

SUPPLIER TRAINING

Doing Business with Tactair



DOING BUSINESS WITH TACTAIR

At Tactair, we strive to avoid problems and want to work with you on continuous improvement.

The following training document was designed to help clarify our expectations and to prevent avoidable issues.

This document is for reference only and does not supersede official Tactair communication.



COMMUNICATION



Your Tactair Buyer is your Point of Contact

Copy your Buyer on ALL communication



Please advise of personnel changes in quality and sales so that we can update our records and discuss training and support.



COMMUNICATION - RESPONSIVENESS

- We expect a prompt response to all of our communications
- Please respond to:
 - Open Orders “Auto-Email” sent weekly on Thursdays and request feedback on orders due in next 4 weeks by following Monday. Note: PO delivery dates are our dock dates **NOT** ship dates. Now includes all open RFQs and open CARs.
 - Quote requests within 1 week or by the requested due date
 - CAR Letters by the requested due date
 - Quality System Audits within 30 days or by requested date
 - Engineering information requests (with initial feedback) within 24 to 48 hours
- Response times are tracked as a supplier performance metric



TACTAIR WEBPAGE

Please review the Supplier Support section on
www.tactair.com

You will find:

Supplier Portal

Supplier Quality Assurance Requirements (SQARs)

Purchase Order Terms & Conditions (POTC)

Mutual Non-Disclosure Agreement

Packaging SQPR-03 and Marking S-3006 Documents

Quality System Requirements Standards & Audits

Supplier Training Documents

Supplier Forms: SDWR, Suggestions and CAR forms



SUPPLIER PORTAL

- The Supplier Portal provides an efficient paperless system for suppliers to complete our Quality Survey.
- Periodically we request updated Quality Surveys from all suppliers. The requests are emailed and include your username and password and instructions on how to access the Portal. We allow 30 days to complete.
- Certifications are no longer uploaded in the Supplier Portal. Effective 9/30/18 all certifications should be emailed to suppliercerts@tactair.com. The subject line of the email should list PO#, Line#, part# and quantity.
- Email invoices to payables@tactair.com.



SQARS

- Applicable Supplier Quality Assurance Requirements are called out on purchase orders for each part number.
- A complete listing of SQARs can be found in the supplier support section of the Tactair webpage:
<http://www.tactair.com>
- SQARs are revision controlled and the applicable revision is listed on the purchase order.
- Any questions, contact your Tactair Buyer

Not following SQARs will result in rejected parts, adversely impact your quality rating, and cause production delays



AS9100 AND ISO

SQARs for AS9100 and ISO requirements.

SQAR 019

- Supplier shall perform a complete First Article Inspection (FAI) in accordance with the current revision of AS9102. The supplier may use their own forms, as long as they contain all required information as outlined by AS9102. Parts must be inspected to our blueprints even if 3D models were supplied. The FAI part must be tagged. Ref. the Supplier Quality Assurance Requirements document on our website for complete description.

SQAR 029

- Supplier must be AS9100 (Aerospace Quality Management Systems Requirements) certified by an accredited Certification/Registration Body (CRB).

SQAR 029A

- Supplier must be ISO9000 (Quality Management Systems Requirements) certified by an accredited Certification/Registration Body (CRB).



ITAR

Purchase Orders that contain the following note, **“Tactair has classified this part as a military item subject to ITAR regulations”** are subject to US Export laws and are controlled by the US International Traffic in Arms Regulation (ITAR) 22 CFR part 120-130. Items not specifically classified on the Purchase Order as military items are assumed to be commercial items.

You are required by law to comply with all ITAR regulations including the flow down of this note to any subcontract suppliers.

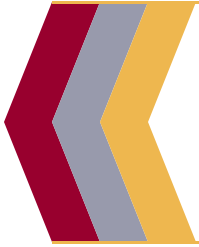
If you are the design authority for any part purchased by Tactair, you must notify Tactair in writing if we have not designated the part properly and we will change our designation.

Refer to our POTCs on our website tactair.com and the following US Dept. of State and Dept. of Commerce websites for additional information:
pmddtc.state.gov/index.html and bis.doc.gov/index.html

OUTSIDE PROCESSING GUIDELINES



- Outside processing must be performed by a NADCAP approved processor whenever SQAR 017 is on a purchase order.
- NADCAP Processes include all NDT, chemical processing (inc. plating, passivation, anodize) heat treat, shot peen, and welding. NOTE: Unless noted on our print or purchase order, no welding is allowed without permission from Tactair.
- <https://www.eauditnet.com/eauditnet/eau/user/login.htm> is the link to the search page for approved NADCAP processors. Note: the processor must be approved for the specific specification/process required at the time the order is placed.
- Any internal processes for which you are not NADCAP certified, must be indicated as such on your Tactair Quality Survey form, should be documented and will be reviewed and must be approved by Tactair's Quality Engineer.
- If Tactair customer-approved processors are required, SQAR 017A will be indicated on our purchase order. (Approved customer processors might not be NADCAP approved).
- Verify your outside processor is using the proper specification and latest revision. If any specifications have been obsoleted or superseded contact us for clarification before processing parts.
- Contact your buyer with any questions.



FLOWDOWN REQUIREMENTS FOR LMC ORDERS

TFC prefixes all Lockheed Martin Corp. (LMC) purchase orders requiring special flow down with LH.

Use only Lockheed Martin approved suppliers for all certifiable processes. (Reference SQAR 017a)

All outside processing purchase orders must include the LMC specification and process code number and the following statement verbatim:

TACTAIR FLUID CONTROLS INC. LM AERO IDENTIFICATION NUMBER 853915

Processing to be accomplished in performance of this purchase order is directly related to a Lockheed Martin Aeronautics Company purchase order and must be accomplished in accordance with process specification(s) on this purchase order and Lockheed Martin Aeronautics Company Appendix QJ. Ref. website:

http://www.lockheedmartin.com/us/aeronautics/materialmanagement/scm-quality/scm-quality_qualityappendices.html

Copies of these purchase orders must be maintained on file and be available for review by the Buyer upon request.

A Certificate of Conformance with a unique certification number containing the elements listed in QJ must be submitted with the parts. Parts shall be suitably wrapped and preserved as required to prevent damage during shipment.



QA REQUIREMENTS

We have high quality standards and require conformance to our drawings and specifications

- Potential issues must be addressed upfront, during the quoting process.
- Certifications for all Specifications as called out on our drawings must be supplied. Specification supersession questions should be addressed during the quoting process or with the buyer prior to processing the parts.
- Submit and securely tag all 1st articles as required per SQAR 019. Our expectation is that all 1st articles are fully functioning parts. Parts must be inspected to our drawing even if 3D models were supplied.
- Complete an SDWR (Supplier Deviation Waiver Request) for any non-conformances and wait for approval before shipping.



USING THE SDWR FORM

- Must use our form located on our website. We prefer the PDF version.
- Use this form to report any incoming damage to parts received from Tactair or other drop ship location. Be sure to list serial numbers and include digital photos whenever possible.
- If other issues are discovered later or arise during manufacture, a SDWR must be sent to your buyer and approved **BEFORE** shipping parts to Tactair.
- Also, use this form to request changes to any frozen planning, ref. SQAR 032.
- SDWRs are only applicable to the parts on the referenced PO and line # and an approved SDWR copy must accompany the shipment with the certification packet. SDWR parts must be clearly identified from other parts in shipment.
- Root cause and corrective action must be identified on the SDWR and must be long term and verifiable.
- SDWR submittal should be an exception, not the rule. Drawing exceptions should be identified during the quoting phase and/or design prevention review process or use our Supplier Suggestion Form to initiate investigating changes to our drawing.

Supplier Request for Product Deviation (SDWR) or Frozen Process Change

YF / TFC Buyer: Date of Request:

Supplier Name: Part Number: Revision:

P.O. Number: P.O. Line #: P.O. Line Qty: Qty Defective: YF # / TFC QAR #:

Request Type (Select One)

Supplier Product Deviation Request (SDWR) (Complete Items 1 thru 4 below)

Notification of Incoming Damage (attach pictures) (Complete Item 2 below and if applicable 1, 3 and 4)

Lead-time to produce new, correct or conforming parts, if disapproved:

***** All nonconforming parts to be tagged / identified, serialized (if applicable) prior to shipment to Young & Franklin / Tactair. If parts are not identified they may be returned for proper identification.*

***** Include a copy of the approved form with your shipment to YF / TFC.*

Change Request to Frozen Planning per SQAR 32 (Complete Item 2 below and if applicable 1, 3 and 4)

(1) Containment: Quarantine defective Product and verify Containment including at Sub-tiers, in Process, Stock, In Transit, etc.	Completion Date:
<input type="text"/>	<input type="text"/>
(2) Nonconformance Description or Requested Change in Frozen Process Planning: Specific / Detailed Explanation	
<input type="text"/>	
(3) Root Cause: Verified Reason that Accounts for the Problem	
<input type="text"/>	
(4) Preventative / Corrective Action to Prevent Reoccurrence: Attach Objective Evidence and/or Supporting Documents	Completion Date:
<input type="text"/>	<input type="text"/>

Number of Attachments:

Supplier's Quality Representative: Date: *Preventative / Corrective Actions will be validated by YF / TFC Supplier Quality on Next Supplier Visit*

Section Below for Young & Franklin / Tactair use Only

YF / Tactair MRB / FRB Authorization: Approved Disapproved Send In for Evaluation (MRB on Hold) Date:

YF / Tactair Engineering Signature:

Disposition / Comments:

FRM-QCP-07 Rev D Revision Date: 02/22/2013 Page 1 of 1



SUPPLIER SUGGESTIONS

- As part of our continuous improvement program, we encourage any suggestions for print changes which will improve quality, reduce costs and ease manufacturing.
- Our Supplier Suggestion Form is on our website. Submit the completed form to your buyer. All suggestions will be reviewed and dispositioned by engineering.
- Communicate any scheduling issues with your buyer to avoid any production delays.

Continuous Improvement	
Supplier Suggestion Form	
Supplier	Contact Name:
Part#	PO#
Date	
Proposed Drawing Change:	
Reason for Change:	
Estimated improvement to cost and/or delivery:	
Tactair Engineering Review/Comments:	
Engineer:	Date:
Reviewed with Supplier	
By:	Date:
FRM-QCP-15 Rev. Note 11/02/06	



DMRs and CARs

- Discrepant Material Reports are generated for all non-conformances. We may request a formal Corrective Action Response.
- Your response to a Corrective Action Request should address the root cause with permanent and verifiable corrective actions. Our standard is the Global 8D Process – see separate training document.
- Tactair will participate in root cause analysis on request.
- CAR responses will be reviewed for completeness.
- We will request to see corrective actions “in use” during visits and audits.
- CAR forms are sent electronically. You can use your own form as long as all 8D steps are addressed.

TACTAIR		Young & Franklin Inc.	
SUPPLIER CORRECTIVE ACTION REQUEST – 8D Response			
For Supplier Training see www.yf.com or www.tfc.com Corrective Actions will be validated by YF/Tactair Supplier Quality on Next Supplier Visit			
Supplier Name & Address:	I		CAR Date of Issue:
Reply To:			CAR DUE DATE:
Supplier e-mail(s):			
Part Number/Description:			
PO Number:	PO Line #:	PO Lot #:	PO Line Qty:
			QTY Defective:
			YF/TFC QAR#:
[D1] Problem Statement / Non Conformance Description: Specific detailed explanation			
YF/TFC Notes from QAR:			
[D2] Form a Cross Functional Team: Names, positions, phone numbers, email, indicate team leader			
[D3] Containment Actions/Interim Corrective Action: Protect YF/TFC from non-conforming parts and support our production			Completion Date:
[D4] Root Cause: Why made?		Root Cause: How escaped?	
[D5] Permanent Corrective Action (PCA): Provide objective evidence			Completion Date:
[D6] Validation: Does your PCA prevent the issue?			Completion Date:
[D7] Verification: How will you ensure that this fix will be permanent and continuous? Include read across to all other similar parts and processes that could have this potential issue			Completion Date:
[D8] Congratulate Your Team: Thank you for proactively resolving this issue, capture "Lessons Learned"			Completion Date:
Date "Conforming Material" will be available:	Supplier Quality Representative Approval:		Completion Date:
FRM-QCP-08 Rev D Revision Date: 3/21/2013			



QA REQUIREMENTS

- ISSUE PREVENTION REVIEWS

- Cross functional design/prevention reviews may be held for new/1st run, significantly changed or parts with repeat quality issues.
- Review specifications and the drawing. Discuss any previous issues and questions.
- Discuss packaging, testing requirements and measurement correlation.
- Suppliers are responsible to meet all specifications and testing requirements as required by our drawing and those referenced in all applicable specifications.



QA REQUIREMENTS

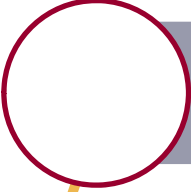
- GAUGES



Use your own standard gauges.



Tactair will only loan gauges under special circumstances



Include separate call-outs for unique, Tactair-only gauge requirements on your quotes



We are willing to correlate gauges if discrepancies arise.



QA REQUIREMENTS

- HANDLING

- Use care with our parts as they move through your facility and ensure that packaging is robust.
- Inspect parts for damage and verify packaging is secure before shipping.
- If issues arise, we will work closely with you to pinpoint the root cause of the damage.



CORRECTIVE ACTION RESPONSES

- We expect immediate notification or confirmation of all quality escapes. Initial containment and response must be within 48 hours. Keep your TFC buyer informed of ongoing progress.
- Robust corrective action should be implemented ASAP and is required within 3 weeks of the notification. If more time is needed you must contact your TFC buyer and request an extension prior to the CAR due date.
- If CARs are not delivered on time and no extensions are requested, you may be put on Disapproved Status Rating in our quality database.
- Disapproved suppliers **cannot** receive any new purchase orders until open issues are resolved and approved by Tactair Quality.



TFC FURNISHED SETUP PCS.

- Include quantity of set up pcs. required on your quote. This cost will be included in our competitive bid assessment.
- Tactair will send additional parts to allow for qty. you request and will note qty. of allowable setup pcs. on the PO.
- Upon completion of PO, if you have consumed qty. of setup pcs. requested, scrap at your facility and ship the order.
- If quantities do not match PO, you must notify the buyer immediately so that adjustments can be made to the PO and our schedules.
- If you use more than the allowable qty., you must notify us via our SDWR form with component part# and excess qty. only (over the allowable) and must include your CAR. We will pursue credit for the value of the component and it will appear on your quality record. The approved SDWR will designate whether parts should be scrapped at your facility or returned to TFC.



DROP SHIPMENTS

- Drop shipments allow Tactair to reduce lead-times to our customers by up to 4 weeks.
- Castings or forgings are drop shipped direct from the foundry to the machine shop location as noted on the MPO.
- Tactair will review and approve all certification paperwork and notify machine shop of approval. Machine shop to notify Tactair when parts arrive and verify quantity of parts received.
- Use SDWR form to report any damage or dimensional issues with the castings or forgings.
- Must only use the quantity (production and set-up pcs.) allotted on the MPO. If any additional parts are needed, you must get permission from Tactair buyer in writing.
- Parts must be stored properly and lot traceability must be maintained.
- Tactair will request cycle count of all inventory at year end.



PART SERIALIZATION

- Serialization provides complete traceability and an easier more efficient way to locate and segregate parts if necessary.
- Reference our S-3006 specification for marking requirements located on our website under supplier support tab.
- If B/P states “serialization permissible” parts do not have to be serialized.
- If PO note states all parts to be serialized, parts **MUST** be serialized or they will be rejected.
- Serial numbers cannot repeat on a particular part number.
- Any numbering sequence is allowable but we encourage including a company identifier.
- On transferred parts TFC may dictate starting SN.
- **If parts are serialized, serial numbers MUST be referenced on all paperwork: c of c, test data reports, FAI, SDWR and CAR.**
- Use SN to identify unique processing lots. Serialize as early in your process as feasible.



SHIPPING

- PAPERWORK REQUIREMENTS

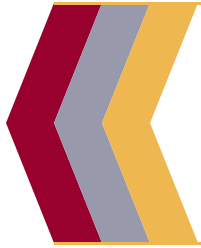
Complete all paperwork outlined in SQARs and POTC

- Include packing lists
- Include all certs from 2nd tier manufacturers, distributors, processors, and suppliers
- Maintain clearly marked lot integrity
- Obtain approval for foreign material, unless DFAR country, prior to manufacture
- Include US lab certs for approved foreign material and any material for which you cannot furnish the original English version of the material cert



CERTIFICATION PAPERWORK

- SQARs with certification paperwork requirements are 008, 009, 014, 014a 015, 016, 017 (incl. NDT), 018, 024 & 028
- All certifications must contain linkable control numbers such as heat number, batch number, work order or job number, ref. SQAR 018
- Specification numbers must match drawings unless otherwise instructed by Tactair in writing and noted on purchase order
- There must be a document for every certifiable process and they must be legible
- Documents must be signed and dated
- Review for any typing errors.
- Review for correct drawing revision level.
- Parts with unacceptable certifications are held in quality and may result in a formal rejection if corrected paperwork is not received within 3 days.
- All quality records must be retained for a minimum of 10 years.



SHIPPING

- PACKAGING & POLICIES

*As noted in POTC Section 26
refer to SQPR-03 on our website for details*

- Package to ensure clearly marked lot integrity
- Separate, protect, and oil parts as required
- Restrain parts securely to avoid damage and “jumbled totes”
- Distinguish parts in multi-order shipments
- Ship collect
- Use Tactair UPS Account Number – Contact your buyer for the account number.
- For shipments over 70 lbs., contact UPS Freight – Contact your buyer for the account number.



QUESTIONS?

Please do not hesitate to contact your buyer with questions as soon as they arise. This communication will help us all ensure high quality and on-time delivery.

SUPPLIER TRAINING

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Training Complete
Thank You