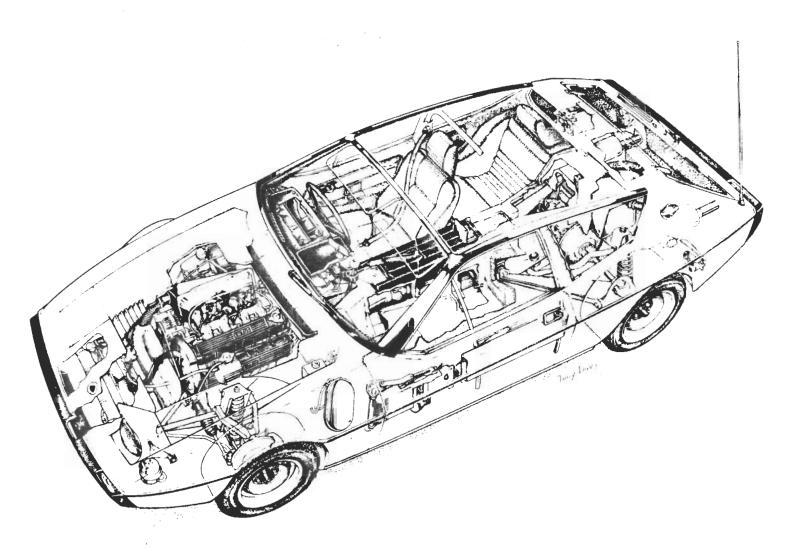


EVERGREEN LOTUS CAR CLUB MARCH/APRIL January/February 1986

Terry Elmore, chairman 3010 132nd Ave. SE Snohomish, WA 98290

Dave Larson, Editor Rt. 4, Box 423 Vashon, WA 98070



It's interesting to see how the cars that show up at our monthly meetings vary. March had a preponderance of late models with three Esprits, an Elite, two Europas, and a lone Seven. February was the big turnout for Sevens of various varieties — Lotus, Westfield, and Donkervoort. But one question looms in my mind — where are all the Elans? When I first joined Evergreen Lotus I expected Elans to be in the majority with Europas running a close second, but with the exception of Rob Roberts' car we seldom see any. Are they all garaged and waiting restoration? Come on out and join the fun! (P.S. — Steve Wallace says his Elan has now been mechanically rebuilt and runs well but has been stripped for repainting and that is going slowly.)

The meeting this month is on Saturday, April 19th, at John and Nikki Daniels' (owners of the yellow late Elite) out in Carnation. They have promised to lead us on a tour of some local 'interesting' roads. From the looks of the map to their house, it ought to be a pleasant way to take care of that case of spring fever you've got. By the way, the rumor mill has it that John is thinking of selling the Elite in order to get a Jaguar -- let's see if we can't convince him that if he's got to be fickle, he ought to at least get another model Lotus.

Recent publications of interest to Lotus enthusiasts:

--Autoweek, March 31

The "Escape Road" column features the Lotus Eleven LeMans

--Thoroughbred & Classic Cars, March 1986

The issue of this British magazine currently on the newsstands has a three-page article on the 1963-66 Mark I Lotus Cortina

Lotuses, being as rare as they are, can be difficult to evaluate when it comes to buying/selling. About the best you can do is watch the classifieds in Autoweek, Hemmings, ReMarque, R&T, etc. and take a guess as to the actual condition of the car advertised. In the long run, it all basically comes down to just how badly you (or your potential buyer) wants the car. One of the British automotive publications last year took an informal survey of car club members' views on prices in that country. Here are the results for Lotus:

Lotus

Only 95 early Elites are left and prices for the best ones are now from £9000 to You name:#

The Elan remains the favourite with enthusiasts and the top price for a Big Valve Sprint is £9000. The Plus Two is still the underdog in terms of value today, which is a pity but probably the result of the fact it was never made as a convertible. 'Basket case' Elans go for £2000 and spares are no problem.

There is a fairly serious parts problem coming up now with the early Renault-based Europas but no doubt enterprising club officials will overcome that in time. The top one per cent of later Europas are up with the Elans in terms of value as knowledgeable enthusiasts have realised how good the late Special model really was

Later models are not 'collectable' yet as a rule and there are some bargains to be had so long as you buy carefully.

Lotus Cortina

Blue chip stuff here, especially with the MkI, which may or may not be prepared to the original A-frame rear suspension spec. Most will be found today with Mk2 style leaf springs on the rear, but it's not yet crucial to the value. Just note that some people are converting their cars back to the problematical MkI spec for the sake of 'originality'.

The point is that MkI cars have risen in value by 22 per cent in one year and the best ones fetch £5000 today.

If you find a restoration project car, check out how much of the special original trim and mechanical parts remain with the car: the lack of these precious items may affect your decision.

If you're after a Mk2, prices vary between £1200 and £1500 with the occasional exception at £2000.

As we approach our second anniversary (our first meeting was held on May 8, 1984), I'm delighted to say that EVERGREEN LOTUS is a viable and growing group— as you can see from the updated roster additions, we're now approaching 50 paid members. Our good renewal rate (we now have only one member from last yet to pay his dues for this year— come on, Mike L., with all the parts you keep buying we know you can afford it!) is due in large part I think to the reminder that was sent out at the time the Jan/Feb LOTUS LINES went out— this was Dave Larson's idea, and has proven very successful in keeping you all with us for another year of Greater Northwest Lotusing. With the additional names of Lotus owners I have, several of whom I've recently spoken to who expressed great interest in joining us, I anticipate having another page of roster additions next issue, with ten or more names.

We now also provide our newsletter to Lotus Ltd., the Lotus Car Club of BC, the Seattle-area MG Car Club, and now the Northwest Alfa Romeo Club, and will soon be exchanging newsletters with many of the local British car clubs (SAMOA, Tyee Triumph, the Healey club, etc)- if you have any contacts with any other groups please let us know so we can get in touch with them as well. "What for" you may ask- in addition to the many technical tips contained in other groups' newsletters, many of which can be applied to our cars, we learn of events that other groups are planning (sometimes right from the initial idea stages) with a mind to possibly participating ourselves, either individually or as a group; in this same line, as a fairly new group, we can draw on the experience of other, longer-established groups to come up with ideas for events we can put on ourselves- I'll steal ideas from anybody, as I'm new at running a group like this and can use all the help I can get. Eventually, we hope that an annual All-British Field Meet can be organized in the Seattle area, like the very successful one in Portland, and the new one in Vancouver BC this year, but this will take a lot of interaction between the various British marque clubs to get off the ground. Lastly, the other newsletters we receive make for some enjoyable reading, and you never know what you'll come across- I was reading an article in INIEZIONE, the Alfa mag, on one of their members that ice-races on a street course in Anchorage Alaska every year(!), and he mentions that he bought and restored a Lotus 47 (the race version of the Europa) which is for sale- anyone interested? He says it's not an Alfa and his heart isn't in it- what can I say? These newsletters are always available for your perusal, and I'll start bringing them along to meetings as well..

I hope you don't mind that I tend to go on a bit in these Reports, compared to the presidents of some other clubs that write at most a paragraph or two each issue. As we have some members who have never attended a meeting, and in fact some we've never met or spoken to, I look on this column as my opportunity, albeit only once every two months, to direct a few words to all our members, and not just the regulars that we see at most all the meetings and other events. We do hope that more of you, who haven't attended very many of our functions in the past, can find the time to join us at least once in a while this year— I don't think you'll find you time has been wasted.

That's from me, at least in this column- some things you'll find in this issue include an entry form for the upcoming All-British Field Meet in Vancouver on May 3rd, maps and info for forthcoming monthly meetings and up-to-date info on other events for the new few months- please take a few minutes to look over the dates, and make a note to try and make a few, now, before you make other plans on those dates, OK?



THE ELITE IS NOT DELIVERED RACE-READY

CONTRARY TO SOME DELIGHTFULLY FLATTERING FOLK TALES, THE ELITE IS NOT DELIVERED RACE-READY, THIS MYTH ARISES, NO DOUBT, FROM THE FACTORY PRACTICE OF ROAD DRIVING EACH NEW CAR. BY THE SAME TOKEN. THESE FACTORY JAUNTS DO HAVE VIRTUES AND ONE SHOULD NOT BE DECEIVED BY THE FRESH, VIRGINAL APPEARANCE OF A NEW ELITE. COLIN CHAPMAN'S CREWS HAVE A BIT OF A GO WITH EACH NEW ONE. IT'S RATHER AN OLD WORLD TRADITION, NOTHING BEATS AN ENGLISH COUNTRY ROAD FOR RELIEVING ANY MAIDENLY TEN-SIONS THAT MIGHT INHIBIT A NEW MACHINE, AND WILLFUL TENDENCIES CAN BE DISCOVERED AND CORRECTED BEFORE THEY BECOME EVIL HABITS. THE CHAPMAN SUSPENSION HAS BEEN THOROUGHLY SCRUNCHED AND WIGGLED TILL IT CARRIES THROUGH FAST CORNERS ON ALL FOURS WITH THE TENACIOUS GRACE ONE EXPECTS FROM A LOTUS, THE OVERHEAD CAM COVENTRY CLIMAX GETS A THOROUGH-GOING PHYSICAL ON THE TEST BENCH EVEN BEFORE IT GOES INTO THE CAR. AND ON THE ROAD THE GIRLING DISCS

GET A BRISK EXERCISING ALONG WITH THE CLUTCH GEARBOX COMBO TO ASSURE A PROPER ASSORTMENT OF CHANGES, IN SHORT, A NEW ELITE HAS HAD AT LEAST A TASTE OF THE FAST HEEL AND TOE WORK THAT LIES AHEAD IN HIGH SPEED TOURING OR PRIZE COMPETITION. TO THE OWNER WE LEAVE THE DETAILS OF FINAL BREAK-IN AND THE SELECTION OF VARIOUS RAC-ING ACCESSORIES, PLUS PAINTING ON THE NUMBER, A DANDY JOB FOR A DECORATIVE CREW MEMBER, AND IF YOU DO COME OFF A WINNER, THERE IS A COMFORTABLE INSIDE PASSENGER SEAT TO CARRY HOME YOUR TROPHY.

If you live in the Pacific Southwest we will be pleased to arrange for you to examine and drive the Elite. For those in more remote areas we can supply information through correspondence and put you in touch with owners in your area.

Exclusive agents for Lotus cars in Southern California, Arizona and Utah.

BOB CHALLMAN Ecurie Shirlee Corporation SHOWROOMS AND SERVICE FACILITIES 2301 SEPULVEDA BOULEVARD MANHATTAN BEACH, CALIFORNIA FRONTIER 6.8833

SPECIFICATIONS

Dimensions: Wheelbase, 88"; Length, 130"; Width, 58"; Height, 46"; Weight, 1,376 lbs.

Engine: Four-cylinder, overhead-cam Coventry Climax; 1216cc, 79 bhp @ 6300 rpm, Twin S.U. carburettors.

Fuel consumption: Range, 30-40 mpg.

Transmission: Four speed, synchromesh on top three. ZF Four speed synchromesh optionally available. Top speed: 120 m.p.h. Suspension: Front, independent by com-

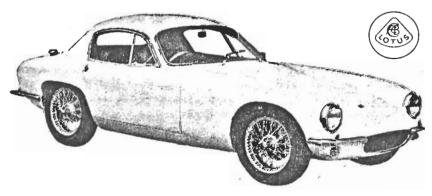
bined coil-spring-damper units and trailing links.

Steering: Rack & pinion, (2.5 lock to lock), your choice right or left side.

Brakes: Girling hydraulic, 9½" discs_outboard front and inboard rear. Handbrake, on rear.

Price: \$4,780 P.O.E.

LOTUS ELITE



MONTHLY MEETING SCHEDULE

At our March meeting at Raj Savara's we planned our meetings for the next five months, another first for EVERGREEN LOTUS:

APRIL Saturday, April 19th

John and Nicki Daniels; Carnation

see map herein

MAY

Sunday, May 18th

Frank Grabner's, Ballard

see map

JUNE

AUGUST

Date TBA

Dave and Alice Larson, Vashon Island

the Annual Vashon Tour

JULY

Meeting up in BC, in conjunction with the LOTUS DAY at EXPO and the Pacific Rim Meet

Lezlee and Terry Elmore, Snohomish

Annual Club Picnic

The May meeting was originally going to be on Saturday the 17th, but as you can see from the reprint of the letter from PEGASUS Vintage Racing I've reprinted here, the Vintage Racing Club of BC, the group that puts on the Vintage Weekend, is putting on an event (Spring Race Meeting and Vintage Drivers School) on the 17th which some of us would like to attend, so we've moved the meeting date back a day, and hope this is OK with you all. Anyone else interested in going up with us on the 17th, let me know.

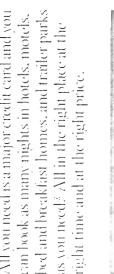
I still do not have entry form for the PACIFIC RIM MEET- just as soon as these are available, we will get them directly to you. We will be providing the BC group with our mailing list so they can send a copy to each of you directly, and hopefully their mail service won't take their usual two weeks to get them here. If you're going up for this, and haven't made your accommodation arrangements yet...well, do it NOW!!! It may be three months off, but with EXPO rooms in BC are in very short supply, and you should make your reservations immediately unless you're comfortable sleeping in your car. The BC group has offered to billet our members in their homes, if we aren't able to get rooms, and I have confirmed that anyone that wants can camp out at Westwood track, at least on both Friday and Saturday nights, but there isn't much in the way of facilities there.

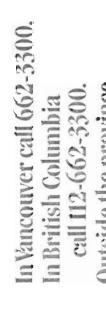
The number below is the agency handling out-of-province registrations- my own suggestion is that you try to get a room out east of Vancouver, closer to Westwood since that's where most of the action of the PacRim Meet will be taking place. We have a room in Port Coquitlam, just a few miles from the track- you might also ask for something around Coquitlam, Port Moody, or perhaps somewhere a little south like Surrey. I have a copy of the Tourism BC Accommodation Guide which lists all the places available to stay, both hotels/motels and campsites, in the Lower Mainland, which you are welcome to look at or if you need info on a specific place give me a call and I'll look it up for you.

No where to stay? No problem

Just call ResWest, the official reservations service of British Columbia.

All you need is a major credit card and you







Julie BERNHARD 2371 Hughes Ave. SW Seattle WA 98116 h 937-5449

'69 Europa S2

Harrison CHRISTIAN
P.O. Box 61
Eatonville WA 98328
h 832-6184
w 832-3233
'74 Europa TC

Robert COLLINS 11811 NE 102nd P1. Kirkland WA 98033 h 822-4400 w 624-0152 '74 Europa TC Lotus 20 Lotus 23

Dennis COONS 8121 NE 145th St. Bothell WA 98011 h 488-0567 w 342-0851 '72 Europa

John and Nicki DANIELS 11232 312th NE Carnation WA 98014 h 788-2729 w '77 Elite

Frank DEE 14036 109th Ave NE Kirkland WA 98034 h 821-6406 w 641-4441 '70 Elan '6X Elan racer '63 Super 7 SCCA

Richard GORANSON 418 79th Ave. SE Everett WA 98205 h 334-9590 w '69 Elan

David GRAHAM 1054 NE 103rd Seattle WA 98125 h 526-0796 w 634-3648 '69 Elan S4 , S7S4, Cortina Ed HARRISON & Mary Ann WHALEN 419 Wheeler St. Seattle WA 98109 h 283-6394 w Donkervoort Eight

Kit LINDSAY 3436 37th Ave. SW Seattle WA 98126 h 935-7197 w '67 Elan S3 SE

Tom McGRATH
8315 Overlake Dr. W
Bellevue WA 98004
h
w
Donkervoort Eight

John A. MENGEDOHT 1237 NE 90th Seattle WA 98115 h w '78 Esprit S1

(address change)
Raj SAVARA
12003 E. 149th
Puyallup WA 98374
h 848-0445
w 841-6781
'78 Esprit S1

John SHIH .P.O. Box 16739 Seattle WA 98116 h 932-2404 w 932-1621 '74 Europa TC

Darryl and Esther SPRINGER 213 Walnut Lane New Holland PA 17557 h (717) 354-8426 Elan Sprint

Lynn WHITING S. 4810 Felts Rd. Spokane WA 99206 h (509) 928-3345 w (509) 928-4191 '78 Esprit



Calendar of Events

STOP DREAMING! START DRIVING!

- Apr 12, 13 Portland Swap Meet Multnomah County Expo Center, Portland, Or.
 - The Northwest's largest swap meet.
 - Mostly American registration and street rod orientation but some foreign sport cars. A number of vendors have some Lotus literature/brochures.
- Apr 19 (Sat) Evergreen Lotus Enthusiasts Monthly Meeting.
 At John and Nikki Daniels, Carnation, Wa.
- May 2, 3, 4 Vancouver, B.C. All-British Field Meet. (Call Terry Elmore for information on this one.)
- May 18 (Sat) Evergreen Lotus Enthusiasts Monthly Meeting. At Frank Grabner's, Seattle, Wa. (Ballard)
- May 17, 18 IRDC Championship Race, S.I.R., Kent. Wa.
- June 1 (Sun) Washington All-Ford Picnic, Bellevue Community College, Bellevue, Wa.
 - Mostly Fords, of course, but a little of everything else. Where else can you take a picture of your Lotus-Powered-By-Ford sandwiched between a Cobra and a Model T Speedster?
- June 13, 14, Cart Indy Car "Portland 200' and SCCA Trans Am, Portland International Raceway, Portland, Or.

 The biggest spectacle in Northwest racing. You owe it to yourself to go at least once.
- June 15 (Sun) Washington All-GM Picnic, Pierce County Fairgrounds, Graham, Wa.

 I've never been to this one but assume its similar to the All-Ford Picnic. Lotus is part of GM now so it might be
- June 22 (Sun) Evergreen Lotus Enthusiasts Monthly Meeting.
 At Dave and Alice Larson's, Vashon Island, Wa.
- July 5, 6 IRDC Championship Race, S.I.R., Kent, Wa.
- July 10 (Thur) Lotus Day at Expo 86, Vancouver, B.C.
- July 11, 12, Sixth Annual Vintage Race Weekend Together With Lotus Pacific Rim Meet, Westwood Race Track, Westwood, B.C. You'll hear a lot more about this in future issues. THE event to attend in your Lotus this summer.

Come tour the back roads of a rural Puget Sound island.

July 20 (Sun) Forest Grove Concours, Forest Grove, Or.

A mixture of antique, classic and special interest cars on display in the park-like grounds of a college. The year I went it included an early Lotus Elite and Pete Lovely's Formula I Lotus.

July 25, 26 IRDC Driver Training Session, S.I.R., Kent, Wa. (Call 833-1055 for information.)

July 26, 27 IMSA, Portland Internation Raceway, Portland, Or.
Includes: 300 KM Camel Grand Prix (GTP)
100 KM Champion Spark Plug Challenge
200 KM Camel GTO/GTU

100 KM Kelley American Challenge

Aug 8, 9, 10 Tacoma Grand Prix, Tacoma, Wa.
- Formula Atlantic and NASCAR Races around the Tacoma Dome.

Aug 16, 17 IRDC Championship Race, S.I.R., Kent. Wa.

Aug? Annual Evergreen Lotus Enthusiasts Picnic.
At Terry and Lezlee Elmore's.

Aug 29, 30
31
All-British Field Meet, Portland International Raceway,
Portland, Or.
- Honoring Jaguar this year, but still an event worth
attending.

Aug 30, 31 SCCA Race, Olympia, Airport, Olympia, Wa.





Terres Elmere, Chauman - Evergreen Lotus Car Club, 3010 132 ndi Club S.E. Snohomish Un 98290

44 april 19166

Dear /C.74

I am writing to let your Club know that the Vintage Racing Club of B.C. is putting on two events this summer that may be of interest to you.

17 MAY 1985

SPRING RACE MEETING and VINTAGE DRIVERS SCHOOL

This is for those interested in Vintage Racing or merely wish to upgrade their driving skills. The successful completion of this school will allow participants to compete in Vintage-only events. Please phone:

Michael Rigby

224-2153

OI

JOhn McGregor

53604228

12 and 13 JULY 1986

6th HISTORIC RACING WEEKEND AT WESTWOOD CIRCUIT

This is an EXPO 86 endorsed event and will without doubt be the best yet. The one-make sports car Clubs are invited to use the special enclosure next to the Track. A tour of the Track will be organised during the lunch break on both days. Clubs are encouraged to run their own events (eg. Concours) and to cordon off exclusinve areas of parking on arrangement with myself.

I hope that you will be able to participate.

Yours truly,

DR. ROBERT C. FOLLOWS

ROSEBUD

Strange name for a racing team?

Don't let it fool you; the cars,

drivers and preparation are tops

BY DENNIS CIPNIC

N THE FACE OF IT, "Rosebud" is a strange name for a motor racing team, especially one which operates with an almost deadly efficiency. In 1962, its first full year of competition, the powder blue cars emblazoned with a rosebud rampant on a Texas-shaped shield of white started off by winning the Formula event at Daytona, continued likewise through Sebring's Junior event, and won again with a Lotus 19 at Laguna Seca's SCCA sports car races. They whipped more Juniors at the Northwest GP. were 1st in 2-liter class at Riverside. and ended the year beating the field in a Lotus Mk 19 at Nassau.

Rosebud? Its name is no stranger than its makeup. The cars are housed in a leased ex-Coca-Cola bottling plant in a small southeast Texas city named Victoria. They are carried to races in a huge semi-van with an airconditioned, sleeper-equipped cab. The owners would like to remain anonymous, but they picked for a team name the one word which could connect them to it. Their manager, Jock Ross, is an affable Scot from California, and Rosebud's Junior drivers came from the state of Washington, half the width

of a continent away. They picked another Scot, Innes Ireland, who lives in Wales, to drive their Lotus 19 and, though a Texas team they have never raced in Texas.

This apparent labyrinth of confusion might begin to make some sense if we go back to 1961 and start at the beginning. It all started when two Texas ranchers and oil operators, Don Miles and his father-in-law Tom O'Connor, Jr., went to Galveston to watch the annual SCCA summer meet.

They enjoyed what they saw and set about learning to participate. First came a couple of karts, followed soon after by a trio of Sprites. The Sprites needed a race track, so O'Connor acquired the use of a deserted USAAF training field some 30 miles west of Victoria, where he and Miles set up a 3.5-mi circuit and proceeded to learn to drive.

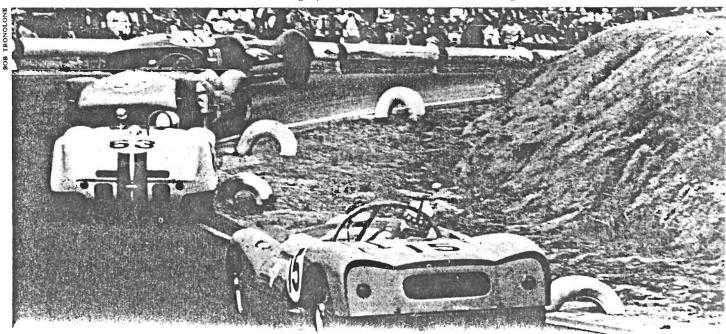
O'Connor had long been interested in sports, and had once backed a minor-league baseball club called the Victoria Rosebuds. The team's name was derived from the Victoria Chamber of Commerce slogan: "City of Rosebuds." O'Connor and Miles took the name for their 2-man driving school/scuderia, and Rosebud Racing was born.

Developments came rapidly: They acquired a Lotus 18, then a 20, and a Dolphin-Ford to complement the Sprites. They took the two Lotus Juniors to the Riverside and Laguna Seca, Calif., races in 1961. Already realizing their own driving limitations, the partners had hired two West Coast drivers, one of them claiming to be a mechanic. He turned out to be fine on Sprites, but inadequate to meet the requirements of the Juniors. O'Connor and Miles realized that halfway personnel would never do. They contacted Jock Ross, then with Lotus in California, as astute a mechanic and manager as can be found.

Jock took a leave of absence from Lotus to "look things over" at Rosebud. He prepared the team's Lotuses for Nassau that year, and Rosebud won the Pan American Trophy with Pete Lovely driving.

Pete became the team's No. 1 driver, then when Jock Ross permanently joined the team in time for Daytona and Sebring in 1962 he brought an old friend and Lotus driver from the West Coast, the late Pat Pigott, with him.

Innes Ireland in the Rosebud Lotus 19 chases Walt Hansgen, Graham Hill and John Cannon through Riverside's turn six.



ROSEBUD

Meanwhile, O'Connor and Miles retired the Mark 18 and bought another 20 and a 22. Lovely won at Daytona in the 22, then took the Sebring F-Jr race in one of the 20s. The other was demolished, and the 22 suffered a broken crankshaft.

Meanwhile, back at the ranch, there was a Lotus 19 Ross had purchased from the British Racing Partnership via Stirling Moss, a BRP partner. Stirling delivered the car at Nassau and drove it there for Rosebud. At Daytona, two months later, Ross met pro racing manager Ken Gregory, another BRP partner, and Innes Ireland, who was driving for the UDT racing team, which was managed by BRP and Gregory.

Result: Innes Ireland visited Victoria and wound up driving the Rosebud 19 for the latter half of 1962. He is scheduled to continue doing so this

year.

Before Ireland arrived on the scene, Lovely drove the car to victory at Laguna Seca. Innes' initial Rosebud effort was less auspicious: a dnf at Mosport's Canadian GP. The 1962 final was more like it: an overall win at Nassau. In between, he managed to take the 5th overall and 1st in the 2-liter class at the Riverside, Calif., Grand Prix.

During the same year, Lovely and Pigott used the Juniors to sweep 1st

and 2nd at Kent, Wash. Lovely then went on to a 1st and 3rd in two Riverside F-Jr heats.

For the year, in Juniors and the Mark 19, the Rosebud record was: nine 1sts, two 2nds, four 3rds, two 4ths, one 5th. And then there was the newest Rosebud car: a 3rd, also at Nassau, in the GT Tourist Trophy race. by Innes Ireland driving a Ferrari 3liter GTO. The car might have done better had it not been literally straight off the boat from England, where Mike Parkes had driven it to a fine record during the summer/fall season.

During 1963, Rosebud plans to campaign in up to a dozen major U.S. races. "Europe would be nice, but until we've had more experience it's out of the question," says Ross. "We're still not as good as we could be." They'll use the GTO, the Mark 19, and a second sports/racing or GT car; perhaps another 19, perhaps not.

"Jack Brabham and, I think, BRM are working on a sports car of just under two liters," says Jock. "We are interested in what they might come up with. In any case, we plan to go with an under-2-liter, about 1800 to 2000 cc, and an over-2-liter car. One will be our present 19."

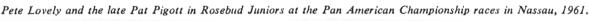
Jock Ross on the importance of European vs. American races: "American races must be of some importance. If they weren't, there wouldn't be so many Europeans over here trying to win them. I've seen major sports car events in England where they would have been delighted to have the fields we see here."

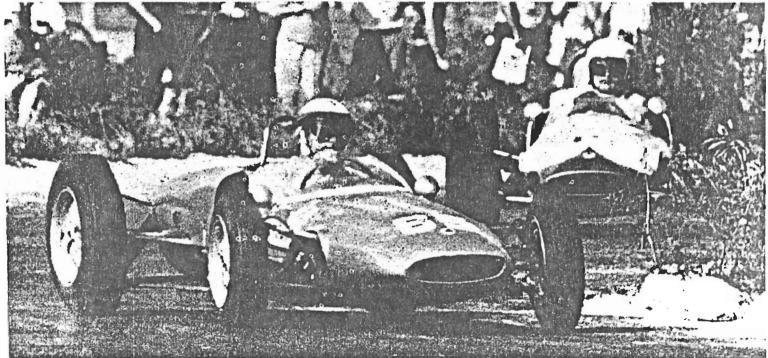
The Juniors are being retired to "club" status, to be raced by Ross, Mr. Miles' younger brother (and Rosebud mechanic) Roy, and possibly the team's owners in regional events. Their appearance on Gulf area tracks will mark Rosebud's initial team effort in its own area. It is the only one of the major Texas racing entourages (Hall/ Sharp, Mecom Racing, Rosebud Racing) never to have campaigned in its home state.

Jock explains this by saying that regional races are often so short-scheduled he doesn't have time to properly prepare the cars, they're generally too short for a major test of machines or drivers, and they do not provide the top competition that Rosebud's pro drivers like to win against. However, with the "demotion" of the Juniors to club status, they'll be driven by nonpros, in which case the regional competition might prove more equal, and preparation time will not be quite so

"We're actually retiring the Juniors from major racing because it's futile to run them this year," Jock explains. "A monocoque Junior will appear this year, to go to Formula II next year. To win the big events for Juniors we'd have to buy these new cars. And it's ridiculous to buy new cars for a formula which is only going to last one more year."

There are two key words in the





above: "major" and "win." They describe the nature of the Rosebud effort. O'Connor and Miles are campaigning in motor racing because "it's fun." But it's lots more fun when you're winning, especially when you're winning the big races.

The entire Rosebud team is honed for victory like a fine knife, and the point of the blade is Jock Ross. He runs a completely equipped shop, right down to magnafluxing equipment but only three men, counting himself service the cars. He does not believe a crew of that size (and he doesn't want a larger one), can handle more than one entry in a long-distance race, so there's only one GT car. And it's a Ferrari simply because they're the most

"Plus the fact," Jock adds, "that in a few seasons when the car's obsolete and we're finished with it, Mr. O'Connor can drive it on the street. He enjoys a good car."

successful big GTs in the world these

In middle-distance races for sports cars Ross believes Rosebud can handle two machines, one for the overall win, another for a possible overall but a more probable class victory. So there are two sports/racing cars. Here, again, the 1st car is a Lotus 19 because, in Jock's words, "nothing has beaten them yet." He speaks similarly of Climax engines, and Rosebud owns three of them.

The second sports or, perhaps, GT car will likewise be a field beater. Rosebud's owners do not plan to choose one that doesn't show definite immediate promise of being a winner. They may even try to build one if no suc-

cessful makes are available. And if Rosebud ever goes back to formula racing, which the owners like, it will be when the present confusion over Juniors, F-II, F-I and Intercontinental cars is straightened out.

"We have no present plans to enter the Grand Prix circuit ourselves," Ross added, "but if a top driver and car were available, we might prepare the car and campaign it at Watkins Glen for the U.S. race."

To increase his chances, Jock insists on painstaking preparation of every Rosebud car, and a schedule which gives him time to virtually rebuild a vehicle between races.

"One race a month," he says, "gives us more of a chance for success than a race a week, or every two weeks. When I'm preparing a car I do my damnedest to give it the best possible chance to win; but I need time to do this properly. Twelve major races a year is about our limit."

O'Connor and Miles seem to feel the same. They enjoy working the Rosebud cars into a near-perfect mechanical state. And listening to their cars in a race is a pleasure: They literally run like clockwork.

Preparation includes what Jock calls "making the car live up to its fullest potential." In order to achieve this end it is sometimes necessary for him to overcome inherent deficiencies in the machine's design, such as redesigning part of the rear suspension of the Lotus 19. This idea worked so well that such teams as UDT have adopted his modification.

To carry their strategy to the final critical point, Rosebud's mentors employ only smooth drivers of proven

reliability, either American or pean, who understand something the nature of the machine in who they're competing. O'Connor and Milliane carefully building a driving team which will be identified with Rosebud Racing, with pipelines to additional top-notch drivers who might prove necessary to an extended effort such as Sebring. They'll hire anybody to, and including, the World Champion, if they think he can do a job for Rosebud.

Ross watches his cars on every lap of every race, listening to their performance, watching the driver. He feels that driving decisions are up to the man behind the wheel, but he wants his machines to be treated properly. Fortunately, Rosebud's cars are so well prepared that a driver can use them hard and still treat them right.

Every point of the race is calculated: probable preparation of opposing cars; how many, if any, pit stops Rosebud should take; what kind of tires to use ("This helped us at Nassau," Jock points out); listening to the "enemy's" engines during practice; and signaling the driver his exact position every lap. Rosebud is even playing around with the use of radio transceivers to further aid team strategy.

"Basically, if there could be one key to our racing," says Jock, "that would be the word conservative. We want the best possible chance to win—the proven machine, complete preparation, and a driver who is not wild or who will break the car before the race is over."

Rosebud's methodical computation of the odds marks the entry of a new, truly professional team into American road racing.

Evergreen Lotus Terry A. Elmore 3010 132nd Avenue S.E. Snohomish, Washington 98290

HOW TO KEEP UP WITH

Lotus in 1986

With a monthly circulation now approaching five thousand copies our up-market magazine Lotus World enters its fifth year of publication next month, ample proof of its popularity. Read by subscribers in over lifty countries it provides up to the minute news for both Lotus owners and enthusiasts around the world and judging by our daily postbag everyone of them enjoys the special link our magazine brings direct to their homes.

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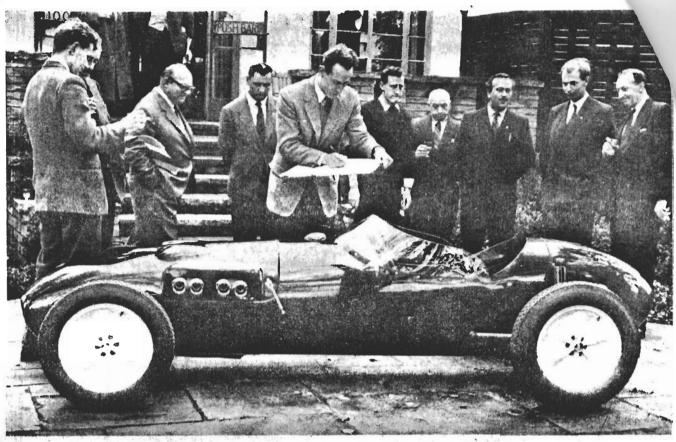
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Photos by John Ross

THE FABULOUS FEATHERWEIGHT

The story behind Britain's new 620-pound, 141-horsepower racing roadster

By Colin Chapman, designer

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The new International racing car Formula II for single-seater cars, with an engine capacity up to 1500 cubic centimeters (91½ cubic inches) unsupercharged, has provided a natural entrée for such companies as mine, the Lotus Engineering Company, into real racing car competition.

Outwardly the most striking item of importance is the disc type magnesium alloy wheel. This peculiar design was chosen as the lightest and strongest possible type of wheel since unsprung weight represents a major problem with cars as light as this, and I also felt that the time had come to discard the heavy conventional knock-off wire wheel. In order to keep weight down the web of the wheel should be as thin as

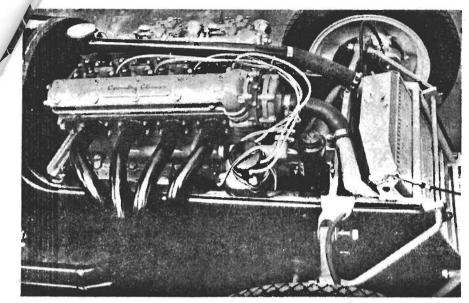
possible, consistent with strength and for ease of manufacture, the foundry likes uniform thickness. In order to satisfy these two requirements and yet obtain the required variation in bending strength throughout the wheel a solution is to use the "wobbly web" principle. With this the peripheral distance at various radii from the hub is kept approximately constant which results in quite deep folds near the hub where great strength is required. These fade out to quite shallow waves at the rim where loads are less. Another advantage of this continuous web is that the fatigue life of the wheel is greatly enhanced by the absence of holes cast between the spokes, which inevitably have rough edges and may provide starting

points for fatigue cracks.

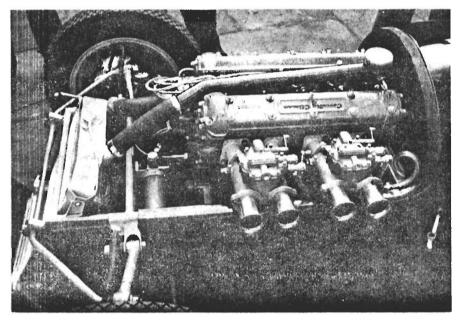
Another aspect which arose when designing these new wheels was that of wheel changing during a race. Firstly, with the dry weight of the Lotus at only 620 lb, it is unlikely, under normal conditions, that the tires will wear out during a race.

Having disposed of the strength and practicability requirements of the wheel I was not worried about front brake cooling, because with a non-enveloping body there is no shortage of cooling air behind the wheel. On the Lotus this is further improved by the convolutions of the new wheel which creates air turbulence around the brake disc.

· One final point of interest before I leave the wheels is that the front wheel hub is



91\frac{1}{2}\cdot cubic inch Coventry Climax four-banger has bore and stroke of about 3.2x2.8 ins. Twin overhead cam engine weighs 255 lbs., has 10:1 c.r., 141 bhp on 100 octane fuel.



Exceptional power to weight ratio is a bit in excess of 490 bhp per ton. Front suspension is by double wishbones. Front arm of top wishbone doubles as anti-roll bar.

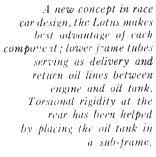
integral with the wheel, and six bolts and nuts hold the brake disc in place. In the case of the rear wheels these same six bolt holes are used to hold the wheel itself in place.

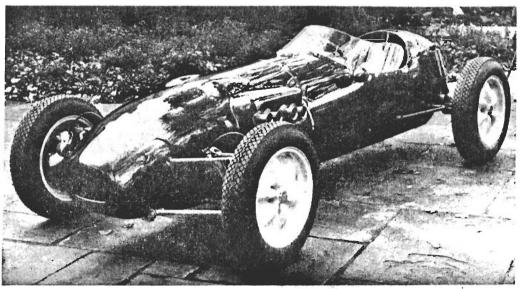
Front suspension layout is definitely not conventional. We now have double wishbone location with the front member of the top wishbone doubling up as an antiroll bar: the springing and damping still being effected by the one direct acting unit. I realized that the high speed potential of the F2 car would produce a further increase in gyroscopic loading if the swing axle were retained, and as I feel that the limit must nearly have been reached I decided to adopt a fairly conventional wishbone layout. A great deal of thought has gone into the new layout and the designer of the proprietary king pin assembly is quite happy about its suitability for its new role. We have fitted a heavier than standard spindle which permits a wider bearing spacing in the wheel hub. This, in its turn, enables the wheel bearings to deal with the slight increase of load brought about by the fitting of the disc brake calipers ahead of the king pin. in order to assist in cooling.

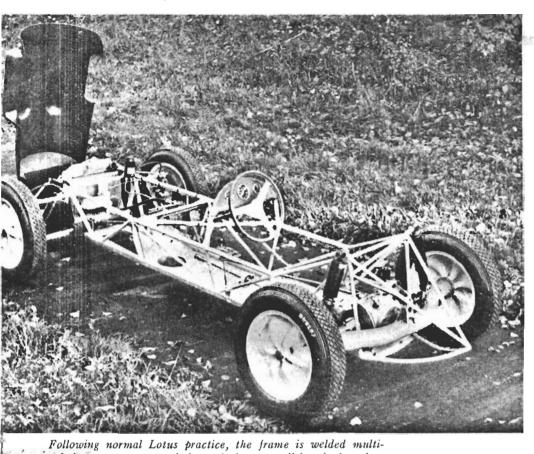
As in the sports car, a De Dion rear axle assembly is used but with one radius arm only each side, and a central location for the De Dion tube instead of the earlier panhard rod. This layout is so designed that the lines of action of the fore and aft location (radius arms) and the vertical location (suspension unit) pass through the wheel hub axis, thus relieving the De Dion tube of all major loads other than side bending loads.

Now we come to that part of the car which might be considered as revolutionary—the constant-mesh gearbox and combined final-drive unit. The gearbox is an original layout designed with the express purpose of obtaining these advantages:

Maximum transmission line offset (downwards) in order to reduce the

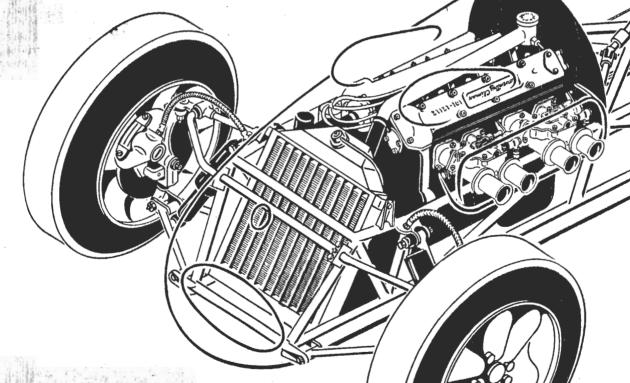






FABULOL

Following normal Lotus practice, the frame is welded multi-tubular structure consisting of four parallel 1-inch tubes.

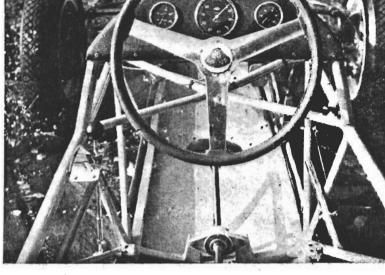


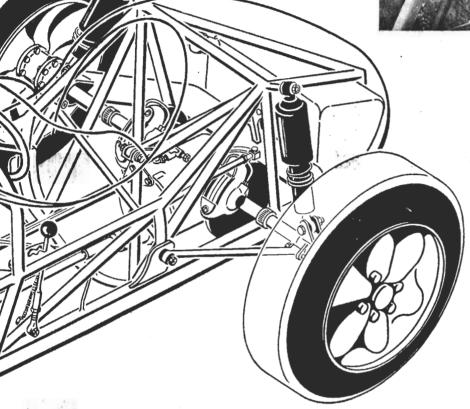
Artist Pete Millar emphasizes general layout of chassis and engine. By mounting the engine rigidly in the frame, weight has been saved and an added advantage is the stiffening of front end.

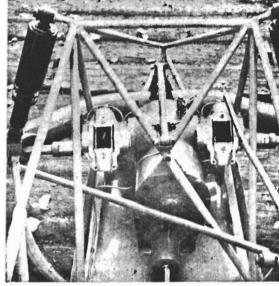


continued

Power is transmitted to the final drive through a rigidly mounted driveshaft that is supported by a central bearing. Wheelbase measures 7 ft., 4 in.; tread, 4 ft., and overall length 10 ft., 11 in.







The constant-mesh gearbox and final drive unit; inboard disc brakes. To locate the rear axle laterally, left radius arm has additional rod welded to end of the axle which crosses to right radius arm pivot.

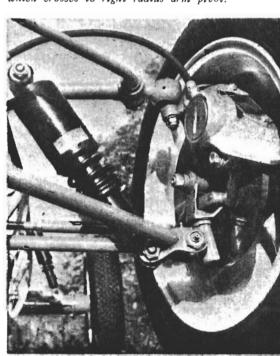
The front wheel and disc brake assembly. Magnesium wheels weigh only 7 pounds each and are of special design with ribs that provide immense strength near hubs.

height of the driving seat. A 5-inch stepdown has been achieved by using a hypoid ring and pinion, of about 1-inch offset, and virtually five pairs of transfer gears which run between the normal pinion bearings and at 4-inch shaft centers. These pairs of transfer gears are all similar in general dimensions except for the number of teeth, readily interchangeable to permit alternative top gear ratios and also changes of intermediate gearing to suit different racing circuits; reduce the power loss of transmission and, more important, the heat generated, by having only one meshing point on the indirect gears. The weight of the gearbox and final drive

unit is extremely light, placing whatever weight there is at the required place—at the back of the car. The gear ratios are quickly interchangeable with the box in position. In practice the driveshaft has first to be removed, which takes only five minutes in taking off muff couplings and the center bearing, and then front cover of the box.

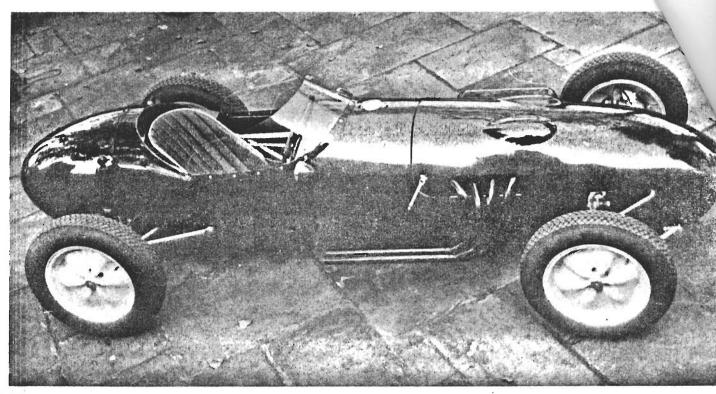
Secondary advantages introduced were a rather high rotational speed (top gear is an overdrive) and wide gear centers which serve both to reduce the loading and thus the weight.

The gears are so designed that with only one additional pair of gears it is possible to get six different top gear ratios and a



FABULOUS FEATHERWEIGHT

continued



The F2 is so light that the complete chassis can be carried about by two men. 12-gallon fuel tank, located amidship, helps brace the center section. A twin dry plate clutch transmits the power to the rear mounted five speed gearbox and hypoid rear end.

comprehensive selection of intermediate ratios.

The box has its own pressure, scavenge, and filtering system. The gears are lubricated by direct jets onto the backs of the mating teeth and a worthwhile reduction in power consumption should be achieved by means of the resultant "dry" gearbox and final drive. At the same time provision can be made for adequate oil cooling and filtering during the cycle.

On each side of this final drive assembly are mounted the disc brakes with their calipers facing forwards.

The drive is taken through a twin-plate Borg and Beck clutch which has been modified to Lotus specifications. I have mounted the twin overhead camshaft 1500 cc (91½ cubic inches) Coventry Climax engine rigidly in the chassis in the form of a torque box, so that the strong crankcase can supplement the torsional stiffness of the chassis. This is achieved by making the rear engine plate of 10-gauge strong alloy and incorporating it as a chassis bulkhead at four attachment points, the front engine mounts being bolted straight to the chassis with ½6-inch high tensile bolts:

In a racing car, due to the fact that chassis members are disposed nearer to the polar axis of the chassis frame, it is more difficult to obtain the same degree of stiffness for any given weight than is possible in a wide-framed sports car. So,

in this respect, I have been greatly assisted in making use of the very stiff Coventry Climax engine.

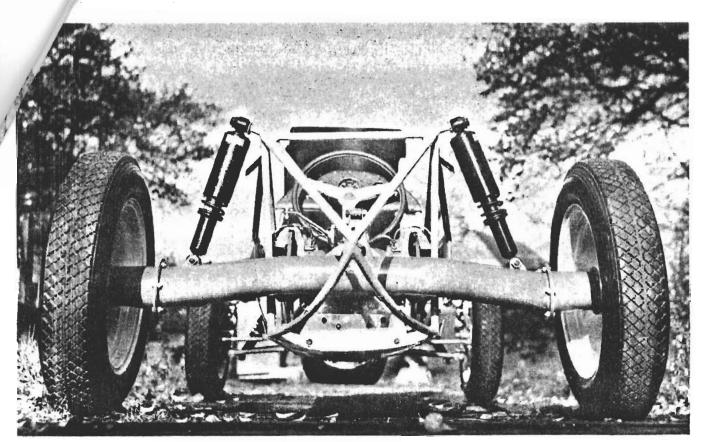
The oil tank for the engine is mounted in the tail of the car and is fed through the bottom tubes of the chassis-so being cooled en route. Fuel comes from a 12gallon scuttle tank mounted amidships over the driver's legs in the usual Lotus practice of minimizing the handling changes which take place as the fuel level drops. With only this tank in the car, the weight distribution is 53 per cent on rear wheels and 47 per cent on the front. An alternative 10-gallon tank can be mounted in the tail, which if used can give a 60/40 weight distribution and the two tanks together will provide sufficient fuel for a 300-mile race, since it is anticipated that the car will have an approximate consumption of 15 mpg.

There is a water header tank built into the top of the radiator, which is slanted backwards for space and weight reasons and which is in a fully ducted system.

Until protracted tests have taken place, I cannot say whether we shall use the two-throat Weber carburetors, as fitted to the prototype car, or another make of two-throat carburetor, which is at present being developed. I would, however, like to say a word about the position of the air intake tubes on the F2 car. There is a school which will immediately shake their heads when they see the air intakes stick-

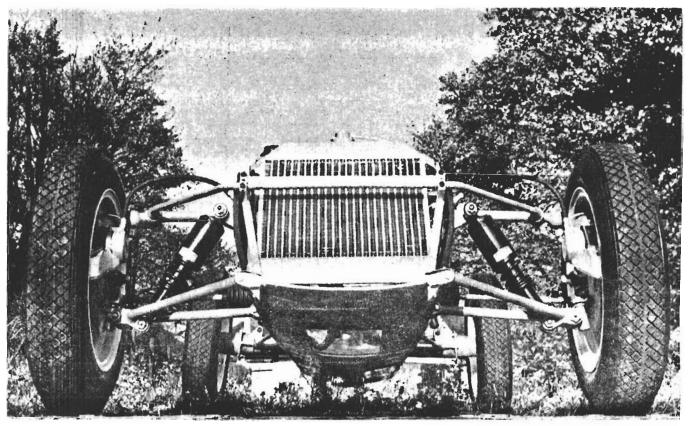
ing out of the hood of the F2 car, because they still believe that the rush of air past the orifices causes a depression on the "Flit gun" principle. I can say, at least, that it does not apply in this case. Numerous tests with wool tufts on a fast moving car of similar design have shown that the tufts around the air intakes remain virtually stationary, and most certainly do not blow back along the bodywork. The reason for this is easy to appreciate. The turbulence created by the exposed suspension parts and by the wheel are causing a dead area behind them and it is into this area that the air horns protrude. The moving part which has the most profound effect on this situation is the top of the wheel which, when on the move, is traveling forwards at twice the speed of the car and is tending to throw forward the air that it carries around with it, and this air spills into the rearward airflow past the car so making your relatively calm pocket in which the induction system can function satisfactorily.

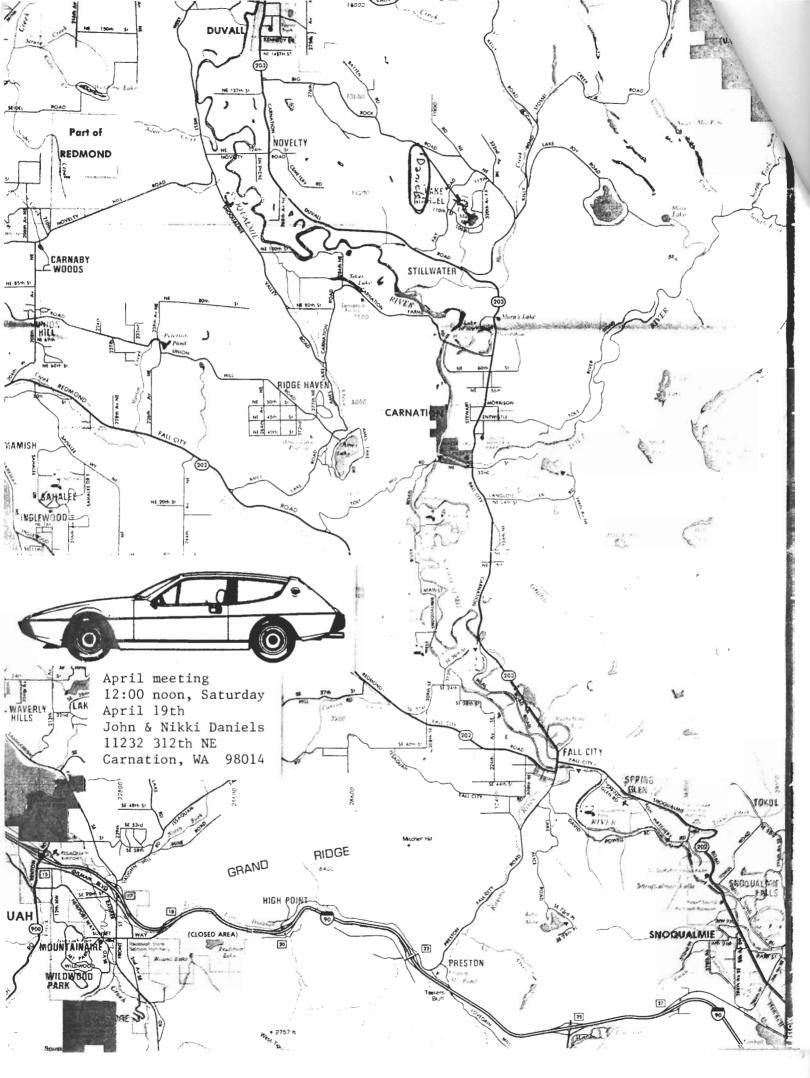
So much for the salient features of the F2 car, which show a marked departure from my earlier designs. Are there to be alterations to the first prototype before we go into production? There are bound to be detailed changes which we find necessary as tests progress—but in the main the F2 car will appear on the circuits next year virtually as the photographs here show it.

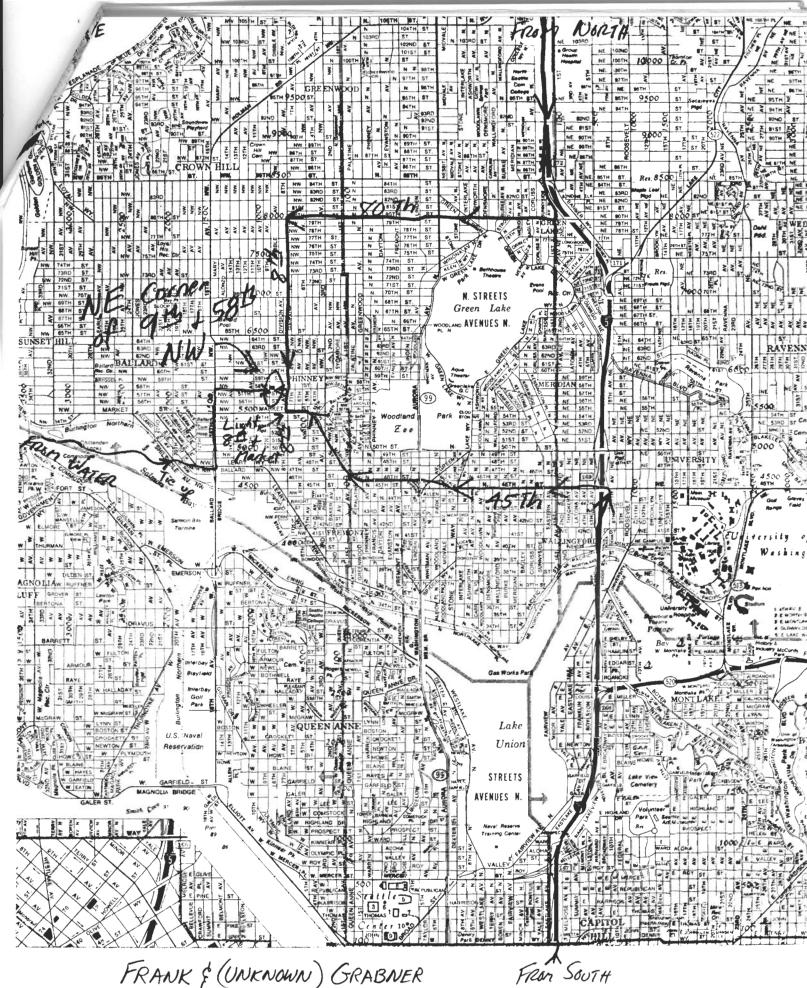


Pronounced rear wheel camber and large section DeDion tube are seen in above photo. Girling disc brakes provide stopping power, mount inboard.

Front suspension on the roadster is a departure from normal Lotus practice, comprising helical springs enclosing telescopic dampers with unequal wishbones. Anti-roll torsion bar connects each single upper arm.







FRANK & (UNKNOWN) GRABNER 844 NW 585 ST. Seattle, (Ballard) 98107 783-5726

MAY MEETING EVERGREEN LOTUS (SATURDAY, MAY 18, 12:00 NOON)