



# **TECHNICAL GUIDANCE MATERIAL for AVIATION SECURITY EXPLOSIVE DETECTION DOGS (EDD) CERTIFICATION**

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**SUBJECT: AVIATION SECURITY EXPLOSIVE DETECTION DOGS (EDD)  
CERTIFICATION**

**EFFECTIVE DATE: 26 MARCH 2020**

## **1. APPLICABILITY**

This technical guidance material applies to Authorized Officers, Aviation Security Canine Teams, Canine/EDD Trainers and Assessors when preparing or conducting assessments for purposes of SACAA certification.

## **2. PURPOSE**

To establish certification criteria and process for all EDDT trainers and teams providing service to civil aviation, as required by CAR Part 110 in order to enable screening personnel to be certified

## **3. REQUIREMENTS**

Assessments are to be conducted with a view to achieve the outcomes outlined in CAR 110. This guidance material will detail how best to ensure that canine/EDDT assessments are conducted in a manner that achieves the desired outcome.

## **4. REFERENCE:**

- I. ICAO Annex 17
- II. Civil Aviation Regulations
- III. Part 12, 13

## **5.TERMS AND ABBREVIATIONS:**

TERM	DEFINITION
AVSEC	AVIATION SECURITY
CAR	CIVIL AVIATION REGULATIONS
CATS	CIVIL AVIATION TECHNICAL STANDARDS
EDD	EXPLOSIVES DETECTION DOG
EDDT	EXPLOSIVES DETECTION DOG TEAM
FREDD	FREE RUNNING EXPLOSIVES DETECTOR DOGS
NASP	NATION AVIATION SECURITY PROGRAMME
SACAA	SOUTH AFRICAN CIVIL AVIATION AUTHORITY

## **6.GENERAL**

This certification criteria will determine the proficiency and reliability of EDD teams in the detection of explosives. All EDD teams must be tested on all basic explosive odours. It is recommended that authentic explosives to be used.

## **METHODOLOGY**

SACAA authorised officer will have the responsibility of assessing and certifying AVSEC EDD team under the testing rules set forth as per Part. 110 technical standards

### **1 Methods of deploying EDD in civil aviation**

There are two main methods of deploying EDD for air cargo screening and airport security.

#### **1.1 FREDD (free running explosives detector dogs)**

Application of FREDD requires that the EDDT conduct a search for explosives where the cargo or item is stored or prepared (e.g. a cargo warehouse and an airport terminal). The dog should be trained to indicate where in the cargo consignment or item it detects the scent of an explosive odour it was trained to recognize. The indication needs to be as accurate as possible in order to determine which consignment (s) or item should go for secondary screening.

The manner in which cargo is presented to the EDD team and the screening environment where the EDD team is operating in should not impair the performance of the team. To that end, the authorized officer should assess whether FREDD can be

suitably applied for cargo screening before approving the conduct of FREDD operations. A re-assessment by the screener organization conducting EDD screening should be undertaken where material changes to the manner in which cargo is presented, or the screening environment, have taken place.

The following is a list of factors that will be considered when assessing whether the application of FREDD is suitable:

- a) *cargo placement* — The maximum limit in terms of height shall be 160cm from the hinds of the dog for the shipment being screened, particularly where larger shipments are concerned. No shipment shall be placed against wall or obstruction of any kind during screening
- b) *size of consignments* — cargo consignments come in different configurations, such as in homogenized consolidated shipments, loose cargo at piece level, built-up pallets and unit load devices (ULDs). For larger consignments, the EDD team may need to carry out a series of searches, each covering a different part of the consignment to ensure that screening is thorough and covers all sections of the cargo, including the center. The maximum depth each search can cover to ensure EDD teams conduct screening thoroughly shall not exceed 100cm;
- c) *soak time* — the longer an explosive substance dwells in an environment, the larger the developing odour pool will be, thus enhancing detection. Different explosives have different vapor pressures, and dependent on explosive quantity, the size and type of container, the time required for explosive vapours to become effectively detectable by EDD, or 'soak time', may differ. The minimum soak time for cargo shall be 45 minutes, beginning with the placing of the hides, before an EDD can screen the cargo.

## 2 Explosive odor recognition assessment

The main purpose of this document is to guide the industry on certification criteria utilised by SACAA to assess the canine's ability to detect the explosive odours and to improve the canine team's proficiency on the detection of explosives. The team's ability to locate explosives and traces of explosives.

The odour recognition assessment consists of 16 boxes. Inside each box there should be a smaller container holding the aids or distractor or blank. It should have 10cm diameter holes on each lid. Selection and quantity of explosives used should be from approved list of basic odours list. The containers can be set up in a straight line or a large circle or cross setup. We are giving the teams flexibility in working without changing the way the canine teams have been trained.

The EDD assessment will be conducted using reliable, controlled verified samples of live explosives detailed in substance list. EDD assessor will decide in consultation with the screening organization the evaluation area.

## 3 Search Area

Each assigned area may be comprised of four rows of items (boxes/cones/bags/containers).

Each area shall contain a minimum of 3 hides of explosives substances according to the substance list in the guidelines for assessment test. A test area may contain a blank row. A systematic search technique shall be observed.

- j) The handler must await acknowledgement confirmation from the authorized officer before rewarding the dog.
- k) Only one false indication is allowed.
- l) Search items will be presented by authorized officer, the dog handler shall have no knowledge of how many hides are to be found and he/she is instructed-in case of indication to continue to search the remaining area.
- m) Explosive aids may not be pinpointed to source by the dog due to height, wind current or placement of the aid. In this event the authorized officer shall advise handler by stating "Not at source" and thereafter the handler shall conduct a follow-up to determine the source no further than one meter in either direction of the shipment.
- n) Reasonable judgement should be considered to all changes in behavior by the dog towards explosive odour.
- o) The authorized officer shall conduct an out brief with each EDDT assessed and provide feedback on areas of excellence or those of improvement

#### Disqualification Criteria

- The EDD shows uncontrolled submissive or aggressive behavior
- Misconduct by a handler may result in disqualification
- The EDD handler is not able to control the dog during the assessment
- Physical punishing of the EDD.
- The EDD handler does not follow the instructions of the authorized officer;
- The EDD engages in uncontrolled barking
- Spike collars or e-collars are used
- Handler fails to present (guide) the EDD to search the productive areas.

The team will be tested in the following areas:

1. Pipes or Boxes
2. Baggage
3. Cargo

## **REQUIREMENTS**

### Documentation

Checklist should reflect the following:

- Date and Time
- EDDT names/particulars
- EDD chip number
- Area of Testing
- Type of screening
- Scent list
- Comments

## TEAM

A team must have:

- Trained and immunized
- Initial and maintenance training
- Current (6 months) assessment report from assessment Centre.

## CERTIFICATION

A final report and certification letter will be issued detailing the EDD handler, ID number, EDD name and chip number as well as type and method of screening.

The certification is renewable every twelve months.

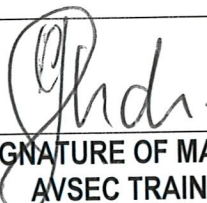

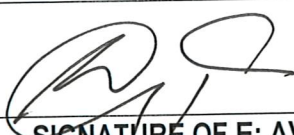
It is the responsibility of the screener organisation to submit an application 60 days prior to expiry to ensure that a certification assessment for an EDDT is arranged in time to renew certification.

## QUERIES

Any queries or requests for further guidance as a result of this communications should be sent to:

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