

Dhmi Havacılık Akademisi Erzincan Eğitim Tesisinin Arff Memurları Üzerindeki Etkileri Ankara Esenboğa Havalimanı Örneği

Effects of Dhmi Aviation Academy Erzincan Training Facility on Arff Officers Case of Ankara Esenboga Airport

ÖZET

Ülkemizde bulunan 61 havalimanının herhangi bir nedenle, uçak veya havalimanı terminal binalarında meydana gelen öncelikle yangın ve acil durumlar için, dhmi tarafından, arff memurları istihdamı sağlanmıştır. Arff memurları günün 24 saatin de havalimanlarında, vardiyalı olarak çalışırlar. Ayrıca Uluslararası sivil havacılık teşkilatı(ICA0) standartlarına göre eğitim alarak, yerdeki uçaklara, aynı zamanda terminal içerisindeki meydana gelebilecek kaza-kırım ve acil durumlara müdahale etmekle görevlidirler. Hukuki görev dayanakları, uçak kaza kırım kurtarma ve yangınla mücadele yönergesidir. Arff memuru olabilmek için üniversitelerin sivil savunma ve itfaiyecilik ve Acil Durum ve Afet Yönetimi programlarından mezun olmanın dışında;

- ✓ En az 1.65 metre boyunda olmak.
- ✓ Boy uzunluğunun santimetre olarak ifade edilen değerinin son iki rakamından en çok 10 fazla veya 15 noksan kilo ağırlıkta olmak. (Tartma ve ölçme aç karnına ve çıplak ayakla olacaktır)
- ✓ Astım, bronşit, nefes darlığı, epilepsi, renk körlüğü, kekemelik, sağırılık, ileri derecede görme bozukluğu vb. biyolojik rahatsızlığı bulunmamak.
- ✓ Aşırı psikolojik duyarlılık ve heyecan, davranış bozuklukları, kapalı alan korkusu, yükseklik korkusu, karanlık korkusu, kan tutması vb. psikolojik ve sinirsel rahatsızlıklardan herhangi birine yakalanmamış olmak.
- ✓ "c" ve "ç" maddelerinde belirtilen bedensel ve psikolojik yapı ile yurdun her yerinde AARFF (Hava Alanı Kurtarma ve Yangınla Mücadele) Memuru olarak görev yapabileceğine dair tam teşekküllü devlet veya üniversite hastanelerinden "Sağlık Kurulu" raporu almış olmak.

Şartlarını taşımak gerekmektedir. Bu çalışmada Arff memurların teknik, beceri, bilgi ve yeteneklerini arttırmak için 2017 yılında hizmete giren Havacılık Akademisi Erzincan eğitim tesisinde eğitim alan 44 personelin görüşlerine yer verilecek ve tesis hakkında açıklayıcı bilgiler sunulacaktır.

Keywords: Arff memurları, Uçak Yangınları, Uçak Yangınları Eğitimi

ABSTRACT

Arff officers were employed by DHMI for primarily fire and emergency situations that occur in aircraft or airport terminal buildings of 61 airports in our country for any reason. Arff officers work in shifts at airports 24 hours a day. In addition, they are responsible for responding to aircraft on the ground, as well as accident-destruction, fire and emergency situations that may occur in the terminal, by receiving training according to the standards of the International Civil Aviation Organization (ICAO). Legal basis of duty is the directive of aircraft accident, disaster rescue and firefighting. To become an Arff officer, in addition to graduating from civil defense and firefighting and Emergency and Disaster Management programs of universities.

Be at least 1.65 meters tall.

Being at most 10 kilos more or 15 kilos less than the last two digits of the height expressed in centimeters. (Weighing and measuring will be on an empty stomach and bare feet)

Asthma, bronchitis, shortness of breath, epilepsy, color blindness, stuttering, deafness, severe visual impairment, etc. not have a biological disorder.

Excessive psychological sensitivity and excitement, behavioral disorders, fear of closed spaces, fear of heights, fear of darkness, bloodstain, etc. not have any of the psychological and nervous disorders.

To have a "Health Board" report from a full-fledged state or university hospital, stating that he can work as an ARFF (Airspace Rescue and Fire Fighting) Officer all over the country, with the physical and psychological structure specified in the "c" and "ç" articles.

In this study, the views of 44 personnel trained in the Aviation Academy Erzincan training facility, which was put into service in 2017 in order to increase the technical, skills, knowledge, and abilities of Arff officers, will be included and explanatory information about the facility will be presented.

Anahtar Kelimeler: Arff officers, Aircraft Fires, Aircraft Fires Training

INTRODUCTION

In Turkey, the firefighting profession is conducted as an ARFF officer under the Fire Brigade and the General Directorate of State Airports Authority (DHMI) within the local administrations. In Turkey, until 2005, flight security at DHMI airports served under the name of "Fire Brigade". Considering the qualifications of the equipment used and the work done within the framework of the civil aviation literature and the research conducted by the International Civil Aviation Organization (ICAO), it was thought that the definition made could not fully meet this service. In

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accordance with the importance of the service rendered and international standards, on 03.10.2005, the title of "Firefighter" within the body of DHMI was changed by the Council of Ministers and made "ARFF Officer". The full abbreviation of the title, whose abbreviation is ARFF, is "Aircraft Rescue and Fire Fighting" and its meaning is "Air Rescue and Fire Fighting." Persons with this title are called "ARFF Officers." ARFF includes the evacuation of all employees and passengers on board, minimizing the existing danger and rescue efforts in case of emergency at the airport (SHGM, 2016).

RFF Officers receive training by ICAO according to the specified standards and work within the body of DHMI. They are responsible for responding to accidents and emergencies that may occur in aircraft on the ground and in the air. They work 24/7 and with a shift system. In terms of international civil aviation legislation, ARFF officers have to be equipped with many qualifications. They are periodically audited by the European Civil Aviation Conference (ECAC), of which they are members. The only criterion emphasized in these inspections is the compliance of flight safety with international standards. The adequacy of the ARFF organization is one of the most important criteria of flight safety. Duties of ARFF officers within DHMI;

- ✓ Performs periodic maintenance and repair of all vehicles in Fire Fighting and Rescue departments.
- ✓ It is present during the refueling of aircraft.
- ✓ Airplanes leaving the runway bring back traffic with equipment.
- ✓ It ensures the safety of life and property on airplanes.
- ✓ Interferes with radioactive materials.
- ✓ It creates foaming by taking precautions when the landing gear is not deployed in airplanes.
- ✓ Performs rescue work in aircraft accidents occurring in and around the airport.
- ✓ Provides rescue service for airplanes that make an emergency landing due to an unfavorable reason.
- ✓ Takes precautions for planes landing without notice or permission.
- ✓ Takes necessary precautions against suspicious bomb notices or threats.
- ✓ Implements all kinds of rescue and extinguishing activities in natural disasters and fires on the plane in the air or on the ground (Akbaş, 2020).

The ARFF officer, the responsibilities arising from the mission and the need to always be prepared for emergencies, the take-off and landing of many aircraft, refresher training, and the need for coordination when time races, crashes or fires occur, and the risks and hazards inherent in the task makes their lives quite difficult (Caner, 2017).

The conditions to be met by the candidates who will work at DHMI as ARFF officers are as follows;

- ✓ Be at least 1.65 meters tall.
- ✓ To be no more than 10 kilos more or 15 kilos less than the last two digits of the height expressed in centimeters (being on an empty stomach and bare feet).
- ✓ Absence of any health problems (bronchitis, shortness of breath, asthma, epilepsy, stuttering, color blindness, deafness, severe visual impairment, etc.).
- ✓ Not having any of the psychological and neurological disorders (behavioral disorders, fear of closed spaces, extreme psychological sensitivity and excitement, fear of heights, fear of darkness, bloodstain, etc.).
- ✓ Persons who will work as ARFF officers are required to obtain a health report from full-fledged state or university hospitals (ÖSYM, 2012).

In this study, the contribution of the simulator training provided by the ARFF officers working at Ankara Esenboga Airport at the Erzincan training academy facilities, which became operational in 2018, will be evaluated and also information about the facility will be given.

RESEARCH AND FINDINGS

Although the ARFF officer is a similar profession to firefighting from the outside, it is separated from each other with sharp boundaries in terms of different subjects. The ARFF officer takes shape according to ICAO standards and is inspected periodically in terms of flight safety. ARFF officers are required to have expertise in certain areas in terms of flight safety and accident-crash applications. Airport emergency plan, first aid, medical intervention, fire extinguishing, use of special equipment (Quick Rescue Vehicle, Hovercraft, Sprayer, Hose Types, HRET

Technology), search and rescue studies are some of these areas (DHMI, 2003; DHMI, 2016; Aeroportist, 2017;). The fact that ARFF personnel are equipped in areas that require expertise has a prominent place in responding to many plane crashes with high fatality rates. For this reason, in order to conduct ARFF services in a better way in the future in our country, it is necessary to create ARFF Specialist staff within the bodies of the General Directorate of Civil Aviation (SHGM) and DHMI, which are public institutions.

For example, in Singapore and Australia, there are search and rescue stations at the airports close to the sea against the plane crashing into the sea and ARFF Experts are located at these bases (Aeroportist, 2017)

At Trabzon Airport, which operates in a location close to the sea in our country, on 13 January 2018, the Boeing 737-800 type passenger plane, PC 8622 of Pegasus Airlines, departed the runway between Ankara and Trabzon. Considering the possibility of the plane crashing into the sea in this incident, scenarios reach serious dimensions, and it is seen that saving lives, which is the primary goal of ARFF services, is an area that requires expertise.

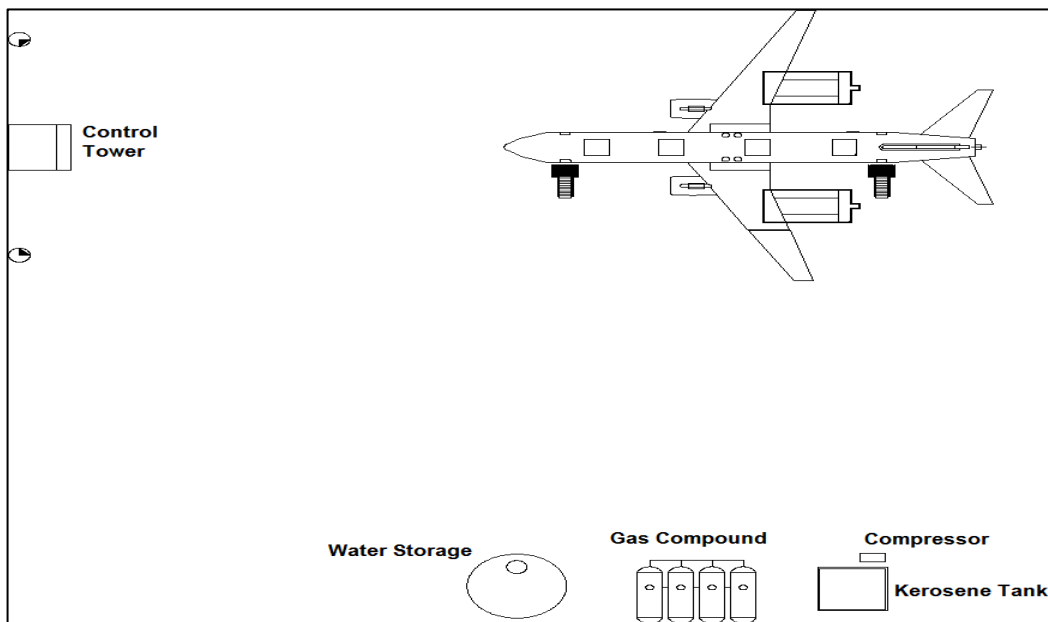
To give another example, the Boeing 737 type passenger plane, which made the Izmir-Istanbul flight on February 05, 2020, landed at Sabiha Gokcen Airport at around 18.20 in the evening, when the passenger plane, which fell 25 meters below the runway, broke apart and broke into a fire. Airport arff personnel quickly extinguished the fire, saving the lives of many people and ensuring their evacuation.

Since Arff personnel do not constantly encounter a case, they should receive continuous and good training by reducing the risks present in emergency and rescue operations in accordance with the legislation, considering that they must enter closed areas with full-fledged personal protective equipment. In order to increase the quality and efficiency of these trainings, Dhmi established a beautiful facility in Erzincan to provide training for Arff and other firefighters.

Erzincan Airport Aircraft Fire Fighting Simulator Training Facility



Aircraft Fire Fighting Simulator Training Facility has been established at Erzincan Airport to enable ARFF (airport rescue and firefighting) personnel to conduct practical training on intervention and rescue operations in aircraft accident crashes and fires. The trainings given at the mentioned training center will ensure that the theoretical knowledge and experience of the personnel are applied during real events and will increase the success of the personnel in the event of an aircraft emergency. The facility, measuring 120x100 meters, includes a control tower, aircraft fire extinguisher simulator, water tank and fuel tanks.



The aircraft fire extinguishing simulator consists of the main airframe structure made of steel construction system, which simulates a Boeing 737-800 type aircraft on a one-to-one scale. There are many special fireplaces to start fires in different scenarios inside and outside the aircraft. While these fires are simulated, real aviation fuel, kerosene, is used on the left side of the plane and propane gas is used on the right side.



Aircraft Fire Fighting Simulator simulates Boeing 737-800 type aircraft with exact measurements. It is possible to start a live fire in 28 different sections inside and outside the aircraft, meeting all the intervention methods prescribed by ICAO.

In the Aircraft Fire Simulator, fire simulations can be made in the following sections separately or simultaneously in many sections.

Aircraft Internal Fires

- ✓ Cockpit Fire Cockpit Area (Mid Deck)
- ✓ Kitchen Fire Passenger Compartment (Front)
- ✓ Splashing Fire Passenger Compartment (Front)
- ✓ Seat Fire Passenger Compartment (Front)
- ✓ Overhead Luggage Compartment Fire Passenger Compartment (Front)
- ✓ Overhead Luggage Compartment Fire Passenger Compartment (Rear)
- ✓ Seat Fire Passenger Compartment (Rear)
- ✓ Toilet Fire Passenger Compartment (Rear)
- ✓ Cargo Bay Fire Cargo Bay

Aircraft Exterior Fires

1. Right Engine
 - a. Engine Section Compressor Fire
 - b. Engine Section External Fire
 - c. Engine Section Jet Engine (Rear Section) Fire
2. Right side Underwing Fire
3. Right Landing Gear
 - a. Brake Fire
 - b. Wheel Fire
 - c. Pneumatic Foot Fire
4. Left Engine
 - a. Engine Section Compressor Fire
 - b. Engine Section External Fire
 - c. Engine Section Jet Engine (Rear Section) Fire
5. Left Airframe Fire
6. Left Underwing Fire
7. Left Landing Gear
 - a. Brake Fire
 - b. Wheel Fire
 - c. Pneumatic Foot Fire
8. Right Airframe Fire
9. Auxiliary Power Unit (Tail)
10. Right Side Fuel Spread Fire
11. Left Side Fuel Spread Fire

In addition, special cut-off areas for entry into the fuselage by forced methods in accordance with the reality, opening doors in accordance with the reality, special cut-outs for rescue works by cutting seats and seat belts in the passenger compartment, in order to enter the aircraft and rescue by using forced methods in case it is not possible to enter the aircraft by normal means. Various rescue operations, consisting of dummies calling for help in areas and under armpits, can also be performed in the simulator. There are 9 smoke generation machines in the aircraft to make the in-flight rescue work close to the real thing.



The system has a multi-stage special security system and automatically protects itself in case of any danger. The facility has versatile training opportunities in terms of the scenarios it contains. In the simulator in question, training requests from home and abroad can also be met based on ICAO standards.

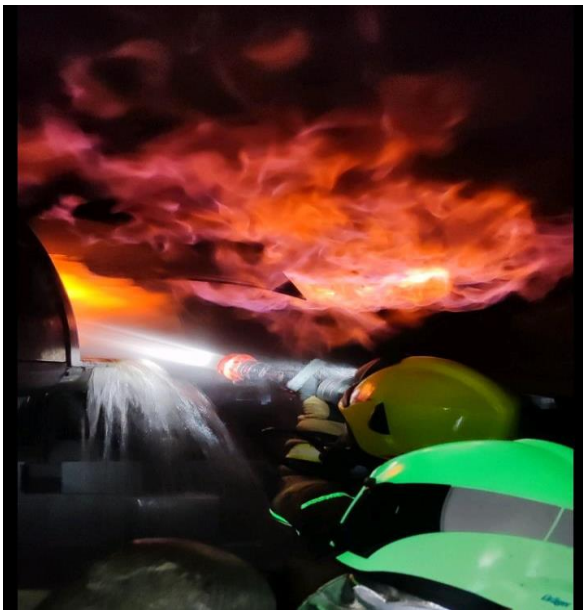
For training exercises under real fire conditions, FIRE FIGHTING TRAINING SIMULATOR brings with it a versatile and realistic training experience that cannot be achieved with the use of ordinary firefighting training methods. The operator of the training facility can create training conditions that challenge students' abilities by adapting the degree of difficulty and complexity and extent of fires in certain situations.

Since 2013, when the facility was built, 1100 ARFF personnel working at airports within the body of our General Directorate have been trained and certified on the Aircraft Fire Extinguishing Simulator.

In addition, 43 ARFF personnel working at TRNC Ercan Airport, 26 ARFF personnel working at Sabiha Gokcen Airport and 13 personnel working at Eskisehir Airport within Anadolu University Rectorate were trained on the Aircraft Fire Simulator.

Aircraft Fire Extinguisher Simulator has filled an important deficiency in our country, as it allows the personnel performing rescue and firefighting services at airports to conduct practical training in conditions simulated to real events. These practical trainings at the simulator facilities will continue uninterruptedly in the following years.





Special Purpose Driving Simulators

Special Purpose Driving Simulators have been established at Istanbul Atatürk Airport and Erzincan Airport in order to provide practical training on the use of fire extinguishing vehicles, snow fighting vehicles and apron vehicles at the airports operated by our General Directorate and to enable the personnel to gain experience against the use of vehicles that are no different from the real thing.

With the trainings to be given on the simulators; Training the personnel in response to aircraft, building, facility and nature fires that may occur in the airport and fighting against snow in the airport PAT (runway-apron-taxiway) areas, raising the awareness of the personnel to reduce the accidents that occur in the airport, better understanding of the traffic rules in the apron by our personnel and making them ready for duty. It is aimed to give on-the-job training about vehicles to new personnel.

Fire-fighting vehicle simulators and snow-fighting vehicle simulators were installed at Erzincan Airport, and an Apron driving simulator was installed at Istanbul Atatürk Airport.

Measurement and evaluation of the personnel trained in the mentioned vehicle simulators can be done by the system. For the implementation of the training scenarios to be created, one-to-one models of Istanbul Atatürk

Airport, Ankara Esenboga Airport, Antalya Airport and Erzinçan Airport have been made, and the weather conditions (rain, snow, day/night) and ambient conditions (airport traffic) can be adjusted at the modeled airports.

Erzincan Airport Special Purpose Driving Simulator Training Center

A training facility of approximately 400 m2 was built for the installation of driving simulators at Erzincan Airport. Within the facility; training rooms, system rooms, trainer rooms, meeting room, kitchen, etc. usage areas. There are Fire Fighting (ARFF) Vehicle Simulators and Snow Fighting Vehicle Simulators within the facility.

Erzincan Airport Special Purpose Driving Simulator Training Center

A training facility of approximately 400 m2 was built for the installation of driving simulators at Erzincan Airport. Within the facility; training rooms, system rooms, trainer rooms ARFF Vehicle Simulators;

Within the scope of ARFF vehicle simulators; 1 cabin type and 4 desk type ARFF vehicle simulators were designed.

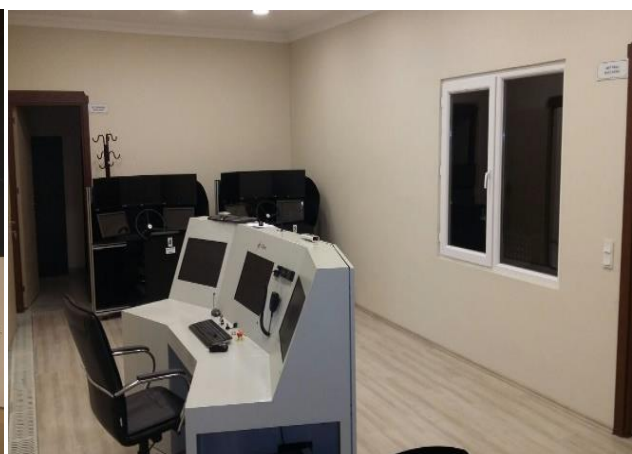
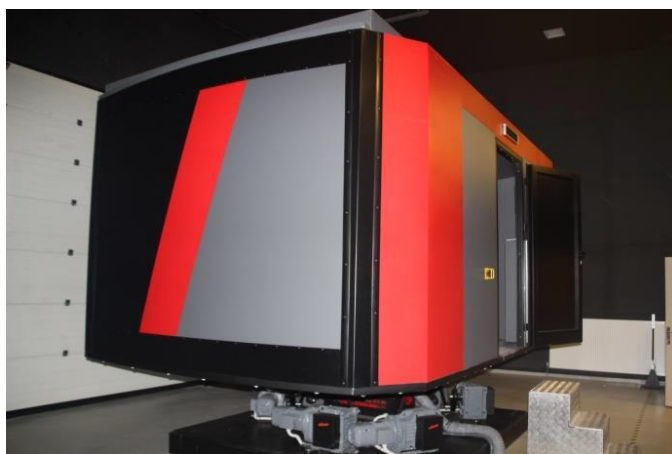
As a cabin type vehicle simulator; Rosenbauer brand 8x8 water-foam-dry chemical powder system fire extinguisher was simulated. The cabin simulator is mounted on a 6-degree-of-freedom (DOF) moving platform, and the simulator has a dome-type display system. Real vehicle equipment is used to increase realism in the simulator.

As a desk type vehicle simulator; 1 Rosenbauer brand 8x8 fire extinguisher, 1 Ziegler brand 6x6 fire extinguisher, 1 Volkan brand sprinkler vehicle and 1 Volkan brand rescue vehicle was simulated. Desk type simulators have touch screens for controlling vehicles.

In the prepared training scenarios, fire can be intervened together or separately with cabin type and desk type simulators, which increases the realism of the training and enables the implementation of practices for teamwork.

In addition, there is a trainer console where simulation and training scenarios can be prepared, all kinds of variables (space, time, weather conditions, fire location-size, etc.) can be controlled and training evaluations can be made.

Rooms, meeting room, kitchen, etc. usage areas. There are Fire Fighting (ARFF) Vehicle Simulators and Snow Fighting Vehicle Simulators within the facility



Snow Fighting Vehicle Simulators

Within the scope of snow fighting vehicle simulators; 2 cabin type and 4 desk type vehicle simulators were designed.

As a cabin type vehicle simulator; Both P21S and P21C models of Bucher snow fighting vehicles were simulated in

a single cabin. With software and hardware changes, both compact (P21C) and traction type (P21S) snow fighting vehicle training can be given in the same cabin.

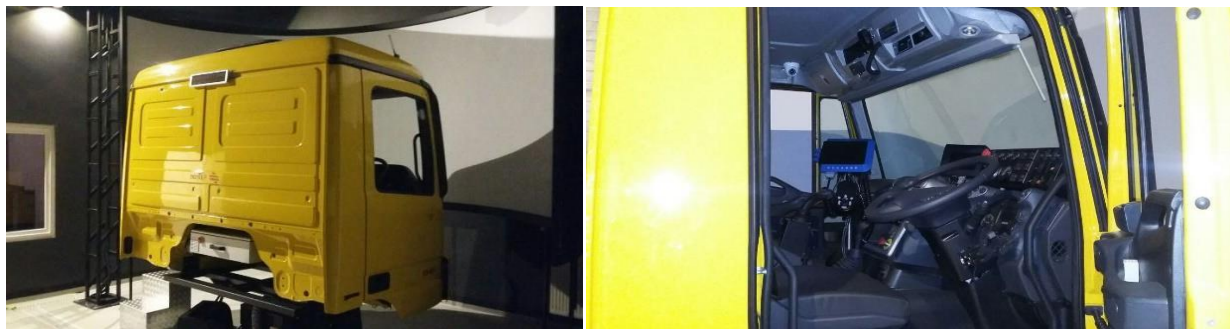
As other cabin type vehicle simulator; In a single cabin, both Fresia F90 model snow blower (rotary) and Giletta brand Clabu model de-icing liquid spreader was simulated. In this cabin type simulator, with software and hardware changes, both rotary and de-icing liquid spreading vehicle training can be given in the same cabin.

Cabin type simulators are mounted on a moving platform with 3 degrees of freedom (DOF), and there is an oval screen display system in the simulator. Real vehicle equipment is used to increase realism in the simulator.

The above-mentioned 4 brand-model snow-fighting vehicles have also been simulated as table-type vehicle simulators, and there are touch screens for controlling the vehicles in the table-type simulators.

In the prepared training scenarios, snow can be fought together or separately with cabin type and desk type simulators, which increases the realism of the training and enables the implementation of teamwork practices.

In addition, there is a trainer console where simulation and training scenarios can be prepared, all kinds of variables (space, time, weather conditions, snow height, etc.) can be controlled and training evaluations can be conducted.

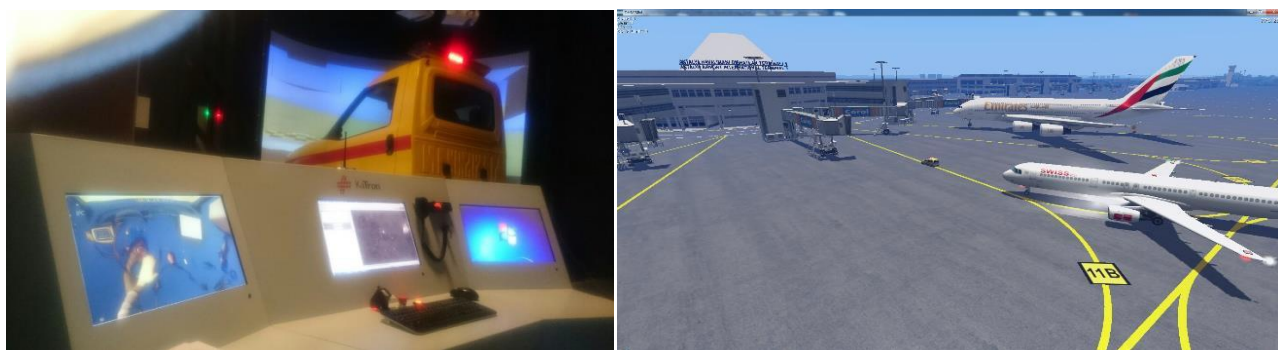


Istanbul Ataturk Airport Apron Service Vehicle Simulator Training Facility

The apron vehicle simulator was installed inside the old heat plant building at Istanbul Atatürk Airport, and the renovation and revision of the said area was conducted.

There is a cabin type vehicle simulator in the training facility, and a Fiat Doblo model vehicle used in apron services at our airports was simulated as a simulator. The cabin simulator is mounted on a moving platform with 3 degrees of freedom (DOF), and the simulator has an oval screen display system. Real vehicle equipment is used to increase realism in the simulator.

In addition, there is a trainer console where simulation and training scenarios are prepared, all kinds of variables (space, time, weather conditions, etc.) for the simulation can be controlled and training evaluations can be made.





Effects of Training in Erzincan Training Facility on Staff

Since the main operational purpose of the RFF services operating at the airports is to save lives, significant importance is attached to the training activities of the personnel, considering the sensitivity of the service conducted. For this reason, RFF personnel employed by our Agency to carry out rescue and firefighting services, before they actually start their duties, must undergo a long basic training within the framework of the documents published by the International Civil Aviation Organization (ICAO), of which we are a member, and after completing their basic education, they will continue to work throughout their professional lives. are subjected to theoretical and applied refresher training.

A survey was conducted among 44 personnel out of a total of 120 Arff personnel working at Ankara Esenboga Airport, and information about the Simulator training received was collected.

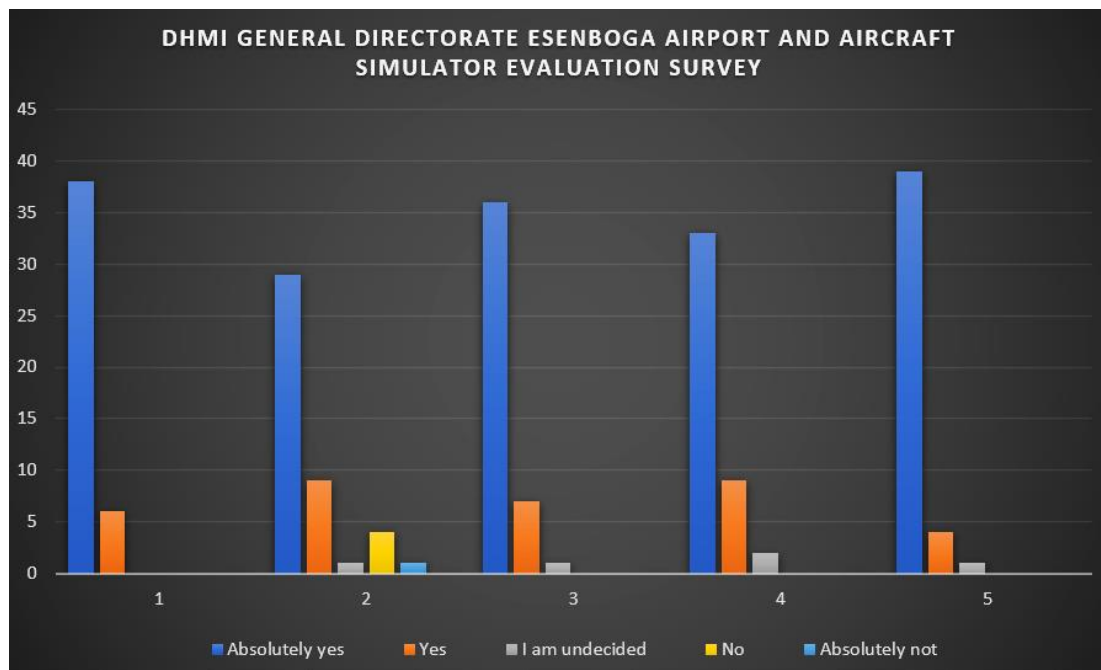
The following questions were asked to the Arff personnel who received training.

1. Were you satisfied with the training you received at the Erzincan training center?
2. Were you satisfied with the Quality of the training provided?
3. The training provided; Do you think it has improved you in your profession?
4. Would you like to benefit from this training regularly?
5. Would you recommend the training at the Erzincan training center to your other colleagues?

The answers to the questions were prepared by offering options between 1-5.

1. Absolutely not
2. No
3. I am undecided
4. Yes
5. Absolutely yes

The trained personnel appreciated the training and the quality of the training, and yes and absolutely yes answers were given to all questions.



CONCLUSION & RECOMMENDATIONS

According to international civil aviation rules, a separate protection level is determined for each airport, based on the fuselage sizes of the aircraft flying to the airports and the number of flights they make during the year. Specially equipped rescue and fire extinguishing vehicles, materials and equipment in numbers and capacities to meet the specified rescue and firefighting categories, and trained RFF personnel who can use them at full capacity and uninterruptedly in an emergency, are at the airports at any time to respond to any emergency that may occur. is kept ready for duty.

In order to intervene in a brief time in aircraft accidents, crashes and fires that may occur in and around airports, as well as in fires that may occur in the buildings and facilities of the airport, the state-of-the-art rescue and fire extinguishing vehicles are procured and put into service. In addition, RFF Units are also responsible for keeping up-to-date and implementing the emergency plans prepared for the interaction of all stakeholders in the Presidency of the Civil Administrative Officer against emergencies that may occur at the airports.

In order to ensure that the practical training of RFF personnel is conducted in conditions that simulate real events, an Aircraft Fire Extinguisher Simulator, which simulates Boeing 737-800 type aircraft with exact measurements, was installed at Erzincan Airport. It is possible to start living fires in 28 different sections inside and outside the aircraft within the framework of the scenarios prepared in a way that meets all the intervention methods prescribed by ICAO on the simulator system, and it is possible to respond to these fires with real vehicles.

Also, at Erzincan Airport, with the ARFF Driving Simulator, it will provide training on aircraft accident crash and firefighting, individually and/or under the supervision of an instructor, so that any training request for RFF services can be met; A computer-based and remotely accessible ARFF Basic and Tactical Training System, in which video, audio professional narration, two-dimensional/three-dimensional schematics and animations are used and applied scenarios are created, has been put into service.

With the aforementioned ARFF Basic and Tactical training system, which was installed in addition to the aircraft fire extinguishing simulator system and the ARFF driving simulator system, all kinds of training demands for RFF services on an international scale can be met, and these systems, which are still available in very few countries, are of great interest to DHMI and our country. It will be a source of extraordinary pride and prestige.

Aircraft Lift Airbags System, Temporary Road Panels Set, Aircraft Transport Modules and details provided for use in the rescue and lifting of 4F class large-bodied aircraft (A 380, B 777, B747, etc.) and smaller aircraft that have lost their mobility at the airport. Aircraft Rescue Equipment is available. This equipment has been frequently used in the rescue operations of aircraft that have lost their mobility at domestic and international airports in recent years. The equipment in question is still; It is located at Atatürk, Antalya, Esenboga and Erzurum Airports and is ready to be dispatched to other airports if needed.

Faulty interventions by firefighter personnel during extinguishing or rescue operations may endanger the lives of the victims/disaster victims. Therefore, considering the human life of the personnel who will take part in the rescue and firefighting; They should be brave, knowledgeable, physically capable, and able to act with group work. It is of significant importance in terms of Fire Brigade and RFF services to have personnel who have team spirit, have high knowledge and experience, and are able to fulfill the given instructions perfectly, in order to perform the service in a complete manner and to ensure full coordination.

- ✓ Therefore, DHMI should increase the efficiency and effectiveness of this facility, which it has brought to our country, by making extensive protocols not only with the Arff officers but also with the municipal fire departments.
- ✓ DHMI should also increase the recognition of the Erzincan training facility and ensure that especially Arff officers and firefighters in neighboring countries benefit from these facilities.
- ✓ Arff officers should be more willing and demanding to ensure the continuity of the quality education they receive.
- ✓ DHMI should make English publications on its social media accounts for the recognition of its Erzincan Education Facility, which it owns on an international scale.
- ✓ The awareness and professional motivation of firefighter candidates should be increased by making protocols between the Firefighting and Civil Defense Programs of the universities.

REFERENCES

www.dhmi.gov.tr

Uçak Kaza Kırım ve Yangınla Mücadele Yönergesi

Belediye İtfaiye Yönetmeliği

Türkiye Afet Müdahale planı

Binaların Yangından Korunması Hakkındaki Yönetmelik

Kılıç,A.(2010).Ateşi Tutan Eller Ateş Kahramanları, Teknik Yayıncılık Tanıtım A.Ş.,İstanbul

Uygun, M. İnal, E. (2019). Türkiye'nin İtfaiye Hizmetlerinin Acil Durum ve Afet Yönetimi Süreçlerine Göre Değerlendirilmesi. Hastane Öncesi Dergisi (HOD). 4(1): 13 – 22.

Gökkaya,E. Kaya,A.(2021). Türkiye’de İtfaiyecilik Eğitimi ile Hava Kurtarma ve Yangınla Mücadele Biriminin Yapısal Değerlendirmesi. Hastane Öncesi Dergisi (HOD). 6(1):143-158

Çınar Ö. & Cengiz S. (2022). Acil durum ve afetlere müdahale personelinin kriz anı kurum içi iletişimlerinin değerlendirilmesi: Trabzon ili örneği. Gümüşhane Üniversitesi Sosyal Bilimler Dergisi, 13(1), 140-152.

ÖSYM,(2012). ARFF Memuru Olma Kriterleri. <https://www.osym.gov.tr/TR,2990/kpss-20122-tercihkilavuzundan-terlesterime-icin-tercih-yapantercih-yapacak-adaylarin-dikkatine-22112012.html>.