

NOVEMBER/DECEMBER, 1993

Minutes of WPCC Meeting

October 26, 1993

Officers Present: Treasurer, Carole Friend; Secretary, Pat Greenwald
Board Members Present: Dick Dandois, Vaun Hamlin, Wayne Jones,
and Laurie Maglietta.

The meeting was called to order by Secretary, Pat Greenwald.
On a motion by Wayne Jones and a second by Dave Capone, the
minutes were approved.

The treasurer's report was read and approved. The current
balance is \$302.52 with more Hershey expenses pending.

Old Business

Vaun reported on the Legislative Council meeting. His advice to
club members: "Contact your representative if something interests
you."

Wayne reported that the Hershey trip was a success and the
weather was beautiful. Four club members were on the bus and
Vaun went separately.

Pat reported on the "Run Down the Pike." It was a great trip
with good weather, interesting and educational stops, and a good
meal at the end. Thanks to Laurie and Vaun for the planning.

Dave Fabyonic reported that he attended the Carlyle event the
previous Friday.

New Business

Wayne led a discussion concerning the current status and the
future of the club. Items brought up included;

- * a shake-up in the way the club operates
- * the number of events per year
- * the number, location and types of meetings
- * raise in dues
- * fewer newsletters supplemented with post cards or phone chain
- * account cushion verses zero account balance

Al Friend agreed to run for president with the understanding that
if elected, he will change the club drastically.

On a motion by Bob Heiber and a second by Dale Smith, the meeting
was adjourned.

OIL



B

by Harold Sharon

all and roller bearings need very little lubrication. Mostly, they need coolant. If the cages are steel the lubricant must protect the steel-on-steel interface, which is a tough job. Fortunately the loads here are light, and usually the cage is

soft steel while the balls are hard as hell. (Hell, by the way, is about Rockwell C-65). A difficult aspect of ball bearing lubrication is that both the ball and the race are very hard. The oil must be kept very clean because the inflexibility of the hard parts allows no place for grit to hide. Look at a ball race after just an hour's running with slightly dirty oil and you'll see a satin surface, which is really millions of small scratches. Super clean oil would make the races shiny. Another peculiarity of rolling-element

lubrication is that if the oil's "too good" the balls are inclined to skid rather than roll. And this is bad! As you might guess, balls that are lightly loaded are more prone to having this problem.

Journal bearings have always been the favorite for automotive engine use. Journal bearing lubrication needs are distinctly different from rolling bearings. Slipperiness is highly desirable, as is film strength. Film strength is what keeps the journal and the bearing metal apart. Surprisingly, with all the commotion and heavy loads inside a running engine there is scarcely any metal-to-metal contact between adjacent moving parts. Oil also performs other vital functions in the engine. It keeps sliding parts from heating too much. It suppresses corrosion. It cushions impact. Slipperiness, sometimes called oiliness, lowers friction. Friction wastes power (by generating heat) and also wears out parts.

Wear and corrosion are closely related. Really clean, highly stressed parts corrode fast. Bearings and journals are really clean because wear removes dirt and protective oxides. And the very nature of the machinery stresses parts. Corrosion causes roughness and roughness causes wear and wear causes heat, and heat and roughness accelerate corrosion! Roughness accelerates corrosion by increasing the surface area on which the corrosive can act. Oil must neutralize the corrosives and separate parts to prevent wear.

Bearing material dictates many of the ingredients in oil. Oil must not contain things that would corrode or enhance the corrosive action of other materials. Very few lubricant manufacturers can anticipate all the uses to which their oil will be put, but with the help of engine and bearing manufacturers, they try to act in concert so that the best bearings will hit the market at the same time the right lubricants do. Collusion isn't always pernicious!

Remember the rash of cam lobe failures in the '70s? Overhead cams acting at mid-length of rocker arms had to exert nearly twice the force of good strong valve springs. Sliding speed is low so the hydrodynamic film is weak, and the cam wipes right through it and destroys itself. That era about drove the lube manufacturers nuts. "SF" oils got pretty popular at that time. They have very high film breakdown strength. Our old cars have light valve springs, less aggressive piston rings, and lower piston side loads because of lower compression, longer rods, and lower RPM, so our lubricant needs are less severe.

Another important function of oil is cushioning impact of parts. Connecting rods and wristpins suffer this type of duty severely. Viscosity of the oil at operating temperature is a measure of the cushioning available. Loose rods, pins, and pistons call for higher viscosity oil.

What's with all the popularity of multiple-viscosity oil? That's just oil with an additive that stiffens when heated, somewhat offsetting the natural thinning of the oil when it heats up. Does this additive affect lubricity? Yup, it sure does! It makes it worse. Multi-viscosity oil is just a convenience to start easily on a cold morning, but not knock when hot. It is also useful for the guy who doesn't change oil when the season changes, or is too dumb to know that winter is colder than summer. For your summer-only antique car, skip this. An oil that's too thick also heats more from the shearing action going on (mostly at the piston walls). This wastes power, reducing gas mileage.

High-speed machinery such as race cars, motorcycles, and modern small-engined cars causes oil to foam. The pump can't pump it, and it doesn't cool bearings very well. Adding silicone lowers the surface tension and the bubbles collapse fast.

Should you use a detergent oil? Detergents are super wetting agents. They wash the varnish and scum from the metal, keeping it in suspension in the oil. Without a filter, the stuff just circulates through the engine, wearing it out faster. Don't use detergent unless the engine has a filter or your oil consumption is high or you drain the oil fairly often. (You should read that sentence as "use detergent oil and change filter and drain your oil often enough.")

Oil contains acid neutralizers to keep down corrosion. Synthetic oils are particularly good in this regard, and they have to be, because they stay in the engine for so long because of their high cost. They really are superior lubricants as well.

What about all these wonderful additives we can buy? They contain such nice sounding things as molybdenum disulfide, copper, zinc, graphite, and polytetrafluoroethylene. The oil makers and engine makers work long and hard to formulate oil that will do the best overall job physically and chemically. Putting all this hokus pokus junk in your oil absolutely destroys their efforts. The guy who can "prove" that Teflon is good because he poured it in his idling engine and the RPM went up 100 revs is the same guy who's wondering why his rings are sticking and his oil consumption is up six months later. The guy who shows you the wonders of moly is the same one who complains of low oil pressure next year. His bearings are corroded and he wonders why. Is STP great? Sure, if you're using the wrong viscosity oil in the first place. Put in the right oil! Moly and graphite are very small, very hard particles and very temperature resistant, too. Pile a bunch of them under your piston rings and hold them there with charred oil and you have a ring modifier instead of a viscosity modifier. Additives are like eating a lousy diet and taking lots

of vitamin and mineral pills. Try a better diet instead!

If your car has splash feed, which means low oil flow, the oil stays in the bearings longer and heats up more. You need a higher viscosity which will thin out because of long residence time in the bearings. Likewise with air-cooled cars. The cylinders run hot and need a higher viscosity oil, which will still have something left when it gets "good and hot." (Bad and hot would be a more appropriate term!)

Remember the old, "inferior" once-through lube systems of the first decade of the century? Indian motorcycles (motorcycles) used it well into the thirties. The oil arrived at the bearings 100% clean, 100% cool, with 100% of the acid neutralizers intact and no foam, as every drop was brand new oil. Also, no filter was needed. The only drawback—oil consumption a bit higher than modern systems. So, the once-through system has advantages.

Some old engines used iron pistons. Some rings are iron, some are chrome faced. Newer ones are moly faced. Some cylinder walls are aluminum. Some are silicon-carbide which is so hard it's machined with diamond. There are hundreds of alloys of babbitt. Some thick babbitts pound out and the engine runs with loose rods all the time. This requires high viscosity oil. Some old engines produce all their torque at very low RPM. These require good film strength. Today's trend is toward higher RPM, requiring anti-foaming excellence. Gasohol imposes special lube requirements. The fuel itself has proven corrosive to bearings and detrimental to conventional oils, which are made for compatibility, with hydrocarbon fuels.

A very common question among automobile buffs is, "What kind of oil would you use in such-and-such kind of engine?" The only serious answer begins... "Well, it all depends..."

WPCC TO BE RE-INVENTED? STICK AROUND!

by Al Friend

Well, if you missed the October meeting, you missed a very exciting one. Hopefully this meeting has turned WPCC in a new and better direction. Irene Artzberger summed it all up when she stated "*We have to try something, because what we are doing isn't working!*"

Wayne Jones led a very pointed and emotional discussion that included, among other topics:

1. Members are not using their Corvairs for events and meetings. Wayne asked why do we have a Corvair Club if members are going to drive their water-pumpers because they are air conditioned.
2. Long winded meetings that do not include Corvair topics.
3. Not enough money in the treasury to allow the officers any flexibility.
4. Members who have time to contribute-but won't!
5. Members who have little time to contribute-but do!
6. The burning out of the few busy members who are expected to do everything year after year.
7. Reasons for poor attendance at meetings and events.
8. New members who attend a meeting or two and then drop out of sight. Are they voting for change with their feet?

Inspired by Wayne's sincere plea for change, I volunteered to run for President, if the following members would run with me, as a slate "for change".

Wayne Jones V P and Journal editor
Pat Greenwald Secretary
Dale and Ellen Smith Co-treasurers and Club
CORSA liaison

They all agreed to serve, as did Dave Fabyonic agree to revise the by-laws when the dust settles.

Let me state right here and now that "the slate", if elected, plans to **change** virtually everything about WPCC. If you do not want WPCC to change, then get your "anti-change" slate together, and run against us.

I would also like to ask that the 1993 Officers and Board conduct the elections at the December 12 Holiday party, since this is traditionally the best attended event of the year, and we need to get started as soon as possible.

In my opinion, our Club and similar organizations are stagnating and failing because the pace of life in the 90's leaves little time for anything except making a living. For those who want to enjoy doing old car things with their Vairs, many alternatives exist. I really don't think that we have enough to discuss to justify giving up an evening every month for a meeting. Many events are poorly attended. Could it be that we don't have time to properly plan and promote them? If the answer is yes, the lets try fewer but properly done events. The changes that we finally make will depend on input from the other officers, but here are a few changes that I plan to propose:

1. The dues will be raised to \$15.00 immediately.
2. Fewer, but more interesting meetings, in conjunction with events, parties, picnics, etc.
3. No regular meeting place, time or dates. Everyone will have to read the quarterly Journals to find out what is going on, and rent money can be spent more productively.
4. Fewer, but better planned events. Event chairpersons will be monitored by the officers to insure that information is published in a timely manner.
5. A time limit will be put on unrelated topics that come up during meetings.
6. Fewer Vair Street Journals so we don't keep burning out our editors.
7. Development of a phone alert system to notify ACTIVE members of late breaking events, of to call emergency meetings.
8. Corvair related topics to be discussed at meetings. All meeting formats will be:

Old Business

New Business

Why each of you did or did not drive a Corvair to this event/meeting.

Please plan to attend the November 23 meeting and the December 12 Holiday Party to give your input and event ideas to next year's candidates, and let's re-invent WPCG so it helps us to enjoy our Corvair without wasting any more of our valuable time.

CORVAIR LAMP SUMMARY (EXTRACTED FROM GM SHOP MANUALS)

LARRY SCRIV

| <u>APPLICATION/YEAR</u> | <u>'60-63</u> | <u>'64</u> | <u>'65-66</u> | <u>'67</u> | <u>'68-69</u> |
|--|---------------|------------|---------------|------------|---------------|
| ADLAMP OUTER HIGH/LOW (37 1/2 & 50 W) | 4002 | 4002 | 4002 | 4002 | 4002 |
| HEADLAMP INNER HIGH (37 1/2 W) | 4001 | 4001 | 4001 | 4001 | 4001 |
| PARKING & TURN (4-32 CP) | 1034 | 1157 | 1157 | 1157 | 1157 |
| TAIL, STOP, TURN (4-32 CP) | 1034 | 1157 | 1157 | 1157 | 1157 |
| BACK-UP (32 CP) | 1073 | 1156 | 1156 | 1156 | 1156 |
| INSTRUMENT (3 CP) | 1816 | 1816 | 1816 | 1816 | 1816 |
| TURN ANNUNCIATORS (1 CP) | 57 (2 CP) | 1445 | 1445 | 1445 | 1445 |
| TEMP-PRESS (2 CP) | 57 | 1895 | 1895 | 1895 | 1895 |
| GEN-FAN (2 CP) | 57 | 1895 | 1895 | 1895 | 1895 |
| HI-BEAM ANNUNCIATOR (1 CP) | 53 | 1445 | 1445 | 1445 | 1445 |
| GLOVE BOX (2 CP) | 57 | 1895 | 1895 | 1895 | 1895 |
| HORN (15 CP) | 211 | 211 | 211 | 211 | 211 |
| COURTESY (6 CP) | 89 | 631 | 631 | 631 | 631 |
| LICENSE PLATE (4 CP) | 67 | 1155 | 67 | 67 | 67 |
| RADIO DIAL (2 CP) | 1891 | 1893 | 1893 | 1893 | 1893 |
| HEATER CONTROL (1 CP) | 53 | 1445 | 1445 | 1445 | 1445 |
| BRAKE WARNING (2 CP) | | | | 1895 | 1895 |
| MARKER LAMP, FRONT (2 CP) | | | | | 194A |
| MARKER LAMP, REAR (2 CP) | | | | | 194 |

DEPENDING ON YEAR & MODEL, THERE ARE 11-TO 13 DIFFERENT TYPES OF LAMPS USED ON CORVAIRS, IN 27 TO 33 SEPARATE LOCATIONS ON THE VEHICLES. "ON BOARD SPARES" FOR ONLY THE MOST CRITICAL APPLICATIONS WOULD SUGGEST THE FOLLOWING:

1960 1 EA #57, 1 EA #67, 1 EA #1034, 1 EA #4001, & 1 EA #4002
 1961-69 1 EA #67, 1 EA #1157, 1 EA #1895, 1 EA #4001, & 1 EA #4002

MANY OWNERS, HOWEVER, CHOOSE TO CARRY ONE OR MORE SPARES FOR PRACTICALLY EACH TYPE OF LAMP. THE AUTHOR RECOMMENDS THE FOLLOWING FOR *MOST* CORVAIRS, ESPECIALLY WHEN AWAY FROM HOME:

1 EA #67, 1 EA #211, 1 EA #631, 1 EA #1156, 2 EA #1157, 1 EA #1445, 2 EA #1816, 2 EA #1895, 1 EA #4001, & 2 EA #4002

NOTE: KEN LANE OF COLUMBIA BASIN CORVAIRS RECOMMENDS A 40 CP WAGNER #2357 TO REPLACE THE 1157.

GREENBRIER GOES TO HOLLYWOOD

Larry Claypool

Earlier this year, the CORSA national office received a call from *SUNSET BOULEVARD PRODUCTIONS*, a movie company scheduled to shoot a film in Chicago. The script called for an older semi-collectable van that could sit three across the front seat. Earlier VW vans had been considered, but someone at the production company suggested a Greenbrier as an interesting alternative.

The preliminary contact was to find out more about Greenbriers. What did they look like? Were there any of them around? Were any for sale? Kathy Jensen, in the CORSA office, fielded the initial call, and sent the company some *COMMUNIQUE*s depicting Greenbriers. She also suggested they contact me regarding available Greenbriers.

A day later, I received the suggested call. I searched the CCE membership directory, mentally trying to picture who had what. I came up with a dozen possibilities.

The initial report must have positive, as the Vehicle Coordinator, George DiLeonardi, called the next day. I suggested to George that he take a drive out to my shop to view a Greenbrier firsthand. He agreed, and arranged to be out the next morning.

Things now began to happen very quickly! I dragged a '65 Greenbrier Deluxe out of the back where it had been rusting, er, I mean resting, for about a year. Although I knew the motor turned freely, I never had attempted to start it; in fact, I hadn't done a thing to it other than tow it in. The truck had sat previously for about ten years. I figured it would make a good "beater"; it was rusty, a little beat up, but not "parts car" status yet.

I also called CCE member Jim MacDonald, who has a pretty nice '64 Greenbrier. With both 'Briers present, George was able to take several still shots. The roll-down side windows, wide interior, full width front seat, and distinctive exterior styling were all pluses in the studio's considerations.

"If we decide to go with the Greenbrier, we'll need three. What's available? We prefer to buy vehicles outright where possible; that way if anything happens, there's no problems". Well, the '65 I had was certainly available. Another club member, Jim Felbinger, had, by utmost coincidence, another '65 Deluxe model for sale. Both of these were sticks; one three, and the other four speed. George then talked to Jim MacDonald about his '64; as a automatic it was the preferred choice for "moving" shots, as the actors wouldn't have to remember shift patterns, shift points, or clutch work besides their lines. Although not for sale, a rental price was agreed upon. If the Director liked the photos, we'd be in business.

On Wednesday, George called again. "They love them. I bought Felbinger's Greenbrier; it should be down to you tonight. We need you to make all three trucks look the same. We'll paint them, but things like mirrors, emblems, etc. need to be identical. The automatic will be used for moving scenes; the two others for stationary and interior shots. But all three need to run reliably, so we can move them from location to location. How quick can you have them done?"

Fortunately, the entire ordeal began in February, a traditionally slow time in my shop. Repair of my Greenbrier was about what I figured; brake lines, carb rebuilds, o-rings, gas tank cleaning, battery, and wheel cylinders. The engine fired up nicely, but was drowned out by the rattle of it's severely loose flywheel! Out came the power train; in went a new clutch assembly. The other '65, although running and driving, required considerable work as well; carb rebuilds, various engine shrouds were missing, exhaust leaks, loose steering, and other details were attended to.

The '64 "driver" truck received a tune-up and top off of all fluids; otherwise it was pretty much set already.

Then came the process of making the trucks look similar. A trailer hitch and roof rack were removed from the '64, along with it's wire wheel covers. I had more '61 and '62 door emblems than any other, so that's what was installed on all three vehicles. A radio antenna was installed on one 'Brier; the washer nozzles and door reflectors were taken off of two. Similar "west coast" style mirrors were installed on all three. Since the '64 was a Standard, the Deluxe interior panels were removed from both '65's. None of the three had radios installed at the time, so the only other change to the dash area was to tuck the gas heater controls out of the way on Jim's, leaving only the air heater controls exposed (Jim's truck has both!).

The process was completed by the following Monday; one week from the initial contact. George stopped by, and seemed well pleased. A huge flatbed truck was summoned, and all three Greenbriers went off at once. Next stop, the paint shop.

The film is set in current times, thus the trucks were "aged" cosmetically to look pretty well used. Convincing "rust" streaks were added over the faded (but new) red paint jobs. Interiors were repainted, as well, to matching shades of Fawn Beige.

The movie, *WITH HONORS*, stars Joe Pesci, playing a homeless person who is befriended by a college kid; the owner of the Greenbrier. Basically, Pesci ends up doing homework for the college kid, who, in trade, lets Pesci live in the van. To accomplish the many interior shots, a four-foot by three-foot section was cut out of the left side of one of the '65 models. Windshields were removed during some of the shots as well. Filming lasted about three months. George reported that all three Greenbriers performed flawlessly; in fact, one of the '65's (the one without the hole in it) was purchased by an impressed crew member.

Jim's '64 was returned to the paint shop, where it was resprayed it's former white with brown stripe. An added plus came in the way of a headliner which was fabricated and nicely installed. This truck, along with the '65 I had originally sold them, was then brought back out to my shop. All of Jim's accessories, such as the hitch and wire wheel covers, were reinstalled. An oil change and complete check over was also performed at the studio's expense. The '65 is still in as-photographed condition, purposely left that way in the event any retakes are needed. After a few months, ownership returns to me.

All in all, it was a very pleasurable experience dealing with this production company, George DiLeonardi in particular.

We hope to see the 'Briers favorably depicted in the movie!

Condensed slightly from the Aug, 1993 issue of *AIRHORN*; Chicagoland Corvair Enthusiasts

NOV/DEC VAIR ST JOURNAL