AAVSO Program Committee Report to Membership

AAVSO Council created the Program Committee in 2012 to improve our services to our Membership, the Astronomical Community, and the Public-at-Large. The process has been conducted over the past three years and in several phases.

We have waited to give this report to you until the transition in Directors has been made. Now that the transition to Dr. Stella Kafka is complete, we are prepared to share with you our analysis of where we are and where we want to be.

This report will be presented in several Phases...

PHASE I

AAVSO Program Committee Report 2012- Alignment With Vision and Mission Statements

The purpose of the Program Committee is two-fold:

- to align programs with the Vision and Mission Statements of the AAVSO.
- to ensure that the programs provide the most efficient use of AAVSO funds.

The Vision and Mission statements are currently under consideration by that Committee, so this report can only look at the current statements which are:

AAVSO Vision - Discovering the Universe through variable stars

The AAVSO's Mission - The AAVSO is an international non-profit organization of variable star observers whose mission is:

- to observe and analyze variable stars
- to collect and archive observations for worldwide access
- to forge strong collaborations between amateur and professional astronomers
- to promote scientific research and education using variable star data.

Alignment With Vision and Mission Statements

Director, Arne Henden, has provided the committee with a document outlining the major projects and staff functions associated with them. In this section, we will look at the individual programs and align them with specific mission statements.

To observe and analyze variable stars:

- AAVSOnet
- VSX
- APASS
- Administration

- Research
- Charts
- Staff Tech Support
- Membership communications, observer/member support
- Publications
- Grant Writing/Research Proposals
- Fundraising/Development

To collect and archive observations for worldwide access:

- Citizen Sky
- Administration
- Fundraising/Development/Grant Writing
- Server Development & Maintenance/Database Administration
- Charts
- Membership communications, observer/member support
- Staff tech/Support
- Web front & back end projects

To forge strong collaborations between amateur and professional astronomers:

- Citizen Sky
- Publications
- Meetings
- Administration
- Translations of material into Spanish
- AAVSOnet
- APASS
- Research Proposals
- Staff tech/Support
- Membership communications, observer/member support

To promote scientific research and education using variable star data:

- Chandra E/PO
- CHOICE
- Mentor Program
- Outreach
- Publications
- Meetings
- Charts
- Translations of material into Spanish
- AAVSOnet
- VSX
- APASS
- Administration
- Grant Writing

- Research Proposals
- Research
- Fundraising/Development
- Web front & back end projects

To ensure that the programs provide the most efficient use of AAVSO funds.

At this point we need to look at how funds are collected and how they are spent. We align them with the programs:

- Administration
- Grant Writing
- Research Proposals
- Research
- Fundraising/Development
- CHOICE
- Outreach
- Chandra E/PO
- Publications
- Mentor Program
- Meetings
- Charts
- Translations of material into Spanish
- AAVSOnet
- VSX
- APASS
- Staff tech/Support
- Web front & back end projects

CONCLUSIONS:

- Most current AAVSO programs map well to the existing mission statement. However, this conclusion may be voided if Council adopts a drastically revised mission statement.
- 2) The committee was unable to conclude that present programs provide the most efficient use of AAVSO funds. More information is needed in this regard.

RECOMMENDATIONS:

It is recommended that:

- 1) Council assesses the impact of any new or revised mission statement to the current alignment of programs.
- 2) Council establishes a follow-on committee to carry on the unfinished work of this committee.

- 3) AAVSO Director provide additional information, via formal report to the follow-on committee, that allows the follow- committee to ascertain whether existing AAVSO programs provide the most efficient use of AAVSO funds. This report shall answer, at a minimum, such questions as:
 - What is the ratio of tasks being completed by volunteers vs. paid staff?
 - Could we identify who is doing what?
 - If research funds are secured, does the workload shift?
 - How much interaction/teamwork is involved? (Connected to previous question.)
 - What are the expected outcomes?
 - How do staff members' labor hours map to current AAVSO programs?
 - What is the budgetary impact (net gain or loss) of each program?

PHASE II

AAVSO Program Committee Progress Report 2013

Our first report concentrated on the alignment of programs with the Vision and Mission Statements.

The next stage involves the overall evaluation of the programs, themselves. This is a more complex issue and requires careful consideration.

The AAVSO is in a unique position in that our members (who provide the product, i.e. our observations) are often our clients (those who use our database). This means that we need to pay attention to the needs of our members. Currently, the Program Committee has the following sources for these data:

- The AAVSO Forums (VSOF)
- The AAVSO Strategy and Operations Survey (2012). (SOS)
- The AAVSO Professional Astronomer Report (2013) (PAR)
- The AAVSO Staff Report (2013) (HQSR)
- The AAVSO Membership Survey (2013) (MS)

Using these tools, and our knowledge of the AAVSO programs, we have broken the programs into the following five groups:

I. OBSERVING SECTIONS

- II. ELECTRONIC/ REMOTE PROGRAMS
- III. EDUCATION AND OUTREACH
- IV. PUBLICATIONS
- V. PROGRAM SUPPORT

The evaluation is in the form of:

- Strengths
- Weaknesses
- Improvements made
- Suggested improvements
- Comments

What appears below is, for the most part, a condensation and compilation of the committee's comments. The chairman has the original reports and will post them for anyone who wishes to see them.

We found...

I. OBSERVING SECTIONS

- Strengths
 - Many observers.
 - Good support.
- Weaknesses
 - Need for QC of observations, visual and CCD.
 - Need for strong leaders in some programs.
 - Upgrade of instructional materials.
- Improvements
 - Improvement in instructional materials.
 - Data Mining.
 - Zapper.
- Suggestions
 - Use non-observers to verify observations.
 - Improve training for observers.

Section Comments:

- We do not advertise what we do. All sources point out our lack of information. We need to get the message out, not only to the astronomical community, but the general public, as well.
- Aaron Price suggested that we have a forum thread devoted to the professional astronomer in which they can interact and suggest projects for AAVSO observers. We need to have some sort of direction.
- A suggestion has been made that we have a standing committee devoted to the professional astronomers who would monitor, and provide advice to our

observing program members. Such a structure is in place with sister organizations such as ALPO.

- Manuals need to be developed and put on line for all observing programs. Right now, we only have the visual, CCD, and DSLR manuals. They do not need to be extensive but should include special techniques for securing and submitting observations. This especially is needed for the EB, SPPV, and YSO programs. The forums would be a good place to gather the information.
- There are problems with the data we are getting via CCD. More training and QC of data is needed.
- A CHOICE course using the skill of non-observers (the majority of our membership) could provide the QC in concert with Zapper.
- Our observing programs should be highlighted in each issue of the *AAVSO Newsletter*. This is a way of exposing our members to the various observing programs we offer.
- The LPV and CV programs have excellent weekly reports via the *CVNet*, and *LPV Circular*. Since the Bulletin takes up valuable staff time, is it time to let volunteers handle it?
- Our long term mission has been to follow the long term observations of variable stars and to archive them for the use of future studies. The committee believes that, to drop any of our observing programs would compromise future studies regarding the evolution of stars.

II ELECTRONIC/ REMOTE PROGRAMS

AAVSO International Database

- Strengths
 - This is probably one of the most visible and externally useful aspects of what the AAVSO does.
 - It is a logical modern extension of the longtime mission of the AAVSO to collect and disseminate reliable variable star data.
 - It is very easy to access the data.
 - It is one-stop shopping for astronomical photometry.
 - It is very easy to contribute new data to the system
 - This is a great use of technology to act as a multiplying force for our mission.
 - Database and on-line resources are very good and are an immerse contribution to the community.
 - The website, the AID and online resources area true strength of the AAVSO.

- Weaknesses
 - With AID online, it is harder to police the quality of the data being entered into the database.
 - The "Zapper" tool helps address this by allowing users to bring obviously erroneous data to the attention of the AAVSO staff.
 - There are also some checks in the entry software to guard against accidental mistakes in data entry, but this is still not as accurate as having every entry scrutinized by a staff member
 - Use of these data still requires some knowledge of the methods used by those submitting data.
 - Ideally all methods would merge seamlessly but they do not.

• Improvements

- The page for introducing the AID was last updated in 2011.
- The staff continues to work on zapper and encourages people to police and take ownership for the quality of data they submit.
- DSLR photometry tutorial

• Suggestions

- Need better QC of data.
- Make Zapper fun. People might comb our database for errors as a hobby.
- Zapping would be easier if done from curve generator tool.Major rewrite of code is under development.
- Continue efforts to tie together the CCD, DSLR, and visual observing frames.
- Continue to develop and disseminate DSLR photometry techniques.
- Many members have suggested including spectroscopy in the database.
- Incorporate data from bright star monitors directly in the database.
- Encourage other groups (like CBA & VSNET) to adopt the AAVSO file format for observations.
- Emphasize parameter space not covered by surveys comingonline.
- Encourage monitoring of variables that change too fast and unpredictably for the new automated survey telescopes.

VSP CHARTS

- Strengths:
 - No more flipping through a box-of-charts. Charts well organized and catalogued.
 - Anyone with an Internet connection can instantly generate a chart to suit.
 - The process by which sequences are put together for charts is quick, the volunteers who put it together are patient and helpful, high quality is the norm.
 - The interface with existing sequences easily allows for updates and corrections to data included on charts.
 - Changes in sequences appear nearly instantaneously.
 - Errors are easy to correct because it would require a change in computer code rather than changing every published chart with a problem.
 - Astronomers no longer go blind making charts on index cards from the BD charts with an opaque projector.
- Weaknesses:
 - The only significant weakness is what if you don't have Internet? Or what if your Internet connection is down when you need the chart?
 - The weakness of VSP is the same as the weakness of any electronic medium relative to printed books. VSP does not accumulate notes and wisdom scribbled on written charts at observatories.

• Improvements Made:

- Binocular charts are now generated by VSP.
- The Astronomical League has begun a binocular variable program that is tied in with AAVSO. That gives us the opportunity to attract new observers.
- Many improvements made recently. Problems posted to the "Software" forum appear to get addressed rather quickly and normally the human element is eventually identified as the source of the error.

• Suggested Improvements:

• DKS suggested in the software forum that he would like to see a higher resolution option for the output from VSP. It was pointed out that the purpose of VSP is not to produce pretty pictures, but to produce a useable finding chart.

- Ability to print more circular overlays with VSP charts.
- Ability toquery more than one star at a time.

VSX

Note: VSX plays an important supporting role in VSP and VPHOT that does not come out in the analysis of it as a stand-alone program.

- Strengths
 - It is a dynamic database that is always growing and expanding.
 - Any AAVSO member can contribute, so it can grow as a result of the collective knowledge of the membership.

Weaknesses

- It is not as comprehensive as Simbad, which could be seen as a direct competitor. The only bits of information that VSX has, which Simbad does not have, are AAVSO specific information like AAVSO identifiers.
- It is unclear to people not involved with VSX how accuracy of the included information is assured.
- VSX did not make the list of 20 strengths of the AAVSO identified by members in the last membership survey. Items needed to garner a response rate greater than 0.5% to be included in this list. However, neither was it identified as a weakness of the AAVSO.

• Improvements Made:

• VSX is being constantly updated, but it happens almost invisibly.

Suggested Improvements:

- Clearly communicate the rationale for how VSX contributes something to the AAVSO. Every AAVSO member should be able to say why we maintain VSX when Simbad is out there too.
- Make the improvements and updates to VSX more visible. CMJA suggested last year in the "Software" forum that there be a page or a FAQ for VSX.

AAVSONet

• Strengths:

• Easy access to professional telescope rigs for AAVSO members.

- Potentially allows 24/7 coverage of a target near the equator.
- Bright star monitoring gathers high quality data tying together the visual and CCD frames better than we ever have done.
- Helping build APASS and improving calibration photometry across the sky.

Weaknesses:

- Slow startup for new scopes.
- More AAVSO staff involvement on startups.
- Independent operators host the telescopes. The council is well aware that those operators need to be chosen carefully, and even then problems can arise. The independent operator is one of the weak links.
- The way that AAVSO-net has organically grown rather than being rolled out as a mature rigorously considered system affects how it has been received by the membership. First impressions are important. Members' opinions of the project and its utility may be influenced by an early experience that is not consistent with the current operation of the network.
- It is not clear how widely the resource is utilized by the general membership.
- It takes time and resources from HQ and the director to maintain the network. It is a clear expansion of how we go about our mission. In the past we primarily maintained an archive, now we maintain hardware and facilities. Some members are nervous about the added cost and liability.

• Improvements:

• Formalizing a Telescope Allocation Committee that processes requests using an established rubric. Recent experience shows this process as established is fast and efficient.

- Additional equipment added to the network. See the dedicated forum for regular updates from Arne that are too many to document here.
- A memo of understanding is now signed by independent operators.
- Member accessible BSM (bright star monitor) database.

Suggested Improvements:

- New leadership to do project management.
- Complete and post a User's Guide for AAVSOnet.
- Provide more easily accessible and detailed information about the brightness limits and capabilities of each of the network telescopes.
- More PR. Make the membership more aware of what AAVSOnet has done. Hype and advertise successful observing campaigns that members have carried out. We should document and share success stories.
- Add capabilities to observe solar system objects (i.e. asteroids).
- Educational program tie-ins.
- The membership ranked AAVSO-net the #1 opportunity of the AAVSO in the latest membership survey. Their comments called for the AAVSO to utilize and expand the use of AAVSO-net telescopes.
- In view of our budget crisis, it might be necessary to charge for use to make the program budget neutral.

APASS

Strengths:

- Great concept. Nearly finished.
- Frankly the APASS Website does a very good job of critically assessing itself.
- A high density all-sky catalog of photometric standards all on the same system.
- High (and improving) internal consistency to the data.
- Great tool to do high precision CCD photometry from 10th to 17th magnitude.
- It ties together the Tycho and SDSS magnitudes.

- Weaknesses:
 - AAVSO time and processing.
 - Many of the people working on the project are volunteering their time, so delays are inevitable.
 - With each new release the magnitudes are updated. So users need to update with each data release.
 - There are some duplicate entries that have not been fixed yet because of astrometry errors in the image overlaps. That also means there are some stars that have not been "observed twice" and have no internal statistical uncertainties. There are saturated stars in the catalog that have not been identified and removed.
 - The instrumental corrections and transformations could be improved.
 - Issues with a red leak in the first-generation Astrodon B-Filters pollute the early parts of the survey. Not leverage able to AAVSO benefit.

• Improvements:

- There have been seven data releases over the past three years, each improving on the other as far as coverage, internal consistency, and absolute calibration. The latest was DR7 in March 2013.
- There is a plan to reprocess the images over the next year to improve both astrometry and photometry in crowded fields.

• Suggested Improvements:

- A second overlapping survey to improve the photometry further.
- Include fainter stars in the catalog.
- Further refine instrumental corrections.
- Redo the B-filter fields initially done with the Astrodon Bfilter that has a red leak with the newer filter that has no red leak.
- Control for and correct for images polluted by cirrus clouds.
- In view of our financial situation, we should look at charging for use of the data.

VPHOT

• Strengths:

- Much easier to use than IRAF. Very intuitive user interface. Easy to learn to use. This is hands-down the best and easiest to use photometry reduction software out there.
- You can do high quality photometry solutions anywhere with an Internet connection.
- Seamlessly use data in VSX, VSP, and AAVSO-net in photometric solutions.
- Users can make, edit, and share with each other customized photometry sequences and images.
- Weaknesses:
 - You need an Internet connection with decent bandwidth to use VPHOT.
 - Aaron Price is still listed as the editor and maintainer for the VPHOT entry/info Websites.
 - It is not possible to get multiple "seat licenses" if you want to use the interface as part of a class you are teaching. Other software can be shared by research students and staff in a single observatory.
 - The documentation for what the astrometry solution software and VS Search need in terms of FITs header keywords to operate properly is difficult to find.
 - The upload queue sometimes freezes up and requires staff to fix it.

• Improvements:

• Work continues on changes to VPHOT as requested by the community on the VPHOT forum pages.

• Suggested Improvements:

- Seamlessly integrate APASS into VPHOT to identify comparison and check stars in the field.
- Improve the astrometric solution software in VPHOT. It is the subject of many comments on the online forum dedicated to VPHOT.
- Assign paid staff members to understand the inner workings of VPHOT so that a single volunteer is not the only source

for trouble-shooting information and how to fix it when it breaks.

- The online videos are a useful tutorial but it would be helpful to have the information documented in a written User Manual.
- Create a streamlined procedure for reporting when the upload queue processing freezes.

Section Comments:

Not well advertised. Members and professionals need to be acutely aware of what we offer. We are not considered significant unless we sell ourselves. Professionals especially are unaware of what we offer.

III EDUCATION AND OUTREACH

MENTOR PROGRAM

- Strengths
 - Availability of members to assist new members.
 - ♦ AAVSO Forums.

• Weaknesses

- Too few mentors.
- Often there is a lack of follow through by new observers.
- Need for better communication.
- Better advertising to new members.

• Improvements made

• Hard to determine.

• Suggested improvements

- Assign a new observer to a mentor.
- More mentors needed
- Better communication.
- Use of electronic media (Skype, e-mail, telephone) to assist new observers.

CHOICE COURSES

• Strengths

- Courses are well planned and conducted.
- Appropriate to the various programs of the AAVSO.
- Low cost. Available to all members.

• Weaknesses

- Relatively new program needing expansion.
- Time required for development of new courses.

• Improvements made

- Quality of courses.
- Number of courses.

• Suggested improvements

- Keep up the good work.
- ♦ Add more courses
- Through CHOICE course certify members for data verification.

OUTREACH

• Strengths

- Speakers Bureau.
- PPT presentations available on line.

• Weaknesses

- Not well advertised.
- No connection to groups such as the Astronomical League.

• Improvements made

- Materials are added to presentations.
- Members giving talks.

• Suggested improvements

- Better advertisement of what we offer.
- More involvement by members.
- Connect with organizations such as A.L.
- Add presentations to our inventory.
- Revise current presentations to be up-to-date.

CITIZEN SKY

• Strengths

- Epsilon Aurigae project best Pro/Am collaboration in history.
- Attracted diverse group of observers.
- Where we should go in the 21^{st} Century.
- Involves all types of observers.
- Great education tool.
- DSLR Manual & Tutorial has been prepared.

• Weaknesses

• None that I can see.

• Improvements made

• Project continues as part of the AAVSO.

• Suggested improvements

- Better exposure to the public.
- Look for new projects.

CHANDRA EDUCATION

- Strengths
 - Donna Young is a powerful advocate for the program.
 - Hands on Astrophysics and its successor, Variable Star Astronomy are excellent teaching tools.
 - Science Olympiad is an excellent source for attracting young individuals.
 - Connections to educators.
 - Ability of students to use our data for small research projects.

• Weaknesses

 Not well advertised. This should be a crowning jewel for the AAVSO to attract new members, especially younger ones.

• Improvements made

• Continuous improvement of programs.

- Suggested improvements
 - Better advertising for program for AAVSO members and the public in general.
 - Need to involve universities and colleges in the program.

Section Comments:

- A CHOICE course using the skill of non-observers (the majority of our membership) could provide the QC in concert with Zapper.
- The Speakers' Bureau should be expanded and outreach should be made to local clubs, AL Regional Meetings, the AL National Meeting, local colleges, schools, and libraries to offer presentations on the AAVSO. KRS is working on something presently.
- Our Power Point presentations on our WebSite should be openly offered to AL clubs. They are always looking for material for their meetings. Discuss this and a link to our site with AL leadership.

IV PUBLICATIONS

• Strengths

- JAAVSO flagship publication of AAVSO.
- Publications meet needs of members.
- Quality generally good.
- Weaknesses
 - Not of quality for citation.
 - Format not consistent with other journals.

Improvements

- JAAVSO publication now on schedule.
- Improvement of contributions.

Suggestions

- Change format of JAAVSO to match that of other journals.
 Completed with 2015 issue.
- Include letters for immediate communication. (Electronic?)
- Make Newsletter more scientifically relevant. Need to have figures within text. *(Figures are now embedded in text).*
- More scientific rather than historic papers.
- Because of budget, review page charge structure for nonmembers.

Section Comments:

- Make format compatible with other journals (*Completed with 2015 issue*).
- Encourage observers to publish in JAAVSO.

V. PROGRAM SUPPORT

MEMBERSHIP COMMUNICATIONS

- Strengths
 - Good communication on web site, Facebook, Annual Report, Newsletter and in the Forums.
- Weaknesses
 - ♦ Unknown.
- Improvements made
 - Recent Facebook communications.
 - Twitter communications.
 - Suggested Improvements
 - Increased use of social media.

OBSERVER/MEMBER SUPPORT

Strengths

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- Good notification system for new objects and transient phenomena.
- Announcements for Pro-Amateur collaborations.
- Notifications of articles in recent literature.

Weaknesses

- Many poor observing sections.
- Poor or outdated or lacking observing manuals for specialty observing such as SPPVs, EBs and Nova Search.
- Reactive versus proactive observer support.
- Limited number of forums.
- Variable response time from less than one to over one week.

Improvements Made

• Recent addition of YSO section.

- Addition of Spectroscopy Forum.
- More active Zap inquiries.
- Support and guidance now given to members (especially new observers) by staff.

Suggested Improvements

- New manuals for SPPVs, EBs, Solar/SID, and Nova search.
- A Website detailing problem categories and specific Staff covering those problem areas.

STAFF TECHNICAL SUPPORT

Strengths

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- As above in Observer/Member Support.
- Weaknesses

Improvements Made

• Staff support in place..

Suggested Improvements

• Improvements in place. Continue to serve members.

FUND RAISING/DEVELOPMENT

Strengths

- Good AAVSO presence at national star parties and meetings.
- Good donor base, rapid thank you letters and gift receipts.

Weaknesses

• Limited sources of available new funding.

Improvements Made

• More frequent star party and meeting appearances.

Suggested Improvements

♦ Just as we have a responsibility to the Professional Astronomical Community to provide quality data, they have one to support us. This needs further dicussion.

WEBSITE

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Strengths

- Good content, great visual appeal.
- Great database, tools and software offerings.
- Forums allow members to interact.

Weaknesses

- Poor navigation.
- Lack of frequent new feature items (news, blogs).
- A few broken links.

• Improvements Made

- Moved to Amazon Cloud in 2012.
- Continual upgrades to LGC and WebObs.
- Addition of Stellar News Feed.

Suggested Improvements

- Review Drupal Contact Management System.
- More educational content like VSOTM, CCD Views or Eyepiece Views.

Section Comments:

We have limited staff. We need to enlist volunteer members to assist in this area.

MEETINGS

Strengths

- Reasonable costs.
- Good accommodations.
- Respectable format.
- Well presented topics.
- Chance to interact with other members.

Weaknesses

- Spring meeting locations lack geographical diversity over time.
- Joint meetings with SAS and others dilute VS content.
- Site hosting costs may burden AAVSO budget.

Improvements Made

- WEB based registration
- Broadcast of Special Papers and General Meeting.

Suggested Improvements

- A study has been completed by Kevin Paxson on past meetings and is under review by HQ and Council for future sites.
- Get new joint meeting partners (could help attract new members).
- Have one special feature guest speaker per meeting (fly in if necessary).
- Scrutinize spring meeting scheduling not to conflict with college semester or quarter finals period.
- Consider meeting with the AL, ALPO, etc. as a way of reducing cost and exposing individuals to what we do.

Overall Summary:

- 1. We need to tighten QC on our observations. This is mentioned in all sources.
- 2. We need to be more visible to the Astronomical World. *PAR* and *MS* are especially clear on this.
- 3. The low response to *MS* reveals an apathy amongst our members. We need to excite them about the AAVSO.
- 4. Intense public outreach is needed to increase our membership and be true to our mission/vision.

What remains to be done?

- Consider ways of expanding our reach.
- Look at other successful organizations (AL, ALPO, ASP, CBA) and others to enhance our presence.
- Form cooperatives with the Europeans and their approach to data gathering. Consider being the archive of their data (specifically spectroscopy).
- The Program Committee should be an important tool for the Director to set his/her goals and Action Plan as well as be a tool in evaluating the Director. The Director should use this tool in prioritizing activities thereby assisting him/her in giving direction to the Staff.
- The Program Committee should work with the Budget Committee in assessing the impact of our suggestions on the budget.

PHASE III

In PHASE III Council took the data from the first two studies and established our list of high-priority goals.

AAVSO Data QC (Visual and CCD)

Comments: The AAVSO is known by the outside world by its data and publications. Data QC is an important piece.

Improve AAVSO Publications.

Improve content and presentation of the Newsletter and JAAVSO. Form an outside committee to facilitate this.

Comments:

We need better publications. JAAVSO needs seek papers from members and users of our data to make it more relevant to the scientific community. The Newsletter needs to be improved with an expanded format with more observer oriented information

Observing Section Manuals

New or updated for EB, SSP, Solar/SID, Nova Search and spectroscopy. Comments: Our summer observer survey indicated increased participation in some groups (up to 40%) if observers manuals were written. Some sections are "secret societies" and methodologies and best practices are not known.

Better Professional Collaboration

Advisory Committee, Professional Forum Site *Comments:*

Our current definition of "Professional Collaboration" needs to be reworked. It needs to be a greater experience for both the amateurs and professionals. Amateur education and participation in publication need to be stressed.

AAVSO Visibility and Promotion.

Comments: AAVSO Promotion and Visibility are important but not on a top priority basis.

Membership meetings.

Better localities, dates and venues to better encourage membership attendance.

Comments:

New meeting locales for the Spring and Fall Meetings along with better dates, featured speakers and associated workshops could boost existing and new member attendance.

Improved Observing Sections.

Better and updated websites, more Forum activity and more leaders and volunteers.

Comments:

More leadership, updated websites and increased Forum activity are needed to improve Observing Sections. New or updated manuals are not enough. Observer motivation and guidance need to be enhanced.

Improve Mentor Program.

Better organization, more volunteers and better communication. Comments: Our Mentor Program does need reworking and seems to be under-utilized. Perhaps a new and free "new observer" CHOICE Course could bridge the gap for educating and "jump starting" new observers.

Improve AAVSOnet.

Better PR and organization, updated user guide and criteria for acceptable projects. Comments: AAVSOnet needs to be expanded, better managed and have the criteria for valid projects defined. It seems to be not used by many, hence our lower priority.

Improve VPHOT.

Improve the software, update the user manual and/or videos. Comments: I use VPHOT about 5 or 6 times a weeks. VPHOT is 85% functional and improvements IMHO are of a lower priority.

PHASE IV

AAVSO Program Committee Suggestions for Future

- In order to determine the best direction for our programs to best serve our membership and the astronomical community, we need to know the current assets and potential of our membership. To this direction, we suggest:
 - Devise a detailed observer equipment survey to capture information on telescopes specifics, mountings, binoculars, CCD capability, spectroscopy equipment, etc. The Demographic Survey of 2011 barely scratched the surface of observers' equipment. A new survey may give greater insight into why amateurs observer their particular stars and objects of interest.
 - A survey of membership skills along with willingness of members to volunteer if, and where needed.
- Develop action plans for our prioritized Program items list.
 - In view of our goals for outreach, membership growth, and Pro-Am collaboration, we recognize that small college observatories may be an under-appreciated

resource that the AAVSO can leverage to build presence regionally or nationally in the US. The Program Committee has no specific recommendations or plans with regard to this, but we are keeping it in the forefront of our thinking as opportunities may present themselves.

- Form a committee for the improvement of our publications (JAAVSO and the Newsletter). we would envision a committee comprised of Kolman, Landolt, Saladyga, Percy and one or two other Council members, along with input from Stella Kafka.
- We may wish to pursue observing manuals for the EB and SPP sections, a Spectroscopy Manual, a Nova Search and a manual for Solar/SID observing. There has already been discussion of this on the Forums.
- ♦ Other Council Members may have other ideas for work for 2015.
- It is vital that we include Dr. Kafka's input regarding programs.

We especially appreciate the work done by Kevin Paxson in the preparation of this document. His development of the surveys and analysis of them were vital in its success.

Respectfully Submitted,

Outgoing Program Committee

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Incoming Program Committee

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