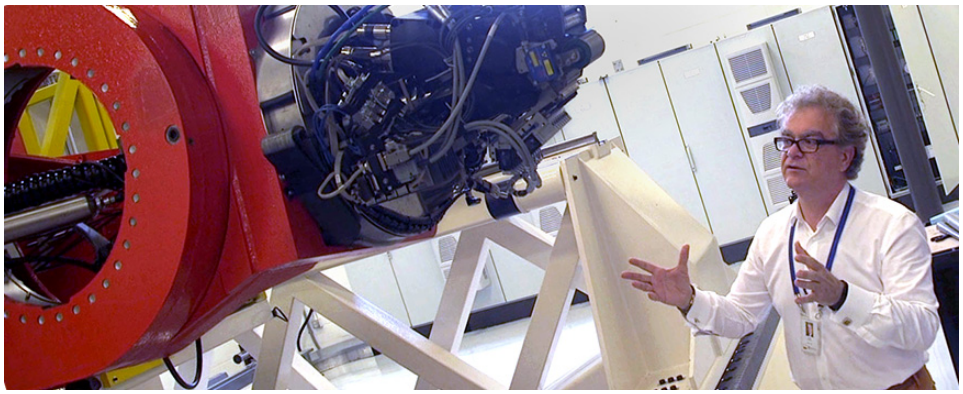

Professor Zafer Gürdal

From: http://www.sc.edu/uofsc/posts/2015/08_mcnair_imagination_takes_flight.php#.V0mVT2a9iHk
Craig Brandhorst writes on August 25, 2015 about the McNair Center for Aerospace Innovation and Research, University of South Carolina and its director, Zafer Gürdal: "A new type of airplane wing assembled without the use of rivets. Durable plastic sensors manufactured on a 3D printer. Composite materials for building the fuselage of the next generation jumbo jet. At the University of South Carolina's McNAIR Center for Aerospace Innovation and Research, all of the above are on the drawing board. . . A specialist in composite materials and structures, Gürdal has been fascinated by aerospace since he started building toy rockets as a child in Turkey. Professionally, he's spent decades contemplating the engineering problems faced by the aerospace industry and now has the tools and the team to truly test his vision."

See:
http://www.me.sc.edu/fs/gurdal.html
http://www.worldcat.org/identities/lccn-n90-638241
http://nl.linkedin.com/pub/zafer-gurdal/9/89b/671
http://www.dept.aoe.vt.edu/~gurdal/Aerospace
http://www.informatik.uni-trier.de/~ley/db/indices/a-tree/g/G=uuml=rdal:Zafer.html
http://www.barnesandnoble.com/c/zafer-gurdal
http://www.amazon.com/Zafer-G%C3%BCrdal/e/B001HCWO72
http://www.citg.tudelft.nl/en/about-faculty/departments/structural-engineering/sections/structural-mechanics/seminar/seminar-pages/2006/zafer-gurdal/

Ronald E. McNair Endowed Chair Holder
Mechanical Engineering
Director, McNair Center for Aerospace Innovation and Research
University of South Carolina

Biography:
Dr. Gürdal's research interests are in structural and multidisciplinary design and optimization, design and optimization of composite materials and structures, and computational methods for design with manufacturing emphasis. His research has largely been funded by NASA Langley Research Center and Air Force Office of Scientific Research (AFOSR) in the US, and EU Research Frame work programs in Europe. He was one of the

investigators of the NASA – Virginia Tech Composites program during his tenure at Virginia Tech. He was the principal investigator and co-investigator of more than 60 research grants, majority of which on methodologies for composite laminate design and novel structural configurations, as well as experimental verification of composites structures research. The funding sources for his research included ALCOA, Lockheed Martin, Newport News Ship Building, Boeing (Helicopters, Commercial, and Defense), McDonnell Douglas, Sikorsky Aircraft, Ford Motor Company, Fokker Aerostructures. His research cooperation in Europe included DLR, NLR, ONERA, CIRA, EADS, Dassault Aviation, Airbus, Allenia, Rolls Royce, Astrium, Dutch Space, Piaggio, and Israel Aircraft Industries. He also worked with a number of small companies, and is one of the founders of a small business in Blacksburg Virginia, and one in the Netherlands. Prof. Gürdal's research contributions resulted nearly 300 publications. He was a key-note/plenary speaker for 14 international conferences, co-authored of 3 books, and taught several AIAA Professional Development Short courses. He served as the graduate thesis advisor for more than 60 masters and 30 doctoral students. He is a Lifetime member and Associate Fellow of the American Institute of Aeronautics and Astronautics (AIAA), and one of the initial members of the AIAA Multidisciplinary Technical Committee (MDO-TC).

Education:
Ph.D., Aerospace & Ocean Engineering, Virginia Polytechnic Institute & State University, 1985
M.S., Mechanical & Aerospace Engineering, Illinois Institute of Technology, 1981
B.S., Mechanical Engineering, Middle East Technical University, 1979

Selected Publications:
1. BOOK: Gürdal, Z., Haftka, R. T., and Hajela, P., Design and Optimization of Laminated Composite Materials, Wiley, New York, 1998.
2. BOOK: Raphael T. Haftka and Zafer Gurdal, Elements of Structural Optimization, 3rd Edition, Springer, 2011
3. Gerdon G, Gurdal Z. Optimal Design of Geodesically Stiffened Composite Cylindrical Shells. AIAA Journal, November 1985; 23(11):1753-1761.
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9. Shin, D. K., Gurdal, Z., and Griffin, O. H., Jr., Minimum weight design of laminated composite plates for postbuckling performance, AIAA Paper 91-0969-CP, Proceedings 32nd AIAA/ASME Structures, Structural Dynamics, and Materials Meeting, pp 257-266 (1991)
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14. Gürdal, Z., and Olmedo, R. A., "In-Plane Response of Laminates with Spatially Varying Fiber Orientations: Variable Stiffness Concept," AIAA Journal, Vol. 31, No. 4, 1993, pp. 751–758
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