



National Aeronautics and Space Administration's KNOWLEDGE MAP

NASA's practitioners and organizations engage in a wide range of knowledge activities, from self-directed queries to social interactions that bring people together to share stories. The tool below serves as a springboard to enable you to find what you don't know, share what you do know, or discover something new. While some knowledge services at NASA are not accessible to everyone, this tool connects you with points of contact for further information. It is a first attempt to help people navigate the rich variety of knowledge at NASA, and it is meant to grow and adapt to meet the needs of its users.

NASA's knowledge community invites you to explore the knowledge work taking place across the agency and welcomes your [feedback](#).

Categories

Centers/Organizations

Points of Contact

Filter By:



APPEL



GSFC



GRC



HEOMD



JSC



LaRC



MSFC



NEN



NESC



NSC



OHCM



OP



SMD

**Dan
Yuchnovicz**
(POC)
April, 2014



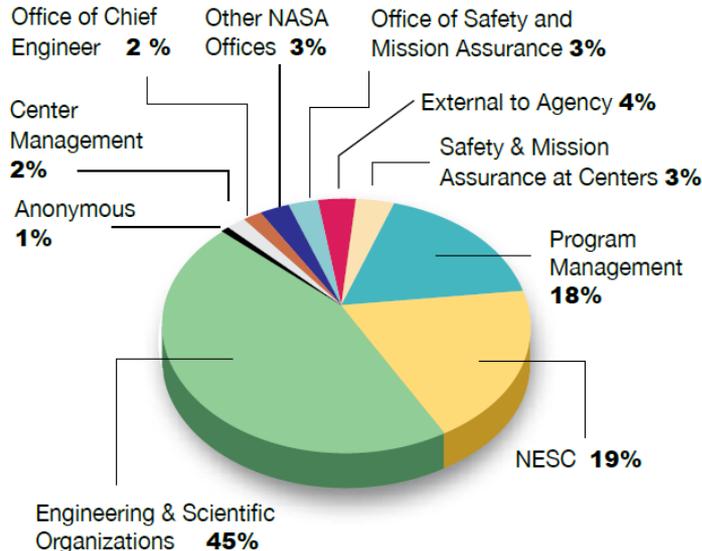
NESC KM Activities



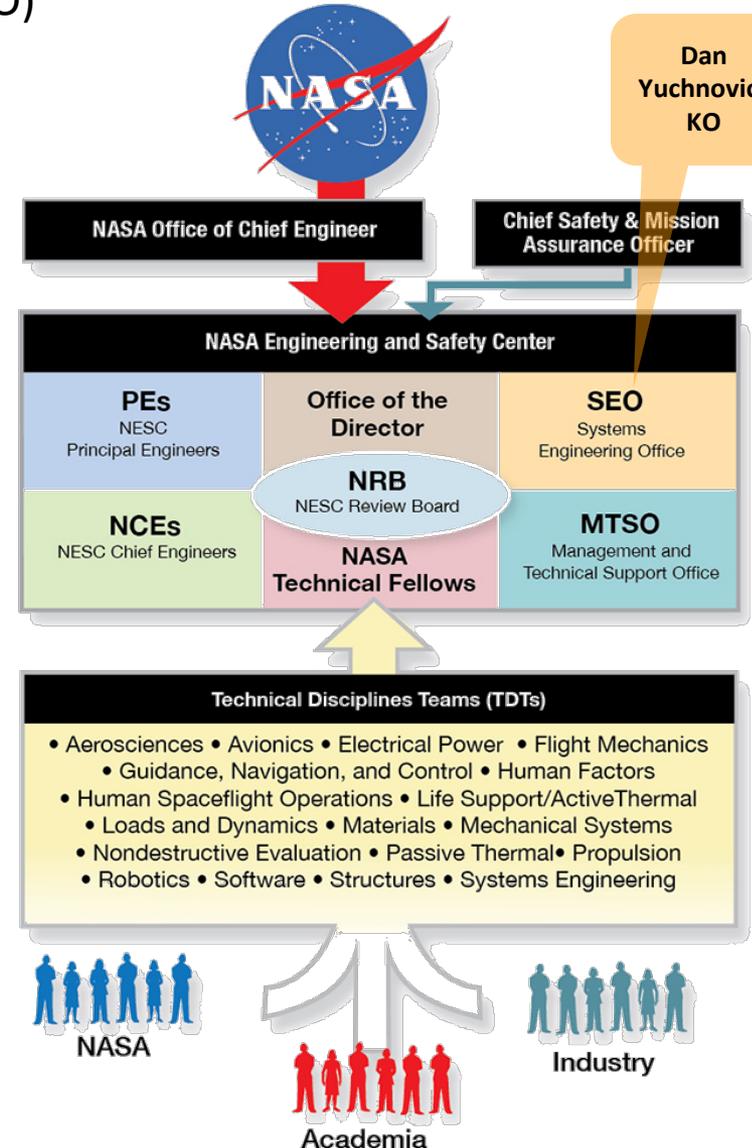
Engineering Excellence

- ✓ NESC KO located in Systems Engineering Office (SEO)
- ✓ KO planning, meetings, process development, etc.
- ✓ KO knowledge product generation
- ✓ Academy and webcasts

Sources of Accepted Requests: 541 Total



All statistics as of October 31, 2013





NESC KM Activities



Engineering Excellence

- ✓ Requirements for knowledge capture and transfer in NESC Management Plan

<i>Title:</i> NASA Engineering and Safety Center (NESC) Management Plan	<i>Revision:</i> B	<i>Date:</i> 05 February 2008	<i>Page:</i> 2 of 11
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2.0 Background and Scope

The key functions of the NESC are to:

4. Transfer knowledge and lessons learned through various technical reports, communications, and the NESC academy.



NESC KM Activities



Engineering Excellence

- ✓ Requirements for knowledge capture and transfer in NESC Operations Plan

<i>Title:</i>	<i>Document</i>	<i>Revision:</i>	<i>Date:</i>	<i>Page:</i>
NASA Engineering and Safety Center (NESC) Operations Plan	PL-07-20	1.0	14 June 2007	5 of 17

3.3 Knowledge Transfer and Discipline Stewardship

The NESC gains advanced technical knowledge through its networks of technical experts and through its unique activities supporting the Technical Issue Identification and Technical Issue Resolution product/service lines. The Knowledge Transfer and Discipline Stewardship Product/Service Line includes efforts to share technical knowledge throughout the Agency and to

- ✓ NASA Technical Fellow Directed Tasks
- ✓ NESC Academy
- ✓ Lessons Learned



NESC Website



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Main Knowledge Products

NEWS News, features & press releases

MISSIONS Current, future, past missions & launch dates

MULTIMEDIA Images, videos, NASA TV & more

CONNECT Social media channels & NASA apps

ABOUT NASA Leadership, organization, budget, careers & more

For Public | For Educators | For Students | For Media

NASA Engineering & Safety Center

NESC Home

NESC Reports

Technical Updates/Bulletins

NESC Honor Awards

NESC Academy

NESC Contacts

NEN- Communities of Practice

Media and Press

Workshops

Leadership & Organization

NESC Director, Vacant

Deputy Director, Timmy R. Wilson + Biography

Leadership Team + Read More + Biographies

Organization Structure + Read More

NESC News Subscription

Learn about the most current and challenging engineering activities being addressed by the NESC

NESC Overview

NASA Engineering and Safety Center's (NESC) mission is to perform value-added independent testing, analysis, and assessments of NASA's high-risk projects to ensure safety and mission success. The NESC engages proactively to help NASA avoid future problems. + Read More

Find answers to common questions. + Frequently Asked Questions

Learn more about the NESC background and organization. + NESC Trifold + What is the NESC?

Ten Years and Counting - The NESC

Presented by Ralph R. Roe, Jr. Moderated by Timmy R. Wilson Introductory Remarks by Robert M. Lightfoot

NESC Features

NESC Proposes Alternate Orion Heat Shield Carrier Structural Design

02.03.14 - NESC designs an alternative to reduce overall heat shield mass.

NESC Shell Buckling Investigation Continues to Make Gains

02.03.14 - Space Launch System is seeing results from the NESC Shell Buckling Investigation.

Submitting Requests

Do you have a technical concern? Please contact the NESC.

If you would like to submit a technical request anonymously, please mail it to:

NESC
NASA Langley Research Center
Mail Stop 118
Hampton, VA 23681

2013 Technical Update is now available

The NESC: A Decade of Learning

NESC Assisted Chilean Miners

Shell Buckling Knockdown Factor

NESC Videos



Primary Reason for Website



NESC Knowledge Product Activities (Jan '13 to Present)



Engineering Excellence

- ✓ Ralph Roe Completed Columbia Accident Lessons Learned Presentation to all Centers
- ✓ NESC Technical Reports (accepted 79 requests, completed 67 reports)
- ✓ Submission of Lessons Learned to LLIS via LaRC
- ✓ Development of Engineering Technical Bulletins



NASA Technical Reports Server (NTRS)

Providing Access to NASA's Technology, Research, and Science



NESC Uses Agency servers for Assessment Report and LL

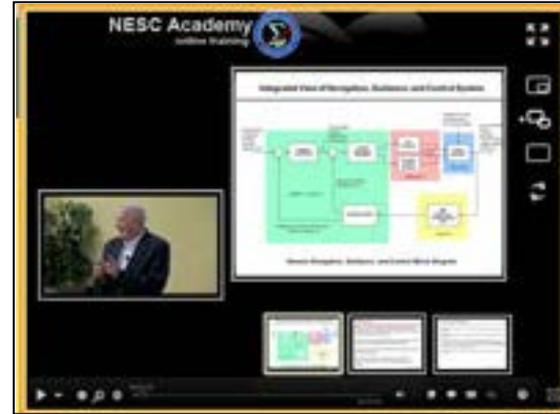


NESC Knowledge Product Activities (Jan '13 to Present)

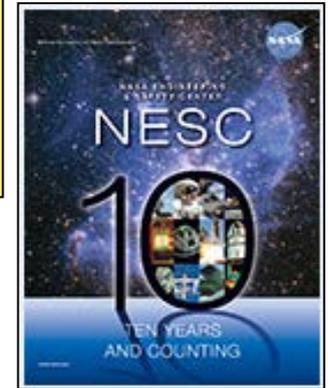


Engineering Excellence

- ✓ NESC Academy Videos
(metrics later in presentation)



- ✓ NESC 2013 Technical Update



- ✓ NASA Tech Fellow Technical Discipline Web Casts and NEN Support



- ✓ Continuing Early Career Engineer Participation on NESC Assessments





NESC Academy Website



Engineering Excellence



NESC Academy Online

NASA Engineering and Safety Center



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Home

Latest Videos

Assessments

Disciplines »

Other NESC

All Videos



Please click on the "Sign In" link (top right) to see additional videos.

All NESC Academy Videos



The NESC's goal is to ensure mission success by providing value-added technical assessments for the Agency's programs, projects, and institutions. As a distributed Agency-wide organization, the NESC brings together diverse perspectives to develop robust solutions and recommendations.

The NESC Academy offers online training videos from multiple technical disciplines and feature discipline-specific training and lessons learned from NESC assessments. The courses provide guidance and insight from technical experts in their respective fields.

Please monitor this site as additional videos will be added over time.

Welcome Guest

NASA Engineering and Safety Center (NESC All)



Page: 3 of 4

Search:

Displaying presentations 81 to 120 of 138

Sort By: Name | Date | Presenter | Type

Air Date: To: Type: All apply clear

Lessons Learned in Characterizing the Dynamic Stability of the Orion Crew Module and Launch Abort Vehicle

Dr. Bruce Owens
53 Minutes 50 Seconds

Links



Lessons Learned on Past Manned Spaceflight Programs That Seem to Have Been Forgotten

Bass Redd
52 Minutes 4 Seconds

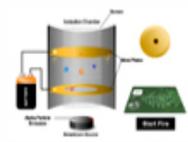
Links



Life Support Systems Part 4 (Smoke Detection and Fire Suppression)

Henry A Rotter Jr.
39 Minutes 3 Seconds

Links



Life Support Systems Part 5 (Smoke Detection Lessons Learned)

Henry A Rotter Jr.
4 Minutes 18 Seconds

Links



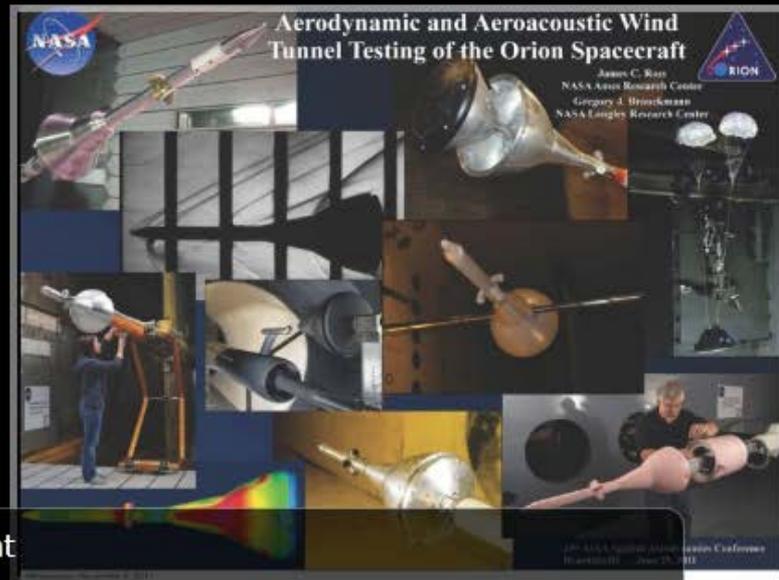
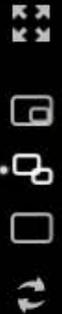


NESC Academy Video Player

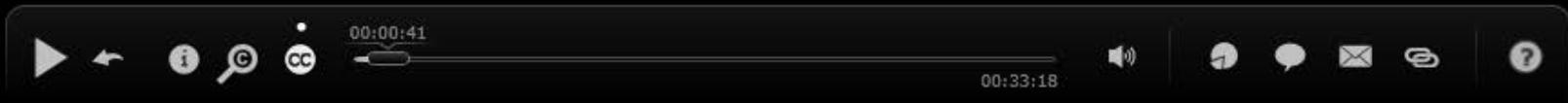


Engineering Excellence

NESC Academy
online training



and along the way I'll point out lessons learned on each of those.





Video Lesson Capture Process



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- ✓ Camtasia Relay server used for video streaming
- ✓ Presenters download Camtasia plug-in for Power Point to their computer. NESC provides tech support.
- ✓ Presenter narrates their presentation (can pause) then uploads video file to Camtasia Relay site
- ✓ Video of presenter via computer web cam is optional
- ✓ Editing by NESC video editor typically required to clean up audio or long breaks.
- ✓ All videos must be approved by export control for Public Release (we maintain both public and ITAR videos)
- ✓ Closed Captioning
 - ✓ Current CC process achieves over $\approx 99\%$ accuracy (outstanding)
 - ✓ To aid in achieving this we provide a set of best practices to presenters
 - ✓ Ex. Don't read equations, especially variables – refer to an equation number or a term in the equation

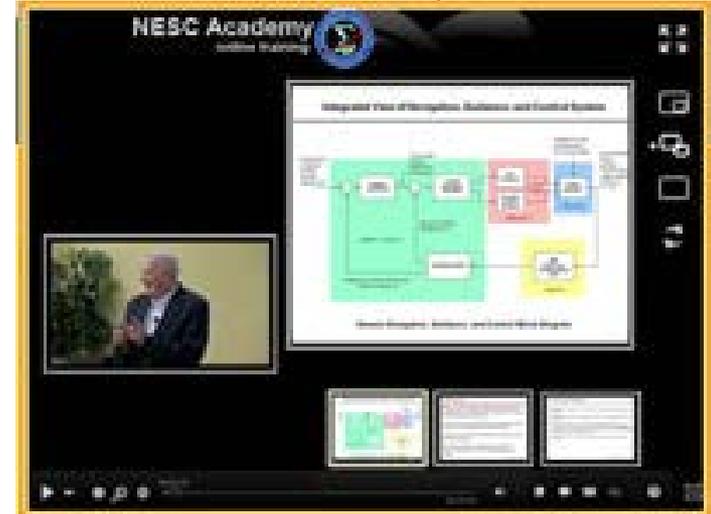
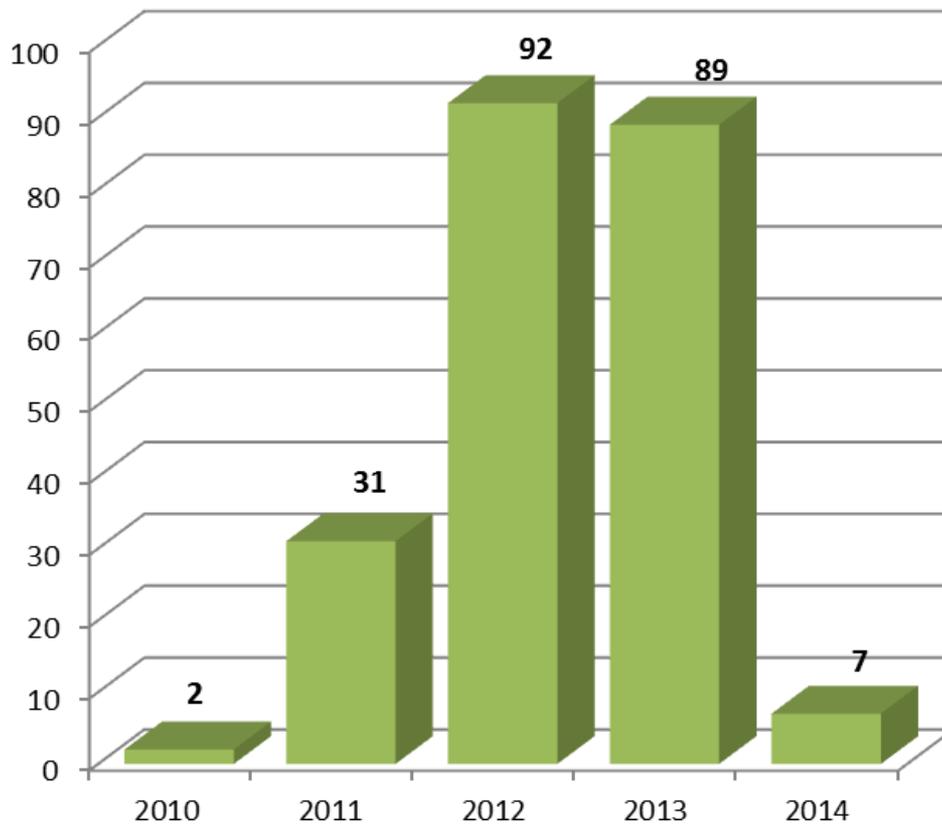


NESC Academy Video Lessons



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**Number of Video Lessons Released
By Calendar Year
221 Total Lessons Released**



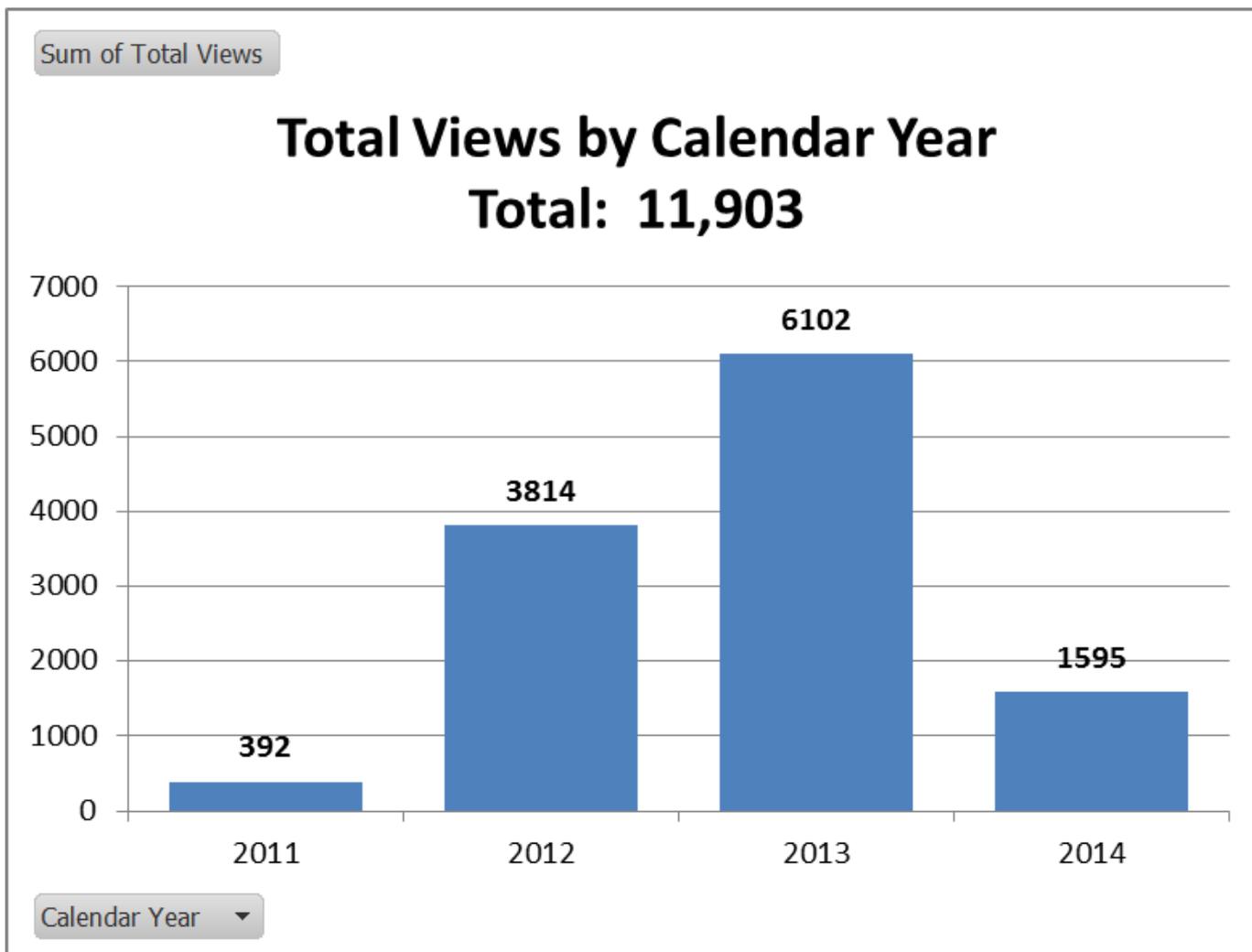
■ Number of Video Lessons Released



NESC Academy Video Lessons



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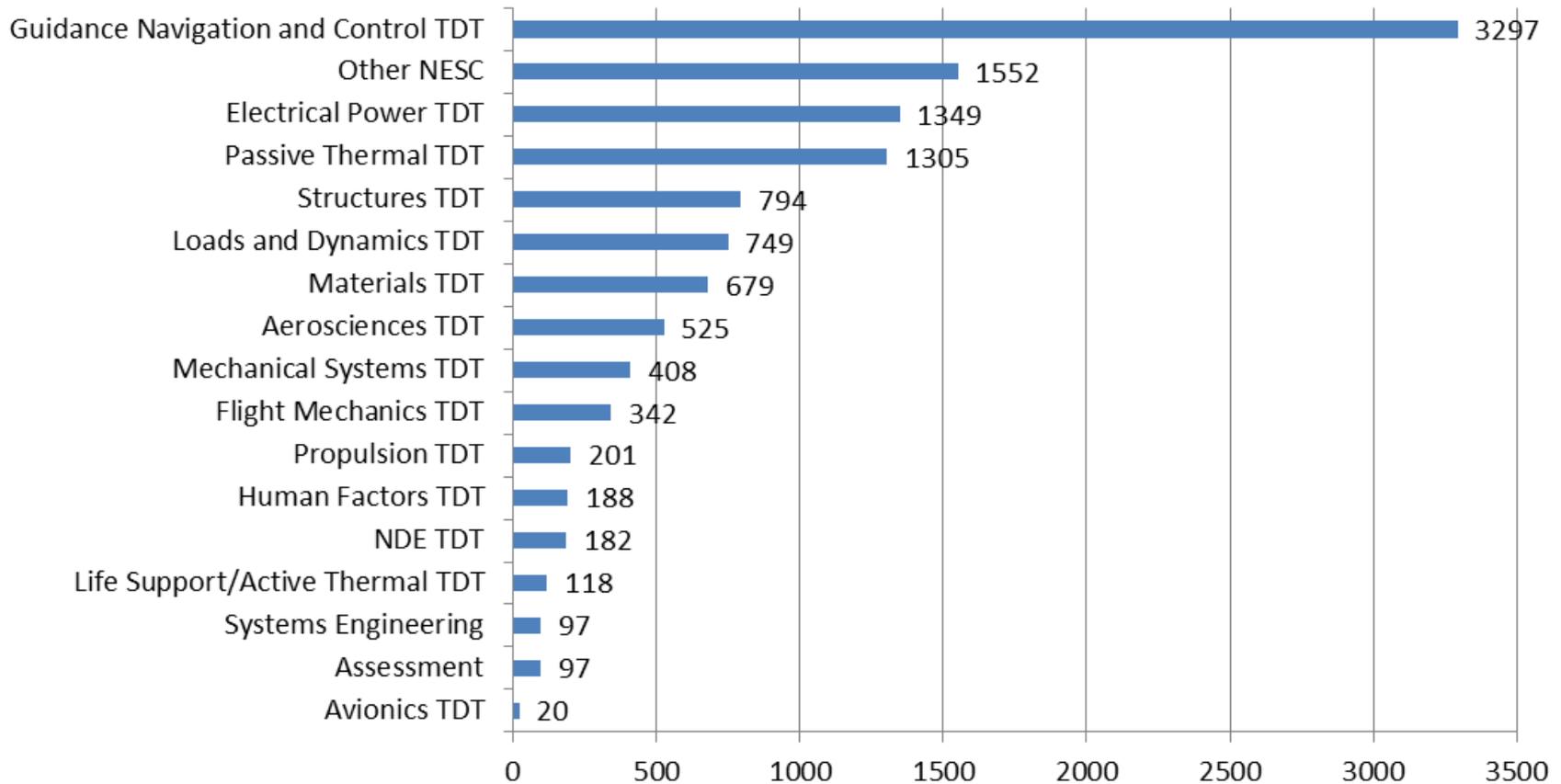


NESC Academy Video Lessons



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Total Views by Discipline Total: 11,903



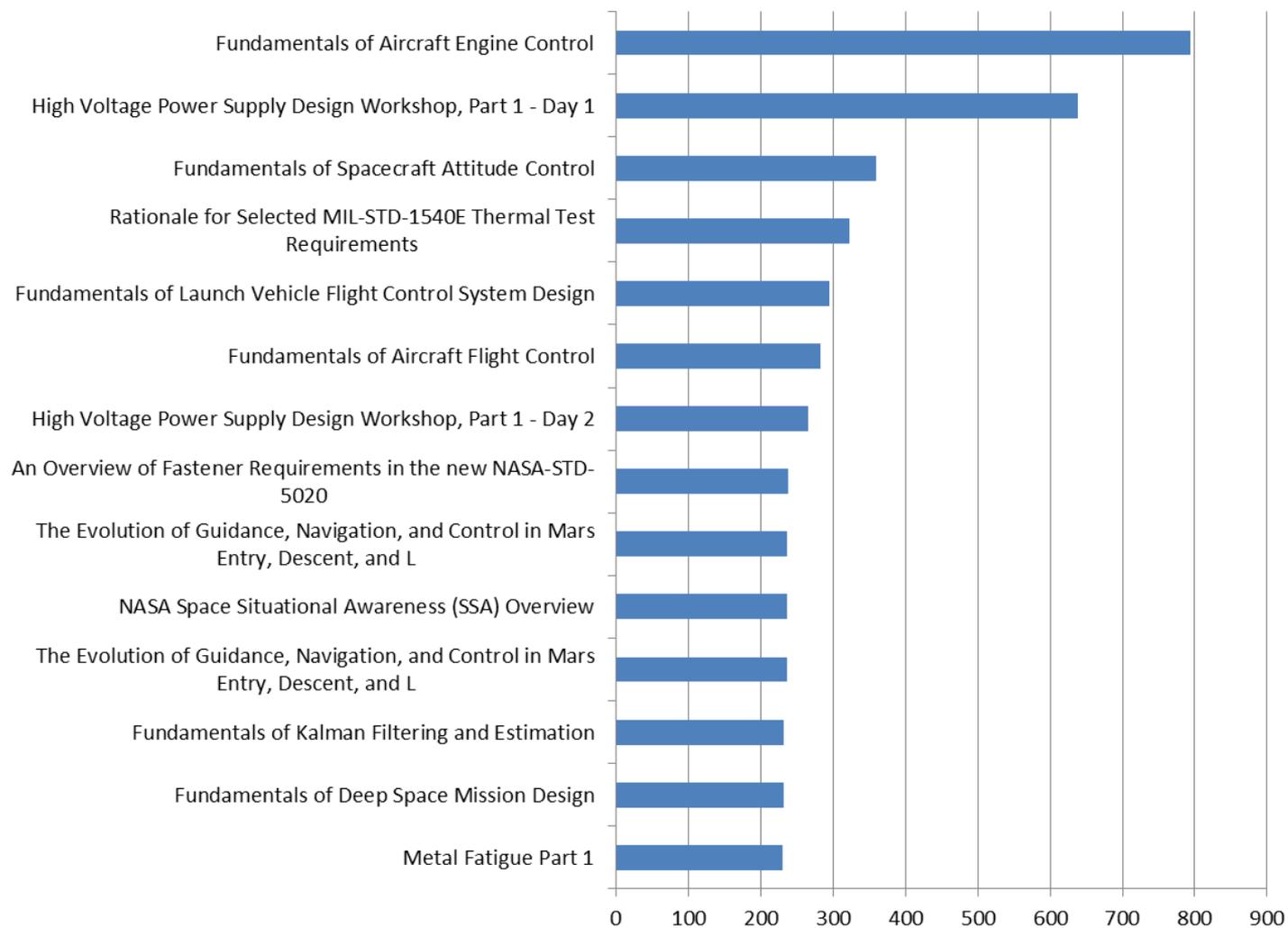


NESC Academy Video Lessons



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Most Viewed Lessons



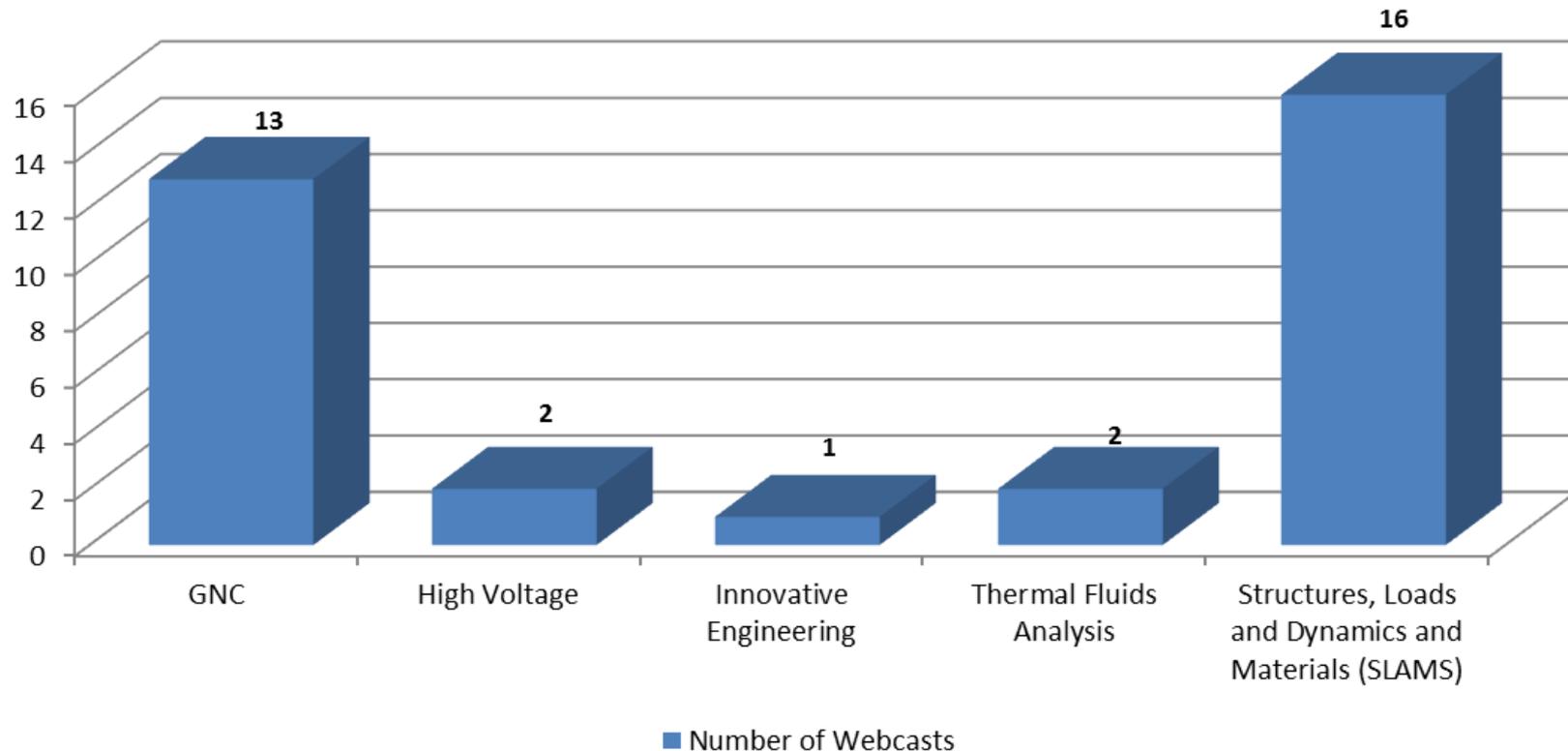


NASA Tech Fellow Web Casts



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NESC Technical Webcasts By Discipline Total: 34

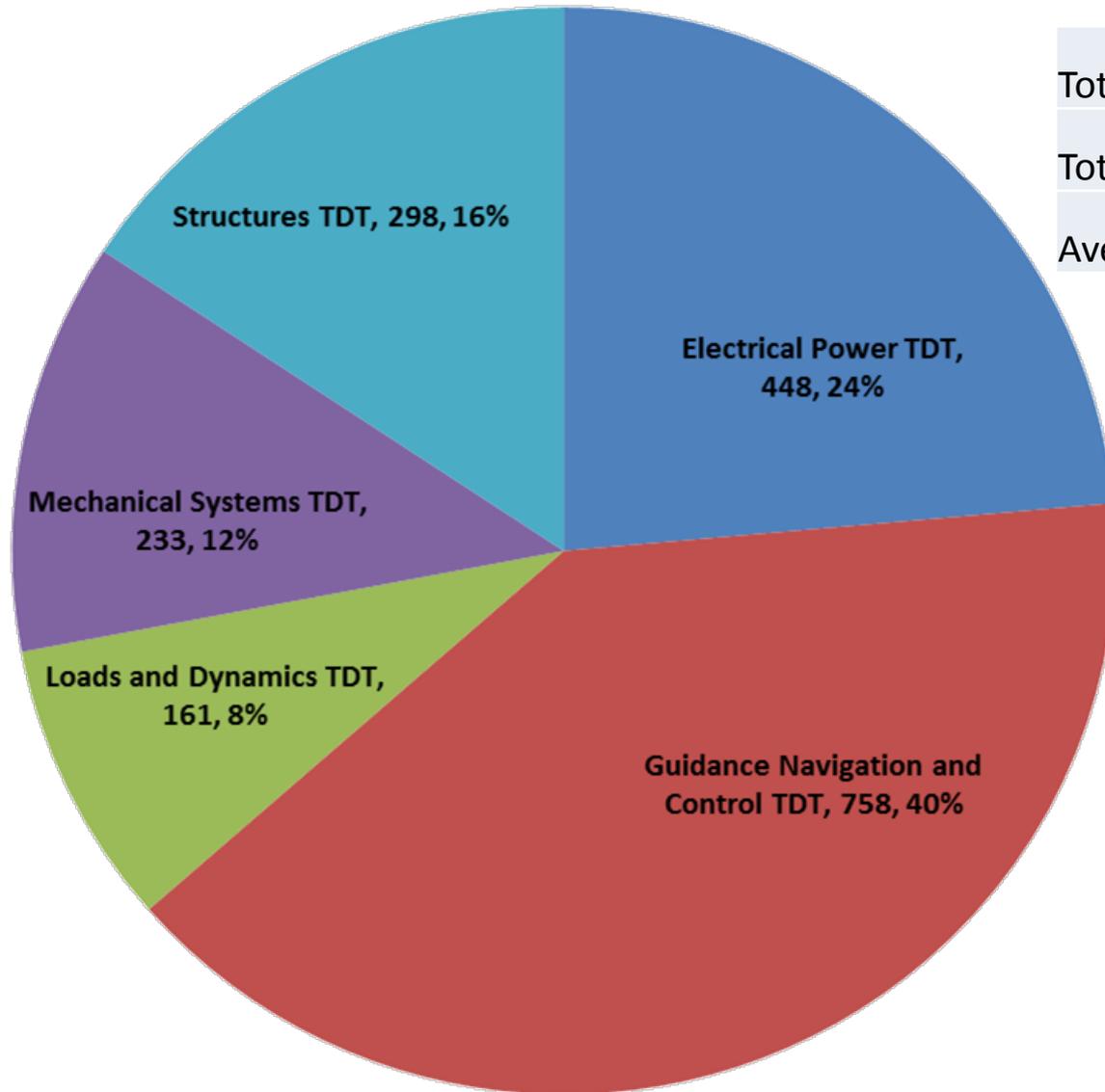




Live Webcast Participants



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Total Webcasts	34
Total Participants	1898
Average Nmbr of Participants	55.8



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Backup Chart



Camtasia Studio by TechSmith



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There are two parts to Camtasia Relay:

- The recorder, which runs on your computer.
- The server, which processes and publishes all presentations.

While using Camtasia Relay, you interact with both of these components. Presenters interact with the server through the Camtasia Relay website. The website is specific to, and run by, your organization. Presenters use the same username and password to log in to both the recorder and the website.

- Go to the website to:
 - Check on presentation status.
 - Learn about your profiles.
 - Specify publish destinations (available only for some profiles).
 - Enter account information that may be required for some of your publish destinations.