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Commercialisation of flight inspection - 10 years on

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SUMMARY

The transfer of activities from the private sector to the public sector (privatisation) grew in prominence in the latter half of the last century. The trend has not been without controversy and each nation has embraced it in its own way. Where it has been successful both economic and quality safeguards have been put in place to protect the public. Privatisation has been applied widely throughout the aviation sector and has included the provision of flight inspection in several countries. Flight Inspection in the UK went fully commercial in October 1996 when Flight Precision (FPL) began operations at Durham Tees Valley airport. Since then service companies in the UK have delivered flight inspection services reliably and at lower cost than before. The market has also continued to evolve with changes in both the number of customers and suppliers.

In addition to the challenges of quality and keeping up to date with ANS technology that can face some government run flight inspection units, private suppliers of flight inspection services need to consider the expectations of shareholders and the threats of competition. Success in this environment demands creativity and a "can do" approach.

This paper presents some of the important issues that FPL has had to deal with over the past 10 years. It considers both the successes and difficulties encountered and the subsequent lessons learnt. It concludes that the advantages of private sector provision of flight inspection services have been clearly demonstrated.

HISTORY OF PRIVATISATION

Privatisation, the process of transferring property from public ownership to private ownership and/or the transferring the management of a service or activity from the government to the private sector, was common in the 1930s. It grew in ascendancy in the 1980s and 1990s¹ (especially within the UK) and has had an impact on flight inspection in several countries. Indeed, in October 2006 flight calibration in the UK will have been fully commercial within the private sector for 10 years. In 1996 both the UK CAA and the UK MoD withdrew from providing flight calibration/inspection/ checking/ testing services to the civil and military sectors respectively. Previously each organisation had its own independent, evolutionary approach to involvement with the private sector.

The commercialisation of flight inspection has been the theme of various papers in recent IFISs. These have included the advantages and disadvantages of competition²; re-engineering the flight inspection function^{3,4} and running it as a business⁵; competition and cooperation⁶; commercialisation⁷⁻¹⁰ and contracting out¹¹ and the customers point of view¹²; the requirements for managerial competence and proven business techniques in the administration of flight inspection¹³.

The sale of a state owned business to the private sector can be via shares, or via asset sale by auction, or by the issue of vouchers to the public (as in Russia, Poland and Czechoslovakia in the 1990s). This helps to establish a "free market" and foster competition and give greater choice. The UK state airline (now BA) and the state airports (now BAA) were transferred to the private sector by sale of shares, and CAA Flight Calibration Service was sold by tender subject to performance guarantees.

PROS AND CONS OF PRIVATISATION

The empirical law that "when n economists are gathered together they hold at least (n+2) opinions" applies equally to privatisation. This political issue is seen as part of the great struggle between capitalism and socialism. As such it is often driven by expediency being sensitive to the

prevailing mood of the public and the trade unions. Opponents of privatisation argue that entrusting private businesses with essential services reduces the public's control, which leads to profiteering, excessive cost cutting for profits, and results in poor quality services. Supporters of privatisation however, argue that when business decisions are taken by the suppliers, and services are removed from the influence of politics (where decisions are too easily corrupted by the interests/selfishness of one party), goods and services will improve. As a consequence unprofitable or poorly run businesses will not survive.

However, many economists argue that the real issue is monopoly versus competition and not "private" activity associated with self interest versus public "activity" associated with altruism. Self interest is a universal element in the human condition whether in the public or private sector¹⁴. It is not that self interest is a better motivator than altruism but that in the private sector goals are self chosen, not centrally chosen. Whether services are public or privately delivered, consumers should be able to avoid having to accept poor service.

This is why professionalism is important. The professional ethos acknowledges that there is a potential conflict of interest between the customer and the supplier and encourages the professional to put his interests second. I am pleased to say that this philosophy has always been a key value for Flight Precision (FPL) staff in decision making.

NATIONAL DIFFERENCES

Each country has its own political sensitivities over privatisation. Water privatisation has been contentious in Bolivia, Uruguay, and Ghana and there have been riots in Bolivia and Peru. Some European countries support domestic privatisation of utilities but wish to protect these industries from foreign take over. The current UK government is more pragmatic than its predecessor under which privatisation "took off"¹⁵. It is keen to introduce innovative, entrepreneurial business values into public services but is not in favour of a full scale privatisation of services arguing that it doesn't matter who provides services to the public (public sector, private sector, or voluntary sector) so long as they what they deliver is efficient, responsive and of good quality. It has effectively repossessed the previously privatised railway track owning company and has made it clear that some train running companies are at risk of having their concessions removed on grounds of failing to provide adequate services. The current big issue is the National Health Service which plans to use Private Finance Initiatives (PFI), which are opposed by the public sector unions, to fund 100 new hospitals by 2010¹⁶. Under a PFI scheme a capital project is designed, built, financed and managed by a private sector consortium under a long term contract. The consortium gets paid out of public money depending on performance. If targets are missed it will be paid less.

FUNDING OF AVIATION PROJECTS

PFI's have been used in the UK aviation sector, one of the most successful being the formation of the tri-service Defence Helicopter Flying School (DHFS) in 1995. Under a 12 year contract, FB Heliservices (A Cobham Flight Operations and Services joint venture) trains more than 220 pilots a year and flies more than 35,000 hours annually with a fleet of 50 aircraft. However the complexity of the Scottish Centre Air Traffic Control forced NATS to abandon its PFI approach to this project in 2000. Subsequently, in August 2001, NATS was part privatised through a Public Private Partnership (PPP)^{17,18} with the sale of 46% to a consortium of airlines (BA, Virgin, BMI, Easy Jet, Airtours, Britannia, JMC and Monarch). This was intended to give NATS greater management freedom to develop its business and allow better access to funds needed to upgrade a single integrated air traffic system.

As governments world-wide have become strapped for cash due to demands to finance their social programmes, ICAO has long supported the concept of commercialised Air Navigation Service Providers (Corporatised Bodies as CANSO prefers to call them) to fund the new global CNS/ATM necessary to support a healthy world economy¹⁹.

SERVICE PROVISION AND REGULATION

Political research has confirmed that the separation of service provision from service regulation is key to the development of commercialisation in

the Air Traffic Management sector²⁰. Airlines have identified this as a condition for better relationships with their service providers, and IATA has requested it. The European Commission's Single European Sky Initiative (SES) also has this theme at its heart. In the UK the CAA's Economic Group regulates airports, air traffic services and airlines from an economic standpoint. It promotes market liberalisation to facilitate optimal supply and control of the aviation infrastructure. However it does not regulate the supply of flight inspection services.

The CAA's Safety Regulation Group (SRG) was established to follow up several aviation safety incidents that occurred in the 1980s and, what is now ATS Standards Department (ATSD), was formed in 1988. ATSD clarified the roles of both regulator and regulated organisations insisting that the regulatory process should neither prescribe nor force limited technical solutions that could inhibit technical freedom and innovation 21. ATSD regulates the safety aspects of flight inspection and its clarification of the minimum safety requirements needed for flight inspection organisations was an essential pre-requisite for the commercialisation of this activity in the UK.

SINGLE EUROPEAN SKY

The challenge for SES is to ensure that appropriate standards are not eroded, that regulations are developed transparently and applied uniformly. The regulation level must be commensurate with risk and administered by people with appropriate levels of expertise and competence²².

Yet flight inspection is not covered directly by SES. The responsibility for ensuring that the quality of flight inspection is acceptable lies with the navaid operator, who is covered by SES regulations. CAA ATSDIN 80 points out that in the absence of SES regulation for flight inspection arrangements, the requirements of CAP670 will continue to apply in the UK^{23,24}. Some countries have introduced legislation of a similar nature (e.g. DFS Flugvermessungsrichtlinie and Danish BL-8-2), whilst others will accept credentials issued by their European counterparts, provided they have sight of critical approval and control documents. This varied approach to approval can pose some administration challenges to flight inspection companies wishing to offer services over a wider area.

MEETING CUSTOMERS' EXPECTATIONS

It is evident that deregulation of aviation has led to the emergence of low cost airlines and a huge increase in traffic, in turn causing difficulties for the ANSPs. The airlines have called for capacity enhancement and improvements in service (reduction in delays and cost containment). The evangelists Michael O'Leary of Ryan Air and Stelios Haji-Ioannou of Easy Jet are very vocal in their call for more competition between airports such as the break up of the 3 London BAA airports. (O'Leary is also not very complimentary about the quality of recent decisions of either UK or European economic regulators!).

Flight inspection organisations have a part to play in this called for improvement of ATM services. The issue of cost is containment clear, however it is more difficult to be certain that the other expectations of service are actually being delivered. It requires open communications with customers, which takes significant time to achieve, and staff at all levels being sensitive and willing to face up to sometimes unpleasant messages. FPL religiously records any communication that could be described as a complaint, and having investigated it, feeds back to the customer what has been done to prevent reoccurrence. In the hierarchy of complaints, at the top level, all customers understand our inability to control the weather, they understand less that aircraft sometimes go "tech", and bottom line they do not like "no shows", especially when they have laid off lucrative flight school training activities to accommodate the flight inspection aircraft. Whilst this issue is relevant to state run organisations, it is likely not to be as important as it is to private flight inspection firms that could lose business as a result.

QUALITY AND SAFETY MANAGEMENT

The need to have a quality management process to underpin safety and satisfactory service delivery has grown steadily since W. Edwards Demming and Joe Juran lectured to Japanese business leaders on Total Quality Management principles and Phil Crosby developed his concept of

"zero defects"²⁵. As a small business FPL started with a part time approach to quality management. Firstly it was treated as an additional management responsibility for a flight inspector. Later it was transferred to an office based manager. However, as we have grown, we have now realised that a full time professional is required in order to keep on top of the paperwork and to promote understanding and adherence to internal procedures.

To support the proposition that "aviation is safe" as a whole, aviation organisations need a Safety Management System (SMS) as part of their Quality Management System. Guidance is publicised in documents like EASSR3, CAP 713, CAP730 and the joint FAA/Eurocontrol report on safety principles²⁶. As a consequence FPL has implemented a SMS in its procedures.

COMMERCIAL FLIGHT INSPECTION

Flight Inspection in the commercial environment has changed from an administrative culture, where operations are carried out only "by the book", to a managerial, "can do" culture operating also to the "spirit of the book". The replacement of cost recovery charges by negotiated prices has focussed the need for attention on asset utilisation, staff productivity and cost control.

The scheduling of flight inspection tasks has become more difficult with an increase in the number of fixed dates for inspection as Air Traffic Engineering has been contracted out or been centralised. The buoyant navaid installation market has also added more fixed dates to the flying programme, and in addition busy airports have added constraints by imposing tighter slot times. These factors have reduced mission planning flexibility, which in turn has focussed greater attention on forecasting crew duty/ flying hours and on action to improve flight inspection aircraft availability and reliability.

The need for continual investment cost in staff recruitment, training and development has been highlighted by the turn over of staff caused by the current global shortage of pilots. Cost control also has not been helped by recent increases in jet fuel.

CASH AND INVESTMENT

An important difference that FPL has experienced in the private sector is the emphasis on cash management. This requires attention to getting paid on time which some (by no means all) government customers find hard to accommodate. It also means that flight inspection staff must be committed to looking for the best deal on hire cars, air fares and hotels when travelling on business.

Investing for the future is a challenge that faces all flight inspection units, both private and public sector. Capital is hard to get hold of in the base case in the public sector. It is easier to access within the private sector provided the business case can demonstrate a long term return. Vision (clairvoyance?) is also required to decide how best to meet future mandatory requirements. Some of these investments are not specifically focussed towards improving the flight inspection function, e.g. 8.33 kHz radios and Mode "S" transponders.

All flight inspection organisations like to own and control their own aircraft and FIS assets. FPL/AFI are no exception. The challenge lies in convincing shareholders to invest capital when they may have more profitable opportunities in other business sectors. This is where strategic planning as part of an integrated business planning and budgeting process is critical. Where long term partnerships and contracts provide budget security, investment is relatively easy to justify. Ten years ago FPL operated 2 x HS748 and 2 x C441 aircraft. These have now been replaced by 4 x B200 aircraft and together FPL and AFI, with its B200T, are looking to justify another aircraft to help satisfy market demand and improve reliability of supply. FPL and AFI now operate in 20 countries to the satisfaction of its customers.

What is also clear is that private sector flight inspection services need to be backed by financially strong organisations wishing to be in the market for the long term. Only these kinds of organisations can be relied on to find the investment and maintenance required. The inability to handle an engine failure put TRACE Worldwide out of the flight inspection business. Even a bird strike, which can occur from time to time can take an aircraft out of action for several days, and put pressure on cash flow. Happily FPL/ AFI is part of Cobham plc and has no concerns in this area.

TEN YEARS' EXPERIENCE IS POSITIVE

So looking back 10 years what are the conclusions? Has commercialisation been a success? Certainly the flight inspection market in Europe is more developed than it was 1996. The UK and Ireland have benefited from private sector flight inspection services since 1991, which have been delivered through 5 separate suppliers. In addition more nations than ever before avail themselves of private sector companies not based at home. Some have benefited from not having to maintain a low utilisation aircraft and some have felt confident enough to discontinue employing their own flight inspectors.

The benefits promised for the UK were both capital injection into the flight inspection function and cost containment/ reduction. In practice the UK has seen 5 military Andover aircraft, and 2 HS748 civil aircraft replaced by 4 B200 King Airs using high specification automatic flight inspection systems, and this has been achieved without any reduction in safety or standards. Over the period the real cost of civilian flight inspection has reduced by 10% and the real cost of military flight inspection has reduced by 50%.

Competition and co-operation between flight inspection service providers still exist. This is good for the industry as it allows the use of arrangements for back-up aircraft which in turn is good for our customers. FPL has used four back-up aircraft from time to time to satisfy its commitments.

Early concerns for commercialisation of flight inspection in the UK, such as predicting that competition would prevent innovation or that private companies would not spend resources on developing improvements in systems and techniques, have not materialised. FPL has also participated in development activities to commission a new generation of PAR units and to introduce the capability to flight inspect aircraft carriers at sea.

Union concerns that efficiency savings would be made by cutting staff pay also have not occurred; Flight Inspector (Navaid) salaries are 6% higher today in real terms than they were in 1996.

In addition, with the commitment and goodwill of its staff, FPL has been able to maintain an emergency response time of 24 hours, with best endeavours for 12 hours.

Flight inspection can be delivered successfully by the public sector. However the advantages of private sector provision, without any diminution in standard, have been demonstrated clearly, and in future more countries are likely to access them. FPL and AFI are very willing to work and co-operate with potential customers in this area.

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