

## AIAA and ASME ZOOM Meeting Thursday, October 26, 2023 at 0600 PM to 0730 PM PDT A Pilot's Qualitative Evaluation of a MIG-21 and a MIG-23 Mr. Jim Brown III "JB"





Jim Brown "JB" is a Fellow and Past President of the Society of Experimental Test Pilots, a Fellow of the Royal Aeronautical Society and an Eagle of the Flight Test Historical Foundation. He has logged over 10,000 flight hours in 157 different models of aircraft and is the world's highest time Stealth Fighter pilot. JB will provide a qualitative evaluation of the MiG-21

(NATO "Fishbed") and MiG-23 (NATO "Flogger"). These aircraft were the subject of much study and mystery amongst NATO pilots during the Cold War, with both aircraft being mainstays of the Soviet Bloc air fleet. However, any significant data regarding these aircraft was classified and not available for dissemination. Since dissolution of the Soviet Union, several of these aircraft made their way into the hands of aviation enthusiasts in the United States. As a result, limited unclassified flight test can be conducted and the results presented to the public.





This presentation will be an overview of both aircraft from experiences and data obtained during National Test Pilot School student projects in the two-seat MiG-21UM and cross country ferry with subsequent flight test of a two-seat MiG-23UB. Topics will include a comparison of aircraft systems, design and operational philosophy between these Soviet workhorses to what is typically found in western fighter designs.

The MiG-21, of which over 10,000 were built, was known to be a small,

agile 2nd Generation fighter and point defense interceptor. It was thought to have a reasonable high angle of attack capability and resistance to departure from controlled flight. Flight test results will be presented to show the advantages and disadvantages of this design in those roles. Limited performance and flying qualities results will be included.



With over 5,800 MiG-23s having been delivered, this aircraft was viewed as a large improvement to the MiG-21. This Third Generation, swing-wing

fighter was thought to have improved combat radius over the Fishbed and was rumored to have quite nasty high angle of attack characteristics. Qualitative and some quantitative data will be provided to prove and refute these concepts.



Jim Brown graduated "With Distinction" from the Virginia Military Institute in 1976 with a BS Degree in Civil Engineering, earned a Master of Science in Management from Troy State University and completed graduate study in Mechanical Engineering with California State University, Fresno. Following two European tours flying the F-4 and F-5, he was selected to attend the USAF Test Pilot School where he graduated with Class 86A in December of 1986. Following graduation he tested the A-7, F-15 Eagle, F-117 and F-22.

In 1994, he joined the Lockheed Skunk Works<sup>®</sup> as an Experimental Test Pilot in the F-117 where he tested software, avionics and weapons improvements. These improvements saw

service in Operation Joint Endeavor over Bosnia and Operation Iraqi Freedom, the second Gulf War. As the Chief Test Pilot with over 900 flight hours, JB went on to test the F-22 eventually becoming the Raptor Chief Test Pilot. In January 2016, he retired from Lockheed and joined National Test Pilot School (NTPS) as the Chief Operating Officer and Test Pilot Instructor. He is currently the President of NTPS and is responsible for the day to day and strategic operations of NTPS.

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Click the following link to attend this exciting ZOOM Meeting. <u>https://aiaa.zoom.us/j/88433012714?pwd=dHgvMjQ5dEZsWmITZHV2dXZsR0JmUT09</u>

Meeting ID: 884 3301 2714 Dial In: 877 853 5257 US Toll-free, 888 475 4499 US Toll-free