

**\*\*\*WELCOME\*\*\***

**Sixth Annual  
JPL MISSION UPDATES  
& SOCIETY EXPO!!!**

**Society Officers & Exhibit Table Volunteers:  
Please Check-In with Fred!**

# Agenda & Timeline

- 1pm to 2pm:
  - Opening Ceremonies
- 2pm to 2:15pm:
  - James Webb Space Telescope (JWST) Overview
- 2:15pm to 3:45pm:
  - Long Break (Details in Later Charts!)
- 3:45pm to 5pm:
  - JPL Mission Updates
- 5pm to 5:15pm:
  - Q&A
- 5:15pm to 5:30pm:
  - Closing Raffle!!!



# Opening Ceremonies

- Logistics
- Brief History of This Expo
- Why Join a Professional Society?
- Common Aspects of These Societies
- Highlights of Invited Societies (Alphabetical)
- Multi-Society Event Planning
- “Polling the Audience”
- List of STEM Activities
- Summary of Events (during Long Break)
- Special Raffle Rules

# Logistics

- Please 'Silence' your 'Social Media'!
- Restrooms
  - Signs Posted
- FREE Bottled Water & Snacks Available at Society Tables During Break (via Society Donations!)
- Today's Charts will be Posted (Real Soon):
  - <http://www.incose-la.org>
  - <http://www.ieee-occs.org>

# Brief History of This Expo

- First Expo prior to Curiosity Landing (08/2012)
- Purpose was Several-Fold:
  - Become a Premier Science, Technology, Engineering & Math (STEM) Outreach Event
  - Preview Unique Challenges of That Mission
    - Later Expanded to Include Other JPL Mission Updates
  - Allow Local (LA & OC) Societies to Exhibit
    - Many Diverse & Active Societies
    - Each supports One or More STEM Careers
    - Each needs More Volunteers
    - Help Advertise Their Upcoming Events
    - Plan & Promote Multi-Society Events

# Why Join a Professional Society?

- Updates on Latest Technologies & Trends
- Prominent Local Speakers Featured
- Learn Latest about Your (or Another!) Industry
- Great Networking Opportunity (ie, Job Leads!)
- Become Active in Your Field
  - Organize Events (Like This One!)
- Looks Great on Your Resume
- Inexpensive Dinners (Optional) Featured
- Can Assist in CA Licensing (PE) & Certifications (PMP)
- Offers Discounts (Insurance, Travel, etc)
- For STEM Students: Great & Local Way to Explore Technical Career Interests & Mentoring Options
  - Societies Strive to Create & Support College Chapters

# Common Aspects of Societies (1 of 2)

- Serve under their National Organizations
- As Active as Their Members (Volunteers!)
  - Some Chapters More Active than Others (eg, LA versus OC)
- Conducts Regular Meetings (4 Types)
  - Invited Speaker & Lunch/Dinner Meetings
    - Technical Topic on Current/Proposed Technologies/Trends/Policies
  - Planning Meetings (Executive Committee or “ExCom”)
  - Technical Seminars/Conferences (One or More Days)
  - Year-End Member Appreciation Holiday Party
- Maintain Job Banks & Career Networking



# Common Aspects of Societies (2 of 2)

- Key Officers Elected Annually
  - Chair, Vice-Chair, Secretary & Treasurer
- Other Important Positions Also Needed
  - Publicity, Webmaster, STEM Outreach, Industry/College Liaisons, Membership, etc
- Seeking Convenient & Inexpensive Logistics
  - Meeting Rooms (with Free Parking?)
  - Catering Options
- Many Provide Annual Student Grants & Scholarships
- Strive to Identify & Conduct STEM Outreach



# Highlights of Invited Societies

- For Each Noted Society at Expo:
  - Some ‘Non-Traditional’ ‘Societies’ are Included
    - Offer Other Unique STEM-related Activities
  - Name(s) of Staff at Each Table will be Identified
    - Will have Name Badges; Introduce Yourself!
  - Their Upcoming Fall Event Date(s) are Noted
    - Ask at their Table for any “Expo Specials”!
  - Have New Member Sign-In Sheets per Table
    - Get \*\*\*TWO\*\*\* Raffle Tickets for each Sign-Up!
  - Each Society Has Placard of Needed Volunteer Positions
    - Can also Sign-up as a Requested Volunteer
    - Get \*\*\*THREE\*\*\* Raffle Tickets for Each Volunteer Sign-up!
  - Some Tables have a Special STEM Activity (ONE Raffle Ticket)!
  - Each Society’s Web Site (URL) is also Cited
- Presented Alphabetically (Next Several Charts)

# Invited Societies (1 of 10)

- Architecture, Construction & Engineering (ACE)
  - [www.acementorla.org](http://www.acementorla.org)
  - Local STEM Mentoring Program
  - 2 Local Schools: Bishop Montgomery & North High
- Aerospace Legacy Foundation (ALF)
  - [www.aerospacelegacyfoundation.org](http://www.aerospacelegacyfoundation.org)
  - Maintains an Aerospace History Speaker's Bureau
  - Supports Columbia Memorial Space Center (Downey)
  - Sat & Sun, Oct 07-08: OuteRimCon (Downey)
- Association of Computing Machinery (ACM)
  - [www.acm.org](http://www.acm.org)
  - Wed, Sept 13: Dinner & Talk @ UCI-Cove (& Bi-Monthly)

# Invited Societies (2 of 10)

- Armed Forces Communications & Electronics Association (AFCEA)
  - [www.afcea-la.org](http://www.afcea-la.org)
  - Thurs, Sept 21: Luncheon & Talk @ SMC: Col Bracy
  - Wed & Thurs, Oct 18-19: SMC Industry Days
  - Thurs, Oct 19: Luncheon & Talk @ SMC: LtGen Thompson
- American Institute for Aeronautics & Astronautics (AIAA)
  - [www.aiaa.org](http://www.aiaa.org)
  - Tues, Sept 19: FA-18 Pilot Dinner/Talk @ MB Library
  - Thurs, Sept 21: Dinner/Talk: USC Design/Build/Fly Winners
  - Tues, Oct 10: AIAA-CSULB Dinner/Talk “Future of Space”
  - Thurs, Oct 19: AIAA-Cyber Dinner/Talk @ S-Café
- A-MAN
  - [www.aman.org](http://www.aman.org)
  - STEM Science Center (Inglewood, CA)
  - Holds Annual Saturday Science Academy (Oct thru April)

# Invited Societies (3 of 10)

- Association of Information Technology (IT) Professionals (AITP)
  - [www.aitp.org](http://www.aitp.org)
  - Tues, Sept 26: Peter Coffee Dinner/Talk (Playa Vista)
  - Fri & Sat, Oct 13-14: 18<sup>th</sup> Annual Southland Technology Conference (LB-Hilton)
- American Society of Civil Engineers (ASCE)
  - [www.ascemlab.org](http://www.ascemlab.org)
- American Society of Mechanical Engineers (ASME)
  - [www.asme.org](http://www.asme.org)
  - Tues, Oct 10: Dinner/Talk @ UCI: Energy Efficiency
  - Tues, Nov 14: Dinner/Talk @ CSUF: Bio-Medical

# Invited Societies (4 of 10)

- American Society for Quality (ASQ)
  - [www.asq.org](http://www.asq.org)
- EnCorps (STEM Teachers Program)
  - [www.encorps.org](http://www.encorps.org)
  - Serving Under-Resourced Communities
  - Provides 4-Month Career & Technical Education (CTE) Teaching Credential (thru OC-Dept of Education)
- Engineering Council (OC)
  - [www.ocec.org](http://www.ocec.org)
  - Enhance “Public Image” of Engineers & Scientists
  - Promote Interaction between Societies & Universities in OC
- Girls Who Code
  - [www.girlswhocode.org](http://www.girlswhocode.org)
  - Conducted Local Summer Camp (hosted by AT&T)
  - Their 2 Books are on NYTIMES Best Seller’s List



# Invited Societies (5 of 10)

- Heritage Center (@ SMC- El Segundo)
  - [www.heritagecenter.org](http://www.heritagecenter.org)
  - Hosts SMC & Museum Tours for Local Schools
  - Conducts Off-site STEM Outreach Events
  - Providing Several STEM Activities at Expo
- Institute of Engineering & Technology (IET)
  - [www.theiet.org](http://www.theiet.org)
  - Sat, Oct 21: “Safety & Reliability in Complex Systems” (Carlsbad)
- Institute of Industrial & Systems Engineers (IISE)
  - [www.iise.org](http://www.iise.org)
  - Sat, Oct 21: “Branding” Meeting @ USC
  - Sat, Nov 11: “Change Fatigue” Lunch Meeting (Cerritos)



# Invited Societies (6 of 10)

- Institute of Electrical & Electronics Engrs (IEEE)
  - [www.ieee.org](http://www.ieee.org)
  - CSULB Student Chapter
    - Explore their Excellent, Local & Tuition-Competitive Engineering Programs
  - Coastal LA Section (CLAS)
    - Sat, Oct 07: Annual CyberSecurity Summit (@ LMU)
    - Fri, Oct 20: RF Technology Expo at Proud Bird (LAX)
  - CyberSecurity SIG
    - Wed, Sept 27: Dinner/Talk: Software-Defined Networks (SDNs) (@ ATEP-Tustin)
  - Game Special Interest Group (GameSIG)
    - Project One: Programming Classic (circa 1981) Video Games
    - Project Two: 7<sup>th</sup> Annual Collegiate Video Game Design Competition (May 2018 @ Chapman Univ)
  - OC-Computer Society (OCCS)
  - OC-Consultants Network (OCCN)
  - Power & Energy Society/Industrial Applications Society (PES/IAS)
    - Thurs, Oct 19: Industry Trends: Past, Present & Future (Santa Ana)
  - Robotics & Automation Society (RAS)

# Invited Societies (7 of 10)

- InterNational Council On Systems Engineering (INCOSE)
  - [www.incose-la.org](http://www.incose-la.org)
  - Sat, Sept 30: Systems Security Engineering Tutorial (El Segundo)
  - Tues, Oct 10: Dinner & Talk: “Integration of System Modeling & Design Processes” (El Segundo)
  - Tues, Nov 14: Dinner & Talk: “Syst Engr & Energy” (El Segundo)
- Investors Forum
  - [www.investorsforum.org](http://www.investorsforum.org)
  - Features Patent Overview & Process Details
  - Fri, Oct 13: Ongoing Speaker’s Series @ UC-Irvine
- Information Systems Security Association (ISSA)
  - [www.issala.org](http://www.issala.org)
  - Thurs, Sept 14: 32<sup>nd</sup> Annual SoCA Security Symposium (Costa Mesa)
  - Wed, Sept 20: “Persistent Threats” Luncheon & Talk (WLA)

# Invited Societies (8 of 10)

- National Space Society (NSS)
  - [www.oasis-nss.org](http://www.oasis-nss.org)
  - Nov 25-27: 43<sup>rd</sup> Annual LA Science Fiction Convention (LAX-Marriott)
  - May 24-27, 2018: International Space Development Conference (ISDC) (LAX-Sheraton)
- Open Tech Initiative
  - <http://opentech.la.com>
  - Part of American Apprenticeship Initiative
  - Offers STEM & IT Training, Internships & Job Placements
- Optical Society of SoCA (OSSC) (in conjunction with Irvine Valley College (IVC))
  - [www.ossoc.org](http://www.ossoc.org)
  - Wed, Oct 11: Mars Rover 2020 Instrumentation Overview (@ JPL)

# Invited Societies (9 of 10)

- Society of Automotive Engineers (SAE)
  - [www.sae.org](http://www.sae.org)
  - Sat, Oct 28: Formula Car Suspension (@ Fontana Speedway)
- Society of Hispanic Professional Engineers (SHPE)
  - [www.shpe-la.org](http://www.shpe-la.org)
- Structural Engineering Association (SEA)
  - [www.seaosc.org](http://www.seaosc.org)
  - Nov 07-08: “Strengthening Our Cities” Summit (LA)
- Surface Mount Technology Association (SMTA)
  - [www.smta.org](http://www.smta.org)
  - Thurs, Sept 21: Dinner & Talk on 3-D Printing (Anaheim)
- Society of Women Engineers (SWE)
  - [www.losangeles.swe.org](http://www.losangeles.swe.org)
  - Thurs, Sept 28: Port of LA Boat Tour



# Invited Societies (10 of 10)

- The Mars Society
  - [www.marssociety.org](http://www.marssociety.org)
  - Sept 07-10: 20<sup>th</sup> Annual International Mars Society Conf (@ UC-Irvine)
- The Planetary Society
  - [www.planetary.org](http://www.planetary.org)
  - Mon, Sept 18: Cassini's Grand Finale (Cal Tech)
- VitalLink
  - [www.vitallinkoc.org](http://www.vitallinkoc.org)
  - Sponsors Unique 'Hands-On' STEM Career Workshops
  - Fri, Oct 27: Next Engineering & Advanced Manufacturing Regional Advisory Board (Location TBD)
  - April 2018: Annual STEM 'Hands-On' Career Showcase Weekend (OC Fairgrounds)
- Women in Defense (WID)
  - [www.wid-glac.org](http://www.wid-glac.org)
  - Sat, Sept 16: WWII Woman Aviator History Dinner & Talk @ Western Museum of Flight (Torrance)

# Multi-Society Event Planning

- This Expo!
- Consolidate Future Cyber Talks (3 noted!)
- Young Professionals (YP) Fall “Kick-off” Event
  - Several Societies desire such YP Outreach
  - Proposed Topic: Resume & Interview Workshop
  - Hosted by Active IEEE-CSULB Student Chapter
  - Planned for Sat AM, Oct 21 (with FREE Lunch)
    - Initial Flyer at AIAA, CSULB, IET & INCOSE Tables
- Others TBD



# “Polling the Audience”

- Quick Show of Hands:
  - Attending This Expo for FIRST TIME?
  - Seen Early Episodes of Original “Star Trek”?
  - How Many are Currently a Member of One (or More) Cited Professional Societies?
  - How Many are Jr-High Students?
  - How Many High-School Students?
  - How Many are College Students?
  - How Many are Educators/Teachers/Admin?

# List of STEM Activities Today

- Located at Certain Noted Society Tables:
  - Robot-Following-Course Games
    - Program Robot to follow Curvy “Road-Course”
  - Design “Robots” via “Cube-Circuits”
- Air-Launched Straw Rocket Contest (S-Patio)
  - Build & Launch Rocket over Max Distance
  - Several Launchers Available
- Apollo Trivia Contest
  - Guess Answers related to Historic Apollo Program
  - Located at Table featuring LEGO-Saturn-V Model

# Events (during Long Break)

- **PRIORITY: Visit Society Tables & Discuss:**
  - Their Special Exhibits
  - STEM Career Options
  - Becoming a New Member (No Obligation!)
  - Needed Volunteer Opportunities
- “Apollo Trivia” (at Saturn-V (LEGO) Table!)
- Outside of S-Café:
  - Air-Launch Straw Rocket Contest (on Patio)
  - High-Bay View of JWST Flight Hardware (Bldg M8)
  - Space Museum (First Floor of ‘White Tower’(E2))

# Special Raffle Rules

- Open to ALL Expo Attendees!
- Can Earn Raffle Tickets via ANY of following:
  - ONE for Discussing a STEM Career at Society Table
  - ONE for Completing a cited STEM Activity
  - TWO for Each Society New Member Sign-Up
  - THREE for Each Society Volunteer Sign-up
- After Talk & Q&A, Winning Ticket Numbers will be Drawn & Prizes will be Awarded
  - Unique STEM-Related Prizes Generously Donated by Attending Societies
  - Winners MUST be Present to Win Prizes!
    - MAX ONE Prize per Attendee!

# Remaining Agenda

- 2:15pm to 3:45pm:
  - Long Break (Details Discussed!)
- 3:45pm to 5pm:
  - JPL Mission Updates
- 5pm to 5:15pm:
  - Q&A
- 5:15pm to 5:30pm:
  - Closing Raffle!!!



# Break Events (2:15pm to 3:45pm)

- **PRIORITY: Visit Society Tables & Discuss:**
  - Their Special Exhibits
  - STEM Career Options (ONE Raffle Ticket)
  - Becoming a New Member (TWO Raffle Tickets)
  - Needed Volunteers (THREE Raffle Tickets)
- “Apollo Trivia” (at Saturn-V (LEGO) Table!)
- **Outside of S-Café:**
  - Air-Launch Straw Rocket Contest (on Patio)
  - High-Bay View of JWST Flight Hardware (Bldg M8)
    - LIMITED Tour Times (Sign-up Sheets on Back Table)
  - Space Museum (First Floor of ‘White Tower’(E2))
    - LIMITED Tour Times (Sign-up Sheets on Back Table)