


APPLICATION	REVISIONS				
NEXT ASSY	USED ON	REV	DESCRIPTION	DATE	APPROVED
		J	Revised per CIN 65352	9/22/1999	

ALL SHEETS ARE REV J

APPROVALS		DATE	Teledyne Electronics and Communications LOS ANGELES, CALIFORNIA		
PREPARED	M. Bloom	8/13/96	 QUALITY ASSURANCE PROVISIONSS P.O. FORM		
CHECKED	T. Nunez	8/14/96			
APPROVED	M. Maat	8/15/96			
APPROVED			SIZE A	CAGE CODE 16170	DRAWING NO. 7700033
			SCALE	REV J	Sheet 1 of 11

1.0 SCOPE

This document is applicable whenever Quality Assurance procurement requirements are selected for, or transmitted on the Purchase Order to suppliers of service(s) or material(s) to Teledyne Electronic Technologies, MDR Facility. These Quality Provisions (Q.P. Riders), are assigned by Supplier Quality Assurance (SQA), to facilitate the communication of Quality Assurance procurement requirements to suppliers of service(s) or material(s) to TET MDR.

2.0 QUALITY PROVISIONS

The Quality Program Provisions are incorporated herein as Attachment A.

3.0 MERCURY FREE CERTIFICATION

Depending on the product(s) or material(s) purchased, some Suppliers will be required to complete and return a Mercury Free Certification. The Mercury Free Certification is shown in Figure 1., and shall be completed as provided for by Quality Provision number 279.

4.0 VENDOR ATTACHMENT "A"

Pages A-1 through page A-8 of this document shall be issued to approved Vendors at the time the Request for Quotation (RFQ) is issued. When purchase negotiations are complete and the Quality Provisions are noted on the Purchase Order, pages A-1 though A-8 (Vendor Attachment "A"), shall be issued to the successful bidder again with the Purchase Order.

SIZE A	CAGE CODE 16170	DRAWING NO. 7700033
SCALE	REV J	Sheet 2

SUPPLIER TAKE NOTE

QUALITY PROGRAM PROVISIONS (PURCHASE ORDER)

THE INDICATED QUALITY PROGRAM PROVISIONS WITH THEIR TERMS AND CONDITIONS BECOME AN INTEGRAL PART OF THE PURCHASE ORDER. THE APPLICABLE QUALITY PROGRAM PROVISIONS ARE INDICATED BY NUMBER ON THE FIRST PAGE OF THE PURCHASE ORDER OR PURCHASE CHANGE ORDER IN THE AREA LABELED Q.P. RIDER PROVISIONS .THE TEXT FOR THE NUMBERS APPEARING IN THIS BLOCK ARE DEFINED IN NUMERICAL SEQUENCE ON THE FOLLOWING PAGES.

NOTE: (Applicable to all procurement):

- (1.) Where a specification is referred to herein, it shall be construed as being of date of issue as of the date of this Purchase Order or a firm quotation, whichever is earlier.
- (2.) Nonconforming Material

The seller is not authorized to perform material review action of nonconforming materials, with the intent of delivering such nonconforming materials, without the express written authorization from Teledyne Electronic Technologies, MDR Facility. Disposition of any departures from drawings, specifications. or other purchase order requirements must be approved by the Teledyne Product Assurance Department prior to shipment.
- (3.) Resubmission of Rejected Material

All material rejected by Teledyne and subsequently resubmitted by the supplier to Teledyne shall bear adequate identification of such resubmission either with the material or on the supplier's shipping document. Reference shall be made to Teledyne rejection document and evidence given that the causes for rejection have been corrected. Government Source Inspected Material must have evidence that the resubmission has also received GSI.

SIZE A	CAGE CODE 16170	DRAWING NO. 7700033
SCALE	REV J	Sheet 3

QUALITY PROGRAM INSPECTION SYSTEMS

100. MIL-PRF-19500

The seller shall comply with APPENDIX D of Military Specification MIL-PRF-19500, "Military Specification Semiconductor Devices, General Specification For", and all other terms of this Purchase Order in the manufacture and delivery of these materials.

101. NHB 5300.4(1B) (Formerly NPC200-2)

The seller shall comply with NASA Reliability and Quality Assurance Publication NHB 5300-4(1B), "Quality Program Provisions for Aeronautical and Space System Contractors", and all other terms of this Purchase Order in the manufacture and delivery of these materials.

102. NHB 5300.4(1C) (Formerly NPC 200-3)

The seller shall comply with NASA Reliability and Quality Assurance Publication NHB 5300.4(1C), "Inspection System Provisions for Aeronautical and Space System Materials, Parts, Components and Services", and all other terms of this Purchase Order in the manufacture and delivery of these materials.

103. MIL-Q-9858

The seller shall comply with Military Specification MIL-Q-9858, "Quality Program Requirements", and all other terms of this Purchase Order in the manufacture and delivery of these materials.

104. MIL-I-45208

The seller shall comply with Military Specification MIL-I-45208, "Inspection System Requirements", or the "Ingernation Standards for Quality Systems" ISO 9001, ISO 9002 OR ISO 9003 and all other terms of this Purchase Order in the manufacture and delivery of these materials.

105. MIL-PRF-38534

The seller shall comply with Appendix A of Military Specification MIL-PRF-38534, "Hybrid Microcircuits, General Specification for", and all other terms of this Purchase Order in the manufacture and delivery of these materials.

106. Quality Assurance Plan

A detailed and procurement-specific Quality Assurance Plan shall be submitted to Teledyne Microelectronics for approval at least 90 days prior to acceptance inspection/test of materials to be provided under this Purchase Order. Major inspection and test control points are to be identified in relation to the overall manufacturing cycle (flow plan), and acceptance criteria at these points are to be specified. Sample Acceptance Inspection/Test forms and work instructions are to be included. The seller's Quality Assurance Procedures Manual shall be provided with the plan.

107. Inspection and Test Plan

The seller shall prepare an inspection and test plan including a flow chart of inspection and test points. The type of inspection or test at each point must be identifiable to the item(s) being fabricated on this Purchase Order.

a) Two (2) copies of the inspection and test plan shall be submitted to Teledyne through the buyer for approval by the Teledyne Product Assurance Department prior to start of fabrication.

b) The initial shipment on this order must be accompanied by one (1) legible and reproducible copy of seller's certification identifiable to materials submitted, that the inspection and test plan is on file and is available upon request. The certification shall contain the signature and title of an authorized representative of the seller.

108. MIL-PRF-38535

The seller shall comply with Appendix C of Military Specification MIL-PRF-38535, "Integrated Circuits (Microcircuits) Manufacturing, General Specification For", and all other terms of this Purchase Order in the manufacture and delivery of these materials.

SURVEILLANCE/SPECIAL INSPECTION

120. Government Source Inspection NASA Contracts

"All work on this order is subject to inspection and test by the Government at any time

SIZE A	CAGE CODE 16170	DRAWING NO. 7700033
SCALE	REV J	Sheet 4

and place. The Government Quality representative who has been delegated NASA Quality Assurance functions on this procurement shall be notified immediately upon receipt of this order. The Government representative shall also be notified 48 hours in advance of the time articles or materials are ready for inspection or test."

121. Certified Supplier Procurement

All items covered under this Purchase Order are to be processed in accordance with the Supplier Certification agreement on file between the supplier and Teledyne Electronic Technologies. Teledyne Source Inspection is not required on this order (Q.P. Rider 130 does not apply.)

122. Government Source Inspection - Military Contracts

Government inspection is required prior to shipment from your plant. Upon receipt of this order, promptly furnish a copy to the Government representative who normally services your plant or, if none, to the nearest Army, Navy, Air Force or Defense Supply Agency Inspection Office. In the event the representative office cannot be located, our purchasing agent shall be notified immediately.

123. Government Surveillance - NASA and Military Contracts

"The Government has the right to enter and review any or all of the work included in this order at the supplier's plant." Government inspection or release of product prior to shipment is not required.

124. Source Inspection and Administration of Navy Procurement

The manual of Source Inspection and Administration of Navy Procurement (NAVEXOS P-1034, Appendix A) is hereby incorporated in, and made part of, the requirements of this order.

125. Government Source Inspection for MIL-PRF-19500 Devices

a) Device Manufacturers. During the performance of this order your Quality Control or Inspection System and Manufacturing Processes are subject to review, verification and analysis by authorized Government representatives. Government approval (indicated by stamp) of lot traceability documentation is required. Government re-

lease of shipment is not required unless otherwise specified.

b) Suppliers Other than Manufacturer.

During the performance of the order your control of device lot traceability documentation and inventory control for MIL-PRF-19500 JAN devices are subject to review, validation and verification by an authorized Government representative. Government release of shipment is not required unless otherwise specified.

130. Teledyne Source Inspection

All items covered by this Purchase Order will be source inspected by a Teledyne Quality representative. This will include surveillance of the products, quality system, procedures, and facilities. The seller shall furnish, at no cost, the necessary facilities and equipment, supply data, and perform tests as required by the applicable drawings, specifications, and inspection instructions under surveillance of the Teledyne Quality representative. Final acceptance of source inspected material will be at Teledyne. The seller shall give Teledyne as much advance notification as possible that an inspection is required. Teledyne cannot guarantee compliance with the seller's desired schedule without adequate advance notification. Seller shall obtain stamp and signature of the Teledyne Quality representative on the shipping document prior to shipment of material. Failure to do this may result in rejection of material upon receipt

131. Teledyne In-Process Inspection

In addition to the requirements of Teledyne source inspection (130), all items covered by this Purchase Order require in-process inspection by a Teledyne Quality representative. Prior to the hermetic sealing, any permanent closure, final electrical test or as required by specification and/or Purchase Order, the supplier shall give the Teledyne buyer as much advance notification as possible that an inspection is required. Teledyne cannot guarantee compliance with the supplier's desired schedule without adequate advance notification.

132. First Article

A unit of the product being purchased, representative in every way of the product to follow shall be identified and designated

SIZE A	CAGE CODE 16170	DRAWING NO. 7700033
SCALE	REV J	Sheet 5

"First Article" and shall be approved by Teledyne Quality Assurance prior to any further submittal of the purchased quantity of the same product.

Any additional submittal of the purchased quantity shall be at the supplier's risk. Submittal of a First Article shall be required unless the following conditions are satisfied:

- (1) The supplier includes with the product submitted a copy of the Teledyne first article approval for the product.
- (2) The supplier identifies a Teledyne Purchase Order number on which delivery of the product was made within the past twenty-four (24) months.

The First Article shall be 100% inspected and the data recorded by the supplier prior to its submittal to Teledyne.

One (1) legible and reproducible copy of the supplier's inspection report shall accompany the First Article submitted. This report shall contain, as a minimum, the following:

- (1) The Teledyne Purchase Order number.
- (2) The specification or drawing number, including the revision level to which the product was built.
- (3) The technique(s) used in the production as reflected in the First Article, for example:
 - A) Production tooling - identification number (see Note 1.).
 - B) Numerical control - identification number (see Note 1.).
 - C) Jigs and fixtures for alignment, gang drilling, etc. describe.
 - D) Individual setup and fabrication - describe.
 - E) Other - describe.

- (4) A list of actual measurement data taken from the First Article on a form and in a format which can be used to verify the results. If the report is not 100% complete, please explain the omissions.

The selection of the First Article shall be made in a manner approved by Teledyne. If the product on which the first article report was made changes in any way, a new report is required. However, with Teledyne concurrence, the new First Article report may cover only the changed items and those items affected by the change. Specific details on those items proposed for inspection shall be submitted with the request for the abbreviated First Article.

Inspection performed on a "prototype" product is not considered a first article and cannot be used in lieu of one without written concurrence of Teledyne.

NOTE (1): If the First Article is to be considered as "proof test" for production or numerical control tooling, please advise Teledyne at the time of submittal.

133. Acceptance of Production Tooling

Acceptance of production tooling on this Purchase Order shall be contingent on inspection and acceptance by Teledyne. Representative dimensions of each sample produced from this tooling must conform to the dimensions and tolerances as specified on the engineering drawing and/or specifications on this Purchase Order. This inspection shall be under the cognizance of the Teledyne Quality representative at the seller's facility or as directed by the buyer. The items may be shipped to Teledyne for inspection. Samples must be identified with Teledyne's tooling number and name.

134. Teledyne Furnished Tooling

The term "Teledyne furnished tooling" shall include, but is not limited to, jigs, fixtures, PWB artwork and inspection devices, procured by or for Teledyne and used by a Teledyne supplier for production and/or inspection on a Teledyne procurement. The supplier who has physical custody of Teledyne furnished tooling shall use it only on items deliverable to Teledyne as typified by this procurement document. Any other use shall require written permission of Teledyne Procurement.

Prior to its use, Teledyne furnished tooling must be accepted by Teledyne Quality Assurance. This acceptance may be in the form of a Teledyne inspection stamp, as in the case of PWB artwork, or a written acceptance which

SIZE A	CAGE CODE 16170	DRAWING NO. 7700033
SCALE	REV J	Sheet 6

references the tooling by tool number.

If the tooling is procured by the supplier, then Teledyne acceptance may be obtained either by a 100% inspection of the tooling or acceptance of a "First Article". The acceptance shall be in written form from Teledyne Product Assurance. Any tooling procured by a supplier for Teledyne as Teledyne furnished tooling shall be documented by a definitive set of drawings. A copy of these drawings shall accompany the request for acceptance of the tooling.

Teledyne furnished tooling which is used in the inspection of a product shall be kept in calibration by the supplier who has physical custody of the tooling. Records shall be kept which indicate the calibration status.

The supplier shall be responsible for the care and repair, for other than normal wear, of the tooling. It shall be available for surveillance and/or inspection upon reasonable notice during the supplier's normal business hours. The tooling shall be returned, upon demand, in good condition except for normal wear.

TRACEABILITY AND CONTROL

150. Traceability to Raw Material

All items fabricated under this Purchase Order shall be traceable to raw material used. All traceability and inspection records must be identifiable with the Lot Number(s) of raw materials, parts or assemblies to which they are applicable and shall be available upon request or audit by Teledyne.

- a) Raw material used shall be identified by a lot number as well as material type, specification, heat number, etc., and shall be identifiable with lot of raw material used. When two (2) or more parts, are joined in an assembly, the seller shall prepare an assembly parts list identifying each assembly and the Lot of raw material from which it was fabricated.
- b) All material fabricated by the seller in one lot shall be identifiable to that lot when supplied to Teledyne. When the seller is combining materials fabricated in two or more different lots to fulfill Purchase Order requirements, these materials shall be segregated and identifiable to the lots from which they were fabricated.

- c) The seller shall request from the buyer whose signature appears on the Purchase Order written authorization to submit materials in two (2) or more lots to fulfill the total quantity of each item on this Purchase Order.
- d) Semiconductor dice shall be identified by wafer lot number. A "wafer lot" is defined as a homogenous lot of devices which have been processed through all phases of wafer manufacturing together.
- e) All semiconductor devices and individual dice shall be identified by wafer lot number and wafer number within the wafer lot. A "Wafer Lot" is defined as a homogenous lot of devices which have been processed through all phases of wafer manufacturing.

151. Dice Traceability Requirement

All dice used in the device(s) described on this order must have traceability to the manufacturing lot. A "Manufacturing Lot" is defined as, and shall be composed of, those devices which were processed through all phases of wafer fabrication together. Shipping documentation must provide traceability from the dice to the Manufacturing Lot identification of the devices.

152. Identification of Limited Calendar Life Material

The seller shall identify each item, package or container of limited calendar life material with the manufacture date, storage temperature and special handling conditions, in addition to the normal identification requirements of name, part or code number, specification number, type, size, quantity, and manufacturer's recommended shelf life. This identification, including special handling conditions, shall be recorded on the shipping documents for the material.

153. Identification of Limited Calendar Life Material in a Cured Condition

- a) The supplier shall provide identification of cured limited life materials, including cure dates, for each deliverable item. This information shall be in addition to the normal prescribed item identification. A legible and reproducible certification shall be furnished, stating that the materials used were within their calendar life and were processed in accordance with established procedures for

SIZE A	CAGE CODE 16170	DRAWING NO. 7700033
SCALE	REV J	Sheet 7

the material. The certification shall be signed by an authorized representative of the supplier.

b) The seller shall furnish, with each shipment of parts or parts within an assembly incorporating a limited calendar life material that does not require age control after installation (e.g. adhesives, resins, plastic base paints, etc.), one (1) legible and reproducible copy of a certification stating that the limited-calendar-life material was properly controlled prior to use and within the shelf-life period when incorporated. The certification shall be identifiable with the part(s) or assembly(s) to which it applies and this Purchase Order. The certification shall contain the signature and title of an authorized representative of the seller.

154. Seller's Controlled Products

The initial shipment on this Purchase Order shall be accompanied by one (1) legible and reproducible copy of applicable specifications, drawings and/or catalogs.

155. Change of Product or Process

The supplier/manufacturer shall not implement any changes in design, materials, processes, or control without written approval from Teledyne Electronic Technologies, MDR Facility. The intent of this requirement is to ensure that all material supplied under this order will be homogenous, and the performance, reliability, and quality of the material is not degraded. Changed articles shall be clearly identified and in a different manner from previous articles.

156. Customer Furnished/Procured Material

The customer supplying material on this Purchase Order shall maintain all traceability and inspection records at their facility for the items shipped.

157. Wire Identification

Each package or spool of wire on this order must be legible and permanently identified with:

- (1) Purchase Order Number.
- (2) Gauge.
- (3) Insulation Cure Date (as applicable).

- (4) Military Specification Number (if applicable).
- (5) Teledyne Specification Number.
- (6) Manufacturer.
- (7) Lot/Melt Number.

158. Supplier Other than the Manufacturer

- a) The Supplier (Seller other than the manufacturer) shall identify the manufacturer and location of manufacture of each item furnished under the procurement.
- b) When items are identified by a buyer number, the Supplier shall provide complete information as to the original manufacturer and original manufacturer's part number. Such identification shall be with each shipment.
- c) In case of semiconductor chip processors supplying chips in dice or wafer form to Teledyne Electronic Technologies, MDR Facility, the manufacturer's original identification, in conformance with provisions 150 and/or 151 herein, shall be maintained.

TESTING AND CERTIFICATIONS

200. Qualification and Lot Acceptance Testing

- a) Qualification Testing: The qualification tests, as specified in the Quality Provisions of the applicable specification, are not required as part of this order.
- b) Lot Acceptance Inspection (Group B): Group "B" testing to the Quality Provisions of the applicable specification on this order is not required.
- c) Lot Acceptance Inspection (Group C): Group "C" testing to the Quality Provisions of the applicable specification on this order is not required.
- d) Lot Acceptance Inspection (Group A): Group "A" testing to the Quality Provisions of the applicable specification on this order is not required.

201. Recorded Data

When Teledyne specifications require recording data during processing, inspection or testing, one (1) copy of the recorded data shall accompany the shipment. Data shall be identified with the Procurement Document Number, part number, serial number, lot

SIZE A	CAGE CODE 16170	DRAWING NO. 7700033
SCALE	REV J	Sheet 8

number, test type and accept/reject quantities as a minimum.

rized representative of the facility performing the tests.

210. Supplying PROM's

Programmable Read Only Memories must meet the following requirements:

- a) Burn-in shall be in accordance with MIL-STD-883, Method 1015, Condition D, after programming.
- b) Electrical tests shall include marginal "O's" testing for programming verification.
- c) Programming equipment shall be calibrated daily to proper pulsing conditions.
- d) PROM part marking shall be unique and traceable to vendor lot number.

220. Test Reports

Each shipment must be accompanied by one (1) legible and reproducible copy of reports of tests performed in accordance with specification or Purchase Order requirements, identifiable to material submitted. These reports must contain the signature of and title of an authorized representative of the agency performing the tests and must assure conformance to specification requirements. Test reports not accompanying shipment will require a waiver from Teledyne Electronic Technologies, MDR Facility prior to shipment.

230. Nondestructive Test Reports

Each shipment shall be accompanied by a legible and reproducible copy of nondestructive test reports defining the parameters required by the specification and/or purchase documents. The report shall clearly identify acceptable and unacceptable parts.

The tests shall be performed at the supplier's facility or at a facility approved by Teledyne. All findings shall be reported in a suitable form which shall contain, as a minimum:

- (1) The Teledyne part number(s).
- (2) A control or serial number for each part tested.
- (3) The results of the tests.
- (4) Identification of the individual performing the tests.
- (5) The signature and title of an autho-

Test reports not accompanying shipment will require a waiver from Teledyne Electronic Technologies, MDR Facility prior to shipment.

231. Functional Test Reports

Each shipment shall be accompanied by a legible and reproducible copy of actual test results of the material submitted, identified with specified test parameters defined as operational, mechanical, electrical, hydraulic inspection, etc. When the data is submitted in a format that is not comparable to the Teledyne specification, a parameter and test condition cross reference sheet must be supplied. These reports shall be authenticated by the signature and title of an authorized representative of the agency performing the agency performing the tests. Test reports not accompanying shipment will require a waiver from Teledyne Electronic Technologies, MDR Facility prior to shipment.

232. Pressure or Leak Test Reports

Each shipment shall be Accompanied by two (2) legible and reproducible copies of actual test reports identifiable with the test parameters and product submitted. These reports must contain the signature and title of an authorized representative of the agency performing the tests and must assure conformance to specification requirements. Test reports not accompanying shipment will require a waiver from Teledyne Electronic Technologies, MDR Facility prior to shipment.

270. Statement of Conformity-General

Each shipment must be accompanied by one (1) legible and reproducible copy of a statement of conformity, listing the Purchase Order to which the material complies. The certification shall contain the signature and title of an authorized representative of the seller. Certifications not accompanying shipment will require a waiver (TF/RIF #1759) from Teledyne Electronic Technologies, MDR Facility prior to shipment.

271. Certification of Material Conformance

Each shipment must be accompanied by one (1) legible and reproducible copy of a certifica-

SIZE A	CAGE CODE 16170	DRAWING NO. 7700033
SCALE	REV J	Sheet 9

tion stating that the items produced were from materials which the seller has available for examination. Certifications must contain the signature and title of an authorized representative of the seller. Certifications not accompanying shipment will require a waiver (TF/RIF #1759) from Teledyne Electronic Technologies, MDR Facility prior to shipment.

272. Process Certification

Each shipment of material on this Purchase Order must be accompanied by two (2) legible and reproducible copies of a certification containing the signature and title of an authorized representative of the agency performing the tests. The certification shall include the process used, such as: heat treating, magnetic particle inspection, liquid honing, penetrant inspection, radiographic inspection, surface preparation and treatment (plating), ultrasonic inspection, etc. When parts are serialized, the serial numbers must appear on the certification. Certifications not accompanying shipment will require a waiver from Teledyne Electronic Technologies, MDR Facility Prior to shipment.

273. Certification of Commercial Material

Each shipment must be accompanied by one (1) legible and reproducible copy of a statement of conformity, listing the Purchase Order to which the material complies. Certifications not accompanying shipment will require a waiver (TF/RIF #1759) from Teledyne Electronic Technologies, MDR Facility prior to shipment.

274. Government Q.P.L. Source Certification

The seller shall include with each shipment a certified statement that the items on this Purchase Order were produced by a currently approved Q.P.L. manufacturer. Indicate the name of the manufacturer and current Q.P.L. number on the statement. Material shipped from a distributor must be accompanied by a reproduced copy of the shipping document from the original manufacturer, or a certified statement signed by a responsible official and contain this statement: "Original shipping document from the manufacturer is on file at this facility and is available for review by Teledyne Electronic Technologies, MDR Facility upon request." Certifications not accompanying shipment will require a waiver from Teledyne Electronic Technologies, MDR

Facility prior to shipment.

275. Reserved

276. Manufacturer Certification

The seller shall include with each shipment a certified statement that the items on this Purchase Order were manufactured by _____, and certify that the parts meet Teledyne Electronic Technologies, MDR Facility specification requirements as stated on this Purchase Order. Certifications not accompanying shipment will require a waiver (TF/RIF #1759) from Teledyne Electronic Technologies, MDR Facility prior to shipment.

277. Multilayer and Two-Sided Printed Circuit Boards, High Reliability

The seller shall provide certification of compliance to all applicable specification requirements and shall supply test coupons or tabs (fabricated simultaneously with the boards) with each lot of multilayer boards supplied. For two-sided printed circuit boards, the seller shall provide certification of compliance to all applicable specification requirements and shall supply test tabs, coupons or one extra circuit board (fabricated simultaneously with the lot) with each lot supplied for the purpose of performing acceptance tests at Teledyne Electronic Technologies, MDR Facility. Final acceptance of the lot will be contingent upon test results.

278. Semiconductor Device Traceability

The Certificate of Conformance required for each shipment must also include compliance with the following requirements of MIL-PRF-19500 for all parts:

3.3.1 Traceability Documentation: Procurement traceability of JAN marked devices shall be confirmed by documentation to the Government or to users with Government contracts or subcontracts regardless of whether the devices are procured directly from the manufacturer or from another source such as a distributor. When other sources are involved, their documentation shall be in addition to and include that provided by the manufacturer and previous distributors. This documentation shall include the

SIZE A	CAGE CODE 16170	DRAWING NO. 7700033
SCALE	REV J	Sheet 10

following information:

a. Manufacturer's Documentation:

1. Manufacturer's name and address.
2. Customers or distributor's name and address.
3. Device type and product assurance level (i.e., JAN, JANTX, JANTXV, JANS).
4. Lot date code (including assembly plant code).
5. Inspection data or latest reinspection date.
6. Quantity of devices in shipment from manufacturer.
7. Signature and date of transaction.

b. Distributor Documentation for Each Distributor:

1. Distributor's name and address.
2. Name and address of customer.
3. Quantity of devices in shipment
4. Latest reinspection date if applicable.
5. Certification that this shipment is a part of the shipment covered by the manufacturer's documentation.
6. Signature and date of transaction.

As used herein, the term distributor means any source other than the manufacturer.

NOTE: The traceability requirement will be enforced by the inspections detailed in paragraph 4.1 and its subparagraphs of MIL-PRF-19500.

279. Mercury Free Certification

All items covered by this Purchase Order shall be certified as being free of metallic mercury or mercury compounds as referred to in MIL-E-16100. Further, the seller shall certify that the items have not mercury contaminated during fabrication and testing prior to delivery. (Reference Purchase Order Attachment.)

280. Reserved

PACKAGING REQUIREMENTS

290. Minimum packaging per MIL-P-116, Method III, "Packaged for Mechanical and Physical protection only."

291. Minimum packaging per MIL-M-55565.

293. Packaging in accordance with good commercial practice to the extent necessary to provide protection from hazards of contamination and physical damage encountered in general handling, shipping and storage.

294. Automated Assembly Packaging

- a) Components to be supplied on tape and reel. Tape size (width) to be determined by supplier.
- b) Components to be supplied in tubes. Must protect components from damage during shipment and handling.
- c) Components to be supplied in matrix trays. Must protect components from damage during shipment and handling.

295. All devices shall be packaged in waffle packs for delivery to Teledyne Electronic Technologies. No more than 20% of a waffle pack shall be vacant except for those packs containing the remaining devices of the shipment. Each waffle pack shall include an antistatic protective sheet and a release sheet. The waffle packs shall not be stacked in a manner that uses the bottom of one waffle pack as the lid or cover of the waffle pack below it. The cavity size dimension(s) of the waffle pack selected for device shipment shall not allow the device to turn or rotate within the cavity during transit to Teledyne Electronic Technologies.

297. DOCK TO STOCK

Shipment utilizing Bar Code Labeling in accordance with TET 7700080.

299. Components to be packaged in accordance with TET document 7261475.

300. For metal packages the Supplier is required to implement Table IV Package Evaluation Requirements as specified in TET 7250203. For multilayer, Cofire, and Ceramic packages the Supplier shall implement Table IV Package Evaluation Requirements as specified in TET 7259992. (MIL-PRF-38534, Option 1).

SIZE A	CAGE CODE 16170	DRAWING NO. 7700033
SCALE	REV J	Sheet 11

