# Task force on Streamlining the Governance and Management of ASPRS

# Report to Executive Committee:

# Recommendation #6 Membership

# 13 FEBRUARY 2015

# (to be considered by Excom at its meeting on 19 February 2015 and presented to the Board of Directors for consideration)

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### **Introduction**

The Streamlining Task Force presented a report to the Board at its meeting in Denver on 17 November 2014. While the overall direction of the Task Force’s recommendations was accepted, it was felt that the recommendations were insufficiently specific to indicate clear actions. The Task Force, therefore, agreed to present to Excom a series of short, focused reports on individual recommendations. Of the seven recommendations in the original report, #7 is already being implemented and requires no further treatment. Thus six reports are required, of which this is the first. It covers Recommendation #6 on membership categories, which was written as follows in the report to the Board:

“Simplify the membership by eliminating honorary and emeritus, associate and inactive categories. Adopt a new structure of Individual and Corporate members, each with multiple distinguishments: Individual – Student, Full, Fellow, Sustaining, Affiliate; Corporate – Sustaining, Affiliate.”

### **Analysis**

The Task Force conducted business both by e-mail, especially consideration and extension of the report provided by Barbara Eckstein, and through its tenth meeting, a teleconference that took place on Friday 16 January 2015. An important input was received from Steve DeGloria, entitled “Soil and Water Conservation Society Membership” (Appendix A). Refinements were made at the Task Force’s eleventh and twelfth meetings, on 30 January and 13 February 2015. There was agreement that:

1. The Society has too many categories of membership
2. There are no Affiliate Members, so this category appears especially superfluous, yet we need a category to cover organizations with which we have relationships, e.g. AUVSI
3. MUCs are a mixed blessing, but this category seems to be essential for some companies to pay its employees’ dues
4. The two categories of membership for those who have rendered distinguished service, Honorary and Fellow, seem to be overkill. Indeed, there are considerable overlaps between the definitions of these categories given in the bylaws.
5. All societies that members of the Task Force considered as a result of Barbara’s report and members’ reviews of further societies seem to have membership categories catering for individual and organizational members.
6. Most societies offer some concessionary membership categories, e.g. students, unwaged
7. There is a trend in societies to offer members an *a la carte* menu of services, whereby they can join for a small fee then purchase further goods and/or services as they prefer
8. The Soil and Water Conservation Society (SWCS) writes very elegantly about the benefits of membership and its membership categories blur the gap between members and donors, as is the case with so many non-profits
9. The Society needs to create much improved benefits of membership, i.e. its value proposition, in order to attract members.

### **Recommendation**

The Task Force therefore concludes that there should be three categories, the rudiments of which are tabulated below, though it is acknowledged that this requires further, detailed work:

|  |  |  |
| --- | --- | --- |
| **INDIVIDUAL MEMBER** | **ORGANIZATION MEMBER** | **FRIEND OF THE SOCIETY** |
| Individuals | Organizations | Any entity |
| Common benefits   * All IMs enjoy the same IM benefits * Online journal * ?   *A la carte* benefits   * Printed journal * ? | Common benefits   * All OMs enjoy the same OM benefits * Printed journal * ?   *A la carte* benefits   * Online journal site license * ? | Benefits   * Customized per Friend   Common benefits   * n/a   *A la carte* benefits   * n/a |
| Dues   * Varies by career level (student, professional, executive, retired, unemployed) | Dues   * Varies by size and type of organization (educational, government, military, commercial) | Dues   * None, as many of the arrangements with Friend members may be reciprocal |

It became clear to the Task Force as it worked on this that the Society must work hard on (i) describing and proselytizing its value proposition; and (ii) setting out the benefits of each category of membership. The thoughts of individual members of the Task Force with respect are recorded in Appendix B. It is useful at this point to consider the material in Appendix A: this provides us with a model and we can certainly develop statements about benefits along similar lines and try to write them up in the same compelling yet simple manner. We must not lead with discounts – the benefits have to be more convincing than just lower prices! As we consider the challenge of developing the benefit statement, we feel the need for a more general narrative on the advantages of the Society to precede the lists of benefits. Appendix C is a lightly edited version of an interview given by Michael Hauck to the magazine *xyHt*. Note that a dialog on 6 February 2015 by members of the group organizing the 2015 UAS Technical Demonstration and Symposium results in more material to be woven in, in particular a diatribe by Brian Murphy. A chunk of the e-mail chain is included in Appendix B.

What about MUCs? The Task Force wishes to dispense with this category, but will some Sustaining Members no longer pay their employees’ dues?

We wish to phase out emeritus members, though we will certainly grandfather existing emeritus members into the new scheme as concessionary individual members. This avoids members who wish to pay dues being invited not to do so, but the retired category is available for those not in a position to pay yet who wish to continue to be members.

Similarly, we wish to grandfather Fellows and Honorary Members, whilst merging these categories for the future. Therefore we require an attractive name for this category of individual member – “Honorary Fellow of the Society” works sufficiently well, but we are open to suggestions. We recommend that this term be used as an honorific or recognition, *not* as a category of membership, and an Honorary Fellow of the Society may be a member in any Individual category, or, indeed, not a member at all.

Michael has begun work on how the bylaws may need to be changed to accommodate the above. This task is relatively straightforward once the membership categories are decided.

### **Appendix A: Material provided by Steve DeGloria from the Soil and Water Conservation Society**

**“How can you benefit?**

• Support local, national, and international conservation and land stewardship

• Be a part of the conservation community

• Share your work and be informed on other advances in the industry

• Enjoy professional development opportunities on current and emerging interdisciplinary topics

• Network with professionals from many disciplines through local, regional and international meetings

• Be eligible for awards and scholarships only available to SWCS members

• Effective representation in policy circles on environmental, agricultural and conservation issues

• Interaction and education through local chapter membership in US and Canada

**“All Members Receive**:

• One year Subscription to the *Journal of Soil and Water Conservation*

• Monthly e-newsletter Conservogram

• Discount to the SWCS annual conference

• Discount on SWCS publications

• Discounts on page charges

• Free book: *Aldo Leopold: The Man and His Legacy*

**“Membership Levels** - (in US funds) Presidents Club\* $220 annually

Leader† $145 annually

Conservationist $90 annually

Student‡ $30 annually

† Leaders also receive

• Special recognition in our annual report

• A gift from the Society and Membership Lapel pin

\* President’s Club Members also receive

• Special recognition in our annual report

• A gift from the Society and Membership Lapel pin

• Invitation to the VIP reception during our annual conference”

### **Appendix B: inputs from individual members of the Task Force on benefits**

* Individual
* Leadership opportunities:
  + Ability to hold an office, or chair a committee
  + Participate in, shape and create standards, guidelines and policies
* Member services:
  + Discounted "events" fees
  + Job postings
  + First chance to obtain goods or services that sell out or fill up (webinars)
  + ASPRS itself is an advocate for its members (e.g. advertising accomplishments)
  + For younger members, scholarships or other financial assistance may be available
  + ASPRS regional structure, face-to-face meetings, webinars and web forums provide value to members at the local level
* Networking/professional connections:
  + The remarkable feeling of being in a room where everyone not only "gets" what we do, but also thinks the science, technology and applications are totally awesome, exciting and worth the price of admission!
  + Safety net: a member encountering misfortune can turn to members for recommendations and to determine if they had heard about job openings. This is like a résumé board, but involves individual members networking while they are at ASPRS functions.
  + Access to member firms, including job postings, but also learning about the services or products that can be used in everyday work
  + Although ASPRS is a professional society, personal relationships begun through contact within ASPRS have proved beneficial to many members
  + Networking is key for members; and developing a sense of community is cornerstone to a society, including ability to participate in events, conferences, socials, mentorship, and internships
  + Mentoring opportunities provide an opportunity to give back
  + Social aspects are perks - get better connected to successful or more senior members
* Education and professional development:
  + Keeping apprised of industry trends and standards, developing technology and job advancement opportunities, through webinars, conferences, and professional publications
  + Benefit from sharing of technical expertise with peers, industry leaders and vendors of software and equipment
* Support role of ASPRS in furthering the profession:
  + Certifications available that are valued by employers/clients (membership is not required for certification, but members tend to be more knowledgeable about what’s available and the requirements)
  + Create a demand for ASPRS certifications by federal and other public entities, and raise the profile of the Society
  + Branding the Society as desirable for professional success
  + Support ASPRS as the leading authority on standards and technical/scientific advances in photogrammetry and remote sensing.
* Organization
* First choice of booths/sponsorship at conferences (they sell out)
* Reach clients at trade shows or conferences
* Use websites, webinars and published media to advertise to clients - advertising is key
* Sell their stuff
* Network to build client base, professional partnerships and pool of future employees
* Advertise positions and reach out to members to hire staff
* Member firms want to keep their employees connected to industry trends to be able to: educate clients about technology; keep staff educated or certified; and provide services/products
* Benefit of staff to be part of a society for professional development and continued education: it looks good for a company to have staff motivated to participate in the administration of a Society
* Be “distinguished” from competitors as industry leaders or through qualifications of staff (i.e. certifications, board positions).
* Friend
* Opportunities to co-locate meetings, e.g. JACIE
* Conference cooperation and advertising.
* Team webinar sessions (especially important if an organization does not have the GoToWebinar level we have)
* Booths/sponsorships offered second to organizations
* Build strategic partnerships
* Co-operate with other societies to generate industry standards
* Network as some professionals are members of multiple organizations with synergetic goals
* Academic research or advancement of technology for non-profit
* Benevolent activities and social good projects

### **Appendix C: Michael Hauck’s interview with xyHt**

*Q. What does ASPRS do on behalf of its members?*

ASPRS is a society of technical individuals and organizations dedicated to helping others make smart, professional decisions through the use of imagery and geospatial information. We do this by providing standards and best practices, professional certifications, continuing education, publication of a peer reviewed journal, publication of technical books, teaming with other organizations when interests align, and participation in highly focused technical divisions that advance the state-of-practice. ASPRS is a platform that members can use to advance their careers while helping society make better decisions on land use and other important issues. Our members find value in collectively serving this mission, in promoting our profession, and in networking and fellowship. Now, as much as when it was founded 81 years ago, ASPRS is in a position to help its members mold the future and create a legacy for the next generation to build upon. Many practitioners, from young professionals to senior managers, have commented, “I owe my career to ASPRS.”

*Q. What are the most challenging issues for ASPRS members in the coming years?*

Even as the work of our members has become increasingly important to the functioning of modern society, the challenges faced by members have also increased. Members face cheap labor outsourcing from abroad, broken government contracting models, gaps in our educational system, restrictions on travel and support for volunteer activities, the ever-constant pressure to lower costs, and the urgent need to innovate business models. Globalization and commoditization challenge traditional services and products, while, ironically, the new technologies we create to stay competitive also disrupt our existing businesses. Since we face these and other challenges in common, ASPRS members are stronger when we identify them and address them together. Fortunately, ASPRS is viewed as a trusted, objective, non-political third party when it comes to technical matters, so policy makers frequently solicit the advice of ASPRS and our members.

*Q. What actions is ASPRS taking to improve the climate for professionals working in the field?*

We have an active mentoring program with our young professionals, which we seek to grow. We added several new student chapters recently and continue to fund scholarships and awards valued at over $50,000 each year. For continuing education, ASPRS expanded its monthly GIS-focused Geobyte webinars with CaGIS, and we are planning to add a similar series with an Asset Management theme. For professional certification, ASPRS has added Lidar-specific certifications and is exploring a UAS-specific certification. We stood up a new technical activities division focused on the exciting UAS platform. We are working with sustaining members to encourage their support of employees volunteering their time to work on ASPRS activities and participate in events. We have greatly expanded the general interest content in our journal, PE&RS. I am really excited about the well-received improvements we have been making in our conferences (e.g. higher quality technical sessions, more opportunity to talk with exhibitors, better locations, and more time for networking). On the standards front, ASPRS just published its new Positional Accuracy Standards and has distributed its Procurement Guidelines for public comment. Most important, we are conducting new market research to share with our members.

*Q. Where is the profession headed in the coming 3-5 years?*

I believe that the need for ASPRS may be greater now than it ever has been before. The growing commercialization and commoditization of geospatial information over the last decade has created a deep societal dependence upon the work of our members. Our member contributions are often behind the scenes -- unknown by most citizens -- but they are increasingly important and necessary to the functioning of modern society. Society needs our members, our expertise, our standards, our publications, our support for education, and our professional engagement. ASPRS members understand and expertly address the big issues of our time – from agriculture to defense, from climate change to transportation planning, and from water resources to energy management, to name just a few. As we move forward ASPRS will continue to help its members maintain their skills and market awareness, nurture the next generation of professionals, help our members tell their stories to the public, and inspire others to join us on our journey.

*Q. As UAVs begin entering the U.S. commercial air space, how do you envision the coming 3-5 year* *transitional period? Will benefits become quickly apparent to clients and providers?*

ASPRS recently stood up a UAS Division to focus on technical activities related to autonomous systems. Some, but not enough, of our members already benefit from UAS developments. Some Federal members have been using UAS for years already. Many government and contractor members have been operating under COAs, but they have limited value for most of our commercial members. Additionally, a few of our commercial members (Altavian, Trimble, Woolpert) were recently granted Section 333 Exemptions. I expect we will see more exemptions granted. Nonetheless, I think most members would say that the current regulatory environment is holding them back. Very soon FAA will release rules for public comment to govern commercial use of UAS within visible line of sight. Even then, final adoption of the rules may take one or more years. Rules for beyond visible line of sight will take even longer. ASPRS serves on the advisory group for FAA’s Aviation Rulemaking Committee in this area, but the committee’s work of writing proposed rules is just getting started. Meanwhile, ASPRS members in Canada and many other countries have been routinely flying UAS commercial operations for years following their local regulations.

*Q. What is special about ASPRS?*

The members of ASPRS have immense technical depth across a broad range of disciplines on which no other professional society is focused. Their work is integrated into so many aspects of modern life that it is easy to take it for granted. From the internal workings of GPS to the imagery embedded in the daily weather forecast, ASPRS members are behind the scenes making it all work for the betterment of humankind. Whether they serve in academia, government, or industry, ASPRS members make a difference in improving the quality of people’s lives around the world. ASPRS invites geospatial practitioners to consider becoming a member of this critically important professional society.

### **Appendix D: E-mail discussion on 6 February 2015**

From Alan Mikuni

Nicely stated Brian.

From Becky Morton

This begins to get into the area that our Professional Practice Division would take up.  The current Division Director is Michael Zoltek - [michael.zoltek@pictometry.com](mailto:michael.zoltek@pictometry.com). Perhaps we could extend this portion of the discussion over to him as well.

From Brian Murphy

Thanks Jeff.

While writing this, I was also thinking that ASPRS should, very much so,  advocate that we are the National professional organization overseeing all things photogrammetry. While even here in Florida, photogrammtry is a licensable profession, and you can qualify to become a licensed surveyor, this task is very daunting, even for me, having been in the industry for 12 years (it is very land-surveyor centric); thus, UAS mapping enthusiasts are rarely ever going to qualify for licensing. States who are under represented by the photogrammetry profession, or States that lack a regulatory process for assessing and validating professional violations and un-licensed activities in photogrammetry, need some means to police and regulate. ASPRS should be the defacto organization and standard that all states should use for all things photogrammetry. We should organize a peer-review process (similar to what the ADA has) as a means to police the profession for un-licensed or un-certified photogrammetry. We are going to have many UAS folks out there buying a DJI phantom, and an Agisoft license, attempting to sign and seal mine volumes. Do they know what the heck they are doing, or just pressing a fancy button? What processes does ASPRS have in place for helping police this.

We need to write a white paper on this matter, and then begin distributing it to State regulatory agencies in order to plan for a way for ASPRS's peer review process to be incorporated into their Statues in instances where the state is undeserved by their own peer-review process.

Here is ADA's Peer Review Policy for Patient - Dentist disputes: [www.ada.org/~/media/ADA/Member%20Center/FIles/peer\_review\_overview.ashx](http://www.ada.org/~/media/ADA/Member%20Center/FIles/peer_review_overview.ashx)

Thoughts?

From Jeff Young (Jeffrey M. Young)

Indeed…. a great annunciation of ASPRS’s differentiation from the rest of the UAV/UAS community.

From Becky Morton

Love it, Brian! I am printing this and memorizing it for my elevator speech. Thanks!

From Brian Murphy

So, the Toastmasters in me is going to come out - so excuse me. I love writing speechs, and have actually been considering doing speech writing as a side-job for weddings and funerals (seriously).

Based on the heated discussion earlier, I would like to draft a boilerplate speech on this topic, which we could all use as a boilerplate plenary speech for UAS conferences. In partnership with these conferences, we can exchange advertising in our weekly newesletter and PE&RS for a speaking spot on their main stage (as a means of attracting ASPRS members to their various UAS conferences)

Here is a very rough outline / off the cuff draft of a speech I just wrote (it gets a lot better towards the end):

* Welcome. So, as many of you know, the two largest business cases for civil applications of UAS are mapping, seconded by cinematography. How many of you were mappers, before getting into UAS? Any cinemetpgraphers in the audience?
* The UAS market is already very very saturated, so how are you going to distinguish yourselves from your competition when developing and marketing your business to your customers? While someday everyone will have their respective quadcopters and airplane and FAA certifications, when it comes down to cost, cost effectiveness, and delivering what is promised, what will it all come down to? Certification. Certification of your data. Certification of your profesional qualifications. Not just certification of licensed UAS pilots; but the individuals overseeing the processing, positional accuracy and interpretation of the data produced
* In terms of UAS based mapping, there are many different types applications for mapping, from precision agriculture, natural resources to infrastructure mapping
* **Agriculture and Natural Resources:** these segments don't always require the geospatial precision and accuracy for jobs that might be more survey-specific; but it requires certain and specific competencies in the remote sensing discipline. Terms like NDVI and Principal Component Analysis are terms that we are intimately familiar with; while computer software can easily regurgitate these imagery by-products using simple algorithms,  there is much more that goes into it than pressing a simple easy button. What time of year should you fly? What time of day? How will the moisture content in the air effect the results of your analysis?
* Don't try to reinvent the wheel when attempting to do things with multispectral or hyperspectral imagery that has already been attempted; For instance: insert case study here\_\_\_\_\_\_\_\_\_\_utilize ASPRS's journal, PE&RS as a resource in order to asses what remote sensing applications can be used for what. As a member of ASPRS, you get access to these journals for free
* How should your Color Infrared Imagery look when it is post-processed? Does it look like this, or this? (show images of bad vs. good radiometric CIR imagery)
* Oh - and by the way, ASPRS offers a track for certification to become a Certified Remote Sensing Scientist for you or your employees; through this track you will showcase your years of experience and general competencies in math, physics, as well as remote sensing and general principals in photogrammetry and GIS. Competencies ESSENTIAL to attempting to beat out your compeition
* In terms of conducting mapping projects for infrastructure; projects like mining, roadways, oil and gas, etc....Positional accuracy of your data is key; how do you sign and certify something the accuracy of your resulting aerial image mosaic (orthoimage) if you are unfamiliar with how GPS receivers work; how much ground control do you need to lay out for the system that you are flying. Do you know what a ground control point is? How do you certify the accuracy of that ground control point!?
* **ASPRS has standards put forth in order to assist you with simplifying the means by which you assess the horizontal and positional accuracy of your data....**
* **ASPRS has a Certification, called the Certified Photogrammetrist,** under which you can sign and certify the accuracy of your aerial imagery using the ASPRS standards already pre-established from decades of public-private collaboration from the traditional manned aerial imagery and satellite imagery
* We also provide networking: once many of you master operating your UAS; you are soon going to realize you also need to master the data side of UAS as well, and that is where ASPRS will come into play. ASPRS is here as a resource. We are an organization backed by inviduals who work for the USGS, the national Geospatial Intelligence Agencies, some of the largest and oldest aerial imagery firms in the U.S. and many many academic institutions who deal with photogrammetry and remote sensing on a regular basis.
* When pursuing work, are your customers going to favor quality over cost? ASPRS advocates for a high standard of professionalism. For Federal contracts, governmental agencies are required to compete jobs based upon vendor qualifications, and not price. Many State agencies are required to do the same thing
* So who are we? Who is this ASPRS organization!?
* **ASPRS is..**..Hardware manufacturers who make remote sensing platforms for the moon, earth and even Mars. Firms like Optech, Reigl and Leica have been manufacuring remote sensing, LiDAR and aerial imagery platforms for many years.
* **We are** Software manufacturers: large firms like BAE, who make the GXP photogrammetry suite, or smaller firms like Caridnal Systems, who serve the DOT photogrammetry markets.... Firms like ERDAS and ENVI, who have made remote sensing software for many many years
* **We are** service providers: companies like Woolpert, Quantum Spatial, Keystone aerials; comapnies with some of the largest fleets of aerial imagery planes and helicopters in the U.S. Companies that you can partner with, for small jobs that they pass on a daily basis.
* **We are** government agencies, like USGS, NOAA, and NGA..
* **We ARE** academic institutions like the University of Florida, or Ohio State University, Penn State
* **We are ASPRS.**
* **Join us. Learn from us. And become a part of the ASPRS family of geospatial professionals**
* **Thank you**

What do you guys think?