News Events Features Show Reports Reviews

Special Specia

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February / March 2013

Issue No: 6

Best viewed as Full Size Single Page

122 Pages of Action





Sporty Sebring



CARS, CARS, CARS



Drive-In Delight







THIS MONTH: Cars, Cars, Cars Drive-In Delight Rolex Thunder Sporty Sebring and Much More



FREE Online Magazine

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Editorial Team: North America Editor – Steve Wood West Coast Contributor - Jim Pratt Cruisin' & Hot Rod's - Gary Rosier UK Team - The Gremlins at Kew



Editorial

Welcome to the March / April 2013 issue of Speedi Wings & Wheels.

The winter period is generally quiet from the air show perspective, but the U.S. Sport Aviation Expo was held in Sebring, Florida in January. We have a report from the Expo in this issue.

There's been plenty going on in the Daytona Beach area on the ground. January and February is the time when motorsport fans travel south to Daytona for the Rolex 24 hr race in January, followed by Speed Week and the classic Daytona 500 race in February.

Take a look at our 'Content's page to find out more about what's in this issue. The magazine is published bi-monthly during the last week of February, April, June, August, October and December. Follow *SpeediiTV* on Twitter to keep up to date when future issues are published.

Blue Sky's and Safe Flying.

The Speedi Team

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Boeing C-40A Transport Aircraft for US Navy

Photo: Boeing

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B2 Cars, Cars, Cal



91 Drive-In Delight





- **Rolex Thunder:** Each January, the Daytona International Speedway reverberates to the cacophony of sound sound of race cars for a full 24 hr period The Rolex 24 race is on. We take a look at the practice sessions.
- **Sporty Sebring:** Sebring, in southern Florida has been well known for many years for its own 12 hr endurance race a shorter version of Daytona's Rolex 24 hr. But it's the U.S. Sport Aviation Expo which grabbed our attention this year.
- **82** Cars, Cars: Spruce Creek Fly-in was the venue for a large car show in January. Over 160 cars were on show, and what cars they were.
- **91 Drive-In Delight:** We take a close look at some of the local Cruiser events which took place in Daytona Beach this February.

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- Speedi's Blog: Steve Wood looks at 'what's hot and what's not' in the world of aviation
- News from the Barn: News of the events & 'happenings' at Spruce Creek Fly-in.
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FV DEUIS Snippets of Aviation News

ECLIPSE SUBMITS RFI TO USAF REQUEST FOR VERY LIGHT JET FLEET

Response Shows \$1 Billion in **O&M Savings Over 10 Years by** Converting from Legacy Aircraft to an Eclipse Jet Fleet

U.S. Air Force's Request for legacy aircraft. Information (RFI) for a large fleet of Very Light Jets (VLJ) to support their Specialized Undergraduate Pilot Training (SUPT) Multi-place Training Track. Eclipse Aerospace's proposed solution could save 13 million gallons of jet fuel per year.

Currently operating a 20 year old fleet of legacy business jets that has become increasingly expensive to support and maintain, the Air Force is examining innovative industry approaches to meeting SUPT syllabus requirements in a more affordable and cost effective manner.

Mason Holland, Eclipse's CEO stated "I have met with senior Air Force leaders and they are looking for an efficient and affordable solution to challenges. Eclipse is offering an innovative and response to the RFI we have proposed a solution that is expected to save the USAF hundreds of airplane for this Air Force mission," aircraft. millions of dollars over the next ten currently in production."

the Eclipse Jet meets and/or exceeds same time providing the significant

all of the SUPT syllabus cost savings in fuel and operational O&M costs over ten years by converting to an Eclipse Jet fleet." About Eclipse Aerospace, Inc.

The Eclipse Jet is 70% more

requirements. More important, from support that the Air Force needs. At a budgetary viewpoint, our response today's cost of jet fuel, fuel costs demonstrates how the USAF can alone for this program would save over one Billion dollars of decrease by more than \$500 million."

Eclipse Aerospace, Inc. is the Albuquerque, NM, — Eclipse fuel-efficient and 70% less costly to manufacturer of the Eclipse 550 Aerospace responded today to the support than the current SUPT twin-engine jet, the most fuelefficient jet in the world. Eclipse also



As the largest consumer of jet provides engineering, maintenance, fuel over 10 years.

said Eclipse Aerospace Co-Founder solutions in this very tight budget For more information: "Our submittal," Holland environment and the Eclipse Jet is www.ECLIPSE.aero. continued, "was fully responsive to the only light jet that can meet the the Air Force's request. It shows that mission requirements, while at the

fuel in the U.S. Government, the Air service, and support for the fleet of Force is seeking ways to reduce their 260 Eclipse 500 Twin-Engine Jet their fuel consumption and operating aircraft. Adhering to the motto costs. By converting the SUPT "Customer First," Eclipse Aerospace quickly program to the Eclipse Jet, the USAF is focused on providing a superior implementable alternative. In our could save 130 million gallons of jet customer experience for existing and future owners, operators, and pilots "The Eclipse Jet is the perfect of the revolutionary Eclipse Jet

Eclipse Aerospace corporate years while upgrading their fleet Mike Press, a retired Air Force offices are based in Charleston, S.C. with the most efficient and Colonel. "The Air Force is looking Principal operations are located in technologically advanced light jet for significant savings and affordable Albuquerque, N.M. and Chicago, Ill.

FORT WORTH, TX, and **TEMPE, AZ**, February 14, 2013 – AMR Corporation (OTCQB: AAMRQ), the parent company of American Airlines, Inc., and US Airways Group, Inc. (NYSE: LCC) today announced that the boards of directors of both companies have unanimously approved a definitive merger agreement under which the companies will combine to create a premier global carrier, which will have an implied combined equity value of approximately \$11 billion based on the price of US Airways'

stock as of February 13, 2013.

Operating under the American Airlines name, one of the most recognized brands in the world, the combined airline will have a robust global network and a strong financial foundation. The merger will offer benefits to both airlines' customers, communities, employees, investors, and creditors. Customers will have access to more choices and increased service across the combined company's larger worldwide network and through an enhanced oneworld® Alliance, of which American Airlines is a founding member. With firm orders for more than 600 new mainline aircraft, the combined airline will have one of the most modern and efficient fleets in the industry, and a solid foundation for continued investment in technology, products, and services.

The combined airline will offer more than 6,700 daily flights to 336 destinations in 56 countries. The combined airline is expected to maintain all hubs currently served by we serve. American Airlines and US Airways. resulting in more travel options for customers. Both airlines expect that the regional carriers they own -



AMR Corporation's American Eagle experience available. The – will continue to operate as distinct entities, providing seamless service to the combined airline. The company will be headquartered in Dallas-Fort Worth and will maintain a significant corporate and operational presence in Phoenix.

"Today, we are proud to launch the new American Airlines – a premier global carrier well equipped to compete and win against the best in the world," said Tom Horton, Chairman, President, and Chief **Executive Officer of American** Airlines. "Together, we will be even will have the scale, breadth and better positioned to deliver for all of capabilities to compete more

around the globe and gives us a strong platform to provide our customers the most connected, comfortable travel

and US Airways' Piedmont and PSA operational and financial strength of the combined airline is expected to enable continued investment in new products and technologies and will create exciting new opportunities for our people, even as we deliver strong cash flow and sustainable profitability.

> Doug Parker, Chairman and Chief Executive Officer of US Airways, said, "Today marks an exciting new chapter for American Airlines and US Airways. American Airlines is one of the world's most iconic brands. The combined airline



our stakeholders, including our customers, people, investors, partners, and the many communities

"The combination of American and US Airways brings together two highly complementary networks with access to the best destinations

effectively and profitably in the global marketplace. Our combined network will provide a significantly more attractive offering to customers, ensuring that we are always able to take them where they want to travel, when they want to go." Photo above: AA New 777 Livery

Eagle News from Embry Riddle Aeronautical University

Pratt & Whitney Donates Two Turbofan Engines to Embry-Riddle

Gift Enhances Aerospace Engineering Education and Research Programs

Daytona Beach, FL, February 11, 2013

In a ceremony today at its Daytona Beach Campus, Embry-Riddle Aeronautical University officially took delivery of two turbofan engines donated by leading aircraft engine maker Pratt & Whitney to

engineering education at the university. The event featured remarks by John P. Johnson, president of Embry-Riddle, and Alan Epstein, vice president, technology and

environment, Pratt &

Whitney.

enhance aerospace

The engines, housed in the Gas Turbine Laboratory at the campus, will help engineering students expand their understanding of turbine engines. Students eventually will take the engines apart to study the evolution of engine design compared to other engines in the lab.

"This donation by Pratt & Whitney offers considerable educational value to our students, research knowledge to our faculty and credibility to our College of Engineering," said Magdy Attia, professor of aerospace engineering and director of the laboratory. "It strengthens our relationship with a world-class engine company and

reinforces Embry-Riddle's niche as a leader in hands-on, applied education."

"The success of Pratt & Whitney in its more than 87-year history is in large part due to innovation driven by some of the world's finest engineers," said Epstein. "Pratt & Whitney is pleased to partner with Embry-Riddle to further such



progress in this century. We invest in science and math education because we rely on talented engineering students to help us solve technical challenges."

One of the engines, a Pratt & Whitney JT8D-15A, is used in Boeing 727 and 737 and DC-9 aircraft. It can produce up to 15,500 lbs. of thrust and was an innovator in fuel efficiency. The other engine. a PW4062 used in the Boeing 747 and 767 aircraft and the KC-46A tanker, can achieve 62,000 lbs. of

Embry-Riddle's Gas Turbine Laboratory is used in conjunction with courses in thermodynamics, propulsion and heat transfer, as well as for graduate student research projects and work with aerospace corporations.

About Pratt & Whitney

Pratt & Whitney is a world leader in the design, manufacture and service of aircraft engines, space propulsion systems and industrial gas turbines.

> United Technologies, based in Hartford, Conn., is a diversified company providing high technology products and services to the global aerospace and commercial building industries. Learn more at www.pw.utc.com.

> PHOTO CAPTION: Left to right: Magdy Attia, professor of aerospace engineering, ERAU; Stephen Yue, director of McGill University

Institute for Aerospace Engineering; Michael Winter, chief engineer for technology, Pratt & Whitney; Tasos Lyrintzis, chair of aerospace engineering, ERAU; Hany Moutstapha, distinguished visiting professor of engineering, ERAU; Maj Mirmirani, dean, College of Engineering, ERAU; Alan Epstein, VP, technology and environment, Pratt & Whitney; John Johnson, president, ERAU; Joie Alexander former member of Volusia County Council; Wagdi Habashi director, CFD lab, mechanical engineering department, McGill University; Richard Heist, chancellor, Daytona Beach campus, ERAU.

Embry-Riddle Launches New High School Aerospace Institute in Rockford, Illinois

Classes to Begin in Fall 2013 for **Jefferson High School Students**

Daytona Beach, FL, February 15, 2013

The College of Aviation at Embry-Riddle Aeronautical University's Daytona Beach Campus has partnered with Rockford Public Schools in Illinois to establish an Aerospace Institute at Jefferson High School beginning in Fall 2013. Embry-Riddle offers more than 29

Embry-Riddle's Aerospace Institute program, also in place in several school districts elsewhere in Illinois and in Florida, gives high school students a collegiate model of aviation and aerospace education to

introduce them to highpaying jobs in these career fields.

"Our community has over 170 companies that are related to the aviation/aeronautics industry," said David Carson, Director of College and Career Readiness for Rockford Public Schools. "So we have a huge number of job

opportunities available for our students and it's critical to our community that we have the talent pool to fill the needs of all of those companies moving forward."

Ken Dufour, a Rockford businessman and Embry-Riddle trustee, agreed. "I think it's a great northern Illinois. It's a footprint for the future."

Embry-Riddle's dual-enrollment program is offered free of charge to high school students, enabling them to earn both high school credit toward graduation and college credit for courses taught by Embry-Riddle professors in their own high school classrooms. Students and parents have the potential to save nearly \$40,000 in college tuition costs.

Through its Aerospace Institutes, STEM (science, technology, engineering and mathematics) related courses to high school students in topics such as aeronautical science (professional

step for the aerospace community in Principles of Aeronautical Science course will give students a broadbased introduction to aviation history, flight theory, aircraft systems and performance, and flight physiology. In the Unmanned Aircraft Systems (UAS) course, students will learn about the military and commercial history, growth and application of UASs and will build and fly their own radio-controlled models.

> "We are absolutely delighted that Rockford Public Schools is joining our team," said Dr. Leo Murphy, Director of Advanced Placement Programs at Embry-Riddle. "The goal of our program is for our high school students and in particular our first-generation college students to obtain a solid foundation in critical-

> > thinking skills before attending college to complete their degree."

For more information on Embry-Riddle's high school Aerospace Institute program, contact Dr. Murphy at (386) 226-7066 or leo.murphy@erau.edu.



pilot), aeronautical engineering, homeland security, meteorology, aviation maintenance science, space science and unmanned aircraft systems.

The new Rockford institute will initially offer two courses. The

HE ROLEX 24 at Daytona is as famous as the Le Mans 24 hrs race in France.

The race is run in January each year, at the Daytona International Speedway on the Atlantic Coast of Florida.

Daytona Beach is home to many other famous races, including the Daytona 500.

The Rolex race kicks off 'Speed Weeks' in Daytona which includes the Daytona 500 and supporting races.

We would have loved to have brought you photos of the race itself, but sadly the media credential people at the Daytona International
Speedway are not yet
enlightened enough about the
merits of online magazines
and declined our request for
credentials.

Not to be outdone, our ace photographer, Gary Rosier, went along as a fan to the prerace events. Which, apart from seeing the start and the finish, is as good as going to the race itself. In some respects it's better as you can get to places which during the race is either off-limits without media credentials or just too crowded. As editor, I know, as I done both when Dodge

kindly provided me with Speed Week credentials a few years back.

The drivers are trying harder than during the race to get pole position and test their cars. During the race it can be very much a race of reliability and staying out of trouble.

We hope that you enjoy these photos as much as Gary enjoyed taking them.

Perhaps your interest in Speedi Wings & Wheels Magazine will encourage Daytona International Speedway to be more enlightened for next year!















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Gates Open 8:30 a.m. . Flight Line closes 12:00 noon . Free Event Parking

Airshow Starts at Approximately 1:00 p.m. • No Coolers/Dogs For Information call: TICO Warbird Airshow, Inc. (321) 268-1941

Advance Tickets - Adult \$15, Children (5 to 12) \$5 . Advance 3-Day Pass - \$45

Gate Tickets - Adult \$20, Children (5 to 12) \$10



PARRISH













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SUN nFUN International Fly-In & Expo

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APRIL 18-21! BE THERE.

AIR SHOW NEWS







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Welcome the U.S. Navy
BLUE ANGELS
Father's Day weekend

June 15-16







JUNE 8-9, 2013 OC AIR SHOW



AIR SHOM DEMS - 5





















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ELCOME TO SPEEDI'S Blog.

Speed is something the city of Daytona Beach, in Florida knows all about. It's the home of the **Daytona International** Speedway. Indeed, **Daytona** was the birthplace of speedway racing in the USA. It all started on the beach back in 1902. The present speedway was built in 1959 and host an oval course for speedway racing and a

point for the likes of the **USAF Thunderbirds**, who performed a fly-by for the opening of the 2013 Daytona 500. This is the premier race in

the speedway calendar.

This yearthe weather leading up to the Daytona 500, which took place on Sunday, 24 February, was much warmer

than normal. A good 10 combined oval and track to 15 deg F warmer. It all

changed for the race day which was cooler and overcast.

Living at **Spruce Creek** Fly-in, a private airport just 7 miles south of Daytona.

means we are inundated by fans and team members renting homes in our community. Not that we mind, and indeed this is why team

owners often like to stay at Spruce Creek, away from the crowds.

The 2013 Daytona 500 was notable this year for



pole position. This was first pole position by a woman. Patrick is the most successful woman in the history of American open-wheel racing—she is the only woman to win a race. She was paid a salary of around \$12m per year. No doubt this will increase substantially

after taking the pole

position/ She finished

8th overall in the race.

Danica Patrick taking

Sadly, the weekends event were marred by a major pile-up on the last lap of the Daytona 300

race. This injured at least 33 spectators, but fortunately there were no fatalities.

The speed theme at the speedway started the year back in January with the Rolex 24 hr event. We have some great photos from the practice and the race on pages 7 through 28. It's not just on four wheels that speed fun takes place. Early March sees the 72 nd annual Daytona **Beach Bike Week. The** speedway takes up the 2-wheel fun with bikes

Supercross event on March 9.



Bike Week is a major event for Daytona Beach, and on a much wider scale that the speed week races at the speedway. The march event is the major of two

> bike week events at Davtona Beach. Biletoberfest takes place in October and we brought our readers some interesting photo

coverage of the 2012 event ion pages 101 through 109 of our also motocross action at October / November 2012 issue - click here. Spruce Creek Fly-in, my home base in Florida, is

> a great place to see all kinds of airplanes and special vehicles. Indeed in this issue we are featuring photos from a recent car show which took place at **Spruce Creek in** January - see

pages 82 through 95. Sadly it appears, that due to the huge success of these events, bringing in large numbers of vehicles from outside of Spruce Creek, the January event will be the last in the series. It's all down to insurance risk as airplanes on taxiways don't mix well with cars and people on the same taxi-way.

One of the other problems we have at **Spruce Creek is that** there is a very popular cafe - The Downwind Cafe - right in the heart of the airport. Indeed, visitors have to cross an active taxiway to get to the cafe. There have >>



course for the Rolex 24 hr event.

The speedway is right next door to the Daytona **International Airport.** This is ideal as a launch

races, notably the Daytona 200 road race on March 16. There's

the speedway with the

>> a few close calls when visitors in cars failed to give way to passing airplanes,

despite the very clear

stop signs. As a pilot,

a car reaching these

stop signs. The photo

Downwind Cafe in the

on the active taxi-way.

above shows the

residents to the community's focal point, known as The Big Tree. This is a good excuse for

formation pilots to go flying, particularly those, who like me, have a smoke system. In my case I have a unique and more complex system than

Spruce Creek. I'm very wary when I see I can select either continuous smoke, which is like the background with the car other planes. An alternative. which I use

It's been a very busy time at the Fly-in for pilots in Goofy and Lakes, Flights, and indeed for many other pilots at Spruce Creek. The weather has been kind, with cool mornings and warm evenings. The cool air means the planes performance in enhanced. The warm evenings brings out the

all the other pilots at

most of the

time as it fits well with the name of my plane -Goofy, from its registration 600FY - is pulsating smoke. A morse code if you like. It seems that everyone loves the way it puffs along, just like a smoke signal. Its all automatic and I can adjust the

length of the pulses. Take a look at this video of my plane during the recent Spruce Creek Toy parade - click here

On pages 47 through 53 of this issue you can read all about the 'Big Wing' flights that Goofy & Lakes Flights have been putting together for formation displays and memorial flights. Of course for a memorial flight I will have the smoke on continuously.



In the world of commercial aviation, the major news is the problems Boeing are having with the battery system on their new B787 models. It seems that along with many other new technologies, Boeing decided to use Lithium Ion battery >>

more traditional Ni-Cad batteries.

Li-lon batteries are used



in the majority of phones, computers and the like. But they have one major drawback. They can spontaneously ignite, which is what happened in the case of the B787 batteries. It was not just one incident, but a series of

failures over multiple

>> packs rather than the airplanes. It also seems that many battery packs have been replaced during during the B787's

short production life.

The FAA and other countries aviation agencies have grounded the 787. The groun

dings will continue until **Boeing has** come up with a fix and this has been approved by the FAA after appropriate testing. All this is costina

> Boeing's 787's customers a huge amount of money. LOT **Polish Airlines** has said the grounding of its two 787's is costing it \$50,000 per day. Most

affected has been ANA.

which has 17 of the planes.

Airbus, which is in the final stages of preproduction planning for its new A350 XWB is dropping the lithium-ion batteries it had planned to use in its passenger jet, in favor of a more proven Ni-Cad battery alternative.

Both Airbus and Boeing sold a massive number



of new planes to **American Airlines last** year. AA, which had never purchased Airbus planes placed the order for future deliveries. **Guess what happened** just a few weeks ago. American announced its merger with US Airways, a major operator of Airbus planes.



NEWS FROM THE BARN

Photos for this feature by Steve W

EWS FROM THE Barn is a regular feature about the happenings at the largest (and greatest) fly-in community in the world - Spruce Creek Fly-in. Situated on the Space Coast of Florida, just 7 miles south of the famous Speed City of Daytona Beach, Spruce Creek is a very special place. Our North America editor, Steve Wood, has lived there for since 2001, so he should know. We hope you enjoy this regular feature about a very special aviation community.

Spruce Creek Airport Information - Courtesy of the Spruce Creek POA Website - www.scpoa.com

The Spruce Creek Airport is the heart of the Spruce Creek Fly-In Community. The Airport is a private airport owned and operated by the Spruce Creek Property Owners Association (SCPOA). The Spruce Creek Airport Authority Committee through the SCPOA Board of Directors has the authority and the responsibility to oversee the operation of the Spruce Creek Airport. The SCPOA employs a full time, 24-7 security staff. The Airport runways, taxiways and aircraft parking areas are regularly patrolled and are under continuous video surveillance by the Security staff 24 hour a day.

All flying activities at the Spruce Creek Airport are regulated by the FAA and by the recommended procedures published in the Aeronautical Information Manual (AIM). In addition, a limited number of local rules and procedures have been established to promote a safe and enjoyable airport. All resident, tenants and invitees are encouraged to cooperate and abide by these procedures.

SPRUCE CREEK AIRCRAFT ARRIVAL & DEPARTURE PACKAGE - The airport management provides information to assist all pilots operating in and out of the Spruce Creek Air, viewed or printed with Adobe Reader. Download PDF

AIRPORT SAFETY VIDEO — The airport management recommends that all Spruce Creek Fly-In residents and airport users view this very good airport safety video. Click Here.

Airport Information Quick List

VORTAC OMN 112.6 165°R/13.9 DME

VORTAC ORL 112.2 020°R/35.6 DME

FSS St. Petersburg 122.2

APCH CNTRL Daytona Beach ..125.35 (South) 125.8 (North)

INSTR APCH (Rwy 05) GPS (Private, Residents Only)

CTAF...... 122.975 (pilot actuated lights 3-5-7 clicks)

- AWOS...... 121.725

FUEL 100LL & JET A (self serve and truck delivery)

Airport Manager: Airport Assistant Manager: Airport Committee Chairman:

Ken Doucette Dick Cunneen Bob Spillman 386 767-5814

Cell 386 872-1430 Cell 386 872-1431 Cell 305 367-0175

NEWS FROM THE BARN



N OUR 'News from the Barn' section we will be **L** featuring news and photos from Spruce Creek Fly-in, the world's greatest aviation community. With over 1600 homes, and not all of them are hangar homes, and home to over 3000 people, there are over 650 airplanes based at Spruce Creek. But it's not all about aviation at Spruce Creek there's golf, tennis, motorcycling and much more, as well as a Country Club and the Downwind restaurant right alongside Beech Boulevard - a major taxiway in the center of the airport. EAA Chapter 288

(Daytona Beech) meets at Keith Phillip's hanger on the has the special other major taxiway - Cessna registration N-600FY. Boulevard. Then there's the Gaggle Flight, which is quite smoke on his airplane something in its own right. Every Saturday morning (and sometimes on Wednesday too) members of the Gaggle Flight meet at The Big Tree which sits right perhaps in the middle of the airport. Upwards of 30 aircraft depart in flights of 3 or 4 (and sometimes more) flying a sign out to breakfast. The arrivals back are usually spectacular, with overhead breaks the norm. Our North America editor, Steve Wood, is part of Goofy Flight - named

after his GlaStar which Steve even has 'goofy' which can 'puff' or be continuous at whim. Everyone has great fun at Spruce Creek Fly-in

which expla there's inside the



entrance which reads "Caution - Children And Adults At Play".







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The Big Wing

Saturday, 19 January, 2013 was a great day for the annual Spruce Creek bonfire. The weather was perfect for both the event and the Gaggle Flight fly-by. This is a story about one of the flights which took part in the fly-by.

The 'Big Wing' name was coined by a Spruce Creek pilot when he saw Lakes / Goofy Flight practicing for the Bonfire fly-by. He said it reminded him of what he had read about Mallory's Big Wing flown during the Battle of Britain in WWII. In fact it was British fighter ace Sir Douglas Bader who developed the Big Wing concept. It started with a flight of 3 squadrons joining up out of RAF Duxford to protect Britain from German bombers. In essence, the tactic involved meeting incoming Luftwaffe bombing raids in strength with a wingsized formation of three to five fighter squadrons. Later on it expanded to larger fighter wings to provide mutual protection and to take on the enemy at altitude shortly after they crossed the English Channel. Some say it was

an ineffective strategy, but it

would certainly have been an impressive and intimidating sight.

We did not set out to

specifically develop a Big Wing flight. Our aim was to have fun putting together a large number of totally different aircraft into a safe and visually impressive formation. Large flights have been put together before at Spruce Creek. Usually they are all of the same type of airplane. A large number of planes in a single flight would normally be spilt into two or three elements for the break out of single echelons.

Our flight is called Lakes / Goofy Flight as the Bonfire Flight concept was developed jointly by Lakes Lead, Jeff Edwards and Goofy Lead, Steve Wood. It took a lot of practice to go from our typical flight of 4 or 5 planes to the 11-ship formation at the Bonfire. We started our practice flights well before the December 2012 Toy Parade. At the Toy Parade we flew two 8ship formation passes and then split the flight into 5ship and 3-ship elements for the break.

Steve flew with the team

during the week while Jeff was flying for US Airways. On the weekends, Jeff led the team and Steve was in the rear adjusting the positions of the flight. We briefed extensively before and after all our practice flights.

After our successful 8-ship

we turned our attention to

how we could safely break 11 aircraft out of a single formation. In essence, it was biplane. The planes flying very simple, despite all 11 planes being different types with a mixture of high and low wings. Due to our different types of planes, we break. do not fly with wing tip overlap. This is in contrast to flights flying similar aircraft. Our style is to fly a slightly looser formation with spacing as evenly as possible bearing in mind the was done. To ensure there varying wing widths (Grumman Lynx @ 24 '6"to the Cessna 180 @ 35'10"). The relatively slow speed of our airplanes means we have to keep our flight in Parade formation for longer than the faster flights - a challenge in the turbulent air behind the other flights.

Our rendezvous was kept simple. A 'Vic' of 7 planes joined initially with a flight of

4 joining in diamond astern of lead. The changes in formation were designed to have as few planes moving as possible. The first pass was a 'Vic' formation. On the downwind leg this was smoothly changed to a 'Triple Diamond'. For the final break pass we transitioned to a 'Stingray' formation at the Toy Parade, formation. Jeff led the flight as he could see both sides of the formation from his open cockpit Great Lakes positions 2 and 5 each had a bubble canopy (which gives better visibility) for extra safety during the

> When we conducted the break, we had three right echelons breaking one after the other. The diagram below shows just how this were no problems in the air, prior to all flights, the team did an extensive ground 'walk through' of each formation, the formation changes and the break. 'Walk throughs' are normal for large sky-diving formations and aerobatic flights. This certainly caught the attention of some of the other pilots around The Big Tree. Our break was initiated by lead with a

single radio call to #7 and all the other aircraft broke on interval with the preceding aircraft in sight.

The whole flight sequence can be seen on youtube at http://www.youtube.com/wat ch?v=SSbtzIr733Y

Lakes / Goofy Flight team for the 2013 Bonfire fly-by comprised the following:

Lead – Jeff Edwards – Great Lakes. #2 Miike Taylor – Skylark LSA. #3 Jim Clark - Piper Pacer.

#4 Lynn O'Donnell -Stinson.

#5 Ted Chang - RV-9A. #6 Herb McCormick -Maule.

#7 Larry Traskos – Cessna

#8 Connie Shad – Cherokee 180.

#9 Mike Kubes – Grumman Lynx.

#10 Dave Henning - Super Decathlon.

#11 Steve Wood - GlaStar (Goofy).

See next page for photo showing how the 11 ship formation break was performed:

Article by Lakes Flight Lead -Jeff Edwards, and Goofy Flight lead - Steve Wood.





Lakes / Goofy Flight - Bonfire Break Sequence - Stingray Formation



First to Break: 7 - Larry Traskos - Cessna 180 (break with radio call by lead), followed by:

Echelon 1: 5 - Ted Chang RV-9A (bubble canopy), 8 - Connie Shad - Cherokee 180, 11 - Steve Wood - GlaStar (Goofy), then:

Echelon 2: 2 - Mike Taylor - Skylark (bubble canopy), 4 - Lynn O'Donnell - Stinson, 10 - Dave Herming - Super Decathlon, then:

Echelon 3: 1 - Jeff Edwards - Great Lakes (flight lead), 3 - Jim Clark - Piper Pacer, 6 - Herb McCormick - Maule, 9 - Mike Kubes - Grunman Lynx

Photo by Li Fen Chang









Photo Right: Dave Henning -Super Decathlon (by Mike Zirpoli)

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Lakes / Goofy Flight was in action again at Spruce Creek on Sunday, 3 February 2013 with their Big Wing. This time it was to fly a 'Missing Man' formation for a Spruce Creek resident and fellow pilot, Bill Ryan. Bill passed away recently and the flight took place at a celebration of life event held in Bruce Williams hanger.

The photos on this page, and the next three pages (all by Gary Rosier), show some of the formations flown. It was an exceptionally windy and bumpy day as a cold front went through. But the sky was crystal clear. Photo above shows the first pass, photo bottom left shows the second pass, photo right shows part of Goofy Flight returning ready to break.

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Lakes Flight & Goofy Flight are featured in this issue in the 'News from the Barn' section on pages 46 to 55. Here Lead - Jeff Edwards we take a closer look

at some of the planes which have flown with these two flights. **Photos above: Lakes** and his Great Lakes.

Photos below: Goofy Flight Lead - Steve Wood - and his GlaStar, known as 'Goofy' from its special registration (N-600FY). Photos: Gary Rosier





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NOSE ART & NUMBERS



In this regular Nose Art & Number feature we showcase our readers Nose Art and Special Registration Numbers. Just send in your pics, along with a bio (around 150 words) about your nose art or special registration to noseart@speedi.tv - and don't forget, spread the word.





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NOSE ART & NUMBERS





AutoNews

Top Titbits of Auto News

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Bentley Motors Motorsports News design now underway at Bentley's

GT3 Concept Racer appeared on **Autosport Stage in January**

M-Sport Ltd announced as Continental GT3 technical partner

new motorsport department at the factory in Crewe, the Continental GT3 is on schedule to make its first on-track appearance by the end of 2013.

To assist with the design of



After highlight unveilings at both the Paris Mondial de l'Automobile and the LA Auto Show, the Bentley Continental GT3 Concept Racer is set to star at the 2013 Autosport International exhibition. The Continental GT3 takes the spotlight once again by appearing for its UK debut on the Autosport Stage for the duration of the show, from 10th-13th January at the NEC in Birmingham.

Following the announcement of Bentley's return to motorsport in the GT3 category, response to the Continental GT3 has been overwhelmingly positive with significant interest from numerous potential customers. With detail

specialist components and offer focussed technical expertise during the development of the programme, Bentley is delighted to announce a technical partnership with M-Sport Ltd, whose credentials include the successful running of World Rally Programmes since 1997, including winning two Manufacturer's World Rally Championships.

Bentley's Director of Motorsport, Brian Gush, comments: "Not only do we now have a world-beating operation in M-Sport as our new Technical Partner, but we have the honour of showing our Continental GT3 concept at Autosport International. The car continues to attract interest from around the

globe, which is very encouraging as we progress the detail design. The whole team is looking forward to the exciting months ahead."

M-Sport will design and develop specialist components, together with design work and project organisation being undertaken inhouse at Crewe. The company's Dovenby Hall base in Cumbria complements the Crewe-based team and factory facilities, together creating an array of expertise and equipment that will help to ensure the development of a competitive GT3 racecar worthy of Bentley's return to the racetrack.

Commenting on the new partnership, M-Sport's Managing Director Malcolm Wilson remarks: "Joining forces with Bentley to help create the new Continental GT3 is a rare privilege. Bentley's design and analysis work to-date has shown that the Continental GT road car can become an extremely competitive race car, and we are looking forward to capitalising on our extensive competition car development experience and success to help Bentley realise its goals."

Interesting titbits:

Bentley Motors is the third largest R&D investor in the UK's automotive sector and the 18th largest nationally.

Bentley exports over £500m worth of goods every year to established markets like the US, as well as emerging markets such as China and South America.

BENTLEY REVEALS NEW PERFORMANCE FLAGSHIP **CONVERTIBLE**

world: 202 mph (325 km/h)

Exhilarating supercar performance from uprated 625 PS (616 bhp) W12 engine and eightspeed transmission

Muscular lines and sporting, contemporary hand-crafted luxury

An engaging, sensory driving experience with coupe-like refinement

15% improvement in driving range, fuel economy and emissions distinctly sporting character.

The Continental GT Speed Convertible, Bentley's new open-top GT Speed Convertible, Bentley performance flagship - and the world's fastest four-seat convertible - made its international debut on 14th January at the North American International Auto Show, Detroit.

The new GT Speed Convertible combines the sensory pleasures of roof-down luxury touring with the shattering performance of a 625 PS (616 bhp) twin-turbocharged 6.0 litre W12, while delivering a fifteen per cent improvement in fuel efficiency. The close-ratio eight-speed transmission, uprated and lowered suspension and retuned steering provide exhilarating acceleration and sharp, communicative handling without detriment to the renowned ride comfort of Bentley's Continental convertible. Permanent all-wheel drive ensures optimum traction and power delivery whatever the road conditions.

Taking its place at the pinnacle of the Bentley Continental range, the new GT Speed Convertible has a top **Fastest four-seat convertible in the** speed of 202 mph (325 km/h) and in true Bentley style, no compromises have been made in craftsmanship, luxury or refinement to deliver this unrivalled performance.

Subtle sporting design cues include exclusive 21-inch alloy wheels, dark-tint grilles and 'rifled' exhaust tail pipes. Inside its handcrafted cabin, the GT Speed convertible features the Mulliner Driving Enhanced W12 efficiency with a Specification as standard, blending contemporary luxury with a

Commenting on the new Continental

sensory thrills of the world's fastest four-seat soft-top and the practicality of a year-round grand tourer, together with unrivalled levels of luxury and refinement. It is designed for those who accept no compromise."

Powertrain: 12 cylinders, 625 PS (616 bhp) and 8 gears

The Continental GT Speed convertible shares its powertrain specification with its Bentley stablemate the GT Speed coupé. The 625 PS (616 bhp) twinturbocharged, 48-valve, W12 engine powers the new convertible to 60 mph in 4.1 seconds (0-100 km/h in 4.4 s.) and onto a top speed of 202 mph (325 km/h). Nought to 100 mph (160 km/h) is despatched in



Chairman and Chief Executive Dr Wolfgang Schreiber said: "Following the recent successful introduction of the GT Speed, the new GT Speed Convertible will appeal to drivers who seek the

only 9.7 seconds. Peak torque – an impressive 800 Nm (590 lb.ft) – is reached at just 2000 revs/min and maintains that level through to 5000 revs/min for effortless, refined performance at all times.

AutoNews

Top Titbits of Auto News

www.speedi.tv

"The" sports car celebrates a special anniversary

ATLANTA - For five decades, the 911 has been the heart of the Porsche brand. Few other automobiles in the world can look back on such a long tradition and with such genuine continuity as the Porsche 911. It has been inspiring car enthusiasts the world over since

its debut as the Type 901 at the IAA International Automotive Show in September 1963. Today it is considered the quintessential sports car, the benchmark for all others. The 911 is also the central point of reference for all other Porsche series. From the Cavenne to the Panamera, every Porsche is the most sporting automobile in its category, and each one carries a piece of the 911 philosophy.

More than 820,000 Porsche 911s have been built, making it one of the committed to the performance most successful sports cars in the world. For each of its seven generations the engineers in Zuffenhausen and Weissach have reinvented it, time and time again demonstrating to the world the innovative power of the Porsche brand. Like no other vehicle, the 911 reconciles apparent contradictions such as sportiness and everyday practicality, tradition and innovation, exclusivity and social acceptance, design and functionality. It is no wonder that each generation has written its own personal success story. Ferry

Porsche best described its unique qualities: "The 911 is the only car you could drive on an African safari or at Le Mans, to the theater or through New York City traffic."

In addition to its classic yet unique lines, the Porsche 911 has always been distinguished by its advanced technology. Many of the ideas and technologies that made their debut



in the Porsche 911 were conceived on the race track. The 911 was principle from the start, and motor racing is its most important test lab. From the very beginning it has been at home on circuits all over the world, earning a reputation as a versatile and dependable winner. Indeed, a good two thirds of Porsche's 30,000 race victories to date were notched up by the 911.

How Porsche celebrates the anniversary

For Porsche, the 50th anniversary of this iconic sports car is the central theme of 2013. There will be a wide

variety of anniversary events, starting with the "Retro Classics" automobile show in Stuttgart. From March 7-10 the Porsche Museum will ring in the anniversary year with four special exhibits: an earlymodel 911 Turbo Coupe, a 911 Cabriolet study from 1981, a 1997 street version 911 GT1 and the preseries Type 754 T7. This chassis by Professor Ferdinand Alexander

> Porsche was a milestone on the way to the 911 design.

The company is also sending an authentic 1967 model 911 on a world tour. Over the course of the year, this vintage 911 will travel to five continents where it will be shown in places like Pebble Beach, Calif., Shanghai, Goodwood, U.K., Paris and Australia. As an ambassador for the

Porsche brand, this vintage 911 will be in attendance at many international fairs, historical rallies and motor sport events. Fans and interested individuals can follow the car's progress at http://porsche.com/follow-911.

The Porsche Museum is celebrating "50 years of the Porsche 911" from June 4 - Sept. 29, 2013, with a special exhibition featuring the history and development of the 911. In the spring the museum's own publishing house, Edition Porsche-Museum, will publish an anniversary edition entitled "911x911."

CHICAGO - The new Nissan GT-R world's most challenging racing Track Edition, which made its U.S. debut at the 2013 Chicago Auto Show, is the third and most exclusive model in the 2014 GT-R lineup. Designed to take Nissan's legendary 545-horsepower street supercar even closer to a pure motorsports competition machine, it features a specially tuned suspension, special brake cooling guides, front spoiler with carbon fiber air ducts and a lightweight quilted cloth mat where the rear seats usually reside. It is set to go on sale at select GT-R certified Nissan dealerships nationwide beginning in May 2013. Production will be limited to 150 cars for the U.S. market.

Said Pierre Loing, Vice President, Product and Advanced Planning and Strategy, Nissan Americas: "The concept behind the

GT-R Track Edition is to enable drivers who enjoy even more demanding high-performance driving than the GT-R Premium and Black Edition models' extreme performance, the chance to come closer to a competition spec vehicle - no back seat, stiffer suspension, higher grip seats, additional brake cooling – the works."

Changes to the GT-R's sophisticated 4-wheel independent suspension for the Track Edition include specialized Bilstein DampTronic gas pressure shock absorbers and higher spring rates. Much of the 2014 GT-R's suspension development took place on the Nürburgring, one of the

circuits, where the Track Edition damping force and handling benchmarks were further refined by GT-R development driver Toshio Suzuki. The Track Edition's air guides for the front and rear brakes were also refined through rigorous track testing.

The Track Edition's performance enhancements are added to a significant number of upgrades to the GT-R for the 2014 model year, ranging from the adoption of new fuel injectors for enhanced torque response in the 4,500 - 6,000 rpm range and improved throttle and acceleration feel at mid- and highrpm ranges, to the addition of an oil pan baffle to stabilize oil turbulence and oil pressure under high performance driving conditions. An aluminum nameplate is now added to each hand-assembled engine



bearing the name of the specially trained "Takumi" craftsman who built that individual engine. In addition to developing 545 horsepower, the GT-R's standard VR38DETT V6 produces 463 lb-ft

of torque. The engine is backed by an advanced paddle-shifted sequential 6-speed dual clutch transmission, which can be driver selected to shift at race car-like speeds (0.15 seconds). The sequential-shifting transaxle features separate wet clutches for the odd (1,3,5) and even (2,4,6) gears and pre-selects the next highest and next lowest gear for quick shifts. It also features Hill Start Assist for easy starts on uphill inclines. High performance differential oil, used in GT-R motorsports competition, is standard.

The Nissan GT-R's unique Premium Midship platform, created expressly for use with the GT-R, enables the use of a world's first independent rear transaxle ATTESA E-TS all-wheel drive system, which optimizes weight distribution and handling capability. The rear drive-

> biased system can vary torque split from 0:100 to 50:50 depending on speed, lateral acceleration, steering angles, tire slip, road surface and yaw rate.

In the interior, the new GT-R Track Edition includes special blue-trimmed high-grip front seats that use a special leather and fabric appointments. And, like all 2014 GT-Rs, the Track Edition's interior offers a cockpit-style instrument

panel with a large center-mounted tachometer, a large metallic-framed center console with ergonomically designed shift lever, a red "engine start" button and carbon fiber interior trim.

AutoNews

Top Titbits of Auto News

www.speedi.tv

Daytona (US), 12th February 2013. Hotels & Resorts for its fantastic BMW is embarking on a new chapter of its motorsport four successful years with the BMW M3 GT, the new BMW Z4 GTE will Z4 GTE. There is a lot of take over at the head of the manufacturer's campaign in the 2013 American Le Mans Series (ALMS). On Tuesday, BMW

Motorsport and BMW Team RLL presented the car and drivers for the new season at the "Daytona International Speedway" (US).

Supported by Premium Partner Crowne Plaza Hotels & Resorts, guests from around the world were given the opportunity to inspect the BMW Z4 GTE at close hand, talk to those responsible for the team, and experience the

iconic racetrack in Florida from the cockpit, courtesy of taxi rides with the BMW ALMS drivers.

"As we approach the start of the ALMS season in mid-March, so the anticipation is gradually rising," said talent we have on the team -**BMW Motorsport Director Jens** Marquardt. "All of us at BMW Motorsport and BMW Team RLL are very curious to see how the first few races pan out with the new BMW Z4 GTE. We are setting out on a development year, but are very confident we have once again developed a car that has the potential the launch that is very exciting is not The new car took to the racetrack for to win races and titles in the form of the BMW Z4 GTE. Seeing our drivers at this event, you could tell how much they are looking forward to the first race in Sebring. I would also like to say a big thank you to our Premium Partner Crowne Plaza

support here in Daytona."

Team Principal Bobby Rahal commitment in North America: after added: "Obviously I am very excited races in the number 56 car. Joey to enter this new year with the BMW Hand (US) and John Edwards (US) enthusiasm in the team for the new car. Certainly there will be a development period involved but ultimately I see no reason why we



can't be competitive with the great competition that exists in the GT category in the ALMS. Although this might be a development year in many respects, the level of driver including the two new exciting additions with Maxime Martin and John Edwards – I think that ultimately we can have success and do much as we did in 2009, the first year of the BMW M3 GT, and work M3 GT. All the dimensions of the hard toward achieving maximum results in its first year. One aspect of to comply with ACO regulations. just the introduction of the BMW Z4 GTE and our drivers, but also the collection of historic cars that were the cars that began the success story of BMW in North American racing."

BMW Motorsport also announced the driving pairs for the coming season. Car number 55 will be driven by Bill Auberlen (US) and ALMS rookie Maxime Martin (BE). Dirk Müller (DE) will contest all the will alternate as the two-time ALMS GT champion's driving partner. Edwards will stand in for Hand when he is unavailable due to his parallel commitment in the DTM.

> Jörg Müller (DE, #55) and Uwe Alzen (DE, #56) will bolster the squad at the endurance races at Sebring (US) and Road Atlanta (US).

The BMW Z4 GTE will contest its first season in 2013. In July 2012, BMW Motorsport engineers in Munich (DE) began work on developing a GTE version of the BMW Z4 GT3, which would

comply with ACO regulations. The BMW Z4 GT3 itself has enjoyed many years of success in high-class GT series around the world. The regulations stipulate that electronic aids that may be used on the BMW Z4 GT3, such as ABS and DSC, are not permitted on a GTE car.

The BMW Z4 GTE is considerably more compact than its successful predecessor, the BMW BMW Z4 GTE have been modified its maiden test outing in the second half of January. BMW Team RLL was integrated in the process throughout the entire development period. Engineers from the USA travelled to Munich in December to play their part in the assembly of the BMW Z4 GTE.

THE McLAREN P1TM ADOPTS TWIN POWER TO DELIVER PHENOMENAL TORQUE, **INSTANTLY**

Feb 20, 2013

- * IPAS (Instant Power Assist System) and DRS (Drag Reduction System) offer instant boost of power and straight-line speed
- * 916PS (903 bhp) and 900Nm, with emissions of less than 200g/km
- * Substantially revised 3.8-litre twin-turbo V8 petrol engine coupled to low-weight, highly efficient electric motor ensures instant torque developed by the McLaren for optimised throttle response
- * Full E-mode offers in excess of 10km emission-free driving

combined force of two highlyefficient powerplants, offering the

optimum mix of superb throttle response, day-today drivability and top speed. A mid-mounted 3.8-litre twin-turbo V8 petrol engine and a highly effective electric motor give a combined output of 916PS (903 bhp) and a maximum torque figure of 900Nm, ensuring instantaneous throttle response through the rev range, more akin to a naturally aspirated engine.

Emissions of less than 200g/km on the combined cycle are reduced to zero in full electric drive mode, while the Formula 1-derived DRS and IPAS technologies offer an increase in straight-line speed and an instant boost of power.

The 3.8-litre twin-turbo V8 petrol engine in the McLaren P1TM is a new version of the familiar

M838T unit, that has been significantly upgraded to optimise cooling and durability under the higher loads. The engine block has a unique casting to incorporate the electric motor. The petrol engine produces 737PS (727 bhp) at 7,500rpm, and 720Nm of torque from 4,000rpm. To optimise efficiency of the petrol engine, extensive testing and development work has always been carried out with McLaren Automotive technology partner Mobil 1 on lubrication and hydraulic fluids.

The lightweight electric motor, Electronics arm of the Group, produces 179PS (176 bhp), and is unique to the McLaren P1TM. The The McLaren P1TM will have the motor produces maximum torque of 260Nm instantly from a standstill, greatly increasing the throttle

response of the McLaren P1TM, and peak combined torque of 900Nm is delivered from just 4,000 rpm. In addition to this, the McLarendeveloped 'boost' system, IPAS, provides up to 179PS instantly. The instant response of the electric motor provides a sharper throttle response more associated with a normally aspirated engine, and the

significantly enhanced air-charging system enables the McLaren P1TM to have more top-end power – the perfect combination for high performance.

The electric motor is mounted directly onto the engine, and all drive is channelled through the dualclutch seven-speed gearbox to drive the rear wheels. Thus, the electric motor and 3.8-litre twin-turbo V8 petrol engine work seamlessly together, providing more than just added ultimate power and torque.

A further benefit is that the emotor can provide faster upshifts. This is achieved through the application of instant negative torque at the point of shift, making the engine revs drop as quickly and efficiently as possible to the required engine speed for the upshift.

In addition to the obsessive

weight-saving measures demonstrated throughout the McLaren P1TM, so too is the optimisation of usable energy. When offthrottle the electric motor provides additional drag torque, recovering energy to the battery that would otherwise be lost to the brakes.

About McLaren Automotive:

McLaren Automotive is a British manufacturer

of luxury, high-performance sports cars, located at the McLaren Technology Centre (MTC) in Woking, Surrey. McLaren has pioneered the use of carbon fibre in vehicle production over the past 30 years, and since introducing a carbon chassis into racing and road cars with the 1981 McLaren MP4/1 and 1993 McLaren F1 respectively,











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First Saturday of every month!



Join us for a day of cars, music and fun on the first Saturday of every month from 9 am - 1 pm in our west parking lot. DJ music by Frank Roberts. Free to display, free to attend! Check in on day of event.













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More motorsport news & photos from Daytona Beach, Speed City USA.

Daytona Beach Speed City USA



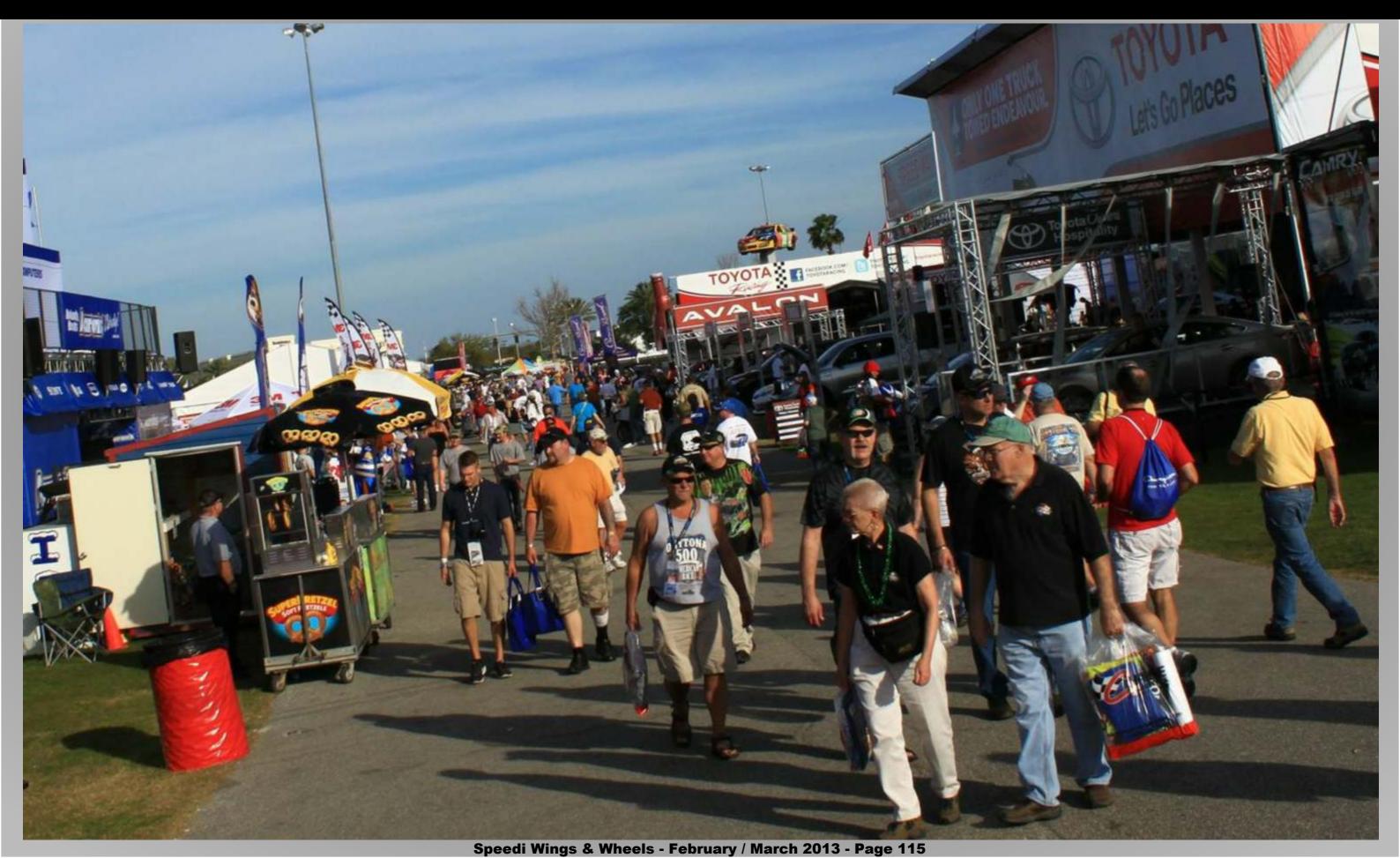




















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