

## **James (Jim) E. Fulbrook, PhD**

**Address:** 3478 Barristers Keepe Circle, Fairfax, VA 22031  
**Phone/text:** 703-577-4184 **Email:** [fulbrookjim@gmail.com](mailto:fulbrookjim@gmail.com)

### **Summary**

Inventor and entrepreneur with numerous patented and patent pending products. Owner of Efficiency Products, LLC®, a *Service-Disabled Veteran-Owned Small Business (SDVOSB)*. Former DoD contractor with 18 years as a Human Factors Engineer and Instructional Systems Specialist. Retired Army officer with 31 years' service as an aviator (decorated Vietnam service), scientist, and more.

### **Professional and Military Experience**

**Inventor, Founder and CEO, Efficiency Products, LLC®, Fairfax, VA (January 2018 – present).** Oversee business mission to develop, design and market healthcare and consumer products for everyday use and cultivate manufacturing/distribution partnerships and licensing agreements with other companies. Efficiency Products' inventions have US Patent and Trademark Office (USPTO) Intellectual Property (IP) rights as patents or patent pending applications. Current products include:

<b>US7,874,410</b>	01/25/2011	<b>Intravenous Pole Power Organizer (IVPPO)</b>
<b>US7,967,137</b>	06/28/2011	<b>Organizer of Expendable Supplies for Medical Patients (IV Pole Organizer Tray)</b>
<b>US8,042,491</b>	10/25/2011	<b>Weedless Fish Structure (Gamefish Attractor)</b>
<b>US10,577,765</b>	03/03/2020	<b>Scooper for Collecting Animal Feces (US10,927,517, 02/23/2021)</b>
<b>US10,676,940</b>	06/09/2020	<b>Doorway Shoe Molding</b>
<b>US10,694,846</b>	06/30/2020	<b>Bedding Rack Multifunctional Apparatus</b>
<b>US10,925,379</b>	02/23/2021 05/04/2021)	<b>Fanny Pack Thermal System (PCT App allows all claims,</b>
<b>US11,058,573</b>	07/13/2021	<b>Heat/Cool Pad Therapy System</b>
<b>16/922,272</b>	07/07/2020	<b>Doorway Casing Chisel (Notice of Allowance rec'd 07/23/2021)</b>
<b>42/581,743</b>	04/28/2021	<b>Ultraviolet Light Disinfecting Face Shield System (PCT filed)</b>
<b>42/658,441</b>	05/06/2021	<b>Field of Reach Ultraviolet Light Disinfecting System (PCT filed)</b>
<b>42/743,910</b>	05/17/2021	<b>Ultraviolet Disinfecting Cartridge System (PCT filed)</b>

**Human Factors Engineer (HFE) and Senior Instructional Systems Specialist (ISS), DCS Corp, Alexandria, VA (September 2000 – July 2017).** Position encompassed the following roles:

- **Lead Training Developer for the Integrated Bridge (IB) Project (APO MRAP), (2010-2017).** Developed Training Support Packages (TSPs) for the IB and provided HFE support for interface designs based on soldier feedback and system updates. The IB comprises touch screen computers that integrate MRAP systems for vehicle commanders. TSP products included a

detailed training manual, an in-vehicle reference guide, and an interactive Level 3 simulator for Operator and Field Level Maintainer New Equipment Training (NET).

- **Principal Investigator (PI) and HFE, (2002-2010).** Developed a prototype Augmented Reality Binocular System (ARBS) for USAF air tower controllers to improve situation awareness and allow for continuous airfield operations. The ARBS was a Phase II/III SBIR (\$1M+) contract recognized by the Air Force Research Laboratory (AFRL) as its SBIR Project of the Year in 2010. Successfully submitted two experimental designs and protocols to Institutional Review Boards (IRBs) and was a reviewer on a couple of IRB boards. PI for another SBIR Phase II (\$1M) project and won two other SBIR Phase I projects for military applications for night vision systems.
- **Training Materials Developer (2000-2009).** Created more than one dozen computer and web-based training (CBT/WBT) products and training aids for Army soldiers, U.S. Marines, the Navy, and the British Army. CBT/WBT development was for night operations that included night vision goggles (NVGs), laser aiming sights, and Thermal Imaging Systems. Other CBT/WBT products included fiber optic diagnostic test and repair systems, communications, and navigation systems. Awarded two patents for night operations and training products during this time.

**Personnel Readiness Officer, US Army, Ft. Lewis, WA, January 1997 – August 2000.** Served as the Deployment Validation authority for agencies within the Ft. Lewis military region. Wrote a 110-page regulation on soldier readiness and processing procedures. Developed a Deployment Packet and a detailed readiness validation checklist. Some aspects of these products were selected for Army-wide use.

**Research Scientist, Night Vision Electronic Sensors Directorate (NVESD), US Army, Fort Belvoir, VA (August 1995 – December 1997).** Worked in the areas of Infrared (IR) or thermal systems training, modeling and simulation. Authored a 75-page manual on thermal sight operations and helped design a pocket vehicle thermal image identification guide. These products were used by the Army and U.S. Marine Corps for some years. Selected in 1996 as the Military Scientist of the Year at NVESD.

**Various Aviation Operational and Officer Staff Assignments, US Army (July 1986 – August 1995).** Completed assignments as an Army ROTC Assistant Professor of Military Science (APMS) at Georgetown and Penn State Universities (1990-95); served as an Operations Officer in a Medical Brigade Headquarters (Germany, 1998-90); and served as an Operational Aviator and Executive Officer in a Medical Evacuation helicopter unit in Augsburg, Germany (1986-88).

**Research Psychologist (PI) and Research Aviator, US Army Aeromedical Research Laboratory (USAARL), Fort Rucker, AL (October 1981-July 1986).** Performed a variety of aviation-related, IRB-approved research and test activities focusing on enhancing safe night vision operations. Served on a few IRBs for human and animal research projects within USAARL. Provided technical input to modifying NVG-compatible cockpit and exterior lighting in Army aircraft. Served as an instructor at the Aviation Officer Advanced Course and developed video presentations on the Vietnam War (Lam Son 719, My Lai, and helicopter tactics). Wrote a three-part article series on the Vietnam War for *Aviation Digest* in 1986. This article series is frequently cited as an historical reference on Vietnam Helicopter Operations.

**Warrant Officer, US Army, Various Aviation Operational Assignments (May 1970-September 1981).** Served as an Operational Warrant Officer Master Aviator (CW3) and was qualified in the UH-60, UH-1,

and OH-6 helicopters, as well as an instructor pilot in the UH-1 and OH-6. Logged over 3,500 flying hours, 1,420 of which were combat hours during a tour in Vietnam from May 1970 until June 1971. Valor awards during Vietnam tour include: **Silver Star, Distinguished Flying Cross, 59 Air Medals, and two Vietnamese Crosses of Gallantry.** Flew helicopters as a National Guard aviator (1971-1981).

Obtained FAA commercial, instrument and flight instructor ratings in rotary-wing and single engine fixed-wing aircraft and logged over 500 hours as a commercial pilot and flight instructor (1971-1979).

Summary: Served in the Army for 31 years including 22 years of active duty as an aviator, scientist, and more (1969-2000); DoD Contractor with DCS Corporation as a Human Factors Engineer and Senior Instructional Systems Specialist (2000-2017); and Founder of Efficiency Products, LLC® (2018-current).

### **Other Experience and Skills**

- Taught numerous college and university courses as an adjunct professor in topics such as anatomy and physiology, learning and memory, sensory perception, biology, psychology, and photography. Consistently received highly favorable evaluations from students.
- Accomplished photographer with a large portfolio of stock photographs. Efficiency Products, LLC® has a “doing business as (dba)” designation for commercial photography and the sale of stock photographs with a specialty in landscape photography themes and compositions.

### **Education**

- PhD, Neurobiology, University of Delaware (UD), Newark, DE, 1981
- Achieved “All but Dissertation” (ABD) status for Doctorate in Psychology in 1979 at UD
- MS, Neuroscience, University of Delaware, Newark, DE, 1979
- BA, Psychology, Glassboro State College (Now Rowan University), Glassboro, NJ, 1975

### **Professional Associations**

- VP, Inventors Network of the Capital Area (INCA)
- Member, United Inventors Association of America (UIA) & Inventors Group of America (IGA)
- Life member of Veterans of Foreign Wars (VFW), The American Legion (AL), 71<sup>st</sup> Assault Helicopter Assoc. (Vietnam unit), and Vietnam Helicopter Pilots Assoc. (VHPA)



### **Disability Statement**

Rated at 100% medical disability by the Veteran’s Administration (VA). Copies of VA ratings, military awards, and DoD Form 214 service summaries are available upon request.

### **Efficiency Products, LLC**

Efficiency Products, LLC® is a Service-Disabled Veteran-Owned Small Business (SDVOSB). Contacts: [jim@efficiencyproductsllc.com](mailto:jim@efficiencyproductsllc.com), [www.efficiencyproductsllc.com](http://www.efficiencyproductsllc.com)

is a registered Trademark: USPTO No. 5,789,101, dated 25 June 2019.

Business information: **EIN** 82-2364961; **DUNS** 086742976 and **CAGE** Code 8CBM4, VA SCC ID S696328-6. **NAICS Codes** include: 541714/715 – R&D in Biotech, Engineering, & Life Sciences; 339113, 423450, 561720 Healthcare Field Services, supplier, Mfr. **Select PSCs:** Health R&D Services, AN12/13/22/32/42 et al., 6532 Hospital Specialty Items, 6515 Med-Surg PPE Equipment/Supplies, Q701/901/999 Specialized Med Support, Disinfection, & General.

As of 29 September 2021