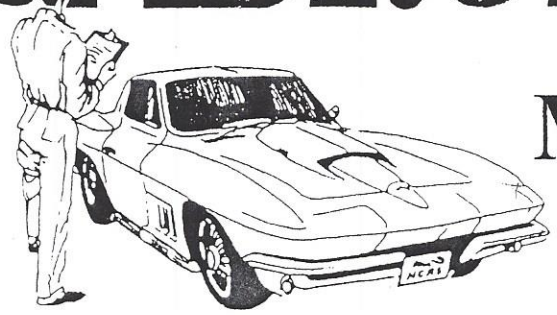
ROADRUNNER



March, 2017

THE NEWSLETTER OF THE NEW MEXICO CHAPTER NCRS

COMING EVENTS

Mar	5	Pomona Swap Meet, LA County Fairplex, Pomona, CA
Mar	**11**	**NCRS New Mexico Chapter Meeting, Judging Meet, Location TBA, Albuquerque**
Mar	12	Rio Grande Corvette Club Meeting and Event, 12:30 PM, Reliable Chevrolet, Albuquerque
Mar	18	Christian Rods & Customs, Sonic, 5000 San Mateo NE, 7:30 PM, Albuquerque
Mar	19	Route 66 Rodders, Cruisin' at Fastino's, 1:00 PM, 2600 Juan Tabo NE, Albuquerque
Mar	22	NMCCC Meeting, Old Car Garage, 3232 Girard NE, 7:30 PM, Albuquerque
Apr	**6-8**	**NCRS Western Regional, Laughlin, Nevada**
Apr	**8**	**NCRS New Mexico Chapter Meeting, Location TBA, Albuquerque**
Apr	9	Rio Grande Corvette Club Meeting & Event, 12:30 PM, Reliable Chevrolet, Albuquerque
Apr	15	Christian Rods & Customs, Sonic, 5000 San Mateo NE, 7:30 PM, Albuquerque
Apr	16	Route 66 Rodders, Cruisin' at Fastino's, 2600 Juan Tabo NE, 1:00 PM, Albuquerque
Apr	23	Pomona Swap Meet, LA County Fairplex, Pomona, CA
Apr	26	NMCCC Meeting, Old Car Garage, 3232 Girard NE, 7:30 PM, Albuquerque
Apr	27-30	Pate Swap Meet, Texas Motor Speedway, Fort Worth, TX
May	**13**	**NCRS New Mexico Chapter Meeting, Route 66 Cleanup, Carnuel, NM**
May	14	Rio Grande Corvette Club Meeting & Event, 12:30 PM, Reliable Chevrolet, Albuquerque
May	20	Christian Rods & Customs, Sonic, 5000 San Mateo NE, 7:30 PM, Albuquerque
May	21	NMCCC Albuquerque Museum All Makes Car Show, Albuquerque Museum
May	21	Route 66 Rodders, Cruisin' at Fastino's, 1:00 PM, 2600 Juan Tabo NE, Albuquerque
May	24	NMCCC Meeting, Old Car Garage, 3232 Girard NE, 7:30 PM, Albuquerque

For further information on these and many other automotive events, please see http://nmcarcouncil.org

NATIONAL CORVETTE RESTORERS SOCIETY

NEW MEXICO CHAPTER

Minutes of proceedings

Saturday, February 11, 2017

The meeting was called to order by President Billie Pyzel at 8:40 AM. The meeting took place at 3rd Street Restorations.

Visitors in attendance: Skip Burroughs

A motion was made by Dan Pyzel and seconded by Pete Lindahl to accept the minutes from the previous meeting. The motion passed.

Treasurers Report: Treasurer Eli Maestas reports that our current balance is $4446.46.

Judging Report: There will be a judging meet following our March 18 meeting at 3rd Street Restorations. There are currently two cars to be judged. Dan Pyzel requests that anyone wanting to have their cars judged next month, to contact Bill Baker, to have him get your judging papers.

Dan Pyzel reminds anyone going to the Laughlin Regional in April to get your reservations made now.

Our April 15 meeting will be held at San Felipe Casino.

Also discuss was the Road Tour in July that will be stopping in Albuquerque overnight.

A motion was made by Dan Pyzel and seconded by Talbot Smith to adjourn the meeting.

Following the meeting, a Tech Session was given by Skip Burroughs, on ignition timing, and why it is so important . Skip is a former member of the Ford Drag Racing Team in the 1960's and 1970's and was crew chief on "Gas Ronda's Ford Mustang Funny Car ."

Respectfully submitted

Phil Dankworth

MARCH MEETING

The March meeting of the New Mexico Chapter, NCRS will be Saturday, March 18th. Please note; this is one week later than our usual meeting time. We will meet at 8:30 AM at Rick Jones' shop on Constitution at third street in downtown Albuquerque. After a short business meeting, we will have our Spring Chapter Judging Meet. Once again, this is a good opportunity to gain judging points and experience. Please come out and help.

APRIL

Again in April, we will move our meeting date back a week to avoid conflict with the NCRS Western Regional in Laughlin, Nevada. Our meeting date will be Saturday the 15th. More details will follow.

MAY

In May the NCRS will hold the Heartland Regional in Newton, Iowa. Our Chapter meeting will be on Saturday, May 13th, and will be our Spring cleanup session of old Route 66 at Carnuel, NM. On Sunday the 21st the New Mexico Council of Car Clubs and the Albuquerque Museum will have the annual Museum Car show at the Albuquerque Museum. This show is open to all makes, and the theme this year is automobiles built in 1967.

SANTA FE PICNIC

After sixteen years, the Old Santa Fe Trail Corvettes have decided to hang it up. More and more work for less and less return have made it not worth continuing. These guys and gals have given all of us so much for so many years. They will continue to host tours and picnics now and then. Thanks friends for everything.

MARCH BIRTHDAYS

3/1 Bill Wilhelm
3/14 Mike Whitehead
3/17 Adrian Betts
3/25 Debbie Zamora
3/29 Ida Lise Leyba

3/8 Rick Jones
3/15 Robert Payne
3/18 Ken Betts
3/25 Donna Barnett
Happy Birthday!!!

3/12 Vi Chavez-Cropp
3/16 Molly Whitehead
3/19 Mike Zamora
3/27 Rex Davis
Happy Birthday!!!

THE TALEPIPE

PUBLICATION OF THE TEXAS CHAPTER OF THE NATIONAL CORVETTE RESTORERS SOCIETY

FIRST QUARTER 2017 ISSUE

Michael Johnson's 1966 Big Tank Coupe. See article on page 7 for story.

Hunting for the Rare and Elusive Tanker by Michael Johnson

When you ask Corvette enthusiasts what the most coveted Corvette would be to own, you will probably get as many answers as there are enthusiasts. It is something different to everyone, some go for a '57 fuelie, or a '67 L71, or a big block C3 with A/C. C2 tankers catch my interest, the cars built with the 36.5-gallon gas tank in the rear that takes up most all the luggage space, at a $202 price. Somehow the addition of that tank, and almost as importantly, the story of why anyone would order it, along with a host of other options, is intriguing to me.

They are quite rare Corvettes. Initially the big tanks were for special race prepared cars, with fuel injection, big brakes, HD suspension, and not many other options. The bigger tank allowed longer time on the track without refueling, but later became less popular with racers, due to weight distribution/handling issues, and more popular with other buyers for a variety of reasons. They started in 1959, as an option with a 24-gallon tank, and no soft top was available with them since the tank took up so much space in a C1. No numbers are known for how many were produced for each year, until 1962, when it is known 65 of them were made, out of 14, 531 total produced. For C2s, when the tank size went up to 36.5 gallons, there were 63 made in '63, 38 made in '64, 41 made in '65, 66 made in '66, and only 2 made in '67, as the big tank option was halted.

I first started looking for a tanker when several threads appeared on the NCRS TDB, where people were discussing their tankers. I started reading up on the critical characteristics and talking to people who owned them. I had contacted one member who had one and asked if he might want to sell. He said he was not interested, so time passed and I noticed him again talking about his tanker, but now saying he would be interested in a sale. I contacted him immediately, and we made a deal. It is an Ermine White '64 FI tanker, unrestored with low miles, but hard use. It had the original window sticker, and some previous owner history, and had been owned by the current owner for 30+ years. My lessons in "Tankerology" came immediately into use.

Thanks to Bill Gould's research, I also contacted the 2nd and 3rd owners of the car, but alas the original owner had passed, and only stories from the 2nd owner about her existed, but also some great old pictures (picture 1 shows owner #2 picking up the car) and stories of the car in the '60s (picture 2 shows the car after it was stolen in 1968 near Boston and painted with a black stripe on the tail and hood patches to camouflage it). It turns out the car was originally owned by a lady in Cleveland, Ohio, where it was delivered at Humphrey Central Chevrolet. It has a list of 13 options on the window sticker, including J65 metallic brakes, 3.08 posi rear, leather saddle tan interior, power windows, and F40 suspension. When some probable Goodyear Blue Streak tires were swapped for the Power Cushions at delivery, the total was over $6,000, quite expensive for the day. Chronographs were soldered on the speaker grill (still there and they still work) and an oil temp gauge was installed in the glove box door, along with an 8-track tape player, all installed by the original lady owner. All this led the former owners to conclude the car was ordered for competitive road rally duty, but no records have yet been found to prove that.

The car had been through 6 owners before me (one wrote a history of the car in Vette Views in 1977), but little had been done to it except maintenance (and some chrome plating of engine parts) over the years, and when things were replaced, like the shocks, brakes, and rear leaf spring, the owner keep the original parts. It still showed all the original unique tanker marking, like the dyslectic backward "N" + "03" put on the bodies in the lower body assembly process in the basement of the St. Louis plant (picture 3 shows this marking on the back bulk head behind the tank, and the "364" body number), to mark it for numerous modifications and fabrications for the big tank, before being brought upstairs to be mated with the birdcage and modified upper body section in the main line of the body shop, as so well described by John Hinckley. In restoring the engine, the original

markings on the back of the heads were also visible, so the car is a great example of an original tanker. I have decided not to do much more than get it running and driving well, and preserving most all the rest of the originality of the car where possible.

It seemed like after all the due diligence and education on "Tankerology" I had done, thanks to the NCRS TDB, and talking with various tanker experts, that like potato chips, one would not be enough. I looked at numerous others, but wanted something a bit different and of course not too outrageously priced, though that is relative in the tanker world. As luck would have it, a friend who knew of my search contacted me about a very different one for sale by the long time owner. It was a total frame off restoration, and so unusual were the options, much more due diligence was required. It too was a '64 FI, but it had J56 brakes, F40 suspension, TI, and P48 wheels among the 15 options it originally came with. And it was Tuxedo Black exterior with a white leather interior (picture 4). Speaking to former owners and verifying what was known, I couldn't resist it either. Unfortunately, the original owner, a sailor in San Diego who ordered it through Guaranty Chevrolet and transferred to Ft. Carson, Colo., had passed, so no information about the why of ordering such an unusual car could be found, but it had sat in various stages of neglect since the mid 1970s, in the Midwest until it was restored in 2010 or so.

But just when I thought I had enough, another opportunity presented itself in the NCRS Classifieds, as by now a friend in California was letting me know when something unusual was for sale. This was a silver/black '66 427 tanker (Cover Photo) for sale by a long time NCRS member who has owned it for the last 35+ years, and the original owner gave him a statement about the "why" of ordering the car. It says that he (a doctor in Tennessee) ordered it for his daughter for her high school graduation and he checked every option box he could see, which also required he order the 390 HP 427 since he wanted A/C. Yes, again a fully loaded car, this time with 20 options on the window sticker, and an unrestored car again with the tanker markings, but by '66 they had changed some. I really liked all the characteristics of the car, so made a deal. I am still in the process of finding more owners from the car's past.

So now I have 3 tankers, all a bit different, but all have some things in common. They are all loaded up with options, and most likely the original owners wanted exactly that. They all come from long time NCRS member owners who treasured the cars. Only the white '64 was raced. Only one has been judged in NCRS, at a SoCal Chapter meet 16 years ago. I am looking forward to taking all of them through judging, and really want people to see these unusual cars. This may be all the tankers I need for now, my garage is full and my wife says that is it. But……if the right one comes along……

Owner #2 picking up the car

Picture 1

The car shown after it was stolen in 1968 near Boston and painted with a black stripe on the tail and hood patches to camouflage it

Picture 2

Picture 3: Shows N + 03 and 364 Body #

Picture # 4: Car # 2, 1964

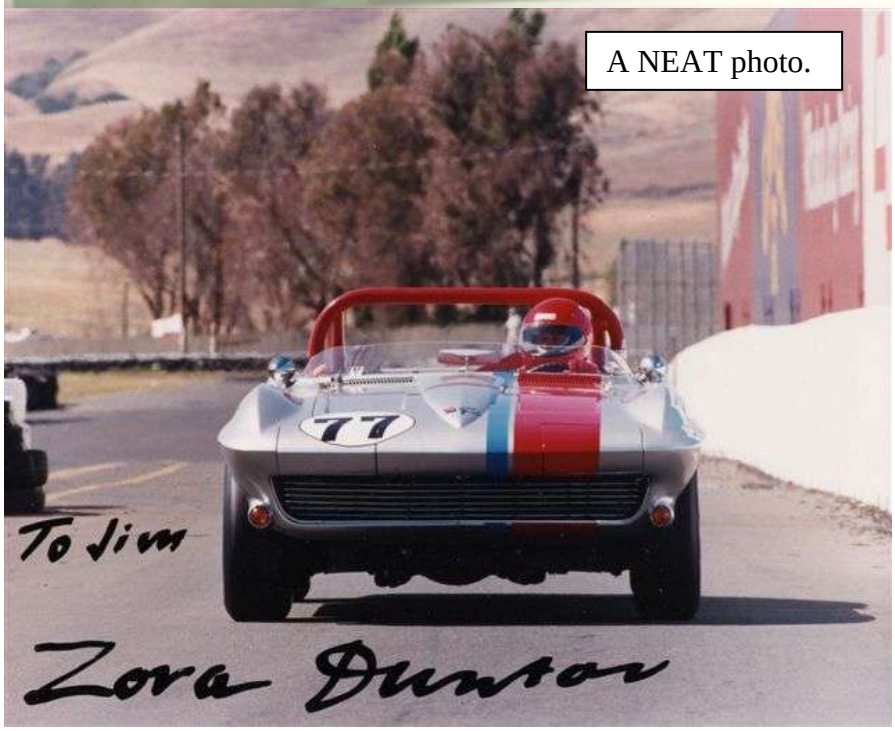
Corvette Racing Early Years by Jim Gessner

On Labor Day Weekend, September 2, 2000, the Corvette Museum sponsored the Millennium Celebration. I and other CORVETTE RACE CAR owners were invited for a special display. DOLLIE COLE, Chairman of the Board of the Museum and wife of Ed Cole was the perfect host. Corvette Plant Manager Will Cooksey added excitement to the event and presented Awards to the participants.

Significant Corvette Race Cars were present including the # 2 Cunningham 1960 LeMans car driven by Dr, Dick Thompson and Kimberly. That car was found in an Irwindale, California junkyard in 1982 by Mike Philsbury, a Southern California NCRS Corvette collector who discovered many neat race Corvettes.

JIM JEFFORDS was at the event, along with DICK GULDSTAND [1967 LeMans Corvette driver] and DOUG HOOPER [1963 Grand Sport #001 driver].

JEFFORDS owned and raced the 1956 Blue SR-2 and the 1960 CAMORADI LeMans car. Both of these cars were also present. NCRS members and car owners Loren Lundburg and Rich Mason brought these neat cars.



A NEAT photo.

I will be doing a fun, ''SITTING AROUND THE CAMPFIRE'' Roundtable with all of us ''old racers'' having a REUNION and discussion of the old days at the National Convention in July. The seminar will be held Thursday from 10AM to 11:30AM. These things have a way of creating a lot of excitement like MONTEREY 1987 and 2002. There will be a POWER POINT photo display of 1960 -73 Corvette racing to trigger our old memories. Here is a link to a story on the 2013 Sonoma Historic Motorsports Festival.
http://specialcarstore.com/content/sonoma-historic-motorsports-festival-racers-panel

NCRS National Convention 2017 by Bob Demmel

Well folks the national convention to be held July 9-13, 2017, is just around the corner both time and distance wise. The preparations are well underway and the registration information will be released in the January/February edition of the Driveline. In addition to the Year of the '67 we have several displays, seminars and tours lined up. Among the displays there is a GM mystery motor, and an original 265 motor. The seminars will include a session with Dave McLellan and Dave Hill, one with Jim Gessner and several veteran Corvette racers and one with Pat Lobb, the owner of the GM mystery motor. There are four planned judging point seminars as well as the Advanced Judges' Seminar. Tours include a Wine & Whiskey tour, Fredericksburg, the Missions, SeaWorld, Natural Bridge Caverns, and Lackland Air Force Base. A special, once in a lifetime event will be the night time tour and dinner at the Alamo. This dinner will include a visit from two living history enactors.

The convention itself will be held in the newly completed Henry B. Gonzalez Convention Center located on the River Walk. There will be ample space for all of the cars, vendors, swap spaces, and displays in the exhibition hall. Trailer parking will be indoors! The Welcome Reception is being held in the Lonesome Dove Room and Grotto in the convention center. We have a special guest appearance at the welcome reception that you won't want to miss so be sure to bring your cameras!

The host hotel will begin taking reservations for the convention on 1 February 2017. The host hotel is located on the River Walk within easy walking distance of the convention center. Secured Corvette parking will be available. There are over 150 restaurants, shops and bars within walking distance of the host hotel.

If you are planning to have your 1967 Corvette flight judged at the national Please Register Early! There will be a limit on the number that can be flight judged. There is NO LIMIT on the number of 1967 Corvettes that we will accept for the Year of the '67 display, or as we like to call it the Round Up on the River. We want to have more than 100 1967 Corvettes for display so please help us make that happen.

See you in San Antonio! Y'all Come!

NCRS 2017 NATIONAL CONVENTION SAN ANTONIO TX

C1 Corvette Paint Process from the St. Louis Plant

By Tim Ehlers – Part 1 of 2.

I've had the following document in my C1 library for quite some time and thought it would be interesting reading for those of you with C1's, C2's, and C3's.
The author is Harry Jones of the Michigan Chapter. Harry's title was General Motor Assembly Division (GMAD) Senior Process and Production Engineer and one of his responsibilities was coordinating Corvette Body, Paint and Trim adhesives, sealants, bonding and paint materials, processes and equipment with the GMAD Corvette Assembly Plant. An electronic version of Harry's document is available at:
http://www.stlouisncrs.org/news_files/St_LouisNCRS_ChapterNewsletter2ndQuarter2015.pdf
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CORVETTE-ST. LOUIS PAINT SHOP INFORMATION

The information provided is best memory of processes, equipment etc. used on C-1 Corvettes.

SCHEDULE / PRODUCTION RATE

- Body/bird cage build schedule run sheets hand written on 8 ½" X 11" paper based upon orders received from Central Office-Detroit. 1st order in 1st order out dependent upon part availability! Each body assembly (including bird cage) assigned sequence number from 1 to 500. Build run (500 vehicles) consisted of 25 pages, 20 vehicles per page. Pages stapled together. Pages mimeographed to produce number of needed run sheets per schedule so each operator and assembly fixture had one. Mimeograph build sheet listed body style and options ordered. New build schedule run sheets given to operators by plant scheduler when current run sheet sequence number reached close to 500.
- Usual hourly build rate-7 units/hour. 56 units/8-hour shift. Weekly build 280. Monthly build 1,120. Yearly 10,000 (1st reached in 1960).
- When on two shifts, daily build is 112. Weekly 560. Monthly 2,240. Yearly 20,000 (1st reached in 1963).
- Whether on one or two shift, unit cycle time was 9 minutes. Paint shop facility lengths set body cycle time!

BIRD CAGE/BODY ASSEMBLY

- One birdcage for all body styles, hard tops and convertibles - C-1's. C-2's had two birdcages, one for convertibles, one for coupes. After weld assembly, birdcage hung onto overhead monorail conveyor using chains to hold it in best position for spray cleaning and drainage. Birdcage moved through small washer enclosure and sprayed with solution to remove oils, etc from metal surfaces followed by treated water spray to neutralize and remove cleaner. Birdcage dripped dry.
- Birdcage placed onto small four-wheel dolly and manually moved into small side draft dry spray booth. Unit sprayed with one coat olive drab colored zinc chromate primer. Some interior box areas covered using needle type spray gun inserted into box sections. Unpainted areas inside box areas prone to rust in later years due to humidity, etc. Good corrosion resistant primer. Paint flashed and air-dried – usually in two-three minutes. Build sequence number written on birdcage with green paint stick after paint dried.
- Birdcage assembled to underbody assembly in plant basement, which included attachment of transmission yoke metal safety shield to floor pan underside. Unit hoisted up through floor opening and placed onto body truck where remaining body panels were assembled to it.
- Body truck, a four-wheeled rectangular box shaped conveyance moved by a single floor chain drag type conveyor through body panel assembly operations, paint and trims shops and then back to underbody load area where another underbody assembly placed onto it again.

• Body build sequence number hand written by operator on inside of certain panels with green paint stick. Paint sticks would dry out if not used within several days. After weekend, operators threw them away to start shift. Operators used specific paint stick colors so sequence number could easily be read against white/beige panel color. Area picked for sequence number application usually in non-visible area after body trimmed. Subsequent operators checked sequence number before joining parts/subassembly together. Remember grease pencils not invented yet.
• Filler material skived into bond seams along the entire body. Material air-dries in approximately 3 minutes.
• Some parts assembled to body – radiator support, gas tank door and rubber bumpers (2), male (hood underside) and female (fire wall) hood lock and catch parts including rubber bumpers (2) on hood anti-rattle pins, hood release and park brake handle assembly and cables, hood hinges-RH/LH, front left side hood hold open support assembly, seat belt anchors RH/LH, door lock including inner door mechanisms and catch (lock pillar) RH/LH, window regulators (RH/LH)-both power (minus electric motor) and hand wind, glove box door, fire wall inside insulation pads (3) with rubber push-in buttons, dimmer switch on floor, gas tank and neck rubber seal to body, gas tank vent hose, clamp and attaching screw inside gas fill lid, gas tank access cover (only with two screws-prevent it from moving) and under dash wire harness clips. Believe there are others. Just can't remember them!!
• Engineering not concerned about final visual appearance of parts when primer and topcoat paints peel off due to paints not able to stick to plated or rubber substrates.

PAINT PREP SHOP

• All raw body exterior panel surfaces scuffed sanded inside dry side draft booth type enclosure.
• Operators used single hand held air operated oscillating (jitterbug) type sanders with stack of 280-grit sandpaper mechanically held to sander soft pad bottom to sand entire body surfaces except bond seams.
• Operators used 8-inch diameter air operated circular moving sanders with 280-grit disc paper adhesively held to soft backup pad to smooth out bond seams.
• Operators rubbed their gloved open palm along body panels/bond joints to feel smoothness. Much operator training necessary for this job. New hires usually placed here because of job dirtiness.
• Quick dry (less than one minute) hard pit filler material (received in 10 oz hand squeeze out tubes) applied with tongue depressor from local medical supply house to any visible pits in panels and bond seams. Areas then sanded either by hand with stack 280 grit paper or with jitterbug sander, etc.
• Complete body tack ragged with cheesecloth material to remove sanding dust. Material dipped in specified tacky varnish type liquid and hung up to dry for about one hour. Then material folded onto itself several times to form 8-inch square tack pad. Operator rubbed tack rag over entire body. Tack rag would maintain its tackiness, but not leave residue when rubbed over body panels and would pick up all dust, etc. Manually held air-supplied nozzles were used to blow out dust in crevasses, etc. Ionized air process not invented yet so static affect occurred.

PAINT SHOP

• Throughout Paint Shop, usually in front of and at exit of each spray booth and oven was metal plate surface (called transfer area) whereby operators/sprayers manually move body truck off conveyor into holding area and then back onto conveyor after repair prep work completed. These areas were used to complete major body panel surface and prime/paint repair preparations.
• Operators used five foot long steel poles inserted into round pipes welded to rear corners of body truck to manually move them through transfer areas.

• Cowl vent assembly, kick panels (2), RH dash finish out panel, glove storage tray (one 'L' clip riveted to it), gage cluster housing (zinc die cast-received primed from vendor) (2) and trunk finish out panel were laid on floor of body with correct side up. Dash end caps (2) loosely attached to final assembly place with one screw. Speedo housing (zinc die cast-received primed from vendor) loosely attached to dash panel with two bolts.

PRIME SPRAY BOOTH AND BAKE OVEN

• Sprayers, using an air-supplied nozzle, blow off both body and truck and tack rag complete body exterior again.
• Booth was down draft type; three job lengths long where sprayers stood on open grating. Under grating was moving waterfall through which air/overspray collected and filtered through media material, which was disposed of. Water and air recirculated back through spray booth. Floor drag chain conveyor moved body/truck from one station to the next.
• Body, certain attached parts and small parts laying on body floor sprayed with quick flash lacquer based red color primer which flashed for one job length followed by coat of gray colored lacquer based primer, wet on wet.
• Two sprayers, one standing on each side of the body, moved their spray guns in unison (they mirrored each other's action) to prevent dry spray occurrence of primer products on both sides and edges of hood, roof (coupe), convertible top storage cover lid, gas tank access panel/area, trunk inside and both sides of deck lid panel. Care was taken when painting hood, doors, deck lid, trunk inside and convertible top storage lid not to mar wet paint as sprayers opened and closed panels. With doors open, painted lock and hinge pillar areas, door edges (usually little to no paint was applied to door bottoms) and trunk lock close out panel and cowl vent grille assembly (both of which were lying on body floor).
• With doors in open position, sprayers primed seat separator and lid (both sides) and then closed it, dash center console panel, kick panels (2), RH dash finish out panel, glove storage tray, trunk finish out panel, speedo housing, gage cluster housings (2) and dash end caps (2). Some parts were held to be primed and then laid back onto body floor. Others were painted while on the floor or attached to the body. All were transported through the Bake Oven in the body.
• Deck lid left open (male lock installed on lid but trunk close out panel not installed). But convertible top storage lid hood and doors were closed to lock contact (not latched).
• When primed body reached end of Prime Spray Booth conveyor, two sprayers moved body across transfer area and onto one of four conveyors through Prime Bake Oven. Time from spray booth to oven was considered the specified flash time for both primers. Sprayers were careful not to touch wet primer.
• Primer bake - 60 minutes at 280F. Oven gas fired. Using four conveyors through oven shortened required length and provided capacity to also dry bodies from Wet Sand Area.
• At end of Prime Bake Oven, operators moved body/truck over transfer area and onto Wet Sand onveyor.

WET SAND AREA

• Operators used hand held jitterbug sanders with water supplied via hose to front of unit. 360 grit sandpaper was used to smooth primer finish.
• If operator exposed red color primer, body was rerun through Primer Bake Oven to dry water and back through Primer Spray Booth for another coat of gray primer. Operators moved body/truck onto desired conveyors in Prime Bake Oven.
• After Wet Sand Area, bodies run back through Primer Bake Oven to dry water.
• Deionized water not invented yet so water spots under color coat an issue.
• Operators moved body/truck through transfer area onto Number One Topcoat Color Spray Booth onveyor.
• Body interior and associated parts lying on body floor were not wet sanded.

TOPCOAT COLOR SPRAY BOOTH AND BAKE OVEN

- Paint Scheduler marked topcoat color on trunk front panel with green paint stick. Color names, red, blue, turquoise, maroon, green, white, black and silver. Abbreviation of these colors were used to save time when writing them and in caps (RED, BLU, TUR, MAR, IVO, BLK, and SIL.
- Interior colors were marked on driver side floor panel area with green paint stick. Colors were red, black, charcoal, blue, and turquoise. Abbreviations of these colors were written in caps (RED, BLK, CHAR, BLU and TUR).
- Scheduler compared sequence number marked on visible body panels and matched it with build schedule sheet to determine vehicle exterior and interior colors.
- Never had body with sequence number from one build schedule and another body with same sequence number from another build schedule in paint shop at same time. That's the reason for the 500 job/build run number.
- Topcoat color was applied in down draft wet Spray Booth just like Primer Spray Booth. Spray Booth held three jobs. Floor drag chain conveyor moved body/truck from one station to the next.
- Sprayers apply lacquer based quick flash sealer coat (whitish in color and produces a spider web looking finish) to all body areas and parts on body floor. Sealer was required so lacquer topcoat color would adhere to primers. Painters called sealer an 'adhesive'.
- Body, certain attached parts and small parts lying on the body's floor were sprayed with three coats of specified topcoat color, wet on wet over the sealer coat.
- Two sprayers, one standing on each side of the body, moved their spray guns in unison (they mirrored each other's action) to prevent dry spray on both sides and edges of hood, roof (coupe), convertible top storage cover lid, gas tank access panel/area, trunk inside and both sides of deck lid panel. Care taken when painting hood, doors, deck lid, trunk inside and convertible top storage lid not to mar wet paint as sprayers opened and closed these panels. With doors open, they painted lock and hinge pillar areas, door edges (usually little to no paint was applied to the door bottoms) and trunk lock close out panel and cowl vent grille assembly (both of which were lying on the body floor).
- With the doors in open position, sprayers painted seat separator and its lid (both sides) and closed it and the trunk finish out panel.
- If interior color specified was different than exterior color, the dash center console panel, kick panels (2), RH dash finish out panel, glove storage tray, speedo housing, gage cluster housings (2) and dash end caps (2) were then painted.
- Sprayers used care to prevent overspray when interior parts were specified different color than exterior.
- If both exterior and interior was same color, parts were painted at same time with other parts. Some parts were held by sprayers to be painted and then laid onto body floor. Others were painted while they were lying on body floor or attached to body. All were transported through Bake Oven in body.
- Flash time between sealer and each topcoat color coat was about one-two minutes.
- At the end of the Topcoat Spray Booth, sprayers moved body/truck from the Spray Booth conveyor over transfer area onto one of the two Topcoat Color Bake Oven conveyors. Flash time between Spray Booth and Bake Oven was about 5-6 minutes. Sprayers were careful not to touch wet topcoat color application.
- Bake was 20 minutes at 160F, which sufficiently dried paint finish for subsequent repair sanding and handling without causing surface imperfections. Bake Oven was gas fired.
- After Topcoat Bake Oven, minor topcoat color surface imperfections were removed by hand sanding using stack of wet 400-grit sand paper. Major imperfections were removed using

jitterbugs with wet or dry stack of 400-grit sandpaper followed by hand wet sanding. All repaired areas were wiped with a tack rag to remove sanding dust prior to being retop coated.

By Tim Ehlers – Part 2 of 2.

FINAL PAINT REPAIR SPRAY BOOTH AND BAKE OVEN

- Small repairs to topcoat finish were completed here.
- Body repair areas were sprayed with specified topcoat color with dry spray areas created around repaired area sprayed/blended in with specified thinner which melted the original applied topcoat color areas with the just applied color. After flashing the repaired area would be virtually undetectable.
- If ordered, front fender cove area masked off with paper and tape and sprayed with two coats of specified topcoat color. Sprayers checked build schedule to obtain specified cove color. Hopefully no fender area required paint repair. Masking paper was removed prior to Final Bake Oven. Operator used care in its removal to prevent wet paint mars.
- Final bake was 45 minutes at 250F. Oven was gas fired.
- Required bake for lacquer paint to obtain specified gloss (lacquer reflow) was 32 minutes at 320F. Fiberglass bodies could not withstand that high of a temperature.

INTERIOR PARTS

- Since these parts were not baked at reflow temperature and were not polished, gloss level was less than the body exterior.
- Radio speaker grilles, defroster bezels and delete interior courtesy light covers were gang placed onto cardboard sections (cut from boxes holding parts from suppliers), spray primed with red color lacquer based primer in the Primer Spray Booth, sections laid onto body floor and baked in the Primer Bake Oven. Several coats of specified exterior lacquer topcoat color were applied in Topcoat Color Spray Booth, sections laid onto body floor and conveyed through Bake Oven. Material Handler delivered these parts to their installation area in the Trim Shop. Several sections painted would last for complete shift.

BLACK-OUT SPRAY BOOTH

- Prior to this Spray Booth, the three inner tube material radiator close out pieces were glued to the radiator support and lower valance panel to close out the opening between them, thus improving radiator cooling.
- Black out was a 10-degree gloss black color quick flash/dry paint called Duco. Dry Spray Booth and no bake oven after it. Sprayers applied black-out to front and rear wheelhouse openings so exterior color (from topcoat application to wheel house opening edges) could not be seen when completed vehicle at wheel/tire level. Masking shields were not used. Sprayers used small spray guns with reduced fan width (and lower air pressure). Care by sprayers kept black-out paint off body exterior color. Also front scoop areas, RH/LH, sprayed without shields-chrome trim hid overspray areas.
- Black out of engine compartment required use of form fitting shields (like fender covers) to reduce masking labor costs. Cowl shield was installed first followed by fender shields-RH/LH. Shields just covered lip of cowl and fenders. Shield undersides covered with soft material. Every so often operators skived (using a putty knife) built-up overspray off shield edges.
- Hood underside required use of large shield slid down the hood from hood rear forward. No masking tape applied to create sharp color break line along shield/hood edges. No masking was applied along hood front edge. Shield design prevented overspray from blowing around hood edge and onto hood's top exterior color. Sometimes left side operator had wet paint on glove and

after masking was removed, when handling hood to lower it, he would leave some blackout color on exterior color hood underside.

POLISH AREA

- Since fiberglass body panels could not withstand specified lacquer topcoat final bake reflow temperature-35 minutes at 325F, polishing exterior surfaces was required to create same gloss level as would have been obtained if bodies could have passed through reflow oven.
- Operators used electric polish wheels and specified 17-inch diameter polish pads. Polish material applied with large paintbrush slopped onto panels. Very few vehicles were polished below body side accent line. Operators did not like to bend over to reach these areas. Polishing was performed in open area between Paint and Trim Shops boundaries.

BODY TRUCKS

- Body trucks usually cleaned once a year at model change. As imagined, they became covered with body panel excessive adhesive from operators wiping their tools, hands, etc. off on them, primer and topcoat overspray collection, bonding and pit filler material, etc.

WHEELS

- Raw metal wheels were processed in the main plant. They were hung onto a rack holding five wheels in car position, two on each side, and one at the rear of rack, which was suspended from an overhead monorail conveyor. This conveyor transported the wheels through a 6-stage small parts washer enclosure that removed oil, etc. from surface, applied an iron phosphate rust resistant coating and a chromate seal rinse, and then baked. Then they went through flow coat application enclosure where they were coated with semi gloss black primer paint. The application area was 15 feet long in which many nozzles on each side of conveyor sprayed/flowed primer paint onto them. Excess primer dripped off parts as they went through drip enclosure. Temperature and humidity control in this area was critical to prevent visible primer sags on parts. Bake was 45 minutes at 325F.
- Primed wheels were top coated with 83-degree gloss enamel paint color in main plant and transported to Corvette plant on storage racks. Bake was 30 minutes at 275 F. Enamel paint was used due to better chip resistance than lacquer paint.

SMALL METAL PARTS

- Just about all raw metal parts used on Corvettes were processed through the same cleaner/phosphate/flow coat primer system as wheels after which they were transported to Corvette plant in various sized containers for assembly and installation. This processing line also handled all the passenger and truck small metal parts. Very few raw metal parts were received primed from vendors. These parts were spray primed.
- Parts were hung onto rectangular racks and held there by pins (part of the rack) through any holes in parts. Racks were hung onto overhead monorail conveyor swivel hooks. Some racks held over 100 pieces naturally dependent upon their size.
- Sags on wheels and other visible metal parts after vehicle assembly processed on this conveyor system was not desired because the sag if not sanded off would show after being top coated.

STEERING COLUMN ASSEMBLY AND STEERING WHEEL HUB

- The steering column assembly, steering wheel hub and lower cover were sprayed with one coat of specified exterior color in small parts dry paint spray booth in the trim shop. All these parts/assembly were received primed from vendor.
- They were hung onto processing racks and conveyed through small dry spray booth and infrared oven on overhead monorail conveyor. Bake was 10 minutes and 180F. Steering wheel hub and lower steering column cover were gang painted one color and used as scheduled. Steering column was painted per build schedule run sheet.

• Build schedule determined specified color, etc.

DEADENER APPLICATION

• Deadener was airless spray applied using a special gun with a reversible tip for cleaning to the inside top of all four wheel house opening areas. Coverage was specified behind headlamp cans-but rare to find material there. Material applied after front fender top wind split molding (C-1) was installed to prevent deadener blowing through molding/stud mounting holes and onto topcoat color. Also if applied before molding installation, deadener would collect onto attaching studs as they passed through holes in fender top hampering nut attachment to molding stud.
• Material was received in and used from 55-gallon drum that was not agitated. No shielding used which required sprayer technique and carefulness to keep material off topcoat color finish.

SERIAL PLATE

• Vehicle serial number stamped onto plate by teletype machine and installed to body (left hand hinge pillar, steering column or under dash) somewhere in the Trim Shop initially with screws-later welded to steering column on paint line after bake or under dash with rivets.
• Body build schedule run number information given to frame and motor lines (by scheduler) so assemblies meet at body drop and final line per vehicle order.

BODY DROP

• At motor set onto frame, inspector wrote body color in caps on front suspension assembly with white paint stick. Full color name was used. Body drop operator job to cross check trimmed body color with color name on frame to insure body/chassis okay per schedule.
• Was not actual body drop as Trim Shop conveyor ran parallel to Chassis Line? Body picked up with overhead hoist and moved sideways to and over Chassis Line and placed onto chassis.

FINAL PAINT REPAIR

• Minor topcoat color surface imperfections were removed by hand sanding using stack of wet or dry 400-grit sand paper. Major imperfections were removed using jitterbugs with wet or dry stack of 400-grit sandpaper followed by hand wet or dry sanding. All repaired areas were wiped with tack rag to remove sanding dust prior to being re-top coated.
• Dual tracked flat top conveyor used to convey vehicles through repair facilities.
• Dry side draft spray booth used followed by 20 minute at 180F bake. With body completely trimmed, bake temperature restricted to 180F due to glass and other parts.
• Repairs required polish to bring repaired area to specified luster. Same repair processes, thinner blend in of repair area, polish wheels and materials as used in Final Repair Spray Booth and area at end of Paint Shop. Polishing was performed in open area.

HARD TOP ASSEMBLY

• This assembly was received fully assembled and top coated with specific color and shipped in a large rack from the vendor.

Harry Jones
Wednesday, June 2, 2010

The NM NCRS Parts Swap is available to all NM NCRS members including spouses and significant others who have, or have access to, automotive parts for sale or to be given away to a good home or garage. Listing will run for 3 months unless cancelled earlier. Contact the NM Chapter NCRS Swapmeister, Pete Lindahl, at 505-663-0995 or pclindahl@comcast.net.

PARTS FOR SALE:

- **Parts** – Complete set of original very nice driver quality Mid-Year bumpers including center bar (flash chrome and wavy, just the way NCRS judges like them) $600.00. Rare and Original 1965 only Corvette BB Engine cooling fan blade. Fan Clutches for Big Block and Small Block, I have the correct Eaton made (Coil Type) and Schweitzer built (Bar Type) available with just about any date you need/want (I have them from 1960 thru 1972). All fan clutches are rebuilt/restored and work as new and are so good that you can use them for PV and Flight Judging. 1962-1967 Small-Block engine cooling fans, 1966-67 Big Block engine cooling fan, 1970 -72 LT-1 engine cooling fans, 1968-70 Big Block engine cooling fans, 1963-67 Small-block engine cooling fan (5-blade no date) and a very hard to get 1971 (Dated August 1970) Big Block with A/C engine cooling fan. 1963-67 vent window regulators way past restored but built to pass "PV" and I can custom make them to fit your aftermarket door panels as well. I have been restoring Corvettes over 20 years. Drop me an email (best way to contact me) or try a phone call we'll see if I can help you. Contact Rick Jones via email cadiman1949@comcast.net or call 505-247-0053. (03-17)

- **Restored BB & SB TI Distributors** (several), Restored OEM, NOS & Reproduction TI Amps, Restored A-Arms & T-Arms & all/any correct parts for your chassis rebuild, Restored C-2 Kelsey Hayes Knock-Off wheels; have several sets, including 67 Bolt On's Restored C-2 Vent Window Regulars New Delco reproduction products: Coils, Caps, Rotors, Amps, distributor parts, Brake caliper w/SS sleeves, master, steering box, P/S parts, etc. by Lone Star Calipers, so call me for discounts that beat the "Big Box Suppliers" 65-66 Convertible Red Door Panels, C-2, C-3 OEM front/rear stabilizer bars. OEM wheels for 88-89-nice 64 Removable Hard. Top ReNu-A-Vette/Mike Zamora @ 505-717-1140 or michaelz0591@yahoo.com (03-17)

- **Keys, GM/Briggs & Stratton Logo Head, KEY NUMBER Stamped on KNOCK OUT, & w/ Registered Trademark ® on B&S Logo (NOS & Excellent Used)** Hundreds of KEY NUMBERs available for 63M-66 Corvettes w/ octagon head keys and 65-66 Corvettes w/round head keys. Original factory stamped keys, $10 to $30 each depending on condition. Details, contact Pete at 505-663-0995 or pclindahl@comcast.net. (03-17)

- **Keys, GM/Briggs & Stratton Logo Head, KEY NUMBER Stamped on KNOCK OUT, & w/ Registered Trademark ® on B&S Logo (NOS & Excellent Used)** - Hundreds of KEY NUMBERs available for 54-63E Corvettes w/ octagon head keys. Original factory stamped keys, $10 to $25 each depending on condition. For details, contact Pete at 505-663-0995 or pclindahl@comcast.net. (03-17)

- **ANCO Windshield Wiper Blades, 65-67 15" OE by ANCO** - Holders (NOS & Used) 65 w/ bright polish finish & 66-67 w/ brushed finish; Refills (NOS) 65-67 w/2-lines & "correct" Patent Number; Flex Tops (New) 65-67 stainless steel. For details contact Pete at 505-663-0995 or e-mail pclindahl@comcast.net. (03-17)

- **TRICO Windshield Wiper Blades, 63-67 15"** - Holders (NOS & Used) 63-65 w/ bright polish finish & flat top, 66 E/M w/ brushed finish & flat top, 66L/67 w/ brushed finish & peaked top; Refills (NOS) 63-65 w/ "Skidposts" (Dots), 66-67 w/3-lines & Patent Numbers. Contact Pete at 505-663-0995 or e-mail pclindahl@comcast.net. (03-17)

- **Spare Tire Locks w/Key (Used)** - 63E (w/o drain hole) $125; 63L-'65 (w/ 1/4" drain hole) $125; 66 (w/ 5/16" drain hole) $125; 67 and newer (w/ "B" keyway) $125; 68 and newer (w/ "D" keyway) $100; 69 and newer (w/ "H" keyway) $75; 70 and newer (w/ "K" keyway) $75. Key spare tire lock to your key code, $20. Shipping & Insurance extra. Pete at 505-663-0995 or e-mail pclindahl@comcast.net. (03-17)

- **Cover, Spare Tire Lock (New)** - 63M and newer w/ spare tire lock, GM p/n 3841701, $12. Shipping & Insurance extra. Pete at 505-663-0995 or e-mail pclindahl@comcast.net. (03-17)

- **Horn Relays, Delco-Remy (NOS)** - Delco-Remy embossed on covers. 53-54 w/ 6v (1116775) $75; 58-62 (1116781) $125; 63-65 (1115824) $225; 66-67 (1115837) $275; 68-69E (1115862) $225; 69L-70 (1115890) $225; 71 (1115889) $125. Shipping/Insurance extra. Pete at 505-663-0995 or e-mail pclindahl@comcast.net. (03-17)

- **Rebuildable Cores wanted** -C-2,3 Cores: Gas Caps, A-Arms, T-Arms, Brake Dust Shields, Frt. Caliper Mounting Brackets, Rr. Shock Lower Mtg, Spare Tire Bolts/lock bolt, most any suspension parts. Contact Mike Zamora @ 505-717-1140, or mike_zamora@hotmail.com. (03-17)

- **Hoods** - NOS 65-66 hood, light gray glass; Used 65-66 hood (excellent condition), painted red. Shipping & Insurance extra. Pete at 505-663-0995 or e-mail pclindahl@comcast.net. (03-17)

- **Doors** - Used 66 (also fit 65) Convertible Doors (excellent condition) complete with exterior hardware (handles & locks), vent window assemblies, Soft-Ray glass, & window regulators. Shipping & insurance extra. Pete at 505-663-0995 or e-mail pclindahl@comcast.net. (03-17)

- **Member Parts** – If you have something Corvette you'd like to sell we can put it here…

- **1966 Corvette Big Block Heads** – Selling a set of complete 1966 Corvette 427/390hp Oval Port Heads (3872702 Castings). The heads are complete and correct for a 1966 (one year only). They came off of a running 1967 427/400hp engine. The heads were changed because they are visibly different from 1967 casting because of the drilled bosses for the spark plug shields. Guarantied not to be cracked, asking $1000 OBO, Contact Rick Jones via email cadiman1949@comcast.net or call 505-247-0053. (03-17)

- **Virgin Broach marks and bare engine stamping pad; 1962 & 1963 "870" Engine Short Block** – If you are looking for a mid-1962, late-1962 or early-1963 3782870 casting for your Corvette I may have what you are looking for. Dates are E-62, F-62, I-62 or L-62. The block was an over-the-counter engine built before the assembly dates and "CE" was stamped on the engine pad. The broach marks are perfect!!! I have a disassembled short-block (standard bore) that has been checked for cracks and pressure tested. You get the block, crank and rods. Asking $2000 OBO. Contact Rick Jones via email cadiman1949@comcast.net or call 505-247-0053. (03-17)

- **Flat Top Double Hump "461X" Heads** – I have a set of 3782461 "461" heads with the flat-top Double Humps which are correct for 1961 275hp & 315hp engine. The heads are complete, pressure tested and guarantied not to be cracked, asking $1500 OBO Contact Rick Jones via email cadiman1949@comcast.net or call 505-247-0053. (03-17)

RESTORATION SERVICES:

- **Key & Lock Service** - Keys cut by the KEY CODE with Curtis Key Cutter just like at your Chevrolet Dealer. Alarm, door, glove-box, ignition, rear compartment, and spare tire locks re-keyed. For details contact Pete at 505-663-0995 or e-mail pclindahl@comcast.net. (02-17)

- **Windshield Wiper Arm Restoration/Repair Service** - Mid-year Corvette windshield wiper arm restoration and repair service, restoration - restore wiper arm and finish as original; repair - replace broken rivets, springs, and clips, and "wrenched-on" base pieces. For details contact Pete at 505-663-0995 or e-mail pclindahl@comcast.net. (03-17)

- **Complete or Partial Restoration Service Available** – 1956 to 1972 Corvette restoration service. Big Block, Small Block, Fuelie or Tanker… I speak them all. Were you thinking about having your car judged, maybe we should talk about the process. From a local Chapter Meet to National Flight Judging or even all the way to Performance Verification, Bloomington Gold and Duntov; I've done them all. Charges are based on an hourly rate for the time it takes to guide you through the process (if you want to do the work yourself) or we can discuss the cost of having me do all or part of the job for you. Contact Rick Jones via email cadiman1949@comcast.net or call 505-247-0053 to make an appointment to discuss what I can do for you. (03-17)

- **Resto-Mod Conversions for C-1 and C-2 Corvettes** – If you are considering converting your C1 or C2 into a Resto-Mod because you love the look of your car but you don't like the way it drives we need to talk! The car's value can be greatly increased and the whole process may not be as expensive as you thought. Charges are based on an hourly rate for the time it takes to guide you through the process (if you want to do the work yourself) or we can discuss the cost of having me do all or part of the job for you. You could save thousands by having me guide you in the right direction and save you from going in the wrong one. For more information please contact Rick Jones via email cadiman1949@comcast.net or by phone 505-247-0053 to set up an appointment to get the process started. (03-17)

- **Fan Clutch Rebuilding and Restoration of for Schweitzer or Eaton Clutchs** – Fan clutch rebuilding service for 1960 to 1974 Corvettes. Contact Rick Jones via email cadiman1949@comcast.net or call 505-247-0053. (03-17)

- **Specialized Restoration** - Aluminum Wheels (Knock-Off or Bolt On's), TI Amp box, TI & Point Distributors-all tested on Sun Distributor Tester, Vent Window Regulators w/new gear, A-Arms w/riveted correct ball joints, T-Arms w/GM parts & tolerances, Headlight Motors w/new main gears, Power Window Motors. All restored parts are 100% guaranteed. For details and pricing, contact Mike Zamora @ 505-717-1140, or michaelz0591@yahoo.com (03-17)

CARS FOR SALE:

- **For Sale:**

WANTED:

- **Parts for NM NCRS Chapter parts Swap** - Wanted-C-2&3 Cores: TI Distributors & Amps, Gas Caps, A-Arms, T-Arms, Brake Dust Shields, Frt. Caliper Mounting Brackets, Rr. Shock Lower Mtg, Spare Tire Bolts/lock bolt, most any suspension parts. Contact Mike Zamora @ 505-717-1140, or michaelz0591@yahoo.com (03-17)