

Respecting IHL obligations to the deceased does make a difference: The ICRC-led Falkland Islands/Islas Malvinas identification operation

Jane Taylor,¹ Pierre Guyomarc'h,^{2*}  Oran Finegan,³ Luis Fondebrider,⁴ Mercedes Salado Puerto,⁵ and Morris Tidball-Binz,^{6, 7, 8, 9, 10}

¹Deputy Head of Forensics, International Committee of the Red Cross, Geneva, Switzerland

²Head of Forensics, International Committee of the Red Cross, Geneva, Switzerland

³Director and Founder, Forensic Action International, Carlingford, Ireland

⁴Independent Consultant, Madrid, Spain

⁵Director for Eurasia and Middle East, Argentine Forensic Anthropology Team, Buenos Aires, Argentina

⁶United Nations Special Rapporteur on Extrajudicial, Summary or Arbitrary Executions, Switzerland

⁷Adjunct Clinical Professor in Forensic Medicine, Monash University, Melbourne, Australia

⁸Visiting Senior Research Associate, Pozen Center for Human Rights, University of Chicago, Chicago, IL, USA

⁹Visiting Professor, University of Coimbra, Coimbra, Portugal

¹⁰Visiting Professor, University of Milan, Milan, Italy

*Corresponding author

email: pguyomarch@icrc.org

Abstract

The posthumous identification of Argentine soldiers killed in action during the international armed conflict in the Falkland Islands/Islas Malvinas was the result of the Humanitarian Project Plan, an unprecedented humanitarian forensic operation carried by the International Committee of the Red Cross at the request of Argentina and the United Kingdom. As a result of respect for international humanitarian law obligations to the dead and the novel use of humanitarian forensic action to help make this possible, tombstones that once read "Argentine soldier known only to God" now bear a name, thereby assuring their families of the fundamental right to know the final fate of their loved ones. This project was originally requested by relatives of unidentified soldiers and some veterans of the war, and was agreed to and supported by the parties to the past armed conflict. Although the unidentified soldiers were not missing (as it was known that they had died on the battlefield and that they were buried with dignity in a military cemetery, although without identification), it was essential for their relatives to have their names restored and to be able to honour them in their respective graves. While this was a logistically challenging and complex forensic operation, the main challenges were not exclusively logistical and scientific, but were political and diplomatic as well. At the completion of two Humanitarian Project Plan missions, 121 Argentine soldiers originally buried without a name had been identified; one identity had been corroborated and the remains of one body that were buried in two different graves were reassociated. All families were informed.

Keywords: obligations to the deceased, IHL, identification, exhumations, international armed conflict

: : : : :

Competing interest statement: Authors 1, 2, 3, 4 and 6 are present or past employees of the ICRC. Authors 1, 3, 4, 5 and 6 participated in HPP1 and/or HPP2.

The advice, opinions and statements contained in this article are those of the author/s and do not necessarily reflect the views of the ICRC. The ICRC does not necessarily represent or endorse the accuracy or reliability of any advice, opinion, statement or other information provided in this article.

Introduction

On 13 March 2019, a group of families of Argentine soldiers killed almost thirty-seven years earlier on the battlefields of the Falkland Islands/Islas Malvinas visited the Argentine Military Cemetery¹ on the islands to mourn and honour their loved ones buried there since 1983 but only recently identified. This visit followed one carried out by another group of more than 200 relatives (representing 107 families) for the same purpose on 26 March 2018. These ceremonies, generous and with a deep humanitarian sensibility, were only possible thanks to the Geneva Conventions, an extraordinary joint effort from two countries, the work of the International Committee of the Red Cross (ICRC),² and the innovative use of forensic science to make the identifications a reality.

The path to these two visits was long, complex and not always smooth. It was the result of many years of campaigning by Argentine families of the unidentified soldiers and both Argentine and British veterans, the passion of a few individuals, intensive diplomatic negotiations, and careful planning and execution of a complex forensic operation.

The archipelago in the South Atlantic that would come to be known as the Falkland Islands/Islas Malvinas has always been subject to controversy with regard to both its discovery and its sovereignty, with the French, British, Spanish and Argentines all having laid claim at various times. Spain claimed discovery in 1520, while the English claimed the first landing in 1690, but the first colonization was not until 1764 by the French, who conferred the name Îles Malouines.³ An independent British settlement in another part of the islands occurred in early 1766, which saw the islands being reclaimed by the British, as they were unaware of the French settlement. France subsequently sold its sovereignty to Spain, which took possession in 1767. Argentina claimed inheritance of the islands, which it named Islas Malvinas, as part of gaining independence from Spain, while Britain still claimed its sovereignty rights. While this was always a source of tension between Britain and Argentina, relations were largely peaceful except for a ten-week period in 1982. Today the islands are a self-governing British Overseas Territory, but Argentina still asserts sovereignty, and the sovereignty dispute remains unresolved.

1 Referred to as the Cementerio Militar Argentino de Darwin (Darwin Cemetery) in Argentina.

2 The ICRC is an independent and neutral organization with an exclusively humanitarian mission to provide protection and assistance at the global level to victims of armed conflict and other situations of violence. At the same time, it promotes respect for and compliance with international humanitarian law (IHL) throughout the world. Its action is based on the Geneva Conventions of 1949 and their Additional Protocols. Founded in 1863 by Swiss philanthropist Henry Dunant, the ICRC is the oldest organization within the International Red Cross and Red Crescent Movement and has won three Nobel Prizes since 1917. See the ICRC website, available at: www.icrc.org (all internet references were accessed in March 2025).

3 Lowell S. Gustafson, *The Sovereignty Dispute over the Falkland (Malvinas) Islands*, Oxford University Press, Oxford, 1988.

The seventy-four days of conflict between Argentina and the United Kingdom in 1982 were a short but intense international armed conflict⁴ in which the four Geneva Conventions and Additional Protocol I applied. The actual conduct of hostilities saw the conflict referred to as “the gentleman’s war” due to the respect shown towards applicable international humanitarian law (IHL), in areas such as the use of a maritime exclusion zone (called the Red Cross Box in this case), the deployment of hospital ships, the treatment of prisoners of war, and respect for the dead. The latter element of respect for the dead, as required under IHL, is the focus of this paper.

International humanitarian law obligations

IHL and specifically the Geneva Conventions and their Additional Protocols oblige the parties to an armed conflict to treat with dignity those who die in war, to recover their bodies, to try to identify them, to bury them respectfully and to document their whereabouts. IHL also protects the right of family members to know the fate and whereabouts of their loved ones who are missing in action.⁵

The ICRC is mandated under IHL to assist the parties to armed conflicts in fulfilling their obligations towards the dead, the missing and their families, for which it has developed specialized forensic capacity in the field of humanitarian forensic action.⁶ The ICRC was active during the armed conflict in the Falkland Islands/Islands Malvinas, carrying out its work in various areas, including visiting and recording the data of 11,692 prisoners of war and delivering more than 800 Red Cross messages. In 1991, the ICRC organized the first visit of families to the Argentine Military Cemetery.

The conflict resulted in the deaths of hundreds of combatants on both sides (255 British and 649 Argentine). The British repatriated the majority of their deceased, and a number from both sides remained unrecovered or buried at sea, primarily on the ARA *General Belgrano* and HMS *Sheffield*, which were sunk during the

4 Matteo Fornari, “Issues of International Humanitarian Law (IHL) in the Falklands/Malvinas War”, in Marcos Pablo Moloeznik, Jose Gabriel Paz and Randy Willoughby, *Two Dimensions of the Malvinas/Falklands War: A Forty Year Retrospective*, 1st ed., University of San Diego, San Diego, CA, 2022; Howard Levie, “The Falklands Crisis and Laws of War”, in Alberto R. Coll and Anthony C. Arend, *The Falklands War: Lessons for Strategy, Diplomacy and International Law*, Routledge, London, 1985.

5 See ICRC, “Missing Persons and Their Families”, fact sheet, Geneva, 2015, available at: www.icrc.org/en/document/missing-persons-and-their-families-factsheet; ICRC, *Humanity after Life: Respecting and Protecting the Dead*, Geneva, 2019, available at: www.icrc.org/en/document/humanity-after-life-respect-and-protection-dead; Protocol Additional (I) to the Geneva Conventions of 12 August 1949, and relating to the Protection of Victims of International Armed Conflicts, 1125 UNTS 3, 8 June 1977 (entered into force 7 December 1978), Art. 32; Jean-Marie Henckaerts and Louise Doswald-Beck (eds), *Customary International Humanitarian Law*, Vol. 1: *Rules*, Cambridge University Press, Cambridge, 2005 (ICRC Customary Law Study), Chaps 35–36, available at: <https://ihl-databases.icrc.org/en/customary-ihl/rules> (all internet references were accessed in March 2025).

6 For more detailed information on specific provisions of the Geneva Conventions and their Additional Protocols, see ICRC, *Humanity after Life*, above note 5.

war. After the ceasefire the British side fulfilled its obligations under IHL by recovering Argentine combatants killed in combat from the battlefields and temporary graves, attempting to identify them, giving them a dignified burial, and documenting and recording all required information. All the bodies were duly buried in a specially built military cemetery near the island town of Darwin. The British officer Colonel (then Captain) Geoffrey Cardozo was the assigned officer responsible for organizing the burials respecting Commonwealth War Graves Commission (CWGC)⁷ format and standards. The final report produced by Cardozo⁸ would prove crucial on a number of fronts.

The Argentine Military/Darwin Cemetery is located on East Falkland (Isla Soledad), 88.8 km from the capital city of Stanley, and contains a total of 230 graves, which at the end of the British actions included 121 graves with unidentified remains. Despite efforts to identify all the fallen, a number of them could not be identified at the time and were therefore buried without a name but with the inscription “Argentine soldier known only to God”, in accordance with the standard epitaph used throughout the world by the CWGC for burials of unknown soldiers. In 2001, the Commission of Relatives of the Fallen in the Malvinas and South Atlantic Islands carried out the reconstruction of the cemetery with the support of the private company Aeropuertos Argentina 2000 SA. During this renovation, the crosses marking each grave were replaced with new ones, and the epitaph on these graves was translated into the Spanish “Soldado Argentino solo conocido por Dios”.

Establishing the humanitarian project plan

In April 2012, the ICRC received a formal request from the Republic of Argentina to identify, for humanitarian purposes, the soldiers who had fallen and were buried without names in the Argentine Military Cemetery near Darwin. This request came after Julio Aro, a veteran of the conflict, who after having visited the cemetery on several occasions and being distressed by so many unidentified soldiers, many of whom were his own comrades, decided to establish the “Don’t Forget Me” Foundation (Fundación No Me Olvides) to memorialize those fallen in the war. Many of the families of fallen soldiers whose remains had not been identified also called for their identification, with the help of the Commission of Relatives of the Fallen in the Malvinas and South Atlantic Islands, in order to know the exact whereabouts of their missing loved ones, as is required under IHL. Julio Aro travelled to the UK to meet with English veterans, including Colonel Geoffrey Cardozo, who had buried the fallen. He learned from Cardozo that there were records created by the British about the location and recovery of the bodies on the battlefields and of their burials in the Argentine Military/Darwin Cemetery, and that these records could help in

7 The CWGC is an intergovernmental organization of six Commonwealth countries created during the First World War which ensures the care of the graves of people in 150 countries around the world. See the CWGC website, available at: www.cwgc.org.

8 Geoffrey Cardozo, *Argentine War Graves Register*, DEFE 70/824, UK Ministry of Defence, 1986 (produced pursuant to Article 17 of Geneva Convention III).

the search for the unidentified. Together with Gabriela Cociffi, an Argentine journalist, Aro began to promote the idea of identifying the still unnamed bodies in the cemetery. Together with the families, they campaigned actively with State agencies, civil society, the Argentine Forensic Anthropology Team (Equipo Argentino de Antropología Forense, EAAF)⁹ and the ICRC. One of their requests for support was to Roger Waters, co-founder of the rock band Pink Floyd, who was on tour in Argentina at the time, and who met with then president Cristina Fernández de Kirchner in early 2012 to support the calls for the identification of the still unnamed fallen in the Argentine Military/Darwin Cemetery. In response to their campaign, including the many letters from families expressing their desire for their relatives to be identified, the president publicly announced on 2 April 2012 that she had addressed a letter to the president of the ICRC requesting the organization to

take the appropriate measures and intercede with the United Kingdom to enable the identification of the Argentine and even English men fallen in the war who have not been identified, because each one deserves to have his name on a tombstone.

This is an excellent example of the important role of families and civil society in promoting State actions on the right to know.

The ICRC accepted Argentina's request, focusing strictly on its humanitarian mission and based on the needs and interests of the relatives and war veterans. The organization's unique forensic capacity for assisting humanitarian action, the only one of its kind in the world, also prompted the ICRC to accept this challenging request.

Several simultaneous and interconnected steps were required before the signing of what became known as the Humanitarian Project Plan (HPP). High-level diplomatic work in Geneva, Buenos Aires and London advanced the negotiations and helped prepare for the complex mission ahead.

The ICRC also worked with authorities in Argentina to develop the international standards necessary for the families of the unidentified soldiers to be informed of and understand the identification process, to be able to give their duly informed consent, and then to provide the information and genetic samples necessary for identification. Between 2013 and 2017, multidisciplinary teams from the Argentine government worked to identify, locate, contact and visit the families. The teams were made up of personnel from the Ministry of Foreign Affairs and Worship, the Secretariat of Human Rights and Cultural Pluralism of the Nation, the Ministry of Social Development of the Nation, the General Notary Office of the Nation (Escribanía General del Gobierno de la Nación, EGGN), (Ministerio de Relaciones Exteriores y Culto, Secretaría de Derechos Humanos y Pluralismo

9 The EAAF is an Argentine not-for-profit scientific non-governmental organization created in 1986 at the initiative of various human rights organizations with the aim of developing forensic anthropology techniques to help locate and identify the Argentines who disappeared during the 1976–83 military dictatorship.

Cultural, Ministerio de Desarrollo Social), the Dr Fernando Ulloa Center for Assistance to Victims of Human Rights Violations,¹⁰ and the EAAF.

Their task consisted of explaining the process and collecting relevant information and biological reference samples (BRS) for DNA comparison. Information collected about the fallen combatants included personal details, physical description, habits, medical and dental data, and personal effects. Buccal swabs were used to collect the BRS from relatives, following the ethical standards of the Declaration of Helsinki.¹¹ The availability of these reference samples was considered vital for identifying the remains.

The ICRC led the agreement with the Argentine multi-agency team on the information collection process, including on the appropriate forms to be used, interview procedures, associated family-needs assessment, and the requirements for informed consent, with a mandatory question to families on their wishes about the final place of burial in case of identification. All the information reports and sets of BRS collected were officially certified by the Argentine authorities through the EGGN, a representative of which was present in all interviews with families. The BRS were sent by the Argentine authorities to the EAAF genetic laboratory entrusted with their profiling and future analysis for identification purposes.

Families were not obligated to participate in the process. Several of the consulted families initially refused to participate, and some even objected to the exhumation and the identification process. The reasons for this were manifold, and included the belief that this project was a political game (actively fomented by rumours dispersed by some sectors of society) and the fear that it was a strategy to “make the Argentine presence disappear from the islands”. This situation changed throughout the process, however, especially after the forensic work in the field and the beginning of the identification notifications to the families, as we will discuss later. At the end of 2017, out of 148 families whose relatives were potentially buried in the Argentine Military/Darwin Cemetery, a total of 107 families requesting the identification of their relatives had provided information and samples, together with their informed consent for the identification process.

Another key step in designing the project was the preliminary visit to the islands in mid-2016 by an ICRC delegation to conduct a feasibility study, including the collection and analysis of soil samples, and to determine the necessary operational set-up and logistics required for such an unprecedented forensic operation. This visit confirmed the feasibility of carrying out the identification process and provided the essential elements needed to design and prepare the required forensic operation. For example, the visit confirmed the impossibility of using tents to install a temporary morgue due to the challenging climatic conditions on the islands, in particular the prevailing winds on the site, and therefore the need to use purpose-built containers instead.

10 The Ulloa Center was responsible for providing psychosocial support and individual follow-up for families.

11 World Medical Association, *WMA Declaration of Helsinki: Ethical Principles for Medical Research Involving Human Subjects*, June 1964, available at: www.wma.net/policies-post/wma-declaration-of-helsinki/.

The visit also ensured the local support that was essential for the success of the operation. This was facilitated greatly through a series of open-door meetings with local community members and local government officials to explain the humanitarian purpose and technical procedures of the forensic operation. This fundamentally helped to mitigate early resistance and dispel negative preconceptions about the objective of the work to be carried out.

At the end of 2016, representatives of the Republic of Argentina and the United Kingdom convened at the ICRC headquarters in Geneva to negotiate the terms of the project, and on 20 December of that year, the Argentine deputy foreign minister, Pedro Villagra Delgado, the minister of State for the Foreign and Commonwealth Office of the United Kingdom, Sir Alan Duncan, and the ICRC president, Peter Maurer, signed the agreement named the Humanitarian Project Plan. This agreement defined the objectives, roles, responsibilities and timelines for the execution of the operation, as well as the forensic processes required, which were in accordance with what was proposed by the ICRC.

Between December 2016 and May 2017, preparations for the forensic operation were finalized. This required the development of specific and adapted protocols, standard operating procedures and forms for each of the stages of the forensic investigation, from exhumation to re-inhumation of the bodies, in order to ensure the systematic collection of necessary information and samples, the adequate documentation of findings essential for the integrated and reliable identification of the bodies,¹² the quality control and assurance of all the procedures used, the preparation of specially prepared standardized reports for the operation, and respect for the dignity of the remains and the cemetery site throughout the process. The forensic operation was framed under and guided by international standards, in particular the United Nations Minnesota Protocol on the Investigation of Potentially Unlawful Deaths,¹³ to help satisfy the need for robust and reliable results. All phases of the operation and activities were described by flow charts, and schedules were prepared in advance of the operation.

Out of humanitarian considerations, it was agreed that all the exhumed bodies, once examined, documented and sampled, would be reburied in their respective graves in new coffins. This required the prior purchase of more than 100 coffins and their transportation and storage on-site. The dignity of the dead was thoroughly respected throughout the operation.

Prior to the launch of the forensic ground operation, the project's forensic coordinator held meetings with the selected genetic laboratories in order to define the statistical formulations to be used for reliable identifications, including the prior and posterior probabilities; the formatting of the genetic identification reports, in Spanish and English; and the final disposition of samples used for DNA testing. As proposed by the ICRC and agreed by the parties in the HPP, the bulk of the DNA

12 Mercedes Salado Puerto *et al.*, "The Search Process: Integrating the Investigation and Identification of Missing and Unidentified Persons", *Forensic Science International: Synergy*, Vol. 3, 2021.

13 *The Minnesota Protocol on the Investigation of Potentially Unlawful Death (2016)*, UN Doc. HR/PUB/17/4, 2017, available at: www.ohchr.org/sites/default/files/Documents/Publications/MinnesotaProtocol.pdf.

analysis, matching and reporting would be carried out by the laboratory selected in Argentina (the EAAF's Forensic Genetics Laboratory), which held the biological reference samples of families of the unidentified fallen soldiers. In addition, for quality assurance and control purposes, 15% of the bone/teeth samples would be sent for testing in two other forensic genetic laboratories agreed by the parties.

The required temporary mortuary was designed and planned for installation at the work site in Darwin Cemetery, and site security and access protocols were established. It was decided to equip the mortuary with state-of-the-art equipment and technology, including for the systematic radiography of all the bodies. A detailed digital and computer support system was designed for the operation, which allowed the management and safeguarding of all the information in real time and with total security, and included a forensic database¹⁴ designed by the ICRC for large-scale identification processes, 1–7.

The Falkland Islands/Islas Malvinas forensic identification operation in detail

The fieldwork for the first HPP (HPP1) was performed between June and August 2017 by a multidisciplinary and multinational team including the project manager, the head of the forensic operation and the forensic experts (one forensic odontologist, two forensic pathologists, four forensic anthropologists, one forensic radiologist, two forensic archaeologists and one forensic logistician), together with support staff. All participating forensic experts were selected on the basis of their extensive international forensic casework experience, including in humanitarian forensic action. They included ICRC and non-ICRC forensic experts, with the latter being hired by the ICRC in order to ensure their necessary diplomatic immunity and to satisfy strict requirements of independence, neutrality and impartiality.

The purpose of HPP1 was strictly humanitarian and was framed under the Geneva Conventions' obligations to identify the war dead. Therefore, the main aim of the forensic operation was only the identification of the unidentified soldiers. Investigation of cause and manner of death was not an objective of HPP1, and it was agreed by the parties that the deaths be recognized as resulting from armed conflict, although specific injuries were documented and described in order to inform families who requested it during the notification. As a particular requirement of the project, the unidentified bodies were to be analyzed on-site and reburied on the same day as their exhumation.

The forensic operation required a sophisticated logistical set-up due to the remote and isolated location of the cemetery. The facilities were set up in a purpose-built protected area close to the eastern edge of the site. Five adequately equipped

14 Ute Hofmeister, Shuala S. Martin, Carlos Villalobos, Juliana Padilla and Oran Finegan, "The ICRC AM/PM Database: Challenges in Forensic Data Management in the Humanitarian Sphere", *Forensic Science International*, Vol. 279, October 2017, 1–7.

containers housed the mortuary, the office, a general store, a rest room and a check-point. A dedicated IT network was established to support communication, data management and reporting, and a specially installed internet link was provided to connect the main office to the accommodation centre, where a separate main server was housed. Automatic backup of data was ongoing; this included closed-circuit video footage of the cemetery which was continually recorded for the entirety of the operation. The fact that the bodies were analyzed on-site and reburied on the same day as their exhumation removed the need for a temporary body storage facility.

Field workflow was divided into the following main components: exhumation (archaeological intervention), triage, mortuary examination (including radiographic, pathological, anthropological and odontological examinations), DNA sampling and analysis, reburial, and preparation of the integrated forensic report. At the beginning and end of the forensic tasks carried out in the cemetery, and at the request of the forensic team on behalf of the families, a religious ceremony was officiated by the parish priest of the local Catholic diocese in honour of those buried there.

Archaeological phase: Recovery of the remains

The aim of the archaeological phase was the recovery of the bodies and the documentation of any evidence associated with the burials. This was done by a team of two forensic archaeologists, the logistician and two support staff. The archaeological approach prioritized not damaging graves that were not to be excavated. The project deadlines, as well as the changing weather conditions during the day on the island (temperatures from -5°C to 7°C , strong winds and occasional snow and rain), required a streamlined approach that included the use of heavy machinery for some of the tasks. Each cross and plate were removed from the grave and soil to a level of 1–1.7 m, in order to enable access to the body. After the remains were exposed (there were almost no remnants of the coffins), further detailed work was completed by the archaeologists using specialized hand tools. Graves were opened individually except in those cases where they were continuous, in which case they were dug at the same time to gain a better visualization of the disposition of the bodies and their alignment in relation to the crosses. All stages were documented photographically.

To ensure compliance with the obligation to re-inter the bodies on the same day as the exhumation, initial preparation of the graves occurred the day prior to the exhumation. This involved the removal of the surface layer of the soil with the mechanical machinery without exposing the remains. The process was facilitated by the fact that the bodies were originally wrapped in two body bags, which were for the most part still relatively well preserved, making it easier to extract the remains in full compliance with applicable standards. On average, between two and four bodies (the full range was one to five) were exhumed and reburied daily, depending on the weather conditions and the complexity of the cases.

Once the remains were extracted from the grave, they were transported on a stretcher to the contiguous triage area and the grave remained empty awaiting the reburial of the body.

Triage

The triage stage involved the first assessment of the bodies before the detailed laboratory examinations and was carried out by the team of archaeologists and one of the forensic anthropologists. The triage site was located adjacent to the mortuary. Each body was labelled with a unique case number generated according to the burial location at the cemetery. At the time of initial burial in 1983, each outermost body bag had been marked in indelible marker with the location of the body recovery site, usually a battlefield. This information was compared with the information in the Cardozo report, and in almost all cases was consistent with the latter.

Most bodies had been placed inside two body bags, which were opened and the contents documented and photographed. Most of the bodies appeared saponified, with only four being fully skeletonized. The burial in multiple body bags, together with the low temperature and prevailing humidity of the ground (5.5°C and 99% at one metre depth), had allowed for the preservation of the soft tissues and ensured their integrity for the forensic examination.

The bodies and body bags were then prepared for the analysis phase by cleaning them of soil and excess water.

Mortuary phase

Mortuary facilities

The mortuary room consisted of a single 40-foot shipping container that had been specially fitted out as a workspace with water supply, electric power, lighting, heating and storage. Hard-wearing, non-porous linoleum flooring covered the entirety of the floor space and aided cleaning and general work safety. Openable windows to aid ventilation and a strong lockable main door were provided for the container. The mortuary facility conformed to local health and safety requirements. It was designed in a systematic manner to make the best ergonomic use of the specialist forensic staff and the available space within the container. A mobile X-ray machine and associated workstation was set up in the mortuary room for easy viewing of radiographs during the *post-mortem* examination. The room was equipped with a single partially movable autopsy table, to facilitate the taking of radiographs and movement of the bodies. A station for collecting and handling the bone samples for DNA analysis was set up in a clean area of the room. A drying oven was used for the bone samples and personal effects, which facilitated their swift processing. A designated storage area for equipment such as autopsy and odontology toolkits, cameras, personal protective clothing, hand-sterilizing gels, specimen containers and body bags was also defined.

Mortuary examination

The workflow was designed to prioritize identification. Prior to body examination, photographic recording of the remains was performed, and the triage assessment

was complemented with a radiological examination. All the pockets of clothes on the bodies were checked to locate any object important for the identification process.

The bodies were then systematically analyzed by the multidisciplinary forensic team made up of two archaeologists, one forensic radiologist, two pathologists, three anthropologists and an odontologist. The lack of space limited the more traditional approach of discipline-specific teams working independently.

Radiographic examination

The mobile X-ray unit allowed for fast and easy scanning and viewing of X-ray images simultaneously during the *post-mortem* examination. For each body, depending on the condition, six to eleven images were taken for a full body assessment. The fact that body bags were opened during the previous triage phase and the body was visible helped decision-making regarding appropriate radiographic images.

The radiological examination provided preliminary information about *ante-mortem* injuries, *peri-mortem* trauma and associated ballistic evidence, and clothing and personal belongings that had not been found when the bodies were initially recovered and examined on the battlefield. It also contributed to the assessment of each individual's age. As mentioned above, all this information aided the identification process.

In addition, the radiographic examination also helped with the detection of artefacts that could pose a hazard to the forensic specialists and support staff. Items of an unknown origin and specifically possible unexploded ordnances that may have been missed or concealed within the clothing at the time of the original burial were checked by one of the archaeological team members (ex-UK military forces) to determine whether they were a threat or safe to handle. This was done prior to any physical examination of the remains.

Associated evidence

The external examination of the bodies was performed by two archaeologists, one pathologist and one anthropologist and involved the inventory and documentation of each set of remains. The radiographic images were used to pinpoint the exact location of associated evidence (personal belongings, ballistic artefacts, etc.).

All clothing was searched by hand for items of interest that may have been concealed within. Ballistic items (such as bullets, magazines and shell splinters (shrapnel)) and personal items were all retrieved for cleaning and recording. Items of a medical nature were also recorded as an indicator of wound damage in relation to ballistic items identified during X-ray imagery. Items of identification and other paperwork were recovered and handled with extreme care during inspection for any information on name or identity prior to being recorded. A list of all clothing was completed using a standardized form.

According to the HPP1 protocols, the bodies had to be reburied with all their belongings (clothing and associated objects). In a few cases, when elements useful for identification (e.g., documents and tags) or personal effects of great sentimental value (e.g., wedding rings or personal correspondence) were found, these were preserved for eventual return to the families, in accordance with the obligations of the Geneva Conventions.

Pathological and anthropological examination

The examination team was comprised of two pathologists and two anthropologists. Working in pairs of a pathologist and an anthropologist, one pair looked for soft-tissue injuries, skeletal trauma and ballistic evidence of any sort, while the other pair photographed and recorded the evidence in the internal exam *pro-forma* form.

A biological profile for each individual was established through various forms of analysis. Potentially individualizing skeletal findings (e.g., *ante-mortem* fractures) were also documented for comparison purposes. In several cases the hands of the individual were in a condition where fingerprinting could be attempted. Restoration work was undertaken by one of the pathologists using the injection of saline solution or the “degloving” and “glove-on” method. These fingerprints were imaged at high quality and transmitted together with the scanned fingerprint paper to Argentine agencies for potential matching.

Odontological examination

The odontological examination was performed after the anthropological/pathological examination. The cranial radiograph was used as a preliminary screening, and where dental evidence was obvious or for dental age estimation purposes, additional specific radiographs were taken of the maxilla and mandible. A complete post-mortem dental charting of missing and present teeth and dental restorative components was completed, again utilizing a standardized form. Graphic documentation of all evidence was used to ensure collection, collation and preservation of the maximum amount of available dental data and appropriate interpretation, as per international best practice. At least two teeth in good (unrestored) condition were extracted from the maxilla and/or mandible and were carefully cleaned and imaged prior to being stored as DNA samples.

DNA sampling and analysis

A forensic expert with the relevant skills was in charge of genetic sampling at the completion of the pathological and anthropological examinations. The methodology followed internationally recognized standard operating procedures, including the ICRC’s own guidelines on the use of DNA analysis for identifying human remains.¹⁵

15 ICRC, *Guidelines for the use of Forensic Genetics in Investigations into Human Rights and International Humanitarian Law Violations*, Geneva, December 2019, available at:

Specimens collected included a section of bone from the tibia, or teeth as mentioned above. Images were taken prior to sampling and again following sampling, showing the section of removed bone or tooth and a label with the correct nomenclature for each case. The chain of custody of samples was ensured throughout the process, from collection to handing over for DNA laboratory analysis.

Bone and dental samples were sent to the EAAF Forensic Genetics Laboratory, located in the Province of Córdoba in Argentina, which was charged with their profiling and matching against profiles generated from the BRS. Additionally, for quality assurance and control purposes, two additional sets of bone samples were collected from fifteen randomly selected unidentified bodies and sent to two independent forensic genetics laboratories in Spain (University of Santiago de Compostela) and the United Kingdom (University of Central Lancashire) for extraction and profiling. These laboratories confirmed the quality and reliability of the analyses carried out in Argentina.

Reburial

As noted previously, the forensic analysis, documentation, sampling and recording of each body were completed in time for its reburial on the same day as the exhumation. Each set of remains was placed in an appropriately labelled white body bag and a new coffin for reburial in the original grave. The bodies were reburied with the artefacts found in the original grave, except those objects with intrinsic and/or sentimental value, which were specially sealed and handed over by the ICRC to the authorities to be returned to the families of the deceased, as required under IHL. In accordance with the humanitarian principles governing the operation, all stages of this process were carried out ensuring dignity and respect for the deceased person, and it stands as a model of a complex forensic operation guided by the duty to protect the dead.¹⁶ The gravesite was subsequently reconstructed to its original form.

Data centre and integrated identification report

The data centre was managed by the forensic coordinator for the project and one of the forensic anthropologists, who was tasked with inputting data into the ICRC database. Information collected from each set of remains was first submitted to a quality control procedure and then entered into the electronic database to enable the comparison between available missing persons and unidentified remains data. As described above, the reconciliation process used all available lines of evidence in

<https://shop.icrc.org/guidelines-for-the-use-of-forensic-genetics-in-investigations-into-human-rights-and-international-humanitarian-law-violations-pdf-en.html>. See also Morris Tidball-Binz *et al.*, "A Good Practice Guide for the Use of Forensic Genetics Applied to Human Rights and International Humanitarian Law Investigations", *Forensic Science International: Genetic Supplements Series*, Vol. 4, No. 1, 2013, e212–e213.

16 See Morris Tidball-Binz, *Protection of the Dead: Report of the Special Rapporteur on Extrajudicial, Summary or Arbitrary Executions*, UN Doc. A/HRC/56/56, 25 April 2024, p. 12, available at: <https://documents.un.org/doc/undoc/gen/g24/066/26/pdf/g2406626.pdf>.

an integrated approach to generate a preliminary hypothesis of identification. This potential identification was then supported or excluded by DNA comparison.

The forensic coordinator was charged with overseeing the overall project and its quality control and assurance. Work schedules, logistics and daily human remains identification workflow in the mortuary were managed by the coordinator to ensure that the HPP standards were met. On a daily basis, each phase of the forensic analysis generated its specific report (archaeological, radiological, external examination, associated evidence, pathology, anthropology, odontology and genetics), which included the methods applied and the essential findings. In this last fieldwork phase, the coordinator was in charge of checking these reports and integrating them into a single draft report for each case, called the Preliminary Integrated Expert Report, which summarized all the forensic analyses and findings for each specialty.

Once the results of the genetic analysis were received, the multidisciplinary technical team met in Geneva to carry out the process of reconciling the information for each case and the drafting of the final version of the Integrated Expert Report.

The final reports were subsequently completed and presented to the delegations of Argentina and the United Kingdom at the ICRC headquarters in Geneva, in the framework of a diplomatic meeting that was held in December 2017 and which underlined the quality of the process, the commitment and support of all those who collaborated in the operation, and the results achieved.

Results of HPP1

In total, 122 sets of human remains were exhumed from 121 graves,¹⁷ examined, and then reburied in the Argentine Military/Darwin Cemetery.

DNA profiles were obtained from all 122 sets of human remains. The threshold for DNA identifications was set at 99.95% – this high threshold was agreed among the three participating laboratories to ensure the highest surety of identification. Also, as agreed before the operation, all DNA samples that survived the process of conducting the DNA tests were subsequently destroyed for reasons of data protection. The DNA profiles of non-identified remains were stored in the genetic laboratory in a separate database for comparison with profiles obtained from families who wish to donate samples in the future. Strict data protection requirements were complied with throughout the operation. Reports were prepared for all families who submitted BRS samples, including those whose loved one had not been identified.

At the time of the presentation of the results in Geneva (December 2017), the ICRC forensic team had identified eighty-eight combatants and had collected the information and processed the samples necessary to enable the future identification of all thirty-four remaining bodies, provided that sufficient information and samples were available from the families concerned.

17 One grave contained the mixed remains of two persons.

In the days following the delivery of the reports in Geneva, the Argentine authorities proceeded to inform all the participating families, in a personal and confidential manner, of the results of the operation and to deliver to them the corresponding reports and personal belongings recovered. This delicate process was in line with good practices in this area, shared in advance by the ICRC with the teams involved.

The notifications to the families were carried out by multidisciplinary teams, following the same institutional representation scheme explained above for the interviews and taking of BRS. This was always done in the presence of the a representative of the EGGN, who certified the process and consulted the families on their wishes regarding whether the body should remain buried on the islands or should be transferred to the mainland.

Questions from relatives were answered as information became available, and doubts and rumours regarding each case were dispelled. All the families that had given consent to participate in HPP1 were notified of the results individually, regardless of whether the body had been identified or whether it was known with certainty that their relative was not among the bodies buried in the cemetery.

After the delivery of the reports and when the professionalism, commitment and respect used for the operation were made public, several families who until that moment had not participated in the process decided to do so, providing the necessary information and samples to enable the identification of an additional thirty-four soldiers.

HPP2

All except one of the exhumations, examinations and identifications that occurred as part of HPP1 involved single burials. It was known that two graves at the cemetery actually contained the remains of multiple individuals,¹⁸ some of whom had already been identified in 1982. Due to the complexity of the initial recovery of these remains, and their condition (burned and fragmented), it had not been possible for the British personnel to separate the individuals, so they were interred together with multiple names on the plaque. The six families of those interred in one of these graves, whose deaths had been the result of a helicopter crash, agreed to request the identification of their loved ones and provided the necessary information and samples. In 2019 the ICRC was again requested to facilitate the forensic process.

After renewed diplomatic negotiations and agreements, a team of six forensic specialists returned to the Falkland Islands/Islas Malvinas to complete a second operation (HPP2) in September 2021. A similar logistical set-up was installed, though it was slightly complicated by COVID-19 restrictions. On this occasion the objective was twofold, since in addition to the identification of the bodies, their individualization was required – that is, the separation of the elements that corresponded to each person.

18 This excludes the double burial mentioned at above note 17.

The forensic team conducted an anthropological analysis of the commingled human remains, took samples for genetic analysis, temporarily buried the remains, and waited on the islands until the genetic results were available. With these results, it was possible to re-examine the bodies and proceed both with their individualization and with the reconciliation of the missing persons information with the *post-mortem* information prior to their identification. The six combatants were successfully identified and their bodies individualized at the completion of the mission.

During this period on the islands, the forensic team participated in virtual meetings with the families and the Argentine authorities. In these meetings, the families were informed of the process, notified of the identifications and consulted about their wishes regarding the final reburial of the bodies. These wishes were later certified by the EGGN.

Three of the families expressed their desire that their family members remain buried in the original grave; to this end, the remains were placed in individual containers within the same coffin, and duly labelled with metal plates containing the code of the body and the name of the person. Two of the families wanted their family members to be buried in new individual graves. In the case of the sixth family, whose loved one had already been identified and buried in a single grave in 1982, the mixed remains found in the multiple burial were reunited with the rest of the body.

In agreement with the families, the burials were carried out at a certain time so that the families could hold ceremonies at the same time in their respective villages. A video of each burial was recorded and sent to the family concerned, along with the Integrated Expert Reports on the identification.

Lessons learned and conclusions

Of the Argentine soldiers originally buried without a name in the Argentine Military/Darwin Cemetery, 117 were successfully identified in HPP1 and five additional new identifications were made in HPP2. These identifications were ultimately made possible by the fact that the British respected their obligations under IHL to respect and protect the dead, recorded the identifying information, and provided dignified burials that were also recorded. By initiating a grave registration system and ensuring that identification details were preserved, the confirmation of identity was able to be completed, even forty years after the conflict.

While no forensic identification exercise is ever straightforward or without challenges, be it after conflict or disaster, HPP1 and HPP2 illustrate good practice and may serve as a model for the discipline of humanitarian forensic action, drawing on the ICRC's experience and expertise in the field. This experience and expertise made it possible to overcome important logistical obstacles, including those related to geographical isolation and the extreme climatic conditions prevailing on the islands, and to solve complex forensic problems, including those inherent to an

integrated, large-scale identification process with strict deadlines, ensuring throughout the process the maximum rigour of control and quality assurance and maximum respect for the dignity of the dead while at the same time complying with the multiple legal and diplomatic requirements for the operation, to the satisfaction of the families and the parties concerned. The process also contributed positively to dialogue and rapprochement between the parties on such a noble issue as shared humanitarian objectives.

These operations could also be, and have already been, used to sensitize and inform militaries on their obligations to the enemy's dead during conflict, and how respect for these obligations can bring relief to the families.

Most importantly, the HPP is an example of the influence that families can have in enabling such actions. Without the active and unrelenting pressure from the former combatants and the family associations in Argentina, this humanitarian action may never have eventuated. The project also embodies the enormous impact that respect for families and their active participation can have on the credibility, reliability and acceptance of such processes at a societal level. When the forensic process was ultimately understood by the families, when they came to understand the efforts that the British had made, and when they saw the results of the HPP1 mission, there was an increased level of trust and a sense of comfort for the community. This highlights the role that forensics can play as a catalyst for reconciliation and peacebuilding, and the relief that knowledge and conformation of the fate and whereabouts of loved ones brings to families.