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INDY

SCOTT JASEK UNVEILS PLANS AND INITIATIVES OF THE COMPANY THAT WORKS SIDE BY SIDE WITH DALLARA IN THE USA

GP2

THE RAPAX TEAM HIT THE TRACK AGAIN IN 2011 DEBUT AT ABU DHABI AND IS ALSO LOOKING TO STRENGTHEN ITS RELATIONSHIP WITH DALLARA IN OTHER CATEGORIES

AERODYNAMICS AND

AERODYNAMICS AND COMPUTERS, WORKING TOGETHER TO OPTIMIZE COSTS AND EFFECIENCY: WE LEARN HOW IT WORKS



WORKING FOR THE DAY AFTER TOMORROW

e find ourselves in quite an unusual situation: the racing market is stagnant, but at the same time we have as much work as ever. We are working on two very important projects in the area of road-car engineering, which will both continue for many years. Also, we are completing our Me2 project. In the aerodynamics sector we are working hard, both to deliver our racing cars by the end of the year, and, mainly for our clients, with competition and road car projects. The driving simulator has sparked interest from teams and constructors of cars and components. Constructing a new headquarters in the USA at Indianapolis requires attention and application, as well as a financial commitment.

Then there are the new racing cars: there is F3, the Renault World Series; and the new one for the IndyCar series. The Renault World Series will be a "robust" evolution of the current one. The new F3 will be a surprise as it is conceptually different from the previous model. And then there is IndvCar: it will be a car with a new look: with different and advanced security criteria; planned to be constructed partly in Italy, partly in the USA; with reduced costs and a longer life for components. We have a lot to do, and we must do it well if we want to meet the expectations of our customers. because all of these projects have been given to us as a result of the reputation that we have built over the years. We cannot risk disappointing those who believe in us. But I am certain that we can do it.

- Jan Carlo ballare



USA

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Interview to Scott Jasek, co-owner Indy Racing Experience, Experiential Marketing Incorporated, Indy Parts, and Indy Engine Group



Mr. Jasek, what are the main activities of your company and how was the business relation-ship with Dallara created?

"Our relationship first began during the mid-1990s, which was the infamous split between CART and what then became the Indy Racing League. At that time there were two manufacturers - Dallara and G-Force - and driver Nelson Piquet told us that the only way to go was to buy a Dallara because they would always take care of you no matter what. In 2000, Dallara supplied us with our first two 2-seat Indy cars and has since added four more to our fleet. In 2007, we established Indy Parts to become the sole U.S. parts distributor for Dallara and later played an integral role in assisting former Champ Car World Series teams with their transition back to the IRL following the open-wheel unification efforts prior to the 2008 season. Like Dallara, we have diversified our portfolio with four





different yet related companies. Our on-track racing falls under the Indy Racing Experience, the marketing falls under Experiential Marketing Incorporated, the parts are under Indy Parts, and our machining and engine capabilities are under the Indy Engine Group banner. All four of these companies will play a role in moving forward with Dallara's U.S. initiatives."

What do you most appreciate about working with Dallara?

"Integrity and loyalty are what we admire most about Dallara. In our past experiences with Mr. Dallara and his company, words like lovalty, innovation, and integrity come to mind. Our mission as a company is to surround ourselves with the best. We feel that we have bolstered strong relationships with several top brands. We currently operate the Indy Racing Experience at the world's greatest track (Indianapolis Motor Speedway) and the world's top theme park (Walt Disney World). We have a wonderful partnership with the world's leading computing company in HP, and with Dallara, we feel we are tied together with the world's leading automobile and race car manufacturer."

The joint relationship has created this new project of a fantastic new facility in front of the mythical Indy Speedway, from which the future Indy cars will be manufactured. How do think the relationship with Dallara is going to evolve? "Like Dallara, our companies always strive to improve. We not only want to provide the very best service to our customers, but we also want to stay ahead of the game. We have always been open to new opportunities, and that's why I think this partnership with Dallara is so exciting. Not only is Dallara focused on building the new era of Indy cars, but it is also looking to expand its footprint in the U.S. and offer consulting services to manufacturers."

Besides traditional activities of spare parts distribution, you will be part of all the emotional activities linked to this new engineering center: a restaurant, show-cars, areas for the pit stop competition, an interactive museum, a gift shop, a visible assembly areas, simulators for fans, possibility to ride in a two-seater on the road or on the track of Indianapolis, conference and event rooms. Can you tell us something more? And which of the "attractions" listed do you think could have the best growth?



The Indy Racing Experience two-seats, taylor-made by Dallara for the fan experiences on the famous Indiana race-track



"I mentioned earlier the partnership we have with Walt Disney World in Orlando, Florida. It was important for us to expand our footprint into an area viewed as a destination and one where we could operate our Indy Racing Experience yearround. In the city of Indianapolis, we are looking to make this facility a destination – the first of its kind. Whether it is the middle of summer or the middle of winter, we want people to travel to Indianapolis and come to one place for all things Indy car. We are inspired by Dallara's innovative mindset and trying to use that approach when planning out all the different elements this building will offer the common race fan."

The Indy Racing Experience two-seater, tailor-made by Dallara for the fan



to experience the famous Indiana racetrack From previous interviews with Dallara staff, we see that there is a will to put together the technical and highly specialized area with an entertainment area, in order to combine learning and emotions. A real high tech "adventure playground" for motorsport Passionate fans. Is this what you have in mind and what you are sharing with Dallara?

"I'm not so sure people in the U.S. truly understand the impact Dallara has had on the racing community. Many may feel that Dallara simply provides the chassis and parts for Indy cars, but this building will help educate those fans on the many designs and projects Dallara has been associated with. I think the new Dallara state-of-the-art simulator will raise the standard of what it takes to be a driver in the IZOD IndyCar Series. This building won't just be a factory that rolls out Indy cars. We believe it will be the foundation for the future of racing."

How important do you consider marketing is in the racing scenario and, in

your opinion, how does the fan's interactive experience impact on brand awareness and "loyalty" in the racing world?

"Our success with the Indy Racing Experience has not been one measured from television advertisements, website hits, or stories in the newspaper. It has been simple word-of-mouth that has helped us the most and we think that stems from our personal approach we take with our customers. It's all about the experience with our companies and that will not be any different in our new facility. We have always felt a learning experience within a fan experience becomes a marketing tool!"

How do you see Indy Car Series in three years time, in terms of fan's popularity, and the brand's potential for development?

"With the momentum that currently surrounds INDYCAR, we are eagerly anticipating the largest growth span the league has had in its history. The INDYCAR representation has made it a priority for the 2011 season to enhance the customer or fan experience. They hope to become more hands on with their fan base, educate them through their experiences, and retain their loyalty at the end of the day. Our approach will be the same. Our goal is for our Main Street facility to be the one-stop shop for all things racing. We strive to be the destination of all Indy-Car fans regardless of the time of year."

What do you think about the more direct presence and more intense commitment that your partner Dallara has decided to undertake in the U.S.?

"This goes back to the potential for new opportunities within our company and Dallara. We know that Dallara's expansion to the U.S. is so much more than producing Indy cars. Mr. Dallara has made a commitment with this facility to strengthen his company's relationship with the racing community as a whole and we couldn't be more excited to be a part of this endeavour."

Alessandro Santini



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"IT HAS ALWAYS GONE WONDERFULLY FOR US WITH DALLARA AS A CONSTRUCTOR, AND WE HOPE TO BE ABLE TO USE THEIR PRODUCTS OUTSIDE GP2"

he GP2 season 2011 already began in February with the first testing at Abu Dhabi for the Asian Series, based around three events. The new Dallara car has debuted on the occasion, it's the third model. We have had custom made cars for the category since it began in 2005.

The Italian Rapax Team, current champion, is ready to face the new adventure and reaffirm its status as leader of the pack. The new car could change the balance of the race, the prize will go to those who are quickest in finding the right set up.



But what are the relationships between the GP2 teams and Dallara? We asked Gianfranco Sovernigo, owner of the Rapax team. "We are happy to be the first Italian team to win the GP2 Main Series", explained Sovernigo, "it has always gone wonderfully for us with Dallara as a constructor, and we hope to be able to use their products outside GP2". The team principal Andrea Bergamini, helped us to analyse the evolution of the models. "Even if it is a young team, Rapax has worked with all three GP2 models", he explains. "We used the first in the GP2 Asia Series, then having the most expensive car, the 08, allowed us to win the 2010 championship with Pastor Maldonado. Now there is the new single-seater, which I think is magnificent. The three Dallara cars constructed for GP2 between 2005 and today have all been ahead of their time, offering aerodynamics suited to that period, following the changing rules of F1. Cars that been designed especially with young driver's development in mind, with the result being that they are difficult to drive, and at the same time very fast and with a high performance. With the personnel at Dallara, the teams, including ourselves, always have a useful and positive exchange of information. They are always available, attentive and ready to solve the problems that arise from time to time. We are talking about details, because the product is of a very high level". There will be thirteen teams on the track for the GP2 Main Series 2011, one more than last year. There is no lack of innovation. After the Durango team finished at the end of 2009, the DPR team has also left the track. Both have been replaced by two new teams for the series: Air Asia, owned by Tony Fernandes who was part of the F1 Lotus Team, and Carlin, which is already present in GP3, World Series Renault and the British F3. It should be noted that the Vasseur-Todt team will be called Lotus ART following an agreement with the Lotus Group.

Alessandro Santini





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Pastor Maldonado, GP2 2010 champion

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WHEN SIMULATION IS GOOD FOR SPORT

n the automotive industry, Computational Fluid Dynamics, otherwise known as CFD, is the branch of aerodynamics that simulates what is experimented on in a wind tunnel, on a computer. With the help of very advanced numeric methods, it resolves the complex equations that govern the flow field around the car. In the last ten years, this young science has made giant steps forward: refining the technique and

improving its fundamental role in the design and aerodynamic development of a competition car, becoming a complementary tool, and in many way irreplaceable, with regards to the wind tunnel. Dallara has also found the same level of development in CFD: always in step with the times and in line with the rest of motor sport. Its involvement in the aerodynamic design of our cars has been gradually increasing, therefore justifying the investments made in the last few years, both in term of qualified personnel and in terms of being at the forefront of technology. The technique is an extremely efficient and valuable tool that allows for the development and testing of multiple configurations in the face of more restricted costs and times with respect to those required by the installation and maintenance of a wind tunnel.











In a further comparison with wind tunnels, CFD allows for the reduction of the number of experimental trials necessary in reaching the project target. It also allows the simulation of physical conditions and problems that are difficult, if not impossible, to reproduce in a wind tunnel. Examples of this are: the study of acoustic aerodynamics; the analysis of comfort in race cars; thermal analysis in general and, in particular, brake cooling. For these and for many other problems in the automotive field, CFD offers a reliable solution in short amount of time.

AN EXCLUSIVE SERVICE FOR CLIENTS

Our department has faced problems with various types of cars, dealing with unprecedented new requests. For this reason Dallara has invested in terms of gualified and competent personnel, creating a dedicated area to the business of research and development, around the CFD department. It has a duel aim of supporting the work of the department designated to design and implementing new tools to increase performance. The CFD engineers dedicated to production are busy with both Dallara projects and client projects. These clients have significantly increased, a result of the reliability and professionalism that Dallara offer to the market. In line with company policy, the CFD department offers an exclusive service to the clients, searching to satisfy the advanced needs and to guarantee confidentiality of the relationship and the data that is in our possession. Experience, competence, professionalism and respect for privacy are the characteristics that our work embodies. This is all enhanced by the hardware and software investments that the company is constantly committed to, updating the accounting system and the installed software and providing a department with sufficient computing power to satisfy the internal and external demands. The latest investment in that area, available since the end of 2009, has allowed the creation of computer platform shared by the CFD and FEA departments, equipped with the

latest generation of processors and calculation management software that automatically organises processes 24 hours a day. In terms of both hardware and software, the system's flexibility allows an expansion in the number of calculations at any moment, autoupdating if necessary.

A "NETWORK" OF INFORMATION

At operational level our department works transversely with other departments: the technical office in finding structures for the simulation; the computation office in finding useful data for assigning appropriate boundary conditions; the aerodynamics of the tunnel to compare the results in terms of load and resistance and to produce further configurations: and the FEA department in providing input for the structural simulations. Therefore the information exchange inside the business is crucial both in the pre-processing phase, and during the post-processing phase, or the phase of the analysis of results, numbers and graphics that allow to formulate conclusions on the car's aerodynamic performance to share with the aerodynamics of the tunnel. In this regard, typically produced visuals that are utilised in the phase of analysing the flow field around the car are lines of the flow, the contours of pressure and the vortexes generated by aerodynamic details. The more refined the tools are, the more precise and comprehensive the informations that we receive. It allows us to make much better improvements of our product: this allows us to be present in every type of competition and often to see the lights go out from the front row.

> Simona Invernizzi CFD Project Engineer



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THE PURSUIT OF EXCELLENCE

On the road since 1972.

Consultancies, design and production of racing cars and high performance road cars.

Aerodynamics: wind tunnel and computational fluid dynamics (CFD).

Research & development: vehicle dynamics and driving simulator.



Dallara is a performance partner of DPTC