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## **'CONTRACTING OUT' – THE COST EFFECTIVE SOLUTION TO MILITARY FLIGHT INSPECTION**

### **ABSTRACT**

This paper is intended to present Military Authorities with the concept of, and experience in, 'Contracting-Out' flight inspection to specialist, civilian, organisations.

Throughout the world military budgets are perennially under the scrutiny of Government Treasuries looking for savings in defence budgets. This is never truer than in the post 'cold-war' Europe. On the other hand, events after 11 September 2001 show that defence requirements have merely changed shape with Military budget holders continually under pressure to 'do more, with less'. One way achieving this seemingly impossible task is devolving certain high cost, essential, but nonetheless non-operational tasks to civilian organisations. These organisations have the expertise to conduct the tasks effectively but without incurring the high cost overheads associated with indigenous military units. This paper traces and reviews the UK Ministry of Defence (UK MoD) experience in 'contracting-out' its flight inspection requirements; it also answers one specific question about the efficacy of using civilian contractors in an operational environment.

### **BACKGROUND**

1. After the 'cold-war' and the very significant reduction in the threat of general conflict in Western Europe, the UK Government undertook a series of military cost cutting initiatives. UK government policy at the time was to commercialise

public sector activities too. Consequently, it was decided to devolve responsibility for flight inspection to a civilian contractor. It was felt that good business practise - focusing on one area of expertise only - would yield significant savings whilst maintaining, or even enhancing standards. Eventually, the RAF's flight checking unit, 115 Squadron (Sqn), disbanded in October 1993, when - following competitive tendering - the task was transferred to the civilian sector.



*Photograph courtesy MoD Archives*

2. The UK MoD's initial move was towards a 3-year Government-Owned Contractor-Operated (Go-Co) solution using ex-115 Sqn equipment Andover E Mk 1 aircraft and many ex-115 Sqn personnel. The MoD continued to supply Navaid and Radar Inspectors, Operations & Administrative Support plus an Operations Centre. The contractor provided Flight Deck crew, Engineering and Supply support. This contract proved that, despite some contractual difficulties, the concept was fundamentally sound and financial savings were achieved. The basic success of the concept convinced the MoD to take

the next step, after putting the task out for re-tender.

3. This next step was, to all intents and purposes, a Contractor-Owned Contractor-Operated (Co-Co) solution with the contractor providing nearly all of the resources; aircraft, pilots, flight inspectors and operational facilities. The MoD only retained a military officer to act as contract monitor and 6 radar specialists to make assessments of operational radars and schedule the military tasks. The second contract was awarded to a new contractor, Flight Precision Ltd (FPL), who was able to remedy the contractual difficulties of the previous contract.

4. The final step was a fully 'contracted-out' solution with the contractor providing all services including the radar assessors and military tasking and the level of contract monitoring was elevated to Headquarters level. The success of the initial Co-Co stage was such that this final incremental development was taken within 18 months of the Co-Co contract being let. Significantly, FPL's contract was renewed late last year for a period of 10 years.

### **UK MOD'S EXPERIENCE**

#### **5. Efficiencies Achieved.**

a. **Costs.** Immediate savings to the military budget have been made that include:

(1) The cost of a calibration sqn or flight. Running costs of 115 Sqn to the UK MoD were £12 m pa. These costs comprise:

- (a) Capital expenditure on aircraft and FIS equipment
- (b) Personnel
- (c) Continuation training
- (d) Maintenance
- (e) Depreciation
- (f) Risk

All of these costs and risks are transferred to the contractor.

This money, less the contract price, can be returned to the front-line to fund the running of sexy fast-jets or other essential front-line equipment.



*Photograph courtesy BAE SYSTEMS*

#### **b. Operational.**

(1) Military flight inspection budgets rarely feature high in the annual spending round. Therefore, military flight inspection units rarely enjoy the benefits of the latest equipment or frequent updates. Private investment in efficient cutting-edge equipment results in shorter, more efficient and effective calibration time. This reduces cost, enhances the standard of result and has less impact on operational bases, where operations can continue on an almost normal basis.

(2) The personnel working for the current contractor want to be there; obviously this depends on Company management style, salary levels, terms and conditions etc. However, this has translated into a vastly reduced turnover of personnel resulting in lower training overheads and reduced costs. Other beneficial spin-offs are:

- (a) Increased expertise, standardisation and professionalism.
- (b) Higher standards for less flying.

(3) Careful selection of the correct personnel results in a wider skill-base. Experience in both Civil & Mil procedures results in improved techniques in both areas.

### c. Administrative.

(1) Harmonisation of civil/military procedures, which could be seen as important in this increasingly litigious world.

(2) The combining of civil/military tasks and a reduction in transit flying to the benefit of all parties: the classic win/win/win situation.

6. All these benefits have arisen from a long-term contract at a sensible price.

## 7. Results.

a. **Monetary.** Without presenting boring tables of monetary gains and profit/loss spreadsheets, most of which is commercially sensitive anyway, FPL uses the following example to show what magnitude of savings have been achieved by the UK MoD:

(1) The nav aids operated by MoD in the South Atlantic are currently flight checked 3 times a year. This used to be conducted by a specially modified C130.

(2) The whole of FPL's contract for ALL the MoD's nav aids (including the South Atlantic) is less than it cost the MoD to dispatch the C130 there ONCE a year.

(FPL now dispatches a crew and FIS kit that is installed (in one day) into a specially modified Islander. The Islander and crew then conduct the checks. The FIS and crew then return to the UK, usually about a week later. The FIS is usually taken from an aircraft in the UK that is on scheduled maintenance.

### b. Lessons Learned.

(1) First: pick your contractor! The results obtained depend directly on the quality of the PEOPLE employed by the contractor, not Government policy or by

any other external factor. Irrespective of who provides the service:

(a) Excellent equipment and funding but with poor human resources = Poor results

(b) Mediocre equipment and funding but with good human resources = good results

(c) Excellent equipment and funding but with excellent human resources = outstanding results

FPL's mix of Civilian and ex-Military personnel has proved to be ideal. This combination of civilian and military cultures has allowed a high level of creativity in problem solving. The blend of pilots, flight inspectors, ground engineers, air traffic controllers and commercial staff has led to practical, high quality, Value For Money solutions. Ensure that your proposed contractor can conduct all the inspections that you require, effectively. The military maintains Precision Approach Radar as a core precision approach aid for good operational reasons. It can be a little embarrassing if the Service Provider thinks that this requirement is the same, but slightly different, to an ILS inspection.

(2) Second: Adopt a flexible contract structure. The UK MoD buys an annual number of flying hours from its contractor that it pays for monthly. Hours flown in support of the contract are also agreed between MoD and the contractor at the end of each month. Reconciliation takes place at the end of the year that mutually agrees the total hours flown. The contractor then repays the MoD for hours underflown, or the MoD pays the contractor for any additional hours spent on the contract. These underfly/overfly rates are contractually agreed beforehand.

(3) Experience over the past 5 years has shown that, due to an efficient operation, FPL consistently underflies the contract and is required to pay back an amount each year. However, this arrangement automatically caters for unexpected additional flying; for example

when short-notice variations in the scope of work or unforeseen deployments are required. Should the unexpected not materialise, the MoD can demonstrate that additional savings being made on the contract base case when the annual financial review is undertaken. Nevertheless, the regular payment and regular monitoring of cost, which is settled efficiently once a year, that gives everyone the confidence to do what the customer needs at the time without the need for distracting contract re-negotiations.

**c. Partnership.** Trust your Contractor!

(1) A high level of trust has to be established between the relevant military department and the contractor. It is an old Marketing adage, but it's true. A 'cowboy' operation is unlikely to last even a short time. For the contractor the returns are not huge; but commitment for the long-term can underpin the whole business. Additionally, it is in the customer's interest for the contractor to succeed. The savings for the military budget are significant and justifies the leap of faith required. Risks can be significantly reduced if contractors with experience and proven expertise in military operations are selected. With its unique experience, Flight Precision is pleased to assist organisations considering this course of action.

(2) Although not essential to the success of a solely military 'contracted-out' flight inspection operation, trust, co-operation and understanding between the 2 parties can allow the business to expand into the civilian sector too. This allows the contractor to expand that, in turn, translates to a bigger market share. The contractor can then spread costs, to the price benefit of all customers.

### **'HOT' OPERATIONS.**

**8.** A question that always arises is "what happens in a wartime scenario?" The answer is relatively simple: Nothing much changes. Civilian contractors have always been involved at the sharp-end of

conflicts and the following realities should be borne in mind.

**9.** In 'Hot' operational scenarios, flight calibration is NOT the no. 1 priority; other priorities take precedence. Moreover, most armed forces also have interim operational flight inspection procedures that can be followed in wartime as an interim measure. In the UK this is detailed in JSP 318A.

(a) As an aside, FPL's experience is that when the politicians start visiting operational theatres, THEN flight calibration rapidly becomes a priority! However, if security is sufficiently good for politicians to visit the operational theatre, then the personal safety of civilian flight inspection staff can also be pretty much guaranteed.

**10.** It is part of the UK MoD's contract that FPL provides flight inspection services in operational environments. This is subject to mutual agreement on a case-by-case basis. E-3 Sentry support provides a lot of comfort factor in a potentially hostile environment! Nonetheless, there are situations where it would not be appropriate for civilians to be operating and that could result in more extreme reprisals being taken against civilian personnel than military forces; aircraft festooned with aerials are not easy to explain if Mr Badguy is accusing your crew of spying. Additionally, it is not unreasonable to expect the Government to underwrite insurance risks in this situation, as commercial insurance would probably not be available or so prohibitively expensive as to be unaffordable.

**11.** Again, it's FPL's PEOPLE that are most important. The ex-military personnel are well able to advise on the risks associated with any particular scenario. They know who to talk to, what to do, or more importantly what NOT to do and they are also familiar with Airspace Coordination Orders, Rules of Engagement and a myriad of other operational matters. This gives local theatre commanders confidence that these contractors know what they are doing in their area of responsibility and are not going to be an embarrassment to them.

**12.** For those that remain unconvinced about commercial flight inspection operations in operational environments, FPL has, in the last 5 years, successfully operated in:

a. The Former Republic Yugoslavia, including: Banja Luka - 3 times, Sarajevo

b. Kosovo - Pristina



*Photograph courtesy Richard Hayes (FPL)*

And was on standby to deploy to Bagram and Kabul prior to and over Christmas 2001.

## **CONCLUSIONS**

**13.** Flight Inspection is not a core military activity; national and international security is. The increasing cost of defence requires that as many non-core functions are devolved to competent, specialist organisations to reduce the cost of the 'tail' of the military animal to provide adequate 'teeth' for the front-line.

**14.** In the economics of the 21<sup>st</sup> century, military authorities have no option but to 'think the unthinkable' and seriously consider contracting out their flight calibration requirements. We all know that many military establishments want to retain an autonomous flight inspection organisation for reasons of independence and prestige. However, common sense tells us that it must be more cost-effective these days to 'buy-in' services from expert organisations rather than maintain the overheads of an indigenous unit within the military.

**15.** In outsourcing flight inspection services, the UK MoD has obtained significant savings, while regaining access to the latest flight inspection technology. This has led to improved repeatability and standards and simultaneously reduced operational impact on the reduced number of front-line flying bases.

**16.** The most effective service provider is not necessarily the cheapest bidder. Careful selection of the contractor is essential to ensure that the military customer's operational needs are fulfilled effectively.

**17.** Short-term contracts are effective in establishing confidence in the quality of the service on offer; these can be extended when trust has been established between the customer and the contractor, to the mutual benefit of both parties.

**18.** Finally, concerns over operational requirements should not cloud the issue. Flight inspection does not usually take place under fire and would not be a priority in such a situation. Therefore, this convenient excuse should not be considered a valid reason for dismissing the concept of contracted-out flight calibration – which IS the cost-effective solution for military flight inspection in the 21<sup>st</sup> century.



*Photograph courtesy David Fraser (FPL)*

*Special thanks to the UK MoD and BAE SYSTEMS for use of the photographs (Andover and Eurofighter respectively)*

