

Interface Redesign

Collegesportingnews.com

Drew Hart

December 4, 2007

Table of Contents

Executive Summary	3
Analysis of Current Interface	4
Layout	4
Color and Graphics	4
Interface Elements	4
Interface Design: Strengths	5
Interface Design: Areas for Improvement	6
Redesigned Interface Wireframes	8
Home Page	8
Sub Page	9
Analysis of Redesigned Interface	10
Implementation Options	11
Approach 1: Fixed-Width, Left-Aligned	11
Approach 2: Fixed-Width, Centered	12
Approach 3: Fixed-Width and Variable-Width Columns	12
Approach 4: Fixed-Width and Variable-Width Columns, Centered	12
Recommended Implementation	12
Other Recommendations	12
Appendix A	13
Figure 1: Home Page Top	13
Figure 2: Home Page Top	13
Figure 3: Home Page Bottom	14
Figure 4: Home page Middle	15
Figure 5: Home Page Top	15

Executive Summary

Collegesportingnews.com has contract with Alpha & Omega Web Designs to create a new interface layout for their website (www.collegesportingnews.com). A number of interface problems were identified, and this redesign targets these issues, offering a solution that addresses and resolves the problems.

This report is organized into four sections. There is also an appendix containing different screen shots of the current home page, isolating particular problems. The sections of this report are:

- *Analysis of Current Interface*
The current interface is deconstructed into component elements and the existing design is evaluated based on interface design principles.
- *Redesigned Interface Wireframes*
Digital wireframes, showing placement and arrangement of interface elements, are presented for both home page and a sub page.
- *Analysis of Redesigned Interface*
Improvements in the proposed interface are presented, as well as how the new interface addresses limitations in the existing site.
- *Implementation Options*
Four approaches to implementing the redesigned interface are presented, with a consideration of the advantages and disadvantages. The recommended approach is identified.

The redesigned website interface presents a number of improvements over the existing interface. These improvements include:

- Significantly reduced weight of the home page, making download and render time much quicker, making it less likely for users to bail out and leave the site
- Incorporating more ‘white space’ into the interface making it easier on the eye to look at and read
- Reducing the amount of ‘dead space’ on the page, especially below the fold
- Global navigation is easier to identify, and the buttons/links are consistently formatted
- The redesigned home page and sub pages are aesthetically more pleasing as much of the imbalance and distractions have been removed.
- The header and content areas are now equal size in all resolutions, eliminating any presence of a horizontal scroll bar.
- A few, minor labeling changes have been incorporated, making navigation easier for the user.

Analysis of Current Interface

Layout

- The interface for collegesportingnews.com uses a mixture of fixed-width and variable-width elements. The left and right columns are fixed; the center content column is variable. The navigation bar in the header is variable.
- When the window on a wide-screen monitor is maximized, the text can be difficult to read.
- When displayed at a resolution of 800 x 600, the header/header graphic is wider than the content, causing a horizontal scrollbar to appear (see Appendix A, Figure 1).
- However, when displayed at a resolution of 1680 x 1050, the content area is wider than the header/header graphic (see Appendix A, Figure 2).

Color and Graphics

- The color scheme is blue and white; the blue is mostly found on borders, text headers, heading backgrounds, and the bottom border strip. Many other colors make up the backgrounds of the various columnist banners (located on the right side of the home page).
- Graphics are excessive. There are 31 images on the home page. The result is a page weight of 199k, large enough to require 46 seconds for download and rendering on a 56k modem (calculations based on tests run at www.websiteoptimization.com).
- As of this analysis, one columnist's graphic appears four times on the home page.

Interface Elements

The collegesportingnews.com interface contains the following elements which will be brought forward in some form (with modifications made to some elements) into the redesigned interface:

- Graphics
 - header (one large graphic, incorporating a background image, the logo, and two taglines)
 - navigation buttons or graphics
 - 'College Sporting News'
 - 'CSN News Index'
 - 'College Sporting New Power Web Sites'
 - '2007 Football Championship'
 - 'FCS Yearbook' (appears twice; once as a simple graphic, once as a navigational graphic)
 - buttons in "Columnist" section
 - logo
 - photographs
 - clipart (football player, spider)

- columnist graphics located next to articles
- HTML text global navigation
- CSN publication sign-up form
- HTML text article introductions with links to full articles
- HTML text news headlines
- “Features” section with links to:
 - ‘Scoreboard’ page
 - ‘Schedules’ page
 - various poll pages
- “Columnist” section (with graphical links to articles written by each particular columnist)
- Link to ‘MIAC Profiles of Excellence 2006/07’ book order page
- Link to ‘2007 FCS Yearbook’ download page

Interface Design: Strengths

The primary strengths of the church collegesportingnews.com interface is its adherence to certain interface design principles and to some of the Gestalt rules of visual perception.

- The site maintains relatively good consistency (with the exceptions noted in the ‘Areas for Improvement’ section of this analysis) in the location of interface elements throughout the home page and sub pages.
 - the global navigation buttons and CSN news-related buttons maintain the same position
 - most pages maintain a three-column (two outside fixed, center variable) layout
- Readability is easy due to a good use contrast. Most of the text is dark with a light or white background. Where text is white, the background is dark. Where photographs are overlaid with text, the text is also given a black outline.
- The site left-aligns all text, applying the principle of alignment.
- The Gestalt rules of proximity and similarity are used well to identify the global navigation buttons/links, which are located next to one another, and are formatted as small-caps.
- The Gestalt rules of enclosure and similarity help the user to identify the different content sections located in the center column. The header of each section is white text on a dark background, and is formatted as small-caps.
- The “Columnist” section makes good use of the Gestalt rules of proximity, similarity, and continuity. The user knows this is a group because each graphic is located next to each other, each graphic is designed similarly (text on left, photo on right), and are aligned to the left of the right-hand column.
- The user is able to quickly identify news articles on account of a consistent use of a dark blue header text that is larger in size than the text of the article itself.
- The site makes a nice use of the design principle of white space in regard to the space between each article and the ensuing header.

In addition, printing also functions fairly well due to the fixed-width side columns (150px each), and the variable-width center column (100%).

Interface Design: Areas for Improvement

Limitations in the current interface center on the design principles of consistency, simplicity, repetition, white space, focus, balance, aesthetics, contrast, and the Gestalt rule of similarity.

- Consistency
 - The ‘Staff’ and ‘Feedback’ subpages fail to maintain the 3-column layout that is found in all the other global navigation sub pages.
- Simplicity
 - There are too many different types/styles of graphics throughout the home page, which complicate the look and feel of the site. These types include photographs, team logos, clip art, and the columnist’s banner-type graphics.
 - Each article in the content area has a team’s logo-graphic attached to it. This, too, complicates the look and feel of the content area.
 - Putting all the columnist’s graphical navigation buttons on the home page complicates the look of the home page.
 - Inserting the CSN logo at the bottom of the page next to the photographs of the basketball players is out of place and unnecessary.
 - The home page consists of two separate links to the ‘2007 FCS Yearbook’ download page, one through the graphic at the top of the right-hand column, and another through a text-link in the main content area.
- Repetition
 - On the home page, Mr. Mies’ columnist graphic appears three times, each next to an article he wrote. These articles are one after another, resulting in his graphical banner to be rendered all in the same area (see Appendix A, Figure 3).
- White Space
 - There is almost no spacing between the columns, resulting in the text bumping up against the outside columns.
 - The vertical spacing of the layout elements in both outside columns is very tight, leaving no space for the eye to rest, and making it difficult to distinguish one element from another.
 - The whole site feels too busy due to the fact that there is no space around the entirety of the site; all content bumps up against the browser widow.
 - Due to the long center column, there is too much ‘dead space’ in the outside columns once the user scrolls down below the fold.
- Focus

- The header is too tall, and takes up nearly half the page when viewed at a resolution of 600 x 800. The tagline “Eyes on the Prize” is excessively large.
- The right column of the home page is graphic and color heavy, drawing the users eye away from the main content (see Appendix A, figure 4).
- Balance
 - The header width is much greater than the content area, resulting in a horizontal scroll bar when viewed at a resolution of 800 x 600. But at a resolution of 1680 x 1050, the content area is wider than then header.
- Aesthetics
 - The resolution of the graphic in the header is very grainy, and the color is washed out.

Perhaps the most significant limitation in the current interface concerns the layout and location of the global navigation buttons/links.

- The bottom row of global navigation buttons is dissimilar to the top row in that it’s color contrast is reversed; the upper bar is light-colored text on a dark background, while the lower bar is dark-colored text on a light gray background. This dissimilarity results in confusion on the users part. (See Appendix A, Figure 5)
- In addition, the current placement of the global navigation bar does not allow for all the navigation buttons to be located on one line together.


Redesigned Interface Wireframes

Home Page

<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="border: 1px solid black; padding: 2px;">[site logo goes here]</div> <div style="border: 1px solid black; padding: 2px;">[site tagline goes here]</div> <div style="border: 1px solid black; border-radius: 50%; padding: 2px; text-align: center;">A</div> <div style="text-align: right;"> About Us Contact Us Feedback Site Map Privacy Policy </div> </div>	
<ul style="list-style-type: none"> Home FCS News Columnist Articles Gridiron Power Index All Stars Teams Fan Zone CNS Report Mapping the MIAC Polls Scoreboard Schedules CSN Staff 	<p>Pellentesque Tellus Arcu</p> <p>Ipsum Lorem Integer quis nibh. Curabitur purus lacus, luctus ut, sagittis id, ultricies at, urna. Nam fringilla felis nec nisi. Aenean dignissim tellus eget leo. Nulla ut odio et urna condimentum aliquet. Read more</p> <p>odio et urna condimentu Vestibulum sagittis, dui ultrices nonummytristique, purus lacus ultrices augue, sit ametvehicula enim enim ut nulla. Morbi cursus arcu nec dolor. In lacinia mauris. Read more</p> <p>Integer quis nibh Curabitur purus lacus, luctus ut, sagittis id, ultricies at, urna. Nam fringilla felis nec nisi. Aenean dignissim tellus eget leo. Nulla ut odio et urna condimentum aliquet. Aliquam molestie. Pellentesque tellus arcu, rutrum a, sagittis sed, ultrices eu, nibh. Vestibulum sagittis, dui ultrices nonummytristique, purus lacus ultrices augue, sit ametvehicula enim enim ut nulla. Read more</p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px; text-align: center;"> [sign-up form for the CSN report goes here] </div>
<ul style="list-style-type: none"> I-AA.org archive 	<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p style="text-align: center;">B</p> <div style="border: 1px solid black; width: 40px; height: 40px; margin: 0 auto; display: flex; align-items: center; justify-content: center;"> X </div> <p>Suspendisse fringilla nisi eu odio. Etiam iaculis, mi dignissim ullamcorper commodo, libero magna tempus turpis, ut aliquet tempus turpis, ut aliquet</p> </div> <div style="width: 45%;"> <p style="text-align: center;">C</p> <div style="border: 1px solid black; width: 40px; height: 40px; margin: 0 auto; display: flex; align-items: center; justify-content: center;"> X </div> <p>Ipsum Lorem Sagittis Sed eget risus. Praesent et erat et dolor ornare eleifend. Quisque magna magna, gravida nec, faucibus lobortis, aliquam facilisis, velit. Praesent igula dui, lobortis ut, viverra vitae, mattis nec, turpis. Praesent et erat et dolor ornare eleifend. Read more</p> <p>Class aptent taciti sociosqu ad litora torquent per conubia nostra, per inceptos hymenaeos. Suspendisse venenatis condimentum sapien. Vestibulum ante ipsum primis in faucibus orci luctus et ultrices posuere cubilia Curae; Nullam condimentum, tortor Read more.</p> <div style="border: 1px solid black; width: 40px; height: 40px; margin: 0 auto; display: flex; align-items: center; justify-content: center;"> X </div> </div> </div>
<p> Home FCS News Columnist Articles Gridiron Power Index All Stars Teams Fan Zone CNS Report Mapping the MIAC Polls Scoreboard Schedules CSN Staff </p> <p>© 2001 - 2007 College Sporting News. All rights reserved worldwide.</p>	

(see Analysis of Redesigned Interface for explanation of the above A-D markings)

Sub Page

[site logo goes here]	About Us Contact Us Feedback Site Map Privacy Policy
<p>Home</p> <p>FCS News CSN News Index FCS Recent Headlines</p> <p>Columnist Articles</p> <p>Gridiron Power Index</p> <p>All Stars</p> <p>Teams</p> <p>Fan Zone</p> <p>CNS Report</p> <p>Mapping the MIAC</p> <p>Polls</p> <p>Scoreboard</p> <p>Schedules</p> <p>CSN Staff</p>	<h2 style="margin: 0;">FCS News</h2> <p><u>Maecenas at orci in quam dictum tincidunt</u> Sed pellentesque porttitor sem. Donec ac justo vel lacus rutrum euismod. Fusce sed nisl. Sed orci nibh, volutpat tempor, imperdiet vitae, mollis id, metus. Quisque dapibus purus sit amet orci. Suspendisse fringilla eleifend nibh. Vestibulum et dolor sagittis felis ornare malesuada. Nunc accumsan metus vehicula pede. Aliquam ac quam Read more</p> <p><u>Fusce blandit lorem a velit</u></p> <div style="display: flex; align-items: flex-start;">  <div style="flex-grow: 1;"> <p>Ut tellus tellus, dictum lacinia, lacinia eu, porttitor non, elit. Suspendisse leo nibh, bibendum eu, vestibulum sed, fermentum eu, ipsum. Donec aliquet hendrerit arcu. Pellentesque lacus nibh, posuere eu, porta eu, tincidunt eu, tortor. Aenean metus tellus, commodo sed, pellentesque at, bibendum a, nibh. Aliquam erat volutpat. Nullam nec arcu. Suspendisse velit tellus, facilisis vitae, eleifend quis, sodales ac, orci. Praesent et nulla. Integer sit amet neque. Integer id turpis quis massa rhoncus dictum. Suspendisse potenti. Read more</p> </div> </div> <p><u>Quisque leo eros, pretium consequat</u> Donec aliquet hendrerit arcu. Pellentesque lacus nibh, posuere eu, porta eu, tincidunt eu, tortor. Aenean metus tellus, commodo sed, pellentesque at, bibendum a, nibh. Aliquam erat volutpat. Nullam nec arcu. Read more</p> <p><u>Fusce eget lorem, Etiam tempus, nisl ut</u> Dignissim auctor, nisl ligula malesuada nisi, sed imperdiet est nibh quis felis. Nunc viverra quam quis odio. In sed neque. Nunc sit amet risus id lorem vestibulum cursus. Read more</p>
<p> Home FCS News Columnist Articles Gridiron Power Index All Stars Teams Fan Zone CNS Report Mapping the MIAC Polls Scoreboard Schedules CSN Staff </p> <p>© 2001 - 2007 College Sporting News. All rights reserved worldwide.</p>	

Analysis of Redesigned Interface

The redesigned interface for collegesportingnews.com offers a number of benefits over the existing interface design and addresses the limitations identified by the analyst of the current website. Most significantly, the overall weight (size, in kilobytes) of the home page has been drastically reduced, thus allowing the page to download and render much quicker.

- The number of graphics has been reduced from 31 to 5-8. As graphics are very ‘heavy,’ this reduces the weight significantly. It also simplifies the page makes it easier to look at.
- The height of header/graphic has been reduced (note “A” in the hope page wireframe), again reducing the graphical weight of the page. In addition, the tag line will be produced via HTML, reducing the download time.
- Each graphic of significant size is used only once on a given page
- The graphic ‘banner’ associated with each columnist has been reduced in size as well. Note “D” indicates how this might render on the home page.
- The ‘FCS Yearbook’ graphic occurs only once on the home page. This is indicated by Note “C” in the wireframe.
- In the redesigned subpage, all the team mascot graphics have been removed, reducing the weight of the page.

Another significant enhancement in the redesign is the implementation more white space.

- Text and graphics do not bump up against the browser window.
- There is more space between the left column and the content area.
- There is a nice amount of ‘open space’ to the left of the sign-up form, setting it apart from the news items in the content area.
- The ‘dead space’ below the fold in the present interface is significantly reduced by going to a 2-column layout. Below the fold, the only ‘dead space’ might be in the left column.

The most significant improvement in the redesign is the new layout and location of the global navigation.

- The global navigation links/buttons have been moved to the left-hand column. This allows for all the buttons/links to be grouped together in one place, rather than on two separate lines. In this way, the user is very clear about what constitutes the global navigation.

- In addition, each global navigation button/link follows the same design principle of contrast. They may be light text on a dark background, or all dark text on lighter background. Either way, placed here they are all the same.

Another enhancement in the redesign concerns the size of the header.

- The header/header graphic is the same width as the content area. This eliminates the presence of a horizontal scroll bar, even when viewed at a resolution of 800 x 600.

Finally, a few minor changes to the interface make the site easier to navigate. These concern the labeling practices of the site.

- A navigation bar has been added to the upper right section of the header.
 - The ‘Privacy Policy’ has been moved from the footer to the header
 - ‘Contact Us’ and ‘Site Map’ have been added
 - ‘Feedback’ has been moved from the previous global navigation bar
- The global navigation has been repeated in the footer in a simple HTML format.
- ‘Scoreboard,’ ‘Schedules,’ and ‘Polls’ – formerly in a “Features” section – are now a part of the global navigation bar.

Implementation Options

The redesigned collegesportingnews.com interface can be implemented a few different ways, with each approach offering different advantages and disadvantages.

Approach 1: Fixed-Width, Left-Aligned

- The design could be coded in a left-aligned and entirely fixed-width fashion, using two columns of fixed size.
- The left-most column contains the global navigation and subnavigation links.
- The right column contains the main content, which could include news headlines, columnist articles, the CNS sign-up form, and the link to the 2007 Yearbook download.
- The logo, tag line, and the utility navigation are in the header.
- The advantage of this approach is that there is exact control over alignment of the elements within the columns, and the lengths of the lines are reasonable. This approach also allows for greater consistency across platforms.
- The disadvantage of an entirely fixed-width approach is that there is usually a lot of ‘dead space’ on the right side of the page at higher resolutions or on wider monitors.

Approach 2: Fixed-Width, Centered

- This approach is very similar to the first approach, except that the entire interface is centered on the page.
- This approach has the same benefits of the first approach. And in addition, it reduces the amount of ‘dead space’ at higher resolutions.

Approach 3: Fixed-Width and Variable-Width Columns

- This approach combines both fixed-width and variable-width elements.
- The left column would be fixed-width, while the right column would be variable-width. In this case, the content expands to fill the available window space.
- The benefits of the third approach are that there is no issue of ‘dead space,’ for all the content is visible and fills the window space on at higher resolutions. In addition, printing should not be a problem.
- Unless coded otherwise, a disadvantage of this approach is that the line lengths of the variable width column could become too long to comfortably read.

Approach 4: Fixed-Width and Variable-Width Columns, Centered

- This approach is a combination of approach 3 and 4. The interface makes use of the fixed and variable-width columns and is also centered on the page.
- Approach 4 has the benefits of the flexibility of having variable-width columns, little or no ‘dead space,’ and looks nice on the screen.

Recommended Implementation

- Of the approaches described, the fourth is recommended. The left column would have a fixed width, and the right column would have a variable width, while the whole interface would be centered on the page.
- This approach will also make sure that the header and content are the same width.

Other Recommendations

- To help with download and render time, it is recommended that any graphics that do not need to be accessible to screen readers be coded via CSS background image.

Appendix A

Figure 1: Home Page Top



Figure 1: Home Page Top (800 x 600 resolution, 20 inch monitor, screen maximized)

Figure 2: Home Page Top

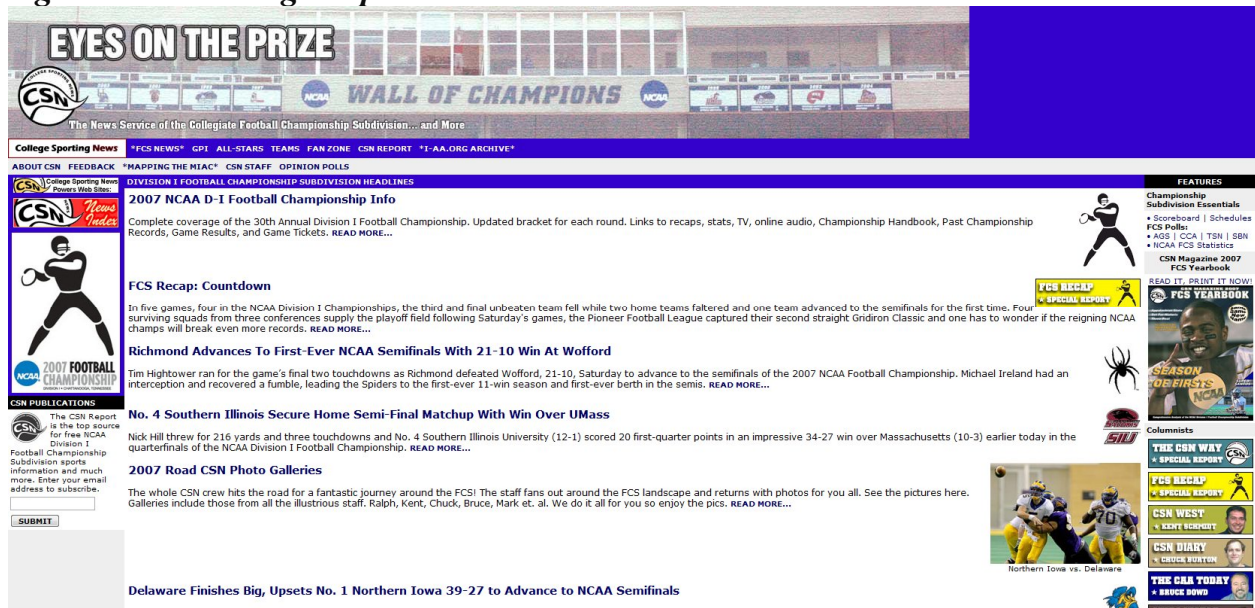


Figure 2: Home Page Top (1680 x 1050 resolution, 20 inch monitor, screen maximized)

Figure 3: Home Page Bottom

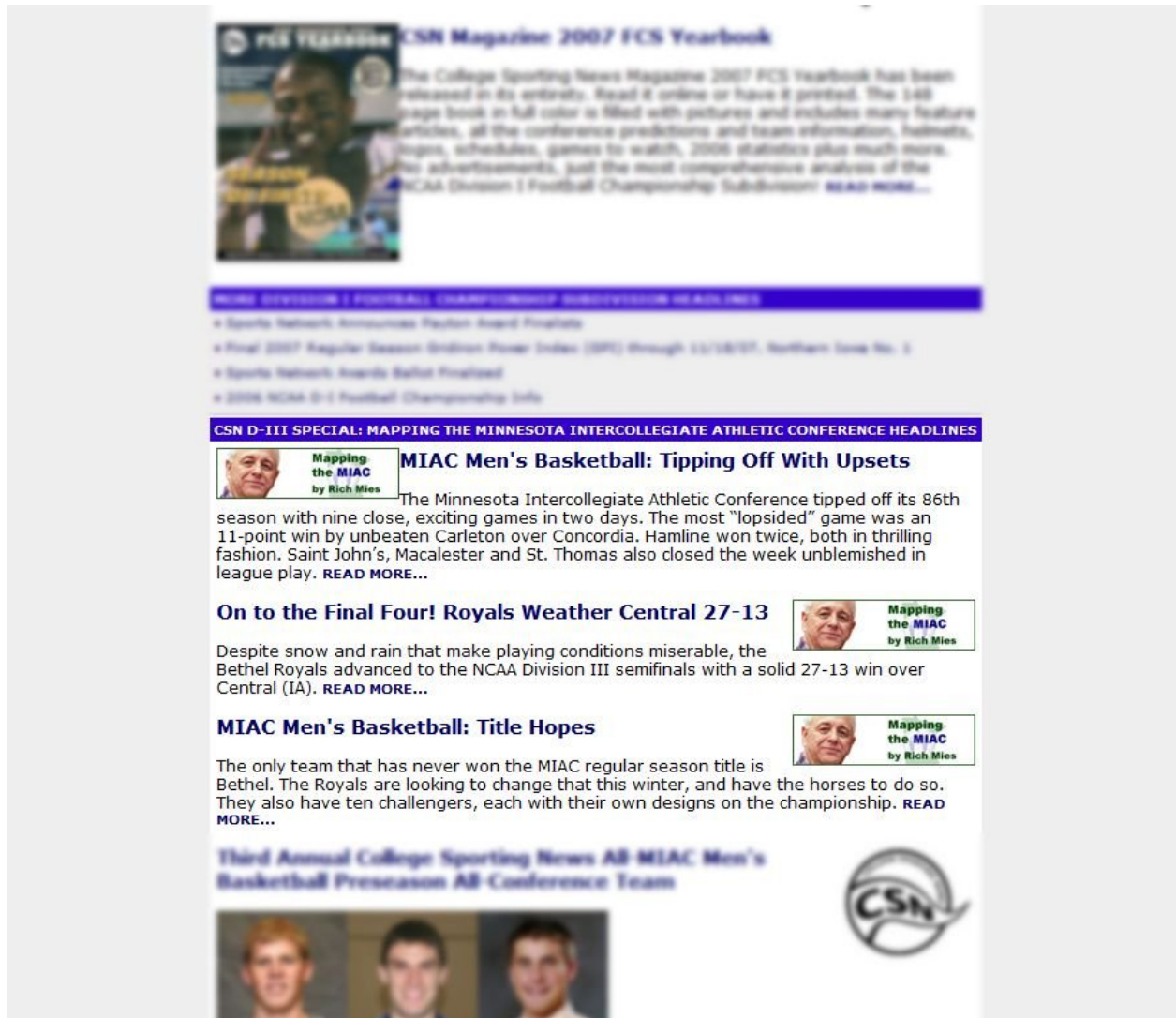


Figure 3: Home Page Bottom (1680 x 1050 resolution, 20 in monitor)

Figure 4: Home page Middle

Game tickets. [READ MORE...](#)

FCS Recap: Countdown

In five games, four in the NCAA Division I Championships, the third and final unbeaten team fell while two home teams faltered and one team advanced to the semifinals for the first time. Four surviving squads from three conferences supply the playoff field following Saturday's games, the Pioneer Football League captured their second straight Gridiron Classic and one has to wonder if the reigning NCAA champs will break even more records. [READ MORE...](#)

Richmond Advances To First-Ever NCAA Semifinals With 21-10 Win At Wofford

Tim Hightower ran for the game's final two touchdowns as Richmond defeated Wofford, 21-10, Saturday to advance to the semifinals of the 2007 NCAA Football Championship. Michael Ireland had an interception and recovered a fumble, leading the Spiders to the first-ever 11-win season and first-ever berth in the semis. [READ MORE...](#)

No. 4 Southern Illinois Secure Home Semi-Final Matchup With Win Over UMass

Nick Hill threw for 216 yards and three touchdowns and No. 4 Southern Illinois University (12-1) scored 20 first-quarter points in an impressive 34-27 win over Massachusetts (10-3) earlier today in the quarterfinals of the NCAA Division I Football Championship. [READ MORE...](#)

Delaware Finishes Big, Upsets No. 1 Northern Iowa 39-27 to Advance to NCAA Semifinals

The University of Delaware fell behind 10-0 early, but a pair of big fumble recoveries and the old reliable arm of Joe Flacco and running of Omar Cuff was all the Hens needed to upset top-ranked Northern Iowa 39-27 in the NCAA Football Championship Subdivision quarterfinals Saturday afternoon at the UNI-Dome. [READ MORE...](#)

Appalachian State Defeats Eastern Washington, Advances to Semifinals

Quarterback Armanti Edwards accounted for 347 yards of offense and three touchdowns while Appalachian State University's defense limited Eastern Washington's potent aerial attack to a season-low passing output en route to a 38-35 triumph in Saturday's NCAA Division I Football Championship quarterfinal at Kidd Brewer Stadium. [READ MORE...](#)

11/27/2007 CSN WAVES

Listen to the national Division I Football Championship Subdivision talk show CSN WAVES every Tuesday at 8 p.m. Central time at CollegeSportingNews.com. Host Ralph Wallace and guests lend an earful and insight into the NCAA's top football

CSN PUBLICATIONS
The CSN Report is the top source for free NCAA Division I Football Championship Subdivision sports information and much more. Enter your email address to subscribe.

SUBMIT

CSN Magazine 2007 FCS Yearbook
READ IT, PRINT IT NOW!
FCS YEARBOOK

Columnists

- THE CSN WAY** * SPECIAL REPORT
- FCS RECAP** * SPECIAL REPORT
- CSN WEST** * KENT SCHMIDT
- CSN DIARY** * CRUCE BURTON
- THE CAA TODAY** * BRUCE BOWD
- SWAC WORLD** * NICK DEKISO
- CSN GO SOUTH** * MYRON ROSCA
- Mapping the MIAC** by Rich Mies
- CSN WAVES** * STREAMING AUDIO
- CFWP** * ERIC GEMUNDER

*MIAC Profiles of...

Figure 4: Home Page Middle (1680 x 1050 resolution, 20 in monitor)

Figure 5: Home Page Top

EYES ON THE PRIZE

WALL OF CHAMPIONS

Global Navigation bars with opposite contrast layouts

College Sporting News *FCS NEWS* GPI ALL-STARS TEAMS FAN ZONE CSN REPORT *I-AA.ORG ARCHIVE*

ABOUT CSN FEEDBACK *MAPPING THE MIAC* CSN STAFF OPINION POLLS

DIVISION I FOOTBALL CHAMPIONSHIP SUBDIVISION HEADLINES

2007 NCAA D-I Football Championship Info
Complete coverage of the 30th Annual Division I Football Championship. Updated bracket for each round. Links to recaps, stats, TV, online audio, Championship Handbook, Past Championship Records, Game Results, and Game Tickets. [READ MORE...](#)

FEATURES
Championship Subdivision Essentials
• Scoreboard | Schedules
FCS Polls:
• AGS | CCA | TSN | SBN
• NCAA FCS Statistics
CSN Magazine 2007 FCS Yearbook

Figure 5: Home Page Top (1680 x 1050 resolution, 20 in monitor, widow maximized)