# **Common Operations Picture**

# Preliminary Design Document (PDD)

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# **REVISION HISTORY**

Date	Version	Description	Author(s)
24/02/2014	0.1	First draft	Søren Sandal Jeppe Ibsen Anders Hansen Hassan Sheta Steffan Lildholdt

### 1. SCOPE

#### 1.1. Identification

The Royal Danish Air Force has requested Company F to deliver a self-protection suite for the F-16 combat aircraft(see Figure 1). The required solution incorporates a pod1 and an intelligent cockpit control unit for controlling the electronic warfare suite. The pod will be dispensing payloads (chaffs2 and flares) and hosting the Missile Warning System (MWS). The solution shall provide warning upon detection of missile threats and be able to automatically dispense payloads in response.<sup>1</sup>

#### 1.3. Document overview

This document creates an initial overview of the structure of this subsystem, which will satisfy the requirements. It contains the information required by the developers, to construct the surrounding system.

This document is strictly used only by Systematic and prime contractor.

### 2. REFERENCED DOCUMENTS

F-PodSoW-2014-V2

 $^1$ This section is copied from the document "Pod Structure Statement of Work" ID: F-PodSoW-2014-V2

## 3. PREVIOUS WORK

Figure 3.1 shows one of our earlier projects where the objective were to develop a pod for the MIG-29 fighter plane. We intend to use some of the basic concepts from this project in the development of the pod for the F-16 combat aircraft.



Figure 3.1: An image of one of our previous pods. The final design might be different. No internal modules will be part of the final design.

### 4. PRELIMINARY DESIGN

Figure 4.1 shows a blueprint of the preliminary design of the pod. The dimensions have been determined according to the Statement of Work.

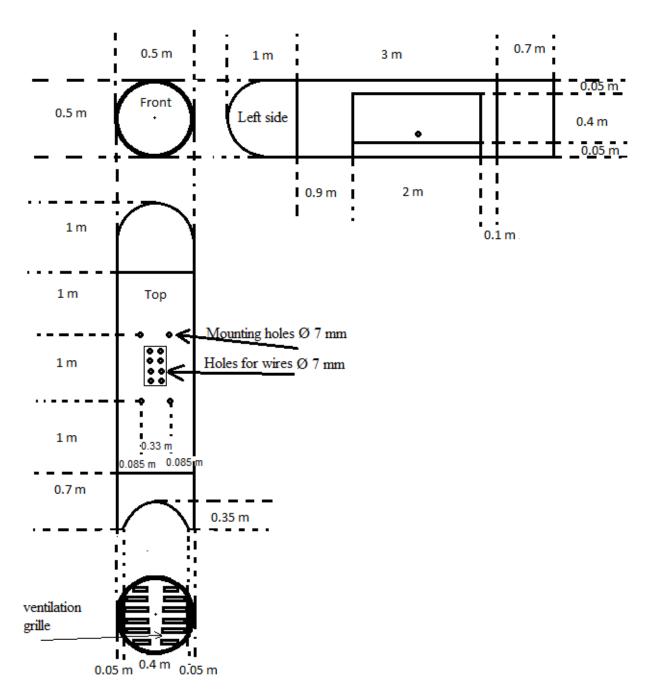


Figure 4.1: Measurements for the pod.

### 5. OTHER

### 5.1. Author contact information

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