

# THE PARTICIPATION OF THE PORTUGUESE AIR FORCE CIVIL SUPPORT MISSIONS (2012-2016)<sup>1</sup>

## *A PARTICIPAÇÃO DA FORÇA AÉREA PORTUGUESA EM MISSÕES DE APOIO À PROTEÇÃO CIVIL (2012-2016)*

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### **Abstract**

This paper falls within the field of military science and examines the use of Air Force capabilities in Civil Support missions.

The paper's main objective is to identify the assets involved in the accomplishment of Civil Support Missions, under the larger scope of Public Interest Missions, and its specific objectives consist of: recognising the threat and risk environment, identifying the type of support missions performed, and assessing the dual use of Air Force capabilities in this type of support missions.

The research adopted a methodology based on a constructivist ontological orientation and an interpretivist epistemological view wherein specific facts are observed through a qualitative lens.

The model of analysis and the conceptual dimension were developed by examining the legal and normative framework in force, using an inductive reasoning strategy to construct a theory.

It was concluded that the Air Force effectively contributes to accomplish the national objectives through its involvement in Civil Support Missions.

**Keywords:** National Security, Resilience, Portuguese Air Force, Civil Protection, Dual Use.

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## **Resumo**

*A presente investigação é edificada sob a égide das ciências militares e o seu objeto de análise versa sobre a participação da Força Aérea Portuguesa em missões no âmbito da Proteção Civil.*

*Inserido no tema das missões de interesse público, o objetivo geral desta investigação é identificar e avaliar a eficiência dos meios da Força Aérea Portuguesa empregues na prossecução das missões de apoio a ações de Proteção Civil. Por sua vez, os objetivos específicos consistem em reconhecer as ameaças e o ambiente de risco, identificar os contributos no apoio à Proteção Civil, identificar os meios empregues e a eficiência das suas capacidades nesta tipologia de missões de apoio.*

*No domínio metodológico, com base numa orientação ontológica construtivista e numa posição epistemológica interpretativista, observam-se factos particulares através de uma estratégia qualitativa.*

*O modelo de análise desenvolvido alicerça-se através da análise documental, assim como na dimensão concetual e em entrevistas, com base num raciocínio indutivo, tendo em vista a formulação de uma teoria.*

*O resultado deste estudo valida o contributo eficiente da Força Aérea para a garantia dos objetivos do Estado, como a segurança e o bem-estar, através da sua participação em missões de apoio a ações de Proteção Civil.*

**Palavras-chave:** *Segurança Nacional, Resiliência, Proteção Civil, Força Aérea Portuguesa, Duplo Uso.*

## **Introduction**

The Constitution of the Portuguese Republic (CPR) determines, under Article 27(1), that “Everyone has the right to freedom and security” (AR, 2005), and, because those rights are one of the fundamental pillars of the State (Feiteira, 2016, p. 283), they should be recognised by establishing appropriate strategies and capabilities.

In a globalised world where unpredictability and lack of control are major aspects of contemporary societies (Duarte, 2015, p. 451), Civil Protection is a decisive tool to safeguard people and goods. It is, therefore, a guarantee of National Security.

Article 9(d) of the CPR states that promoting “the people’s well-being and quality of life and real equality between the Portuguese” (AR, 2005) is a fundamental task of the State. As a result, and because the well-being of the population is a fundamental pillar of the State, the Civil Protection authority aims to prevent, mitigate, and manage risks and assist in restoring normalcy (AR, 2006, Art. 4(1)), directly contributing to the first objective and helping to build resilience.

The Portuguese Air Force (PoAF) inherently functions as a Civil Protection agent (AR, 2006, Art. 46(1)(c)) integrated in the Civil Protection system. However, the abstract way in which citizens perceive the Air Force's involvement in this type of missions means that a paradigm shift is needed. Thus, it is imperative that we examine the involvement of the Portuguese Air Force in public interest missions by making this topic our object of study.

With regard to its geographical scope and functional aspects, this study assesses the PoAF's involvement in missions carried out in mainland Portugal, within the framework of cooperation with the National Civil Protection Authority (ANPC), the body responsible for coordinating the available resources. As for its time-frame, this investigation covers the period between 2012 and 2016, during which serious large-scale events occurred.

Within the topic of public interest missions, the general objective of this paper is to identify the assets available and to assess their effectiveness in Civil Support missions. Accomplishing this objective requires developing a theory that provides a general view on the effectiveness of the PoAF in building National Security and resilience as objectives of the State. In turn, the specific objectives of this investigation, which were drawn from the general objective, are:

- to identify the threat and risk environment;
- to recognise the PoAF as an actor in the accomplishment of the State's strategic objectives;
- to identify the type of Civil Support Missions performed by the PoAF;
- to identify the PoAF assets used in those Civil Support Missions;
- to evaluate the effectiveness of the PoAF assets employed Civil Support Missions;

In order to ascertain the facts, this investigation posed the following research question (RQ): Does the PoAF improve the quality of life of Portuguese citizens by participating in Civil Support missions?

The following subsidiary questions (SQ) were posed to help answer the above question:

- SQ1: Does the PoAF have National Security responsibilities?
- SQ2: Is the PoAF involved in guaranteeing Human Security?
- SQ3: Is the PoAF's support to the Civil Protection Authority efficient?

The research used the inductive approach associated with a qualitative strategy. The research design was based on the case study method, and the data collection instruments used were a document review, which covered primary open sources, and interviews.

The paper is divided into five chapters. The first chapter presents the research motives and a review of the literature, and introduces the model of analysis, the methodological framework, and the data collection and processing techniques. The chapter ends by stressing the importance of the topic, the expected contributions of the paper, and its target audience.

The second chapter presents the global risks and threats and how they relate to the national context, identifying the current legal and normative framework that demonstrates

the country's strategic awareness of the current volatile environment. This chapter concludes with a synthesis that answers SQ1.

The third chapter aims to ascertain how the dual use of the PoAF capabilities contributes to the well-being of the populations and, as a result, guarantees the country's resilience. These contributions are illustrated by the public interest missions in which the PoAF is involved and the respective operational commitments. The chapter concludes with a synthesis that answers SQ2.

The fourth chapter presents the results of the case study. To that end, a qualitative analysis of the interviews conducted with the PoAF and the ANPC was carried out. Next, a theory was formulated based on the results. The chapter assesses the interviews and the theory presented to answer SQ3 and the RQ.

The conclusion summarises the general lines of the methodology used in the study and validates the results according to the general and specific objectives, reiterating the answers to the research question and the subsidiary questions. This chapter also states the investigation's contributions to knowledge and proposes future research lines.

## 1. Thematic research and literature review

“An elementary question is one that strikes at the deepest core of our individual and collective perplexity with the technical clarity of a slingshot. Rousseau's question was like this; so must ours be”.

Santos (2010, p. 8)

This investigation aims to meet the recommendation made by pilot Lt João Franco in his master's thesis, which calls for studies that “raise the awareness of the PoAF military personnel and of the general public regarding the areas of action of the PoAF, its output, and what each person's contributions are” (2014, p. 61). The author concludes that “the Air Force's output goes beyond simply fulfilling its operational mission; there are other activities and processes, (...) and there is a lack of Organizational Self-Awareness” (2014, p. 60). Thus, the aim is to foster a more effective organizational awareness about the influence of the PoAF on the country's intangible assets in the field of security, protection, and trust.

The relevance and importance of this research is also supported by studies in the field of military science. Thus, the analysis of security and the AAF is supported by the papers: “A Evolução do Conceito de Segurança e as Implicações nas Operações Militares no Séc. XXI” [The Evolution of the Concept of Security and its Implications for 21st century Military Operations] (Reboredo, 2010) and “O conceito de segurança alargada e o seu impacto nas missões e organização das Forças Armadas” [The concept of expanded security and its impact on the missions and organisation of the Armed Forces] (Viana, 2003). Studies on Civil Protection and the Armed Forces will also be presented: “O Dispositivo e as Capacidades das Forças Armadas na resposta a situações de Crise decorrentes de catástrofe ou Calamidade

Pública” [The Armed Forces Crisis Response Apparatus and Capabilities in situations of disaster or Public Calamity] (Henriques, 2009), “As Forças Armadas e a Proteção Civil no âmbito Nacional e Regional” [The Armed Forces and the Civil Protection service at the National and Regional level] (Ramalhete, 2010), and “O Exército Português nas Operações de Apoio Civil” [The Portuguese Army’s Civil Support Operations] (Mateus, 2014). A paper on the dual use of military assets, “Forças Armadas: Recursos Logísticos de Interesse Dual” [Armed Forces: Logistical Resources of Dual Interest” (Rainha, 2013), was also analysed.

This research also aims to meet the recommendations of the CEDN, that is, to foster citizens’ awareness of the usefulness of the military (CM, 2013). Thus, by showing how the PoAF capabilities are used in Civil Support missions, this paper demonstrates their usefulness outside the traditional pure warfare paradigm.

### **1.1. Model of Analysis, Strategy, and Research Design**

The research question and the subsidiary questions hinge on the key concepts that support the model of analysis, “National Security”, “Resilience” and “Dual Use”. Due to their complexity, interaction, and interdependence, these concepts are explored throughout the investigation, providing a link between the state-of-the-art and the validation of the variables. The following dimensions encompass the above concepts: safety, public interest missions, and two of the three cycles of Civil Protection: prevention and rescue.

The paper adopts distinct ontological and epistemological positions regarding the object of study. The second and third chapters adopt a constructivist ontological position, since the dynamics associated with social issues and phenomena such as security, safety, and the PoAF as an actor, relate, as Bryman argues, to the interactions between social actors and between them and the surrounding environment (Bryman, 2012 cited in IESM, 2016, p. 18). By identifying the legal and normative framework, it was possible to verify that they are indeed subject to these dynamics because “they are embedded in a social environment that shapes them, and must adapt to its specificities” (Cunha, n.d., cited in Gouveia, 2012, p. 82). On the other hand, the analysis carried out in chapter four is supported by the interpretative epistemological position, which was adopted because the analysis of the interviews inevitably depends on the researcher’s subjectivity (Morgan and Smircich, 1980, cited in IESM, 2016, p. 20) to understand the phenomenon under study in all its dimensions.

The research uses an inductive approach to analyse facts that, when combined, allow the researcher to answer the questions posed and construct a theory.

A case study research design was used to narrow the scope of the analysis. According to Bell (1997, pp. 23-24), by using this type of design researchers are able to evaluate a specific organization by highlighting its unique and specific characteristics and by shedding light on the way it interacts with the surrounding environment, allowing them to build a theory. Thus, the study focuses on the PoAF and on its collaboration with the ANPC in mainland Portugal. The researcher’s claims about building a theory are based on Flick (2005, pp. 238-239), who

argues that a theory must satisfy criteria such as confirmability, auditability, authenticity, and utilization.

The research used a qualitative approach based mainly on document analysis and interviews. Moreira (1994, p 102) states that although data collection relies on qualitative dimensions, this does not mean that quantitative elements should be avoided, therefore, descriptive and quantitative data have been included to support the qualitative assumptions. This investigation concurs with this position and chapters three and four present quantitative data on the PoAF commitments.

## 1.2. Data Collection, Analysis, and Processing

Data were collected through a document review and through interviews. With regard to the document review, primary and open national sources were preferred so that all recipients are able to access the results of the research without restrictions. The interviews were semi-structured and were conducted exclusively with military responders chosen for the relevance of their position or for their experience. The responders were Lieutenant General Alfredo Cruz<sup>2</sup>, director of the *Mais Alto* magazine; Colonel João Pereira, Head of the Operations Division of the Air Force Staff<sup>3</sup> (EMFA); Colonel Martins Lavado, the representative of the Chief of the General Staff of the Armed Forces (CEMGFA) at the ANCP; Major André Simões, 2nd commander of the Air Force Survival Training Centre<sup>4</sup> (CTSFA); Major Jorge Marques, from the Directorate of Infrastructure<sup>5</sup> (DI); and the Assistance and Aid Systems Operators<sup>6</sup> (OPSAS) Command Chief Master Sergeant, CCM Luís Batista.

With regard to data analysis using a qualitative approach, Moreira (1994, pp. 101103) argues that researchers must have a discerning attitude because establishing relationships between the events under study requires flexibility and involvement on their part. Thus, although the researcher is a member of the PoAF, her approach was to focus the research on measuring the PoAF's effectiveness in civil support missions.

The data obtained from the interviews was processed bearing in mind the main axes of the research. The aim of the researcher is to identify convergent and divergent opinions on the quantified facts and ultimately to draw conclusions from them.

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<sup>2</sup> Throughout his career, Lieutenant Cruz has served as Commander of the 752 Helicopter Squadron – PUMA, as Azores Operational Commander, and as Air Force Operational Commander, among others.

<sup>3</sup> Among other duties, this Division is responsible for analysing the security context and for defining the requirements of the system of forces and the force posture.

<sup>4</sup> Among other components, the CTSFA includes the Chemical, Radiological, Biological and Nuclear Defence Squadron (CRBNDS), which provides education and training on defence against Nuclear, Radiological, Biological, and Chemical attacks.

<sup>5</sup> The DI is responsible for managing and articulating the PoAF Bulldozers among its various infrastructure projects.

<sup>6</sup> This PoAF specialty provides assistance in preventing and combating fires in aircraft, weapons, facilities, and land, as well as in rescues involving accidents.

## 2. Security and Safety Awareness in Portugal

“Unable to adequately manage the unprecedented complexity of the ongoing process of globalisation, this new century is off to a poor start, and in these first years we already witnessed a procession of indiscriminate violence, multiple terror events across the globe, devastating economic and financial crises and social advances that, although desirable, have had the worrying effect of greatly discrediting political action”.

Sampaio (2016)

There is no doubt that the national environment is affected by global risks and threats. Having recognised that these risks and threats are diverse, it is crucial to ascertain if the country has the strategic awareness to address their effects and what instruments it has at its disposal. This chapter aims to demonstrate that the PoAF plays an effective role in guaranteeing National Security and the well-being of the population.

### 2.1. Guaranteeing National Security in the Current Strategic Context

The perception about the current strategic context, which is uncertain and complex, enables the problematization of the concept of National Security. To define the concept, the following questions must be considered: who is being protected, what goods are being protected, what is the intensity of the disturbance, and what are the structures and assets support it (Gouveia, 2015a, p.134). These criteria validate the concept of Security emanated by the National Defence Institute, which defines it as:

[...] a condition of the Nation which is represented by the permanent assurance of survival in peace and in freedom, guaranteeing its sovereignty, independence, and unity, the integrity of the territory, the collective protection of people, goods, and spiritual values, the normal conduct of the State’s tasks, the freedom of political action of the sovereign bodies, and the full functioning of democratic institutions.

Carvalho (2009, p. 16)

Pedro Clemente (2015, p.95) defines Security as the tranquillity resulting from an absence of danger. The author also stresses the importance of distinguishing between the concepts of security and safety. On the one hand, the author mentions that *segurança* has an equivalent in the English term *security*, which means “freedom from fear” (Gouveia, 2013 cited in Clemente, 2015, p. 95); on the other hand, the concept of safety is related to the Civil Protection operations in case of disasters, both natural and caused by human actions.

Despite these different concepts, it is commonly accepted that National Security is the combination of security and safety because ultimately its goal is to guarantee the integrity of people and property.

## 2.2. The Deterritorialisation of Risks and Threats

The Strategic Concept for National Defence (CEDN) states that the current context stems from unexpected events such as the economic and financial crisis and the emergence of new actors. The document identifies the following variables as risks and threats to global security: transnational terrorism, piracy, transnational crime, the proliferation of weapons of mass destruction, the increasing number of fragile States and civil wars, regional conflicts, cyber terrorism and cybercrime, conflicts over scarce natural resources, natural disasters, and climate change.

The document states that those global risks affect the national context, and mentions that the Portuguese prevention, adaptation, and rapid response (CM, 2013) capabilities to deal with environmental risks and threats should be improved.

Given the admittedly global scope of these risks and threats, which inevitably influences the Portuguese reality, it can be said that there has been a deterritorialisation of threats (Garcia, 2015, p. 100).

This global scope invites the question of who is responsible for guaranteeing National Security. On this matter, General Garcia Leandro argues that:

[...] security can no longer be taken for granted anywhere in the world, and everyone must work towards it and guarantee it, day after day; a country's Defence cannot remain an isolated entity, and is now only a part of the Greater Security that affects all people, and the issue of large-scale natural disasters must be dealt with very seriously.

Leandro (2007, p. 12).

As for the question of what is the purpose of Defence, General Loureiro dos Santos states that:

[...] the role of the Armed Forces goes beyond the military defence of the State against the threats to its integrity, usually within the framework of the military alliances in which it participates. They are also the ultimate guarantee of the State's authority, ensuring the functioning of democratic institutions (...), supporting and reinforcing the Civil Protection services in emergencies (...) for which they are specially prepared and trained.

Santos (2016, pp. 157-158)

## 2.3. Legal Framework for the Involvement of the Air Force in Civil Support Missions

The Portuguese Armed Forces (AASF) efforts to ensure the people's wellbeing and security must be sustained by a national strategic awareness reflected in a legal and normative framework that sets out the institutional responsibilities of the State and its instruments.

Examining the extensive and explicit legal and normative framework for the role of the Armed Forces in the guarantee of security has led to two conclusions: that a national strategic awareness exists and that the PoAF is an instrument for achieving the objectives of the State.

Thus, under Article 273(2) of the CPR, the national defence policy aims to guarantee “national independence, territorial integrity and the freedom and security of the population from any external aggression or threat” (AR, 2005); at the same time, Article 275(6) establishes that “the Armed Forces may be charged, as laid down by law, with cooperating in civil defense missions, tasks concerning the fulfillment of basic needs and the improvement of people’s quality of life” (AR, 2005).

Article 24(1)(f) of the National Defence Law also defines that the Armed Forces “may be charged (...) with cooperating in Civil Support missions and in tasks related to the fulfilment of basic needs and the improvement of people’s quality of life” (AR, 2009a).

Article 4(1)(f) of the Basic Organic Law on the Organization of the Armed Forces states that the Armed Forces have the obligation to “collaborate in Civil Support missions and in tasks related to the fulfillment of basic needs and the improvement of people’s quality of life” (AR, 2009a).

Thus, the answer to SQ1, “Does the PoAF have National Security responsibilities”, is that the State does in fact have strategic awareness of the importance of its military capabilities, which include the PoAF, for the guarantee of National Security, namely through its involvement public interest missions, especially those in support of civil protection activities. Thus, the PoAF has proven responsibilities in the field of security.

### 3. The Portuguese Air Force in the field of Public Interest

“Security is the basis upon which the human condition is built; it is the infrastructure of civilization and it is of the utmost importance for the development of all people and every society”.

Pinto (2015, p. 216)

The global awareness of risks and threats across all sections of society has irrevocably changed the value of Human Security. This awareness compels societies to develop their capabilities to guarantee and overcome a diverse range of fracturing events.

This chapter assesses the PoAF’s involvement in public interest activities by identifying the national strategic objectives that are critical to decrease the risk environment and to guarantee resilience, and by confirming that the PoAF is an actor in the achievement of those objectives. To achieve the first objective, the research will endeavour to validate the dual use of the PoAF capabilities, while the second will be achieved by providing a qualitative description of the missions.

#### 3.1. Human Security and Civil Protection

Human Security gained prominence after World War II, when guaranteeing the people’s wellbeing and security began to involve different dimensions, including economic, food, health, environmental, personal, and community security, among others (Gouveia, 2015b, pp.

420-421). Human security aims to protect the vital freedoms of those exposed to threats and risks, enabling them to create systems that guarantee their survival, dignity, and livelihood. Thus, Human Security has two meanings; on the one hand, it relates to public order and the rule of law; on the other, to the social and natural context. Human Security calls “not for only protection, but also for prevention, and aims to empower people to protect themselves in vulnerable situations” (Amaro, 2008, p. 85).

The issue of people being able to “stand on their own” relates to the issue of guaranteeing resilience. Knowing that resilience is a “process through which people face or overcome crisis and adversity, that is, a person’s ability to defend themselves and recover from adverse factors or conditions” (Werner & Smith, 1982 cited in Magalhães & Faria, 2014, p. 163), how does the State guarantee resilience? The answer is: through its Civil Protection activities.

Civil Protection is a multidisciplinary activity that focuses on prevention, rescue, and rehabilitation of major accidents and/or catastrophes, and is the responsibility of all actors in society: State actors, non-State actors, and individual citizens.

### **3.2. The Dual Use of Military Capabilities**

Societies today are aware of the threats and risks they face, and fully understand that security is now a fundamental part of their lives. Catastrophes, natural disasters, and crises are a staple of today’s society, which is volatile, non-linear, and subject to continuous change. These diverse events have a global scope, making it necessary to answer the questions “how to do it?”, “what for?”, “against what?”, “how?”, and “with what means?” (Viana, 2014, p.369). In this “century without a compass” (Moreira, 2014, p. 339), the State must become organised and define objectives to be achieved and a strategy to achieve them. That strategy must be:

[...] anticipatory and proactive, at its core and in a broad sense, choosing the best way to reach a certain goal with the means available (hard and soft power), playing a dialectical game that involves minimising vulnerabilities, maximising potential, and neutralizing threats.

Garcia (2010)

What is, then, the national strategy in light of the current economic constraints at a national and international level? In fact, a paradigm shift occurred, to which the State was not indifferent, regarding the use of military assets in civil society. Although the accepted concept, dual use, was initially adopted by the Portuguese Navy, the CEDN formalized its use by including it in its strategy to promote the rational and efficient use of resources. Thus, dual use is simply “the employment of AAFP assets in military and non-military public service, combining, in compliance with the constitutional and legal order, military and non-military public service tasks, fostering synergies based on the rationalisation and complementarity of assets and their logistics” (Palma, 2011).

The CEDN expressly states that the military’s capabilities are also at the service of Civil Protection and thus serve to guarantee the people’s well-being in a dual-use system.

### 3.3. The Air Force as an Agent of Effective Action

The relationship between society and the PoAF is both systemic and systematic, which means that adapting its structures to requirements that fall outside the scope of military defence is both an imperative and an ongoing effort.

With regard to the missions of the PoAF, they can be said to be intrinsically linked to the national objectives. Articles 1 and 2 of the Organic Law of the PoAF (CM, 2014) state that the Air Force's main mission is "to participate, in an integrated manner, in the military defence of the republic, under the Constitution and the law" as well as, among others, "to collaborate in Civil Support missions and in tasks related to the fulfillment of basic needs and the improvement of the people's quality of life".

The CEDN stresses the need to rationalise and optimise resources by developing integrated civilian and military capabilities, emphasising the importance of dual use.

Therefore, the primary tasks with which the PoAF is charged, in combination with the national permanent and conjunctural objectives raise two issues: one concerns the dual use of military assets in the public interest; the other concerns the guarantee of Human Security as a top priority.

#### 3.3.1. Public Interest Missions carried out by the Air Force

The primary mission of the PoAF is to cooperate in an integrated manner in the military defence of the Republic through air operations and to ensure the defence of the national air space.

The intrinsic characteristics of airpower are crucial for this mission. The characteristics and capabilities of airpower are crucial to the success of the operations, and, in the Annual Activities Report of 2015, the Chief of Staff of the Air Force (CEMFA) states that:

[...] the current Security and Defence challenges are characterised by their global reach, unpredictability, and asymmetry. Airpower, a contributing factor of National Power, is an ideal means of achieving the national strategic objectives; its characteristics, such as flexibility, range, and speed make the modern Air Force one of the most important tools in a nation's strategy. Likewise, airpower can be applied across the spectrum of public interest missions, serving the public in unique and irreplaceable ways, supporting the populations and safeguarding Human Security.

EMFA (2016b)

In addition to its primary mission, the PoAF carries out other public interest missions that contribute to ensure the people's well-being and security in which air power plays a decisive role.

Thus, the public interest missions carried out by the PoAF are: combating crime and international trafficking in narcotic drugs<sup>7</sup>, maritime surveillance<sup>8</sup>, monitoring and controlling maritime traffic<sup>9</sup>, controlling and combating pollution, search and rescue, transport of organs, medical evacuations, naval evacuations, and collaboration with the ANPC in mainland Portugal.

Therefore, identifying the air assets used in this type of missions will serve to demonstrate that air assets can be deployed in different scenarios and not only in a military environment.

The number of flight hours (FH) logged is also relevant because it shows that achieving the mission requires ground personnel and assets at permanent readiness during the same time-frame.

Thus, Table 1 presents the various types of missions, the assets employed, and the flight hours allocated to each mission.

In addition to the above missions, the PoAF dog teams provide training and administer courses to the *Polícia de Segurança Pública*, the *Guarda Nacional Republicana*, and the Prison Services, and the PoAF also provides support to the Regional Civil Protection Services of the Azores and Madeira.

Therefore, the answer to SQ2, “Is the PoAF involved in guaranteeing Human Security?” is that the PoAF carries out a set of public interest missions of different types, aiming to foster a climate of security and protection and to provide an agile response to any type of critical event.

#### **4. Case Study – The Air Force Civil Support Missions**

“Guaranteeing Portugal at the smallest request”.  
EMFA (2015)

This chapter analyses the PoAF assets used in the Civil Protection cycles and assesses their efficiency. The facts under study will be appraised bearing in mind the operational directives, the qualitative assessment of the assets committed, and the analysis of the interviews.

##### **4.1. Forms of cooperation in the Civil Protection cycle**

The Civil Protection services aim to prevent, mitigate, and reduce risks, and to assist in the restoration of normality (AR, 2006, Article 4(1)). Accomplishing these goals involves three action cycles: prevention, relief, and rehabilitation (Amaro, 2008). However, because the PoAF

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<sup>7</sup> In close collaboration with the Judiciary Police.

<sup>8</sup> In the control of illegal immigration under the European Patrols Network - EPN and the European Agency for the Management of Operational Cooperation at the External Borders - FRONTEX.

<sup>9</sup> In collaboration with the Directorate General of Natural Resources, Safety and Maritime Services within the framework of project SIFICAP - Integrated System for Surveillance, Monitoring and Control of Fishing Activities.

Table 1 – Public Interest Missions carried out by the PoAF

Public Interest Missions	Aircraft	2012	2013	2014	2015	2016
Fighting crime and international drugs trafficking	P-3C C-295	9 target search missions	92 target search missions	333:00 FH	415:35 FH	278:05 FH
Maritime Surveillance (illegal immigration)	C-295 P-3C	Commitment of C-295 aircraft, a total 463:45 FH within the framework of FRONTEX	Commitment of C-295 aircraft, a total 84 missions and 389:00 FH within the framework of FRONTEX	Commitment of 431:00 FH within the framework of FRONTEX and the EPN	Commitment of 805:40 FH within the framework of FRONTEX and the EPN	Commitment of 765:10 FH, of which 623:45 FH were logged within the framework of FRONTEX and 141:25 FH under the EPN
Monitoring and Controlling Maritime Traffic	P-3C C-295 EH-101	256:20 FH	410:35 FH	281:40 FH	425:00 FH	289:00 FH
Controlling and Combating Pollution	P-3C C-295	Exercises and surveillance	01:00 FH	140:10 FH	359:20 FH	288:15 FH
Search and Rescue	P-3C C-295 EH-101	292:50 FH	372:15 FH	230:25 FH	316:10 FH	298:40 FH
Transport of Organs	C-295 P-3C EH-101 FA-50	46:05 FH	54:20 FH	55:40 FH	68:30 FH	68:05 FH
Medical Evacuations	C-295 EH-101 FA-50	464:20 FH	593:20 FH	484:15 FH	631:20 FH	669:20 FH
Naval Evacuations	P-3C C-295 EH-101	146:30 FH	92:10 FH	187:25 FH	117:20 FH	122:45 FH
ANPC	Allouette III EH-101 C-295 C-130	Support to firefighting operations and 1 flood relief mission in Madeira: 63:50 FH	Support to firefighting operations: 20 missions and 117:00 FH	Support to firefighting operations: 15 missions and 14:10 FH	Support to firefighting operations: 15 missions and 05:50 FH	Support to firefighting operations, including in Madeira: 34:50 FH

Source: Adapted from RASI (2013, 2014, 2015, 2016, 2017) and the PoAF's Annual Statistical Yearbooks (2013, 2014, 2015, 2016, 2017).

is not involved in the rehabilitation cycle, this case study will only analyse the prevention and relief cycles.

The PoAF's involvement is supported by two directives: Operational Directive no. 4/2016 on the "Participation of the Armed Forces in Civil Protection Actions" issued by the EMGFA (EMGFA, 2016) and Directive no. 7 on the "Participation of the Air Force in Civil Protection Actions" issued by the CEMFA (EMFA, 2016a). With regard to the forms that this collaboration takes, National Operational Directive no. 2 (DON2) on the *Dispositivo Especial de Combate a Incêndios Florestais* [Special Mechanism to Fight Forest Fires] (DECIF) issued by the ANPC states that the PoAF may be committed in reconnaissance actions, in evaluation actions, and in the coordination of air assets whenever the circumstances require it, depending on the availability and priority of employment of these military assets (ANPC, 2016). Operational Directive no. 3 (DON3), issued by the same Authority, states that, in case of chemical, biological, radiological and nuclear (CBRN) incidents, the PoAF may cooperate in Civil Protection operations by providing reconnaissance, detection, and monitoring; by collecting radiological and chemical samples; by issuing forecast, warning, and manual reports; and by assisting in the collective decontamination of personnel and equipment (ANPC, 2010).

#### 4.1.1. Prevention

The PoAF participates in the prevention cycle by conducting joint drills and exercises with the ANPC and with other entities, at the national, district, and municipal levels.

Table 2 lists the Prevention exercises in which the CBRN PoAF team participated during the time frame under study.

**Table 2 – Air Force CBRN Teams**

Year	Drills/Exercises	Type
(usually annual)	CELULEX	joint exercise to ensure operational proficiency
2012	Radiological Emergencies	joint exercise on the handling of radioactive sources
2013	ConvEx 2013	joint exercise on the handling of chemical agents
2016	DIM RAD Teams	joint exercise on the handling of radioactive sources

Key: DIM RAD – Detection, Identification, and Monitoring of Radiological materials

Source: Adapted from Simões (2017) and Lavado (2017).

With regard to CBRN, Lavado (2017), the CEMGFA representative at the ANPC, states that the PoAF's "knowledge and operational capabilities make it a crucial instrument to build the national capacity", working in close cooperation and coordination with civil entities and providing full support to the ANPC. In order to legitimise this capacity, Simões (2017), 2nd commander of the PoAF Survival and Training Center, states that the PoAF's "technical maturity", which is sustained by its widely recognised expertise, enables it to perform any mission. Simões also stresses that this "expertise in the air environment distinguishes it from other national entities".

Table 3 lists the exercises where the Rescue Squadrons of the PoAF Units were involved.

**Table 3 – Rescue Squadrons of the Air Force Units**

Year	Drills/Exercises	Type
2013	Air Base 11:	joint full-scale emergency exercise
2015	Air Base 5	joint exercise on a forest fire caused by an accident with an F-16 aircraft
2016 (April)	Air Base 6	joint exercise on an accident with an EH-101 aircraft
2016 (December)	Air Base 11	joint full-scale emergency exercise

Source: Adapted from Batista (2017) e Lavado (2017).

With regard to the participation in drills through the Rescue Squadrons of the PoAF Units, Batista (2017), Command Chief Master Sergeant of the Assistance and Aid Systems Operators (OPSAS), highlights that the "specialised technical knowledge of these teams in the air environment is relevant for civilian operations and is highly valued and recognised".

#### **4.1.2. Rescue**

According to the Annual Internal Security Reports (RASI) of 20122016, the PoAF is more heavily involved in the rescue cycle, especially in providing assistance to the DECIF in the Charlie phase<sup>10</sup>. Since firefighting support commitments, as mentioned by Lavado (2017), inevitably depend on the size, impact, and severity of events, identifying the number of occurrences and the burned area in mainland Portugal is relevant for this study. Thus, it can be firmly stated that the requests for collaboration increase or decrease depending on the severity of the occurrences, which can be seen in the total burned area. During this period, the worst years in terms of total burned area 2012, 2013, and 2016, as Table 4 shows.

<sup>10</sup> Every year between July and September.

**Table 4 – Number of occurrences and total burned area in mainland Portugal**

Year	Occurrences (no.) (1 January - 15 October)			Reignitions (no.)	Burned area (ha)		
	Brush fires (Area <1ha)	Forest fires	Total		Settlements	Woodland	Total
2012	16 611	4 393	21 004	1 855	48 094	62 085	110 179
2013	14 819	3 525	18 344	2 241	54 856	94 620	149 476
2014	5 806	1 035	6 841	276	8 657	10 831	19 488
2015	12 081	3 247	15 328	1396	23 639	40 216	63 855
2016	10 402	2 677	13 079	963	85 785	74 705	160 490

Source: ICNF (2016).

The PoAF supports firefighting activities by providing air assets and bulldozers (MR), by supplying fuel to ANPC aircraft, by establishing Air Asset Centres (AAC), and by implementing Zones to Receive International Reinforcements (ZRRINT). Table 5 provides an overview of the PoAF involvement in quantitative terms, listing the assets used to support Civil Protection activities in mainland Portugal.

**Table 5 – PoAF support to the DECIF**

Tarefas	Missões de coordenação de meios aéreos, reconhecimento, vigilância, transporte aéreo de pessoal e equipamentos de combate a incêndios				Apoio às operações de Meios Aéreos	Apoio Específico	Reabastecimentos
	Allouette III	EH-101	C-295	C-130			
Ano	Hora Voo				N.º Solicitações Realizadas		Litros
2012	50:17	0:00	4:67	8:67	4	2	105.625
2013	110:33	0:00	6:58	0:00	4	1	353.342
2014	0:00	0:00	0:00	0:00	1	0	1.210
2015	4:15	1:33	0:00	0:00	1	0	2.490
2016	0:00	0:00	25:58	8:92	1	2	419.085

Source: Adapted from Lavado (2017).

Table 5 shows that there is a causal relationship between the number of occurrences (burned area) and the involvement of the PoAF: in the most significant years (2012, 2013, and 2016) there were more refuelling operations and logged FH.

#### 4.2. Evaluating the efficiency of deployed Air Force assets

With regard to the efficiency of the air assets committed by the Air Force, Cruz (2017), the director of the *Mais Alto* magazine, states that their most salient characteristics and capabilities are speed, reach, manoeuvrability, and mobility. These capabilities enable it to mitigate the effects of disasters through a rapid and flexible response. Cruz also points out that the available air assets vary according to the type of risks and mission (reconnaissance, surveillance, transport). Pereira (2017), Head of the Operations Division of the EMFA, emphasises the efficiency of air power, noting that “the PoAF is able to rapidly access the affected area due to the speed provided by air assets, it is deployable and can be used as an advanced logistics unit (providing medical support, meals, among others), it can command and control air operations in case of disaster, and it can coordinate all operations by using its regular resources or even by providing tactical communications”. Pereira also argues that knowledge is the PoAF’s “most important contribution because its broad and efficient capabilities in the planning and command and control of air operations and air assets, as well as its unique characteristics in our country, make it fully efficient”. Lavado (2017) mentions the same characteristics, reinforcing that the PoAF’s efficiency is proven by the way it fully and successfully accomplishes the missions it is called upon to participate in. All respondents unanimously stated that the PoAF’s efficiency in building resilience unequivocally contributes to National Security.

On the other hand, with regard to the efficiency of the use of MR, Marques (2017), an officer in the PoAF Directorate of Infrastructure with proven experience in the use of MR, argues that they unambiguously contribute to the “protection and security of the national human, economic, and environmental heritage”. Therefore, referring to the assets’ surplus capacity, Marques also argues that the PoAF guarantees the protection of people and property by “creating accesses, conducting deforestation and cleaning operations, establishing security perimeters, and assisting in the containment and mop-up phases of forest fires”.

#### 4.3. The Air Force’s perception of its contributions

When asked about how the PoAF perceives its contributions, the respondents’ answers were both convergent and divergent. Divergent from the perspective of the audience to which they referred and convergent because all come to similar conclusions.

Thus, with regard to perceptions about leadership, Pereira (2017) considers that today there is greater awareness about the involvement of the PoAF in civil missions and in missions to support the people’s well-being; as for the military personnel with operational duties, Cruz (2017) states that they are fully aware of that involvement, and that they are

highly motivated and proud to take part in this type of mission. Simões (2017) emphasises the external perception, mentioning that, due to its capacity of “commitment, interoperability, coordination, and coordination of assets”, the PoAF is widely recognised by all entities. Marques (2017) points out that the personnel involved in MR manoeuvres are aware of the results and importance of their participation in this type of support missions.

#### **4.4. Expectations for the future**

In terms of operational capabilities, the prospects are optimistic. With regard to the commitment of air assets, Pereira (2017) foresees that the PoAF will be involved in surveillance and fire detection missions through the use of UAVs, which will entail less human and financial resources, anticipating the rescue process and promoting a more cost-effective use of assets.

As for human capabilities, Simões (2017) and Batista (2017) highlight the PoAF’s expertise in the field of CBRN and combat to aircraft fires. Because education helps to promote development and resilience, the future must be built with cohesion to enhance and empower people (Rosa, 2016). Thus, all respondents agree that knowledge is an intangible asset that the PoAF, due to its geographical reach, can make available to the civilian population, developing specific capabilities, as Lavado (2017) states. Providing more and better education to citizens so that they know what to do and how to act is crucial, and Batista (2017) argues that the OPSAS specialty, which operates at Unit level, can help build this individual and community capacity through awareness raising activities.

#### **4.5. The Air Force output as a national intangible asset**

The characteristics of air power make the PoAF a capability whose output has a wider reach than what can be shown by purely quantitative data. The efficient use of its assets in the support missions it is called upon to participate in, specifically by the ANPC, undoubtedly results in national intangible assets such as security, collective protection, and trust.

The public interest missions carried out by the PoAF guarantee (Human) Security by developing resilience through the readiness of its assets, by fostering a perception of confidence in civil society, and a sense of protection that stems from its ability to contribute, within its sphere of intervention, to the range of national strategic objectives. Having validated all the indicators under study, it can be theorised that the PoAF is an instrument that enhances the national strategic potential because it guarantees crucial assets for the democratic rule of law.

Thus, the answer to SQ3, “Is the PoAF’s support to the Civil Protection Authority efficient?” is that the PoAF cooperates efficiently with the ANPC in different ways by participating in drills and exercises and by providing air assets and MR, AAC, and ZRINTR, as well as its intangible asset, that is, knowledge. This conclusion has been validated and demonstrated by the qualitative indicators and by the analysis of the interviews.

The PoAF’s support to the ANPC develops resilience and ensures the people’s security and well-being, on the one hand, and, on the other, promotes National Security in general.

The RQ “Does the PoAF improve the quality of life of Portuguese citizens by participating in Civil Support missions?” is thus validated, and it can be stated that the PoAF is an efficient instrument that enhances the national strategic potential.

## Conclusions

The public interest missions carried out by the PoAF, including its Civil Support missions, are indicative of the country’s strategic awareness about the relevance of the use of military assets in ensuring the people’s security and well-being. This awareness legitimises the importance of the PoAF and the pertinence of committing its capabilities to foster resilience.

This investigation focused on the RQ “Does the PoAF improve the quality of life of Portuguese citizens by participating in Civil Support missions?” Three SQ were explored and analysed in the chapters of this paper.

The first chapter demonstrated that the investigation was carried out within the scope of military science, based on an inductive reasoning methodology that served to formulate a theory. Thus, specific facts were examined, using a qualitative strategy based on interpretative analysis and a case study design that relied on data collected through a document review and interviews.

The second chapter dealt with the concept of security, bearing in mind the political, diplomatic, social, and economic phenomena of the last sixteen years, which had a multiplier effect on the dynamics of security. Today’s societies are characterised by the global scope of risks and threats of various origins: natural, human, or both. Therefore, guaranteeing security has become one of the fundamental objectives of the State. This chapter explored a specific goal, which involved identifying threats and risks to ascertain the extent of the country’s awareness through its legal instruments. Thus, from the perspective of safety, chapter one provided an answer to SQ1, “Does the PoAF have National Security responsibilities?” since all variables that relate to the identification of risks and threats, to the implicit need to address their consequences, and to the identification of the legal and regulatory framework were validated. Therefore, it is concluded that the PoAF has unequivocal responsibilities in the field of security because its mission also involves ensuring the people’s well-being by using its assets in Civil Support missions, as required by the country’s strategic awareness.

The third chapter demonstrated that the PoAF’s involvement in public interest missions helps to develop and ensure the national resilience insofar as the use of its assets enables citizens to transition from a state of fragility to a state of normalcy. This chapter explored two specific objectives: the first, to outline the strategic objectives that minimise the risk environment and guarantee resilience; the second, to identify the PoAF’s role as an actor in achieving these strategic objectives. Accomplishing the first objective requires developing integrated capabilities, and the second objective is served by identifying the public interest missions carried out by the PoAF. Thus, chapter two provides an answer to SQ2, “Is the PoAF involved in guaranteeing Human Security?” The variables under study and the specific

objectives stated were fully validated, thus, it was concluded that the PoAF undertakes a set of public interest missions in distinct areas such as: the fight against crime and international drug trafficking, maritime surveillance, monitoring and control of maritime traffic, controlling and combating pollution, search and rescue, transport of organs, medical evacuations, naval evacuations, and cooperating with the ANPC, contributing to foster a sense of security and protection, and providing an agile response to any critical event.

The fourth chapter analysed the case study on the participation of the PoAF in Civil Support missions. The chapter focused on the main objective and on two secondary objectives: identifying the PoAF assets used in Civil Support missions, and assessing their efficiency. The case study provided an answer to SQ3, "Is the PoAF's support to the Civil Protection Authority efficient?" It was concluded that the PoAF cooperates efficiently with the ANPC in a diverse range of areas by participating in drills and exercises and by providing air assets and MR, AAC, and ZRINTR, and by sharing its intangible asset, that is, knowledge. This conclusion has been validated and demonstrated by the qualitative indicators and by the analysis of the interviews, which support the interpretative epistemological position adopted by the researcher. Thus, it is concluded that the support provided by the PoAF unequivocally mitigates the effects of severe events such as major accidents, disasters and/or catastrophes, providing a positive answer to the RQ "Does the PoAF improve the quality of life of Portuguese citizens by participating in Civil Support missions?"

Having analysed the facts related to Human Security and safety, to public interest missions as a contributing factor for national resilience, to the use of PoAF assets in Civil Support missions, a theory could then be formulated. Considering the dynamics involved in improving the quality of life of Portuguese citizens, the current context should be seen as a dynamic system whose interdependent variables such as security, safety, the rational and efficient use of resources, the dual use of assets, and the value of each local community to the Nation as a whole serve as a guide for the national strategy, and ensure that the PoAF cooperates and contributes to the requirements of the State. In addition to this rationale, two other factors must also be mentioned: the characteristics and capabilities of its air and human assets. The speed and reach of those assets, as well as the motivation of its military personnel and the pride they take in this humanitarian cause are also important factors that contribute to the success of the missions. Therefore, it can be said that the PoAF assets can be turned into national intangible assets such as security, protection, and trust through the efficient achievement of the support missions it is called upon to perform, specifically those in support of Civil Protection activities, hence its output enhances the national strategic potential.

The contributions of this research are threefold: it increases the organization's selfawareness about the national intangible assets that the PoAF creates by participating in Civil Support missions; it provides the academic community with a relevant document that contains explicit knowledge of the PoAF assets and the efficiency of their use in Civil Support missions; it highlights the knowledge and usefulness of the PoAF as an instrument of the National Security and Defence strategy. Having identified and evaluated the PoAF

assets employed in Civil Support missions, it can be concluded that the objectives have been achieved.

The research recommendations relate to the fact that Civil Support missions should be disseminated by the institution, both internally and externally, as they serve the public interest. This can be done by publishing articles in the *Mais Alto* magazine, as well as on the EMFA Intranet and website, providing a clear picture of the assets committed (aerial, material, and human), and by including the paper in the PoAF Yearbook and in the Annual Activities Report, thus valuing the contributions of everyone involved.

The limitations of this study stemmed from the classified nature of some bibliographical sources. Because the intent was to ensure that the study could be accessed by everyone, it was only possible to provide a list of the fundamental military documents that provide the basis for the PoAF's involvement. However, drawing on open source documents such as those provided by the ANPC, it was possible to define auditable and quantifiable variables.

As for future research in this field, a number of issues that could be explored, such as: the importance of command and control for air operations in support of firefighting activities, and the potential contributions of the PoAF; in what manner does the PoAF contribute to the Regional Civil Protection Services of the Azores and Madeira; what kind of investment should be made in PoAF weapons systems that will enable it to engage directly in firefighting operations.

In light of the above, it is concluded that the PoAF is an important asset in the value chain, guaranteeing national safety and improving the people's quality of life through its efficient involvement in Civil Support missions, under the banner "Guaranteeing Portugal at the smallest request".

### Works cited

- Amaro, A., 2008. Segurança Humana e Proteção Civil na Sociedade do Risco: A Crise do Modelo Estatocêntrico na(s) Segurança(s). *Territorium*, 15. pp. 83-94.
- Assembleia da República, 2005. *Constituição da Republica Portuguesa*. Coimbra: Almedina.
- Assembleia da República, 2006. *Lei de Bases da Proteção Civil* (Law no. 27/2006 of 03 July, amended by Organic Law no. 1/2011 of 30 November and by Law no. 80/2015 of 3 August), Lisbon: Diário da República.
- Assembleia da República, 2009a. *Lei de Defesa Nacional* (Organic Law no. 1-B/2009 of 7 July). Lisbon: Diário da República.
- Assembleia da República, 2009b. *Lei das Bases da Organização das Forças Armadas* (Organic Law no. 1-A/2009 of 7 July, ammended by Organic Law no. 6/2014 of 1 September). Lisbon: Diário da República.
- Autoridade Nacional de Proteção Civil, 2009. *Manual Operacional – Emprego dos Meios Aéreos em Operações de Proteção Civil*. [Online] Carnaxide: ANPC. Retrieved from: [www.prociv.pt](http://www.prociv.pt), [Accessed 12 February 2017].

- Autoridade Nacional de Proteção Civil, 2010. *Diretiva Operacional Nacional n.º 3 de 2010, relativa ao Dispositivo Integrado de Operações Nuclear, Radiológico, Biológico e Químico*. [Online] Carnaxide: ANPC. Retrieved from: [www.prociv.pt](http://www.prociv.pt), [Accessed 12 February 2017].
- Autoridade Nacional de Proteção Civil, 2016. *Diretiva Operacional Nacional n.º 2 de 2016, relativa ao Dispositivo Especial de Combate a Incêndios Florestais*. [Online] Carnaxide: ANPC. Retrieved from: [www.prociv.pt](http://www.prociv.pt), [Accessed 12 February 2017].
- Autoridade Nacional de Proteção Civil, 2017. *Plano Nacional de Emergência de Proteção Civil*. [Online] Carnaxide: ANPC. Retrieved from: [www.prociv.pt](http://www.prociv.pt), [Accessed 25 May 2017].
- Batista, L., 2017. *A participação da FA em Missões de Apoio a Ações da Proteção Civil*. Interviewed by Susana Marques [face to face]. Lisbon, 6 January 2017.
- Bell, J., 1997. *Como Realizar um Projeto de Investigação*. Lisbon: Gradiva.
- Carvalho, J., 2009. Segurança Nacional, Serviços de Informações e as Forças Armadas. In: Faculdade de Letras de Lisboa, *Segurança Nacional, Serviços de Informações e as Forças Armadas*. Faculdade de Letras de Lisboa, 28 May 2009. Lisbon: Revista Segurança e Defesa.
- Clemente, P., 2015. *Cidadania, Polícia e Segurança*. Lisboa: ISCPSI.
- Cruz, A., 2017. *A participação da FA em Missões de Apoio a Ações da Proteção Civil*. Interviewed by Susana Marques [face to face]. Lisbon, 16 January 2017.
- Conselho de Ministros, 2013. *Conceito Estratégico de Defesa Nacional* (Resolution of the Council of Ministers no. 19/2013 of 5 April), Lisbon: Diário da República.
- Conselho de Ministros, 2014. *Lei Orgânica da Força Aérea* (Decree-Law no. 187/2014 of 29 December), Lisbon: Diário da República.
- Duarte, F., 2015. Sociedade de Risco. In: Gouveia, J. and Santos, S., Ed. 2015. *Enciclopédia de Direito e Segurança*. Lisbon: Almedina. pp. 451-453.
- Escorrega, L., 2009. A Segurança e os “Novos” Riscos e Ameaças: Perspectivas Várias. *Revista Militar*, 8/9 – August/September [Online] Retrieved from: <https://www.revistamilitar.pt/artigo/499>, [Accessed 26 January 2017].
- Estado-Maior da Força Aérea, 2013. *Relatório Anual de Atividades 2012*, Lisbon: EMFA.
- Estado-Maior da Força Aérea, 2014. *Relatório Anual de Atividades 2013*, Lisbon: EMFA.
- Estado-Maior da Força Aérea, 2015. *Relatório Anual de Atividades 2014*, Lisbon: EMFA.
- Estado-Maior da Força Aérea, 2015. *À mais pequena solicitação garantindo Portugal*. [Online] Lisbon: EMFA. Retrieved from: <http://www.emfa.pt/www/noticia-913>, [Accessed 7 January 2017].
- Estado-Maior da Força Aérea, 2016a. *Participação da Força Aérea em Ações de Proteção Civil - DIR 07/16*. Lisbon: EMFA.
- Estado-Maior da Força Aérea, 2016b. *Relatório Anual de Atividades 2015*, Lisbon: EMFA.

- Estado-Maior da Força Aérea, 2017. *Relatório Anual de Atividades 2016*, Lisbon: EMFA.
- Estado-Maior-General das Forças Armadas, 2016. *Participação das Forças Armadas em Ações de Proteção Civil - DIROP 04/16*. Lisbon: EMGFA
- Feiteira, A., 2016. Tendências das Ameaças Globais - Ordem Jurídica Internacional e *Intelligence*. In Borges, J. and Rodrigues, T., Ed. 2016. *Ameaças e Riscos Transnacionais no novo Mundo Global*. Lisbon: Fronteira do Caos.
- Flick, U., 2013. *Métodos Qualitativos na Investigação Científica*. Lisbon: Monitor.
- Franco, J., 2014. *O produto da Força Aérea*. Master's thesis in Military Aeronautics, Pilot specialty. AFA: Sintra.
- Franco, J., 2016. O produto da Força Aérea. *Revista Mais Alto*, 419, pp. 27-34.
- Garcia, F., 2010. *Da Guerra e da Estratégia*. A nova polemologia. Lisbon: Prefácio.
- Garcia, F., 2015. Defesa Nacional. In Gouveia, J. and Santos, S., Ed. 2015. *Enciclopédia de Direito e Segurança*. Lisbon: Almedina. pp. 99-101.
- Gouveia, J., 2012. *Manual de Direito Internacional Público*. Coimbra: Almedina.
- Gouveia, J., 2015a. Direito Constitucional da Segurança. In Gouveia, J. and Santos, S., Ed. 2015. *Enciclopédia de Direito e Segurança*. Lisbon: Almedina. pp. 131-136.
- Gouveia, J., 2015b. Segurança Humana. In Gouveia, J. and Santos, S., Ed. 2015. *Enciclopédia de Direito e Segurança*. Lisbon: Almedina. pp. 418-422.
- Henriques, J., 2009. *O Dispositivo e as Capacidades das Forças Armadas na Resposta a Situações de Crise Decorrentes de Catástrofe ou Calamidade Pública*. Individual research work - Flag Officers Course. IESM: Lisbon.
- Instituto da Conservação da Natureza e Florestas, 2016. *9º Relatório Provisório de Incêndios Florestais – 2016, 01 de janeiro a 15 de outubro*. [pdf] Lisbon ICNF. Retrieved from: <http://www.icnf.pt/portal/florestas/dpci/relat/rel-if/2016>, [Accessed 17 December 2016].
- Instituto de Estudos Superiores Militares, 2016. *Orientações Metodológicas para a Elaboração de Trabalhos de Investigação*. IESM Notebooks, 8. Lisbon: IESM.
- Lavado, J., 2017. *A participação da FA em Missões de Apoio a Ações da Proteção Civil*. Interviewed by Susana Marques [face to face]. Oeiras, 9 January 2017.
- Leandro, J., 2007. O Estado, o Cidadão e a Segurança. Novas soluções para um novo paradigma. *Segurança e Defesa*, February, pp. 12-19.
- Magalhães, J. & Faria, L., 2014. Stress e Resiliência - como transformar adversidades em respostas positivas. In: Banceiro, J., Palma, P. and Lopes, M., ed. 2014. *Psicologia para não psicólogos*. Lisbon: Editora RH. pp. 159-178.
- Marques, J., 2017. *A participação da FA em Missões de Apoio a Ações da Proteção Civil*. Interviewed by Susana Marques [email]. Lisbon, 23 January 2017.
- Mateus, J., 2014. *O Exército Português nas Operações de Apoio Civil*. Applied Research Work - Final Scientific Report, AM: Lisbon.

- Ministério da Administração Interna, 2013. *Relatório Anual de Segurança Interna 2012*, Lisbon: MAI.
- Ministério da Administração Interna, 2014. *Relatório Anual de Segurança Interna 2013*, Lisbon: MAI.
- Ministério da Administração Interna, 2015. *Relatório Anual de Segurança Interna 2014*, Lisbon: MAI.
- Ministério da Administração Interna, 2016. *Relatório Anual de Segurança Interna 2015*, Lisbon: MAI.
- Ministério da Administração Interna, 2017. *Relatório Anual de Segurança Interna 2016*, Lisbon: MAI.
- Moreira, A., 2014. O Conceito Estratégico Nacional. In: Barroso, L. and Escorrega, L., 2014. *Estudos de homenagem Abel Cabral Couto*. Lisbon: IESM. pp. 335-340.
- Moreira, C., 1994. *Planeamento e Estratégias da Investigação Social*. Lisbon: ISCSP.
- Palma, J., 2011. O papel das Forças Armadas nas operações inter-agências de combate às ameaças emergentes em Portugal. *Cadernos Navais*, no. 38 July, p. 44.
- Pereira, J., 2017. *A participação da FA em Missões de Apoio a Ações da Proteção Civil*. Interviewed by Susana Marques [face to face]. Lisbon, 20 January 2017.
- Pinto, M., 2015. *Perspetivas para uma Sociologia da Ação*. Lisbon: Fronteira do Caos Editores.
- Rainha, J., 2013. *Forças Armadas: Recursos Logísticos de Interesse Dual*. Individual Research Work CEMC 2012/2013. IESM: Lisbon.
- Ramalhete, J., 2010. *As Forças Armadas e a Proteção Civil no âmbito nacional e regional*. Individual Research Work CPOG 2009/2010. IESM: Lisbon.
- Reboredo, N., 2010. *A evolução do conceito de Segurança e as implicações nas Operações Militares no Séc. XXI*. Individual Research Work - CPOSM 2009/2010. IESM: Lisbon.
- Rosa, M., 2016. O futuro constrói-se com mais e melhor educação. *Jornal Público*, [Online]. Retrieved from: <https://www.publico.pt/2016/09/05/sociedade/noticia/o-futuro-constroise-com-mais-e-melhor-educacao-1743164>, [Accessed 29 January 2017].
- Sampaio, J., 2016. Acceptance speech on the occasion of the Nelson Mandela Award. *Jornal de Negócios*, [Online]. Retrieved from: [http://www.jornaldenegocios.pt/economia/politica/detalhe/jorge\\_sampaio\\_recebe\\_premio\\_nelson\\_mandela](http://www.jornaldenegocios.pt/economia/politica/detalhe/jorge_sampaio_recebe_premio_nelson_mandela) [Accessed 29 January 2017].
- Santos, B., 2010. *Um discurso sobre as ciências*. Lisbon: Edições Afrontamento.
- Santos, L., 2016. *A Guerra no Meio de Nós, A Realidade dos Conflitos do Século XXI*. Lisbon: Clube do Autor.
- Simões, A., 2017. *A participação da FA em Missões de Apoio a Ações da Proteção Civil*. Interviewed by Susana Marques [email]. Lisbon, 12 January 2017.

- Viana, V., 2003. *O Conceito de Segurança Alargada e o seu Impacto nas Missões e Organização das Forças Armadas*. Long term individual work - Curso superior de Comando e Direção. IAEM: Lisbon.
- Viana, V., 2014. Reflexões sobre o conceito estratégico nacional e sua implementação. In: Barroso, L. and Escorrega, L., 2014. *Estudos de homenagem Abel Cabral Couto*. Lisbon: IESM. pp. 367-384.