

## AMMO Chiefs Association (ACA)

# Christmas

# "Shell and Flame"





Issue Number: XXII

19 December 2011

We are the Ammo Chiefs Association, a not-for-profit; fraternal Association dedicated to the promotion of camaraderie among active duty and retired **USAF AMMO Chiefs**. Our members work throughout the year to raise funds for worthwhile charitable causes such as the Richard Gauvin Memorial Fund, the Enlisted Widows Foundation, and a Sunshine Committee to respond to members' time of distress. The ACA contributes to the morale of active duty AMMO troops at the Chapter level through recognition and sports programs. The ACA sponsors awards programs for the AMMO School House Outstanding Performer, and the AFCOMAC Outstanding Performer. ACA has contributed to cultural enterprises such as the RAF Welford AMMO Museum. *We are AMMO*, *and proud of it!* Please visit the AMMO Chiefs web page for more information at <a href="http://ammochiefs/ammochiefs.com">http://ammochiefs/ammochiefs.com</a>.

## From the gavel...



My fellow chiefs and friends, as we close out this year and start the next with new leadership, I would like to thank all members for their support and help during my tenure as President. As we prepare to turn over the helm I implore all members to support our new Board of Directors and make time in your busy schedules to continue to support our AMMO Troops and our AMMO Family.

I have had the opportunity to see a lot of good things happen as a result of the ACA and I know that we will all do our very best to make more good things happen...we are movers and shakers and once we put our mind to it we can pretty much make anything

happen. But one thing that seems to be a continued issue is the low membership numbers. We have to make this a priority and I'm hoping the next Board of Directors will have a lot better success with the coming years. With numbers there is strength.

We still have our military deployed to too many places so please remember our Soldiers, Sailors, Marines and Airmen who are in harm's way and their families and keep them in our prayers.

Finally Ronnie and I would like to pass on to all a very Merry Christmas and a Happy New Year...IYA AMMO YAS!

Darrell ACA President

New Chief Selects. We hope they will joy us in supporting the young Ammo troops through ACA programs. Tony.crotts@beale.af.mil
Malcolm.crump@aviano.af.mil
Kevin.hendershot@lakenheath.af.mil
Melvin.jobe@osan.af.mil
Joseph.kegg@seymourjohnson.af.mil
Joseph.kitchel@eielson.af.mil
Jonathan.martin@tyndall.af.mil
Jc.riggs@spangdahlem.af.mil
Harold.whisler@us.af.mil



### From Your Vice President

ACA Members, As we come to the end of 2011, I pass on my thanks to our membership and Board of Directors for their continued support of the ACA organization and local chapters, without your candidate support we would not be able to do what we are so proud to do as an organization—taking care of our own. This has been an Ammo motto as far as I can remember. It's still alive and well today. Many of our chapters continue to support Ammo troops located many miles across their region and serving in the AOR. To sustain our organization we must continue to grow through new memberships and regain support

from past members that allowed their membership to lapse. For those that may have let their membership go dormant, there's no late fee just sent in your dues for the 2012 or consider paying up for life membership.

Outstanding tribute to Mr. Bob Hope, who in my opinion was one of the greatest supporters of American military starting just before outbreak of WW II. When you go to the below web link there will be other youtube clips of some of his performances enjoy and share with the younger Ammo troops.





http://www.youtube.com/watch?v=L-HeETwJSUc&feature=player\_embedded

We appreciate the hard work of our past ACA BOD members; this is a picture of outgoing ACA BOD at 2010 Reunion. I look forward to working with the incoming ACA BOD members.

For ACA Newsletter inputs please send to:

John Matthews at <a href="mailto:rammoc1994@comcast.net">rammoc1994@comcast.net</a> Rich Pennington at <a href="mailto:rpennington7@cox.net">rpennington7@cox.net</a>

Richard Pennington ACA Vice President



L to R Mark, Danny, Dwight, Tom, Darrell, Bart, Fred, Rich



## From the Desk of the Secretary

This is my last article as Secretary of the ACA; it has been my pleasure to serve the Association as Secretary for the last four years. I am now in the process of handing over to our Ammo Chief brother Jack Seaman and as the result of the recent elections I will be moving to Vice President. I thank you for your support over the years and urge you to continue to support the ACA; for those Ammo Chiefs who receive this newsletter who are not members please consider joining your fellow Ammo Chiefs in order to strengthen the

Association.

**Election Results:** The following were elected to serve a four year term of office commencing 1 January 2012: President-Rich Pennington; Vice President-Fred O'Hern; Secretary-Jack Seaman; Treasurer-Darrell Beasley; Chief at Arms-Kevin Lewis; Directors at Large-John Cecere; Mark Gossett; Dwight Howard; and Bart Ivy.

**Membership:** Membership in the ACA continues to be static. The membership in good standing figure is 160 (up from 150). The recent additions have been reinstatements, recent selectees, associate and honorary memberships. It is particularly concerning there are 55 in-active or lapsed members. The number of active duty 2W0 chiefs and chief selectees who have not chosen to participate is mystifying. Attached is the Membership Roll current as of 1 December. We urge all members to review it and actively encourage those eligible to join or reinstate their membership. If you believe there is an error on the roll please contact Jack Seaman at Ammo.Chiefs.Association@gmail.com or Jacknsamotb@cfl.rr.com.

Annual membership dues should be paid NLT 31 January 2012. If you have paid dues continuously you are eligible to convert from Annual to Life Membership by paying the additional years to receive credit for 10 years of continuous paid membership. Please contact Jack for the balance of your pro-rated payments. Send checks for renewal to the ACA Secretary, 300 Salida Drive, Indian Harbour Beach, FL 32937.

If you previously joined or submitted an application to the ACA and are not listed on the attached Membership Roll, your membership is lapsed. We would welcome your return; you may be reinstated by paying 2012 dues (\$25); send a check and **new application** (applications attached) to ACA Secretary, Jack Seaman, 300 Salida Drive, Indian Harbour Beach, FL 32937.

Rich Pennington rpennington 7@cox.net Fred O"Hern Chief.OHern@gmail.com

President Vice President

Jack Seaman jacknsamotb@cfl.rr.com Darrell Beasley ammobeasley@cox.net

Secretary Ammo. Chiefs. Association@gmail.com Treasurer

Kevin Lewis <u>kevin.lewis@atk.com</u> Rick Follett <u>Rfollett@egginc.com</u>

Chief at Arms Web-Site Manager

John Cecere cecerejc@aol.com Mark Gossett mgossett@prodigy.net

Director-at-Large Director-at-Large

Dwight Howard DHoward@jpkii.com Bart Ivy bart.ivy@evanhoe.com

Director-at-Large Director-at-Large

Please keep your address and contact details current, a quick e:mail will suffice <u>Ammo.Chiefs.Association@gmail.com</u> or Jack Seaman <u>at Jacknsamotb@cfl.rr.com</u>.

You can reach ACA Officers by email at the addresses above if you would like their snail mail addresses contact the Secretary. Please contact any of the members of the ACA Board of Directors if you have any items of interest or information you feel would be of benefit to the organization.



#### ACA Website Manager Rick Follett E-mail: Rfollett@egginc.com

I haven't received very many inputs or concerns with our ACA website over the past year; if you have any ideas or recommendations for our website please email me so we can continue to improve it.

#### **Chief Master Sergeant Gauvin Ammo Troop Memorial Fund**

Here are the results of the 2011 CMSgt Gauvin Scholarship Fund. The Board of Advisors reviewed and voted on 13 applications. This year's essay theme was, "My Commitment to America's Future." One applicant was a dependent of a deceased (after retirement) AMMO Troop. All others were dependents of Active Duty or Retired AMMO Troops. The 2011 disbursement of \$7,500.00 for 12 qualified applicants is as follows:

A. Day	\$1,000.00
K. Porto	\$750.00
M. Kim	\$750.00
K. Nudd	\$750.00
T. Carman	\$750.00
R. Havener	\$500.00
C. White	\$500.00
K. Howe	\$500.00
A. Love	\$500.00
E. Allen	\$500.00
S. Kim	\$500.00
B. Sinerious	\$500.00

The future of the fund remains healthy. The monetary donations from each AFCOMAC class, private organizations (AMMO Chiefs Association and its chapters), and individuals are the main contributors. The original BoA and subsequent boards had worked toward registration with the National Combined Federal Campaign (CFC). This has proven to be a real challenge. The latest minimum requirements for CFC national status are to provide service/donations in 15 different states or 1 foreign country and must also exceed one of the following "De Minimis" rules: 1. Donate at least \$5,000 to each state (minimum 15 different states) or 2. Render at least 3 different services/donations in each state (minimum 15 different states) or 3. Complete a combination of criteria 1 and 2. Based on this, the CMSgt Gauvin Scholarship Fund is nowhere close to meeting the CFC minimums. AFCOMAC will continue to accept donations to support the fund.

Applications must be submitted by 1 June, each year. For an application or information, send your request to: 9 MUNS Scholarship Coordinator, 5890 A Street, Beale AFB, CA 95903-1545 Telephone (530) 634-3685/2400

## 7<sup>th</sup> AMMO Chiefs Association Reunion

Where will it be held? This will be at top of the list of action items for our new ACA BOD. We need our membership input so we can start the communication process to start identifying some candidate locations. Once a location is selected a reunion committee will have to be formalized to start the planning. Some of the key areas/options for consideration, location, time of year and activities. The reunion is a very social event and enjoyed by the spouses in many cases that get to renew friendship with people they haven't seen in a while. We look forward to hearing back from you with ideas—at this point everything is open for discussion.

Rich Pennington

From the archives article provided by John Matthews Sr. CMSgt (ret)

# **Laser-guided bombs**

A laser-guided bomb (LGB) is a guided bomb that uses semi-active laser homing to strike a designated target with greater accuracy than an unguided bomb. LGBs are one of the most common and widespread guided bombs, used by a large number of the world's air forces.



**BOLT-117** laser guided bomb

#### Overview

Laser-guided munitions use a laser designator to mark (illuminate) a target. The reflected laser light ("sparkle") from the target is then detected by the seeker head of the weapon, which sends signals to the weapon's control surfaces to guide it toward the designated point. Laser-guided bombs are generally unpowered, using small fins to glide towards their targets. Powered laser-guided missiles, such as some variants of the US AGM-65 Maverick and the French AS.30L, use the same guidance system, but have greater range and maneuverability because they are not limited to unpowered flight. Some LGB's have been fitted with strap-on rocket motors to increase their range; one such weapon is the USN AGM-123 Skipper.

The earliest laser guidance seekers measured the intensity of the reflected laser light at four corners of the seeker window. The seeker then actuated the control fins to steer the weapon in the direction of the strongest signal return, thereby keeping the weapon centered on the laser sparkle. Later weapons have more sensitive seekers and more sophisticated control systems that waste less energy with course corrections, improving accuracy and range, but the principle remains essentially the same. The first such weapon to be developed was the Texas Instruments BOLT-117.

Most laser-guided bombs are produced in the form of strap-on kits: seeker heads, and steering fins that can be attached to a standard general-purpose bomb or penetration bomb. Such kits are modular, allowing relatively easy upgrades, and are considerably cheaper than purpose-built weapons.

### **Development**

Laser-guided weapons were first developed in the United States in the early 1960s. The United States Air Force issued the first development contracts in **1964**, leading to the development of the Paveway series, which was used operationally in Vietnam starting in **1968**. Although there were a variety of technical and operational problems, the results were generally positive. LGBs proved to offer a much higher degree of accuracy than unguided weapons, but without the expense, complexity, and limitations of guided air-to-ground missiles like the AGM-12 BULLPUP. The LGB proved particularly effective against difficult fixed targets like bridges, which previously had required huge loads of "dumb" ordnance to destroy.

It was determined that 48% of Paveways dropped during 1972–73 around Hanoi and Haiphong achieved direct hits, compared with only 5.5% of unguided bombs dropped on the same area a few years earlier. <sup>[2]</sup> The average Paveway landed within 23 feet of its target, as opposed to 447 feet for gravity bombs. <sup>[2]</sup> The leap in accuracy brought about primarily by laser guidance made it possible to take out heavily defended, point objectives that had eluded earlier air raids.

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The most dramatic example was the Thanh Hoa Bridge, 70 miles south of Hanoi, a critical crossing point over the Red River. Starting in 1965, U.S. pilots had flown 871 sorties against it, losing 11 planes without managing to put it out of commission. In 1972 the "Dragon's Jaw" bridge was attacked with Paveway bombs, and 14 jets managed to do what the previous 871 had not: drop the span, and cut a critical North Vietnamese supply artery. [2]

In the wake of this success, other nations, specifically the Soviet Union, France, and Great Britain, began developing similar weapons in the late 1960s and early 1970s, while US weapons were refined based on combat experience.

The USAF and other air forces are now seeking to upgrade their LGBs with GPS guidance as a back-up. These weapons, such as the USAF Enhanced Guided Bomb Unit (part of the Paveway family), use laser designation for

precision attacks, but contain an inertial system with GPS receiver for back-up, so illumination is lost or broken, the weapon home in on the GPS coordinates of the



navigation that if the target will continue to original target.

#### **Problems and limitations**

While LGBs are highly accurate under ideal conditions, they present several challenges for successful use, making them somewhat less than the "silver bullet" sometimes suggested.

The first problem is designation. To ensure accurate guidance, the target must be illuminated by a laser designator and the pilot must deliver the weapon within the "weapon basket" (the zone in which the weapon seeker can observe the laser target marker *and* the weapon has sufficient energy to guide to the target). Laser guided bombs can be launched without the laser designator turned on, in which case it will follow a ballistic path, until such time as the seeker picks up the reflected laser signal. This allows the aircraft to deliver an LGB using techniques such as loft or toss bombing. However, if the designator is turned off, the laser spot moved, the laser signal is blocked (for example by cloud or smoke), the weapon's accuracy will be greatly reduced. A particular problem with laser designation can be path length under certain environmental conditions. Laser designators operate in the Infra-Red wavebands and attenuation of the laser signal by the moisture content of the atmosphere can reduce the signal strength below the threshold of the seeker. Laser designators modulate their output on a number of discrete codes and to guide correctly the bomb and designator must be matched.

For an accurate attack against a small target, uninterrupted designation is desirable. But, the simple guidance system of early LGBs (such as the American Paveway II) resulted in a rectilinear flight path, with a tendency to lag below the sightline. To compensate, crews will release their weapons on an unguided, ballistic flight path, activating the designator only to refine the bomb's final impact point. This is more demanding of crew and aircraft, requiring a high standard of basic, unguided bombing accuracy and more attention to the bomb's flight.

In the 1970s and 1980s it was common for aircraft to rely on a separate designator, either carried by ground forces, operated by the forward air controller, or carried by another aircraft in the strike group. It was often deemed more practical for one aircraft to designate for its comrades. Modern conflicts and a growing emphasis on precision-guided weapons have pointed to the need for autonomous designation, and many fighter-bomber aircraft are now being fitted with designator pods to self-designate for laser-guided munitions.

Even if the launch aircraft is capable of autonomous designation, the problems described above remain. Laser illumination can be interrupted by smoke, fog, or clouds, limiting the usefulness of LGBs in poor weather or very dusty conditions. In desert warfare, such as the 1991 Gulf War, laser designation sometimes reflected off the sand, causing weapons to home on false targets. Furthermore, the need to provide designation may leave the aircraft dangerously exposed to ground fire or enemy air support.

An additional concern is the limited "weapon basket", if the weapon is released too low or too far from the target, or in a trajectory that puts the weapon outside the seeker's field of view, it will miss. Optimum altitude for an effective LGB attack is from medium altitude (20,000 - 30,000 ft), increasing the aircraft's vulnerability to surface-to-air missile (SAM) attacks.

For these reasons, while all modern air forces have put an increasing emphasis on LGBs and other precision-guided munitions, some tacticians still see an important role for the accurate delivery of unguided bombs. During their 1981 raid on the Iraqi nuclear reactor at Osirak, the Israeli Air Force chose to use unguided Mark 84 bombs rather than laser-guided weapons because they felt the need to designate the target would leave the attackers unacceptably vulnerable.

#### Citations

- 1. <u>^ [1]</u> Paveway Laser-Guided Bombs
- 2.  $\wedge \underline{abc} \subseteq \underline{\text{From Saigon to Desert Storm}}^{\underline{[dead link]}}$
- 3. <u>^ India develops its first Laser-Guided Bomb</u>

#### Bibliography

Clancy, Tom. "Ordnance: How Bombs Got 'Smart'". Fighter Wing. London: HarperCollins, 1995. ISBN 0-00-255527-1.

#### **Commentary**

National debit impacts to DoD has been in the news a lot lately about spending cuts to defense; everyone is talking about what might happen in respect to reduction in end strength and procurement. I found an interesting article that compares the services in 1990 to today.

In 1990, the Army had 172 Combat Battalions, Navy had 546 Ships, and the Air Force had 4355 Fighters.

In 2011, the Army had 100 Combat Battalions, Navy had 288 Ships, and the Air Force had 1990 Fighters.

Defense spending today headed to less than 3 percent of national income; lowest level since 1940.

Our active duty Ammo chiefs are facing what many of us faced in the past; drawdowns and major budget cuts impacting development of new weapon systems, procurement of spare parts for support equipment, and training munitions to maintain aircrew proficiency.

Based on pending budget cuts and end strength reductions we stand to lose many quality Ammo troops around the globe. Most having gone through this in the past will highlight the fact that mission requirements seldom change and create a burden on a smaller workforce. This has the possibility of allowing higher levels of risk to be taken to meet the mission. In Ammo line of work we must stay attuned to this and not allow our young Ammo supervisors to put themselves and their troops in harm's way. Ammo pride runs very deep and the words "it can't be done" are very seldom heard behind the fence line.

As chiefs one of the most important things we must have is creditability if you say you're going to do something you only have one shot. If you don't follow through on your words the troops will lose faith in you. Leadership is learned and follow ship is earned. Talk to younger supervisors and instill values of knowing their personnel and what's going on in their lives. Uncertainty in their lives can create a lot of stress and tends to cause them to lose focus on detail.

#### Rich Pennington

# Ammo Memorial Plaque at the Wings Over the Rockies Air and Space Museum

On September 27<sup>th</sup> a plaque provided by the Ammo Chiefs Association was dedicated to Ammo at the museum that occupies one of the remaining hangars of Lowry AFB, Colorado. If you went to a munitions tech school prior to 1994 you did so at Lowry.

Retired Colorado ANG "Ammo Chief" Ron "Doc" Holliday made the presentation on behalf of the ACA. In his presentation "Doc" provided a brief history of Ammo at Lowry through the years starting in 1938 until it closed in 1994; this included not only

the basic course for munitions but missiles, nukes, explosive safety, inspection, AFK, load crew training to name a few. He also reminisced about classes being held back in the day with 461's and 462's sharing the same place which at times caused for some pretty stressful break periods.



back row 1-r: Chief Huffman, Rich Downing, Chief Quinn, Greg Anderson, SMSgt Hauschild, MSgt Lupien; front row 1-r: Chief Kiel, Chief Holliday, MSgt Mercil, and SSgt Day

Doc thanked Chief Mike Roylance for his help on the history and Chiefs Huffman (Ammo Chief Retired) and Chief Quinn (CO-ANG Ammo Chief) for their assistance in mounting and hanging the plaque, along with his wife Linda who took the pictures.

If you take an opportunity to visit the museum, the plaque is located in the Lowry Room over the Technical School history section.

Present for the dedication were: Rich Downing Director of Museum Advancement; Greg Anderson CEO Wings Museum; David Kerr COO; CMSgt Robert Huffman "Huffy" (Ammo Chief CO-ANG, ret'd); CMSgt Robert Quinn (CO-ANG Ammo Chief); CMSgt Calvin Kiel (Ammo Chief ret'd) and his Wife Joyce; CMSgt Ron Holliday "Doc" (CO-ANG Ammo Chief ret'd) and his wife Linda; SMSgt Ed Hauschild NCOIC 140th Munitions element; and the following Ammo Troops MSgt Brad Mercil; MSgt Todd Lupien; SSgt Douglas Day.



Vietnam era static display

The ACA extend thanks to Doc Holliday for his leadership in arranging this memorial to Ammo heritage at our birthplace.

#### **ACA Web Page News**

Visit http://ammochiefs/ammochiefs.com for further information.



## **Chapter News**



**Mid-Atlantic Region** 



The Ammo Chiefs Association Mid-Atlantic Chapter (ACAMC) sent holiday care packages to the Ammo Troops at Bagram and Kandahar Air bases in Afghanistan. Jack Miller spearheaded the project and collected donations from the membership and his local Junior Reserve Officer Training Corps. In the end, each location got about 50 pounds of goodies! Feedback from Chief Nikolas and SMSgt Meyers was extremely positive.

A couple of our chapter members attended the AFCOMAC 25th Anniversary. Some of the founding fathers and past commanders were present and the dedication ceremony was a class act. A good time was had by all.

In recognition of SMSgt David A. Jamison of Joint Base Langley-Eustis winning the 2011 Air Combat Command Lieutenant General Leo Marquez Award in the Supervisor-Manager category, the chapter presented a \$50.00 check, certificate, letter, and a chapter coin. This is a great and well-deserved honor bestowed upon SMSgt Jamison.

We selected two personnel from the 1 MXS Ammo Flight to receive some help over the holidays in the form of buying presents and other necessities for their children and family. Our chapter members will take them on a shopping trip and ensure they have some type of brightness in their lives during the Christmas season.

SrA Randy P. Brooks of Joint base Langley-Eustis was selected as our Sharp Ammo Troop for 2011. Even though there were only two packages submitted, the competition was tough. The ACAMC will present a letter, \$50.00 check, a certificate, and a chapter coin to SrA Brooks in the near future.

One of our members, Steve Bowersox, PCS'd in October. We wish him the best in his recruiting job in the Arlington, Texas area.

The chapter held elections for the office of vice president. The voting was finalized at the 10 Dec 11 meeting. Our new ACAMC vice president is Eddie Fuquay.

Finally, how could the year end without a little drama? Eddie was one of the first to leave the meeting at Bill McCullough's house and grabbed Pat Barcus' coat by mistake. Luckily, Pat's wife had a set of car keys with her. Maybe next year, we'll have a hat-check girl hand out receipts! :-)

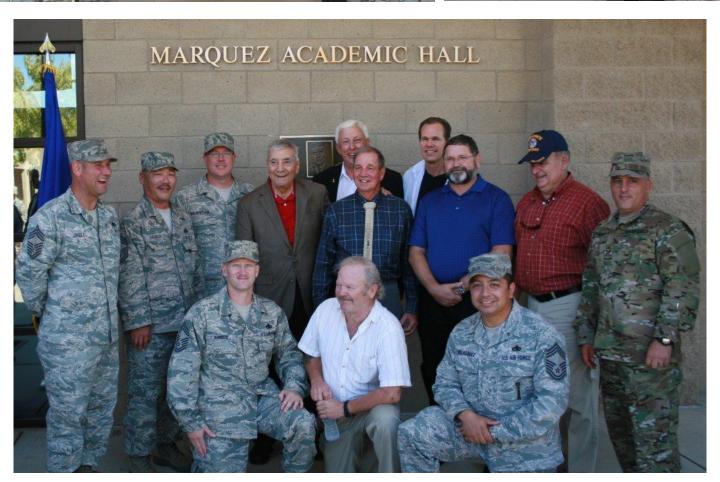
Bill McCullough CMSgt (ret) ACAMC Secretary-Treasurer

#### **AFCOMAC 25 Years Later**

AFCOMAC celebrated their 25th year of operation in September 2011. Lt Gen Leo Marquez (ret) was a key supporter of establishing the AFCOMAC program. Brig Gen Levy (former commander at AFCOMAC) was guest speaker during a dedication ceremony where the Marquez Academic Hall (AFCOMAC Schoolhouse) was dedicated in the name of Lt Gen Leo Marquez during 25th Anniversary ceremony. We plan to post additional pictures on the ACA website and possible video once we receive them from AFCOMAC. Below are a few pictures taken during the 25<sup>th</sup> Anniversary and dedication ceremony.







# AMMO Chiefs Association, Inc. (ACA) 300 Salida Drive; Indian Harbour Beach, FL 32937 Membership Application

**Eligibility:** USAF, Air Force Reserve, or Air National Guard AMMO Chiefs, active or retired and SMSgts with a line number for Chief are eligible for membership. AMMO Chiefs are individuals who serve or served as a Chief or Chief Selectees in Duty AFSCs 2W000, 461X0, or 46500 (or AFSCs that were administratively converted directly to the foregoing).

Active or former members of the USAF, AFR, or ANG who served honorably in duty AFSCs 2WO, 461X0, or 465X0 AFSCs (or previous AFSCs that were administratively converted directly to the foregoing AFSCs) are eligible for Associate Membership. Applicants for Associate membership must be sponsored by an AMMO Chief member and approved by a majority of Directors.

**Dues:** \$25.00/year or \$250 Life Membership Send check or money order with this application to address above. Introductory price for Selectees is \$10 for the first year or \$200 for Life Membership.

First Name	MI	Last Name	
Spouse's Name:			
Mailing Address:			
Street			
City, State, ZIP Co	de:		
Home Phone Numb	oer		
Cell Phone Number	r		
E-Mail Address (1)	):		
E-Mail Address (2)	<b>:</b>		
Service Status: Act	ive Duty: (Circ	le one) Yes No	
Present Grade/Rar	ık or Rank at R	Retirement:	
Date Entered Servi	ce:	_	
Date of Retirement	:		
War Veteran: (Sta	te War or Cam	paign)	
Brief history of you	ır AMMO wor	k i a duty/unit acci	mmant datas hasas at

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