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## PSYCHOLOGICAL SUPPORT AND INTERVENTION IN ACCIDENTS IN FOREST FIRE FIGHTING BY AVIATION

Portugal has one of the highest forest fire risk rankings in Europe. The answers are basically the same today as they were evident a decade ago [2, p.5]:

- (a) the high percentage of forest lands that are unmanaged;
- (b) the increase in fuel loads, both in amount and extent;
- (c) the high number of unwanted fire ignitions during moderate to severe burning conditions;
- (d) climate change.

Faced with a forest fire, the rapid mobilization of an initial attack aircraft is a determining factor in limiting the progression of the fire until the ground-based resources arrive.

In Portugal's history of aerial firefighting, it was only in 1970 that aerial reconnaissance actions were used for the first time. But, only after 1980, the use of aircrafts started in direct combat actions, through the launching of water, retardant products and through the transport of helitransport teams [6, p. 9].

The use of aviation in fighting forest fires becomes essential for the control of nascent fires and as support for the circumscription of large fires. In Portugal, the aircraft included in the forest fire fighting device are: - Helicopters. - Aircraft.

Helicopters are very versatile means, as they can either transport combat teams or helicopters are very versatile means of firefighting, as they can transport firefighting teams or by spraying water, foam, or retardant products. They can also participate in rescue and primary evacuation and primary evacuation of victims in exceptional situations. For firefighting, helicopters can be equipped with a bucket carried as a suspended load.

All indicators confirm that aircraft, whether fixed-wing or rotary-wing, are one of the most important variables in the equation for rural fire-fighting resources. Different types of aircraft can be used, which respond differently to the orography of the Portuguese territory, as well as to the different water surfaces available, and which allow, depending on their availability, very acceptable discharge rates, either via scooping, for fixed-wing means, or in natural water points or others for rotary-wing means, working the most suitable aircraft for the territory being affected.

The following table identifies the different types of aircraft, and their classification is associated with the corresponding installed load. The table also mentions which are the most used aircraft in the different different devices in the last 20 years, in Portugal.

Table 1

Classification of the type of afficiant, used since the year 2000			
	Standard Capacity		Capacity
Aircraft Type	(litres)	Aircraft	(litres)
Light Helicopter	Up to 1,000	Ecureil AS350	900
Medium Helicopter	Between 1,000 and 2,500	Bell 205 and 212	1,200
Heavy Helicopter	Above 2,500	Kamov KA32	4,000
Light Aircraft	1,500-3,000	Dromader	2,200
Medium Aircraft	From 3.000 e 5.000	Airtractor FB	3.100
Heavy Aircraft	above 5.000	Canadair 215	5.350
In 2006 and 2007, through a bilateral agreement, two Beriev BE200 aircraft also participated			

Source: Assembleia da República 2020 [1]

Despite all the safety measures, in the last two decades, in Portugal, eight pilots of aircraft involved in fighting forest fires have died, three from helicopter accidents, three from Dromader and two from a Canadair aircraft crash, data revealed in the air accidents reports by the Portuguese Office for Prevention and Investigation of Accidents with Aircraft and Railway Accidents [3]. Also, the number of lives lost of civilians and forest firefighting crews has increased in the last decade [5].

Whenever these fatal accidents occur, a dependable structure of the Ministry of Health and the National Institute of Medical Emergency (INEM) is activated: the CAPIC [4].

The Center for Psychological Support and Intervention in Crisis (CAPIC) was created by INEM in 2004, in order to meet the psychosocial needs of the population and professionals. It is formed by a team of clinical psychologists with specific training in intervention in psychological crisis, psychological emergencies, and psychosocial intervention in catastrophe.

This service guarantees the position at the Urgent Patients Orientation Center (CODU), on a 24 / 24H basis, on a National scale, and the operationalization of the Mobile Emergency Psychological Intervention Units (UMIPE). CAPIC's areas of activity are broad and include, among others, the following functions: a-) Teleassistance: intervene with CODU contacts in situations of psychological crises, suicidal behaviors, victims of physical or sexual abuse / violence, among others. b-) Mobile Emergency Psychological Intervention Unit (UMIPE): triggered by CODU to the location of the occurrences where their intervention is considered necessary, such as assistance to victims of accidents or their family and friends, support in the management of these occurrences, namely, support at the beginning of the grieving process as a result of unexpected and / or traumatic death, situations of imminent risk of suicide, psychiatric emergencies that pose a risk to life for oneself or others and intervention with victims of sexual abuse / rape. UMIPE are

also integrated into INEM's response devices to exceptional situations, namely, fires, floods, explosions, natural and human disasters. c-) Support for emergency teams professionals: aim at psychological intervention with emergency teams in emotionally demanding and potentially traumatic situations.

Summarizing and concluding whenever there is an accident involving an aircraft, this team of psychologists is immediately called to the scene and their role is responsible for ensuring psychological care for the victimized population and their families, as well as for emergency teams, with the aim of promoting the development of active adaptation strategies in crisis situations, minimize the negative impact of the event, restore the functional level and prevent the exacerbation of psychological symptoms. In the pursuit of these objectives, it proceeds to the evaluation, emotional stabilization, counseling and referral, proposes means of medical emergency appropriate to each situation, advises professionals on how to proceed in contexts of psychological crisis and takes steps to articulate with other entities.

## Literature

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