MISSION STATEMENT

A) To discover, identify, gather, preserve, and display documents, records, items, etc. pertaining to eastern auto racing facilities, competitors, personalities or events.

B) To assist writers to publish and/or research articles regarding historical eastern auto racing topics.

Our organization collects & displays articles dealing with any eastern auto racing facilities for any racing enthusiast to enjoy. Please consider either joining our organization or contributing to our projects.

MEMBERSHIP APPLICATION

NAME:

ADDRESS:

CITY/STATE/ZIP:

E-MAIL: _____

AREA OF INTEREST:

_____\$25 SUPPORTER Non-voting supporter of the mission statement of the EARHS. Admission to showroom by appointment.

- \$40 INTERNATIONAL Non-voting international supporter with basic benefits.
- \$250 CORPORATE SUPPORTER Corporate supporters are non-voting supporters whose contribution to the EARHS will be permanently noted in the EARHS showroom. Contributions will be used to develop additional displays, catalog information collected, and to defray expenses in pursuit of the mission statement.

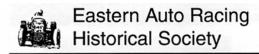
PLEASE MAIL TO:

EARHS, P.O. BOX 333, OREFIELD, PA 18069 Make checks payable to EARHS.

For additional information call 610 395-5303 or 610 398-2188

**EARHS is recognized as a federally tax exempt charity by the IRS under section 510c(3). EARHS P.O. Box 333 Orefield, PA 18069

www.earhs.org



Newsletter

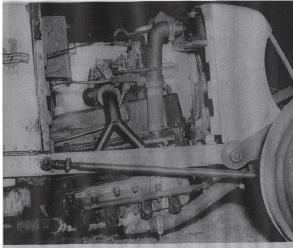
ter Vol. XIX 2022 Ed. #3 Upside Down and Backwards

As the midget racing craze was gaining popularity in the U.S. in the 1930s, one of the most intriguing aspects of the sport was the vast number of engine choices available. Motorcycle engines like Harleys and Triumphs, the outboard boat Elto 4-60, and others were popular, including tractor and small car engines, which were sleeved or destroked to meet car specifications. By the mid-1930s the 4-cyl. double overhead cam Offy was introduced to owners with deep pockets and many of the less affluent owners pressed the 1937 Ford V8-60 flathead engines into service.

By 1939 Buddy Shay and his brother, Vic Schey, (Buddy changed his last name to help the announcer) were looking for a cheap junkyard answer to an age-old problem. Buddy had been running an old sleeved-down Chrysler 4-cylinder in his narrow Cullen-Thompson rail chassis. It fit well, but it was down on power and it had to go. The cheapest and easiest solution was to find a wrecked Ford and appropriate the V8-60 engine for racetrack duty, but the V-profile simply wouldn't fit into his narrow chassis without the intake and carbs protruding way above the hood. Handling would clearly be adversely affected. The solution was to turn the flathead upside down and install it from the bottom. Presto, the V8-60 fit 'beautifully' and the center of gravity of the car was substantially lowered. However, there were



a few engineering issues to address! Buddy Shay in his #36 with brother Vic Schey, in Frank Jensen's #8, Lakeside Speedway, Denver, CO, 1941.



The Ford V8-60 mounted in Buddy Shay's midget. If this makes no sense to you, turn the page upside d

With the engine in its 'new' position, Denver mechanic, Dale Mortimer, decided to operate the engine 'backwards' to utilize rotation to the left side of the car for increased traction. So, exhaust ports became intake ports and vice versa. Instead of reversing the ring and pinion to make the rear turn in the 'new' direction, Shay and his cohorts simply installed it upside down as well!

With the oil pan on the top of the engine, it had to be converted to a dry sump system. Channels were installed around the inside of the oil pan and oil galleys were plugged and rerouted to collect oil for a sump pump to send the oil back to an oil tank mounted to the firewall. From there the stock Ford oil pump moved engine oil to lubricate the engine. Despite this Rube Goldberg design, there were no problems with fouled spark plugs. A common aircraft carburetor fed fuel to the former exhaust ports, now intake ports. The new exhaust ports required a 'one of a kind' exhaust system from the bottom of the engine bay. The ground clearance of only a few inches helped the handling and the standard V8-60 overheating problem was miraculously cured!

Buddy Shay ran the car at Lakeside through 1940-1941, but in 1942 took over the Paul 'Pappy' Headrick Offy and brother Vic drove Buddy's famous #36. Vic broke his right leg in a motorcycle accident in June, 1942, but decided he wanted to run the final race at Lakeside on July 4, 1942 before the government ban on auto racing took effect. If you have an upside down engine, hooking up a left foot throttle shouldn't be a big deal, right? Vic Schey hit the fence, flipped the #36, and suffered injuries, which proved fatal two days later.



Vic Schey's fatal crash at Lakeside, 7-4-1942.

EARHS Fall Open House Date Sunday, October 30, 2022 5080 Kernsville Road, Orefield, PA 10 am – 5 pm

EARHS CORPORATE SPONSORS PLEASE SUPPORT OUR SPONSORS

Weisel Racing Equipment, Inc. Orefield, PA Plunkett & Graver, P.C. Allentown, PA The Gang at Stoner Racing Enola, PA **High Speed Graphics** Orefield. PA Father & Son Spl. #33 Junie & Bina Metz Reliable Auto Body Allentown, PA John Schneider Allentown. PA Leigh Earnshaw Enterprises Morgantown, PA Pocono Raceway – Mattioli Foundation Long Pond, PA

Antonini Radiator Pottsville, PA Midnight Machine Co. – Ed Gittens Mountaintop, PA Jim & Donna Hontz Bethlehem, PA Freddy Adam – The Kutztown Komet From Freddy's family, friends, and fans Bob & Carole Wilkey Hollsopple, PA & CO

Your monetary support in any denomination or donations of historically significant items, photos, documents, etc. toward projects undertaken by the EARHS are welcomed and encouraged. EARHS is recognized as a federally tax exempt charity by the IRS under Section 501c(3).

EARHS "wants and needs"

Wanted: Racing photo collections – share and preserve programs. If you have vintage racing photos, EARHS would like to be able to scan and copy these items. All items will be returned intact and we can provide you with a computer disc of those items from significant collections.

We are especially interested in Dorney Park items from the 1940's, 1950's, and 1960's and all Allentown Fair items, including indoor racing events, but all items are welcome.

Wanted: Showcases and display cases. Often cases of unusual configuration can be used for displays of trophies and memorabilia. Also, race programs from the '48 & '55 Allentown Fair.

Group tours of the EARHS showroom are available by appointment for civic and auto related groups, car clubs, etc.

We continue to fill our showroom—all members are invited to visit and check our progress. Please call Pete Trumbauer (610 398-2188)