



Foreign Comparative Test (FCT) Program Briefing to Spanish Industry April 2015

**Colonel Scott Wallace
Comparative Technology Office
Emerging Capability & Prototyping
571-372-6803**



Why Foreign Comparative Test?



In 2014, 2/3 of global R&D spending was outside the US*

***2014 Global R&D Funding Forecast," Battelle and R&D Magazine, December 2013, p.7**

FCT → Innovation, Affordability, Improvements



FCT Mission



Mission: Find, Assess & Field World-Class Technologies to Enhance Military Capabilities and Provide Long-Term Value

- ***Technologies should present:***
 - ***Significant cost savings resulting in positive ROI***
 - ***Significant performance enhancements***
 - ***Novel approaches***
- ***Connects Foreign Technologies to US DoD Development and Acquisition Programs***
- ***Office of the Secretary of Defense (OSD) Selects & Funds Projects, US Military Services & USSOCOM Execute Testing***



FCT for FY15+



- ***Widen technology readiness spectrum considered by FCT program***
- ***Develop the CTO information clearinghouse function for foreign-industry technology options***
- ***EC&P Focus Areas (FY16)***
 - ***Space Capability Resilience***
 - ***Autonomous Systems***
 - ***Electromagnetic Spectrum Agility***
 - ***Asymmetric Force Application***



Working with FCT

- **Product templates**
- **Individual meetings**
- **Trade shows, local conferences, e.g. AUSA, Modern Day Marine**
- **Industry days in the Washington, DC area**
- **CTO international travel**

2012 Foreign Comparative Test - Product Template

Product: XX mm High Velocity (HV) Airburst Munition System (ABMS)

Company Name: Advanced Systems (AS)
Country: Republic of Antaresca
Point of Contact: Mr. Jones
Phone: (353) 355-2555
Website: www.absc.com
Email: absc@absc.com

Short Description: The HV ABMS consists of a Fire Control System, an Acquisition Programmer and XX X XX mm Air Burst Munition. High explosive, Flash and Bang. Counter de/afade, increased lethality, improved accuracy.

Technology Readiness Level (fielded, lab tested, operational test): TRL 9 The HV ABMS is fielded and in production.

Countries using the technology: Madagascar, Dominican Republic, Greenland, etc.

Application: (the so what?) The HV ABMS is specially designed to allow soldiers to effectively engage enemies in de/afade and to provide improved accuracy and higher lethality through its technologically improved muzzle velocity compensation capability.

Science (how it works?): Muzzle velocity compensation for the immediate round fired. The 40mm HV ABMS is an upgrade kit to existing launchers to provide Air Bursting Precision capability. The FCS accurately lazes the target and the ballistic card computes the time to burst. The computed time to burst based on the measured velocity is programmed into the fuzes only upon use at the ammunition programmer. Enhanced safety with its built-in self-destruct mode and gives ABMS the ability to function as a point detonating (IE) cartridge as well as an Air Burst cartridge.

Date:
 • Grenade Length: XX mm • Weight: XXX gm
 • Muzzle Velocity: XXX m/s • Maximum Range: XXXX m
 • Lethal Radius: X m • Armng Distance: XX to XX m
 • Fuse Type: Programmable Time Fuse

U.S. Patent: AS does not currently have a relationship with a US company

Previous work with DoD: Technology developed through US DoD laboratory funding



FCT has a variety of tools to understand your technology



Back-Up



Measuring Progress

~ Last 34 Years ~



- ***OSD investment: \$1.23 Billion (constant FY14 \$)***
- ***Led to procurements for 271 projects worth \$10.9B***
- ***Accelerated fielding averages 2-4 years***
- ***Led to foreign vendor teaming with U.S. industry in 34 states for roughly 30% of the projects procured***
- ***Average project – \$600-800K, 18-24 months***



Key Points of Contact



OSD	CTO Main		571-372-6803
	Col Scott Wallace	scott.t.wallace.mil@mail.mil	571-372-6825
	Dan Cundiff	thomas.d.cundiff.civ@mail.mil	571-372-6807
	Paul Frichtl	paul.j.frichtl.ctr@mail.mil	571-372-6804
	Bob Thompson	robert.a.thompson172.ctr@mail.mil	571-372-6822
	Mark Morgan	mark.j.morgan26.ctr@mail.mil	571-372-6819
	Walker Adams	walker.c.adams.ctr@mail.mil	571-372-6821
Army	Randy Everett	william.r.everett.civ@mail.mil	410-306-4824
Navy	Arthur Webb	arthur.webb@navy.mil	703-696-0340
AF	William Reed	william.a.reed32.ctr@mail.mil	202-404-4735
SOCOM	Nyle Wilcocks	robert.wilcocks@socom.mil	813-826-3141



Send Us Your Product Information



Product Template

- Product
- Company Name
- Country
- POC Information
- Website
- TRL
- Countries Using
- Application (So What?)
- Science (How it works)
- Data (key performance metrics)
- US Partners
- Previous Work w/ DoD

OSD Foreign Comparative Test – Product Template

Product: XX mm High Velocity (HV) Airburst Munitions System (ABMS)

Company Name: Advanced Systems (AS)
Country: Republic of Antarctica
Point of Contact: Mr. Jones
Phone: (555) 555-5555
Website: www.abcd.com
Email: abcd@abcd.com

Short Description: The HV ABMS consists of a Fire Control System, an Ammunition Programmer and XX x XX mm Air Burst Munitions. High explosive, Flash and Bang, Counter defilade, increased lethality, improved accuracy.

Technology Readiness Level (fielded, lab tested, operational test): TRL: 9 The HV ABMS is qualified and in production.

Countries using the technology: Madagascar, Dominican Republic, Greenland, etc.

Application: (the so what?) The HV ABM is specially designed to allow soldiers to effectively engage enemies in defilade and to provide improved accuracy and higher lethality through a technologically improved muzzle velocity compensation capability.

Science (how it works): Muzzle velocity compensation for the immediate round fired. The 40mm HV ABMS is an upgrade kit to existing launchers to provide Air Bursting Precision capability. The FCS accurately lazes the target and the ballistic card computes the time to burst. The computed time to burst based on the measured velocity is programmed into the fuze only upon exit at the ammunition programmer. Enhanced safety with its built-in self-destruct mode and gives ABM the ability to function as a point detonating HE cartridge as well as an Air-Burst cartridge.

Data:

- Grenade Length: XX mm • Weight: XXX gm
- Muzzle Velocity: XXX m/s • Maximum Range: XXXX m
- Lethal Radius: X m • Arming Distance: XX to XX m
- Fuze Type: Programmable Time Fuze

U.S. Partner: AS does not currently have a relationship with a US company.

Previous work with DoD: Technology developed through US DoD laboratory funding.





How to Get More Info



- **CTO Website -- <https://cto.acqcenter.com/osd/portal.nsf/>**
 - Additional background information on FCT
- **Contact your Embassy in DC – Defense Attaché or the trade or science and technology organization**
- **Contact the Security Cooperation Office / Attachés in the US Embassy in your country**
- **Contact CTO directly – either the main office or Service/SOCOM specific contacts given in this brief**