Click Here

Que veut dire arme létale

Termes associés : Armement Une arme létale est un dispositif ou un instrument conçu spécifiquement pour causer la mort d’une personne. Elle est capable d’infliger des blessures graves, voire mortelles. Les armes létales comprennent généralement les armes à feu, les armes blanches, les explosifs et les armes chimiques. La réglementation autour des armes létales en France En France, l’usage des armes létales est strictement réglementé par le Code de la sécurité intérieure et d’autres textes législatifs et réglementaires. La possession, l’acquisition, la détention et l’utilisation d’armes létales sont soumises à des règles spécifiques et nécessitent souvent des autorisations ou des licences. La réglementation française classe les armes en différentes catégories en fonction de leur dangerosité. Les armes létales, telles que les armes à feu de poing et les armes blanches prohibées, sont généralement interdites ou très réglementées pour les civils. Les armes à feu de chasse et de tir sportif sont soumises à des conditions strictes de possession et d’utilisation, nécessitant notamment une licence de tir ou un permis de chasse. L’usage des armes létales en France L’usage des armes létales est principalement réservé aux forces de l’ordre et aux militaires dans le cadre de leurs missions officielles. Ces professions sont formées et encadrées par des règles spécifiques concernant l’utilisation des armes létales, qui visent à garantir un usage légitime, proportionné et conforme à la loi. Il est important de se référer aux lois et réglementations en vigueur sur l’armement, ainsi qu’à l’avis des autorités compétentes, pour obtenir des informations précises sur la réglementation des armes létales en France. WEKA propose d’ailleurs une fiche spécialisée sur les armes létales, plus spécifiquement sur le pistolet automatique et le revolver. Vous pouvez aussi retrouver des fiches sur des armes non létales, comme le pistolet à impulsion électrique. Contenu de sensagent définitionssynonymesantonymesencyclopédie dictionnaire et traducteur pour sites web Alexandria Une fenêtre (pop-into) d'information (contenu principal de Sensagent) est invoquée un double-clic sur n'importe quel mot de votre page web. LA fenêtre fournit des explications et des traductions contextuelles, c'est-à-dire sans obliger votre visiteur à quitter votre page web ! Essayer ici, télécharger le code; SensagentBox Avec la boîte de recherches Sensagent, les visiteurs de votre site peuvent également accéder à une information de référence pertinente parmi plus de 5 millions de pages web indexées sur Sensagent.com. Vous pouvez Choisir la taille qui convient le mieux à votre site et adapter la charte graphique. Solution commerce électronique Augmenter le contenu de votre site Ajouter de nouveaux contenus Add à votre site depuis Sensagent par XML. Parcourir les produits et les annonces Obtenir des informations en XML pour filtrer le meilleur contenu. Indexer des images et définir des méta-données Fixer la signification de chaque méta-donnée (multilingue). Renseignements suite à un email de description de votre projet. Lettris Lettris est un jeu de lettres gravitationnelles proche de Tetris. Chaque lettre qui apparaît descend ; il faut placer les lettres de telle manière que des mots se forment (gauche, droit, haut et bas) et que de la place soit libérée. boggle Il s'agit en 3 minutes de trouver le plus grand nombre de mots possibles de trois lettres et plus dans une grille de 16 lettres. Il est aussi possible de jouer avec la grille de 25 cases. Les lettres doivent être adjacentes et les mots les plus longs sont les meilleurs. Participer au concours et enregistrer votre nom dans la liste de meilleurs joueurs ! Jouer Dictionnaire de la langue françaisePrincipales Références La plupart des définitions du français sont proposées par SenseGates et comportent un approfondissement avec Littré et plusieurs auteurs techniques spécialisés. Le dictionnaire des synonymes est surtout dérivé du dictionnaire intégral (TID). L'encyclopédie française bénéficie de la licence Wikipedia (GNU). Traduction Changer la langue cible pour obtenir des traductions. Astuce: parcourir les champs sémantiques du dictionnaire analogique en plusieurs langues pour mieux apprendre avec sensagent. 0 visiteurs en ligne calculé en 0,172s The Motorsport Images Collections captures events from 1895 to today’s most recent coverage.Discover The CollectionCurated, compelling, and worth your time. Explore our latest gallery of Editors’ Picks.Browse Editors' FavoritesExperience AI-Powered CreativityThe Motorsport Images Collections captures events from 1895 to today’s most recent coverage.Discover The CollectionCurated, compelling, and worth your time. Explore our latest gallery of Editors’ Picks.Browse Editors' FavoritesExperience AI-Powered CreativityThe Motorsport Images Collections captures events from 1895 to today’s most recent coverage.Discover The CollectionCurated, compelling, and worth your time. Explore our latest gallery of Editors’ Picks.Browse Editors' FavoritesExperience AI-Powered Creativity Que veut dire l’expression arme létale ? L’expression arme létale désigne une arme susceptible de donner la mort à une personne touchée. Autrement dit, une telle arme peut tuer, son tir est mortel. Par exemple, les armes de guerre utilisées par l’infanterie sont des armes létales : pistolet-mitrailleur, lance-roquette, fusil à lunette. De même pour ce qui est de l’armement de chasse : fusil, carabine. Idem avec les armes de poing (sauf si elles sont armées à blanc) : pistolet, révolver. La notion d’arme létale est convoquée dans le débat public quand il est question de l’armement des polices municipales, chargées de missions de maintien de l’ordre. Les avis divergent quant au fait de savoir si elles doivent être équipées d’armes létales ou non. Enfin, on appelle système d’armes létales autonome un engin (robot, drone) qui embarque des armes létales et qui est programmé pour tuer des humains. Ce type d’automate a déjà été utilisé sur des champs de bataille ou dans des interventions spéciales mais son utilisation soulève des questions éthiques. L’opposé de arme létale est arme non létale. Une arme non létale est conçue pour maîtriser un individu sans le tuer. Le taser, le lanceur de balles de défense (ou LBD), le gaz lacrymogène sont des armes non létales. 27 février 2022. Pour soutenir l’Ukraine dans le conflit qui l’oppose à la Russie, les dirigeants européens décident de lui fournir des armes létales. Que veut dire l’expression arme létale ? L’expression arme létale désigne une arme susceptible de donner la mort à une personne touchée. Autrement dit, une telle arme peut tuer, son tir est mortel. Par exemple, les armes de guerre utilisées par l’infanterie sont des armes létales : pistolet-mitrailleur, lance-roquette, fusil à lunette. De même pour ce qui est de l’armement de chasse : fusil, carabine. Idem avec les armes de poing (sauf si elles sont armées à blanc) : pistolet, révolver. La notion d’arme létale est convoquée dans le débat public quand il est question de l’armement des polices municipales, chargées de missions de maintien de l’ordre. Les avis divergent quant au fait de savoir si elles doivent être équipées d’armes létales ou non. Enfin, on appelle système d’armes létales autonome un engin (robot, drone) qui embarque des armes létales et qui est programmé pour tuer des humains. Ce type d’automate a déjà été utilisé sur des champs de bataille ou dans des interventions spéciales mais son utilisation soulève des questions éthiques. L’opposé de arme létale est arme non létale. Une arme non létale est conçue pour maîtriser un individu sans le tuer. Le taser, le lanceur de balles de défense (ou LBD), le gaz lacrymogène sont des armes non létales. Accueil > Dictionnaire > Définitions du mot « arme fatale » Objet qui permet de tuer à tous les coups. Un crayon bien taillé entre de bonnes mains peut se révéler une arme fatale. Au minimum, on peut énucléer quelqu’un, au pire, traverser l’orbite jusqu’au cerveau. J’ai taillé le mien à la perfection. Mais une arme fatale est inutile si elle n’atteint pas sa cible. — Renée Knight, Révélée (Figuré) Moyen sûr d’arriver à ses fins. Conçue comme l’arme fatale antifraude, cette pratique consiste, pour les Etats volontaires, qui sont plus de 100 aujourd’hui dans le monde, à s’échanger des renseignements financiers sur les comptes ouverts à l’étranger par les contribuables. — Anne Michel, L’OCDE constate une importante décrue des dépôts bancaires dans les paradis fiscaux Source : Gallicagram. Créé par Benjamin Azoulay et Benoît de Courson, Gallicagram représente graphiquement l’évolution au cours du temps de la fréquence d’apparition d’un ou plusieurs syntagmes dans les corpus numérisés de Gallica et de beaucoup d’autres bibliothèques. Quand le couteau ne fait plus son office, qu'il ne coupe plus comme il le devrait, le cuisinier dégaine une arme fatale : un fusil à aiguiser ! France Bleu — Un coup de fusil pour dégainer ses couteaux La mairie de Castres s’est dotée d’une arme fatale pour détruire les nids de frelons asiatiques qui pullulent dans la région. Un pistolet longue portée qui permet d’envoyer des billes remplies de concentré d’insecticides dans le nid pouvant se situer jusqu’à 40 mètres du tireur. Les billes explosent dans le nid et détruisent la colonie en 5 minutes. L’intervention devient plus rapide, moins dangereuse pour l’intervenant et encore plus efficace. ladepeche.fr — À Castres, la mairie s’est dotée d’une arme fatale contre les frelons asiatiques - ladepeche.fr Le cochon vietnamien, nouvelle arme fatale de la gendarmerie ! le 09 octobre 2019, lors d'une patrouille pédestre... SudOuest.fr — Charente-Maritime : son cochon vietnamien mangeait les pieds de cannabis Née d’une mère Européenne mannequin et d’un père Palestinien, le mélange est des plus réussis pour Isabella Khair Hadid, dite «Bella Hadid». Et c’est la science qui le dit. Elle aurait un visage parfait à 94.35%. Son arme fatale ? Le menton parfait à 99.7%. Son flop est l’arcade sourcilière, qui n’en est pas vraiment un puisqu’elle atteint quand même les 88%. Afrik — Bella Hadid, la plus belle femme au monde devant Beyoncé ! Les châteaux français : l’arme fatale du cinéma hollywoodien En France, ils sont légion et naturellement les produc... Les châteaux français : l’arme fatale du cinéma hollywoodien | CNC Il a fallu près des trois quarts de ce 4e tour aux joueurs raonnais de Michaël Grand pour assurer leur victoire. L’arme fatale vosgienne, Adinany, coupait pour la seconde fois du match la trajectoire d’un corner de Tahar et permettait aux siens de refaire le break (2-4, 72e). Football - Coupe de France (4e tour). Behonne-Longeville sort avec les honneurs face à Raon Définitions du Wiktionnaire Que veut dire l’expression arme létale ? L’expression arme létale désigne une arme susceptible de donner la mort à une personne touchée. Autrement dit, une telle arme peut tuer, son tir est mortel. Par exemple, les armes de guerre utilisées par l’infanterie sont des armes létales : pistolet-mitrailleur, lance-roquette, fusil à lunette. De même pour ce qui est de l’armement de chasse : fusil, carabine. Idem avec les armes de poing (sauf si elles sont armées à blanc) : pistolet, révolver. La notion d’arme létale est convoquée dans le débat public quand il est question de l’armement des polices municipales, chargées de missions de maintien de l’ordre. Les avis divergent quant au fait de savoir si elles doivent être équipées d’armes létales ou non. Enfin, on appelle système d’armes létales autonome un engin (robot, drone) qui embarque des armes létales et qui est programmé pour tuer des humains. Ce type d’automate a déjà été utilisé sur des champs de bataille ou dans des interventions spéciales mais son utilisation soulève des questions éthiques. L’opposé de arme létale est arme non létale. Une arme non létale est conçue pour maîtriser un individu sans le tuer. Le taser, le lanceur de balles de défense (ou LBD), le gaz lacrymogène sont des armes non létales. 27 février 2022. Pour soutenir l’Ukraine dans le conflit qui l’oppose à la Russie, les dirigeants européens décident de lui fournir des armes létales. Share — copy and redistribute the material in any medium or format for any purpose, even commercially. Adapt — remix, transform, and build upon the material for any purpose, even commercially. The licensor cannot revoke these freedoms as long as you follow the license terms. Attribution — You must give appropriate credit , provide a link to the license, and indicate if changes were made . You may do so in any reasonable manner, but not in any way that suggests the licensor endorses you or your use. ShareAlike — If you remix, transform, or build upon the material, you must distribute your contributions under the same license as the original. No additional restrictions — You may not apply legal terms or technological measures that legally restrict others from doing anything the license permits. You do not have to comply with the license for elements of the material in the public domain or where your use is permitted by an applicable exception or limitation . No warranties are given. The license may not give you all of the permissions necessary for your intended use. For example, other rights such as publicity, privacy, or moral rights may limit how you use the material. Interrogée par: Matthieu-Joseph Navarro | Dernière mise à jour: 6. Oktober 2022 Notation: 4.5 sur 5 (33 évaluations) Deux armes létales ont été choisies par le législateur pour équiper la police municipale : il s'agit des pistolets automatiques chambrés en calibre 7,65 mm et des revolvers chambrés en . Demande de suppression de source | Afficher la réponse complète sur weka.fr Qu'est-ce que du matériel létal ? Quelque chose de létal peut provoquer la mort. En règle générale, létal est souvent utilisé lorsqu'il peut y avoir un dosage en dessous duquel le produit n'est pas considéré comme mortel. Qu'est-ce que les armes autonomes ? Le CICR définit les systèmes d'armes autonomes comme des armes qui sélectionnent des cibles et exercent la force contre elles sans intervention humaine. Une personne active l'arme, mais sans connaître ses cibles spécifiques – personnes ou biens –, ni le moment et/ou le lieu précis où elle frappera. Est-ce que la France fournit des armes à l'Ukraine ? La France « poursuivra et renforcera » ses livraisons d'armement à l'Ukraine, a annoncé ce lundi 30 mai 2022 la nouvelle cheffe de la diplomatie française Catherine Colonna, en visite à Kiev. Quelle est l'arme la plus puissante du monde ? Le magnétar, l'arme la plus puissante de l'univers | korii. TOP 15 DES ARMES EN VENTE LIBRE Élément essentiel pour la production des munitions de petit calibre, les poudres seraient produites à Pont-de-Buis-lès-Quimerch (Finistère) par NobelSport France (groupe Sofisport), leader européen de la production de poudre simple base, sur un site dédié à la production de poudre depuis 1688 et de munitions non ... Cette place de numéro 3 de la France repose principalement sur 6 groupes : Thalès, Naval Group, Safran, Dassault Aviation, le CEA et Nexter, groupe industriel d'armement terrestre — fabricant du char Leclerc notamment — liste à laquelle il faut ajouter Airbus, 7e fabricant d'armes mondial, et MBDA, groupe européen ... Weapon intended to be less likely to kill a living target than conventional weapons This article needs additional citations for verification. Please help improve this article by adding citations to reliable sources. Unsourced material may be challenged and removed.Find sources: "Non-lethal weapon" – news · newspapers · books · scholar · JSTOR (April 2022) (Learn how and when to remove this message) An instruction on oleoresin capsicum (pepper spray) at Marine Corps Base Camp Lejeune Non-lethal weapons, also called nonlethal weapons, less-lethal weapons,[1][2][3][4] less-than-lethal weapons, non-deadly weapons, compliance weapons, or pain-inducing weapons are weapons intended to be less likely to kill a living target than conventional weapons such as knives and firearms with live ammunition. It is often understood that unintended or incidental casualties are risked wherever force is applied; however, non-lethal weapons minimise the risk of casualties (e.g. serious/permanent injuries or death) as much as possible. Non-lethal weapons are used in policing and combat situations to limit the escalation of conflict where employment of lethal force is prohibited or undesirable, where rules of engagement require minimum casualties, or where policy restricts the use of conventional force. However, these weapons occasionally cause serious injuries or death due to allergic reactions, improper use and/or other factors; for this reason the term "less-lethal" has been preferred by some organizations as it describes the risks of death more accurately than the term "non-lethal", which some have argued is a misnomer.[2][5][6][7] Non-lethal weapons may be used by conventional military in a range of missions across the force continuum. They may also be used by military police, by United Nations forces, and by occupation forces for peacekeeping and stability operations. Non-lethal weapons may also be used to channelize a battlefield, control the movement of civilian populations, or to limit civilian access to restricted areas (as they were utilized by the USMC's 1st Marine Expeditionary Force in Somalia in 1995). Similar weapons, tactics, techniques and procedures are employed by police forces domestically in riot control, prisoner control, crowd control, refugee control, and self-defense, where the terminology of "less-than-lethal" is often used. Demonstration of the use of a Taser gun on US military personnel. The device was originally developed for use by civilian police. In the past, military and police faced with undesirable escalation of conflict had few acceptable options. Military personnel guarding embassies often found themselves restricted to carrying unloaded weapons. National guards or policing forces charged with quelling riots were able to use only batons or similar club-like weapons, or bayonet or sword charges, or fire live ammunition at crowds. In the late 1980s and early 1990s, the Non-lethality Policy Review Group at U.S. Global Strategy Council[8] in Washington and other independent think tanks around the world called for a concerted effort to develop weapons that were more life-conserving, environmentally friendly, and fiscally responsible than weapons available at that time.[9] The U.S. Congress and other governments agreed and began an organized development of non-lethal weapons to provide a range of options between talking and shooting. Recognizing the need to limit the escalation of force, research and development of a range of non-lethal weapons has since been undertaken internationally by governments and weapons manufacturers to fill the need for such weapons. Some non-lethal weapons may provide more effective riot control than firearms, truncheons or bayonets with less risk of loss of life or serious injury. Before the general availability of early military non-lethal weapons in the mid 1990s, war-fighters had few or no casualty-limiting options for the employment of scalable force and were continually at risk whenever lethal force was prohibited during sensitive missions. In 2001, the United States Marine Corps revealed its development of a less-than-lethal energy weapon called the Active Denial System, a focused high frequency microwave device said to be capable of heating all living matter in the target area rapidly and continuously for the duration of the beam, causing transient intolerable pain but no lasting damage. The skin temperature of a person subjected to this weapon can jump to approximately 130 °F (54 °C) in as little as 2 seconds depending on the skin's starting temperature. The system is nonlethal (the penetration of the beam into human skin is only a few millimeters).[10] In 2004, author Jon Ronson cited an unclassified military report titled "Non-Lethal Weapons: Terms and References"[11][12] 21 acoustic weapons were listed, in various stages of development, including the Infrasound ("Very low-frequency sound which can travel long distances and easily penetrate most buildings and vehicles ... biophysical effects are projected to be: nausea, loss of bowels, disorientation, vomiting, potential internal organ damage or death may occur. Superior to ultrasound...)", however no such effects had been achieved as of 2002[update].[13] In 2010, the Joint Non-Lethal Weapons Directorate Non-Lethal Weapons Reference Book was created. The weapons in this book are currently in development.[14] This section needs additional citations for verification. Please help improve this article by adding citations to reliable sources in this section. Unsourced material may be challenged and removed. (July 2012) (Learn how and when to remove this message) Until the development of non-lethal weapons, police officers around the world had few if any non-lethal options for riot control. Common tactics used by police that were intended to be non-lethal or less lethal included a slowly advancing wall of men with batons, officers on horses trained to deal with policing situations, or a charge into a riot using the flats of sabers. Other reasonably successful approaches included shotguns with lower-powered cartridges, "salt shells", using bean-bag rounds and ricocheting shots off of the ground. In the mid-20th century, with the integration of fire-control systems into major cities, police found that high-pressure fire hoses could be effective in dispersing a crowd (the use of water cannons and fire trucks has remained an effective non-lethal tactic to disperse riots). Trained police dogs were also commonly used to scare and disperse rioters and apprehend individuals. In the 1980s the development of high-tensile plastics like Kevlar and Lexan revolutionized personal armor and shields, and led to new tactics for riot squads and other special-purpose teams. Officers could now stand up against violent rioters throwing dangerous projectiles without having to resort to lethal methods to quickly disperse the danger. Coupled with the introduction of effective non-lethal chemical agents such as tear gas and offensive-odor canisters, and non-lethal impact rounds such as rubber bullets and "bean bag" flexible baton rounds, riot tactics were modified to rely less on violent response to attacking rioters than on a return to the slowly advancing wall, with supporting officers firing non-lethal ordnance into the crowd to discourage advance.[citation needed] Police officers on patrol were traditionally armed with batons or pistols or both, and non-lethal methods of subduing an attacker centered on hand-fighting techniques such as jujutsu and baton use. In the 1980s and 1990s officers began deploying non-lethal personal sidearms such as pepper sprays, and eventually electroshock weapons such as tasers, which were developed for use by police and also found a market in self-defense by private citizens. However, these weapons were developed for non-lethal resolution of one-on-one conflicts.[citation needed] During the 1990s and early 2000s (decade), interest in various other forms of less-than-lethal weapons for military and police use rose. Amongst other factors, the use of less-than-lethal weapons may be legal under international law and treaty in situations where weapons such as aerosol sprays or gases defined as chemical are not.[citation needed] Between the years of 1987–1990, after a three-year field study by the FBI's Firearms Training Unit; In 1990, the use of oleoresin capsicum was approved and used by the FBI, the first official law enforcement agency to do so.[citation needed] In the late 1990s and early 2000s (decade), police began to adopt a new pepper spray delivery system based on the equipment used in paintball. A specialized paintball, called a "pepperball", is filled with liquid or powdered capsaicin, the active ingredient in pepper spray, and is propelled by compressed gas using a paintball marker similar to those used for the sport but operating at a higher pressure. The impact of the capsule is immediately painful (a pepperball's shell is thicker than a standard paintball and is fired at a higher velocity), and it breaks open on impact, dispersing the capsaicin with similar effect to aerosol-delivered pepper spray. However, to be most effective, pepper spray must contact the eyes, nose, or mouth of the target; pepper spray on clothing or tougher skin has a much reduced effect.[citation needed] Long range acoustic device mounted on police vehicle, 2004 Republican National Convention, New York City Swedish police in riot gear, carrying an extended telescopic baton A Taser X26 making an electrical arc between its two electrodes Pepper spray training Exploded tear gas canister in the air This section needs expansion. You can help by adding to it. (July 2010) Non-lethal weapons have a design intent to provide an effect to reliably elicit a degree of incapacitation but without the typically lethal or permanent lasting effects of conventional weapons. This design intent has often made them a weapon of choice for use by law enforcement during civil protests, etc. Effect modalities vary by the technology being employed: kinetic projectiles function by blunt impact which actuate pain receptors to elicit a behavioral change, lights affect visual perception, acoustics affect hearing, etc.[citation needed] Notwithstanding their design intent, non-lethal weapons can still cause harm. This is particularly true with certain technologies that interact with appropriately vulnerable regions; an example is kinetic munitions on the head, neck, eyes, abdominal and urogenital regions of the body.[15] As a result, some analysts describe "non-lethal" as a misnomer and recommend defining them as "less-lethal",[16] whereas other sources identify "non-lethal" as representing a goal of minimization of producing fatalities or permanent injuries[17] while not literally requiring minimization to a zero probability thereof. This article needs additional citations for verification. Please help improve this article by adding citations to reliable sources. Unsourced material may be challenged and removed.Find sources: "Non-lethal weapon" – news · newspapers · books · scholar · JSTOR (April 2010) (Learn how and when to remove this message) Non-lethal weapons are intended to minimize injury or death. While people are occasionally seriously injured or killed by these weapons, fatalities are relatively infrequent. Causes of death from non-lethal weapons are varied and occasionally uncertain. Misplaced or ricocheting shots, pre-existing medical conditions, inadequate user training, repetitive applications and intentional misuse have been implicated in different cases where death has occurred.[citation needed] As different parts of the body differ in vulnerability, and because people vary in weight and fitness, any weapon powerful enough to incapacitate may be capable of killing under certain circumstances. Thus, "non-lethal force" does have some risk of causing death: in this context, "non-lethal" means only "not intended to kill".[citation needed] Several groups maintain there is great room for improvement in non-lethal weapons and procedures for their use. Claims for the relative safety of such weapons are usually contingent on their being used "properly". For example, the rubber bullets developed during the 1960s were supposed to be fired at the ground and hit the target only after ricochet,[18] and other non-lethal bullets are designed to be fired at the lower body; they can be lethal if fired directly at the head.[citation needed] Non-lethal rounds are firearm rounds which are designed to incapacitate, but not kill, a target. The rounds rely on the transfer of kinetic energy and blunt force trauma to accomplish this incapacitation. Rubber bullets, rubber buckshot, soft polymer rounds, wax bullets, plastic bullets, beanbag rounds, sponge grenades, ring airfoil projectiles (both kinetic and tear gas projectiles) and rubber bullets with electroshock effect (e.g. Taser XREP rounds) are less lethal than conventional metal bullets, and are also propelled at lower speed by using less propellant. "Bean bag" type bullets are sometimes referred to as flexible baton rounds. More recently, high-velocity paintball guns are also used to launch less-lethal rounds, including the FN 303 launcher and PepperBall commercial products.[19] There is also the Variable Velocity Weapon Concept, for which a propulsion energy source may not yet have been clearly established and/or finalized.[20] In any case, all of these technologies apply the same basic mechanism, which is to launch a mass at the target that interacts kinetically.[citation needed] Fiocchi 12-gauge rubber buckshot: containing 15, 8.3 mm, .58 gram rubber pellets, with a muzzle velocity of 790 fps. 12-gauge beanbag rounds and exposed bean bag round projectile U.S. M234 launcher ring airfoil projectile rounds Launcher, projectile, 64 mm, riot control, M234 Hand grenades come in several less-lethal varieties, such as "flashbang" (stun) grenades, "sting" grenades with rubber shrapnel, and grenades designed to release chemical irritants (described below).[21] In 1972, stun grenades were used to capture the hijacked Sabena Flight 571, allowing the Israeli forces headed by Ehud Barak and including Benjamin Netanyahu to storm the plane and take it over within 10 minutes while capturing two terrorists and killing Ali Taha, the leader of the terrorist group and his aide, while rescuing all passengers (three were wounded, and one died of her injuries several days later).[22] A stun grenade was apparently used by members of the IHH against the IDF soldiers during the Gaza flotilla raid at the beginning of the IDF storming of the Mavi Marmara.[23] In June 2010, in Kenya, a stun grenade was used to draw attention, and then a real grenade along with an explosive package were used, killing many people. In April, during the 2010 Kyrgyzstani uprising, police attempted to use stun grenades to stop a demonstration but the crowd overwhelmed the police.[citation needed] In March stun grenades were used by Belarusian police in Minsk against demonstrators, and in September they were used by Greek police in Athens.[citation needed] In these latter two cases, the demonstrations were dispersed with no injuries.[citation needed] In February 2011, stun grenades were seen used by Egyptian police against rioters.[citation needed] Further information: Incapacitating agent Water cannon during a German demonstration, 2001 Water cannons are commonly used in crowd and riot control, for dispersal or to prevent movement on a particular position. These water cannons are intended to disperse crowds with little risk of harm, but the pressure can still cause eye injuries or even death. Water-filled rounds for small arms are in experimental stages.[24] Electrified water cannons were in development but was abandoned.[citation needed] Malodorants produce strong odours that cause people to leave the affected area. In 2008, the Israeli Defence Forces began using Skunk for crowd control. It is a form of mist sprayed from a water cannon, which leaves a terrible odor of rot or sewage on whatever it touches, and does not wash off easily.[25] The active ingredient in pepper spray is oleoresin capsicum (OC), an acrid irritant chemical derived from cayenne pepper plants.[26] A 1998 estimate by the International Association of Chiefs of Police suggested at least 113 pepper spray-related fatalities had occurred in the United States, all with aggravating factors such as intoxication, pre-existing health problems, or from the police use of airway-restrictive immobilizing holds that can cause positional asphyxia.[27] The Southern California chapter of the American Civil Liberties Union recommends against maximal prone restraint techniques following pepper spray application, and they caution that anyone sprayed should be monitored to ensure effective breathing.[28] Vancouver Police Department officers in anti-riot gear and armed with tear gas grenade launchers confront Stanley Cup rioters. The use of chemical weapons such as tear gas (CS) and pepper spray (OC) has come under increasing scrutiny and criticism due to studies showing serious long term side effects. Many police forces are no longer exposing their members to the chemicals during training.[citation needed][29] Journalist Rubén Salazar was killed in Los Angeles in 1970 by an errant CS gas canister during the Chicano riots. Other serious injuries and fatalities have occurred from either tear gas itself or the projectiles it is delivered in, including the critical injury of veteran Scott Olsen from a tear gas canister during the 2011 Occupy Oakland protests.[30] Main article: Psychochemical weapons Psychochemical weapons are psychoactive drugs, such as BZ, LSD, Kolokol-1, EA-3167, and 3-Methylamphetamine designed to have a disorienting effect when used during combat or interrogation.[31] During the 2002 Moscow theater hostage crisis, Russian special forces used an unidentified gas (thought to be 3-methylfentanyl or another fentanyl variant dissolved in halothane gas) in an attempt to induce sleep in both hostages and terrorists. Many of the hostages and terrorists (including all of the suicide bombers) were anesthetized, but some terrorists donned gas masks and thus were able to avoid the effects of the gas. Because the agent used was a potent Fentanyl derivative (a synthetic opioid), it causes respiratory depression and ultimately respiratory failure if administered in high enough dosages. The central nervous system effects, such as anesthesia and respiratory depression could have been reversed by an opioid antagonist such as naloxone, which is stocked by hospitals and most ambulances. However, because the Russian authorities did not release any information regarding what type of agent was used, medical professionals were unaware that an opioid had been used during the rescue attempt and thus were unable to administer the antidote which could have saved most hostages. Approximately 700 hostages were rescued, while 130 died from exposure to the gas. All the terrorists were ultimately killed by Russian forces through some combination of gas exposure and gunfire.[citation needed] Further information: Incapacitating agent Blister agents, including CR gas, are less often used riot control agents. Other irritants include CS gas and nonivamide (PAVA).[citation needed] Main article: Sticky foam Sticky foam was tried by the U.S. Marine Corps in the peacekeeping Operation United Shield in 1995 with some success, but as a result various complications in its field use were also discovered.[32] Main article: Area denial weapons Area denial weapons work by either incapacitating or deterring the enemy.[citation needed] Iron caltrops Vehicle stoppers include a wide range of methods and devices meant to disable a vessel or vehicle to prevent attack by an oncoming vessel or vehicle or to stop that vessel or vehicle for evaluation. Vessel and vehicle stoppers may include kinetic, chemical, or electromagnetic means.[33][34][35] Simple rows or clusters of sharpened sticks (also known as punji sticks), and the use of small caltrops have been a feature of anti-infantry warfare for centuries.[36] They are known to have been in use since Roman times and may have been used earlier: the concept was familiar to the 4th century BC Greeks, who used rocks, brush, nets and trees placed in the path of enemy conveyances on land or ensnarement devices hidden under water to achieve the same result: stop the enemy or suspected hostile in his tracks for examination or to prevent or limit incursions. Contemporary caltrops look something like large jacks from the childhood game. Placed in the path of oncoming wheeled or tracked vehicles, they are meant to foul wheels, destroy tires and tracks, and incapacitate vehicles.[33] However, due to the difficulty of mass-producing them in the pre-modern age, they were rarely used except in the defense of limited areas or chokepoints, especially during sieges, where they were used to help seal breaches. Increasing ease of production still did not prevent these methods from slowly falling out of favor from the late Middle Ages onward.[36] Caltrops are still sometimes used in modern conflicts, such as during the Korean War, where Chinese troops, often wearing only light shoes, were particularly vulnerable.[36] In modern times, special caltrops are also sometimes used against wheeled vehicles with pneumatic tires. Some South American urban guerrillas as the Tupamaros and Montoneros called them "miguelitos" and used these as a tactic to avoid pursuit after ambushes.[37] A German policeman with Pepperball gun in Dresden In current usage a riot gun or less-lethal launcher is a type of firearm that is used to fire "non-lethal" or "less-lethal" ammunition for the purpose of suppressing riots. Less-lethal launchers may be special purpose firearms designed for riot control use, or standard firearms, usually shotguns and grenade launchers, adapted to riot control use with appropriate ammunition. The ammunition is most commonly found in 12 gauge (18.5 mm/.729 inch) shotguns and 37mm (1.46 inch) or 40mm (1.57 inch) grenade launchers. In the United States, the term "riot gun" more commonly refers to a riot shotgun that shoots baton rounds or bean bag rounds. In recent years, law enforcement, military and other security organizations sometimes use a type of paintball marker-like weapon that shoot frangible pepper-spray projectiles, which rupture upon impact and release chemical aerosols that irritates the eyes and nose of nearby individuals. Such weapons are used generally in the role of stand-off weapons, where physical proximity to a suspect is deemed dangerous but deadly force is not warranted. The irritant payload may differ from product to product but is usually a capsaicinoid powder called PAVA (capsaicin II), and less frequently a liquid or gas.[38][39][40] Electroshock weapons are incapacitant weapons used for subduing a person by administering electric shock aimed at disrupting superficial muscle functions. One type is a conductive energy device (CED), an electroshock gun popularly known by the brand name "Taser", which fires projectiles that administer the shock through a thin, flexible wire. Other electroshock weapons such as stun guns, stun batons, and electroshock belts administer an electric shock by direct contact.[citation needed] An NYPD officer stands ready with a sonic weapon, the LRAD 500X, at an Occupy Wall Street protest on November 17, 2011 near the New York City Hall Main article: Directed-energy weapon Directed energy weapons are weapons that emit energy in an aimed direction without the means of a projectile. They are non-lethal and can immobilize people as well as machines (e.g. vehicles).[41] Directed energy weapons include electromagnetic weapons, (including laser weapons) and microwave weapons, particle beam weapons, sonic weapons and plasma weapons. HSV Technologies, Inc. (named for its founders, Herr, Schlesinger and Vernon; not to be confused with Holden Special Vehicles), formerly of San Diego, California, USA, then Port Orchard, WA, designed a non-lethal device which was profiled in the 2002 TIME magazine article "Beyond the Rubber Bullet". It is an electrolaser using ultraviolet laser beams of 193 nm, and promises to immobilize living targets at a distance without contact. There is plan for an engine-disabling variation for use against the electronic ignitions of cars using a 248 nm laser. The lead inventor, Eric Herr, died in 2008 and the company appears to have been dissolved, with their website defunct as of September 2017.[42] Pulsed energy projectiles or (PEP) is a technology of non-lethal directed energy weaponry currently under development by the US military. It involves the emission of an invisible laser pulse which, upon contact with the target, ablates the surface and creates a small amount of exploding plasma. This produces a pressure wave designed to stun the target and knock them off their feet, and electromagnetic radiation that affects nerve cells causing a painful sensation.[citation needed] The pulsed energy projectile is intended for riot control and is said to work over distances of up to 2 km. It weighs about 230 kg and will probably be mounted on vehicles. The weight could become lighter as laser production technology improves.[citation needed] The system was developed by Mission Research Corporation (now owned by Orbital ATK). It uses a chemical deuterium fluoride laser device producing infrared laser pulses. The plasma (produced by the early part of the pulse) explodes because its electrons absorb the energy of the later part of the pulse.[citation needed] In 2003, a US military review reported[citation needed] that the electromagnetic radiation produced by PEPs had been shown to cause pain and temporary paralysis in animal experiments.[citation needed] United States Special Operations Command FY 2010 plans included starting developmental work on a counter UAV pulsed energy projectile.[43] An active denial system (ADS) is a dish that projects electromagnetic radiation just powerful enough to penetrate human skin and make the victim feel as though they are on fire, although no physical damage is done.[citation needed] The ADS is a non-lethal, directed-energy weapon developed by the US military,[44] designed for area denial, perimeter security and crowd control.[45] Informally, the weapon has also been referred to as a "heat ray",[46] since it works by heating the surface of targets, such as the skin of targeted human subjects.[47] In 2011, the ADS was redesigned to make it smaller, more reliable, and able to be used on the move. The ADS II is being designed to operate from moving aircraft, as well as moving ground vehicles. The redesign does not address problems in different environmental conditions.[48] Air Force Special Operations Command is experimenting with mounting an ADS on the AC-130J Ghostrider gunship to target threatening crowds or individuals on the ground. This is to give the gunship a non-lethal option so the crew has more engagement options. Due to the increasing number of engagements in populated areas, the Air Force is aiming to field a system within 10 years to have enough aircraft available with non-lethal systems.[49] The aircraft will apparently use the ADS II version.[50] A dazzler is a directed-energy weapon intended to temporarily blind or disorient its target with intense directed radiation. Targets can include sensors or human vision. Dazzlers emit infrared or invisible light against various electronic sensors, and visible light against humans, when they are intended to cause no long-term damage to eyes. The emitters are usually lasers, making what is termed a laser dazzler. Most of the contemporary systems are man-portable, and operate in either the red (a laser diode) or green (a diode-pumped solid-state laser, DPSS) areas of the electromagnetic spectrum.[citation needed] Initially developed for military use, non-military products are becoming available for use in law enforcement and security.[51][52] Weapons designed to cause permanent blindness are banned by the 1995 United Nations Protocol on Blinding Laser Weapons. The dazzler is a non-lethal weapon intended to cause temporary blindness or disorientation and therefore falls outside this protocol.[citation needed] PHASR Rifle The personnel halting and stimulation response rifle (PHASR) is a prototype non-lethal laser dazzler developed by the Air Force Research Laboratory's Directed Energy Directorate, U.S. Department of Defense.[53] Its purpose is to temporarily disorient and blind a target. Blinding laser weapons have been tested in the past, but were banned under the 1995 UN Protocol on Blinding Laser Weapons, which the United States acceded to on 21 January 2009.[54] The PHASR rifle, a low-intensity laser, is not prohibited under this regulation, as the blinding effect is intended to be temporary. It also uses a two-wavelength laser.[55] The PHASR was tested at Kirtland Air Force Base, part of the Air Force Research Laboratory Directed Energy Directorate in New Mexico.[citation needed] Several nations developed blinding laser weapons and they were allegedly used during the war in Donbas by Russia.[56] The Long Range Acoustic Device (LRAD) is an acoustic hailing device developed by LRAD Corporation to send messages and warning tones over longer distances or at higher volume than normal loudspeakers. LRAD systems are used for long-range communications in a variety of applications[57] including as a means of non-lethal, non-kinetic crowd control. Though they have been called "sonic weapons",[58] LRADs are not inherently for military use. The round black devices on top of New York City police Hummers are LRADs.[citation needed] According to the manufacturer's specifications, the systems weigh from 15 to 320 pounds (6.8 to 145.1 kg) and can emit sound in a 30°- 60° beam at 2.5 kHz.[59] The manufacturer also produces systems for public address and mass notification use that broadcast 360°.[60] In the United States, the University of Texas-Austin Institute for Advanced Technology (IAT) conducts basic research to advance electrodynamics and hypervelocity physics related to electromagnetic weapons.[61] Although generally considered "non-lethal weapons", electromagnetic weapons do pose health thre