

## Flight Inspection Customers - A Buying Guide

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### ABSTRACT

Many States rely upon outside Flight Inspection providers to conduct the routine inspection of their Air traffic facilities. Flight inspection represents a significant portion of an Air Traffic provider's budget. This paper discusses the various components involved in tendering for a flight inspection service and suggests the publishing of a standard guide for Customer States.

Flight Inspection is one of the more expensive ingredients of operating an airways system.

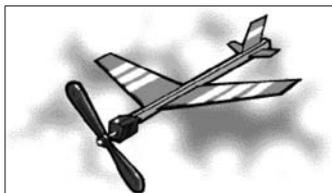
Not all States are able to justify the high costs of establishing and operating a flight inspection service. This means for such States flight inspection services need to be hired as required. Such flight inspection services can be obtained from Flight Inspection providers operating in their region.

Today more and more Flight Inspection providers are self funding rather than being Government funded organisations, and as such the need to operate on a commercial basis is necessary. The spin off from this is an increased availability of competitive Flight Inspection Services for Flight Inspection Customers.

Flight Inspection services come in different packages:



### All the bells and whistles



### No Bells and Whistles



### RPV?

Whilst price is one factor in selecting a Flight Inspection provider there are other factors which should be considered by a Customer in selecting the best match for their requirements. Furthermore, Customers need to ask the right questions in order to be able to fully assess the value of what the bidding Flight Inspection Providers are offering.

This short paper explores the possibility of establishing a standard Buying Guide for Flight Inspection Customers.

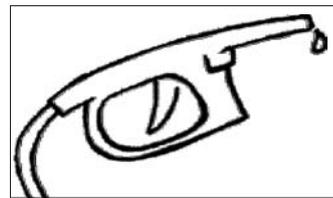
### STATING THE REQUIREMENTS

#### Basic Requirements - to be supplied by the Customer State

(1) List all the facilities together with WGS84 Lat, Long, the nearest airport, and the type of inspection required i.e. Routine, Commission, Route etc.,

From this information the Flight Inspection provider is able to assess the size of the deployment.

(2) List all the airfields where fuel is available, accommodation is accessible, and aircraft parking is secure.



What, fuel arrives next week!!!



You want to take Tour?

From this information the Flight Inspection provider is able to plan refuelling overnight stops and crew stand down days, and establish the most economic routing for the deployment.

(3) Provide the required Month/dates within which the Flight Inspection is to be completed.

From this the Flight Inspection provider is able to plan how and whether the task can be accommodated into their existing work schedule.

(4) State any preferred flight inspection procedures to be used. E.g.: FAA8200 or other.

Flight Inspection providers will have their own set of Flight Inspection Procedures. These are normally those [or based upon those] used in their home base country. Flight Inspection Providers are usually prepared to fly other procedures. Knowing what procedures are required enables flying hours to be more accurately estimated.

Customers may deem it adequate to state that the flight Inspection procedures used shall embrace the objectives contained in the ICAO DOC8071 Guidance material. In this case the Flight Inspection Provider should advise what procedures they will use to fulfil this requirement.

(5) State the desired "Port of entry" airfield, and the location for any pre and post deployment briefings required.

The port of entry affects the Flight Inspection Provider's ferry costing component.



100 facilities not 50? No problem!!

You can fly upside down-Great!!

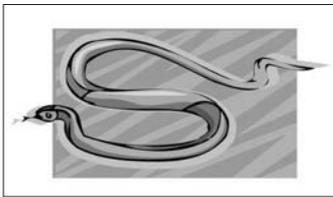
From the pre deployment briefing the Flight Inspection Provider is able to adjust the proposed programme to take account of any changed circumstances or additional requirements which may have arisen. Also Air Traffic and Ground Engineers can be briefed on the flying patterns involved.

At the post deployment briefing the Flight Inspection Provider is able to discuss in detail any technical or operational issues which may have occurred during the deployment. It is also when draft reports are presented.

(6) Provide dates of days/times on which Flight Inspection would not be possible or would be restricted or delayed due to Air traffic operations or support staff not being available. Advise best daily time slots for Flight inspection.

From this information the Flight Inspection provider can plan daily activity and thereby estimate the total number of days required including stand down days. Inspection activity elsewhere can often times be incorporated if staff are not available at a particular location.

(7) State any limiting factors on the placement and/or operation of Flight Inspection ground equipment.



#### Limiting!!

The Flight Inspection provider needs to know any activity which may impact upon the available flight inspection operation time on any given day. eg The need to obtain Airport passes each day, transport of equipment [ground reference stations , trackers etc] to specific locations are activities which can eat into the available time.

Conditions of haze and or smog known to occur on a regular basis may preclude the use tracking devices reliant upon good visibility. In this respect customers may state what type of Flight Inspection System positioning is preferred or necessary.

(8) State the preferred or required type of quote i.e.

(a) Fixed all inclusive price with:

Separate hourly rate for any additional flying requested by the customer or introduced delays due ATC holding, plus

Separate daily charge for any delay due facilities being not ready for inspection, or needed to accommodate additional flying requested.

Ferry price component revealed or not.

(b) All inclusive in country hourly flying rate, with Fixed ferry price, and Separate hourly rate for any additional flying requested or delays due ATC holding, plus Separate daily rate for any delays due facilities not being ready for inspection or required to accommodate additional flying requested.

(c) In country hourly flying rate, with Separate fixed crew expenses, Separate fixed ferry price, and Separate daily rate for any delays due facilities not being ready for inspection or required to accommodate additional flying requested.

(d) Any combination of the above.

Where hourly rates are used the Flight Inspection Provider should provide the Customer with their estimated hour/days to complete the task involved.

Rather than logging ATC hold time the Customer may prefer the provider to include an estimated allowance for such delays.

The foregoing eight requirements are the basic ingredients which the Flight Inspection Provider needs to respond with a quote to a customer.

#### Contractual Arrangements:

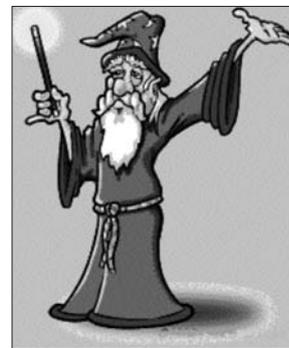
It is good business practise to establish a contract between the Flight Inspection Provider and the Customer State, stating the work to be done, the period during which the work is to be completed, the price, the payment conditions, and what each party is responsible and liable for. Other matters such as dispute resolution procedures are sometimes included. The writers view is that the contract needs to be as simple as possible.

#### Additional Requirements - Demonstrating Quality

Customers need to be confident that the Flight Inspection Provider being considered is able to demonstrate "fitness for the purpose".



No problem -we are the best!!



Just say the word, we can do anything!



Fit -Of course we've been doing it this way for years!

For this the following additional requirements are applicable:

The Customer should:-

(1) Require the bidding Flight Inspection Provider/s to fully describe their flight inspection system [including the aircraft], advising frequency of calibration, where calibrated and how the calibration standards are maintained [traceability]. The Customer may also request copies of calibration certificates and reports.

(2) Require the bidding Flight Inspection Provider to provide certificates or other documentation demonstrating crew competency in carrying out their respective flight inspection duties. The Customer may also request copies of recent flight inspection reports providing evidence of crew personnel currency.

(3) Require the bidding Flight Inspection Provider to provide copies of documents or a certificate from a Civil Aviation Regulatory Authority approving or certifying the Bidder as a 'bone fide' Flight Inspection provider.

(4) When the bidding Flight Inspection Provider proposes to use an aircraft other than a dedicated flight inspection aircraft. Require them to describe what checks if any they propose to establish that the use of such an aircraft and crew will meet the Customers requirements for the inspection task/s involved.

(5) Require the bidding Flight Inspection Provider to submit any relevant ISO Quality Assurance Certificates held.

(6) Require the Flight Inspection Provider to state their response time to an emergency Flight Inspection request.

Whilst item (6) is not a direct quality matter it may be considered to come within the scope of being "fit for the purpose", for some Customers.

Satisfactory responses to the above six additional requirements will provide the Flight Inspection Customer with confidence that the quality of Flight Inspection Provider is "fit for the purpose".

#### **Supplementary Requirements - Added value**

Over and above the basic Flight Inspection deployment requirements and the additional Quality Assurance requirements, there can be added value services which a Flight Inspection Provider may be able to offer.

Below is a listing of questions concerning added value items which a customer may consider to be of significance?

(1) Is the Flight Inspection Provider able to offer a seat on their aircraft for customer personnel needed to facilitate successful completion of the

Deployment. If so how many seating positions are available.

This may cover the need for supervisory or coordination roles, and/or the transport of technical personnel to less accessible facility locations.

(2) Is the Flight Inspection Providers Flight Inspection Engineer or Flight Inspector able to provide assistance to Ground engineers in the resolution of problems found during an inspection.

Some Flight Inspection providers employ Navaid engineers as Flight Inspectors and some do not.

(3) Is the Flight Inspection Provider part of an organisation or closely associated to an organisation from which they can provide direct links to any of the following related services:

a. Instrument Flight Procedure Design.

b. Airfield Certification.

c. Nav/lighting installation or repair.

In Conclusion I would invite Flight inspection Customer States as well as Flight Inspection Providers to furnish their comments so that anything I have omitted can be included.

Should the Flight Inspection Community consider it to be beneficial, a guidance document could be developed by ICASC and made available to all on the ICASC Website?