



齊為飛援·赴嶺重洋  
We Serve Over and Above

## GOVERNMENT FLYING SERVICE

*Captain Michael CP Chan*  
MBS MBB GMSM AE  
FR AeS

18 South Perimeter Road, Hong Kong International Airport, Lantau, Hong Kong

電話 Tel.: +852 2305 8202  
傳真 Fax: +852 2215 0230  
網站 Web Site: <http://www.gfs.gov.hk/>  
電郵 E-mail: michaelchan@gfs.gov.hk

本處檔號 Our Ref.: GFS ADM/4-35/3  
來函檔號 Your Ref.: CB4/PAC/R64  
日期 Date: 1 June 2015

Mr Anthony Chu  
Clerk, Public Accounts Committee  
Legislative Council  
Legislative Council Complex  
1 Legislative Council Road  
Central, Hong Kong

*Dear Anthony,*

**Public Accounts Committee  
Consideration of Chapter 2 of the Director of Audit's Report No. 64  
Operation of the Government Flying Service**

I refer to your letter dated 13 May 2015 addressed to both the Secretary for Security and the undersigned. The joint response of the Security Bureau and the Government Flying Service is set out at Annex for your reference, please.

*Sincerely yours*

(Captain Michael Chan)  
Controller  
Government Flying Service

c.c. Secretary for Security  
Secretary for Financial Services and the Treasury  
Director of Audit

Introduction

- (a) *an organization chart of the Government Flying Service (“GFS”), showing the establishment and strength in each of the sections within GFS (paragraph 1.3 of Audit Report refers);*

An organization chart of the GFS showing the approved establishment and working strength of civil servants as at 1 May 2015 is at Appendix I. On top of the working strength as shown in the attached organization chart, the GFS is currently employing a total of ten full-time contract staff (including 1 Qualified Flying Instructor (“QFI”), 2 Senior Line Pilots (“SLPs”), 2 Qualified Crewman Instructors (“QCIs”), 1 Flight Operations Manager, 2 Assistant Aircraft Engineer (“AAEs”), 1 Operations Support Officer (“OO”) and 1 Executive Assistant (“EA”)) on non-civil service terms, two part-time aircraft engineers and one part-time browser driver.

Provision of flying service

- (b) *referring to paragraph 2.4 of Audit Report, performance targets on four types of flying services were consistently not met from 2010 to 2014. Please provide reasons why the targets were not met. Will GFS review these four targets with a view to setting more realistic figures?*

From 2010 to 2014, around 90% of GFS’ services were able to meet its performance targets. Among the out-of-pledge cases relating to the four types of flying services mentioned in paragraph 2.4 of the Audit Report, around 70% were due to undesirable weather conditions and air traffic control. The increase in service demands from GFS (as pointed out in paragraph 1.5 and Table 2 of the Audit Report) was also a main factor contributing to the rising number of occasions where GFS’ aircrew and aircraft had to cope with multiple call-out situations and unscheduled maintenance with limited resources in the past five years. The detailed breakdown by the reasons for the out-of-pledge cases of the four targets are elaborated at Appendix II.

The GFS will make reference to the guidelines for setting performance targets to review the four targets in consultation with the Security Bureau (“SB”), the Financial Services and Treasury Bureau (“FSTB”) and other relevant Government agencies.

\*Note by Clerk, PAC: *Please see Appendix 18 of this Report for Appendix I.*

- (c) *the guidelines for GFS to handle flying service requests from government bureaux/departments ("B/Ds") (paragraphs 2.21 and 2.22 of Audit Report refer);*

The GFS provides flying services in accordance with the GFS Ordinance (Cap. 322). The relevant guidelines for GFS to handle flying requests from Government B/Ds are stipulated in Chapter 3 of the government's General Regulations ("GRs") and Volume 6 Section 3 of the GFS Operations Manual ("OM") (see **Appendix III**).

According to the above guidelines, the GFS provides flying services to other government departments on the condition that the emergency rescue services of the GFS are not affected. Passengers using the services of the GFS are mainly staff of the HKSAR Government or persons in connection with the provision of public services, such as staff of the Marine Department responsible for repairing radar and various communications installations, staff of the Electrical and Mechanical Services Department responsible for repairing communications and navigation installations in remote hill tops and mountains and staff of the Hong Kong Observatory responsible for collecting meteorological data. Applications from government departments for non-emergency flying service or passengers carrying have to be agreed and signed by the Heads of Departments or authorised directorate officers in the departments. Approval will only be given for tasks that are related to the work of the government or public service involving aerial operations, and where the department cannot identify other suitable modes of transport to meet the need, and provided that the emergency rescue services of the GFS are not affected.

- (d) *in view of the priority use of flying service for primary tasks including air ambulance service, search and rescue, law enforcement and fire fighting over other tasks/duties, justifications of according a high proportion of its flying service to requests from B/Ds from 2010 to 2014 (paragraph 2.2 and Table 2 of Audit Report refer);*

Paragraph 2.2 of the Audit Report only cited a part of GFS's Statement of Unit Policy (the "Policy Statement") and Volume 1 Section 1 of the GFS OM which focuses on what considerations the department needs to take into account when allocating its flying hours for the purpose of maintaining a sufficient number of safe aircraft and qualified aircrew for its various missions. If read in a holistic manner, the Policy Statement and Volume 1 Section 1 of the GFS OM (see **Appendix IV**) in fact include clear and detailed guidelines on GFS' tasking priorities.

According to the guidelines, all routine government tasks are of a lower priority than GFS' emergency rescue and air ambulance services.

It is also worth noting that routine government tasks provide important opportunities for junior pilots to accumulate their required flying hours, consolidate flying skills, and build up their operational experience levels with a view to better preparing themselves for acquiring higher professional qualifications. The services provided to government B/Ds are, therefore, part of GFS' training programmes for junior pilots.

- (e) ***reasons for the non-compliance of the guidelines of according priority to emergency services as depicted in Case 3 of Audit Report and measures taken/to be taken to prevent similar occurrence in future;***

Case 3 happened when GFS' aircrew were engaged in a multiple call-out situation. The GFS has reviewed the case and concluded that there could be room for improvement in terms of aircrew deployment should there be a supervisor at the Air Command and Control Centre ("ACCC") who could better coordinate the tasking priorities on site (because all available member of the staff capable of assuming the role of supervisor were deployed for flight mission at that time). While it is not practical under the current manpower situation for a supervisor to be stationed at the ACCC during all shifts, the GFS has issued an Operations Notice to remind staff members of the need to adhere to the guidelines on tasking priority (see **Appendix V**). The department will continue to review its operation and implement suitable measures to prevent reoccurrence of similar situations in future.

- (f) ***guidelines on tasking priorities to facilitate more effective and efficient deployment of limited resources (paragraph 2.30(b) refers);***

The relevant guidelines are at **Appendix IV**.

- (g) ***given the high operating costs of using GFS aircrafts and in view of the competing demands for flying services (paragraph 2.23 of Audit Report refers), how will Security Bureau disclose these costs to other B/Ds in order to raise their cost-consciousness of the familiarization flights and whether it would consider suggesting B/Ds who request flight services to seek external service providers, or to outsource certain flight services so that GFS could focus its resources in providing primary tasks relating to emergency services?***

The GFS issued a memo on 12 May 2015 (see **Appendix VI**) to remind all government B/Ds to be vigilant in their consideration of

requesting GFS' flying services in accordance with the government GRs. The current operating costs of GFS' aircraft are mentioned in the memo to enhance the cost-consciousness of government B/Ds in using GFS' flying services. The GFS will remind B/Ds again of the direct operating cost in its annual call memo on the forecast of requests for GFS' flying services.

### **Management of aircrew members**

- (h) *referring to paragraph 3.6 and Note 14 of Audit Report, around 35% to 40% of the pilots were under training at various stages and as a result, some call-out cases were delayed or declined. What measures has GFS undertaken to ensure that the number of qualified pilots are manned at a sufficient level at each shift to respond to service demand of different tasks/missions?*
- (j) *measures implemented by GFS to solve the problems as highlighted in paragraph 3.10(b) of Audit Report. Whether GFS has considered if by enhancing its remuneration package and/or working conditions, it would have been able to retain some of its staff who have left GFS? If yes, please give details, such as the scope of enhancement and the number of staff retained;*

As shown in **Appendix VII**, there were altogether 9 operational pilots leaving the Pilot Grade prematurely in the past ten years, which accounts for more than 20% of the civil servants establishment of the Grade. The premature wastage of these pilots has not only reduced the working strength in terms of headcount, it has also lowered the overall skill and experience level and affected training resources of the Pilot Grade.

To offset the loss, the GFS has expedited its recruitment process and engaged one QFI and two SLPs on non-civil service contract ("NCSC") terms with a view to recovering the department's training and operational capacity to its original / establishment level. Continuous efforts have also been made in expediting and streamlining the various stages of the training processes with a view to ensuring that the new intakes could be equipped with the required skills and professional qualifications for performing the full range operational duties of GFS as soon as possible.

As a result of the department's recruitment and training effort, 12 officers recruited at the Cadet Pilot level have been qualified as junior operational pilots in the past 10 years, reducing the number of Pilot Grade vacancies to 5 in June 2015 which will likely be filled up within 2016 by another recruitment exercise underway. With the department's effort in carrying

out a total of 105 conversion or upgrade courses for helicopter pilots from 2010 to 2014, the number of qualified helicopter Captains has also increased from 13 as at 1 January 2010 to 19 as at 1 January 2015.

While GFS will continue its recruitment and training effort, the reduction of headcount and deterioration of the overall skill and experience level of the Pilot Grade, as a result of the premature wastage of experienced pilots in the past ten years, cannot be compensated within a short period. The GFS will continue to review its manpower situation with a view to further enhancing the maturity process of the junior pilots.

In response to the rapid increase in emergency flying hours in recent years (as pointed out in paragraph 1.5 and Table 2 of the Audit Report), apart from relying on the SLPs on NCSC terms for sharing out the increased workload, the GFS has exercised flexibility in planning for the manning levels at “high risk” days in order to achieve better utilization of its limited manpower resources. The GFS will critically review the establishment of the Pilot Grade and bid justifiable resources according to the established mechanism. The SB has also reserved funding in 2015-16 for the GFS to commission a consultancy study on its manpower and management problems, with a view to ensuring the sustainable development of the department in the longer term.

On the remuneration package and / or working conditions, the Standing Committee on Disciplined Services Salaries and Conditions of Service (“SCDS”) conducted a grade structure review for the disciplined services in 2008. For the four disciplined services grades of GFS (i.e. Pilot, ACMO, Aircraft Engineer and Aircraft Technician grades), the SCDS, after taking into account their unique nature and requirements of work, recommended some improvements to their pay scales which were accepted by the Chief Executive-in-Council in October 2009. The SCDS also stated in the report that there were intrinsic differences between a career of a pilot in the GFS and the commercial sector. Raising the pay of pilots in GFS may not fully address the wastage of the grade as some GFS pilots may choose to leave for gaining the requisite experience required for long-term career development rather than for immediate financial gain. In any case, the SB and the GFS will keep in view the manpower situation and, where necessary, consider various possible options in consultation with relevant stakeholders (e.g. the Civil Service Bureau, the FSTB, the SCDS, the Public Service Commission, etc.) for better retaining experienced officers.

- (i) ***paragraph 3.10(a) of Audit Report pointed out that GFS was suffering from manpower shortage problems in its pilot grade. Please provide the following statistics / information on both pilot grade and air***

*crewman officer grade in the past five years;*

- *figures on wastage, with breakdown on the number of staff by their work experience in GFS of less than 5 years, 5 years to 10 years and over 10 years;*
- *the number of recruitment exercises conducted and time taken to fill the vacancies in each recruitment exercise and the number of staff recruited in each exercise; and*
- *reasons for the wastage (e.g. collected from the exit interviews), especially for those pilot/air crewman officer who have substantial experience in GFS.*

Figures on the premature wastage of GFS' Pilot Grade and Air Crewman Officer ("ACMOs") Grade from 2005 to 2014 are at **Appendix VII**.

In the same 10-year period, the GFS conducted seven recruitment exercises for ACMOIII and seven recruitment exercises for Cadet Pilots. A recruitment exercise for Cadet Pilots is now in progress. The recruitment exercises for ACMOIII and Cadet Pilots both consist of seven to eight stages. The time required for completing each recruitment exercise is about nine months on average.

For Cadet Pilots, the number of intakes in each recruitment exercise is between two and four. The figure is limited by the actual capacity of the pilot training system and dependent on the number of suitable candidates identified. For ACMOIII, depending on the vacancy level of the ACMO Grade during that period, the number of intakes in each recruitment exercise ranges from two to seven.

Regarding the reasons for premature wastage of experienced pilots, information collected from the resigned officers at exit interviews indicates that the main driving force was to achieve a better lifestyle with better work / life balance, higher salary and better career prospect. For those experienced ACMOs who prematurely left the service, they refused to provide their reasons for resignation.

(k) ***the target number of Commander Discretion Reports ("CDRs") for 2015;***

Many CDRs arise from a slight extension of duty period for completion of emergency flying call-outs received towards the end of shifts. In many cases, it would in fact be more effective and reasonable for the aircrew to slightly extend their duty period (usually within one hour) to complete the tasks instead of leaving them to the next shift. It is

therefore not practical for an emergency response organisation like GFS to completely eliminate the chance of using of CDRs. Given the continuing increase in emergency call-outs as shown in the past five years (paragraph 1.5 and Table 2 of the Audit Report refers), there would inevitably be a higher possibility for GFS to receive emergency call-outs towards the end of shifts. Without control over the increasing demand for its services and the time such call-out requests come in, it would be difficult for GFS to set a target number of CDRs as a standard to achieve. GFS will, as always, avoid unnecessary use of CDRs as far as possible.

***(l) reasons for the large number of actual CDRs in 2012, and whether the health conditions of pilots/air crewman officers and/or aviation safety would be adversely affected as a result (Figure 6 of Audit Report);***

The more than usual number of CDRs for extension of duty period in 2012 (25 versus the average number of 17.75 for the remaining four years from 2010 to 2014) was mainly due to the unusually high number of air ambulance requests and Search and Rescue (“SAR”) missions towards the end of shifts. Out of these 25 CDRs, 23 involved extensions of duty for less than one hour, and the remaining 2 CDRs involved extension of duty for 1.17 and 1.58 hours respectively. It should also be noted that the rest time given to the concerned aircrew after the extended duty period in all these 25 cases was on par with the legal minimum period of rest as set out in the “Flying Time and Duty Hours Limitations Scheme” in the GFS OM. The GFS therefore considers that the health conditions of aircrew and flight safety were not adversely affected as a result of the CDRs.

***(m) reasons for the higher number of CDRs involving air crewman officers than pilots (paragraph 3.12 of Audit Report refers);***

The duty periods and roster patterns of GFS’ aircrew are governed by the “Flying Time and Duty Hours Limitations Scheme” in the GFS OM.

According to the GFS OM, if aircrews operate in pairs (i.e. 2 pilots or 2 ACMOs) in a particular shift, their maximum allowable duty hours will be one hour longer than an aircrew working by himself / herself. While it is a legal requirement for pilots to work in pairs for most operations, ACMOs often operate individually on fixed-wing and helicopter air ambulance flights under the current resource deployment pattern of the department. As most CDR cases arise from a slight extension of duty periods (usually less than one hour) for completion of fixed-wing SAR missions or early morning air ambulance call-outs received towards the end of shifts, the two pilots involved are not required to submit a CDR,



whereas the single crewman on the same flight would be required to do so. As a result, there are more CDRs for ACMOs than for pilots.

The GFS will continue to review the manpower situation of the department with a view to minimizing the number of CDRs in future.

- (n) *referring to the submissions from GFS Pilots Union, GFS Aircraft Technicians Union, GFS Aircraft Engineers Association and GFS Air Crewman Officers Association, response from GFS / Security Bureau to the concerns expressed by the unions/associations, including measures to be taken to address their concerns;*

As pointed out in paragraph 1.5 and Table 2 of the Audit Report, GFS' total service-related flying hours has increased by 18% from 2010 to 2014. The growth in the number of operations has inevitably stretched the manpower resources of all departmental grades in the GFS.

For the Pilot Grade, apart from the increase in service demands, the Grade is also facing premature wastage problem and is constrained by the long lead time required for training up operational pilots to replace the resigned ones. The measures in place for tackling these issues are set out in our reply to items (h) and (j) above.

Regarding the ACMO Grade, it has no apparent talent retention and recruitment problems at the moment (see establishment and working strength at **Appendix I**). The main issue facing the Grade is the manpower shortage problem arising from the increase in flying missions in recent years on top of their 24/7 support to the operation and management of ACCC and daytime operation of the Wan Chai helipad control room. The GFS has implemented flexible deployment measures and engaged NCSC staff to relieve the manpower pressure in the interim. To address the issue in the longer run, the department will critically review the establishment of the Grade and bid additional resources if necessary under the established mechanism.

As regards the Aircraft Engineers ("AE") Grade and the Aircraft Technicians ("AT") Grade, the main challenge is the manpower shortage problem arising from the increasingly frequent maintenance exercises required as a result of the increased service demands in recent years, the more sophisticated maintenance requirements developed by the aviation industry, as well as the need to support the operation of a Design Organisation. Succession planning is another challenge as both Grades have entered a period of retirement peak. The GFS has been implementing various measures such as speeding up recruitment and training, engaging NCSC staff to share out duties, and seeking permission

**\*Note by Clerk, PAC:** Please see Appendix 18 of this Report for Appendix I.

for deferring retirement of suitable candidates with a view to ensuring smooth succession of the two Grades. It will also critically review the establishment of the two Grades having regard to the increase in service demands in recent years and explore possible options in consultation with relevant stakeholders for improving the manpower support of the department.

In the longer term, the SB has allocated funding to the GFS in 2015-16 for commissioning a consultancy study on GFS's manpower and structure against the increasing operational commitments.

### **Maintenance of Aircraft**

- (o) *despite routine maintenance and daily inspections, there were still an average of 1.6 defects reported by pilots per day. What are the reasons for such a high number of defects, and whether these defects would be revealed in routine/daily maintenance or inspections to minimize their occurrence?*

To ensure the safety and operability of its aircraft, the Engineering Section of the GFS conducts routine maintenance and inspection in strict accordance with the requirements of the aircraft manufacturer and the Hong Kong Civil Aviation Department ("HKCAD"), as well as internal guidelines in the GFS Engineering Procedures Manual. However stringent these procedures are, the serviceability of many mechanical and electronic parts of an aircraft may not be revealed unless they are put to use under specific flying conditions. To ensure safety, GFS' pilots are required to make a report to the Engineering Section should they observe anything unusual with the operation of an aircraft (known as "Pilot Reported Defects" or "PIREPs"). It should be noted that even with all the maintenance and inspection procedures duly completed on ground, it is still normal by industry standards to have a certain number of PIREPs for a particular aircraft.

In fact, the PIREPs level of GFS' aircraft has remained steady at around 550-600 cases in each of the past 10 years despite the rapid increase in flying hours and the ageing of its fleet during the same period. The HKCAD, which is responsible for regulating GFS' maintenance activities, has also found no inadequacy in GFS' control over its PIREPs level in its past operational reviews on the department.

While most PIREPs are unavoidable, the Engineering Section of GFS will continue to closely monitor its PIREPs level and review the nature of each reported case in its monthly Maintenance Review Meetings with the

HKCAD, with a view to upholding the safety standard of GFS' aircraft and minimizing the number of PIREPs where possible.

**(p) *reasons for the relative high number of aircraft defects reported by pilots on Super Puma (Figure 11 of Audit Report refers);***

The main reasons for the relatively higher number of PIREPs for the Super Puma helicopters include –

- (a) the Super Puma is a larger helicopter which comprises more mechanical and electronic parts than an EC155. The possibilities of having individual parts malfunctioning will therefore be higher;
- (b) the Super Puma is used for performing a wider range of services (including fire-fighting, off-shore SAR cases, etc.) than the EC155. The aircraft is therefore exposed to a higher intensity of deterioration.
- (c) the average flying hours of Super Puma helicopters are higher than an EC155. The possibilities of PIREPs are therefore higher.

While the GFS will endeavor to monitor and minimize the number of PIREPs, it should be noted that a certain level of PIREPs is normal for any aircraft operator in the aviation sector. In fact, the majority of the PIREPs captured in Figure 11 of the Audit Report were minor observations and defects which did not lead to any consequential safety issues or airworthiness implications.

**(q) *with reference to Figure 11 of Audit Report (Aircraft defects reported by pilots), please provide comparative figures for similar aircrafts used in Hong Kong or overseas;***

The GFS provides a locally and internationally unique range of flying services, from emergency rescue to law enforcement. It does not have any comparable counterparts locally or elsewhere. It is therefore not possible to compare GFS' PIREPs level with other operators directly.

It should be noted that the HKCAD has not raised any particular concern over the steady and normal PIREPs level of the GFS in the past monthly maintenance review meetings and half-yearly audits on GFS' maintenance activities. The manufacturers of GFS' aircraft have also confirmed that the PIREPs level of the GFS is similar to other operators using the same or similar aircraft model(s). The GFS will continue to work towards a

steady PIREPs level, and consider ways to minimize the number of PIREPs as far as possible.

- (r) ***whether the high percentage and rising trend of unscheduled maintenance was attributable to the ageing of the aircrafts, which might warrant attention on aircraft safety issues (paragraph 4.8 of Audit Report refers)?***

As pointed out in paragraph 1.5 and Table 2 of the Audit Report, GFS' total flying hours relating to services has increased by 18% from 2010 to 2014. The more intensive use of its aircraft in the past five years has inevitably accelerated the wear and tear of the fleet and led to an increased number of hours for unscheduled maintenance.

It should however be noted that despite the rapid increase in service demand in the past five years, the GFS has been able to keep the time spent on unscheduled maintenance (see Figure 10 of the Audit Report) at a relatively stable level with no obvious rising trend.

The Engineering Section will continue its effort to ensure the same level of safety for its fleet regardless of its age.

- (s) ***what measures could be taken to further reduce the downtime of operational aircraft due to unscheduled maintenance? Whether GFS would consider setting a target on unscheduled maintenance so as to minimize its disruption to day-to-day operations?***

As pointed out in paragraph 1.5 and Table 2 of the Audit Report, GFS' total flying hours relating to services has increased by 18% from 2010 to 2014. The more intensive use of its aircrafts in the past few years has inevitably increased the need for both scheduled and unscheduled maintenance. The increase in unscheduled maintenance has nothing to do with the vigour of the scheduled maintenance, which GFS conducts in full compliance with the relevant standards. As most unscheduled maintenance are unpredictable and unavoidable in nature and the GFS does not have control over the increasing demand for its services, it would not be meaningful for GFS to set a target number of unscheduled maintenance. Consideration can however be given to increasing the manpower support to its Engineering Section with a view to speeding up the inspection and repairing works wherever an aircraft is grounded for maintenance. The department will critically review the establishment of its Engineering Section and bid additional resources under the established mechanism if necessary.

- (t) ***please provide recent audit and/or inspection report(s) from the Civil***

***Aviation Department or overseas organizations on GFS operations and frequency of such audit and inspections (paragraph 1.3 of Audit Report refers);***

The following audit and/or inspection reports are attached for reference:

- **Appendix VIII** : The report dated 4 December 2014 from the British Royal Air Force (Search and Rescue Force Standards and Evaluation) on helicopter operations in the GFS
- **Appendix IX** : The report dated 22 June 2011 from the 750 Naval Air Squadron of the Fleet Air Arm of the British Royal Navy on fixed-wing aircraft operations in the GFS
- **Appendix X** : The report issued by the HKCAD in December 2014 on the operation of the GFS as a holder of the Air Operator's Certificate
- **Appendix XI** : The report dated 30 December 2014 from the HKCAD on the operation of the GFS as an approved Aircraft Maintenance Organisation
- **Appendix XII** : The report dated 24 April 2015 from the HKCAD on the operation of the GFS as an approved Design Organisation.

***(u) referring to paragraph 4.19(a), what are the factors that hinder the synchronization of major repairs and inspections?***

The Engineering Section of the GFS has been making its best efforts in synchronizing major repairs with inspections so as to minimize the overall ground time of its fleet. It should however be noted that synchronization may not be practical in some situations. For example, for some ad-hoc major repairs which carry safety and airworthiness implications, the Engineering Section needs to carry out the repair works without any delay. Under such circumstances, it is not possible to tie in the major repairs with the next routine inspection as it is neither appropriate to defer the major repairs, nor to advance the next routine inspection at the expense of shortening the regular maintenance cycle which may accelerate the deterioration of the aircraft. The Engineering Section will continue to exercise professional judgment in planning for the maintenance of its fleet. The department will also critically review the manpower of the Engineering Section and bid additional resources under the established mechanism if necessary.

***(v) measures to minimize the waiting time for air tests and the reduction in waiting time as a result. Whether a quantitative target could be set for such reduction (paragraph 4.19 (c) of Audit Report refers);***

Most air tests are required to be carried out between 3 000 and 6 000 feet

***\*Note by Clerk, PAC: Please see Appendix 26 of this Report for Appendices VIII to XII.***

above ground, under good visibility conditions, and by experienced pilots with the required qualifications. Constrained by the limited number of days where suitable weather conditions are available in each year, the more stringent air traffic control of the Hong Kong International Airport in recent years, the limited number of pilots qualified for conducting the air tests, and the increasing number of call-out cases which have occupied most of the Pilot Grade's working hours, there were indeed more occasions in recent years where a repaired aircraft was required to wait for a longer period of time before air tests can be arranged.

To improve the situation, the GFS will endeavour to shorten the waiting time for air tests by strengthening communications between the Engineering Section and the Operations Section, so that the flight operations supervisors can be fully aware of the imminent air test requirements and make their best efforts in taking them into account in planning the flying programmes for the qualified pilots. Given that the weather conditions, the airport traffic and the demand for GFS' flying services are all factors beyond GFS' control, it would not be meaningful for GFS to set any quantitative target for waiting time for air tests.

- (w) *measures to remind relevant staff to place order promptly for spare parts in accordance with the laid-down requirements, including whether information technology system could be used to issue such reminders (paragraph 4.19 (d) of Audit Report refers);*

Briefings have been conducted to remind staff to place orders promptly for spare parts in accordance with the established requirements. Regular meetings will continue to be held between the Engineering Section and the Supplies Office to discuss and review outstanding order(s).

### **Procurement of aircraft and spare parts**

- (x) *please provide the investigation report by GFS on the case depicted in paragraph 5.3 in which payment discount was not duly obtained when procuring Zlin. What measures have been taken by GFS to tighten payment control;*

The investigation is underway and will be completed in about three months' time. The GFS conducted a briefing on 28 April 2015 to remind all relevant staff of the need to strictly adhere to the prevailing procurement and accounting rules and regulations. The department's guidelines for handling payment has also been reviewed and updated to require a statement in each payment application to confirm whether any applicable discount has been claimed.

- (y) *reasons for continuing using the operational aircraft J-41s for training purpose after procurement of Zlin and Diamond, resulting in low utilization of the new training aircrafts. Whether this would hinder the deployment of J-41 for operational use and the measures that have been taken to increase the utilization of Zlin and Diamond for training purpose;*

The training aircraft (Zlin and Diamond) were procured for enhancing basic skills and decision-making, and as a platform for accumulating flying hours towards an Airline Transport Pilots Licence (“ATPL”). Most of the operational training that will enable fixed wing pilots to become fully qualified is, however, aircraft type-specific. This means that whilst training on Zlin and Diamond would reduce some of the burden for hours building on the J-41 (and the Challenger 605 (“CL-605”) in the future), there is still a need for a specified amount of actual operational training on the front line aircraft itself (i.e., J-41 and CL-605 in the future).

Due to the current manpower situation in the fixed wing stream, there is often only one crew on shift (from 0700 to 1300 hours, and from 1600 to 2200 hours), so the crew members may need to carry out training whilst at the same time maintaining airborne standby for any emergency callouts. This does not pose any problem because the aircraft would carry sufficient fuel and suitable mission equipment when used for training so that the pilot and the aircraft would be fully ready for deployment for operations if necessary.

As for increasing the utilization of the training aircraft, the GFS has reviewed the situation and taken the following measures:

- instigating a structured training programme focused primarily on the development of the GFS junior pilots which will ensure that the usage of the aircraft will increase in the future;
- recruiting more junior fixed-wing pilots in the last 3 years to fill up the gaps resulting from premature wastage; these pilots are now going through the early stages of their training and gradually building up hours towards the grant of their ATPLs by carrying out regional navigation training; and
- qualifying all fixed-wing pilots to fly the Diamond, so that with the arrival of the new jet in late 2015-16, the Diamond will form a training partner for the new jet.

- (z) *justifications for GFS to replace existing helicopters by a single-model*

***fleet and whether GFS will re-consider this decision, taking into account the possibility of suspension of operation of the whole fleet if manufacturing defects were encountered;***

The justifications for procuring a single model fleet have already been fully set out in the Finance Committee paper (i.e. paragraph 5 of Paper R64/2/INFO4 issued to Members on 30 April 2015) and in paragraph 5.19 of the Audit Report, and are still valid.

The GFS carried out a risk assessment of operating a single-model fleet during the market research and tender preparation stages for the new helicopter procurement from 2012 to 2014, and concluded that the new helicopters would bring increased reliability as a result of enhanced modern technology and more stringent international safety standards governing the manufacture and certification of such aircraft. The chance of the whole fleet being grounded due to manufacturing defects which cannot be rectified within a short period of time is assessed to be extremely small.

***(aa) tender documents for the procurement of the helicopter fleet and how the relevant provisions on the track record of the proposed model should be interpreted;***

The tender documents are in a CD ROM attached.

During the market research phase in 2012, four potentially suitable models of helicopter produced by three reputable manufacturers were considered. All of these models will have had more than three years of proven operational experience by the due delivery date for the new GFS helicopters in or after 2017-18.

***(bb) details of staff, such as their titles and experience, responsible for preparing the tender documents and tender assessment in relating to the tender in item (aa) above;***

Officers responsible for preparing tender documents are as follows-

<b><u>Rank</u></b>	<b><u>Experience</u></b>
Controller, GFS	Over 30 Years
Chief Aircraft Engineer	Over 25 Years
Two Senior Pilots	Over 25 Years
Senior Aircraft Engineer	Over 20 Years
Aircraft Engineer (Airframe/Engine)	Over 10 Years
Aircraft Engineer (Avionics)	Over 15 Years
Qualified Air Crewman Instructor	Over 30 Years

**\*Note by Clerk, PAC: Tender documents not attached.**



Air Crewman Officer I

Over 25 Years

Officers responsible for tender assessment are as follows-

<b><u>Rank</u></b>	<b><u>Experience</u></b>
Chief Pilot	Over 30 Years
Senior Pilot	Over 20 Years
Senior Aircraft Engineer	Over 20 Years

(cc) *in response to Audit's recommendation in paragraph 5.33 of Audit Report, whether GFS has reviewed the adequacy of its contingency plan of deploying EC155 as back-up for the new single-model helicopter fleet; what concrete plans have been drawn up?*

The GFS drew up the contingency plan of retaining one EC155 for deployment in 2013 and considers the plan still appropriate. The GFS will monitor the operation of the new helicopter fleet upon delivery and formulate suitable contingency measures as necessary.

**Way forward**

(dd) *timetable and implementation plan for the commissioning of the consultancy study as mentioned in paragraph 6.7 of Audit Report?*

We plan to complete the invitation of Expression of Interest from potential contractors of the project in 2015-16 for commencing the tender process as soon as possible.

END

**Four On-scene time targets not met from 2010 to 2014**

(1) Air Ambulance: Type A/A+ Casualty Evacuation within Island Zone

Pledged on-scene Time (Minutes)	Targets (%)	2010 (%)	2011 (%)	2012 (%)	2013 (%)	2014 (%)
20	90	<b>95</b>	<b>89</b>	<b>86</b>	<b>87</b>	<b>87</b>
		56 out of 1145 cases	134 out of 1245 cases	177 out of 1266 cases	176 out of 1352 cases	169 out of 1259 cases
<b>Reasons for not meeting the on-scene time target (Number of cases)</b>						
Weather Limits		6	60	119	101	116
Air Traffic Control Delay		12	24	20	28	9
Unserviceable Aircraft		23	27	22	22	26
Engagement of crew members in other tasks		6	7	5	19	5
Others (Note)		9	16	11	6	14
<b>Total</b>		<b>56</b>	<b>134</b>	<b>177</b>	<b>176</b>	<b>169</b>

Note: Other reasons include situation where aircraft needs to return to GFS for refuel or change of flight crew for subsequent missions, aircrew need to dress up and prepare for air ambulance cases of infectious disease, etc.

(2) Inshore search and rescue by helicopter: between 22:00 and 06:59 where additional crew/specialised equipment is not required

Pledged on-scene Time (Minutes)	Targets (%)	2010 (%)	2011 (%)	2012 (%)	2013 (%)	2014 (%)
40	90	<b>83</b>	<b>67</b>	<b>79</b>	<b>78</b>	<b>76</b>
		3 out of 18 cases	3 out of 9 cases	5 out of 24 cases	5 out of 23 cases	7 out of 29 cases
<b>Reasons for not meeting the on-scene time target (Number of cases)</b>						
Weather Limits		1	1	3	1	3
Air Traffic Control Delay					1	
Unserviceable Aircraft			1		1	
Engagement of crew members in other tasks						
Others (Note)		2	1	2	2	4
<b>Total</b>		<b>3</b>	<b>3</b>	<b>5</b>	<b>5</b>	<b>7</b>

Note: Other reasons include longer flight time required due to extreme range and location and/or fuel planning (aircraft need to plan the refuelling at oil rig for long-range search and rescue operations), extra time required for gathering case details (such as victim information, location) for mountain rescue cases to facilitate mission planning, detouring and/or slower airspeed under marginal weather conditions during night time for safety reasons, etc.

(3) Law Enforcement: outside Island Zone where additional crew/specialised equipment is not required

Pledged on-scene Time (Minutes)	Targets (%)	2010 (%)	2011 (%)	2012 (%)	2013 (%)	2014 (%)
30	90	<b>79</b>	<b>73</b>	<b>83</b>	<b>76</b>	<b>80</b>
		3 out of 14 cases	3 out of 11 cases	1 out of 6 cases	4 out of 17 cases	2 out of 10 cases
<b>Reasons for not meeting the on-scene time target (Number of cases)</b>						
Weather Limits		1		1		
Air Traffic Control Delay						
Unserviceable Aircraft					1	
Engagement of crew members in other tasks						
Others (Note)		2	3		3	2
<b>Total</b>		<b>3</b>	<b>3</b>	<b>1</b>	<b>4</b>	<b>2</b>

Note: Other reasons include longer flight planning time required for law enforcement operations due to the need for protecting sensitive information until the commencement of the missions, special flight route, fuel planning and airspeed required by the tasking department, etc.

(4) Fire-Fighting: Water Bombing

Pledged on-scene Time (Minutes)	Targets (%)	2010 (%)	2011 (%)	2012 (%)	2013 (%)	2014 (%)
40	85	<b>74</b>	<b>72</b>	<b>76</b>	<b>65</b>	<b>74</b>
		10 out of 38 cases	26 out of 92 cases	9 out of 37 cases	15 out of 43 cases	10 out of 38 cases
Reasons for not meeting the on-scene time target (Number of cases)						
Weather Limits					1	1
Air Traffic Control Delay				1	2	1
Unserviceable Aircraft or equipment		2	6	3	2	2
Engagement of crew members in other tasks		1	2		2	
Others (Note)		7	18	5	8	6
<b>Total</b>		<b>10</b>	<b>26</b>	<b>9</b>	<b>15</b>	<b>10</b>

Note: Other reasons include time required for fitting fire-fighting equipment to aircraft, longer flight time required due to extreme range, location and fuel planning (fire-fighting often involves prolonged operations), extra flight time required for avoiding residential area when carrying a fire-bucket under-slung.

CHAPTER III - GOVERNMENT TRANSPORT

**Flying Services provided by the Government Flying Service**

360. The Government Flying Service (GFS) operates helicopters and fixed wing aircraft primarily for internal security, search and rescue and casualty evacuation purposes. However, when training and operational commitments permit, the Controller, GFS may carry out suitable flying tasks for Government Departments (including the carriage of government officers). Such flights, however, will only be approved if they are considered to be in the public interest and when no other form of transport would be suitable in the circumstances.

361. General approval is given for the following persons to travel as passengers in GFS aircraft subject to the provisions of GR 360 (although civilian personnel may decline to fly if they so wish):

- (a) members of the Executive and Legislative Councils on duty;
- (b) government officers on duty;
- (c) members of the Auxiliary Services on duty;
- (d) Justices of the Peace on official visits;
- (e) persons carried as a result of emergency operations; and
- (f) personnel engaged on maintenance of the aircraft or equipment installed in the aircraft who are required to travel on test flights.

362. No passengers other than those listed above will be carried in GFS aircraft except with the prior approval of the Controller, GFS.

Amendment No. 1/2004

## CHAPTER III - GOVERNMENT TRANSPORT

### Emergency Flights

363. When an aircraft is required for an emergency task, e.g. for a casualty evacuation or a search and rescue operation; a request should be made by telephone to HQ Command Control Centre (HQCCC) (Tel : 2860 2400).

### Routine Task Flights for Government Departments

364. (1) Applications for passenger or other task flights which are not in an emergency category should be made in the first instance by telephone to the Tasking Section, GFS (Tel : 2753 8406) giving as much notice as is possible and specific details of any special routings or timings required. Written application on the standard form (available from the Controller, GFS) must follow. The use of facsimile is acceptable.

(2) Two copies of the application form should be completed and certified by the Authorizing officers who are authorized to sign the application form (normally an officer of directorate level). One copy should be sent to the GFS at the time the request is accepted to confirm the flight booking made by telephone; the second copy must be made available to the crew of the aircraft at the time of flight.

365. It is important that aircraft are only used by Government officers when there is good reason for doing so, i.e. no other form of transport would satisfy the particular need. It is not enough to book an aircraft in routine circumstances simply because it happens to offer a quicker way of getting from place to place. Since it is impracticable to lay down precisely the circumstances in which the use of aircraft by Government officers is justified, responsibility is placed on Heads of Departments and their authorized senior officers to make sure that every request is necessary. The GFS can advise, where desired.

366. Flights arranged by Official Justices of the Peace on Government Secretariat authority will not require completion of Part B of the application form. However, Part A should be sent to the GFS in the normal way. Justices of the Peace will not be required to produce the second copy of the form to the Pilot.

367. The Controller, GFS, has discretion to allocate the type of aircraft to be used for a particular flight, i.e. helicopter or fixed wing, to allocate priorities and to reject applications for flights if necessary.

Amendment No. 2/97

## CHAPTER III - GOVERNMENT TRANSPORT

368. If a passenger is likely to be delayed at any pre-arranged landing point, he should inform the Operations Section, GFS Headquarters (2305 8301) as soon as possible. Passengers who fail to do this and who arrive late are liable to find that the helicopter has left and they will have to make other transport arrangements.

369. Passengers other than those included on the application form and deviations from the route specified on the application form will not be permitted unless the prior agreement of the Controller, GFS has been obtained.

370-372

### **Insurance Cover Provided for Government Flying Service**

373. All GFS aircraft are insured for normal flying risks in the same way as commercial aircraft. Passengers are covered under a personal accident insurance policy for an amount not exceeding HK\$500,000 per seat. Further details on the insurance coverage provided in respect of GFS aircraft are available from the Controller, GFS.

374-399

Amendment No. 2/97



**Government Flying Service  
Air Command and Control Centre Procedures**

**SECTION 3      TASKING CENTRE AND TASK PROCESSING**

**Chapter 1      Flight Booking Policy**

1.      The role of the Tasking Centre in the GFS is to receive and process routine flight bookings from the client departments of the SAR Government.
  
2.      The policy of accepting this routine government tasking is based on a "first come - first served" system. In cases of a shortage of aircrew or aircraft availability, all tasking is allocated, subject to the Task Priorities detailed in the OM Volume 1, Section 1, Chapter 2.
  
3.      The maximum number of tasks to be accepted is subject to the availability of resources, i.e. aircraft, aircrew and aircraft maintenance schedules etc.
  
4.      Normally a maximum of 2 lines of tasking is to be accepted during the week (Monday to Friday). In cases where more than two lines of tasking is requested, prior approval must be sought from FOM prior to acceptance. At weekends, the acceptance of tasking is to be reduced to a minimum due to the limited availability of aircrew. Note that all tasking is subject to the tasking priorities as mentioned in para 2 above.
  
5.      Prior to the start of each financial year, the Administration Section, on behalf of the Controller, will write to the head of each Government Department and Disciplined Service, asking them to submit their flying hour requirements, for the forthcoming financial year. Each bid must be accompanied with a justification. On receiving the bids, FOM will decide on the hours to be allocated to each individual department.
  
6.      Each of these departments is to nominate at least one officer at directorate level to certify and sign the OM 288, which must be submitted with each flight application. The specimen signature of these approving officers will be kept by the GFS Tasking Centre for signature verification purposes, and checked prior to accepting a task application.

**INTENTIONALLY BLANK**

## Chapter 2 Flight Booking Procedures

The following procedures are to be adopted for the booking of GFS aircraft:-

1. Application for flight in a GFS aircraft should be initiated by sending a completed flight booking form to [flightbooking@gfs.gov.hk](mailto:flightbooking@gfs.gov.hk) by the applicant no earlier than 3 months of the flight. An acknowledgement email should then be sent to the applicant to acknowledge the application by an Operations Officer (OO). A provisional flight booking form will then be prepared by the CO(Ops).
2. CO(Ops) will bracket the time-slot on the Monthly Programme Board (MPB) while AM(Flt Ops)2 will confirm the time and date of the flight booked is correctly shown on the Monthly Programme Board. He will also approve this booking by completing Part D of this provisional flight booking form.
3. CO(Ops) should inform the applicant the status of the application no later than 28 days before the flight. If the application is accepted, a soft copy of the OM 288 (application for flight in a GFS aircraft) will be sent to the applicant. The applicant should complete the form, duly signed by the authorizing person, and forwarded to the GFS by fax or mail at least three working days prior to the date of the flight. Follow up action (e.g. verification of signature, confirmation of the request, including Date, Time and Place) are to be carried out by CO(Ops). AM(Flt Ops)2 is to be kept informed of any irregularities.
4. If the flight involves carrying non-government passengers, AM(FltOps)2 must complete Part C in order to certify the justification of approval in accordance with GR362.
5. If a flight is generated internally, any non-government passengers carried must be given prior approval by the Controller GFS, and must also sign a letter of waiver for self-indemnity purposes. This letter is available from the ACCC and the Tasking Centre. When the flight is complete, these letters are to be returned to CO(Ops) for record purposes and kept for at least 2 years in the Tasking Centre records.
6. All bookings must be supported by the signed application form submitted by the applicant. If no application form signed by the authorizing person is received, the requested flight will not be carried out, unless approval is given by FOM.
7. Cancellation of flights:-

If a pre-programmed flight is cancelled, due to adverse weather condition or special operations etc, the client is to be informed at the earliest opportunity by the ACCC.

A new date and time for a postponed flight will be rearranged by the CO(Ops) accordingly. All these revisions are to be entered into the Revision Content of the OM 288.

**INTENTIONALLY BLANK**

## Government Flying Service

### Statement of Unit Policy

The Government Flying Service (GFS) came into being on 1 April 1993. It is a civilian, disciplined service, replacing the Royal Hong Kong Auxiliary Air Force which was disbanded on 31 March 1993. This statement defines the Government's policy and objectives for the GFS.

### Part 1 – General

#### Mission statement

2. The GFS is to provide safe, efficient and cost-effective flying services in an environmentally friendly manner to support the work of various Hong Kong Special Administrative Region Government departments and agencies. This includes 24-hour emergency air ambulance and search and rescue services.

#### Operations

3. The role of the GFS is to provide flying services to the Hong Kong Special Administrative Region Government. Without prejudice to the generality of that role, the specific functions of the GFS are prescribed in section 5 of its Ordinance. That is, its job is to –

- (a) support the Hong Kong Police Force and other law enforcement agencies of Hong Kong in carrying out their law enforcement duties;
- (b) carry out search and rescue and casualty evacuation;
- (c) assist in fighting fires and in responding to any other emergencies which constitute a threat to life or property;
- (d) carry out photography for aerial surveys;
- (e) assist the medical services;
- (f) carry such persons as the Secretary for Security may authorize as passengers; and
- (g) perform any other tasks incidental to the matters in (a) to (f).

4. Subject to the approval of the Secretary for Security, the GFS is authorized to undertake flights for hire and reward, other than for the purpose of public transport as defined in Article 98 of Air Navigation (Hong Kong) Order (AN(HK)O) 1995.

### Priorities

5. While the GFS is required to carry out all the tasks in paragraph 3, some must take priority over others. For convenience, the various tasks are distinguished as “primary” and “secondary”.

6. Primary tasks are those that always take first priority over all others. That is, they have first claim on the resources of the GFS. They are –

- (a) emergency operations involving Search and Rescue (SAR) overland and offshore within the Hong Kong Flight Information Region (HK FIR) and within the Hong Kong Maritime Search and Rescue Region, including aeromedical/casualty evacuation;
- (b) operational support to the Police (deployment by air; logistical support for the Special Duties Unit (SDU) in operations and training; reconnaissance and surveillance);
- (c) operational support to the Emergency Monitoring and Support Centre (EMSC) and other Government departments in connection with civil emergencies;
- (d) airborne fire fighting where risk exists to life or property; and
- (e) ground and air training of Hong Kong Special Administrative Region Government departments, primarily police formations.

7. In any emergency situation, the Controller is responsible for determining priorities between competing claims.

8. Secondary tasks are those which the GFS will perform when resources are not required for the primary ones in paragraph 6. Should there be a last minute call on resources arising from a primary task, any commitments to secondary functions will be cancelled or postponed. The secondary tasks are –

- (a) VIP and other “communications” flights <sup>(1)</sup>;
- (b) oil pollution surveillance; and

---

Note (1) : communications flight are all flights not otherwise specified in paragraphs 6 and 8.

- (c) aerial survey flying services.

**Resource planning: priorities for use of flying hours**

9. Priorities for the use of authorised flying hours are –
- (a) essential aircrew training and examinations to acquire/maintain/renew aircrew categories, flight crew licences, instrument ratings, type ratings and role qualifications;
  - (b) air tests;
  - (c) primary operational tasks;
  - (d) basic cadet pilot and ab-initio air crewman training, operational conversion training and role conversion training;
  - (e) secondary tasks; and
  - (f) other services as directed by the Secretary for Security.

[Note: depending on their specific nature, tasks in (f) may take priority over others. Whether they should will be judged on a case by case basis.]

**Expected proportion of operations in any one role**

10. As directed by the Secretary for Security.

**Command, Control and Planning**

11. The Controller directs the work of the GFS. He is accountable to the Secretary for Security who determines its policy. The Controller has an overriding statutory duty to ensure safe operation (section 7(2) of the Ordinance). He should keep the operation under constant review to ensure that it continues to satisfy demand for GFS services.

12. The Controller's powers are defined in section 12 of the GFS Ordinance –

- (a) the control and operation of the Government Flying Service, including services to be performed by members;

- (b) requirements for training;
- (c) classifications and criteria for promotions;
- (d) the holding of inspections, drills, exercises and parades;
- (e) subject to any regulation made under the Ordinance, conditions relating to the provision of welfare to members;
- (f) the administration of aircraft, buildings, equipment, finance, furniture, grounds, stores and vehicles; and
- (g) the form and requirement for reports, correspondence and records.

13. Thus, the Controller's Orders are the source of direction on operations, administration (in its widest sense) and training. The disciplinary provisions that underpin the Controller's powers are prescribed in the Discipline Regulation of the GFS.

#### **Environmental Policy**

14. The Controller GFS is to establish an environmental policy and ensure implementation in accordance with the Controlling Officer's Environmental Report.

#### **Organisation**

15. GFS staff comprise civil servants supported by an auxiliary section. The Controller will ensure that the organisation and structure remain effective in meeting demands imposed by policy changes.

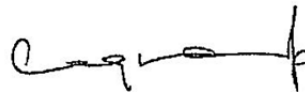
#### **Localization**

16. In common with all departments the GFS follows the standard localization policy covering appointment and renewal of agreement and is developing programmes to give local officers the necessary training and experience to fit them for senior positions. The special circumstances of the GFS require that process to take place within a timeframe that is realistic in terms of the need to maintain the highest operational and safety standards. The Controller will make proposals for achieving this and will periodically report on progress in this respect.



**Governing and supporting documents**

17. This statement should be read in conjunction with the following –
- (a) the GFS Ordinance (Cap. 322) and subsidiary legislation (ie. the General Regulation, the Discipline Regulation, and the Welfare Regulation);
  - (b) Controller's Orders;
  - (c) Air Navigation (Hong Kong) Order 1995;
  - (d) Hong Kong Aviation Requirement 145;
  - (e) GFS Operations Manuals;
  - (f) Engineering Procedures Manual;
  - (g) Administrative Procedures Manuals; and
  - (h) Regulations of the Hong Kong Special Administrative Region Government.



(Mrs Regina IP)  
Secretary for Security

7 January 2000

SBCR 3/1397/78

SUP.doc/mem/ak/GFS-5UP

**Government Flying Service  
Operations Manual (General)**

**SECTION 1 POLICY**

**Chapter 1 Safety Policy**

**GFS Safety Policy**

The objective of the Government Flying Service (GFS) Safety Policy is to ensure that the efficient delivery of GFS flying service at the highest possible quality meets the highest flight safety standards. GFS will continuously refine its Safety Policy in the light of operational experience and changes in statutory requirements; and to ensure flight safety, achieve the Department's vision and enhance customer satisfaction.

The organisation, procedures and control system (Safety Management System) in relation to flight safety are defined clearly in GFS Operations Manuals, which comply with the requirements of the Air Navigation (Hong Kong) Orders.

The GFS Safety Management System is accepted by HKCAD. It is endorsed by the undersigned as the Head of Department and must be adhered to by all personnel at all times. However, the daily administration of the GFS Safety Management System, including the GFS Operations Manuals, is delegated to the incumbent of Manager (Flight Safety).

It should be noted that the GFS Safety Management System does not override the latest Air Navigation (Hong Kong) Order, or any new or revised requirements published by HKCAD as and when required.

The GFS Safety Policy should be understood, implemented and maintained by all personnel within the Department.

Signed 

Captain Michael Chan  
Controller,  
Government Flying Service

**INTENTIONALLY BLANK**

## **2 Safety Management System (SMS)**

The Safety Management System (Operations) applies to all activities of the Operations Section,-Training & Standards (T&S) Section and Air Command and Control Centre (ACCC) of the GFS. It has been developed in accordance with CAD712. The Sections included in the SMS(Ops) are the Helicopter, Aeroplane, Aircrewman Officer (ACMO), Flight Operations (Flt Ops) and the Flying Element of the QA Section. The SMS is fully documented and is structured in 3 levels :

### **Level 1 :**

- Operations Manual - General (Volume 1)

This document details the GFS Quality & Safety Policy, Structure and Operational procedures. Additionally, it documents selected important procedures required by the Civil Aviation Department (CAD) and the Air Navigation (Hong Kong) Order 1995.

- GFS SMS Manual (Volume 2)

This document details the GFS Safety Policy and the Safety Management System of its Operations Section and Training & Standards Section with references to the CAD712 Standard.

### **Level 2 :**

- Operating Procedures (Vol 3, 4, 5, 6, 10 & 11);
- Training Manuals (Vol 7, 8 & 9);
- Relevant Aircraft Flight Manuals and Checklists (normal, abnormal and emergency);
- Manufacturers Operating Manuals (BAe 4100);
- Operations and Standards Notice ;
- Helicopter Landing Sites Directory.

These documents describe the actual processes and controls, applied to all GFS flying activities, including operational and training activities.

The GFS recognizes that it is impractical to document every work procedure. Where a specific situation arises that is not covered by the Standard Operating Procedures (SOPs), it is appropriate to refer the GFS SMS Manual (Vol 2) for guidance as to the intent of GFS Flight Safety Policy and Responsibilities. If necessary, a new procedure is to be developed and included.

**Level 3 :**

- Quality and Flight Safety Records

These records are established by personnel performing the tasks, operations or activities for which the results need to be recorded. Records are controlled in accordance with the documented procedures.

**3 Management Personnel**

The following personnel are identified as being responsible to ensure that the Operations Section and T&S Section are in compliance with CAD712 requirements. They are also required to review the management review report.

- Controller, GFS (C,GFS)
- Chief Aircraft Engineer (CAE)
- Chief Pilot (Operations) [CP(Ops)]
- Chief Pilot (Training and Standards) [CP(T&S)]
- Manager (Flight Safety) [M(FS)]
- Manager (Quality Assurance) [M(QA)]
- Senior Aircrewman Officer (SACMO)
- Flight Operations Manager (FOM)

**4 Compliance with CAD Standards**

The OM system is structured in compliance with the CAD360 and CAD712 standards, with policy statements relating to each area of activity within the relevant operating procedures.

## **Chapter 2 Operational Policy**

### **1 Functions of the GFS**

The function of the GFS is to provide flying services to the Government for such purposes as are incidental to the administration of Hong Kong. Without prejudice to the generality of that role, the specific functions of the GFS are prescribed in section 5 of its Ordinance (CAP 322) at Annex A. Its job is to:-

- (a) support the Hong Kong Police Force (HKPF) and other law enforcement agencies of Hong Kong in carrying out their law enforcement duties;
- (b) carry out Search and Rescue (SAR), Casualty Evacuation (Casevac) and Helicopter Roadside Rescue operations;
- (c) assist in fighting fires and in responding to any other emergencies which constitute a threat to life or property;
- (d) carry out photography for aerial surveys;
- (e) assist the medical services;
- (f) carry such persons as the Secretary for Security may authorize as passengers; and
- (g) perform any other tasks incidental to the matters in (a) to (f).

#### **1.1 Emergency Tasking of GFS Aircraft**

Notwithstanding Para 10, part III of the Government Flying Service Ordinance (CAP 322), the GFS is normally tasked for emergency sorties by the following agents :

- (a) Police Headquarters Central Control Centre (**HQCCC**)
- (b) Fire Service Command Centre (**FSCC**)
- (c) Maritime Rescue Coordination Centre (**MRCC**)
- (d) Civil Aviation Department Rescue Coordination Centre (**CAD RCC**)

Under normal circumstances, requests for helicopter assistance by the general public within Hong Kong boundary are to be referred to the respective emergency services as GFS has neither the protocols nor resources to deal with direct requests.

Whilst GFS may prepare to respond to a request, a response will not be actioned until formally tasked out by the agents listed above. If however, the Duty Operations Manager (DOM) or Aircraft Commander considers that life will be put at risk by delaying a response, he/she is authorized to consider deploying an immediate response. The DOM should inform appropriate agents regarding GFS response for their follow up actions of the case. The DOM should also advise FOM, CP(Ops) or CP(T&S) by the quickest means with all details and to continuously monitor the progress.

## **1.2 Routine Tasking of GFS Aircraft**

Whilst emergency response tasking will take priority at all times, GFS will also provide routine flying services to support government departments when training and operational resources as well as commitments permit. The principles and guidelines in using GFS aircraft for routine task flights have been stipulated in Articles 364 – 369 of the ‘General Regulations’. Refer to page 1-2 Annex A/1, A/2.

## **1.3 Persons Eligible to Travel as Passengers in GFS Aircraft**

- (a) In accordance with Articles 361 – 362 of the ‘General Regulations’, general approval is given for the following persons to travel as passengers in GFS aircraft :
- (i) Members of the Executive and Legislative Councils on duty;
  - (ii) Government officers on duty;
  - (iii) Members of the Auxiliary Services on duty;
  - (iv) Justices of Peace on official visits;
  - (v) Persons carried as a result of emergency operations; and
  - (vi) Persons engaged in maintenance of the aircraft or equipment installed in the aircraft who are required to travel on test flights.
- (b) For passengers to be carried in GFS aircraft other than those listed in para. (a). above, prior approval must be sought from C,GFS. The Flight Operations, Tasking Centre must ensure that OM268 form is duly completed and endorsed by C, GFS prior to each flight.

- (c) All passengers who are authorized by C, GFS should fully understand the content of OM272. They must sign and complete the form prior to the commencement of the flight. The DOM is responsible for ensuring that the concerned flight is properly recorded.
- (d) The following criteria provide general guidance in considering passengers to be carried in GFS aircraft:
  - (i) The flight should not affect any emergency response, training or government tasks;  
Note:  
Passengers must be advised that the flight will be subject to delay or cancellation and it may not be re-arranged.
  - (ii) It is in the public interest to carry the passengers who are discharging duties in his/her official capacities;
  - (iii) There is an operational justification for the passengers to be carried in GFS aircraft;
  - (iv) Family members of the passengers will not be carried except with prior approval of C, GFS.

#### **1.4 Persons Eligible to Act as Aircrew Members in GFS**

Normally, only full-time officers in the employment of the GFS will be allowed to act as Aircrew in any GFS aircraft. Exceptions to this rule may only be approved in certain situations, such as:

- (a) Professional pilots employed by the Authority as FOI's may be granted approval to act as an Aircrew member under certain circumstances in the capacity of co-pilot.
- (b) According to the exigencies of the service, professional instructors or examiners may be appointed on a temporary basis to carry out certain training and testing duties until the department has its own qualified personnel to take over the roles.

However any approval will only be granted by the C, GFS, on a case-by-case basis, and will be subject to a full assessment of the individual's experience, qualifications and current employment position.



## 2 Task Definitions and Deployment Priorities

Task definition and priority for the deployment of GFS assets can be obtained from the following table which serves to provide guidelines to facilitate the decision process to effect assets deployment for a situation, event or incident.

Task Descriptions	Priority	Services
Life Saving	1	<ul style="list-style-type: none"> <li>◆ SAR</li> <li>◆ EMS*: A+ Casevac</li> <li>◆ Major Disaster Response involving mass, evacuation, deployment of operational personnel and/-or equipment to scene of incident</li> <li>◆ Helicopter Roadside Rescue</li> <li>◆ EMS: A Casevac</li> <li>◆ Fire-fighting: and response to any other emergencies which constitute a threat to life &amp; property</li> <li>◆ EMS: B Casevac</li> </ul> <p><i>*EMS (Emergency Medical Service)</i></p>
Internal Security and Law Enforcement	2	<ul style="list-style-type: none"> <li>◆ Response to urgent Police-operational needs</li> </ul>
VVIP	3	<ul style="list-style-type: none"> <li>◆ CE Office</li> <li>◆ Heads of State or equivalent</li> </ul>
Emergency aerial support for Disciplined Services and other law enforcement agencies of Hong Kong Government	4	<ul style="list-style-type: none"> <li>◆ Operational support tasks</li> </ul>
Operational flight for CAD, LandsD	5	<ul style="list-style-type: none"> <li>◆ Aerial survey for aircraft accidents or natural disaster</li> </ul>
Fire-Fighting	6	<ul style="list-style-type: none"> <li>◆ Vegetation fire</li> <li>◆ Deployment of ground party and equipment for fire-fighting</li> </ul>

<b>Task Descriptions</b>	<b>Priority</b>	<b>Services</b>
VIP	7	◆ As per Hong Kong Precedence List
Oil Pollution aerial support	8	◆ Aerial Reconnaissance & Patrol of incident scene
Training flight for Disciplined Services and other law enforcement agencies of Hong Kong Government	9	◆ Training flight for law enforcement and emergency duties
Aerial Survey	10	◆ LandsD aerial survey
Routine Government Task	11	◆ Transport of personnel or freight to remote locations

### **3 Scheduled Use of Operational Resources**

Without compromising the capability and resources availability to effect emergency response priority (1-6) stated under Para 2, the scheduled use of operational resources such as flying hours, aircraft and available crew can be arranged according to the following priorities.

- (a) essential aircrew training\* and examinations to acquire/maintain/renew aircrew qualifications, flight crew licenses, instrument ratings, type ratings and role qualifications;
- (b) air tests\*;
- (c) basic pilot and ab-initio aircrewman officer training, operational conversion training and role conversion training;
- (d) secondary tasks (Priority 7-11); and
- (e) other services as directed and prioritised by the Secretary for Security.

\*Note: The overriding principle is that supervisors should make best effort to coordinate the deployment and use of resources without compromising any life-saving or ER missions. Priority given to (a) & (b) above should only be exercised if there is no other option or alternatives to re-schedule the respective requirements. Essential aircrew training, in particular, must be linked to a license examination, rating renewal or acquisition of essential qualification when no alternative option, such as availability of instructor or examiner exists.

### **4 Operational Assets**

- (a) Aeroplane
  - (i) 2 BAe4100 aircraft
  - (ii) 1 DA42 aircraft
  - (iii) 1 Zlin 242L aircraft
- (b) Helicopter
  - (i) 3 Eurocopter AS332L2
  - (ii) 4 Eurocopter EC155B1

For efficient and effective deployment of operational assets & manning, reference should be made to Annex B to this section for “Guidelines for Asset Management”.

**GOVERNMENT FLYING SERVICE**

Operations Notice

Number : 02/15

Applicability :  Helicopter Crew  
 Aeroplane Crew  
 Operations Unit  
 Engineering

**Deployment of Operational Resources and Use of Flying Hours**

This notice is served to remind the guiding principle of the priority for the deployment and use of operational assets and flying hours in accordance with the "Operational Policy" of OM Vol 1, Sect 1, Chp 2, Para 2&3.

2. All duty supervisors ie FOM, DM and DLS and crews should take due considerations to effect the deployment of available resources such as aircraft or aircrew for any Emergency Response (ER) iaw the priority laid down under Para 2.
3. While Para 3 of the same chapter also stipulated additional considerations to facilitate any decision making by supervisors, circumstances and situations at the time may also dictate what and how to deploy the resources. As a general rule of thumb, training sortie can be re-scheduled but every minute counts in life-saving and air ambulance missions.
4. Unless the only available resource is tasked for item (a) & (b) under Para 3 with no other options, our primary consideration is to spare no effort to deploy the most effective and efficient response for any emergency services such as SAR, Search, Air Ambulance (Casevac), Law Enforcement and Fire-fighting as the highest priority.
5. Please be guided accordingly

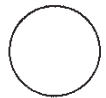
Issued by : CP(Ops)

Signed :



( Captain West Wu )

Initial Issued : 5 Feb 2015  
Valid Until : 4 May 2015

**RESTRICTED (ADMIN)****MEMO**

From : Controller, Government Flying Service  
 Ref. : (3) in GFS CR/1-195/0  
 Tel. No. 2305 8306  
 Fax. No. 2753 8438 (Open) / 2624 9279 (Conf)  
 Date 12 May 2015

To : Heads of Bureaux/Departments  
 (Attn. \_\_\_\_\_)  
 Your Ref. \_\_\_\_\_ in \_\_\_\_\_  
 dated \_\_\_\_\_ Fax No. \_\_\_\_\_  
 Total pages 2

**Provision of Familiarisation Flight Services**

The primary role of the Government Flying Service (GFS) is to provide a 24-hour coverage of search and rescue, air ambulance, law enforcement, fire-fighting support and other emergency services. In addition, subject to resources availability and essential operational needs, the GFS will also provide safe and efficient flying service to support the work of various bureaux/departments/agencies of the HKSAR Government.

**Cost-consciousness of using GFS services**

2. In the Value-for-Money audit review (Audit Report No. 64) on the "Operation of the GFS" published in April 2015, the Director of Audit considers that in the absence of interdepartmental charging, user bureaux/departments may not be cost-conscious of their demands for the GFS flying services, in particular, the familiarisation flight service for official guests. In the light of the competing demands for the limited resources of the GFS, you are reminded to be vigilant when considering the use of GFS aircraft for familiarisation flights. The direct operating costs in 2014 for the existing GFS aircraft are –

<u>Aircraft Model</u>	<u>Direct Operating Cost (per hour)</u>
L2 Super Puma helicopter	\$35,270
EC 155B1 helicopter	\$23,890
J-41 fixed-wing aircraft	\$15,180

3. As stipulated in the General Regulation 365, '*it is important that aircraft are only used by Government officers when there is good reason for doing so, i.e. no other form of transport would satisfy the particular need. ... Since it is impracticable to lay down precisely the circumstances in which the use of aircraft by Government officers is justified, responsibility is placed on Heads of Departments and their authorized senior officers to make sure that every request is necessary.*'

**RESTRICTED (ADMIN)**

## **RESTRICTED (ADMIN)**

### **Possible disclosure of B/D's usage statistics**

4. As another recommendation of the Director of Audit, consideration is being given to the proactive disclosure of annual statistics on the provision of familiarisation flight service with a breakdown of the usage and related costs by user bureaux/departments. You will be advised of this at a later time when a decision is made. For the time being, we would be most grateful if you could draw the attention of all your directorate staff to this memo.

5. Enquiries could be addressed direct to Chief Pilot (Operations) at 2305 8306.



(Captain West WU)  
for Controller,  
Government Flying Service

c.c. S for S (Attn. Ms Trinky Chan)

## **RESTRICTED (ADMIN)**

### Statistics on Premature Wastage of GFS Pilots from 2005 to 2014

Year of Service	Resignation			Termination of service due to failure in completion of overseas training	Total
	Senior Pilot	Pilot I	Pilot II	Cadet Pilot	
less than 5 years	-	-	-	5	5
5 - 10 years	-	-	3	-	3
over 10 years	3	2	1	-	6
	3	2	4	5	14
	9			5	14

### Statistics on Premature Wastage of GFS Air Crewman Officers from 2005 to 2014

Year of Service	Resignation		Transfer to other government departments	Total
	ACMOII	ACMOIII	ACMOIII	
less than 5 years	-	5	4	9
5 - 10 years	-	1	1	2
over 10 years	1	1	-	2
	1	7	5	13
	8		5	13