To our readers:

The Helm is a good way to keep family and friends informed of our activities and what we do here at AUN-ROTC. If you have any questions, comments, suggestions, or if you would like someone to be placed on the mailing list, please email me at cre0002@auburn.edu

MIDN 3/C Eilertsen
Public Affairs Officer

INSIDE THIS ISSUE:

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>1</td>
</tr>
<tr>
<td>NROTC Drill Meet</td>
<td>2</td>
</tr>
<tr>
<td>The Nuclear Submarine</td>
<td>3,4</td>
</tr>
<tr>
<td>Nuke Sub Continued</td>
<td>4</td>
</tr>
<tr>
<td>Ivy League Rotc</td>
<td>5</td>
</tr>
<tr>
<td>Fake Seal Among Us</td>
<td>6</td>
</tr>
<tr>
<td>National Championship</td>
<td>7</td>
</tr>
<tr>
<td>Event Pictures</td>
<td>8-9</td>
</tr>
</tbody>
</table>

The Spring semester of 2011 has already hit the ground running. The Auburn University NROTC unit has wasted no time kick starting this semester with the annual JROTC field meet, NROTC Drill meet, advancements in FITREP technology, and not to mention being stationed at the best football school in the United States of America. This edition of The ‘Helm’ is full of updates on the unit and insightful articles written by our staff. The Helm staff would like to wish everyone a safe and wonderful semester! War Eagle!
Auburn NROTC Drill Meet
By MIDN 4/C Wetzl

On Saturday, 29 January 2011, Auburn’s NROTC Unit hosted the 29th Annual Invitational Drill Competition. Five schools participated in a series of events, to include Platoon and Squad Basic, Platoon Inspection, Color Guard, as well as several Exhibition events.

The Competition itself was held on Auburn University’s Intramural Athletic Fields, although an early start time and efficient logistical management ensured that competitors, spectators, and organizers were cleared off of the Intramural Fields before late afternoon rolled around, allowing for other Auburn University students to come and play a pick-up game of soccer or football without disrupting the Drill Competition.

The weather that Saturday was exceptional for the time of year, allowing for an incomparable and unprecedented Drill competition experience. What started out as a fairly cool morning quickly warmed into a bright spring day, which resulted in many individuals receiving a small amount of sunburn. The Auburn NROTC Annual Drill Competition has historically received moderate to heavy rainfall on the day of competition.

The efficiency with which the Drill Competition was conducted is an indicator of how important prior planning and a sound logistical organizing team are to any event. In the event that organizers had not planned properly, either in terms of manpower, location, or equipment needed, the Drill Competition could have been drug out until late afternoon. Additionally, the competing teams themselves did their part by being knowledgeable of their time and place of competition for each event, as well as the participation of visiting Assistant Marine Officer Instructors asjudicators. All of these factors combined to make the Auburn NROTC Drill Competition a shining example of how a thoroughly efficient unit can function, and what the results can be.
The competition itself was lively, aggressive, and friendly. The five schools that competed were Auburn University, University of South Carolina, University of South Florida, Tulane University, and University of Memphis. The overall victor in the competition was the University of Memphis, with the University of South Florida falling in as a runner-up. The uniform of the day was Service Dress Blues, however this was not mandated as a rule, but was typically the traditional uniform worn to drill competitions. The University of South Florida was an exception to this rule however, as was noted by the other schools when USF arrived in choker whites. Rampant speculation spread as the other schools hypothesized as to why such a decision was made. Ultimately, most individuals decided that the University of South Florida was either attempting to standout in the competition, possibly giving them an edge, or due to their school’s geographical location, were wearing choker whites because it was just plain hot in Florida most of the year.

The Evolution of the Nuclear Submarine
By MIDN 4/C Moritz

The Nautilus, the first Nuclear Submarine, was commissioned on 30 March, 1953. Admiral Hyman G. Rickover, generally considered the father of the nuclear navy, was the driving force behind her construction, and was invaluable in the continuation of the program.

The biggest advantages of Nuclear technology are that it does not require oxygen, enabling the submarine to cruise submerged for extended periods, and that the submarine does not require refueling while underway, meaning the submarine can operate independent of tenders. In addition, the reactor produces ample power to propel the boat and generate electricity for auxiliary components.

Nuclear propulsion is not without disadvantages, however. Unlike a diesel-electric submarine, nuclear submarines cannot sit still in the water and be completely silent, as the reactor always makes some noise, due to the need to circulate coolant. Also, the cores eventually need to be replaced, and when they do, the
Nuclear Submarine Cont.

Improvements in reactor technology and drive trains have led to substantial increases in speed—some estimates have the top speed of modern fast-attacks at 30-33 knots, though the exact number is classified. Technologies such as anechoic tiles (a rubber tile that is placed on the hull to absorb sound and deaden sonar waves), and reactors that can operate at fractions of full power using naturally occurring convection currents to circulate coolant, rather than pumps, have made submarines much quieter. Improved sonar systems have greatly improved the ability of submarines to find and target enemy vessels, and improved weapons have enabled the submarine to reliably kill those targets.

Modern nuclear reactors operate on a two-loop system. One loop of pressurized water circulates inside the reactor, and is fully isolated. The other loop circulates outside the reactor, and is not radioactive. Primary system circulates water in an all-welded closed loop consisting of the reactor vessel, piping, pumps and steam generators. The heat is transferred to water (pressurized to keep it liquid)—then it transfers the heat to the secondary system, which boils water. The systems are isolated to contain radiation in the primary system only. The steam in the secondary system then turns turbines that drive the screw and generators.

Modern nuclear submarines carry an impressive array of weaponry. The Mk 48 ADCAP, or Advanced Capabilities, torpedo is a homing torpedo with speeds in excess of 40 kn, and smart capability. Submarines also have the capability to lay mines, which are usually deployed via torpedo tubes and special casings. Attack submarines have the capability to attack surface targets with torpedo-tube launched harpoon missiles, and to attack land-based targets with Tomahawk missiles carried in vertical launching tubes. Attack submarines can also mount ASDS, or Advanced SEAL Delivery System. This is a mini-sub housed on the hull, just aft of the sail. Ballistic missile submarines are the most survivable and effective part of America’s strategic arsenal. As such, their primary mission is to remain undetected. These submarines can, however, perform many of the same missions, if necessary, as attack submarines. Since the end of the Cold War, 4 Ohio-class SSBNs have been reconfigured as SSGNs, carrying up to 154 conventional Tomahawk missiles. These submarines also have two dedicated chambers for use by Special Forces groups.

Modern submarines carry two primary sonar arrays—passive and active. Passive sonar is carried in the bow, along the length of the hull, and in a towed array trailing aft of the boat. This eliminates deaf spaces behind the propeller. Active sonar’s are carried under the keel and on the sail. Active sonar uses a transmitter and receiver, and is more accurate, but using it also reveals the position of the user to the target. Passive sonar just uses a receiver, and requires either the user or the target to be moving to get range and bearing. Because of the passive nature of the unit, it can be operated without the user giving away their position.

The Nuclear Submarine has served indispensably since its introduction, and as technology increases, it will continue to serve as a flexible, stealthy and lethal weapons platform.
Ivy League Schools to Reinstate ROTC
By MIDN 3/C Eilertsen

It may come as a surprise to most people that the nations most prestigious universities do not have ROTC programs. One would assume that the oldest and most academically demanding institutions would have a long standing tradition with the program that has been developing civilians into officers since the 1900s, but this is not the case. ROTC is one the main contributors of officers in to the US Armed forces. ROTC graduates make up roughly 39% of the officers in the US Military. So why do some of the nations most prominent and historical universities not have the program? It all started in the Vietnam War era.

As a way of protesting the prolonging of the war in Vietnam, colleges including: Harvard, Yale, and Columbia banned the program. After the U.S ended the war, these Ivy League schools did not repeal the ban. They continued to keep the military out of the schools as a way to protest the government’s Don’t Ask Don’t Tell policy.

Although the previously mentioned colleges did not allow the program on campus, students still had the option to participate in ROTC programs at other universities. For example, a cadet at Harvard University would have to commute to the Massachusetts Institute of Technology (M.I.T) for all ROTC related activities if they wanted to commission upon graduation. This poses all kinds of problems for those individuals wanting to pursue a career as an officer in the US military. Some individuals would have to commute up to two hours one way which, for obvious reasons is not only inconvenient, but has a high potential to negatively impact the studies of those students.

It seemed as though the Ivy League was going to continue their ban up until the recent abolishing of the Don’t Ask Don’t Tell policy. Leading the charge on the reinstitution of ROTC into these respective colleges is Harvard’s President Drew Gilpin Faust and the Secretary of the Navy, Ray Mabus. Secretary Mabus and Harvard’s president recently signed an agreement, which brings back the formal presence of the Naval ROTC onto the nation’s oldest campus. With Harvard leading the way, we can expect to see the reemergence of the ROTC into other schools like Columbia and Yale in the near future. The four-decade ban keeping the military out of reach for the brightest students in the country is finally coming to a close.
Andrew Irvin Bryson definitely captured the attention to numerous people at Louisiana State University with a heroic story of being a Navy SEAL wounded in an attack in Afghanistan. He supposedly cut down insurgents who killed three of his teammates when their post was ambushed in Afghanistan. He had a Purple Heart and a Combat Action Ribbon. This was given to him by Louisiana Governor Bobby Jindal.

He may have impressed the crowd, but some at the ceremony figured something was fishy, and suspected Bryson as a faker. Students of the Louisiana State University Student Veterans organization questioned his stories he spoke of about numerous combat activities and kills. So many students didn’t buy his tales, that he forced his resignation from the club.

He did serve in the Navy, but not as a SEAL. He was an aviation electronics technician. Within his eight years of service, he deployed to Iraq and Afghanistan but never earned the medals he said he did, according to the records kept by Navy Personnel Command. For almost a year, he silently attempted to clear the record following the ceremony the governor gave, “I wasn’t a Navy SEAL,” he said, explaining how the governor’s office had sought veterans’ stories to recognize publicly with the state’s medal. “So I kind of just gave them a story.” “I falsified a story to try to help out vets. It’s just grown into a massive nightmare,” he said. “Almost every single month since this has happened; I’m not able to sleep a lot because of it.”

Bryson said he created himself into a fake character to draw more attention to the experiences of combat veterans attending college after their military service. He said, “I was really trying to help out vets at LSU,” he said. He insisted his intentions are honorable, noting he continues to assist other student vets who are struggling with the transition to school and, for some, the stresses from their combat tours.

At club meetings, “He’d sit there and tell stories. It was well-known that he had a Navy Cross and a Silver Star,” he said. “He took stories from other people and he made them his own, said one of Bryson’s friends. It’s a bit scary that people can falsify their identity. The military has to get a grip on these stories.
The campus of Auburn University was buzzing last year about their new head football coach, Gene Chizik. The expectations that were held by the fans and student body were hopeful and optimistic. At the close of the season, the Auburn Tigers had a record of 8-5 with a big win in the Outback Bowl against Northwestern. It seemed as though things were looking up on the plains, and after Auburn captured their new quarterback, Cam Newton, the possibilities seemed endless.

Although hopes were high, I believe few people foresaw the history that would be made in the coming fall. The season was kicked off with a series of outstanding victories for the Tigers, but there were still doubts as to whether or not it would last. This was until Cam led the Tigers to a huge victory over South Carolina to push them to a record of 4-0. At this point, the Auburn fans started to believe in the possibility that history could be made this season with Cam leading the way.

The season was a surreal experience as they kept annihilating their opponents week after week. The Auburn football team was on top of the world as the Iron Bowl was approaching. Those four quarters were a test of the faith that all Auburn fans had in their beloved Tigers. After a remarkable comeback, the Auburn Tigers vanquished their neighbors to the west. At this point, it seemed that a 14-0 season was inevitable.

The rest is quite literally, history. Auburn marched onto the field in Atlanta and did not hesitate in silencing the critics that said the Tigers could not beat the Gamecocks offense twice in one season. From there, their sights were set on Glendale and they never looked back. After a game winning field goal, the Auburn Tigers had made history. Toomer’s was erupting as the fight song was sung, and the fans celebrated the second National Championship Victory in the Auburn history.

What the future will hold is still a mystery, but one thing is certain, the 2010-2011 Auburn Tigers football team was a family that was second to none. War Damn Eagle.
Event Pictures