

October 5, 2006

To: Mark Hopkins, NSS Senior Operating Officer
cc: Members of NSS Board of Directors
cc: Members of NSS Internet Services Committee
Subject: ISC Activity Report, Period from April 2006 thru September 2006

Problems and Concerns

- Many ISC open action items, but not enough experienced volunteers to work them
- NSS Email Plan still behind schedule — will need volunteers to help implement it
- Web site redesign progress stalled after ISDC — need new leadership and many volunteers
- Need for interaction with Membership Database remains — need Privacy Policy ASAP
- Link to Political Action Network highlighted in new NSS brochure — need dedicated PAN page ASAP
- Online Volunteer Form up — still need “buy in” by NSS Officers and committee chairs
- Still need to ensure that all online forms agree with the new NSS Membership Policy.
- Need short bio & small photo for each new Director, Officer, Governor, and Advisor for Web site.
- The *Ad Astra* and Awards sections need updating as well as some “pizzazz” styling.

Introduction

- I apologize for the length of this report. Since my term has expired and I am pursuing a different leadership position in the NSS, I felt it was necessary to use this report as a means to pass on status, lessons learned, and recommendations to my successors on both the ISC and WOC.
- In July, I worked with the NSS Bylaws Committee to finalize drafts of proposals to modify the NSS Corporate Policies, one of which was to add definitions for the Internet Services Committee (ISC) and Web Oversight Committee (WOC). These were emailed to the NSS Officers and Board of Directors for final review. In August, the Executive Committee voted to approve all of these changes to the NSS Corporate Policies document. An “NSS Web Site Policy” stills need to be written for this document.
- The Internet Services Committee is the new name for what was previously called the Internet Development Team (IDT). The IDT had been operating fine since ISDC 2004; the name change was partly to change some confusion about it being a volunteer committee, and partly to make clear that the ISC’s role is to provide free Internet services to the NSS — without any claim of ownership or authority. The NSS leadership can and does also utilize paid Internet contractors and services (e.g., CyberTeams, Imaginova). For the legal protection of NSS, ownership for the content on NSS Web pages must rest with the NSS committees that are responsible for functions similar to those described on “their” parts of the NSS Web site.
- The Web Oversight Committee is the new name for what was previously called the Internet Communications Committee (ICC). The name change was partly to change some confusion about it being a provider of “content” for the NSS Web site, and partly to make clear that the WOC — via its (sometimes virtual) collection of the NSS staff and committee representatives — has the final authority over the NSS Web site. The WOC is therefore the Web-savvy agent of the NSS leadership. Its function when operating as a full committee is to coordinate the development and use of standards for the NSS Web site; leaving the creation of specific pages to its individual members and their ISC partners.

NSS Volunteer Recruitment

- The ISC continued to provide support to the Operations Committee with its effort to recruit volunteers to serve on or otherwise assist NSS committees. The ISC continued to monitor submissions of the new online form (<http://www.nss.org/volunteer>) to recruit volunteers (both members and non-members) via the NSS Web site. **The Membership Committee plans to devote an entire subcommittee to finding ways to recruit, train, and reward volunteers — if a higher-level committee is not created (e.g., one reporting directly to the Operations Committee).**
- Meanwhile, the ISC continues to enhance the Online Volunteer Form (<http://www.nss.org/volunteer>), adding an ability for the new volunteer to select their proficiency in each of their chosen volunteer skills. The ISC has supplied draft text for the online help for many of the skill areas. **The ISC requests that the Operations Committee assign an action to the appropriate Officers to have their committee chairs review any existing online help and to provide corrections and additions.**
- Unlike other online forms created to date, the Online Volunteer Form (<http://www.nss.org/volunteer>) involves no financial transaction and is not processed by HQ. Instead, committee chairs and NSS officers are notified via email of new volunteers and are provided with a Web link to display their information. Future upgrades to the data retrieval process will display data for multiple volunteers in an online spreadsheet, as well as provide various search options. The priority of adding such features depends on that of other ISC requests.

ISC Subteams and Open Actions

- The ISC has a number of outstanding open actions from various NSS committees. This number is increasing faster than the ISC's ability to close them. An ISC Email Subteam was created in July 2005 but quickly became idle after an initial push. The Subteam's engine was restarted in February 2006 but stalled soon afterwards due to a server crash. The ISC Chair continued on as acting Email Subteam Lead in order to draft an NSS Email Policy, Plan, and Procedures document. More volunteers are needed on this Subteam in order to implement the Email plan and to write the Email procedures.
- Meanwhile, ISC support of NSS Web site improvements has proceeded in a more haphazard manner. An ISC Web Site Subteam was finally created in late March in an attempt to get organized sufficiently to address the many Web-related open actions. Chapter leaders were sent the meeting notices to build up a volunteer team. Both paper and online volunteer forms were promoted at ISDC 2006, and training was offered to those volunteers enticed away from ISDC programming.
- A few volunteers have surfaced (Marianne Dyson and David Brandt-Erichson), that has resulted in the creation of two new Web sections: "Book Reviews" and "Space Settlement". Fortunately, Arthur Smith will likely become the new ISC Chair in October, which should breath new life into the ISC Web Site Subteam.

NSS Email Lists and Email Protection

- Development and implementation of the NSS Email Plan is still far behind the desired and requested schedule. As stated above, progress on both was finally restarted in late February only to get derailed by a server crash shortly after the very productive face-to-face Email Subteam meeting.
- While the Email Subteam has yet to reconvene due to other priorities of the members, the ISC Chair, acting as Email Subteam Lead, has continued on in to order to draft the long overdue NSS Email Policy, Plan, and Procedures document. This document will serve as a material source for a top-level "NSS Email Policy" section for the NSS Corporate Policies document, an ISC-level "NSS Email Procedures" document, and most likely an intermediate "NSS Email Plan" containing information to be controlled by the NSS Executive Committee, yet considered too detailed to be incorporated into the NSS Corporate Policies document. Much research and testing has occurred since ISDC — though at the expense of Web site enhancements. An early

draft, originally promised for ISDC, will hopefully be available by the Fall Meeting in Las Cruces. The draft will focus on the Email Policy portion.

- Despite these setbacks and delays, ISC Email Subteam members continue to provide email forwarding capability to many NSS leaders, and provide email list capability via three mailing list software packages: “MajorDomo” and “Mailman” on the CyberTeams server, and “Cobalt” on the Xisp server. The plan is still to transition all needed email lists to the more powerful and user-friendly Mailman software, which also can be partly automated via Web forms and PHP scripts. The old MajorDomo lists, discovered by spambots in mid-2005, continue to be attacked by spam at an exponentially increasing rate, as indicated in Figure 1.

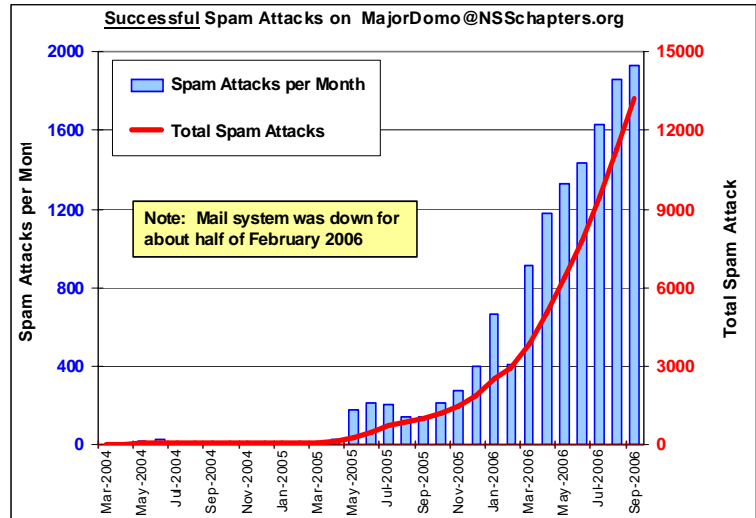


Figure 1. Fraction of spam attacking MajorDomo.

- Even though the Mailman software is fully operational and several NSS groups (e.g., ISDC 2006) have created their own mailing lists, several security and maintenance issues have arisen that has put the full transition on hold until they are resolved. The complexity associated with all of Mailman’s powerful features, despite its user-friendly Web interface, is daunting even for the site administrators, let alone the NSS Committee Chair who just wants it to work and lacks the time or desire to learn all of the details of each feature. Since ISDC, the ISC Email Subteam has researched every Mailman option for every feature, in both the online help files and the configuration files on the Unix server. Based on that research, it will recommend NSS-standard default values for each Mailman option, depending on the type of mailing list (e.g., discussion group, announcement-only, etc.). Partly to enforce those NSS-standard default values, but mainly to simplify the setup and maintenance work for mailing list owners, the ISC Email Subteam plans to create simple online forms that will automate common Mailman functions. List owners will still have the ability to utilize the Mailman Web interface to customize their lists as needed.
- The Unix files associated with the email forwarding and mailing list support capabilities (specifically “virtusers” and “aliases”) were recently overhauled in a major cleanup operation. Each file was divided into logical subparts, as shown in Table 1, and new Unix scripts were written to reassemble them. (Do-it-all script “buildem” calls both “buildv.sh” and “builda.sh”; then “updatealiases”.)
- The file “virtusers_people.inc” is now the single repository of NSS.ORG email addresses for all NSS personnel, to include all HQ staff members and contractors, members of the Board of Directors, members of NSS committees, and other leaders. Each address has been formatted as **Firstname.Lastname@nss.org**, where the “Firstname” part is the common spoken name of the person (e.g., “Fred.Johnston@nss.org”). This is to allow someone to easily guess the NSS.ORG email address for an NSS leader when trying to send that person an email message. A special request will be required to obtain an additional, shorter or more cryptic personal NSS.ORG address (e.g., “fredj@nss.org”). The often cryptic *external* email addresses for these persons now need only be kept in either this file or the related “aliases_people.inc”, greatly reducing the maintenance burden when such email addresses are changed. While these NSS.ORG email addresses are expected to be printed on NSS business cards and in NSS publications (e.g., *Ad Astra*), **these personal NSS.ORG email addresses will not be published on NSS Web pages — unless requested — to avoid detection and abuse by spambots.** (For this reason, all the samples above and below are not real addresses.)

Table 1. Breakup of Email Forwarding Files to Ease Maintenance Burden

VIRTUSERS file	ALIASES file	Description of Contents
virtusers_intro.inc	aliases_intro.inc	Introductions explaining these files and process
virtusers_history.inc	aliases_history.inc	History of changes to any and all of these files
virtusers_chapters.inc	(none yet)	Internal NSS.ORG addresses for NSS chapters
virtusers_people.inc	aliases_people.inc	NSS.ORG email addresses for NSS persons that forward to non-NSS (mostly) email addresses
virtusers_jobs.inc	aliases_jobs.inc	NSS.ORG email addresses for job assignments that forward to individual NSS.ORG addresses
virtusers_mailman.inc	aliases_mailman.inc	Email addresses and processing for mailing lists managed by Mailman software
virtusers_majordomo.inc	aliases_majordomo.inc	Email addresses and processing for mailing lists managed by Majordomo software
virtusers_closing.inc	aliases_closing.inc	Remaining and “catchall” email addresses and any processing not otherwise categorized
buildv.sh	builda.sh	Unix scripts to reassemble “virtusers” or “aliases”
buildvu	buildau	Unix scripts that do above, then “updatealiases”

- Another major reason for the more formal standardized “Firstname.Lastname” NSS.ORG email address format is to provide immediately visibility for NSS job assignments and mailing list participation. The file “virtusers_jobs.inc” is now the single repository of NSS.ORG email addresses associated with NSS job assignments. In addition to the existing job-related email addresses such as “nsshq@nss.org” and “members@nss.org”, there is now an email address for each named leadership position in the Society (e.g., “_ISDC_2006_Chair@nss.org”); each one assigned (forwarding) to a specific person’s personal NSS.ORG address (e.g., “Ilmar.Davison@nss.org”). Almost all of these new job-related email addresses are *internal-use-only* (**not-to-be-published**) and are distinguished by a leading underscore (note above). This job assignment email address strategy builds on work begun by Bruce Mackenzie, as a means for keeping up with frequent NSS job reassignments.
- It is a goal and recommendation that as the new Mailman mailing lists are developed, that list owners (especially those associated with NSS committees) will use the personal NSS.ORG email addresses of their members — or the job assignment ones if more appropriate — rather than their more cryptic (and usually short-lived) *external* email addresses. This will make it obvious which persons are subscribed to the mailing list, for the list owners and also the list members (if given such a right); one of the complaints about the current mailing list system. It will also enable an external email address change to take place in just the file “virtusers_jobs.inc” and automatically apply to all subscribed mailing lists, greatly reducing the maintenance burden.
- The Email Subteam continues to wage war on spam and viruses on two fronts. One is email protection; the other is email address hiding. CyberTeams is still in the process of installing anti-spam and anti-virus free Unix software server-wide. The Subteam is also keeping open the option for a paid service called “Postini” which can provide robust email protection, but at a cost of \$2 per month per email address. Meanwhile, email address hiding is appearing more and more to be the only viable long-term solution, and thus “war” efforts since ISDC have focused on ways to remove published email addresses from the NSS Web site, yet still provide an easy way to contact required NSS personnel. The best solution seems to be online forms, and an Online Feedback Form is being developed that will replace “nsshq@nss.org”, “members@nss.org”, and other “Contact Us” type email addresses currently published on the NSS Web site. The Feedback Form has a pull-down menu for the person to select a category for their question or comment; and that category will

determine the job assignment NSS.ORG email address (e.g., “_Chair_XXXX_Comm@nss.org”) to send the auto-generated email message. The Online Feedback Form can be accessed via: <http://www.nss.org/feedback>

- As each spam-bombarded email address is removed from the NSS Web site, it also needs to be removed eventually from the VIRTUSERS or ALIASES file that forwards email directed to it to the final recipient(s). Currently, when an email address is removed from these forwarding files, the sender gets back a standard, unfriendly “Undeliverable” message from the “System Administrator”. To provide a more friendly and helpful response, a prototype email auto-reply capability has been created. The auto-reply script sends an email message back to the Sender with the bounced email address as the “From:” (rather than the generic “System Administrator”). The short email message explains that the email address has been removed from the system or does not exist, and then provides the URL of the new Online Feedback Form and the NSS Headquarters telephone number. To see an example response, just send an email message to “webmaster@nss.org”; yet another spam-bombarded address.

NSS Privacy Policy and Procedures

- The ISC continues to provide support to an NSS Task Force that is drafting an NSS Privacy Policy for the Executive Committee controlled Corporate Policies document, as well as associated Privacy Procedures. As for the Email Plan, progress on the Privacy Policy has been much slower than desired. The Wiki created to capture privacy issues and concepts continues to be enhanced. As for the Email Plan, the Task Force is working on a draft of the Policy to be made available by the Fall NSS meeting.

NSS Web Site

- Members of the ISC and WOC met at ISDC 2006 for a 2-hour Web Site Workshop. This meeting focused on defining a new structure for the NSS Web site based on the prioritized “goals” defined at ISDC 2004. The result was a decision to offload most of the links and content on the Home Page further down the Web tree, and to create introductory “portal” pages for the four to six major sections of the Web site to be highlighted with prominent links on the redesigned Home Page. Based on feedback from the Board of Directors, the current five choices for major sections are “Who Are We?” (aka About Us), “Space Settlement”, “Educational Materials”, “Events”, and “Get Involved!”.
- Following the successful Workshop, many side meetings occurred during ISDC 2006 with available Committee Chairs that own key sections of the NSS Web Site, including Awards, Chapters, and Policy. With state-of-the-art pencil-and-paper tools, the small groups drafted concepts for their new “portal pages”. Very little has been done since due to other priorities and lack of sufficient ISC and WOC leadership (mainly) and volunteers. **The redesign is not an ISC effort; it must be lead by the WOC.**
- *Ad Astra* section — Imaginova (contractor) for Richard Godwin & George Whitesides (WOC) continues to maintain and keep fresh the *Ad Astra* Online site at <http://www.space.com/adastra/>. Meanwhile, the “primary” site for our “flagship magazine” at <http://www.nss.org/adastra/> continues to be neglected and has become such an embarrassment that most links to it have been temporarily redirected to the *Ad Astra* Online site. A team of volunteers are needed to overhaul the main *Ad Astra* section.
- Awards section — This new section has not been updated since January, despite more awards presented at ISDC 2006. One or more volunteers are needed to update this section with the latest award recipients and to add photographs and other graphics to add more “pizzazz” to these Web pages.
- Chapters section — Ronnie Lajoie (ISC) for Chapters Committee (WOC) continued to maintain the new Chapter Web Listing at <http://chapters.nss.org/a/lists/> via the automated macros in the Excel Chapter Database. In a related note, he also worked in partnership with NSS HQ and Imaginova to create similar Excel macros to automatically generate the text of the Chapter listing in *Ad Astra* magazine, which premiered in the Fall Issue. For the first time since the formation of the NSS, the chapter listing information on the NSS

Web site and in *Ad Astra* magazine was finally in 100-percent agreement with a master data source. The next steps are to continue to work towards porting the Chapter Database from the Excel file into NODAC and to further automate the process of generating the chapter listings for the Web site and *Ad Astra*.

- Home Page — Arthur Smith (ISC) for George Whitesides (WOC) maintained and modified the new “Mission Info Center” at the top of the NSS Home Page to highlight special events (currently Space Shuttle missions). Arthur and George, as well as Brett Silcox, have worked together to provide the latest news and make other minor improvements to the Home Page, while awaiting guidance from the WOC on the much desired Web site redesign.
- ISDC section — (guessing) Frank Berte, Loretta Hidalgo, Andrew Hoppin, Karen Lau, Pat Montoure, William Pomerantz, Tim Scott, Randall Severy, Brett Silcox, Robin Snelson, Mike Turney (ISC) for Pyle & Whitesides & ISDC Committee (WOC) finalized the ISDC 2006 Web site at <http://isdc.nss.org/2006/>. Congratulations to the team on an excellent ISDC and Web site!
- ISDC section — Randall Severy (contractor) for Whitesides & Conferences Committee (WOC) updated registration files and provided initial setup support for ISDC 2007 Web site at <http://isdc.nss.org/2007/>.
- Legislative section — Arthur Smith (ISC) for Policy Committee (WOC) updated the Legislative Action section at <http://www.nss.org/legislative/> to advertise and provide links to information about the June Space Blitz.
- Legislative section — Ronnie Lajoie (ISC) for Policy Committee (WOC) created a Web shortcut for the Political Action Network (PAN) at <http://www.nss.org/PAN> for advertising in the new NSS brochure and elsewhere. The PAN shortcut was initially pointed to the Legislative Action main page (above). **A volunteer is needed to make a special Web page devoted to the PAN ASAP.**
- Membership section — Brett Silcox (HQ) for Membership Committee (WOC) created a new membership benefits page at <http://www.nss.org/membership/benefits.html> with text and graphical information about NSS benefits, and links to text and graphics links to our many benefits partners. A shortcut has been created for use in publications and advertisements: <http://www.nss.org/benefits/>
- Membership section — Ronnie Lajoie (ISC) for Membership Committee (WOC) overhauled the membership brochure download page at <http://www.nss.org/membership/flyers/> with text and graphics links to the new color NSS brochure, plus placeholders for a future B&W brochure.
- Public Affairs section — Arthur Smith and Ronnie Lajoie (ISC) for VP-PA Jeremy Pyle (WOC) updated the list of names of Directors in the “About Us” section at <http://www.nss.org/about/bod.html> based on the recent Board of Directors election. Short bios and photos for the Web pages below <http://www.nss.org/about/bios/> will be sought for new Directors after the Officers Election ends in October, since similar info will also be needed from new Officers, Governors, and Advisors.
- Public Affairs section — Tom Jackman and Ronnie Lajoie (ISC) for VP-PA Jeremy Pyle (WOC) updated the list of names of Governors in the “About Us” section at <http://www.nss.org/about/bog.html> based on recent special elections and deaths. More updates are planned after the Officers Election ends in October. Also began a new section at the bottom of the BoG Web page for “Past Members of the Board of Governors”. This will allow NSS to recognize and honor all or some of its past Governors. **This proposed change still requires approval from the Public Affairs Committee (if not higher).**
- Public Affairs section — Since ISDC, George Whitesides has been sending out press releases directly via Constant Contact, the same mechanism used to publish *NSS Downlink*, and thus the “News” section at <http://www.nss.org/news/> no longer has an updated archive of past NSS Press Releases. The ISC will address this issue at the Fall NSS Meeting in Las Cruces.

- Resource section — Ronnie Lajoie and later David Brandt-Erichson (ISC) for Marianne Dyson (WOC) replaced the old “Books” page at <http://www.nss.org/books-authors.html> with a new “Reading Space” book reviews section at <http://www.nss.org/resources/books/>. David and Marianne deserve most of the credit for converting a set of prototype pages into a fully functional addition to the NSS Web site. In addition to an introductory “portal” page, “Reading Space” has three main sections: Non-Fiction Books, Fiction Books, and Children’s Books. Marianne’s goal is to feature at least one new book of each type per month. Further enhancements for “Reading Space” include the possibility of a supporting database.
- Resource section — Ronnie Lajoie (ISC) for VP-PA Jeremy Pyle? (WOC) finally brought up-to-date the text-links part of the Space Links page at <http://www.HAL5.org/space-links.shtml>.
- Settlement section — David Brandt-Erichson (ISC) for Al Globus and the new Space Settlement Advocacy Committee (WOC) has single-handedly created an entire new section of the NSS Web site at <http://www.nss.org/settlement/>. David has been working tirelessly since ISDC to produce what promises to be the major NSS Web site attraction. Already, major parts of the section are operational, including revamped Roadmap pages (brought over from the abandoned “Community” section), an *L5 News* archive (ported over from the L5news.org site), and a mirror/copy of NASA Ames Space Settlement site. More details can be found in David’s supplemental report.
- Volunteer section — Ronnie Lajoie (ISC) for Operations Committee (WOC) continued to maintain and assist chapters with using the NSS Common Calendar of Events at <http://my.calendars.net/nss>.
- WSD templates — Updated the NSS common header to replace some navigation bar choices and reorder others. Also updated the NSS common footer to add a “Last updated on” date statement. Also created XHTML versions of these templates for use by NSS Web pages also formatted in XHTML (e.g., the revised “<http://www.nss.org/membership/flyers/>”). XHTML is used to ensure that Web pages display properly on all browsers since they can be sent to the W3C validator to check for formatting errors. To enable quick checking of any XHTML NSS Web page, the XHTML version of the NSS common footer template has an “X” link to the W3C validator to the left of the new “Last updated on” date statement.

NSS Online Forms

- Minor updates to all previously existing online forms, including updating the common NSS header and footer, updating online help files, and extending the range of the credit card expiration date year.
- Added pull-down menu options “NASA Federal Credit Union” and “Car Dealership” to the “How did you hear about NSS?” question on the membership forms, in support of the extremely successful NASA FCU partnership — which has yielded over 500 new NSS members since it began at ISDC 2006. Also added some checking to dissuade (so far unsuccessfully) people from crediting the Baltimore chapter if they have already selected a choice (e.g., “NASA FCU” or “Car Dealer”) other than “NSS Chapter”.
- Created an Online Training Form at https://www.nss.org/volunteers/ISDC_training_form.html to collect contact information, course selections, and availabilities in support of Internet-related training sessions at ISDC 2006. For speed reasons, no database tables were created; instead the collected information was just processed and formatted into an email message to the training coordinator and effected instructors. This new capability can be enhanced over time, as needed, to support future training opportunities.
- Added a Space Shuttle Patch intro page at https://www.nss.org/membership/Space_Shuttle_Patch.html plus associated Donation and Membership form files (based on similar Donation and Membership forms), in support of a new recruitment campaign. No changes were required to processing scripts.
- Converted all online form Web response templates files from HTML to XHTML format. This is to ensure response Web pages display properly on all browsers since they can be sent to the W3C validator to check for formatting errors.

- Quietly “released” NODAC version 0.B (hex version 11) in August as a way of wrapping a bow around a hodge-podge of minor changes since the release of version 0.A in February. These changes included a few bug fixes and minor enhancements, requested changes to the online form supporting JavaScript functions, and support for the new Online Training Form and new Space Shuttle Patch campaign.
- For example, updated JavaScript function “Check_Postal_Code” to be smart enough to add a missing delimiter (e.g., hyphen in the 9-digit U.S. zip code) if the user fails to provide it but otherwise provides the correct postal code alphanumerics. Also improved checking of UK and Bermuda postal codes.
- The plan/goal is to release NODAC version 0.C prior to the NSS Fall Meeting in Las Cruces. This release will have more significant changes and upgrades incorporated (including the next item), which will be reported after they are operational.
- Supported NSS brochure design activities to ensure that the brochure membership form and the online membership forms are in agreement. As a result of this process, the online forms will be modified to add a checkbox to “Please have my local NSS Chapter (if any) contact me” and a pull-down menu for a new PAN member to select the optional Phone Tree participation level.
- Started logging changes to the online forms and associated JavaScript and response template files in an Excel file “Online_Forms_Version_History.xls”; and changes to the NODAC-specific files (including online form processing scripts) in a separate Excel file “NODAC_Version_History.xls”. This will allow an NSS leader to understand what has changed in the online forms and why, without getting down into the details of the form processing routines. And vice-versa for a NODAC developer.
- Continued to provide and enhance monthly online form metrics reports to the Board of Directors. Also performed the following special requests:
 - Analysis of *Ad Astra* “Bill Me Later” requests vs. indications of payment in Membership Database.
 - Analysis of new memberships associated with highly successful NASA Federal Credit Union deal.
 - Analysis of new memberships associated with the not-so-successful Space Shuttle Patch campaign.
- On the afternoon of July 6, PAIR.COM, which hosts the CyberTeams server, made a configuration change to their computers that temporarily disabled the MySQL database software. The problem did not affect any Web page or online form, nor the NODAC PHP script software that processes them — just the MySQL database software that stores the data from the online forms. The problem was soon tracked down and corrected and the database software resumed operation on the morning of July 8. During the down time, however, anyone who submitted an online form got an error message and all submitted data was lost. In case this situation happens again, work has begun to improve NODAC’s detection of a “down database” and to send a more appropriate response back to the user. It will also send a special notice to the regular HQ/ISC recipients, with some of the information from the submitted online form. This will allow an HQ or ISC person to notify the original form submitter when the Database is back up.
- Whenever the NODAC PHP script software or MySQL database structure needs upgrading, there is a period of time when NODAC must become unavailable, so that the new and revised files can be uploaded and one last final test take place. During previous upgrades, all done after midnight, the NODAC main script would send a simple “down for maintenance” type response to any person who attempted to submit an online form. Again, all the submitted data would be lost, no doubt frustrating the online form submitter. Because of this situation, and the above “database down” situation, every online form has been modified to call a special JavaScript function upon loading its Web page. If NODAC is down for maintenance or due to a database problem, the JavaScript function will load a special “Down for Maintenance” Web page *instead of the online form*. This way the visitor will be saved the time, trouble, and aggravation of filling out the online form, only to have all the submitted data rejected later.

NSS Web Forums, Blogs, Wikis, and other Web Goodies

- Arthur Smith continued to maintain and provide administrative oversight for the Web forum (BBS) capability, via the 3rd-party software package “phpbb”, as well as the Web logging (blogging) capability, via the software package “Movable Type”. Around May, upon discovering spam attacks to **phpbb**, Arthur was forced to disable the software. In late July, a security hole in **phpbb** was discovered and shortly after the announcement went out across the Internet, the NSS Web site was attacked and almost all of its files were deleted! Randall Severy, a recipient of the announcement, was able to quickly plug the security hole, and then restore the missing Web site files from the daily backup tapes within a day. Major disaster averted!
- Gary Barnhard continued to maintain and provide administrative oversight and training for the Wiki capability. Numerous Wikis have been grouped into a WikiPharm at <http://nssdocs.xisp.net/nsswiki1/>, including one at <http://nssdocs.xisp.net/nsswiki1/NssWebsiteDesignWiki> to support the Web site redesign process.
- The NSS Internet Infrastructure Task Force of Gary Barnhard, Randall Severy, and Dale Amon continues to make progress towards a secure and robust hardware and software infrastructure and working environment for the NSS Web site and email support services. It is currently drafting a plan which it hopes to present to the NSS leadership at the Fall NSS meeting in Las Cruces.
- Since January, the AWStats software that creates monthly metrics for the NSS Web site has been faulty. The metrics Web pages at “<http://www.nss.org/awstats/awstats.pl?config=nss>” only show data for Web site visits between midnight and 4 AM. Fortunately, it was learned that the master files storing the data processed by AWStats contain Web site visits for ALL times of the day. The AWStats problem was traced to its configuration file. Once fixed, the AWStats software can be used to regenerate the metrics pages for each month in 2006. Also, now that these master files have been located, the ISC will eventually be able to provide a capability to generate metrics for specific Web pages over longer spans than one month; something not possible with AWStats.
- During the investigation for the above AWStats problem, the master file storing data on visits to the HTTPS side of the NSS Web site was found. AWStats does not process the HTTPS side, and thus no metrics pages exist (not even faulty ones) for the online forms and other HTTPS Web pages. Unlike the HTTP side, where the visit data is stored in a separate master file each month, all of the visit data to the HTTPS side is stored in one large (123-MB) master file. That file now contains over a million entries dating back to March 2004. (Over half of these entries are just the browser requesting a supporting GIF or JPG image or CSS file). After much experimenting with the Unix “grep” command, the correct combination was found to extract requests for just the online form pages, a more manageable 77,000 entries. This data still needs further processing in order to extract useful metric information, such as the ratio of the number of visits to a particular online form to the number of submitted ones.
- While experimenting to extract online form visits from the HTTPS master visit file, it was discovered that the file contains over 22,000 requests for a “favicon.ico” file, and almost 7000 requests for a “robots.txt” file. Many more requests for these files were found in the HTTP-side files. The “favicon.ico” file is used by Web browsers to place a tiny custom icon near the shortcut rather than the default browser icon. The “robots.txt” file is read by *polite* Web spiders (e.g., Googlebot) to determine which parts of the Web site tree should *not* be indexed. NSS has no control over the frequent requests for these files, and the Web site error log files were filling up with statements where these files were missing. The ISC thus created “robots.txt” files for parts of the NSS Web site where they were missing, and also reviewed and revised any already there. It also created a placeholder “favicon.ico” icon consisting of a simple yellow star in a black background. Since the icon image can only be 16x16 pixels, complex images such as the NSS logo become grossly distorted. The ISC invites NSS artists to craft NSS a nicer “favicon.ico” icon.

Final Comments

- This is my last report as Chair of the Internet Services Committee. I am very proud of the work that the all-volunteer ISC members have accomplished since being handed the reins from the Website Migration Task Force at ISDC 2004. In the past 2-½ years, as a free service to NSS Committees and HQ staff, we have maintained, enhanced, upgraded, and (in some cases) completely overhauled almost every part of our email support system and Web site. We have also introduced new capabilities to NSS including *Moveable Type* blogging, *phpBB* Web forums, Wiki pages, *AWStats* Web site metrics, *MySQL* databases, and *PHP* scripting; plus provided assistance for CyberTeams products including *Web Site Director*, *MyNSS*, and the internal SYSTEM.NSS.ORG. We have also increased the robustness of the underlying hardware and software infrastructure. Although a much-desired Web site redesign is still in the beginning stages, the ISC was still able to make many improvements to our Web site:
- The NSS Home Page and the News section have kept visitors informed of the latest happenings inside and outside the Society. The Legislative section has helped coordinate four Space Blitz events. The ISDC section has provided Web site and online registration support for two very successful ISDCs (2007 is next), as well as kept an archive of many others. The Chapters section finally has up-to-date and greatly enhanced chapter listings, plus new pages on chapter formation and annual reports. The Membership section has a new front end, plus numerous new online membership forms supporting a variety of recruitment campaigns, plus new online forms for volunteer recruitment and training session signup. The in-work Giving section hosts an advertisement for our eScrip deal plus numerous new online donation forms supporting a variety of fund-raising campaigns. The in-work Resources section has a greatly enhanced Book Reviews section. And finally, the all-new Awards section and Space Settlement section are already on their way to becoming major attractions of the NSS Web site.
- The ISC also supported the creation of definition language for the ISC and WOC that has now become part of the NSS Corporate Policies. Just as there is plenty of work left to further modernize our email support system and Web site, there is also plenty of work left to further define the roles, responsibilities, processes, and procedures for the ISC and its relations to the WOC and other NSS committees. One of my regrets was never finding the time to create a much desired (on my part) Web page for the ISC to describe its functions and especially to coordinate its activities. Perhaps in the future
- I would like to thank once again the small (too small) but dedicated team members of the ISC for their truly great work in enhancing the NSS Web site and other NSS internet capabilities. These members include Dale Amon, Gary Barnhard, David Brandt-Erichson (our new super-star), Marianne Dyson, Bruce Mackenzie, Stephan Prater, Randall Severy, and the ever hard-working Arthur Smith — who will very likely take over as Chair. Good luck Arthur, and May the Force — and all these hard-workers — Be With You!

— Ronnie M. Lajoie, Internet Services Committee Chair