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# Personnel Recovery

That Others May Live to Return With Honour

A Primer



**Joint Air Power  
Competence Centre**

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**Joint Air Power  
Competence Centre**

**Centre de Compétence  
de la Puissance  
Aérienne Interarmées**

von-Seydlitz-Kaserne  
Römerstraße 140  
47546 Kalkar  
Germany/Allemagne

[www.japcc.org](http://www.japcc.org)

TEL +49 2824 90 2200  
NCN +234 or 239 2200  
FAX +49 2824 90 2274

[contact@japcc.de](mailto:contact@japcc.de)

**FROM:**

**The Executive Director of the Joint Air Power Competence Centre (JAPCC)**

**SUBJECT:**

**An Overview of the History and Conceptual Developments of Personnel Recovery –  
A Primer**

**DISTRIBUTION:**

**All NATO Nations and Relevant Organisations – Releasable to the Public**

Over the last two decades, situations involving isolated personnel and hostages have had a profound impact on politicians and the general public. Because of the availability of television and the Internet, people receive more detailed information and are therefore gripped by more of these cases. There are many examples where situations involving isolated personnel or hostages caused political embarrassment, and even where military operations had to either be significantly altered or ceased due to sensitivities tied to public perception. Recovering people from these situations becomes increasingly important now that we understand what the consequences can be at the national and international political and military levels. Whilst we understand the significance of these matters, Personnel Recovery (PR) is still developing too slowly within the Joint Military environment.

This Primer is designed to provide the reader with an overview of the history and conceptual developments of PR. It describes how PR has evolved into a consolidated effort from international joint military organisations to recover isolated personnel in all situations, whether in peacetime or combat environments. It identifies that a combination of capabilities, education and training are not yet fully understood by a significant portion of NATO members and are not structurally arranged within many NATO military organisations. This document provides international military leaders and staffs with guidance in understanding the importance of PR and how they can imbed this concept into their respective organisations. A common purpose amongst nations is a necessary first step toward ensuring better development of PR within their respective military organisations. This document will act as a catalyst to generate discussions toward these goals. In the end, it could become a basis for better cooperation and understanding of working together with civil authorities in the future because there is a global interest in enhancing the positive outcome of PR and hostage taking. Finally it seeks to communicate the importance of looking at this issue through a global lens and to define the effort needed for a comprehensive approach for an effective PR system.

I would like to especially thank Maj Bart Holewijn for his contributions to this product. We welcome your comments on this Primer or any of the future issues it identifies. Please feel free to contact my Combat Support Branch at JAPCC. E-Mail: [jpr@japcc.de](mailto:jpr@japcc.de). Tel. +49 (0) 2824 90 2258 or 2248.

**“That others may live to return with honour”**



**Dieter Naskrent**

Lieutenant General, DEU AF  
Executive Director

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# CHAPTER 1

## Introduction

### 1.1 Introduction

Throughout history, armies traditionally fought the wars whilst government officials, explorers and tourists travelled and worked all over the globe. During war, travel or exploration, individuals may have become isolated from their group, or the group itself may be lost or fall victim to some disaster with no possibility of making it to safety. From a military perspective, the isolation, capture and/or exploitation of personnel during operations can have a significant negative impact on operational security, the morale of assigned forces and on public support. This is particularly true in the current information age where everything we do can and will be recorded on television and the Internet.

The consequences for isolated personnel have not gone unnoticed. There are many initiatives, national as well as multi-national, in the field of Personnel Recovery (PR). However, whilst many of these initiatives may be known to a wider audience, most are limited to a small group of Subject Matter Experts (SMEs). There has however been a significant increase in interest in the development of PR.

### 1.2 Aim

The aim of this Primer is to provide an insight into the history of PR and to pursue a common global standard; to highlight the current complexities with stand-alone national policies; and to suggest changes necessary for a collaborative approach.

This document first provides a history of PR. It then describes the current status of conceptual developments before finally providing ideas for the way forward.

### 1.3 What is Personnel Recovery?

Before continuing on, it is essential for the reader to have a clear understanding of what constitutes PR

and how it differs from other forms of recovery and / or rescue. For the purposes of this document the following definitions are used:

**Personnel Recovery: The sum of military, diplomatic and civil efforts to effect the recovery and reintegration of isolated personnel [11].**

The above is to be proposed as the definitive for both NATO and the European Union (EU). It means that every effort will be made to recover people, for whom one is responsible, back to safety once they find themselves in difficulties. This definition purposely does not limit the resources that can be utilized during the recovery effort.

**Isolated Personnel: Military or civilian personnel who are separated from their unit or organisation in a situation that may require them to survive, evade, resist exploitation, or escape while awaiting recovery [11].**

This definition is also proposed to become the formal definition for both NATO and the EU. It means that if one is unable to continue the mission and cannot be returned through pre-planned arrangements, he or she may be considered to be isolated. This is obvious in the case of aircrew who have been forced to eject from their aircraft. However, one may also be considered to have become isolated if the vehicle one drives has run out of fuel or is forced to stop due to any kind of malfunction or accident, whether or not through human intervention.

### 1.4 Scope and Limitation

**National and International.** This Primer addresses initiatives in the field of PR, both nationally and internationally. The JAPCC is aware of initiatives within NATO and the EU in addition to initiatives in the Pacific region. However, this document is by no means prescriptive.

**Non-conventional Assisted Recovery and Hostage Rescue.** With Non-conventional Assisted Recovery (NAR), Special Operations Forces (SOF) and / or insurgents are

employed to recover isolated personnel; SOF are again employed, alongside diplomatic and civil means, during Hostage Rescue. Both NAR and Hostage Rescue are normally considered part of PR. However, within NATO, it has been decided that NAR and Hostage Rescue sit within SOF doctrine rather than PR doctrine. Moreover, Hostage Rescue is usually considered a national task rather than at the NATO / EU force level. NAR and Hostage Rescue are therefore considered outside of the scope of this document.

**Other Personnel.** As previously stated, PR is about recovering one's own personnel, i.e. people for whom one has a responsibility. As a minimum this includes the military and civilian personnel that constitute the National / NATO / EU force. The force commander should also be aware of, and consider, all participants within the operational theatre that are not subordinate to the force commander (e.g. members of Non-Governmental Organisations (NGOs), Other Governmental Departments (OGDs), reporters etc.). Dependent upon the number of 'other' personnel, the techniques and procedures used to recover them may be the same or similar in nature. The separate recovery of other personnel is therefore not included in the scope of PR unless the Operation Plan (OPLAN) for the operation states otherwise. Support to outside agencies should be

provided under the umbrella of a Non-combatant Evacuation Operation (NEO).

**Recovering Equipment.** Recovering equipment may, in certain cases, be considered as important as recovering personnel. The techniques used to recover equipment may be considered to be the same or similar to the recovery of personnel. Nevertheless, the principle (moral) differences between recovering personnel and equipment are substantial. Therefore, the recovery of equipment is considered outside the scope of this document.

**Survival Equipment and Personnel Recovery Tools.** This document focuses on the conceptual developments in PR. Conceptual developments lead to requirements for survival equipment and other PR tools to be developed and acquired. Although not the primary focus, such equipment requirements are addressed when appropriate.

**This is not an Asset Register.** This document does not comprise a catalogue of the PR capabilities that individual nations and international organisations have at their disposal. As PR may be conducted using any available resource, a register would simply, and pointlessly, list a country's available military and non-military assets.





In former times, war was compact and it was difficult to get isolated.

## CHAPTER 11

### History

*"If I say it's safe to surf this beach, Captain, then it's safe to surf this beach!"*

Lt Col Bill Kilgore (Film: 'Apocalypse Now')

#### 2.1 Introduction

To understand fully the current state of PR it is important to first review its inception and development. This chapter is not intended as an authoritative history of PR but merely attempts to highlight historical developments and examples that have been important in its development.

#### 2.2 Before World War II

**2.2.1 Military.** In former times, wars were typically fought as a series of battles with the size of each battle limited by the number of participating soldiers. Command and Control (C2) was exercised through the use of visual (e.g. flags) and aural (e.g. voice or bugle)

signals by the commander who oversaw the battlefield from a distance. Due to the lack of both long-range and night-compatible communications the physical battlespace was limited in size and the fighting limited to daylight hours. As battles were confined in space and time, it was relatively difficult to become isolated and relatively easy to self-recover. However for those who became isolated, the commander typically did not care much for their well-being; not simply because of a lower value for human life but in many cases the troops were mercenaries. Should mercenaries not return, no ransom money or salary would have to be paid. For injured and isolated personnel, the situation was even worse. Medical care was at best limited, with a high probability of dying as a result of wounds.

Change was measurable during the 19th century with the advent of the Industrial Age. Mechanisation not only revolutionised the economy but also changed the nature of warfare. The mass production of weapons and communications (e.g. the telegraph) resulted in the use of larger armies that could be commanded and controlled over larger battlefields in battles lasting



**In former times, numbers of POW were significant and hardly any recovery was conducted.**

for many days. However the personnel were still considered as a cheap commodity with limited training and easy to replace. This culminated in the massive battles of World War I during which tens of thousands of soldiers perished in a single battle. Despite the size of the battlefield, trench warfare was a very linear battle with the chances of becoming isolated still rather slim. However commanders still considered casualties acceptable and had limited interest in recovering isolated personnel.

Despite the carnage of the Great War, matters changed little in the Inter-War years. Opinion considered warfighting to be a concept of the past and thus did not consider the development of new military concepts to be a priority; this despite the fact that soon after the Armistice several conflicts and small-scale wars broke out. The conceptual development of military operations focused on swiftly delivering a deadly blow to the opponent and in avoiding static trench warfare. This meant that even if personnel became isolated, hostilities would be limited in time.

**2.2.2 Civil.** Civil travel was limited in earlier times and was typically the preserve to explorers and missionaries who travelled to remote areas. Due to the lack

of fast means of travel and communications, it would take a considerable time for people to be reported as missing and a subsequent search for them to commence. Good example of this is the story of Dr David Livingstone (see intermezzo 1) and Captain Scott. However, stories of people being searched for, located and recovered are rare. In the majority of cases the missing were simply assumed to have fallen victim to an accident and no further action taken. Nevertheless, the fate of those missing appealed to the imagination of the wider public. One notable example is the 1719 novel *Robinson Crusoe*[30] written by Daniel Defoe.

**Intermezzo 1:**  
*Six years of isolation for Dr Livingstone*

**Dr Livingstone I Presume?** During the mid-19th century, debate surrounded the origin of the River Nile. Some thought the river originated from Lake Victoria whilst others thought it started further south.

In January 1866, Dr David Livingstone set out to seek the source of the Nile. After setting out from the mouth of the Ruvuma river, Livingstone's assistants began deserting him and informed the authorities that Livingstone had in fact died. Livingstone, meanwhile, continued on his expedition. However, over time, most of his medicine and supplies were stolen and he became ill from several tropical diseases.

Livingstone lost almost complete contact with the outside world for six years and was ill for most of the last four years of his life. Of his 44 dispatches only one made it to Zanzibar. Henry Morton Stanley, who in 1869 had been sent by the New York Herald newspaper, finally found Livingstone on the shores of Lake Tanganyika on 27 October 1871, greeting him with the now famous words "Dr Livingstone, I presume?" to which Livingstone responded "Yes, and I feel thankful that I am here to welcome you."



**Captain Scott strived to be the first person to reach the South Pole, but failed by 33 days. He and his team perished on their return and were found eight months later by a search party.**

## 2.3 World War II up to the Gulf War (1991)

**2.3.1 Military.** Significant change occurred during the course of World War II. During the Battle of Britain in 1940, the immediate problem, in particular for the Royal Air Force, was the acute shortage of experienced aircrew. Placing inexperienced aircrew in expensive fighters not only produced limited fighting capabilities but often resulted in the loss of the aircraft through enemy fire. Recovering aircrew therefore became a cost-effective way of increasing fighting power.

It became increasingly evident to both sides that aircrews ditching in the English Channel or being shot down over mainland Europe had limited chances of survival if there was no effective rescue system for recovery. Maritime patrols were established for downed aircrews in addition to networks of resistance cells to aid aircrew to evade to neutral countries.

In the Pacific theatre the situation was somewhat different. In Japanese culture it was deemed unacceptable to surrender to the enemy with many Japanese aircrew choosing to die with their aircraft and inflicting as many casualties as possible in kamikaze-style actions.

On the allied side it proved impossible to conduct long-range rescue over the vast Pacific Ocean. Aircrews were therefore forced to ditch crippled aircraft as close to friendly ships as possible in order to effect their own recovery. In the case of aircrew forced to bail out over land, they had limited chances of surviving the parachute landing and of being accurately located in the jungle. Furthermore there were no dedicated means available to recover personnel.

The introduction of the helicopter, particularly during the US involvement in Vietnam, delivered a revolution in PR. Helicopters had been in existence since World War II, although their utility had been limited by a lack of powerful engines and lift. A major leap forward was the introduction of the HH-3 'Jolly Green Giant', powerful enough to carry protective armour, defensive weapons, sufficient fuel to cover all of North Vietnam and, vitally, a hoist to recover personnel from the jungle floor; it was also capable of carrying a team of Para Jumpers (PJs). These PJs were not only trained as Para Jumpers but were also combat medics, unarmed combat specialists and scuba divers and are referred to as Pararescuemen. In 1967 the improved HH-53B 'Super Jolly Green Giant' arrived in Vietnam and was closely followed by the HH-53C. This improved variant was Air-to-Air Refuelling capable and



**HH-3E 'Jolly Green Giant', the first dedicated CSAR helicopter.**

thus had a potentially unrestricted range. During the 1980s the later variant HH-53Es were finally replaced by the HH-60G 'Pave Hawk' helicopter which still forms the backbone of the Combat Search And Rescue (CSAR) capability for the United States Air Force (USAF)[23, 55].

**2.3.2 Civil.** With the dawn of the jet airliner, global travel became more accessible followed by an inevitable growth in tourism. Despite this growth, the prospect of becoming isolated receded even in the more remote areas. In instances of people becoming isolated, media coverage was not widespread and therefore an intensive search was not always guaranteed.

## 2.4 Gulf War (1991) up to the Present

**2.4.1 Military.** The first Gulf War (1991) has been described as the first true Media War. Advances in media capabilities were exploited by military and non-mili-

tary on both sides, however the scale and effect of the exploitation of prisoners increased dramatically. This media phenomenon (the so-called CNN effect) was not new, however the effect on the morale of the general populace of Western nations was significant. Shortly after the outbreak of hostilities, Iraqi television broadcast images of Coalition Prisoners of War (POWs) including Maj Coccione, Flt Lts Peters and Nichol shot down in their Tornado by Iraqi MANPADS. The



© Copyrighted (from video)

**Flt Lts Peters and Nichol.**

Coalition considered this exploitation of POWs as a war crime and in breach of the Geneva Conventions<sup>1</sup>. The Iraqi regime had hoped to demoralize both the Coalition military and their respective populations. In fact it only served to strengthen the Coalition in their efforts to secure victory.

The potentially negative impact of captured personnel being paraded in the media was further highlighted by the experience of the US-led Unified Task Force (UNITAF) sent to Somalia in 1992 under United Nations Security Council (UNSC) Resolution 794[57]. On 03 October 1993 a US helicopter was shot down (see *Intermezzo 2*), with the pilot the eventual sole survivor. Global television audiences witnessed Somali militia dragging the dead bodies of the aircrew through the streets of Mogadishu. As a result, President Clinton ordered additional troops to Somalia to protect the remaining US forces, ordered all military activities to cease on 06 October (except in cases of self-defence) and ordered a full withdrawal by the end of March 1994.

### *Intermezzo 2: Blackhawk Down*

**Blackhawk Down.** CW3 Michael Durant was the pilot of SuperSixFour, a MH-60A Black Hawk of the 160th Special Operations Aviation Regiment (SOAR). On 03 October 1993, during Operation Gothic Serpent, SuperSixFour was hit by a rocket-propelled grenade and crashed approximately one mile south-west of the operation's target in downtown Mogadishu.

Durant and his crew of three, Bill Cleveland, Ray Frank, and Tommy Field, survived the crash, though they were badly injured. Durant suffered a broken leg and a badly injured back. Two Delta Force snipers, MSG Gary Gordon and SFC Randy Shughart, had been providing suppressive fire from the air against hostile Somalis who were converging on the crash site. Both volunteered for insertion and fought off the advancing Somalis, killing an undetermined number, until they ran out of ammunition and were overwhelmed and killed, along with Cleveland, Frank, and Field. Both Gordon and Shughart received the Medal of Honour posthumously for this action.

The Somalis held Durant in captivity for eleven days after which he was released, along with a captured Nigerian soldier, into the custody of the International Committee of the Red Cross (ICRC). After being freed, Durant made a rapid recovery and returned to fly with the 160th SOAR.[32]

A further example of the exploitation of military personnel through the media was during UN/NATO operations in Bosnia-Herzegovina during the 1990s. In response to NATO aerial bombing missions, Bosnian Serbs broadcast pictures of UN personnel being held as human shields at strategic locations. Although first broadcast on Serbian television, the pictures were quickly transmitted to the worldwide audience. This seriously affected the NATO air campaign.

A further dimension to PR became evident during the Second Gulf War (2003). The ambush of 507th Maintenance Company personnel emphasized the asymmetric nature of modern warfare in which all deployed personnel were at risk of isolation, capture and / or exploitation. Prior to this time PR training had been focused on those personnel who, by virtue of their role and position such as aircrew, Special Forces and observers, were considered prone to capture. However it became clear there was a moral duty and increasing political pressure to recover isolated personnel regardless of their role or position. This led to the realization, within the military, that significantly more personnel required to undergo PR and SERE (Survival, Evasion, Resistance and Extraction) training, the demand for which could not be satisfied by existing training mechanisms.

### *Intermezzo 3: Jessica Lynch*

**The Ambush of 507th Maintenance Company.** On 23 March 2003, a convoy comprising elements of the US Army's 507th Maintenance Company and the 3rd Combat Support battalion, made a wrong turn into enemy territory and was ambushed near Nasiriyah, 200 miles West of Basra.

Eleven soldiers were killed in the ambush with six (including Private Lynch, a female supply clerk) being

captured. Another female soldier, Lori Piestewa, received a serious head wound in the ambush and later died in an Iraqi civilian hospital. Lynch was wounded and initially listed as Missing In Action. Video footage of the American Prisoners of War, including Piestewa, was later broadcast to the world on Al Jazeera television.

After a period in the custody of the Iraqi Army, Lynch was taken to a hospital in Nasiriyah. US Forces were informed of her location by an Iraqi, who informed them she had been tortured and injured but was still alive.

On 01 April 2003, US Marines staged a diversionary attack in order to draw Iraqi irregulars away from the Saddam Hospital in Nasiriyah. Meanwhile, a raid was launched on the hospital and successfully rescued Lynch and retrieved the bodies of 8 other American soldiers.

After the war, footage was recovered of both Lynch and Piestewa at an Iraqi hospital; in the footage, the latter was still alive.



**After being captured by the Iraqis, Jessica Lynch was part of a daring and complex rescue and returned safely to the USA.**

Upon the commencement of NATO-led International Security Assistance Force (ISAF) operations in Afghanistan, it was immediately noted that large swathes of the country were effectively uncontrolled. The geo-

graphy and topography of Afghanistan, in addition to the enemy threat, made the recovery of isolated personnel a difficult task, not helped by a shortage of available recovery assets. ISAF had to depend on available US forces operating under Operation Enduring Freedom (OEF) which led to a complex, parallel C2 structure. Only after a series of incidents and the addition of other coalition recovery capabilities was the C2 structure addressed.



**Terry Waite was taken hostage in Beirut and released after almost four years of captivity in total isolation.**

**2.4.2. Civil.** The threat of isolation or capture to civilian personnel has increased in direct proportion to the increased involvement of civil organisations in conflict areas. The majority of these organisations are NGOs, OGDs and local charities / projects / initiatives such as the International Committee of the Red Cross (ICRC), United Nations High Commissioner for Refugees (UNHCR) and Médecins Sans Frontières (MSF). In addition the number of civilian staff contracted to the military has also increased (e.g. political advisors, legal advisors, etc.). Enemy forces have increasingly adopted the capture of vulnerable civilian hostages, vice military personnel, in order to further political or military advantage with the capture of hostage negotiator Terry Waite as an example. Quite often civilian organisations prefer to remain independent of the military (and its associated protection) to carry out their work.

#### Intermezzo 4: Giuliana Sgrena's Kidnapping

**Giuliana Sgrena's Kidnapping.** Giuliana Sgrena (born December 20, 1948) is an Italian journalist who worked for the Italian communist newspaper *Il Manifesto* and the German weekly magazine *Die Zeit*. While working in Iraq, she was kidnapped by insurgents on the 04 February 2005. Her release was subsequently negotiated and she was freed on the 04 March 2005; however, rumours persisted that Italy apparently paid a ransom for her release. She was later shown in a video pleading that the demands of her kidnappers (the withdrawal of Italian troops from Iraq) be fulfilled.

After her release, Sgrena and the two Italian intelligence officers who secured her release came under fire from US forces at a checkpoint while on their way to Baghdad International Airport. Nicola Calipari, a Major-General in the Italian military intelligence service, was killed, and Sgrena and one other officer were wounded in the incident. The event caused an international outcry.



**Giuliana Sgrena returned safely to Italy after a very complicated rescue from Baghdad.**

The emergence of round-the-clock news coverage (by stations such as CNN and the BBC) has led to a significant increase in the numbers of war correspondents and reporters deployed in the conflict area. Whilst many are professionals in their chosen field, a significant number of reporters have limited, if any, experience in conflict areas and are therefore

ill prepared for the risks they potentially face. There are several memoirs from reputable journalists such as Kate Adie[10] and Martin Bell[22] who have spent a considerable time reporting from conflict zones. These memoirs mention situations in which the reporters have (almost) become isolated and prone to capture. Bell himself was wounded by shrapnel while reporting a live 'stand-up' for the BBC in Bosnia.

The constant demand for the rapid dissemination of information in the modern age has resulted in near-instantaneous national (and international) news and, in the instance of isolated / captured or kidnapped personnel, governments are compelled by the weight of public opinion to act. The case of Giuliana Sgrena (Intermezzo 4) is an example of a situation where SOF are tasked to execute the recovery.

The question presented to political leaders and military commanders is whether the isolation / capture of civilians should be considered under the umbrella of PR or rather under NEOs. This debate will be addressed in more detail in paragraph 3.2.3.

## 2.5 Trends

In conclusion, several trends in the conduct of warfare have emerged over time, which are relevant to PR. Key trends that have been considered important to the conceptual development of PR in this chapter are:

**Hybrid Warfare.** Up to and including the Cold War era, the primary military concept was focused on force-on-force (typically nation versus nation) engagement with an adversary that was similar in strength, organisation and weaponry, and with a relatively defined front-line. Since the end of the Cold War, the focus has moved towards an opponent that is significantly dissimilar in strength and also different in organisational identity (insurgents) and in the manner in which they operate (e.g. asymmetric warfare).

**Coalition Operations.** Military operations are typically conducted by nations comprising a coalition of the willing and able. Coalition operations present a number of challenges in key areas such as Command

and Control, Rules of Engagement, interoperability, communication etc, and thus tend to increase the complexity of military operations. This has led to the increased requirement within standing Coalitions for common standards in policy, equipment and training.

**Comprehensive Approach.** Operations are increasingly conducted within the framework of the Comprehensive Approach. This has resulted in an increasing number of International Organisations (IOs) / OGDs and NGOs that work, in parallel with the military, in nation building but are separate from the military command structure.

**Personnel are not Expendable.** Military commanders have recognized the increasing cost of training personnel to use modern high-technology weapon systems; the value of well-trained personnel to the commander has therefore increased. In addition, western populations have grown sensitive (perhaps due to media coverage) to the numbers of fatalities and casualties suffered, and have increased the pressure upon political

leaders to minimize the loss of life and to make every effort to recover captured/isolated personnel.

**Exploitation.** Adversaries have gained easy media access to a global audience and can, through the use of footage of captured personnel, attempt to influence public and political opinion. This tactic is not only advantageous in terms of lowering enemy morale but the exploitation and trading of captive personnel can also reap financial benefits.

**Increased Rate of Progress.** Developments in modern technology have increased the scale and tempo of military operations, including the field of PR. It has proved difficult for conceptual thinking to keep pace with the rate of change in technology, like with the arrival of GPS and SATCOM. It would appear that the military is reactive to the speed of development rather than agile in its thinking.

1. Article 13 of the 3rd Geneva Convention implies that the public showing of POWs, in whatever way (TV or pictorial) is a breach of International Humanitarian Law (IHL) and in severe cases can be judged as a war crime.



# CHAPTER III

## Conceptual Developments

*“Having a Personnel Recovery capability will not make you win a war. Not having one certainly can make you lose one ...”*

Gen Lance Smith (Former SACT)

### 3.1 Conceptual Developments within NATO

Until 2004, NATO doctrine with respect to PR (although that specific term was not used) was addressed in both the Search And Rescue (SAR) manual (ATP-10[1]) and the CSAR manual (ATP-62[20]). NATO helicopter doctrine (ATP-49(D)[18]) also addressed what was originally called Limited Extraction (LIMEX) and later referred to as Combat Recovery (CR). The delineation between these three documents is illustrated in Figure 1.

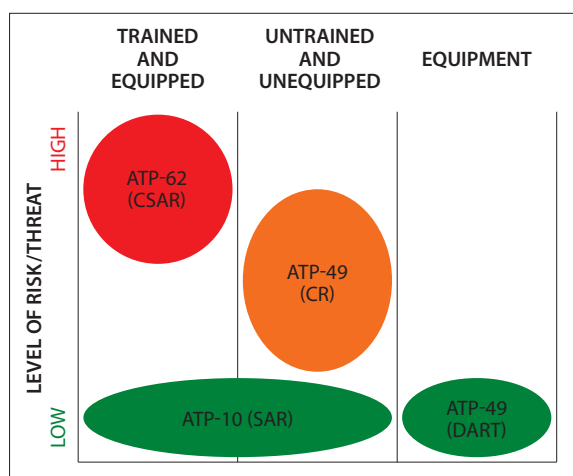


Figure 1: Delineation of ATP-10, ATP-62 and ATP-49.

Whilst the SAR manual made no distinction between survivors, based on their level of training nor on the survival equipment they carried, the CSAR manual focused exclusively on aircrew. The CSAR manual was based on the premise that, whilst there was a hostile threat to the isolated personnel, the recovery force had complete freedom of movement in the employment of their tactics and procedures when in

the vicinity of the isolated personnel. The capability requirements of the recovery force were tailored to a singular survivor, or (worst case) a limited numbers of survivors.

The LIMEX concept was developed once it became clear that the CSAR concept and capability only considered downed aircrew. Land Forces had identified a requirement to recover their own personnel particularly during any form of air manoeuvre operations.

In 2004, NATO drafted PR policy and doctrine with SERE training standard and PR Tactics, Techniques and Procedures (TTPs) following in short order.

**3.1.1 NATO Search and Rescue – Development History.** Since its inception, NATO has developed a standard for the conduct of SAR operations in the absence of any international procedures. In the resulting publication, ATP-10 NATO Search and Rescue, SAR is defined as:

**Search and Rescue: The use of aircraft, surface craft, submarines, specialized rescue teams and equipment to search for and rescue personnel in distress on land or at sea (1 November 1968)[9].**

Several new editions were published, resulting in ATP-10(D) being published in 1995[1]. It had however taken seventeen years to develop as there was a significant disagreement between two member nations. A revision of ATP-10(D) was started in 2000, but was faced with the same disagreement. In 2005, the majority of NATO nations ratified ATP-10(D) with a single ‘not ratifying’ abstention from one member nation. As a consensus could not be reached, the new edition could not be promulgated and the Military Committee (MC) was requested to seek resolution on the issue. Meanwhile no editorial changes could be made to either ATP-10(D) or the proposed new edition.

In the meantime, the International Civil Aviation Organisation (ICAO) and the International Maritime Organisation (IMO) both recognised there was a gap in the civil provision of SAR. A joint working group was formed to develop civil SAR, which resulted in the

publication of the ICAO and IMO Search and Rescue (IAMSAR) manual. The revised edition of ATP-10(D) had considered aspects of the IAMSAR manual to ensure, where possible, the procedures were harmonised.

In 2009 a revised edition of ATP-57 Submarine Rescue manual[19] was drafted. As a result, the chapter on submarine rescue within ATP-10(D) had to be removed and replaced with a completely new text. As no editorial changes could be made to the existing or proposed ATP-10(D), a doctrinal conflict arose.

Eventually, the United Kingdom (UK), the then-custodian of ATP-10, proposed to cancel ATP-10(D) and utilise the IAMSAR manual. The proposal for nations to de-ratify ATP-10 was discussed before the Military Committee Air Standardisation Board (MCASB) on the 07 July 2009. Shortly after this meeting Belgium, the Netherlands, the UK and the US de-ratified the document, with other member nations stating their intention to follow suit. Should more nations de-ratify ATP-10, then the NATO SAR Panel will be forced to reconsider NATO policy. As existing NATO policy is to adopt civil standards wherever practicable, the most likely course of action will be to formally propose the cancellation of ATP-10 in favour of the IAMSAR manual (see also paragraph 4.2.2.).



SAR in mountainous terrain.

**SAR Concept – ATP-10 Focuses Primarily on Peacetime SAR.** Under ICAO and IMO conventions, individual sovereign nations have responsibility for their organic SAR, although national SAR capabilities may be used to augment other host nations. The SAR areas of responsibility are coincident with ICAO Flight Information Regions and, in addition to bi-lateral agreements, are included in the current ATP-10(D).

Whilst the use of military SAR capability is permitted under ICAO and IMO convention, NATO has neither a parallel SAR command structure nor available organic SAR assets. Only SAR assets declared to NATO for Expeditionary Operations fall within the scope of NATO PR doctrine

### 3.1.2 NATO Combat Search and Rescue (CSAR).

The NATO definition of CSAR is:

**Combat Search and Rescue: The detection, location, identification and rescue of downed aircrew in hostile territory in time of crisis and war and, when appropriate, isolated military personnel in distress, who are trained and equipped to receive combat search and rescue support. (1 October 2003)[9].**

**NATO CSAR Concept.** During the 1990s NATO identified the requirement for CSAR policy, and capability, to recover downed aircrew. The MCASB SAR Working Group was tasked to develop the draft ATP-62[20] which, at the time, was largely based on US doctrine.

**CSAR Focused Primarily on Aircrew.** As the NATO definition suggests, aircrew were considered the primary target audience for CSAR. This was based on the assumption that all aircrews had undergone SERE training and were equipped with survival aids including personal location and communication equipment.

### **CSAR Focused on Trained and Equipped Personnel.**

The most recent draft of ATP-62 includes a reference to 'other trained and equipped personnel'. This broadened the remit of CSAR to include SOF.

**CSAR Focused on Wartime.** The CSAR concept was developed at the height of the Cold War and as the title suggests was a combat capability employed during conflict and not peacetime.

### **NATO CSAR was Developed for Linear Battlespace.**

Again, with its conception during the Cold War, CSAR was based on the presumption that there would be a linear battlefield. Should aircrews become isolated on 'our' side of the Forward Line of Own Troops (FLOT), the recovery would be a SAR-type mission. Should aircrews become isolated on 'their' side of the FLOT, it would be considered a CSAR mission. As there would be no Allied forces present on the opposing side of the FLOT, the Air Component Commander (ACC) could act without the requirement to coordinate with other component commanders.



**Scott O'Grady was shot down over Bosnia (in 1995) and rescued after six days by a CSAR team.**

**3.1.3 Personnel Recovery Doctrine – History.** In 2003, the NATO MCASB SAR Panel discussed the development of NATO PR doctrine. In July 2004 an initial discussion draft was presented to the SAR Panel with the recommendation for the formal development of a PR policy / doctrine agreed in September 2004. A validation proposal was drafted by the SAR Panel chairman and promulgated by the MCASB. In March 2005 the MCASB approved the development of NATO PR policy / doctrine as Study 7195 with the short title AJP-3.3.8. Several drafts followed, before a decision was

Date	Reference	Title
July 2004	AJP-3.3.8 Initial Discussion Draft	Personnel Recovery Policy/Doctrine
March 2005	AJP-3.3.9 (SD-2)	NATO Personnel Recovery
July 2005	AJP-3.3.9 (SD-3)	NATO Personnel Recovery
September 2005	AJP-3.3.9 (SD-4)	NATO Personnel Recovery
Unknown	AJP-3.3.9 (SD-5)	NATO Personnel Recovery
May 2006	AJP-3.3.9 (SD-6)	NATO Personnel Recovery Doctrine
February 2007	AJP-3.3.9 (SD-7)	NATO Personnel Recovery Doctrine
April 2007	AJP-3.7 (SD-1)	Allied Joint Doctrine for Personnel Recovery
August 2007	AJP-3.7 (SD-2)	Allied Joint Doctrine for Personnel Recovery
December 2007	AJP-3.7 (SD)	Allied Joint Doctrine for Personnel Recovery
March 2008	AJP-3.3.9 (SD-7)	Allied Joint Doctrine for Personnel Recovery
July 2008	AJP-3.3.9 (SD-8)	Allied Joint Doctrine for Personnel Recovery

**Figure 2: Development history of NATO Personnel Recovery doctrine.**

taken to separate the document into a policy and a doctrine document. Further detail on the doctrinal development can be found in Figure 2 and in intermezzo 5. The NATO PR policy development is addressed in paragraph 3.1.4.

*Intermezzo 5:*

*Personnel Recovery Doctrine Taxonomy*

**Taxonomy: AJP-3.3.8 – AJP-3.3.9 – AJP-3.7.** At the time that the initial discussion draft for the NATO Personnel Recovery doctrine document was being developed, the Military Committee Joint Standardisation Board (MCJSB) Allied Joint Operational Doctrine Working Group (AJODWG) had just started to develop the Allied Joint Doctrine Hierarchy (AJDH), a system that would help the reader understand the relationship between various Allied Joint Publications (AJPs) and Allied Tactical Publications (ATPs) far better than the existing sequential numbering system. Within the AJDH, Personnel Recovery doctrine was classified as AJP-3.3.8; the first '3' indicated it was a document under AJP-3 Allied Joint Operations Doctrine, the second '3' indicated it was a document under AJP-3.3 Allied Joint Air and Space Operations Doctrine and the '8' indicated it was the eighth topic under AJP-3.3.

By the time the initial discussion PR draft was discussed in the MCASB SAR Panel, a new version of the AJDH had been developed, placing Personnel Recovery doctrine under AJP-3.3.9; AJP-3.3.8, with no apparent reason, had completely disappeared. Later the MCJSB AJODWG concluded that PR was a Joint Task that should have been included in AJP-3 and not in AJP-3.3. This led to PR doctrine being classified as AJP-3.7.

During 2006/07 the question of ownership of PR doctrine emerged between the MCJSB AJODWG and the MCASB SAR Panel. The SAR Panel had originally been tasked although the AJODWG wanted to hold responsibility for PR as it was deemed Joint doctrine. It was eventually decided that the SAR Panel would retain responsibility for NATO PR doctrine in accordance with its Terms Of Reference (TOR). The SAR Panel had already started using the AJP-3.7 taxonomy, but was forced to revert to the AJP-3.3.9 numbering until a ratification draft was distributed among NATO nations through the MCJSB.

**PR Doctrinal Concept.** NATO PR doctrine is based on a number of assumptions:

**All Means may be Used to Recover Personnel.** PR is not limited to the use of military means to recover iso-

lated personnel. To the contrary, any kind of means (military, diplomatic and civil) should be considered in the recovery dependent on a number of contingent factors (e.g. time, terrain, threat, etc.).

**Swift Execution Increases Chances of Success.** Time is considered vital, and a swift recovery with less 'able' forces is typically preferred over a slower execution with an appropriately equipped force. History has demonstrated that swift recoveries have resulted in a higher success rate.

**Commanders are Responsible for Their Own Personnel.** Commanders at all levels are to consider PR in their planning and execution of operations. Clearly, commanders at lower levels have far fewer resources and capabilities to execute recovery operations than their higher-level counterparts. Nevertheless, commanders are to first attempt to recover their own personnel using their own means, and only when that is not possible, support should be requested through the chain of command.

**Personnel Recovery is a Joint Responsibility.** In the majority of scenarios, the subsequent recovery effort will involve several components. Command and Control of the rescue effort should clearly define the roles of supported and supporting component commanders to affect the recovery.

**Personnel Recovery Comprises Five Essential Tasks.** All PR activities can be encompassed in the following five essential tasks:

- Report
- Locate
- Support
- Recover
- Reintegrate

These essential tasks are often mistakenly referred to as the five phases of a PR operation. Although it is obvious that one has to locate the isolated personnel prior to recovery, the tasks may be planned and executed concurrently. The five PR tasks are described further in Intermezzo 6.

#### *Intermezzo 6:*

#### *The Five Tasks of Personnel Recovery*

##### **The Five PR tasks**

**Report.** Incidents, in theory, should be reported through the appropriate chain of command. However, in practice, reports often arrive via a number of different channels, formal or otherwise. During NATO Air Operations over the Former Yugoslavia, a US F-117 was shot down over Belgrade at which point the pilot immediately activated his survival radio. However the aircraft was tasked on a separate (secret) Air Tasking Order (ATO) and the activation of the survival radio was not received / forwarded to the Combined Air Operation Centre (CAOC). The CAOC received the report later through the pilot's home base in Italy. In the modern information age, the initial report may comprise 'a CNN breaking news item'.

**Locate.** The preferred method of locating isolated air-crew is using their survival radio (e.g. PRC-112, -434) although in some scenarios other methods could work like SATCOM or even mobile phones. Every effort should be taken not to compromise the location of the isolated personnel as this will complicate, if not render it impossible, a recovery operation.

**Support.** Support falls into two broad categories; support to the isolated personnel and support to their next of kin, colleagues, unit etc. During SAR events there are many examples of survival equipment (dinghies, tents, food, etc.) being dropped from aircraft to aid survivors whilst the rescue effort was being co-ordinated. There are also several examples of support being provided to isolated personnel during CSAR / PR events. One such example, during the Vietnam War, was the rescue of Lt Col Hambleton, pilot of Bat 21[60]. Hambleton was supported and protected through air attacks on the approaching North Vietnamese Army (NVA) and mines were air dropped to further protect him. An example of psychological support was the case of Mike Durant[32]. Whilst being held captive in Mogadishu, Durant's colleagues flew over the city playing his favourite song

(Thunderstruck by AC / DC) through powerful loudspeakers mounted on a Blackhawk helicopter.

**Recover.** The recovery may be conducted either as a deliberate option, a contingent or improvised mission or through civil or diplomatic means. The recovery of Dale Zelko[61], the F-117 pilot shot down over Belgrade, was one example of a deliberate mission utilising dedicated CSAR assets. There are however examples of improvisation in which personnel were recovered on the stub-wing of Apache helicopters and flown to safety. A third way of recovery is through the intervention of civil and or diplomatic means. Mike Durant[32] was eventually released following negotiations conducted by the ICRC. The option for personnel to self-recovery should not be discounted.

**Reintegrate.** A properly conducted debriefing and reintegration process is vital to both the individual(s) and the military hierarchy. This process is important not just in the prevention or reduction of the effects of Post-Traumatic Stress Disorder (PTSD) but in understanding the cause of the incident, evaluating the SERE/PR aspects of the recovery and in collecting intelligence on enemy forces and dispositions. When Terry Waite was released after years of captivity in Lebanon, he underwent a deliberately slow process to be reunited with his family[59]. A similar process was used when three Northrop employees were recovered in Columbia together with Ingrid Betancourt[43]. Whilst the three men underwent an extensive US military reintegration programme, Betancourt made numerous public appearances and clearly did not receive any reintegration treatment. Ultimately the effects of captivity and the success of reintegration programmes will only reveal themselves in the longer term.

**NEOs are not part of PR doctrine.** NEO sits alongside major combat operations, peace support operations, and counter-insurgency operations as a stand-alone military requirement. PR however can be conducted as a subset within the framework of any of these stand-alone operations. During a NEO, commanders have an inherent responsibility for both their own personnel and the evacuees, many of whom will be civilian and of various nationalities.



**The PRC-112 is the most common used survival radio in Western Militaries.**

**Non-conventional Assisted Recovery is part of PR, but not part of PR doctrine.** As previously stated in Chapter 1, while NAR is considered part of PR, it is however usually, but not exclusively, conducted by SOF. It may employ covert national TTPs, and is therefore not described in great detail in NATO, EU or SOF doctrine.

**Education and Training.** Personnel, of all ranks, are to be educated and trained in PR to an appropriate level commensurate with their operational role and position. PR training should be completed as an element of basic training, as a theatre-entry standard and undertaken, in-theatre, in the form of continuation training.



**Demonstration of solidarity for the release of Ingrid Betancourt and other FARC captives.**

**Definitions for SAR, CR and CSAR.** The existing NATO definitions for SAR, CR and CSAR were developed in isolation and at separate times. For clarity and consistency the following definitions are proposed:

**Search and Rescue (SAR):** The location and recovery of persons in distress in an environment where hostile interference is not expected. The SAR definition does not refer to isolated personnel as SAR can, and should, be provided to persons not considered ones 'own personnel'.

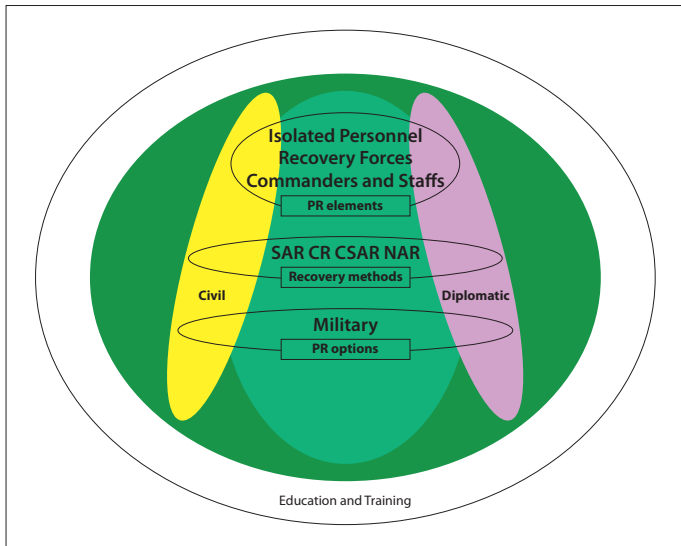
**Combat Recovery (CR):** The recovery of isolated personnel from a situation where hostile interference may be expected. During CR, either the recovery force or the isolated personnel, or both, have not been trained in CSAR TTPs.

**Combat Search and Rescue (CSAR):** The application of specific tactics, techniques and procedures by dedicated forces to recover isolated personnel,

**who themselves are trained and appropriately equipped to receive this support, from a situation where hostile interference may be expected.**

**Options, Methods and Elements are Separated.** As Figure 3 (page 18) shows, a clear distinction is made between the PR options, methods and elements. Options include diplomatic and civil channels in addition to military options, as the use of military means (force) may not always be available, possible or desirable. The recovery methods (SAR, CR, CSAR, NAR) are referred to using the most common terminology<sup>1</sup>.

**3.1.4 Personnel Recovery Policy – Development History.** In response to the MCJSB AJODWG's desire to separate PR policy from doctrine, the Director NATO Standardisation Agency (DNSA) asked the Director International Military Staff (DIMS) to develop NATO PR policy. As DIMS did not have the requisite expertise within his staff, he asked the DNSA to develop the policy on his behalf. In January 2007 the



**Figure 3: The PR system.**

inaugural meeting of the PR Ad-Hoc Working Group (PRAHWG) was convened and a first draft of the policy was distributed among the participants for comment.

The PRAHWG conclude their comments with Study Draft (SD)-3, which was sent to the DIMS for processing and approval through the Military Committee; the draft was also distributed amongst NATO nations and the strategic commands for comment. Two member nations could not agree on the wording to reflect sovereign nations' SAR responsibilities during peacetime and of SAR's status as a subset of PR. Following further study (Study Draft 7) the policy stalled with both the DNSA and DIMS seeking a solution[31]. The situation has yet to be resolved.

**Policy Concept.** The first paragraph of the (draft) NATO PR policy states[31]:

*The isolation, capture and/or exploitation of NATO personnel during operations could have a significant negative impact on operational security, morale of assigned forces and public support. In addition, NATO operations rely on contract support and interaction with other non-military organisations, for which NATO may have a responsibility. The Alliance therefore requires a system to recover military and civilian personnel that have become isolated.*

The actual policy statement in the draft PR policy is [31].

The NATO PR Policy is to develop and maintain a system with the following objectives:

- Protecting the operational security and morale of NATO personnel by providing for their recovery and reintegration, in case they become isolated;
- Enhancing the PR capabilities of NATO by sharing, where possible, the lessons learnt during PR exercises and missions.

and that provides:

- Applicable documentation for the preparation and conduct of PR operations;
- A suitable infrastructure plan (including commanders, staffs and recovery forces) prepared for PR and the establishment of agreements with other organisations;
- Appropriate PR training and equipment standards.

It is evident that NATO considers PR as a critical factor for success, or critical in the sense that not having a PR plan would have a negative impact on NATO operations.

### 3.1.5 Personnel Recovery Strategic Communications Policy – Development History.

In late 2009, a representative of the US Forces Defence Prisoner of War / Missing Personnel Office (DPMO) approached the NATO SAR Panel chairman with a proposal to develop the PR strategic communications policy. The strategic communications branch at Supreme Headquarters Allied Powers Europe (SHAPE) had shown interest and (in the absence of any PR expertise at SHAPE) welcomed such an initiative. With no opportunity to convene a formal SAR Panel meeting, PR SMEs started to draft a preliminary guidance document.

**Strategic Communications Concept.** The preliminary draft is based on the following assumptions:

#### Personnel Recovery Incidents will Attract Media Attention.

In modern western society there is little public (and political) appetite to suffer casualties and fatalities. In instances of missing or captured personnel. The media will want 'to have the story'. It is therefore



vital that commanders and media officers in direct contact with the media understand this demand and are adequately prepared;

**Personnel Recovery Incidents may have a Strategic Effect.** Actions undertaken at the tactical level often have strategic consequences, especially with the immediacy of embedded media reporting. The recovery of personnel has strategic effect in influencing the morale of the individual and the fighting force, the morale and support of the civil populace and the military / political direction of the campaign;

**Actions Speak Louder than Words.** It is vital that the Strategic communications policy is coherent in the message, delivery of the message and in the actions of all personnel to support the message.

**3.1.6 PR TTPs – Development History.** In the summer of 2005, a number of the NATO SAR Panel gathered to develop an initial discussion draft of the NATO PR TTPs, which was to be presented to the full SAR Panel. The basis for the development of the initial discussion draft was ATP-62[20] and the Balkans Local Operating Procedure (LOP), developed for NATO operations over the Former Yugoslavia, and the ISAF Standard Operating Procedure (SOP)-319 for PR in Afghanistan.

The three documents were merged and presented to the SAR Panel as ATP-3.3.9.x. The document was intended to be placed under the PR doctrine (AJP-3.3.9),

hence the '3.3.9' numbering; the 'x' was used to leave the document 'open' and potentially replace ATP-62 or stand alongside the NATO CSAR manual. This approach was adopted in an attempt to avoid the difficulties encountered during the (ongoing) ratification of the revised ATP-62. Development of the TTPs continued until the MCASB expressed doubt as to whether the TTP document was indeed a separate document or a replacement to ATP-62. A consensus could not be reached and so a validation proposal was sent to NATO nations, where again the MCASB was prevented from taking a decision on the validation of the PR TTPs; this despite all responding nations indicated that the TTPs should be developed as a matter of priority.

The SAR Panel had already undertaken a significant amount of work into the development of the PR TTPs prior to, and in parallel with, the validation proposal. The document had already been renumbered ATP-3.7.1(SD-1c)[16] and was considered mature enough to be distributed and used in exercises and operations (Figure 4). ATP-3.7.1 was well received by staffs in ISAF and NATO's Air Component who considered ATP-62 out-dated and not relevant to modern operations.

With no MCASB decision taken on the validation proposal, all formal development activities had to be halted. Although no further work was undertaken until late 2009, several members of the MCASB had requested informal development of the PR TTPs. Informal work continued under ATP-3.7.1 in

Date	Reference	Title
September 2005	ATP-3.3.9.x Initial Discussion Draft	NATO Personnel Recovery TTPs
January 2006	ATP-3.3.9.x (SD-1)	NATO Personnel Recovery TTPs
April 2006	ATP-3.3.9.x (SD-2)	NATO Personnel Recovery TTPs
August 2006	ATP-3.3.9.x (SD-3)	NATO Personnel Recovery TTPs
May 2007	ATP-3.7.1 (SD-1)	NATO Personnel Recovery TTPs
January 2008	ATP-3.7.1 (SD-1b)	NATO Personnel Recovery TTPs
February 2008	ATP-3.7.1 (SD-1c)	NATO Personnel Recovery TTPs
May 2010	ATP-3.7.1 (SD-2)	NATO Personnel Recovery TTPs

**Figure 4: Development history of the NATO Personnel Recovery TTPs.**

order to avoid confusion with the development of PR doctrine. This resulted in ATP-3.7.1 (SD-3) NATO PR TTPs.

**PR TTPs Concept.** NATO PR TTPs are based on the use of CSAR procedures in the recovery of a wide range of isolated personnel and not just the doctrinal CSAR target audience. The main conceptual items are:

**Target Audience Orientation.** As opposed to documents that have a topical orientation (i.e. separate chapters on planning, execution, communications, etc.), the NATO PR TTPs are aimed at three target publications:

- Staff guide
- Recovery Force Operator guide
- Isolated Personnel guide

Each volume is comprehensive and so, dependent upon one's role, the other volumes may be discarded; where appropriate, information is duplicated across the volumes. The current Recovery Force Operator guide only covers the use of aerial assets (i.e. helicopters) as there has been no input from other SMEs to the document. It is the intention to invite additional contributions once the current document is distributed for ratification.

**Text vs. Annexes.** Within each volume the main body (the text) provides a general overview covering responsibilities and activities. The annexes are intended to provide the specific detail (e.g. message templates, checklists, etc.) that one could utilise in their individual role.

**Expandable Model.** It is recognised that not all TTPs are required in every scenario, at all times and against all levels of risk and threat. However a baseline in TTPs is assumed, to which increases in risk / threat and additional procedures or elements of procedures can be added.

**This is it.** A number of NATO standards serve as the basis for national doctrine, procedures, training programmes, etc. The NATO PR TTP document will however provide all the relevant information without the need for a national adaptation or addendum. Whilst

providing an unusual depth and amount of detail, the document facilitates standardisation and interoperability between participating nations.

**3.1.7 The JPR Joint Operations Guide (JOG) – Development History.** With no internal NATO agreement on the development of PR doctrine and TTPs within existing NATO procedures[8], the Joint Warfare Centre (JWC) representative on the MCJSB AJODWG offered to develop a JOG as an interim solution. This was agreed amongst the AJODWG with the JWC and the custodian of AJP-3.3.9 / ATP-3.7.1 cooperating to publish the Joint PR (JPR) JOG[39] in 2007. The JOG was in effect a combination of the latest version of the NATO PR Doctrine and Volume I of the PR TTPs.

The lack of formal PR doctrine and TTPs was evident during operations and exercises conducted in 2009. It was found that draft versions of AJP-3.3.9 and ATP-3.7.1 were being used rather than the JPR JOG. An update of the JPR JOG was requested however, contrary to the first version, initially the second version was a continuation of the original JOG and not a compilation of the latest versions of AJP-3.3.9 and ATP-3.7.1 and included lessons learned as illustrations. Concern has been raised about this new approach of the JOG. This resulted in a new draft that comprises (almost) verbatim the latest versions of the NATO doctrine and TTPs including the SERE training standard. The second edition of the to be released by February 2011.

**JPR JOG Concept.** The JPR JOG has four main characteristics:

- **Collation of State-of-the-art PR Doctrine and TTPs.** As the contents of the NATO PR doctrine and TTPs were considered highly mature, and to avoid any confusion, the JOG simply collated the contents of AJP-3.3.9(SD-8) and ATP-3.7.1(SD-2) and STUDY 7196 without any significant modification;
- **Interim Solution.** The JPR JOG is intended only as an interim solution and will be withdrawn once the NATO PR doctrine and TTPs, under development by the MCASB SAR Panel, are ratified and promulgated.

At present the intention is to publish annual updates until the aforementioned documents, are ratified and promulgated;

• **The JPR JOG is UNCLASSIFIED.** Whilst the content of the JPR JOG does not differ significantly from the unclassified (draft) NATO doctrine and TTPs, the first edition of the JPR JOG was classified NATO RESTRICTED. This limited the audience to NATO members and to secure IT systems. There second edition is declassified to NATO UNCLASSIFIED;

• **The JPR JOG is a Bi-SC Document.** Whilst the original JPR JOG was a SACT document, ACT and ACO have decided to distribute the second edition as a Bi-SC document.

**3.1.8 SERE (Survival, Evasion, Resistance and Extraction) – Development History.** As previously stated, CSAR is defined as the employment of specific TTPs by dedicated forces to recover isolated personnel who themselves are trained and appropriately equipped to receive this support. Reference to the aircrew survival equipment is made; however, CSAR does not detail the type of training personnel should receive. This issue of training was raised at the September 2004 SAR Panel at which it was agreed that a standard of SERE training would prove beneficial, as training was not specified in ATP-62. A validation proposal was drafted and in early 2005 the MCASB formally tasked the SAR Panel to develop a SERE training standard as Study 7196[7].

Work commenced with the European Air Group (EAG) acting as custodian. The resultant 2007 Study Draft (SD)-5 was considered mature enough to be distributed as a Ratification Draft (RD). The MCASB however could not agree. One nation insisted on first approving a PR policy, then a PR doctrine and, once these were approved, related standards (such as the SERE training) could be sent out for ratification. This stance ignored the fact that the SERE training standard was developed from the accepted CSAR manual and not from the development of PR policy or doctrine. With the MCASB unable to reach a decision, the ratification issue was sent to the MC; to date no decision has been forthcoming.



**Countries have different SERE training programmes.**

### SERE Concept

The SERE training concept is based on three levels of training:

- Basic training (level A);
- Intermediate training (level B);
- Advanced training (level C).

The Alanograph<sup>2</sup> (Figure 5) indicates that effective SERE training is conducted within the 'cone of excellence' and that SERE training is considered a cumulative process. A SERE instructor should progress through levels A, B and C training with additional instructor training. Specialist SERE instructors are proficient in specific environmental training (e.g. arctic, desert, jungle). The SERE training package combines generic functional and doctrinal training with SERE-specific continuation, theatre and reintegration training.

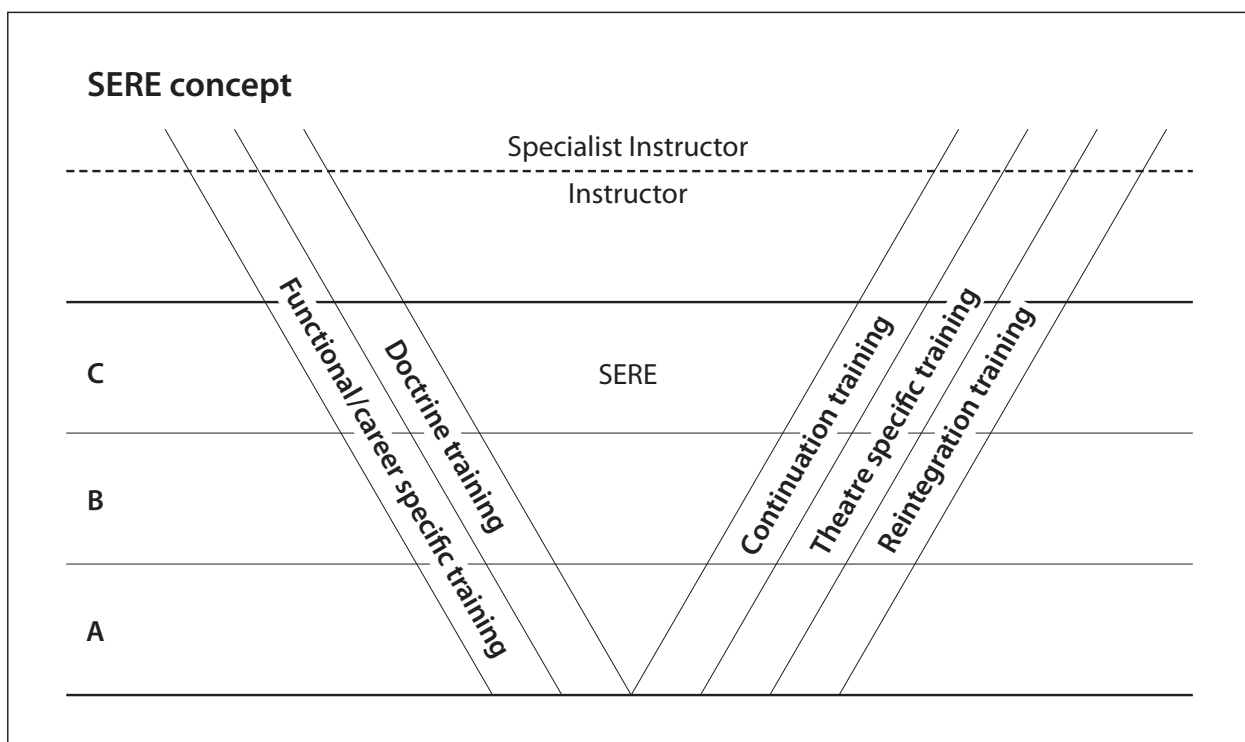


Figure 5: The Alanograph.

**Education and Training.** NATO does not currently provide formal education and training in the field of PR. Live training is typically limited to opportunist PR events as part of larger NATO exercises. This is in stark contrast to the US with the dedicated PR Ex Angel Thunder. Staff training, mostly command-post or computer based exercises, is limited to Air Component staffs and those staff personnel deployed to current ISAF operations in Afghanistan.

The COS ISAF, CC Air Ramstein, Joint Force Commander (JFC) Brunssum and SHAPE have all voiced the requirement for the formal education and training of dedicated PR staff. Development of a NATO PR staff course has been undertaken (see para 4.3).

During several iterations of VOLCANEX (2002–2006) the European Air Group (EAG) identified the requirement for individual PR training. The EAG subsequently developed, and is conducting, a dedicated Combined Joint PR Standardisation Course (CJPRSC) with the specific aim to:

- Enhance the knowledge and proficiency required to execute a PR mission in a non-permissive environment;
- Impart knowledge and proficiency amongst European and NATO coalition partners;
- Enhance flying proficiency within a PR Task Force (PRTF), as an element of a COMAO;
- Enhance knowledge of the organisation and operation of a Joint PR Cell (JPRC).

The first two aims of the CJPRSC were successfully incorporated into the Tactical Leadership Programme (TLP), held in Florennes, Belgium in 2007 and 2008, with a strong focus on CSAR missions. Given the nature of current operations, the EAG decided to re-focus, and add relevance to the course. Change was initiated in the PR Course at Cazaux AB, France, in September 2009, and was finalized during the PR Course at Lechfeld AB, Germany, September 2010<sup>3</sup>.

**3.1.9 Other Related Emerging Concepts – Conduct after Capture (CaC).** In conflicts between nations, captured military personnel are protected by the



**EAG organises and conducts the annual Combined Joint Personnel Recovery Standardisation Course (CJPRSC).**

Laws of Armed Conflict and accorded POW status. POWs are required by law to provide personal information when challenged, previously known as the 'big five'; Name, Rank, Date of Birth, Personal Service number, Blood Group or, failing this, equivalent information [27, article 17]. This is exactly what Lieutenant Lance P. Sijan divulged when captured by the North Vietnamese Army after his aircraft was destroyed[44]. He was posthumously awarded the Medal of Honour for his conduct during captivity (see page 24). Several nations have subsequently made changes to their respective 'big five' and CaC policy however there is currently no standard NATO CaC policy.

In conflicts characterised as hybrid or asymmetric warfare, captured personnel may find themselves held by terrorists or criminals who do not abide by the Laws of Armed Conflict. In such cases, alternative strategies may have to be implemented. However, as operations are increasingly multinational in nature, it becomes essential to harmonise CaC policies among nations. If not, individual actions may endanger the

lives of one's coalition comrades. Several nations are therefore currently developing a new approach to CaC that takes the type of captor into account.

**Media and Operations Security.** The requirement to impose absolute Operations Security (OPSEC) measures during a PR event cannot be overstated. From a military perspective, the safety of the isolated person(nel) is paramount and overrides the 'right' of the press for information. Quite often the media is only informed post the conclusion of the mission.



**Media pressure is immense during hostage situations.**



**Capt Lance P. Sijan, who died in "Hanoi Hilton", received posthumously the Medal of Honor for his bravery and courage during his failed rescue and capture.**

However, the military stance is contrary to the priorities of the media and the appetite at home for information. The media will compete for the 'breaking' news story, politicians have electorates and public opinion to answer to, whilst relatives of the missing personnel will naturally want to know every single detail about 'their relative'.

From a military standpoint, OPSEC should always prevail.

**3.1.10 Urban SERE.** Urban SERE is the exact opposite of rural SERE. Whereas in rural survival it is preferable to avoid the local population, lay up and await recovery, isolated personnel in the urban environment may have a better chance of survival when 'hiding in the crowd'. The urban populace may stumble across the isolated personnel however, the transient nature of the population ensures that at different times of the day, different aspects of the environment permits the isolated personnel freedom of movement and a degree of impunity and safety. Therefore the ability to read these dynamics in the urban environment, and the ability to navigate through its complexities, gives the isolated personnel the best chances of evading capture.

During Operation Gothic Serpent in Somalia (see intermezzo 2 and [32]) there were several instances of troops being isolated or separated from friendly forces. Despite being denied mutual support, the isolated troops were able to manoeuvre within the hostile battlespace, provide their own perimeter security and ensure a high degree of safety. Conversely, those who remained static at helicopter crash sites were pinned down by the sheer weight of incoming fire (the majority inaccurate) and, with limited scope for movement, became a focal point for hostile forces.

Whereas SERE training has been historically aimed at those personnel most prone to capture (aircrew and SOF), the threat in the urban environment has now shifted to all personnel, the majority of which are untrained and ill equipped to counter the threat. In 2006 the incident in which six UK Royal Military Police personnel were cornered in an Iraqi Police station, before being overpowered and murdered, demonstrates how a lack in comprehension of urban dynamics, allied to poor tactical decisions, has deadly consequences.



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### New challenges to survive and evade in an urban environment.

The challenge now faced by the SERE and PR community is how to train all personnel to the required standards of urban SERE whilst maintaining rural skill sets. Urban training must evolve whilst remaining relevant and fit-for-purpose. Research and development is required to affect recovery from such a dynamic and challenging environment and, whilst some initial development work has been undertaken, there are common standards.

It is clear that urban policy, doctrine and TTPs must be addressed by the SERE community.

#### 3.1.11 Conflicting Concepts – Personnel Recovery vs. Medical Evacuation vs. Casualty Evacuation.

Three terms are used to describe the recovery of personnel; PR, Medical Evacuation (MEDEVAC) and Casualty Evacuation (CASEVAC). Although all three terms are not yet mentioned in the AAP-6 they have been in used for a long time. Only Aeromedical evacuation, which is the movement of patients to and between medical treatment facilities by air transportation[9], is mentioned, but not used, in the text.

The following definitions highlight the differences:

**Personnel Recovery.** The sum of military, diplomatic and civil efforts to affect the recovery and reintegration of isolated personnel. Security, uncertainty and speed are key concerns in PR. Security concerns not only the route to and from the location of the isolated personnel, but especially in the location and the pick-up point of the isolated personnel. Uncertainty exists in terms of both the environment (threat) and of the isolated personnel (medical situation). Speed is key to a quick recovery. The quicker a recovery can be conducted, the bigger is the chance that isolated personnel can be successfully recovered. PR does not prescribe the level of medical care during the recovery as this is considered part of the assessment process.

**Medical Evacuation.** There are two existing NATO definitions:

**The medically controlled process of moving any person who is wounded, injured or ill to and / or between medical treatment facilities (AMedP-13);**



US Medevac Helicopter extracting a wounded soldier in Afghanistan.

**The process of evacuating casualties from the theatre. This involves the use of both military and civilian medical and logistic agencies and includes ambulances, hospital ships, casualty ferries, helicopters, converted aircraft and hospital trains or buses (AJP-4.10).** MEDEVAC is the generic term to describe the recovery of an injured individual to a medical facility, under medical supervision. It is often considered a prerequisite for MEDEVAC that both the pick-up location and the drop-off location for a patient are fully secured. Thus the term PR is being increasingly used to trigger the requirement to secure a pick-up location and administer the required medical care to isolated personnel. In other quarters, MEDEVAC is considered a logistics issue and simply the transport with medical supervision, between medical facilities, in particular from a medical facility in theatre to a place out of theatre (i.e. strategic MEDEVAC).

**Casualty Evacuation. Tactical evacuation of casualties from sea and subsequent movement through a medical evacuation chain to E-2/3<sup>4</sup> facilities within theatre (ALP-4.1).**

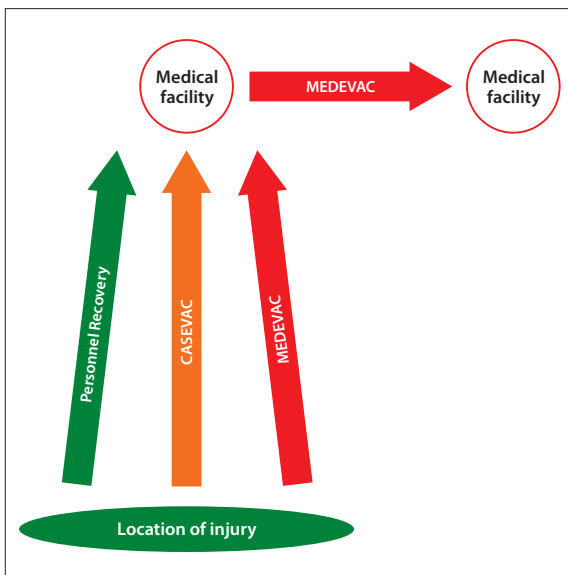
The term CASEVAC is widely used within the Land component to refer to a MEDEVAC where it is impossible to ensure a level of medical care during transportation of the casualty. CASEVAC does not address the requirements to secure the pick-up area and may still be considered to be a description of the logistics chain. Again the term PR is being used here to secure the pick-up location in order to administer medical attention. Both MEDEVAC and sometimes CASEVAC focus on the medical condition of personnel and the required level of medical care during transportation. However in the case of uninjured or deceased isolated personnel, recovery may not be required.

The application of these terms is also depicted in Figure 6.

**Personnel Recovery vs. Recovery of Equipment.**

NATO distinguishes between the recovery of personnel and the recovery of equipment (see para 1.4). The tasking and coordination of the recovery of personnel is the responsibility of the operations branch whilst





**Figure 6: PR vs. MEDEVAC vs. CASEVAC.**

the recovery of equipment falls within the remit of the logistics chain. This delineation may lead to friction should the logistics chain require the use of other components' assets.

## 3.2 Conceptual Developments within the EU

**3.2.1 CSAR Concept – Development History.** In 1999 the EU set a military capability target for 2003 known as the Helsinki Headline Goal (HHG). This target was based upon a number of operational scenarios, known as the 'Petersberg' tasks, and required specific numbers of assets and capabilities. The requirement was outlined in the Headline Force Catalogue (HFC). An EAG report[33] provided an inventory of available capabilities and shortfalls in CSAR in addition to proposals for collective (and standardized) CSAR training.

It was evident from the HFC that there were numerous shortfalls in capabilities other than CSAR. Thus the European Capability Action Plan (ECAP) programme was initiated in 2001 to develop plans and proposals to fill the identified shortfalls. The programme involved some 20 working groups, one of which was to develop CSAR doctrine to support European military operations. The development of the EU CSAR doctrine

was finalised in 2004 and approved by the European Union Military Committee (EUMC) in 2005.

**Concept.** The EU CSAR doctrine could be considered as a summary of NATO's ATP-62, with the added emphasis that any European CSAR operation would have to be conducted multi-nationally (probably with the US) as European nations that do not currently have the full range of assets required to conduct a complex recovery mission.

**3.2.2 Personnel Recovery Architecture – Development History.** In September 2006 the EAG recommended improvements in interoperability across EU armed forces' PR equipment. Subsequently, in 2008, a project team was set up to develop Common Staff Targets (CSTs) and Common Staff Requirements (CSRs) for PR equipment for the European Defence Agency (EDA). A key element of the project was the development of PR architecture to identify interoperability issues. The architecture, developed in 2009 by a contractor, used NATO doctrine and TTPs as their basis. The CSTs, finally approved by EDA participating Member States in early 2010, provided a common European stance on PR.

**Concept.** The interoperability Study provided a capability development road-map, an analysis of current equipment and conceptual documents in addition to recommendations based on operational, system and technical views. A follow-on study is being conducted in 2010 and will explore the link between the conceptual (the PR system and its components – distress call device, detector, communication server and locator) to potential technical solutions (including legacy as well as future technologies).

**3.2.3 EU Personnel Recovery Concept – Development History.** One of the conclusions of the EU CSTs and the interoperability study was that an operational concept was required prior to the development of CSRs. The first draft (2009–2010) proposed to combine NATO policy, doctrine and TTPs into one EU document. When presented to the European Union Military Staff (EUMS), the EUMS added additional policy and doctrine to the draft resulting in a more comprehensive

document. The final draft is, as the date of publication of this document, with the EUMC for staffing and approval. Furthermore, integration of PR into Network Enabled Capabilities (NEC) was suggested as an additional workstrand for the EDA project team.

**Concept.** The concept itself could be regarded as a combination of key items of the NATO PR policy and doctrine set within the EU framework, without duplicating the NATO documents. It aims to protect the security and morale of EU personnel by providing for their recovery and reintegration, should they become isolated. It enhances the PR capabilities of the EU by learning (and sharing) lessons from previous PR missions. The concept is intended to apply to both military and non-military personnel involved in EU-led Crisis Management Operations (CMOs). The principles, tenets and guidance contained within this concept are coherent with allied documentation.

### 3.3 Conceptual Developments within Multinational Planning Augmentation Team (MPAT)

**Development History.** The MPAT was established in early 2000 to develop procedures to facilitate the rapid and effective establishment and / or augmentation of a multinational Coalition Task Force (CTF) Headquarters (HQ). More than 30 nations are participating in the MPAT programme with nations from the Pacific region alongside France, Germany, Italy and the UK.

However MPAT has no formal participatory agreements and is without memoranda of agreement, terms of reference, or other more formal arrangements. The informal and ad-hoc nature of the programme has allowed participants to share information and to develop joint concepts and procedures without formal policy constraints (a key inhibitor to multinational interoperability).

The MPAT programme includes military planners and also incorporates expertise from OGDs, NGOs and the UN.

The operational objectives of the MPAT programme are:

- Increase the speed in initial crisis response by a Joint Task Force (JTF) in the Asia-Pacific region;
- Improve the interoperability of coalition or combined forces;
- Improve Multinational Task Force Headquarters mission effectiveness.

The methodology employed by MPAT is aimed at:

- Developing a cadre for skilled multinational military planners;
- Developing a common set of procedures.

**MPAT PR Concept.** The MPAT PR concept is largely based on the US PR concept. However, as MPAT relies on the voluntary contributions of participating nations the concept will need to be adaptable to the capabilities provided by the relevant contributors. Therefore, rather than providing detailed procedures, the MPAT concept is more generic than prescriptive.

### 3.4 Conceptual Developments within Nations

The JAPCC staff has researched PR programmes with JAPCC member nations, Memorandum Of Understanding (MOU) nations and with PR SMEs. This re-

search is by no means exhaustive, but it does provide a representative picture of ongoing PR developments and programmes.

**3.4.1 National PR System.** The majority of PR SMEs agree that PR requires a systems or holistic approach. However the US is the only nation known to currently have all the requisite assets and elements of the system and to also train them as a whole. Exercise Angel Thunder is a good example of this systems approach where they train multinational, multi service and multi-agency. They train civil, military and diplomatic scenarios. Other nations can only train and educate individual elements of the system.

**3.4.2 Comprehensive PR Policy.** The US is the only nation that has a (classified) comprehensive national PR policy that incorporates all US Government Departments and Agencies. The US Government is bound, by law, to protect all US citizens anywhere in the world and regardless of their status.

**3.4.3 National Strategic Communications Policy.** The US is the only nation that apparently has a policy on strategic communications specifically focused on PR. The US does not consider strategic communications only to be limited to the strategic level. The strategic communications concept also covers the operational and even tactical level in terms of roles and responsibilities.

**3.4.4 National Military PR Policy.** Only Belgium, France and the US have national PR policies [46, 49, 50] with Belgium and France basing their policies on the draft NATO PR policy. US policy predated the NATO policy and was used as the basis for the development of NATO PR policy. Canada is developing a PR policy, which may be approved early 2011. Some other countries, like Italy, have only CSAR national policies.

**3.4.5 National Doctrine.** The US has both Single Service [2, 3, 4] and Joint publications. The UK and Belgium have Joint doctrine [40, 47] however, there is an important difference in the interpretation of the word 'doctrine'. In the Anglo-Saxon world doctrine has



**Angel Thunder is the largest multinational, multi service and multi-agency dedicated PR exercise.**

the status of law i.e. mandatory regulations that one must comply with; doctrine may therefore contain detailed procedures. Within NATO, doctrines are 'fundamental principles'. NATO doctrine provides a basis for procedures that are contained in other documents (e.g. TTPs and SOPs).

**3.4.6 National TTPs.** Given the differences in meaning of the word doctrine, the UK and US have TTPs as integral parts to their doctrinal publications [2, 3, 4, 40]. Belgium, The Netherlands and Sweden do not have national TTPs but use the draft NATO doctrine [17] for this purpose. The UK is currently in the process of reviewing its national doctrine.

**3.4.7 National SERE Programme.** A majority of nations have some form of SERE education and training programme based upon the (draft) NATO SERE Training Standard [7]. The US programme is based on their own national doctrine for evasion and recovery [6]. Austria provides two SERE level C courses based on the NATO standard; one tailored towards SOF operating for extended periods of time in mountainous terrain, and the second tailored toward aircrew operating in more moderate conditions. The Czech Republic provides all three levels of SERE training as part of their

normal training programme but not through a specialist SERE school. The SERE training within Belgium, the Netherlands, the UK and the US is primarily targeted at aircrew whilst Sweden, Canada[13] and again the UK identify who is at medium / high risk of isolation and educate and train their personnel accordingly. In Sweden all military personnel that are to be deployed abroad are to be trained to SERE level B. In the Netherlands, pilots are typically trained up to level C with the remaining aircrew trained to level B.

In Belgium, Sweden, Italy and the Netherlands all aircrew undergo set continuation training and undertake pre-deployment training as appropriate. Other nations (Germany, the US) only offer an initial training programme with no continuation training. The UK does not have set refresher training so personnel just undergo the initial SERE course. Several NATO nations also conduct pre-deployment SERE training, however these programmes are typically instigated at the local command level.

The respective SERE schools of Belgium and the Netherlands are currently looking into ways of co-operation in order to improve the quality of training and maximize efficiency.



The Dutch SERE school offer pre-deployment training for aircrew.

**3.4.8 National Conduct after Capture (CaC) Programme.** There is no current NATO standard concerning Conduct after Capture (CaC). Several nations include CaC as part of their SERE level C training for aircrew and SOF; this is typically conducted during an interrogation phase and may last up to one day. Other nations provide CaC training based on an assessment of the risk level of isolation and / or exploitation of specific personnel. Norway provides CaC training for interrogators and, along with Denmark, has visited Canada. Belgium, Denmark, Sweden and the Netherlands have sent instructors to the Norwegian course or otherwise used the Norwegian content in conducting CaC training. This has provided a certain level of standardisation.

**3.4.9 National PR Education Programme.** The US appears to have the most comprehensive training programme. The PR Education Training Center (PRETC) provides a basic PR course (PR-102), a course for JPRC / PR Coordination Cell (PRCC) controllers (PR-300) and a course for a JPRC / PRCC director (PR-301). Bespoke courses are provided upon request not just to the US armed forces, but also to other US Government Departments and to other nations.

France maintains a course for all JPRC / PRCC personnel and to which all Rotary-Wing pilots must attend. Sweden also provides a course aimed at personnel manning a JPRC / PRCC without distinguishing between director, controller or SERE specialist. In November 2010, German staffs attended the Swedish course in preparation for their deployment to ISAF and NATO Response Force (NRF).

The Dutch SERE school is offering to host a similar course to an international audience, but does not currently have the capability to run such a course. As an

aside, the Dutch Defence Helicopter Command (DHC) runs an annual Helicopter Weapons Instructor Course (HWIC) for Dutch aircrew, part of which involves a 'PR week' comprising academic and practical PR training. Dutch SOF will typically provide the extraction force during this training.

Belgium and Italy are currently in the process of developing a PR instructors course with the first course expected to be undertaken in 2011.

**3.4.10 National PR Training Programme.** German, French, Italian and US PR / CSAR units continuously conduct PR training. Outside these units, only the US is known to train their JPRC / PRCC staffs regularly.

**3.4.11 National PR Exercise Programme.** The US is the only nation that conducts a national cross-governmental exercise dedicated to PR Ex Angel Thunder, conducted in the vicinity of Davis Monthan Air Force Base in Arizona, jointly exercises all military arms and governmental agencies (e.g. Federal Bureau of Investigation (FBI), Drug Enforcement Agency (DEA) and the Peace Corps) in the art of PR. France also conducts national PR exercises however these are less comprehensive and restricted to the military.

1. Some other terms used are limited extraction (LIMEX), incident response team, (IRT), tactical recovery of aircraft and personnel (TRAP).
2. The name Alanograph refers to the first name of the person who developed this diagram, Alan George.
3. During this 4th iteration, 271 personnel from 12 EU / NATO nations took part in this unique training opportunity. After 4 days of academic sessions, 11 PR missions were successfully flown by 2 Task Forces composed of 6 Fast Jets, 12 Rotary Wing and 1 NATO E-3A. These 11 missions totaled 102 sorties, 230 flying hours and the safe recovery of 40 Isolated Personnel (ISOP's). The different scenarios covered 3 of the 4 PR methods (SAR, CSAR and CR) with a specific focus on CR. During the course, the integration and the development of a JPRC (Joint Personnel Recovery Centre), manned and run by a CAOC2 detachment, increased the realism and offered valuable PR training to all participants. The support provided by the Host Nation and by several NATO organisations (JAPCC, ACC RAMSTEIN, LFC BRUNSSUM and POLYGONE) contributed to the overall success of the course.
4. These are annotated as Role 2 and 3 medical facilities.

# CHAPTER IV

## The Way Ahead

*“The question is not if the proper assets are available; they are available somewhere in the world. The question is where ...”*

Ambassador Charles A. Ray (Former DASD)

### 4.1 Introduction

The danger to isolated personnel posed by both conventional and asymmetric threats, the responsibilities of modern commanders and media and political pressures, have all combined to increase the demand for PR capability. It is clear that current capabilities fall short of the requirement, which, in addition to emerging issues, need to be addressed. This chapter is intended as ‘food for thought’ rather than as a blueprint.

### 4.2 Complete and Implement Current Programmes

The PR process has been subject to the bureaucracy inherent in large organisations and between nations. NATO PR Policy, doctrine and TTPs have been developed, or are under development; however consensus and ratification has proved difficult. Staff effort is required to agree and standardise ATP-10, ATP-62, AJP-3.3.9, ATP-3.7.1 and Study (NATO Standardisation Agreement (STANAG))-7196.

**4.2.1 NATO PR Policy, Doctrine and TTPs.** Once ratified, NATO policy, doctrine and TTPs should ideally be incorporated into training, education and exercise programmes. All NATO exercises should include dedicated PR events, have an appropriate PR Annex to their orders and contain an SOP for the execution of PR. Importantly, all exercises should report lessons identified / learned in order to develop future doctrine and TTPs.

**4.2.2 NATO SAR and CSAR Manual.** As all NATO nations agree that the IAMSAR manual is the definitive document governing peacetime SAR, ATP-10

should either be withdrawn or be rewritten. This would enable staff effort to focus on PR for deployed operations.

As CSAR is a subset of PR, consideration should be given to replace ATP-62 NATO CSAR manual with ATP-3.3.7 NATO PR TTPs.

**4.2.3 Cooperation between NATO and EU.** With an overlap in member states it is essential that both the EU and NATO cooperate in the development of PR concepts, procedures and use of assets. Collaboration has occurred in the development of a PR management tool and in the management of Isolated Personnel Reports (ISOPREPs) however future projects should include Joint education, training and exercises like the CJPRSC.

### 4.3 Education and Training

As soon as doctrine and procedures are developed, personnel must be educated in them. This has to be differentiated between the different groups of personnel dependent on the roles and responsibilities they have in regard to PR. Once educated, personnel have to be trained to their roles and responsibilities through training events and exercises.

Chapter 3 shows that there are a few national courses, with the bulk provided by the US, but with a clear focus on national doctrine and TTPs that are not necessarily compatible with the views of other nations. It is therefore advisable to develop a set of standardised courses to educate people in the same way as personnel from other nations are educated. Existing courses may well be used as the basis for a standardised course.

NATO policy, doctrine and TTPs should be incorporated into the education and training programmes of commanders and staff officers of all levels, as part of existing national or multinational courses (e.g. the Staff Officer Orientation Course or the Combined Joint Operation Centre Course at the NATO School, Oberammergau).



© NATO School Oberammergau

**The NATO School in Oberammergau.**

The TLP School in Albacete (Spain) had developed an introductory PR course (a 'PR 101') intended for aircrew. The inaugural course successfully graduated in June 2010 with a next edition planned in October 2011. Competing demand for resources may preclude PR training (a Joint training activity) from TLP which is essentially an aircrew / Air Force-oriented programme and organisation.



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**TLP Albacete, planned to host the 2011 CJPRSC.**

**4.3.2 Staff Specialist.** In addition to generalist staff officers there is a requirement for specialist PR SMEs. At theatre commander level the focal point for PR is the JPRC, with component and sector level PR coordinated through the PRCC. Doctrinally[11], personnel manning the JPRC / PRCC should receive the appropriate education and training. Currently neither EU nor NATO provides a course to educate JPRC /

PRCC staffs. Therefore a course needs to be developed and provided for these personnel. Such a course can be offered centrally (perhaps at the NATO school in Oberammergau) or distributed based on a standard curriculum. An initial curriculum has been developed by a group of PR SMEs from USA, DEU, SWE and NLD, but two issues remain unresolved; a location to provide the course and personnel to instruct PR.

**4.3.3 Recovery Forces.** The only formal education and training opportunities available to recovery forces are the EAG Combined Joint Personnel Recovery Standardisation Course (CJPRSC) and the US Ex Angel Thunder. NATO had, in the past, undertaken Ex Cooperative Key, which was intended to provide Partnership for Peace (PfP) and new NATO Nations exposure to NATO air operations. A significant portion of Ex Cooperative Key was allocated to Rotary Wing and 'slow-mover' participants to the conduct recovery serials.

**4.3.4 Extraction Forces.** Many nations have airmobile and SOF units that can be employed as extraction forces and are familiar with operating in the Rotary Wing environment. In many cases this capability is maintained without formalised and standardised extraction training; training which could enhance the quality and proficiency of the extraction force, act as a force multiplier and improve interoperability between nations who cannot provide a full PR package.

**4.3.5 Isolated Personnel.** The draft NATO PR policy states[31]: Nations are to:

- Identify personnel prone to isolation and/or exploitation and ensure they are trained and equipped to NATO standards;
- Provide, within national capabilities and priorities, resources and trained personnel to support NATO PR in operations and exercises in accordance with NATO standards and procedures;
- Consider NATO PR during the national planning processes and implement it into directives and planning documents;
- Ensure that, within national capabilities and priorities, intelligence, research and analysis are provided in support of NATO PR;

- Reintegrate isolated personnel in accordance with national rules and regulations. Intelligence gathered and lessons learnt should then be fed back into the NATO PR system.

Therefore, in accordance with the draft NATO policy on PR, SERE training should be provided to all aircrew and to all personnel at risk of isolation and / or exploitation.

**4.3.6 Train the Trainer Programme.** It is clear from the draft NATO PR policy that a greater number of personnel will require to undertake SERE training. However the capacity of current SERE schools cannot meet this increase in demand. One solution is to ‘train the trainer’ to provide a more distributed education and training system.

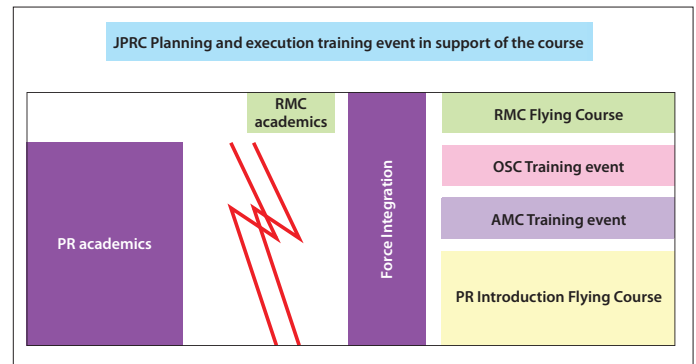
**4.3.7 Education Standardisation.** Belgium, Canada, Germany, Italy, Sweden, the Netherlands and the UK use the current (draft) NATO SERE training standard (Study 7196) as basis for their national courses. This standard should be ratified and implemented across NATO.

The Belgium and Dutch SERE schools are looking into closer cooperation and integration of their education and training programmes.

The NATO training standard does not, however, include SERE instructors. To better facilitate a ‘train the SERE trainer’ programme, the remit of Study 7196 should be expanded or alternatively a separate standard for SERE instructors should be drafted.

## 4.4 Training

An efficient and effective method of combining education and training requirements is depicted in Figure 7. Concurrent events can satisfy the training requirements of different personnel, roles and units. In the example of a Personnel Recovery Task Force (PRTF), all personnel require similar but subtly different knowledge and expertise. Training of the Rescue Mission Commander (RMC) requires command of a complete task force, however, prior to command, the RMC must first be trained as a Task Force participant. The same



**Figure 7: A possible set-up for a combined education and training effort.**

applies to the On Scene Commander (OSC) and the Airborne Mission Coordinator (AMC). Thus, crews with no prior experience in PR can participate in the introduction course. Once they have completed that course, they can enroll in one of the other three courses as applicable. This way several courses are given in parallel and all participants get the training appropriate to their level of expertise.

The various course modules should be (NATO) standardised to allow for nations to have their own national training programme for certain aspects of the training and to be able to participate in multi-national training for other parts.

## 4.5 Exercises

**4.5.1 Include PR in Routine Exercises.** It is vital that PR is considered an integral part to all exercises. The exercise programme allows PR concepts to be validated in addition to providing the main source of data and lessons identified, required to facilitate and improve the development of doctrine, TTPs, other related standards, education and training.

**4.5.2 Organise (multi-national) PR Exercises.** With the exception of the US, no other nation has the dedicated assets to conduct full PR training and operations. For the majority of NATO nations the solution (with or without the US) would be to undertake Joint and Combined training. As most existing multi-national exercises are Command Post Exercises (CPX) at best,



there is probably little benefit in linking a 'field training' PR exercise to a command post exercise. A better approach would be to expand current national PR exercises to accommodate international participation. Another possibility is to resurrect Ex Cooperative Key.



**Cooperative Key 2001 was a good example of an imbedded Joint and Combined CSAR exercise.**

## 4.6 New Areas to Explore

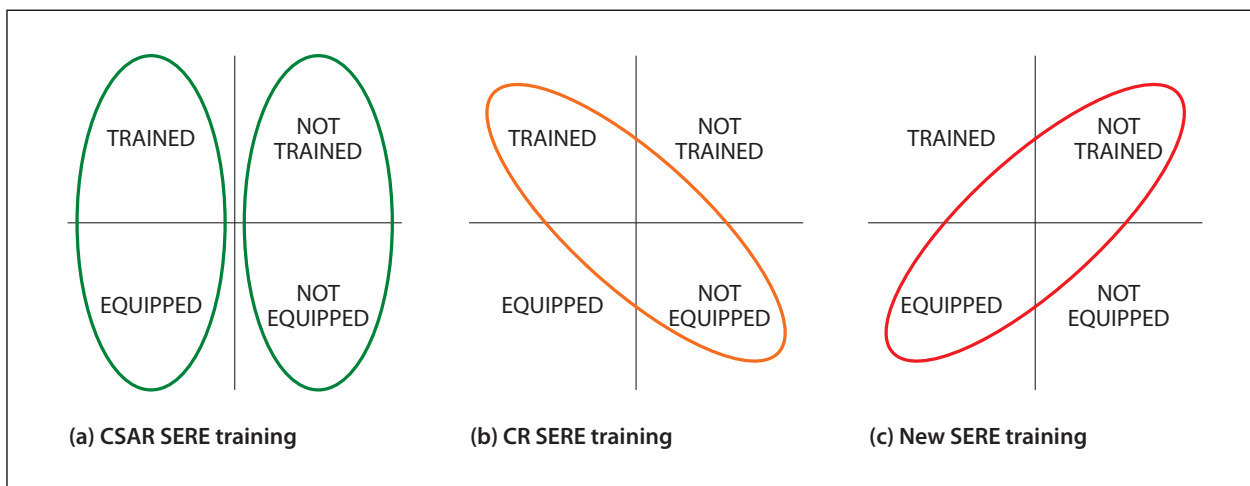
**4.6.1 SERE Training.** Orthodox SERE training makes a clear distinction between personnel that are trained and equipped and those who are not; see Figure 8(a). With the development of the NATO SERE training standard[7] there is a current focus on personnel that are trained but are not equipped; see Figure 8(b). One area that is not covered is depicted in Figure 8(c) addressing personnel that are not formally SERE trained but are provided with the appropriate equipment.

The effort in this area should be focused on educating these personnel in order to meet the 'trained and equipped' standard; however, this may be impossible due to time and money constraints or security issues.

**4.6.2 Land Forces Recovery Procedures.** NATO PR TTPs primarily focus on the use of Rotary Wing assets for the recovery of isolated personnel. However PR is not limited to the use of Air assets and capabilities. Depending upon the operational context, land forces may form the largest deployed contingent and should be prepared, with land-centric TTPs, to recover isolated personnel. It should however be desirable for 'land' procedures to be consistent with 'air' procedures (Joint TTPs?) using existing best practices where appropriate.

**4.6.3 Urban SERE.** Neither NATO nor the EU has a concept for urban SERE. With the rise in hybrid / asymmetric warfare and an increase in urban operations, comprehensive (cross-government, combined coalition) staff effort should be dedicated in this area.

**4.6.4 CaC.** Standardised recovery procedures are key to the success of Coalition PR operations both for the safety of the isolated personnel and the recovery team – they may not be one and the same nationality! Should isolated become captured in a group there is an additional requirement for standardised CaC procedures and behaviour. The actions of one captive



**Figure 8: SERE training focus.**

within the group could endanger the chances of survival of others as indicated in the story of Gonsalves, Howes and Stanstell held captive by FARC[43]. In this age of Coalition operations, a NATO CaC standard should be developed taking into accounts the different national programmes and laws.



**Gonsalves, Howes and Stanstell were three US government contractors who, after their plane crashed, were held captive for five and one-half years by the FARC in Columbia.**

**4.6.5 Non-military SERE Education.** Whilst SERE training for (identified) military personnel will be covered by a (future) STANAG, such education and training for non-military personnel (contractors, government officials, charity workers etc.) remains problematic. This is especially true for contractors or personnel working in direct support of the operation. Issues include the lack of awareness among civilians, financial constraints and the availability of appropriate education facilities. Where there are civilian SERE schools there is no guarantee they perform to any standard. It would significantly enhance the chances of success, and the safety of all involved, if military recovery forces knew what to expect from isolated civilian personnel. Military SERE training standards (with the appropriate security and classification) should be made available to civilian SERE

schools in order to develop their curriculum. These civil SERE schools could subsequently become certified, should they wish to. However, when the military hire civilians to positions identified as at risk, pre-employment training should include SERE training at a certified training establishment.

## 4.7 Personnel Recovery Centre of Excellence

This primer recognises a number of ongoing PR initiatives but also acknowledges the small cadre of PR expertise and knowledge. Both NATO and the EU have a number of common member nations and common military ambitions. However there is no mechanism to ensure that both organisations use the same concepts, which may lead to inefficiencies and potentially dangerous situations. Therefore, the establishment of a Centre of Excellence (CoE) with links to both NATO and the EU would be a major step forward.

A PR CoE would cover a combination of four areas; concepts, managements of documents, education & training and advice & assistance. Figure 9 shows what a PR CoE may comprise.



**Figure 9: Personnel Recovery Centre of Excellence responsibilities.**

Within the conceptual area, the PR CoE may be tasked to develop operational concepts from the tactical to strategic level. Particular attention should be paid to integrating existing (multi)national concepts, lessons identified and emerging technologies into the new concepts. These conceptual developments could be briefed during conferences as required.

The PR CoE could also be tasked to develop and maintain the policy, doctrine and TTPs documentation for international organisations, to ensure standardisation of training and interoperability for deployed Joint and Combined operations.

As the organisation that develops the concepts, it would perhaps be appropriate for the PR CoE to train and educate on the subject. It would give the CoE the opportunity to present emerging concepts to the relevant audience and, in return, receive feedback to help validate the developed concepts. The target audience could be:

- General staff officers to receive an appropriate level of situational awareness regarding PR.
- Specialist staff officers (JPRC and PRCC personnel) to qualify in the planning, coordination and conduct of PR at the operational level staff.
- Senior leadership to inform them of the operational and strategic importance / implications of PR and a lack thereof.

In addition, instructors could also provide lectures to a variety of national, NATO and EU courses / training events.

A CoE which delivers documentation and courses could provide additional support to nations, the NATO and EU command structures regarding the:

- Development of national PR concepts;
- Development of national education and training programmes;

- Assistance in assuring that national documents, education and training are in accordance with (international) standards;
- Development of requirements for PR-related equipment;
- Development of the PR aspect of operations plans for operations and exercises;
- Provision of presentations during conferences on lessons identified during operations and exercises.

**PR CoE Manning.** Manning the PR CoE would be dependant upon its remit. An estimated twenty personnel<sup>1</sup> (not including administrative support) would be sufficient to staff the aforementioned 4 areas of responsibility and, if support and assistance could be safeguarded, part of this manning could be met from existing NATO, EU and EAG PR staffs.

**Personnel Recovery Centre of Excellence Location.**

The PR CoE would be ideally located in Europe and within driving distance of key NATO and EU headquarters due to travel expenses and travel time of augmenters.

That others may live to return with honour ...

<sup>1</sup> The number 20 is based on the estimate that custodianship of the various documents requires 5 staff, running in-house courses an additional 5, support to exercises another 5 and support to operations including deployments a further 5.



**The Return of Ingrid Betancourt.**

# ANNEX A

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# ANNEX B

## Acronyms

<b>ACC</b>	Air Component Commander	<b>CMO</b>	Crisis Management Operation
<b>ADC</b>	Aide De Camp	<b>CNN</b>	Cable News Network
<b>AJDH</b>	Allied Joint Doctrine Hierarchy	<b>CoE</b>	Centre of Excellence
<b>AJODWG</b>	Allied Joint Operational Doctrine Working Group	<b>CPX</b>	Command Post Exercise
<b>AJP</b>	Allied Joint Publication	<b>CR</b>	Combat Recovery
<b>ALP</b>	Allied Logistical Publication	<b>CSAR</b>	Combat Search and Rescue
<b>AMC</b>	Airborne Mission Coordinator	<b>CSR</b>	Common Staff Requirement
<b>AMedP</b>	Allied Medical Publication	<b>CST</b>	Common Staff Target
<b>AOI</b>	Area of Operational Interest	<b>CTF</b>	Coalition Task Force
<b>AOR</b>	Area of Responsibility	<b>DEA</b>	Drug Enforcement Agency
<b>ATO</b>	Air Tasking Order	<b>DHC</b>	Defence Helicopter Command
<b>ATP</b>	Allied Tactical Publication	<b>DIMS</b>	Director International Military Staff
<b>BBC</b>	British Broadcasting Service	<b>DNSA</b>	Director NATO Standardisation Agency
<b>BM</b>	Battle Management	<b>DPMO</b>	Defence Prisoner of War/ Missing Personnel Office
<b>BSM</b>	Battle Space Management	<b>EAG</b>	European Air Group
<b>C2</b>	Command and Control	<b>ECAP</b>	European Capability Action Plan
<b>CaC</b>	Conduct after Capture	<b>EDA</b>	European Defence Agency
<b>CAOC</b>	Combined Air Operations Centre	<b>EU</b>	European Union
<b>CASEVAC</b>	Casualty Evacuation	<b>EUMC</b>	European Union Military Committee
<b>CJPRSC</b>	Combined Joint Personnel Recovery Standardisation Course	<b>EUMS</b>	European Union Military Staff
		<b>FARC</b>	Fuerzas Armadas Revolucionarias de Colombia
		<b>FBI</b>	Federal Bureau of Investigation

<b>FIR</b>	Flight Information Region	<b>LIMEX</b>	Limited Extraction
<b>FLOT</b>	Forward Line Own Troops	<b>LOP</b>	Local Operating Procedure
<b>HFC</b>	Headline Force Catalogue	<b>MANPAD</b>	Man Portable Air-defence System
<b>HHG</b>	Helsinki Headline Goal	<b>MC</b>	Military Committee
<b>HQ</b>	Headquarters	<b>MCASB</b>	Military Committee Air Standardisation Board
<b>HWIC</b>	Helicopter Weapons Instructor Course	<b>MCJSB</b>	Military Committee Joint Standardisation Board
<b>IAMSAR</b>	ICAO and IMO Search and Rescue	<b>MEDEVAC</b>	Medical Evacuation
<b>ICAO</b>	International Civil Aviation Organisation	<b>MOU</b>	Memorandum Of Understanding
<b>ICRC</b>	International Committee of the Red Cross	<b>MPAT</b>	Multinational Planning Augmentation Team
<b>IED</b>	Improvised Explosive Device	<b>MSF</b>	Médecins Sans Frontières
<b>IMO</b>	International Maritime Organisation	<b>NAR</b>	Non-conventional Assisted Recovery
<b>INFO OPS</b>	Information Operations	<b>NATO</b>	North Atlantic Treaty Organisation
<b>IO</b>	International Organisation	<b>NEC</b>	Network Enabled Capabilities
<b>ISAF</b>	International Security Assistance Force	<b>NEO</b>	Non-combatant Evacuation Operation
<b>ISOPREP</b>	Isolated Personnel Report	<b>(N)GO</b>	(Non) Governmental Organisation
<b>JAPCC</b>	Joint Air Power Competence Centre	<b>NRF</b>	NATO Response Force
<b>JFC</b>	Joint Force Commander	<b>NVA</b>	North Vietnamese Army
<b>JOG</b>	joint Operations Guide	<b>OEF</b>	Operation Enduring Freedom
<b>JPR</b>	Joint Personnel Recovery	<b>OPLAN</b>	Operation Plan
<b>JPRC</b>	Joint Personnel Recovery Cell	<b>OPSEC</b>	Operational Security
<b>JTF</b>	Joint Task Force	<b>OSC</b>	On Scene Commander
<b>JWC</b>	Joint Warfare Centre	<b>PA</b>	Public Affairs
<b>LCC</b>	Land Component Commander		



<b>PfP</b>	Partnership for Peace	<b>SME</b>	Subject Matter Expert
<b>PJs</b>	Para Rescue Men	<b>SOF</b>	Special Operations Forces
<b>POC</b>	Point of Contact	<b>SOP</b>	Standard Operating Procedure
<b>POW</b>	Prisoner of War	<b>SRR</b>	Search and Rescue Region
<b>PR</b>	Personnel Recovery	<b>STANAG</b>	NATO Standardisation Agreement
<b>PR AHWG</b>	Personnel Recovery Ad-Hoc Working Group	<b>STRATCOM</b>	Strategic communications
<b>PRCC</b>	Personnel Recovery Coordination Cell	<b>TLP</b>	Tactical Leadership Programme
<b>PRETC</b>	Personnel Recovery Education Training Center	<b>TOR</b>	Terms of Reference
<b>PRTF</b>	Personnel Recovery Task Force	<b>TTPs</b>	Tactics, Techniques and Procedures
<b>PTSD</b>	Post Traumatic Stress Disorder	<b>UK</b>	United Kingdom
<b>RAF</b>	Royal Air Force	<b>UN</b>	United Nations
<b>RD</b>	Ratification Draft	<b>UNHCR</b>	United Nations High Commissioner for Refugees
<b>RMC</b>	Rescue Mission Commander	<b>UNITAF</b>	Unified Task Force
<b>RNLI</b>	Royal National Lifeboat Institution	<b>UNSC</b>	United Nations Security Council
<b>SAR</b>	Search and Rescue	<b>US</b>	United States
<b>SD</b>	Study Draft	<b>USA</b>	United States of America
<b>SERE</b>	Survival, Evasion, Resistance and Extraction	<b>USAF</b>	United States Air Force
<b>SHAPE</b>	Supreme Headquarter Allied Powers Europe	<b>WMD</b>	Weapons of Mass Destruction







**Joint Air Power Competence Centre**

von-Seydlitz-Kaserne  
Römerstraße 140 | 47546 Kalkar (Germany) | [www.japcc.org](http://www.japcc.org)