

2014 Ammunition Hall of Fame Inductee
CARMINE SPINELLI



Mr. Carmine Spinelli achieved an extraordinary pattern of excellence in providing U.S. Army Armament Research, Development and Engineering Center (ARDEC) many enduring contributions throughout his 40-year Department of Defense career in the areas of: armament and systems engineering, project management, innovation, personnel management, Total Quality Management, life cycle engineering, acquisition strategy, and national and international policy. From 1995-1998, he was Technical Director for ARDEC and was responsible for all technical operations. He managed the annual budget of more than \$600 million and a technical staff of over 2000 scientists and engineers with approximately 2000 support personnel. Prior to being ARDEC Director, Carmine was Deputy Director, U.S. Army Fire Support Armaments Center (FSAC) (currently called Munitions Engineering

Technology Center (METC), from 1990-1995. During his tenure at FSAC, Mr. Spinelli managed an organization of more than 1000 scientists and engineers involved in the research, development, and engineering of a variety of armaments including artillery, mortars, mines, demolitions, precision munitions and related fire control systems for the entire U.S. Army. Mr. Spinelli was selected as a member of the Senior Executive Service in 1990.

Mr. Spinelli was a key force in modernizing the Army's stockpile of tactical nuclear weapons. He successfully organized and directed the development of the M753 Nuclear Projectile. This program provided the first nuclear projectile which was ballistically similar to the U.S. standard non-nuclear projectile for the US and our NATO allies. He was also responsible for the successful development of other nuclear projectiles (M785, M422, Lance, Pershing II) and nuclear security programs: Weapons Access Delay Systems (WADS) and the Survivable Overpack Container (SOC).

Mr. Spinelli provided leadership and managerial effectiveness which led to the type classification of 64 items and release of 41 items to the troops in non-nuclear munitions and weapons. Examples of these fielded items include: Howitzer (Paladin and M119), projectiles (M864), Mines (Volcano - truck or helicopter deployed) and 60mm, 81mm and mortar training projectiles which could be reused more than ten times and enabled cost savings of \$756 million.

Mr. Spinelli recognized the importance of greatly increasing battlefield lethality by the use of non-nuclear smart munitions to minimize the logistic burden of delivery of large quantities of conventional munitions. He energized the smart munitions program in all areas: mortars (81mm and 120mm); artillery (SADARM), tanks (Smart Target Activated Fire and Forget (STAFF), X-Rod and Damocles), and mines (Wide Area Munitions (WAM) and the Intelligent Mine Field.)

Mr. Spinelli spearheaded the Electric Armaments program by securing funds and constructing the world class Electric Armament Launch Facility at ARDEC and the creation of an FFRDC to support this area at the University of Texas (Institute for Advanced Technology). He also initiated technology base programs with far reaching potential such as the Intelligent Mine Program and the Low Cost Competent Munitions Program.

Mr. Spinelli was critical to further elimination of unexploded ordnance. He recognized the catastrophic consequences of battlefield live duds both to our forces and to the indigenous population in a battlefield area. He initiated a successful program for the development of a low cost self-destruct fuze for use in submissile munitions such as the Multiple Launch Rocket System (MLRS) and submissile artillery projectiles.

Mr. Spinelli was an early advocate for the extensive use of modeling, simulation and virtual prototyping on all design efforts. This has resulted in substantial decrease in the need for testing and associated costs. This leadership led to major advances in warhead effectiveness for Sense and Destroy Armor (SADARM), Smart Target Activated Fire and Forget (STAFF), and Wide Area Munition (WAM).

Mr. Spinelli showed great leadership and was very effective in securing international collaboration in which five nations (U.S., United Kingdom, Germany, Italy and France) agreed to standardize and develop a 52 caliber cannon. His initiatives for common ballistic firing tables and assurance of interoperability were agreed to by NATO countries. He also played a major role in assuring successful transition of the Light Weight 105mm Howitzers from the UK to the U.S. and the 120mm mortar system from Israel to the U.S.

Mr. Spinelli was highly creative on all fronts in decreasing the cost, time and difficulties of the acquisition process. He foresaw the need for increasing the collaboration of both government and industry. He led the acquisition reform initiative for the Paladin howitzer system, the Advanced Field Artillery System and the Future Armored Resupply Vehicle. He also led the effort for government and industry employees to work side-by-side on programs such as STAFF (Alliant), WAM (Textron) and X-Rod (Hercules).

Mr. Spinelli took the lead in establishing an organization right sizing program which became a model for ARDEC. He led the establishment of Integrated Process Teams (IPTs) for all of his programs to significantly reduced development time and cost and increased the leadership potential of many junior scientists and engineers by maximum empowerment for their decisions.

Mr Spinelli was instrumental in many successes Picatinny Arsenal achieved. In 1995 Picatinny received the Quality Improvement Prototype: Co-winner, Army R&D Organization of the Year. In 1996, Picatinny was awarded the Best Medium Size Installation; R&D Center of Excellence; Commander in Chief Award for Installation Excellence; Presidential Award for Quality; Quality Partner Award from New Jersey and in 1997 the R&D Center of Excellence. All these were called at the time, the Triple Crown of military achievements.

Mr. Spinelli has been an outstanding leader in ARDEC and has left an indelible mark on the armaments community. His previous government awards include: Army Decoration for Exceptional Civilian Service Award (1998, 1990); Presidential Rank Meritorious Award (1996); Department of Defense Distinguished Civilian Service Award (1995); SES Performance Award (1994, 1993, 1992) NDIA Firepower Award (1988); Army Meritorious Civilian Service Award (1987, 1982); Honorable Order of Saint Barbara (1987), Technical Director's Award – ARRADCOM (1981), Army Research and Development Award (1965) and many Merit Performance Awards.