



Award & Recognition Program Description

Space Operations Organization
Award Group (AG) Subcommittee



Authors:

Richard G. Marlow
Kevin Marston



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1. BACKGROUND

When an individual or team goes to extraordinary measures to save a spacecraft, complete the objectives of a mission when all seems lost, or create a new method of operations that could revolutionize the way space operations are conducted, there should be some form of recognition other than the self-satisfaction of a job well done. The SpaceOps Organization, through its system of awards, is able to recognize individuals (or teams) in the aerospace field whose efforts deserve a reward and international recognition.

After due consideration, the Executive Committee (ExCom) and Committee-at-Large (CAL) approved the establishment of the “Awards and Recognition program of the International SpaceOps Organization” at the Rome meeting in December 2005. It was agreed that such a program would provide good publicity and increase the stature of the SpaceOps Organization to bestow awards every two years during the SpaceOps Conference. It would be very prestigious and rewarding to the recipients to receive the recognition of their peers in front of the international community for their extraordinary efforts in space operations.

The awards recognize and honor the outstanding efforts in overcoming space operations problems and assuring success, those teams or individuals whose exceptional contributions were critical to an anomaly recovery, crew rescue, or saving a space mission, and those individuals who provide distinguished service and support to the SpaceOps organization and conferences.

The ExCom/CAL meeting in Rome approved the creation of a system of awards, with three initial awards: (1) “International SpaceOps Outstanding Achievement Award,” (2) “International SpaceOps Distinguished Service Medal,” and (3) “Symposium Best Paper” award. The ExCom also established an Awards Group (AG) subcommittee with the charter to establish the award criteria and procedures, oversee the initial design and biennial production of the awards, and carry out the selection process. Founding members and current members of the Awards Group are shown in Appendix A.

Nominations for all awards are made through an on-line application on the SpaceOps Organization’s web site (www.spaceops.org). The qualified nominations are forwarded to the SpaceOps Operation’s Award Group (AG), which is responsible for selecting the winning nominations.

The first awards were presented at SpaceOps 2006 in Rome, and then again at SpaceOps 2008 in Heidelberg, Germany. Having been through two cycles of the awards process, it was found by the Awards Group that some improvements in the process could be made. It was also determined that the Award for Outstanding Achievement (AOA) was really a team and not an individual award, and that the Distinguished Service Medal (DSM) covered two completely separate categories, service to the SpaceOps organization and service to the field of space operations. As a result of these findings, a revised award selection process, modifications to the criteria for the AOA and DSM, and a new award, the Exceptional Achievement Medal (EAM), were approved by the ExCom at their meeting in Toulouse, France, on 29th October, 2008. Modifications in the system were made at the ExCom/CAL meeting in London in Oct. 2010 and were incorporated into Version 12. A change in the AG makeup was made at that time, i.e., to have a representative from each ExCom agency on the AG.

For the 2014 awards cycle, it became obvious that there was a similar need to split the EAM into two separate awards, one to recognize an exceptional achievement, and the other to recognize a lifetime of achievement in space operations, that might not be characterized by a single outstanding exceptional event, but rather a continual series of events that have benefited the field of space operations. As a result, on the May 9 2014 meeting, the ExCom approved the establishment of the Lifetime Achievement Medal (LAM) that is meant to be of equal importance to the EAM. Version 15 of this document records this new award for the first time.

For the 2020 awards cycle, the AG determined that there was significant overlap in the processes and rules for nominating and selecting the winners of each award, and so streamlined the processes and rules in version 18 of this document.

The Charter of the Awards Group (Appendix B) was developed and approved by the ExCom in 2015.



For the 2025 awards cycle, the AG recommended to the ExCom that a new award be created to recognize individuals early in their careers who have made significant contributions in the field of Space Operations.

2. DESCRIPTION OF AWARDS

The SpaceOps Organization has six major awards to recognize exceptional achievements or service that are unrelated to any specific conference. They are the International SpaceOps Award for Outstanding Achievement (AOA), the International SpaceOps Distinguished Service Medal (DSM), the International SpaceOps Exceptional Achievement Medal (EAM), the International SpaceOps Early Career Achievement Award (ECA), the International SpaceOps Lifetime Achievement Medal (LAM), and the SpaceOps Appreciation Award (SAA). These six awards are presented biennially at the SpaceOps Conference. Each of these awards covers a unique area of accomplishment as shown in Fig. 1.

In addition to those major awards, a “Best Paper of Conference Certificate” is assigned after each SpaceOps Conference to the most outstanding papers of the conference, including the “Best Student Paper”, as determined by the Technical Program Committee

A detailed description of each including the award criteria and rules follows.

Award	AOA	DSM	EAM	ECA	LAM	SAA
To	Team	Individual	Individual	Individual	Individual	Individual
For	Achievement	Service	Achievement	Achievement(s)	Achievements	Service
Span	Single Mission	SpaceOps Conferences	Single Mission	Mission(s)	Lifetime	SpaceOps Conferences

Figure 1. The SpaceOps System of Awards



2.1. Rules and Regulations for AOA, DSM, EAM, ECA and LAM

- 2.1.1. All awards are biennially awarded and presented at the biennial SpaceOps conference, at a meeting or event involving the entire conference such as a banquet or plenary session.
- 2.1.2. Anyone may submit nominations for the AOA, EAM, ECA, or LAM. Nominations for the DSM may only be accepted from: (1) sitting members of the CAL; (2) former or sitting members of the ExCom; and (3) former recipients of the DSM.
- 2.1.3. Each nominator can nominate only one (1) team for the AOA and only one (1) person for the EAM, ECA, LAM or DSM.
- 2.1.4. Required number of nominees:
 - (a) Only one qualified nominee is required for an award to be presented for the DSM, EAM, ECA, and LAM.
 - (b) The AOA requires three (3) qualified nominees. A waiver for this rule may be granted upon a majority vote by the Awards Group subcommittee (minimum of three voting members).
- 2.1.5. Each endorser can provide endorsement for only one (1) team for the AOA and only one (1) person each for the EAM, ECA, LAM, and/or DSM.
- 2.1.6. Qualified nominations shall be accepted in the year the nominations open. Previously submitted nominations can be updated and resubmitted by the nominator(s) as long as all current requirements for the nomination are still met. No automatic carryovers will be adjudicated.
- 2.1.7. Awarding of the EAM, ECA, LAM and DSM is mutually exclusive for the same recipient in the same award cycle. If nominations for more than one award are received, the AG shall decide which award is the most suitable for the recipient. However, the same recipient may receive more than one of these awards as long as they are presented in different award cycles.
- 2.1.8. See the section for a specific award for rules and regulations unique to that award.



2.2. Awards Process (AOA, DSM, EAM, ECA, LAM)

2.2.1. A "Call for Nominations" is issued about one year before the conference.

- (a) The call for nominations for the AOA, EAM, ECA, and LAM shall appear on the SpaceOps websites (both the home and the conference), in the Journal of Space Operations and Communicator (if possible), in the Call for Papers of the next conference, and by email to all participants in the previous conference.
- (b) The call for nominations the DSM shall be an email to sitting members of the CAL, former or sitting members of the ExCom, and former recipients of the DSM.

2.2.2. Nominations for awards are due to SpaceOps Secretariat by no less than 30 days before the last scheduled ExCom/CAL meeting before the next SpaceOps Conference. The precise date will be indicated in the "Call for Nominations".

2.2.3. The nomination procedure shall be as follows:

- (a) Complete a nomination package of documents as follows:
 - (1) Download the team award nomination form (AOA only) or individual award nomination from the Awards page on the SpaceOps website.
 - (2) Fill out the appropriate form, including selecting the type of award for an individual, all required information about the nominee (team or individual), a citation that describes the specific documented contributions of the nominee (team or individual), names of endorsees, and required information about the nominator.
 - (3) Provide a one-to-two-page summary of the accomplishments and/or activities that serve as the basis for the nomination.
 - (4) Include at least three letters of endorsement (except for the ECA, requiring only two letters of endorsement). Only one endorser may be from the same local organization (up to center level) as the nominee.
- (b) Each nomination package (email with nomination documentation and endorsement letters as attachments) must be submitted to the SpaceOps Secretariat as indicated in the nomination forms.

2.2.4. Once the nominations are submitted to the SpaceOps Secretariat, the Secretariat will place all nomination packages on the Awards website and notify the AG Chair.

2.2.5. Once the nominations are received after the nominations close, the AG Chair shall screen the nominations and submit a list of qualified nominations to the membership of the AG for selection.

2.2.6. The selection process shall be as follows:

- (a) The AG shall use teleconferences and e-mails to discuss the nominations.
- (b) Before the final meeting (during the last ExCom/CAL meeting before biennial conference), the AG members shall use a scoring sheet (see Appendix C) to grade the nominations for AOA, EAM, ECA and LAM based on meeting the established criteria for the corresponding award.



- (c) At the final meeting the AG shall review and discuss the results of the scoring and determine whether the available nominations justify allocating an award (or two in the case of AOA, ECA and DSM).
- (d) Each AG member organization shall have one vote for selecting the winner of each allocated award (up to two in the case of AOA, ECA and DSM). If there is only one nomination for an award, then the vote shall be a simple “Yes” or “No” vote.
- (e) AG members who are part of or directly associated with a nominated team, or provided a nomination or endorsement of a team or individual, must recuse themselves from voting for associated / nominated / endorsed nominee, but may participate in the discussion.
- (f) The winning nomination must have the approval of at least 75% of the AG (quorum required).
- (g) In the event of a tie for a winner in any award category (or sub-category as with AOA), there shall be a subsequent runoff vote between the two tied nominations, except for DSM, in which category there may be two winners. In the event of failure for any nomination to receive at least 75% approval of the AG, there shall be a subsequent "Yes" or “No" vote on the nomination with the most votes. If the nomination does not receive approval of at least 75% of the AG, the nomination will not go forward.

2.2.7. The winning nominations and nomination packages selected by the AG shall be sent to the ExCom by the AG Chair via e-mail.

2.2.8. The ExCom shall verify or reject the selection(s).

- (a) AG members who are also members of the ExCom may also submit their verification vote.
- (b) The winning nomination(s) must have the approval of at least 75% of the ExCom (quorum required). The results of the vote will be transmitted immediately to the AG Chair and the SpaceOps Secretariat.

2.2.9. Immediately after selection and not less than sixty (60) days before the start of the conference, the name of each individual to receive awards shall be announced to the AG and CAL and forwarded immediately to the SpaceOps Secretariat for preparation of the awards.

2.2.10. The winning individual(s) shall be notified as soon as possible after selection so that they can make plans to receive the award at the conference.



2.3. International SpaceOps Award for Outstanding Achievement (AOA)

2.3.1. Award Criteria

- (a) This award is presented for outstanding efforts in overcoming space operations and/or support challenges, and recognizes those teams whose exceptional contributions were critical to the success of one or more space missions.
- (b) The major areas of consideration, or categories, for the award are:
 - (1) Critical to an anomaly recovery, crew rescue, or saving of a space mission.
 - (2) Development of a new paradigm that has significant effect on the performance of a space mission or to the space operations field.
 - (3) Instrumental in significantly reducing the cost of space operations.

2.3.2. Award Description and Rewards

- (a) A trophy shall be awarded for the winning team(s). The awardee organization shall receive the trophy. The trophy shall be engraved with the name, organization and/or names of team members, and date of the award. The trophy shall have a presentation box. If the award is won by a joint team, a second trophy may be purchased from SpaceOps Secretariat.
- (b) A certificate (signed by the ExCom Chair and Awards Group Chair) shall be presented to each individual on which is printed a citation of up to 25 words. The certificate shall be in a presentation folder.
- (c) The team leader shall be offered a complimentary full registration to the conference at which the award will be presented. If the team leader is unable to attend the conference, then the team may send another team member in their place with the complimentary registration, as long as that person will be able to receive the award at the awards ceremony.
- (d) The awardee team shall be invited to write a paper about the event for which the award was made to be reviewed and published in the Journal of Space Operations and Communicator.

2.3.3. Specific Rules and Regulations

- (a) Up to two (2) awards may be made biennially. When two awards are assigned, one shall be for category (1) and the other one shall be either for category (2) or (3). See paragraph 2.3.1(b).
- (b) A maximum of 10 members may be on a nominated team, and a team leader must be designated.
- (c) Any awards similar to the AOA that have been awarded to nominees (e.g., the AIAA Space Operations and Support Award) may be considered in the selection process.
- (d) The event for which the award is bestowed shall not have occurred more than ten (10) years prior to the conference at which the award will be presented. A waiver for this rule may be granted upon a majority vote by the Awards Group subcommittee (minimum of three voting members).



2.4. International SpaceOps Distinguished Service Medal (DSM)

2.4.1. Award Criteria

- (a) This award is presented to give unique recognition to an individual who has distinguished himself or herself with service to the SpaceOps organization. The recipient shall be an individual who has shown exceptional dedication to the interests of the organization by making significant contributions over an extended period of time.

2.4.2. Award Description and Rewards

- (a) Medal with neck ribbon of blue (ocean), green (land), sky blue (atmosphere), black (space) and yellow (sun/stars) stripes; and a lapel pin of the medal. The medal shall be engraved on the reverse with the purpose of the award (“For Distinguished Service”), the name of the recipient, and the year the award was presented. The medal and lapel pin shall have a leather-like presentation case.
- (b) An 11” x 14” certificate (signed by the ExCom Chair and Awards Group Chair) shall be presented to each recipient. The certificate, on which is printed a citation of up to 25 words, shall be contained in a leather-like presentation folder.
- (c) The recipient shall be offered a complimentary full registration to the conference at which the award will be presented. If the recipient is unable to attend the conference, then this complimentary registration is not transferable.
- (d) A description of the award presentation and accomplishments of the awardee resulting in the award of the DSM shall be published in the *Journal of Space Operations and Communicator*.

2.4.3. Specific Rules and Regulations

- (a) A maximum of two (2) awards may be issued biennially. No award needs to be made at any given conference. The maximum number for a particular biennial cycle may be increased upon issuance of a waiver by the ExCom upon request by the AG.
- (b) No current member of the Awards Group Subcommittee shall be eligible to receive the DSM.
- (c) Length of service to space operations shall be an important factor in the selection of candidates. The length of service includes all space operations activities and not just to the SpaceOps Organization, although the time of service to the SpaceOps Organization shall weigh greater than the time of other service (i.e., of more value).



2.5. International SpaceOps Exceptional Achievement Medal (EAM)

2.5.1. Award Criteria

- (a) This award is presented to give unique recognition to an individual who has distinguished himself or herself in the field of space operations and support. The recipient shall be an individual whose exceptional contributions were critical to the success of a space mission or who has achieved a significant contribution to the field of space operations.

2.5.2. Award Description and Rewards

- (a) Medal with neck ribbon of purple and gold stripes (colors of royalty) separated by a black stripe (represents space); and a lapel pin of the medal. The medal shall be engraved on the reverse with the name of the recipient, and date of the award. The medal and lapel pin shall have a leather-like presentation case.
- (b) An 11” x 14” certificate (signed by the ExCom Chair and Awards Group Chair) shall be presented to the recipient. The certificate, on which is printed a citation of up to 25 words, shall be contained in a leather-like presentation folder.
- (c) The recipient shall be offered a complimentary full registration to the conference at which the award will be presented. If the recipient is unable to attend the conference, then this complimentary registration is not transferable.
- (d) A description of the award presentation and accomplishments of the awardee resulting in the award of the EAM shall be published in the *Journal of Space Operations and Communicator*.

2.5.3. Specific Rules and Regulations

- (a) Only one (1) award may be made biennially. No award needs to be made at any given conference.
- (b) No sitting member of the SpaceOps Executive Committee, Committee-at-Large, or Awards Group shall be eligible to receive the EAM.
- (c) Length of service to space operations shall not be a factor in the selection of candidates. This award is for a single achievement.



2.6. International SpaceOps Early Career Achievement Award (ECA)

2.6.1. Award Criteria

- (a) This award is to recognize the contribution of individuals who have made significant contributions in the field of Space Operations early in their career. Early career is defined as less than 10 years' experience in the field of Space Operations. The criteria are similar to that of the EAM, but for an early career professional: the recipient shall be an individual whose contributions were critical to the success of one or more space mission(s) or who has achieved a significant contribution to the field of space operations.

2.6.2. Award Description and Rewards

- (a) A plaque shall be awarded to each awardee.
- (b) An 11" x 14" certificate (signed by the ExCom Chair and Awards Group Chair) shall be presented to the recipient. The certificate, on which is printed a citation of up to 25 words, shall be contained in a leather-like presentation folder.
- (c) The recipient shall be offered a complimentary full registration to the conference at which the award will be presented. If the recipient is unable to attend the conference, then this complimentary registration is not transferable.
- (d) A description of the award presentation and accomplishments of the awardee resulting in the award of the ECA shall be published in the *Journal of Space Operations and Communicator*.

2.6.3. Specific Rules and Regulations

- (a) A maximum of two (2) awards may be made biennially. No award needs to be made at any given conference. The maximum number for a particular biennial cycle may be increased upon issuance of a waiver by the ExCom upon request by the AG.
- (b) No sitting member of the SpaceOps Executive Committee, Committee-at-Large, or Awards Group shall be eligible to receive the EAM.
- (c) As noted above, length of service to space operations is a defining factor for this award, limited to a maximum of ten (10) years.



2.7. International SpaceOps Lifetime Achievement Medal (LAM)

2.7.1. Award Criteria

- (a) This award is presented to give unique recognition to an individual who has distinguished himself or herself in the field of space operations and support over an extended period of time. The recipient shall be an individual whose illustrious career and exceptional contributions were critical to the success of several space missions or who has made many significant contributions to the field of space operations.

2.7.2. Award Description and Rewards

- (a) Medal with neck ribbon of royal gold and purple stripes plus a black stripe (represents space), with a lapel pin of the medal. The medal shall be engraved on the reverse with the name of the recipient, and date of the award. The medal and lapel pin shall have a leather-like presentation case.
- (b) An 11” x 14” certificate in linen (signed by the ExCom Chair and Awards Group Chair) shall be presented to the recipient. The certificate, on which is printed a citation of up to 25 words, shall be contained in a leather-like presentation folder with a SpaceOps logo on the cover.
- (c) The recipient shall be offered a complimentary full registration to the conference at which the award will be presented. If the recipient is unable to attend the conference, then this complimentary registration is not transferable.
- (d) A description of the award presentation and accomplishments of the awardee resulting in the award of the LAM shall be published in the *Journal of Space Operations and Communicator*.

2.7.3. Specific Rules and Regulations

- (a) Only one (1) award may be made biennially. No award needs to be made at any given conference.
- (b) No sitting member of the SpaceOps Executive Committee, Committee-at-Large, or Awards Group shall be eligible to receive the LAM.
- (c) Length of service to space operations shall be a major factor in the selection of candidates. The minimum length of service for qualifying for the LAM is typically 20 years or more.
- (d) Significance of achievements accomplished during the period of service is of prime importance. More than one recognized achievement must be identified.



2.8. SpaceOps Appreciation Award (SAA)

2.8.1. Award Criteria

- (a) This award is to recognize the contribution of members of the SpaceOps Organization after supporting at least two SpaceOps Conferences and upon their departure from the organization, or to individuals who have provided great service to the organization.

2.8.2. Award Description and Rewards

- (a) A plaque (signed by the ExCom Chair and Awards Group Chair) shall be presented to the recipient.
- (b) The recipient shall be recognized in the SpaceOps Newsletter and on the SpaceOps website. This recognition shall include the name and organization of the recipient, description of the service provided to the SpaceOps organization (e.g., ExCom or CAL, participation in subcommittees, editorial boards, Technical Activity Committees, etc.), and years of service. The recipients for the last cycle shall also be announced during the Awards Ceremony of the next conference.

2.8.3. Specific Rules and Regulations

- (a) There is no restriction to the number of Appreciation Awards made each year.
- (b) There are two (2) types of SAAs with separate qualifications.
 - (1) SSA Type 1: The nominee shall have actively participated in the ExCom or CAL for a period of at least four years (contiguity not required) and contributed to at least two SpaceOps conferences.
 - (2) SSA Type 2: The nominee shall have performed great service to the SpaceOps Organization. There are no pre-defined criteria for SAA Type II; it is instead up to the Awards Group and Executive Committee to determine if the nominee is worthy of the award. Examples include having served Technical Program Chair, or as a book editor.
- (c) The SAA Type I is not retroactive, but is applicable only from the date of its implementation (November 1, 2009). The SAA Type II can be granted for services performed since January 1, 2004.
- (d) The relationship between the SAA and DSM shall be as follows:
 - (1) If a person has received the SAA Type I, then they are still eligible to receive the DSM and vice versa.
 - (2) If a person has already received the DSM, then they are not eligible for the SAA Type II for the same or similar service.

2.8.4. Specific Process

- (a) SAA Type I process shall be as follows:
 - (1) The SpaceOps Secretariat shall inform the Chair of the Awards Group of the upcoming departure/retirement of a current member of the SpaceOps ExCom or CAL.
 - (2) The SpaceOps Secretariat and the Chair of the Awards Group shall together prepare a summary of the member's service and present it along with a recommendation to the Executive Committee for consideration.
 - (3) The Executive Committee shall determine by majority vote if the award shall be approved, informing the Chair of the Awards Group and the Secretariat of the result.
- (b) SAA Type II process shall be as follows:



- (1) Any member of the SpaceOps ExCom, CAL, or Awards Group may nominate a person for this award for special service provided to SpaceOps Organization. The nomination shall be provided to the Chair of the Awards Group (through Secretariat if desired) along with written justification for the award.
 - (2) The Chair of the Awards Group shall provide the information received to the members of the Awards Group.
 - (3) Using discussion (online or in person) and non-secret vote (if necessary), the AG shall come to a consensus concerning the nomination.
 - (4) If the AG approves the nomination, this result along with the supporting documentation shall be sent to the Executive Committee for final approval. The Executive Committee shall determine how this approval or disapproval shall be made.
- (c) The results of the Executive Committee decision shall be sent to the Chair of the Awards Group.
 - (d) The name(s) of the recipient(s) shall be forwarded to the SpaceOps Secretariat by the Chair of the Awards Group for preparation of the plaques.
 - (e) The award plaque shall be presented to the recipient at the time and place as chosen by the Executive Committee.



2.9. Best Papers of Conference

2.9.1. Award Criteria

- (a) This award is to recognize the most outstanding papers of the conference, at minimum the best three overall, plus the best student paper. The papers should be exceptional in technical content, have an important impact on the field of space operations, or report on important historical events that are of importance to the community. The quality of the written presentations may be considered.

2.9.2. Award Description

- (a) A certificate (signed by the ExCom Chair and Awards Group Chair) on which is printed a citation of up to 25 words shall be presented to each author of the winning papers. The certificates shall be contained in presentation folders.
- (b) The winning papers shall be included (with required modifications) in the book of best papers and published in the *Journal of Space Operations and Communicator*.

2.9.3. Specific Process, Rules and Regulations

- (a) The number of awards made for each conference shall be determined by the Technical Program Committee (TPC).
- (b) The author(s) of the papers shall receive their certificates at the conference during a designated awards ceremony (closing ceremony preferred).
- (c) The process for the Best Paper Award selection shall be defined by the conference Technical Program Chair and the Chair of the Awards Group.
- (d) All papers shall be considered equally, regardless of whether they are designated for oral presentation or poster presentation (as long as the author requested the paper to be in the poster presentation or was put there by the TPC because it was a better forum for presentation rather than orally and not because of inferior quality).
- (e) Plenary papers shall not be considered.
- (f) No individual shall be eligible for the award for more than one paper in which the person is the primary author.
- (g) The paper must be presented at the conference for it to be eligible to receive the award. (Presence of a presenter and presentation materials is considered to be sufficient as proof of presentation).
- (h) The quality of the presentations may be considered in selecting the winning papers.
- (i) The names of the recipient(s) along with the title of their papers shall be forwarded to the SpaceOps Secretariat for preparation of the certificates. If this does not occur in time for the individualized certificates to be prepared for presentation at the conference, then generic temporary certificates shall be presented, to be replaced by the final certificates after the conference.



3. AWARDS ADMINISTRATION

3.1. Program Administration

The SpaceOps Secretariat shall administer the proposed SpaceOps Awards. The Administrator’s role shall be:

- 3.1.1. Collect nominations.
- 3.1.2. Distribute all complete nomination packages to AG Chair as described in section 2.2.
- 3.1.3. Produce appropriate award (trophy, medal, certificate, etc.)
- 3.1.4. Coordinate logistics for award ceremony.
- 3.1.5. Formally notify recipient and provide information on the award presentation.
- 3.1.6. Announce recipients in appropriate web sites, etc.

3.2. SpaceOps Awards Schedule

The awards schedule is tied to the SpaceOps Conference, which is scheduled the Spring of odd-numbered years as of 2021 (previously even-numbered years), and the Fall SpaceOps Committee Meeting, which is scheduled the Fall just prior to the Conference.

Nomination Submission Deadline	30 days before Fall SpaceOps Committee Meeting
Distribute Nominations to AG	Nomination Submission Deadline + 1 week
Selection by AG	Fall SpaceOps Committee Meeting
Validation voting by ExCom	Fall SpaceOps Committee Meeting

3.3. Scope of Awards Group

See the Charter of the Awards Group in Appendix B.

3.4. Administration of Awards Group

See the Charter of the Awards Group in Appendix B. Note the following change to the Charter:

- 3.4.1. Co-chairs
 - (a) The co-chairs shall consist of a Chair (equivalent to senior co-chair) and a Co-Chair (equivalent to junior co-chair).

3.5. Changes to the Awards

- 3.5.1. Any of the rules and appearance of the existing awards can be changed, or existing awards retired, or new awards implanted upon the action of the Awards Group with the consent of the ExCom.
- 3.5.2. Examples of other awards that have been suggested for implementation by SpaceOps but not agreed upon include:
 - (a) Small Satellite Operations Award - this would recognize distinguished achievement in the operations of small satellites, which often do not get the publicity associated with their big brothers. This award could be either separate or a category of the Award for Outstanding Achievement.
 - (b) The different categories listed in the criteria of the Award for Outstanding Achievement could each be broken out into individual awards.
 - (c) Best Poster of Conference – to give incentive and recognition for those people who make poster presentations.



3.5.3. Process for Adopting New Awards or Retiring Existing Awards

- (a) The Awards Group may nominate new awards, but they must be approved by a majority vote of the ExCom. The same is true for retiring existing awards.
- (b) The approval of new awards must consider the financial impact of producing and administering the awards, which data should be prepared by the AG with cooperation of the SpaceOps Secretariat and submitted to the ExCom and CAL at the time of nomination for acceptance.
- (c) The nomination of the award shall also include a written justification for the need or value of such an award. Similarly, the retirement of an award should also include a written justification for retiring the award.



APPENDIX A – AWARDS GROUP MEMBERS

Founding members of the Awards Group

Trevor Sorensen, University of Kansas (Chair)

Megan Scheidt, AIAA (Secretariat)

Andy Downen, NASA JPL

Junjiro Nakahara & Narita Kaneaki, JAXA

Kathy Kelly, NOAA

Paolo Maldari, ESOC/ESA

Surendra Parashar, CSA

Jean Marc Soula & Geneviève Campan, CNES

Current members of the Awards Group

Listed in the SpaceOps Roster and Working Group List



APPENDIX B – CHARTER OF THE AWARDS GROUP

1 SCOPE

The Awards Group scope is:

To oversee and manage the awards of the SpaceOps Organization. The Group will be responsible for the oversight of the awards nomination process, the promotion of the awards and their processes, and the coordination the review and selection of the recipients. Oversee the award criteria and procedures; oversee design and biennial production of awards; execute the selection process; identify and define other potential awards and prepare proposals to be submitted to the Executive Committee.

2 MEMBERSHIP COMPOSITION/REPRESENTATION

The working group will have two co-chairs. Membership of the working group is open to anyone who is nominated by a CAL or ExCom member organization or company. Working Group members can serve in no more than 1 additional working group. However, no one will co-chair more than one working group at one time.

3 STRUCTURE

The AG Chair are responsible for assuring that the actions assigned to the working group are completed on schedule and are reviewed by the members prior to presentation to the CAL / ExCom meeting. The minutes or results of working group meetings should be archived with the SpaceOps minutes on the SpaceOps website.

4 CHAIR SELECTION PROCESS

The working group shall self-select the Chair and a co-Chair based upon a plurality vote among the working group members. Each shall be selected by separate vote call. The Chair and the co-Chair shall come from different organizations. The outcome of this selection shall be presented to the CAL for endorsement.

5 CHAIR TENURE/SUCCESSION

Each of the chairs will have a term of four years, with the start of one chair's term staggered by two years relative to the other in order to ensure continuity of leadership.

6 CONSENSUS PROCESS

The working group will work on consensus basis with respect to the resulting recommendations and decisions. If this cannot be achieved it will be reported to the CAL (or ExCom if necessary) for resolution.



APPENDIX C (a) – SCORING FOR AOA (Teams Only)

Step 1. Determine which category the nominated team best fits

- i. Critical to an anomaly recovery, crew rescue, or saving of a space mission.
- ii. Development of a new paradigm that has significant effect on the performance of a space mission or to the space operations field.
- iii. Instrumental in significantly reducing the cost of space operations.

Step 2. Grade the team using the table below for the selected category ONLY.

Category	Metric	Points
Mission Salvation (100 points)		
Technical Difficulty	Required the most complex and most risky operational approach to successfully complete/save mission	50
	Required little complexity and routine operations to successfully complete/save mission	0
Risk Management	Management of high risk during operations resulted in total recovery of mission or mission success	30
	Management of low risk during operations resulted in partial recovery of mission or mission success	0
Significance of Accomplishment	Actions resulted in the saving of human life or salvation of mission of major significance (science, commercial, technical)	20
	Actions did not increase the expected performance of the mission or mission was not important	0
New Paradigm (100 points)		
	Developed operational method(s) to significantly increase the performance of the mission that resulted in much greater return from the mission goals than expected (e.g., more science data or longer duration of mission) or that has resulted in significant improvements in the field of mission operations	100
	Little or no operational procedures were developed, or they were of no significance to the field of space mission operations.	0
Reducing Cost (100 points)		
	Developed methods/ techniques or equipment or software that resulted in major cost reductions in space operations	100
	Produced little or no reductions in space operations	0

Step 3. The maximum score is 100 points. Once you have completed the scoring of each team, send the results to the SpaceOps Secretariat, including your score sheet and the category chosen.

Step 4. To normalize the scores, all of the scores received from each AG member will be ranked with Rank=1 for the highest scoring team, Rank=2 for the second highest scoring team, etc. If two teams have the same score, then they will each get the average between the next two ranks (e.g. two teams have the second highest score, so they will each receive a score of 2.5 and there will be no third ranking). The ranks of each nominated team from each of the AG members will be totaled and the winning team is the one with the lowest score.

Step 5. The results of the scoring will be discussed within the AG Group at the final in-person meeting and the winner selected based on the scoring results and any extenuating circumstances. In case of 2 or more



nominations with same score, simple voting should be applied and if this is not resolving the issue the AG will agree by discussion.



APPENDIX C (b) – SCORING FOR EAM and ECA (Individuals Only)

Step 1. Determine which category the nominated individual best fits

- i. Critical to an anomaly recovery, crew rescue, or saving of a space mission.
- ii. Development of a new paradigm that has significant effect on the performance of a space mission or to the space operations field.
- iii. Instrumental in significantly reducing the cost of space operations.

Step 2. Grade the nominee using the table below for the selected category ONLY.

Category	Metric	Points
Mission Salvation (100 points)		
Technical Difficulty	Required the most complex and most risky operational approach to successfully complete/save mission	50
	Required little complexity and routine operations to successfully complete/save mission	0
Risk Management	Management of high risk during operations resulted in total recovery of mission or mission success	30
	Management of low risk during operations resulted in partial recovery of mission or mission success	0
Significance of Accomplishment	Actions resulted in the saving of human life or salvation of mission of major significance (science, commercial, technical)	20
	Actions did not increase the expected performance of the mission or mission was not important	0
New Paradigm (100 points)		
	Developed operational method(s) to significantly increase the performance of the mission that resulted in much greater return from the mission goals than expected (e.g., more science data or longer duration of mission) or that has resulted in significant improvements in the field of mission operations	100
	Little or no operational procedures were developed, or they were of no significance to the field of space mission operations.	0
Reducing Cost (100 points)		
	Developed methods/ techniques or equipment or software that resulted in major cost reductions in space operations	100
	Produced little or no reductions in space operations	0

Step 3. The maximum score is 100 points. Once you have completed the scoring of each nominee, send the results and scoresheet to the SpaceOps Secretariat.

Step 4. To normalize the scores, all of the scores received from each AG member will be ranked with Rank=1 for the highest scoring nominee, Rank=2 for the second highest scoring nominee, etc. If two nominees have the same score, then they will each get the average between the next two ranks (e.g. two nominees have the second highest score, so they will each receive a score of 2.5 and there will be no third ranking). The ranks of each nominee from each of the AG members will be totaled and the winning team is the one with the lowest score.



Step 5. The results of the scoring will be discussed within the AG Group at the final in-person meeting and the winner selected based on the scoring results and any extenuating circumstances. In case of 2 or more nominations with same score, simple voting should be applied and if this is not resolving the issue the AG will agree by discussion



APPENDIX C (c) – SCORING FOR LAM (Individuals Only)

Step 1. Grade the nominated individual using the table below.

Category	Metric	Points
Mission Salvation		
	Personally developed techniques or made critical decisions that directly resulted in the salvation of high-value mission(s)	10
	Did not make significant contribution to the salvation of a mission	0
Leadership		
	Led operations centers or teams that resulted in significant advances in the field of space exploitation	10
	Failure to execute routine operations would result in minor mission upset	0
New Paradigm		
	Developed a new paradigm that resulted in significant advance in state of the art in operations	10
	Utilized a well understood or routine operation that does not increase state of the art in operations	0
Lifetime		
	A long and very distinguished career in the field of space operations	40
	New to the field of space operations	0
Stature (Peer Recognition)		
	Is widely regarded as a world leader in the field of space operations	30
	Is virtually unknown in the field of space operations	0

Step 2. The maximum score is 100 points. Once you have completed the scoring of each nominee, send the results and scoresheet to the SpaceOps Secretariat.

Step 3. To normalize the scores, all of the scores received from each AG member will be ranked with Rank=1 for the highest scoring nominee, Rank=2 for the second highest scoring nominee, etc. If two nominees have the same score, then they will each get the average between the next two ranks (e.g. two nominees have the second highest score, so they will each receive a score of 2.5 and there will be no third ranking). The ranks of each nominee from each of the AG members will be totaled and the winning team is the one with the lowest score.



Step 4. The results of the scoring will be discussed within the AG Group at the final in-person meeting and the winner selected based on the scoring results and any extenuating circumstances.