# **CURRICULUM VITAE**

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JOB DESCRIPTION: 1) Expert in the Design, Manufacture and Employment of Firearms and Ammunition

2) Weapons Systems Engineer

Note: This CV is annotated in Italics for the purposes of clarity for those who are not in the civilian firearms, nor in the military weapons, industries

# I. EDUCATION - DEGREE PRODUCING:

Bachelor of Science: Weapons Systems Engineering, US Military Academy, West Point, 1970

Concentration on the stabilization of projectiles in free flight and the design of automatic function small arms

Master of Arts: Military History (with Minor in Industrial Curriculum Vitae, LTC Arthur B. Alphin, Page I of XV Pages

Engineering), Rice University, 1980

Concentration of study on the projection of power and the function of weapons and industry in that projection.

Master of Arts: International Studies, US Command and General Staff College, 1981

Concentration of study on Foreign Strategic Minerals and their Impact on the US industrial base

### II. EDUCATION - FORMAL:

Armor Officer's Basic Course, Ft. Knox, KY

Distinguished Honor Graduate and Military Stakes Winner

Airborne School, Ft. Benning, GA 1970 Graduate (Recipient of Airborne Wings)

Ranger School, Ft. Benning, GA, 1971 Graduate (Recipient of Ranger Tab)

Armor Officer's Advanced Course, Ft. Knox, KY, 1978 Honor Graduate

Special Course on Kinetic Energy Impact, Southwest Research Institute, San Antonio, TX, 1986 Honor Graduate

Nikon College, Columbus, OH, 2002 Honor Graduate in Advanced Digital Photography

## III. MILITARY CAREER:

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Private, US Army (MOS 11B10) 1965-1966

Cadet, US Military Academy, 1966-1970

Lettered as Shooter on Inter-Collegiate Pistol Team Studied weapons systems and related technology under Gerald Stowe, Curator, West Point Museum.

Platoon Leader, 2nd Plt., C Company, 1st Bn. 35th Armored Regiment, 1971-1972

Executive Officer, C Company, 1st Bn., 35th Armored Regiment, 1972

Assistant S-3, 2nd Brigade, 1st Armored Division, 1972-1974

Placed in an 0-4 slot and responsible for the planning and supervision of the 1st Armored Division Gunnery Training Cycle.

Company Commander, B Company, 2nd Bn., 66th Armored Rregiment, 1974-1975

Extra detail as Chief Gunnery Officer for the TPDS (Target Practice Discarding Sabot) Tests, 7th Army Training Center, Grafenwoehr, West Germany, 1975

Operations Officer (S-3), 2nd Bn., 66th Armored Regiment, 1975

Aide-de-Camp to MG George S. Patton, III, Commander, 2nd Armored Division, 1975-1977

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Commander, 502nd Military Police Company, 2nd Armored Division, 1977

Adjunct Professor, US Army Armor School, Ft. Knox, KY, 1977-1978

Course development and teaching in tank ground mobility and long range tank gunnery

Adjunct Professor, Rice University, Houston, TX., 1979-1980

Taught core course on Military History (HI-201/202) Coached Rice University Rifle Team, 1978-1980 Founded and Coached Rice University Pistol Team

Adjunct Professor, US Command and General Staff College, Ft. Leavenworth, KS, 1980-1981

Taught utilization of Direct Fires and Indirect Fires Coached Skeet Team

Assistant Professor, US Military Academy, West Point, NY 1981-1983

Taught Military History (HI401/402)

Professor, US Military Academy, West Point, NY 1983-1985

Founded and taught a Military Technology Course combining Ordnance Engineering and History (OE/HI385) 1983-1984

Wrote and Produced a series of television tapes to place OE instruction throughout the US Army system.

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Director, Materials Testing, Jefferson Proving Ground, Madison, IN 1985-1988

Personally solved the 4.2 inch Mortar Crisis, 1987 Responsible for the Reference Ammunition Program for the Free World

Responsible for the majority of Army (and many allies) surveillance and other acceptance of ammunition and cannon components

Created and completed a modernization program that increased accurate data capture to 99% plus and total throughput from 9 tons of ammunition per week to 55 tons of ammunition

Director, Advanced Technology Rersearch, Armor-Engineer Board, Ft. Knox, KY 1988

Created testing to quantify the degradation of a soldier's capacity while wearing the chemical protective suit.

Chief, Armor Test Division, Armor-Engineer Board, 1988-1990

Responsible for tests of many components/features of what became the M-1A1 Abrams Tank.

Special Assistant to Commandant, US Army Armor School, Ft. Knox, KY, 1990-1991

Wrote the doctrine for foot mobile infantry supported by tanks.

# IV. A-SQUARE COMPANY

Preliminary work, 1974-1986

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Finalized designs for magazines, feed ramps, magazine boxes, extractors, ejectors, bolt faces (cartridge head seat) feed lips, feed ramps, stock bedding,

Started manufacture, 1986

Developed manufacture of rifles, cartridge cases, bullets, and ammunition.

Created a new set of machinery, fixtures and tooling for the manuffacture of cartridge cases and bullets.

Product exported to, and used, on every continent except Antarctica

Established as experts in Export Regulations, 22 CFR

Established as experts in shipping of HazMat by Air.

Established as major supplier of Proof Ammunition to the Industry.

# V. OTHER ACCOMPLISHMENT HIGHLIGHTS:

Obtained one of the first chronographs in civilian hands and began ammunition testing, 1962 Rated as Master in Pistol by the NRA, 1970 Traveled on first Safari, 1974

Rated as A in Skeet Shooting by the NSSA, 1976.

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Created and trademarked the Triad of Bullets (Monolithic Solid, Dead Tough Soft Point and Lion Load soft Point).

### VI. PUBLISHED WORKS:

<u>I Have Not Yet Begun To Fight: John Paul Jones</u>, Carolrhoda Books, 2004 (Co-author with Elaine Marie Alphin)

<u>Dwight D. Eisenhower</u>, Carolrhoda Books, 2004 (co-author with Elaine Marie Alphin)

Photograph Credits for <u>West Point</u>, <u>Small Arms of the World</u>, and others.

The Warrior Heritage, Rice University, 1980

A Bigger Hammer: Tank-Infantry Tactics and Technology, Abrams Press, 1990

Any Shot You Want, On Target Press, 1996.

Articles/chapters in periodicals and compendiums, 1977-1992, including <u>Armor</u>, <u>American Academic Encyclopedia</u>, <u>Safari</u>, and <u>Hunter's Guide to Professional Outfitters</u>

# VII. SPORTING ARMS and AMMUNITION MANUFACTURERS INSTITUTE:

Applied for, examined, peer reviewed, and accepted for membership, 1992

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Held seat on the Executive Board, 1992-2011

Held seat on the Technical Committee, 1992-2011

Held seat on Sub-Committee for standardized metric conversion between SAAMI and CIP (Commissione Internationale Permanente, Liege, Belgium) 1995-1999

Personally standardized, or participated in the standardization of, .25-45 Sharps, .260 Remington, 6.5-06 A-Square, 6.8 SPC, 7mm-08 Remington, 7mm STW, .300 Blackout, .300 Pegasus, .338 Federal, .338-06 A-Square, .338-378 Weatherby, .338 Lapua, .338 Excalibur, .358 STA, .375 Weatherby, .416 Taylor, .416 Weatherby, .458 Lott, .470 Capstick, .495 A-Square, .50-70 Sharps Auto, .500 A-Square, .577 Tyrannosaur.

# VIII. PAPERS, LECTURES, SEMINARS and TELEVISION DOCUMENTARIES:

Zimbabwe Professional Hunters and Guides Association, 1992, 1994, 1995, 1996.

Seminar on ammunition and bullet performance on African animals

Seminar on safety with American client hunters Keynote address AGM, 1995/6

Professional Hunters Association of South Africa, 1994, 1995

Seminar on ammunition and bullet performance on African animals

Seminar on safety with American client hunters

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Namibian Professional Hunters Association
(Berufsjaegerverbund Namibie), 1994, 1995, 1996
Seminar on ammunition and bullet performance on
African animals
Seminar on safety with American client hunters
Keynote address AGM, 1996

Berufsjaegerverbund Deutschland, 1995, 1996
Seminar on ammunition and bullet performance on
African animals.

US Army Armor School, 1978

Lectures on ground mobility and tank gunnery Television program on the same

Command and General Staff College, 1981

Paper on Small Arms Design Lecture on Long Range Tank Gunnery

US Military Academy, 1982, 1983, 1984

Lectures on Small Arms Design, and Industrial Power as a Factor in War, to the entire Corps of Cadets and to summer ROTC Professor Training.

Television programs on History of Small Arms Technology

Clemson University, Clemson, SC, 1982

Lecture on Weapons Design, and Industrial Power,

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#### as a Factor in War.

- Fitchburg State University, Fitchburg, MA, 1983

  Lecture on Weapons Design, and Industrial Power,
  as a Factor in War.
- Virginia Military Institute, Lexington, VA, 1984

  Lecture on Weapons Design, and Industrial Power,
  as a Factor in War.
- Austin Peay State University, Clarksville, TN, 1984

  Lecture on Weapons Design, and Industrial Power,
  as a Factor in War.
- Houston, TX, 1979, 1980

  Lectures and range instruction to women on legal and practical use of firearms in self-defense.

# IX. SHOT SHOW and OTHER EXHIBITS:

Exhibited at SHOT (Shooting, Hunting, and Outdoor Trades) Show 1985, 1986, 1987, 1988, 1989, 1990, 1991, 1992, 1993, 1994, 1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, and 2011

IWA (Internationaler Waffen), Nurnburg, Germany, 1991, 1992,1993, 1994, 1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2009, 2010

Country Show, Paris, France, 1991, 1992, 1993, 1994, 1995, 1996, 1998, 1999

EXA Show, Brescia, Italy 1995, 1996

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Safari Club International, Las Vegas, Nevada, 1986, 1987, 1988, 1989, 1990, 1991, 1992, 1993, 1994, 1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002, 2003,

Rocky Mountain Elk Foundation 1994, 1995, 1996

Foundation for North American Wild Sheep (FNAWS) 1994, 1995

Exhibiting includes explaining new technology to customers and daily news briefings and media interviews

## X. STUDY and RESEARCH

Taught shooting, safety, and advanced gunnery techniques by Nelson L. Brown, (ex-Corporal, 3rd Infantry Division, Western Front, France, WW I), 1958-1964.

Collaborated with Mr. Philip Cavanaugh, Curator, Patton Museum of Armor and Cavalry, Ft. Know, KY on preservation of engineering evolution of American Tank Gun Controls and Fire Controls, 1977-1978

Conducted research in the terminal ballistics of spin stabilized, kinetic projectles in non-homogenous mammalian targets, beginning 1974-.

Over 20,000 carcass shots and 2,500 post mortems. Established and proved the two major failure modes of a projectile, and established and proved the effect of rotational velocity and precessional

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velocity in terminal ballistics.

Conducted research on the effect of small arms recoil on the human body.

Resulted in stock designs to support the rotator cuff muscle and to reduce strain on the cervical spine.

Conducted research on the ammunition consumption of tank and tank destroyer battalions in the ETO (European Theater of Operations).

Product of research was dissertation and other materials on doctrine and training for tanks combined with foot mobile infantry, 1989-1992.

Conducted research on interior, exterior and terminal ballistics, 1962-2011.

Conducted research in welding, maching and abrasives in firearms parts manufacture, 1977-1985

#### XI. CONSULTING

Special Engineering Consultant to Winchester (USRAC) Re-design of parts, including bolt face, extractor, feed ramp, magazine box, etc., and the machinery to make them, to convert the Model 70 rifle to controlled round feed.

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- Consultant to Browning Arms Company

  Procedures for proof and reference ammunition
- Consultant to Mossberg, Inc. *Stock design for riot shotguns*
- Consultant to Sturm, Ruger & Co., Changes necessary for chambering the Model 77 rifle in large bore cartridges; and design and proofing of the Redhawk revolver.
- Consultant to Savage Arms Co., Chambering the Model 110 rifle in .425 Express and other large bore cartridges.
- Consultant to Remington Arms Co.,

  Bolt face, extractor and feed issues on the Model 700 and 7400 rifles.
- Consultant to Weatherby, Changes in both rifles and ammunition for .416 Weatherby.
- Consultant to Heym, GmbH, Germany, Bolt face, extractor and ejector problems in bolt action rifle.
- Consultant to Reimer Johannsen, GmbH, Germany, Bolt face, extractor, ejector, and magazine issues in bolt action rifle.
- Consultant to CIP Proof House, Neu Ulm, Germany *Test fixture and data capture issues.*

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Consultant to Brinks Armored Car, European Division Firearms and ammunition issues for specialized use in cash delivery vehicles.

Consultant to Barnaul, Russian Federation Problems with cartridge cases fabricated from steel.

Consultant to Francois Mitterand, President of France, Many firearms related issues.

Consultant to Victor Zazarej and Nelson Mandela, Republic of South Africa, Safari rifles and ammunition related issues.

Consultant to Department of National Parks and Wildlife Management, Harare, Zimbabwe Firearms and ammunition problems including the Chete Cull Disaster.

## XII. LEGAL CASES

See website for a list of legal cases (such list is not all-inclusive due to loss of records during un-supervised moves while delivering health care to paralyzed spouse).

# XIII. PROFESSIONAL and SOCIETAL MEMBERSHIPS

Life Member, National Rifle Association Member, Second Amendment Foundation Member, Society of American Military Engineers.

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Member, American College of Forensic Examiners. Member, Zimbabwe Professional Hunters and Guides Association.

Member, International Professional Hunters Association.
Member, Professional Hunters Association of South Africa.
Member, Berufsjaegerverbund Namibie.
Life Member, Safari Club International.
Member, Royal Photographic Society.

Past Member, British Institute of Professional Photographers (note: could not keep up with publish or perish requirements while delivering health care to paralyzed spouse)

Past Member, Association of Firearms and Tool Mark Examiners (note: Association changed rules in 1996 such that only police, police lab technicians and prosecutors could become members)

Note: LTC Alphin has held clearances above Top Secret for much of his adult life and participated in many interesting activities, not all of which are enumerated above. Some detailed questions about the CV and these activities cannot be answered until certain agreements and restrictions expire, and some cannot be answered for eternity. LTC Alphin is not currently participating in such activites and has not since 2009.