QUALITY ASSURANCE PROVISIONS

C-321: SPECIFICATION

NSN: 9G 1650 00-058-0646
P/N: (78286) 65251-08062-101
NOMEN: Cylinder, Drag Strut M.L.G.

Articles to be furnished hereunder shall be manufactured, tested and inspected in accordance with drawing number (78286) 65251-08062-101 Rev. "M", or latest revision and all details and specifications referenced therein.

I. Quality/Inspection Requirements

A. MIL-I-45208 applies:
B. First Article Testing applies:
C. Mandatory Inspection applies: Refer to contract section C.
D. Production Lot Testing Applies

II. Supplemental Requirements

A. Additionally, para. 3.1-3.5, 5.1-5.2, 6.1-6.2 of MIL-Q-9858 apply.

B. The contractor shall include on the detailed process/operation sheets developed, a tracking method that is traceable to the contract, all in-house manufacturing processes and the identity of all manufacturing sources performing processes/operations outside of their said facility. These sheets shall not be revised or altered after sucessful completion of First Article/Production Lot Testing without the approval from the Basic Design Activity (BDE) via the P.C.O..

C. The Inspection Method Sheets which list the characteristics of each item produced under the contract shall have serial number traceability to the raw material, casting, or forging. The tracking method used on the inspection / method sheets shall be traceable to the contract. In addition, the contractor is responsible for providing completed inspection method sheets showing the actual dimensions taken of all *Critical Characterisitics*.

D. Markings should be in accordance with MIL-STD-130 Rev. "H" paragraph 5.3.3(a), (b),(c), and (g). Method and location shall be in accordance with the drawing.

III. Mandatory Inspection Requirements

During production, mandatory inspection is required to be accomplished by the contractor, as follows:

A. Level of Inspection (LOI):

1) Critical Characteristics: 100% inspection shall apply.

2) Major and Minor Characteristics - LOI shall be in accordance with a sampling plan acceptable to the QAR.

B. Critical Characteristics:

Drawing: 65251-08062-101
Zone B4
65^0 +/- $0^05'$
Zone B4
Dia. -C- 3.500 +.000 -.002 to be maintained concentric to Datum -A- within .001 T.I.R.
Zone B4
3 $^{5/8}$-16-3 thread, pitch dia. of thread is to be maintained concentric to datum -C- within .0015 T.I.R.
Zone B6
3 $^{5/8}$-16-3 thread, pitch dia. of thread is to be maintained concentric to datum -B- within .0015 T.I.R.
ZoneB6
Dia.-B- 3.500 +.000 -.002 to be maintained concentric to Datum -A- within .001 T.I.R.

C. Major and Minor Characteristics:

1) Shall be defined by the contractor subject to QAR concurrence, unless defined on applicable drawings and associated specifications.

IV. Unless expressly provided for elsewhere in this Clause, equipment such as fixtures, jigs, dies, patterns, templates, mylars, special tooling, test equipment, or any other manufacturing aid required for the manufacture and/or testing of the subject items will not be provided by the Government or any other source and is the sole responsibility of the Government or any other source and is the sole responsibility of the contractor. The foregoing applies notwithstanding any reference to such equipment or the furnishing thereof that may be contained in any drawing.

I-961 FIRST ARTICLE TESTS REQUIRED (Government Testing)

I. First Article Inspection/Test Criteria:

The tests to be performed under the First Article approval clause of the contract are:

A. Dimensional Check 100 % of finished part

B. Form / Fit

C. Compliance with drawing, (**78286**) ***65251-08062-101 Rev.*** "M", and specifications referenced therein.

D. Review documentation as provided under DD 1423 requirements.

In addition to the above tests, the First Articles to be delivered hereunder shall also be subjected to those tests which will demonstrate that the articles comply with contract requirements.
The contractor shall be responsible for providing necessary parts and repair of the First Article (s) during testing.
The contractor shall be responsible for providing necessary parts and repair of the First Article Sample (s) during testing.

II. Special Instructions:

Sample (s) may be considered as production items under the contract provided the sample(s) can be refurbished to ready for issue (RFI) condition and provided the sample(s) have inspection approval of the cognizant QAR. Sample(s) may be shipped as production items only after all other units required under the contract have been produced and are ready for shipment.

Notification of Shipment of Material For Governm,ent Testing:

A. Fourteen (14) days prior to shipment of First Article Sample (s) the contractor shall notify the designated test facility, in writing of the antisipapated shipping date, with an information copy to the PCO, ACO, and QAR The contractor shall also arrange for preliminary inspection of test samples by the CAO/QAR.

B. Upon shipment of First Article Samples, two (2) copies of the Material Inspection and Recieving report (DD form 250), bearing the QAR's signiture and indication of preliminary inspection, shall be fowarded to the PCO / ACO and the designated test facility. The envelopes shall be clearly marked, "DO NOT OPEN IN MAILROOM".

I-964 FIRST ARTICLE APPROVAL (GOVERNMENT TESTING)

A. The contractor shall deliver two (2) units of lot / item 001 within 180 calander days from the date of this contract to the government designated facility listed below.

NAVANDEPOT CHERRY POINT
Attn: Betty Lupton, code 6.3.674
PSC Box 8021
MCAS Cherry Point, NC 28533

Marking of test sample (s) shipping container:
"FOR FIRST ARTICLE TESTING. NOT FOR RFI, DO NOT TAKE UP IN STOCK".
CONTRACT NUMBER:

For First Article Test, the shipping documentation shall contain this contract number and the lot/item indentification. The characteristics that the First Article must meet and the testing requirements that are specified elesewhere in this contract.

B. If the First Article is disapproved, the contractor, upon Government request, shall submit an additional First Article for testing. After each request, the contractor shall make any necessary changes, modification, or repairs to the First Article or select another First Article for testing. All costs related to these tests are to be borne by the contractor, including any and all costs for additional tests following a disapproval. The contractor shall furnish any additional First Article to the Government under the terms and conditions and within the time specified by the Government.
The government shall act of this First Article within the time limit specified in paragraph" **B"** above. The government reserves the right to require an equitable adjustment of the contract price for any extension of the delivery schedule or for any additional costs to the Government related to these tests.

C. If the contractor fails to deliver any First Article on time, or the contracting officer disapproves any First Article, the contractor shall be deemed to have failed to make delivery within the meaning of the default clause of this contract.

D. Unless otherwise provided in the contract, and if the approved First Article is not consumed or destroyed in testing, the contractor-

1) May deliver the approved First Article as part of the contract quantity if it meets all contract requirements for acceptance.

2) Shall remove and dispose of any First Article from the government test facility at the contractors expense.

E If the Government does not act within the time specified in paragraph **B** or **C** above, the contracting officer shall, upon timely written request from the contractor, equitably adjust under the changes clause of this contract the delivery or performance dates and/or the contract price, and any other contractual term affected by the delay.

G. Before First Article approval, the acquisition of materials or components for, or the commencement of production of, the balance of the contract quantity is at the sole risk of the contractor. Before First Article approval, the costs thereof shall not be allocable to this contract for 1) progress payments, or 2) termination settlements if the contract is terminated for the convenience of the Government.

H. The contractor shall produce both the First Article and the production quantity at the same facility and shall submit a certification to this effect with each First Article.

I. The contractor shall provide specific written notification to the procuring contractor officer informing him/her of the shipment of any articles furnished in accordance with this clause. Such notification must be addressed to the attention of the ACO with copies to NAVICP 072 and to the testing activity. Failure to provide such notiication shall excuse the government from any delay in performing First Article Testing and informing the contractor of the sesults thereof.

C-330 PRODUCTION LOT TESTING REQUIREMENTS

The material produced under contract shall be accepted by the cognizant CAO/QAR upon the successful completion of these requirements.

I. **Production Lot Test Requirements**

A. The cognizant CAO/QAR shall select two (2) item (s) at random from the production lot. In addition the QAR shall select one (1) item (s) at random from each successive lot or portion thereof.

B. Production Lot Testing to be completed during production after First Article Approval.

C. Sample (s) are to be unpainted. Corrosive areas to be coated with a light preservative.

II. The tests to be performed under the Production Lot Sample testing provisions of the contract are:

A. Compliance with drawing ***(78286) 65251-08062-101 rev. "M"*** or latest revision and all specification referenced therein.

B. Dimensional Check

In addition to the above tests, the Production Lot Sample(s) to be delivered hereunder shall also be subjected to those tests which will demonstrate that the sample(s) comply with contract requirements.

III. **Testing location**

A. Ship sample(s)/data to:
NAVANDEPOT CHERRY POINT
Attn: Betty Lupton, code 6.3.674
PSC Box 8021
MCAS Cherry Point, NC 28533

B. Shipping container marking: NON RFI

Within fifteen (15) days of completion of Production Lot Testing the CAO/QAR shall prepare and submit two (2) copies of their test report with conclusions and recommendations to the Contracting Officer.

Shipment and Distribution of Sample(s):

A. Fourteen (14) days prior to shipment of Production Lot Sample (s) the contractor shall notify the designated test facility, in writing of the antisipapated shipping date, with an information copy to the PCO, ACO, and QAR The contractor shall also arrange for preliminary inspection of test samples by the CAO/QAR.

B. Upon shipment of Production Lot Samples, two (2) copies of the Material Inspection and Recieving report (DD form 250), bearing the QAR's signiture and indication of preliminary inspection, shall be fowarded to the PCO / ACO and the designated test facility. The envelopes shall be clearly marked, "DO NOT OPEN IN MAILROOM".

C. Sample(s) may be considered as production items under the contract provided sample(s) can be refurbished to ready For Issue (RFI) condition and provided sample(s) have inspection approval of the cognizant DCMAO. Sample(s) may be shipped as production items only after all other units required under the contract have been produced and are ready for shipment.

D. Sample(s) will be returned to the contractor.

E. The designated test facility and the contracting officer shall be notified as to all shipping data applicable to the sample(s), such as bill of lading number, method of shipment, etc...14 days prior to shipping.

C-331 PRODUCTION LOT TESTING (GOVERNMENT TESTING)

A. The Production Lot Samples shall be:

1.Selected at random by the cognizant government QAR. Such sample(s) shall be submitted via the cognizant government inspector, all transportation charges prepaid by the contractor to:

NAVANDEPOT CHERRY POINT
Attn: Betty Lupton, code 6.3.674
PSC Box 8021
MCAS Cherry Point, NC 28533

2. The samples shall be identified by contract number, lot number, and be clearly marked as follows:

PRODUCTION LOT TEST SAMPLES
NOT R.F.I. MATERIAL
DO NOT TAKE UP IN STOCK

B. Such samples shall be delivered to the testing facility in sufficient time prior to the delivery date of the production articles to allow a 60 day period for testing and written notification by the contracting officer of the approval or disapproval of the samples.Within 90 days of the reciept of the samples, the testing facility shall notify contracting officer, PCO /ACO of the results of the testing, together with the recommendation for approval or disapproval.

C. In the event the contractor does not recieve written notification of approval or disapproal of the samples for a particular lot within 60 days from their submission for such testing, the contract delievery schedle shall be equitably adjusted as necessary.

D. If the contractor fails to deliver any Production Lot Samples for testing within the time or times specified, or if the contracting officer disapproves any Production Lot Samples, the contractor shall be deemed to have failed to make delievery within the meaning of the default clause of this contract, and this contract shall be subject to termination for default.

E. In order for a Production Lot to be acceptable, all samples representative of the lot must pass all the contract requirements. In the event a sample fails to pass such requirements, the lot will be rejected. In such event, the government may, at its option and at no additional cost to the government, (I) terminate all or any porition of this contract for default, (II) require the manufacture of a new Production Lot, or a rework of the rejected Production Lot if the means and procedures by the contractor for rework are acceptable to the government, or (III) require the submission of additional samples for test. The foregoing procedures shall apply to new or reworked Production Lots in the same way as they did to the original Production Lot.

F. For each additional sample or each resubmission of a modified sample which the contractor is required to submit for approval hereunder as a result of a failure of a previos sample to conformto the requirements of the specification, the contractor shall pay to the

government the costs of reinspection, examination and retesting and the contractor and his sureties (if any) shall be liable for the amount of such costs.

G. Nothing contained in the foregoing provisions of this clause. and no action of the government in accordance herewith, shall in any way prejudice the right of the government under the clause of this contract entitled Default.

CONTRACT DATA REQUIREMENTS LIST
(2 Data Items)

FORM APPROVED
OMB NO. 0704-0188

PUBLIC REPORTING BURDEN FOR THIS COLLECTION OF INFORMATION IS ESTIMATED TO AVERAGE 440 HOURS PER RESPONSE, INCLUDING THE TIME FOR REVIEWING INSTRUCTIONS, SEARCHING EXISTING DATA SOURCES., GATHERING AND MAINTAINING THE DATA NEEDED AND COMPLETING AND REVIEWING THE COLLECTION OF INFORMATION. SEND COMMENTS REGARDING THIS BURDEN ESTIMATE OR ANY OTHER ASPECT OF THIS COLLECTION OF INFORMATION, INCLUDING SUGGESTIONS FOR REDUCING THIS BURDEN TO DEPT. OF DEFENSE, WASHINGTON HEADQUARTERS SERVICES, DIRECTORATE FOR INFORMATION OPERATIONS AND REPORTS, 1215 JEFFERSON DAVIS HWY., SUITE 1204, ARLINGTON, VA. 22202-4302, AND TO THE OFFICE OF MANAGEMENT AND BUDJET, PAPERWORK REDUCTION PROJECT (0704-0188) , WASH. DC 20503. PLEASE DO NOT RETURN YOUR FORM TO EITHER OF THESE ADDRESSES. SEND COMPLETED FORM TO THE GOVERNMENT ISSUING CONTRACTING OFFICER FOR THE CONTRACT / PR NO. LISTED IN BLOCK E.

A. CONTRACT LINE ITEM NO.	B. EXHIBIT	C. CATEGORY: TDP TM OTHER
D. SYSTEM/ITEM 9G 1650 00-058-0646	E. CONTRACT/ PR. NO.	F. CONTRACTOR

1. DATA ITEM NO.	2. TITLE OF DATA ITEM	3. SUBTITLE
1	CERTIFICATION DATA REPORT	COMPLETE PROCESS OP SHEETS

4. AUTHORITY (Data acquisition document No.)	5. CONTRACT REFERENCE	6. REQUIRING OFFICE
DI-MISC-80678/T1		DEFENSE SUPPLY CENTER RICHMOND

7. DD 250 REQ	9. DIST STATEMENT REQUIRED	10. FREQUENCY	12. DATE OF FIRST SUBMISSION
LT		AS REQ	SEE BLOCK #16
8. APP CODE		11. AS OF DATE	13. DATE OF SUBSEQUENT SUBMISSION
A		AS REQ	SEE BLOCK #15

16. REMARKS

PARA. 10.1, 10.2, 10.2.1, 10.2.2, 10.2.4, 10.2.5 SHALL APPLY
* UPON SUBMISSION OF FIRST ARTICLE/ PRODUCTION LOT TEST SAMPLE (s)
** IF PROCESS OPERATION SHEETS CHANGE AFTER SUCCESSFUL COMPLETION OF FAT/ PLT.

14. DISTRIBUTION

a. ADDRESSEE	b. COPIES Draft	Final Reg	Final Repro
DCMC / ACO	*	1/0	
DCMC / QAR	**	1/0	
PCO		1/0	
15. TOTAL		3/0	

1. DATA ITEM NO.	2. TITLE OF DATA ITEM	3. SUBTITLE
2	CERTIFICATION DATA REPORT	COMPLETE INSPECTION METHOD SHEETS

4. AUTHORITY (Data acquisition document No.)	5. CONTRACT REFERENCE	6. REQUIRING OFFICE
DI-MISC-80678/T2		DEFENSE SUPPLY CENTER RICHMOND

7. DD 250 REQ	9. DIST STATEMENT REQUIRED	10. FREQUENCY	12. DATE OF FIRST SUBMISSION
LT		AS REQ	SEE BLOCK #16
8. APP CODE		11. AS OF DATE	13. DATE OF SUBSEQUENT SUBMISSION
A		AS REQ	SEE BLOCK #1`6

16. REMARKS

PARA. 10.1, 10.2, 10.2.1, 10.2.2, 10.2.4, 10.5 SHALL APPLY
* UPON SUBMISSION OF FIRST ARTICLE / PRODUCTION LOT TEST SAMPLE (s)
** AT TIME OF CONTRACT COMPLETION.

14. DISTRIBUTION

a. ADDRESSEE	b. COPIES Draft	Final Reg	Final Repro
DCMC / ACO	*	1/0	
DCMC / QAR	**	1/0	
PCO		1/0	
15. TOTAL			

G. PREPARED BY	H. DATE	I. APPROVED BY	J. DATE
John D. Leighty		John D. Leighty pg 1 of 3	

CONTRACT DATA REQUIREMENTS LIST
(2 Data Items)

FORM APPROVED
OMB NO. 0704-0188

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A. CONTRACT LINE ITEM NO.	B. EXHIBIT	C. CATEGORY: TDP TM OTHER
D. SYSTEM/ITEM 9G 1650 00-058-0646	E. CONTRACT/ PR. NO.	F. CONTRACTOR

1. DATA ITEM NO.	2. TITLE OF DATA ITEM	3. SUBTITLE
3	REQUEST FOR WAIVER	

4. AUTHORITY (Data acquisition document No.)	5. CONTRACT REFERENCE	6. REQUIRING OFFICE
DI-CMAN-80640B		DEFENSE SUPPLY CENTER RICHMOND

7. DD 250 REQ	9. DIST STATEMENT REQUIRED	10. FREQUENCY	12. DATE OF FIRST SUBMISSION
LT		AS REQ	
8. APP CODE		11. AS OF DATE	13. DATE OF SUBSEQUENT SUBMISSION

16. REMARKS

14. DISTRIBUTION a. ADDRESSEE	b. COPIES Draft	Final Reg	Final Repro
DCMC / ACO		1/0	
DCMC / QAR		1/0	
PCO		1/0	
15. TOTAL		3/0	

1. DATA ITEM NO.	2. TITLE OF DATA ITEM	3. SUBTITLE
4	REQUEST FOR DEVIATION	

4. AUTHORITY (Data acquisition document No.)	5. CONTRACT REFERENCE	6. REQUIRING OFFICE
DI-CMAN-80641B		DEFENSE SUPPLY CENTER RICHMOND

7. DD 250 REQ	9. DIST STATEMENT REQUIRED	10. FREQUENCY	12. DATE OF FIRST SUBMISSION
LT		AS REQ	
8. APP CODE		11. AS OF DATE	13. DATE OF SUBSEQUENT SUBMISSION

16. REMARKS

14. DISTRIBUTION a. ADDRESSEE	b. COPIES Draft	Final Reg	Final Repro
DCMC / ACO		1/0	
DCMC / QAR		1/0	
PCO		1/0	
15. TOTAL		3/0	

G. PREPARED BY	H. DATE	I. APPROVED BY	J. DATE
John D. Leighty		John D. Leighty 2 of 3	

CONTRACT DATA REQUIREMENTS LIST
(1 Data Item)

Form Approved
OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average 110 hours pe response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden , to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. Please DO NOT RETURN your form to either of these addressess. Send completed form to the Government Issuing Contracting Officer of the Contract/PR No. listed in Block E.

A. CONTRACT LINE ITEM NO.	B. EXHIBIT	C. CATEGORY: TOP ____ TM ____ OTHER ____

D. SYSTEM/ITEM	E. CONTRACT/PR	F. CONTRACTOR
9G 1650 00-058-0646		

1. DATA ITEM	2. TITLE OF DATA ITEM	3. SUBTITLE
5	**CERTIFICATION DATA / REPORTS**	

4. AUTHORITY (Data Acquisition	5. CONTRACT REFERENCE	6. REQUIRING OFFICE
DI-MISC-80678/T3		**DEFENSE SUPPLY CENTER RICHMOND**

7. DD 250 REQ	9. DIST	10. FREQUENCY	12. DATE OF FIRST SUBMISSION
LT	STATEMENT REQUIRED	**AS REQ**	**SEE BLOCK 16***
8. APP CODE		**11. AS OF DATE**	**13. DATE IF SUBSEQUENT**
A		**AS REQ**	**SEE BLOCK 16***

17. PRICE GROUP
18. ESTIMATED TOTAL PRICE

PARA. 10.1,10.2,10.2.1,10.2.2,10.2.4,10.5 APPLY

BLOCK#12 -UPON SUBMITTAL OF FIRST ARTICLE SAMPLE (S) AND/OR PRODUCTION LOT SAMPLE.

BLOCK #3-SEPERATE REPORTS SHALL BE PROVIDED FOR THE BELOW LISTED SUB TITLES. CERTIFICATION REPORTS FOR PRIME PROCESS AND MATERIAL SPECIFICATIONS SHALL INCLUDE CERTIFICATION THAT ALL VENDORS PREFORMING THESE PROCESSES ARE PRIME (OEM) *(78286) Sikorsky Aircraft* APPROVED SOURCES.

BLOCK #5 - CONTRACT REFERENCE: P/N: **65251-08062-101**
Material :4340 Tube per AMS 6415
After rough machining heat treat per Mil-H-6875 and note #2
Note #3 applies
Electroless nickle plate per AMS 2404 and note #9
Magnetic Particle insp per ASTM E1444
Epoxy Primer per Mil-P-233778
Acrylic Lacquer per Mil-L-17538
After plate bake at 375° +/- 25° for 6 houres
These certifications are required at First Article Testing or contract completion if testing is waived.

14. DISTRIBUTION			
a. ADDRESSEE	b. COPIES		
	Draft	Final	
		Reg	Repro
DCMC / ACO		1/0	
DCMC / QAR	*	1/0	
PCO	**	1/0	
		3/0	

G. PREPARED BY	H. DATE	I. APPROVED BY	J. DATE
John.D. Leighty		John.D. Leighty pg 3 of 3	

DD Form 1423-1, JUN 90 *Previous editions are obsolete.*

1007/183 S/N 0102-LF-010-5500