

USNC-URSI Business Meeting

Boulder, CO

Tuesday, Jan. 7, 2025, 5:00 PM MST

AGENDA

1. Call to Order (Jamesina Simpson)
2. Approval of the agenda (Jamesina Simpson)
3. Introductions and Changes to the Committee (Jamesina Simpson, 10 min.)
4. Thank you to our Sponsors! (Jamesina Simpson, 5 min)
5. New USNC-URSI and NRSM Websites (Jamesina Simpson, 9 min.)
6. Operating Manual and LinkedIn Page (Jamesina Simpson, 1 min.)
7. Constitution Discussion and Vote (Mike Newkirk, 20 min.)
8. 2025 NRSM Results (Jamesina Simpson, 5 min.)
9. Accounting Update (Gary Brown, 10 min.)
10. Sponsors & Exhibitors Ideas (Jamesina Simpson, 10 min.)
11. Commission Membership Discussion (Jamesina Simpson and Mike Newkirk, 10 min.)
12. Commission Ideas, Needs, Efforts, and Plans (Commission Chairs, 20 min.)

DINNER (6:30 – 7:00)

13. USNC-URSI Chapters and Sub-Committees (20 min.)
 - a. Women in Radio Science (Winry Ember)
 - b. Workshops and Short Courses (Jonathan Chisum)
 - c. Student Paper Competition (Asimina Kiourti)
 - d. JMC (Jamesina Simpson for Mahta Moghaddam)
 - e. E-Lectures (Jamesina Simpson for Lakhtakia Akhlesh)
14. Society Representatives (25 min.)
 - f. IEEE AP-S (Branislav Notaros)
 - g. IEEE MTT-S (Jamesina Simpson for Zoya Popovic)
 - h. GRSS and URSI Commission C (Kumar Vijay Mishra)
 - i. Society Representative Ideas, Needs, Efforts, and Plans (Society Reps)
15. Government Representatives Ideas, Needs, Efforts and Plans (Government Reps, 5 min.)
16. Members at Large Ideas, Needs, Efforts, and Plans (Members at Large, 5 min.)
17. URSI and USNC-URSI Awards (Jamesina Simpson, 5 min.)
18. Report by the URSI Past President (George Uslenghi, 5 min.)
19. Update from the NASEM Representative (Ana Ferreras, 5 min.)
20. 2026 Planning (Jamesina Simpson, 5 min.)
21. Joint Membership Lists (Chris Anderson, 5 min.)
22. Commission Business Meetings Forms and Slides (Chris Anderson, 15 min.)
23. Old Business (Jamesina Simpson)
24. New Business (Jamesina Simpson)
25. Adjournment (Jamesina Simpson)

Minutes

The meeting was called to order by USNC-URSI Chair Jamesina Simpson at 5:11pm MST.

Chair Simpson presented the agenda. Mike Newkirk moved to approve the agenda. Steven Reising seconded. The agenda was approved by a show of hands.

Chair Simpson started the meeting by highlighting a few changes in Commission leadership:

- Eric Mokole is now chair of Commission C.
- Bryan Butler is now chair of Commission J.
- Winry Ember is now chair of WIRS.

Chair Simpson highlighted and thanked the 2025 NRSM sponsors – Johns Hopkins University Applied Physics Lab (JHU APL) sponsored the student luncheon, URSI sponsored the WIRS reception.

Chair Simpson then presented new websites for USNC-URSI:

- For the NRSM: nrsmboulder.org
- For the USNC-URSI: usncursi.org

Chair Simpson requested that commissions please provide images that can be used on the USNC-URSI website. A suggestion was made by Commission K to explore developing the various commission pages so that they would be a community resource.

A member asked if Commission should be posting commission business meeting minutes and, if so, Chairs be asking members to review and approve minutes. One commission responded in the affirmative, no other commissions voiced an opinion. One other commission noted that some of the meeting minutes and other commission information was quite old. Chair Simpson noted that some of the data is still in process of being moved to the new website and is, in fact, in need of being updated.

A member noted that some Commissions have minutes posted on the website but others do not and suggested it would be highly desirable for all commissions to post minutes. Another member noted that their Commission has a newsletter and requested an ability to link to their web page. Chair Simpson requested that each Commission keep their website looking active, whether minutes, etc. are posted with the goal of not having multi-year gaps (which has happened in the past) that makes it look like the Commission isn't active.

Constitution Changes

Mike Newkirk presented an overview of the USNC-URSI Constitution Review that been conducted over the previous year by a select review committee. The committee members reviewed the April 2021 constitution to determine whether any updates were needed and recommended the following changes:

- Early Career Representatives (ECR) should be added to the USNC as non-voting members with a recommended number of 4. ECR members would be nominated by commission chairs then elected by USNC-URSI.
- Early Career Representatives could serve as officers in the Commissions in an effort help bolster Commission memberships.
- A recommendation was made to align USNC with other URSI member countries to use the nomenclature of “President” vs “Chair.” However, NASEM policies do not allow USNC to use that terminology, so this recommendation was retracted.
- The USNC membership composition was amended to include “other members as necessary” per NASEM policies.
- The committee recommended a few minor editorial changes.

Mike Newkirk then observed that a draft of the updated Constitution was not actually sent out to the USNC to review prior to the Business Meeting. He amended that oversight by sending the Constitution via email and promised to request an email vote on approving the changes at a future date.

A member asked whether the non-voting ECRs could serve as a representative for a commission chair to the Committee and vote in that capacity. In essence, could a Commission appoint an ECR to represent the Commission in their stead. A lively discussion ensued and revolved around two cases:

1. Whether an ECR could serve as a substitute for a commission officer that could not attend the USNC meeting but could vote on behalf of the commission officer.
2. Whether an ECR could be elected as a Commission Chair and attend the USNC meeting and vote in that capacity.

The discussion around Case #1 was supportive and generally in favor. The discussion around Case #2 was complicated by the mechanics of the difference between Early Career Members and Early Career Representatives and how an ECR could become a Commission Chair. Additionally, NASEM does not allow a voting member of a USNC to be replaced by a substitute on matters that have to be processed internally in the Academies. The answer to Case #2 was generally unresolved, although Mike Newkirk clarified that the intent of the above constitution changes was to foster active participation in the commissions and USNC and ensure commissions have representation on topics that are pertinent to them and USNC.

NRSM 2025 Overview

Chair Simpson then proceeded to present an overview of the NRSM:

- The plenary session is Wednesday morning featuring two distinguished speakers.
- Committee members were extended an invitation to attend the student mentoring luncheon immediately following the plenary session.

- Preliminary registration numbers were 363 participants with 340 accepted manuscripts.

A short discussion ensued about schedule adjustments for future NRSMs with the consensus being that this year's schedule seemed reasonable.

A member noted that significant participation at the NRSM was achieved through special session submissions. Chair Simpson encouraged Commissions to consider organizing special sessions to both bolster commission participation and attendance at the NRSM.

Chair Simpson then noted that for 2026, the deadline for special session proposals is May 1. The proposal must include session organizer names and contact information; encouraging people to volunteer is an important part of the NRSM this week.

Chair Simpson then thanked all the people that contributed to the organization of the 2025 NRSM.

USNC Financial Report

Mike Newkirk announced that he had taken over as the accounts manager from longtime member and officeholder Gary Brown.

Mike stated that USNC relies upon 3 sources of funding to cover our operating expenses:

- NSF, which pays USNC membership dues to URSI. Mike noted that USNC is the largest contributor to URSI.
- Endowment Funds (Basu and Booker). These funds support the awards that are given at USNC at each triennial general assembly.
- Private Account. These funds are the main source of paying USNC operating expenses.

Mike noted that NASEM applies for NSF funding in 5-year consolidated grants that apply to all NASEM committees. As of the date of the NRSM, the NSF proposal for the current 5-year increment was still under consideration.

Mike presented that income for the Private Account is derived from proceeds from NRSMs as well as joint AP-S/USRI summer meetings. Primary USNC operating expenses include student travel support, officer and commission chair travel expenses, NRSM and URSI student paper competition awards, and USNC-URSI awards.

Chair Simpson reminded commission chairs that they have \$3,000 per triennium to spend to benefit their commission, which is often used to attend the NRSM, URSI GAAS, or AP-S conference. Requests to spend this allocation, especially if travel is involved, need to be submitted well in advance to receive NASEM approval.

A member observed that the presented account balance had dropped year over year and asked whether that represented an actual loss or was a byproduct of accounting (e.g., when funding

accrued to the account). Mike noted that it was likely the latter as incoming funding is not always consistent in the month that it arrives from one year to the next.

A member noted that there was no interest accrued for 2024 in the Private Account and questioned whether that was correct. Ana, USNC's NASEM representative, responded that the academies invest their funds in a portfolio and the actual gain/loss year-over-year is unknown. A short discussion ensued as to whether there should have been interest accrued and if so, how much. It was suggested that the USNC officers investigate further.

Foundation Status

Mike Newkirk presented an update on creating a Foundation for USNC. Mike presented the challenging process the Executive Committee went through before ultimately deciding against it. At this point in time, the USNC is no longer pursuing the creation of a Foundation.

Accounts Manager

Mike Newkirk announced that Gary Brown has decided to step down after a distinguished 18 year term as USNC accounts manager. Mike noted that the Accounts Manager position is appointed by the USNC Chair and has no term limits. The advantage of that arrangement is to ensure consistency in how USNC manages its accounts across triennia. Mike made the suggestion that USNC consider forming a Finance Committee that could share the load of managing our finances.

Chair Simpson announced that Mike Newkirk had been appointed as Accounts Manager effective 1/7/2025 and will continue to serve in his role as Immediate Past Chair through 2026. As Immediate Past Chair his primary responsibility will be to support the U.S. delegation to the 2026 URSI GASS.

Mike then presented a special recognition to Gary for his 18 years of service as Accounts Manager.

Sponsors and Exhibitors

Chair Simpson presented that it has been a USNC goal for several years to attract sponsors and exhibitors to the NRSM. If USNC wants to continue supporting students at the same level in the future, any new initiatives, exhibitors, USNC requires additional sponsorship. Commission chairs were requested to discuss sponsorship for future NRSMs. In particular, Commissions were requested to identify contacts for potential sponsors as well as volunteers that could lead or contribute to outreach in some way.

A member noted that APL has been a sponsor for several years and they found the NRSM to be an excellent opportunity to recruit students.

A member asked whether there was a packet of information that could be passed along to sponsors. Chair Simpson stated that the website had a flyer for a request for support to the

student mentoring. Secretary Anderson stated that USNC had developed such packets in previous years, but not for the 2025 NRSM.

A discussion ensued about sponsorship levels, flyers, packets, etc. and whether developing such material was useful or if it created too much work for USNC volunteers. A member asked whether USNC needs a sponsorship committee and chair or whether members/committees could pursue sponsors “ad-hoc”, particularly if the sponsorship contact was local to the member. Another member floated the idea to simply have a “booth fee” to enable students walk by various booths rather than having multiple levels and benefits. A member noted that the IEEE Radar and Vehicular Technology (VTC) conferences organized an entrepreneur panel as a way of engaging students as well as attracting sponsors to that event.

Chair Simpson stated that NRSM organizers tried to reach out to multiple companies local to the Boulder area to get some to sign up for a booth. Although many expressed interest, ultimately no one did. A member suggested that USNC craft a “value proposition” document that is specific to the NRSM to help attract sponsors. A discussion ensued about sponsorship levels, attractiveness to industry, possible non-industry labs, and how to make NRSM attractive to sponsors and future students, but ultimately the group did not reach a consensus.

Commission Membership Discussion

Mike Newkirk opened this discussion by stating that he had multiple conversations with people interested in becoming a commission member but that did not have many publicly available publications. In these discussions, he noticed that several USNC commissions were small; membership in any commission requires attendance and presentation/participation at NRSM. Those requirements present a hindrance to people that have restrictions on presenting work publicly.

A member asked what the current requirements were for Early Career Members (ECM), Associate Members (AM) and Full Members. Requirements are provided in the USNC Membership Guidelines (<https://www.usnc-ursi-archive.org/docs/USNC-URSI%20Membership%20Requirements.pdf>) and this document was presented to the group.

A member asked about the current number of USNC members and whether activities USNC has invested in have attracted new members. Secretary Anderson stated that the total number of people on the USNC Commission membership lists was 1147, however, this number was an upper bound as membership lists have not been adjusted for attrition nor inactive members.

Chair Simson then announced a dinner break from 6:32 – 7:06pm MST.

Following dinner, a member asked whether USNC can leverage or change the membership guidelines in such a way that we can gain new members and grow the size of commissions. Revised membership guidelines would get people involved in USNC that are not necessarily able to present their work in an unclassified forum.

A vivacious discussion was then had on the topic of membership requirements.

A member agreed that it would be useful to encourage new members, but not to relax the requirements of membership such that a higher membership level might fall below a lower membership level.

A member noted that the primary constraint was the requirement for journal article publications. A member suggested changing the journal article requirement to something along the lines of “publication that has completed peer review.”

A member noted that the membership requirements include a catchall phrase of “Allowances will be made for fewer articles of special significance, or for scientific and research accomplishments of unusual merit.”

A member asked why USNC had these voluminous criteria for commission membership. It was noted that the membership guidelines were generated by USNC and are not dictated by NASEM.

A question was raised about whether there should be a membership cost. Chair Simpson noted that the benefit is that one is an elected member of USNC not just a dues-paying professional society such as IEEE. A short discussion ensued about reducing membership requirements, but the general sentiment was against that.

A member noted that they recalled years ago the publication requirement was lower, however completing a Ph.D. counted towards the membership requirement.

A member noted that many government employees have problems publishing but generally have been able able to join under the special allowance mentioned above.

A member commented that Commission B potential members have a hard time finding the mechanism to apply. Mike Newkirk noted that in recent years USNC had confusing and overlapping membership application processes, but that the Executive Committee has been trying to streamline.

At this point, Bane Notaros made a motion to make greater use of the special allowance if a potential member has equivalent contributions to peer-reviewed journal articles. Potential members would still have to demonstrate participation in the commission to gain membership. John Chisum seconded. The motion passed with one abstention and all other votes in favor. Commission chairs were encouraged to publicize the special allowance to potential members

To wrap up the discussion on commission membership, Chair Simpson suggested commissions create a strategic goal or plan for growing the commission, publicizing URSI as the one organization that encompasses all of radio science, partnering with other commissions, and attracting ECMs. Chair Simpson noted that USNC has seen a decrease in new applications coming through and implored commissions to evaluate and update their websites.

Chapter and Sub Committee Report

WIRS (Winry Ember) – Winry reported that WIRS would like to introduce a networking event in future years as a community-building event. WIRS has also discussed creating a special travel award using their triennial funds to help more women attend the NRSM.

Workshops (Jon Chisum) – Jon reported that the 2025 NRSM had three workshops, which compared favorably to the range of 2-5 in previous years. Jon noted that three workshops is probably the minimum to ensure a healthy workshop program and justify the added day to the NRSM. The total workshop attendance was approximately 80, in line with previous years. Jon noted that attracting workshop proposals has been a challenge and recommended Commissions encourage their members to submit workshop proposals. It was noted that workshop committee was not looking for proposals for something “massively innovative.” A good workshop could be tutorial in nature, perhaps sharing something that would help inform a graduate student or someone new to the field. Workshops are currently scheduled for a half-day (3 hours), although a full day could be proposed.

Student Paper Competition (Asimina Kiourti) – Chair Simpson reported that Asimina assumed responsibility as the role of Student Paper Competition (SPC) chair this year. Asimina reported that for 2024 USNC switched over to a two-page two-column paper format and received many more submissions than in prior years. A new SPC review process was created in 2025, which Asimina presented to the group.

Asimina reported that the 2025 SPC received 46 submissions, of which 15 were disqualified. The review process for the remaining 31 manuscripts was double-blind and required recruiting volunteers from across the USNC membership in order to alleviate the review burden on Commission chairs. A review committee was formed from a poll that was responded to by 6 of the 10 commissions.

From the reviews, the SPC selected three finalists and two honorable mentions. The three finalists are competing tomorrow during a dedicated session and will also be presenting their papers during the regular sessions.

A member asked about the main reason papers were disqualified. Asimina reported that the vast majority were because the advisor did not submit an attestation, followed by administrative or formatting problems. Asimina requested Commissions put out a call for future NRSMs as the SPC committee needs to ensure that reviewers have no conflict of interest (COI) with a paper author (e.g., a reviewer or SPC judge that is also a co-author on the paper).

A member suggested creating a sufficiently large static reviewer pool that could be tapped year-over-year such that COIs could be handled by not utilizing those with COI's.

A member suggested sending a response email to those papers that were administratively disqualified and give the paper authors an opportunity to correct the defect. Asimina reported that that SPC did not have enough time or people to handle and process such requests.

Chair Simpson noted that commissions that have not provided reviewers to the SPC review pool may make it harder for a student in their commission to be selected as a finalist as their manuscripts may be reviewed by a non-expert in their field.

Joint Meetings Committee (Jamesina Simpson) – Chair Simpson thanked Sima Noghianian for serving as the TPC chair for the summer AP-S/URSI joint meeting. She then reported that Fikadu Dagefu and Majid Manteghi agreed to serve on the AP-S/URSI special session committee. Chair Simpson then requested Commissions poll their members and provide names of people interested in serving in the future.

Chair Simpson presented dates for upcoming joint conferences to be presented to Commission members. She noted that AP-S had instituted a new process for proposing to host the joint meeting. AP-S is currently inviting proposals for conferences to be held within North America (2029) and outside North America (2030). The next JMC meeting will be held in Ottawa in July 2025. Chair Simpson then noted that the current AP-S and USNC Memorandum of Understanding is due for renewal in 2025.

E-Lectures (Jamesina Simpson) – Chair Simpson presented that USNC provided two E-Lectures in 2024 with the next E-Lecture on January 20 (which was later corrected to Feb. 20).

Society Representatives

IEEE AP-S (Branislav “Bane” Notaros) – Bane began by stating that the flagship conference for the AP-S society is the joint AP-S/URSI conference, attesting to the strong bond between the two societies. He noted that AP-S has a wide technical scope; the society does not only focus on antennas and propagation; it covers a lot of areas in electromagnetics. He stated that AP-S membership has grown from around 9,000 in the late 80’s to over 13,000 in 2024. Approximately 25% of the increase occurred in 2024, with more of the membership outside of US/Canada than within. He noted that AP-S financially cosponsors many joint conferences all over the world.

Bane presented that the 75th Anniversary AP-S Conference (held in Florence Italy) conference had over 2,000 papers and 2,000 registrations. Additionally in 2024, a new conference was introduced: Latin American Conference on Antennas and Propagation. Bane then presented a recap of a number of AP-S conferences around the world in 2024, all of which were declared a smashing success, generating a lot of new activity and excitement for the society.

Bane remarked that AP-S would like to generate more industry participation in the society and organized a panel to discuss their concerns. The results of that panel suggested that AP-S is considered too “academic” and not relevant to the applied work that happens in industry, something the society hopes to rectify. Bane ended his time by noting that the AP-S and USNC MOU is up for renewal and with more participation outside US and less desire to generate large surpluses from the conference, the financial contribution to USNC from participating in the joint meeting may be reduced.

A member then thanked Bane for all the work he has done for URSI and enhancing the collaboration between AP-S and USNC-URSI.

IEEE MTT-S (Jamesina Simpson for Zoya Popovic) – Chair Simpson presented that Zoya plans on submitting a special issue proposal on radio science to one of the MTT journals or magazines.

Geoscience and Remote Sensing Society (Kumar Vijay Mishra) – Vijay presented that the IEEE Geoscience and Remote Sensing Society (GRSS) is focusing on synthetic apertures, climate change, and reconfigurable intelligent surfaces, topics that overlap with several USNC commissions. He stated that GRSS has several special issues on these topics that have been organized and invited USNC members to contribute. He reported that in 2024 a new conference was launched – Conference on Computational Imaging Using Synthetic Apertures; part of the conference includes a climate change standards group.

Vijay also stated that GRSS has a new focus is on Integrated Sensing and Communications (ISAC). GRSS formed a new working group because the topic is gaining increasing interest in IEEE. Vijay's hope is that the new working group will help grow the Commission C membership through collaboration with relevant IEEE societies and technical working groups on this topic area. He reported that GRSS sponsored several conferences in India as the country has the largest growing membership in IEEE. Finally, he noted that GRSS is sponsoring a summer school in Delhi possibly in collaboration with Commission C.

Government Representative (Kate Mulraney) – Kate presented that Den Eleuterio (ONR Program Manager) will be presenting at tomorrow's Plenary Session on ONR's ongoing R&D programs. Kate observed that with a new administration coming in, new priorities will be established with a lot of emphasis on keeping pace with science and technology developments that are happening outside the US. A big push for ONR will likely be on innovating faster and recruiting students and junior engineers to become part of organizations and moving through the ranks in government R&D.

Chair Simpson wrapped up the society reports by expressing a desire to find additional ways to engage with these societies as well as identify other societies to participate in USNC.

Members at Large Ideas, Needs and Discussion

Chair Simpson noted that MAL provided a lot of value to USNC. She is looking for ways to continue engaging with MAL and better incorporate their participation in USNC and the NRSRM.

URSI and USNC-URSI Awards

Chair Simpson reported that calls for URSI award nominations will be released in Spring 2025 and USNC desires to have strong candidates and a strong presence at the URSI level. USNC is

looking for strong candidates to acknowledge our colleagues for these awards and appealed to Commissions to send in their nominations.

URSI Past President Report

George Uslenghi presented an update from URSI. URSI has requested USNC to support SPC awards at the URSI level with the request that the Chair of the SPC come from the USNC. George reported that Sembiam will be Chairing the next SPC. George also reported that the first WIRS chapter was created by USNC and that has now expanded and now 11 chapters across URSI. These chapters are supported by a €500 grant per year. The URSI Radio Science Letters journal is still slowly growing, the problem is that it does not yet have enough submissions to be indexed, which presents a challenge for young researchers and faculty that need to be published in an indexed journal. George urged USNC members to attend the upcoming URSI conferences. Finally, George noted that next year USNC will need to nominate and vote on an URSI Vice President.

NASEM Representative

Anna Ferreras presented an update from NASEM. Anna provided an overview and update of the Board on International and Scientific Organizations (BISO) as a refresher for long-time members and an introduction for new members. The purpose of BISO is to advocate scientific diplomacy. Ana reported that Mike Newkirk is the USNC representative to the BISO advisory board; any concerns to be elevated to BISO should go through Mike. BISO also provides a resource to advocate for foreign visitors to the US that need a visa. Ana reported that Diamond de Guzman (ddeguzman@nas.edu) is the new administrative assistant for BISO and will be processing all of the financial and membership requests.

Ana reported that core NASEM funding is provided by a consolidated 5-year NSF grant shared among all the USNCs, which is on the order of \$6 Million. However, the funding is insufficient to completely cover the cost of hosting all the various USNCs. Ana has requested every USNC to develop a value proposition with a deadline of February of 2025. These propositions will be used to approach other government agencies or philanthropists for funding to cover the gap.

Finally, Ana noted that NASEM is interested in fostering more collaborations between USNCs as well as engaging high school students. Ana requested any members with grand ideas to please submit them to her.

2026 Planning

Chair Simpson reminded all the commission chairs of the special session deadline, review process (and requested Commission chairs to recruit volunteers now), and submit plenary session ideas. She commented that starting in 2026, CU Boulder will be starting classes earlier, impacting USNC's ability to hold the NRSM using campus facilities.

Secretary's Report

Secretary Anderson presented updated Commission membership lists that he had so diligently reformatted over the past year to generate some consistency in how USNC tracks members. He requested that Commission chairs please fill in any missing information and identify members that have bad email addresses or outdated contact information.

Secretary Anderson then presented this year's Commission Feedback form for the Commission business meetings. He requested the forms be submitted no later than 8:00pm on Thursday so that he could have the information ready for the woefully early morning Executive Meeting on Friday.

Old Business... none noted

New Business... none noted

Bryan Butler motioned to adjourn; Eric Mokole seconded. The motion was passed with unanimous consent. The meeting was adjourned at 9:08pm.