



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.

Your position, administrator

SHK

Your date

29/06/201

7

Your designation

M-16/15

Our position, administrator

Carl Johan Frödin,  
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Our previous date

Our previous reference

## **The Swedish Armed Forces' actions in response to SHK RM**

### **2017:01**

(1 appendix)

#### Background

In its report RM 2017:01, the Swedish Accident Investigation Authority (SHK) has issued the Swedish Armed Forces (FM) with eleven recommendations to implement no later than 27 October 2017. Appendix 1 contains FM's decisions and division of responsibility regarding what action has been taken in response to each recommendation.

#### Decision

Participating in the handling of this matter were Major General Mats Helgesson, Colonel Anders Persson, Colonel Anders Janson, Lieutenant Colonel Michael Lundquist, Lieutenant Colonel Niclas Berger and Åsa Dahlström, legal advisor.

This matter has been resolved by Supreme Commander Micael Bydén. In addition, Lieutenant Colonel Jonas Larsson and Maj Michael Rosenqvist and Maj Carl Johan Frödin have participated in the final administration of the matter, with the latter acting as rapporteur.

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SWEDISH ARMED  
FORCES

**RESPONSE**

Date  
13/10/2017

Designation  
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Distribution list

Swedish Accident Investigation Authority

For information

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## Background

The handling of the recommendations contains references to action programmes and conducted supervisory measures, hence this background.

In autumn 2015, Hkpflj (Swedish Armed Forces Helicopter Wing) had the serious incident involving HKP16 in Lake Vättern and then a serious incident involving a HKP14 at Namsos in winter 2016. C Hkpflj (the commander of Hkpflj) then decided to develop an action package containing nine points in order to improve the aviation safety situation. At around this time, SHK shared facts particularly from the event in Lake Vättern with the Swedish Armed Forces and FLYGI (Swedish Military Flight Safety Inspectorate). Following this, FVC (Chief of Air Force) decided on operational limitations and a helicopter seminar. FVC also decided on a ten-point action programme and further seminars in order to follow up both C Hkpflj and FVC action programme.

FSI (Flight Safety Inspector) supervision of the Air Operator's management in spring 2017 identified two major deviations, one concerning the proactive and preventive aviation safety work and the other the influence of the responsible persons on resource management.

Regarding these major deviations, FSI has received satisfactory action plans regarding, inter alia, personnel reinforcements at the central aviation safety function, personnel training and review of the document LML.

FSI decided in spring 2017 to conduct enhanced supervision at Hkpflj. During this supervision, FSI concluded that the action programmes have had an effect and that a positive development has taken place since the serious incidents.



Summary of recommendations and action taken/planned in response to RM 2017:01

### **Recommendation RM 2017:01 R1**

*Review the organisation and implementation of OPEVAL helicopter, taking into account the weaknesses identified in section 2.1 with respect to expertise, risk evaluation, commencement and termination criteria, pressure of time and divided responsibilities.*

#### Action taken:

Completely new process developed in which the appointed OPEVAL leader comes to PROD FLYG and presents the plan with C PROD FLYG and with relevant officers as the audience. At the presentation, Avdch (department head) decides under which premises OPEVAL is conducted/not conducted.

By relevant officers is normally meant\*:

- CF
- CT
- KFA
- MOA

\* = Where applicable, CS, C SIS and C FU can also participate.

This new process means that all aspects are included in C PROD FLYG's decision:

- Shall/may the crews perform flights in the described manner? CF
- Does supplied/used materiel affect airworthiness adversely? CT
- Is the capability requested for the war unit? KFA
- Which conditions exist for acquisition/cost of new materiel? MOA
- Is the capability cost-effective in terms of money, equipment and personnel?

Avdch

#### Action planned:

C PROD FLYG's orientation is for C TU HKP to also be L CF and issue a decision on flying for all flight operations regarding OPEVALs. Staff preparation for this, including a review of how personnel is placed at the disposal of TU HKP for OPEVAL, will take place in Q4 2017. The purpose is to make it more explicit who is leading and conducting OPEVAL and to improve the conditions for having access to the right resources and expertise for completing the task.

#### Schedule:

Complete Q1 2018

#### Responsible:

VL

**Recommendation RM 2017:01 R2**

*Audit previously conducted OPEVAL within helicopter operations in order to ensure that these have been implemented in a correct manner on the basis of reasonable levels of safety.*

**Action taken:**

The implementation of recommendation RM 2017:01 R1 has taken into account previously conducted OPEVAL. Assessment has been made that it is at present not time critical for the development of OPEVAL helicopter to conduct a more in-depth audit of previously conducted OPEVAL.

Worked commenced to clarify the number of OPEVAL HKP reports that have been issued over the years. The indication is approximately 60 for HKP 14, 15 and 16.

**Action planned:**

When the extent of previously conducted OPEVAL HKP reports becomes clear, a new position will be taken on the need for more in-depth audit.

**Schedule: Complete**

Q1 2018

**Responsible:**

VL

**Recommendation RM 2017:01 R3**

*Ensure that senior Flight Operations officers have the requisite expertise with respect to current helicopter systems and mission profiles to enable them to lead and support subordinate personnel and assess their capability.*

**Action taken:**

Review of existing processes described in FV publications<sup>1</sup>.

**Planned measures:**

None.

Personnel according to the recommendation already exists and is appointed in accordance with applicable regulations. Since OPEVAL is conducted in order to produce new flying operations procedures, there will be gaps in the expertise of the personnel who conducts it, but this is handled by selecting personnel with the best possible conditions.

The measures according to recommendation RM 2017:01 R1 are partly also valid for this recommendation as they deal with a new procedure for conducting OPEVAL.

**Schedule: N/A**

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<sup>1</sup> For flight operations positions [LML Appendix B5.1.3, Chapter 3](#).

Responsible:

VL

**Recommendation RM 2017:01 R4**

*Ensure that FlygSäk (Flight Safety) has the requisite expertise with respect to current helicopter systems and mission profiles and sufficient resources to monitor and analyse the aviation safety situation and management systems application in a satisfactory manner.*

Action taken:

New HL HKP at Flygsäk has type rating on HKP 16 and has flight operations on this type at Hkpflj 2nd sqdn.

Flygsäk will be supplied with an additional three positions, of which one position will be HL with the task of statistics and analysis. These positions will make it possible for Flygsäk to better conduct monitoring and analysis of the aviation safety situation and application of the management system.

Action planned:

It is planned that HL HKP at Flygsäk will obtain type rating on HKP 15 and have flight operations on this type at Hkpflj.

Other:

Assessment is that it is at present not practically possible to have HL HKP also obtain type rating on HKP 14, having taken into account finances and available time for the HL in question. Assessment has also been made that it is at present not realistic to supply Flygsäk with an additional HL HKP in order to cover the need for expertise on HKP 14.

Schedule:

Complete Q2 2018

Responsible:

VL

**Recommendation RM 2017:01 R5**

*Create and implement an SMS that is adapted to the Armed Forces' military aviation and ensure that the requisite training is provided to the officers concerned.*

Action taken:

Training in SMS is planned for personnel both at FLYGI and PROD FLYG. An initial analysis has been made of which differences exist between SMS and the aviation safety work that is regulated in RML.

Action planned:

In connection with the rule development that is in progress, the focus is to review RML regarding what is described as aviation safety work. After received SMS training, C FLYGI intends



to analyse the matter further and to raise the matter at the Aviation Council for further handling as part of the rule development work.

Schedule:

SMS training Q4 2017.

Rule development Q4 2018.

Responsible:

C FLYGI prepares, decision by ÖB.

**Recommendation RM 2017:01 R6**

*Clarify the meaning of FMV's technical design responsibility so that the organisations and responsible persons involved have an understanding of and are in agreement as regards the interpretation of SAMO (coordination agreement between FMV and the Armed Forces).*

Action taken:

FLYGI has conducted information meetings with both FMV and PROD FLYG in order to clarify responsibilities concerning technical design responsibility.

Action planned:

FLYGI will conduct more meetings with concerned parties during autumn 2017 with the same purpose as previously. FLYGI will, during supervisory measures, follow up that information meetings have had the intended effect in order to ensure that there is an understanding and consensus as regards the interpretation of SAMO.

Schedule:

Information meetings complete Q4 2017

Supervisory measures Q4 2018

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Responsible: FSI

**Recommendation RM 2017:01 R7**

*Reinforce the supervision of the Armed Forces' helicopter operations in order to ensure the safety of these operations until such time as the SMS is implemented by the Armed Forces' Air Operator.*

Action taken:

A targeted supervision has been conducted in June 2017. During the supervision, it emerged that a major improvement has taken place at the division in question. There are parts that PROD FLYG centrally must improve regarding aviation safety work and the influence of responsible persons on resource management. FLYGI participates in and follows the development of the action programmes that FVC and C Hkpflj have developed.

Action planned:

FLYGI will conduct the next supervision at the Helicopter Wing in autumn 2017 and participate in the forthcoming helicopter seminar at which the action programmes will be discussed. For 2018, there are



planned supervisory measures, and these can be reinforced or brought forward as necessary depending on the result of forthcoming supervisory measures.

Schedule:

Ongoing in accordance with FSI's judgement.

Responsible:

FSI

**Recommendation RM 2017:01 R8**

*Draw up a state safety programme (SSP) for military aviation.*

Action taken:

Work with a state safety programme has been commenced.

Action planned:

Continued production during autumn 2017.

Schedule:

Complete Q4 2017

Responsible:

C FLYGI

**Recommendation RM 2017:01 R9**

*Ensure that amendments to the RML are implemented in a manner that is quality assured and that all the organisational units involved in the change process are fully aware at all times of their respective roles and interfaces and that they agree on the division of responsibility.*

Action taken:

The plan for the rule development of RML established in 2015 has been amended by C FLYGI, and the schedule for when the work is to be completed has been postponed. C FLYGI has decided that the continued rule development must take place closer to the organisations concerned. C FLYGI has requested and will receive support from personnel from PROD FLYG so that development and the implementation will take place in a better way.

Action planned:

A clarification and, in some respects amended, transitional provisions will be issued regarding the RML parts that ÖB established on 21/10/2016. FLYGI will also conduct meetings in the autumn with the organisations concerned.

Schedule:

Complete Q4 2017

Responsible:

C FLYGI

**Recommendation RM 2017:01 R10**

*As part of its supervisory role, audit the new reporting system on the basis of the requirements in the RML and the reporting culture within helicopter operations on the basis of the shortcomings identified in this investigation.*

Action taken:

Ever since the introduction, FLYGI has focused on following up the implementation of the new system in connection with supervisory measures. The picture described in the SHK report corresponds well with FLYGI's observations during supervisory measures. In the supervisory reports, FLYGI has stated that more training is needed and will continue to develop the system. During supervisory measures conducted in 2016 and 2017, FLYGI has continuously compared how the reporting took place at the operational establishment in question and in the old DA system and in the new system in PRIO. At some establishments, FLYGI has seen increased reporting and at some, decreased. Specifically at the Helicopter Wing there was a decrease initially. During supervisory measures, FLYGI has seen increased reporting where the local management has been committed and sympathetic, and unfortunately the opposite where the commitment and attitude of the local management has been less positive. A further negative observation is that the central aviation safety function has been undermanned and poorly trained during the introduction.

Action planned:

FSI plans to raise the question of the development of the deviation system with the officers concerned. Continued follow-up of the system will take place during forthcoming supervisory measures.

Schedule:

Continuous

Responsible:

FSI



**Recommendation RM 2017:01 R11**

*Investigate in more detail the feasibility of strengthening the independence of the supervisory function and consider making a request to the Swedish Government in this respect.*

Action taken:

FSI has commenced analysis of the recommendation.

Action planned:

Raise the question at the next Aviation Council.

Schedule:

Analysis complete Q4 2017.

Responsible:

FSI