



# **ATSEP QUALIFICATION TRAINING COURSE: SURVEILLANCE ADS STREAM SYLLABUS**

1. AUTOMATIC DEPENDENT SURVEILLANCE (SUR ADS)
  - 1.1. GENERAL VIEW ON ADS
    - 1.1.1. Definition of ADS
  - 1.2. ADS-B
    - 1.2.1. Introduction to ADS-B
    - 1.2.2. Techniques of ADS-B
    - 1.2.3. VDL Mode 4 (STDMA)
    - 1.2.4. Mode S Extended Squitter
    - 1.2.5. UAT
    - 1.2.6. ASTERIX
  - 1.3. ADS-C
    - 1.3.1. Introduction to ADS-C
    - 1.3.2. Techniques in ADS-C
2. HUMAN MACHINE INTERFACE (SUR HMI)
  - 2.1. HMI
    - 2.1.1. ATCO HMI
    - 2.1.2. ATSEP HMI
    - 2.1.3. Pilot HMI
    - 2.1.4. Displays
3. SURVEILLANCE DATA TRANSMISSION (SUR SDT)
  - 3.1. SURVEILLANCE DATA TRANSMISSION
    - 3.1.1. Technology and Protocols
    - 3.1.2. Verification Methods
4. FUNCTIONAL SAFETY (SUR FST)



#### 4.1. SAFETY ATTITUDE

##### 4.1.1. Safety Attitude

#### 4.2. FUNCTIONAL SAFETY

##### 4.2.1. Functional Safety

### 5. DATA PROCESSING SYSTEMS

#### 5.1. SYSTEM COMPONENTS

##### 5.1.1. Surveillance Data Processing Systems