

The Vertical Flight Society Southwest Chapter presents...



Erasmio Piñero

Principal Engineer, Bell Textron Inc.

Propulsion Analysis, Integration, and Flight Test

Tip-jet Helicopters: History, Design Challenges, and Solutions

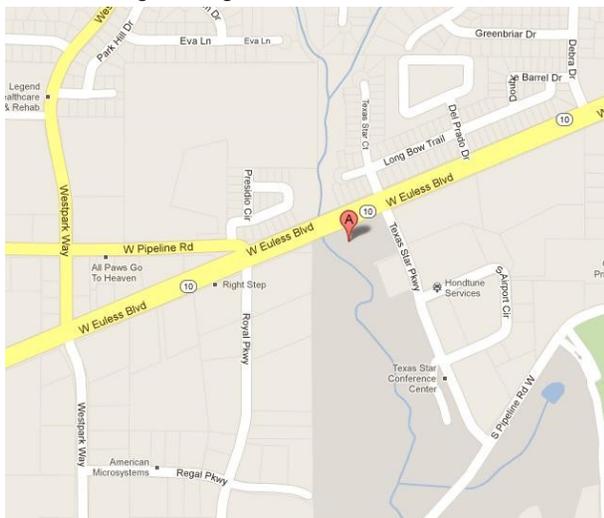
Wednesday, November 6, 2019



Mr. Erasmio Piñero will cover the history of tip-jet helicopters and briefly discuss the design challenges and solutions for such rotorcraft. The advantages and disadvantages of various designs in the 70 years history of tip-jet rotorcraft will be explored. Designs that originated in Germany during World War II, refined in the early 1950s, and the abandonment in the configuration in the late 60s will be discussed. A detailed analysis of the McDonnell Model 120 demonstrator will illustrate how far the technology matured and how much promise it held during the creative years of the Cold War.

Mr. Piñero has over 35 years of aircraft operations, systems integration, and flight test experience. He has been with Bell Textron since 2012, where he is currently responsible for propulsion analysis, engine systems integration, and flight test propulsion discipline support on the Bell V-280 demonstrator. Previously, Mr. Piñero worked in propulsion integration and flight test on the Bell Boeing V-22, the F-35 *Lightning II*, and its predecessor the X-35 Joint Strike Fighter. Additionally, he has worked on structural design, avionics system installations, and airframe structural analysis for the Sikorsky S-76, S-70, S-92, and *Comanche* helicopters. Mr. Piñero is also a veteran of the United States Navy, where he served as a Naval Flight Officer, accumulating eight hundred hours of flying time on twelve different naval aircraft.

Outside of his professional responsibilities, Mr. Piñero is interested in aircraft preliminary design, propulsion integration, preservation, and aviation history. He is a frequent contributor to trade magazines and the Journal *Vertiflite* of the Vertical Flight Society, and regularly delivers lectures and presentations at selected universities, conventions, professional societies, public schools and aviation-oriented clubs, with the goal of educating the public and to encourage young people to pursue careers in aeronautical engineering.



Location:

Texas Star
1400 Texas Star Parkway
Euless, TX 76040

Dinner Menu:

*Honey Glazed Ham w/ Pineapple Chutney, Vegetables, Salad
Coffee, Tea, Water & Dessert*

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|---------------|-----------------------|----------------|
| | Social | 6:00 PM |
| | Speaker/Dinner | 6:30 PM |
| Price: | Members | \$27 |
| | Member Couples | \$47 |
| | Non-members | \$37 |
| | Students | \$15 |

Payment required in advance. Tickets purchased after RSVP
deadline will incur an additional \$5 fee.

**CANCELLATIONS MUST BE RECEIVED 24 HOURS IN
ADVANCE OF REGISTRATION DEADLINE**

For additional information on the social event or VFS please contact one of the following people:

Elizabeth Ward (817) 280-3806

Hong Xin (817) 377-7504

Rick Mullen (817) 280-5197

Nathan Wu (817) 280-4209

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George Havrilla (817) 280-4253

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<http://southwest.vtol.org/>

Please **RSVP** by completing the online form here: [VFS RSVP](#) by **12:00pm Friday November 1, 2019**.
If you have any issues with the form, email Rick Mullen at rmullen@bellflight.com or call 817-280-5197
Tickets are available by payroll deduction for Bell Employees only.