

2016 Richard H. Johnson Award

Presented to

James Franklin Robbins

About the Award

- The Precision Strike Association awards the Richard H. Johnson Technical Achievement Award (the Johnson Trophy) at the Precision Strike Technology Symposium.
- This award is named after the first recipient, and recognizes an individual from public or private sector for outstanding personal technical achievements resulting in significant contribution to precision strike systems.



Award Criteria

- The award honors notable technical innovations in the field of precision strike which advanced the defense of the United States.
- Recipients made these contributions as individual technologists, advancing state of the art. In selecting a recipient, PSA seeks nominees whose accomplishments and contributions:
 - Transcend a single program
 - Were sustained over a period of time
 - Have been widely felt by the warfighters who defend the United States
 - Has influenced other technologists
 - Have made precision strike systems more available to warfighters defending the United States

Prior Winners

- 2009 Richard H. Johnson
- 2010 Robert J. Whalen
- 2011 Robert H. Widmer
- 2012 David Keith Sanders
- 2013 Gary F. Polansky
- 2014 Chris Geswender
- 2015 Wade Dyer and Paul Manz

About the Jury

- The 2016 Jury included members from the largest guided weapon prime contractors
 - BAE, Boeing, MBDA, Lockheed Martin, and Raytheon
- The jury included members from organizations
 - Lone Star Analysis, Sandia National Laboratory
- The jury chairman was Dean Clubb

2016 Awardee of the Johnson Trophy



J. Frank Robbins

Citation???

Selected Contributions and USAF Career Events

**Precision Air to Ground
Weapons**

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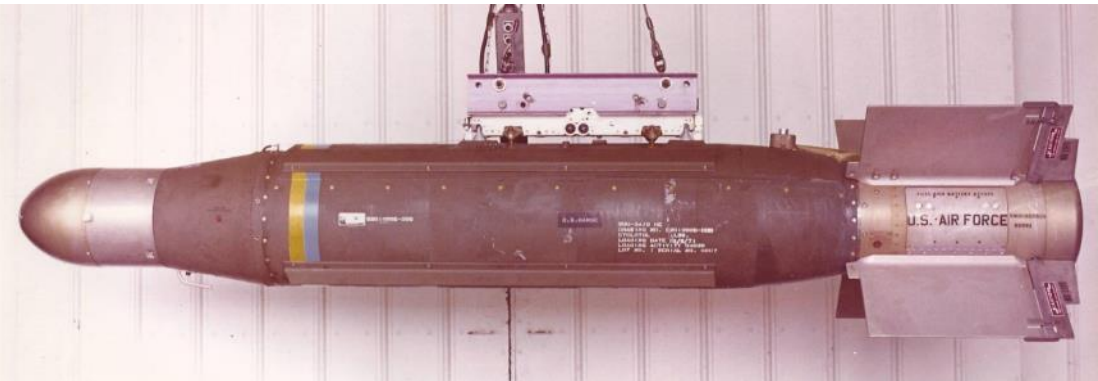
Air to Air Weapons

A light blue downward-pointing arrow indicating a flow from the second box to the third.

**Air Force Base Support and
Air Combat Training**

Pave Storm- 2000 Pound Guided Cluster Weapon for Defense Suppression

- 1972 to 1975: Frank was lead engineer and project manager
- Development, IOT&E and Production within 3 1/2 years
- Used laser and electro-optical guidance developed for MK-84's
- Carried 1800 one-pound bomblets to saturate SAM and AAA sites



Pave Storm Included Glided Versions



DME Pave Storm

(Distance Measurement Equipment)



The Tactical Munitions Dispenser

- Frank then in 1975 to 1978 went on to successfully lead the development and initial production of the Tactical Munitions Dispenser (TMD)- Which evolved into the Wind Corrected Munitions Dispenser



AMRAAM!



- 1978, Frank was assigned to develop the acquisition strategy for AMRAAM
- Began a 12 Year Journey from concept through validation and Full-Scale Development, IOC, Second Source and Block Change Product Improvement Plan
- Increasing responsibility and influence

Range and Airbase Systems

- Frank was named Program Director for these systems which are the infrastructure for Precision Strike in the early '90's
 - Chemical/Biological Defense
 - Camouflage/Concealment/Deception
 - Explosive Ordnance Disposal
 - Runway, Facility and Utility Repairs
 - Much more



Little Known Air Base Systems: Full-scale Decoys



Impact Outside Precision Strike

Using Prototype Ground Penetrating Radar to Locate Tunnels at El Paso/Nogales



Supporting Joint Task Force 6

Deputy Director for the Air-to-Air Joint Systems Program Office

- AMRAAM, AIM-9X, Harm Targeting System, Ground-Launched AMRAAM, Other Classified Systems
- FMS, P3I, Full-Scale Production
- Acquisition Reform

AMRAAM



AIM-9



HARM



Director of the Precision Strike Systems Program Office

- AGM-130, GBU-15, EGBU-15, AGM-142, AGM-65H and K, Advanced Fuzing Systems, Advanced Warhead Systems, Advanced Data Link Pods, Miniature Air Launched Decoy (MALD), Explosive Hazard Reduction
- Urgent and Compelling Rapid Acquisition of All-weather GPS enhancements to GBU-15's: delivered 45 weapons in 45 days and 100 weapons in 69 days at CSAF direction.
- Vice President's Hammer Award for the new AGM-65H/K innovation to replace older missile configurations
- Provided direct support to Operation Allied Force and Operation Enduring Freedom



Always on Target!



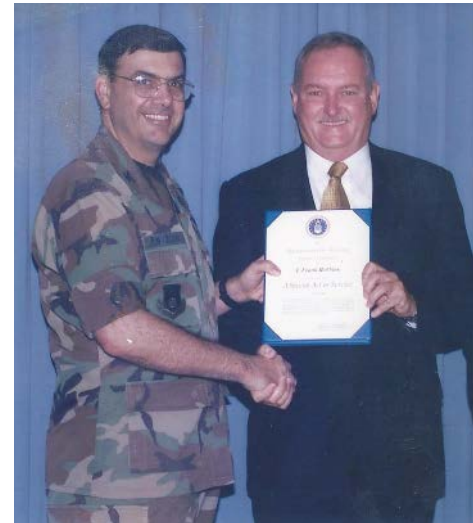
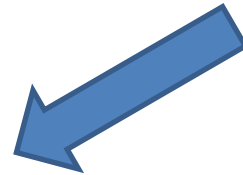
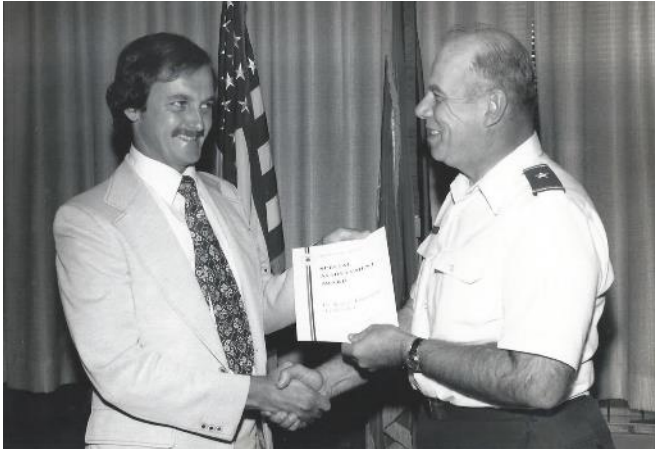
Examples of Recognition Outside the Precision Strike Community



The USAF Beginning and Retirement



In Between....



Since Federal Retirement

- Consulting on many Government and Commercial Programs through RWB Aerospace Professionals
- Has been very active in NDIA Gulf Coast Chapter as an Industry Panel Chair and Co-Chair on Issues Selected by Eglin Acquisition and Laboratory Leadership
 - Urban and Complex Terrain Close Air Support
 - Universal Armament Interface
 - Weapon Fuzing
 - Weapon System Engineering
 - Flexible Weapons and Weapon System Open Architectures



Johnson Criteria – Widely Felt Impact

Example – *Urban and Complex Terrain*

CAS Industry Panel Team



Raytheon
Missile Systems

NORTHROP GRUMMAN

 **BOEING**
Kaman Fuzing

LOCKHEED MARTIN

BAE SYSTEMS

EDO corporation
GLOBAL TECHNOLOGY REACH

ATK

 **AEROSPACE PROFESSIONALS**
AN RWB COMPANY

Honeywell

HARRIS

Rockwell Collins

 **AIC**



THE RESPONSIVE ADVANTAGE

communications

 **MUSTANG**
TECHNOLOGY GROUP

DRS TRAINING & CONTROL SYSTEMS, INC.

 **DRS**
TECHNOLOGIES

GENERAL DYNAMICS
Ordnance and Tactical Systems

GENERAL DYNAMICS
C4 Systems

And Others

Front Tag of Frank's Truck



END OF LUNCH PRESENTATION??

LONDON TIMES

30 JAN 98

14 OVERSEAS NEWS 4M

Pentagon tests 'bunker buster' for Iraq raids

THE Pentagon, which unveiled precision-guided "smart bombs" during the Gulf War, yesterday promised even smarter bombs if and when America and Britain launched new raids against President Saddam Hussein's weapons programme in Iraq.

Racing against time, the US Air Force has developed a weapon that, it is believed, can vaporise the germ and chemical warfare agents which Saddam is hiding, rendering them harmless.

Pentagon officials are aware of the moral and political problems that could be created if bombing raids release anthrax and botulism spores or poison gas into the atmosphere where they could kill thousands of civilians.

But a bomb filled with rocket fuel has set off a 30-second inferno that rose to several thousand degrees during testing at Eglin Air Force Base in northwest Florida. Major Ken Ektornot told CBS News it was several days before he could even set foot in the scorched bunker.

Before the chemical and biological arms can be burnt up, a weapon is needed that can penetrate reinforced concrete bunkers as many as four floors underground.

The air force is confident that new categories of "smart bombs" are now capable of hitting deeply buried targets that could not be reached in the past. Called "bunker busters", they are 5,000lb laser-guided penetration bombs or missiles, pencil-shaped and with hardened nose cones.

New bombs can destroy Saddam's hidden biological weapons, writes

Ian Brodie

They can scythe through layers of metal and reinforced concrete to a depth of well over 100ft.

Frank Robbins, research director at the Eglin base, says the problem is making sure the weapon does not explode until it has fully penetrated the bunker. This is where a new delayed fuse comes in that can count the number of floors it goes through as the bomb penetrates the bunkers. As an example, the fuse can be programmed to detonate on

the fourth floor. American television viewers saw Pentagon videotape of a "bunker buster" smashing its way through four walls of concrete.

Mr Robbins said he would feel uncomfortable if he were Saddam. "I don't believe a person can pour enough concrete to protect himself from the attack capabilities we're developing."

Although the fuse that counts the floors is still being tested, Mr Robbins said it is far enough along to be fitted on "bunker busters" already sent to the Gulf.

In Baghdad last night, a bellicose Saddam issued a new warning to America against attacking Iraq, insisting his people would fight with "all their capabilities".

He spoke as Madeleine Albright, the American Secretary of State, began a tour of Europe and the Middle East to justify the use of force if Saddam continued to deny United Nations weapons inspectors access to his "presidential" compounds. "If the devil pushes these enemies into evil and aggression and they attack us, we will be forced to fight them with all our capabilities," Saddam said in a message to senior Iraqi leaders to mark the start of the Eid al-Fitr holiday marking the end of Ramadan.

□ **Davos, Switzerland:** Kofi Annan, the UN Secretary-General, said that he would be proposing to the Security Council improvements for Baghdad in its present \$2 billion (£1.2 billion) oil-for-food deal. (Reuters)



Albright: on Gulf tour to justify tough action



BRITAIN consults with Iraq day that Robin Albright State, is ordinate dent Ss allow U ccess to " spoke tc Foreign had talk Russian



Precision
Strike

Always On Target

Fall 2002



Approved for public release. Distribution unlimited.

PROGRAM DIRECTOR'S INSIGHTS

When we see the words "Always on Target" it brings to mind that our focus is on giving you, our military force, the weapons that you need to strike at the enemy's heart. I hope we are responding to your needs, large and small, to this end. We look with pride at the television reports, the newspapers, and our internal intelligence reports at the effectiveness of our precision weapons. We remember that for everyone one of those weapons, there is a team of you who have built the system up, checked it out, and loaded it on an aircraft before they can be placed on target by our aircrews. Back in February of this year at our supportability conference, I asked all the programs at Eglin and Hill to exchange ideas and concerns with you as our users from all over the globe. We want to make your jobs less difficult if at all possible. The dialogue at that conference is leading to improvements within our programs and other programs throughout the Armament Product Directorate that will hopefully better meet you needs. Thank you all for participating in the conference, and for including us in your emails and in other meetings to discuss important issues!



Some issues are being resolved, but others seem to drag on forever! I know that the burden of record keeping and data entry can be greater at times to you all in the field than the physical job of assembling, testing and loading our weapons. That comes across loud and clear, and hopefully sooner, rather than later, that will not be the case. We also see that certain acquisition strategies for weapons in the past have overlooked workload impact to your teams in the field in areas such as warranties. We see that we must avoid unwarranted workload, and are considering the supportability impact of every decision we make early on in our programs. We hear your horror stories of storage and handling, the challenges of test equipment reliability and complexity, lack of spares, and other important messages, and we are trying to respond. In summary, you have our utmost respect, and we think we understand your challenges. My entire office is here with one purpose, and that is to help you in the field! Please continue to let us know what we can do, and feel free to call, email or send a letter to me at anytime! Frank Robbins, Director, Precision Strike Systems Program Office - E-Mail james.robbyns@eglin.af.mil, DSN 872-9514, Ext 2017.

Annual Air-to-Surface Munitions Supportability Conference Best Yet!

Eglin was the site 5-8 February for the Fourth Annual Conference to bring air-to-surface munitions users and supporters together for a complete status update and to discuss issues of mutual interest to improve warfighter capabilities with munitions. Hosted by the Precision Strike System Program Office, participants all agreed the presentations and discussion were "Right on Target".

Major General Robert Chedister, Air Armament Center Commander, welcomed more than 160 USAF participants from across the



USAF
TAWC
REVIEW

Hank Robbins - 4261



WINTER

Highlights in Frank's Career

- 1963 to 1965, As a high school student
 - Built his own wind tunnel and experimented with airfoil designs
 - Built radios and kit televisions
 - Designed and installed a central music system for a hotel complex
- Graduated with a Master of Science in Physics
- Was hired by NASA as an Electronic Engineer on Apollo
 - Worked in Operational Television and Wideband Data Transmission at Kennedy Space Center
 - Designed and fabricated communications systems used in launch operations
- Was Recruited by the Air Force in 1972 to work on guided weapons at Eglin- Then the fun began!