Twenty Relevant Points re: personal, direct, specific work done by Martin 08.May.2021

[1] Micro and nano sensor devices for use in public places including ports, freight centers, airports, train and bus stations, markets, & other likely locations for terrorist attacks with explosives & other devices. Focus on "CBRNE" detection & alerts - chemicals, biological pathogens, radioactive substances, explosives (all types).
[2] Border control with sensor devices, optics including discrete micro-optics, for prevention and interdiction of contraband especially focusing on drugs, explosives and other CBRNE/terrorism devices.
[3] Mathematics, algorithms, and software for pattern detection, identification, cross-referencing, and establishing associations and linkages between persons, groups, bases, activities, and targets.
[4] Co-developed and co-managed world's first AUV (autonomous underwater drone) – US Navy.
[5] Worked on early-generation UAV drones and later small and micro drones for diverse applications including surveillance, inspection, and military/security tasks
[6] Detection and retrieval of radioactive materials stolen by terrorists for use in a dirty-bomb, using ALV (land robots) and UAV (airborne drones).
[7] Assistance in planning & design of system for detection and prevention of human trafficking operations.
[8] Drones used by different clients - FBI (police), Hollywood film producers (movies), highway engineers.
[9] Co-development of mobile (trailer-based) water purification system with antimicrobial bioprotection with Mexican-American engineering company, for use companies, businesses, villages & towns. Antimicrobials involve compounds developed for US military and are effective, long-duration, against all viruses, bacteria & fungi. The water purification was simpler, more efficient and accurate, cheaper than others.
[10] Blast-resistant air-inflated structures and shelters capable of withstanding large nearby explosions.
[11] Developed dRAKE system for anti-piracy for container ships, freighters, tankers, serving several large multi-national shipping companies. dRAKE used UAV & AUV drones and is an excellent part for SPS project.
[12] Modeling, simulation, & intelligence work for identifying, tracking, & intervention of terrorists including bombmakers and also illicit financial "money-laundering" network operations in support of such criminals.
[13] System to address public alerts, public health plans, and crowd/chaos management in event of CBRNE attack events including Anthrax and other highly infectious and dangerous biological pathogens.
[14] Co-developed and managed project to develop chemical sensors (2) capable of ultra-fine resolution detection of (a) liquid explosives (why liquids are restricted on air flights) & (b) nerve agents (like Novochuk).
[15] Work on countermeasures (physical and electronic) for use against variety of threat-agents, including to defeat and neutralize countermeasures employed by hostile forces including pirates operating at sea.
[16] Co-development of geospatial information "AI" system for use in public health "pandemic" settings for H1N1 influenza and more recently COVID-19.
[17] Project with US military that developed first wearable combat computing, vision, sensor fusion.
[18] Implementation of mobile laboratory for chemical forensics to be used in counterterrorism in Iraq & AF.
[19] Consulting with US police in use of UAV drones & land-based robots & sensors in criminal investigations.
[20] Extensive work on cooperative and collaborative networks of mobile devices including UAV drones, multi-spectral sensors, satellite data, and AI analysis, for use in emergency and disaster situations (e.g., post-hurricane and earthquake, during storms and fires), and in both informational and proactive modes including defensive countermeasures.

Work has been conducted, supported by, and provided for national security, intelligence and military agencies in USA, CA, UK, FR, DE, EU central authorities, IL and RU, as well as for several large corporations.

Implementations involving [1], [2], [3], [5], [6], [11], [12], [19], [20] that we did led to Lives Being Saved. These positive results included the prevention of several major terrorist attacks – USA, UK, EU, IL, RU - among which had been plans underway and stopped, for multiple "dirty bombs" (low-grade nuclear explosives) as well as other forms of terror against generally large population groups and cities. There are other positive results, in terms of use of technologies and knowledge created through not only my work but several (m any) close colleagues, that are not even known to myself but I am assured of the good outcomes that have been realized.