

PROJECT ENGINEER . . . Hand polishing an aluminum front wheel for Craig Breedlove's race car "American Spirit"

Women's

World

Women, liberated from the home, seek careers in the entertainment field, medicine, outer space, politics and automotive racing. It is in this last category one must be forewarned and forearmed as to the subtlety of the dedicated female racing affi-

An advance state of this condition of fascination with exhaust fumes and the sound of piston engines may be found in a female form with the title "Project Engineer" at Craig Breedlove's racing compound in Torrance. The lady in question, is quite well versed on metal building materials-she and Craig Breedlove selected Harvey Aluminum as their exclusive source of supply.

Margie Smith, girl project engineer, has from earliest years been addicted to the auto mechanic's workshop, tools of the trade, and particularly the intoxicating fumes of the internal combustion engine. This young lady is perhaps the only female race car designer in existence, and such a rare creature is displaying even rarer talents in the design of fabrication of Breedlove's newest assault on existing speed records, namely Class B, C, and D.

Not satisfied with the results of her latest creation, she now has taken on the additional title of project manager which means even greater responsibilities for the total success of Breedlove's rear engine American Spirit.

Miss Smith, soft spoken and unassuming, is the second woman to graduate from the University of Denver with a Bachelor's degree in mechanical engineering. While other girls plastered their walls with photos of screen idols and rock 'n roll stars, Margie had eyes only for the silhouettes of racing cars and the intricacies of automobile body design.

After Craig Breedlove laid out the basic concept of the car, talented, pint-sized Margie Smith detailed the design. In order to further insure an application of the most up-to-date theories in aerodynamics, she brought in Paul Lamar, aerodynamacist, long associated with Jim Hall and the famous Chaparal.

The challenge facing the builders was to keep the size of the vehicle small, get everything in and functioning properly, and provide the greatest power-to-

In consultation with Harvey Aluminum Vice President Gib Moudry, special metals, and Mr. Laurence, the Breedlove team selected certain Harvey automotive alloys in titanium and aluminum. These metals would give the car great lightness and all ssary. The high speeds involved in this project resulted in gear train difficulties.

Breedlove, Smith and Lamar, with the help of T. W. Khiralla, gear consulting engineer, rebuilt the rear end with a completely hand-tailored gear train. The two-wheel drive car design resulted in stability becoming a problem. Taking a page from Chaparall history, mechanical stability was insured by using two wing sections. Besides enclosing the rear axle, the wing sections put a downforce on the drive eels promoting stability. A slight lift on the nose of the car added the final necessary touch.

Further, as part of the concept of using only two rear drive wheels, the center of gravity was located behind the midpoint of the wheel base. The primary reason for the two-wheel drive car is the limited land space at the Bonneville Salt Flats where Breedlove hopes to set still another record. Margie Smith's design makes for a simpler, lighter vehicle with less frontal area required. With the rear engine, two-wheel drive, two wing sections, and high acceleration capabilities, it may well be one young lady's dream of writing her name in racing history will be accomplished.

is Margie Smith who serves as project engineer and for the developing of the famous vehicle.



"I notice Woody has 28 let-errmen on his 50-man squad he termen on his 50-man squad h brought here," said McKay.

"All those guys on the Ohio State team can't be soph-omores," said the Trojan boss. He concluded, "Remember, we have only 14 lettermen."

New Activities Announced for Gardena Center

Two new sports activities will be offered youngsters this win-ter at Rosecrans Recreation Center, 840 W. 149th St., Gar-

Tumbling and wrestling will be available for 6-8-year-old youngsters every Thursday at 3:30 p.m. at the Los Angeles City Recreation and Parks facility, according to Roger Williams center director.

The basic skills of wrestling and tumbling will be taught with emphasis towards municipal games development, Will iams said.

The skills and safety of archery will be taught boys 9 and over at 4 p.m. every Friday.

El Camino Holds Wrestling Event

Six top notch junior college every year," Dave Hengsteler, wrestling teams will convene at El Camino wrestling coach El Camino College today and stated. While all other junior colleges belong to the NJCA, California Tournament. While all other junior colleges association Dual belong to the NJCA, California has it's own program which in El Camino will join forces cludes sectionals and a state tournament. El Camino will join forces cludes sectionals and a state tournament. Arizona Western, Big Bend, Bakersfield vs. Phoenix ranked Arizona Western, Big and Phoenix are among the na-Bend Community College of Washington and Phoenix City College and Phoenix is the 1968 College. Saturday's afternoon bout has defending national champ. Arizona against Arizona

Washington and Phoenix City College.

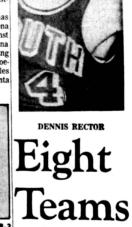
Competition starts today at 7:30 p.m. The tournament will be split into two sessions Saturday at 1 p.m. the split into two sessions Saturday at 1 p.m. the split into two sessions Saturday at 2 p.m. The tournament will be split into two sessions Saturday and Santa Ana pionship for the state of Washington last year.

The three California colleges reserved. Saturday's afternoon bout has defending national champ. Ari- El Camino against Arizona Consequence of the Saturday's afternoon bout has defending national champ. Ari- El Camino against Arizona destending national champ. Ari- El Camino against Phoenix in the evening El Camino against Arizona destending national champ. Ari- El Camino against Phoenix in the evening El Camino against Arizona destending national champ. Ari- El Camino against Arizona against Phoenix in the evening El Camino against Phoenix in the evening El Camino against Arizona against Phoe

Press-Herald PORTS

Gun Control Law Arcadia Gets Explanation Track

Sportsmen and hunters con-bacco tax representative of the cerned over the effect of the Internal Revenue Service .



Battle

Among the eight high schools competing in the Torrance Christmas Classic at North High, three Torrance quints

Fla., against the Detroit Tigers, world - champions-to-be. Starter Bill Singer had a 3-0 lead in the third inning when the Tigers filled the bases, bringing up Norm Cash with two outs. Willie Horton was on first base, Al Kaline on second and Dick McAuliffe on third when

Dick McAuliffe on third when Singer looked in for the sign from Haller. Singer whirled, threw to second and caught Ka-line napping, and the Dodgers went on to win 5-0.

It was only an exhibition game, but it set up a highly ef-fective defensive weapon for the

season.

Don Drysdale led Dodger pitchers with seven pickoffs, six of them at first base. Singer, the runnerup with five, picked off two runners at second. Claude Osteen and Mike Kekich each picked off two. John Purdin, Jim Brewer and Mudcat Grant accounted for the other three.

Haller caught three runners off first base, two off second, and threw out 45 per cent of runners attempting to steal. The Dodger team total for catching would-be thieves was 44 per cent. Haller, whose arm had been questioned by the Giants, had 43 per cent success at second base, 57 per cent at third.





THREE-CAR PUZZLE—Moving around on the outside, Edddie Sauer (No. 31) is able to avoid a Figure 8 collision between Don Dinger's Car No. 74 and another auto mostly hidden. Sauer will start another year of racing Sunday afternoon at Ascot Park.