To: JCC Website Committee

From: Webmaster

Subj: Website Status: February 1, 2016

In this report, I have attempted to provide information only and not conjecture or qualitative analysis. There are no recommendations for changes herein. This is for your information.

I also want to disparage no one or any process. We anticipated, I suspect, that getting to a well-functioning website would not be a straight line or a fast process.

There are terms used when discussing websites. It is time consuming to stop and define many of these terms during a ten-minute presentation and somethings definitions are elusive. Please use Wikipedia or other sources to gain a working knowledge of the following terms. I believe you will find it is important to your understanding of the material. I am not an expert by any means on this subject. At the next board meeting, I have twelve minutes to lay out what I feel we need to do. My recommendations will be based the information contained herein.

Terms of Interest:

Website or site	Host	Server
Local Server/local host	Shared Server	Managed Server/Managed
		Hosting
SEO (Search Engine	The Languages of WordPress:	Brute Force Attack
Optimization)	HTML, CSS, PHP, JavaScript (aka	
	Jscript), JQuery, Ajax, and MySQL	
SQL Injection	Plugin	Widget
Shortcode	Theme	Free Theme
Paid/Premium Theme	Child Theme	Core WordPress
Wordpress.org vs.	Slider	Footer
<u>Wordpress.com</u>		
Header	Body	Side Bar
Backend /Frontend		
Menu or Nav Menu	Bread Crumbs	Root
Open source	Silo, silo design or structure	Robots.txt
Cloudflare/CDN	nameservers	Visual editor/Text editor
Cache		

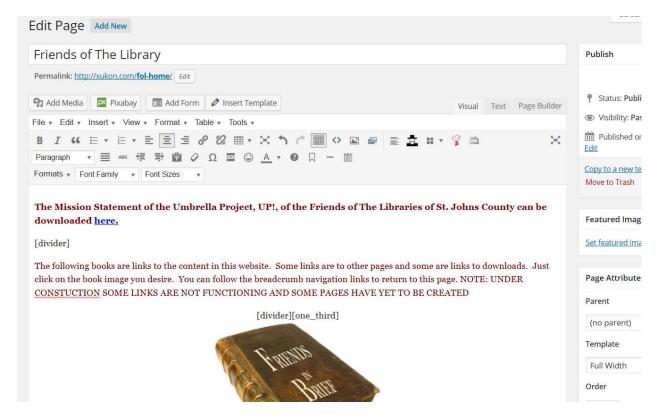
This report is divided into five sections:

- 1. Structure
- 2. Speed
- 3. SEO
- 4. Security
- 5. Trends

1. Structure

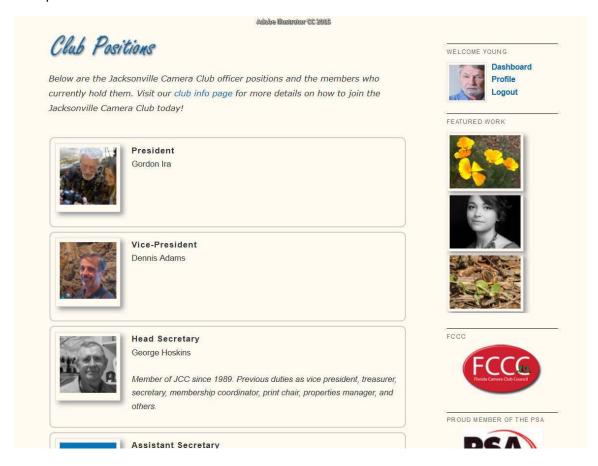
WordPress was begun as a blogging platform and evidence of this exist to this day. It was meant to be usable by everyone or if not everyone by a large percentage of the population. By this, I mean it was meant to be a tool used by average, non-IT personnel.

A typical page of a WordPress site, from the backend, looks like this:

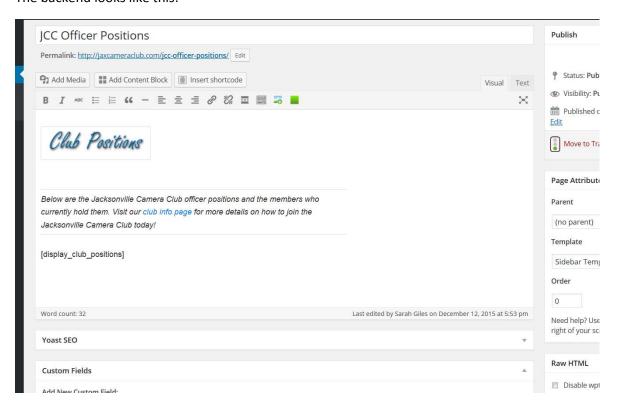


You are seeing a webpage with the visual editor of WordPress active. With a couple of hours, training or watching tutorials you could change any of this information or begin writing your own pages.

The following is the front page and back page of a typical JCC website page. In this case, we are seeing the Positions Page. The point is of this example is that this is a common design throughout the site not just this example.



The backend looks like this:



Most all the content of the page in contained in the shortcode, [display_club_positions].

This is very hard and time consuming to edit. The information in the shortcode lives in a PHP file in the child theme of the site. Probably the Functions.PHP file.

A PHP file looks something like this: Shortened to a few lines this file was over 400 lines in its entirety.

```
// CHILD functions.php
function remove_parent_theme_features() {
    // remove Movie Custom Post Type
    remove_action( 'init', 'parent_movie_add_post_type');
    /*
    alternatively, we can add our custom post type to
    overwrite only some aspects of the parent function
    add_action( 'init', 'child_movie_post_type');
}
function child_movie_post_type() {
    $child_args = array(
        // other arguments...
        // change Custom Post slug
        'rewrite' => array( 'slug' => 'child-movie'),
        // remove excerpts and add post thumbs
        'supports' => array( 'title', 'editor', 'author', 'thumbnail')
    );
    register_post_type( 'movie', $child_args);
}
```

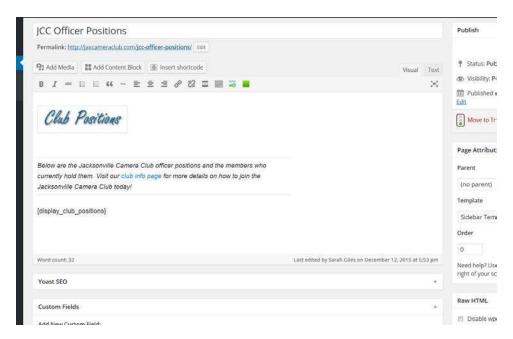
'show_on_cb' => 'cmb_test_text_show_on_cb', // function should return a bool value

You really have to know what you are doing to edit this, it takes time and you run the risk of creating a conflict and breaking the site.

Why would a website be designed this way? One reason would be control. Visualize a small county with its own IT department and a countywide website. You want uniformity in design to standardize the management of the site. You want to limit what individuals outside of the IT department can do.

In the above example, the names of the club board members can be changed via another shortcode placed on another page that limits the fields that can be edited. It also limits any changes in design that might "mess up" the layout of the information.

It our case the photos come from the profile images of the members and the database of this information is also tied to the points assignment and control system that automatically adds points for each office. Of course these other shortcodes have no way of handling the change of name of the secretary position from "Head Secretary" to Secretary and has no way of handling two individuals that change horses in the middle of the year as in Librarian and Peoples' Choice in 2015. This type of change was not programed into the system. In this example, the developer or IT department is enlisted to make the changes or the manager of points adjust the answers manually.



Another element is noteworthy above. The Title of this page in WordPress is "JCC Officer Positions". You see this at the top of the screenshot.

In the visual composer, you see the name Club Positions in blue script. The blue script is not text it is an image. The automatic system of WordPress to name pages and have those titles show up on the page has been "turned off" in the code. Now if we write say ten pages of new content and we are to match the other pages we have to create ten images of matching script. I can offer no reason for this design decision other that whimsy.

Forum

The site contains a forum powered by a plugin, named Buddypress, an iconic WordPress plugin. You can visit the site and see the activity on our Forum. Generally, forums need a large number of participants to be effective. We could expect a forum on even a narrow subject to need hundreds of members/participants to be viable.

Blog

There is no blog on the site. Creating a blog simply consist of adding a page and designating the page as the blog in WordPress. Blogs typically need to be alive to be viable which means several people contributing material. This can include outing information, program descriptions, Banquet details, Christmas parties, tutorials, etc. These posts can be archived, searched and read by members later. Post and pages can be assigned to "Categories" and given meta data known as Tags. These are used to find and display information in a world of various ways.

Gallery

The site's galleries are powered by a premium plugin, NextGen Pro. NextGen has an illustrious and checkered past. It was developed and run for many years as an open sourced plugin and then the developers "sold the name" to Photocrati. They almost immediately upgraded the plugin to version 2.0. It started having catastrophic problems with most premium themes. It crashed many sites. The advice to the users of the premium themes was to revert to the version prior to 2.0. Many did and today that version is still available under the name NextCellent as an open source plugin.

The plugin seems to cause us no known issues.

Digital Contest

This is also executed via a shortcode. It is tied into the NextGen pro Gallery Plugin and has worked well from my experience. It is probably the shining light of our website along with the heavy emphasis on the galleries: We now have over 200 galleries on the site. Each theme of the digital contest is a gallery, each member can have a gallery, galleries have been created from digital versions of print contest winners and digital contest winners, and outing images and various contests.

This shortcode could have been written as a plugin.

WordPress is constantly updated to take advantage of security patches and new features. When major updates happen (Designated as a .number as in 4.4) the plugins are also updated to stay compatible.

There will come a day when the Digital Contest shortcode needs to be updated to continue to function. This will be a continuing expense/complication.

User Functions (Roles)

WordPress, again showing its blogger roots, natively supports member roles. There are six:

- Super Admin somebody with access to the site network administration features and all other features.
- Administrator somebody who has access to all the administration features within a single site.
- Editor somebody who can publish and manage posts including the posts of other users.
- Author somebody who can publish and manage their own posts.
- Contributor somebody who can write and manage their own posts but cannot publish them.
- Subscriber somebody who can only manage their profile.

Our site uses a plugin (or a couple of plugins) to extend the functionality of users by giving permissions to individuals for specific junctions. On our website, all members are assigned to the *Subscriber* role and given permissions that vary with the job. *Author, Editor* and *Contributor* go unused and *Super Admin* is not applicable.

Cache

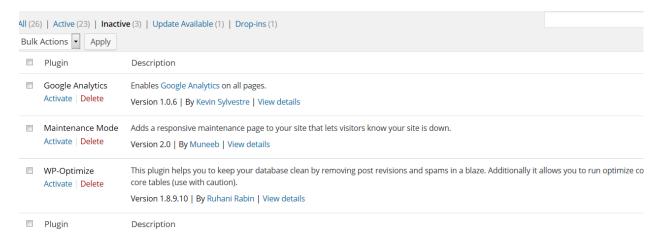
The site has no caching plugin. It does have a database plugin (W3-Optimize) but it is inactive.

Active Plugins on the site are listed for the record

Plugin	Description	
Avatar Manager Deactivate	Avatar Manager for WordPress is a sweet and simple plugin for storing avatars locally and more. Easily. Version 1.6.0 By Cătălin Dogaru View details	
bbP last post Deactivate	This Plugin changes the 'freshness' (eg 4 hours ago) that bbPress displays on topic and forum lists to the date of the last post forum or topic (eg 17th January 2014 at 5.15pm) Version 1.3 By Robin Wilson View details	
bbPress Deactivate Settings About	bbPress is forum software with a twist from the creators of WordPress. Version 2.5.8 By The bbPress Community View details	
Better Forum List Widget for bbPress Deactivate	The default bbPress Forum List widget is pretty bare bones. This plugin adds a topic count and organizes the forum categories Version 1.0.0 By c.bavota	
Cimy User Extra Fields Deactivate	Add some useful fields to registration and user's info Version 2.7.0 By Marco Cimmino View details	
Cimy User Manager Deactivate	Import and export users from/to CSV files, supports all WordPress profile data also Cimy User Extra Fields plug-in Version 1.4.6 By Marco Cimmino View details	
Custom Login Widget with Cubepoints Integration Deactivate	A customizable login widget that will allow you to add a welcome message, the users avatar, and custom links. Version 2.4 By Roger MacRae View details	
Custom Post Widget Deactivate	Show the content of a custom post of the type 'content_block' in a widget or with a shortcode. Version 2.8.5 By Johan van der Wijk View details	
Custom Sidebars Deactivate	Allows you to create widgetized areas and custom sidebars. Replace whole sidebars or single widgets for specific posts and pa Version 2.1.0.2 By WPMU DEV View details	
Settings Reset Deactivate	Adds the necessary JavaScript code to enable Google's Analytics. After enabling this plugin you need to authenticate with Google, t select your domain and you're set. Version 6.4.9.6 By SumoMe View details	
Settings Deactivate	Displays Google Analytics Reports and Real-Time Statistics in your Dashboard. Automatically inserts the tracking code in every pag your website. Version 4.9.2 By Alin Marcu View details	
Dtht-	A simple image widget that uses the native WordPress media manager to add image widgets to your site. Version 4.2.1 By Modern Tribe, Inc. View details Check out our other plugins including our Events Calendar Pro!	
Dashboard Deactivate	Protect your WordPress site by hiding vital areas of your site, protecting access to important files, preventing brute-force login atte detecting attack attempts and more. Version 5.2.0 By iThemes View details Get Support	
Deactivate FAQ	Hide custom menu items based on user roles. PLEASE READ THE [FAQ](http://wordpress.org/plugins/nav-menu-roles/faq/#conflict ARE NOT SEEING THE SETTINGS. Version 1.7.4 By Kathy Darling View details	
D	The most popular gallery plugin for WordPress and one of the most popular plugins of all time with over 12 million downloads. Version 2.1.20 By Photocrati Media View details Get help Contribute	
• There is a new version of NextGEN Gallery by Photocrati available. View version 2.1.23 details or update now.		
Deactivate	The complete "Pro" add-on for NextGEN Gallery. Enjoy ecommerce, beautiful new gallery displays, and a fullscreen, responsive Pro Lightbox with social sharing and commenting.	
	Version 2.3.5 By Photocrati Media Visit plugin site	
Carlo I.B. at a	NextGEN Public Uploader is an extension to NextGEN Gallery which allows frontend image uploads for your users. Version 9999.8.1 By WebDevStudios View details	

NextGEN Public Uploader Settings Deactivate	NextGEN Public Uploader is an extension to NextGEN Gallery which allows frontend image uploads for your users. Version 9999.8.1 By WebDevStudios View details	
Raw HTML Deactivate	Lets you enter any HTML/JS/CSS in your posts without WP changing it, as well as disable automatic formatting on a per-post basis Wrap your code in [raw][/raw] tags. To avoid problems, only edit posts that contain raw code in HTML mode. Upgrade to Pro to to use Visual editor on the same posts without it messing up the code. Version 1.4.15 By Janis Elsts View details	
Shortcodes Ultimate	Supercharge your WordPress theme with mega pack of shortcodes	
Deactivate Examples Where to start?	Version 4.9.9 By Vladimir Anokhin Project homepage Support forum Changelog	
UpdraftPlus - Backup/Restore Add-Ons / Pro Support Settings Deactivate	Backup and restore: take backups locally, or backup to Amazon S3, Dropbox, Google Drive, Rackspace, (S)FTP, WebDAV & email, c automatic schedules. Version 1.11.23 By UpdraftPlus.Com, DavidAnderson View details	
User Login Log Deactivate	This plugin track records of wordpress user login with set of multiple information like ip, date, time, country, city, user name etc. Version 2.2 By weblizar View details	
WP Approve User Deactivate	Adds action links to user table to approve or unapprove user registrations. Version 9992.2.3 By Konstantin Obenland View details Donate	
Yoast SEO FAQ Premium Support Settings Deactivate	The first true all-in-one SEO solution for WordPress, including on-page content analysis, XML sitemaps and much more. Version 3.0.7 By Team Yoast View details	

Installed, but not active



Responsive

Our site is technically responsive. It is not always shown to be as responsive as it could be. Less than ideal viewport imagery is evident on some phones and tablets. The classic solution for this is to upgrade the theme.

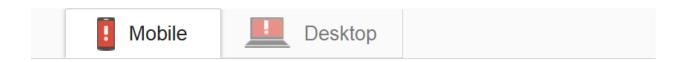
2. Speed

The internet was very slow in the age of dial-up connections. It has sped up dramatically with the advent of improved/faster internet connections. At the same time, other factors have become a force to slow the apparent speed, namely mobile. Cell phones using a slow data connection have pushed websites to more nimble and faster to load. In short, the need of sites to be fast is still an issue.

It is possible to test the speed of a website using some analytical tools rather than just our feeling. There are also factors that affect the speed that are on the client end not the website or host. We all experience periods of varying speeds of our browser or internet provider. You can test your internet connection speed by going to http://www.speedtest.net/.

In testing Website speed, there are two good tools. One is: Google's: Pagespeed, https://developers.google.com/speed/pagespeed/insights/

This is the result of Pagespeed run for our site for mobile:



38 / 100 Speed

! Should Fix:

Enable compression

▶ Show how to fix

Eliminate render-blocking JavaScript and CSS in above-the-fold content

▶ Show how to fix

Reduce server response time

▶ Show how to fix

Leverage browser caching

▶ Show how to fix

Optimize images

▶ Show how to fix

This is the result for desktop:



46 / 100 Suggestions Summary

! Should Fix:

Enable compression

▶ Show how to fix

Reduce server response time

▶ Show how to fix

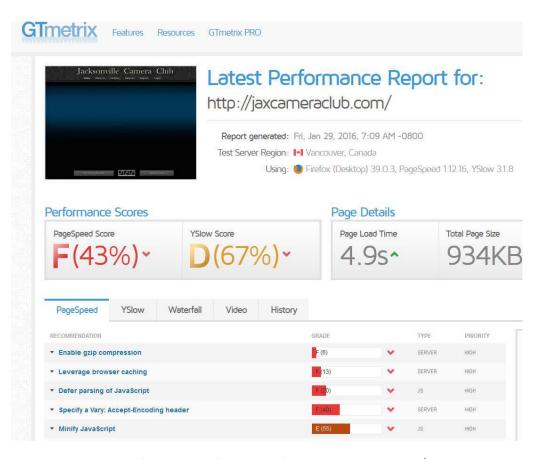
Eliminate render-blocking JavaScript and CSS in above-the-fold content

▶ Show how to fix

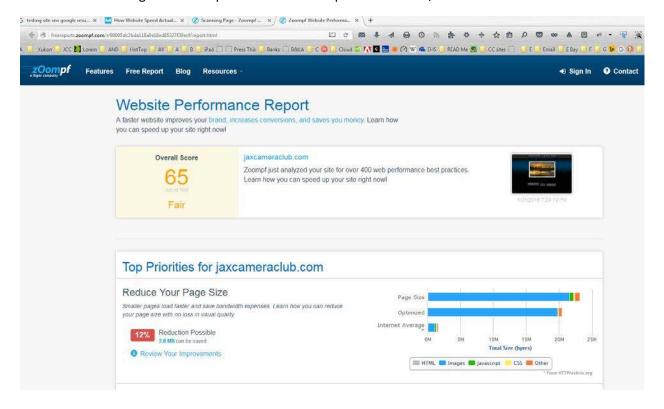
Optimize images

▶ Show how to fix

The other "best" test is from GTMetrix. The important number is the Pagespeed score. YSlow, a Yahoo developed test is no longer considered very much by developers. A reasonable goal for us would be a Pagespeed score of 80.



This is another rating from Zoompf. I show it for completeness but w/o comment.



What affects speed of a site?		
Design of Site**	Host/Hosting Plan	
Size of Site	Plugin installed	
Cache Plugin	Time of Day	
Optimize the database	Traffic	
**Special Coding, Jscript above the "fold", Size (compression) and quantity of images		

3. SEO

The site has the Yoast SEO plugin installed. It is a rather ubiquitous. Every page has evidence of the plugin and the process of installing and maintaining it is rather tedious.

We check the results of searches with three search engines: Google, Bing, Yahoo.

The search engine market share is as follows: 2015, rounded. I have seen other reports with Google's share in the High 80's. The importance is that Google is what counts.

Google 64 %

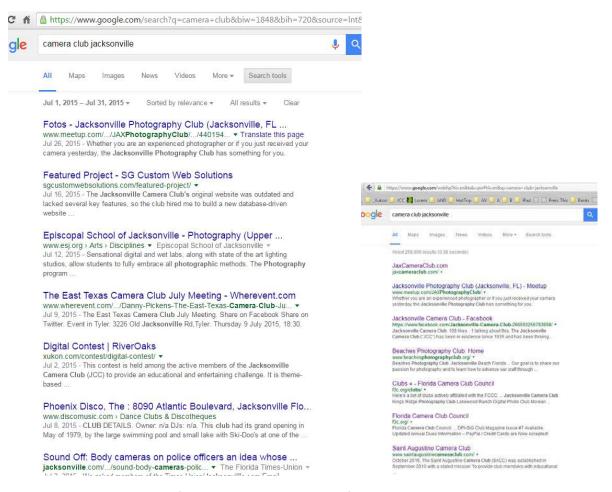
Microsoft 22 %

Yahoo Sites 12 %

Others 2 %

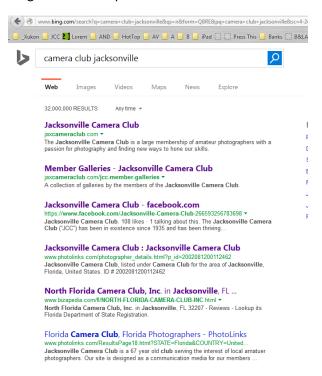
The importance of SEO to our club is rather limited compared to most businesses. We only need to be highly rated in the eyes of potential members. We can expect that someone being interested in a camera club would search for Camera or Photography Club, and the location: Jacksonville, North Florida, Northeast Florida, Florida. Searching the main three engines with the terms Camera Club, Jacksonville gives the following results:

Google

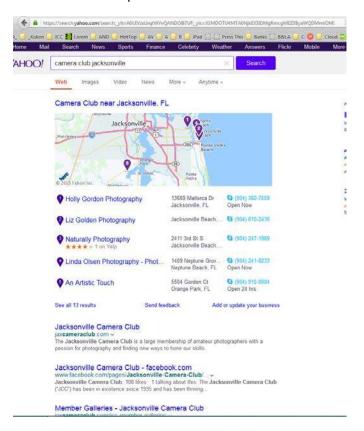


Earlier when I had searched for JCC, it did not appear on first or second page. I can no longer test since it pulls it from my stored search data/sites visited data. Paula P reported to me this year that JCC was not appearing in Google search either. Please try the search yourself and see what result you get.

Bing: JCC comes up fine



Yahoo JCC comes up fine



4. Security

WordPress powers approximately 25% of the websites in the world. That is a lot of targets for hackers. Most information sites, like ours, have nothing of value to steal but they are still targets for hackers. Often unsophoisticated, brut force attacks.

Websites and their hosts can do a lot to not become the low-hanging fruit for these hackers. Changing standard terminology on the site, installing a security plugin, beign careful where you are when you login, adopting strong passwords, and frequent backups are the first lines of defense.

Our site shows the strength of passwords automatically as they are typed and "Strong" is recommended for suscriber level. Our site is backed up weekly with a plugin, *UpDraft Plus*. It is backed up to an Google Drive account in the club's name. Our security plugin is iThemes Security.

It was reported that we were hacked in the fourth quarter of 2014. Now it is believed we were not hacked but that the host had pulled the plug on our site over a disputed invoice. This led to our moving to Arvixe Hosting.

It was again reported that we were hacked in the fall of 2015. Our developer believes we were hacked. She found no concrete proof (Changed code or the like) of the hacking. We ended up solving the issue by reverting to a previous backup. The site was hardened as noted above. Plus her PHP and Java Script code was modified to prevent SQL injection attacks.

I have queried some WordPress professionals with the details of our 2015 "hack" and the question: Does is look like hacking? Of the three I asked they say it doesn't have the normal fooftprint of hacking. I asked if could have been done inadvertately by us. Answer: It is possible.

My conclusion: We may or may not have been hacked in 2015. For now we harden our site and continue to backup. Things we should do anyway.

6. Trends

Website design and functionality trends are driven more by sites that produce income for their owners than information sites such as ours.

The big influencers are usage habilts and changing levels of patience. On usage habits, phones and tablets are the key and patience is dictating that slow sites are not in favor.

We see trends of: Simplicity, scrolling vs. clicking, more visual, including images and video. Not more audio by itself. Audio is seen as distracting many times. More control in the hands of the user.

Importance to us: Be accessible and well functining on phones and tablets as well as desktops and laptops. This implies speed and design.

Respectively Submitted

Young McQueen

904.287.0700 Young@xukon.com