

(A) GENERAL:

(A.1) PRATT & WHITNEY IS THE END USER.

(A.2) DURING PERFORMANCE OF THIS ORDER, YOUR QUALITY CONTROL SYSTEMS AND MANUFACTURING PROCESS ARE SUBJECT TO REVIEW, VERIFICATION, ANALYSIS, AND APPROVAL BY TCT, AND AUTHORIZED P&W AND FAA REPRESENTATIVES.

(A.3) TCT, P&W, AND THE FAA SHALL BE AFFORDED THE RIGHT TO VERIFY AT THE SUPPLIER'S PREMISES ANY INFORMATION RELATING TO THE MANUFACTURE, PROCUREMENT, TESTING, AND/OR INSPECTION OF PRODUCT REQUIRED FOR THE PERFORMANCE OF THIS ORDER.

(A.4) SUPPLIER IS RESPONSIBLE FOR COMPLYING WITH ALL OF THE REQUIREMENTS OF THIS PURCHASE ORDER INCLUDING PROVIDING COMPLETE AND PROPER DOCUMENTATION WITH EACH SHIPMENT OF PRODUCT. IF THE REQUIRED DOCUMENTATION IS INCOMPLETE OR INCORRECT, THE SUPPLIER'S ACCOUNT MAY BE DEBITED \$200.00 PER OCCURRENCE.

(A.5) SUPPLIER IS SUBJECT TO ALL TERMS AND CONDITIONS SPECIFIED ON THE REVERSE SIDE OF THIS PURCHASE ORDER.

(A.6) THE INFORMATION DISCLOSED HEREIN IS PROPRIETARY WITH TURBOCOMBUSTOR TECHNOLOGY, INC (TCT) AND/OR P&W AND SHALL NOT BE DUPLICATED, USED, OR DISCLOSED TO REPRODUCE ARTICLES OR SUBJECT MATTER COVERED THEREIN WITHOUT WRITTEN PERMISSION OF TCT. BY ACCEPTANCE OF THIS P.O., THE SUPPLIER AGREES TO AFFIX THIS STATEMENT TO ANY DUPLICATION THEREOF IN WHOLE OR IN PART.

(A.7) UNLESS OTHERWISE STATED, ALL QUANTITIES STATED HEREIN ARE ESTIMATED QUANTITIES ONLY. TCT'S ACTUAL REQUIREMENTS MAY IN FACT BE

LESS THAN THE AMOUNTS LISTED AS "MAXIMUM" OR "TOTAL". THE FACT THAT NO RELEASES ARE MADE, OR THAT THE RELEASES MADE ARE LESS THAN THE ESTIMATED QUANTITIES, WILL NOT SERVE AS A BASIS FOR AN EQUITABLE ADJUSTMENT UNDER THE "CHANGE" CLAUSE OR ANY TERMINATION CLAUSE. TCT MAKES NO GUARANTEE, WARRANTY, OR ANY OTHER REPRESENTATION THAT ANY OF THE QUANTITIES STATED IN THIS AGREEMENT WILL IN FACT BE REQUIRED. ANY COST SELLER INCURS OUTSIDE THE AGREED UPON LEAD TIME IN ANTICIPATION OF RELEASED REQUIREMENTS WILL BE SOLELY AT THE SELLER'S OWN RISK AND TCT ASSUMES NO LIABILITY THEREFOR.

(A.8) ANY EXPEDITED DELIVERY COSTS (E.G. AIR FREIGHT) CAUSED BY NON-ADHERENCE TO THE PURCHASE ORDER SCHEDULE SHALL BE THE RESPONSIBILITY OF THE SUPPLIER.

(A.9) UNLESS OTHERWISE APPROVED IN WRITING BY TCT, PRODUCT SHALL NOT BE DELIVERED EARLIER THAN TEN (10) DAYS PRIOR TO THE REQUIRED DELIVERY DATE SPECIFIED ON THE PURCHASE ORDER. AT TCT'S DISCRETION, THIS PRODUCT MAY BE RETURNED AT THE SUPPLIER'S EXPENSE.

(B) QUALITY SYSTEMS:

(B.1) SUPPLIER MUST BE CERTIFIED TO AS9100 OR AS7003.

(B.2) SUPPLIER'S QUALITY SYSTEM MUST CONFORM TO ASQR-01.

(B.3) ALL MATERIALS AND PROCESSES SHALL BE CONTROLLED IN ACCORDANCE

WITH THE APPLICABLE PWA MCL-LCS REQUIREMENTS (REF. MCL F-17). APPROVED MCL-LCS SUPPLIERS ARE IDENTIFIED IN MCL APPENDIX 36; WHEN USED, NDT SOURCES MUST BE APPROVED AND BE LISTED IN MCL APPENDIX A, APPROVED COMMERCIAL TEST LABS MUST BE APPROVED AND BE LISTED IN APPENDIX 56, AND SPECIAL PROCESS SUPPLIERS MUST BE APPROVED PER MCL F-36 AND BE LISTED IN MCL SQL.

(B-4) SUPPLIER IS RESPONSIBLE FOR FLOWING DOWN AND FOR ENSURING ADHERENCE TO THE REQUIREMENTS OF THIS PURCHASE ORDER BY ALL SUB-TIERS.

(B.5) N/A.

(B.6) SUPPLIER WILL RETAIN ALL RECORDS IN ACCORDANCE WITH ASQR-01 (UP TO 40 YEARS, DEPENDING ON THE RECORD TYPE), AND WILL MAKE THESE RECORDS AVAILABLE TO TCT UPON REQUEST WITHIN 24 HOURS.

(B.7) AS REQUIRED TO VERIFY PRODUCTS AND PROCESSES, SUPPLIER SHALL USE AND MAINTAIN CALIBRATED INSPECTION AND TEST EQUIPMENT IN ACCORDANCE WITH MCL F-22, ANSI/NCSL Z540.1, ISO 10012, AND ISO/IEC 17025, AS APPLICABLE.

(C) SOURCE SUBSTANTIATION AND FIRST ARTICLE REQUIREMENTS:

(C.1) SPECIAL PROCESSES SHALL NOT BE PERFORMED WITHOUT WRITTEN AUTHORIZATION (VIA BLUEPRINT, P.O., OR SIMILAR). SOURCE SUBSTANTIATION / APPROVAL IS REQUIRED FOR ALL SPECIAL PROCESSES IN ACCORDANCE WITH THE APPLICABLE P&W SPECIFICATION (E.G. PWA300). NO CHANGES MAY BE MADE TO APPROVED SOURCES OR PROCESSES WITHOUT TCT AND/OR P&W APPROVAL, AS APPLICABLE.

(C.2) N/A

(C.3) UNLESS OTHERWISE SPECIFIED ON THE PURCHASE ORDER, A FIRST ARTICLE SHALL BE MANUFACTURED, AND INSPECTION RESULTS SHALL BE DOCUMENTED IN ACCORDANCE WITH AS9102 AND ASQR-08.2. BOTH THE PRODUCT AND INSPECTION RESULTS SHALL BE SUBMITTED TO AND APPROVED BY TCT ENGINEERING (AND/OR P&W IF APPLICABLE) PRIOR TO CONTINUING PRODUCTION.

(D) PRODUCT REQUIREMENTS:

(D.1) SUPPLIERS OF BARSTOCK, CASTINGS, FORGINGS, EXTRUSIONS, ROLLED OR WELDED RINGS, AND SONIC CONFIGURATION PARTS SHALL COMPLY WITH ALL APPLICABLE REQUIREMENTS OF PW-QA 6078.

(D.2) UNLESS OTHERWISE APPROVED IN WRITING BY TCT OR P&W, 100% INSPECTION TO THE BLUEPRINT (B/P) AND/OR P.O. REQUIREMENTS SHALL BE PERFORMED ON ALL PRODUCT PRIOR TO SHIPMENT. ALL SAMPLING PLANS SUBMITTED FOR APPROVAL SHALL BE STATISTICALLY VALIDATED USING A SAMPLE SIZE OF AT LEAST 25. ONCE APPROVED, SPC METHODS SHALL CONTINUE TO BE USED TO ENSURE THE PROCESS CAPABILITY (CPK) IS MAINTAINED AT OR ABOVE A 1.3.

(D.3) HEAT NUMBER / LOT TRACEABILITY SHALL BE MAINTAINED FOR ALL

MATERIALS / PRODUCT DURING ALL STAGES OF PROCESSING THROUGH SHIPMENT TO TCT.

(D.4) UNLESS OTHERWISE SPECIFIED, RAW MATERIAL SHALL BE LINE MARKED WITH THE MATERIAL TYPE AND INDUSTRY SPECIFICATION, SIZE, MILL NAME, AND HEAT NUMBER. PROCESSED MATERIALS SUCH AS CASTINGS, FORGINGS, AND BLANKS SHALL BE INK MARKED WITH THE PART NUMBER AND HEAT NUMBER IF NOT OTHERWISE SPECIFIED ON THE P.O., B/P, OR OTHER REFERENCED DOCUMENTS.

(D.5) IF RAW MATERIAL INCORPORATED INTO THE PRODUCT IS NOT CERTIFIED IN ACCORDANCE WITH MCL-LCS REQUIREMENTS, A SAMPLE OF MATERIAL OF THE SAME HEAT CODE AS THE PRODUCT SHALL BE PROVIDED FREE OF CHARGE TO TCT FOR INDEPENDENT VERIFICATION OF RAW MATERIAL PROPERTIES. THE SAMPLE SIZE SHALL BE 6" X 6" FOR SHEET, STRIP, OR PLATE; 6" LENGTH FOR WIRE, TUBE, OR BAR; OR AS OTHERWISE AGREED UPON FOR OTHER PRODUCT TYPES. THIS REQUIREMENT WILL BE IMPOSED BY MATERIAL SPECIFICATION AT A MAXIMUM FREQUENCY OF ANNUALLY OR WITH EACH SHIPMENT, WHICHEVER IS LESS. (GROUPING OF MULTIPLE PRODUCTS AND/OR MULTIPLE P.O.'S BY COMMON MATERIAL SPECIFICATIONS IS ACCEPTABLE.)

(D.6) ANY SPECIALTY METALS INCORPORATED IN ARTICLES DELIVERED UNDER THIS PO SHALL BE MELTED IN THE UNITED STATES OR OTHER QUALIFYING COUNTRY IN ACCORDANCE WITH DFARS CLAUSE 252.225-7014, "PREFERENCE FOR DOMESTIC SPECIALTY METALS", AND DFARS CLAUSE 225.872-1, "CONTRACTING WITH QUALIFYING COUNTRY SOURCES - GENERAL".

(E) SHIPPING REQUIREMENTS:

(E.1) PACKAGING SHALL BE ADEQUATE TO PREVENT DAMAGE AS WELL AS EXCESSIVE SHIFTING DURING TRANSIT.

(E.2) ALL CONTAINERS OVER 50 LB GROSS WEIGHT SHALL BE PLACED ON A

PALLET TO ENABLE MECHANICAL HANDLING.

(E.3) PAPER, CARDBOARD, OR OTHER SUITABLE MEANS SHALL BE USED TO PREVENT METAL-TO-METAL CONTACT BETWEEN ALL MACHINED/FINISHED SURFACES OF PRODUCT.

(E.4) PACKAGING SHALL BE CLEARLY IDENTIFIED WITH THE FOLLOWING INFORMATION: SUPPLIER NAME, P.O. NUMBER, PART NUMBER OR PRODUCT DESCRIPTION, BATCH NUMBER OR HEAT NUMBER, AND SHELF LIFE (IF APPLICABLE).

(E.5) PRODUCT SHALL BE PRESERVED IN ACCORDANCE WITH THE APPLICABLE REQUIREMENTS OF PARAGRAPH 5 OF P&W SPECIFICATION POP 1614, UNLESS OTHERWISE APPROVED BY TCT.

(F) DOCUMENTATION REQUIREMENTS:

(F.1) PACKING SLIP, WHICH INCLUDES SUPPLIER'S INFORMATION, THE PART NUMBER AND QUANTITY BEING SHIPPED, THE PACKING SLIP NUMBER, AND THE P.O. NUMBER (INCLUDING LINE AND RELEASE NUMBERS).

(F.2) CERTIFICATE OF CONFORMANCE, WHICH INCLUDES THE SUPPLIER'S INFORMATION, THE TCT P.O. NUMBER, THE PART NUMBER ORDERED AND QUANTITY BEING SHIPPED, HEAT NUMBER, THE PACKING SLIP NUMBER, A CERTIFICATION STATEMENT INDICATING THAT THE PRODUCT IS FULLY CONFORMING TO ALL REQUIREMENTS OF THE PURCHASE ORDER, BLUEPRINTS, SPECIFICATIONS, AND OTHER ASSOCIATED DOCUMENTS, AND REFERENCE TO DOCUMENTATION AUTHORIZING SHIPMENT OF NONCONFORMING PRODUCT (IF APPLICABLE).

(F.3) UNALTERED PRODUCING MILL CERTIFICATION FROM A P&W APPROVED TESTING LAB, INCLUDING RAW MATERIAL TESTING RESULTS AND REFERENCES TO MATERIAL SPECIFICATIONS AS REQUIRED BY P.O. OR B/P AND TRACEABLE TO EACH HEAT NUMBER, SHALL BE INCLUDED WITH EACH SHIPMENT.

(F.4) MATERIAL SAFETY DATA SHEET (MSDS) - ONLY REQUIRED WITH THE INITIAL SHIPMENT ON THIS P.O.

(F.5) DOCUMENTATION FROM TCT AUTHORIZING SHIPMENT OF NONCONFORMING PRODUCT (IF APPLICABLE), WHICH REFERENCES THE P.O. NUMBER, PART NUMBER AND QUANTITY AUTHORIZED FOR SHIPMENT.

(F.6) TEST AND CERTIFY TO THE FOLLOWING SPECIFICATIONS AS APPLICABLE FOR NON-ROTOR

APPLICATIONS (AS APPLICABLE):

-BAR, ROD, TUBE, PLATE, SHEET, STRIP, WIRE: F-14, E-25 AND TO THE FOLLOWING MATERIAL SPECIFIC REQUIREMENTS (THIS LIST IS FOR REFERENCE, AND DOES NOT WAIVE ANY ADDITIONAL REQUIREMENTS CONTAINED WITHIN F-14):

-INCO 718 SHEET/STRIP: TEST AND CERTIFY TO E-44.

-WASPALOY: TEST AND CERTIFY TO E-39.

-BRAZE/WELD WIRE: TEST AND CERTIFY TO F-53.

-FORGINGS: F-4, F-65

-CASTINGS: F-11

(F.7) LCS SUPPLIERS (REF. MCL APPENDIX 36) SHALL CLEARLY STATE THE FOLLOWING (OR SIMILAR) ON THE CERTIFICATE OF CONFORMANCE: "PARTS HAVE BEEN CONTROLLED TO MCL MANUAL SECTION F-17".

(F.8) NON-LCS SUPPLIERS (REF. MCL APPENDIX 36) SHALL CERTIFY TO F-22, AND OTHER APPLICABLE F SECTIONS. IN ADDITION, CLEARLY STATE THE FOLLOWING ON THE CERTIFICATE OF CONFORMANCE: "PRODUCT/PROCESS NOT LCS CERTIFIED. TESTING REQUIRED UPON RECEIPT."

(G) NONCONFORMING PRODUCT:

(G.1) IF TCT ENGINEERING HAS AGREED IN WRITING (PRIOR TO SHIPMENT) TO ACCEPT NONCONFORMING PRODUCT IN ITS CURRENT CONDITION, THE SUPPLIER SHALL SUPPLY A SEPARATE CERTIFICATE OF CONFORMANCE FOR THE NONCONFORMING PRODUCT, REFERENCING THE P.O. NUMBER, PART NUMBER, QUANTITY, MEANS OF TRACEABILITY, ETC. THE DOCUMENT SHALL ALSO STATE THAT THE PRODUCT DOES NOT FULLY CONFORM TO THE PURCHASE ORDER REQUIREMENTS AND SHALL IDENTIFY AND TAKE EXCEPTION TO THE SPECIFIC NONCONFORMANCES IDENTIFIED. SUPPLIER SHALL ALSO INCLUDE DOCUMENTATION FROM TCT AUTHORIZING ITS SHIPMENT.

(G.2) IF PRODUCT IS FOUND TO BE NONCONFORMING UPON RECEIPT BY TCT (AND

WITHOUT PRIOR NOTIFICATION OF THE NONCONFORMANCE BY THE SUPPLIER AND SHIPMENT AUTHORIZATION BY TCT), AND IS DEEMED BY TCT ENGINEERING TO BE REWORKABLE TO A USABLE CONDITION, SUPPLIER MAY BE HELD RESPONSIBLE FOR ALL COSTS INCURRED BY TCT ASSOCIATED WITH REWORKING THE PRODUCT, UP TO ITS ORIGINAL PURCHASE PRICE.

(G.3) WHEN SHIPPING TO TCT, NONCONFORMING PRODUCT SHALL BE PHYSICALLY IDENTIFIED USING A TEMPORARY METHOD OF IDENTIFICATION (PREFERABLY A RED TAG). NONCONFORMING PRODUCT, WHEN SHIPPED WITH CONFORMING PRODUCT, SHALL BE SEGREGATED IN SEPARATE BAGS, BOXES, OR OTHER APPROPRIATE PACKAGING. THE PACKING SLIP SHALL IDENTIFY THE NONCONFORMING PRODUCT (QUANTITY AND IDENTIFICATION/TRACEABILITY) SEPARATELY FROM THE CONFORMING PRODUCT.

[REV 04/04/11, MOVED F-22 FROM F6 TO F8,

REV 02/05/11,INSERTED NEW D1 TO INCORPORATE PW-QA 6078,

REVISED F2 CERTIFICATE OF CONFORMANCE REQUIREMENTS;

REV. 12/15/10 ADDED F7, F8, REVISED F-SPEC REFERENCES IN B3, B7, F6; REV. 11/10/10 ADDED E5, REMOVED REFERENCES TO OTHER UTC COMPANIES; REV. 07/14/09 REF. NOTE C1,D4,D5; REV. 07/16/08 REF. NOTE A9;

REV. 05/27/08 REF. NOTES D,F; REV. 04/15/08 REF. NOTE A7]