

1.0 Introduction. It is the policy of The Institute of Navigation (ION) to make awards to worthy candidates whose outstanding contributions to the art and science of navigation are recognized by their peers in the field. In general, the candidates are nominated by one or more sponsors familiar with the candidates' backgrounds. The candidates and their sponsors for each award need not be members of the Institute. An Awards Selection Committee determines the recipients of : (1) Thurlow Award; (2) Hays Award; (3) Weems Award; (4) Superior Achievement Award; and (5) Early Achievement Award. **The regulations for these awards are an attachment to this policy.** The Burka Award is given to the author(s) of a paper published in Navigation, the journal of the ION. The recipient of this award is selected by the editor of that publication. This policy addresses the ION awards governed by the Awards Selection Committee.

It is important that adequate and timely information which describes the awards criteria be circulated to the members of the ION and other professional organizations, including the military, who may have knowledge of qualified individuals for the awards. The awards process is initiated by the Technical Director of the ION with an announcement to the navigation community soliciting nominations for the awards. The announcement shall include an ION Awards Program brochure which describes the awards and the names of previous winners. It shall also provide copies of the standard ION Awards Nomination Form. **The Awards Nomination Form is an attachment to this policy.** The cover letter should stress that only nominations which strictly adhere to the format of the Awards Nomination Form will be accepted by the Awards Selection Committee. The nomination for each award consists of a short description of the candidate's contribution which best fits the criteria required for receiving the ION award and which conforms to the ION nomination standards set forth in the annual ION Awards Program announcement. An Awards Selection Committee selects the winning candidate for each award. These awards are presented to the selected winners as part of a ceremony, such as an Awards Dinner, an Awards Luncheon or an Awards Banquet, which is held during the Annual Meeting of the ION. The intent of the ceremony is to attract the participation of as many ION members as possible and to provide a professional atmosphere by the attending navigation community which lends the appropriate level of recognition and dignity to the awards recipients for their unique achievements. The Awards Plaques presented to the selected winners shall be of the highest quality commensurate with the level of the award. The names of all past award recipients and dates shall be maintained in the records of the ION National Office and made known to the members in an appropriate manner.

2.0 Awards Selection Committee. The President shall appoint an Awards Selection Committee Chair, hereafter called the Awards Chair, as one of the first acts upon commencing a new term of office at the end of the ION Annual Meeting. The Council must approve the selection of the Awards Chair. The Awards Chair shall choose an appropriate committee, typically eight active members of the ION who are knowledgeable of the navigation community from whom the candidates will be nominated. The President, with assistance from the Executive Committee and the ION National Office Staff, may make recommendations to the Awards Chair. However, it is

the final responsibility of the Awards Chair to select the members of the Awards Selection Committee. It is recommended that the Awards Chair and the other members of the Awards Selection Committee consist of previous winners of ION Awards. This will motivate the Committee to maintain high standards for selection of the next generation of awards winners. It will also minimize potential conflicts of interest which would occur if any member of the Awards Selection Committee were among the nominees for any award. If a member is nominated for an award, then this member must either decline the nomination or withdraw from the Committee.

The President alone must approve the selected committee. In order to maintain the integrity of the secret voting process, the names of these members shall remain unknown to the general membership of the ION. Only the President and the ION National Office staff with a need to know shall be informed of the selected members of the Awards Selection Committee.

The ION Technical Director provides the schedule that must be met by the Awards Selection Committee and conducts the solicitation, gathering and, if necessary, the credentials validation of the awards nominations. To the extent possible, the ION Technical Director shall determine the credibility of the nominations, but this responsibility must be primarily born by the Awards Selection Committee. The nominations and a verbal credibility report are passed to the Awards Chair in accordance with the established schedule. The Awards Chair distributes the nominations to the Committee along with the established schedule adjusted for the activities of the Committee. The Chair solicits verbal credibility comments by a deadline from the members who are most familiar with the backgrounds of the candidates. These credibility comments are shared verbally with all other members of the Awards Selection Committee. The purpose of this initial screening process is to provide a level playing field for all candidates of the same award. For example, the "lingo" of certain fields of navigation expertise can be deceiving in terms of the importance or uniqueness of the accomplishment being described by the sponsor(s) of an award candidate. It is also possible for a candidate to receive a nomination for a contribution which has been exaggerated.

Copies of the nominations shall be forwarded to all members of the Awards Selection Committee by the Technical Director. The Awards Chair passes the written voting criteria and process to the Awards Selection Committee along with the schedule. The written voting criteria shall be based on the Awards Selection Committee Guidelines. **The Awards Selection Committee Guidelines are attached to this policy.**

The voting process is at least a two-step process as described in the guidelines. The Awards Selection Committee votes on the final ballot based on a scoring system provided by the Awards Chair. **The Scoring System for Evaluation of ION Award Nominations is attached to this policy.** The candidate with the highest score and preferably with a clear consensus vote is the winning candidate for each award. The Awards Chair reports the vote details back to the Awards Selection Committee such that each member can see their votes for their candidates, but not their name (use an index for each committee member). When a candidate has been nominated for more than one award or the nomination is clearly for the wrong award, the Awards Chair must use his discretion and seek the discretion of the Awards Selection Committee to correct the problem.

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Likewise, if the majority of the Awards Selection Committee agrees that no candidate is worthy of a particular award, then the Awards Chair should recommend that this award not be given that year. It may also become apparent that one or more nominees are well qualified to receive special recognition for their achievements, but do not specifically qualify for one of the formal ION awards. In this case the Awards Chair can request that the ION National Office prepare a special and appropriate award for these candidates.

When the votes are tallied by the Awards Chair, there should be a clear consensus for the winning candidate. If this is not the case, the top candidates, i.e., those whose scores are closely matched, should be resubmitted to the Awards Selection Committee. The same scoring technique is used, but only a subset of candidates are on the ballot and the Awards Selection Committee is encouraged to give the highest score to the most qualified candidate and not to give the same score to any two candidates. If a tie vote should result, then the Awards Chair must break the tie with his vote. The Awards Chair reports the winning candidates to the Technical Director of ION National Office and to the President. It is important that strict secrecy of the outcome of the vote remain with the Awards Selection Committee, the staff at the ION National Office with a need to know and the President.

Awards Selection Committee Guidelines

I. Materials provided to each Committee member:

- A. Copy of these guidelines or the guidelines developed by the Awards Chair.
- B. Complete package of nominations.
- C. Copy of the Regulations for each Award.
- D. Copy of the Scoring System for Evaluation of ION Awards Nominations.
- E. Complete list of the Awards Selection Committee, including address, phone (home and business and fax) numbers and email addresses (if available).

II. Voting Guidelines

- A. Review the scoring system and the regulations for each award.
- B. Read each nomination by award category and consider whether the candidate's qualifications are more appropriate for another award. Duplication of nominees in more than one award category is permitted. Also carefully scrutinize the credibility of each award submission and, if appropriate, call or correspond with one or more of the references provided with the nomination. If there is a clear discrepancy, immediately notify the Awards Chair, so that the entire Awards Selection Committee can be notified. Apply a preliminary score to each nomination. It is very important that the high standards of ION awards be maintained by exercising impartiality and fairness in the selection of recipients.
- C. Select no more than 5 nominees for each of the award categories. No candidate should be included in the list if the candidate is not qualified for the award. It is also acceptable that NO candidates are judged eligible for an award.
- D. Send first pass selections by name only to the Awards Chair by the deadline for the first pass. Dialogue between Awards Selection Committee members is encouraged at this point.
- E. The Awards Chair will use the first pass submittal to prepare a ballot of qualified candidates for each award. This final list may consist of more than 5 nominees for each award.
- F. Reread the nomination for each award candidate in the final list and, if appropriate, correspond with one or more of the references. Apply the final score for each candidate and submit the score to the Awards Chair by the final ballot deadline.
- G. The Awards Chair will provide the individual scores without naming the source and the total scores for each candidate back to the Awards Selection Committee. If there is not a clear consensus, a run-off vote for the top candidates will be taken.

Scoring System for Evaluation of ION Award Nominations

Score	Interpretation
0.	Nominee is definitely not qualified and should not receive the award.
1.	Nominee is qualified but of lesser stature than the average of previous winners.
2.	Nominee is well qualified and achievements are about the same as the average of previous winners.
3.	Nominee is well qualified and achievements are above the average of previous winners.
4.	Nominee is truly exceptional and well above the average of all previous winners of the award under consideration.

Valid Considerations

1. The nominee's actual contributions listed on the nomination form.
2. Significance of the nominee's contributions.
3. The contributions' relationship to navigation or guidance.
4. Timeliness of the contribution, downgrading those made or becoming significant prior to the "award year" under consideration and those that have not yet "arrived" but have potential for the future. For the "continuing contribution" award, older contributions are significant, but accomplishments should have continued into the "award year."

Invalid Considerations

1. The literary style of the nomination. This is of particular significance where a nomination is prepared by a foreign nation lacking full command of the English language.
2. Personal knowledge of information not included in the nomination form unless that information is shared with other members of the Awards Selection Committee.
3. Contributions for which the candidate has been recognized by a previous ION award. The Awards Selection Committee Chair, base upon committee member consensus can recommend to the Technical Director that a nominee be considered either in the following year or in a different award category.
4. The type of navigation (marine, land, air, space, etc.) to which the contribution applies.
5. Any attempt to influence the Awards Selection Committee in making their selections other than through the procedure of formal nomination.
6. Sentiment, prominence of the nominee, political affiliations, race, creed, color, sex and national origin.
7. Nationality of the nominee except insofar as it might influence the magnitude of the accomplishment; i.e., a given contribution might represent a greater accomplishment in a third world developing nation as opposed to one that is highly developed.

THE INSTITUTE OF NAVIGATION

Awards Nomination Form

The purpose of a nomination is to present a factual statement of accomplishment for consideration by the ION's Awards Selection Committee. Collaboration in the preparation of a nomination is permissible and recommended. A candidate may be nominated for more than one award in which case a separate nomination form for each nomination is required. The awards are intended to recognize an individual; group awards are not acceptable. Only nominations received in correct form by February 15, in the year of the award will be considered.

Nominee:

Name: _____
Current Affiliation: _____
Address: _____
Phone: _____
Fax: _____

Award:

Name of Award for which Nominated: _____

Biographical Sketch:

Include a one page biographical sketch for the nominee in 10-point font or larger.

Contributions:

Summarize the contributions made by this nominee as they pertain to the eligibility requirements listed in the enclosed awards brochure. Be specific regarding the nominee's role in each significant accomplishment mentioned. Indicate clearly whether the nominee worked independently, participated in the efforts of a group, supervised, authorized, etc. Give dates by year of accomplishment stressing the most recent ones. Please avoid claiming any accomplishments that would prove embarrassing if included in a citation. Avoid flowery language and long detailed descriptions. This summary should not exceed one page in length in 10-point font or larger.

References:

Attach the names, affiliations, addresses, and telephone numbers of three professional references who are familiar with the nominee's contributions and accomplishments.

This nomination is respectfully submitted by:

Name: _____
Affiliation: _____
Address: _____
Phone: _____
Fax: _____
Signature: _____ Date: _____

Please return signed form and attachments to:

Chair, Awards Selection Committee
The Institute of Navigation
1800 Diagonal Road, Suite 480
Alexandria, Virginia 22314

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REGULATIONS - Thomas L. Thurlow Award

I.

- A. The purpose of this award is to recognize an individual who has made an outstanding contribution to the advancement of navigation.
- B. A recipient does NOT have to be a member of the Institute of Navigation.
- C. Companies, Agencies, Bureaus, Associations or Groups of Individuals are not eligible for consideration.
- D. The Award shall be given, at most, once each year. It shall be given only in those years in which an outstanding contribution is considered worthy of such recognition.
- E. Previous recipients are eligible for consideration again if their continuing contributions so warrant.

II.

- A. The award recipient shall be selected by secret ballot of the Awards Selection Committee after careful evaluation of all candidates. The selection will be made at least one month prior to the Annual Meeting.

III.

- A. The intent of this award is to recognize an individual who has made a contribution to the science of navigation with highest consideration given to the following criteria in descending order of importance:
 - 1. An outstanding invention or design of equipment which applies to the science of navigation.
 - 2. An outstanding method for use in navigation.
 - 3. Outstanding research or study relating to navigation.
- B. Preference in selection of the recipient shall be given to those contributions that assumed prominence and importance, or culminated during the year immediately preceding the award presentation.

IV.

- A. The award shall consist of a suitable plaque with appropriate wording.
- B. Formal presentation of the Award will take place at the ION Annual Meeting.

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REGULATIONS - Norman P. Hays Award

I.

A. The purpose of this award is to recognize an individual who has contributed encouragement, inspiration, support and management to the advancement of navigation.

B. A recipient does NOT have to be a member of the Institute of Navigation.

C. Companies, Agencies, Bureaus, Associations or Groups of Individuals are not eligible for consideration.

D. The Award shall be given, at most, once each year. It shall be given only in those years in which an outstanding contribution is considered worthy of such recognition.

E. Previous recipients are eligible for consideration again if their continuing contributions so warrant.

II.

A. The award recipient shall be selected by secret ballot of the Awards Selection Committee after careful evaluation of all candidates. The selection will be made at least one month prior to the Annual Meeting.

III.

A. The intent of this award is to recognize an individual engaged in management of the military services, civil government or industry, as distinguished from those whose contributions consist primarily of a specific invention, method or research, or as a practicing navigator.

IV.

A. The award shall consist of a suitable plaque with appropriate wording.

B. Formal presentation of the Award will take place at the ION Annual Meeting.

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REGULATIONS - Weems Award

I.

A. The purpose of this award is to recognize an individual who has made continuing contributions to the art and science of navigation.

B. A recipient does NOT have to be a member of the Institute of Navigation.

C. Companies, Agencies, Bureaus, Associations or Groups of Individuals are not eligible for consideration.

D. The Award shall be given, at most, once each year. It shall be given only in those years in which an outstanding contribution is considered worthy of such recognition.

E. Previous recipients are eligible for consideration again if their continuing contributions so warrant.

II.

A. The award recipient shall be selected by secret ballot of the Awards Selection Committee after careful evaluation of all candidates. The selection will be made at least one month prior to the Annual Meeting.

III.

A. The intent of this award is to recognize an individual who has made continuing contributions to the advancement of navigation over a period of years although the contribution in any one particular year did not warrant consideration for a Thurlow or Hays Award.

IV.

A. The award shall consist of a suitable plaque with appropriate wording.

B. Formal presentation of the Award will take place at the ION Annual Meeting.

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REGULATIONS - Superior Achievement Award

I.

- A. The purpose of this award is to recognize an individual(s) who has demonstrated an outstanding performance as a practicing navigator.
- B. A recipient does NOT have to be a member of the Institute of Navigation.
- C. Companies, Agencies, Bureaus, Associations or Groups of Individuals are not eligible for consideration.
- D. The Award shall be given, at most, once each year. It shall be given only in those years in which an outstanding contribution is considered worthy of such recognition.
- E. Previous recipients are eligible for consideration again if their continuing contributions so warrant.

II.

- A. The award recipient shall be selected by secret ballot of the Awards Selection Committee after careful evaluation of all candidates. The selection will be made at least one month prior to the Annual Meeting.

III.

- A. The specific area of consideration is outstanding performance as a Practicing Navigator of any vehicle, in any medium - marine, land, air, undersea and space.
- B. Preference in selection of the recipient shall be given to those contributions that assumed prominence and importance, or culminated during the year immediately preceding the award presentation.

IV.

- A. The award shall consist of a bronze oxidized replica of The Institute of Navigation emblem mounted on 8 by 11 inch walnut, with gold lines radiating from the emblem, and appropriate wording on a bronze plate mounted below the emblem.
- B. Formal presentation of the Award will take place at the ION Annual Meeting.

REGULATIONS - Early Achievement Award

I.

A. The purpose of this award is to recognize an individual early in his or her career (35 years or younger in the year of the achievement) who has made an outstanding achievement in the art and science of navigation.

B. A recipient does NOT have to be a member of the Institute of Navigation.

C. Companies, Agencies, Bureaus, Associations, Full-Time Students or Groups of Individuals are not eligible for consideration.

D. The Award shall be given, at most, once each year. It shall be given only in those years in which an outstanding contribution is considered worthy of such recognition.

E. Previous recipients are not eligible for consideration.

II.

A. The award recipient shall be selected by secret ballot of the Awards Selection Committee after careful evaluation of all candidates. The selection will be made at least one month prior to the Annual Meeting.

III.

A. The intent of this award is to recognize an individual for an outstanding achievement related to the art and science of navigation early in his or her career but not in competition with the Thurlow, Weems or Superior Achievement Award candidates who are usually well advanced in their careers. The criteria for consideration in descending order of importance are:

1. An innovation or invention (which has been successfully demonstrated) or a novel equipment/system development relating to navigation.

2. An outstanding method for use in navigation.

3. Outstanding research or study relating to navigation.

B. Preference in selection of the recipient shall be given to persons early in their careers for those contributions that assumed prominence and importance, or culminated during the year immediately preceding the award presentation.

IV.

A. The award shall consist of a suitable plaque with appropriate wording.

B. Formal presentation of the Award will take place at the ION Annual Meeting.

REGULATIONS - Tycho Brahe Award

I.

- A. The purpose of this award is to recognize an individual who has made an outstanding contribution to the advancement of the science of space navigation, guidance and control.
- B. A recipient does NOT have to be a member of the Institute of Navigation
- C. Companies, Agencies, Bureaus, Associations or Groups of Individuals are not eligible for consideration.
- D. The Award shall be given, at most, once each year. It shall be given only in those years in which an outstanding contribution is considered worthy of such recognition.
- E. Previous recipients are eligible for consideration again if their continuing contributions so warrant.

II.

- A. The award recipient shall be selected by secret ballot of the Award Selection Committee after careful evaluation of all candidates. The selection will be made at least one month prior to the Annual Meeting.

III.

- A. The intent of this award is to recognize an individual who has made overall contributions to civilization in any form such as scientific, technical, engineering, theoretical or writing. The highest consideration shall be given to the following additional criteria in descending order of importance:
 - Unique insight that significantly enhances the field of Cosmology (cosmography, cosmic objects, astrophysics); for example, break-through experiments and first-time applications of new technologies such as optical planetary and asteroidal observations that are applicable to the design of future space navigation systems.
 - Meticulous application of instruments such as the Hubble and X-Ray telescopes, Next Generation Space Telescope, radio/radar sensors to track, map and uncover the motions of cosmic objects thus enhancing the navigation and guidance of future vehicles exploring deep space. Examples envisioned are GPS-like constellations or interplanetary beacons around a planet, stellar accelerometers and new generation Doppler systems capable of high precision velocity measurements and navigation.
 - Research and or publications addressing the advancement of inertial-astro, terrestrial or celestial navigation, automation of celestial navigation for terrestrial use, celestial mechanics for interplanetary navigation, use of VLBI for reference frame alignment

and other interferometric techniques such as differential to precisely measure long baselines between observatories and enhanced kinematic surveying. Equally important are advances in the state-of-the-art in man-machine interfaces that are intuitive for the human and allows great precision, economy and safety in close maneuvering quarters and landing.

B. Preference in selection of the recipient shall be given to those contributions that assumed prominence and importance, or culminated during the year immediately preceding the award presentation.

IV.

A. The award shall consist of a suitable plaque with appropriate wording.

B. Formal presentation of the Award will take place at the ION Annual Meeting.