



**DRAFT**

**AIAA Section Meeting**

**Sunday, October 23, 2022**

**Mr. Vincent Casale**

**Cradle of Aviation Museum Docent,**

**Grumman Senior Aerospace Reliability Engineer, retired**



**“TOMCAT REVISITED”**

**Location:** Cradle of Aviation Museum  
Charles Lindbergh Boulevard  
Garden City, New York

**Time:** 11:45 AM: Arrive at Cradle  
Noon: Presentation at F-14  
After Noon: Self-tour of museum

**RESERVATIONS REQUIRED**

**RSVP BY Oct. 21, 2022**

**[davidsparis@twc.com](mailto:davidsparis@twc.com)**  
**or (516) 458-8593**

**Cost: Cradle admission must be paid.  
\$14 or \$16**

**Important Note: Attendance is limited to a maximum of fourteen people. If you sign up and then change your plans, please let Dave Paris know so he may inform the next person on the waiting list.**

**The Cradle of Aviation Museum does not require visitors to wear COVID-19 masks. However, we suggest that you wear a mask if that makes you more comfortable.**

The Grumman F-14 Tomcat was the only American swing-wing fighter aircraft ever produced. The Tomcat was a carrier-capable, supersonic, twin-engine, two-seat, twin-tail aircraft in US Navy service from 1974 to 2006. 712 were built. The aircraft was made famous by its use in the Top Gun movies.

This presentation will focus on the essence of the main engineering design features current at the time of development and manufacture of the Grumman F-14 Tomcat and the essence of the aircraft's functional features. They will include:

- Authenticity of Cockpit instrumentation as shown in Top Gun I and II
- Design and fabrication of Twin Tail and Variable geometry wing
- Box Beam Tank
- Fueling System design and readout
- Pre-Catapult Launch Instrumentation
- GE Canon design and installations
- Armament: Phoenix and Sidewinder Missiles
- Weapon system Black Box and Telemetry installation
- Air refueling
- TARPS: Tactical Air Reconnaissance Position System
- Aircraft Camouflage Identification

Vin Casale was a senior reliability engineer at Grumman Aerospace for 34 years. He was the aircraft systems engineer for the A6A, E2C, and F-14 TOMCAT. He was responsible for the design and function of aircraft system integration to comply with contractual specification. He utilized state of the art onboard telemetry for built in test information. His system engineering degree was from CW Post.

**Directions:** When you arrive at the museum, go to the desk to the left of the entrance, pay the entrance fee, and tell the receptionist that you are attending the noon presentation on the F-14. We will meet there and go as a group to the F-14 at 11:55.