

Gliding Bulletin

02-10 SPRING 2010

AIRCRAFT DOCUMENT AMENDMENT STATE Please check that all staff and trainees are working with documents to this amendment state.

AIRCRAFT	ACM	FRC	FTS	R to S	SOIU
VIGILANT T Mk 1	AP101G-1101-15 First Edition April 1990 AL 16 Soon 17	AP1101G-1101-14 Issue 6 March 2007 AL1 ANA 5	AP101G-1101-5M Issue 2 CD-ROM February 2004 AL1 Apr 09	Issue 6 Dated 1 May 07	Fourth Edition Dated Jun 09
VIKING T Mk 1	AP101G-1001-15 Initial Iss Oct 04 AL2 ANA1	AP101G-1001-14 Issue 3 Mar 04 AL4	AP101G-1001-5M Edition 3 CD-ROM March 04 AL3 Apr 09	Issue 6 Dated 1 May 07	Fourth Edition Dated Dec 02 Ed 5 in Draft

DID YOU KNOW If the CO detector discolours in flight, ie goes black, it will revert to near normal colour when the source of CO is removed for a period of time. Thus if it goes black it is not safe to fly that aircraft until the source of CO has been rectified by the engineers. Additionally it is **MANDATORY** to replace the CO detector for a new one prior to the next flight. An incident recently occurred when an aircraft without air-scoops was doing a stalling exercise and CO may have come in via the hole in the DV window. Replacement scoops will soon be installed in all aircraft and this particular problem will be overcome.

ESCAPE DRILLS CHECK OF UNDERSTANDING All Tutor AEF pilots are required to check the cadet's understanding of the emergency video during the taxi out on every single sortie. As an AEF pilot myself I think it is essential that we follow suit because a large proportion of cadets get it wrong and the training has to be reinforced. Thus amend your SOPs for GIC flights and brief all of your staff to include a mandatory check of understanding. TGOs will be amended in due course.

CHANGES TO VIGILANT AIRCREW MANUAL Some of you will have noticed that the change in the FRC reference over-volting drill is not reflected in the ACM. The amendment will come through soon but the more technically minded will know that an alternator has a near uniform output from 400-4000 RPM. Thus reducing the RPM has no effect on the over-volting and the only action available is to trip the alternator circuit breaker conveniently labelled **GENERATOR FUSE**.

VIGILANT COCKPIT DOORS Every year we get one or two incidents where canopy doors on the Vigilant fly open in flight. This is almost always due to it not being correctly fastened prior to take-off. A new addition to the checks will include a physical check that the door resists outward pressure on the

canopy frame. Thus a gentle push on door below the locking handle will hopefully rid us of this persistent problem. Whilst we are on the subject make sure you brief that the jettison procedure is **BOTTOM** handle then **TOP**. This avoids any chance of the bottom handle jamming.

VIKING COCKPIT PLACARDS You can see that there are a number of redundant and some utterly useless labels in the Viking cockpit. The complete label set has been re-designed so that all are relevant and appropriated placed. Squadrons will change on an opportunity basis, but all aircraft will be done in one visit to ensure uniformity.

VIGILANT MUTE SWITCH A mute facility will soon be available in the Vigilant so that extraneous R/T will not compromise your beautiful IT. This will inevitably lead to many aircraft being snagged for radio problems when they fail to receive radio calls. In case this happens your first check is to ensure that the radio is un-muted. This will always solve the problem. The switch will be internally lit to reduce the problem but aircrew will need to be aware.

VIGILANT CARB HEAT At some of our sites there can be a big delay between completing the PRE-TAKE-OFF checks and getting airborne. During this delay carburettor icing can easily occur. Thus a new check will be introduced such that in the case of delay CARB HEAT is re-selected HOT during the PRE-TAKE-OFF checks. The first line in the TAKE-OFF checks will thus be to return the CARB HEAT to IN COLD and LOCKED.

WINDMILL RE-STARTS An additional check will be introduced to check that IGN is ON if there is no RPM rise on throttle movement post start. This will hopefully remove the problem we get with inadvertent IGN selections during flight with the engine off.

PLASTIC STRING A drum of winch cable weighs a lot, 153 KG to be precise. A drum of plastic string for winching weighs a lot less, in the order of 90% less. Thus if we launch our gliders with plastic string they have to lift less weight into the sky so they get higher on each launch and apply less wear and tear on the aircraft. A “win –win” situation. We have a modified winch here at Syerston for trial; we are merely waiting for the airworthiness authorities to convince themselves of the efficacy of the new system. If the trial is successful then look forward to a far easier launch set up and less blood on the floor during cable repairing and DIs.

STATISTIC Another plea to get the weekend Stats to CGS engineering ASAP after the weekend. It is the only mechanism by which they can plan the working week. To manage the fleet efficiently and have **MAXIMUM UTILISATION** this needs to be done.

AIRCRAFT CLEANLINESS Part of the routine end of day activities is to ensure that all aircraft are clean and all equipment required for operations the next day is returned to secure storage or battery charging etc etc. Although there is a big pressure to get these tasks completed and go home, they are important and need to be completed thoroughly. Accumulation of debris in the wheel area can cause problems and accidents. Recently the engineers removed 3.5 Kg of mud and grass from the spats of one Vigilant. If this freezes it locks the wheel, if the brakes heat up it combusts. We are getting more and more complaints from the aircraft maintenance organisation regarding the state of aircraft at some sites. If necessary, stop flying 10 minutes earlier and do the job properly.

VIKING REAR COCKPIT CONTROL COLUMNS The rear cockpit control column can be removed by undoing a wing nut and removing the bolt. It is clearly undesirable for this to happen when not required. Although there has never, in the history of the aircraft, been an instance of this happening a belt and braces approach is to be adopted. This means a serrated (star) washer will be placed below the wing nut to prevent slackening.

COME IN ZH 234 YOUR TIME IS UP All of our aircraft are subject to calendar and hours based servicing. For Vigilant aircraft this means that you are to leave 2 flying hours available for the aircraft to be flown to Syerston for servicing. Recently an aircraft not only flew off every last minute, it also went five minutes over. Don't let it happen, it causes a massive amount of extra and un-necessary work.

DICED CARROTS AND TOMATO SKINS It is well known that both of these items increase your susceptibility to airsickness. If you are aware of your trainee you can sense the onset of the problem

and avoid the sortie ending puke. Sometimes however the little darling will not be quick enough reacting to avoid vomiting on the safety equipment in the cockpit ie the parachute. When this happens *Double Bag* the parachute for return to servicing. Why Double bags? Simple the SERCO drivers do not enjoy the smell of week old vomit.

VIGILANT INSTRUMENTATION If you are unfortunate enough to get fumes in the cockpit and are thus forced to turn off all of the electrics (Main Switch and two circuit breakers) then all of the instruments that rely on electrickery will also stop working. Fear not, the mighty Grob modified VW engine will continue to work normally as it is magneto driven. Best to think about this before it happens. How about a quick brief with emergency of the day?

RAF FORM 724 (VIKING) A new form is being introduced so that the engineers can better track fatigue usage. You will receive a full brief and an idiots guide in due course. To make your life easier a new F2965 is also being produced so that the data for the F724 is more simply gathered.

VIKING CANOPY LANYARDS Squadrons are permitted to manufacture lanyards when required to replace worn items or to facilitate replacement of bent "Dog Clips". It is essential that lanyards are made exactly to the specification laid out so that the angle to which the canopy opens is carefully governed. Once in use, a daily check of condition during the Before Flight Servicing is mandated to ensure no deterioration and no distortion. If in doubt change the whole assembly. A few minutes work can prevent a £1000.00 repair. The orientation of the dog clip is very important so on "crew in" check that it inserted from below ie with the flat part of the spring clip uppermost.

BNC/TQ The course to achieve the qualification needs to be appropriate. A TQ holder could be tasked to fly an aircraft from Odiham to Kinloss so a firm grasp of pilot navigation is essential. So don't plan to fly in your own back yard, ensure you go to unfamiliar areas so that the trainee can demonstrate the appropriate level of skill.

COMPLIANCE WITH JSP 550 In simple terms the ACO QGI category scheme does not comply with 550 because our categories run for more than 12 months. The relevant requirements are:

1. That an endorsement of competence be issued and renewed annually and entered in the instructors logbook.
2. That instructors undergo flight checks not less frequently than annually.

The second para is covered by the CFS and CGS visit programme with few exceptions but the first para needs to be addressed. With our 13, 18 and 24 month categories the easy way to sweep all of this up is to insert a line in section 4 of the logbook on 1 Jan each year which reads "Certified competent in role" countersigned by the unit commanding officer. You will then have the joy of being 550 compliant. TGOs will be amended in due course. A change to 550 is being staffed as we speak.

ACP 126 RADIO-TELEPHONY MANUAL Has been revised and re-issued. One paper copy will be sent to each Sqn. Further copies can be down-loaded from the CGS website.

Occurrences			
Date	Narrative	Code	Eng Assessment
13-Feb-10	While entering the rear cockpit for a further launch, the pilot noticed that the setting knob of his aircrew watch had detached with the risk of FOD entering the cockpit.	TF	No FOD had entered the aircraft, so no further action required.
21-Feb-10	Jogger ran across the active runway.	NO	None required
24-Feb-10	A projectile was fired at the aircraft during the climb shortly after take off at about 250ft AGL.	NO	N/A
27-Feb-10	Suspect Heavy Landing.	HF(A)	U/I
28-Feb-10	Rough running and rpm reduction following elec fuel pump de-select.	TF	U/I
01-Mar-10	Aircraft was towed to the launch point. Thinking the tow rope was released, the driver began to pull away. As he started to drive away, his foot slipped off the clutch, unfortunately the tow rope was still attached and the gliders collided.	HF(A)	U/I
06-Mar-10	At 400 ft the rpm suddenly reduced to 2100-2200 with associated rough running and heavy airframe vibration. Subsequent EGR and application of carb ht did not resolve fault.	TF	U/I
07-Mar-10	Following a T&G at 350ft the rpm reduced to 2450 and then to 2000. After a few seconds the rpm recovered to 2500, but reduced once more. Carb ht did not resolve fault.	TF	U/I
07-Mar-10	During climb at 100 ft elec pump was deselected then at 1100 ft the engine ran roughly. During recovery to base when pump was reselected on, engine ran normally.	TF	U/I
07-Mar-10	During stall exercise the CO detector was noted to have discoloured.	TF	U/I

Chris Heames
Sqn Ldr
Chief Instructor
ACCGS