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George N. Bullen is an internationally recognized expert and consultant to industry for the manufacture of fixed and rotary wing air vehicles, rockets, missiles, and space vehicles. His expertise includes inhabited and uninhabited aerial vehicles, space vehicle design and manufacture, laser weapon system design and manufacture, and lean processes and applications. He has been awarded 16 US and international patents for technology innovations related to manufacturing, mechanization, robotics, robotics control software, and nuclear testing/quality devices, which are the basis for all current automated systems for the assembly of airframes in the United States and Europe.

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Carroll Grant has 41 years experience in the aerospace/aircraft industry. His aerospace experience includes 31 years in composites and 10 years in metal aircraft structure. In the 1990s, he was heavily involved in the largest composites R&D programs funded by the US government (NASA Langley Research Center programs and DARPA programs).

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Mr. Grant is extensively involved in aerospace composites conferences. He is the current chairman of SAE’s Manufacturing, Materials, and Structures (MM&S) Committee and chairs automated composites manufacturing sessions at SAE events. Other activities include writing occasional articles for a composites magazine; he is an advisory board member for two technical colleges, and conducts occasional “Composites 101” seminars for non-composites companies that want to learn about composites. He also does “automated lamination” tutorials at a community college for students who are studying composites.

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Dan Day graduated with a BS in mechanical engineering from Montana State University in 1990. He has since been employed with the Boeing Commercial Airplane Division in Seattle, Washington. Dan’s experiences range from fabrication to assembly of aluminum and composites structures. He became an Associate Technical Fellow in 2005 while developing lean wing assembly systems. Dan has worked across numerous airplane programs from development through the early production implementation, including the graphite composite intensive 787. Dan has also led composite fabrication projects for primary structural wing components requiring extensive cross-functional integration. Dan is currently leading research and development in composite wing assembly and automation technology.
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Having worked for Ford Aerospace, McDonnell Douglas, Boeing, and M Torres allowed him to participate in most major A&D programs of the last two decades.

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