

WHAT'S NEW FOR INDY?

by RAY BROCK

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Starting with the most successful car builder in recent years, we dropped in to see A. J. Watson in Glendale. Watson-built cars followed up the '56 win with victories in '59 and '60 and are noted for their simplicity of construction and light weight. This year, Watson has built two new cars, making radical changes in suspension and using smaller diameter frame tubing which he believes will combine to trim almost 100 pounds off the total car weight. Instead of the torsion bar type suspension which has become universal at Indy in recent years, Watson is using special coil spring-shock units, designed by Monroe Shock Absorber Company, at each wheel. The total weight of four of these units is 80 pounds less than the conventional torsion bars, torsion arms, shock absorbers, etc. The last 20 pounds of the 100 saved is the result of the lighter tubing and slightly different frame design.

The new cars will carry the name of the Leader Card 500 Roadsters and will be driven by two of the best drivers in the business, '59 winner Roger Ward and Johnny Boyd. Just how the new suspension layout will work is an unknown quantity as we go to press but Watson isn't often wrong so prospects look good. Just in case things don't work quite as expected, brackets have been included in the frame so that torsion bars can be installed at the rear of the car. Only the rear is anticipated as a possible trouble spot due to the heavy fuel loads that must be carried. The rest of the new car's design follows the proven Watson method of upright Offy engine and torque tube driveline mounted on the left side of the car, driver on the right. The nose and tail sections are molded fiberglass, the cowl is aluminum and flat underpans are magnesium.

Our next stop was at Kurtis-Kraft where Frank Kurtis, dean of race car builders, had three cars nearing completion. One car was for Fred Gerhardt and will be driven by Jack Turner. The car is conventional in design with the engine mounted on the left side of the car and tilted 18° more to the left requiring a large bubble behind the left front wheel. As with most recent Indy cars, the body is offset a couple of inches toward the left side so that the majority of the weight is to the inside

for the turns. A second car, Tassie Vatis owner and Chuck Hulse driver, is identical to Gerhardt's car. The third car differs slightly with the engine set straight up, otherwise everything else is the same. This last car is owned by William Tucker and will be driven by Bob Christie.

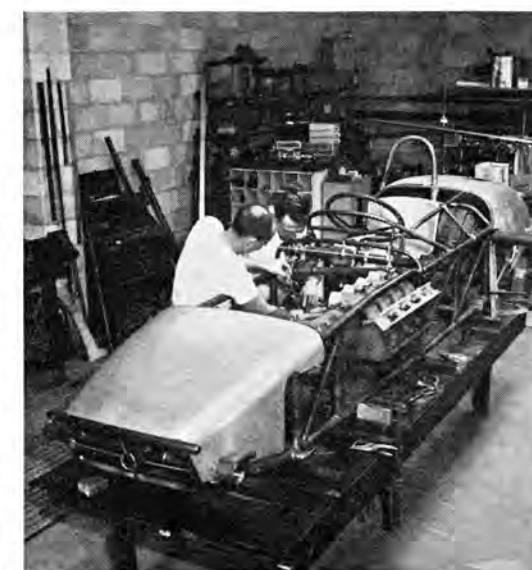
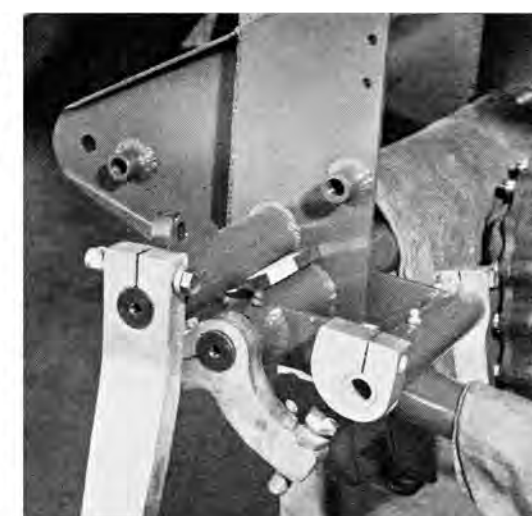
Only one all-new car was turned out by Quinn Epperly's shop for the '61 race but a couple of more cars were worked over to improve their potential. One of the cars that received a chassis tune-up was the Demler Special which finished second in '58 with George Amick driving, fifth in '59 and third in '60 with Paul Goldsmith driving. This year the car will be driven by Jim Hurtubise, 1960 Rookie of the Year and holder of the Indy qualification record of 149-plus mph. The second car which came back in Epperly's shop for modifications was brand new last year but wasn't completed in time to get a thorough shake-down so didn't make a qualification attempt at the '60 500. This car was tried out after last year's race by veteran driver Tony Bettenhausen and he turned several laps above 147 mph so Tony's boss, Lindsey Hopkins, bought the car for Tony to drive this year. The engine lies 18° off horizontal on the left side with the upper part of the engine extending through the frame rails to add extra weight on the left side of the car while permitting the driveline to pass by the left side of the driver. The new car was built by Epperly for the Hoover Trucking Company and is a duplicate of the Hopkins car. It will be driven by Don Branson, fourth place finisher last year.

(Continued on following page)

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RIGHT—New Hoover Special being built by Quinn Epperly also features the engine mounted on the left side of the car with upper part of block and cam towers projecting through frame.

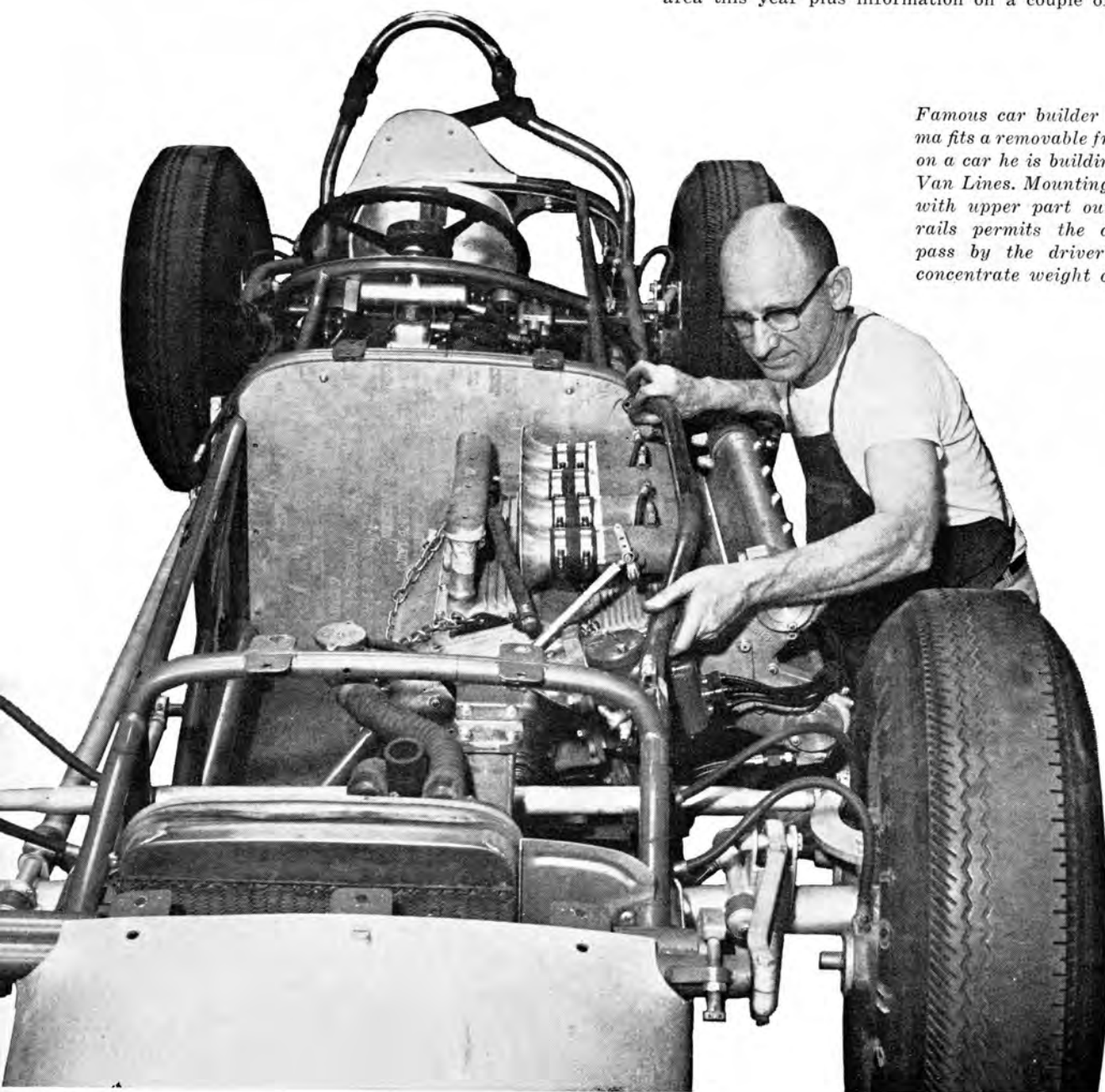


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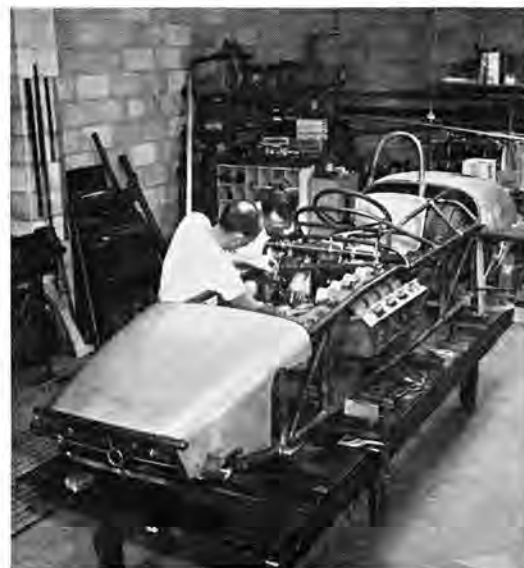
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WHAT'S NEW FOR INDY? continued



ABOVE — Eelco Special is a '57 Kuzma model but has been reworked for the '61 race by moving engine back 3 inches modifying nose and tail sections. Russ Congdon will drive

LEFT — J. C. Agajanian and mechanic Johnny Pauelson pose by Aggie's Willard Battery Special with driver Parnell Jones. '60 Watson car is identical to last year's winner

For the first time since 1952 when world champion Alberto Ascari did the trick, a foreign car and driver will try to make the starting lineup for a Memorial Day race. World champion Jack Brabham will try to qualify a rear-engine Cooper Grand Prix car. Last summer Brabham toured the track at 145 mph in a Cooper and will reportedly make the attempt this year in a similar car that has a little more engine displacement and probably some more speed. The 165-inch Climax engine falls well short of the maximum allowed unsupercharged displacement of 255 inches but makes up for this shortcoming with very light weight and good cornering speed. We understand that last summer's practice runs were made on soft rubber sports tires and that they were completely worn out in less than ten laps. Dunlop is building the tires for Brabham's Cooper but from what we have heard on the subject, they will have to sacrifice some speed to get a longer wearing tread compound. Because of the small displacement engine and possible slow-down with the change in tire design, we predict that Brabham and the Cooper will not be a major threat to the Offy-powered roadsters although it should make the 33-car qualifying line-up.

Another car which will feature a rear-engine location and attract plenty of attention is Jack Zink's Offy-powered Trackburner. The original idea behind Zink's car was to use a gas turbine

powerplant but when the engine was not readied in time, an Offenhauser was installed. This car is being constructed by Zink's chief mechanic Dennie Moore and will be driven by Troy Ruttman. The Offy engine and transmission will hook directly to a Halibrand quick-change center section with double-jointed axles to the rear wheels. Independent suspension will be used on all four wheels with special upper and lower A-arms both front and rear. Springing will be with combination coils and shocks like Watson is using but midget race car torsion bars will also be used to permit easy weight-jacking when adjusting the chassis.

Among the interesting features of the car are two 35-gallon fuel tanks, one on either side of the car, which are located at the center of balance so that the car's handling will not be changed as fuel is consumed. The car is designed to weigh 1400 pounds dry which is about 200 pounds less than the lightest conventional car and about 100 pounds lighter than the new Watson cars. The success of this car probably depends a lot on how good the weather is at Indianapolis during May, because there will probably be a lot of bugs to be worked out and this takes lots of practice. One thing for sure, if this car gets a good qualifying speed, you can look for a switch to rear engined cars in 1962.

The crowd-pleasing Novis have had

a rough time the past couple of years, failing to make the race, and they almost didn't even show up at the track this year due to financial difficulties of the man behind the Novis, Lew Welch. Late in March, the cars and the equipment were purchased by Paxton Products, manufacturers of McCulloch and Paxton superchargers. The blowers on these 168-inch V8's were originally designed by McCulloch so under the new title of Paxton Products Supercharged V8 Special, they are aptly named. With such a late start on the cars, the three Granatelli Brothers started an all-out program to get only one car ready. Novi specialist Jean Marcenac has been retained to help get the engine in shape and Frank Kurtis is changing the chassis around according to the new owners' plans. At this time, no driver has been signed.

Other cars which are not new this year but have been completely refurbished for the race include last year's pole position winner, the Dean Van Lines Special driven by Eddie Sachs. It is a '60 Watson chassis and has been sharpened up by mechanic Clint Brawner. Clint will also supervise the preparation of a second Dean car, a '59 Kuzma chassis which was reworked by Kuzma this last winter so that the engine is now laid over 18° from horizontal to the left side of the car with the upper part of the engine extending through the frame rails. A third Dean car will be prepared by Danny Oaks,

who was the mechanic for Jim Hurtubise's car last year. Danny will be in charge of a modernized '57 Kuzma chassis which has been completely rebuilt. It will use an upright engine on the left side of the car and will be driven by ninth place finisher in '60, Bud Tinglestad.

The Metal-Cal Special which was driven last year by the late Jimmy Bryan has been changed slightly for the '61 race by mechanic George Salih and will be chauffeured by Chuck Stevenson. Chuck was in contention last year until a car just ahead of him got into trouble forcing Chuck into the infield where he spun out and killed his engine. With the small, lightweight Metal-Cal car and an experienced, calm driver like Stevenson, Salih's car should have a good chance.

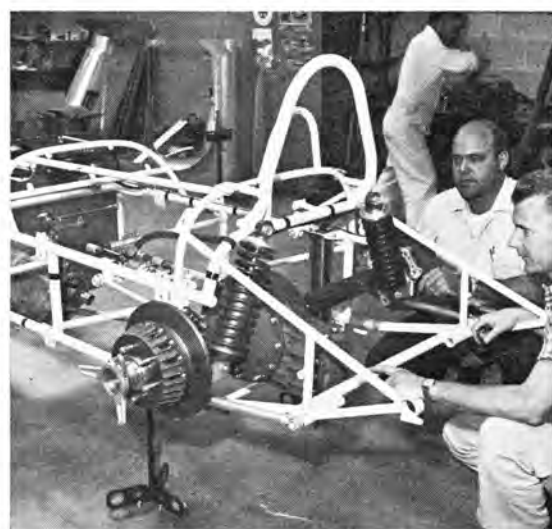
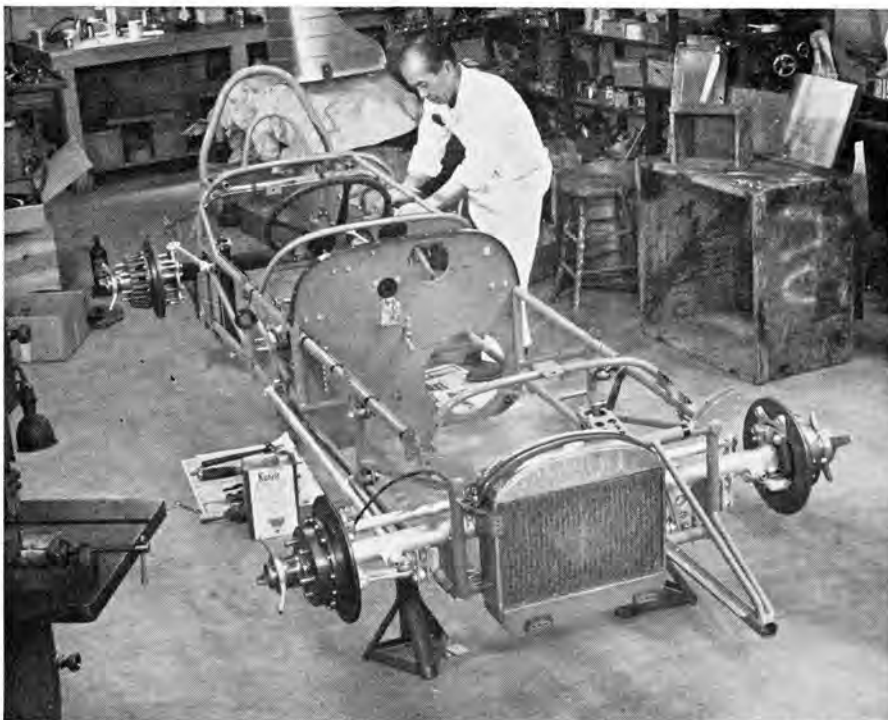
Salih also reworked a car during the past winter which was new last year but failed to qualify. It is the Auto-Dynamics Special and was built by Lujie Lesovsky. Modifications were mostly of a minor nature but should help the performance. The job of final preparation and care during the month of May will be handled by Edger Elder with Lloyd Ruby slated to drive.

A good pre-race favorite to win Rookie of the Year honors is Parnelli Jones of Los Angeles. He will be making his first attempt in J. C. Agajanian's car which Watson built last year and finished seventh with Lloyd Ruby driving. Parnelli has had plenty of racing experience and is usually a contender for the championship in any circuit he drives.

The pole position car for 1959, a Lesovsky car built in '59 and driven the last two years by the late Johnny Thompson will once again run under the Racing Associates banner but will be driven this year by Paul Goldsmith. Mechanics Herb Porter and Bob Phillips have constructed a new car along the same lines as the Lesovsky car and it will probably be driven by Roger McClusky. Both of these cars feature the engine mounted on the right side

(Continued on following page)

TOP — Chickie Hirashima, mechanic on last year's winning car, assembles new Watson car which he will groom for Leader Card; Johnny Boyd driver. **CENTER LEFT** — Watson cars have three lightweight air cylinders fastened to frame which quickly raise the car off pit apron for fast tire changes. **CENTER RIGHT** — A. J. Watson explains new coil spring-shock absorber to Ray Brock. Coils save 20 pounds per wheel over conventional torsion bars. **RIGHT** — George Salih's Metal-Cal Special has driveline on right side of driver with top of engine tilted over to the left. Chuck Stevenson will drive.





Autolite will invade the Indianapolis field this year with dealer association sponsorship of Lindsey Hopkin's car to be driven by Tony Bettenhausen. Car is a '60 Epperly model but was a late arrival at the speedway last year and did not attempt to qualify. This car was one of the first to lay the engine 18° off horizontal with top half through frame.

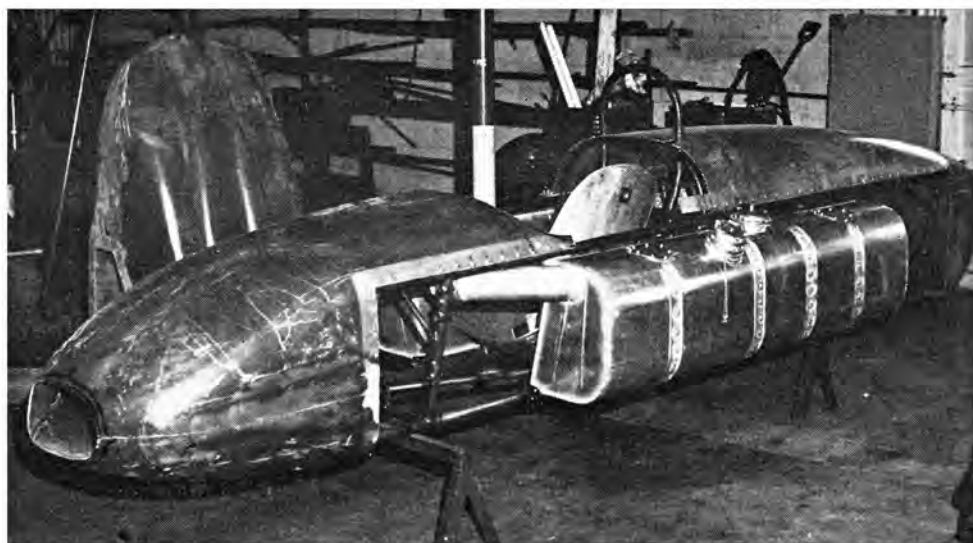
of the car and tilted over to the left until it is nearly horizontal. The driver sits on the left side of the car.

1960 National champion A. J. Foyt will have a new car this year and again race under the name of the Bowes Seal Fast Special. Co-owner and chief mechanic George Bignotti has assembled the car from a number of sources and it can best be described as looking like a Watson chassis but slightly longer both front and rear. The frame is much lighter than average and magnesium has been used throughout to cut down on weight. Something new has been cooked up by Bignotti for the brake discs. Beryllium metal, which weighs only 1/5th as much as steel, has been used for the discs with a total reduction in weight of 36 pounds for the four wheels. George claims that the dissipation of heat is better with the beryllium, too, so brakes should be better. Brush Beryllium Company made up the discs and if they work as hoped on the Bowes car, will probably get Brush some brake disc business.

Although we didn't have a chance to personally inspect all the cars that will try for the 33 starting spots this year, we saw most of the new ones and have a pretty good idea of how last year's cars and drivers will pair up so now it is time to make some selections. This problem of making selections is getting tougher every year but we'll choose five and hope that we can keep our record untarnished with one of them taking the checkered flag. Our choices: Roger Ward, new car and Watson as mechanic; Jim Rathmann, last year's winning car but it has the speed to do it again, Smokey Yunick mechanic; Johnny Boyd, a new car by Watson, last year's winning mechanic Chickie Hirashima; Chuck Stevenson, a steady driver with a good car and crew headed by George Salih; Paul

Goldsmith, this car will fly with a stop somewhere. Whether we have the good driver like Paul, Porter and winner or not, this '61 race should be a real dandy and we wouldn't miss it. Phillips, mechanics.

There are our selections. There are Check with us again in the August at least five more whom we would like issue and we'll give you the inside to have included, too, but we've got to story with photos.



Zink Trackburner was originally scheduled to use a turbine engine but it wasn't ready in time so an Offy will be used in this first rear engined car to race at Indy in a couple of decades. Two saddle-type fuel tanks concentrate fuel at center of balance; most of the body sections are fiberglass. At right, fabricated A-arms will be used front and rear for the Zink car which will have double U-jointed axles between rear axle gears and wheels. Front spindle is modified Ford passenger car item.



Photos by Eric Rickman,
Les Nehamkin, Ed Spilman