

French Symposium on Soldier Enhancement

≈ Part 4 ≈

Editor's note:

A symposium on French army initiatives to enhance soldier capabilities was held in Paris 19 June 2017 at the headquarters of the French Armed Forces titled “The Enhanced Soldier: The Needs and Prospects of Increasing the Fighter’s Abilities.” The Army University Press at Fort Leavenworth, Kansas, agreed to publish translated versions of the presentations given in seven parts as *Military Review* Online Exclusive articles to promote broader understanding of allied views and initiatives on a subject of intense collective interest. The below is the fourth of the seven presentations. The other presentations are published in separate documents.

The Hexagone Balard, headquarters of the French Armed Forces and the
Ministry of the Armed Forces, 19 December 2015 in Paris.
(Photo courtesy of Wikipedia)





French Compagnie Républicaines de Sécurité (*left*) and gendarmes mobiles conduct crowd control 15 September 2016 in Paris. (Photo by Bruno Domenjod via Wikimedia Commons)

Policing and Enhancement, from Reality to Needs

The Demonstration of 15 September 2016 in Paris

Christian Ghirlanda, CRS Central Directorate

This is a translation of a lecture given during the conference called “The Enhanced Soldier: The Needs and Prospects of Increasing the Fighter’s Abilities,” held in the Headquarters of the French Armed Forces, in Paris, 19 June 2017.

The Commitment

On 15 September 2016 at 0415, *Compagnie Républicaines de Sécurité 13* (Republican Security Company 13, or CRS 13) gathered and moved to Paris to integrate into an operational group of eleven companies placed at the disposal of the Paris Police Headquarters during the riots and demonstrations against France’s new Labor Law.¹ At 1045, accompanied by “TI520,” as named by call sign, the cell representing the higher authority, authorizing the use of force, the unit arrived at *Gare du Nord* (North Railway Station).² It controlled the area without major difficulty and avoided the surrounding protestors. At about 1445, upon instruction from the command center, CRS 13 and TI520 moved on the front of the demonstration.

Their mission was to integrate a new tactic called the “Tube.” Employing the Tube requires a line of

police officers to follow the demonstrators along each side of the route in order to flank-guard the crowd and prevent any unexpected action from the sides. For the unit, it was imperative to keep at least part of the demonstrators’ procession as close as possible beside the moving crowd. In this case, the unit stayed on the right flank of a “nebula made up of several hundred thugs eager to fight” as reported by TI 520 to the author.

The tactic, then still in the testing process, was inspired by lessons learned from German law enforcement. However, its employment contravenes one of the three principles of French policing, that of maintaining a specific distance between the police and the demonstrators. Moreover, it has the disadvantage of spreading the police line, making it lose thickness and depth. It also allows very little capacity for using a reserve force because of the contact it induces with the crowd, and it limits a unit’s ability to withdraw because, by following the progression of the protestors,

French CRS police officers conduct crowd control during a 2016 demonstration in Paris. (Photo by Bruno Domenjod via Wikimedia Commons)





A French riot police officer is engulfed in flames after a Molotov cocktail was thrown by protestors 15 September 2016 during a demonstration against the controversial labor reforms of the French government in Paris. (Photo by Thomas Samson, Agence France-Presse)

the unit often becomes constrained by buildings along the route that are obstacles to maneuver.

The protesters belonged largely to the ultraleft movement; they were determined and equipped like an emerging tactical organization. One police officer stated,

We note the presence of several hundred hooded individuals, masked, equipped with protective glasses and gathered into tactical groups of the “black block” type. Their pre-determined objectives are any symbol of the “capitalist world” and any kind of uniformed servicemen, including the policemen. As soon as the parade began, incidents broke out; the anarcho-autonomous movement took the lead in the procession and control of the action. On several occasions, between the subway station “Filles du Calvaire” and “Place de la République,” it was necessary to make offensive leaps and charges to repel the attacks of these hostile groups.

The level of violence escalated quickly and was well coordinated. The traditional peaceful demonstration served as a refuge for rioters, and in some parts of the procession, they were supplied with propelled projectiles and improvised explosive devices. According to TI520, “We also note that the demonstrators are supplied with incendiary explosive devices and incendiary cylinders in the central part of the Place de la République.” A coordinated maneuver by point elements could have deprived the rioters of incendiaries, but this course of action was dismissed because of the risk of triggering solidarity reactions from the demonstrators or uncontrolled crowd movements. Upon arrival at Place de la République, the unit was responsible for controlling the outlet of Boulevard du Temple. It was repeatedly attacked by projectiles, bitumen [pieces of road or roofing material], and incendiary devices, which the unit contained by successive charges and the use of tear gas.

At 1605, CRS 13 was ordered to assist an isolated platoon of the 11CI, a local unit from police

headquarters, that had been violently attacked.³ The unit was forced to deploy again in a line along the buildings to reach its objective and was subjected to many thrown incendiary bottles until 1635 when, as reported by the CRS 13 company commander, “One of my men briefly caught fire ... another had second-degree burns on both thighs.” After one of his platoon leaders ran out of stun grenades, the commanding officer of CRS 13 gave him his own ammunition to keep him operational until resupply was available, but that seemed unlikely at the time. When he completed this transfer and was preparing to give a firing order to one of his “Cougar” launchers to assist the damaged section of the 11CI, the commander and TI520 were deliberately targeted and were hit with an incendiary explosive device that engulfed them in a fireball.⁴

TI520 reported: The commanding officer of CRS 13 was shot in the leg and his uniform caught fire. A shield crew was burned on

projectiles rained down on them. Part of the crowd shouted in joy for having wounded police officers. The commander got up to retake command of his unit, took a few steps and collapsed. He got up again and fell again. A platoon leader placed him against a wall and then had a support group evacuate him to a restaurant that had been transformed into a medical station by the fire brigade. After stabilizing his burns, he was transferred to a hospital with other wounded police officers. His injuries included three areas of second-degree burns from his ankle to his right thigh and a fourth at the level of the nose. He complained of burning pain sensations in his left leg.

TI520 was burned on his arms, and he lost his balance and sense of direction. He was also suffering from extreme tinnitus in both ears. The 11CI personnel recovered him and evacuated him to a sheltered passage where firemen took him and refused, despite his requests, to let him return to duty. He was evacuated to the hospital; his

medical checkup revealed second-degree burns on his right arm and sound trauma with significant hearing loss.

The deputy captain assumed command of CRS 13 until the end of his shift at 1825. The unit moved to its base and was finally released at 1930.

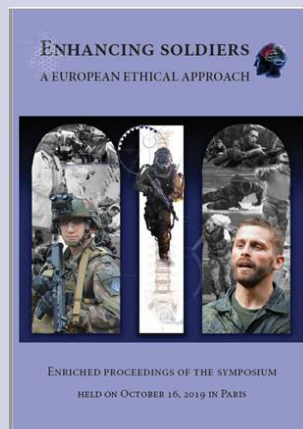
In the end, there were three wounded officers hospitalized and fifteen with lesser wounds in the unit. It fired or threw twenty-five disengage-

ment grenades, twelve stun grenades, and forty-two rifle grenades. The unit had been subjected to attack by projectiles from 1510 to 1655 and had carried out numerous maneuvers aimed at relieving pressure, stopping attacks, or controlling its area of action from 1100 to 1805.

their thighs, while another policeman had his right arm on fire. We were caught in the blast effect of the explosive device. ... There was an explosion that blasted the police superintendent who collapsed, and myself, ... I caught fire on my legs and the flames burned me all the way to my face.

The CRS 13 commander’s men laid him down according to procedure and extinguished the flames under the protection of the shield carriers as the

Enhancing Soldiers, A European Ethical Approach is a compendium of the proceedings of a symposium sponsored by the International Society for Military Ethics in Europe, held 16 October 2019 in Paris, that provided a venue for the presentation of papers by a variety of international scholars discussing research on topics related to initiatives associated with efforts to enhance soldier capabilities. The symposium revisited and updated issues that were previously examined in a similar symposium titled “The Enhanced Soldier: The Needs and Prospects of Increasing the Fighter’s Abilities,” sponsored by the French army 19 June 2017 at the headquarters of the French Armed Forces. The compendium is available online at https://www.euroisme.eu/images/Documents/pdf_cahiers/Le%20soldat%20augmenté%2019-06-2020-web%20VFinal.pdf.



The Avenues of Enhancement

This description of events, deliberately approached from the point of view of the officers in the field,

makes it possible to identify real paths to enhancement. Even before focusing on the major event that caused the injuries of many police officers, it is necessary to focus on other points for which enhancement can be considered.

CRS 13 started its shift at 0415 and was released at 1930 after fifteen and a half hours of intense violent engagement. In police situations, and particularly in law enforcement situations, police officers operate in civil society. The fundamental freedoms of the citizens must be absolutely preserved, and this makes missions very delicate and extremely wearisome over time. Heavy equipment carried by police (between twenty-two and forty-six kilograms per law enforcement agent) places a

In order to assist the 11CI, CRS 13 maneuvered with a layout pointing ahead but was constrained by topography (the buildings) and the close distance with protesters; the unit ended with a column-like organization. At that moment, the unit disregarded the gravity of the situation and also its position in relation to the most violent and determined aggressors. It formed a tenuous column between an immovable obstacle and aggressive opponents who were well equipped, well organized, and masters of the terrain. In addition to operative cognitive enhancements, an integrated and organized exchange of data produced by the different units and arranged via a decision support system would have enabled tactical decision-makers to better interact

“In police situations, and particularly in law enforcement situations, police officers operate in civil society. The fundamental freedoms of the citizens must be absolutely preserved, and this makes missions very delicate and extremely wearisome over time.”

heavy strain on the body. Naturally, there is great need for improvements here. They suggest the use of pharmaceuticals, which could help increase resistance to fatigue and stress. We might also consider food supplements to compensate for the loss of essential nutrients.

The feelings of the superintendent (TI520) and the commander of CRS 13 became evident in their exchanges; without anyone explicitly verbalizing it, they felt there was a lack of information regarding the purpose of the maneuver to support the 11CI beyond simply providing assistance to a unit. While the director of the police contingent clearly defined major objectives from the outset, the treatment of smaller tasks seemed to have been relegated to lower-level tactical leaders who had difficulty understanding and integrating these tasks into the general scheme of the maneuver. The tactical leaders' actions were thus limited to achieving the major objective at the expense of a vision for choosing the appropriate tactics. It appears here that analyzing information must be improved—particularly how it is presented—to allow tactical leaders to have a precise vision of the situation and consider the challenges in their respective areas of operation as they affect and are influenced by the overall field of operation. The field commanders need an operative cognitive enhancement focused on their immediate environment.

with each other and understand the ongoing actions in each other's respective areas of operation, making their own tactics more effective. Coordinated CRS action on the attackers' laterals (left flank) could have relieved the pressure on both 11CI and CRS13 reinforcements. However, this would have required that the tactical field be presented in real time to the various unit commanders so that they could coordinate their actions. It is thus a tactical cognitive enhancement that we are talking about here.

Regarding the cognitive process, we must also focus on the moment before the injury of the commanding officer of CRS 13 and TI520. The commander was forced to delay a firing order to support 11CI because of other tasks. He was then hit the moment he was giving orders. We see here that the commander's cognitive load had been extremely high since the time the unit was engaged. Simple orders were delayed by more urgent matters, and some were impossible to give. It is therefore necessary to consider the relevance of an artificial intelligence assistance system that could be made available to commanders to execute simple or routine tasks after human validation. One of the main objectives of enhancement is to free up time for action by relieving cognitive load.

The CRS Département Central's (Central Department, or DCCRS) DESCARTES project, working on behalf of the *Direction Générale de la Police Nationale* (General Directorate of the National Police), aims to process and provide information collected by units and the command center in the most automated and intuitive manner possible.⁵ Various supporting devices, including augmented reality glasses, will be integrated into the project.

Finally, the intensity of the engagement and the natural movement of the crowd within a very tight "tube"-type deployment do not favor traditional operational logistics processes. In fact, these situations create major obstacles to resupply. For example, the platoon leader of CRS 13 ran low on his stock of grenades. Additionally, compartmentalization and street furniture were obstacles to resupply operations.

In the same vein, it should be noted that specific equipment was used to extinguish the flames on burning officers and that other police officers evacuated the wounded agents to medical stations. It was obvious that the management of injured officials required physical and technical human intervention. There is a real need here to increase the strength and carrying capacity of some police officers. Anthropotechnic options are possible, and exoskeletons appear to be able to meet these operational requirements.

There are other issues that must be considered such as protection against projectiles, noise, and gases, and eye

protection must be addressed in particular. Enhancement and police equipment are both possible responses to these requirements. We are actively working on this. The heavy portable fire extinguishers currently in service no longer meet the need. Other models that are lighter, more efficient, and able to be fielded without compromising the functional capabilities of the units are already undergoing study.

There is undoubtedly a real need for enhancement of police officers in law enforcement. But it also appears that, as a first step, it will be necessary to distinguish clearly between what emerges from the concept of "equipment/formation/training/adjustment" and what is related to individual capacity improvement.

Law enforcement is undoubtedly not the only area of enhancement for the police officer; investigation, command, and intelligence beyond public order also offer many avenues for research. But before initiating these studies, the human, ethical, legal, and administrative foundations of the police officer's enhancement must be laid.

The second contribution on the enhanced policeman in this special issue of the *National Defense Review* outlines its components.

Acknowledgements: the author would like to thank Divisional Commissioner Olivier Bagousse and Commander Philippe Deroff for their active and valuable collaboration in the preparation of this article. ■

Notes

1. The Republican Security Companies are a reserve force of the French National Police, best known for crowd and riot control.

2. T1520 is the radio call sign of the individual with the authority to authorize the use of force. North Station is the busiest railway station in Europe.

3. 11CI is the Intervention Company of Paris Police Headquarters.

4. The Cougar is a 56 mm tilt-barrel grenade launcher that fires the entire range of law enforcement grenades.

5. *Dispositif d'exploitation des systèmes de cartographie appliqué aux ressources terrestres engagées sur des services* translates to operating system for mapping systems applied to land resources engaged in services."