

BMW Car Club
of America
North Star Chapter



North Star Bavarian
April, 2018

Joey Navas



AT EVERY TURN, WE OUTPERFORM.

WINNER OF THE 2018 CENTER
OF EXCELLENCE AWARD

BMW
of Minnetonka
Authorized
Dealer



The Ultimate
Driving Machine®

2018 CENTER OF
EXCELLENCE



THE THRILL OF A BMW

Take a test drive today and you'll see what we mean.

Proud to support North Star Chapter of BMW



The All New BMW 5 Series

BMW of MINNETONKA

15802 Wayzata Blvd., Minnetonka, MN

Call 952-303-7500 | BMWofMinnetonka.com

Sales Hours:
Monday - Thursday
8:30 AM to 8:00 PM
Friday 8:30 AM - 6:00 PM
Saturday 9:00 AM - 5:30 PM

Service and Boutique Hours:
Monday - Thursday
7:00 AM - 8:00 PM
Friday 7:00 AM - 6:00 PM
Saturday 8:00 AM - 5:00 PM

Parts Hours:
Monday - Thursday
7:00 AM - 6:00 PM
Friday 7:00 AM - 6:00 PM
Saturday 8:00 AM - 5:00 PM

PRESIDENT
Gary Ganser
president@northstarbmw.org

VICE PRESIDENT
Tom Lawell
vicepresident@northstarbmw.org

TREASURER
Larry Atneosen
treasurer@northstarbmw.org

SECRETARY & PHOTOGRAPHER
Tracy Rolf
secretary@northstarbmw.org

NEWSLETTER EDITOR
Erik Berger
editor@northstarbmw.org

MEMBERSHIP
Mike Busse
membership@northstarbmw.org

SOCIAL EVENTS
Sandi Schiable
socialevents@northstarbmw.org

DRIVING TOURS
Tom Lawell
tours@northstarbmw.org

TECH EVENTS COORDINATOR
techsessions@northstarbmw.org

WEBMASTER
Kenny Raway
webmaster@northstarbmw.org

TECHNICAL ADVISOR
Paul Dzimian
Motorwerks BMW
techadviser@northstarbmw.org

DIGITAL MARKETING
marketing@northstarbmw.org

DRIVING SCHOOLS
CHIEF DRIVING INSTRUCTOR
Tyler Arvig
drivingschools@northstarbmw.org

DRIVING EVENTS COORDINATOR
Tim Oudin
@northstarbmw.org

WINTER & CAR CONTROL
Tyler Arvig
winterschool@northstarbmw.org
carcontrol@northstarbmw.org

What's Inside

Upcoming Club Events	2
Polar Run "It's not a run, it's a rally!"	4-9
Special CCA Membership offer!	7
The 56th 24 Hours of Daytona.....	10-13

On The Cover



April, 2018

This quarter's cover art brings expensive looks and cheap cars all together with the Hoonicorn V4.0 a.k.a. 1997 540i 6 speed swap rally car now sitting on pretty replica BBS LM wheels and some of China's finest coilover suspension!

Sometimes the illusion of being fancy is just as good as the real thing!

If you would like to see your car or BMW content on the cover of the next newsletter, feel free to email submission requests to editor@northstarbmw.org!

"North Star Bavarian" is published by the North Star Chapter of the BMW Car Club of America, Inc. Please address correspondence to P.O. Box 275 Chaska, MN 55318. All information furnished herein is provided by membership for members only. Ideas, suggestions and opinions, technical or otherwise, are those of the authors, without authentication by or liability to the officers of the Club. Unless specifically stated otherwise, the Club endorses no person, product, service or business. North Star Chapter, Inc. is a non-profit Minnesota corporation.

This newsletter and other information about the chapter may be found on the internet at:
www.northstarbmw.org

Contact for Ad rates:
Dave Nielsen
advertising@northstarbmw.org

Artwork - TIFF or PDF preferable, Macintosh or IBM compatible to:
editor@northstarbmw.org

Deadlines for next full newsletter:
Copy and advertising to editor no later than the 10th of the month preceding publication date,
or contact editor@northstarbmw.org

Typical Publication Dates:
4/15, 6/15, 9/15, 12/15

Upcoming Club Events

HPDE Tech session
April 28, 2018
Speedy Race Gear, South St paul, MN

2018 Tech Inspection
May 3rd, 2018
Motorwerks BMW, Bloomington, MN

Spring Car Control Clinic
May 5th, 2018
1300 145th st E, Rosemount, MN

Crystal Cave Adventure drive
May 19th, 2018
See Motorsport Reg for more details!

BMW Northstar BIR Lapping day
June 1-3, 2018
Brainerd International Raceway, Brainerd, MN

Loop to Larry's Lookout
June 9th, 2018
See Motorsport Reg for more details!

Member Appreciation Picnic
July 14, 2018
Brookview Park, Golden Valley, MN 55426

Road America Adventure
August 3rd-5th
See Motorsport Reg for more details!

Stay tuned for future events!

EXPERIENCE YOUR BMW CLUB MEMBERSHIP
IN FULL THROTTLE AT
MOTORWERKS BMW

TAKE AN ADDITIONAL
15% OFF PARTS & LABOR

WITH YOUR BMW CLUB MEMBERSHIP CARD*

PLUS ENJOY ALL OF THE ADDITIONAL BENEFITS OF
SERVICING YOUR VEHICLE AT MOTORWERKS BMW:

- NEWLY REDESIGNED SERVICE CENTER
- COMPLIMENTARY VEHICLE PICKUP AND DELIVERY FOR SERVICE
- ONLINE SCHEDULING & BILL PAY
- SERVICE LOANER VEHICLE FLEET
- AVAILABLE SERVICE LOANER FUEL AND GLASS COVERAGE
- ALIGNMENTS STARTING AT \$99.99**
- OIL SERVICES STARTING AT \$59.99***

*Customer must be a current BMW Club Member and provide BMW Club Membership Card at time of write up. Offer may not be combined with any other offers unless otherwise stated. Exclusions apply. See Dealer for details. **Vehicle Alignment valid only at Motorwerks BMW. Customer must present Membership Card at time of write up. Exclusions apply. See dealer for full details. Offer excludes Hazardous waste fees. ***Must present coupon at time of write up. BMW synthetic Oil change includes up to 7 quarts of full synthetic oil and filter. Exclusions apply. See dealer for full details.

**AT MOTORWERKS BMW, ULTIMATE PERFORMANCE
COMES WITH ULTIMATE SERVICE, STANDARD.**

1300 American Blvd. West
Bloomington, MN 55420

MotorwerksBMW.com
Sales: 888-866-4255



Motorwerks BMW

A **PENSKE** AUTOMOTIVE DEALERSHIP

The Polar Run - It's not a run, it's a rally!

words and photos by: Erik Berger

Here in Minnesota, we as residents find a lot of ways to keep ourselves occupied through the frigid skin cracking cold that we're so used to between November and March every year. Most take up a hobby like cooking, woodworking or something equally productive to pass the time and keep occupied between the 9-5 grind on the coldest of Minnesota winter days.

Some people though willingly go outside, get in their cars with doors that are frozen shut, or worse yet, frozen open and drive to a cold venue to meet up with their cold friends and have fun that way. The Polar Run is definitely much more column B than it is column A in this case.

In late 2014, I was scrolling through Facebook on my iPhone 5 with a heated blanket draped over my legs in the living room of my house as was usual after work on a chilly November evening, and as I mindlessly flicked the news feed further and further into history, I saw a shared post for an event called 'Polar Run - Rally for a cause'. That wasn't a cat photo or a friends post, and this was before the auto play videos, Facebook ads and other targeted nonsense was integrated in to the feed, so naturally I clicked on it. My phone navigated to a white screen in Safari, slowly loaded a home brew looking word press site with just 5 tabs - one of these tabs across the top said 'about', another white loading page, a result of budget web hosting, I read through the event description. "Twin cities to Lutsen by the way of back roads only!" and I looked further down to find that all of the proceeds go directly to Ronald McDonald house. I emailed my family to ask if our property on lake superior just north of Grand Marais was rented (we have it in a vacation rental pool with a north shore rental company called Cascade) and within minutes, I had the all clear that it had not been rented that weekend in February 2015. I asked to reserve it, and paid the very modest \$150 registration fee to get my vinyl package and registration.

Shortly after registering for this brand new, completely unknown event, I started to see familiar names in the registration alongside me, and only then, weeks after registering, did I think about



what I was going to drive on this rally. Now, if you're reading this, chances are this isn't the first issue of Northstar chapter's newsletter and you know I've got options. Fun options with good winter tires, heated seats, stability control, you name it! That's all well and good, but this event being of such modest scale and distance, I decided instead of playing the smart safe card with Mr. Wags or something like that, I'd take a 1989 325i coupe 5 speed that I just traded some parts for and was destined for part out and scrap on this drive. The car ran and drove just fine, but it had an open differential, horrible tires, questionable brakes, a bone stock unopened 2.5 liter M20 engine and missing lots of original steel. Stupid decision right? Putting hundreds of dollars in to new old stock 2.93 limited slip differential, new brake pads, one new shock absorber, a set of new 185 section 14 inch winter tires and some glorious purple wheels. This is already a pretty sketchy financial decision, but I keep telling myself that the car will be worth the same in parts when I'm done with it, not to worry! That naïve sentiment rang true until the turbo parts started showing up with ebay boxes on my door step. Yes, that's right. There is not an abundance of ear wax in your ear (well, not more than 5 minutes ago), I had decided to take this ratty, used up \$350 BMW E30 325i coupe and strap a 53mm turbocharger on the bone stock engine using parts almost exclusively from china through ebay. original 25 year old BMW parts started coming off, and the shiny but cheap new Chinese parts started getting installed. First order of business was bolting on that turbo exhaust manifold - immediately a clearance issue with the oil filter housing on the car as the manifold had been designed for the lesser 2.7 liter car that did not come with an oil cooler. Great, we're at a stand still and have to order another manifold, right?





The Polar Run - It's a Rally! (Continued)

Heck no! we do what every shade tree back yard mechanic does and remove that pesky oil cooler and install a special briggs and stratton low profile lawnmower oil filter on that engine and proceed as per the original plan! The manifold is now on, great! bolting the turbocharger on is a doddle, plumbing the oil feed and return are easy as drill tap and torque – charge piping and intercooler take one person and a sawzall no more than 45 minutes to perfect in to the glorious final massively efficient charge system. Moving on to the exhaust.. I didn't have much 2.5 stainless tubing laying around, but I had a 45 degree pipe left from a J bend that was purchased for a prior project. Now, I refuse to fully believe in coincidence with a situation and car like this because this scrap remnant of pipe was a picture perfect fit for a hater pipe through a newly created 'hood vent'. With the hood on, there was a 3 exposure at a 45 degree angle right off the turbo. Worried about moisture and snow getting in to the engine, I hopped right back on that venerable ebay.com and ordered up a 2.5 universal tractor exhaust flapper to solve this potential design issue.

Bolt-on ebay turbo kits are a horrible idea, I grant, IF you attempt to do it with no supporting engine modifications! if, however, you spend most of your budget on a good set of nice big fuel injectors and a megasquirt standalone engine management system, I firmly believe to this day the fun per dollar with a nasty ebay turbo kit cannot be matched. Plugging this old megasquirt 2 in to my 1998 Panasonic Touchbook CF-47 with a pentium 233mHz processor and 192mB of ram (my only notebook with a real serial port), I slowly downloaded the tuner software and started talking to the brand new ECU. Questions pop

on the screen like a middle school book report. How many cylinders do you have, what is the working fuel pressure, what size injectors did you use, what's the displacement, is this batch fire or sequential injection? After what seemed like 20 minutes of prompts, the window mysteriously and suddenly vanished and gave way to a massive display of 8 very old school looking digital gauges. I had done it! I had loaded a base map on a standalone ECU in a \$350 car with an \$800 turbo kit from ebay and I was actually ready to calibrate sensors and turn the key! Saying that the first turn of the key was tense with half of the bastardized engine harness laying across the top of the intake manifold and exhaust, strapped together poorly with parts store butt connectors would be a tremendous understatement. Turning the key, eyes transfixed on that 800x600 display reading out engine RPM and injector duty cycle, I see the RPM jump from 0 to 150 and the injector pulse rate gauge shoots up. Moments later, the fuel pump kicks on and the first exhaust farts through that glorious tractor flap equipped hater pipe shoot a fuel heavy fog across the cracked windshield and the 200,000 mile neglected M20 2.5 liter engine snorts to life once again with a hilariously high idle and pig rich fuel ratio. Leaving the sea of electronic gauges alone and taking my shaking hand off of the ignition key, I walk around to the engine bay and crack the throttle body open by hand just a little bit. The turbocharger spools for the first time and I'm absolutely hooked. I crack the throttle again, but this time a much more aggressive blip which gave way to a very responsive and muscular straight 6 shriek through that whistling Chinese turbo. Walking back to the drivers seat, I key off the car and celebrate with a beer! Months later, after road tuning the computer with a wide bank, re routing the exhaust away from the cabin air inlets and putting some more body work back on the car along side the polar run vinyl graphics package, we had a seriously fast, seriously gross looking sideways hoon machine that



returned about 9 miles to the gallon on average, combined with a 12 gallon tank and no functional fuel gauge. ready then for the final rally morning!

Arriving at an unlabeled parking lot in stillwater amongst a wide gamut of other makes and models all adorned with the same vinyl package our E30 was, we got out of the car which we couldn't leave running for heat out of fear we'd all be poisoned by the exhaust and started socializing with a new family, most of which are still on this crazy road 4 years in along with us!

This E30 was dubbed the 'Hoonicorn', it finished the 2015 rally in good form, although did develop cooling system issues on the way back to the cities post rally that necessitated driving the car in 3rd gear on the highway to maintain cooling system pressure. Shortly after returning to town, I followed through and parted the car after one of the front steel brake lines broke in half. This car's legacy wasn't forgotten and many of its bones went to the 2016 rally steed, the 'HoonicornV2.0', a 1988 325iX which was in similarly bad shape, had tons of miles and was given the great gift of ebay turbocharging with all of the V1's turbo goodies. Version 2.0, after a month of trying to figure out why head gaskets were only lasting about 5 minutes (it was incorrect ignition timing) was absolutely solid the entire rally, and was actually solid enough to take down to cottage grove after the rally and do some runs on the dynamometer to see just how many horsepowers that 287,000 mile AWD BMW could put down with the aid of a Chinese exhaust hair dryer. the result? very impressive actually at 289 horsepower and 322lbft of torque at the crank through 11 of the worst tuned PSI ever fed through a BMW engine.

Version 2.0 though also was mercy killed, this time not because it had broken in some way, but because the 325iX transfer cases are worth so much money. The car simply had to be dismantled and gotten rid of. A bitter sweet moment as it carried my team of three effortlessly through the rally and safely back home, got the only speeding ticket on the 2016 polar run, and had that trusty old dog personality that wouldn't let you down. Arriving in Lutsen on the 2016 rally, we drove this car through the worst north shore snow blizzard I have ever seen. white out conditions, no other cars on the road – literally driving up the center of highway 51. Arriving at our overnight, I couldn't help but feel like Clarkson, Hammond or May from Top Gear at the end of one of their challenges, when they said 'I became so attached to this car that I had to keep it'. My difference

The Polar Run - It's a Rally! (Continued)

though is I still followed through and parted out the rusty dumpster and started shopping for HoonicornV3 for Polar Run 2017.

With the end of Polar run 2016 came the end of the Lutsen destination, a choice that was not well received with the rally veterans, but the camaraderie carried through just the same with a new route, a new destination and different blustery challenges and checkpoints against the clock.

2017 brought our V3.0 along — a true departure from the original car, a 1995 525i/A. What happened to me, you're probably asking — did I get hit in the head unusually hard with something heavy? this is an automatic non turbo BMW. Trust me, I get it, I understand and I most importantly AGREE. Before you stop reading though! this car came with a set of nice snow tires, it had working heat, a working stereo, coilovers, monoball control arms and several other goodies all for a cool \$250 price tag. See? you're not many anymore, good. the 2017 rally brought us through rural Wisconsin and culminated after several checkpoints and challenges my team did very poorly with at the creepiest near abandoned Jewish children's summer camp called the Perlstein, a complex we accidentally entered on the wrong end of, something we quickly realized after driving our lowered 20 year old BMW 5 series through the woods, alongside hand painted windowless cabins, seemingly abandoned for decades. After a groundskeeper sorted us out, we turned back and found the real entrance and headed



For your friends who are not yet members!

Purchase A Three-Year Membership And Immediately Qualify For The Membership Reward Rebate Program

The BMW CCA announced a major update to the Membership Reward Rebate Program this week. Individuals who purchase a club membership of three or more years will now immediately qualify for the Membership Reward Rebate Program and may be eligible to receive a rebate of up to \$1,500. Yes, that means you can now skip the old waiting period of 365 days and immediately apply for a rebate with this new option! It's important to note the membership must be purchased on or before the purchase date of the vehicle and the member must apply for the rebate within 60 days of purchase using the form found at bmwcca.org/vehicle_rebate.

Ready to buy or lease a new or CPO BMW and apply for a rebate? A three-year club membership can be purchased for only \$134 at bmwcca.org or by calling the club office at 864-250-0022. Please Note: Memberships purchased for the purpose of obtaining a Membership Reward Rebate from BMW NA are non-refundable from date of purchase.

This is an incredible opportunity to say the least and is available exclusively for members of the BMW Car Club of America. To see the full program rules, eligible models, and offer details please visit bmwcca.org/vehicle_rebate.

As always, individuals who have been club members for 365 days or more without a lapse remain eligible for the Membership Reward Rebate Program.

Associate Members Can Get Rebates, Too! Individuals who purchase a primary three-year club membership can also purchase a three-year associate membership for a spouse or child residing in the same household. By purchasing a member of your household a three-year associate membership, they too will immediately qualify for the Membership Reward Rebate Program. Three-year associate memberships can be purchased for \$30 at the time of the three-year primary membership purchase online or via phone. Associate memberships are an incredible value as they become eligible for a rebate of up to \$1,500 as well.

Free Loaner Cars • Best in Service • 3 Year Warranty

Specializing in BMW, Mercedes, Audi, VW

EURO TECH
Auto Service

www.eurtechmn.com • 651-636-6912
480 8th Ave. NW • New Brighton

in for the team dinner with the few other teams fortunate enough to arrive in the top 5. Shortly after arriving, we decided to get some beer from the car (our final checkpoint was to stock up at a nearby liquor store in the Dells). After opening the 12 pack of Takate like inbred neanderthals, we snapped open the frosty aluminum cans and brought our drinks together to celebrate our arrival on the third annual Polar Run. Two beers in, most of the teams had arrived and the gathering hall, lit by 1970s fluorescent light fixtures, institution grade tables and chairs, and an inadequate climate control system, we were approached by an unassuming man from an unlabeled back room, where he presumably lived stating that he was the owner and rabbi of this facility, and he didn't approve of our beer because it was not Kosher certified. We explained to the man that we weren't Jewish and we had rented the entire facility for our event which luckily encouraged him to concede and everyone started turning up the party wick!

Retiring several hours later to the dormitory block, we found our room had been taken over by another team, and the room we were relegated to had childrens' bunk beds and no bedding.. Capping off an already creepy day in a creepy place with terrible conditions, we wished the other teams a good night in the common area and hopped on our smart phones to find a nearby hotel, which in just 5 minutes had been booked for next to nothing and promised a hot tub, free breakfast, internet access and real bedding!

The glorious morning after, all filled with Hilton breakfast, we headed back to the dreary gray gates of the Perlstein and met up with the hungover, cold and generally unkempt rival team members, trying to not look too smug about our alternative arrangements. One last day in the dells partying and exploring with our Polar Run family, we awoke to a hole in the wall breakfast joint on the way out of town and cannonballed hwy 94 back home with another rally year in our back pockets and some new faces in the rosters for the Polar Run!

2018 is looking up for Team Hoonicorn and the #HoonicornV4. We're registered, the \$400 BMW 540i now has a 6 speed manual transmission swapped in and daily driving the beast has helped track down several previously neglected maintenance items that are being or have been taken care of now, one by one.

When a car starts getting up there in miles like HoonicornV4, 173,000 or so, there's bound to be things overlooked by owners if they're not causing a significant drivability issue, so getting under a 20+ year old vehicle with lots of miles a many owners can be a bit scary. This car was no exception to the rule! Starting at the front end on the right side, the outer steering tie rod end had over a quarter of an inch of play, something that should be stiffly rigid, the left front? the thrust arm was similarly wallered out and had significant play, further exacerbated by a worn pitman idler arm in the steering linkage. The rear end actually fared quite well given the mileage, and beyond a few cracked ball joint boots and a failure to comply ABS wheel speed sensor disabling the ABS, ASC and often times the speedometer, the car was solid in the bum end! The 20 year old V8 though had a bit of a cough to it, and was visibly dumping oil on the ground. A cheap set of champion platinum plugs later, and the

The Polar Run - It's a Rally! (Continued)



miss was gone — the full 282 angry horsepower from that non vanos BMW M62 was back! Narrowing down the source of the oil leak on the lift, I found the oil filter housing o rings were perished and the valve cover gaskets were seeping, a problem that still has yet to be addressed as they're not urgent enough to wrench on the car cold! Mechanicals aside, the washer fluid pump was seized and needed replacement, the wiper blade inserts were older than my nephew and the original DSP stereo sounded like an adult in the Peanuts cartoon. After a quick trip to RockAuto.com for the washer pump, a couple of cheap Vaico wiper blades to cannibalize for the inserts and the local BMW classifieds for a used EONON touchscreen android head unit, the car was beginning to actually be really darn respectable, and dared I say... Rally ready!

Not always is a used high mile BMW story bad though, even for a V8 car. Prior to my purchase of the machine, the previous owner had done brand new Textar/Balo brakes which cleaned up perfectly after a few hard stops!

Rally morning. After getting my navigator and copilots out of bed, the coffee maker's contents added to our stomachs and a brief stop at the BK Lounge for some very high-brow breakfast, we hit the road in our tired old beast for Cottage Grove and the VFW starting point for this years Polar Run rally.

Waiting for the coolant temperature to build and that still functioning automatic climate control to warm our barely conscious bodies, we hit highway 94, 10 S and then Jamaica in Cottage Grove. Sliding in to the lot sideways revealed no other teams had arrived before us, a theme that would be common for the rest of the day, we headed inside and met up with the rally organizer to get our paper route and score book before sitting down in the VFW banquet room and waiting for 40 plus some odd other teams to arrive and follow suit.

Just after 10AM, we adjourn from the drivers meeting and head on to checkpoint 1, a rural wisconsin bar and bowling alley, where we'd been asked to bowl one frame each for points. Since we were first to arrive at checkpoint 1, the venue had to set up the lanes for us as well as we selected the finest alley balls for the challenge. Bowling a 7, and 8 respectively, our score averaged out to 7.5/10 or 15/20 for this checkpoint! Back in the 540, we key in the route for Checkpoint 2, a horse farm, where we would find a pair of Morries employees who

would issue us a written test about Morris trivia! Once again, we arrived before the individuals issuing the test, but I confidently scored a passing grade in the written test as we went on our merry way to checkpoint 3, a stop at a small general store where we were tasked with buying a souvenir! Entering the front doors of this small general store (once again, first team to do so), we were greeted by a man named Bob and his wife who were both ecstatic to see us show up! A bottle of grade A maple syrup, local squeaky cheese curds and a few other trip snacks later, we bid adieu to the couple and continued on the route to checkpoint 4, a liquor store about an hour and a half from the final destination.

Somewhere along the route between checkpoints 3 and 4 we were apparently called in by a civilian for 'weaving in and out of traffic in an unsafe manner' as, after our shopping and loading up the car, a black early model expedition pulled up perpendicular to the hoonicorn in the parking lot and a casually dressed individual approached with a lanyard badge 'Good morning, I'm special investigator blah and I'm talking to you today because X'. After engaging this fine gentleman, I ask if he was sure he was talking to the right person about the right vehicle — he claims yes to my surprise as we really weren't doing anything out of the ordinary anywhere near other motorists, and pointed to our GoPro on the windshield saying we'd be happy to prove we weren't doing anything unsafe on the route. The individual understood my replies and concerns about that call being false and he wished us a fun weekend at our destination as we parted ways.

Enroute to checkpoint 5, the final destination, we found several

The Polar Run - It's a Rally! (Continued)

lightly plowed roads which we traversed confidently at a slight angle after finding the resort hidden away on a wooded peninsula in rural Wisconsin. First, once again, to arrive, followed shortly by our suite mates in the V10 touareg, we found the office at some considerable effort and checked in to our home for the weekend.

The next 36 hours of teams arriving, stories of the day being told, heavy indulgence in tasty beverages and games with friends were a welcome reminder of why we do it, and we will continue to be a part of this event next year as 5 year veterans!

Landing back in St Paul after 687 miles of driving, I pull the data from the Hoonicorn's OBD2 trip logger, dismiss the 7 DTC fault codes in the engine computer and find out that we were somehow able to coax 21.1mpg out of our giant, heavily laden German V8 steed! An impressive showing. Hoonicorn really only had one fault on our trip, the passenger side heater controls 'temp up' button stuck down and tried to make the car 90 degrees for about an hour!

The future is unknown for this Hoonicorn, but it impressed us all with its reliability, economy, power, comfort and capacity!



In-house dyno

We are your local source for Active Autowerke, Fabspeed, Moton, Forgeline, HRE and more!

Check out our project cars on
AutoEdgeRacing.com

We service most vehicle makes and models
Rental cars available at our location
Pick Up and Delivery options available

Auto *Edge*

651-777-6924

Maintenance, Performance, and Track Prep



Professional Alignments to suit your driving needs

Custom Roll Cage Design and Installation

The 56th Rolex 24 Hours of Daytona

words and photos by: Kim Crumb

The Airbus A320 drones at a low pitch as the snow-covered ground recedes below us. It's off to MCO (Orlando) to attend the 2018 Rolex 24 Race at Daytona. It will be my 16th time to attend this race over a span of three decades. How does race enthusiast plan for an event like this?

Nobody does it better than our BMW CCA. They have a great package of tickets and hospitality that you buy in advance; the custom ticket even comes with your name on it! (photo # 200.) This package includes catered hospitality and an elevated viewing area over the hot pits. This year we were right above the Turner BMW Motorsports team.

I arrive with Minnesota friends Paul and Teresa Cole on Friday the 26th of January. Qualifying had been on Thursday; this event is a long "weekend." At 3:15 pm we head to the WeatherTech Paddock Garages. There will be a real "meet and greet" session with the two-car BMW Factory Grand Touring Le Mans (GTLM) Team. This is the global racing debut of the new M8 GTE race car, starting its competition journey to Le Mans. The drivers actually came right out into the BMW CCA crowd and personally answered our questions. I congratulated Bill Auberlen on his record of starts with the BMW team. This will be # 401! (photo KimwithBillAuberlen.) BMW has worked very hard on developing this car, especially the engine: it even has a special flat-plane crankshaft and other upgraded parts. (photo 224) Afterwards, we watch the finish of the BMW Challenge 4-hour race, one of the many support races for the Rolex 24. The results? The #81 Bimmerworld 328i wins the Street Tuner (ST) class, and the new M4 GT-4 comes in 2nd in Grand Sport (GS)!

Then we head to our snazzy condo on the 16th floor of the Ocean Walk. It's right on the sands of Daytona Beach. How did racing get started in Daytona? It really was that wide sandy beach that was the genesis. Looking down from our balcony, I mentally "squint" and try to imagine back to 1931... and Sir Malcolm Campbell screaming by at 245 mph in the BlueBird II. (photo



495) At the time, for example, the top speed of the Ford model A, a typical car that was sold that year was around 60 mph. Something four times as fast likely seemed more like a spaceship than a mere car! There was a young mechanic in the audience, and he was restless about working on cars in the winter cold of Washington D.C. His name? Bill France. He went on to run early NASCAR races on the beach (photo 400 & 408), and he then built the enormous Daytona International Speedway in 1959.

Saturday morning we're up early and head back to The Speedway. At 10:00 am we go to the Turner Motorsports pit. They'll be running the M6 in the GTD Class. GT "Daytona" is where all the factory-built Fédération Internationale de l'Automobile (FIA) GT-3 customer race cars are eligible. Turner does a similar race preview for BMW CCA members. I wish him, and his team, good luck in this long race (photo KimwithWillTurner.)

Soon there are exhibition laps of the Rolex Heritage cars: those include a BMW M1 GTP from the 80's and an E36 M3 from the late 90's (photos 202 & 215.) We've already had a great breakfast at the BMW CCA "pit road patio." You can feel the tempo escalating as the start of the Rolex 24 approaches.

At 1:00 pm we go out on the actual grid - you can actually be that close to the teams pre-race. Teams are being introduced to the fanfare of? Carl Orff's Carmina Burana, which has just the right dramatic flair for the occasion. This particular selection is called "Fortuna, Empress of the World." These teams do surely want a Lady-of-Fortune to smile upon them! (photos 258 & 261.)

There will be live oil-painting done right in the BMW hospitality





24 hours of Daytona (Continued)

area by well-known artist Roger Warrick. It's meant to capture the spirit of this moment, and will be auctioned off for charity... for thousands of dollars... several hours later (photos 278 & 282.) We're enjoying snacks and beverages as we join other BMW CCAers to watch the start of the race from our elevated box above the hot pits. There are even TV monitors here too, so you can see the live video feed in addition to the intense sensory experience of actually being there. The race starts with 50 cars: 20 in "Prototype," 9 in "GTLM" and 21 in "GTD." The first crash happens on the pace lap, before the Green Flag even falls! Porsche 911 RSR #58 suffers serious damage, and their repairs take dozens of laps. One of the leading cars, a DPi, is overheating... the team is asking the driver to "ease" it a few laps to the pit window. He does that, by shutting the car off on the banking, a bet that pays off later. The "Cinderella" story? On Friday, after the final practice, the #48 Lamborghini Huracan had to have major engine/transmission work. The team then rented New Smyrna Speedway, a local half-mile short track, to do a shakedown run, rather than start the race with "zero" debugging time. The competition is close; nobody is going to "run away" with this. The BMW teams are running strong; but not, ahem, at The Front.

We have a wonderful BMW dinner at 5 pm. This fairly elegant cuisine might not be what some are expecting at a racetrack! It's certainly quite an upgrade from the "good old days." (menu photo 427.) Around 7:30 pm it starts to rain... no problem for us; there's plenty of cover in the BMW hospitality area. Then a disaster strikes the #25 BMW. The right front "wet" tire fails, tearing up a lot of the bodywork, etc. It's back to the garage for major crew work (photo 284 & 286.) I've always felt racing is a kind

of crucible, one that tests the participants to their very core... you find out who you really are. The rain eases, and later we head back to the condo. My days of "sleeping a few hours in the car" during the night-part of this race? I don't burn-the-candle at three-ends anymore. I opt for a comfort-stint for such a long race.

We return just after dawn. There apparently had been a big controversy just after midnight. The #29 Audi R8 in GTD was called in for a 5-minute penalty while leading by a whole lap. While not being directly accused of a specific technical violation, the fuel flow on their pitstops had been markedly faster than other teams. This penalty knocked them back 3 laps. The International Motor Sports Association (IMSA) explained it as a "Balance of Performance" (BoP) violation. I call it? The "nuclear" penalty option. Here are the two actual rules that were used to justify this:

Rule 2.1 from that BoP section: "In order to maintain competitive equivalency between cars within each class and between classes, IMSA may, at its discretion, utilize an adjustment method during each season." The second rule used is found in 2.7: "...displays a level of performance above or below the expected result in any Session may be penalized to the full extent..." The team admitted using a different fuel cell, and it apparently worked too good for IMSA's expected "around 40 seconds for a pit stop" criteria that isn't actually spelled out in the rule book. You'd have call their unfortunate predicament a "reverse Cinderella" story?

Cadillac is still leading in Prototype, the new Acura-powered DPi's have had trouble and have faded back. Formula 1 star Fernando Alonso is driving a P2 Prototype, but his team has

also had problems and have faded back. I note that there are many IndyCar star drivers starting their season with this famous race. The Ford GT's seem to have a small-but-steady lead in GTLM. It's a very close in GTD, with four-to-five teams constantly changing positions at the front. There continue to be a number of failures of the right-rear tire on the banking. Remember you're going something like 180 mph when that happens. It's a series-spec tire by Continental. There is, ahem, a lot of finger-pointing. The teams are understandably unhappy. This will likely be "moot" next year as Michelin becomes the new spec-tire supplier. They will be expanding from only providing the tires in the one "open tire" class, GTLM, now.

Despite so much history, Porsche is not doing well in either GTLM or GTD. Ferrari? Not near the front. BMW is not likely happy the way the event is unfolding either. An hour-and-half before the race ends, there is a press release from BMW about being in discussions for a "Balance of Performance" rules change for subsequent races, including the upcoming race at Sebring. (photo 429 + sidebar on BOP)

So, it ends with the #5 Cadillac DPi winning Overall, the Ford GT winning GTLM, and after much back-and-forth trading between the Mercedes, Acura NSX and the Huracan? The #11 Lambo comes out on top in GTD, the first Rolex 24 win for that marque. And that "Cinderella" story I mentioned earlier? After that late rebuild, that #48 Huracan managed to get on the podium for third! There was an unusually low number of yellow flags this year, only 4. Last year, by comparison, there were 21. With the speed of the racecars, and all that green flag running, a new record Rolex 24 distance was set: 808 laps vs. the old record of 762, which totals-up to just under 3000 miles in those 24 hours! How about a photo of me in Victory Lane at Daytona...drat, I'm "just visiting." (305) The Turner M6 is back in its garage....it's still together...but not, of course, as clean as when all this started! (photo 313)

We go from one monumental challenge to another. South on I-95 is: Cape Kennedy, and the GovSat launch by SpaceX. (Photo 366 of me in front of the Countdown Clock.) For six decades this has been America's SpacePort, a reminder of our great country at its "can do" best.

This is the site of many so-very-human dramas that involved "pushing



the envelope" and "never give up," as captured in movies such as "The Right Stuff" and "Apollo 13." You never know who might be around. How about a photo of me with Skylab 4 Astronaut Commander, Jerry Carr. In 1973 he spent 84 days in Skylab, which was our first space station (photo 370.) A launch is always an impressive experience (photo 392) As we're leaving, there is a gorgeous SuperMoon over the Cape (photo 385).

Then? I spend some time Just Doing Nothing, walking the beach, taking in some sun....with no deadlines nor "schedule." Now that's a real luxury in our times. As the plane heads NNW to Minnesota I think of the warmth and the sun, the excitement, the sound of "rev me, rev me" engines as I plan for my own 2018 driving competitions. See you at some club event!

Sidebar story on "Balance of Performance"

The competition in this racing series is very carefully managed via required on-board telemetry. I attach (photo 434) the most recent specification update, it's from January 18th, one week before the race. There is one of these for each Class: DP, GTLM and GTD. This one is for GTLM. It highlights what is being measured and monitored...and subject to discretionary adjustment by the sanctioning body, IMSA: weight, air inlet restrictor, turbo boost-ratio curve, maximum rpm, minimum ground clearance, gas tank capacity, etc. In that BMW press release, it is in these specifications that BMW is suggesting that they are looking for a more favorable rules break for the M8 GTE. I think it is highly likely that there will be yet another "rules adjustment" before the next race at Sebring, in March. I'd anticipate that other teams, like both Porsche and Ferrari, will also be rules-lobbying too, so I wouldn't bet on just one set of adjustments. Think of yourself as the Motorsport Manager for one of these factory teams: you have a Big Budget... and Upper Management is expecting Big Results. You know these crucial rules are being adjusted all the time, and yet your teams still need to win somehow. Talk about pressure...





Free BMW tech help.

Have a technical question about your BMW or MINI? Our free tech blog – **blog.BavAuto.com** – has a searchable database containing hundreds of tech Q&As, do-it-yourself articles and videos. Just one more way Bavarian Autosport saves you money.



www.BavAuto.com • 800.535.2002

Check it out at blog.BavAuto.com...

North Star Bavarian
P.O. Box 275
Chaska, MN 55318

Non-Profit
U.S. Postage Paid
Chaska, MN
Permit No. 95

BMW Car Club
of America
North Star Chapter



Dated material
Please do not delay
www.northstarbmw.org

Same Day Service

on most repairs



15180 martin dr. • eden prairie, 55344
952-922-1797