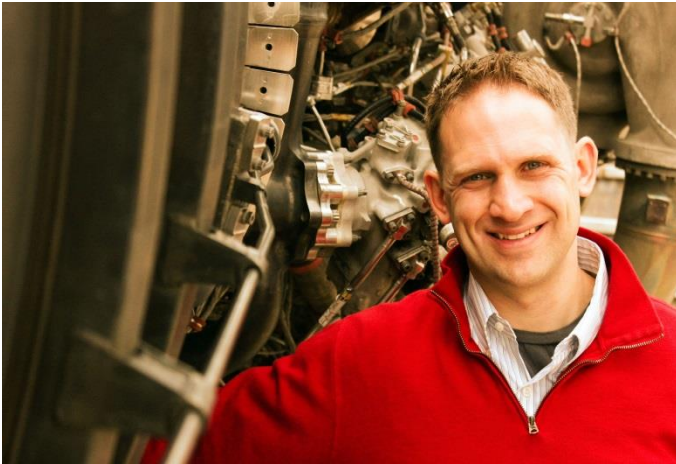


# Lake Shore Graduate Newsletter

## *THE CHOSEN PATH* September Edition, 2016



### ***Paul Gradl, Class of 1998***



Paul Gradl is a Senior Propulsion Engineer at NASA Marshall Space Flight Center in Huntsville, Alabama. He is also a proud father, husband, author, volunteer and entrepreneur. Paul's work has advanced manufacturing techniques and optical measurement technologies, evolved new liquid rocket engines, and supported shuttle launches to the International Space Station (ISS). He is currently working on the NASA mission to Mars.

Paul is a 1998 graduate of Lake Shore Central. He knew in high school his focus would be engineering, and he pursued that path with technical classes and community college courses while attending Lake Shore. During his "free time" he worked in the family landscape business developing his entrepreneurial side. Following high school, Paul attended Gannon University and completed a Bachelor degree in Mechanical Engineering. He went on to complete an MBA while working as an engineer on locomotives for General Electric Transportation Systems in Erie, PA.

In 2004, Paul joined NASA following the Shuttle Columbia tragedy and directed a debris impact testing team that led NASA's Return to Flight efforts on the Space Shuttle Main Engines. His team helped develop flight rationale to ensure future

shuttle missions would be safer. He supported all 22 shuttle missions through the end of the program. In parallel, Paul completed a Masters in Engineering from the University of Alabama Huntsville in 2007.

Mr. Gradl went on to provide engineering expertise for NASA's new rocket engine development program, J-2X, which was the agency's new upper stage engine for an Earth departure launch vehicle. Paul led several technical teams in the development and advancement of new technology including rocket engine nozzles and combustion chambers, handheld laser welding, advanced coatings, structured light scanning and dynamic image correlation for advanced manufacturing and testing.



***Pictured Above: J-2X Engine Test***

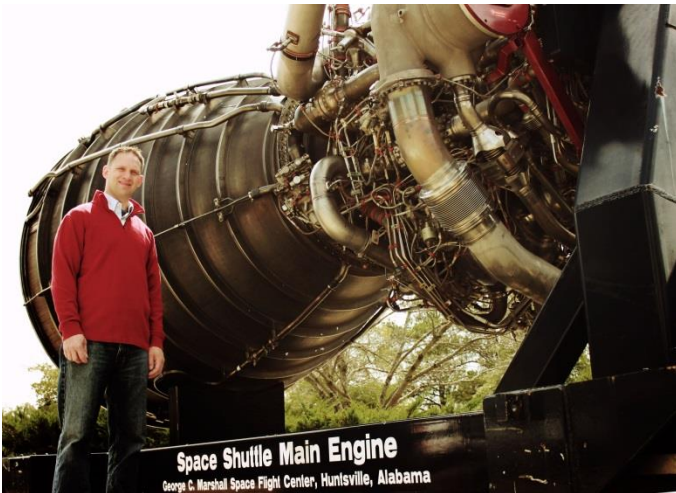
Paul's contributions to the NASA mission have earned multiple awards and recognition. In 2011 and 2012, he was awarded NASA Exceptional Achievement Medals, one of NASA's highest honors. It is awarded to an individual in the Federal service for a significant, specific accomplishment or substantial improvement in operations and technology which contributes to NASA's mission. Other notable recognition includes Space Flight Honoree, Ares Program "Made It Happen" Award, a NASA Certificate of Appreciation, a NASA Special Service Award, NASA Technology Transfer Award,

the Marshall Space Flight Center Research and Technology Award and the NASA Engineering Directorate Partnership Award. Mr. Gradl received the Young Alumni award from Gannon University in 2011 for his accomplishments and has been a guest lecturer at international conferences and national universities.

Paul has published 14 technical papers and journal articles for NASA regarding his area of expertise in liquid rocket engine combustion devices. In 2010, Paul was awarded the 2010 Eugene L. Grant Award by The Engineering Economist Journal, which is the Engineering Economy Division of the American Society of Engineering Education. He has also received a U.S. patent in his field for an innovative laser processing technique for repairs on critical rocket hardware.

coached youth teams prior to having kids. (He hopes to coach Dax on the ice soon.) Paul intertwines his technical passion with music and business as an accomplished disc jockey. He finds time to DJ 20+ events per year, including regional and national performances, most notably in Las Vegas and Atlanta. He has been involved in the local startup community with his weekend inventions and won a local “Shark Tank” style competition. He is thankful that his journey began at Lake Shore.

*Submitted by Lake Shore Central Teachers & Alumni:*  
Kevin Schamberger (class of 1992)  
Elizabeth Schamberger (class of 1999)



Paul’s current role is a subject matter expert in liquid rocket engine combustion devices, specifically combustion chamber and nozzle technology. He supports NASA’s Space Launch System (SLS) as the technical engineering lead for combustion devices on the RS-25 Main Engines. He leads several manufacturing technology development projects with NASA and provides consulting and collaborations with commercial space, national and international industry partners, as well as Department of Defense Programs.

Mr. Gradl resides in Huntsville, Alabama with his wife Leah and their children, Dax and Tess. He considers his family his greatest accomplishment. Paul stays active playing ice hockey and frequently