<u>Commander's Introduction</u> <u>Commander NAVY Andreas Charalambides</u>

The rights and obligations of every state, according coastal the international regulations οf Civil Aviation the and Maritime Organizations. have significantly increased in the past years. Therefore, the Republic of Cyprus is making every effort to improve the provided Search



and Rescue services within her area of responsibility, increasing safety in the Eastern Mediterranean region.

With the operation of five main pillars (Operations Center – "Cyprus Radio" Coastal Station – Cyprus Mission Control Center – "ZENON" Crisis Coordination Center – SAR Training Center) under the unified JRCC Command, the effective operation of the Center with the minimum cost, personnel and response time is achieved. The enthusiasm and zeal of the JRCC personnel is driven by the scope for improvement, and at this point I would like to seize the opportunity to congratulate them expressing my deep appreciation.

We believe that with the adoption of new technologies and the development of a culture of professionalism, always with clear orientation and constant improvement, we are in position to provide high level SAR Services to our fellowman, within the Search and Rescue Region of Responsibility of the Republic, without any loss of human life.

History

The Joint Rescue Coordination Center (JRCC) was established with the enactment of the Law 5 (III)/94 and began its initial operation, on a 24/7 basis, in August 1995, as an independent Squadron of the National Guard Air Force Command. Following the



Council of Ministers decision, the JRCC officially undertook the full responsibility for the organization, coordination, and the supervision of the SAR operations within the Nicosia FIR, in March 2002, relieving the British Forces from the above-mentioned responsibility.

The JRCC falls directly under the Minister of Defense and provides SAR services to persons in distress, as a result of a naval or air accident.

The JRCC is in continuous cooperation with the Shipping Deputy Ministry and the Civil Aviation Department for Naval and Air incidents, and cooperates with the Ministry of Transport, Communication and Works, as the Cyprus's representatives in International Organizations IMO and ICAO, respectively.

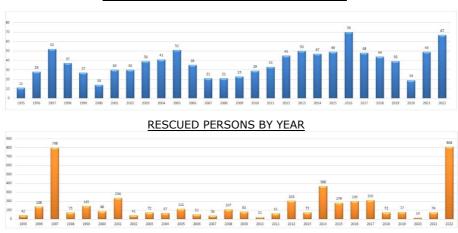
Mission

The primary mission of the JRCC is the organization of the SAR system of the Republic of Cyprus, in order to locate and rescue, in a timely manner, persons of which their life is in danger as a result of an aeronautical or maritime accident, within its area of responsibility, which coincides with the Nicosia FIR.

Statistics (until 31/12/22)

The charts below show the number of people rescued during the *1049* search and rescue operations. Since 1995, a total of *4439* people have been rescued under the coordination of the JRCC.

SEARCH AND RESCUE OPERATIONS BY YEAR



<u>Personnel</u>

The Center is staffed by military personnel of the National Guard, properly trained for SAR operations.

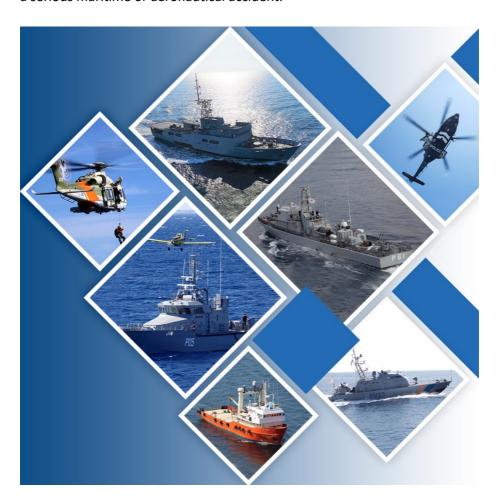
SAR Units

According to the Legislation of the Republic of Cyprus, the primary air units are the helicopters of the 460 SAR Squadron of the National Guard Airforce Command, as well as the helicopters of the Cyprus Police Aviation Unit (CPAU).

The primary naval units are the Coastal Patrol Boats of the National Guard Navy Command and of the Port and Marine Police.

As primary units are considered also the specialized personnel and means of the Ambulance Service of the State Health Services Organization, as well as the Disaster Response Special Unit (DRSU) of the Cyprus Fire Service.

Several Governmental and Non-Governmental Agencies, such as the Forestry Department's Aviation Units, Civil Defence, the Fisheries Department's naval units, as well as vessels of private shipping companies are available in case of a serious maritime or aeronautical accident.



Training

The training of the personnel is crucial and the proper training leads to efficiency.

The JRCC, additionally to the training of its personnel, coordinates various training courses in cooperation with the CPAU, 460 SAR Squadron, Civil Defence, and the State Health Services Organization, covering all SAR aspects.

Such courses include HELO Dunker, Medical Evacuation, training flights, Oil and Gas rigs evacuations etc.













Multinational Exercises

In order to minimize the response time and the loss of human life, the JRCC conducts on a regular basis, exercises with naval and air units of European Union States, neighboring countries, as well as third countries that operate in the Eastern Mediterranean region. The Center has conducted SAR exercises with Denmark, Egypt, France, Germany, Greece, Hungary, Israel, Italy, Lebanon, Norway, the United Kingdom, and the United States of America. The culmination of the above-mentioned exercises are the large-scale, multinational SAR exercises "ARGONAUT" and "NEMSIS", which are conducted on an annual basis.





International Cooperation

A strategic goal of the Republic of Cyprus is the strengthening of the cooperation with the neighboring countries and in this framework, we ensure the constant development of the cooperation with the neighboring RCCs. The Republic of Cyprus has signed SAR agreements



with the states of Israel, Syria, Greece, Egypt and Lebanon. The JRCC also cooperates with the United Nations naval forces in Lebanon (UNIFIL), patrolling in an area portion of which covers part of Cyprus SRR.

<u>Cospas – Sarsat Cyprus Mission Control Center (CYMCC) and</u> <u>SAR/Galileo Ground Satellite Station (MEOLUT)</u>

In 2010, the Republic of Cyprus and the European Committee reached an agreement for the establishment of one of the three SAR/Galileo Ground Satellite Stations (MEOLUTs) stationed in Cyprus, Norway and Spain.

MEOLUT was established in 2012 in cooperation with the European Space

Agency (ESA) and according with the regulations of Cospas – Sarsat.

Furthermore, the Republic of Cyprus proceeded with the establishment of the Cyprus Mission Control Center (CYMCC) servicing Nicosia FIR. CYMCC is colocated with JRCC Larnaca and has been operational since September 2020.



The development of MEOLUT and CYMCC, establishes Cyprus as an important hub of SAR services provision in the Eastern Mediterranean Region.

CYMCC operates on a 24/7 basis, along with the Operations Center of JRCC.



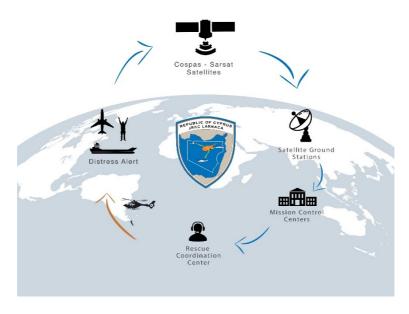
Cospas – Sarsat Operation

The principle of operation of the system is depicted in the diagram below. The system consists of the satellites and the ground satellite stations receiving the alert messages, as well as the Mission Control Centers and the radio beacons. When a beacon is



activated, the transmitted signal/message is relayed by the satellites back to Earth where is received by the ground satellite stations (Local User Terminals – LUT).

The LUTs process the received data and forward the produced data, such as the location of the radio beacon, to the associated MCC. The MCC after processing the data, forwards the final alert to the responsible RCC.



Development of Costal Surveillance System

Our goal is the development of a complete coastal surveillance system. More specifically, the project includes long range (20 km) thermal cameras of, stationed at strategic locations around the island. The system is completed by 3 mobile units, 4 thermal cameras on naval assets, as well as 2 UAVs, for



air surveillance. The cameras contribute to the investigation of SAR incidents close to shore where, according to our statistics, most of the distress situations occur, mainly considering refugees. The project was developed with European funds.







"ZENON" Coordination Center

In 2016, the "ZENON" Coordination Center was established with main mission the handling of the increased migration flow towards Europe, as well as its readiness to function as the National and International Center for



Humanitarian Operations Coordination, including the Non-combatant Evacuation Operations (NEO) from a neighboring crisis region.

The "ZENON" C.C. is capable to also function as the Crisis Coordination Center of the Republic, upon implementation of a Special National Plan of the Crisis Master Plan.



The "ZENON" C.C. was fully activated by the Ministry of Transport, Communications and Works in March 2020 and with the contribution of other Ministries of the Republic, the repatriation of 12000 people during the first wave of the



COVID-19 pandemic, was successfully carried out, supporting the management of the health crisis, in general.

Coastal Station "Cyprus Radio"

On the 1st of July 2015, the JRCC officially undertook the responsibility to operate the "Cyprus Radio" Coastal Station providing maritime information, weather reports and communication (commercial ships to shore) within its area of responsibility. The "Cyprus Radio" operates on a 24/7 basis, along with the Operations Center of JRCC.



ISO Certification

Since April 2015, the SOPs of the JRCC are harmonized with the International Quality Standard ISO 9001:2015, while the Center is a member of the International Certification Network "IQ Net".





SAR Training Center



With the creation of the modern SAR Training Center, the important goal that was set by the Republic of Cyprus for the operation of an international and accredited SAR training center, supported by ICAO, to cover the lack of SAR certified courses in Europe was fulfilled, while also the training needs of the personnel involved in SAR operations due to the migration flows are covered.

The main objective of the Training Center is the provision of training courses to the SAR personnel of the SAR System of the Republic of Cyprus, but also to personnel of foreign countries that is involved in Massive Rescue Operations, during which large number of agencies cooperate under harsh conditions.

The training rooms are equipped with

modern systems and simulation software that create a realistic training environment offering more efficient training, as this is required by the training standards of IMO and ICAO. The newly built Training Center is equipped with interconnected audio and visual systems, simulating a realistic training experience for operation coordination, providing radars, naval and air communication systems, alerting systems, SAR operations planning systems, as well as databases, while custom designed cubicles, equipped with all the control and communication panels, simulate cockpits and bridges.

The project was funded by the Internal Security Fund, managed by the European Funds Unit of the Ministry of Interior.







Utilization of European Funds

The JRCC, utilizing the absorption of funds made available by the European Funds Unit, proceeded with the realization of projects which expanded the range of capabilities, investing towards Republic's benefit, an overall of 18 million euros.





Development of "Zenon" C.C.





Relocation and Operation of JRCC



Development of an alternative JRCC **Operations Center**



























