



Date

Reference

11/03/2016

FM2015 -162 11:2 Page 1 (9)

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

Your date

Your reference

Our position, administrator

Our previous date

Our previous reference

Air Force Department, Anders Danielsson,
+46 8-788 98 14,
anders.b.danielsson@mil.se

Summary of recommendations and action taken/ planned **RM 2015:01**

Recommendation 2015:01 (R1):

Ensure the Swedish Armed Forces creates procedures for detecting at an early stage any interruptions in flight training, and in a clear manner attending to the consequences of these, so that these do not affect safety in the training sessions themselves.

Action taken:

The Chief of the Aircrew Training School 1 (C FBS) has been tasked with drawing up clearer guidance for the training that the Chief of Staff Swedish Air Force (FVC) has had reported and made a decision about.

This involves a number of actions that are reported below.

Planned action:

At a central level, draw up a training plan (UtbP) that includes the training instructions (UtbA) concerning flight operations, as well as all other training that flight trainees are to undergo prior to a combat posting. The training plan is owned by FVC who determines what flight trainees have to do prior to their combat posting. As a complement to UtbP, C FBS is drawing up a monitoring document that tracks the flight trainee through the implementation of the entire training plan.

Each squadron commander ensures that UtbP is realised and is responsible for the monitoring document being kept in such a way that it can be used to observe the progress of training up to combat posting.

¹ The Swedish Air Force's Aircrew Training School

(PEN)

C FBS also appoints a monitoring officer who has the job of monitoring the all trainees in the training intake so as to take with them knowledge about what the flight trainees have undertaken during the training programme.

The monitoring officer's duties include taking part in staff meetings, examinations and being the trainees' point of contact throughout the entire training programme up to their combat posting.

FVC clarifies the priority areas training, operations (preparation) and development of capability, which are produced by the Air Force Department (PROD FLYG), through the Chief of the Air Force Department (C PROD FLYG).

The lists of tasks for the air combat squadrons must clearly state what is prioritised. This means that the air combat squadrons will have different KDU² requirements linked to different tasks, which means that the priority of some capabilities/tasks is reduced in favour of others. This creates the scope of the necessary resources to be allocated to the training task, which reduces the risk of disruptions to flight training. At the same time, the prioritisation between the three principal tasks, basic training, operations (preparation) and development of capability (KDU requirements) so that any lack of resources primarily affects operational capability and only then basic training.

For the Armed Forces air operator, the Armed Forces new organisation that came into effect in 2016 means that the local accountable managers (L VL) also become commander of their respective flotilla.

Both the production task and the mission tasks are channelled via a single commander and the L VL thus gains a uniform and coherent organisational structure with a clear command hierarchy that is the same during both peace-time production and in the event of emergencies and missions/war.

This creates better conditions for commanding the units using task tactics, which is the basis for ensuring that both PPU³ and the methods described in LML⁴ for creating a balance between tasks and resources function in the intended manner.

Schedule:

The plan is for the new training guidance to come into effect in conjunction with the training intake in 2017.

The changes in task allocation to the air combat squadrons is being introduced in parallel to the introduction of the new organisation.

The new organisation is being introduced from 01/01/2016 and is to be fully operational prior to 31/12/2018.

Responsible:

C PROD FLYG

² Combat capability

³ The Armed Forces Production Planning and Monitoring Process

⁴ Ledning av Militär Luftfart (Management of Military Aviation)

Recommendation 2015:01 (R2):

Investigate whether the method established in LML for ensuring the balance between tasks and resources is effective and applied in the right way in order to achieve the purpose.

Action taken:

It is the Armed Forces' understanding that there is a good description of the method in LML, which also frames the term "balance between tasks and resources".

The method in LML is adhered to through continual reporting and monitoring of the balance between tasks and resources each week, with the responsible parties (AH) reporting directly to the accountable manager (VL) in PROD FLYG departmental reports. Each month at the VL management meeting with the responsible parties and other section commanders within PROD FLYG and quarterly at the local accountable managers' (L VL) meeting with the VLs. At these meetings, VLs are able to report on imbalances that have arisen and how these have been dealt with locally. If it has not been possible to rectify the imbalance, the VL decides on the action necessary to reinstate the balance between tasks and resources.

In addition, the supply of pilots have been centralised and is managed through quarterly personnel management meetings.

Planned action:

Schedule:

Responsible:

C PROD FLYG

Recommendation 2015:01 (R3):

Ensure that an established method is applied when transferring flight trainees so that the recipient unit has sufficient knowledge of the trainee's stage of training and individual conditions prior to training.

Action taken:

The method for handing over trainees is regulated in FOM-A Joint 2.4.1. This states that the general requirements for the handover of aircrew and that, at the time of the hand-over, a minimum of qualifications, serviceability and current status are to be stated.

It is the Armed Forces' understanding that this method is applied when handing over aircrew. How the information obtained is further disseminated within the recipient unit is determined by the local flying operations commander and squadron commander on a case-by-case basis.

Planned action:

C FBS is tasked with drawing up a monitoring document that tracks the flight trainees from admission until combat posting and appoints a monitoring officer with responsibility for monitoring a flight training intake from admission until combat posting in accordance with Recommendation 1.

The planning tool WING is currently used to schedule, monitor and to some extent evaluate flight operations within the Air Force. This tool could be a good support when transferring flight trainees between different training phases, but is currently made up of separate databases for each unit, which makes this difficult. A project to develop the system so that a common database structure is created has, however, been initiated. This would make it possible to monitor in great detail a pilot's flying background throughout their entire career, regardless of which unit the pilot or the person who is analysing the data is with. Such a synthesis of a pilot's background would be a valuable complement to the method of handing over trainees described in FOM. Common operational regulations concerning the application and use of the existing WING structure is being published in FOM.

Schedule:

Drawing up of the monitoring document and appointment of monitoring officers is planned for the training intake in 2017.

The project to develop a common national database for WING has been initiated and is expected to be implemented within 2 years.

Responsible:

The flying operations commander within the Armed Forces air operator.

Recommendation 2015:01 (R4):

Assess and, where appropriate, take action to increase the visual signature of the JAS 39 in times of peace.

Action taken:

No action taken.

Planned action:

No action to increase the visual signature of the JAS 39 Gripen is current planned. In the present case, the distance between the aeroplanes when the misjudgement took place was so great that some form of colour marking would probably not have been perceived by the pilot. The marking that was used on previous aeroplane types was primarily intended as a means of differentiating between fighter planes and target planes and not for indicating the direction of turn or angles of aspect. The JAS 39 Gripen aeroplane is difficult to detect visually and it is currently not practically feasible to increase its detectability. In addition, it would, for operational reasons, only be possible to mark some of the aeroplane fleet in such a way, which would further complicate the planning situation. This risks making it even more difficult to ensure access to correctly equipped aeroplanes at the right time, which may result in further friction and delays to flight training.

Schedule:

Responsible:

Recommendation 2015:01 (R5):

Ensure the instructions for fighter pilot flight training have a level of detail, so that senior air force personnel have better support for the design of individual flight exercises in terms of learning curve, exercise planning, limitations and flight safety risks.

Action taken:

The Armed Forces' understanding of the causes of the problem with the training instructions is reported below. This section does not in itself consist of any action that has been taken as a result of the above recommendation, rather it is to be seen as a background to the planned action that is reported thereafter.

The current training instructions are deliberately structured so that the squadron commander has great freedom to take responsibility for designing the details of how an air exercise is to be conducted. The fundamental idea of this concept originates from the introduction of the JAS 39 Gripen into the Air Force and is based on the idea that the squadron commander has the best knowledge of the status of their organisation and their personnel and is therefore the individual who is most appropriate to design the details of the exercise.

In conjunction with the introduction of the JAS 39 Gripen into the Air Force, a centralised training concept for young pilots was selected. What this means is that the young pilots undertook both type rating (CT⁵) and the bulk of CRT⁶ in the training squadrons at F 7; a total of 18 months' centralised Gripen training. This had two benefits. The first was that the trainees were trained in an environment that is optimised for training, with good access to simulators and well-trained instructors and with a clear focus on the training mission. This also meant that the operational squadrons could focus on operational tasks, which allowed an opportunity to maintain an operational capability that is both broad and deep. On the basis of this format, and a flight system (JAS 39 A/B) with a not-too-extensive breadth of capabilities, a high degree of safety could be maintained throughout training, in spite of less detailed training instructions.

However, as a result of a shrinking organisation and decreasing resources, the centralised training organisation was reduced and since 2010 CRT has been divided up into parts, with half being conducted at F 7 and the remaining part at the operational squadrons. No significant reduction in the operational squadrons' task allocation was made and the JAS 39 C/D had also been introduced some years previously, further increasing the breadth of capabilities. All in all, this has contributed to a very difficult situation for the operational squadrons' commanders in terms of planning and prioritisation, in which, in the opinion of the Armed Forces, the absence of detailed training instructions also impaired the conditions for conducting flight training with a sufficiently high degree of safety.

Planned action:

As a result of the changes in the Armed Forces' new organisational structure, the centralised Gripen training is being reduced to only encompass CT as of 2017. Responsibility for CRT is then being transferred to the operational squadrons and the training course for a combat pilot is returning to a concept that is similar to that which was used for previous flight systems. This means that the operational squadrons are gaining a clearer responsibility for the training of young pilots and that basic training is again becoming a highly prioritised task for an air combat squadron.

This shift in the focus of operations and the resulting changes to resource requirements are being compensated for by means of a differentiation of the requirement for operational capability in the manner described previously. The organisational structure is also being changed in such a way that responsibility for CRT in the new organisation can be divided between five of the six operational squadrons, where there were previously only four divisions available for this task. The sixth air combat squadron primarily conducts basic training (CT) the majority of the time under peace-time production conditions.

⁵ Conversion Training.

⁶ Combat Readiness Training.

The change proposed above results in a clearer focus on flight training, a better balance between the total task allocation and available resources and greater opportunity for the squadron commander to exercise the necessary leadership so that flight safety can be maintained at a tolerable level with the current format of training instructions.

The Armed Forces intend to comply with the stated recommendation with respect to a higher degree of detail in the training instructions by developing FOM-D7. This involves a clarification with respect to both training instructions and training manuals. Both of these training documents are being highlighted to and approved by C FBS on the orders of the flight operations commander.

A clearer prioritisation of the training task - in which FVC clarifies through C PROD FLYG the three prioritisation areas training, operations (preparation) and development of capacity, as per Recommendation 1 - will be implemented.

The Armed Forces' air operator will also be giving FBS the task of investigating whether there is a need to draw up more detailed training instructions at a faster rate than that reported above.

Schedule:

The new organisational structure is being introduced beginning in 2016 and the training course for young pilots is being changed as of 2017.

Work on training instructions and training manuals is beginning as soon as possible, with a focus on the JAS 39 E when the Air Force receives the requisite access to flying and simulator time on this flight system. This is expected to take place in 2018.

FBS is conducting the investigation reported above in the first half of 2016.

Responsible:

Responsible for changed to organisational structure and tasks: C PROD FLYG.

Responsible for drawing up new training instructions: The flying operations commander within the Armed Forces air operator.

Recommendation 2015:01 (R6):

Consider establishing special requirements in terms of the level of training, experience and the number of flying hours for instructors on flight training.

Action taken:

FOM-A Joint 5.3 sets out the requirements laid down for training and examination personnel. These contain requirements for level of training and experience. The requirements for flying hours are not unequivocally established and vary depending on the system and training phase. In general, however, it can be said that a flying instructor is expected to be in “good flying shape”, which normally equates to flying being conducted at a rate that is equivalent to an annual quota of 80–100 flying hours.

Planned action:

A clarification is being introduced in FOM with respect to the requirements for a flying teacher and flying instructor so that it clearly states that a flying teacher/flying instructor shall themselves have undergone the training they will be responsible for.

Schedule:

The next time FOM is updated, which is in March 2016.

Responsible:

The flying operations commander within the Armed Forces air operator.

Recommendation 2015:01 (R7):

Investigate and, where suitable, introduce a more coherent organisation into the flight training with the purpose of increasing the flight safety advantages and improving opportunities to address the lack of resources in flight training.

Action taken:

LSS^s has been tasked with drawing up a proposal for a more coherent flight training programme. This proposal involves all basic flight training being conducted without interruption for intervening (academic) studies.

^s Air Combat Training School

Planned action:

The LSS proposal is being implemented. The previous academic gap between GFU9 and GTU10 is being removed. The academic phase is not conducted at Karlberg and concludes prior to the start of GFU.

Schedule:

A coherent flight training programme with current flight training systems can be introduced beginning with the officer programme starting in 2017.

Responsible:

Chief of the Air Combat Training School

⁹ Basic flight training

¹⁰ Basic tactical training