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**Swedish Civil  
Contingencies  
Agency**

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This document is a translation made by SHK of the original response in Swedish to the safety recommendation. In case of discrepancies between this translation and the Swedish original text, the Swedish text shall prevail in the interpretation of the response.

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File no. M-16/18

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## **Response to the Swedish Accident Investigation Authority's recommendation to the Swedish Civil Contingencies Agency to map the need for a developed coordination and management of aviation accidents. (RM 2019:02 R8)**

### **Assignment**

The assignment consists of a recommendation from the Swedish Accident Investigation Authority following the crash of a JAS 39 Gripen in 2018. The Civil Contingencies Agency has understood the importance of this work being conducted with a broad approach in which general conclusions are drawn with regard to the emergency response to aviation accidents.

The assignment has two parts; first identify the development requirements, and then submit proposed changes.

- Map the need for a developed coordination and management of aviation accidents. (RM 2019:02 R8)
- On the basis of the results of the above-mentioned survey, initiate and lead a work in which relevant actors such as the Swedish Maritime Administration, SOS Alarm, the Swedish Civil Aviation Administration and other air traffic management suppliers, the Police, the Swedish Armed Forces, representatives for municipal rescue services and prehospital medical care participate in joint efforts to ensure a coordinated and jointly rehearsed handling of air accidents. (RM 2019:02 R9)

This report constitutes the Civil Contingencies Agency's response to assignment R8. The response to assignment R9 will be prepared and decided on in autumn 2020.

### **Implementation**

The Civil Contingencies Agency has prepared the matter over the course of two meetings in cooperation with relevant actors (see participating stakeholders under *Copy to* below). At these meetings, the aim and objective of the work has been determined and the perspectives of the various actors have been elucidated. A list of needs for developed coordination and management has then been produced. The list describes the areas where development needs have been identified and some concrete examples of each of these. The

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areas are not listed in any order of priority and more areas may become pertinent during the work on assignment R9.

### **Conclusion**

In cooperation with relevant actors, the Civil Contingencies Agency finds that there is a tangible need to develop coordination and management of aviation accidents from an emergency response perspective. It will also be possible to apply the conclusions drawn and forthcoming work to other types of emergency response in which various actors are participating.

In cooperation with relevant actors, the Civil Contingencies Agency has decided to continue working to achieve a coordinated and jointly rehearsed management of air accidents (Assignment R9).

## Areas identified where there is a need for developed coordination and management

### Liaison

Examples of concrete development needs:

- Different technical systems for liaison are used, which results in problems implementing multi-party conversations, that relevant information does not always reach actors and that it becomes difficult to maintain a complete view of the situation.
- Some actors use multiple liaison systems in parallel, which causes problems, especially in the event of single-person staffing.

### Communication

Examples of concrete development needs:

- There are shortcomings in terms of the use of a language that is common to all actors; common, established and comprehensible terminology.
- There is no established nomenclature, terminology and common communication regulations.
- Sometimes technical terms such as “aviation language” are used, which are difficult for cooperating actors to understand.
- There are no procedures for transferring certain information, for example images, from various sensors to the right actor.

### Cooperation

#### View of the situation

Examples of concrete development needs:

- There is a great need for a shared and complete view of the situation, which is not always met because there are shortcomings in terms of information sharing within and between actors.

#### Cooperation other

Examples of concrete development needs:

- There are shortcomings in terms of knowledge about one another’s responsibilities and remits.
- Important information about the accident is not always shared effectively.
- Alarm management needs to be developed.
- Mountain rescue must be involved in future development work.

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## **Raising the alarm**

### **Checklists**

Examples of concrete development needs:

- It is impossible to meet the expectation that it will be possible for checklists to cover every possibility, which requires actors to act independently on the basis of a developed knowledge base.
- There is a need for development in terms of which checklist is to be chosen and how this choice is communicated.
- The content of the various checklists are not known by all municipal rescue services or their cooperative partners, for example the regions and the police.

### **Location of the accident site**

Examples of concrete development needs:

- Determination and indication of position are extremely important and it is far too common an occurrence that the various systems create uncertainty and lead to delays.
- The Armed Forces has its own system (MGRS) for indicating position, which is not understood by all actors.

### **Raising the alarm other**

Examples of concrete development needs:

- Relevant actors are not always immediately informed of the emergency and/or briefed, instead this takes place gradually as they are brought into the emergency response, which creates serious delays.
- The nature of rare occurrences places major demands in terms IT systems and clear information for, among others, the SOS Alarm operators, and these needs are not completely met.

## **Command and control and responsibility**

Examples of concrete development needs:

- Boundaries, unclear division of responsibilities and the number of actors are often perceived as problematic.
- Sometimes, problems arise in terms of handling the system with parallelism, i.e. more than one actor are simultaneously responsible. All too often, an actor behaves passively because they do not perceive themselves to be responsible for a certain phase of the emergency response.
- Boundaries and the division of responsibilities following the acute phase (environmental issues, cordoning off the accident site, damage to third parties etc.) are unclear.

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## **Training and rehearsal**

Examples of concrete development needs:

- The nature of a rare occurrence and the fact that an accident can take place anywhere result in the need for all actors that may become involved in the emergency response to an aviation accident to train and rehearse, a need that is not always met to a sufficient extent.
- Turnover of staff and personnel changes place specific demands in terms of continual training and rehearsal.

## **Dissemination of knowledge and transfer of experience**

Examples of concrete development needs:

- The nature of a rare occurrence and the fact that an accident can take place anywhere result in the need for all actors that may become involved in the emergency response to an aviation accident to study experiences from previous accidents, something that is not currently being done systematically.
- It is important that all emergency responses are evaluated, even with regard to what went well, so that this can be disseminated. All actors need to participate in the evaluation and it needs to begin at an early stage. This is not currently being done systematically.

## **Security**

Examples of concrete development needs:

- In the event of accidents involving, for example, military aircraft, the security aspects are important immediately after the acute phase involving live-saving measures, something which is not being managed sufficiently well.
- The transition from having been a protected military object to the county administrative board having to cordon off the area pursuant to the Public Order Act sometimes causes problems.

## **Environment**

Examples of concrete development needs:

- Any need for decontamination of the accident site and handling of salvage causes problems relating to the division of responsibility, among other things.

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## **Work environment**

Examples of concrete development needs:

- The work environment for the “blue-light actors” must be better taken into account, for example when there are hazardous substances and if the aircraft is loaded/carrying weapons.

## **Additional information**

Examples of concrete development needs:

- The actors must be able to cope with occurrences involving foreign aircraft, for example foreign state aircraft/air forces, which places specific demands in terms of checklist etc.
- The actors need to document the entire sequence of events to a greater extent, including ahead of any preliminary criminal investigation and/or identification.
- Differences in terms of course of action, including between the Armed Forces’ air wings, cause problems.
- The need for equivalence in the emergency response, regardless of where the accident occurs and regardless of whether the aeroplane is military or civil is not being met.

Head of Unit Mette Lindahl Olsson has made the decision in this case. Leif Gustavsson has acted as rapporteur.

[signature]  
Mette Lindahl Olsson

[signature]  
Leif Gustavsson

Copy to (participants in the work):

ACR  
Swedish Armed Forces  
Swedish Coast Guard  
LFV  
Swedish Police Authority  
Region Västerbotten (representative prehospital medical care, appointed by SALAR)  
Rescue Services Eastern Blekinge (representative municipal rescue services)  
Rescue Services Kiruna (representative municipal rescue services, appointed by SALAR)  
Swedish Maritime Administration  
SOS Alarm AB  
Swedish Association of Local Authorities and Regions (SALAR)  
Swedish Transport Agency

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