

# February '09 Safety Newsletter

Dear fellow pilots,

Welcome to the February Safety Newsletter. This month I would like to expand on the Safety Management System (SMS), which we aim to be a fundamental part of our flying operation. I stated last time that..

**“Any member who makes a mistake and is involved in an incident will not be penalized”**

This is fact because we want to encourage openness and a willingness to report incidents. How are we going to achieve this? As follows:

We are going to appoint a Safety Officer, who is an experienced and active club member. He will not necessarily be an Instructor. You will be able to approach him either directly or anonymously to report incidents or any safety concerns you may have. In due course we will be providing a “confidential drop-in box” in strategic places to serve this purpose. You may also of course approach any Instructor at any time with your safety concerns.

The Safety Officer would collect the data and then discuss with the Flight Ops Sub-Committee. Together they would decide on a course of action, which could range from a fair and open investigation (if necessary) to get to the cause of an incident, to simple feedback to the membership via the Safety Newsletter or a Safety Seminar.

Within the SMS we want to promote a Safety Culture where “safety comes first” forms the basis of all our activities. Within this Safety Culture we want the following;

An INFORMED culture, where members understand the threats, hazards and risks and we all work together to identify and manage them.

A JUST culture, where you can make mistakes and report them without fear of punishment. However, we must all recognize that reckless behavior cannot be allowed.

A REPORTING culture, where you are encouraged to voice your safety concerns and report all hazards and incidents.

A LEARNING culture, where you will receive regular updates on safety issues via this Safety Newsletter, regular Safety Seminars and a sharing of information on club incidents, such that everyone learns.

If any member would like to take on the role of Safety Officer and feel they have sufficient experience and are active club members, please contact John Li or myself. We want to hear from you. The post would normally be for a set period, perhaps one year, and then handed over to a new Safety Officer.

OK, lets now have a look at two of our clubs own past experiences and see what we can learn from them.

Starter warning light illuminated just after take-off.

This is not a very nice situation since it probably means that the electric starter motor has re-engaged to the engine. Consequently, the engine would now be turning the starter motor, but at a much higher speed than it is designed to operate. Hence, there is a very serious risk of a fire and the starter motor disintegrating with possible engine damage and failure.

Why did this incident happen? Well, fortunately it is a very rare occurrence and may be attributed to the fact that this was a new type of starter motor that we have not previously used. The starter motor has now been changed back to the "old and proven" type.

What should we do if this happens to us? Firstly, recognise the symptoms so we can identify the failure. Know where the starter warning light is in the aircraft. Check for signs of mechanical distress (strange mechanical noises) and burning smells (mechanical or electrical). If this is occurring we are facing a possible and imminent engine failure and need to get back on the ground as soon as possible. When we are assured of

reaching our landing site consider to shutdown the engine depending on the severity of the symptoms.

In this incident the pilot flew a very tight circuit and put the aircraft back on the runway as soon as possible. All credit to the pilot for quick identification of the problem and decisive and appropriate action.

Aircraft carried out a “touch & go” with the flaps at Full Flap (40 degrees)

In this incident the pilot initially thought he had an engine problem during the subsequent climb. Later he noticed the flaps were still at Full even though the flap selector switch was at Up. He declared an emergency, carried out a turn back and landed back on the runway. At the same time an aircraft was taking off from the same runway with the result that both aircraft came very close to each other.

How can we get into this situation? Either we simply forget to raise the flaps or the flaps fail (stuck at full flap).

How do we recognise the situation? The aircraft will lift off early, will need forward stick pressure (the nose will want to pitch up) and there will be some airframe vibration. If the engine is developing full RPM (and MP if applicable) it is not an engine problem. Hence the poor climb performance is due to excessive drag from somewhere, almost certainly the flaps. All of you should have practiced this scenario with your instructor at some time. If you haven't please practice it next time you fly with an Instructor. You will find the aircraft *will* climb with full flap.

How can we prevent this situation? Check the flap indicator is moving when we select the flaps up during a touch & go. Remember to check the engine gauges for full power. If we don't get either of these about the touch & go.

What do we do if we get into this situation? Firstly, fly the aircraft. Keep the speed safe with an appropriate pitch attitude. Secondly, check the engine gauges and the flaps. If the flaps are stuck at full put the flap switch to match the actual flap position. If we do not do this and the flaps suddenly start working we will lose a large amount of lift (hence height), the stall speed will rapidly increase with the risk of a stall and we shall get a

large trim change (nose will pitch down). In this incident the pilot put the flap switch to up with the flaps at full and carried out the turn back. Had the flaps started to work the result would almost certainly have been a stall & spin.

If we assess the problem as stuck flaps and having put the flap switch to match the actual flap position, try again as per a normal go-around to retract the flaps in stages. If they still do not work reset the flap switch to match the actual flap position and fly a circuit and land.

In summary, do not rush the touch & go. Do check the flaps are moving and do carry out a proper full power check before getting airborne. Request to practice a full flap touch & go with your instructor to become familiar with symptoms of stuck flaps. Don't put yourself in a situation where the flaps could suddenly and fully retract. If you are taking off behind another aircraft keep him in sight and be prepared for him to turn back.

I think that is enough to digest for now. Please feel free to forward any feedback or safety concerns that you may have to John Li or myself for inclusion in the Safety Newsletter. Please look for the "confidential drop-in" box, which will be in place in the next few weeks. There will be one at Shek Kong flight ops and one at the Kai Tak bar.

Happy and safe flying

Bob