

U.S. Department of  
Homeland Security

United States  
Coast Guard



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FEB 01 2016

## MEMORANDUM

From: J. E. Rendon, RADM  
CG ACADEMY (s)

Reply to LCDR F.A. Estevez  
Attn of: (860) 701-6728

To: COMDT (VCG)  
Thru: (1) COMDT (CG-1)  
(2) COMDT (DCMS)

Subj: 2016 MARGIN OF EXCELLENCE NEEDS LIST

1. Enclosed is the 2016 Coast Guard Academy Margin of Excellence Needs list. The list encompasses requests from the Corps of Cadets and Senior Leadership that will significantly contribute to the Academy programs for which public funding may not be available. I sincerely appreciate the support from Coast Guard's senior leadership throughout 2015. Additionally, the generous contributions from the Coast Guard Foundation and Coast Guard Alumni Association were instrumental in providing the Cadets the necessary developmental environment needed for them to become well-rounded, professional naval officers.
2. This year's needs list brings forward some 2015 capital projects that generally fall below the AC&I radar given the current budget environment. My top priority and concern continues to be the Pine Hall building. Originally built as a temporary facility in 1974, the structure has significantly exceeded its life expectancy and a new building is needed to support vital cadet leadership, professional development as well as athletic activities and waterfront operations.
3. Questions regarding the Academy's 2016 Margin of Excellence Needs list can be directed to me or my point of contact, LCDR Estevez, Academy Comptroller who can be reached at (860) 701-6728. Thank you for continued support to the Coast Guard Academy. The support demonstrates your confidence in the direction of our institution and can make a lasting difference in providing our Cadets with the best educational experience possible.

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Enclosure: 2016 Margin of Excellence Needs List

Copy: CG Foundation  
CGA Alumni Association

# United States Coast Guard Academy



## - 2016 - Margin of Excellence Needs List

## Top 20 Margin of Excellence Needs for USCGA (No order of priority)

- CGA Strength and Conditioning Center
- Critical Improvements To Existing Athletic Facilities
- New Pine Hall Sailing Center
- Port and Coastal Maritime Cybersecurity Center
- Geo Info System (GIS) Excellence Initiative
- Instruction/Presentation/Meeting/Collaborative Space in Library
- Cadet Activities Center at Stonington
- Cadet Club Sports Endowment
- STEM Mentor & Leadership Academy
- Hewitt Writing & Reading Center and the Class of 1959 Writing and Speaking Contest
- Leamy Hall Student Center Upgrade
- Smith Hall Student Lounge
- Women's Leadership Initiative
- Eclipse Week
- Cadet Musical Activities
- Cadet Activities
- McAllister Hall South Quad Expansion for Excellence in Cybersecurity Education
- New Small Arms Firing Range
- CGA Leadership Symposium
- Cadet Competitive Cyber Team

**CGA Strength & Conditioning Center****\$3,000,000**

When compared to peer institutions in the NEWMAC, the NEFC and other private colleges and universities throughout New England, the Academy's strength and conditioning facilities for the CGA community (varsity cadet-athletes, club sport cadet-athletes, cadets who are not athletic team participants, faculty & staff) are well below acceptable standard both in terms of size, level/amount of exercise/training equipment and technology. Given the prominence of the life-long fitness culture that exists in the Coast Guard as a whole, a quantum improvement must be made in this area so that a weakness can be turned into a highly visible strength. We propose to capture the outdoor balcony area, located outside the 3<sup>rd</sup> Deck of Roland Hall, and build a new strength and conditioning facility which could be efficiently used by the various constituents in the CGA community. The new facility – once constructed – would be approximately 6,000 square feet in size, and would feature state-of-the art strength training and exercise apparatus. The envisioned design would feature considerable use of glass walls and skylights, in order to take advantage of both natural light, as well as the great view of the Thames River. The existing weight rooms in Billard Hall could then be returned to redefined uses by the Athletics division, including classroom or team meeting room spaces.

**Critical Improvements to Existing Athletic Facilities****\$2,350,000**

The existing synthetic surface is over 40 years old, with a normal life expectancy of 20-25 years, and has deteriorated to the point it needs to be replaced. The project replaces approximately 46,000 SF of NCAA competition synthetic running track and court surfaces on the 5<sup>th</sup> level of Roland Hall athletic facility. The Cadet Memorial Field artificial turf playing surface was installed in 2003 and is approximately 4 years past its 10 year useful life. Cadet Memorial Field is the playing and practice surface for CGA's football and men's lacrosse teams, and as such is in dedicated use by varsity sports programs 180 – 200 days per year. Additionally, Cadet Memorial Field is the site of CGA's commencement activities on an annual basis.

**New Pine Hall Sailing Center****\$10,000,000**

A premiere sailing and maritime center located on the grounds of the United States Coast Guard Academy designed, equipped and operated to support the professional, intellectual and physical development of our Nation's Coast Guard Ensigns and future leaders of character. This beautiful facility would complement the Jacob's Rock Sailing Center and primarily serve as the focal point for Cadet and Officer Candidate waterfront and maritime training activities in spaces designated for lectures, displays, coaching, and teaching in support of programs like Coastal Sailing, T Boats, intercollegiate sailing, and Marine Science. The center will also house office, shop and storage spaces supporting marina operations and boat maintenance and minor repair functions.



**Port and Coastal Maritime Cybersecurity Center**

**\$500,000 per year**

These funds would establish a center for education and research in the interdisciplinary field of cybersecurity as it relates to the maritime community and Coast Guard operations. Funds would be used to hire a faculty member with expertise in cybersecurity as well as appropriate administrative and technical support for execution of the center. This new faculty member would join a team of Coast Guard Academy faculty members from various departments conducting cyber education and research. One of these faculty members would serve as director of the center to coordinate the Academy's efforts in cyber education, training, and research. Emphasis will be in the safety, security, and resilience of the maritime transportation system by focusing on cyber enabled systems.

**Geographic Information System (GIS)  
Excellence Initiative**

**\$500,000 Endowment**

A Geographic Information System (GIS) is a computer software application used for the spatial analysis of data. In the 21st century, GIS has become an essential tool for acquiring, managing, interpreting, integrating, mapping, and displaying spatial information to support decision making in a variety of academic disciplines and critical field operations. For example, GIS is used by environmental scientists making decisions about how to effectively conserve natural resources and protect biodiversity, and it is used by local, state, and Federal agencies and organizations in law enforcement and emergency response. In the United States Coast Guard, GIS is used to coordinate field operations in support of such missions as port security, search and rescue, fisheries management, and emergency preparedness and response with respect to such high-impact events as the Gulf of Mexico oil spill and other incidents of national significance. The United States Coast Guard

Academy is proud to serve as a center of GIS education for the Coast Guard. Currently, GIS instruction is available to cadets in the Marine and Environmental Sciences major, but our goal is for all cadets to have an opportunity to become proficient in the use of GIS technology, employing it not only in course work and hands-on exercises at the Academy but while serving the organization in their new roles as officers afloat or ashore. Funds from the endowment will support the following initiatives:

1. Enrich the cadet education program by bringing to CGA, guest educators, lecturers, and field practitioners who are experts in the GIS research, development, and implementation. Funds will be used for guest honoraria, travel expenses, and meals for guests and hosting cadets and faculty members.
2. Increase cadet GIS research activity by supporting costs related to faculty supervision of highly collaborating cadet GIS research projects involving outreach to USCG Headquarters, operational units, and other federal partners. Costs may include updated research equipment, software, and travel for collaboration with clients or for presentation of research results.
3. Expand cadet GIS internship opportunities by supporting summer cadet internships with other academic institutions (e.g., DHS Centers of Excellence) and local, state, or federal partners or agencies who are active users and nationally renowned leaders in GIS innovation and application.

**Cadet Activities Center of Excellence at Stonington** **\$3,300,000**

The CG Foundation's Stonington Lodge property is used by cadets, faculty, staff, and alumni for a variety of MWR and athletic purposes. The existing facility and rugby pitch is well used; however, the infrastructure is in need of cosmetic/structural renovations and the rugby pitch is too small for playoff and regional finals. CGA has fielded a rugby team since 1968, and in 2006 the men's team earned national acclaim by winning the Division II National Championship. The women's team has developed into a Division II powerhouse now playing against many premier universities in New England. Approximately 100 members of the Corps play on the men's and women's rugby teams, using the existing Stonington pitch for most practices and all home matches. Due to the lack of available and requisite space for a regulation-sized pitch on the USCGA reservation, clearing land and building a new full-sized pitch with turf should be completed in the first phase of a multi-phase project. Subsequent improvements such as locker rooms and field lights will facilitate rugby and other cadet athletic activities. Renovation and upgrades to the existing infrastructure would include cosmetic repairs, installation of HVAC to facilitate year-round use, and installation of a covered patio area adjacent to the facility for recreational use.

**Instruction/Presentation/Meeting/Collaborative Space in Library      \$300,000**

This proposal is for the creation of a flexible, multi-purpose space for library instruction. Currently the Academy Library provides instruction using a rolling monitor in open study areas which can be disruptive to other patrons. This will fund the creation of a space with movable walls, furniture and technology that can be configured for a variety of uses. The main purpose of this room will be to provide library instruction but it will also be available to the entire Academy community for presentations, meetings and other group needs. The room will be equipped with a projector and retractable screen with a moveable station to connect a laptop. Library instruction requiring computers will rely on cadet owned laptops and a supply of Library owned laptops that can be used by participants. Furniture will be versatile to allow the space to be used for computer-based instruction, lectures and presentations, or meetings. When the room is not needed, the walls can be pushed back to return the space to individual study and group collaboration space. The redesign of existing space in the Academy Library will provide a dedicated instruction space while still maintaining the original use of the space. This proposal supports the Academy's information literacy goals, repurposes existing space to increase usability, and also provides an additional resource to the Academy community.

**Cadet Club Sports Endowment      \$1,000,000 Endowment**

The Coast Guard Academy Athletic Department sponsors 8 club sports. These sports and activities are funded through the Cadet Activities Fund, with over 80% funded from cadet dues. The club sports provide cadets an opportunity to compete against other schools and universities in athletic activities not sponsored by NCAA; these teams are increasingly competitive and often compete in post season play. CGA has produced one national champion in 2006 and several continue to compete in regional and national semifinal and final competitions. Funds will be used for Club Sport travel for regional or national championships, and to defray activity operating expenses, registration fees, equipment, safety gear, association dues, etc.



**STEM Mentor & Leadership Academy**

**\$100,000 per year or  
\$2,500,000 Endowment**

The Mentor and Leadership Academy is a six-week residential learning program unlike any other in the country! Throughout the summer, engineering students from Hispanic, Black Colleges and University's' (HBCU) receive classroom education and training on behavior styles, leadership and mentoring. Integrated into the Coast Guard Academy's AIM program (a week-long resident program for rising high school seniors), students have ideal opportunities to interactively practice and reflect on leadership and mentoring over three consecutive one week programs. The students serve as the engineering subject matter experts and lead the instruction of the AROW (Academy Robotics on Water) competition, where the high school students in the AIM program, use their science, math and engineering skills to build a radio controlled floating robotic craft. The teams operate their craft in a water filled arena and complete as many Coast Guard mission oriented tasks as possible. When the students return to their home institutions, they will be competent mentors, armed with the tools to recruit and train their peers to also serve as mentors to high school students. The college students will then be able to train select groups of high school students to be mentors to middle school students, providing a multiplying factor to the training and outreach in the STEM fields.

<b>Hewitt Writing and Reading Center and Class of 1959 Writing and Speaking Contest</b>	<b>\$200,000 per year \$5,000,000 Endowment</b>
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The success of the Hewitt Writing and Reading Center (HWRC), a national leader in teaching writing in the disciplines, has led to a demand for services by cadets and faculty that exceeds current funding. Even with the endowments yielding more funds since FY 2013, the HWRC has needed to cut services. In FY 2015, cadets – who volunteer to visit the HWRC – had to be turned away, as did faculty who sought to collaborate with mentors in creating assignments and assessments that support them in teaching their writing-intensive courses. Fully booked with conferences, workshops, and faculty meetings, mentors can no longer easily work with new instructors and rotators. Without effective guidance in learning to write in the disciplines, cadets can suffer setbacks when assigned to write in courses that the HWRC cannot support. On the horizon is the implementation of the Core Curriculum Review Task Force recommendations. The plan is to build on the structures of the HWRC and the Class of 1959 Writing and Speaking Contest with a thread that more fully integrates writing through a four-year sequence in each major. Without funds to hire more mentors, including STEM writers, and to support implementing the writing thread, the momentum that brings cadets and faculty to the HWRC will be lost.

<b>Leamy Hall Student Center Upgrade</b>	<b>\$850,000</b>
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Funds are needed to upgrade the lower lounge of Leamy Hall into a multi-purpose area that could be used by the Corps of Cadets and other Academy personnel for training, professional development, and social activities. The existing space is outdated, and in need of a major facelift to replicate what is in place at West Point, the Merchant Marine Academy, and local colleges and universities. Funds for the project would also be used to enhance the Dry Dock snack bar wing of Leamy Hall to create an “open floor plan” with more seating, WiFi service, a movie viewing area, as well as space for expanded recreational opportunities specifically geared towards 4<sup>th</sup> class Cadets. A Student Union would enhance quality of life for the Corps of Cadets, and would also be instrumental in marketing the Coast Guard Academy as the service academy of choice for prospective candidates. The concept for this Student Center will be modeled after projects recently completed at area colleges to include the University of Connecticut, Southern Connecticut State University, Connecticut College and Mitchell College.

<b>Smith Hall Student Lounge</b>	<b>\$44,000</b>
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A recent study highlighted development of a sense of community as an important factor in retaining students in technical majors. As a result of this study, student lounges have been constructed in McAllister and Satterlee Halls. As such, Smith Hall is the only academic building without a student lounge for students to congregate and for student-faculty interactions. The requested funds are for the procurement of flooring, lighting, cabinetry, furniture and other furnishings.

**Women's Leadership Initiative****\$200,000 Endowment**

The Coast Guard Academy currently attracts a higher percentage of women than the other services academies. Mentors are essential for retention and advancement. Imagine new opportunities where mentoring relationships can begin to cultivate and grow over time, providing long-term professional outreach, support networks, educational programs, and a means to share and learn from each other's experiences. Mentor relationships work both ways as well. Senior leaders must continue to learn and understand the challenges for junior leaders today. With the help of the Coast Guard Academy Institute for Leadership, we want to create and foster such opportunities with the establishment of the ***Women's Leadership Initiative Endowment*** within the Academy's Alumni Association.

**Eclipse Week - Cadet & Officer Leadership Symposium****\$50,000 per year**

The Institute for Leadership and the Office of Diversity Affairs will host an annual conference, lunch and learn sessions and speakers on diversity and leadership. The purpose of these activities will be to encourage and inform diversity and leadership in its many forms and facets inside and outside the classroom. We will examine and explore topics such as what does diversity look like beyond race, gender, sexual orientation and nationality; how does diversity empower innovation; how do you minimize groupthink while maximizing desired outcomes or how does E. Pluribus Unum make us more powerful as a nation. When seen through the prism of leadership development, inclusion and diversity can be redefined as a competency which provides the basis for developing individuals that are cognitively prepared to engage in an increasingly global arena where cultural complexity is the new norm. No more than 20% of annual funding will be used for food purchases during fellowship breakfast, lunch and dinners attached to keynotes during the entire conference.

**Cadet Musical Activities****\$60,000 per year**

Cadet Musical Activities (vocal & instrumental) have had an enormous impact on the Coast Guard Academy's image for many years. Each of these programs is in high demand placing a great burden on the Club/activity funds managed. They perform in a multitude of different venues and arenas; from the local elementary School Veteran's Day celebration to a National Football League Halftime performance. The cadets involved in these programs have had an enormous impact on CGA recognition and are an exceptional, yet mostly untapped resource to support the Academy goal; to become an institution of national prominence. We have only begun to realize the potential benefits of better supporting these valuable programs, not only for the Corps of Cadets and CGA but for the entire Coast Guard. The potential benefits of additional and more focused community outreach events, diversity affairs and admissions/recruiting partnerships are limitless. The travel for these programs has typically been funded entirely through a limited Cadet Activities Funds. \$60k annually will provide the travel funds to support musical performances that support the USCG/CGA nationwide.

**Cadet Activities****\$300,000 per year**

The Coast Guard Academy currently sponsors over 80 clubs and activities. These activities include religious, ethnic, professional development, and recreational programs. Currently, these programs are funded through the Cadet Activities Fund - over 50% of which is funded from cadet dues. All clubs and activities are established to increase awareness, foster professional development, expose cadets to a variety of experiences, and provide a solid foundation to establish a well rounded cadet/officer/citizen. Funds will defray expenses incurred by cadets for club operating expenses, transportation, registration fees, equipment, safety gear, association dues, etc. Funds will also continue to support gaps in funding for authorized cadet activities including Cadet Class Events, Cadet Social Enrichment, various Cadet Vocal and Instrumental Musical activities and productions, Cadet Sponsor Program trainings.

**McAllister Hall South Quad Expansion for Excellence in Cybersecurity Education****\$950,000**

This project would result in the construction of a Cybersecurity Laboratory and state-of-the-art classroom (~1,600 square feet) on the second level of the south quad of McAllister Hall. The designs for the expansion exist and are part of the McAllister Hall Master Plan. These spaces would be used to teach classes and labs in multidisciplinary Cybersecurity topics, house the National Port and Coastal Cybersecurity Center, and provide the room necessary for faculty and cadets to conduct research to provide expert guidance to the Coast Guard and maritime transportation constituents. With this tangible addition, the Coast Guard Academy will have the classroom, laboratory, and office space needed to offer the curriculum that is currently missing to meet the requirements for designation as a DHS/NSA Center of Academic Excellence in Cyber Defense Education. This space would grow the Academy's capability to educate and train cadets in cybersecurity, cyber safety, and other engineering topics so that future officers can provide effective leadership amidst the emerging connected and data-centric challenges facing the Coast Guard today and in the future.

**New Small Arms Firing Range****\$15,000,000**

With the surge of demands on the CG to meet America's homeland security needs, the CG's use and knowledge of weapons has never before been as vital to the success of our homeland security missions. The design of the new Small Arms Firing Range is consistent with the Academy Facility Master Plan. It provides a facility that meets all COMDT standards for weapons training and qualification. It will also provide armory weapons storage and maintenance space for the Academy. It provides the capacity for the heavy usage required for the Academy and other operational units in the region. It is ideal for intercollegiate competition and training; historically one of the most successful competitive programs at the Academy, with a long tradition of All American shooters and team success compared to other colleges and Service Academies. A new facility removes an incompatible and high environmental health and safety risk function from the barracks environment. It will provide proper systems upgraded to current

technological standards for ventilation systems, bullet traps, and environmental and Occupational Safety and Health Administration (OSHA) controls required to ensure safe and healthy operations for personnel over the long term. It is now essential that every ensign leaving the Academy not only be familiar with the standard CG pistol, and rifle; but that they are also fully qualified in its use as well. Today, the CGA range in Chase Hall is the only non-standard range being used by the CG. Its insufficient size and age require the use of specially made bullets to ensure rounds fired from an M-16 rifle will not penetrate through its dilapidated walls into another room. When constructed, the range's planned purpose was solely for the use of collegiate rifle and pistol teams. Every cadet and officer candidate is required to qualify on the same range with the pistol, but due to the lack of range capability, cadets/officer candidates no longer qualify in rifle. A newly constructed indoor range and armory is not only vital to meeting the CG's strategic needs of homeland security, it is a strong professional development tool that teaches the cadet about responsibility and maturity. The cost is dependent upon the project scope and design.

<b>Loy Institute: Endowed Chair Leader In Residence</b>	<b>\$200,000 per year or \$4,000,000 Endowment</b>
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The Loy Institute for Leadership seeks to hire temporary faculty for a two-year appointment to conduct high quality cutting edge research in leader development and leadership that leads to publication in nationally and internationally recognized scholar and practitioner journals. The Leader in Residence will collaborate with CGA faculty to increase the level and sophistication of scholarly research at the Academy. The Leader in Residence will act as an internal consultant to Academy faculty and staff who are responsible for the Academy's highest priority—developing leaders of character. The Leader in Residence will teach a reduced load of undergraduate leadership courses. Additionally, in an effort to generate energy, share best practices and develop skills among the Academy faculty, staff & coaches who develop cadets, the Loy Institute seeks to sponsor an annual conference “by us, for us, about us.” Leader development is the shared purpose of every member of the Academy community. For leader development to flourish, it is important that everyone understands our unique philosophy and the importance of everyone's role in developing Leaders of Character. This annual conference will highlight, heighten and invigorate best practices among this Academy Community and bring out-sight from other benchmark institutions. Presentations will include academic papers, leadership model professional development sessions, and workshops on implementation strategies, best practices, and honing programs highlighting our LEAD strategy. Our raison d'être at the Coast Guard Academy is developing Leaders of Character, which we define as one who embodies the Core Values (Honor, Respect, Devotion to Duty) and influences and inspires others towards a goal by seeking to discover the truth, determine what is right and demonstrating the courage to act accordingly, always. We owe it to ourselves to invest in our skills at how we execute this mission.

**Cadet Competitive Cyber Team****\$59,000 per year**

The CGA Cyber Team was formally established in November 2015 and these funds would support team activities. The CGA Cyber Team supports an institutional priority to develop deep technical experts in cyber defense and computer network exploitation who will be able to immediately contribute to USCG/DoD cyber operations. Members of the CGA Cyber Team have a standing invitation to deploy with the CGCYBER Rapid Response Team and one cadet has already contributed to their efforts. Up to 12 members have been authorized by Superintendent Instruction to receive sports credit. The Cyber Team's preparation is intense with 2 hours of practice per day and cadets will participate in a variety of competitions both locally and requiring travel. Regular expenses will include team travel to regional and national competitions with most completions taking place over 2-3 days and some with registration fees. Additionally, team effectiveness in competitions is based on maintaining state of the art computing hardware with annual recapitalization of certain components required. The highly focused and technical nature of certain techniques and concepts that the team needs to master sometimes falls outside of the scope of material covered in the CGA Cyber academic program or what can be "self-taught" during practice. In these instances team members will be required to attend various commercial cyber training incurring both registration and travel costs. Full funding will also allow for a recruiting campaign to identify high school level cyber talent and attract them to the Coast Guard Academy.

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## Ensure Academic Excellence



### **Endowed Chair: Engineering      \$160,000 per year or \$4,000,000 Endowment**

This endowment would support a chair for a distinguished visiting or permanent faculty member in the Engineering Department. The incumbent will be a nationally and/or internationally prominent figure in engineering, science, or technology with leadership experience that spans across engineering majors at CGA such as an astronaut or a prominent engineer from industry or government. The goal is to generate excitement and spark interest in engineering at CGA from high school students and 4/c cadets and would be an enthusiastic ambassador for CGA engineering outside the walls of the Academy by giving lectures and engaging in other outreach activities to raise the visibility of CGA. The incumbent will work directly with cadets and faculty in and out of the classroom and laboratory. Based on their unique experiences, they would offer courses, capstone projects, and research initiatives that would not be possible with the current staffing model. This incumbent would provide insight into systems engineering approaches and leadership, policy, ethics, and management issues for future officers. The impact of this position would be felt in enhanced recruitment and retention of engineering cadets to overcome current challenges, enthusiasm for cadets to pursue engineering careers in the Coast Guard, enrichment of the curriculum and learning experience for cadets, and enhanced national prominence of CGA as an excellent institution of higher learning. The nature and duration of the appointment are dependent upon the qualifications of the incumbent and resources available.

### **Distinguished Chair in Homeland Security      \$6,000,000 Endowment**

The U. S. Coast Guard Academy serves as the only college within the Department of Homeland Security. As such, the academic experience of cadets would be greatly enriched by having an interdisciplinary Chair in Homeland Security spend two years at CGA teaching, lecturing and mentoring the Corps (and faculty/staff) in the growing field of Homeland and National Security. Potential candidates for such a position would include former senior members of a Presidential administration, leading thinkers from the myriad of disciplines touching the profession of Homeland Security (marine science, engineering, math, management and government), or well-regarded security scholars.

**Cadet Honors Program** **\$50,000 per year or \$1,250,000 Endowment**

This endowment would enhance cadets' competitiveness for postgraduate scholarships, adding to the Academy's prestige and improving our attractiveness to high-achieving high school students. Scholarships include but are not limited to the Rhodes, Marshall, and Gates for graduate study in Britain, the Fulbright for international research and cultural exchange, the Hertz for graduate work in engineering and applied math, and the Truman, which recognizes the most promising students committed to public service. An endowment would provide significant enhancements to the existing honors program. Funds would be used to endow a part-time "Advisor for Graduate Study and Postgraduate Fellowships" who would provide expertise and advice on all CG-related graduate study as well as coaching and direction of undergraduate honors candidates for postgraduate fellowships. Additional funds would be used for speakers' fees and expenses; tickets and transportation to special cultural events; cadet travel and memberships in national honors conferences; cadet travel for honors-level research; cadet travel to regional interviews for Rhodes, Marshall, or other postgraduate fellowships; and other special experiences that cannot be supported by appropriated funds, such as "externships" for study opportunities outside the scope of current internship programs.

**Cadet Travel Fund for Mechanical Engineering Competitions** **\$11,000 per year**

Funds to support cadet travel to Mechanical Engineering competitions in order to test the products of their engineering designs – an essential component of this major.

**Travel Support for Global Business and Economics Issues Course** **\$50,000 per year**

This Management course which is open to other majors is an introduction to globalization and the cultural, economic, political, and legal environments of international business including an overview of risks, challenges, and opportunities of competing in the global marketplace. The course presents an in-depth examination of the basic principles of international economics, finance and business in a context of global economy to broaden students' perspective on the growing economic interdependence of nations, economies, and businesses — how it happens and how it affects lives around the globe. The course includes a

10 day official visit to Europe. The Coast Guard plays an integral role in facilitating international commerce through port security, vessel safety, and protection of the seas. This margin of excellence request is to support cadets and their faculty advisor travel during the 10 day spring break in order for cadets to visit Europe and experience firsthand international business and commercial activity. Planned is travel to Iceland, the United Kingdom and Belgium. Examples of the planned experience include the Royal Military Academy, European Council, small businesses in Reykjavik and the Belgium Investment Company for Developing Countries. \$50,000 is needed to support cadet and faculty travel. Cadets will be cost sharing this experience.

**Cadet Field Trips for Marine Science** **\$17,000 per year**

Funds are to support cadet field trips to the Florida Keys National Marine Sanctuary during the Coral Reef Ecology course offered by the Science Department. Students in the course draw upon skills developed throughout the marine science program to design and lead field studies at world-renowned marine laboratories located in the Florida Keys. This experiential learning opportunity combines student-led research projects with guest lecturers from nationally prominent marine scientists and tours of nearby USCG Sector Miami. Students gain a broad perspective of the rewards and challenges involved in scientific discovery and the Coast Guard's role in solving problems related to biological conservation in tropical marine ecosystems.

**San Remo Law of Armed Conflict (LOAC) Competition** **\$22,000 per year**

Fund two teams of three cadets per team and one faculty member to take part in the service academy competition held in San Remo, Italy each spring. This is an opportunity to "market" the USCGA and maintain parity with the other service academies. USNA, USMA, and USAFA all send a delegation and USCGA has become a regular member of this competition. This maintains our margin of excellence as well as our role as a military academy. With the advent of Homeland Security, it has become increasingly critical to have cadets well versed in the laws of war and comfortable operating under these guidelines. The report on Abu Ghraib prison brings home the necessity for CGA graduates to be competent and moral enforcers of international law. In 2005, one of the cadets selected to attend this worldwide competition won 3rd place overall. This was particularly impressive in that there were over 150 attendees from around the world, including India, Russia, Italy, Ireland, Australia, Belgium, USMA, USNA and USAFA.

**Society for Policy and International Affairs (SPIA)** **\$15,000 per year**

Society for Policy and International Affairs (SPIA) a cadet club designed to increase participation in and knowledge of the process of governing. Funding would be allocated for the annual cadet trips to the United Nations, Washington, DC, and regional government agencies to learn about local, state, federal, and international governance. Some funds may be used to pay for speakers.

**Marine Science Computer Labs Update and Licensing** **\$75,000**

Requested funds are to update the Computers in the Geospatial and Marine Science Computer labs (Smith 129 &108). These computers were previously purchased through grant funds and are quickly becoming outdated and in need of updates in order to support current computer software requirements. These labs are used by both many of the MES courses and science based elective courses for other majors and as such are loaded with additional science based software including ARCGIS, Stella, and environmental modeling technology. In order to meet the demand for student load and work these computers need additional hardware capabilities (Processor, RAM, Video Cards, etc) in order to function. Updating the computer capabilities of these labs will provide both MES and other major cadets the equipment needed not only for coursework but for current CG sponsored research. Funding will also purchase licenses for ARCGIS software, a geospatial analysis and mapping program that is currently being taught to cadets as part of the major curriculum. Providing Geographic Information System instruction prior to graduation, prepares cadets to use software ranging from SAROPS to GNOME thus increasing situational analysis and decision making capabilities through spatial techniques and technology. Currently the ARCGIS software is used in not only many of the Science courses but also throughout the academic departments. Funding for the software previously came from HQ and DHS, which has now become limited. Requested funds will also purchase three laptops for field research and instrumentation connectivity. The addition of these laptops will allow field researchers the capability to upload and view data while in the field.

**Library Endowment** **\$3,300,000 Endowment**

The Academy Library will continue to have critical needs in collections, technology, and staffing because of dramatic cost increases even though our library now meets minimum standards as set forth by our accrediting agencies. It is our vision the CGA Library be established as the Academy and Coast Guard's premier source for lifelong learning.

**Endowed Chair: Operations Research** **\$160,000 per year or \$4,000,000 Endowment**

An Endowed Chair in Operations Research will support a chair for a distinguished visiting or permanent faculty member in the Department of Mathematics. The faculty member would provide valuable academic, military or industry experience to cadets taking upper division courses in the Operations Research and Computer Analysis major. This faculty member would likely teach a course or courses in areas that are outside the scope of the current faculty and provide valuable insight to both cadets and colleagues in these unique areas.

**Department of Mathematics Cadet Academic Enrichment Experiences** **\$30,000 per year**

Donations of any amount could be offered into a general fund managed by the Department of Mathematics in direct support of cadet academic enrichment

experiences or could be allocated to a specific enrichment activity. Activities include experiences such as cadet field trips, competitions, internships, workshops, and professional membership activities. Activities may include support for cadet travel for various field trips for capstone projects or to businesses with leading practitioners of Operations Research, to academic workshops, to conferences or competitions such as the Service Academy Student Mathematics Conference (SASMC) or the Institute for Operations Research and the Management Sciences (INFORMS) conference, hosting the SASMC, monthly speaker or activity support for the CGA student chapter of INFORMS, cadet memberships for professional organizations such as INFORMS, or opportunities for cadets to take professional qualification exams such as the first Actuary exam or an Analytics certification exam.

<b>Department of Mathematics Faculty Academic Enrichment Experiences</b>	<b>\$30,000 per year</b>
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Donations of any amount could be offered into a general fund managed by the Department of Mathematics in direct support of faculty academic enrichment experiences or could be allocated to a specific enrichment activity. Activities include support of faculty involvement in professional societies or conferences; professional qualification preparation or exams; STEM (Science, Technology, Engineering and Math) outreach, or pedagogical activities, workshops, outreach or research in Mathematics, Statistics, Computer Analysis Operations Research or related areas.

<b>Department of Management Enrichment Fund to Achieve Competitive Advantage</b>	<b>\$50,000 per year or \$2,000,000 Endowment</b>
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The Management Department prepares students for careers in financial and human resource management, information technology management, and leadership positions. The Management Department is accredited by the Association to Advance Collegiate Schools of Business, International (AACSB) – a distinction of quality awarded to less than 10% of schools of business and management worldwide. Among the other service academies, only the Coast Guard and Air Force Academies enjoy this recognition. The Management Department graduates approximately 40 cadets each year.

In order to remain competitive in the world of management education, the department seeks current support and endowment funds to create a multifaceted enrichment fund which will provide the margin of excellence funds needed to achieve and maintain a competitive advantage. The components of the Management Enrichment Fund includes:

1. Business and Economics Lecture Series: The purpose is to bring prominent business and economic experts and leaders to the Academy. The lecture series would include classroom course speakers and public events open to cadets as well as the Southeastern Connecticut business community. In

the future, it may be possible to stream expert lectures to headquarters personnel.

2. Professional Engagement: The purpose is to provide funds for cadets to enhance their professional development. Funds would support travel to enriching locations (e.g. Wall Street) by covering the cost of travel, lodging and meals. Additionally, funds would be used for Cadet Management Association functions where cadets and faculty would interact in a social and professional environment.
3. Cadet and Faculty Research Fund: The purpose is to support research by cadets and faculty. The use of the funds would involve data collection, surveys, purchase of published data, and statistical analysis packages. The Research Fund would also support travel to present papers at conferences and other professional development activities such as business case and investment competitions.
4. Classroom Technology: In order to remain competitive, modern management classrooms require state of the art classroom technology. Equipment such as touch screen monitors, sensor based video technology to record and replay lectures, and data terminals such as Bloomberg are needed to make the USCGA comparable to other schools of management and business.

An endowment of \$2M is required with the goal of generating approximately \$80k per year. Annual or one time gifts to support individual elements of the Management Enrichment Fund should range from \$5-\$50k.

<b>Endowed Chair – Gov’t Accounting and Financial Management</b>	<b>\$5,000,000 Endowment</b>
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Enhancing the ability of the government to manage its assets, liabilities and flow of funds has never been more urgent. The demand by taxpayers, elected leaders and government managers for sound financial information upon which to make decisions continues unabated. At the United States Coast Guard Academy, the Department of Management is focused on preparing cadets for careers in financial management. The department offers a seven course sequence in Accounting and Finance - Financial, Managerial, Intermediate, and Cost Accounting; Audit, Federal Budgeting, and Financial Management.

In November 2012, the Coast Guard Academy entered into a Memorandum of Understanding with the Coast Guard’s Assistant Commandant of Resources and Chief Financial Officer (CG-8). Under the MOU, CG-8 serves as the Management Department’s primary stakeholder. The MOU provides for cadet and faculty research, cadet internships, faculty involvement in government accounting, and support for professional credentialing in government accounting for cadets within the Management major. Graduates from the Management major with a solid

foundation in accounting provide CG-8 with a strong candidate pool for highly selective MBA and Masters in Accounting postgraduate programs. Specifically, the accounting curriculum at the Coast Guard Academy has subsequent relevance to the officers pursuing a career path under the CG-FIN-10 specialty code (financial management). As such, the Management Department, under the MOU, has already been a contributor to shaping the Coast Guard's financial management workforce. The Management Department also hopes to extend its reach beyond the Coast Guard to eventually collaborate with the Department of Homeland Security (DHS), Chief Financial Officer.

The Management Department seeks a \$5M gift to create an endowed chair in government accounting and financial management. Our research suggests that no endowed chairs of government accounting exist at this time. Funding this chair would provide a breakthrough opportunity for a donor to fundamentally influence government accounting and financial management research and policy development and to support the development of cadets with an interest and aptitude in this vital area.

Funds from the endowment would be used to enhance a current civilian faculty position, thus allowing the Academy to attract an academic of national standing. Funds would be used to provide summer support (thereby enhancing salary), research assistance, travel and other expense related to the chair.

**Management Department Cadet Investment Club** **\$25,000**

The purpose of the Cadet Investment Club is to enable cadets to learn more about saving and investing and to become responsible agents for their own financial wellbeing. The Investment Club is one of the largest at the Academy with over 100 members. The club sponsors speakers who provide advice on topics such stocks, bonds, exchange traded and mutual funds, as well as saving for retirement, being responsible stewards of one's financial resources and how the overall economy affects investment decisions.

As cadets gain experience and interest, they can become part of the Investment Club's portfolio management team. The portfolio management team manages the cadet investment fund which began when a generous donor provided funds (held at the Alumni Association) for the cadets to invest. The Club has invested wisely and profitably. It has a well diversified portfolio across a number of asset classes. The Club now seeks addition funds in the amount of \$25,000 in order to increase their portfolio and broaden its diversification.

**Naval Architecture & Marine Engineering** **\$1,000,000**  
**Design Laboratory - Phase I**

A general purpose design lab of approximately 1,825 square feet to support the Naval Architecture and Marine Engineering Senior Design Projects will be constructed and furnished in the North Quad of McAllister Hall, currently an open air space. The addition of a state of the art ship design laboratory for the senior Naval Architecture and Marine Engineering students will greatly enhance the

program and its capabilities and will result in greater recruiting and retention of engineers in this critically needed specialty.

**Naval Architecture and Marine Engineering Design Laboratory – Phase II** **\$800,000**

This 2nd floor addition to the North Quad, situated immediately above the Naval Architecture and Marine Engineering Design Laboratory would allow for better configured classrooms in McAllister Hall to take advantage of current instructional technology including smart board, video, etc. The construction and furnishing of these three 30 person classrooms totaling 1,800 square feet in McAllister Hall will allow for more flexible scheduling of classes throughout the building. (Note: If combined with the construction of the Naval Architecture and Marine Engineering Laboratory, construction costs may be reduced).

**Engineering Cadet Field Trips** **\$80,000 per year**

Funds would support field trips in all four engineering majors.

**Civil Engineering Cadet Field Trips** **\$20,000 per year**

Funds would support cadet field trips to Coast Guard Civil Engineering units, laboratories, centers and selected civilian companies. Trips include CG CEU Providence, CG Head Quarters, FD&CC, active construction projects, and other selected companies as part of the leaning activities for the student chapters of the American Society of Civil Engineers, Moles, and Society of American Military Engineers.

**Electrical Engineering Cadet Field Trips** **\$20,000 per year**

Funds would support cadet field trips to Coast Guard Electrical and Computer Engineering laboratories and centers, and selected civilian companies. Trips include CG C3CEN, C4IT Service Center, Navigation Center, USCG Headquarters, US Naval Underwater Warfare Center, ESPN, Sikorsky, General Dynamics, and other selected companies as part of the leaning activities for the student chapters of the Armed Forces Communications and Electronics Association, the Institute of Electrical and Electronics Engineers, and the Institute Of Navigation.

**Mechanical Engineering Cadet Field Trips** **\$20,000 per year**

Funds would support cadet field trips to Coast Guard engineering laboratories and centers, and selected civilian companies. Trips include USCG Headquarters, US Naval Underwater Warfare Center, Sikorsky, General Dynamics, and other selected companies as part of the leaning activities for the student chapter of the American Society of Mechanical Engineers.

**Naval Architecture & Marine Engineering Cadet Field Trips** **\$20,000 per year**

Funds would support cadet field trips and attendance at Society of Naval Architecture and Marine Engineering Annual Meeting. These opportunities are used to reinforce classroom learning while at the same time allowing cadets to learn about the naval architecture and marine engineering profession. Past trips

have included visits to shipyards, propeller manufacturing plants, Naval Surface Warfare Center Carderock Division, CG Yard and both commercial and Coast Guard ship tours.

**Engineering Faculty Travel** **\$90,000 per year**

In order to enhance national prominence and maintain excellence in the classroom, this would provide funds to support conference and other professional development travel for engineering faculty. Funding would be available regardless of federal budget status or other travel restrictions.

**Homeland Security Law Lecture Series** **\$15,000 per year**

This lecture series, originally established in 2004, offers the Corps of Cadets offers cadets lectures and panels that best deal with the post-9/11 world they will be serving in upon graduation. Promoting national security while still adhering to civil liberties/human rights continues to be a challenge for US policy makers. This annual lecture series ensures cadets are exposed to these challenges and, at least, conversant in the "issues of the day." Past events have included Corps-wide panel discussions on relevant issues of the day, to include: a panel on the USA PATRIOT ACT, as well as one on the Guantanamo Bay Detention Center. Anticipated panels and lectures would include distinguished senior government figures, world renowned academics, USCGA faculty and media figures. Support of this lecture series brings great attention and coverage of the Academy as a first class institution in academic circles.

**Endowed Chair for Resident Fellow of  
The Center for Arctic Study & Policy (CASP)** **\$4,000,000 Endowment**

This promotes inclusion of maritime policy and strategy goals throughout the U.S. Coast Guard Academy's teaching, leadership development, research, and public service missions. Facilitates and delivers advanced, timely and relevant analyses on maritime policy and strategy founded upon interdisciplinary research across the maritime disciplines. Fosters innovative policy approaches to contemporary maritime challenges through collaborative research and outreach with scholarly and policy communities. The Resident Fellow holds a joint appointment as a Distinguished Visiting professor in the Department of Humanities. The Resident Fellow is a senior academic who is widely recognized as an expert in maritime policy and strategy studies.

**Instruction/Presentation/Meeting/Collaboration Space in Library** **\$300,000**

This proposal is for the creation of a flexible, multi-purpose space for library instruction. Currently the Academy Library provides instruction using a rolling monitor in open study areas which can be disruptive to other patrons. This will fund the creation of a space with movable walls, furniture and technology that can be configured for a variety of uses. The main purpose of this room will be to provide library instruction but it will also be available to the entire Academy community for presentations, meetings and other group needs. The room will be equipped with a projector and retractable screen with a moveable station to

connect a laptop. Library instruction requiring computers will rely on cadet owned laptops and a supply of Library owned laptops that can be used by participants. Furniture will be versatile to allow the space to be used for computer-based instruction, lectures and presentations, or meetings. When the room is not needed, the walls can be pushed back to return the space to individual study and group collaboration space. The redesign of existing space in the Academy Library will provide a dedicated instruction space while still maintaining the original use of the space. This proposal supports the Academy's information literacy goals, repurposes existing space to increase usability, and also provides an additional resource to the Academy community.

**HPX Thomson Scattering Frequency Enhancement** **\$20,000**

Thomson Scattering (TS) is one of the main diagnostics in fusion plasma research. Fusion research is the leading effort to advance in on-demand, full time green energy production. The Coast Guard Academy Plasma Lab (CGAPL) has designed our Helicon Plasma Experiment (HPX) to be versatile yet robust enough to perform relevant physics investigations at reduced time and cost. TS is the major diagnostic on HPX used to measure the temperature and density at a single point in the plasma. Our 2.5 J YAG Laser is fired into the plasma to create scattered photons (light). Like a train that passes you and the sound rises and drops in pitch, the light is shifted in frequency. From these shifts the plasma temperature and density can be determined (through detailed physics and engineering). One of the most challenging aspects of TS is calibrating the system. By frequency doubling, HPX will be able to calibrate during data collection at two different frequencies by using two different methods to collect the scattered light. This will considerably reduce our operating costs via shorter analysis, design, and experimental procedures. It will also allow for greater versatility in future and follow-on experiments.

**USCGA Quantitative Reasoning Center** **\$6,575,000 Endowment**

Quantitative reasoning is the ability to identify, use and analyze quantitative information in a variety of settings. Basic mathematical analysis forms the bedrock of quantitative reasoning, which then permeates through the entire curriculum at USCGA. Quantitative Reasoning has been identified as one of the seven "threads" in the proposed core curriculum which start in the 4<sup>th</sup> class year and extend through all majors. In addition, Quantitative Reasoning has been described by the American Association of Colleges and Universities as the "next across the curriculum movement", and Centers such as those described above have been stood up at very prominent institutions. The USCGA Quantitative Reasoning Center will support cadets and faculty in the development of quantitative skills across the disciplines at USCGA. For cadets, the Center will support Supplemental Instruction in core curriculum courses noted as quantitative reasoning courses. In addition, the Center could hold drop-in hours for study led by professional staff, CGA peer tutors and learning assistants. For faculty, the Center will host workshops, discussion groups and speakers based on best practices in teaching and assessing quantitative reasoning skills. In addition, the Director of the Center

will support research and dissemination of best-practices in the instruction of quantitative reasoning and analysis to the Coast Guard and education communities. The Quantitative Reasoning Center will support USCGA's core curriculum as well as all five academic departments from research methods in Humanities to detailed quantitative analyses in Engineering, Science and Management, and the development of the Center will follow best-practices from institutions such as Vassar College and DePaul University. \$4,375,000 of the proposed money is to endow a Director position for the Quantitative Reasoning Center, \$2,000,000 is provided to support part-time professional staff for tutoring and program development and \$200,000 is dedicated to developing and renovating space for the Center.

**Operations Research & Computer Analysis Student Lounge \$100,000**

The Department of Mathematics' top funding request is for completion of a space reconfiguration project that would have an immediate positive impact on the cadet academic experience. Currently, students lack an appropriate quiet area in the Department to work and seek extra academic assistance. All extra academic instructions are held in classrooms, offices, or at a frequently overcrowded hallway table that only accommodates 1-2 cadets. Classrooms are frequently occupied, offices are limited in space to address multiple students at a time and there are many distractions around the hallway table. Completion of this project would create a dedicated space for cadets to study and collaborate while also providing access to computers loaded with the same software as computers in the computer lab (S140). Additionally, a space reconfiguration would allow for a storage and library space. Presently, office supplies are stored in cabinets in classrooms making them inaccessible when classes are in session. Math books are shelved in the computer lab classroom S140 which is almost always in use, making the books inaccessible for cadets and faculty. Funds for the project would be used to partition classrooms S134 and S135 into more efficient workspaces, retaining the ability to meet classroom needs while creating multipurpose spaces to serve as a cadet study area, library and lounge as well as department storage and admin spaces.

## Develop Professional Excellence



### **CGA LEAD Mentoring Program**

**\$2,500,000 Endowment**

This is a comprehensive mentor program that matches 2/c cadet protégés with rigorously trained “1st Line Mentors.” The 1st Line Mentors are paired with “Lead Mentors,” who provide mentoring and supervision. All participants in the program are volunteers. In accordance with current scholarly thinking, all mentors undergo a rigorous training process, which includes both on-line and in-person training. All protégés are given choice in the assignment of mentors. In addition to the potential benefits of the LEAD Mentor Program (including retention and leader development) to 2/c cadets, the program has benefits to the larger Coast Guard. Former 1st Line Mentors have used their mentoring experience and training to establish mentor programs at their respective units. The LEAD Mentor training is in use at units, and with the Mentor Academy. The LEAD Mentor Program is the only such program in the Coast Guard that takes a comprehensive and rigorous approach to mentoring.

### **Cadet Transportation**

**\$125,000 per year**

Past Cadet Activities Fund (CAF) audits have directed the CAF Manager to seek alternate funding sources where appropriate to reduce the growing financial and administrative burden on the Cadet Activities Fund. Transportation costs continue to be one of the biggest costs incurred by the various activities and clubs (~70) supported by CAF. The Comptroller attempted to move the Cadet Transportation contract (Livery, Morale, Club events, Athletic club events, and other) over to appropriated money and combine all transportation contracts including athletics into one funded contract. Unfortunately appropriated funds

were not available to support this initiative and although the preference remains to have appropriated funding for all contracted transportation our current fiscal environment will require our Club/Activity transportation to remain a CAF obligation.

**Institute for Leadership Conference** **\$550,000 Endowment**

Funds used for expenses associated with Institute sponsored annual leadership conferences. Endowment would bring prominent academics and practitioners to CGA for national academic conferences focusing on leadership development. Conferences would also serve to raise national reputation of CGA in field of leader development.

**Leader Development Model and Playbook** **\$250,000 Endowment**

A team of stakeholders from across the Academy has created an elegant model that simplifies the Academy’s philosophy of leader development and explains the strategy for developing leaders of character. The model introduces the potential to continuously assess and improve leader development programs across the 200-week cadet experience. Funding is necessary to see the LEADer Development Model socialized and accepted by faculty, staff, and cadets. Funding would be used to publish the model and playbook, implement a branding strategy, and ultimately institutionalize the “how” of leader development at U.S.C.G.A.

**Diversity and Leadership Symposium** **\$250,000 Endowment**

The CGA Institute to Leadership and the Office of Diversity Affairs will host an annual conference, lunch and learn sessions, and speakers on diversity and leadership. The purpose of these activities will be to encourage and inform diversity and leadership in its many forms and facets. We will examine and explore topics such as what diversity looks like beyond race, gender, sexual orientation and nationality; how diversity empowers innovation; how to minimize groupthink while maximizing desired outcomes.

**Cadet 360 Leader Feedback Program** **\$100,000 Endowment**

This program has proven to be a positive spark in developing the leadership abilities of graduates. It’s a multi-rater assessment process that provides 2/c cadets with a 360-degree view of their leadership performance as articulated by their seniors, peers, and subordinates. This personally tailored and confidential information is then compared to the self-assessment of the rated cadet. The assessment serves as a basis for past reflection, current goal setting, and future growth, all critical components of a leader’s development. Additional investment will allow us to expand the program to 2/c summer training and to the 1/c.

**Cadet E-Leader Portfolio** **\$250,000 Endowment**

The E-Leadership portfolio documents the leadership development journey of a cadet throughout their Academy experience by providing one place for self-reflection and goals. The portfolio is designed for new recruits, or swabs, to begin

use by entering their thoughts of the day. The user can personalize the E-Leadership portfolio as much or as little as they would like with pictures and quotes. The portfolio also provides cadets space to describe their life story in 400 words or less, enter their current career aspirations, and name who their mentors or advisors are. The E-Leadership portfolio will be utilized and updated throughout cadets' time at the Academy. During their last year, cadets can reference their E-Leadership portfolio to review all reflections they have completed during their time at the Academy. The E-Leadership portfolio also provides a space for a cadet's mentors and advisors to view the cadet's goals and career aspirations, helping mentors provide relevant feedback.

### **Visiting Scholars**

**\$250,000 per year**

The CGA Institute for Leadership seeks to provide opportunities for individuals outside of the Academy community to spend focused time providing their unique insight of leadership development programs and/or conducting leadership for the Academy. The Visiting Scholars Program will be open to active duty military and academic and business professionals. These professionals would work with the Leader in Residence and/or Tyler Chair in Leadership to gain a better understanding of a leadership topic of their choice or develop a leadership program that will benefit the Academy. These scholars would be required to apply for the program and produce publishable research or actionable programs for Academy leadership development. Cadets will benefit by interacting with individuals from different backgrounds and experiences who can provide various perspectives on leadership studies.

### **Leadership Fellows**

**\$150,000 per year**

The CGA Institute for Leadership seeks to provide opportunities for members of the faculty, staff, and Corps of Cadets to spend focused time enhancing leadership development programs and conducting leadership research in addition to their regular duties. The Cadet Fellows Program enables a small group of cadets to work with the Leader in Residence and/or Tyler Chair in Leadership in a directed study in a leadership topic of their choice for a semester. The Faculty/Staff Fellows Program provides a member of the faculty or staff the funding to support travel, external training, and course relief for a semester. These fellows would be required to apply for the program and produce publishable research or actionable programs for Academy leadership development.

### **Youth Leadership Conference**

**\$12,500 per year**

In the spring, the CGA Institute for Leadership partners with 2/c cadets to organize, fund and execute an annual youth leadership conference. The youth leadership conference provides cadets the opportunity to practice teaching leadership to younger students. Conference participants have come from as far away as California. The conference is designed for 9th and 10th graders. Also, the youth conference enhances partnerships with the local community and the national Sea Cadet program. During the conference, participants learn about

engineering and leadership. Cadets receive hands on experience guiding subordinates through leadership development and helping high school students see what the Academy has to offer as a college experience.

**Civic Leadership Development Program** **\$25,000 per year**

The Civic Leadership Development Program seeks to provide funding, strategic guidance, and support to cadet development community service initiatives, enabling the Academy to better serve and embrace the New London and Southeastern Connecticut community.

Over the past several years, several civically-minded initiatives have been supported at the Academy including: the Partnership in Education Program, cadet service day, the requirement that all cadets perform a minimum of eight hours of community service, and the recently-adopted annual Alumni Award for Community Service. For this award, a plaque is presented to the individual who performs the greatest number of community service hours per semester, and financial gifts are given to the company and class that lead in community service hours. The Civic Leadership Development Program would help cadets embrace community service by knocking down several barriers they face while completing service projects.

The most common issue with community service is the lack of funding. Because cadets receive minimal salary and are unable to fundraise as members of the military, they are often confined to small scale, labor-only initiatives, such as raking leaves in New London's parks, cooking at soup kitchens, or reading to kids (all performed by cadets in the past few years). Certainly these initiatives are valuable to the community, but any larger scale projects, such as repainting the New London Boys and Girls Club or building a park in New Haven, require funding for supplies and travel. This program would award small grants for community service projects to enable cadets to have more impact and stretch themselves further as they develop their civic leadership.

A second problem facing many cadet community service projects is the lack of expertise in non-profit program management. As a condition of receiving Institute community service funding, cadets would be required to submit a budget and work plan. More important than the exercise of creating the documents, this requirement will provide the opportunity for the CGA Institute for Leadership Director and/or Associate Director to discuss the leadership implications of the project with cadets. These conversations will lead to a deeper and richer understanding of the importance of leadership in civic projects.

**Servant Leadership Development Program** **\$25,000 per year**

The servant leader feels compelled to serve country or organization first. Cadets should feel a strong desire to serve above all else, and then make a decision to lead within the Coast Guard. Servant leadership requires individuals to possess the following qualities: the ability to listen, empathy, healing, awareness,

persuasion, foresight, stewardship, and interest in building community. Servant leaders are leaders of character who have the ability to communicate across cultures and excel at teamwork in order to complete the mission and better the global community.

The CGA Institute for Leadership will sponsor servant leadership trips to domestic and international locations that need assistance or aid. These trips will provide cadets, faculty, and staff with the opportunity for individual growth, increased teamwork, and personal involvement. For example, the Institute assisted cadets to participate in a servant leadership trip to Honduras.

**Applied Leadership & Teambuilding Challenge Course \$80,000**

Request is for integrating character development, confidence and leadership into a memorable series of experiential learning events on a world-class outdoor challenge course. Opportunities to exercise leadership lessons from Chase Hall and the classroom in a dynamic and visible manner have long been critical components of Academy leader development programs. Outdoor challenge courses are widely recognized as an effective means to place students of any experience and skill level in situational leadership roles. Approval of this grant request would enable the Academy to build and utilize a premier, on-site challenge course that would become a capstone event for Academy, OCS and the Leadership Development Center's leadership courses, directly impacting more than 700 students per year. The primary outcomes of the grant would be:

- Promote the Academy and the Leadership Development Center as an unrivaled center of excellence for academic, experiential and practical growth of leadership skills.
- Physically and mentally challenge students in an outdoor environment to solve problems and works as a team to accomplish a common goal.
- Provide a fun and safe facility on which leadership skills that have been observed in the barracks or at operational units can be practiced and perfected.
- Immerse Academy and Leadership Development Center personnel in a world-class environment that will allow them to observe the application of leadership principles from the classroom.
- Build individual confidence and understanding of risk based decision making both as the leader and member of various team-based exercises.
- Provide multiple scenarios at one location to be experienced as a leader or team member over the course of one afternoon or series of events.

**Development of USCGA-specific NOLS Leadership Course for 12-15 cadets per summer \$60,000 per year**

The U.S. Naval Academy leadership expeditions through the National Outdoor Leadership School (NOLS) are custom courses that serve as a leadership practicum in dynamic and demanding wilderness or at sea environments and serve to complement classroom leadership lessons taught at the Academy. NOLS

facilitates development of effective leadership across four domains: self-leadership, active followership, designated leadership, and peer leadership. Leadership under physical and emotional pressure is directly relevant to leadership in a broad array of contexts, and is developed and tested through practice in a dynamic environment in ways that cannot be replicated in the classroom. Additionally, performance based technical skills relevant to the environment (such as terrestrial and celestial navigation in the sea kayaking course) are thoroughly practiced, as are risk management, contingency planning, and decision-making skills.

## Enhance Communication and Partnerships

### **Scholarships for College Preparation Opportunities** **\$100,000 per year**

Even though as many as 70 students attend a year of college prep at Coast Guard expense, there are far more highly qualified candidates interested in an additional year of college prep to prepare them to attend the Academy. This tool has been particularly helpful for those who are underserved by their local high schools. We currently send students to Marion Military and New Mexico Military Institutes. This additional non-appropriated money would allow us to expand our range of schools to other top-notch college preparatory schools such as Fork Union Military Academy, Valley Forge, Greystone, or other schools with strong academic/athletic reputations in more desirable locations.

### **Recruiting Initiatives** **\$100,000 per year**

This funding will provide support for numerous recruiting initiatives to include: tuition scholarships and transportation stipends for financially needy underrepresented high school students who have been selected to attend Academy recruiting activities such as AIM, Open Houses, and Cadet for a day, Genesis Invitational and Academy Experience Programs. Combined, these programs yield a majority of the Academy's future cadets. This funding would remove financial considerations as a barrier for many as tuition expenses continue to rise.

### **Educator Outreach** **\$80,000 per year or \$2,000,000 Endowment**

This funding would provide travel funds to invite approximately 100 educators and administrators to the campus each year for extended contact with Faculty, cadets, and Admissions personnel. All of the DoD service academies host an extensive educators program, with the exception of the Coast Guard Academy. Educator outreach is necessary to build a system of feeder schools, which in turn ensures a steady supply of well prepared students from diverse backgrounds. With a 65 percent decline in the applicant pool occurring since 1980, building demand for an Academy education is the central strategic concern in Admissions. Appropriated funds may not by law be used to support this type of activity.

### **Support for Academy Partnership** **\$6,000 - \$20,000/per year**

These funds permit the Academy to pay an increasingly common fee, to attend college fairs around the country (\$6k). Academy Partners, who volunteer to represent the Academy at over 400 college fairs per year, are often unable to attend due to the fee. In addition, the funds will be used to reimburse extraordinary travel expenses incurred by the Partners. Finally, the funds will be used to resupply Partners with table display materials. These items are essential parts of any college fair event, promoting the institution and attracting visitors to the table to learn more. The most costly of these items is a large stand up tri-fold display. A relatively small percentage of these displays are in the hands of

Partners; our end state goal is to equip each active Partner with their own display unit."

**Engineering Department Recruitment & Retention Coordinator** **\$1,650,000 Endowment**

This endowment would provide the engineering department with a permanent staff member whose focus would be on both recruiting and retention of engineering students at the Coast Guard Academy. This position would spearhead all department outreach programs, including the summer AIM program and chair the department's accreditation oversight committee. Clearly the development and retention of a diverse, technically educated officer corps would be the focus of the individual occupying this position.

**Staff Member Recruiting / Retention of Science, Technology, Engineering and Math (STEM) Students** **\$110,000**

Staff members are already involved with the admissions process by writing letters and calling prospective students. However, given the Coast Guard's growing need for STEM graduates, we must continue to develop effective strategies to attract these students. Funding would enable one or two staff members to contact more potential cadets by phone and email, to attend college fairs and to insert a CGA presence at sites with high numbers of college-bound students with special interests in engineering, science and math.

**Summer STEM Teacher Initiative for the 21<sup>st</sup> Century** **\$100,000 per year**

Funds to defray expenses for attendance of 30 high school and middle school Science Technology Engineering Math (STEM) teachers to the Academy for an intensive National Science Foundation led STEM/Leadership 'boot camp' designed to professionally develop teachers and bolster Academy reach into urban school systems. The program is designed to create a pipeline for direct admission of STEM qualified students from diverse school systems into the Academy by using a blended Project Based Learning and Leadership Development model, coupled with the establishment of regional STEM Mentorship Centers in key geo-markets around the nation.

## Optimize Resources and Promote Sustainability



### **Endowed Director of Sustainability**

**\$4,000,000 Endowment**

This endowment would support a full time sustainability director in the Facilities Engineering Department. This staff member would provide valuable academic, military and industry experience to the Academy to coordinate all of the sustainability activities taking place at the Academy in alignment with the Strategic Plan. In addition to their primary duties, this staff member would assist with teaching courses in areas that are outside the scope of the current faculty and provide valuable insight to both cadets and colleagues in these unique areas.

### **Waesche Hall – New Library Window Wall & Door Entrance**

**\$50,000**

This project will remove the existing entranceway into the library and replace it with glass wall and entranceway to enhance the overall appearance of the Waesche Hall library.

### **Washington Parade Field Monument**

**\$100,000**

Funds would pay for a bronze monument of General George Washington on his horse leading the Colonial Army into battle. This monument would recognize the leadership of General Washington for whom the CGA Parade Field is ceremoniously named. It would also serve as a historical reflection point for cadets, students, faculty and visitors.

### **Chapel Beautification and Restoration**

**\$150,000**

The Academy Chapel's pews, carpet and interior are in poor condition and do not represent the high spiritual ideals to which the Academy strives. The Chapel hosts numerous ceremonies on an annual basis as well as weekly services. Due to its historic integrity and serving as a focal point on campus for both alumni and the community, the Chapel is one of the Academy's most visited buildings. The beautification and restoration effort will serve as the margin of excellence expected of our Academy's intellectual, physical, professional and spiritual development of its future leaders. The project's scope includes refinishing the pews, painting and replacement of the carpet in the congregational assembly area.

## **Promote Athletics and Physical Excellence**



### **Otto Graham Hall of Athletic Excellence**

**\$2,500,000**

The Otto Graham Hall of Athletic Excellence, to be established within a portion of Billard Hall, will transform a currently underutilized part of the building into a celebration of intercollegiate athletics at the Academy. In the selected space, adjacent to areas still being used for cadet recreation, we will share the history of our varsity athletic programs, honor our Hall of Fame Inductees and recognize the pioneers of both men's and women's athletics. The Hall of Excellence will be an area of historic significance for all to enjoy, and an educational tool that will assist both the Athletics division coaching staff and the Admissions staff in recruiting efforts. Our alumni and friends will be able to relive fond memories of athletic contests on the fields, courts, waters and tracks that provided critical leadership and physical development training for so many over the course of time. The area will feature free standing displays for specific prominent coaches and cadet-athletes (i.e., CAPT Otto Graham photos and artifacts (coach), ENS Hayley Feindel photos and artifacts (player, retired number), as well as sport specific gallery

displays. This project will be the final phase of the ongoing renovation of Billard Hall’s office spaces and playing/training areas.

**Two (2) Additional Athletic Trainers** **\$125,000 per year or \$2,250,000 Endowment**

In 2012, the CGA athletic administration conducted an internal assessment according to NATA (National Athletic Trainers Association) and NCAA guidelines, in order to examine the level of athletic trainer staffing in the Athletics division. The assessment determined that the present level of staffing is substantially inadequate. At the time of the assessment, we employed five (5) athletic trainers to service 21 intercollegiate teams and approximately 565 cadet-athletes. When men’s and women’s lacrosse become varsity teams in the 2014-15 academic year (increasing the varsity sports number to 23), the number of varsity cadet-athletes will exceed 600 – but the number of trainers will remain the same. At most colleges and universities, athletic trainers are actively engaged with teams for ten (10) months a year – with summer being virtually inactive. However, the unique work conditions at the CGA (Swab Summer, coverage of the PFE and Health & Physical Education classes), make trainers year-round employees. According to the assessment, two more (2) full-time athletic trainers should be employed in order to minimally cover the full spectrum of the CGA Athletics division activities. In addition to the growing number of varsity teams and cadet-athletes at CGA, significant changes in the college athletics landscape have made the addition of new athletic trainers a necessity. First, an unprecedented number of intercollegiate sport offerings now exist, in addition to requirements to staff non-traditional (i.e., off-season football practice as permitted by the NCAA, in addition to the traditional fall season) season activities, as well as supervision of strength & conditioning sessions. Second, sports-related lawsuits have gravitated away from equipment manufacturers and their “duty to warn”, toward the health care delivery process. Given the premium we place as a service and an Academy on providing quality medical care for cadets, the addition of two (2) athletic trainers to the Athletics division staff is a consistent, logical objective.

**Baseball and Softball Press Boxes** **\$300,000**

Continued improvements to the lower athletic fields, most recently the replacement of the playing surfaces on the baseball and softball fields, have provided a significant upgrade to these facilities. Currently there is no structure at either field which will allow sports information and game management personnel to perform necessary administrative functions (public address announcements, live video/audio streaming, game scoring and statistics, etc.) while being protected from the weather. Cadet Memorial Field and the Nitchman Soccer and Track complex do have press boxes where these services can be provided. This improvement would add consistency to the level of services provided at all CGA home athletic facilities where outdoor competitions are held. It should be noted that anticipated cost is \$175,000 for baseball and \$125,000 for softball, and that the two press boxes can be separated for support by classes or sport interest groups if necessary.



## Model a Community of Inclusion

The strategic initiative to cultivate a community of inclusion permeates through all Divisions and staffing elements within the Academy and beyond into the entire Coast Guard. Creating a community that is both inclusive and strives for excellence should be at the forefront when addressing other needs listed in areas of Academic Excellence, Admissions Excellence, Cadet Enrichment and Development, Institute for Leadership, Library Enhancements, Recruiting & Retention, Commandant of Cadets, and the LDC and within all institutes, fellowships, and lecture series. Additional inclusion and diversity initiatives are reflected below:

### **Pluralism in a Diverse Democracy** **\$25,000 per year**

Each semester expose the academy community to a unique learning experience by a noted lecturer in the area of pluralism in a diverse democracy, and the unique role officers occupy.

### **Interfaith Prayer Breakfast Guest Speaker Series** **\$10,000 per year**

Funding would provide ability to invite high-profile individuals to inspire cadets, faculty and staff on the power interfaith dialogues have to change lives. Past speakers include a survivor of the genocide in Rwanda, Immaculée Ilibagiza who is a living example of interfaith activism put into action. Her life was transformed dramatically during the 1994 Rwandan genocide where she and seven other women spent 91 days huddled silently together in the cramped bathroom of a local pastor's house.

### **Cadet Religious Activities Travel** **\$15,000 per year**

The Academy encourages cadets to participate in Spring Break Religious Activities travel, designed to enrich their overall Academy experience through a threefold cultural, professional, and spiritual emphasis. In 2013, 23 cadets visited Israel, seeing for themselves the earliest beginnings of major monotheistic faiths, and learned firsthand the current socio-political-religious significance of Israel. The travel included visiting the Israeli Naval Academy and Israeli Defense Force, where they learned how Israel incorporates its national defense and maritime security under one umbrella. The Spring Break Trip offers cadets a unique opportunity to see up close the way of life of other countries. Funds for this program will offset cadet costs.

## CGC EAGLE



### **Renew USCGC EAGLE's Wardroom Table**

**\$20,000**

Funds provided would cover removing current table (EAGLE self help project), and replacing it with a custom mahogany table, with a cuttermen pin and USCG Barque EAGLE inlay, covered in barcoat and encapsulated in brass (with fiddle boards). Cost is not scalable. In appreciation, EAGLE would maintain a plaque in the display cabinet recognizing the gift.

### **Renew USCGC EAGLE's CPO Mess**

**\$50,000**

Funds provided would cover removing furniture in EAGLE CPO mess, and upgrading the space into a 'representational' space in EAGLE. Upgrade would include new, custom mahogany furniture, replace of bulkheads and overhead, and upgrade of appliances. Cost is not scalable. In appreciation, EAGLE would maintain a plaque in the display cabinet recognizing the gift.

### **Upgrading USCGC EAGLE's External Tours**

**\$60,000**

Funds provided would cover contracting a professional to provide an outside perspective on the EAGLE topside tours, recommend and fabricate tour displays, provide a video-tour option, provide an EAGLE tour APP (with foreign language options), and provide area specific scripts/topics for our trainees for each of the stations. EAGLE hosts approximately 100,000 guests each summer. Cost is scalable.

**EAGLE's Brightwork****\$100,000**

Funds provided would cover re-finishing all or portions of the fore and after helms, bridge gratings, bitt boxes, and Captain's Coffin. These items are aging and in need of repair. Beautification contributes to EAGLE's appeal during tours and other public affairs events. Additionally, EAGLE hosts numerous CGA Admissions outreach events; and upkeep of CG Assets will be more appealing to prospective cadets. Cost is Scalable.

**EAGLE's Commanding Officer Cabin****\$40,000**

Funds provided would cover re-finishing all or portions of the furniture in the Commanding Officer's Cabin including the rack, lockers, desk, other woodwork, and possibly installing wood paneling to upgrade the space into a representational space. Cost is not scalable. In appreciation, EAGLE would maintain a plaque in the space to recognize the gift.

