Volume 19 Issue 1 "We Duplicate what We Simulate"™

**Winter Issue** 

2017 at RS 236 Years in Business 23

# Juno Followup!

This following is from the NASA website on February 1, 2017.

(https://www.nasa.gov/feature/jpl/it-s-never-groundhog-day-at-jupiter)

#### "NASA Juno to Fly By Gas Giant Thursday

NASA's Juno spacecraft will make its fourth flyby over Jupiter's mysterious cloud tops on Thursday, Feb. 2, at 4:57 a.m. PST (7:57 a.m. EST, 12:57 UTC).

At the time of closest approach (called perijove), Juno will be about 2,670 miles (4,300 kilometers) above the planet's cloud tops and traveling at a speed of about 129,000 mph (57.8 kilometers per second) relative to the gas giant. All of Juno's eight science instruments, including the Jovian Infrared Auroral Mapper (JIRAM) instrument, will be on and collecting data during the flyby.

"Tomorrow may be 'Groundhog Day' here on Earth, but it's never Groundhog Day when you are flying past Jupiter," said Scott Bolton, principal investigator of Juno from the Southwest Research Institute in San Antonio. "With every close flyby we are finding something new."

The Juno science team continues to analyze returns from previous flybys. Revelations include that Jupiter's magnetic fields and aurora are bigger and more powerful than originally thought and that the belts and zones that give the gas giant's cloud top its distinctive look extend deep into the planet's interior. Peer-reviewed papers with more in-depth science results from Juno's first three flybys are expected to be published within the next few months. Also, JunoCam, the first interplanetary outreach camera, is now being guided with the assistance from the public -- people can participate by voting for what features on Jupiter should be imaged during each flyby."

To continue to follow the Juno mission on-line in general, go to:

http://www.nasa.gov/juno http://missionjuno.org

The public can also follow the mission on Facebook and Twitter at:

http://www.facebook.com/NASAJuno http://www.twitter.com/NASAJuno

#### **Latest Juno News**

Updated Feb. 2, 2017 at 3:15 p.m. PST

"NASA's Juno mission completed a close flyby of Jupiter on Thursday, Feb. 2, its latest science orbit of the mission.

All of Juno's science instruments and the spacecraft's JunoCam were operating during the flyby to collect data that is now being returned to Earth. Juno is currently in a 53-day orbit, and its next close flyby of Jupiter will occur on March 27, 2017."

### **NEW PRODUCT**

**High Power Diplexer** 



#### P/N 61221C-1

P/N 61221C-1 is a high power diplexer developed at RS Microwave for applications at the low end of the frequency band. The unit employs innovative techniques in order to obtain optimum insertion loss and isolation performance otherwise unattainable using standard state-of-Pseudoelliptic techniques. characteristics are obtained for both RX and TX channels by implementing some of the concepts that RS Microwave has recently published in the microwave literature on the generation of transmission zeros, while superior performance in terms of resonators quality factor and temperature stability is obtained by implementing RS Microwave patented composite resonator concept. The diplexer is manufactured according to RS Microwave quality standards to withstand the environmental conditions of military applications.

#### A Little Humor!

**Understanding Engineers\* Normal people** believe that if it ain't broke, don't fix it.

**Engineers believe** that if it ain't broke, it doesn't have enough features yet.

\*(<u>https://www.microwaves101.com/</u> encyclopedias/engineering-jokes)

#### **Technical Conferences**

As always, Dr. S. is actively involved in all things professional in the world of microwaves. Updates for 2017 are as follow. We can expect our Company president to be in attendance at these events when held.

IWS 2017: The Fifth Annual IEEE MTT-S *International Wireless Symposium* to be held in China was cancelled and plans for re-start in 2018 are anticipated.

**EuMW** 2017: The Technical Program Committee (TPC) meeting for this annual European event will be held in March in Nuremberg for paper selection and session formation. European Microwave Week will be held in October with planning in progress.

IMS 2017: This annual international symposium will be held in Honolulu, Hawaii in June this year. The TPC meeting was held in conjunction with the Administrative Committee (ADCOM) of the Microwave Theory & Techniques Society (MTTS) of the IEEE meeting in January in Phoenix. It had the third most papers ever submitted (behind San Francisco and Philadelphia), with paper acceptances going out this week.

NEMO 2017, founded by the IEEE Microwave Theory and Techniques Society (MTT-S), is a new annual focal électromagneticevent on multiphysics-based computer-aided design (EM-CAD), rotating between Europe, North America and Asia. NEMO 2017 aims to stimulate discussion and exploration "disruptive" technologies of EM-CAD in addition to traditional topics. This year to be held in May in Seville, Spain, it bring together experts practitioners of electromagnetic- and multiphysics-based modeling, simulation and optimization for RF, microwave and terahertz applications. Drs. Snyder & Bastioli will present a paper entitled: Design, Modeling, and Manufacturing of Extremely Waveguide Filters using a Selective Multi-port Optimization Technique.

IMS 2018 Update: This will be in Philadelphia, and with luck will exceed the record setting event held in 2003 for which Dr. S. was the chairman.

# ♦ ♦ ♦ ♦ ♦ ♦ Personnel News

We love to honor our employees' anniversaries and birthdays!









#### **Our International Luncheon**



**Christmas Party at the Inn** 

















# Employee Milestones Acknowledged



Howie Booth, Wilfredo Gonzalez, Ralph Wiertz Celebrate 25, 15, & 35 years respectively

## **New Employees**





Kathryn Blackwel

Levi Lazaro

Joining us in October and November, Kathryn & Levi are supporting our Purchasing and Planning areas. Welcome to the RS Microwave family!

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Donna Walter 3/28/53 - 2/2/17





It is with profound sadness that we remember our beloved Donna, who passed away in hospital February 2. We will remember always the happy times we shared, her collegial company spirit, and the good morale it generated. Gone too soon, she will be forever in our hearts.





