# "Thirteen Things Item #8 - Case Studies"

Require your suppliers and their sub-tiers to formally notify you of Work Transfers.

# **BCA Example**

## **Timely/Accurate Notification of BCA Work Transfers**

If timely notification with correct/accurate information does not occur, the work transfer package can enter a rework loop. This could jeopardize meeting the reporting requirement of "Notification shall be prior to the manufacturing start date of the first part associated with the work transfer" (ref form X31764 Quality Purchasing Data Requirements-BCA). Incorrect information leading to corrections to the X35781 Supplier Initiated Work Transfer Notification form or the Statement of Work Template could add days/weeks to the notification process.

If assistance is needed during the work transfer submittal process, please contact your Boeing Procurement Agent (supplier personnel) or the SM Bus Ops Work Transfer group (GRP SM Bus Ops Work Transfer - Boeing personnel).

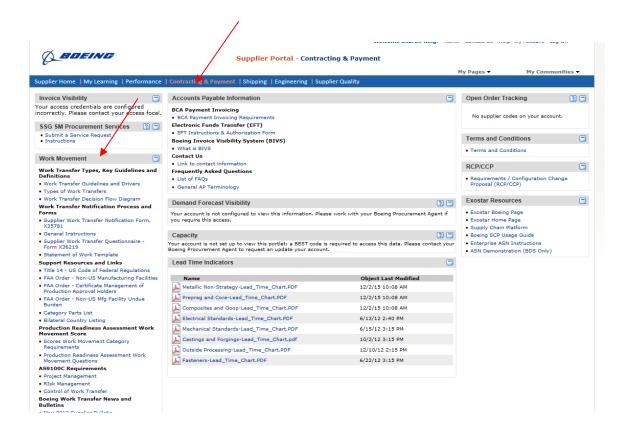
Per the X31764 form, which is referenced in the Q29 purchase order note, work transfer notification must occur within five (5) business days once the following is known:

- 1. Statement of Work (SOW)
- 2. 'To-be' supplier name
- 3. 'To-be' supplier address
- 4. 'To-be' supplier Quality contact information (name, title and telephone number)
- 5. First production target date
- 6. 'As-is' supplier information (supplier name and address)
- 7. Will this be a single sourced Product?

Notification shall be prior to the manufacturing start date of the first part associated with the work transfer.

## **Summary**

The requirements ensure conformance to strategy, financial analysis procedures, contractual and regulatory obligations. Communicate to your suppliers and their sub-tiers to formally notify you prior to Work Transfers as early in the process as possible to minimize risk and promote first pass quality. Use the tools provided on your Supplier Portal (supplier personnel), in the Work Transfer Management System (WTMS) tool (Boeing personnel), and follow the Work Transfer Decision Tree (supplier/Boeing personnel) to determine the reporting requirements to Boeing.



## **BDS Example**

### **Failure to Formally Notify**

Boeing El Segundo discovered a bird cage deformation issue on Boeing Source Control parts as well as MIL parts. Root cause was determined to be the Automated Contact Assembly Machine's inability to detect unformed pins. Boeing and the supplier agreed the corrective action was to replace the old machine with a new Automatic Visual Machine that would capture deformed pins through the In-Sight Vision System. Subsequently, the supplier moved manufacturing from one facility to multiple facilities. Boeing was notified of the move but no detail plan was provided regarding date and equipment. Boeing Product Engineers and Supplier Quality Engineers visited the supplier's new location to perform delta-Qualification. It was discovered that the old Automated Contact Assembly Machine and the new Automatic Visual Machine were both moved and put in production after an internal re-qualification. The CA document was re-opened as the supplier failed to follow the agreed corrective action and to report the use of both machines after the move. The old Automated Contact Assembly Machine was red-tagged and removed from production August 2016.

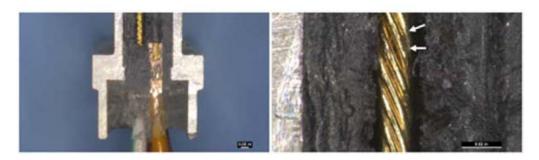


Figure 1 (left) – Partially decaspulated pin inside Micro-D connector Figure 2 (right) – Pin showing no signs of formed birdacage, with some wear from mating (arrows)

## **Summary**

Were it not for the fact that Boeing discovered the relocation of the pin production during a requalification effort, it was likely that the supplier would have been shipping pins manufactured without qualification to their own facility for incorporation into connectors which would have resulted in nonconforming product being delivered. This example demonstrates the importance of formal notification, as required by AS9100 7.1.1 Project Management, 7.1.2 Risk Management, and 7.1.4 Control of Work Transfers, to ensure that all product requirements and potential risks are understood and addressed.

#### **Lessons Learned**

BCA suppliers may utilize Form X36219 "Supplier Initiated Work Transfer Questionnaire" to determine reporting requirements, as possible exemptions may apply.

Once the reporting requirements have been determined and the information on Form X35781"Supplier Initiated Work Transfer Notification" is known, notification MUST OCCUR within 5 business days to the Procurement Representative. X35781 "Supplier Initiated Work Transfer Notification" and X36219 "Supplier Initiated Work Transfer Questionnaire" forms are available on the Boeing Supplier Portal.

BDS suppliers need to be aware of the AS9100 requirements relative to formal work transfer notification to ensure risk are understood and mitigation steps are in place.

Work Transfers when inaccurate or incomplete can result in Factory impacts due to late delivery of parts or parts not having the same quality as the prior supplier.

# What Would You Do?

After reading the examples, consider the following discussion questions. They can be used in a team setting to generate dialogue around the "13 Things" or to help individual employees think about the situation from different perspectives.

- What would you have done if you knew there was insufficient information from a supplier in regards to a Work Transfer?
- 2. Would you have felt comfortable raising your concern with either the supplier or management, and if so, how would you have approached the situation?
- 3. What else could have been done to mitigate these types of non-compliances from happening?