

Solar Communications International, Inc.

Revision – Initial Release

Quality Assurance Manual – RF Transparent Products

Document No. QA-0002

**Solar Communications International, Inc
(SCI)**

**Quality Assurance Manual
For
RF Transparent Products**

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Use and Disclosure of Data

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Approvals



Jennifer Smith - President

3/24/20
Date

Written Quality Policy

At Solar Communications International (SCI), service to our customer is our highest priority.

Detailed in the following pages are the internal policies and procedures used by SCI to assure consistent delivery of quality products.

These procedures are clearly communicated to all management, employees, and suppliers. Our people take great pride in each and every project in which we are involved.

Signed:  Date: 3/24/26

Jennifer Smith - President

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1.0 General

Solar Communication International, Inc. (SCI) voluntarily maintains an internal Quality Assurance Program (QAP) to ensure that the highest standards of quality are upheld through all stages of manufacturing, including design, fabrication, and delivery. The responsibility of this program is not assigned to any one department but is a shared responsibility of every employee at SCI, its subsidiaries, and its subcontractors. It is their sole responsibility to be aware of and comply with the respective sections of this Quality Assurance Program that apply to their area of contribution in producing the products of the highest quality. This Quality Assurance Program is an internal policy of SCI only, is not to be construed as part of any contractual or binding agreement between SCI and its customer and shall not be deemed to constitute or include any express or implied warranties of SCI. All contractual terms and warranties between SCI and its customer shall only be made pursuant to one or more written instruments signed by SCI and its customer and subject to SCI's Standard Terms and Conditions of Sale.

1.1 Product Description

SCI designs, engineers, and implements a variety of RF transparent structures and concealment solutions. There are three categories of concealment solutions:

- Height solutions
- Roof solutions
- Wall mounted solutions

SCI self-supporting structures include, but are not limited to: clock towers, watchtowers, monopoles/light standards, mono-pines, mono-palms, mono-elms, eucalyptus trees, cypress trees, and telecom components.

SCI specializes in the manufacturing of RF Transparent boulders, faux branches, and faux veneers.

In each case, SCI carefully engineers and designs its RF Transparent products to maintain strict adherence to structural requirements and exceed our clients' esthetic expectations.

1.2 General Product Requirements

Fibercell/Fiberglass: SCI Fibercell or Fiberglass product is a vinyl or polyester resin-applied product.

Fibercell can be applied in vinyl/polyester resin encapsulating urethane foam. The application can be done by 'hand lay-up', vacuum suction, or by spray chop on a designated mold. The edges must be reinforced by lay-up.

NOTE: FRP or lay-up angle must be applied into the Fibercell product for attachment purposes.

Fiberglass product can be applied in vinyl/polyester resin. The application must take place in a designated mold. A foam core-matt can be used within the lay-up for rigidity.

NOTE: FRP or lay-up angle must be reinforced and laid into the fiberglass product for attachment purposes.

SCI Microcell products are composed of 2 pound E.P.S. foam encapsulated with urethane hard-coat.

NOTE: The urethane-coated foam will have FRP angle embedded into the foam surface for attachment purposes.

When fabricated, SCI drawings are reverse-engineered to minimize the potential for error in the final product. Shrinkage or expansions are considered while implementing a Microcell design and SCI Project Management is consulted and must approve prior to implementing any foam cutting process.

Assembled Microcell products shall be inspected, all cosmetic changes implemented, and the assembly approved prior to the product being hard-coated and encapsulated. The urethane layer thickness must be within tolerances on each side of hard-coating.

SCI self-supporting structures shall, upon receipt of an RFQ from a Customer, be reviewed and analyzed.. All SCI structures shall be analyzed for wind-speed, wind-load, and general configuration. Structural values will determine all material requirements, labor requirements, and any other requirements that might impact accurate manufacturing cost estimates. In addition, SCI shall provide advice as to access/maintenance panel requirements.

Where steel structures are required, refer to SCI Quality Assurance Manual for Fabricated Steel Products.

1.3 Design Loading

1. SCI requires that the Customer provide SCI with a site specific Structure Data Sheet for each structure ordered. If the antenna structures are mounted on the specified structure, the exact quantity, type, and model number as well as the exact centerline elevation and azimuth orientation will be specified on the Data Sheet.
2. Loads from equipment, accessories, and attachments shall be appropriately considered in the design of the structure.
3. Structures where antennas are to be mounted shall be designed assuming loading conditions for the following primary antenna and coax configuration and requirements:
 - Antenna shall be assumed to consist of three (3) sectors with three (3) antennas and three (3) coax cables per sector unless otherwise specified in the Data Sheet.
 - Cable sizes shall be specified in the Data Sheet. Where omitted, they shall be assumed to be 7/8" Andrews LDF5A type (or equivalent) when length is less than 150 feet or 1 5/8 LDF7A (or equivalent) when greater than 150 feet. For the purpose of providing adequate access only.
 - Two (2) antennas and two (2) coax cables for E911 design shall be included on the Data Sheet. If omitted it shall be assumed no consideration is required.
 - Top Mounted Amplifiers (TMA's) or equivalent per sector shall be considered in the loading unless otherwise specified in the Data Sheet.

- Antennas shall be mounted inside structures using frame designs or standoff brackets unless otherwise specified in the Data Sheet.
- SCI shall be design structures only when specified in the Data Sheet or in accordance with SCIs understanding of the Customers objectives and will be submitted for the Customers approval.
- Basic wind speed and ice conditions shall be in accordance with the Customer provided Data Sheet, the applicable IBC, or TIA/EIA-222 for the county in which the structure is to be located or as required by State and local authorities having jurisdiction, whichever is more stringent.

1.4 Deflection Criteria

Structures with microwave dishes mounted on them shall have a minimum of movement at the location of the microwave dish at operational wind speed. Refer to Section 33.0, Testing and Appendix B., Sample Test and Data Sheets.

1.5 Foundations

1. Where a structure requires a foundation to be designed, SCI will provide, under terms specified in the contract, a design appropriate for the structure. The design shall be signed and sealed by a Civil/Structural Engineer registered in the jurisdiction where the structure is to be located.
2. While SCI does not provide the foundation, the total installed cost of the structure and foundation will be used to determine the most economic structure.

1.6 Occupants

Unless otherwise specified by the Customer on the Data Sheet, structures will be designed for one carrier.

1.7 Coaxial Cable Routing/Azimuth Verification

Coaxial cable shall be routed through internal raceways so that they will not be visible from the outside.

2.0 Organization

The SCI Quality Assurance Program is developed, administered and maintained as a series of processes and practices involving every department and function within the company, its subsidiaries, suppliers, and subcontractors. The organizational structure at SCI allows personnel the freedom to identify, and evaluate quality problems and to initiate, recommend, and provide solutions. This initiative is encouraged and empowered by the authority of the company President and CTO.

2.1 Roles and Responsibilities

The organizational hierarchy and reporting structure is shown in Figure 1. The roles and responsibilities within the company are shown below.

President: The President of the Company provides overall direction for the company and establishes organizational structure and responsibilities. The President is ultimately responsible for all SCI policy and priorities, including QA.

Chief Technical Officer (CTO): Responsible for the company remaining at the forefront of technical development within the industry. Seeks out and pursues new materials, designs, techniques, and applications for SCI products. The CTO authorizes and oversees all testing programs. Maintains authority over all product performance related QA programs as well as technical QA improvement processes and reviews.

Operations Manager (OM): Responsible for the day-to-day operation of the company including Customer Development, Marketing, Sales, Responses to Queries, RFPs, RFQs, Estimating, office policy and procedures, and ensuring that the direction and policies of the company are implemented as directed by the President. Maintains overall responsibility for all Customer Contact QA policies and programs as well as Customer Service QA improvement processes.

Project Manager (PM): Responsible for Manufacturing, Inspection, and Design, functions being implemented and completed in accordance with contractual requirements. The PM maintains responsibility for Subsidiary, Supplier, and Subcontractor control and performance including Inspection results and reporting. Ensures SCI products conform to all customer requirements and SCI QA policies and procedures as directed by QA management.

Estimating: Responsible for accepting all pertinent information for a project and developing accurate cost and scheduling quotes. Forwards quotes to the Customer. Obtains additional information from Engineering and Project Management when requested by the Customer and provides the Customer with that information.

Contracts: Analyzes all contracts and ensures that all contracts are complete and required support documentation has been provided.

Document Control: Responsible for accepting, logging, and assigning Document Control numbers for any documentation, data, drawings, photos, or supporting information on all contracts, ECRs, ECNs. Additionally tracks all QA/QC documentation (such as QARs) and procedures. Additionally maintains Permanent Records Database.

Accounting: Tracks and reconciles all Accounts Receivable, Accounts Payable including payments to suppliers and subcontractors, payments from Customers, office expenses, etc.

Purchasing: Responsible for releasing POs for all purchased materials, parts, assemblies, and subcontractor services required to complete a project. Updates, tracks, and maintains Supplier Evaluation Surveys and Approved Supplier List. Ensures products and services are only purchased through QA Approved Suppliers.

Office Management: Responsible for day-to-day office operations including IT contracting, phone systems, office supplier ordering, office staff supervision, etc.

Administration: Responsible for payroll processing, administrative forms processing and distribution, reception, customer contact. Maintains all Personnel records.

Personnel/Training: Responsible for gathering and providing any hiring, training and personnel administration material as required by Project Management, and QA/QC Manager.

Marketing/Sales: Responsible for initial customer contact and marketing follow-up. Implements Marketing programs and priorities as established by the Managing Director, Business Development, and the President.

Engineering/Design: Evaluates and analyzes customer requirements, advises as to technical product choices, designs to meet or exceed Customer structural, performance, costing, and esthetic requirements. Engineering and Design work with Project Management to ensure that SCI capabilities can meet scheduling and other project parameters.

Quality Assurance/Quality Control Manager: Maintains responsibility for ensuring implementation of SCI QA policy and QC procedures.

Inspection: Maintains responsibility for Quality Control inspection procedures and documentation. Ensures conformance of all material, parts and assemblies used in SCI products with Customer specifications and requirements and SCI Quality Assurance policy and processes.

Material Control: Ensures all SCI material meets SCI certification and traceability. Responsible for inventory tracking and reporting to Project Management.

Shipping/Receiving: Maintains responsibility for checking all SCI shipments for required QA approval and documentation prior to shipment to the Customer. Responsible for ensuring all materials, part, and assemblies to be used in the production of SCI products meet SCI QA/QC certification, inspection, and documentation requirements prior to release to manufacturing/fabrication or inventory stores.

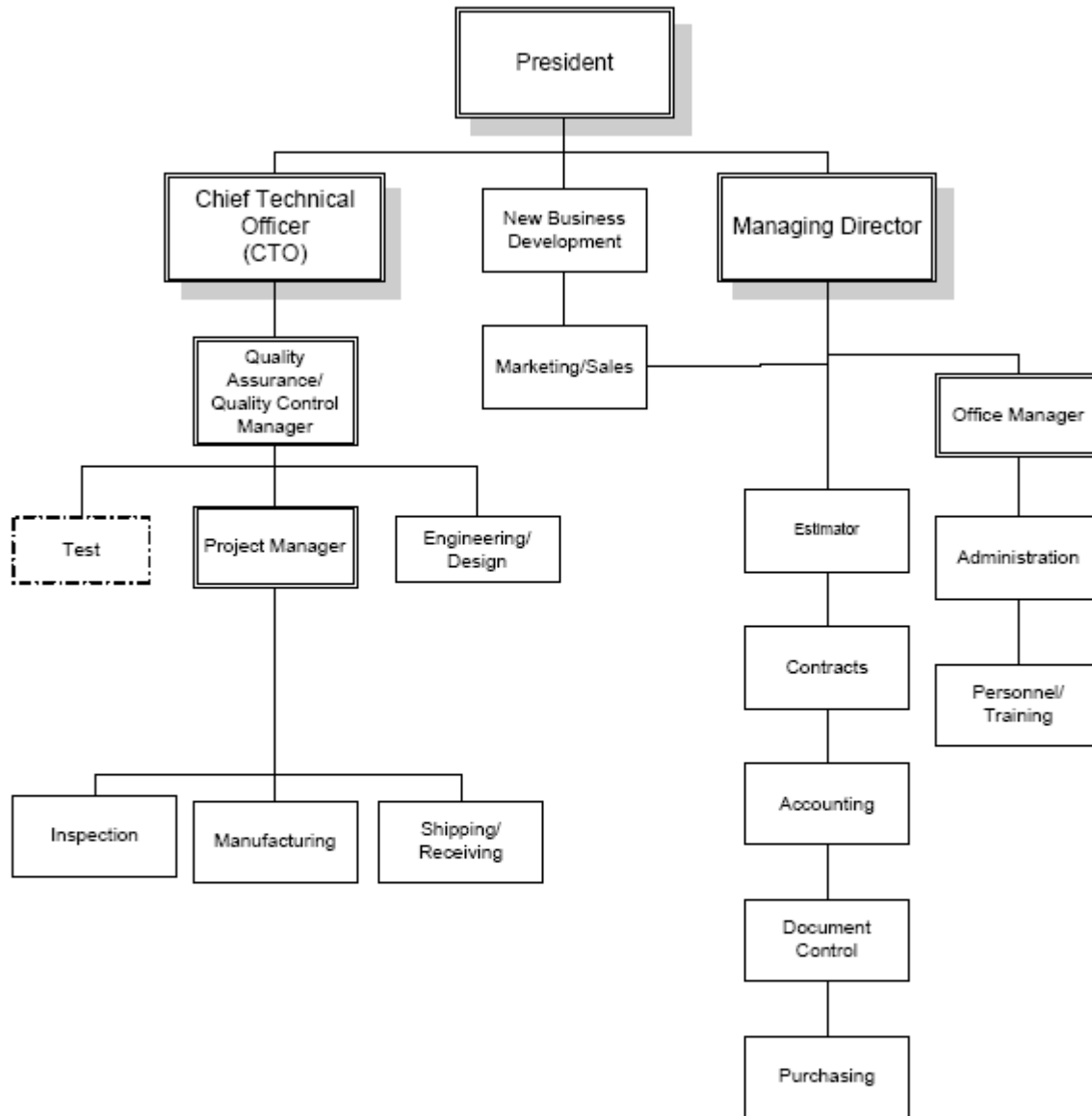


Figure 1. SCI Organizational Chart

2.2 SCI Project Functional Flow

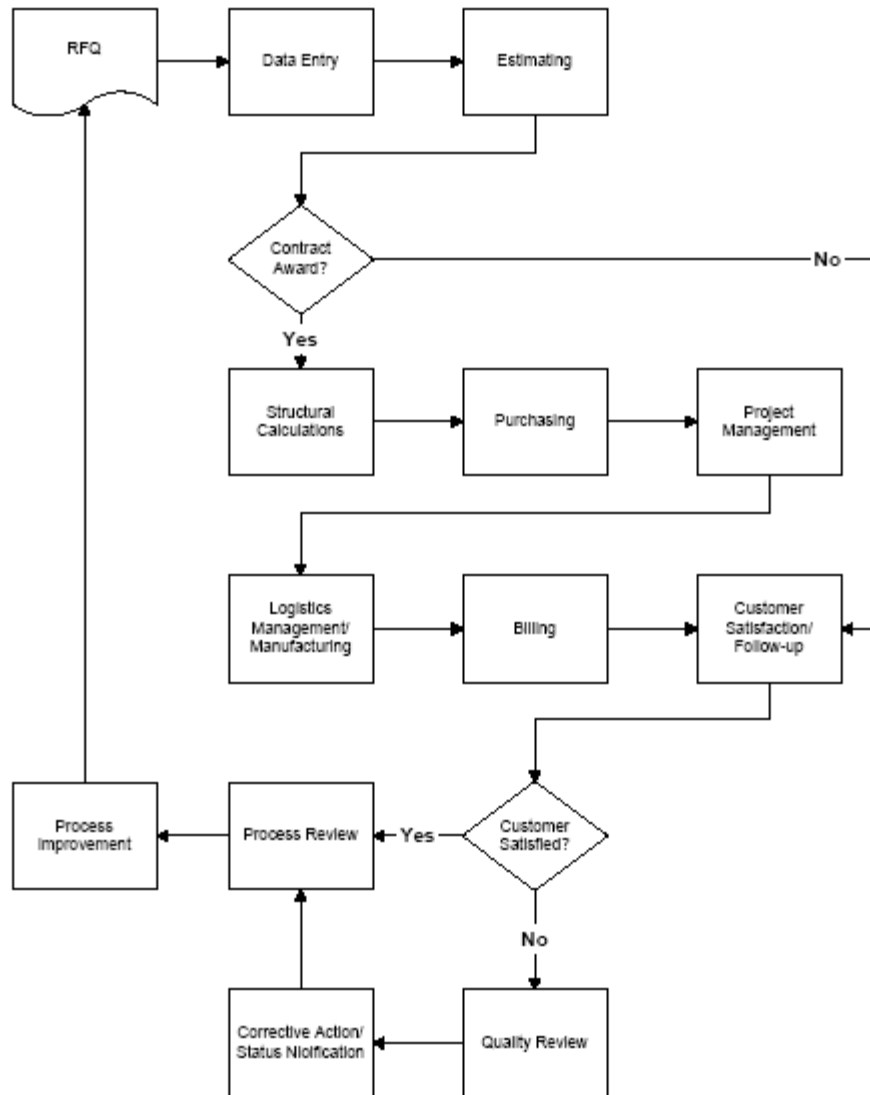


Figure 2. SCI Project Functional Flow Diagram

3.0 SCI Integrated Quality Process

3.1 *Customer Communication and Satisfaction.*

1. SCIs commitment to Customer satisfaction rests at the heart of the Quality Assurance process. SCI strives to meet or exceed Customer expectations and ensure there is clear communication between our Customers and SCI at all times. Requests for information or complaints will be promptly responded to. Customer requirements are clearly communicated to all SCI subsidiaries, suppliers, and subcontractors.
2. SCI maintains a public web site from which Customers may down load product information and announcements and requests samples, detailed specifications, or follow-on contact from an SCI representative.
3. Direct mailings or telephone contact are also employed by SCI.
4. SCI also encourages visits by Customers and will gladly visit Customer locations when it is appropriate.
5. Any SCI employee who has direct communication with customers is aware of formal complaint handling and the Returned Material Authorization (RMA) systems in place at SCI.
6. The RMA system shall be documented. QA shall produce reports to track complaints and cycle times of responses to Customers.
7. **CORRECTIVE ACTION REQUESTS FROM CUSTOMERS SHALL TAKE PRIORITY OVER OTHER PLANNED ACTIVITIES AND MUST RECEIVE IMMEDIATE ATTENTION.**
8. All customer requests for specification reviews will be handled using the formal review system described in Section 29. of this manual and subject to the CTOs review
9. Product changes requiring Customer notification will be handled through the formal Product Change Notification procedure before shipments are made.
10. Customer Service is charged with handling all requests from Customers regarding placement of orders, changes to orders, status of orders, delivery issues, or general queries for information.
11. Data pertinent to Customer satisfaction or dissatisfaction will be tracked and used as opportunities for continual improvement. Such data will form a part of the input to the Quality Management Review.

3.2 Product Traceability

1. All product is to flow through manufacturing and inspection activities defined by Quality Control process and documentation. The identity of the process and materials used during manufacture shall be maintained up to and through Customer receipt.
2. Each product shall be processed through a pre-defined sequence of manufacturing and inspection steps.
3. During processing, the date each step is performed, the operators' signature, the quantity in and quantity out shall be recorded.
4. Process and material traceability shall be maintained in the Job File and archived in the Data Record. Records shall be maintained for up to three years.

3.3 Control of Vendors and Procured Items

1. Vendors and suppliers of materials and services utilized by SCI, including partially or wholly owned subsidiaries, shall be controlled in such a way as to ensure that products of consistent quality are received from an approved source. When a vendor or procured material is found to be discrepant against standards, appropriate action will be taken.
2. All critical materials must be procured from an approved vendor (Refer to Appendix A., Approved Supplier List.) Vendor approval may be granted based on:
 - Vendor site Survey and Evaluation. Refer to Section 12.0, Supplier Survey, Evaluation, and Control.
 - Secondary approval granted by SCI end Customer for the project contracted.
 - First article inspection results
 - Established industry reputation
 - ISO 9000 series certification
3. Once adequate performance has been established and the vendor is approved, the vendor shall be listed on the Approved Supplier list.
4. All materials will be purchased and inspected in accordance with the applicable procurement document.
5. The procurement document will specify the tests that the material must be capable of passing, and any additional requirements.
6. Verification of the above shall be verified by vendor supplied Certification and/or successful completion of incoming inspection or laboratory test.
7. Incoming Inspection reports shall note any discrepancies. All discrepant material shall be identified and dispositioned via the Material Review Board (MRB). Any scrapped material shall be documented, submitted to and reviewed by the MRB.

8. No material shall be released to production before the shipment has passed incoming inspection.
9. When it has been determined that a material discrepancy is the result of a vendor quality problem, a supplier Corrective Action Request shall be initiated and entered into the Supplier Survey and Evaluation file.
10. Quality Assurance will review incoming inspection results on a periodic basis to adjust the Preferred Supplier list as appropriate.
11. A supplier quality rating system will be used, as appropriate, for SCI suppliers. The supplier quality rating may be a result of a vendors' historical performance through site surveys, shipment inspections, supplier Corrective Action Requests, and/or other selected quality indices.

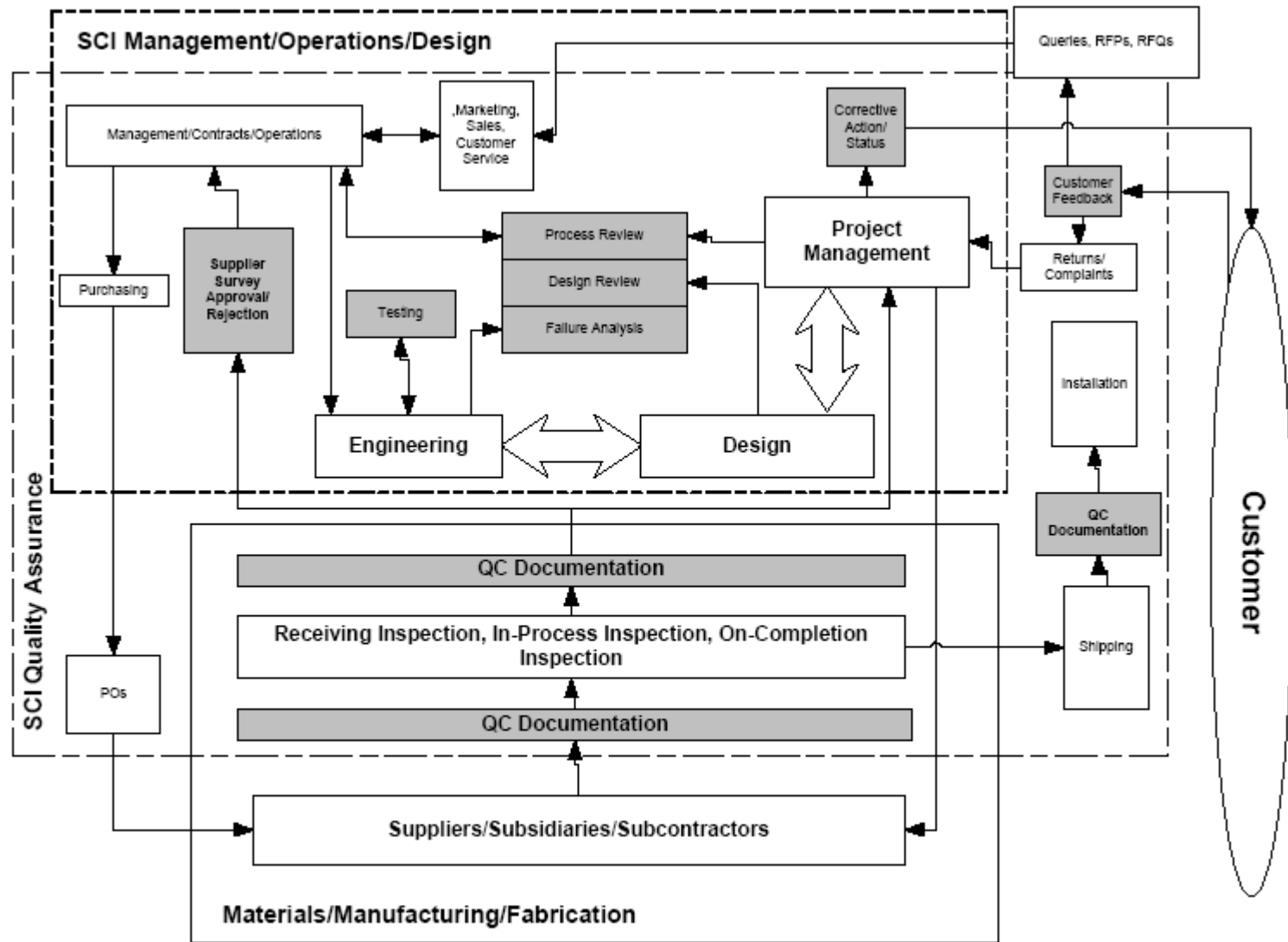


Figure 3. SCI Integrated Quality Assurance Process

4.0 Referenced Codes and Standards

The following documents comprise a part or provide guidance in the development of this manual and the practices and policies defined by it. Any additional codes and Standards specified by the Customer at the time of contract award or required by State or Local governmental agencies will also be reviewed and applied as required.

Document Number/Identification	Title	URL
MIL-Q-9858 or equivalent	Quality Program Requirements	http://ax.losangeles.af.mil/se_revitalization/aa_functions/quality/Attachment/qQUALITY_JAJC.pdf
MIL-I-45208 or equivalent	Inspection System Requirements	http://www.quality-control-plan.com/mil-i-45208-spec.htm
ANSI Z540.1 (or MIL-STD-120 or equivalent)	Calibration Laboratories and Measuring and Test Equipment General Requirements	http://global.ihs.com , http://elsmar.com/pdf_files/Military%20Standards/
MIL-STD-45662A	Calibration Systems Requirements	http://elsmar.com/pdf_files/Military%20Standards/
ISO 9001	International Organization for Standardization	http://www.iso.org/iso/en/ISOOnline.frontpage
SCI Doc. No. QA-0001	SCI Quality Assurance Manual For Fabricated Steel Products	Contact SCI at www.RFtransparent.com
JEDEC/EIA-xxx	General Commercial Quality Practices	
MIL-STD-100G	Standard Engineering Drawing Practices	http://elsmar.com/pdf_files/Military%20Standards/
International Building Code (IBC), Chapter 16	Seismic Design Diaphragms	http://sections.asce.org/stlouis/SEI/ 2004-10-14_2003-IBC-DIAPHRAGM-DESIGN.PDF
International Building Code (IBC), Chapter 26	Light Transmitting Plastics	

5.0 Abbreviations, Acronyms, and Definitions

5.1 Abbreviations and Acronyms

CACA	Cause and Corrective Action Report
DPA	Destructive Physical Analysis
ECN	Engineering Change Notice
FAIR	First Article Inspection Report
FIIR	Fabrication Instructions and Inspection Record
FOB	Freight On Board
IBC	International Building Code
MRB	Material Review Board
NTP	Notice To Proceed
PM	Project Manager
PO	Purchase Order
QA	Quality Assurance
QAR	Quality Action Request
QC	Quality Control
RDR	Rejection and Discrepancy Report
RFC	Request For Change
RFI	Request For Information
RFP	Request For Proposal
RFQ	Request For Quote
RTS	Ready To Ship
SCI	Solar Communications International
SO	Sales Order
SOW	Statement of Work
T&C's	Terms and Conditions
WO	Work Order

5.2 Definitions

Age/Temperature sensitive item	Item in which storage conditions and age directly effect the items original functional abilities and/or physical characteristics. All Age/Temperature sensitive items are to be considered 'Certified Items'.
Ambient Temperature	The surrounding temperature, 25 +3/-5 C, unless otherwise specified
Certified Item	Any item which will be contained in or part of an SCI shippable product, and/or has any portion of the item indicated as a requirement on its PO.
Design –To – Requirements	The engineering process where concepts are formalized into product definition based on the requirements allocated to that product
Destructive Physical Analysis	Analysis used for analyzing the construction and operational limits of a material, device, or structure
Discrepancy	Any deviation from the requirements specified for the product, process, or procedure.
Engineering Change Notice	Document used to track all changes through the document control system.
Failure Criterion	Standard or value against which a material, device or structure exhibits an inability to perform its required function.
Failure Mode	The characteristics of a failure including the specific operation or test existing at the time of failure.
Function	A technical or management discipline such as design engineering, reliability engineering, project management, etc.
Incoming Inspection	The examination of a product after it has been initially received from a supplier but prior to the product being placed into inventory or forwarded to an area of use.
Life Test	An accelerated stress test or series of stress tests to determine the probable failure rate of a product, device, or service.
Manufacturing	The process where equipment or structures are fabricated, assembled, integrated, and verified at the unit or component level.
Non-Certified Item	Any item which will not become part of or contained in a shipable SCI product, i.e.; disposable supplies, 'aides', or support items..
Process	An individual task or set of tasks which, when completed, accomplish a predetermined goal.
Procurement	The process where piece parts, materials, and assemblies are purchased from suppliers, vendors, or subcontractors.
Purchase Order	Form documenting SCI procurement from suppliers, vendors, or subcontractors
Quality	Attribute(s) of a product which enhances its satisfaction to the Customer; typically perceived as an increased product value greater than or equal to that expected by that Customer.
Quality Assurance	The overarching management of quality control to ensure effectiveness of products and/or services provided.
Quality Control	Verification and control of product attributes to sustain conformance to requirements.
Repair	An operation performed on nonconforming product that compensates for the nonconformance and allows the product to meet the Customers specifications.
Rework	An operation performed on nonconforming product that restores all characteristics to a conforming state.

Sales Order

Form documenting Customer procurement of products and/or services from SCI.

6.0 Administration

6.1 Purpose/Scope

To define SCI administration of this manual and the processes and procedures defined within it.

6.2 Procedure

1. At least once each year, this manual will be reviewed by SCI Management
2. Revisions to this manual will be made as required to reflect current SCI Quality Assurance (QA) policy and procedures.
3. Revisions shall be lettered consecutively and pages affected by revision shall be replaced with revised pages.
4. Revisions/reviews of this manual will be recorded within the Revision/Review Log.
5. The Revision/Review Log shall reflect the following:
 - Latest Revision Level
 - Date of Revision or Review
 - Affected Procedures
 - Comments
 - Initials of individual responsible for the revision/change
 - Initials of Manager approving the revision
6. SCI Management and Project Manager shall review customer contracts prior to the start of production to ensure SCI and any necessary subcontractors are capable of successfully fulfilling all contracted requirements.
7. Project Managers report directly to the President and CTO of SCI and have the responsibility of ensuring all Quality Assurance processes and procedures outlined in this manual are observed and implemented.

7.0 Document and Technical Change Control

7.1 Scope/Purpose

To ensure that the proper level of all Engineering technical requirements and contractual information is available, complete, legible, and controlled.

7.2 Procedures

1. Document Control shall be monitored and maintained by Administration Personnel with the aid and guidance of Project Management.
2. All documents, when not in use, will be maintained in a controlled location and/or reside on a password controlled Server, or archived.
3. A log of all documents and their revision levels will be maintained as part of the Document Control function.
4. A log of access to all documents will be maintained as part of the Document Control function. The Access Log will be a permanent record of the following, in no specific order:
 - Document or Drawing Number
 - Revision level
 - Document or Drawing title
 - Number of pages or sheets in the document or drawing
 - Initial date the document or drawing entered into the document control system
 - Quantity of identical documents
 - Date document was issued for use
 - Person document was issued to
 - SCI job or quote number requiring use of the document
 - Date document refilled in Document Control
 - Document Control stamp/entry indicating the condition of the document and that it was replaced in its entirety.
5. Contracts Personnel shall upon receipt of mid-contract revisions or changes supply the Project Manager with a copy of the customers Authorization and requirements regarding the change.
6. Documents in use at the time of revised document receipt shall be removed from use by contracts personnel and the new revision level document issued to the possessor of the original document.
7. Procedural or material changes required by a revision will be incorporated into the manufacturing/fabrication/assembly plan, reviewed and approved by the Project Manager or designate and implemented at the earliest possible time into the fabrication process.
8. All documents permanently removed from the Document Control system shall be returned only in accordance with customer instructions.

9. Administrative personnel will periodically perform audits of the Document Control System as deemed necessary by the Operations Manager, Project Manager, President, or Customer with contractual rights to require such audits.

7.3 *Electronic Records*

All SCI documents, data, and records, outlined in the SCI QA manual, including engineering drawings, are entered in electronic form and maintained in the Permanent Records Database.

1. Upon completion of a project, hard copy versions of Job Files are archived or shredded. A project is complete when both:
 - Final delivery has been completed and accepted by the Customer.
 - Final payment is accepted by SCI.
2. The Records Database shall be backed up daily for up to three years.
3. Financial data related to any project is segregated and maintained separately from project engineering, specifications, manufacturing records, etc.
4. All SCI databases shall be password protected and access controlled.

8.0 Inspection Stamps, Usage/Control

8.1 Scope/Purpose

To establish procedures for the issuance, use, and control of inspection stamps. The status of a particular item or process traceable to a specific employee is the sole purpose of the stamps.

8.2 Procedures

1. Stamps will be issued, monitored and controlled by the Quality Control Manager or designated personnel.
2. Control of stamps will be achieved via stamps via the Stamp Issuance Log. Refer to Form No. QC-008, Section 34, Forms.
3. Stamps shall be audited on a yearly cycle. The purpose of the audit is to ensure that the stamps impression is legible and in good condition. The actual audit impression of the stamp will be located in the Stamp Issuance Log.
4. The Stamp Issuance Log shall document:
 - An initial impression of the stamp
 - The signature of the person to whom the stamp is issued
 - Date of issuance
 - QC personnel issuing the stamp or witness
 - 'Audit' impression from the stamp (when applicable)
 - Date of audit
 - Date stamp removed from service
 - QA Managers initials acknowledging removal of stamp
5. Any stamp which has been damaged and/or no longer leaves a legible impression shall be removed from service. Removal from service shall be documented in the Stamp Issuance Log.
6. Any stamp removed from service shall not be returned to use.

8.3 Stamp Definitions

The presence of a stamp is indicative of the following definitions:

NOTE: Not all stamps are required for every project

- **Inspectors Acceptance Stamp:** Presence indicates conformance verification by a quality department representative. Its presence is valid on any document which is Quality Department Controlled. This is the only recognized indication of an inspector's verification and approval. Initials alone are not considered valid.
- **Inspectors Rejection Stamp:** Presence indicates an existing nonconformance condition and is verified as such by a Quality Department representative. Valid on any Quality Department controlled document.
- **Inspectors Defective Stamp:** presence is indicative of an existing nonconformance condition that requires rework or is incomplete and is verified by a Quality Department representative. Valid on any document Quality Department controlled document.
- **Inspectors Approval Stamp:** (of previously rejected or defective item): Triangle stamp shall be overlapped with either the rejected or defective inspectors stamp indicative of reworked and/or repaired item which has been brought to a stamp of conformance. Valid when present on any Quality Department controlled document.
- **Material Control Stamp:** Presence is indicative of SCI Material Control personnel's issuance of material as documented on any Quality Department controlled document
- **Shipping and Receiving Stamp:** Presence is indicative of Acceptance and conformance verification by Shipping/Receiving personnel. Valid on all Shipping/Receiving documents.
- **SCI Management Approval Stamp:** Presence is indicative of items reviewed and approved by a Manager of SCI. Presence is valid on any SCI document. Generally used as an indication of a document approval or conformance verification by an inspector.
- **Document Control Stamp:** Presence is indicative solely of a particular documents entry into the Document Control System. Refer to Section 7.0, Document and Technical Change Control. Presence is not indicative of approval or disapproval of the document.
- **Operator Stamps:** Presence is indicative of a particular employee's performance of an operation in the fabrication of any SCI product. Validity is limited to SCI Quality Department controlled document. Presence is not indicative of approval or conformance by an inspector.

9.0 Identification

9.1 Scope/Purpose

This section defines the identification requirements and methods regarding all SCI processed materials, tooling, and non-conforming items.

9.2 Procedure

1. Identification for non-certified items shall be identified at a minimum with the following:
 - A completed 'Non-Certified' sticker or, as an alternative method, database log entry
 - Indication of acceptance via Receiving Department Stamp
 - Date item received
 - PO number used for item requisition
 - Applicable shelf-life identification requirements
2. Non-certified items received by SCI which are supplied in cans or containers shall be identified individually (each can or container).
3. Non-certified items received by SCI which are supplied in 'bulk' shall be identified on the container (when possible) or on 1 item within the lot received.
4. Certified items shall be identified at a minimum with the following, in no particular order:
 - A 'Certified Material' sticker
 - Indication of acceptance via Receiving or Quality Department Stamp
 - Date item is received
 - Quantity received
 - Part Number or Item description
 - PO number used for item requisition
 - Certification Number shall be indicated, when applicable
 - Applicable shelf-life identification requirements
5. Each Certified item received shall be identified per procedure above where size is permitting. Items which are too small to be so identified shall be bagged and tagged in compliance with the requirements above.
6. All 'Shelf-Life' and/or Age-Temperature sensitive items shall be identified on the manufacturers labeling with the following in addition to all other identification requirements:
 - Expiration Date
 - Receiving or Quality Department personnel's Stamp
 - A 'Monthly Indicator'

NOTE: Where manufacturers labeling does not include the above information, a 'Limited Shelf-Life' sticker will be used to provide the required information.

7. Customer and/or Government furnished items shall be clearly identified as such to prevent misuse and intermingling with non-customer/Government supplied items.

8. All Customer or Government furnished items shall be identified with a Customer/Government Supplied Item' sticker indicating the following:
 - Supplier of Item
 - Shipper/Invoice number
 - Quality or Receiving Department personnel certification number
 - Date received
 - Applicable SCI Certification Number
 - Intended Job Number of item received
9. All Customer/Government Furnished items shall be identified as outlined in the preceding procedures
10. Any Customer/Government furnished item determined to be non-conforming shall be identified per Sections 27.0, Nonconformance Procedures.
11. Pre-kitted materials/items shall be identified such that improper use of its contents is unlikely and traceability is maintained.
12. Each kit shall be identified per steps 1 through 11 of this procedure.
13. Each kit shall be have a 'Pre-Kitted Material' sticker affixed to its storage packaging indicating the following:
 - Job Number and Intended Use
 - Part Number and Revision Level for which kit contents are intended
 - Serial number of unit contained within kit
 - Material Control personnel stamp
 - Date of possession transferred to Material Control
14. Any Pre-kitted materials determined to be non-conforming shall be identified per Section 27.0, Nonconformance Procedures of this Manual.
15. All SCI owned tooling shall, at a minimum, bear indication, by label, of:
 - SCI ownership
 - Customer Name, Part Number, and Revision of item produced
 - Tool Type
 - Pertinent 'use' information
 - Any tool of more than one piece shall identify each piece with an A, B, C, or D. Additionally, total number of pieces shall be identified (i.e.; 1 of 3, 2 of 3, etc.)
- 16 Location of identification shall be such that it is in a clearly visible, non-critical area of the tool or logged and tracked as an element of an asset accounting database.

17. Size and method of location shall be determined by the size, shape and function of the tool but must meet the following criteria:
 - Scribed or stamped impression is required
 - When scribing or stamping may damage the tool, an aluminum placard shall be impression stamped with the required information
 - Aluminum placards may be rivet attached if no tool damage occurs or cable attached
18. Any temporary tooling plaster casts shall be identified via scribing, stamping or painting.
19. Prior to initial storage, when temporary tooling is in use, it shall bear indication of the intended end product P/N or T/N Revision or Change Level, and surface location (i.e.; part contained/part not contained).
20. Temporary tooling (including disposable tooling) which is not to be stored shall be identified per the previous requirements of this section. Additionally, indication of surface location and the latest SCI Job Number in which the temporary tool was used shall be present.
21. Tooling determined to be nonconforming shall be identified per Section 27.0, Nonconformance Procedures.
22. All measurement equipment used for conformance verifications which are thought to be out of calibration shall be identified as such by affixing an 'Out of Calibration' sticker to the instrument itself as well as its storage container. The sticker is to remain attached until the instrument has been calibrated.
23. Nonconforming items, whether parts, materials, subassemblies, details, tools, or disposable materials shall be clearly identified in a manner which eliminates the possibility of being mistaken for a conforming item.
24. At a minimum, non-conforming items shall be identified as such by affixing a completed 'Rejected' sticker to the item itself.
25. The 'Rejected' sticker will be filled out entirely indicating the following information:
 - The P/N and Revision Level indicative of nonconformity
 - The RDR Number affiliated with the nonconforming item
 - The affiliated CACA. Number
 - Quantity of items (same P/N) noted as nonconforming on the RDR
 - Serial Number of nonconforming items
 - Brief description of nonconformity
 - Traceability to the inspector determining nonconformity (stamp)
 - Date nonconformity was determined
26. Responsibility for nonconforming item identification rests with Quality Department personnel.
27. Where size of the nonconforming item is prohibitive of directly affixing a sticker, or if doubt exists as to the sticker remaining affixed, bag and tag sticker method of identification shall be used.

28. When multiple items with identical item or part numbers are noted as nonconforming on the same RDR, the 'bag and tag' method of identification shall be employed. If multiple bags are required, each bag shall have a 'Rejected' sticker affixed.
29. Only the serial numbers of the items within a particular bag shall be indicated on the affixed 'Rejected' sticker.
30. Identification of nonconformity shall remain affixed until such time that conformity has been determined or the item has been dispositioned as 'Re-work'.
31. All items dispositioned 'Scrap' shall be clearly identified as such by permanently affixing a 'Dispose- Do Not Use' Sticker.
32. 'Rejected' Sticker shall remain affixed; the 'Dispose – Do Not Use' sticker shall be additional identification.
33. Each and every item dispositioned 'Scrap', shall be identified with a 'Disposed – Do Not Use' Sticker. If originally 'Bagged and 'Tagged', the items will be re-bagged after affixing individual 'Dispose – Do Not Use' Sticker.
34. The Quality Department will periodically audit the entire facility regarding compliance with the requirements of this procedure. All nonconforming items will be processed accordingly. The frequency of audits will be determined by the Quality Control Manager or by the company President.

10.0 Personnel Training

All operations within a manufacturing process must be performed in a consistent and repeatable manner. To achieve that, personnel must be trained, tested, and certified to an established level of proficiency.

10.1 *SCI Training*

SCI personnel are qualified as a condition of employment. Reviews of SCI and employee goals and objectives are conducted yearly. These reviews include identifying additional training which may be required. Training certificates establishing proficiency shall be kept in the personnel permanent file.

10.2 *Subcontractor Training*

All subcontractor personnel are considered to be qualified as a condition of and as a consequence of their being hired. Subcontractors are responsible for identifying and providing any additional training needed by their employees.

11.0 Procurement Control

11.1 *Scope/Purpose*

To provide assurance that all items procured by SCI are in compliance with customer requirements and supplied in a timely manner by qualified suppliers.

11.2 Procedures

1. The Purchasing Manager or designate shall review all POs issued by SCI to verify for completeness and conform to customer requirements. The PO review shall verify that the following is clearly stated:
 - Required certification: Process material test results and certification conformance
 - Test requirements
 - Inspection requirements
 - Complete item description, including specification
 - Purchase Order is completed in its entirety
 - Receiving inspection requirements
 - Vendor to whom the PO is issued is an approved SCI supplier and meets customer approval where required.
2. Quality Assurance conformance of POs shall be via stamping, initialing, and dating the quality block of the PO as required.

12.0 Supplier Survey, Evaluation, and Control

12.1 Scope/Purpose

To establish the requirements for evaluating and controlling the performance of SCI suppliers. Vendors and suppliers of materials and services will be controlled in such a way as to ensure that products of consistent quality are received from an approved source. When a vendor or procured material is found to be discrepant against standards, appropriate action will be taken.

12.2 Procedures

1. Quality Assurance personnel shall measure the performance of all SCI suppliers by conducting surveys and evaluating receiving and source inspection data.
2. The Quality Assurance Manager establishes and maintains a list of suppliers approved by SCI, as the same may be updated periodically. The list shall be made available to personnel performing Receiving, Inspection, Purchasing, and Estimating functions.
3. The approval of suppliers shall be by survey, past performance, questionnaire, or evaluation by customers or other major subcontractors whose survey methods meet SCI and customer criteria.
4. SCI shall only release POs to those suppliers listed as approved by Quality Assurance, except where procurement of commercial 'off the shelf' hardware or articles is acceptable. Whenever possible, customer approved process sources will be utilized.
5. Removal of a supplier from the Approved Supplier List shall be at the sole discretion of SCI Quality Assurance based on a failure to comply with SCI requirements.
6. Periodic surveys or Ad Hoc evaluations of SCI suppliers will be performed by Quality Assurance representatives to ascertain continued ability to fulfill contractual requirements and applicable standards.
7. Purchasing, upon receipt of unsatisfactory supplier rating reports, shall take immediate action as deemed necessary by SCI, including supplier notification and cancellation of current contracts or orders.

13.0 Control of Measuring Equipment

13.1 Scope/Purpose

This procedure will apply to all precision measuring equipment used by SCI to verify conformance of it's product to contracted requirements.

13.2 Procedure

1. The Quality Assurance Manager is responsible for tool and gauge inspection and maintenance.
2. All devices used to determine product conformance are calibrated at established intervals against certified masters traceable to the National Bureau of Standards in accordance with MIL-STD-120, by standard construction methods, or by SCI implemented methods
3. Where applicable, calibration labels must be affixed to calibrated measuring devices used for product acceptance. Labels will contain:
 - Name of calibration facility
 - Date of calibration
 - Date of calibration expiration
 - Calibration inspectors stamp
4. A Certification of Calibration must be on file for every measuring device used in determining product acceptance will contain:
 - Facility performing calibration service
 - Serial Number of item calibrated
 - Original manufacturer and manufactured tolerance range
 - Frequency of calibration performed
 - Date item goes out of calibration
 - Status of item
 - Condition prior to calibration and the Specification employed
 - Traceability via test number or similar.
 - Atmospheric conditions at time of calibration (i.e.; temperature and humidity)
 - A statement indicating compliance with MIL-STD-45662A or equivalent.
5. Where deemed necessary by the Project Manager or CTO, a recall shall be established using a Calibration Log. Refer to Document No. QC-022, Section 34, Forms. The Calibration Log will indicate the date by which each tool must be re-calibrated or removed from service.
6. Where deemed necessary by the Project Manager or CTO, items found to be out of calibration shall be identified with a sticker. Refer to Out Of Calibration Report, document No. QC-025, Section 34, Forms. Item found to be out of calibration shall be removed from service, and segregated until sent out for calibration services.
7. Any tool found to vary from previous calibration cycle will be removed from service. These tools will be reviewed by the Quality Assurance Manager. At the discretion of the QA Manager, these tools will be repaired or scrapped as necessary. The shortened calibration period for the tool shall be established that is appropriate to assure proper performance of the tool.

14.0 Tool Control

14.1 Scope/Purpose

This section establishes procedures and practices for the care, control and identification of tooling in the possession of SCI.

14.2 Procedures

1. All Customer owned tooling in possession of SCI shall be controlled, cared for, and identified per the Customers requirements.
2. All tooling shall be the responsibility, when not in use, of designated Tool Control personnel.
3. All tooling shall be stored in a safe place, in a secured area, accessible to only to authorized personnel.
4. Tooling required for the production of a particular part, detail, or assembly shall be located together within the same tool stall.
5. Any areas of tooling subject to deterioration shall be protected per standard commercial practices.
6. All SCI owned tooling shall be identified per Section 9.0, Identification..
7. Inventory of all tools shall be maintained via the Stored Tooling Log. Refer to Document No. QC-016, Section 34.0, Forms.
8. The Stored Tooling Inventory Log shall document the following:
 - Customer for which tools are used.
 - Customer Part Number and Revision Level for which they are used.
 - List all tools used to produce a given part, detail, or assembly.
 - Indication of acceptable tool condition and QC stamp
 - Date tool entered storage
 - Date tool put into use
 - Reference to RDR number applicable to tools deemed nonconforming.
 - Person tool or tool group use to produce a part, detail, or assembly is issued to and purpose for issuance
 - Tools missing from a particular tool group (where applicable)
 - Date tools are found to be missing from a particular tool group
 - Date tools were found to be missing or damaged
 - Project Manager (SCI employee or subcontract employee) responsible for tool group
9. All tooling shall be issued and controlled by Tool Control personnel
10. Requests for removal from storage shall come from or be approved by Quality Assurance or designated personnel.
11. All tooling shall be conformant and capable of producing contractually acceptable items.

12. All tooling found to be nonconformant or incapable of its intended function shall be processed in accordance with Section 27.0, Nonconformance Procedures.
13. The Tool Control and Issuance System will be periodically audited as deemed necessary by the Quality Assurance Manager or the Company President. Tools shall be replaced as necessary to ensure compliance with SCI quality standards.

15.0 Material Review Board

15.1 Scope/Purpose

This section establishes operating guidelines for an SCI Material Review Board.

15.2 Procedure

1. The Material Review Board shall function as the final authority for disposition of non-conforming items.
2. The President shall be the final authority on all Material Review Board decisions.
3. The Material Review Board shall be Customer reviewed and approved, when contractually required, or at SCIs sole discretion, prior to further processing and/or shipment.
4. Any/all items dispositioned 'rework' by SCI Material Review Board shall be processed per contractual agreement between SCI and its Customer.

16.0 Customer/Government Furnished Materials

16.1 Scope/Purpose

The following procedure defines the correct handling of material furnished by SCI Customers or the Government.

16.2 Procedure

1. Receiving inspection personnel shall perform an examination at receipt to detect damage in transit, completeness, and proper type.
2. Periodic inspection as determined by the QA Manager to assure adequate storage to guard against damage from handling or deterioration.
3. A designated and identified storage area is to be maintained at all times for all Customer and/or Government supplied materials. The duration period for storage shall be kept to a minimum to avoid additional costs to the Customer.
4. Functional testing shall be performed before or after installation, as required by contract or at the discretion of SCI, to determine satisfactory operation.
5. Identification and protection from improper use and disposition shall be maintained via 'Customer and/or Government Supplied Item' sticker.
6. Verification of quantity of Customer/Government property shall be performed periodically as required by contract or as deemed necessary by SCI.

17.0 Project Management

17.1 Scope/Purpose

To assure a method for controlling and verifying that all applicable statutory, regulatory, and contractual requirements are identified and complied with during the full course of the project.

17.2 Manager Responsibilities

1. The Customer will need to supply the Project Manager with necessary project documents. These shall include but may not be limited to:
 - A written statement of the scope of the project or Statement of Work (SOW)
 - Due dates and/or Schedule
 - Special Tolerances
 - Code requirements
 - Material Specifications
 - Inspection requirements
 - Engineering requirements

It is the responsibility of the Project Manager to ensure that all necessary information/data is received from the Customer.

2. The Project Manager shall receive supply and inventory reports from all production facilities on a regular basis.
3. The Project Manager is responsible to ensure the inventory supply is sufficiently stocked and available for all production projects.
4. The Manager will create a Job File to be shared and used by Engineering, Manufacturing, and Inspection.
5. It is also the responsibility of the Project Manager to update or delegate personnel to inform all personnel and suppliers of any and all changes to the project.
6. If there are any revisions to customer drawings while work is in progress, the Project Manager will update or delegate personnel to update all work and retain superceded drawings.
7. The Project Manager will keep a record of all quotes on any project for which they are responsible.

18.0 Job File Description

The Job File is the master file that contains all information regarding the project. All Job Files are kept as hard copy or retained electronically in the Main Office. The main elements of the Job File are:

- Cover Sheet – The cover sheet for each project will be titled and will list the scope of the project, the installation drawing numbers Revision ID, and the customers Release date(s).
- All printed job requirements
- Engineering/Design Drawings

- Material Certifications must be available
- All PO's for material or services unique to the project
- A copy of any unique manufacturing procedure
- All correspondence
- A copy of all Quality Action Requests (QAR)
- All quotes pertaining to the project

19.0 Work Order Description

The Work Order (WO) is the package that accompanies the work as it proceeds through the shop. It includes:

- The cover Sheets titled Work Order. The cover sheet will list the scope of the project, the detail drawing numbers with the drawing revision ID, due dates, and special tolerances.
- A part completion list
- Material Specifications
- Inspection Requirements Sheet, if required
- Drawings
- Any WP's unique to the job
- Fab. Instructions and Inspection Record (QC-010)

20.0 Project Procedures

1. All Projects will be documented on regular production meeting agendas. Production meetings are held between managers to review the status of current and upcoming projects.
2. Designs are conceived and reviewed with customer input.

Note: SCI also builds standard products that require no additional engineering after contract review.

3. Designs must comply with applicable Standards and Codes for the jurisdiction in which the project will reside.
4. The customer may be provided with a preliminary design and structure weight for bidding purposes
5. SCI shall submit all engineering and design drawings as required by the customer. Drawings and documents submitted will be recorded on a Supplier Document Submittal Requirements Form or equivalent database entries. Refer to Document No. QC-026, Section 34, Forms.
6. The form will document, as a minimum:
 - Customer Specification Reference
 - Document Description
 - Notice to Proceed (NTP)
 - Submittal Record indicating the document schedule; Before Design, Before Fabrication, Before Installation, Before Shipment or With Shipment; the type of document, Preliminary, Initial, or Final; number of copies required
 - Any applicable remarks

The Customer may, at the sole discretion of SCI or by contractual requirement, assign a review status based on documents submitted by SCI.

7. Engineering reviews the design input for completeness, ambiguity, or conflicting requirements. The review includes results of any contract review activities. If any questions are found, the design input is returned to the customer for clarification.
8. All work is reviewed by the customer, corrected as required, and signed off.
9. Verification activities are performed at review stages for both analysis and processing.
10. The Job File is updated with the date the project is released to the shop, the date the final drawings are sent to the customer.
11. Scheduling is maintained and updated by the Project Manager.
12. The Project Manager will make sure that projects are assigned to qualified personnel. Initial drafting and fabrication schedules are established in compliance with customer requirements.
13. Ship dates are finalized based on resource availability and the complexity of a particular project.
14. Throughout all design phases, for any questions and/or problems, a documented Request For Information (RFI) will be generated, filed, and will be distributed to any necessary personnel from Engineering, the Customer, Project Management, Fabrication, Purchasing, and Quality Assurance.

21.0 Material Control

1. Materials for certified jobs must have test reports that reflect engineering and project requirements. All test reports will be kept in the Job File.
2. Materials certifications shall be reviewed as specified in the Receiving Procedures, Section 24.0, Purchasing and Receiving.
3. Traceability (if required) shall be obtained on all material(s) for all parts as they proceed through the shop and are transferred onto the WO.
4. Test reports for critical materials will be filed in the Job File and kept in the main office files for the length of time required indicated by the particular project.
5. All information, such as QAR, test reports, unique manufacturing procedures, or WO must be kept in the Job File located in the main office.
6. The QAR is the primary quality control document. It contains information such as non-conformances, changes, modification, repairs, and purchasing or fabrication Request For Change (RFC). Purchasing and/or Fabrication RFCs are subject to review and approval by Engineering and Project Management.
7. Letters of Conformance and Test Reports shall be matched to materials; this ensures accuracy in meeting project material requirements. After review and approval, Certifications are placed in the Job File for future reference.

8. The Job File shall contain all information related to the project. The Job File will remain available as long as required under the terms of the project.

22.0 Engineering, Design, and Drafting

22.1 Scope/Purpose

The purpose of this section is to specify the Engineering, design, and drafting requirements for all types of SCI RF Transparent structures, regardless of their configuration. SCI retains all underlying intellectual property rights in and to its product drawings and designs, which are and shall remain proprietary to SCI and confidential as between SCI and Customer.

22.2 General Design Requirements

All products developed as SCI RF transparent products must be engineered and designed so the structure is RF permeable, preferably in all directions. Engineering is responsible for verifying the radiation pattern of the antennas listed in the Data Sheet.

Engineering is responsible for integrating structures seamlessly into the environment in which the structure is to be placed. Engineering will visit each site to verify colors, textures, size, proportions, and any other factors affecting the integration of the structure.

22.3 Preliminary

All SCI products must undergo an initial Engineering review for the following design elements:

- Specifications
- Code requirements
- Materials
- Special tolerances
- Inspection requirements
- Engineering requirements
- Special Engineering requirements

22.4 Procedures

SCI shall submit the following documented on a Document Submittal Requirements Form:

1. Four (4) copies of the final RF Transparent structure engineering drawings, computer input and analysis results and supporting calculations, each of which shall be sealed by a registered Professional Engineer, registered in the location in which the structure is to be located.
2. The drawings, computer output and calculations shall clearly indicate the Customers Site number, site name, and calculations shall be signed and dated by the originator, checker, and approver.
3. Four (4) copies of the detailed installation drawings at the time the product ships (or with the product when required), and instructions sealed by a Registered Professional Engineer, registered in the jurisdiction in which the structure is to be located, including lifting instructions with appropriate product weight information and lifting points.

4. Drawings shall be 22”X34”, 11”X17”, or 8 1/2” X 11” in size as required in the jurisdiction in which the structure is to be located and shall include lifting instructions with appropriate product weight data and lifting points.

22.5 Design/Drafting Responsibilities

Design/Drafting personnel will be responsible for:

1. Meeting all design and detailing demands
2. Providing Purchasing with detailed material lists/Bill of Materials (BOM) and requirements
3. Updating and maintaining drawing files and drawing revisions

NOTE: Where applicable guidance for SCI drafting standards will be derived from MIL-STD-100G.

4. Maintaining the Drafting Standards book

23.0 Architecture and Engineering Management

23.1 Scope/Purpose.

SCI offers to its Customers the Service to structurally design and evaluate all structural elements of a proposed project.

SCI provides structural analysis and design for all structural steel (refer to SCI Quality Assurance Manual for Fabricated Steel Products) and RF Transparent screening. SCI provides coordination of calculation and engineering phases.

For complete and detailed SCI A&E QA processes and procedures, refer to SCI QA Manual for Architecture and Engineering, Doc. No. QA-0003.

23.2 Procedures

1. SCI shall provide coordination of the calculations and engineering phase.
2. The Project Manager shall be responsible for the development of structural design upon contract award.
3. The Project Manager shall request all reports drawings, photos, and specifications required.
4. All documents shall be supplied to by the Project Manager to Engineering.
5. A job priority list shall be established by the Project Manager and engineer. The priority list shall be based of the calculations format or outstanding list.
6. The Engineer shall supply the Project Manager with structural calculations and design supply in a pdf file.

7. The Project Manager shall provide the Customer with calculation reports and drawings electronically and notify the Customer of the expected delivery date of hard copies.

24.0 Purchasing and Receiving

24.1 Scope/Purpose

24.2 Purchased Parts/Materials

Purchase Orders for materials shall clearly list the grade of material (insert ref.) and all other details required to ensure conformance with code and design requirements.

Purchased Parts and materials acquired through sub-contractors will be outsourced to a qualified vendor possessing all required certifications. Refer to Supplier Evaluation, Survey, and Control, Section 12.0.

All purchases will be accompanied with certification reports, where applicable.

24.3 Receiving

All subcontractor parts delivered will be accompanied by the material test reports.

All parts (raw materials, fasteners, subcontracted parts) not conforming to the specifications listed on the PO will be tagged and quarantined. Refer to Nonconformance Procedures, Section 27.0.

All materials, parts, and consumables will be stocked in pre-assigned areas.

25.0 Manufacturing and Fabrication

25.1 Scope/Purpose

25.2 Personnel Qualifications

Personnel involved in the manufacture and fabrication of SCI products will have the ability:

- To determine and understand required processes and engineering expectations.
- To inspect work as performed for minimum requirements/tolerances specified in the drawing.

25.3 Review Related References

1. Prior to beginning any manufacturing/fabrication procedure, personnel will study drawings to ensure they understand:

- Dimensions
- Procedures
- Process
- Revisions to drawings
- Special engineering notes
- Code Requirements
- Engineering Change Notices (when applicable)
- Any other related guidelines required to complete the project.

- 2 It is the responsibility of the Project Manager or designated supervisor to ensure that all data and instructions are understood prior to beginning any manufacturing, fabrication, or assembly process.

25.4 Process Set-Up

1. Manufacturing areas shall be established and reviewed by the Project Manager or designated supervisor prior to beginning any Manufacturing or Fabrication process to ensure an efficient operational flow.
2. An inventory of materials needed to complete any manufacturing or fabrication process prior to beginning work.

25.5 Pre-Inspection

1. All materials/parts shall be inspected for dimensional as well as material grade prior to manufacturing or fabrication.
2. Inspection hold points shall be identified and reviewed by manufacturing personnel and supervisors.

25.6 Surface Preparation

1. Surfaces must be cleaned of dust, dirt, and debris that may degrade the integrity of joints. Refer to code requirements where applicable.
2. All joints must fit as indicated by design and code.

25.7 Paint/Coating Requirements

The following guidelines shall be adhered to in the manufacture and fabrication of all SCI RF Transparent products.

1. Color formulations shall not contain carbon.
2. TiO₂ (titanium dioxide) concentrations shall be as low as common mixing practices allow.
3. Paint with suspended metallic particles such as aluminum, zinc, or bronze, shall be avoided.
4. All manufacturers instructions supplied with selected paints/coatings shall be followed.
5. Paint shall not be applied to hot or cold surfaces, or when ambient air temperature is below 55 degrees F or above 100 degrees F.
6. Paint shall be allowed 24 hours of moderate, dry conditions to dry.
7. Total paint/coating thickness shall not exceed 0.003 inches.
8. Paint on products being shipped shall be allowed to harden for 72 hours prior to packaging/shipping.
9. Touch up paint shall be provided when product is shipped.

26.0 Inspection

26.1 Scope/Purpose

To establish procedures for inspection of raw material, fabricated parts, details, and assemblies procured and/or manufactured by SCI.

26.2 Receiving Inspection

1. All items procured and received by SCI shall be subject to verification of conformance to contracted requirements.
2. Conformance verification shall be performed by Receiving and/or Inspection Department personnel.
3. Quality Department personnel shall, on all SCI POs bearing indication of 'DIM Inspection Required', perform the operations required by related Drawings, Specifications, and POs necessary to assure conformance.
4. Inspection personnel shall provide documentation supporting conformance verification. Documentation of conformance verification shall be located in the appropriate Job File.
5. Receiving personnel shall verify the balance of items received by SCI for compliance to the contracted requirements.
6. Receiving testing shall be performed on procured items:
 - When required by contract
 - When deemed necessary by the Quality Department for conformance verification
 - Periodically, on certified items which are received by SCI with supplier certifications providing verification of supplier certification accuracy. The frequency of this type of verification is to be determined by the QA Manager.
7. Documentation of tests performed shall be maintained and retained by the Quality Department. These documents will be attached to supplier certifications received. Additionally, items tested per step 6 above will have a copy of the results filed in that particular supplier's vendor rating file. Refer to Section 12.0, Supplier Survey, Evaluation, and Control. Documentation of tests performed shall include the following information:
 - SCI PO number
 - Specification Testing for conformance
 - Incorporated Specifications
 - Material Description
 - Supplier Part Number
 - Material Batch and Lot number
 - SCI Certification number assigned
 - Testers signature
 - Date of Witness verification
 - All processing documents used to fabricate test coupons (if applicable)
 - Test results and calculation summaries

8. Indication of conformance verification by Quality Department personnel shall be indicated by stamp impression at each line item accepted.
9. Receiving personnel shall indicate acceptance (conformity) by stamping and initialing the associated PO.
10. All items received by SCI will be identified per Section 9.0, Identification.
11. All items determined to be noncompliant shall be processed per Section 27.0, Nonconformance Procedures.

26.3 In-Process Inspection

1. Fit will be inspected by designated personnel.
2. Any irregularities outside of code specifications must be addressed and resolved.
3. Inspection steps, testing operations, and sequencing will be specified within the Fabrication Instruction and Inspection Record (FIIR). Refer to Fabrication and Inspection Record, Form No. QC – 010, Section 34, Forms.
4. Inspection methods, including acceptance/rejection criteria, workmanship cleanliness, and handling requirements shall be included on the FIIR.

NOTE: Referencing a specification within the FIIR is not acceptable. All required information within a specification shall be extracted from the specification and documented on the FIIR.

5. In cases of nonconformance that cannot be corrected within code specifications, the part is to be tagged and, whenever possible, stored in a separate area designated for nonconforming parts/materials. A QAR document shall be filled out and forwarded to Engineering and Customer review for usability.
6. Self-inspection should be performed on a percentage basis throughout the project.
7. All in-process test and inspections shall be recorded and all documentation associated with the inspection shall be attached to and become part of the FIIR.
8. The Inspector shall record the following at the time of inspection:
 - Nature and number of observations
 - Number and types of deficiencies found
 - Quantities approved and rejected
 - Appropriate stamp impression (refer to Section 8.0, Inspection Stamps – Use/Control)

26.4 Inspection On Completion

1. A final visual inspection is to be performed by the responsible manufacturing, fabrication, or assembly personnel.
2. Inspection shall be subject to surveillance by the Customer.

3. Required documents shall be initialed by the responsible personnel (WO, etc.).
4. Notify the Inspection Department that the part/assembly is ready for final inspection.
5. SCI shall inspect items being shipped prior to shipping for any defects or damage and verify conformance with Customer specification requirements and any other specification or standard as required by the local jurisdiction where the structure is to be installed.
6. Prior to shipment, all pieces shall be marked indicating:
 - Piece number
 - Installation diagram number
 - Other items required for identification at installation
7. Identification marks shall be visible when material is stacked and shall remain legible for a minimum of one year's exposure outdoors.
8. All final Inspection and test results shall be documented and traceable to the inspected item and the inspector performing conformance verification.
9. Rejected items will be processed in accordance with Section 27.0, Nonconformance Procedures.
10. Items which require re-work or alteration after final acceptance due to Customer contractual changes shall be accomplished as a new job. A manufacturing plan will be developed, Quality Assurance approved, and processed per SCI QA Manual, Section 32.0, Rework and Repair.
11. Unused portion of material(s) shall be properly identified and re-stocked.
12. Work area shall be swept, cleaned, and tools returned to proper location.

26.5 First Article Inspection

1. First Article Inspection shall be performed when:
 - Contractually required
 - Determined necessary the Quality Assurance Manager
 - Requested by the Project Manager
2. First Article Inspection shall include verification of conformance of all specified criteria to the related systems (i.e. engineering dimensions, specifications, testing requirements) and/or shall be per Customer requirements.
3. Documentation of First Article of Inspection shall be generated and retained. Documentation shall be traceable to the actual item inspected when required. Documentation shall be supplied to or shipped with the item to the Customer.
4. First Article Inspection Forms (FAIR) shall be formatted per SCI requirements and/or one of the following documents used:

- FAIR A. Shall be used when only conformant/non-conformant status of item attributes need documented proof of verification. Refer to Document No. QC-011, Section 34.0, Forms.
 - FAIR B. Shall be used when the actual item specifications are documented directly associated with the applicable tolerance, quantitative findings of inspection, the location of the specification performed, and acceptance or rejection status of the specified attribute. Refer to Document No. QC-012, Section 34.0, Forms.
5. Items which are subject to First Article Inspection and are found to be nonconforming will be processed in accordance with Section 27.0, Nonconforming Procedures.

27.0 Nonconformance Procedures

27.1 Scope/Purpose

The following procedures establish a system for processing any item found to be nonconformant, provides a means of item identification and quarantine from conformant materials and items, defines documentation required for nonconformant items, the disposition of the items, verification of disposition, and traceability throughout the process.

27.2 Procedure

1. All items found to be non-conforming to the contracted requirements shall be identified per Section 9.0, Identification.

WARNING: Segregation of discrepant material, parts, and assemblies is a critical tenant of SCIs Quality Assurance Plan. It is taken very seriously by SCI Management. Failure to observe SCI QA procedures regarding the segregation and processing of nonconforming items may result in termination or removal from the SCI Approved Supplier List.

2. All nonconforming items shall be segregated from conforming items, located in a secure area controlled by the Quality Department.
3. Nonconforming temperature/time sensitive items which require storage at temperatures below ambient room temperature shall be separated from conforming stock by placing items in a separate temperature controlled location.
4. Documentation of all non-conforming items shall be accomplished by Receiving or Quality Department personnel via completion of a Rejection and Discrepancy Report (RDR). Refer to Document No. QC-017, Section 34, Forms.
5. Nonconforming item documentation may include but is not limited to
 - An RDR number to provide traceability to a particular job and nonconformance document.
 - Nonconforming notification date
 - The relative job number of nonconforming item(s)
 - The name of the SCI vendor responsible for the nonconforming item
 - The name of the SCI Customer
 - The procuring document number

- Quantity of items inspected
 - Quantity of items determined to be nonconforming
 - Relative engineering document number and revision level
 - Applicable part or tool number of non-conforming item
 - Revision level of nonconforming item(s)
 - Serial number of nonconforming item(s)
 - Location and time at which nonconformance was determined.
 - Inspection phase in which nonconformance was determined (Receiving, In-Process, Final, or Source)
 - Indication of and traceability to the Quality Department personnel responsible for determining nonconforming status
 - A description of nonconforming item
 - Item number providing traceability in the case of multi-item RDRs
 - Description of nonconformance to include contractual acceptable limits and the actual condition of the item
 - Unit serial number relative to discrepancy description
 - Item number of the relevant inspection report
 - Indication of the responsible Project Manager
- 6 Test results, when used in determining the nonconformance of an item shall be included with documentation for the nonconforming item(s).
7. Inspection Reports relating to the nonconforming status of the item(s) shall be included with documentation for the item(s).
8. The status of items determined to be nonconforming at mid-fabrication or final inspection shall have the related shop traveler/planner indicate the conformant condition via the presence of an Inspection Defective or Rejection Stamp, Inspector's signature, the date, the RDR number and the Cause and Corrective Action Report (CACA) generated.
8. An RDR shall be completed and included with the item documentation.
9. The RDR and related document originals shall be filed in the appropriate Quality Department Job File.
10. RDRs generated regarding non-certified (general stock) items will have the original RDR located in the appropriate Supplier's Vendor rating file.
11. The following shall be grouped together and forwarded to the responsible Project Manager for further processing:
- RDR and a copy of all related documents
 - A CACA
 - Shop Traveler/Planning document associated with each non-conforming item.
12. The rejection package shall be forwarded directly to the Purchasing Department for non-certified (stock) items determined to be nonconforming.

13. Nonconforming items shall receive one of three possible dispositions:

- Scrap
- Rework
- Use as is

14. Disposition must be mutually agreed upon by the Project Manager or vendor (when applicable) and the Quality Assurance Manager. Cases which fail to have a mutually agreed upon disposition shall be processed per Section 15.0, Material Review Board.

15. All 'Use As Is' dispositions shall be SCI QA approved prior to further processing and/or shipment. All 'Scrap' dispositioned items shall be identified per Section 9.0, Identification and processed as directed by the Customer.

Note: Nonconforming items which have been reworked in an attempt to bring the item into a state of conformity but which are still not conformant shall be processed per the requirements of this procedure again.

16. Documentation of nonconforming item disposition shall become a permanent traceable record retained by the Quality Department.

27.3 Nonconforming Item Documentation

1. The Project Manager (or vendor) shall propose a disposition for the QA Manager's review via initialing the proposed disposition on the associated RDR. A proposed disposition for each nonconforming item number on the RDR is required.
2. The total hours as estimated by the Project Manager (or vendor) shall be indicated at the lower left corner of the related RDR.
3. A completed Cause and Corrective Action (CACA) form shall accompany the balance of the document package submitted for the QA Manager's review. Refer to Document No. 018, Section 34, Forms.
4. Upon receipt of the 'Rejection Package', the Quality Assurance Manager shall review the proposed dispositions and indicate the Quality Department's disposition via initialing for each nonconforming item number on present on the RDR. Differing dispositions will be processed via SCI QA Manual, Section 16.0, Material Review Board. Either/or the Presidents, the CTO, or Project Manager initials shall indicate final disposition.
5. 'Cause and Corrective Action' shall be processed per Section 30.0, Corrective and Preventive Action System.
6. The RDR and CACA shall be attached to and become a permanent part of the nonconforming item's shop traveler/planner.

7. Rework and repair shall be performed per the Project Manager generated, Quality Department approved, Rework/Repair Plan/Shop traveler which becomes a permanent portion of the item's document package. Refer to Document No. QC-027, Section 34, Forms.
8. Inspection Department personnel shall verify that the rework/repair procedures have brought the once non-conforming item(s) into a state of conformance.
9. Indicated of conformance shall be documented in the appropriate column via acceptance stamping the RDR adjacent to each item number of the RDR being noted as non-conforming.
10. The original indication of non-conformity noted on the shop traveler shall be interconnected with an acceptance stamp, indicating rework to a state of conformity.

27.4 Disposal/destruction of SCI material

1. All SCI material, subassemblies, or parts designated as nonconformant or otherwise disposable must have a form submitted certifying that the material or item has, in fact been disposed of or destroyed. Refer to Doc. No. QC – 029, Section 34.0, Forms.
2. All Disposal and Destruction forms must be signed and dated by an SCI designated individual. The Disposal and Destruction form must include, as a minimum:
 - The method of disposal/destruction
 - The reason for disposal/destruction
 - The date disposal/destruction occurred
 - An SCI authorized signature

27.5 Quality Action Request (QAR) Form Routing

1. When a QAR is filed out, the QAR is then reviewed by the QA Manager.
2. The QA Manager contacts the appropriate people for approval of disposition or repairs.
3. After disposition has been determined and the QAR has been signed off by the cognizant authority, it will be forwarded to Purchasing or in-house engineering for review and the placed in the SO file.
4. A marked copy is then sent to the Project Manager to review and attach to the WO. Another marked copy is sent to the Customer for review.

28.0 Shipping

1. SCI provides product shipping to all customers, as a point-to-point service. SCI shipping service is a F.O.B. (origin freight, San Diego, California) service. SCI prices do not include shipping costs or offloading at destination site.
2. SCI will manage the shipping of product once it is labeled by Manufacturing as Ready To Ship (RTS).

3. A shipping Bill of Materials (BOM) shall be completed by an SCI employee. The BOM shall include the product description and a description of any other miscellaneous parts considered necessary to the shipment.
4. A thorough review of the BOM shall be conducted prior to shipping to ensure all items have been included on the BOM.
5. Subject to SCI's Standard Terms and Conditions of Sale, SCI shall coordinate with the Customer on an agreed upon date to ship and receive SCI product. SCI shall set the date on the shipping document and database to make all necessary freight arrangements.
6. SCI shall only receive freight quotes from approved freight vendors.
7. SCI shall establish the most reliable, cost effective quote and issue a PO for the freight service.
8. SCI shall maintain supervision of freight until SCI product is received and signed for by the Customer.

29.0 Quality Action Request (QAR)

29.1 Scope/Purpose

When any problems occur while manufacturing products, including variations from detail drawings, discrepancies in drawings, and out of conformance parts, a QAR must be submitted by a designated supervisor. For document control, no QARs will be accepted by anyone other than management or shift supervisors.

29.2 Submittal

There are two options for submitting a QAR:

1. Hard Copy: Retrieve a blank QAR from the office document file. Fill out all applicable boxes and leave a detailed description of the problem to be addressed including referencing applicable drawings and/or anything else that may be pertinent to the problem. After completing the QAR, place it in the QA inbox.
2. Electronic Copy: An electronic copy of the QAR forms may be found on line. The form is identical to the hard copy version and should be completed in the same manner. When an electronic copy is completed, the file needs to be saved in the QAR directory on the appropriate Drive. After the QAR is completed, print a hard copy (or forward an electronic copy) and turn it into the Quality Assurance Manager for follow-up.

29.3 Review

After the QA Department has received the QAR, it is to be reviewed for routing. Once the correct department is assigned the task of the QAR, the Authorized Corrective action is noted on the QAR and then forwarded to the proper personnel to be completed.

29.4 Review Process

Reviews are important to assess compliance with a project plan. When a Quality Action Request has been initiated or any Customer request for a specification review is received, the review process examines products/services from the context of quality factors. Quality factors are categories of product/service attributes. Examples of quality factors include:

- Correctness – The extent to which a product or service satisfies the Customer requirements and stated objectives.
- Timeliness – The product/service is provided when needed by the customer.
- Reliability – The extent to which a product functions or a service is provided consistently.
- Productivity – The amount of resources used to produce the product or deliver the service including the relationship between time required and the effort expended (i.e., efficiency).

29.5 Review Process

QA shall plan and conduct reviews according to accepted practices and standards. Review procedures include:

1. Identify reviews in the project schedule.
2. Verify applicable review processes are in place.
3. Document review results:
 - Verify product/service traceability
 - Verify product/service against SCI proposal
 - Verify product/service against standards and specifications
4. Validate corrections by scheduling follow-up actions
2. Verify that defects or errors are tracked to closure.
3. Document review results against product validation data.
4. Summarize review findings for communication to Customer and other technical groups to whom the findings may apply.
5. Enhance review processes whenever possible.

29.6 Filing

After the corrective actions are completed, the person that performed the corrections must sign and date the QAR at the bottom and then turned into the QA Department for completion verification and electronic filing. Electronic filing may be a scanned and stored image of the hard copy of the QAR and/or a transcript electronic copy which is to be saved in the QAR directory on the Permanent Records Database.

30.0 Corrective and Preventive Action System

30.1 Scope/Purpose

Corrective actions are concise plans that are designed to identify areas of factory discrepancy prior to product delivery. The execution of an assigned corrective action is a necessity for maintaining a Quality Assurance System that is effective, responsive, and dynamic.

30.2 Procedures

1. Once an operating discrepancy has been identified, a formal corrective action will be issued, the progress tracked, and the effectiveness verified by the QC Management.
2. Formal corrective actions are issued when:
 - Violations to established procedures are noted during audits or routine observation of operating activities
 - Failure analysis results determine that corrective action is needed.
 - Discrepancies are found during in-process inspection, final lot inspection, or other inspection operations that could have allowed product exhibiting unreliable field performance to ship to customers.
 - A customer contact requires the corrective action as a result of a factory discrepancy.

There are three types of corrective actions:

- a. Internal Corrective Actions: initiated when discrepancies are identified to be due solely to the inner operations of SCI.
 - b. Supplier Corrective Actions: generated as part of SCIs subcontractor control program. These corrective actions require written commitment a formal response from the subcontractor. If the discrepancy is found by SCI Management to warrant such action, a vendor re-qualification audit may be instituted to verify the effectiveness of the corrective action.
 - c. Customer Corrective Actions: are requested by SCI customers or driven by a customer complaint resulting from a factory discrepancy.
4. Preventive Actions are built into the overall SCI Quality Assurance program. These actions include:
 - Thorough review of customer requirements to produce accurate and complete work instructions for how to build conforming products and services.
 - Document and control all requirements, procedures, and work instructions
 - Ensure that properly trained personnel are used in all areas.
 - Maintain identified test and inspection points for control purposes and to prevent non-conforming material from being processed.
 - Maintain controls over vendor capabilities and incoming parts to prevent defective material from incorporation into SCI products.
 - Maintain a strong corrective process to prevent problem reoccurrence.
 - Hold regular reviews of quality indicators to detect trends before defective product has been built.
 - Document and control preventive maintenance procedures.

31.0 Failure Analysis

1. Upon discovery of discrepant material piece parts, or assembly, where the cause of the discrepancy is unknown and there is concern that the discrepancy may reflect on the quality or reliability of the product, the product will be submitted to Failure Analysis. Quality Management will ensure sufficient capabilities are available to perform analysis, assign a failure cause, and expedite a corrective action plan.

2. Failure Analysis requests that could impact the disposition of other material are to be assigned an RMA number and processed promptly.
3. Each Failure Analysis shall be logged in, documenting, as a minimum, the following:
 - Date received
 - Part Number
 - Customer
 - Request origin
 - Observed failure mode
 - Failure Rate
4. A unique number shall be assigned to each request. Notification that analysis has been initiated is provided to the request originator and the analysis is logged out to Engineering.
5. Targeted time allotted for standard Failure Analysis is three (3) weeks. At the end of three weeks, it is the responsibility of Engineering to forward a completed report to SCI's request originator.
6. All documents relating to the Failure Analysis shall be included in the Job File and retained in the Master Records Database.

32.0 Rework and Repair

32.1 Scope/Purpose

Internal rework/repair operations shall be undertaken using approved work instructions and procedures. These procedures will produce work that conforms to the standards of Quality and Reliability as well as non-reworked/repared material. Rework/repair operations will be fully traceable to the affected material.

32.2 Procedure

1. Engineering will approve all rework/repair operations.
2. Product that has undergone rework/repair shall be resubmitted to the necessary internal test and inspection processes and procedures.

33.0 Testing

33.1 Scope/Purpose

This section defines the physical, functional, and structural requirements that SCI products are tested to meet. Standardized testing methods are used to evaluate RF transparent materials used by SCI in designing and manufacturing its products.

Transmission and Reflection characteristics are evaluated, measured, and quantified to determine their effect on radiating antenna. Table 1 outlines RF properties for various materials/panel types.

SCI ensures the objectivity of all test results by utilizing the services of independent testing laboratories including:

SGS – Fire/Destructive testing

Texas A&M; wind tunnel tests

U.S Testing; physical performance characteristics

West Pac; destructive tests

Nemko Labs; RF characteristics

Examples of SCI RF transparent material and assembly test data can be found in Appendix B, Sample Test and Data Sheets. Test data is available on request to Customers and prospective clients in a variety of formats. Refer to Appendix B, Sample Test and Data Sheets.

33.2 Insertion Loss Measurements

Measurements for Insertion Loss shall be performed on all materials used for SCI RF Transparent structures. Testing methodology/apparatus shall be such that it is adjustable to allow for various incidence angles of outgoing RF signal.

Initial measurements shall be conducted to ‘calibrate’ the apparatus so that a true reading of just the material insertion loss is obtained.

Materials shall be measured for Insertion Loss characteristics at a variety of frequencies between 800 MHz – 40 GHz per Customer requirements. The material shall be measured at incident angles of 0, 17, and 30 degrees.

33.3 Reflection Loss Measurements

Measurements shall be performed on all materials used for SCI RF Transparent structures. Testing methodology/apparatus shall allow for measurements at 0, 17, and 30 degrees of incidence to the material under test.

Horizontal distance between the antennas to the material samples shall be ± 5 ft. or per Customer generated test criteria.

Examples of typical material test data may be found in Appendix A, Sample Test and Data Sheets. Complete test criteria and results are kept on file by SCI.

33.4 Physical Property Requirements

1. The thickness of SCI RF Transparent panels/structures may not need be the same as the construction material it is intended to simulate.
2. All testing shall be done on material having the same thickness as product material delivered to the Customer.
3. SCI materials are tested to meet the requirements per Engineering Drawings, Calc tables or supplier information provided to the Customer.
4. Examples of typical Physical/Mechanical properties SCI materials are tested to may be found in Appendix A, Sample Test and Data Sheets. Complete test criteria and results are kept on file by SCI.
4. All panels shall be UV rated to ensure minimal fading over the life of the product.

33.5 Temperature Requirements

All SCI RF Transparent products are tested to ensure that, as a minimum, they operate in temperature extremes from -60F to 200F. Minimal thermal movement should occur over the tested temperature range.

33.6 Paint/Coating Requirements

Paints/coatings used in the design and manufacture of SCI products are tested to ensure minimal degradation to RF performance. Refer to Section 25.0, Manufacturing and Fabrication.

34.0 Forms

QC Form Number	Form Name/Function	Use
QC- 001	SCI Sales Order (SO) (3 Sheets)	Response to proposal. Includes SCI Terms and Conditions. Once signed by the Customer, functions as an SCI Sales Order/Customer Purchase Order.
QC- 002	Purchase Order (PO)	Form used to purchase products and services from SCI suppliers.
QC- 003	Site Survey and Field Evaluation (4 sheets)	Form used to document site location walk through and evaluation.
QC- 004	Supplier/Vendor Quality Control Survey (3 sheets)	Used for formal QA survey of suppliers to determine their suitability as an SCI Approved Supplier.
QC- 005	Quality Control Document Log	Log form used to control access and accountability for all SCI documentation.
QC- 006	Receiving Inspection Report A (2 sheets)	Document used by Inspection personnel to support conformance verification.
QC- 007	Receiving Inspection Report B (2 sheets)	Document used by Inspection personnel to support conformance verification.
QC- 008	Stamp Issuance Log Form	Log used to record and track the use, accountability, and proper appearance of SCI QC stamps.
QC- 009	Test Report Summary	Summary sheet outlining tests conducted for a particular material, part, assembly, or project
QC- 010	Fabrication Instructions and Inspection Record (FIIR) (3 sheets)	Form provided to suppliers and/or subcontractors documenting that all Fabrication and Inspection requirements have been satisfactorily completed.
QC- 011	First Article Inspection Report (FAIR)(A)(2 sheets)	Used when only conformant/nonconformant status of item attributes need documented proof of verification.

QC Form Number	Form Name/Function	Use
QC- 012	First Article Inspection Report (FAIR)(B)(2 sheets)	Used when item specifications directly associated with the applicable tolerance, quantitative findings of inspection, and acceptance/rejection status of the the specified attribute require documentation.
QC- 013	Material Quantity/Issuance Log	Used to document original issuance of material for specific work.
QC- 014	Material Release Form	Form used to document when and why additional material is required to complete work.
QC- 015	Inventory Clearance/Reassignment Form	Used to provide traceability of materials released for use on a project.
QC- 016	Stored Tooling Log	Provides tracability and accountability for tooling when it is not in use.
QC- 017	Rejection and Discrepancy Report (RDR)	Used to identify any material, part, or assembly that does not conform to engineering, design, or contractual requirements.
QC- 018	Cause and Corrective Action Report (CACA)	Identifies the cause for a condition of nonconformance and documents the required corrective action to be taken.
QC- 019	Certification of Conformance	Identifies material, parts, and assemblies that meet all specified requirements.
QC- 020	Quality Action Request (QAR)	Documents requests that some QA/QC review, inquiry, or inspection be conducted and, followed up on as needed.
QC- 021	QA Revision/Review Log	Log at the front of all QA documentation providing a record of when the document was reviewed and/or revised.
QC- 022	Calibration Log	Form documenting the calibration history of all tools, jigs, forms, etc., requiring periodic calibration.
QC- 023	Certificate of Calibration Reference Sheet	Form used to document and certify item calibration
QC- 024	Calibrated Item Removal From Use	Used to document When and why a calibrated item has been removed from use

QC Form Number	Form Name/Function	Use
QC- 025	Out of Calibration Report	Used to document when an item has been found out of calibration, that proper QA procedures have been followed and the disposition of the item.
QC- 026	Supplier Document Submittal Requirements Form	Form used to itemize requested Document requirements and/or deviations.
QC- 027	Rework/Repair Plan	Documentation of required rework or repair procedures.
QC-028	Additional Notes/Comments Addendum	Form used to provide additional notes or comments to SCI QC forms.
QC- 029	Disposal/Destruction Certification Form	Required form certifying SCI material has been disposed of or destroyed when required.
QC - 030	Certified sticker	Sticker used to identify all certified material.
QC - 031	Non-Certified sticker	Sticker used to identify non-certified material.
QC – 032	Limited Shelf-Life sticker	Sticker used when manufacturers labels/instructions do not adequately indicate that an item or material is a limited shelf life item.
QC – 033	Customer/Government Supplied sticker	Used to identify tools, parts, and/or materials owned by the Customer or Government and prevent inadvertent misappropriation of Customer/Government property.
QC – 034	Pre-Kitted Material sticker	Used to identify items that are grouped as a single item or assembly.
QC – 035	Out of Calibration Sticker	Sticker required to identify and prevent the use of any tool that has been found to be out of calibration or beyond its calibration period.
QC – 036	Rejected sticker	Mandatory sticker used to identify and prevent the use of discrepant or nonconforming materials, parts, or assemblies that require disposition.

QC Form Number	Form Name/Function	Use
QC – 037	Dispose – Do Not Use sticker	Sticker used to identify any material, part, or assembly that has been designated for disposal.
QC – 038	Rework sticker	Sticker used to identify any item that has been designated for rework or repair.



04/17/2008
Contact:
Company:
Address:

Job Number:
Job Name:
Job Site:

Proposal (Reference #:)

Revision:0

Product Description:

RFTransparent Height System - To Include:

Engineering and Design Description:

Notes:

Includes:

Excludes:

Delivery - Engineering: 5-10 Business days upon receipt of NTP
Delivery - Project: 6-8 Weeks from final engineering approval
Requirements to Begin Project:

8885 Rio San Diego Drive, Suite 207 • San Diego, CA 92108 • Tel: 619.243.2750 • Fax: 619.243.2749 • www.RFTransparent.com
Technology Without Intrusion ®

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**Form Number QC- 001 SCI Sales Order (SO)/Customer PO
Sheet 1**



04/17/2008
Contact:
Company:
Address:

Job Number:
Job Name:
Job Site:

Proposal (Reference #)	Revision: 0
Job Costs:	
RFTransparent Product:	\$0.00
Engineering And Design:	\$0.00
Shipping:	
Total:	

Notice to Proceed:

Please indicate acceptance of this proposal by signing below and faxing the signed copy to SCI's corporate office at 619.243.2749. Authorization signature indicates that the buyer accepts SCI's standard terms and conditions as well as those indicated within this proposal. SCI will commence work upon receipt of a purchase order. QUOTES ARE VALID FOR 30 DAYS.

Accepted By: _____

Date: _____

8885 Rio San Diego Drive, Suite 207 • San Diego, CA 92108 • Tel: 619.243.2750 • Fax: 619.243.2749 • www.RFtransparent.com
Technology Without Intrusion ®

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**Form Number QC- 001 SCI Sales Order (SO)/Customer PO
Sheet 2**



SOLAR COMMUNICATIONS INTERNATIONAL

TERMS AND CONDITIONS

Acceptance of the Products:	Buyer shall have accepted the Products upon receipt, unless SCI is notified in writing of any non-conforming goods within fifteen (15) days of Buyer's receipt of the Products.
Cancellation/Modification:	No order may be cancelled or modified without the written consent of both parties. Any order cancelled after work is performed by SCI will have a cancellation charge determined by SCI, which includes costs for any work done prior to cancellation with reasonable profit thereon.
Change Orders:	If Buyer desires modifications subsequent to the final engineering drawings, SCI reserves the right to increase the invoice price to reasonably compensate SCI for the labor and costs associated with the change order. Any such increases will be charged at SCI's standard rates as are then in effect and will be deemed part of Buyer's purchase order.
Default:	If Buyer becomes delinquent in payment obligations or other credit or financial requirements established by SCI, SCI shall have the following rights and remedies, in addition to any other rights and remedies available to SCI at law or in equity: (i) SCI may declare and accelerate any and all principal sums then outstanding, including all accrued interest thereon, immediately due and payable, notwithstanding any credit terms previously in effect (which credit terms are qualified hereby); and (ii) SCI reserves the right to change the credit terms at any time and also to extend credit terms or require cash-in-advance payment terms from Buyer. Should Buyer become delinquent in the payment of any sum due to SCI, SCI shall be immediately relieved of any obligation to continue performance under this Agreement. Buyer agrees to pay all costs and fees incurred by SCI (including reasonable attorney's fees and costs incurred or accrued by SCI in which SCI is the prevailing party) in any action, arbitration and/or collection proceeding brought by SCI relating to this Agreement.
Delivery:	Proposal prices do not include shipping costs or offloading at destination site. Materials will be shipped via local ground carrier and shipping costs will be pre-paid by SCI and invoiced to Buyer. Buyer may specify different shipping instructions, subject to agreement by SCI, and Buyer shall be responsible for all additional costs associated therewith. The proposal includes percentages for standard ground domestic shipments. If special packaging is necessary, additional charges may apply. Products are sold (and all risk of loss shall pass to Buyer) F.O.B. origin freight, at SCI's location in San Diego, California (or such other SCI warehouse location, as may be designated by SCI).
Deposit/Terms:	Project orders over \$100,000 require a 25% deposit before SCI will commence work. Subject to credit approval of Buyer, payment terms are "net 30 days after invoicing" and SCI will invoice Buyer on the shipment date unless otherwise provided in the proposal. Balances remaining unpaid 30 days after invoicing will accrue interest at the lesser of 10% per year or the maximum allowed by applicable state law.
Force Majeure:	SCI shall not be liable for any delay in performance hereunder due to unforeseen circumstances or due to any cause beyond its control, including, but not limited to, any acts of God, acts of government, acts of terror, war, labor disputes, supply, materials or energy shortages or delays.
LIMITATION OF LIABILITY:	SCI SHALL NOT, UNDER ANY CIRCUMSTANCES, BE LIABLE TO BUYER FOR CONSEQUENTIAL OR INCIDENTAL DAMAGES ARISING OUT OF OR RELATED TO THE SALE OR INSTALLATION OF PRODUCTS, INCLUDING, BUT NOT LIMITED TO, BUSINESS INTERRUPTION OR DELAY LOSSES, LOSS OF USE OF THE PRODUCTS, COMMERCIAL LOSSES, INCONVENIENCE, OR LOSS OF ANTICIPATORY PROFITS RESULTING FROM THE USE OF PRODUCTS OR DELAY IN ITS DELIVERY, EVEN IF BUYER IS ADVISED OF THE LIKELIHOOD OF SUCH DAMAGES OCCURRING. IN NO EVENT SHALL SCI'S LIABILITY (WHETHER BASED ON AN ACTION OR CLAIM IN CONTRACT, TORT OR OTHERWISE) TO BUYER ARISING OUT OF OR RELATING TO THIS AGREEMENT OR PRODUCT SALES EXCEED THE PURCHASE PRICE OF SUCH PRODUCTS SOLD.
Limited Warranty, Disclaimer:	All Products are warranted to be free of defects in material and workmanship for a period of one (1) year from shipment date, in accordance with SCI's standard written Limited Warranty delivered with the Products. SCI will have sixty (60) days after its actual receipt of a written notice from Buyer specifying a warranty claim in order to review a claim and confirm applicability of warranty. SCI'S WRITTEN LIMITED WARRANTY IS EXCLUSIVE OF ALL WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ALL OF WHICH ARE HEREBY EXPRESSLY DISCLAIMED.
Miscellaneous:	This Agreement constitutes the entire agreement between the parties with respect to the subject matter hereof and supersedes all prior agreements or understandings. This Agreement is made and entered into, and is to be performed in, San Diego, California, and shall be construed in accordance with the laws of the State of California (without resort to conflicts of law provisions). This Agreement shall issue to the benefit of, and be binding on, the parties hereto, their respective successors and permitted assigns. This Agreement may not be assigned without the prior written consent of SCI (which consent may be withheld by SCI in its reasonable discretion). No consent or waiver of any of the obligations of Buyer hereunder shall be effective unless and until reduced to a writing and signed by an authorized representative of SCI. Any controversy or claim arising out of or relating to this Agreement shall be settled by final and binding arbitration in accordance with the Commercial Arbitration Rules of the American Arbitration Association (and California Code of Civil Procedure Section 1283.05, incorporated herein by reference). Any notice required under this Agreement shall be in writing and sent by certified or registered mail, if to SCI, then SCI's address set forth on the attached proposal, and if to Buyer, at the address set forth on the credit application or otherwise provided to SCI in accordance with the foregoing terms of this provision. Notice hereunder shall be deemed to be given three (3) days following deposit with the United States Postal Service, certified or registered mail, as provided herein.
Offer, Acceptance; Governing Terms:	All proposals are subject to re-quote until accepted in writing by buyer and credit approved. The proposal, together with these terms and conditions of sale, constitute an offer by Solar Communication International, Inc. ("SCI") to you, the credit applicant and purchaser ("Buyer"), to purchase the SCI products as described on the attached proposal ("Products"). The offer of SCI to Buyer to purchase the Products expressly limits Buyer's acceptance to these terms and conditions. Buyer's written acceptance will constitute a purchase order to SCI in accordance with the proposal and these terms and conditions of sale (collectively, the "Agreement").
Postponed Delivery:	If Buyer places order "on hold" for period greater than thirty (30) days, SCI will invoice Buyer for work completed as of the date the order is put "on hold". Likewise, if Buyer postpones the delivery date more than sixty (60) days despite SCI's substantial completion of an order, SCI will invoice Buyer as of the original shipment date. Buyer agrees to comply with payment terms of "net 60 days after invoicing", unless otherwise agreed in writing by the parties.
Proprietary Rights:	SCI retains all underlying intellectual property rights in and to its Products. SCI's plans and designs may not be reproduced, disclosed and/or used without the prior written consent of SCI. All drawings, calculations, and design elements provided by SCI to Buyer are considered SCI's proprietary information for use only in conjunction with this Agreement. Buyer agrees to hold all such information in confidence. Reproduction of any SCI supplied drawings without SCI's prior written consent is expressly prohibited.
Returns:	Custom fabricated products are not subject to return or re-sale. Any stock or non-customized materials that are returnable to SCI will be subject to a re-stocking fee equal to 20% of the contract price or \$500.00, whichever is greater.
Suppliers and Subcontractors:	SCI reserves the right to select SCI preferred suppliers and subcontractors, provided SCI will remain primarily obligated to Buyer under this Agreement.

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Page 3 of 3



Solar Communications International, Inc.
8885 Rio San Diego Dr Ste 207
San Diego, CA 92108

Purchase Order

DATE	P.O. NO.
4/20/2006	5332

Vendor

Ship To
Solar Communications International, Inc. 8885 Rio San Diego Dr Ste 207 San Diego, CA 92108 619.243.2750

ITEM	DESCRIPTION	QTY	RATE	AMOUNT
			Total	\$0.00

Form Number QC- 002 SCI Purchase Order (PO)



Site Survey and Field Evaluation

Sheet 1 Of _____

Doc. No. QC 003

Acceptable

Yes

No

Surveyor and Site Location

Date:

Field Surveyor

Address:

City/State/Zipcode

Site Name

Project ID No.

Contact/Witness

Contact Phone

On Site Survey Data

Building Color

Building Finish/Texture:

Expansion Joints

Cornice Trim:

Archetectural Details:



Site Survey and Field Evaluation (continued)

Sheet 2 of ____

Doc. No. QC 003

Site Conditions:	
Framing	<div style="border-bottom: 1px solid black; height: 15px; width: 100%;"></div> <div style="border-bottom: 1px solid black; height: 15px; width: 100%;"></div>
Points of Attachment	<div style="border-bottom: 1px solid black; height: 15px; width: 100%;"></div> <div style="border-bottom: 1px solid black; height: 15px; width: 100%;"></div>
Roof Conditions:	<div style="border-bottom: 1px solid black; height: 15px; width: 100%;"></div> <div style="border-bottom: 1px solid black; height: 15px; width: 100%;"></div>

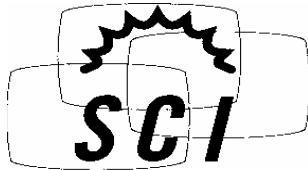
Concealment			Describe:
Parapet Extensions	Yes ____	No ____	<div style="border-bottom: 1px solid black; height: 15px; width: 100%;"></div>
Wall Mounts	Yes ____	No ____	<div style="border-bottom: 1px solid black; height: 15px; width: 100%;"></div>
Rooftops	Yes ____	No ____	<div style="border-bottom: 1px solid black; height: 15px; width: 100%;"></div>
Radomes	Yes ____	No ____	<div style="border-bottom: 1px solid black; height: 15px; width: 100%;"></div>
Steeple	Yes ____	No ____	<div style="border-bottom: 1px solid black; height: 15px; width: 100%;"></div>
Other	Yes ____	No ____	<div style="border-bottom: 1px solid black; height: 15px; width: 100%;"></div>

Dimensions:

Photos			
N, S, E, W			
Finish			
Color			

A&E Drawings			
Same as plans	Yes ____	No ____	New Dimensions
FRP Framing Provided	Yes ____	No ____	

Structural Engineering Special Notes:



SOLAR COMMUNICATIONS
INTERNATIONAL, INC.

Supplier/Vendor Quality Control Survey

Doc. No. QC-004

Supplier Name: _____

Address: _____

Telephone/FAX: _____

Contact: _____

Product Capability and Organization

1. Types of products presently manufactured

Proprietary design: _____

Customer design: _____

Government design: _____

Commercial design: _____

2. The above products are presently being supplied to:

Item	Customer
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

Organization

Quality Control Manager: _____

Reports to: _____

Title: _____

Total number of employees: _____

Total number of QC personnel: _____

Number of QC personnel in:

Engineering: _____

Quality Assurance: _____

Supervision: _____

Inspection: _____

Test: _____

Other: _____

	Yes	No
Are written QC procedures in use?		
Are the procedures available for Customer review?		
Are current QC procedures acceptable?		

Manufacturing Operations

	Yes	No
Are Manufacturing documents used? Describe: _____		
Type of products: _____		
	Yes	No
Is Housekeeping and Material Handling monitored?		
Are there operator training programs?		
Describe: _____		

Facilities

	Yes	No
What type of facilities are available?		
Environmental?		
Material Control lab?		
Clean rooms or equivalent class or equipment?		

Procurement Control

	Yes	No
Does QC review purchase requisitions?		
Are QC requirements specified?		
Are suppliers approved by QC?		
Are suppliers quality performances monitored by QC?		
Are suppliers processes certified?		
Is a supplier's quality rating system used?		
Are suppliers corrective actions documented?		

Material Control

	Yes	No
Are materials and parts identified?		
Are certificates/test reports available?		
Are controls for perishable/time sensitive materials re in place?		
Is stock rotated 'first in/first out'?		

Measuring Equipment Control

	Yes	No
Are calibration schedules established?		
Are records of repair and calibration maintained?		
Is a recall system in place?		
Are standards traceable to NIST?		
Are personnel tools controlled?		
Is Customer/Government equipment controlled?		

Nonconforming Material Control

	Yes	No
Is nonconforming material segregated and identified?		
Is there a Material Review Board in place?		
Do records reflect recurrent deficiencies?		
Is corrective action documented?		
Is acceptance of nonconformance authorized by other than QC? Specify: _____		

Statistical Control

	Yes	No
Are sampling plans used?		
What sampling Standard(s) are employed? _____		
Where are sampling plans used? Incoming _____ In-process _____ Final _____ Pack/Ship _____		

Document Control

	Yes	No
Is there a formal Change Control procedure utilized?		
Are the latest drawings, specifications, procedures, and checklists used?		

Incoming Inspection and Test

	Yes	No
Are copies of POs, drawings, and specifications available and used?		
Are Inspection/Test logs/checklists used?		
Are Inspection/Test datasheets prepared?		

In-Process Controls

	Yes	No
Is 'First Piece' approval required?		
Are Inspection/Test instructions or checklists used?		
Are QC operations integrated in manufacturing instructions?		
Are Inspection/Test results recorded and maintained?		
Is rework controlled and documented?		

Special Processes

In plant: _____	Subcontracted: _____	Both: _____		
			Yes	No
Are processes and personnel (where applicable) certified?				
Are inspection/Test inspections or checklists used?				

Final Acceptance

	Yes	No
Are Inspection/Test instructions or checklists used?		
Are Inspection/Test results recorded and maintained?		
Is all preceding Inspection/Test documentation reviewed for completion and acceptance?		
Is equipment/Document configuration verified to applicable contractual requirements?		
Is this configuration status recorded?		

Packaging and Shipping Inspection

	Yes	No
Are Inspection/Test instructions and Checklists used?		
Are operations and records under surveillance or control of QC?		

Quality Performance Data

	Yes	No
Is Inspection/Test data collected and tabulated?		
Is Data analyzed, reported, and corrective action instituted		
Are performance/trend reports issued to management?		

Quality Audit

	Yes	No
Are independent audits of all significant areas conducted?		
Is evidence of these audits available?		

This questionnaire was completed by :

Signature: _____

Typed Name: _____

Title: _____

Date: ____/____/____

Additional Comments/Notes on attached form Doc. No. QC-028. _____ sheets attached



Fabrication Instructions and Inspection Record (FIIR)

Page 1 of ____

Doc. No. QC – 010

Customer: _____	Job No.: _____
P/N or T/N _____ Rev. _____	Due Date: _____
Nomenclature: _____	PROJ. MGR. _____
Customer PO No.: _____	QA Approval : _____
Unit S/N: _____	

Document Required			Tool Family			
Drawing/Spec. No.	Rev.	Topic	Tool No.	Tool Code	Ownership	QC

Material Required						
P/N	Description	QTY RQD	QTY Issue	Cert No.	Material Control	Date



SOLAR COMMUNICATIONS
INTERNATIONAL, INC.

First Article Inspection Report (FAIR) - B

Doc. No.QC-012

Supplier: _____

Page _____ of _____

P.O number: _____

Cert.
Number: _____

Job Number: _____

Customer: _____

Part Number: _____ Rev. _____

Qty. Received: _____

Nomenclature: _____

Qty. Accepted: _____

S/N: _____

Qty. Rejected: _____

Item #	sheet	Zone	Detail Assy	Design Req	TOLR	Conformant/Nonconformant			
						S/N	S/N	S/N	S/N

If Applicable: RDR number _____

Inspected By: _____

CACA number _____

Date: _____

Solar Communications International 8885 Rio San Diego Dr., Ste 207, San Diego, CA, 92108
T+619-243-2750 F+619-243-2749 www.RFTransparent.com



Material Release Form

Doc. No. QC-014

Additional Material

Mrt No.: _____ - _____ - _____

Required for:

Job No.: _____

Customer:

Material Req'd for

P/N:

Serial No.: _____

Description:

Project Manager: _____

PO No.:

(Signature/Initials)

Date: _____

Process Rev.:

QA Approval: _____

Reason Additional Material Required (circle one)

- A. Product/Process Development
- B. Oversight – S/B specified on FIIR
- C. Replace material during processing
- D. Prior unit nonconforming – Dispositioned scrap
- indicate RDR No.: _____

- E. Unit requires rework/repair to bring into conformance – indicate RDR No.: _____
- F. Other: Explanation - _____

Material Required: (NOTE: This is Mat'l for 1 unit only, not multiple)

Item No.	Material Description	Qty Req'd	Qty Issued	Date Issued	Cert. No.	Mat'l Cont Stamp

Additional Comments/Notes on attached form Doc. No. QC-028. _____ sheets attached.



Inventory Clearance/Reassignment

No. _____

Doc. No. QC-015

Accounting

Completion Job No. _____ Customer: _____

Completion Date: _____ P/N: _____

Inventory

Items Quantity	Remaining in Inventory Item Description
A. _____	_____
B. _____	_____
C. _____	_____
D. _____	_____
E. _____	_____
Date Submitted: _____	Inventory Control: _____

Planning

New Job/Uses For Item Listed Above

	A	B	C	D	E
Crib					
Hold Unassigned					
Assigned to Job No.					
Quantity Assigned					
Responsible Person					

Authorization: _____ Date: _____

Additional Comments/Notes on attached form Doc. No. QC-028. _____ sheets attached.



Stored Tooling Log

Doc. No. QC-016

Tool Family Used to Make P/N _____	Rev. _____
For (Customer): _____	Proj. Mngr.: _____
Tool Family Consists Of::	
T/N:	Rev:
S/N:	Tool Type:
T/N:	Rev:
S/N:	Tool Type:
T/N:	Rev:
S/N:	Tool Type:
T/N:	Rev:
S/N:	Tool Type:

Pre-Production Inspection					Post-Production Inspection			
Date Removed	QC	Date	Issued To	Job No.	QC	Date	Date Returned	Comments

Additional Comments/Notes on attached form Doc. No. QC-028. _____ sheets attached.



REJECTION AND DISCREPANCY REPORT (RDR)

NO. _____

Date: _____

CACA#: _____

Doc. No. QC- 017

Job Number	Customer/ Vendor	PO number	QTY. Recv'd	QTY. Rejected
ENGR. DWG # - Rev.	Part #	Rev.	Rejected	Serial #'s
	Tool #			
In-Process <input type="checkbox"/>	Final <input type="checkbox"/>	Inspector	Part Description	
Indicate Applicable Inspection				
Receiving <input type="checkbox"/>	Source <input type="checkbox"/>			

Item	Serial #	ENGR Loc	Check #	Description	Disposition
		SHT			
		ZN			
		SHT			
		ZN			
		SHT			
		ZN			
		SHT			
		ZN			

USE AS IS	SCRAP	REWORK
-----------	-------	--------

Additional Comments/Notes on attached form Doc. No. QC-028. _____ sheets attached.



CERTIFICATION OF CONFORMANCE

Doc. No. QC- 019

We hereby certify that the items listed below are in accordance with all specifications to the indicated Purchase Order and the applicable Reports are on file for inspection at any reasonable time.

Part No.: _____

Part Name: _____

PO Number: _____

Packing List Number: _____

Date Shipped: ____/____/____

Serial Number (s) : _____

Authorized Signature



Quality Action Request

QAR No.: _____

Document No. QC - 020

Drawing No.: _____	Rev. _____	WO No.: _____	PO No.: _____
Part No.: _____		SO No.: _____	

Problem Area - Check one

Sales	Engineering/ Drafting	Purchasing	Production/ Fabrication	Warehouse/Shipping
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Problem: _____ **Pieces Affected:** _____ **Customer Request:** Yes No

Cause: _____

Recommended Action:

Scrap <input type="checkbox"/>	Use As Is <input type="checkbox"/>	Repair <input type="checkbox"/>	Other <input type="checkbox"/> _____
--------------------------------	------------------------------------	---------------------------------	--------------------------------------

Requested By: _____ **Date:** ____/____/____

Authorized Use Only Below This Line

Authorized Corrective Action:

Scrap <input type="checkbox"/>	As Recommended <input type="checkbox"/>	Repair: SRP: _____	Use As Is <input type="checkbox"/>
--------------------------------	---	--------------------	------------------------------------

Approved By: _____ **Date:** ____/____/____

Preventive Action Recommendations: _____

Approved By: _____ **Date:** ____/____/____

Additional Comments/Notes on attached form Doc. No. QC-028. _____ sheets attached.

Tracked/Logged By: _____ **Completed By:** _____ **Date:** ____/____/____



Certificate of Calibration Reference Sheet

Doc. No. QC- 023

Certification of calibration for:

Item: _____

Serial No.: _____

Brand: _____

Date of Calibration: _____

Recall Date: _____

Reference Official Document Filed Under:

Item: _____

Serial No.: _____

Brand: _____

Date of Calibration: _____

Recall Date: _____

Calibration was Performed By: _____

Quality Control Manager: _____ Date: _____

Additional Comments/Notes on attached form Doc. No. QC-028. _____ sheets attached.



Calibrated Item Removal From Use

Doc. No. QC- 024

On ____/____/____ the following calibrated item was removed from use by
_____ located at _____.

Item Removed: _____ Reason Removed:

S/N: _____ (A) Damage

Manufacturer: _____ (B) Out of Calibration

Last Calibrated On: ____/____/____ (C) Other

Due For Calibration: ____/____/____

Description: _____

Cause: _____

Corrective Action: _____

Rework Instructions: _____

The above listed item has been: _____

(A) Repaired and brought into compliance

(B) Scrapped and removed from use

Additional Comments/Notes on attached form Doc. No. QC-028. _____ sheets attached.

Quality Control Manager: _____ Date: _____



Out of Calibration Report

Doc. No. QC- 025

Item:

Serial No.:

Last Calibrated:

Date Removed from Use:

Out of Calibration Sticker (Doc. No. QC-035) placed on Item: (check)

Item Segregated : (check)

Item Disposition:

Date:

Notes:

Supplier Document Submittal Form

QC - 026

Spec./Req.	Doc. Descript.	Permission To Proceed (Y or N)	Submittal			Remarks
			Sched	Type	Qty	



Rework and Repair Plan

Page 1 of ____

Doc. No. QC – 027

Customer: _____	Job No.: _____
P/N or T/N _____ Rev. _____	Due Date: _____
Nomenclature: _____	PROJ. MGR. _____
Customer PO No.: _____	QA Approval : _____
Unit S/N: _____	

Document Required			Tool Family			
Drawing/Spec. No.	Rev.	Topic	Tool No.	Tool Code	Ownership	QC

Material Required						
P/N	Description	QTY RQD	QTY Issue	Cert No.	Material Control	Date



Disposal/Destruction Certification Form

Document No. QC-029

SO No.:

Project No.:

Date Received:

Material/Item Description:

Location:

Date of Disposal/Destruction:

Method of Disposal/Destruction:

I hereby certify that the above listed item(s) have been disposed of or destroyed as stated.

SCI Authorized Signature: _____ Date: ____/____/____

Certified Material/Item		Doc. No. QC - 030
Rec/Quality. Dept. Stamp	Date Received: ____/____/____	
Quantity Rec'd: _____	Cert. No. (if applicable): _____	
P/N: _____	Description: _____	
Requisition PO No.: _____	Shelf-life reqs: _____	

Non-Certified Material/Item		Doc. No. QC - 031
Rec. Dept. Stamp	Date Received: ____/____/____	
Requisition PO No.: _____	Shelf-Life Identification	
	Shelf-life Limit _____	

Limited Shelf-life		Doc. No. QC - 032
Rec/Quality. Dept. Stamp	<input type="checkbox"/>	Expiration Date: ____/____/____
JAN	FEB	MAR
APR	MAY	JUN
JULY	AUG	SEP
OCT	NOV	DEC

Customer/Gov. Supplied Item		Doc. No. QC - 033
Supplier: _____	Date Rec'd.: ____/____/____	
Shipper Invoice No.: _____	Quality/Rec'ing personnel ID: _____	
SCI Cert No.: _____	Job No.: _____	

Pre-Kitted Material

Doc. No. QC - 034

Job No.: _____

Material Control Stamp:

Date transfer to Mat. Control

Serial. No.: _____

_____/_____/_____

Description: _____

P/N and Rev. No.: _____

Intended Use: _____

Requisition PO No.: _____

Out of Calibration

Doc. No. QC - 035



REJECTED

Doc. No. QC - 036

DISPOSE

Doc. No. QC - 037

**DO
NOT
USE**



Re-Work Tag

RDR No.: _____

Doc. No. QC-038

Reason: _____

Correction: _____

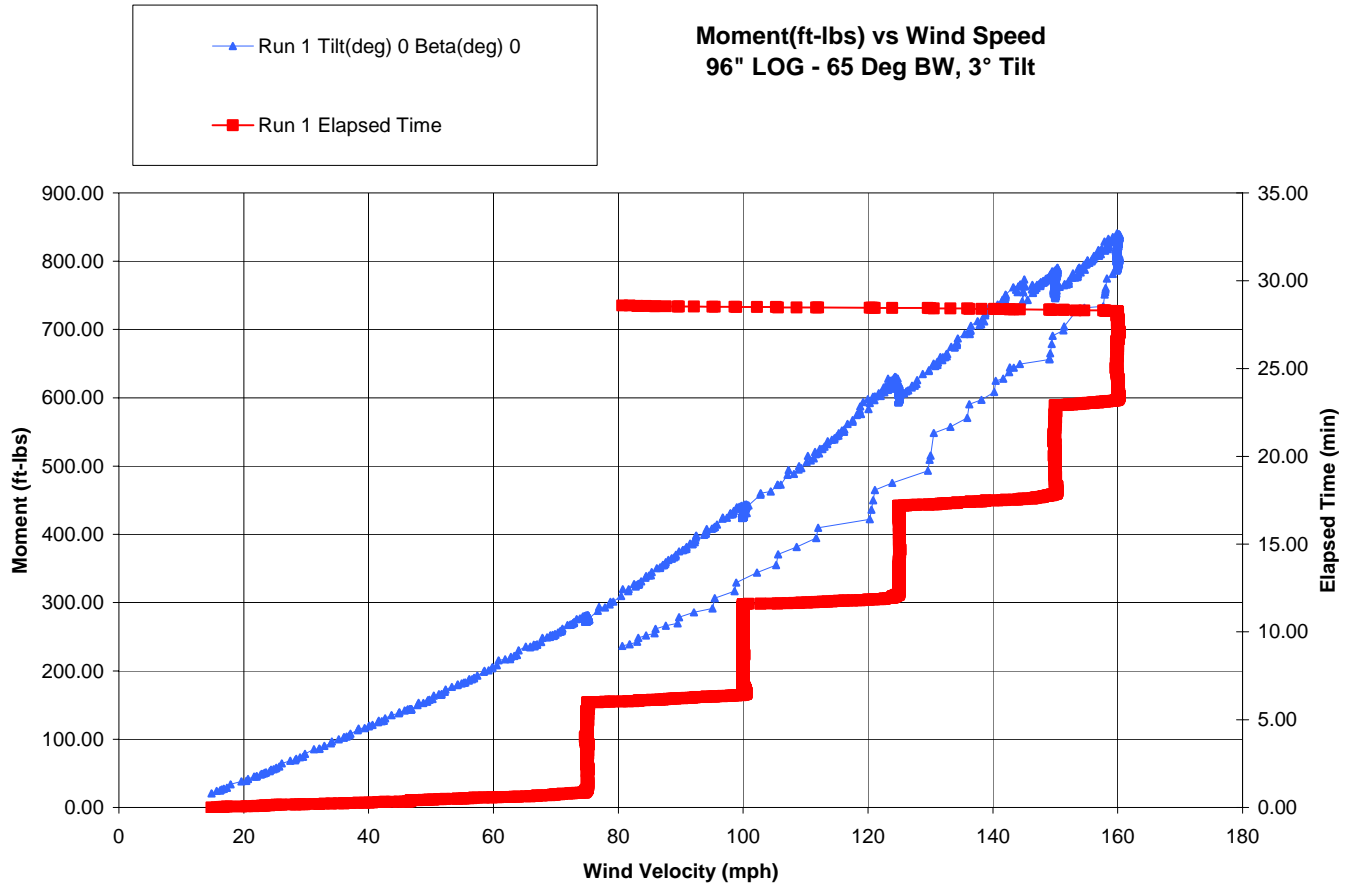
Signed: _____

Date: _____

Appendix A. Sample Test and Data Sheets

Nemko USA					
MicroCell 30 Degrees RF Insertion Loss		MicroCell 17 Degrees RF Insertion Loss		MicroCell 0 Degrees RF Insertion Loss	
Frequency	Insertion Loss (dB)	Frequency	Insertion Loss (dB)	Frequency	Insertion Loss (dB)
1.7e+009	-0.07	1.7e+009	-0.10	1.7e+009	0.02
1.71e+009	-0.12	1.71e+009	-0.14	1.71e+009	0.00
1.72e+009	-0.07	1.72e+009	-0.05	1.72e+009	-0.03
1.73e+009	-0.10	1.73e+009	-0.03	1.73e+009	-0.07
1.74e+009	-0.13	1.74e+009	-0.05	1.74e+009	-0.07
1.75e+009	-0.14	1.75e+009	-0.04	1.75e+009	-0.09
1.76e+009	-0.10	1.76e+009	-0.07	1.76e+009	-0.07
1.77e+009	-0.07	1.77e+009	-0.07	1.77e+009	-0.12
1.78e+009	-0.04	1.78e+009	-0.04	1.78e+009	-0.11
1.79e+009	0.00	1.79e+009	0.00	1.79e+009	-0.07
1.8e+009	0.02	1.8e+009	-0.03	1.8e+009	-0.05
1.81e+009	0.07	1.81e+009	0.02	1.81e+009	0.00
1.82e+009	0.12	1.82e+009	0.05	1.82e+009	0.03
1.83e+009	0.14	1.83e+009	0.11	1.83e+009	0.04
1.84e+009	0.09	1.84e+009	0.09	1.84e+009	0.00
1.85e+009	0.05	1.85e+009	0.12	1.85e+009	0.00
1.86e+009	0.09	1.86e+009	0.12	1.86e+009	0.05
1.87e+009	0.12	1.87e+009	0.12	1.87e+009	0.07
1.88e+009	0.07	1.88e+009	0.14	1.88e+009	0.10
1.89e+009	0.05	1.89e+009	0.09	1.89e+009	0.05
1.9e+009	0.02	1.9e+009	0.07	1.9e+009	-0.02
1.91e+009	0.07	1.91e+009	0.09	1.91e+009	0.02
1.92e+009	0.05	1.92e+009	0.05	1.92e+009	0.05
1.93e+009	0.05	1.93e+009	0.03	1.93e+009	0.07
1.94e+009	0.02	1.94e+009	0.04	1.94e+009	0.11
1.95e+009	0.00	1.95e+009	0.02	1.95e+009	0.10
1.96e+009	-0.02	1.96e+009	0.02	1.96e+009	0.09
1.97e+009	-0.07	1.97e+009	-0.02	1.97e+009	0.12
1.98e+009	-0.09	1.98e+009	0.02	1.98e+009	0.12
1.99e+009	-0.09	1.99e+009	0.07	1.99e+009	0.12
2e+009	-0.10	2e+009	0.09	2e+009	0.07
2.01e+009	-0.05	2.01e+009	0.11	2.01e+009	0.07
2.02e+009	0.00	2.02e+009	0.14	2.02e+009	0.05
2.03e+009	0.05	2.03e+009	0.18	2.03e+009	0.11
2.04e+009	0.05	2.04e+009	0.13	2.04e+009	0.05
2.05e+009	0.10	2.05e+009	0.07	2.05e+009	0.02
2.06e+009	0.15	2.06e+009	0.11	2.06e+009	0.03
2.07e+009	0.16	2.07e+009	0.11	2.07e+009	0.07
2.08e+009	0.11	2.08e+009	0.07	2.08e+009	0.04
2.09e+009	0.07	2.09e+009	0.05	2.09e+009	0.05
2.1e+009	0.02	2.1e+009	-0.03	2.1e+009	-0.03
2.11e+009	0.07	2.11e+009	0.03	2.11e+009	0.03
2.12e+009	0.04	2.12e+009	-0.03	2.12e+009	0.00
2.13e+009	0.02	2.13e+009	0.00	2.13e+009	0.02
2.14e+009	0.00	2.14e+009	0.00	2.14e+009	0.03
2.15e+009	0.05	2.15e+009	0.00	2.15e+009	0.07
2.16e+009	0.02	2.16e+009	-0.03	2.16e+009	0.09
2.17e+009	0.00	2.17e+009	-0.02	2.17e+009	0.07
2.18e+009	0.03	2.18e+009	0.05	2.18e+009	0.12
2.19e+009	0.03	2.19e+009	0.07	2.19e+009	0.14
2.2e+009	0.05	2.2e+009	0.07	2.2e+009	0.17

Sample – Typical Material RF Test Data



Sample – Typical Wind Test Data – Graphical Presentation*

* Source: Tests performed on SCI monopine components - Texas A&M wind tunnel

From: Nancy Nxxxxxxx

Sent: 03/20/05

To: jsmith@ rftransparent.com

Cc: Jason xxxxxx; Geoff xxxxxx; Jim xxxxxx

Subject: Cingular Wireless site: LL345-01 Monopine RFP

Dear Vendors:

Please provide a proposal for the **Monopine** at the address referenced below:

Cingular Wireless site: **LL-345-01**

Site Name: **MLK and Carey Aveneue**

Address: **1344 West Bongo Dr.**

North Nowhere, Nevada, 89030

The following scope shall be taken into consideration when making your bid:

Number of fronds: **N/A**

Pine needles must extend 18" minimum past all antennas.

Pine braches to start at: **25' – 0" AGL**

Cladding on trunk: **Yes**

Special cladding, i.e. Chunky bark: **No**

Galvanized or Painted Pole: **Galvanized**

Numbers of Coax: **24 runs of coax.**

Size of coax: **7/8" dia.**

Number of antennas: **12 antennas (9'2" long X 11" wide)**

Number of TMA's: **18 minimum**

Entry Port: **Centerline 8'-0" A.G.L.**

Exit Port: **Centerline 68"-0" A.G.L.**

Pole diameter at top: **24" minimum**

Pole diameter at bottom: **36" minimum**

Microwave antenna: **No**

Note: Pole needs to be colocatable from a structural standpoint, i.e. foundation and steel.

Attachments do not need to be installed.

Antenna attachments shall include tri-arm bracket.

Scope to include all plan check corrections required by City including wet signed prints.

Prior to sending out final drawings, a check set will be sent to Nancy xxxxxx and Geoff xxxxxx.

Bid shall itemize components and provide a total sum line. This includes engineering and delivery.

Attached in PDF format are drawings for your reference. Please email your bids to Geoff xxxxxx @ Geoff.xxxxxx @cinquoduhmayo.com by Friday, March 24th. If you do not wish to bid, please reply

"No Bid".

Request for Quote Data Sheet - Sample 1 – Sent/Received by email

Tower/Monopole Data Sheet per Technical Specification WNS-E-3089 v1.2

GENERAL INFORMATION

SITE NAME: Scripps Ranch Blvd and Hazard St SITE NUMBER: SNFCCA2241

SITE ADDRESS: 5555 Filipp Road, San Diego STATE: CA COUNTY: San Diego ZIP CODE: 92030

CONTACT PERSON: Gabriel Mancini CONTACT NUMBER: 425-532-8340

CONTACTS ADDRESS: 4555 Wilcox Road, Suite A
Pleasanton, CA 94588

DELIVERY SITE ADDRESS: 01111111 (was same) TDD DELIVERY DATE: TBC

TOWER/MONOPOLE INFORMATION (Highlight Indicate Top Column only)

TYPE: SPLIT-SHAFT TOWER TOWER MONOPOLE LAMINATED WOOD POLE
 CONCRETE POLE OTHER (Specify: Metal Pole)

HEIGHT: 60 FT. NUMBER OF OCCUPANTS: 2 WIND LOADING: 25 PSF PER 1000 ILLUSTRATIONS: 12 INCH SOLID RADIAL CORE

TOWER/MONOPOLE DESIGN REQUIREMENTS:

CARRIER ¹⁾	DESIGN ANTENNA						COAX CABLE	
	Antenna Manufacturer	Model Number of Antenna	Height to Centerline of Antenna (ft. AGC)	QTY	Orientation	Mounting System Release/ Antenna	Cable size/type	QTY
Carrier 1 (Example)	Galvan	AP14-12-800-1940-00000PT	60 RF Core Steel	8	60 RF Core Steel	60 RF Core Steel	1/2" BNC 2.00%	12
FUTURE CARRIER NO. 1 ²⁾	-	4.0' Mast Arm	10' Below Primary	8	0.120-240	10 ft	1.50" 0.120-240	12
FUTURE CARRIER NO. 2 ²⁾	-	4.0' Mast Arm	10 ft Below Future 1	8	0.120-240	10 ft	1.50" 0.120-240	12
MICROWAVE ³⁾	Galvan	RS2M-43P	50' Mast	2	50' Mast	N/A	50' 0.120-240 RES	2
OTHER ⁴⁾								

- Notes:**
- 1) Carrier 1 is the design carrier for this tower. Indicate the carrier to be used in the tower design.
 - 2) Future Carrier 1 and 2 are optional design carriers for this tower. Indicate the carrier to be used in the tower design. The carrier to be used in the tower design must be indicated in the tower design.
 - 3) All tower monopoles are based on a 10' mast arm. All tower monopoles are designed for a minimum height of 10' above the ground and 10' above the ground. The tower monopoles are designed for a minimum height of 10' above the ground and 10' above the ground. The tower monopoles are designed for a minimum height of 10' above the ground and 10' above the ground.
 - 4) All tower monopoles are based on a 10' mast arm. All tower monopoles are designed for a minimum height of 10' above the ground and 10' above the ground. The tower monopoles are designed for a minimum height of 10' above the ground and 10' above the ground.
 - 5) All tower monopoles are based on a 10' mast arm. All tower monopoles are designed for a minimum height of 10' above the ground and 10' above the ground. The tower monopoles are designed for a minimum height of 10' above the ground and 10' above the ground.

STRUCTURE, TRAILERS AND ACCESSORIES (Provide as tower/monopole manufacturer).

ASTHETIC FINISH: NONE STAINLESS STEEL (Specify)

CLIMBING DEVICES: LADDER STEP SCALDS OTHER (Specify)

PLATFORMS: STANDARD LOW PROFILE TOWER w/ ANTENNA MOUNT ASSEMBLY

CABLE SUPPORT: FULL LENGTH (SIC on tower) BRACKETS

LIGHTNING ROD: 10 FT HEIGHT TO BE 5 FT. ABOVE

OTHER ACCESSORIES: TOWER MOUNT WIND-UP OTHER (Specify)

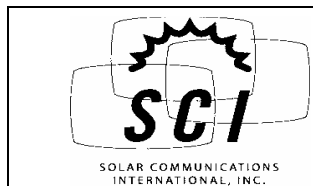
Request for Quote Data Sheet - Sample 2 – Customer Form

Appendix C. QA Requirements Cross Reference Matrix

APPENDIX C: QA REQUIREMENTS CROSS REFERENCE MATRIX

ISO 9001 TO SCI QUALITY ASSURANCE MANUAL TO CUSTOMER SPECIFICATION

ISO 9001:1994 (Section/Title)	ISO 9001:2000		SCI Quality Assurance Manual		Bechtel Requirement	
	Section/Title	Page	Section/Paragraph/Title	Page		
4.1 MANAGEMENT RESPONSIBILITY 4.1.1 Quality Policy	5.1 Management Commitment	3				
	5.3 Quality Policy	4				
	5.4.1 Planning/Quality objectives	4			1.1, 1.2, 1.3	
	4.1.2 Organization	5.5.1 Responsibility and authority	4			
	4.1.2.1 Responsibility and authority					
	4.1.2.2 Resources	6.1 Provision of resources	5			
		6.2.1 General	6			1.1, 1.2
		6.2.2 Competence, awareness, and Training	6			
		6.3 Infrastructure	6			
		6.4 Work Environment	6			
4.1.2.3 Management representative	5.5.2 Management representative	4				
4.1.3 Management review	5.6.1 General	5				
	5.6.2 Review input	5				
	5.6.3 Review output	5				
4.2 QUALITY SYSTEM	4.1 General requirements	2				
4.2.1 General	4.2.2 Quality Manual	3				
4.2.2 Quality systems procedures	4.2.1 General	2				
4.2.3 Quality planning	5.4.2 Quality management system planning	4				
	7.1 Planning of product realization	6				



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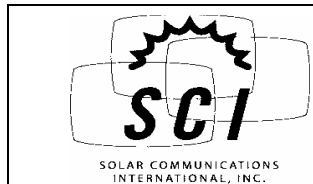
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ISO 9001:1994 (Section/Title)	ISO 9001:2000		SCI Quality Assurance Manual		Bechtel Requirement
	Section/Title	Page	Section/Paragraph	Page	
4.3 CONTRACT REVIEW	7.2.1 Determination of requirements related to the product	7			
4.3.1 General					
4.3.2 Review	5.2 Customer focus	4			
	7.2.2 Review of requirements related to the product	7			
	7.2.3 Customer communication	7			
4.3.3 Amendment to a contract	7.2.2 Review of requirements related to the product	7	23.4		
4.3.4 Records	7.2.2 Review of requirements related to the product	7			
4.4 DESIGN CONTROL	(no requirements)	n/a	22.1		Part 3, 3.1, A
4.4.1 General					
4.4.2 Design and development planning	7.3.1 Design and development planning	8	1.3,		1.4
4.4.3 Organizational and technical interfaces	7.3.1 Design and development planning	8	2.0		
4.4.4 Design input	7.2.1 Determination of requirements related to the product	7	1.3, 2.0		Part 3, 3.1B, 3.2, 3.3
	7.3.2 Design and development inputs	8			
4.4.5 Design output	7.3.3 Design and development outputs	8	1.3, 17.0, 18.0, 22.0		
4.4.6 Design review	7.3.4 Design and development review	8	22.0, 25.0, 26.0		
4.4.7 Design verification	7.3.5 Design and development verification	9	22.0, 26.0, 29.0, 30.0		
4.4.8 Design validation	7.3.6 Design and development validation	9	22.0, 26.0, 29.0, 30.0		
4.4.9 Design changes	7.3.7 Control of design and development changes	9	3.0, 7.0, 22.0, 29.0		



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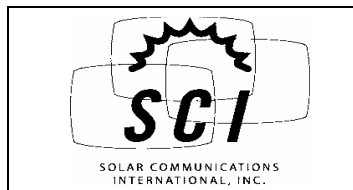
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ISO 9001:1994 (Section/Title)	ISO 9001:2000		SCI Quality Assurance Manual		Bechtel Ref. (Doc. No. 24782-000-3PS-EFX0-00002)
	Section/Title	Page	Section/Paragraph/Title	Page	
4.5 DOCUMENT CONTROL AND DATA CONTROL 4.5.1 General	4.2.3 Control of documents	3	7.0		Form G-321-T
	4.5.2 Document and data approval and issue	3	7.0		1.5
	4.5.3 Document and data changes	3	7.0		
4.6 PURCHASING 4.6.1 General	7.4.1 Purchasing process	9	11.0, 24.0		Part 2
	4.6.2 Evaluation of subcontractors	6	12.0		
	4.6.4 Verification of purchased product	6	26.0, 27.0		
4.7 CONTROL OF CUSTOMER SUPPLIED PRODUCT	7.5.4 Customer property	10	16.0		
4.8 PRODUCT IDENTIFICATION AND TRACEABILITY	7.5.3 Identification and traceability	10	9.0		
4.9 PROCESS CONTROL	6.3 Infrastructure	6	1.0,2.0,3.0		
	6.4 Work environment	6	2.0		
	7.1 Planning of product realization	6	2.0, 3.0, 17.0, 22.0		
	7.5.1 Control of production and service provision	10	17.0, 25.0		
	7.5.2 Validation of processes for production and service provision	10	17.0, 20.0, 26.0		
	7.1 Planning of product realization	6	17.0, 20.0, 22.0		



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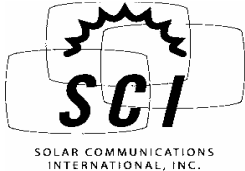
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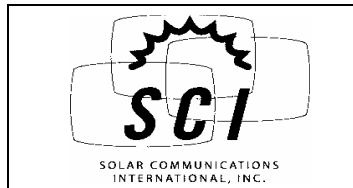
ISO 9001:1994 (Section/Title)	ISO 9001:2000		SCI Quality Assurance Manual		Bechtel Requirement
	Section/Title	Page	Section/Paragraph/Title	Page	
4.10 INSPECTION AND TESTING	7.1 Planning of product realization	6			
4.10.1 General	8.1(a) General	11	26.0		3.5
4.10.2 Receiving inspection and testing	7.4.3 Verification of purchased product	9	24.0		3.5
	8.2.4 Monitoring and measurement of product	12	21.0, 24.0, 26.0		3.5
4.10.3 In-process inspection and testing	8.2.4 Monitoring and measurement of product	12	26.0		3.5
4.10.4 Final inspection and testing	8.2.4 Monitoring and measurement of product	12	26.0		3.5
4.10.5 Inspection and test records	7.5.3 Inspection and traceability	10	7.0, 8.0, 9.0, 26.0,		3.5
	8.2.4 Monitoring and measurement of product	12			
4.11 CONTROL AND INSPECTION, MEASURING AND TEST EQUIPMENT	7.6 Control of monitoring and test devices	11	13.0, 14.0		3.5
4.11.1 General					
4.11.2 Control procedure	7.6 Control of monitoring and test devices	11	13.0, 14.0		
4.12 INSPECTION AND TEST STATUS	7.5.3 Identification and traceability	10	8.0, 9.0, 26.0		
4.13 CONTROL OF NONCONFORMING PRODUCT	8.3 Control of conforming product	12	27.0		Form G-321-T
4.13.2 General					
4.13.2 Review and disposition of nonconforming product	8.3(a) Action to eliminate nonconformity	12	29.0		Form G-321-T

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ISO 9001:1994 (Section/Title)	ISO 9001:2000		SCI Quality Assurance Manual		Bechtel Requirement
	Section/Title	Page	Section/Paragraph/Title	Page	
<u>4.14 CORRECTIVE AND PREVENTIVE ACTION</u>	8.5.2 Corrective action	13	29.0		
	4.14.1 General	8.5.3 Preventive action	13	29.0	
4.14.2 Corrective action	8.5.2 Corrective action	13	29.0		
4.14.3 Preventive action	8.5.3 Preventive action	13	29.0		
<u>4.15 HANDLING, STORAGE, PACKAGING, PRESERVATION & DELIVERY</u>	(no requirements)	n/a			3.6
4.15.1 General					
4.15.2 Handling	7.5.5 Preservation of product	11			3.6
4.15.3 Storage	7.5.5 Preservation of product	11			3.6
4.15.4 Packaging	7.5.5 Preservation of product	11			3.6
4.15.5 Preservation	7.5.5 Preservation of product	11			
4.15.6 Delivery	7.5.1(f) Control of production and service provision	10			
<u>4.16 CONTROL OF QUALITY RECORDS</u>	4.2.4 Control of records	3	7.0		
<u>4.17 INTERNAL QUALITY AUDITS</u>	8.2.2 Internal audit	12	27.0, 28.0, 29.0		
	8.2.3 Monitoring and measurement of processes	12			
<u>4.18 TRAINING</u>	6.2.1 General	6	10.0		
	6.2.2 Competence, awareness and training	6			



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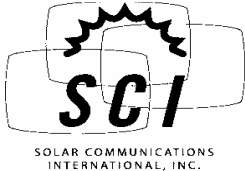
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ISO 9001:1994 (Section/Title)	ISO 9001:2000		SCI Quality Assurance Manual		Bechtel Requirement
	Section/Title	Page	Section/Paragraph/Title	Page	
4.19 SERVICING	7.5.1 Control of production and service provision	10			
4.20 STATISICAL TECHNIQUES 4.20.1 Identification of need	8.1 General	11	32.0		
	8.2.3 Monitoring and measurement of processes	12	32.0		
	8.2.4 Monitoring and measurement of product	12			
4.20.2 Procedures	8.1 General	11	32.0		
	8.2.3 Monitoring and measurement of processes	12			
	8.2.4 Monitoring and measurement of product	12	32.0		
	8.4 Analysis of data	13			
THE ITEMS BELOW ARE NEW TO THE 2000 STANDARD AND HAVE NO EQUIVALENT IN THE 1994 STANDARD					
n/a	7.2.3 Customer communication	7	1.0, 2.0, 3.0		1.5, Form G-321-T
	8.2.1 Customer satisfaction	11	1.0, 2.0, 3.0		
	8.5.1 Continual improvement	13	1.0, 2.0, 3.0, 29.0		

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