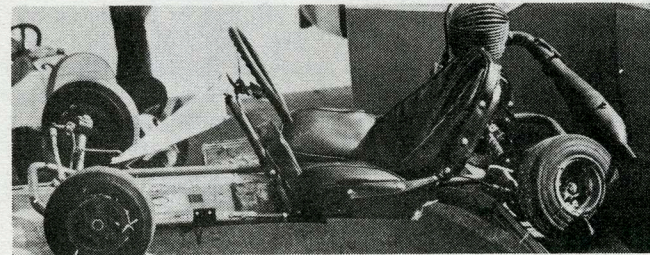
B Stockers—Winner Yagi is led by Gregory.



Vera, ???, and winner Whorton—Open Lite.



sessions!



Curbs are mighty hard on axles!

AMERICAN REED SENIOR

1. Walter Baynes
2. John Beaver
3. Graydon Gaines
4. Chuck Pittenger
5. Dave Allen

AMERICAN REED SENIOR (2)

1. Wally Baynes
2. Rod Whorton
3. Ruben Serrano
4. Bob Allman
5. Wayne Wallace

B OPEN

1. Manuel Lopez
2. Jack Nelson
3. John Stebbens
4. Henry Azevedo
5. Acey Miller

AMERICAN REED JUNIOR

1. Tony Adkins
2. Forest Saylor
3. George Ito
4. Gene Donovan
5. Jeff Tomlorn

C OPEN

1. Gary Emmick
2. Bob Meli
3. Dick Yeates
4. Bill Shaffer
5. Hector Landeros

STOCK HEAVY

1. Rick Gifford
2. Mark Shepard
3. Ed Mitchell
4. Harry Maeda
5. Bill Oldham

OPEN LITE

1. Rod Whorton
2. Joe Vera
3. Nick Adams
4. Lee Ewert
5. Riley Banks

ROOKIE

1. James Vantassel
2. Billy Shaw
3. Jerry Kutumian
4. Dale Payne
5. Bill Norris

STOCK LITE

1. Rod Whorton
2. Frankie Ormonde
3. Rick Gifford
4. Sam Parker
5. Dave Nowell

B STOCK

1. Ken Yagi
2. Kim Gregory
3. Wayne Zufall
4. Greg Buckley
5. Ed Crumley

B LIMITED

1. George McNee
2. Linda Emmick
3. Jim Reifu
4. Don McDonald
5. Bobby Morrow

STOCK JUNIOR

1. Bill Dietz
2. Brian O. Iohertz
3. Kyle Adkins
4. Steve Coumas
5. Dan Bowen

F.K.E.

1. John Julis
2. James Haney, Jr.
3. W. Gregory
4. Dick Carello
5. James Wright

OPEN HEAVY

1. Joe Pacheco
2. Dale Grose
3. Jeff Druck
4. Mark Guzzard
5. Tom Martindale

THE PORTING OF TWO-STROKE ENGINES

USING THE AREA-TIME METHOD

By R. W. Lawley

ABOUT THE AUTHOR

Bob Lawley, 42, is a metallurgist and senior research engineer (materials) for an aerospace company in Sunnyvale, California. His karting experience began in 1961 and he drove in both stock and modified sprint classes until 1966. Since then he has left the driving first to Rich Burton and then later to Dan O'Neill (1968 American Reed Senior Sprint National Champion). He now mostly concentrates on engine theory and some modification work in collaboration with Rich Burton and Barney and Bob Stout of California Kart Sales. Bob also gives much credit to Harry and Erv Kanemoto of San Jose, California, and to Charlie (Hyprode) Murphy and Gil Horstman for their help in getting him started in the right direction in engine modifying. Special thanks also go to Peter Scott-Brown, formerly a McCulloch design engineer, who, "has cheerfully put up with my sometimes inane questions over the past six years or so".

Have you ever wished that you could find a method for modifying two-stroke engines of differing displacements, stroke lengths, and connecting rod lengths; especially after you have finally worked out a combination of port timing that works well with one particular engine? Perhaps you have a Mac 91 that goes like a bomb in Modified Lightweight and you would like to make a Mac 101 go just as fast in B Limited. Or perhaps you would like to get a Saetta or Parilla running in the stock appearing classes. No doubt many of you will agree that such a seemingly simple job can lead to much frustration. It is also possible that you already have had the experience of trying your favorite combination on a different brand of

produce inertia forces which approach the strength limits of presently available connecting rod and piston materials; thus limiting the peaking speed of a given engine design. Ford uses what they call the Hepworth and Grandage formula (shown in detail later in this article) for determining piston acceleration, and it is interesting to note in Table I at what rpm a Mac 91, a Mac 101, and a Saetta (or Parilla) will have a piston acceleration of 100,000 ft/sec squared. From these figures it can be shown how the gear ratios to be used on the same track will differ for each of the engines. Note that we have chosen an arbitrary gear ratio for the Mac 91 in order to compare the other engines to it.

TABLE I

Engine	RPM for 100,000 ft/sec squared Piston Acceleration	Equivalent Gear Ratios and Sprocket Combinations	Gear Ratios as a % of the Mac 91 ratio
Mac 91	10,100	8.15/1 (8-65)	100
Mac 101	9,490	7.66/1 (9-69)	94.1
Saetta/Parilla	9,010	7.30/1 (9-66)	89.5

engine, and having it run well, but not as well as you had hoped; or perhaps it even ran slower than stock.

Before we get too far into this subject it might be worthwhile to mention that no magic port timing or pet modification will make up for sloppy engine assembly work. A two-stroke engine is basically an air-pump, and if it leaks air you will wonder where the power went. In addition, the ignition system must be in as good condition as you can make it, and the timing must be set correctly in relation to both compression ratio and rpm. All of us certainly have watched too many modified engines run slower than a well set-up stock engine to believe that ports, and two or three carburetors are the entire answer. What then is the answer?

We at California Kart Sales and Service in San Jose, California, have derived, and have been using, a modification method based upon the port area multiplied by the port opening time at a given rate of piston acceleration. This method allows us to use knowledge gained from one make of engine on all engines. Thus, for instance, one can determine what port timing to use on a Mac 101, Saetta, Komet or B Bomb if he has a Mac 91 that runs well. It can also be used to determine the port timing for any of the two-stroke motorcycle engines.

According to the Ford Motor Co., it is piston acceleration, not piston speed, that limits the performance of an engine. During their program of designing their Indianapolis engines they concluded that piston acceleration much in excess of 100,000 ft/sec. squared will

How does all of this relate to port areas and port timing? We feel that the total exhaust port area and the blow down area* should be sized on the basis of the port area multiplied by the time it takes to open the port at the limiting rpm determined by the Hepworth and Grandage formula. When working from a known engine to one that is unfamiliar, but of the same displacement, the port area-time figures for the unfamiliar engine are made to match those of the engine we know runs well. If the unfamiliar engine is larger or smaller, the area-time figures for that engine are made proportionally larger or smaller in order to compensate for the difference in displacement.

An example is presented to show how the area-time method works when working from a modified Mac 91 to a Parilla or Saetta. The first task is to obtain the area-time information from a modified Mac 91. For my example I will use the Mac 91 engine used by Dan O'Neill to set fast time in qualifying for A Modified Lightweight at the 1967 Riverside Sprint Nationals.

Step 1. Using the Hepworth and Grandage equation determine the rpm at which the Mac 91 piston acceleration is equal to 100,000 ft/sec. squared.

$$N = \sqrt{\frac{A \times 2189}{S (1 \text{ plus } \frac{1}{2}n)}}$$

N = rpm

A = Piston Acceleration in ft/sec-squared

S = Stroke Length in inches

n = Ratio of Connecting Rod Length to Stroke Length

Substituting the Mac 91 dimensions in the above we have:

TABLE II

Mac 91 Tabulated Data							
Exhaust Port				Blowdown Period			
Opens (degrees before Bottom Dead Center)	Area sq in	Time to Open (milliseconds)	Area-Time (sq in milliseconds)	Duration (degrees)	Area (sq in)	Time (milliseconds)	Area-Time (sq in milliseconds)
95	1.25	1.57	1.96	22.5	.515	.373	.193

$$N = \sqrt{\frac{100,000 \times 2189}{1.635 \left(1 + \frac{1}{2 \times 1.53} \right)}}$$

N = 10,100 rpm

Step 2. Determine the Mac 91 exhaust port opening time.

$$T = \frac{60}{N} \times \frac{E}{360}$$

T = Time in Milliseconds

N = rpm for 100,000 ft/sec squared
Piston Acceleration

E = Exhaust Port Opening Point
in Degrees Before Bottom
Dead Center

Again using the Mac 91 information we have:

$$T = \frac{60}{10,100} \times \frac{95}{360}$$

$$T = 1.57 \text{ milliseconds}$$

Step 3. Determine the area of the Mac 91 exhaust port by the method described in note 1, and multiply it by the port opening time derived from Step 2.

$$1.25 \text{ sq in} \times 1.57 \text{ milliseconds} \\ = 1.96 \text{ sq in} - \text{milliseconds}$$

Step 4. Determine the area-time figure for the Mac 91 blowdown period. First, from the area diagram previously prepared when the exhaust port area was determined measure the distance from the point of exhaust opening to the point where the transfer ports open, and multiply this by the port width.

$$.315'' \times 1.64'' = .515 \text{ sq in}$$

Next determine the blowdown time using the same equation as was used in Step 2.

$$T = \frac{60}{N} \times \frac{360}{E}$$

$$T = \frac{60}{10,100} \times \frac{22.5}{360}$$

$$T = .373 \text{ milliseconds}$$

Finally, multiply the blowdown area by the blowdown time.

$$.515 \text{ sq in} \times .373 \text{ milliseconds} \\ = .193 \text{ sq in} - \text{milliseconds}$$

Table II summarizes the data obtained from the modified Mac 91.

Once information similar to Table II has been obtained from your favorite engine, all that remains to be done is to duplicate the area-time relationships in the new engine. Continuing with our Saetta-Parilla modification, we would then proceed as follows:

Step 1. Realizing that there will be some trial and error involved we will first assume that we should raise the

exhaust port. After trying and discarding several amounts we arrived at .120 inch and then ran through the area-time calculations as follows:

Exhaust area: .83 hi x 1.50 wide (stock width) = 1.25 sq. in.

Exhaust time: (using the rpm corresponding to 100,000 ft/sec. sq. piston acceleration from Table I for the Saetta or Parilla):

$$\frac{60}{9010} \times \frac{86}{360} = 1.59 \text{ milliseconds}$$

Exhaust area-time: 1.25 sq. in. x 1.59 milliseconds = 1.98 sq. in. - milliseconds.

Step 2. We then started with another estimate for the blowdown sizing and after some trial and error we had the following:

Blowdown area:

$$.330'' \text{ high} \times 1.50'' \text{ wide} = .495 \text{ sq in}$$

Blowdown time:

$$\frac{60}{9010} \times \frac{21.5}{360} = .396 \text{ milliseconds}$$

Blowdown area-time:

$$.495 \text{ sq in} \times .396 \text{ milliseconds} \\ = .196 \text{ sq in} - \text{milliseconds}$$

From the foregoing it is easy to see how the seemingly different Mac 91 and our new Saetta-Parilla modifications are in reality quite alike. Table II sums up the pertinent information. The lesson here is that the degree wheel isn't the only tool one should pay attention to when modifying engines.

TABLE III

	Mac 91	Saetta Parilla
Exhaust Opens (degrees before Bottom Dead Center)	95	86
Exhaust Area (sq in)	1.25	1.25
Exhaust Area-Time (sq in milliseconds)	1.96	1.98
Transfer Ports Open (degrees before Bottom Dead Center)	72.5	64.5
Blow Down Period (degrees)	22.5	21.5
Blow Down Area (sq in)	.515	.495
Blow Down Area Time (sq in milliseconds)	.192	.196

The method used for determining the sizes of the transfer ports is much easier, if only because the problem is essentially one of obtaining the maximum possible area in the space remaining. As far as the back port is concerned, we leave it pretty much as is, except for raising it to a height about equal to the rest of the transfer ports. We have found no discernable difference in performance whether the back port is higher than, even with, or lower than the rest of the transfer ports. In fact, we once ran a Mac 75 with the back port opening at the same time as the exhaust port in an attempt to raise the crankcase pressure (Agoura, California Benefit Race 1966); and Rich Burton (1968 IKF Master Mechanic) drove it to a new B Limited qualifying lap record. However, it wasn't any faster or slower than another Mac 75 we used in practice, which was identical except for having a normal back port.

In conclusion, it should be mentioned that this article is entirely too brief to cover all of the things that affect the power out-put of the two-stroke engine. It is meant only as an introduction to one phase, a phase you may not have seen much written about. Finally, and probably most important; does the method described here really work?

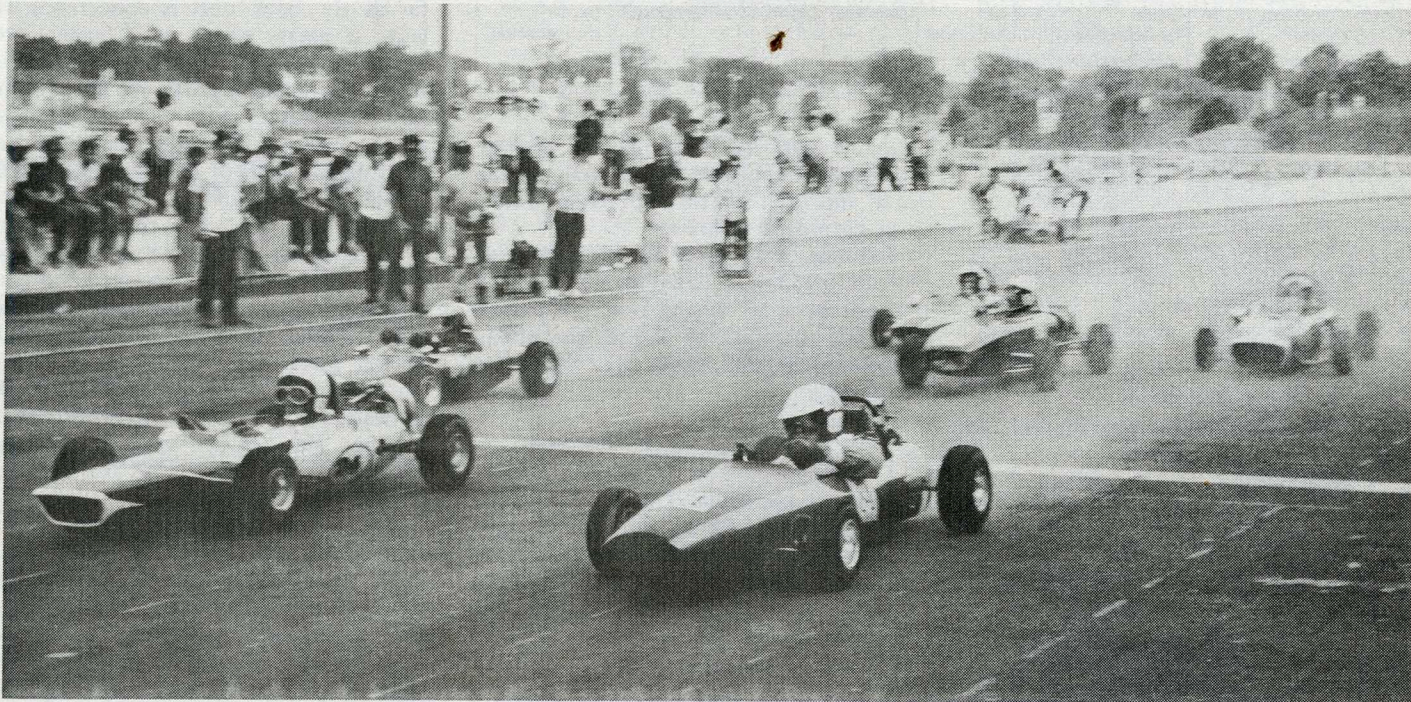
You be the judge. I can only offer the following evidence: the Saetta engines modified by Rich Burton for Joe Vera (1968 IKF Sprint Grand National Champion) during the 1968 season, and for Rich and his brother Kenny for the 1968 enduro season, were essentially area-time copies of the Mac 91 engines that Dan O'Neill used during the 1967 sprint season. I must add that Rich has done much more than just copy old Mac 91 engines. He is a very fine mechanic and has that instinctive ability to get the best from any engine. In addition, his work with his own brand of oiler clutch, and his intuitive "feel" concerning gear ratios and exhaust systems have improved the "copies" to the point where they are now faster on gasoline than the best of the Mac 91's were on alcohol.

NOTES

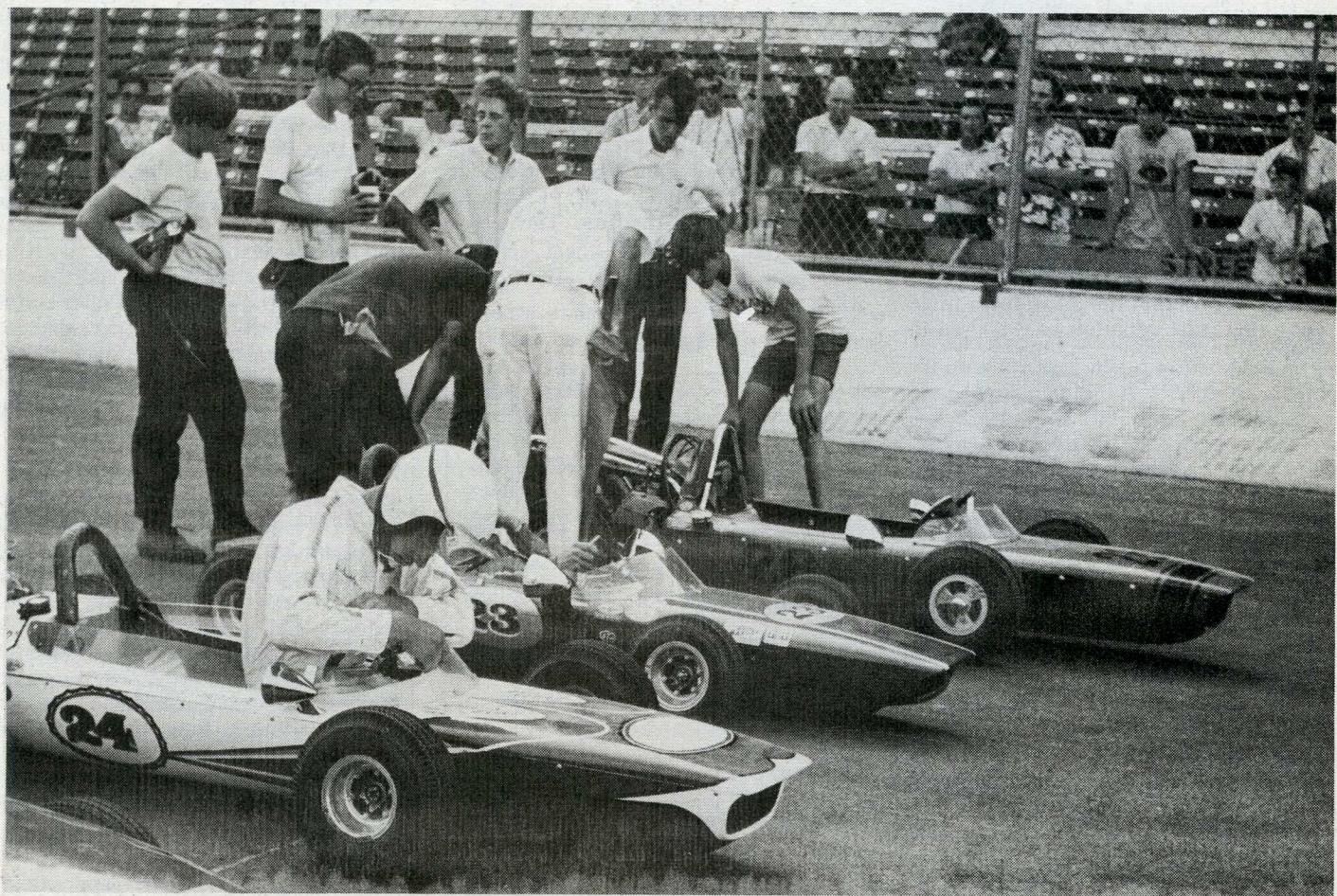
1) An easy way to determine port areas is to place a piece of paper inside the cylinder over the ports, and press the paper along the edges of the ports. In this way a "print" of the port out-line can be obtained, which can be easily measured. Although these areas will not be actual projected areas since they are measured along the curvature of the cylinder, they will be suitable enough since you will be scaling from a configuration you know works well to a nearly similar sized cylinder in the same manner; and therefore, the changes will be relative.

*) That portion of the total exhaust port area which is open prior to the opening of the transfer ports.

FORMULA FIVES AT WISCONSIN STATE FAIR RACEWAY



The race is on for this group of Formula Five cars. If they were driven by pygmies wearing tiny helmets, you might think they were full scale GP machines. But these sleek little Americana Class "Fives" are only 7½ feet long with rear tires a pinch less than 13½-inches in outside diameter.



Three particularly handsome "Broadsword" cars, just prior to moving into their assigned F/5 grid slots.

Will wonders never cease! The mid-western FORMULA FIVE CARS finally got to race on a dry track....two days in a row, in fact...Saturday and Sunday, August 30-31 at the Wisconsin State Fair Raceway....a 1.7 mile circuit which combines part of the one mile oval with a twisting infield road course....not easy to gear for, but interesting to drive!

An immense roofed grandstand overlooks the broad main straight (ala Indy); a few dozen spectators swallowed up by its very enormity. But when the slick little F/5 cars formed up on the grid, those same spectators rose, moved to the trackside fence, and stood fascinated by a minor miracle....honest to gosh formula cars just barely large enough to accommodate adult drivers, beautifully painted and ready for serious competition....tangible evidence of an exciting new concept in small displacement auto racing!

Race Director Les VanLaanen, and members of the Badger Kart Club who hosted the enduro event made the F/5 drivers feel quite welcome. Registration gals, (one of whom was Mrs. VanLaanen) scoring teams, and other race officials performed their various duties commendably, and clusters of enthusiasts gathered around the F/5 pit area. Next time, several more "fives" will be entered. Six cars which had been expected were just days away from completion and before this article reaches print, two more Formula Five races will be history....one at Blackhawk Farms near Rockford, Illinois, the other at Indianapolis Raceway Park. You'll be reading about them in the next issue of MK.

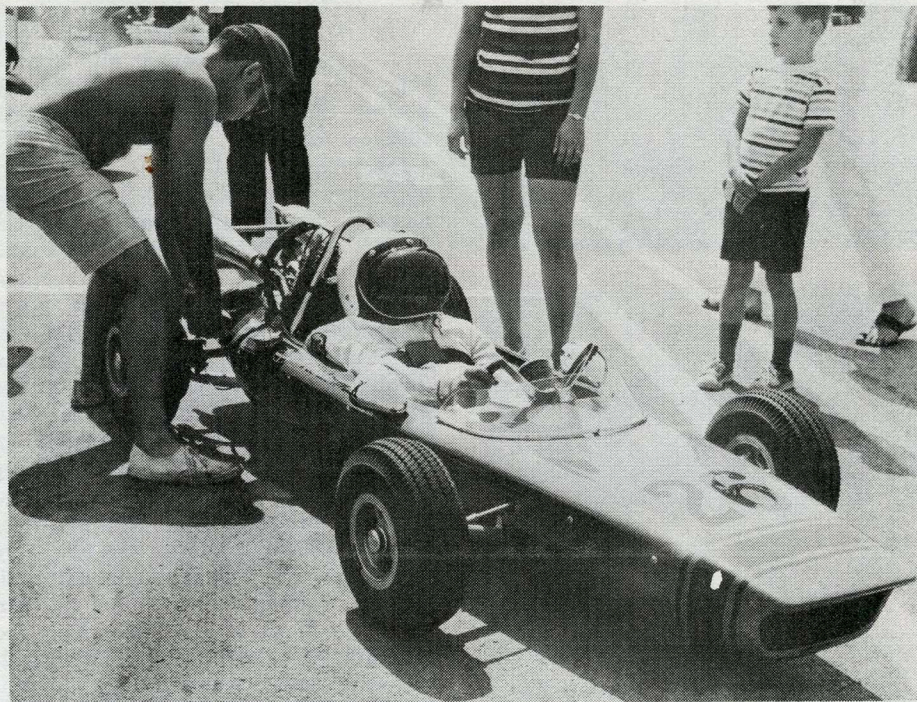
The Formula Five grid formation was F/1 style....cars two abreast in staggered rows so that each driver has an open slot dead ahead. Bruce Sutton in car no. 24 was on the pole for the final Sunday race, with Phil Reed beside him. Later, Phil asserted, "my heart pounded hard when we were lined up ala F/1, waiting for the flag", reflecting just one of the many appealing aspects of FORMULA FIVE RACING.

Phil had the first place F/5 trophy in his pocket, too (with the checkered signal almost in sight) when he dropped a couple of wheels over the edge and wiped off his fuel lines climbing back onto the racing surface....not the thing to do when Harvey Packard is behind you, 'cause Harvey is a staunch competitor and the current National F/5 point leader.

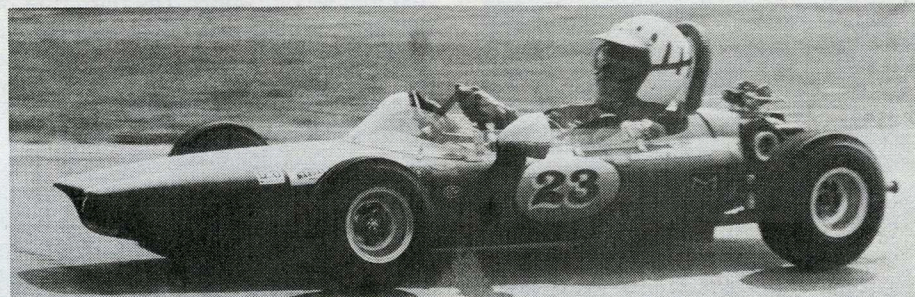
So likeable Harvey drove to victory again in car no. 23, someone having

Continued on Page 42

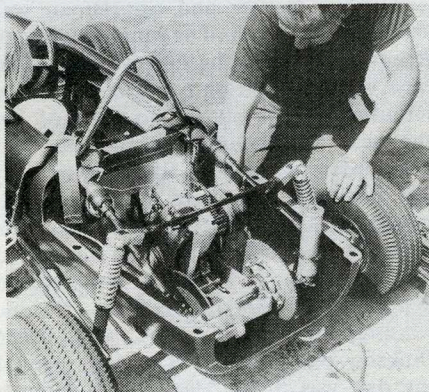
Wayne Smith is experimenting with a watercooled powerplant in his impeccably crafted F/5 car.



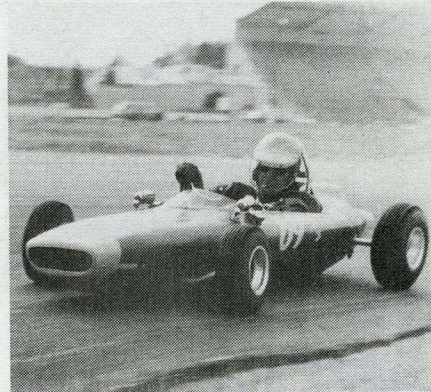
Dave Jacobs' immaculate (bright red) Monte Carlo class F/5 car went out with fractured engine mounts.



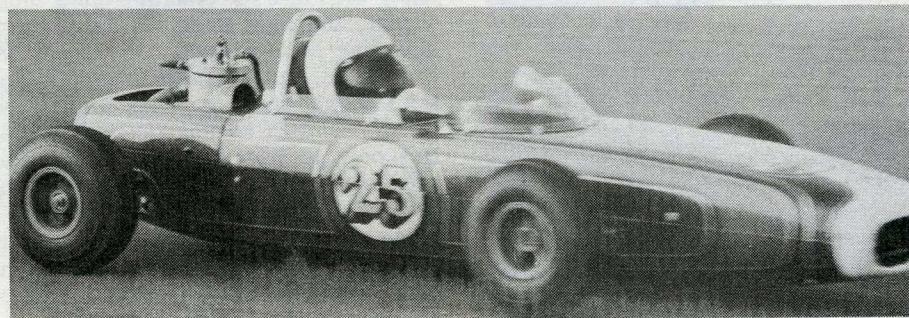
Harvey Packard, victory-bound, in one of the slickest little cars (an F/5 Broadsword) anywhere.



Joe Pohlhammer's cleverly suspended Cutlass ended up with the third place F/5 trophy. Due to a miscalculation, his car has an excessive amount of ground clearance, but the body will be lowered this winter.



Fiftytwo-year-young Tom Johnson takes his racing seriously. Tom even fabricated his own body shell, guided by F/5 design prints. He won a trophy, too - for finishing fourth.



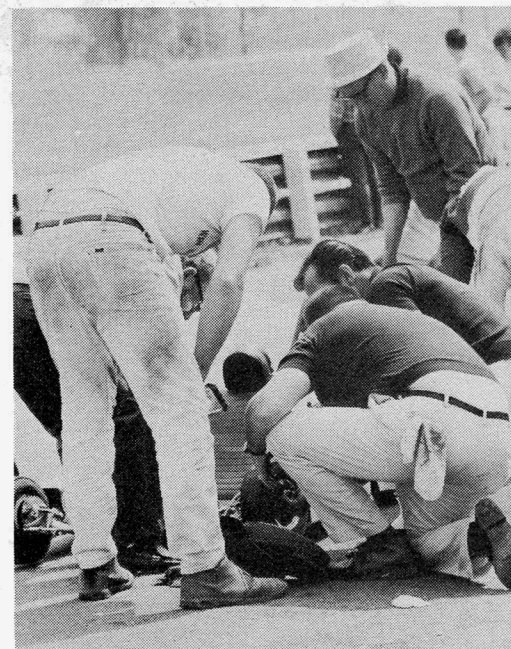
Story by K. Cuthbertson

Photos by B. Harrold Perathaner

The Dart Kart Speedway Club holds five or six races a year at Mid-Ohio, a very challenging road course that is hosting the Can-Am Sports Car Races this year in August.

The race was held May 24th and 25th, with open practice all day Saturday and races all day Sunday, starting with the Juniors at 9:30 a.m. Junior Stock and Junior American Reed ran together. Gary Shaw from Harper Woods, Michigan, won the Junior Stock and Robin Johnson (a girl) won Junior American Reed. This race was followed by the Twins - C Open, B Open and B Stock running together. This was quite an eventful race with the lead changing many times in the C Class and eventually being won by Roy Smith of Norwalk, Ohio. B Open was taken by the boys from Toledo, Ohio with Bill Sanders winning first and Ted Forman second. B Stock winners came from the rear after Bob Anderson and Lee Davidson were leading nearly all the way had to drop back making way for Brandt Shaull and J. E. Lawson to take over first and second spots. The third race of the day was A Stock Light and A Open Heavy. The three fastest karts off the line failed to finish. Tom Cuthbertson switched first place leads with Steve Gronbach for 15 laps, when Steve went out and Tom held the lead for three more laps and threw a chain, at which time Drew Turnbull took over and never lost the lead to win A Open Heavy. In Stock Light Jeff Brown led the race for 13 laps and went out with trouble and Dave Semick took over to win. American Reed Senior and Sportsman was the next race up, and as usual, American Reed Senior was the biggest class. This race was in progress for almost twenty minutes when it started to rain and for the next fifteen minutes the race was run under the yellow flag, however, it did not rain too hard and the track dried quickly. Clayton Hargrove took over the lead just before the rain started and never lost it to win American Reed Senior. Bob Einheit had no trouble winning Sportsman class with Dave Dickson placing 2nd. The last race of the day was Stock Heavy and A Open Light. Dave Cuthbertson took the lead in the first lap and never lost it for the entire race. Fred Scensny practically had second place sewed up until Mike Shaw went into the pits for a quick plug change, and right back out but it took him nine laps to catch him before he could pass, but when he did he never lost second place. A Open Light saw Chuck Heinrich leading the race for 14 laps only to have Drew Turnbull take over for the rest of the race to win, with Chuck dropping back to third.

This ended quite a successful day at the races. No accidents and the rain only lasted about ten minutes so we consider ourselves quite fortunate.



Mick Rupp blew a tire in C-Open.

DART KART CLUB HOSTS



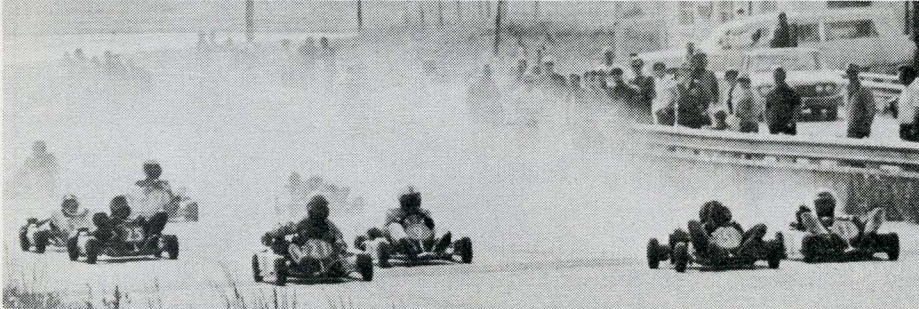
Jrs. — Don Smith, Gary Shaw and ??

There were 147 karters participating from five states, and our next Enduro will be August 23rd and 24th, which will be our Fourth Annual International Karting Olympics. This is run in conjunction with the IKO Sprint races held August 30th and September 1st at Dart Kart Speedway. These are always our biggest races of the year, where not only are trophies awarded, but merchandise as well.

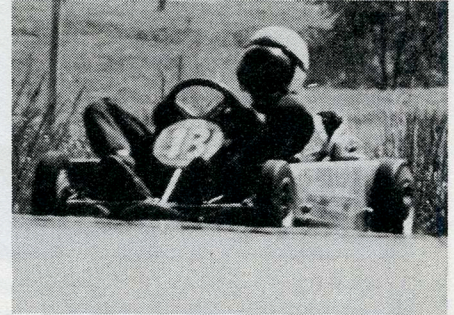
September 13th and 14th we hold a 250 mile race at Mid-Ohio and this is also a big race because it is unusual. The last race of the year will be October 4th and 5th which is our Seventh Annual Midwest Kart Enduro.



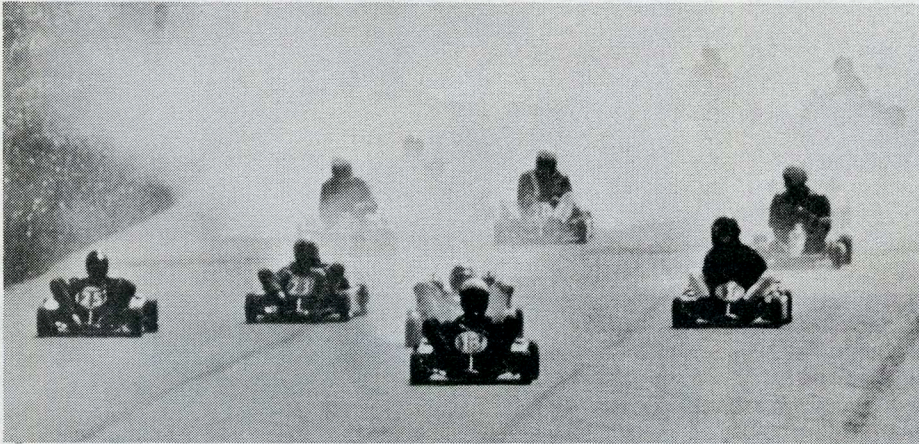
Open Heavy sets out



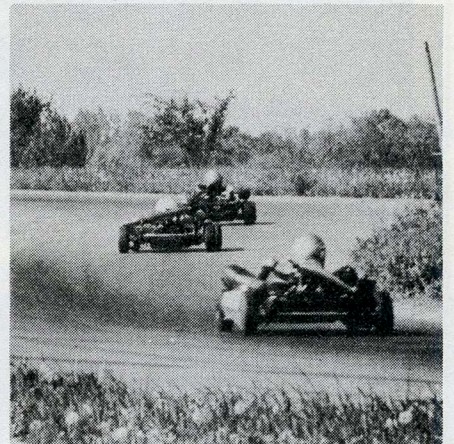
Jr. Stocks smoke off.



C Open winner Ray Smith.



C Open goes out for an hour of fun & games.



The "S" curve just before the scoring chicane.

RESULTS

C OPEN

1. Roy Smith, Norwalk, Ohio
2. Jim Whitehead, Mansfield, Ohio
3. Dave Kollar, South Bend, Indiana
4. Lowell McLellan, Uniontown, Ohio
5. Mick Rupp, Mansfield, Ohio

B LIMITED

1. Buck Keen, Mt. Vernon, Ohio
2. Clarence Short, Mentor, Ohio
3. Robert Lee, Dayton, Ohio
4. Harwood Brown, Dearborn Hts., Michigan
5. Richard Kus, Cleveland, Ohio

A OPEN HEAVY

1. Drew Turnbull, Cleveland, Ohio
2. Jeff Lee, Dayton, Ohio
3. Lewis Carl Hoy, New Whiteland, W. Va.
4. Don Mosholder, Newark, Ohio
5. Jack Van Dyke, Columbus, Ohio

STOCK LIGHT

1. Dave Semick, Euclid, Ohio
2. Marc Boles, St. Clair Shores, Michigan
3. Richard Smith, Columbus, Indiana

FKE I - II - III

1. Sherri Boetcher, Detroit, Michigan
2. Tom Cuthberton, Mansfield, Ohio
3. Don Rausch, Sandusky, Ohio

SPORTSMAN

1. Bob Einheit, Cleveland, Ohio
2. Dave Dickson, Mansfield, Ohio

AMERICAN REED SENIOR

1. Clayton Hargrove, N. Canton, Ohio
2. Glen Murray, Toledo, Ohio
3. Darrell Rose, Cleveland, Ohio
4. Keith Johnson, N. Olmstead, Ohio
5. Paul Grossman, Mansfield, Ohio

STOCK HEAVY

1. Dave Cuthberton, Mansfield, Ohio
2. Mike Shaw, Harper Woods, Michigan
3. J. J. Scensny, St. Clair Shores, Michigan
4. Jerry O. Reller, Cuyahoga Falls, Ohio
5. Donald Binford, Cuyahoga Falls, Ohio

JUNIOR STOCK

1. Gary Shaw, Harper Woods, Michigan

2. Don Smith, Columbus, Indiana

3. Mike Rupp, Mansfield, Ohio
4. Paul Jones, Cleveland, Ohio
5. Richard Allison, Warren, Michigan

A OPEN LIGHT

1. Drew Turnbull, Cleveland, Ohio
2. Richard Laughman, Newark, Ohio
3. Chuck Heinrich, Cleveland, Ohio
4. Dennis Campola, Eastlake, Ohio

B STOCK

1. Brandt Shaul, South Bend, Indiana
2. J. E. Lawson, Utica, Michigan
3. James Lorang, Royal Oak, Michigan
4. Lee Davidson, Cleveland, Ohio
5. Bob Anderson, Mentor, Ohio

B OPEN

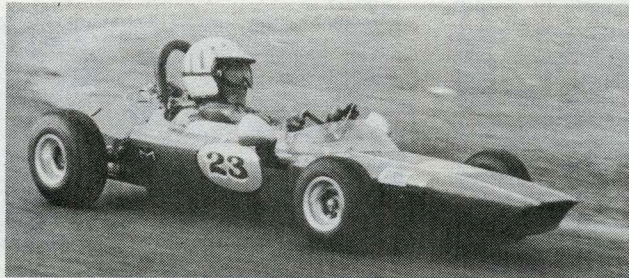
1. Bill Sanders, Toledo, Ohio
2. Ted Forman, Toledo, Ohio

AMERICAN REED JUNIOR

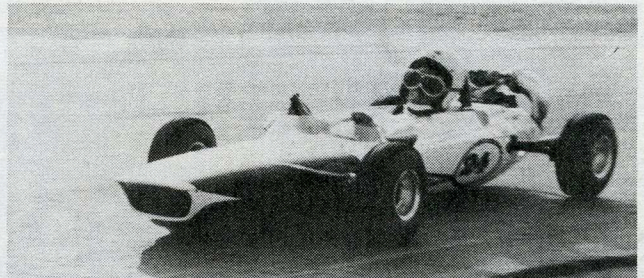
1. Robin Johnson, North Olmstead, Ohio
2. Dave Rose, Cleveland, Ohio
3. Don Meadows, Sandusky, Ohio
4. Tony Stebel, Bedford Hts., Ohio

F/5's TOP 10 NATIONAL POINTS LEADERS

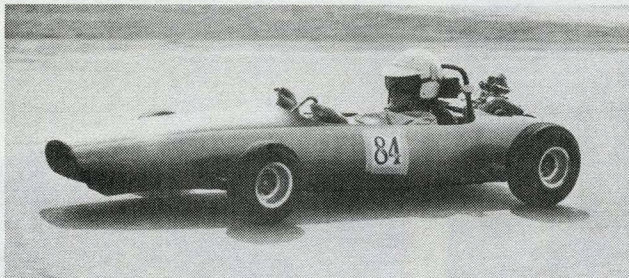
Meet the ten top FORMULA FIVE DRIVERS, per total points computed prior to mid-September. Such points are awarded via a scoring formula based on the number of cars entered where F/5 cars compete as an individual racing class. After more F/5 dates in California, this scoring will be divided, East and West, defined by the Mississippi River. Current driver standings will be published in future issues of MK magazine.



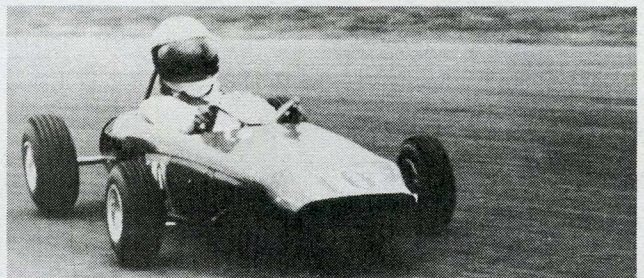
(1) HARVEY PACKARD - - - F/5 Broadsword -- Michigan



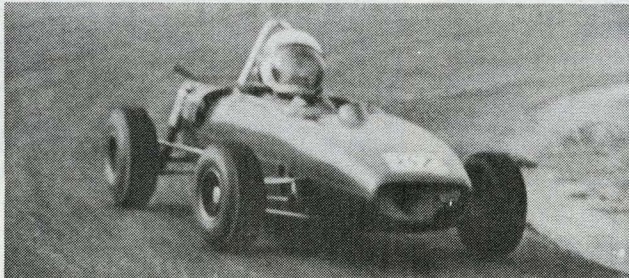
(2) BRUCE SUTTON - - - F/5 Broadsword -- Michigan



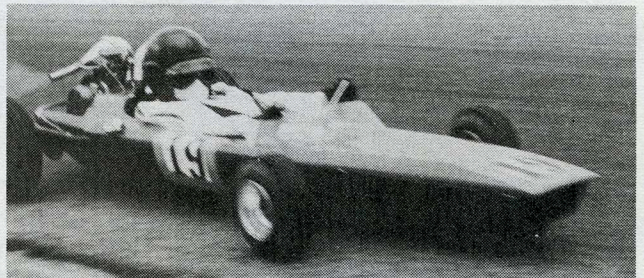
(3) PHIL REED - - - F/5 Special -- Wisconsin



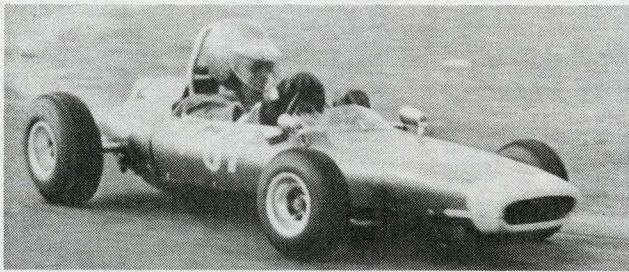
(4) MIKE MELDEAU - - - F/5 Machete -- Florida



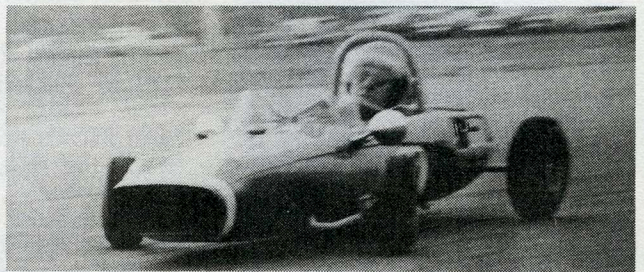
(5) JOE POHLHAMMER - - - F/5 Cutlass -- Wisconsin



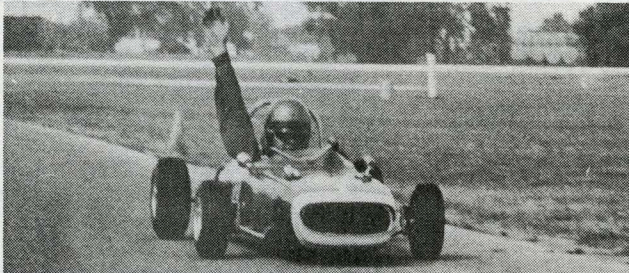
(6) JOHNNY JACUMIN - F/5 Broadsword - No. Carolina



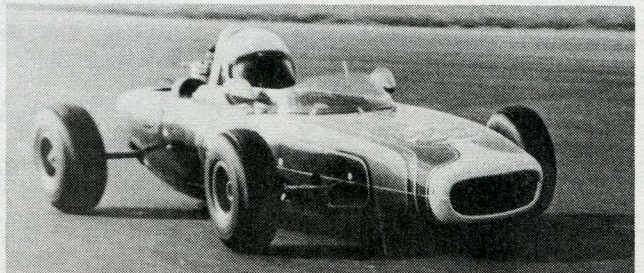
(7) TOM JOHNSON - - F/5 Broadsword -- Wisconsin



(8) DON DIPERT - - - F/5 Machete -- Indiana



(9) JIM JOHNSON - - - F/5 Machete -- Wisconsin



(10) WAYNE SMITH - - - F/5 Cutlass -- Ohio

Racing Roundup

AUBURNDALE (FLA) STREET RACE

The weekend of February 8th and 9th, Auburndale became the mecca of kart racing in Florida. Ideal weather prevailed Saturday and Sunday when the first annual "Gran Prix" kart race was held in the business district of the city.

Around 7,500 spectators lined the streets to watch the midget speedsters careen around the sharp turns of the downtown streets.

They took the turns at high speed, sometimes skidding into the bales of hay stacked along the route. The whine of the souped up engines added to the atmosphere.

At dawn Saturday morning the police department began placing barricades and blocking off the racing area from traffic.

It wasn't long before the kart racers

began arriving from all over Florida to take part in the heats. It wasn't exactly an Indianapolis "500" event but it provided many thrills for onlookers.

Civic organizations had eating booths in city park and all reported a booming business during the weekend.

The police department and volunteers were kept busy during the races keeping the track clear of spectators - and they did an excellent job.

After the races, kart owners and drivers praised the fine hospitality and cooperation of the city, the police and fire departments, the Chamber of Commerce, and all individuals who helped during the two days.

All were anxious to set up another race which will probably be done later and they expressed a desire to make it at least an annual event in Auburndale.

C. W. "Dub" Palmore, Governor of the Florida International Kart Federation, said he was well pleased with the turn-out and felt sure the next one would be even bigger.

It was indeed a big weekend for Auburndale.

The fastest time of the two days was set by Bruce Shipes of Miami, Florida.

RESULTS

JUNIOR STOCK

1. Steve Hadley, Orlando, Florida
2. Rodney Williamson, Casselberry,

B LIMITED

1. Mark Tuttle, Ft. Lauderdale, Florida
2. Glen W. Moore, Tampa, Florida

C OPEN

1. Jack McClurie, Seminole, Florida
2. Mike Foxx, Auburndale, Florida

A STOCK HEAVY

1. Ronny Mixon, Tampa, Florida
2. C. W. "Dub" Palmore, Auburndale, Florida

CLASS II

1. Jolly Rogers, Pinellas Park, Florida
2. Rick Blackwelder, Rockledge, Florida

A OPEN HEAVY

1. John D. Donker, Jr., Lakeland, Florida
2. James Dowling, Winter Haven, Florida

JUNIOR AMERICAN REED

1. Joe Anderson, Jacksonville, Florida
2. Michael Hadley, Orlando, Florida

B STOCK

1. Jimmy Rogers, Jacksonville, Florida
2. Mike Bailey, Hialeah, Florida

A OPEN LIGHT

1. Bobby Johns, Lakeland, Florida
2. Mike Scharnow, Miami, Florida

SENIOR AMERICAN REED

1. Warren Phelps, Winter Park, Florida
2. G. R. Dorna, Lakeland, Florida

A STOCK LIGHT

1. Benny Buchacher, Miami, Florida
2. Robin Thompson, Winter Haven.

POSI-SLIP CLUTCH SHOES

CHECK THE RECORD: 1969 SPRINT NATIONALS

- | | |
|-----------------------|------------------|
| *STOCK LIGHT: 1, 2, 3 | *B LIMITED: 1, 2 |
| *STOCK HEAVY: 1, 2, 3 | *C OPEN: 4 |
| OPEN LIGHT: 1, 2, 3 | STOCK JR: 1, 3 |
| *OPEN HEAVY: 1, 2 | *fast time |

THE FASTEST MODIFIED ITALIAN ENGINES ANYWHERE

Saetta - Komet - Parilla - B Bomb - \$50 ^{From}

NATIONAL CHAMP 1968, 1969: JOE VERA
FAST TIME "A STOCK HEAVY": JEFF BROWN
FAST TIME "A OPEN HEAVY": RICH BURTON

DEALERS CONTACT:

RICH BURTON
4274 COLOMBO DR.
SAN JOSE, CALIFORNIA
408/379-3735

NORTHERN CALIFORNIA DISTRIBUTOR
FOR CLUTCH SHOES:
JERRY KNAPP
MANTECA MOTOR SALES

F/5 AT WISCONSIN

Continued from Page 37

suggested that he get out there and win one for his brand new baby daughter, who's only one month old. Aside from Dave Jacobs' superb looking no. 26, which ended up with a fractured engine mount after Saturday's race, no. 24 (Bruce) became the only DNF on Sunday, due to carburetion problems after a very abrupt temperature change. The very warm, sunny weather suddenly gave way to what felt exactly like refrigerated air, scant minutes before the race commenced. Nevertheless, Bruce still ranks second in F/5 points for 1969.

The photos which accompany this feature story speak for themselves, but for those of you who are seeing MK for the first time, Formula Five is a separate racing organization with 33 governing directors located across the nation. F/5 cars are basically inexpensive, lightweight, quicker than you may imagine, and exceedingly good looking. Most are powered by potent kart engines, except for the slightly larger 360 cc Continental class cars which are also gaining in popularity. All three F/5 classes are for open wheel, GP type cars, consistent in design and relative size....and some of these gorgeous little racing machines will make you look at your stopwatch

in disbelief! Formula Five's mailing address appears elsewhere in this issue.

F/5 TROPHY WINNERS:

- (1) Harvey Packard, Bay City, Mich.
- (2) Phil Reed, Racine, Wis.
- (3) Joe Pohlhammer, West Allis, Wis.
- (4) Tom Johnson, Waukesha, Wis.
- (5) Don Dipert, Walkerton, Indiana

"Lil" INDIAN FUN KART!

"Lil" Indian Fun Kart comes with 3 and 5 H.P. Briggs & Stratton engine, dual rear brakes, mag-type wheels, true Ackerman steering, high speed bearings and speeds up to 25 m.p.h.



Sturdy tubular steel frame and massive front bumper make "Lil" Indian the strongest kart going.

It's a true FUN machine with famous built in "Lil" Indian quality for lasting fun.

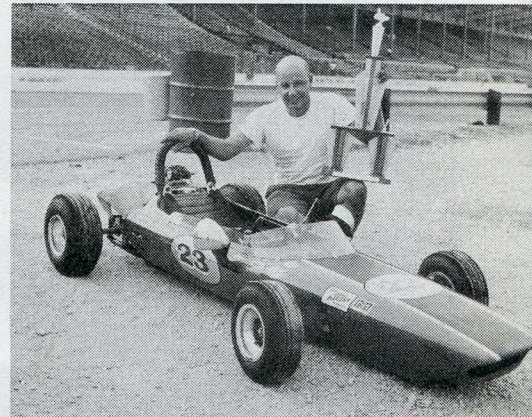
Deluxe padded seats with full length floor pan provide a comfort touch with karting fun.

Available in kits too!



MICHRINA ENTERPRISES, INC.

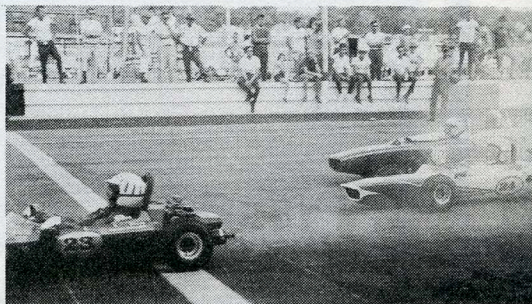
WRITE: "LIL" INDIAN KART,
11865 LEVAN ROAD, DEPT. KMK
LIVONIA, MICHIGAN 48150



National F/5 point leader, Harvey Packard, added another first place trophy to his collection.



Phil Reed, holding the broken fuel line that deprived him of victory.

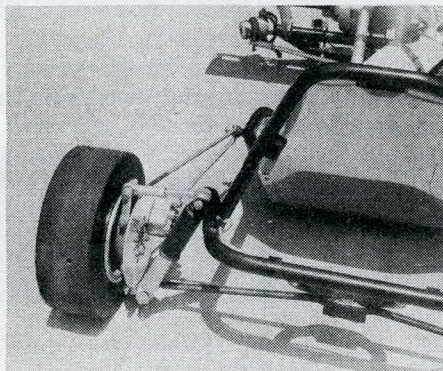


PRODUCT MART

The enclosed photographs are of the rear end of a front-wheel-drive kart which is under development. The hardware, made by DH Enterprises, may be of interest to the FKE and Formula 5 groups.

The wheels and uprights are castings of the companies design. The five-inch diameter wheels are interchangeable on the front spindles of the kart. The wheel in the photograph has been modified recently to accommodate a large diameter tapered hub. This hub becomes part of the upright assembly, giving knock-off-wheel performance. The small diameter shown in the sand cast wheel here simply could not transmit the required torque when used on the driven front wheel. The finning on the upright casting gives strength as well as aiding heat rejection from the brake.

Airheart disc brakes (6-inch) are mounted directly to the upright casting.



The brake pad is also bolted to this casting for good heat dissipation.

The unequal length arms supporting the uprights can be adjusted to vary both the camber and track width of the vehicle. The lower arm doubles as the spring which transfers the load to the wheel. This cantilevered spring is a 1/2-inch diameter rod of heat treated 4140 steel. It has been tapered by hand to give the desired spring rate.

The shock absorber is a steering damper taken from a 250cc Honda motorcycle. Cornering in the kart is hazardous when the shocks are removed -- the machine hops through the corners in an unpredictable manner. The standard fluid in the shock has been replaced with SEA 90 gear oil to give an extra measure of damping.

The A-shaped arm is mounted to the frame through rubber bushings. The rod ends are adjustable by varying the spacers in the upright casting. The resulting longitudinal movement can vary the vertical angle of the upright, or can change the wheel toe-in.

Continued on Page 46

FIRST & THE LEADER!



FRANCISCO'S COMPLETE LINE

Fuels—Additives—Nitros—

DeGummed Castor Oils—

2 and 4 Cycle

No one all purpose fuel can be right for all engines. They must be customized to meet requirements of engines-track conditions-atmospheric conditions-uses sprint or enduro.

FRANCISCO'S COMPLETE FUEL FORMULAS CONTAIN—

Ignitors-Nitros-Boosters-Coolants-Anti-Oxidants-PLUS preservatives-PLUS exclusive degummed castor lubricants that nourish and protect all moving parts. All products are processed by bonded blending specialists that no one has ever come close to duplicating.

EVALUATE YOUR FUEL AND YOUR PRODUCER

Do not associate Francisco Labs. with raw-untreated materials or unexperienced home brewers.

DEALERSHIPS OPEN

FRANCISCO LABORATORIES

3015 GLENDALE BLVD. • P.O. BOX 39742 • LOS ANGELES, CAL. 90039

say you saw it in MODERN KARTING

17 NATIONAL CHAMPS WIN WITH NITRO JOE FUELS & OILS

Nitro Joe's
PRODUCTS

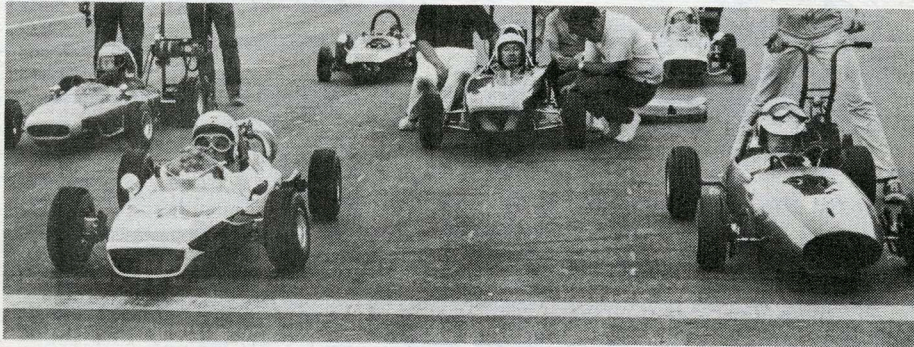


Send for Free Catalog and Decals

280 Center Rd., Monroeville, Penna., 15146 Dept. MK-9—Dealer/Distributor Inquires Invited.

F/5 NEWS

As in this photo, Formula Five grid formations are normally ala Formula One.

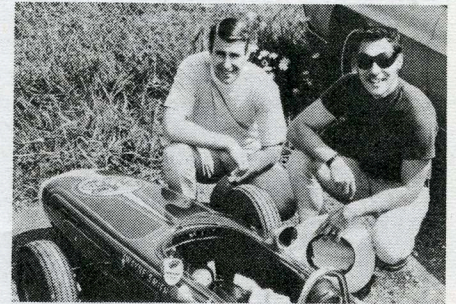


ATTENTION: ALL F/5 DRIVERS: At press time, entries are coming in for the September F/5 race at Blackhawk, and for the I.R.P. October meet. F/5 Americana class cars and F/5 Monte Carlo machines will compete, returning to Rockford, Illinois, October 18-19 for more separate FORMULA FIVE RACING'. The 1969 racing season will soon be over in northern latitudes, winding up at Virginia International Raceway, November 8-9. If you intend to enter your car in the V.I.R. event, please contact Formula Five Headquarters promptly, so that programing

can be planned accordingly. Western drivers should check dates with Charlie Hays, Healdsburg, California, phone: (707) 433-3849. Be sure to take a look at the F/5 race coverage in this issue of MK. The weatherman finally cooperated with Formula Five....in Wisconsin.

F/5 HAS SOME NEW DIRECTORS: Larry Farnsworth (Central California), Dean Montgomery (Texas), Phil Reed (Wisconsin)...and Bobby Nelson, who tested the F/5 Broadsword for MK's January issue, has since become exceedingly enthusiastic about Formula Five.

He says "I've done a lot of racing, but nothing is as much fun to drive as my F/5 car". As you may recall, Bobby is a B-Open champ from North Carolina who holds records in the East. Recently, racing his F/5 car as an FKE-1 (powered by a last year's Mac-91), he started a lap behind a full field of B-Limited karts and passed all but one of them, finishing 2nd overall! Mike Meldeau reports from Florida; "ran my F/5 car in a gully washer on a 3.25 (mile) road course and lapped B-Open in 40 minutes." Mike has a strong 101 in his Machete and ranks fourth in national points. As new cars get "sorted out" and owners find time for engine modification, more "fives" will be showing the performance potential of which they are definitely capable.



Meet Barry Basse (left) and Derr Andrik, Formula Five co-directors for Illinois.

Barry Basse's marvelously suspended car may well be one of them!

COMET KART SALES

IF IT'S FOR A KART WE HAVE IT!

LARGEST STOCK OF KARTS ANYWHERE

DISTRIBUTOR FOR MOST KARTING, ENGINE, ACCESSORIES, PARTS

KOMET & B BOMB

DISTRIBUTOR

AIRHEART DISC BRAKES

MARGAY • PARILLA • B BOMB • KOMET
 MAX-TORQUE • AUTOLIGHT • McCULLOCH • WEST BEND
 CYC. BORING • ALCOHOL • HELMETS • JACKETS
 PANTS • CHAPS • G.E.M. • HARTMAN
 HORSTMAN • WISECO • KARTANE • CRESCENT
 BLENDZALL • SPECIAL FORMULA • HEGAR

WE HAVE ENGINE PARTS-ALL KINDS

DIST: BIG J RODS for MC-90 & 101 & W.B. 820

ELECTRIC STARTERS COMPLETE LESS BATTERY - \$30.00

HEAT GAUGES-DESIGNED FOR KARTS - \$59.50

DIST: 16,000 RPM WESTACH TACHOMETERS - \$37.50 SHIPPED SAME DAY AS ORDERED DEALER INQUIRIES INVITED

DISTRIBUTOR FOR MARGAY AND HORNET KARTS

RUPP KARTS

AVENGER KARTS

**RUPP
 MINI-BIKES**

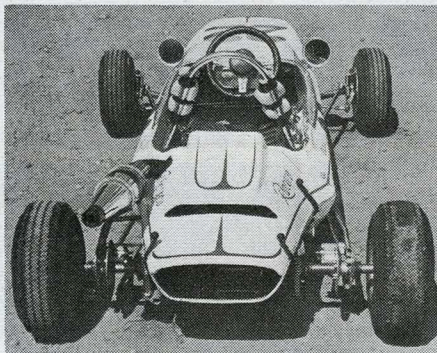
Exclusive
 Indiana **Nitro Joe's**
 Distributor Products!

GREENFIELD, INDIANA

R.R. #6 WEST NATIONAL ROAD PHONE - HO 2-4374

EMERSON 'DIZ' DISMORE

BODY SHELL FOR 360cc CARS:
 Interest in Formula Five's "Conti" class is coming alive now, and for those who prefer not to do their own fiberglass work, a gorgeous new body shell, the "SABER 360" is available....with ample space in the engine bay to hold (for example) a 350 Kawasaki. To allow 62" wheelbase cars extra width for suspension, and to accommodate a wider selection of tires, all Continental "fives" are allowed an overall width equal to 80% of their wheelbase dimension. Until recently, 47½" was the maximum for 360cc cars.



Charlie Hays' F/5 Broadsword, sleek and swift!
 (Note outboard brakes, neat rear suspension).

FLASH: CALIFORNIA REPORT: The Northern California "fives" raced on the same day this news column was prepared (September 14) so a long distance phone call was in order. Charlie Hays was again victorious in his potent little (B-Bomb powered) Broadsword (see photo above), with Tom Hutson the runner-up....at Indian Creek Raceway where the F/5 drivers were welcomed warmly....extremely so, in fact....the 500+ spectators reflecting genuine enthusiasm for the enormously appealing little Formula Five machines....like the people at Indian Creek just couldn't have been nicer! So Charlie remains on



NEW
 improved
 performance!
 more
 fuel
 flow

\$26.95



**CRESCENT RACEWAY DISTRIBUTES A FULL LINE
 OF COMPETITION KARTING ACCESSORIES**

MARGAY KARTS Sprint and Enduro models

AIRHEART DISC BRAKES	CRESCENT RACING LUBE
WISECO PISTONS	TEX-CON TIRES
GEM PRODUCTS	ELIMINATOR TIRES
AZUSA ENGINEERING	HORSTMAN PRODUCTS

CRESCENT RACEWAY
 4844 N. DETROIT AVE.
 TOLEDO, OHIO 43612



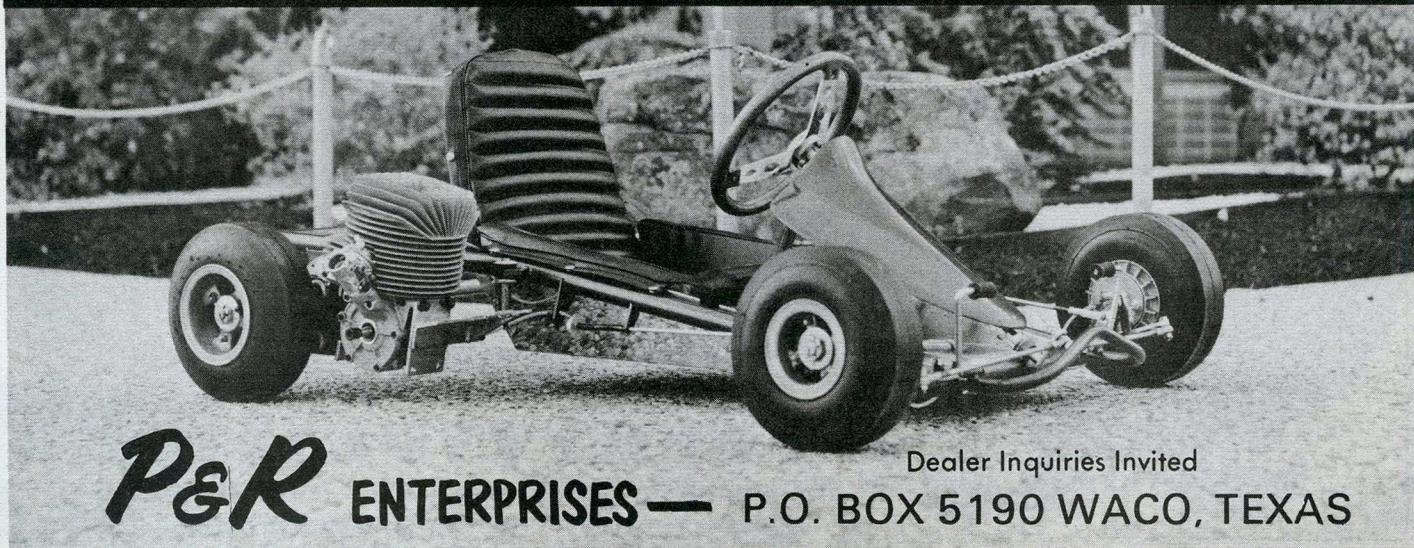
WE STOCK
 TILLOTSON PARTS

top in F/5's western point standings, followed by: (2nd) Pat Peterson, (3rd) Tom Hutson, (4th) Ray Martinelli (in Ed Saravia's car), and (5th) Bill Zarevich. The next F/5 race date on the Pacific Coast will be at Sears Point (near San Francisco Bay)....date not set quite yet. When East meets West, this guy Hays is likely to show a lot of F/5 drivers the tail end of his chromed

expansion chamber. He's smoked some very quick machinery already!

F/5's TELEPHONE TO CHANGE: Formula Five's mailing address is: 4430 Tremont Road, Evansville, Indiana 47710. If you're interested, rules for all three F/5 classes are \$2 or included with membership. Near the end of October, F/5's phone number will change from (812) 477-2638 to (812) 423-1508.

HORNET SIDEWINDER SPRINT



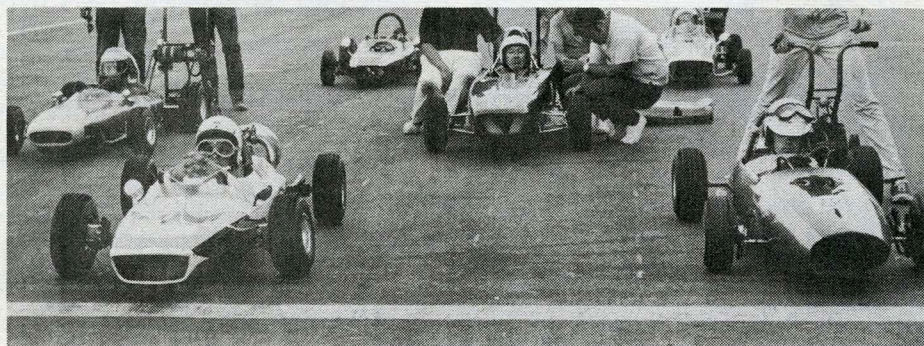
P&R

ENTERPRISES — P.O. BOX 5190 WACO, TEXAS

Dealer Inquiries Invited

F/5 NEWS

As in this photo, Formula Five grid formations are normally ala Formula One.

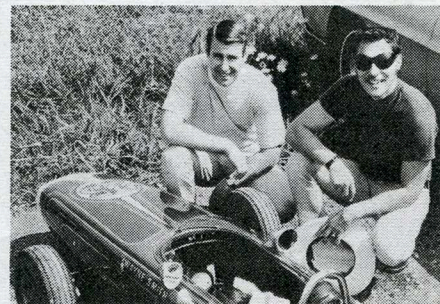


ATTENTION: ALL F/5 DRIVERS: At press time, entries are coming in for the September F/5 race at Blackhawk, and for the I.R.P. October meet. F/5 Americana class cars and F/5 Monte Carlo machines will compete, returning to Rockford, Illinois, October 18-19 for more separate FORMULA FIVE RACING. The 1969 racing season will soon be over in northern latitudes, winding up at Virginia International Raceway, November 8-9. If you intend to enter your car in the V.I.R. event, please contact Formula Five Headquarters promptly, so that programing

can be planned accordingly. Western drivers should check dates with Charlie Hays, Healdsburg, California, phone: (707) 433-3849. Be sure to take a look at the F/5 race coverage in this issue of MK. The weatherman finally cooperated with Formula Five....in Wisconsin.

F/5 HAS SOME NEW DIRECTORS: Larry Farnsworth (Central California), Dean Montgomery (Texas), Phil Reed (Wisconsin)...and Bobby Nelson, who tested the F/5 Broadsword for MK's January issue, has since become exceedingly enthusiastic about Formula Five.

He says "I've done a lot of racing, but nothing is as much fun to drive as my F/5 car". As you may recall, Bobby is a B-Open champ from North Carolina who holds records in the East. Recently, racing his F/5 car as an FKE-1 (powered by a last year's Mac-91), he started a lap behind a full field of B-Limited karts and passed all but one of them, finishing 2nd overall! Mike Meldeau reports from Florida; "ran my F/5 car in a gully washer on a 3.25 (mile) road course and lapped B-Open in 40 minutes." Mike has a strong 101 in his Machete and ranks fourth in national points. As new cars get "sorted out" and owners find time for engine modification, more "fives" will be showing the performance potential of which they are definitely capable.



Meet Barry Basse (left) and Derr Andriik, Formula Five co-directors for Illinois. Barry Basse's marvelously suspended car may well be one of them!

COMET KART SALES

IF IT'S FOR A KART WE HAVE IT!

LARGEST STOCK OF KARTS ANYWHERE

DISTRIBUTOR FOR MOST KARTING, ENGINE, ACCESSORIES, PARTS

KOMET & B BOMB

DISTRIBUTOR

AIRHEART DISC BRAKES

MARGAY • PARILLA • B BOMB • KOMET
 MAX-TORQUE • AUTOLIGHT • McCULLOCH • WEST BEND
 CYC. BORING • ALCOHOL • HELMETS • JACKETS
 PANTS • CHAPS • G.E.M. • HARTMAN
 HORSTMAN • WISECO • KARTANE • CRESCENT
 BLENDZALL • SPECIAL FORMULA • HEGAR

WE HAVE ENGINE PARTS-ALL KINDS

DIST: BIG J RODS for MC-90 & 101 & W.B. 820

ELECTRIC STARTERS COMPLETE LESS BATTERY - \$30.00

HEAT GAUGES-DESIGNED FOR KARTS - \$59.50

DIST: 16,000 RPM WESTACH TACHOMETERS - \$37.50 SHIPPED SAME DAY AS ORDERED DEALER INQUIRIES INVITED

DISTRIBUTOR FOR MARGAY AND HORNET KARTS

RUPP KARTS

AVENGER KARTS

**RUPP
 MINI-BIKES**

Exclusive
 Indiana **Nitro Joe's** Products!
 Distributor

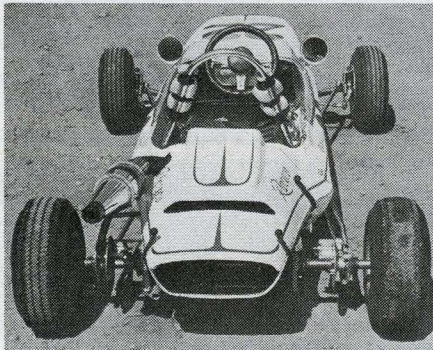
GREENFIELD, INDIANA

R.R. #6 WEST NATIONAL ROAD PHONE - HO 2-4374

EMERSON 'DIZ' DISMORE

BODY SHELL FOR 360cc CARS:

Interest in Formula Five's "Conti" class is coming alive now, and for those who prefer not to do their own fiberglass work, a gorgeous new body shell, the "SABER 360" is available....with ample space in the engine bay to hold (for example) a 350 Kawasaki. To allow 62" wheelbase cars extra width for suspension, and to accommodate a wider selection of tires, all Continental "fives" are allowed an overall width equal to 80% of their wheelbase dimension. Until recently, 47½" was the maximum for 360cc cars.



Charlie Hays' F/5 Broadsword, sleek and swift! (Note outboard brakes, neat rear suspension).

FLASH: CALIFORNIA REPORT: The Northern California "fives" raced on the same day this news column was prepared (September 14) so a long distance phone call was in order. Charlie Hays was again victorious in his potent little (B-Bomb powered) Broadsword (see photo above), with Tom Hutson the runner-up....at Indian Creek Raceway where the F/5 drivers were welcomed warmly....extremely so, in fact....the 500+ spectators reflecting genuine enthusiasm for the enormously appealing little Formula Five machines....like the people at Indian Creek just couldn't have been nicer! So Charlie remains on



NEW
improved
performance!

\$26.95

more
fuel
flow



CRESCENT RACEWAY DISTRIBUTES A FULL LINE OF COMPETITION KARTING ACCESSORIES

MARGAY KARTS Sprint and Enduro models

AIRHEART DISC BRAKES	CRESCENT RACING LUBE
WISECO PISTONS	TEX-CON TIRES
GEM PRODUCTS	ELIMINATOR TIRES
AZUSA ENGINEERING	HORSTMAN PRODUCTS

CRESCENT RACEWAY
4844 N. DETROIT AVE.
TOLEDO, OHIO 43612



WE STOCK
TILLOTSON PARTS

top in F/5's western point standings, followed by: (2nd) Pat Peterson, (3rd) Tom Hutson, (4th) Ray Martinelli (in Ed Saravia's car), and (5th) Bill Zarevich. The next F/5 race date on the Pacific Coast will be at Sears Point (near San Francisco Bay)....date not set quite yet. When East meets West, this guy Hays is likely to show a lot of F/5 drivers the tail end of his chromed

expansion chamber. He's smoked some very quick machinery already!
F/5's TELEPHONE TO CHANGE: Formula Five's mailing address is: 4430 Tremont Road, Evansville, Indiana 47710. If you're interested, rules for all three F/5 classes are \$2 or included with membership. Near the end of October, F/5's phone number will change from (812) 477-2638 to (812) 423-1508.

HORNET SIDEWINDER SPRINT



P&R

ENTERPRISES — P.O. BOX 5190 WACO, TEXAS

Dealer Inquiries Invited

MODERN KARTING / 45

EDITORIAL
(continued)

and you feel you have a valid gripe, you are entitled to voice your opinion—so do so! To your state governor for IKF, or to us in the form of a letter. MODERN KARTING is the only medium of communication in the sport other than IKF itself. We are available for you to use. We at MK feel that there are areas that can be improved upon; therefore, we welcome constructive comment on the sport. We aren't speaking of a letter that badmouths for no good reason, that doesn't help anybody. See if you can't think of a workable solution to the problem at hand, you may come up with just the right thoughts to gain general support throughout the membership.

We here at MK feel that IKF must do something to clear up the problem of race administration procedures at the Nationals. The local club is supposed to handle all race administration chores, while IKF is supposed to be concerned only with safety and general club policy. It usually winds up that IKF is called upon to administrate as well. This is generally because of inexperience on the local club's part. The job of administering an event of the magnitude of our Nationals is a real backbreaker. The local club must

be able to handle the job on its first try, and sometimes this load is enough to completely destroy teamwork due to petty quarrels. IKF winds up playing nursemaid to the local club and trying to do its own assigned duties as well. Something has to suffer. It is you, the participant.

IKF must also be willing to stay out of the race administration area—let the local club handle things in their own way. But, in the meantime, the local clubs must be, somehow, prepared to adequately cope with the job before them. Do you have any ideas?

PRODUCT MART

Continued

The assembly shown in the photographs could be adapted for rear-wheel-drive usage. Welding half of a U-joint to the one-inch diameter shaft which drives the brake disc would be one method. An alternate procedure would be to machine the outboard U-joint clevis as part of the rear spindle. Either way the task would be straight forward, but a lot of work.

A Margay gearbox would be the logical choice for a center section. The unit

could incorporate the inboard U-joint as part of the gearbox final drive. Such a unit is currently used experimentally on the front wheel drive assembly.

Since the half shafts between the gearbox and wheel transfer only engine torque, they can be relatively light. A slim 1/2-inch diameter shaft has taken the output from a modified Mc 101 using an 8.6 ratio in the gearbox. The familiar problem of transmitting both the kart weight and engine torque through a heavy shaft can be obviated with this suspension.

Those versed in suspension and its requirements may have noticed that there is no sway bar. Such a bar, or tube, coupled through a frame support to each wheel, can control body lean in a turn. The vertical spring rate will be unchanged, yet, the lean can be turned to suit the driver. Provisions for a rear sway bar on the front-wheel-drive kart have been provided. So far, testing has shown that the unit works well as shown. There are many more pressing problems to contend with at the moment. The photographs here serve only to present an idea in the development stage. Anyone genuinely interested in adapting a rear wheel drive to the independent suspension shown here should contact Dale Herbrandson, 1605 Lynngrove Drive, Manhattan Beach, Calif 90266 (213-372-6427).



BIG 'J' RODS

**HIGH TENSILE
CONNECTING RODS**

MC 91 — \$69.50

WB 820-610 — \$79.50

Engine, modifications our specialty
on Mac, West Bend, Saetta,
Parilla, Komet.

Superstock MC 91
\$135.00

NOW!

JEFFERY INDUSTRIES

IS THE OHIO DISTRIBUTOR FOR

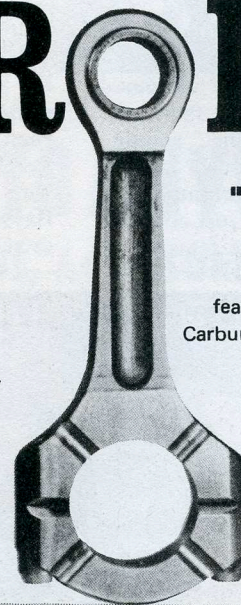
NitroJoe's

PRODUCTS

JEFFERY INDUSTRIES

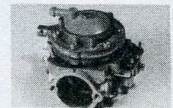
2425 Park Street — Findlay, Ohio 45840 — Phone (419) 423-7404

HOME OF "BIG J" COMPETITION ACCESSORIES



**"BIG J" 250
ALKY CARBS**

featuring the 250 Tillotson
Carburetor modified for Alcohol.

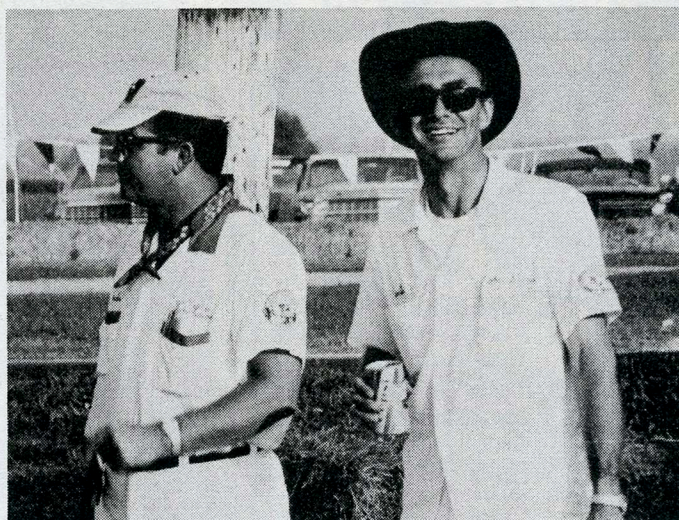


ONLY \$26⁹⁵

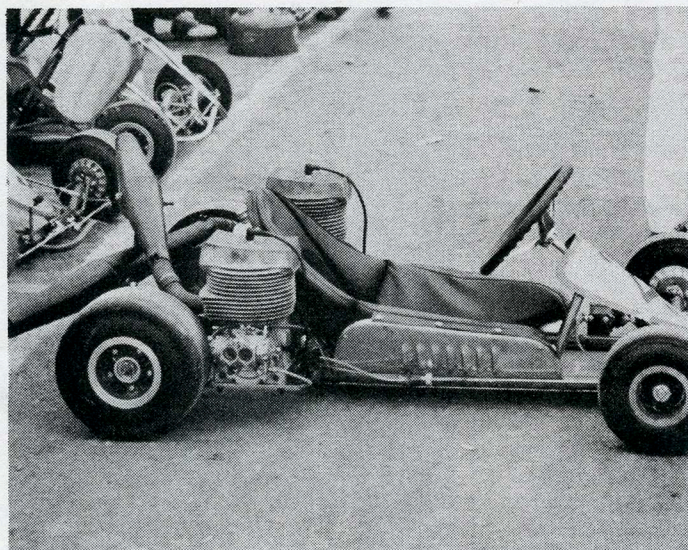
NOTE: Production on
the Lancer Kart is
indefinitely postponed.



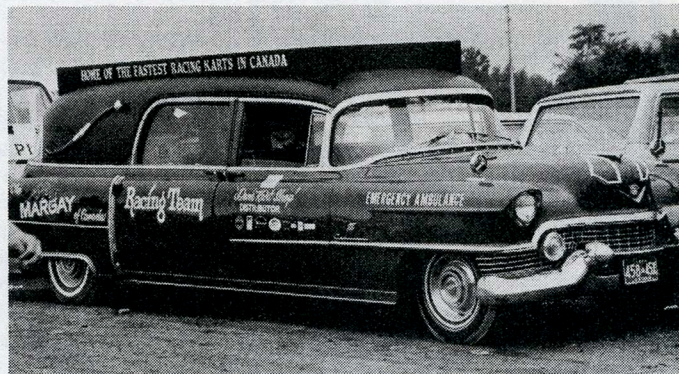
The Emmicks display their combined hardware.



Ken Eaton and John Stader take a break.



Michel's new kart will handle twin B Bombs.

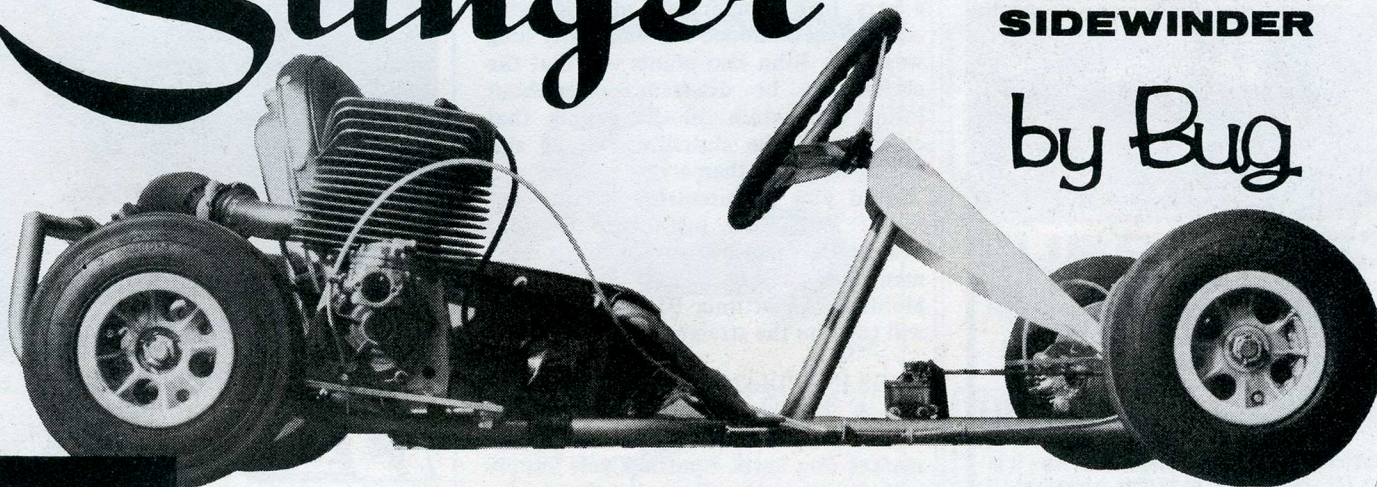


Don Goodyear travels in style.

Stinger

ITALIAN
SIDEWINDER

by Bug



STINGER W/AIRHEART BRAKES - \$349.00

SEND 25¢ FOR ALL NEW BROCHURES

K & P MFG. ■ 330 S. IRWINDALE AVE. M10 ■ AZUSA ■ CALIFORNIA ■ 91702

NEW ITEMS FROM

GEM

NEW Mac V-12 Directional Flow Manifold

Improved version of the famous GEM V-12. Provides directional flow of fuel mixture to rear of cylinder to improve loop scavenging effect.

Gives additional stuffing, lower reed cage and features new styling. Already proven at tracks from coast to coast.

G 1365A—complete \$29.95

G 1366 (V-12 directional flow base with screws & gasket) to convert & update G 1370 manifold \$12.95

Mac Super Stuffer

Gives maximum bolt on crankcase stuffing. Reduces crankcase volume for higher initial compression.

G1322 with gasket \$5.95

GEM

PRODUCTS
Box 845 Carol Stream, Illinois 60187

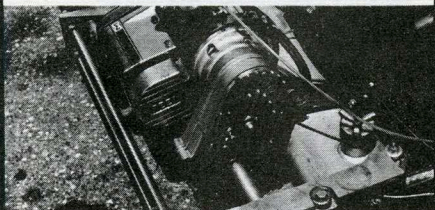
GO WITH PRO!

The Distributor with Everything

Hornet Karts
Sidewinders

Pro is Northeast U.S.A. Distributor

Pro Dyna Drive Gear Box



Pro Super Lube

Better than castor. Approved in stock classes. Run in many modifieds. Plastic Bounceable bottles. \$3.00 per quart—Dealer & Distributor discounts apply on case lots where deserved.

Parilla & Komet Engines B Bombs and better

Write for prices and accessories.

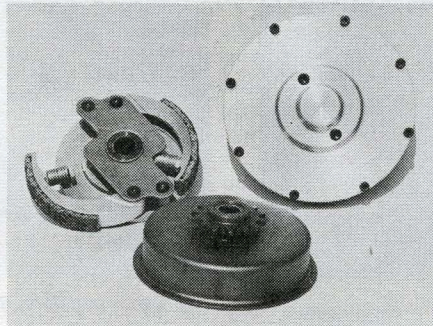
Whatever you need in karting . . . we have it in our big, big catalog of karting equipment. If you can't get it at your dealers, we have it at Pro.

Send 75¢ for latest information and price catalog.

Pro Distributing Palatine, Illinois

PRODUCT MART

THE NEW ADJUST-A-SLIP CLUTCH FROM HARTMAN



John Hartman has introduced a new oil clutch that is built especially to cope with the rigors of enduro racing. The Hartman team at the Enduro Nationals carried out final testing under the most trying conditions—open competition. The clutch performed flawlessly, and helped Kathey Hartman to stretch out tremendous leads in three classes.

The clutch incorporates a new design principle, using no springs to control contact shoe engagement. Rather, centrifugal force is the engagement mechanism. The shoes swing out from the backing plate on a single pivot at the leading edge of the shoe, and are weighted to provide the necessary inertial force to cause driving friction against the clutch drum. This is the source of the name "adjust-a-slip". By adding or subtracting brass washers on the weighting stud, the engagement speed of the clutch can be varied. This feature enables the user to adjust engagement speeds to fit the course and/or wear and tear.

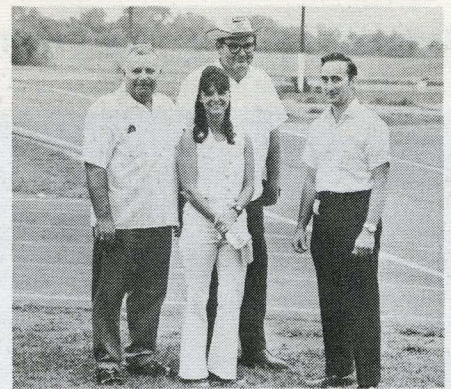
The engagement shoe facing material is a very high temperature material with sintered metal added for extremely long wear life. John also points out that the clutch can be disassembled without losing the clutch oil—the supply that comes with the clutch should be sufficient for more than a year's racing.

Would you be interested to find out more? Well, then, just write to your nearest Hartman distributor, or to Hartman Engineering, 3731 Park Place, Montrose, California 91020, and John will tell you the straight "stuff"!

BUGS IN INDIANA

K & P Manufacturing and Central Cycle Supply have joined forces to market Bug karts. Central Cycle Supply will become the Bug distributor for Indiana and will handle the Bug "Sprint" and "Stinger Sidewinder" for Italian engines.

Central Cycle Supply is currently act-



L to R Tom Pierson, Faye Pierson and Bud Evans of K&P with Lloyd Millikan of Central Cycle Supply.

ing as distributor for Bug karts and Azusa parts, and is located at 51025 U. S. 31 North, South Bend, Indiana 46637.

1970 dealer catalog for karts, parts and accessories

featuring... Bug and **MARGAY** Karts.

Plus popular name parts and accessories. We furnish parts - not excuses or back orders. Let us handle your Karting needs from the largest inventory in the Midwest. Request catalog on your letterhead.

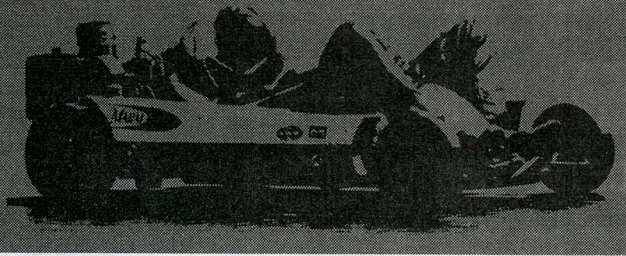
WHOLESALE ONLY!
(Please NO Retail inquiries.)

Central Cycle Supply has UPS service to all 33 Midwest, Eastern, and Southern States.



Telephone A/C (219)
272-0252 or 272-4766

RACING AHEAD



CHAMPIONSHIP ENDURO

October 11 - 12

I. R. P., Chainbreakers Kart Club

October 18 - 19

Warbonnet Raceway, Clayton Walker,
5643 South Pittsburgh, Tulsa, Okla-
homa
Blackhawk Farms, Rockford, Illinois

October 25 - 26

Vaca Valley Raceway, Vacaville, Calif-
ornia, c/o Dick Abbas, 164 Via Del Sol,
Walnut Creek, California

November 1 - 2

Austin Raceway Park, Austin, Texas,
c/o Mac Anderson

November 8 - 9

V.I.R., Danville, Virginia, Barney Peeler,
Jr.

San Antonio, Texas, Jack Harrison, Post
Office Box 13298, San Antonio, Texas

October 18 - 19

Dart Kart Speedway, Stan Keen, Post
Office Box 685, Mansfield, Ohio

October 25 - 26

New Whiteland Track, Chainbreakers
Kart Club

Woodbridge Kart Track, Mildred Kock,
1371 California Street, Woodbridge,
Virginia 22191

Waco, Texas, Alex Chunn, Post Office
Box 5190, Waco, Texas

November 1 - 2

H. R. S. Raceway, San Jose, California

Crescent Raceways, James Vail, 4844
North Detroit, Toledo, Ohio 43612

Louisville, Kentucky

CHAMPIONSHIP SPRINT

October 11 - 12

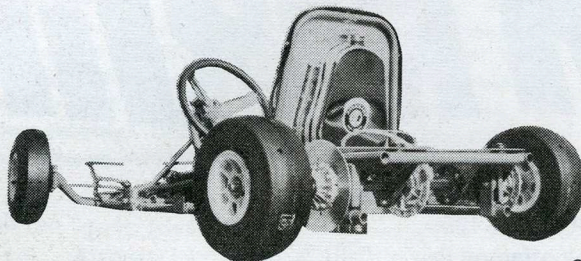
Loudon Co. Kart Track, Loudon, Tenn-
essee (October 12th only)

*Race dates will be printed as space
permits. Send announcements to:
MODERN KARTING
Twentieth Century Publications
P.O. Box 1880
Huntington Beach, California
92648*

THE SORCERERS APPRENTICE

**Red Devil's
Dual American**

DEALER'S?
YES!



**NEW! CATALOG
IN 3 WEEKS**

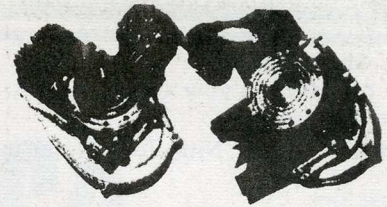
WITH PATENTED
TORSION-FLEX
SUSPENSION (US Pat No 430915)



MFG By

Red Devil Engineering

400 WEST MOORE ST WALLA WALLA, WN 99362 Ph 525-6130



New F.M.S. Oil Clutch

This new self contained machined housing encloses the Rev-Grip Clutch to run in oil. The drum fits into the counter-bored housing and is sealed with an asbestos gasket. The unit is designed for chain drive models to conform with IKF rules regarding wet type clutches. Get the best starts off the line and more rev out of corners with longer clutch shoe life. Available for MC inboard or outboard. W.B. and foreign engines 9 thru 18T

F.M.S.-24. Oil Clutch complete unit with sealed drum and modified rev-grip hub and shoe assy. MC and W.B. 9 thru 15T\$44.90

F.M.S.-25. Oil Clutch with sealed drum and sprocket ready to install with your hub and shoe assy. MC and W.B. 9 thru 15T\$29.90

Instruction and parts list brochure included. Also mailed free on request. Specify application. MC inboard requires countersunk engine side plate mount listed in parts brochure.

Write for Free Service Brochure or send \$1.00 for new 54 page F.M.S. catalog of karts, parts and accessories.

**FAIRFIELD SERVICE
9120 WILSON RD.
INDEPENDENCE, MO. 64053
Area code 816/252-9422**

SUBSCRIBE TO MODERN KARTING

DEALER CATALOG

NOW AVAILABLE ----- \$1.00

Write on Your Letterhead

HALL'S SPEED SHOP

1205 E. LINCOLN, WICHITA, KAN. 67211
PHONE (316) 262-5154

SUBSCRIBE MODERN KARTING

ORIGINAL MAG SPOKES

4", 5", 6"

PRECISION WHEEL MANUFACTURING

1050 EDELS. S.E.
GRAND RAPIDS, MICH 49508

94TH TO THIRD WITH NITRO JOE

Enclosed please find a letter from Alan Smith which we would like to have published in your magazine, if at all possible.

J.A. Victoria, Nitro Joe's Products

Dear Sirs:

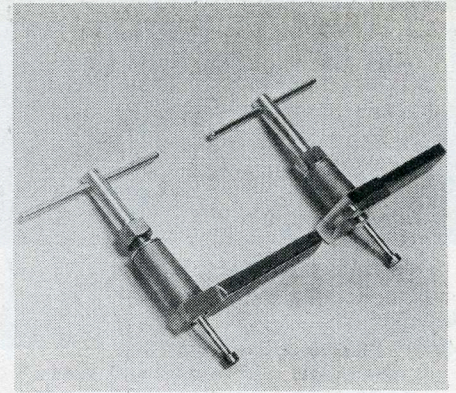
I would like to thank you very much for the trophy I received at the En-

duro Nationals.

The trophy was awarded to me for gaining the most places in the entire Nationals.

I was running "Nitro Joe's" super fuel concentrate, which I believe gave me the extra horsepower to move from ninety-fourth position, to third in the American Reed Senior.

Alan Smith St. Charles, Illinois



WRIST PIN PULLER

Hegar 4 Products has introduced an extremely handy new tool for karters. We are speaking of their new pin puller for McCulloch engines. Two models are offered, one for the Mc 91 and one for the Mc 101.

With these handy little gajets, the piston pin can be removed quickly and easily, even under adverse conditions, such as between races or in the pits. There is no chance of cracking or distorting the piston when using these pin pullers. ("Put away the sledgehammer, Marge.") They are sold separately or as a complete 91 - 101 kit. The complete kit sells for \$18.95 or, separately at 12.95 each. Contact Hegar 4 Products at 5101 S. E. 17th Avenue, Portland, Oregon 97202.

CANADIANS RED DEVIL KARTS

PATENTED TORSION RIDE
SPRINT - ENDURO - FKE

'LIL' INDIAN MINI-BIKES KOMET K88 ENGINES

AIRHEART AZUSA HORSTMAN

TORONTO AREA DEALER
BOB STEVENSON'S KARTS & SNOWMOBILES
ITALIAN ENGINE DISTRIBUTOR 2753 WESTON RD. TORONTO, ONTARIO

DISTRIBUTED BY SASCO ENTERPRISES
124 MANVILLE RD. TORONTO, ONTARIO DEALER INQUIRIES INVITED

Keep Pace with 1969 SUBSCRIBE TO MODERN KARTING

Make MODERN KARTING a constant companion—there's just no other way to keep up to date on all the racing activity nationwide. MODERN KARTING's technical staff will keep you informed on all the new machines, engines and accessories with stimulating articles—in depth coverage written by karters for karters. Big issues EACH MONTH—so, keep informed—buy a 12-pack now—one full year of MODERN KARTING delivered right to your home, only \$7.50

MAIL THIS COUPON NOW!

MODERN KARTING

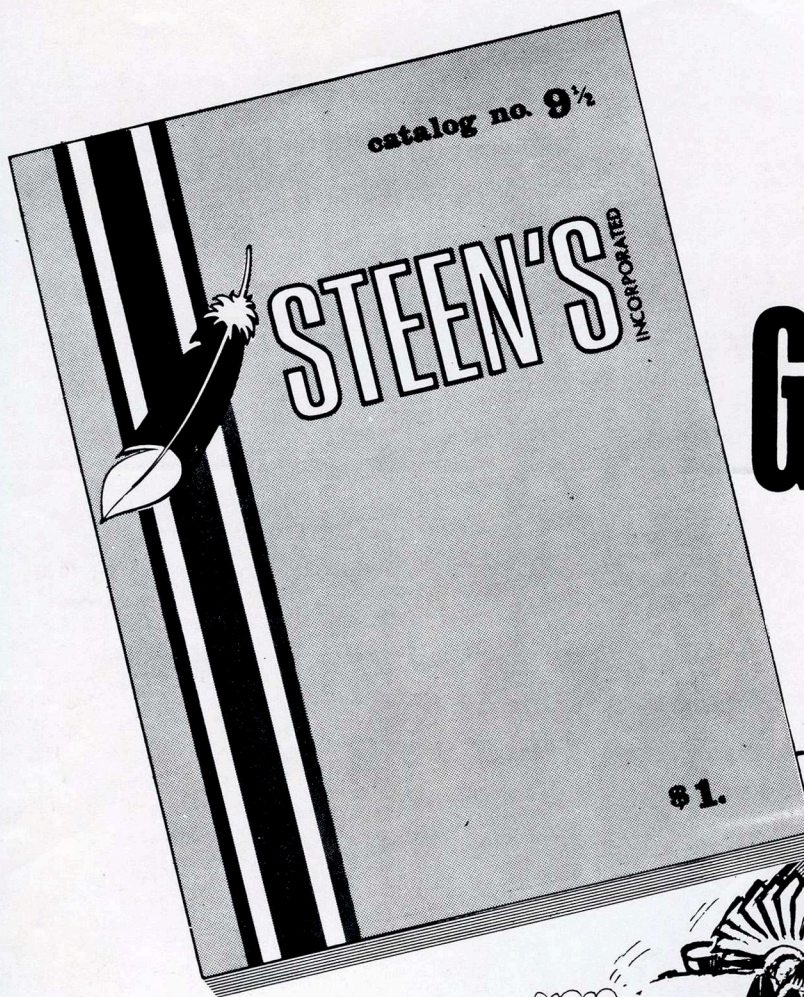
P.O. Box 1880
Huntington Beach, Calif. 92647

CASH
CHECK
MONEY ORDER

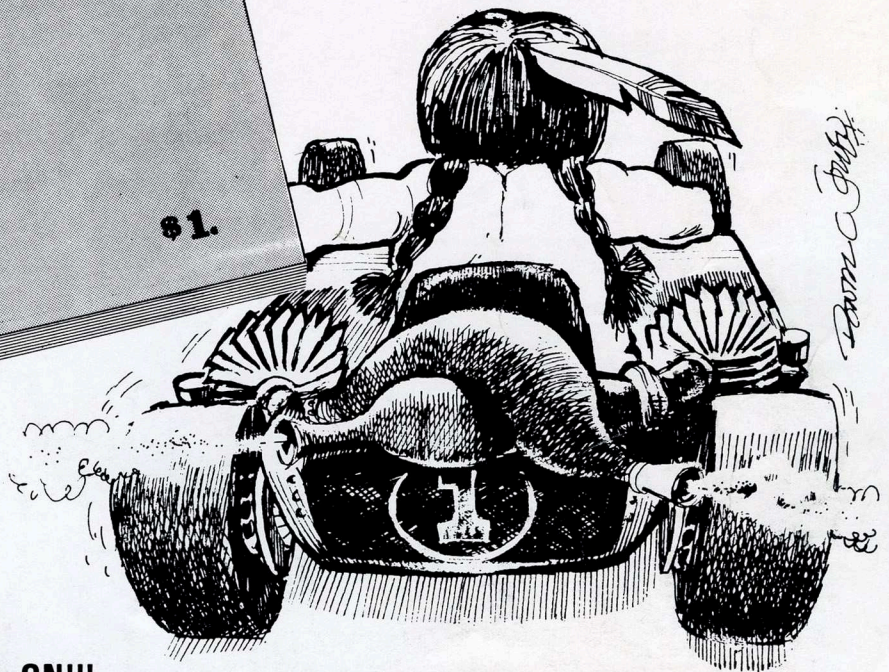
YES, I WANT TO BUY A 12-PACK OF MODERN KARTING. Enclosed is \$7.50. Send to:

NAME _____
ADDRESS _____
CITY _____
STATE _____ ZIP _____

Canadian and Foreign subscribers add 1.00 per year.
Please forward International Money Order Only.



GO GET-UM!



THE WILD WEST LIVES ON!!!

Yep, the Indians at STEEN'S are still as wild as ever about karting! STEEN'S has been supplying karter's needs since the "early days" of the sport, when the kart frontier had just opened up. Times have changed, with all sorts of "civilized" parts and accessories now available, and STEEN'S Trading Post has them all! Yessir, STEEN'S has grown right along with the sport, even hiring more Indians, but only ones who are enthusiasts (one of our braver braves recently won the IKF Winternationals B-Open championship). These enthusiasts know karting, and know you don't like waiting for parts, so they hustle your orders out quicker than ol' Custer said "Oops"!

STEEN'S distributes all the "good guys" products. See if you recognize the names of these heroes: Airheart, Azusa, Bendix, Briggs & Stratton, Carlisle, Crescent, Eliminator, Francisco, GEM, Goodyear, Hegar 4, Hornet, Horstman, McCulloch. And of course there's Mercury, Reed, Rupp, Simichrome, Steen-C, West Bend, and Wiseco - all good friends of karters, and all found at STEEN'S.

So...send that buck NOW for the latest edition of STEEN'S "happy hunting ground" - Catalog 9 1/2 !

**RUSH ME CATALOG NO 9 1/2
SO I CAN GO GET 'EM!**

NAME _____

ADDRESS _____

CITY _____

STATE _____

ZIP _____

STEEN'S
INCORPORATED

BOX 2276 P
ALHAMBRA, CA. 91803

cut it out!

CONGRATULATIONS

ALL SPRINT NATIONALS WINNERS

AND 1969 I. K. F. GRAND NATIONAL CHAMPION

*LINDA EMMICK

Linda established a new B-Limited track record aboard her MARGAY Sidewinder and then proceeded to sweep all three of her heats with husband Gary Emmick's modified B-Bomb providing the push. MARGAY Sidewinders with Emmick Engines also set fast time and established new track records in stock light and C-Open classes.

MARGAY WINNERS:

PLACES FINISHED IN TOP 5
OF EACH CLASS

Stock Jr.—3rd.
Stock Light—1st, 2nd, 3rd, 5th
Stock Heavy—2nd, 3rd
Open Light—2nd
Open Heavy—2nd
B-Limited—1st, 2nd, 4th
C-Open—3rd, 4th

MARGAY KARTS SET FASTEST QUALIFYING TIMES
Stock Light, Stock Heavy, Open Heavy, B-Limited, C Open

MARGAY KARTS Established new track records over any other single make at this year's Nationals.

MARGAY PRODUCTS

3185 SOUTH KINGSHIGHWAY, ST. LOUIS, MISSOURI