

TSUS e-Brief January 2023 | Issue 1



Say "Hello" to TotalSim

With 2023 off to a strong start, we thought it would be a good time to reintroduce ourselves. We are TotalSim US, a full-service computational fluid dynamics consulting and solutions firm.

<u>TotalSim</u> expertly applies advanced CFD technology to solve real-world problems so that clients can bring their products to market more rapidly, at lower costs and with an optimized design. We provide clients with decades of aerodynamic, fluids and thermal engineering knowledge and insight into automotive, racing, aerospace, and industrial sectors.

Our Growing Service Mix:

- External and Internal Fluid Flows
- Heat Transfer and Cooling Particle
 Tracking
- Multi-phase Flow
- Industrial Process Flows
- Noise and Acoustics
- California Air Resources Board (CARB) CFD Testing

- Custom Software Development
- Software Refactoring
- Web-Based Applications
 - Industry-focused CFD simulation and CFD data management
- Reverse Engineering

- CAE Automation pre- and postprocessing of data
- Physical Testing wind tunnel and bench testing

We would love to hear about your next project and share how you can benefit from TotalSim's modeling and simulation experience. Contact Tom Heinmiller at theinmiller@totalsim.us to get started.

A Single-Source EV Engineering Solution

Every aspect of the Electric Vehicle industry is being rocked by new technology, and the increased demand of Electric Vehicles has created some challenges that we can help solve. Recently <u>TotalSim</u> and <u>AltaSim</u> created a strategic partnership, which has created a solution to meet the unique design and production needs for Electric Vehicles.

Together our teams provide a single-source engineering solution for the modeling, simulation and thorough testing of every aspect of your electric vehicle. Let us show you how we can prevent the design mistakes that extend your time to market, increase costs, and reduce the safety for end consumers. <u>Contact us</u> today to schedule a meeting.



On Demand: TSUS/iRacing EPARTRADE Webinar

Have you ever thought about how the digital wind tunnel improves real world and virtual racing? We have the answer!

TotalSim President Ray Leto and Chris Lerch of iRacing had the opportunity to present "How the Digital Wind Tunnel Improves Real World and Virtual Racing - A conversation about how iRacing leverages TotalSim's CFD capabilities" during the 3rd annual EPARTRADE Online Racing Industry week held Nov 28-Dec 2, 2022.

If you missed it, their presentation is now available to watch <u>here</u> and is a must-see for gamers, race engineers, and drivers to learn more about setting up your car.



Invest or Keep the Status Quo?

IBEX Webinar Featuring our Technical Director, Naethan Eagles

Our Technical Director Naethan Eagles and fellow hull refinement expert Scott Porta had the opportunity to present "Refining Performance Hull Forms" during the IBEX webinar on December 19th, 2022.

The well-attended event answered the question "Do I invest money in refining the hydrodynamics of my hull, or just keep in the status quo?" where Naethan and Scott discussed the advantages of relying on a designer's intuitive sense coupled with

Computational Fluid Dynamics (CFD). They concluded that the power of computer modeling can take the uncertainty and expense out of redesigning an existing model.



Click here to access the full webinar.

2023 Confirmed Event Schedule

If you are planning to attend any of these events and would like to meet someone from our team, please <u>contact us</u> and we will schedule a time to meet with you. We will update our event schedule throughout the year as more dates are added.

March 29-30 Ohio Air Mobility Symposium	Columbus, OH
April 18-20 SAE WCX World Congress	Detroit, MI
July 22 - 23 Electric Aircraft Symposium	Oshkosh, WI
July 24-30 AirVenture	Oshkosh, WI
September 13-14 National AAM Forum	Springfield, OH
December 7-9 <u>PRI</u>	Indianapolis, IN





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