FOTW: The ultimate vexillological encyclopedia or an ephemeral web site?

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Abstract

FOTW (Flags of the World) is the foremost Internet site devoted to the display and study of flags. Its public face is a 19,000-page web site, which is regularly updated with material supplied via its 500-member mailing list. The web site is built by a team of graphic artists who draw the flags, and editors who construct the pages, but it is via a mailing list and unsolicited contributions from web page visitors that the information posted on FOTW is obtained. As a website, FOTW has been highly successful in providing vexillological information; as a virtual community, FOTW members have joined together in a nine-year long vexillological discussion that has built an alliance of individuals based on loyalty to the organization and to the discipline. FOTW has had an impact on vexillology far beyond a mammoth picture book - it has built a community that on a daily basis actively engages in vexillological research spanning the range from the basic hunter-gatherer to taxonomist and cataloguer. It has provided a single point source for vexillological information for anyone with Internet access, and it provides a forum to ask questions about where the discipline is heading.

What is FOTW?

FOTW (Flags of the World) exists first and foremost as an international community of variably interested flag enthusiasts that continuously discusses any aspect of vexillology. At its core is a mailing list of over 500 contributors, of whom about 40 are regularly active participating in the discussion and submitting information gleaned from their experience. About 40 more are rarely active, occasionally mentioning a relevant observation, and over 400 are lurkers, inactive or derelict members, presumably reading the postings on the mailing list for their own interest.

FOTW also maintains the FOTW website, the ultimate depository of many of the postings on the mailing list. The website is produced by the volunteer efforts of about 30 editors, each of whom has assigned responsibility to massage the gleanings from the mailing list into a coherent collection on a webpage. As of mid-year 2003, this website has grown to over 19,000 pages, with over 34,000 flag images posted.
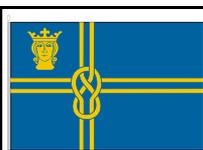
Background: a brief history of FOTW

FOTW was the creation of Giuseppe Bottasini, a computer engineer in Milan, Italy, and an avid flag watcher. It began about September 1993 as a simple e-mail distribution list that was used as a discussion group by about a dozen people. It soon expanded to include a regular group of about 100 to 150 addresses. Many of the images initially distributed via the mailing list were written in PostScript by Christopher Vance, who maintained the best flag-site on the Internet at the time.

The Flags of the World website was also created by Giuseppe Bottasini in the early days of general public access to the Internet (late 1994). Giuseppe initially operated both the website and mailing list from CESI (Centro Elettrotecnico Sperimentale Italiano), until bandwidth pressures resulting from the site's popularity required him to look for a more permanent site. In January 1997 a devastating system crash at CESI forced the immediate move, briefly through an Israeli mirror, to a site at Digibel in Belgium. Giuseppe continued to manage the website, initially assisted by Zeljko Heimer, who was responsible for ensuring a flag on every page, and who standardized the layout of the pages, the image sizes and palettes, and introduced the use of ISO codes for file names. The website continued to grow, exceeding 100 Mbytes in size in October 2000. In May 2001, the "home site" at Digibel in Belgium closed, and FOTW continued as a dispersed series of mirrors operating in ten countries. By mid-year 2003, it was approaching 400 Mbytes in size.

After he stepped down as manager of the mailing list and director of the website, Giuseppe Bottasini wrote "I created FOTW because I dreamed of having available a large, full-color flag book, always up-to-date and containing those local or non-official flags that books normally don't show." (Bottasini 2000). This dream is shared by the dozens of people who make the FOTW website happen, by the hundreds who contribute to the mailing list, and by many of the 2 to 5 million visitors who are attracted to it monthly to browse. Every page on FOTW has a mail link at the top, which visitors can use to communicate with the director, and every week the director receives complimentary comments, thanking FOTW for providing such a bank of information about flags.

How does FOTW work?

i) The mailing list

All material appearing on the FOTW website first passes through the mailing list. Information comes from three main sources: members of the mailing list who report on flags flying in their neighbourhood, active vexillological contributors on the mailing list who research flags, and observations sent to the website by visitors.

With an active membership residing in at least 47 countries (Fig. 1), FOTW enjoys the benefit of local knowledge for thousands of flags. These range from observations reporting previously undescribed flags, to reports on the way flags are used, or simply comments that a particular flag is or is not used in that area. Almost all new members to the FOTW mailing list are eager to relate the flag use in their vicinity; some have made special efforts to unearth in particular municipal flags, many of which

Figure 1 World map showing countries of residence of active FOTW list members.

have only one example extant, or which are used with many variants on a single design. Two examples of contributions in this category are FOTW member and editor Dov Gutterman, who has contacted municipal authorities and thoroughly scoured the villages and towns of Israel, tracking down hundreds of municipal flags, many of which are locked away in village halls or council chambers, and not generally available to public view, and István Molnar who has similarly roamed the byways of Hungary and surrounding parts of Slovakia, Romania, Slovenia and Austria, photographing the municipal flag (often the sole flag in existence) and forwarded it to mailing list. In most cases the mailing list receives these flags for information, although in some cases particular items in the design of the flags raises on-line discussion.

The efforts of Dov Gutterman and István Molnar overlap with the second category of contributions, that of vexillological researchers who delve into the stories, designs and uses of flags, and report them to the mailing list. These researchers are themselves members of the mailing list, and generally also members of local vexillological associations. They are well versed in the background, use, and significance of flags in their subject area, and commonly provide an in-depth treatment of the subject. Probably the most extensive example on FOTW would be Pascal Gross' contribution of nearly 3000 flags or banners of arms of Swiss communes, which he has drawn, and which has been augmented by Zeljko Heimer's heraldic blazon. However, many examples can be seen on the website – almost all of which have required exhaustive research in local sources to ascertain. They include series like the municipal flags of Colombia, Puerto Rico, Catalonia, Norway, and France, the Daimyo banners of Japan, the shipping company flags of USA, and an on-going series of the currently developing flags of regions and municipalities in the Czech Republic. However, almost every country with a developed vexillological tradition has received some treatment of this type.

The third category of submissions involves observations sent to the website by visitors. Almost everyone it seems, upon first becoming aware of the Internet and its search engines, searches to see what information exists about his/her home town. Interest in local flags seems to be widespread because many of these visitors end up at FOTW asking why the flags of their towns are not shown. Upon responding that we can only show flags we know, FOTW often acquires details or images of the flag. A disproportionately large proportion of such contributions come from the designers (or descendants of designers) of such flags – clearly there is much pride in local flags in many parts of the world, and FOTW has filled a niche to pick up information such people want to pass on.

All material submitted to FOTW is forwarded to the mailing list. Initially this was done simply to communicate it, but increasingly it is seen as a means of investigating the veracity of the information. Commonly on-line discussion arises about a submission that can determine the significance of it, recognize if it is a flag-related urban legend, or elucidate more details about the topic. The mailing list functions as an informal board of review, where (it is hoped) the obviously false and spurious material is recognized, and deflected from the editorial process. The volume of such contributions is impressive: the first five years of FOTW (1993-1998) saw the mailing list grow to receiving 18,000 messages per year, a level which it has more or less maintained ±15% since 1998. This corresponds to an average of 50 messages per day, of which probably 40 are flag-related in content. Commonly a particular flag-related theme will gradually slip into non-flag-related areas, before the list master calls a halt to the discussion and a small fraction of messages are notices maintaining the smooth operation of the list.

ii) The website

The FOTW website is prepared by a team of editors, each with responsibility for a different region of the world or topic in vexillology. In mid 2003, the editorial team comprised 26 active editors, 2 editors in training, and the director, residing in 21 different countries. The editors have been remarkably dedicated to their task, zealously guarding their assignments and often spending much time researching the background to a particular issue. It is one thing for a Swiss or American national to be at least vaguely familiar with many of the states, cantons, towns, villages or communes in their country, but it is something else for a Dutch citizen to acquire a detailed knowledge of the administrative structure (past and present) of the Czech Republic and Slovakia, or an Israeli to be on intimate terms with the maps of Italy, Hungary and Venezuela. It certainly helps when editors are multilingual – one editor is fluent in Spanish, German and English, another in Russian, Portuguese and English, a third in Spanish, Portuguese, Arabic and English.

Approximately 80% of the messages posted to the mailing list are flag-related. These are archived by the director of the website, and accumulated on a monthly basis. At the end of the month, the director files the collection of messages and images, and makes them available to the editors of the website as they are ready for them. Here a delicate balance of encouragement and prodding is sometimes needed to ensure editors keep on the task. There is nothing more discouraging for a potential contributor of future items to have his/her first contribution lie languishing in a backlog for many months. People who submit material do indeed look again to see what we do with it.

When an editor receives a package of material from the director, he (so far all are male) assesses what new or improved information is available from the month's contributions, and edits the relevant web pages accordingly. Right from the start, a guideline for the editor has been 'You are an editor, not a tape recorder' (Bottasini 1997). Editors are encouraged to use the original text of the messages from the mailing list where they make sense in the flow of the web page, but not to be constrained into a simple 'cut-and-paste' mode. Some are more rigorous than others in this area, striving to blend contributions into a coherent treatise on a particular topic. However, all end up capturing a flavour of the discussion on the mailing list.

After the editor has completed his update to the web page, he sends it and any associated new or updated images back to the director who gathers the submissions weekly, processes them through a page-building program to give a uniform look to the pages, build the index pages, and check for basic errors (e.g., unlinked images), and then packages them for downloading by mirrors. Currently FOTW is hosted on 17 separate mirrors, each maintained by a different mirror manager. Nine of these receive updates weekly, the remaining eight on a monthly basis. Finally, the director summarises some of the more significant updates for the week, and announces them on the mailing list (thereby often inspiring further discussion on the topics just updated).

A critical element in FOTW is the voluntary effort of the mirror managers. Initially FOTW was hosted by the company that employed the founder of the site, but in January 1997 a system crash and the weight of traffic to the site forced it on to a broader access site at Digibel, a network provider in Belgium. In 2001, the site became too large for Digibel, and it moved on to the current system of a dispersed series of mirrors, no one of which is considered a "main site". Instead, these sites are all mirrors of each other, and visitors can choose to access whichever site gives them reliable connections and good download speeds. Although there are always issues surrounding tardily updated mirrors, this system seems to work well, thanks to the generosity and commitment of the mirror managers. Mirror managers are entirely responsible for maintenance of their mirrors, including the cost of hosting them. Some are hosted by flag shops, some by universities, some by individuals with a keen interest in flags. When the site grew past 100 Mbytes, and again at 200 Mbytes, several mirrors were dropped because of escalating prices, but it is a testament to the loyalty of the mirror operators that 17 people see fit to host the site – this number has steadily grown over the past five years. In return, at least for the commercial mirror operators, FOTW provides a banner at the top of every page which in two clicks can link any visitor to their own web pages.

The nature of the web site inevitably allows for errors and imprecisions to be introduced. A contributor may be completely convinced about a particular fact, and present it forcefully via the mailing list. While many such faults get caught at source, if the topic is about an area that is not well known, it can find its way to the editor, and although the editor does become a bit of an expert on the area of his responsibility, there is always the possibility that he has not encountered that particular issue. One of the strengths of the web page, however, is that when such errors are identified, they can be corrected quickly. Inevitably many comments addressed to the mailing list involve tales about flags that fall into the folklore or urban legend categories. FOTW has striven to present these too, indicating they are of dubious origin, trying to ascertain what germ of truth lies in them, and providing an accurate account of the flag in question.

Quality control on FOTW

Three elements of quality control need to be considered on FOTW: content, images, and text. Each of these presents different problems and opportunities and is discussed below separately.

Probably the most important issue concerning the quality of FOTW, and certainly the issue that was most discussed at the 19th International Congress of Vexillology, is the actual content of the website itself. What gets on it? Who approves of the posting? Who checks it or reviews it? The simple answers are anything that is posted to the mailing list and is accepted by the editor can be posted. In fact, after years of experience, editors do become a quasi-authority on the areas of their work, and can identify obviously spurious information, or commonly mistaken features. However, a passing report of a flag sighted in a town in Britain may have very little to corroborate it, and it can easily be accepted as the flag of the town when it is no more than a decorative banner. FOTW does have at least two checks to catch such errors – first, any contribution from a source off the mailing list is acknowledged to assure the contributor is satisfied to have his/her comment included, and at that time the person in contact can ask questions to clarify the nature of the contribution. Second, posting the contribution on the mailing list gives opportunity to vet the reliability of identification of the sighting. However, perhaps the strongest point in favour of FOTW is that by posting it on the web as the flag of the town, the next visitor from that town can assess its accuracy. The ephemeral nature of the Internet means that it can soon be corrected if a mistake is found. Web page content is constantly under review by the most dedicated of the mailing list members. Frequently a posting is made calling into question the accuracy of a comment on the web page, and while FOTW makes no guarantees that everything is correct, it is to be hoped that it is getting more correct with time.

The second criticism that has been leveled against FOTW with regard to quality is that of the images on the site. To provide a standard appearance, and to maintain reasonable bandwidth access, FOTW established early on a standard flag image height of 216 pixels. On most computer screens this ends up being about 5 cm (2 inches) high – not ideal for showing the detail of badges on British governors flags or US states flags, but certainly suitable for simpler tribands or saltires. Where more detail is required, the badge or coat of arms can be reproduced elsewhere on the page with a higher resolution. This size was initially arrived at rather arbitrarily, based on an aesthetically pleasing image size when the web pages were first being constructed, and refined to 216 pixels to allow division into equal pixel values for flags with 2, 3, 4, 6, 8, 12, or 16-striped flags. Small adjustments can be made, e.g., to 215 pixels for 5-striped flags, 217 for 7-striped flags, and 221 for 13-striped flags.

Images are posted on the website in the gif or jpg format – gif format is most appropriate for flat-field objects, where the same colour fills large areas of image, and file size is kept to a minimum. Photographs of flags in use, and some reproduced images are shown in jpg format, although the compression algorithms of a jpg can reduce the quality of the image. Most images received from off-list contributors come in a format different from the standard FOTW 216-pixel high gif image, and ideally are re-drafted by list members to standard. Colloquially referred to as 'giffers' on the mailing list, these graphic artists are a fundamental and invaluable part of the FOTW team. Some giffers have drawn over 5000 images for the web site, commonly specializing in themes – flags of the Commonwealth, Swiss communes, Czech and Slovak munici-

palities, or national flags and ensigns. Giffers work in various media including vector- or raster-based programs, but export in gif format, maintaining the FOTW standard from a wide variety of sources. Providing images in a uniform format also makes it possible to detect when FOTW images are being used on other sites. Generally FOTW permits and condones the reuse of its images, provided that credit is given to the source of the images, and that they are not being used commercially. When FOTW members roam the Internet (as 'vexiferrets') and locate a collection of 216-pixel high images, chances are they came from FOTW. Usually a polite request to acknowledge the source is all that is needed to have FOTW added as a credit to the web page.

The third area where FOTW has received criticism over the years is in the quality of the textual material associated with it. While it is true that there are spelling and grammatical errors on FOTW, most of these come from the original source. Contributors may not use English as their first language; editors may not use English as their first language and even those that do may not be perfect grammarians. FOTW has never claimed to be an immaculately edited final product – it stands as a perpetual work in progress, and corrections are made as they are identified.

In summary, as far as quality is concerned, FOTW's argument is that we know it is not perfect, but we will correct it when we find it. Being easily modified, this can be done almost weekly. The comments listed here refer primarily to criticism FOTW has received from the vexillological community – other marks of the quality of the pages, including the extent of broken links within the site and to off-site resources (these are checked regularly by automated methods), the overall design of the site, and the loading times of the mirrors, are beyond the scope of this review.

The role of FOTW in the study of vexillology

As pointed out by Orenski (2003), vexillology as a study is about 40 years old; FOTW is now 9 years old. Orenski questioned whether vexillology has yet matured to the point where it can be defined as a science, or if it is still in the observation and reporting stage. Similarly we can ask if FOTW has matured to a state where it contributes to vexillology, or is it merely a glorified picture book which only repeats materials already published.

In the early days of FOTW, the main goal was to complete the collection of national flags and ensigns. Later, FOTW tackled the first-level sub-national flags. For most countries (at least those that use flags at the sub-national level) that is now complete, and the acquisition stage has moved on to the municipal level. Initially flag images were redrawn from readily available sources – published flag books and encyclopedias. As the collection of flags became more extensive, FOTW members turned to hunting on the Internet (vexiferreting), although some members have had considerable success in their home areas by pursuing the offices of municipalities for information about local flags. It might be argued that the discipline of vexillology has not yet progressed beyond the 'hunting and gathering' stage, and FOTW is no more advanced. So what has FOTW provided to the study of vexillology?

i) FOTW provides a readily available depository for flag information – at 19,000 pages it is far more extensive than the most complete paper-based compendium of flag information.

ii) FOTW has provided a medium for list members to discuss the topic – many

list members previously had no contact with vexillology, so in effect FOTW has increased the extent of vexillological investigation being attempted.

iii) FOTW has built a community of amateur vexillologists – even those who only read the messages on the mailing list cannot avoid being intrigued by the discussion.

iv) FOTW has taken vexillology to the masses – with 2 to 5 million hits per month, FOTW is providing vexillological information at a rate that far outstrips all other sources combined. It permits anyone with a link to the Internet to pursue what their flags of interest represent, how they have developed, and what story they tell.

Has FOTW had a negative effect on vexillology? Although we have no data to determine the effect, it is possible that by providing vexillological information "for free" on the Internet consumers of this information are no longer purchasing it in a paper-based form. The counter-argument would state that by providing vexillological information on the Internet, FOTW has inspired many investigators to dig deeper and purchase books and periodicals.

The charge has been laid that FOTW is destroying the local vexillological societies. Again, pros and cons can be cited. FOTW has greatly widened the study of vexillology, bringing many more participants to the discipline, but has indeed provided a sole outlet for many of these newcomers. It has probably forced the local vexillological communities to revise their roles. Many local vexillological societies publish a journal, which may well have been usurped to some extent by FOTW. Recent discussion of this topic on the FOTW mailing list noted that many vexillological journals are written by a very small number of contributors, and that FOTW may well be forcing these periodicals in particular to re-examine their role. In the big picture, I would argue that the overall level of vexillological communication has increased because of FOTW.

A third group that must have been affected by FOTW is the small group of professional vexillological providers, like the Flag Research Center and the Flag Institute. Prior to FOTW, a consumer requiring detailed vexillological information could either investigate via published literature (which can be difficult to find) or by communicating for a fee with a provider (again, not easily located). The FOTW director currently fields 10 to 20 vexillological inquiries per day, some of which otherwise might have gone to a professional provider. Questions that cannot be answered immediately get forwarded to the mailing list with a request to respond to the list and to the original inquirer. About half of these get answered, often very knowledgeably. Members of the Flag Institute are also active contributors to the FOTW mailing list, and frequently give detailed responses to off-list inquirers. Both the Flag Institute and the Flag Research Center (and 53 other vexillological societies) are listed and linked from the FOTW website, thereby providing access to them for the Internet community.

What makes FOTW work?

FOTW is one of the many success stories of the Internet. As director of the web site, I receive almost daily letters of praise from visitors – people amazed at the extent of the site, surprised to find their home or ancestral town flag displayed, and delighted to encounter the colouring book, bibliographic or historical resources. Part of the success lies in the nature of the subject – flags inherently lend themselves to display, and their

appeal is enhanced by supporting information. However, the big success of FOTW is not the web site itself, but the effort that has gone into making it happen.

The core of FOTW is the mailing list, and the relentless discussion that it hosts. Although the website is usually a visitor's first encounter with FOTW, it is participation in the mailing list discussions that captures his/her attention and commitment. Many list members come and go depending on their availability (it *does* take time to digest 50 messages a day!), but many have been members without interruption for several years. List members assign themselves tasks within FOTW – some become editors or giffers, others are vexiferrets delving through the seemingly endless and always changing supply of Internet images or stacks of government documents, yet others attend to the mundane aspects of policing the list to ensure the topics remain flag-related or providing translation of web pages. Everyone it seems can contribute, and new members are frequently welcomed by the 'old-timers' in a friendly environment.

FOTW is composed of humans with all their characteristics and foibles – it would be untrue to imply there are no problems, but in nine years of existence only one active list member has been banned and only occasionally does discussion get so abrasive that the FOTW list master has to call a halt on a topic. Considering the worldwide nature of the list, the potential for political discussion, and the level of activity, this is a record of which FOTW can be proud.

The Role of FOTW in the Future of Vexillology

Orenski (2003) made a concerted effort to answer the question if vexillology is a science, and in doing so speculated on where the discipline is going. He identified a split between the world of the 20th century vexillologists and cybervexillology, a dichotomy that he sensed might be deepening with time. He noted that "if you participate in some aspect of the flag business, you ignore the Internet at your own peril." FOTW has taken the opposite approach. It began with a group of flag enthusiasts who were largely unaware that the subject of vexillology even existed, and it developed its own guidelines and principles for the investigation of flags. This early ignorance of established vexillology may have been its greatest mistake – but surely a mistake that can (and must) be forgiven. If established vexillology is unable to reach the market that wants to know about it, then it is not fulfilling one of the mandates of its (or any) discipline: to advertise and promulgate itself.

It was with a sense of appreciation by the mailing list members that FOTW was accepted as a member of FIAV in 2001. Recognition that FOTW can be a collaborator, not a competitor, in forwarding vexillology was an important step forward in addressing the gap between the traditional vexillologists and the cybervex world.

FOTW stands today as the public banner of vexillology. Any young person who needs flag information or is inherently interested in flags looks to the Internet as his/her initial source. FOTW is one of the first accessed portals of this information. As such it therefore carries the principal responsibility of recruiting the next generation of flag enthusiasts and vexillologists.

FOTW welcomes anyone who wishes to discuss flags – any aspect of them. Not everyone may be interested in the vojvodships of Poland or the use of flags on Star Trek, but with a membership of hundreds and an endless discussion forum, someone always seems to respond.

FOTW makes no claim to be perfect, but through the attention of established and informed vexillologists it strives to move forward. Although never specifically stated on the FOTW mailing list, it is the unwritten assumption that FOTW intends to find every flag, follow every lead into their origins, and make available every fact and factoid about them.

Conclusions

Is FOTW the ultimate vexillological encyclopedia or an ephemeral web site? Yes and yes again. For the past five years it has steadily been adding flag images at the rate of 5000 a year, and has long since surpassed any other single source for flag information. While it may be shallow, it is certainly broad, and depth will come with time and effort. As an encyclopedic source, it is succeeding. But it is also an ephemeral web site, in the sense that it is never the same. On average about 1000 pages are updated every month, and it is this enduring transience that makes it the living voice of vexillology in the first decade of the 21st century.

Acknowledgements

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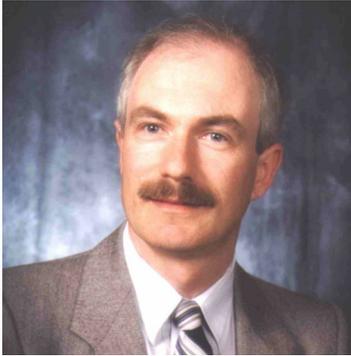
List of works cited

Bottasini, G. (1997): 'Instructions for Editors,' in: *Flags of the World*, <http://flagspot. net/flags/edinstr.html>

Bottasini, G. (2000): 'Giuseppe Bottasini's thoughts on the establishment of FOTW,' in: *Flags of the World*, <http://flagspot.net/flags/fotwbott.html>

Orenski, P. (2003) *Quo Vadimus: an essay on the state and future of vexillology*. Privately published.

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Rob Raeside is the retiring director of Flags of the World. He grew up in Scotland, educated at Aberdeen University, before moving to Canada to attend Queen's University and the University of Calgary. A geology lecturer by profession, he has had a profound interest in geography, maps and flags since he was given an atlas as a birthday present at age 5. When the Internet reached him in 1994, the first pages he searched were for maps and flags, and within a month he was a correspondent on the FOTW mailing list. In 1995 he began editing for the website, and gradually increased his role in FOTW until in June 1998 he took over from the founder, Giuseppe Bottasini, as director, a role he has held until July 2003. He edits pages associated with FOTW, as well as the British and southern Asian pages.

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