

# CASE STUDY

## Launching a Source Inspection Program



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## Client is an OEM in Aerospace & Defense.

The client is a multi-division global market leader in their space. This particular division designs and manufactures complex life support systems for numerous mission-critical applications.

- 141 employees and 3-building campus
- Supports civil & defense sectors
- Products used on aircraft, helicopters, and space platforms

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Receiving Inspection was no longer working. The client needed source inspection, but it was not within their grasp

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## The Challenge

The client was seeing a significant amount of **supplier shipments with issues** at their receiving inspection dock, such as product quality or deficient paperwork.

These shipments **could not be fed to the production line** for consumption until resolved, which averaged 2 weeks of effort to resolve but could run as high as 5 months!

This was causing **significant disruption** to the production schedule, customer shipments, and revenue bookings.

## Client Goals and Constraints

In order to resolve these business disruptions, the client made the decision to implement a **source inspection** program.

Through source inspection, any issues would be identified & resolved at the supplier prior to shipment thus ensuring future deliveries could be received and issued to the production line without delay.

The client faced several barriers and constraints as they evaluated all their options:

### Option 1 – Travel Inspectors to Suppliers

The forecasted source inspection need would quickly tie up all their inspectors, delay shipments while suppliers wait for inspectors to travel in, and required significant travel budget to support.

For these reasons, this was ruled out as a viable option.

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## Option 2 – Relocate Inspectors to the Field

To overcome the limitations of option 1, under this option the client would relocate some inspectors to regional hubs across the country.

This could reduce travel costs and improve response times. However, relocation was lengthy and cost-prohibitive, substantial travel budget would still be required, and the demand in many areas was not enough to justify a full-time employee.

For these reasons, this option was ruled out.

## Option 3 – Hire New Inspectors in the Field

This option was considered to overcome the drawbacks of option 2.

While this option would avoid the relocation costs and improve travel costs, it would also require substantially increases to the client's headcount / staffing budget for the new positions and management structure to oversee it.

It also did not overcome the challenge of less than full-time demand in many regions.

For these reasons, this option was ruled out.

## The Solution

The client contacted Unitek in search of a solution. An intake meeting was held via telephone where Unitek gained a firm understanding of the client's unique needs, goals, and constraints.

Unitek then proposed the solution of utilizing **Contracted Source Inspectors** to achieve the client's goals.

This met all the client's needs while overcoming all the barriers and constraints:

- ✓ **Experienced** – contracted inspectors are highly experienced in inspection methods, working with suppliers, and understanding purchase order requirements. Certified inspectors (i.e. IPC-A-610, etc.) are also available based on customer need.
- ✓ **Local** – contract inspectors are available throughout the country and often live within driving distance to suppliers or a quick regional flight away. This leads to unbeatable travel cost savings and rapid response times!
- ✓ **Fast** – 'hiring' a contract inspection is up to 90% faster than hiring an employee! And because they are contractors there is no impact to client's payroll budgets or headcount levels.
- ✓ **Flexible** – contract inspectors only work when they are needed by the client but are available when surge capacity is needed! This means the client can utilize partial FTE's at specific suppliers or regions without the carrying costs for idle time.
- ✓ **Affordable** – contract inspectors often cost only a fraction of the cost vs utilizing a fully burdened employee. And because they only work when needed, the total annual support cost is significantly lower than hiring or relocating an employee!
- ✓ **Easy Button** –Unitek manages all the administrative aspects of the contractor relationship freeing up the client to focus exclusively on the task at hand. If the client ever encounters any issues or concerns, Unitek addresses those completely and fully.

## Case Study – Launching a Source Inspection Program

Once the client decided to move forward, Unitek established a master agreement for **maximum flexibility to the client**.

Instead of creating separate contracts for different suppliers or inspectors, this single master agreement covered all the contracted roles, regions, and rates the client would ever need to use.

Next, Unitek assigned a Program Manager who worked with the client to **define the requirements** for contracted source inspectors such as location, work load, desired skills and certifications.

Unitek then **matched contract inspectors to the clients requirements** using our existing national network of contracted inspectors. If we didn't have a match in our network, Unitek initiated a search to locate the ideal candidate per the clients requirements.

Ideal candidates were **presented to the client for approval**. This included details about the individuals skills, certifications, location, and availability. The client was also given the opportunity to speak to candidates on the phone if they wish.

Once a contract inspector was selected, Unitek provided **training and on-boarding** to those individuals. This included compliance training, the specific project they would be supporting, and any client-specific procedures, forms, and instructions.

Next, the contracted source inspectors were **dispatched to source inspection requests** at their assigned suppliers per the method agreed-upon with the client.

Generally, several options are available to clients on how Unitek will manage the coordination and logistics of receiving and dispatching such requests.

While **performing a source inspection** task, the contracted source inspectors executed the task per the process agreed upon with the client:

- ✓ **Inspection** – performed per industry best practice against the purchase order, technical data package, and applicable standards and specifications. Inspectors also follow the client's inspection procedure and product-specific inspection instructions (if any). Should questions arise, the contract inspector would call a Quality Engineer appointed by the client for this purpose.
- ✓ **Nonconformance handling** – Handled per client procedure and forms. Generally, shipments containing defects are not accepted for shipment unless directed by client.
- ✓ **First Article Inspection (FAI)** – review supplier FAI package for completeness and accuracy against prevailing industry specification (i.e. AS9102) and client's FAI procedures.
- ✓ **Records** – contract inspectors utilize the client's forms which are submitted to the client upon completion of the inspection activity
- ✓ **Other** – performed other tasks needed by the client

## The Outcome and Results

Within **3 months** Unitek had planned and implemented a source inspection program for the client.

As a result, Unitek helped the client **meet and exceed their goals!** The results include:

1. 43% reduction in supplier defective parts at client's receiving dock
2. 74% improvement in backlog at receiving inspection
3. Significant reduction to production line impacts

This effort had the **additional benefits** of

- ✓ improving the client's plant operations,
- ✓ improving inventory turns,
- ✓ reducing cost of quality,
- ✓ freeing up critical human capital and
- ✓ improving supplier relationships

As a result of Unitek's efforts, the client realized big benefits:

## 3 months

To launch the source inspection program

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## 43%

Reduction in supplier defects at receiving

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## 74%

Reduction in receiving inspection backlog

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## Significant...

Reduction to production line impacts

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## Improved...

Operations and Supplier relationships

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## What's Next For The Client

This was the client's first experience with using contract source inspectors, with fantastic results!

With the infrastructure now in place, the client can easily expand their source inspection coverage to the next priority items/commodities and capture additional benefits.



## Find out more

NTS Unitek offers an ever expanding range of global supplier quality, supply chain management and technical support services across North America and Europe. all our services are scalable, designed to expand and contract based on the complexity, rate of growth, and volatility of your supply chain.

## To find out how:

Go to [www.nts-unitek.com/contact-us](http://www.nts-unitek.com/contact-us)  
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