

# Safety Policy Statement

Safety is a prime consideration at all times within the DTO FlightLevel B.V.

As the Representative of the DTO it is my responsibility to ensure the safety of all our operations and services.

I will ensure that adequate resources and training are provided to manage safety effectively.

We encourage all our staff, instructors, students and stakeholders to report safety events or potential hazards however insignificant they may consider them at the time.

We have an open reporting culture that encourages free and frank reporting through a just culture. We strive to achieve:

- An accident free environment
- An effective safety management system and continuous improvement
- Full compliance with the statutory national and international regulations that apply to us.

These objectives are for the benefit of the DTO, its staff, instructors, students and stakeholders. To this end we have a shared responsibility to achieve these aims.

Safety is everyone's responsibility.

Signed by Representative of the DTO FlightLevel B.V. Drachten, December  $5^{th}$ , 2018,

Homme Jonkman.

DTO FlightLevel B.V.

# Safety Management System

# **DTO FlightLevel B.V.**

Representative: Homme Jonkman

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## 1 Goals

The goals of the Safety Management System are:

- Avoid accidents
- Improve safety
- Increase knowledge on safe operations
- Encouraging a culture where reporting safety issues is for learning and improving on safe operations, not for blaming individuals.

In order to achieve these goals, a systematic approach will be followed as described in this document.

As these goals have a high abstraction level this document gives a set of practical guidelines.

# 2 Roles and Responsibilities in the organisation

### 2.1 Introduction

Since different persons have different roles in a DTO, their main responsibilities towards safety are laid down in this chapter.

## 2.2 Representative of the DTO

The Representative of the DTO is responsible for:

- Developing and establishing the Safety Policy and Safety Management System which ensures that the DTO's activities are carried out safely.
- Ensuring that the DTO adheres to its Safety Policy and Safety Management System.
- Taking the necessary measures in order to achieve the objectives of the Safety Policy.
- Promoting safety in general within the DTO.
- Promoting safety to be 'just culture' within the DTO: encourages and supports people to provide essential safety related information in a non-threatening environment, but is clear about where the line is drawn between acceptable and unacceptable behaviour.
- Assuring everybody involved in the DTO is trained for their roles and responsibilities and has knowledge of and acts according this document. Such training is recorded on the form "Training Record Safety Management System".
- Communicates safety issues within the DTO as described in this document, e.g. via Safety Bulletins, or Critical Safety Information notices.

### 2.3 Instructors

Instructors carrying out tasks for the DTO are responsible for:

- Having knowledge of this Safety Policy and the Safety Management System of the DTO.
- Promoting the knowledge of the Safety Policy and the Safety Management System to the students of the DTO.
- Promoting safety to be 'just culture', encourages and supports people to provide essential safety related information in a non-threatening environment, but is clear about where the line is drawn between acceptable and unacceptable behaviour.

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- Taking note of the safety notices on the safety notification board, newsletter, or any other means of communication.
- Reporting incidents by means of the Incident Registration Form (IRF) and reporting hazards by means of the Hazard Registration Form (HRF).
- Complying with the safety related legislation and regulations which apply at that time and with the additional rules as laid down.

#### 2.4 Students and stakeholders

Students and stakeholders of the DTO are responsible for:

- Having knowledge of this Safety Policy and the Safety Management System of the DTO.
- Taking note of the safety notices on the safety notification board, newsletter, or any other means of communication.
- Reporting incidents by means of the Incident Registration Form (IRF) and reporting hazards by means of the Hazard Registration Form (HRF).
- Complying with the safety related legislation and regulations which apply at that time and with the additional rules as laid down.

## 2.5 Safety Committee

The safety committee has at least the following members:

- Representative (chair)
- Safety System Manager
- Head of Training
- One out of the group of students or stakeholders

#### The safety committee:

- Maintains this document.
- Sets up and maintains the Safety Risk Assessment and its associated actions.
- At least once a year gathers to evaluate this document and to maintain the Safety Risk Assessment and its associated actions.
- Evaluates each incident or hazard that is identified as soon as possible, but at least within one month, documents it and takes the required actions according to what is described in chapter 4 "Safety Management Process".
- Evaluates, documents and executes the results of any safety audit or assessment.
- Takes required measures according Safety Measures and Airworthiness Notices by IL&T and EASA.
- Checks, identifies and evaluates significant changes in the organisation for their safety impact.

The Safety System Manager of the safety committee:

- Supports the representative in execution of the Safety System.
- Keeps the documentation of the Safety System up-to-date.

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## 3 Documentation, publications and materials

To effectively execute the Safety Policy, the DTO maintains and provides the following at the Training Location and for items marked with \*) also at the website of FlightLevel B.V.:

- A Safety Notification Board with:
  - Safety Policy Statement \*)
  - Critical Safety Information \*), as dictated by circumstances.
  - Latest safety bulletins \*), available for at least 3 months.
- Blank Incident and Hazard Registration forms \*)
- A locked letter box for submitting Incident and Hazard Registration forms. It is emptied by the Safety Committee members regularly but at least once a month.
- A document library with:
  - The Safety Policy and the Safety Management System \*)
  - A binder for Active Subjects \*) being processed through the PDCA cycle.
     It contains:
    - All internal and external input (see paragraph 4.2 "Input: Safety Issue identification").
    - An anonymized list of Incident and Hazard Registration reports, stating the date submitted, the title and their status as described in chapter paragraph 4.4.1 "Handling of the reports".
    - The Safety Risk Assessment Sheet.
    - The associated actions and mitigations defined and implemented.
  - A binder with publications \*)
    - Critical Safety Information
    - Safety Bulletins
  - A binder for archived documentation (when processing is finalized)
    - internal and external input including its implemented and evaluated actions and mitigations.
    - An anonymized list of Incident and Hazard Registration reports, its associated analysis and defined actions as implemented.
  - A training record containing a list of individuals trained for their roles and responsibilities. This training record list contains date of training, name of trainer, name of trainee, and their respective signatures.
- At The PC
  - o A link to <a href="http://www.aviationreporting.eu/AviationReporting/">http://www.aviationreporting.eu/AviationReporting/</a>
- In a locked cabinet, only accessible for the safety committee:
  - A binder with the original submitted Incident and Hazard Registration forms. These forms are retained for at least 5 years from the date they are generated.
- In a cabinet, only accessible in case of an emergency by the Representative, Head of Training or Instructors:
  - A separate version of chapter "Emergency Response Plan", including a list with all names, addresses and telephone of all persons and their family involved with the DTO.
- Included in the ship's papers:
  - A copy of this document.
  - A list with names and telephone numbers of the Representative of the DTO, Head of Training, Members of the Safety Committee and the Instructors.



## 4 Safety Management Process

#### 4.1 Overview

The Safety Management Process is organized as a continuous improvement process according to the PDCA (Plan-Do-Check-Act) cycle. The input for this process is described in paragraph 4.2 "Input: Safety Issue identification". After identification of these issues, actions and mitigations are defined to improve the safety according to the flow diagram of figure 1. For a list of possible actions and mitigations see paragraph 4.3 "Output: Actions and mitigations".

One of the important Safety Issue identification inputs is the data and analysis of Incident and Hazard Registration reports. To handle these reports in such a way that it becomes second nature to report incidents and hazards, without fear for personalized actions, a specific process is defined as described in paragraph 4.4 "Incident and Hazard Registration reports". In that way it will contribute to the goals of this Safety Management System.

The Safety Risk Assessment Sheet is an important tool to identify the main Safety Issues, its associated risks and define mitigations, see paragraph 4.5 "Safety Risk Assessment Sheet". If the solution for a safety issue is obvious, straightforward and common-sense, the use of the Safety Risk Assessment Sheet is not mandatory.

After implementing these actions and mitigations, its effectiveness is monitored, and if not satisfactory will be used as new input for a new PDCA cycle.

On top of this PDCA cycle there is a yearly Safety assurance session overlooking the whole process as detailed in chapter 6 "Safety assurance" and taking additional actions if required.



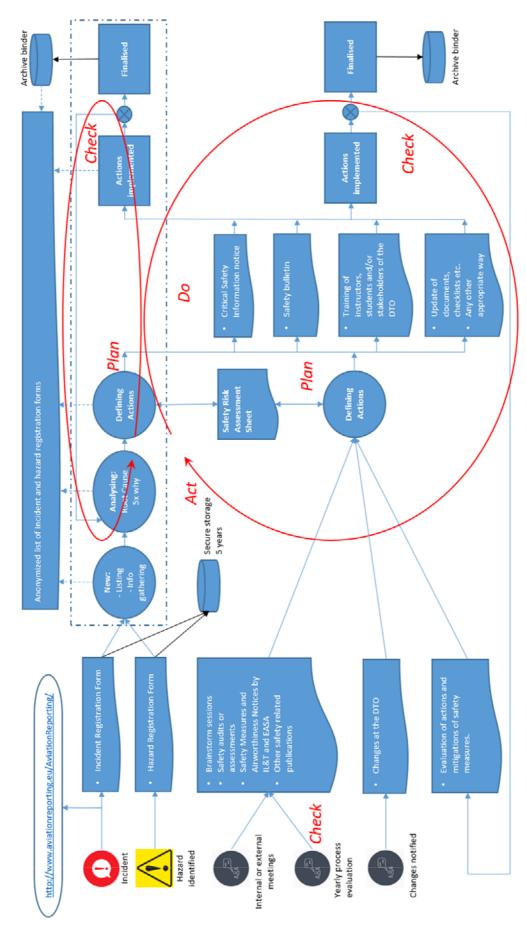


Fig. 1 The Safety Management Process.



## 4.2 Input: Safety Issue identification

As input for the Safety Improvement Process the following sources are used:

- Data and analysis of Incident and Hazard Registration reports
- Brainstorm sessions
- Safety audits or assessments
- Safety Measures and Airworthiness Notices by IL&T and EASA
- Other safety related publications
- Evaluation of actions and mitigations of safety measures
- Significant changes in operation, equipment etc. of the DTO as described in chapter 5 "Change management".

## 4.3 Output: Actions and mitigations

The actions and mitigations from the Safety Risk Assessment Sheet and the analysis of the Incident and Hazard Registration reports could be defined as a, in any combination:

- Publication of a Critical Safety Information notice, containing critical and imminent operational measures to ensure safety.
- Publication of a Safety bulletin, containing general safety information and findings.
- Training of instructors, students and/or stakeholders of the DTO
- Update of this document
- Update of checklists
- Any other appropriate way

## 4.4 Incident and Hazard Registration reports

#### 4.4.1 Handling of the reports

If an Incident and Hazard Registration report comes in:

- All submitted Incident and Hazard Registration forms are numbered sequentially and all members of the Safety Committee are notified of new forms coming in.
- No actions to any individual will be taken based on these forms alone.
- The following procedure is always used to define all actions or mitigations resulting from these reports:
- State 'New'
  - It is registered at the anonymized list of Incident and Hazard Registration reports as 'New'
  - o It is checked for completeness and understandability. If necessary and possible the reporter is requested for clarification.
  - o Further facts related to the reported incident or hazard are gathered.



- It gets the state 'Analysing'.
  - A root cause analysis is executed based on a five times why analysis.
     It is very unlikely such a root cause will point to one individual. If still for some reason the root cause is indicating to be lying at one person, such conclusion can only be accepted if someone outside of the Safety Committee, preferably someone from outside of the DTO, agrees fully with the root cause analysis.
- Action are defined during the 'Defining Actions' state:
  - Based on the found root cause, possible solutions are determined and selected.
     During this process the Safety Risk Assessment Sheet can be used as a tool for determining the solution and evaluating it. If necessary, i.e. when it is identified as a main Safety Issue the Safety Risk Assessment Sheet is modified or amended.
- After the defined actions are executed it gets the state 'Action(s) implemented'.
  - Once the report has the state 'Action(s) implemented' an evaluation for effectiveness of the solution is planned, approximately after 3 months. The outcome of the evaluation is documented.
- When the outcome indicates the measure is effective it gets the state 'Finalised'; The report and its documentation is archived.
  - In case the outcome indicates the measure is not effective it gets to the state
     'Analysing' restarting the PDCA cycle: A new root cause analysis is executed or new actions/solutions are defined.

#### 4.4.2 When to file a report

Any identified hazard should be reported with an Hazard Registration Report form.

Any safety related incident should be reported with an Incident Registration Report form.

Next to submitting an incident or hazard form, the occurrences as defined in <a href="regulation EU">regulation EU</a>

2015/2018 should also be reported to the authorities Mandatory Occurrence Reporting system, e.g. via <a href="http://www.aviationreporting.eu/AviationReporting/">http://www.aviationreporting.eu/AviationReporting/</a>

Especially for occurrences related to aircraft other than complex motor-powered aircraft the following mentioned in annex V of that regulation should be reported:

#### Air operations

- Unintentional loss of control.
- Landing outside of intended landing area.
- Inability or failure to achieve required aircraft performance expected in normal conditions during take-off, climb or landing.
- Runway incursion
- Runway excursion.
- Any flight which has been performed with an aircraft which was not airworthy, or for which
  flight preparation was not completed, which has or could have endangered the aircraft, its
  occupants or any other person.
- Unintended flight into IMC (Instrument Meteorological Conditions) conditions of aircraft not IFR (Instrument flight rules) certified, or a pilot not qualified for IFR, which has or could have endangered the aircraft, its occupants or any other person.



#### **Technical occurrences**

- Abnormal severe vibration (for example: aileron or elevator 'flutter', or of propeller).
- Any flight control not functioning correctly or disconnected.
- A failure or substantial deterioration of the aircraft structure.
- A loss of any part of the aircraft structure or installation in flight
- A failure of an engine, rotor, propeller, fuel system or other essential system.
- Leakage of any fluid which resulted in a fire hazard or possible hazardous contamination of aircraft structure, systems or equipment, or risk to occupants.

#### Interaction with air navigation services and air traffic management

- Interaction with air navigation services (for example: incorrect services provided, conflicting communications or deviation from clearance) which has or could have endangered the aircraft, its occupants or any other person.
- Airspace infringement.

#### **Emergencies and other critical situations**

- Any occurrence leading to an emergency call.
- Fire, explosion, smoke, toxic gases or toxic fumes in the aircraft.
- Incapacitation of the pilot leading to inability to perform any duty.

## **External environment and meteorology**

- A collision on the ground or in the air, with another aircraft, terrain or obstacle or vehicle.
- A near collision, on the ground or in the air, with another aircraft, terrain or obstacle or vehicle requiring an emergency avoidance manoeuvre to avoid a collision.
- Wildlife strike including bird strike which resulted in damage to the aircraft or loss or malfunction of any essential service.
- Interference with the aircraft by firearms, fireworks, flying kites, laser illumination, high powered lights lasers, Remotely Piloted Aircraft Systems, model aircraft or by similar means.
- A lightning strike resulting in damage to or loss of functions of the aircraft.
- Severe turbulence encounter which resulted in injury to aircraft occupants or in the need for a post-flight turbulence damage check of the aircraft.
- Icing including carburettor icing which has or could have endangered the aircraft, its occupants or any other person.

### 4.5 Safety Risk Assessment Sheet

#### 4.5.1 Introduction

A Safety Risk Assessment Sheet can be used as an important tool to identify the main Safety Issues, its associated risks and define mitigations. A Safety Risk Assessment Sheet is maintained in a separate document.

A <u>Safety Issue</u> is defined as a condition, event or circumstance that has potential to cause harm to people or damage to aircraft, equipment or structures.

A <u>risk</u> is defined as the potential outcome from a safety issue and is defined in terms of likelihood of harm occurring and severity.

When filling in the Risk Assessment the risk assessment is evaluated before and after the foreseen actions/mitigations are in place.



#### 4.5.2 Risk Assessment

## The likelihood

Determining the likelihood should be based on any current mitigation measures in place and the effectiveness of those measures related to the hazard identified.

Likelihood of occurrence						
Qualitative definition	Meaning	Value				
Frequent	Likely to occur many times (has occurred frequently)	5				
Occasional	Likely to occur sometimes (has occurred infrequently)					
Remote	Unlikely to occur but possible (has occurred rarely)	3				
Improbable	Very unlikely to occur (not known to have occurred)					
Extremely improbable	Almost inconceivable that the event will occur	1				

## The Severity

Severity of consequences						
<b>Aviation definition</b>	Meaning	Value				
Catastrophic	Results in an accident, death or equipment destroyed	5				
Hazardous	Serious injury or major equipment damage	4				
Major	Serious incident or injury	3				
Minor	Results in minor incident	2				
Negligible	Nuisance of little consequence	1				

#### Risk evaluation

TISK EVALUATION										
Risk Evaluation matrix										
	Severity									
Likelihood	Catastrophic	Hazardous	Major	Minor	Negligible					
	5	4	3	2	1					
Frequent 5	Unacceptable	Unacceptable	Unacceptable	Review	Review					
Occasional 4	Unacceptable	Unacceptable	Review	Review	Review					
Remote 3	Unacceptable	Review	Review	Review	Acceptable					
Improbable 2	Review	Review	Review	Acceptable	Acceptable					
Extremely improbable 1	Review	Acceptable	Acceptable	Acceptable	Acceptable					



Actions/mitigations to be taken are based on the outcome of this evaluation and should reduce the risk level to 'acceptable' or conditionally to 'review':

- **Unacceptable**: The risk is unacceptable and major mitigation measures are required to reduce the level of risk to as low as reasonably practicable.
- **Review**: The level of risk is of concern and mitigation measures are required to reduce the level of risk to as low as reasonably practicable. Where further risk reduction/mitigation is not practical or viable, the risk may be accepted, provided that the risk is understood and has the endorsement of the Representative of the DTO.
- Acceptable: Risk is considered acceptable but should be reviewed if it reoccurs.

# 5 Change management

If significant changes at the DTO occur, they are also evaluated for the safety impact. Such changes occur when:

- New equipment is introduced at the DTO
- Changes to the facilities or scope of work of the DTO are implemented
- New aircraft are introduced
- New routes or airports are being used
- New contracted services are introduced
- New procedures are introduced
- New or changed regulations become applicable
- New training material is used
- Any other significant changes to the DTO occurs

When new individuals (Representative of the DTO, Head of Training, Safety Committee members, Instructors, Students and stakeholders) are introduced to the DTO, they will first receive training in the Safety Policy and the Safety Management System by or on behalf of the Head of Training. Such a training is recorded on the "Training Record Safety Management System".



# 6 Safety assurance

At least yearly, but whenever seen appropriate, the Safety Committee:

- Evaluates this document and updates it if required.
- Checks that the actions and mitigations from the following are in place and effective:
  - o Safety audits or assessments.
  - o Safety Measures and Airworthiness Notices by IL&T and EASA.
  - o Safety Risk Assessment Sheet
  - Incident and Hazard Registration forms (looking back at least three years, also to 'Finalised' documents)
- Discusses any other incidents and hazards identified.
- Updates the Safety Risk Assessment Sheet.
- Checks and updates the list of trained persons and defines actions if required.
- Documents the outcome of the above in a meeting report. These reports are retained for at least 5 years from the date they are generated.



# 7 Emergency Response Plan

### 7.1 Introduction

In case of an incident or accident, this Emergency Response Plan (ERP) will act as a guidance for the DTO to follow. When such an event occurs it is important to use common sense and not only focus on this chapter. Because an emergency situation is stressful and hectic, the text of this chapter is written in "Telegram style" to act as a quick reference.

## 7.2 When to use

Use the Emergency Response Plan when:

- 1. A plane or building of the DTO is involved in an incident or accident;
- 2. A person has been injured or killed in a situation which is related to the DTO activities. Important: If the classification/information stream of the incident or accident is unclear, but there is a suspicion that the DTO might be involved, treat it like an incident or accident.

## 7.3 Start-up

Any of the following persons can activate the Emergency Response Plan:

- Representative of the DTO,
- Head of Training,
- Members of the Safety Committee
- Instructors



#### 7.4 Actions

#### The **person starting up** the Emergency Response Plan informs:

- The Representative of the DTO
- The Head of Training

#### The **Representative of the DTO** or its replacement:

- In case of personal injuries:
  - o Informs relatives
  - o Sends out a press release
  - o Receives the persons involved
- In case of aircraft damage:
  - Arranges aircraft handling (if released by authority)
- Coordinates with
  - o Police (0900 88 44)
  - o ATC (if applicable)
  - o Onderzoeksraad voor veiligheid (0800 63 53 688)
  - o IL&T (070 45 63 434)

#### The **Head of Training** or its replacement

- In case of personal injuries:
  - o Appoints someone to gather information
  - Receives and informs all involved persons related to the DTO
- Further
  - o Contacts and informs all other persons related to the DTO

## 7.5 Press Releases, examples

#### Inform family first!

- In case of precautionary or emergency landing, even if conditions of persons involved is more or less known:
  - "Op datum, tijd is er een luchtvaarttuig geland van onze vliegschool buiten het vliegveld. De reden voor deze landing is vooralsnog onbekend. De toestand van de betrokkenen is tevens onbekend. ... De vertegenwoordiger van de FlightLevel B.V. Vliegschool"
- In case of personal injury:
  - "Het ongeval met het lestoestel van onze vliegschool heeft onze school hard getroffen. Ons medeleven gaat uit naar de betrokken personen. Over de oorzaak van dit ongeval valt op dit moment niets te zeggen. Wij werken samen met de onderzoeksdiensten van de overheid om de oorzaak vast te stellen. ... De vertegenwoordiger van de FlightLevel B.V. Vliegschool"

## 7.6 Cancelation of the Emergency Response Plan

The Representative of the DTO stops the Emergency Response Plan to return to a normal situation. If the Representative of the DTO is not capable to do so the Head of Training together with at least one of the other persons mentioned above decide together to stop the Emergency Response Plan.



# Literature

Regulation (EU) No 2018/1119: DTO organizations

Regulation (EU) No 376/2014: Occurrence-reporting system

Regulation (EU) No 996/2010, annex: List of examples of serious incidents

Regulation (EU) No 2018/2015: List classifying occurrences in civil aviation to be mandatorily

reported according to Regulation (EU) No 376/2014

**UK CAA CAP 1059**: Safety Management Systems: Guidance for small, non-complex organisations **AFF 317102**: Safety Management Manual NON-Complex organization, as used by NL-ATO-236

AFF 317103: Emergency Response Plan, as used by NL-ATO-236