# **OPERATION OF THE GOVERNMENT FLYING SERVICE**

## **Executive Summary**

1. The Government Flying Service (GFS) was established under the GFS Ordinance (Cap. 322) in 1993 to provide flying services to the Government and those in need, including air ambulance service, search and rescue, fire fighting, aerial surveys and law enforcement. The GFS is committed to providing its round-the-clock flying services in a safe, efficient and cost-effective manner. As at 31 December 2014, the GFS had a strength of 218 staff and a fleet of 11 aircraft comprising nine operational aircraft and two training aircraft. From 2010 to 2014, the flying services in terms of flying hours provided by the GFS increased by 18% from 3,253 hours to 3,833 hours. The Audit Commission (Audit) has recently conducted a review of the operation of the GFS with a view to identifying room for improvement.

#### **Provision of flying services**

2. Performance targets. The GFS has set 23 performance targets in its Controlling Officer's Report (COR) for four types of operations (i.e. air ambulance service, search and rescue, law enforcement and fire-fighting operations) for measuring the percentage of the call-out cases in a year with the responding aircraft arriving on scene within the pledged times. The GFS reported in its CORs that on average, six (26%) of the 23 on-scene time targets were not met each year from 2010 to 2014. Over the same period, the GFS responded to 11,175 call-outs relating to the 23 on-scene time targets, of which 902 call-outs (8%) could not meet the respective pledged on-scene times. Of the 902 out-of-pledge cases, 59% were caused by weather limitations/air traffic control delay and 22% were due to unserviceable aircraft/unavailable aircrew. Audit found that the GFS's reported figures had not taken into account 609 multiple call-outs of which 550 were out-of-pledge cases. In addition, 311 out-of-pledge cases were incorrectly reported as on time cases. After making adjustments for these cases, the average number of on-scene time targets not met each year for the five years from 2010 to 2014 was 9.8 instead of six as reported by the GFS in the CORs (paras. 2.3 to 2.7, 2.10 and 2.12).

3. **Response rates for service requests.** Upon receiving a request for flying services, the GFS will arrange aircraft and aircrew with due consideration given to the urgency, weather conditions, availability of air assets and tasking priority. From 2010 to 2014, the GFS declined a total of 852 service requests after examining all relevant factors. The GFS had not duly taken into account these declined cases when reporting its response rates to flying services in the CORs (paras. 2.16 and 2.17).

4. *Other management issues.* Audit found that there was room for improvement in the GFS's management review of the flying services, particularly the out-of-pledge cases in providing emergency services and declined cases due to resource limitations. For the provision of familiarisation flight service for bureaux/departments, there is a need to enhance transparency and public accountability (paras. 2.22 to 2.24).

### Management of aircrew members

5. *Manning for 24-hour flying services.* The GFS has to roster its aircrew to work in three shifts on a daily basis in order to provide emergency response on a 24-hour basis year-round. The GFS has laid down guidelines on the minimum crew requirements for each shift to meet the primary emergency response in addition to other planned tasking commitments. Audit found that of the 4,142 shifts arranged in 2013 and 2014, 178 (4.3%) were insufficiently manned. As a result, some emergency call-out cases were delayed or declined (paras. 3.2 and 3.4 to 3.6).

6. *Aircrew duty and rest hours.* To ensure safety and health in flight operations, the GFS has set the maximum flying/duty hours and minimum rest hours for its aircrew. Any extension of flying/duty hours of the aircrew or reduction of their rest time is recorded in a Commander Discretion Report (CDR) and a target number of CDRs is set each year to serve as a safety performance indicator. For three of the five years from 2010 to 2014, there were more CDRs than targeted (paras. 3.11 and 3.12).

### Maintenance of aircraft

7. *Aircraft availability target.* For management reporting purpose, the GFS's Engineering Section is committed to making available a minimum of five of the nine operational aircraft from 7:30 to 23:00 and four operational aircraft from 23:01 to 7:29 for 95% of the time for each month. From 2010 to 2014, there were shortfalls on aircraft availability against the target in 33 (55%) months mainly due to major repairs and inspections. The failure to meet the aircraft availability target during the long maintenance period was a cause for concern as the provision of emergency services could be affected (paras. 4.3 to 4.6).

8. *Aircraft downtime*. From 2010 to 2014, the downtime of the nine operational aircraft totalled 78,961 hours, of which 26% were due to unscheduled maintenance. Unscheduled maintenance is disruptive to day-to-day operations and maintenance planning. The increasing trend in unscheduled maintenance (from 3,799 hours in 2010 to 4,539 hours in 2014) warrants the management's attention. Over the same period, there were a total of 2,895 aircraft defects reported by pilots before take-off for flying duties or after airborne. Besides rectifying the reported defects, the Engineering Section reviewed some of the defect cases for identifying room for improvement in the future maintenance work. The GFS needs to continue its effort in this regard and extend the scope of the review to cover all out-of-pledge cases (paras. 4.7, 4.8, 4.10 and 4.12).

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

9. **Payment issues and low utilisation of training aircraft.** The GFS procured two training aircraft at a total cost of \$11.06 million in 2008 and 2012. Audit found that the 5% payment discount (\$181,000) provided for in one of the procurement contracts was not obtained. Moreover, advance payments for spare parts totalling \$550,760 were written off after the overseas contractor's bankruptcy. Audit noted that the utilisation of the training aircraft was low. According to the GFS, the utilisation of the two training aircraft was lower than expected due to the reduced number of target trainees and resignation of some trainers. Even though the two aircraft had low flying hours, both aircraft had experienced long downtime due to maintenance-related issues (paras. 5.2, 5.3, 5.5, 5.7 and 5.10 to 5.13).

10. **Delays in delivery of fixed-wing aircraft.** In June 2009, the GFS obtained the Finance Committee (FC)'s funding approval of \$776 million to replace the two fixed-wing aircraft. Due to technical problems encountered in the flight tests, the expected delivery date of the first aircraft would be late 2015 (i.e. 33 months later than the target commissioning date of March 2013 as stated in the FC paper). As a result, the expected benefits of the new aircraft to enhance the GFS's operational efficiency and flight safety could not be realised in the interim. Meanwhile, there were difficulties in maintaining the serviceability of the existing ageing fixed-wing aircraft and their mission equipment (paras. 5.19 and 5.22 to 5.24).

11. **Replacement of existing helicopters by a single-model fleet.** In June 2013, the GFS obtained the FC's funding approval of \$2,187.5 million to replace the existing seven helicopters by a single-model fleet. The FC was informed that one of the existing helicopters would be used as backup for about four to five years after the new fleet was commissioned. Given that these existing helicopters would reach the end of their service lifespan after 2017 and there were occasions of suspension of these helicopters from services due to engineering problems, the GFS needs to review the adequacy of the contingency plan for the new single-model helicopter fleet (paras. 5.31 and 5.32).

### **Recent development**

12. In November 2014, the GFS obtained funding from the Security Bureau for 2015-16 to commission a consultancy study on how well and sustainable the GFS's manpower and structure could support its mission, objectives and needs in the short, medium and long terms (para. 6.7).

### Audit recommendations

13. Audit recommendations are made in the respective sections of this Audit Report. Only the key ones are highlighted in this Executive Summary. Audit has *recommended* that the Controller, GFS should:

#### Provision of flying services

- (a) improve accuracy and efficiency in the reporting of performance information in the CORs including multiple call-out cases and response rates for service requests (paras. 2.13 and 2.18(a));
- (b) strengthen the monthly management review of the performance of the GFS flying services by placing more emphasis on the exceptional cases such as those relating to long time taken/failure in providing top priority emergency services (para. 2.28(b));

#### Management of aircrew members

(c) make greater effort to maintain sufficient crew for each shift of flying duties to provide a reliable primary emergency response (para. 3.13(a));

#### Maintenance of aircraft

(d) continue to review the maintenance planning and endeavour to synchronise as far as possible major repairs and inspections with a view to increasing the availability of serviceable aircraft (para. 4.18(a));

#### Procurement of aircraft and spare parts

- (e) tighten internal control to ensure that the Standing Accounting Instructions requirements on payment control are always complied with (para. 5.15(a));
- (f) review the downtime of the two training aircraft with a view to identifying effective ways to improve their serviceability (para. 5.15(c));

- (g) closely monitor the outstanding contract work for the supply of the two new fixed-wing aircraft to ensure that greatest efforts are being made to expedite delivery of the aircraft (para. 5.27(a)); and
- (h) review the adequacy of the contingency plan for the new single-model helicopter fleet in the event of manufacturing defects or reported failure and make refinement where appropriate (para. 5.33).

### **Response from the Government**

14. The Government generally agrees with the audit recommendations.