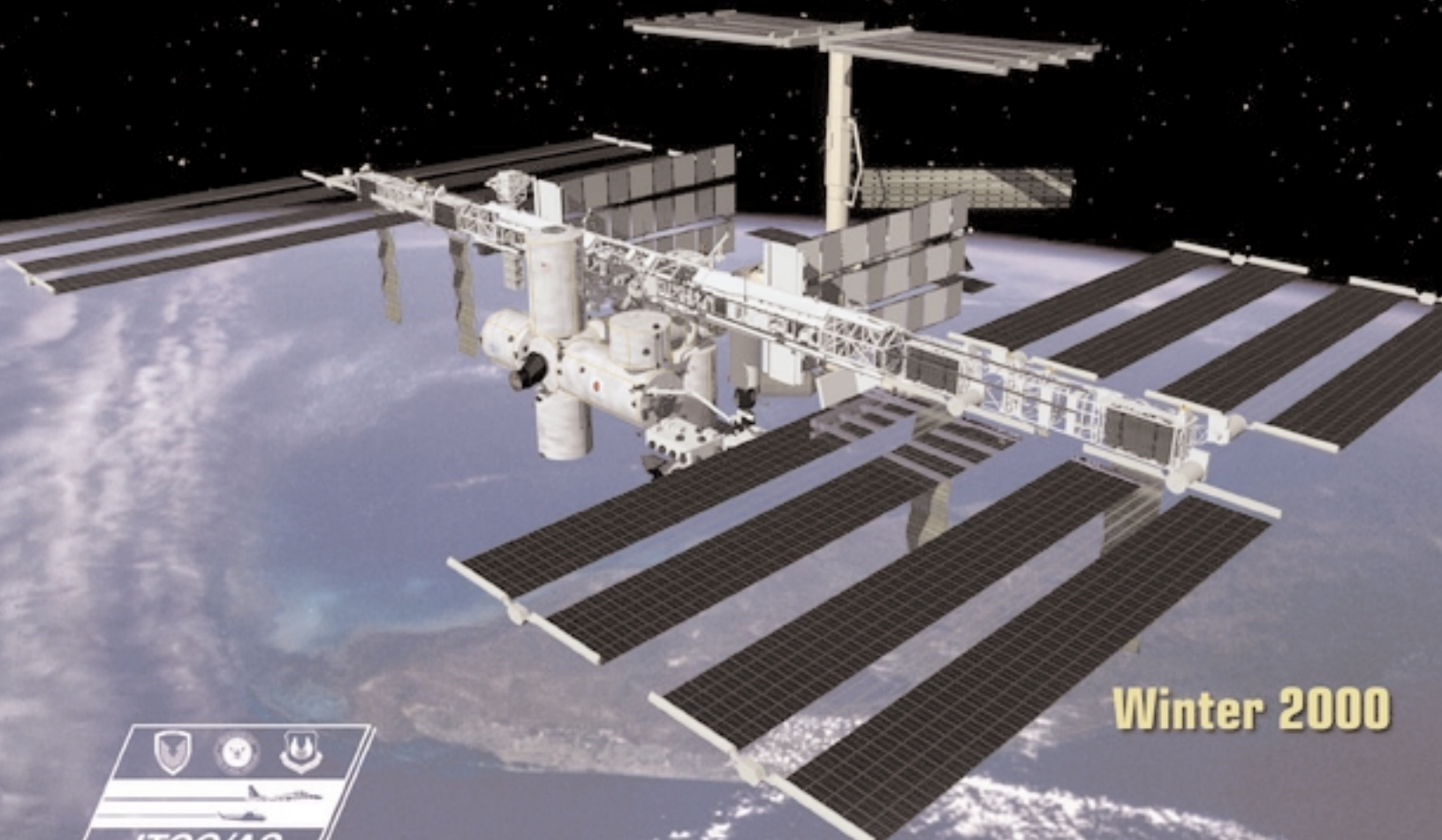


# AIRCRAFT SURVIVABILITY

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## Surviving Space

Ensuring Aerospace Systems Survivability in the Final Frontier




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# NDIA Combat Survivability Award Winner—David Bonnesar

*Editor's note: In the Spring 2000 issue of Aircraft Survivability, we omitted recognizing the recipient of NDIA's Combat Survivability Technical Award for 1999. We apologize for this oversight and are providing the following recognition in this issue.*

 In November 17, 1999, the National Defense Industrial Association (NDIA), hosted their annual symposium at the Naval Postgraduate School in Monterey, California. The symposium theme for 1999 was "Aircraft Survivability 1999—Challenges for the New Millennium." At this symposium, Mr. David Bonnesar was awarded the NDIA Combat Survivability Technical Award for 1999. This prestigious award was given in recognition of Mr. Bonnesar's achievements over the past twenty years in the field of low observable (LO) mission planning. For over twenty years, Mr. Bonnesar worked for what is now known as Lockheed Martin Corporation. During this time, he was largely responsible for development of the hardware and software for the F-117 threat avoidance system, later named the Mission Data Processing System (MDPS). His primary responsibilities in the MDPS group were the design and development of mission planning technology to accommodate 3-D signature management, real-world constraints, low observable technology, vehicle performance data, and advanced optimization techniques in order to maximize the combat survivability of the F-117 Stealth Fighter. The late Mr. Ben Rich, legendary leader of Lockheed Martin's Skunk Works, talked about this achievement in his book titled, *Skunk Works*. During his last two years at Lockheed, Mr. Bonnesar contributed technical expertise to the conceptual design and development of the F-117 Offensive Combat Improvement Program (OCIP). OCIP incorporated into the F-117 aircraft a digital moving map display and a flight management system that increased pilot situational awareness and reduced pilot workload.

Mr. Bonnesar left Lockheed in June of 1989 and in 1990 founded his own company named BONN Corporation. With his new company, he has continued his work under contract to the Air Force, to optimize the F-117 aircraft's automated mission planning system. The



Lockheed F-117 Stealth Fighter. Photo by Eric Schulzinger.

F-117 was extensively employed in combat for the first time during Desert Storm demonstrating impressive combat survivability and mission effectiveness. After Desert Storm, Mr. Bonnesar continued to optimize and improve the MDPS by correcting deficiencies identified during Desert Storm. One reason for Mr. Bonnesar's success has been his commitment to involving the user in all phases of product development. In doing so, he gained a thorough understanding of the user's needs and was consequently able to deliver an operationally effective product.

Throughout his professional career, Mr. David Bonnesar has demonstrated marked creativity and innovation in developing planning and analysis tools that have increased the survivability and enhanced the mission effectiveness of the F-117 Stealth Fighter. There is little doubt that pilots operating the F-117 aircraft today have significantly improved capability for surviving combat missions as the result of Mr. Bonnesar's sustained efforts to improve their mission planning capabilities. In summary, he has devoted his professional life to supporting the Warfighter with singular success in first developing and then extending the state-of-the-art of LO mission planning. ■