## FLORIDA Space Coast Meeting of June 19, 2019

Space Coast Chapter members gathered early at the Suntree Country Club to maximize socialization time prior to a special program honoring the fiftieth anniversary of the landing of the Grumman conceived Lunar Module on the lunar surface. Our chapter, founded by veterans of that amazing effort has since transitioned to include a strong base of aircraft oriented people but has not lost memory of those pioneers.

Attendees were welcomed with a 4 page colored program featuring the arm patches of the participants, a lunar photo of an astronaut tending the LM, and a spec sheet of the 12 vehicles and their activity. Also on display (and much photographed) was our Anniversary Cake decorated to show Neil Armstrong erecting the American flag on the lunar surface. A table top display of Apollo memorabilia, provided by Joe Gollhofer, was also available for viewing to trigger memories of that sometime tortuous journey to the moon.

Following the pledge, Ed Romano led us in prayer and a moment of silence commemorating the loss of fellow retirees Terry Vourakis and Jerry Willoughby. Following the usual Country Club buffet, President Maureen Ayers introduced Peter Meier, a key Propulsion Systems Engineer at the Cape.

Peter had a completely informative but understandable slide presentation on all the propulsion challenges facing the Apollo designers. His first attention getter was to tell us that we were all in motion, and that if we were at the Equator <u>we would</u> be traveling 1,000 MPH! The Kennedy Space Center launch pad is traveling 850 MPH due to earths rotation - '0' MPH at the North Pole ! Pete gave us a visual presentation of various orbital paths and what paths and what speeds must be achieved to perform various missions. Example: you must go over 25,000 MPH to escape earth orbit — go slower then 17,500 PMH and you fall from earth orbit!

Some of the propellant and weight data was also surprising - 70% of the LM vehicle was propellant. The total Apollo vehicle weighed 240,000 Lbs. with fuel again accounting for most of its weight—each engine delivers 1.5 million pounds of thrust!

Peter also touched on some non-Apollo activity, showing us a comparison between the existing Hubble telescope and the Web telescope slated for launch this year. Size wise it was like comparing a plum to a watermelon. He visibly lamented our nations decision to terminate the shuttle program—we are paying the Russians \$75 million per man to transport our people to the Space Station.

Our club attendees were literally glued to their seats throughout Peter's presentation, in this scribes view, a presentation that should be taped and shown to science minded high school seniors and engineering college freshmen.

Our program host for the day, Bill Waldron joined, n Peter in the Q&A period following the presentation—Bill confessing that he scrubbed his own efforts at a presentation after seeing what Pete was presenting. Some of the light discussion touched on NASA's fixation on weight reduction on the Lunar Module including significant bonuses for removing one ounce of weight-shields for the astronauts were made of Reynolds Wrap, and then chem-milled to remove even additional weight (.001 inches of thickness for each minute in the caustic solution). The program brought back

memories of exciting times for many of us whether in "hands on" rolls like Bill or supporting activities like many others. It truly re-defined the company as an aeroSPACE company.

\*\*It was privately noted by a veteran Grumman retiree that the selection of Melbourne for the J-STARS program was heavily influenced by the presence of the residual high performing Grumman Apollo veterans. Current facility population—5,000.

**Scholarship:** President Ayers re-assumed control of the meeting, calling upon Scholarship Chairman Jim Glover to introduce our two guest scholarship students, lunching with us to take part in our LM anniversary. Both young ladies are recipients of George Skurla scholarships and have been interning part time at Northrop Grumman. Juliana Chaput our 2016 winner is majoring in Mechanical Engineering at the University of Virginia. Emily O'Brien, the 2018 recipient, is majoring in Aerospace Engineering at FIT. The other of our six scholarship winners responded with regrets to Jim's invitation. Of particular note by Jim was his report on the Mel High graduation ceremony he attended. Of the 495 graduates, 62 had already completed 2 years of college—a nice financial shot in the arm for 62 families and kudos for our oft maligned Superintendent and his staff.

## **Communications:** With this being our last meeting till September,

Don Powell, our Communications mavin, thoughtfully reminded us of the pending chaos in our club this time last year when President Bob Praises illness forced him to resign leaving our club leaderless. A call to the membership for assistance resulted in a response by Maureen Ayers who has assumed a 2 year stint as president - she has attacked the task with innovation and enthusiasm. Don led the club in thanking Maureen for her service.

**Travel:** Frank gave us a quick slide presentation of travel sites and activities available locally for our summer enjoyment. He then showed us excerpts from the fascinating 10 night cruise/tour he and his wife Brenda took to the Quito/Galapagos Islands region. Unfortunately, Brenda became ill and was hospitalized, missing much of the tours. This experience led Frank to alert all our attendees of the importance of having complete health coverage in your travel insurance policy.

**Sunshine - Chet Emery (321-254-2562):** Chet reported sympathy cards were sent to the families of Terry Vourakis and Jerry Willoughby. A sympathy card was also sent to Brian Masterson on the loss of his wife Joanne.

**Treasurers:** Bill Waldron reported on satisfactory balances in both the Scholarship and General Accounts. Charitable activity heightens in the Fall.

## Future Programs:

- September 18th A speaker from the One Senior Place facility will update us on new and revised senior programs.
- October 16th Elder Law Representative
- December 18th -Christmas Luncheon...featuring entertainment from "The Down Stagers"

**50/50 Drawing:** There were six 50/50's with 2 special prizes being awarded...(1) Suntree Country Club donated a Champagne Brunch for two which was won by Carol Sidorski and (2) A bottle of wine and \$25 gift card to Publix donated by our Chapter was won by Joe Crittenden.

**Employees Birthdays June:** Belford Carter, Larry Pike, Gopal Garg, Thomas Feeney, Arthur Hudson, Jess Busterna, Mary Carney

**Spouse Birthdays June:** Jean Prais, Diane Sewell, Angie Cheslack, Jeanne Jacob

**Anniversaries June:** Heinz & Gloria Schreiber, Rosemarie & Tony Mirabito Bain, Stephen & Katherine Petrovits, James & Barbara Leahy, Joseph & Janet Grusauskas, Robert & Stephanie Rennie, Richard & Angie Cheslack, Joseph & Bea Morales, Don & Sandy Powell

**Employees Birthdays July:** Ralph Harris, Robert Prais, Gerald Cardile, Bill Steenson, Patrick Ranieri, Dale Lambert, John Herba, Ron Winter, Ron Heuer

**Spouse Birthdays July:** Maria Van Name, June Greve, Fran Daidone, Barara Anderson, Angela Romano, Francine Adrion, Audrey Lanzo, Ellen Devoe, Bea Morales, Peg Duester

**Anniversaries July:** Everett & Dianne Bennett, Brian & Diana MacCarthy, Tom & Elaine Daly, Gerald & Patricia Cardile, Al & Cecilia Sanchez

Bill Steenson Secretary

## Congratulations to all Next Meeting - September 18, 2019

NO MEETINGS...... JULY & AUGUST MEETINGS RESUME ..10/16, 11/20, 12/18