



Goddard Procedures and Guidelines

DIRECTIVE NO. GPG 4520.2C **APPROVED BY Signature:** Original Signed by
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EXPIRATION DATE: August 5, 2007 **TITLE:** Director

Responsible Office: 230/Logistics Management Division

Title: Receiving Inspection and Test

PREFACE

P.1 PURPOSE

This procedure describes the process for performing and documenting receiving inspections and tests for incoming products to Goddard Space Flight Center in order to verify that specified requirements for the product are met, and for recording the supplier performance data resulting from those inspections and tests. Requirements for in-process and final inspections and tests, and test status are described in GPG 5330.1.

P.2 APPLICABILITY

This procedure applies to all Goddard Space Flight Center (GSFC) products covered by the scope of the GSFC Quality Management System (QMS).

P.3 AUTHORITY

NPD 8730.3, NASA Quality Management System Policy (ISO 9000)

P.4 REFERENCES

- a. NPG 4200.1, NASA Equipment Management Manual
- b. GPG 5100.1, Procurement
- c. GPG 5310.4, Identification and Traceability of Products
- d. GPG 5330.1, Product Processing, Inspection, and Test
- e. GPG 5340.2, Control of Nonconforming Product
- f. GPG 5900.1, Control of Customer-Supplied Product
- g. GPG 8700.5, In-House Development and Maintenance of Software Products
- h. [GSFC Form 4-30](#), Work Order Authorization (WOA)
- i. Training Module for GPG 4520.1, Receiving Inspection and Test
- j. Training Module for GPG 5330.1, Product Processing, Inspection and Test

P.5 CANCELLATION

GPG 4520.2B, Incoming Inspection and Test

CHECK THE GSFC DIRECTIVES MANAGEMENT SYSTEM AT
<http://gdms.gsfc.nasa.gov/gdms> TO VERIFY THAT THIS IS THE CORRECT VERSION PRIOR TO USE.

P.6 SAFETY

Any special requirements for support or safety considerations (e.g., warning statements or notes; support equipment; personnel; facilities; or qualifications/licenses) associated with performing the receiving inspection and test events shall be recorded on the Work Order Authorization (WOA), [GSFC Form 4-30](#), when the receiving inspection instructions are prepared.

P.7 TRAINING

All personnel who will prepare receiving inspection instructions on a WOA or perform receiving inspection and test activities should be familiar with the training modules for GPG 4520.2 and GPG 5330.1. These training modules may be found at <http://ohr.gsfc.nasa.gov/DevGuide/ISO/home.htm>.

P.8 RECORDS

Record Title	Record Custodian	Retention
GSFC Form 4-30 , Work Order Authorization (WOA) or equivalent for application to software products	As defined in GPG 5330.1	As defined in GPG 5330.1
Inspection and Receiving Acceptance Document (e.g., Small Purchases System or DD Form 250 – “Material Inspection and Receiving Report”)	As defined in GPG 5100.1	As defined in GPG 5100.1
RITS database – contains the supplier performance records (accept/reject and timeliness results) obtained from receiving inspection and test activities	RITS System Administrator	* NRRS 5/1A1 – Procurement Files . (Destroy 6 years and 3 months after final payment.)

* *NRRS – NASA Records Retention Schedules*

P.9 METRICS

- a. Percent of products accepted
- b. Percent of products delivered on time

P.10 DEFINITIONS

- a. Acquisition – The activity of acquiring products. This activity includes, but is not limited to, the following methods of obtaining products: contracts, purchase orders, credit card buys, blanket purchase agreements (BPAs), memorandums of agreement (MOAs), and property transfers from organizations outside GSFC.

- b. **Controlled Equipment** – All equipment with an acquisition cost of \$1,000 or more, that has an estimated service life of 2 years or more, which will not be consumed or expended in an experiment, and selected items of equipment with an acquisition cost less than \$1,000 that are designated, and identified as sensitive by the Center Supply and Equipment Management Officer. (See NPG 4200.1)
- c. **Product Design Lead (PDL)** – The manager or leader with overall responsibility for managing the product design activity.
- d. **Receiving Inspection** – The inspection performed on a product during initial receipt after it has been acquired in order to verify that specified requirements for the product have been met. As a minimum, a kind, count, and condition inspection is performed. Additional inspections and tests (e.g., dimensional testing) may also be performed as part of the receiving inspection process. Receiving inspection is not required for subsequent receipts of the product when it has been performed previously. For example, receiving inspection is not required for returning products that were temporarily located at off-site locations (although, there may be requirements for in-process inspection which are described in GPG 5330.1).
- e. **Receiving Inspection Instructions** – Documented instructions describing who performs receiving inspection and test activities, what these activities shall be, where they are to be performed, and what is considered acceptable. The instructions must include any special handling or storage requirements applicable to the product. Receiving inspection instructions are documented (or referenced) on [GSFC Form 4-30](#), Work Order Authorization (WOA), or equivalent for application to software products.
- f. **Receiving Inspection and Test System (RITS)** – A web-based system, maintained by the Logistics Management Division (Code 230), which compiles a history of supplier performance (e.g., percent of products accepted and delivered on time) based upon the results of receiving inspection and test for each acquisition. Acquisition initiators and procurement personnel use this system to check the performance history of a supplier prior to purchasing products. Acquisition initiators who wish to establish and document receiving inspection instructions on a WOA may also use this system for that purpose.

PROCEDURES

1. OVERVIEW

1.1 All deliveries of incoming products covered by the scope of the GSFC QMS are required to be processed through GSFC's (Greenbelt and Wallops) Central Receiving operations. Delivery vehicles containing items that are impractical for offloading or performance of receiving inspection at Central Receiving (e.g., oversize/bulk items or items requiring specialized handling) shall still report to Central Receiving in order to receive the proper clearance for delivery on Center.

1.2 RITS is used to record supplier performance data resulting from the receiving inspection of the following GSFC products: flight products (spacecraft, instruments, balloons, and sounding rockets), including flight components, piece parts, and material; any item that directly interfaces with flight

products; ground support equipment; ground stations; and inspection, measuring, and test equipment. RITS is not required for administrative supplies, documentation, services, or general tools. The PDL for “software” development activities may determine that the WOA is not applicable to his/her particular software related activities. When this is the case, receiving inspection and test requirements (including the use of RITS) are determined in accordance with GPG 8700.5.

1.3 Use of RITS is only required for the initial receipt of the product and is not required for subsequent receipts of the product when it has been performed previously (e.g., returns of products from launch sites, inspections or test activities, or returns of items out for rework/in-process development or on loan).

2. IMPLEMENTATION

2.1 For products requiring use of RITS, the acquisition initiator shall prepare appropriate receiving inspection instructions on a WOA for each acquisition. These instructions shall be prepared prior to processing the product through receiving inspection and test. Receiving inspection instructions should be prepared as soon as practicable after the acquisition information (e.g., supplier name and location, scheduled delivery date, and contract number or purchase order number, if applicable) has been obtained. Completion of the instructions in a timely manner will help preclude delays in processing the product once it has been received. There are several ways a WOA form may be obtained. The acquisition initiator chooses which method to use. Regardless of which method is chosen, a supplier performance record will need to be created in RITS.

a. Complete the form on-line using the Receiving Inspection and Test System (RITS). Access this system at the following URL:

<http://rits.gsfc.nasa.gov>

This system maintains a database of all WOA’s entered in the system, and allows WOA searches and copying of existing work orders. This system has the advantage over the other methods in that most data will not need to be reentered into RITS since the data from creating the WOA is already available for creating the supplier performance record.

b. Access the form on the Goddard Directives Management System (GDMS). The form may be found at the following URL:

http://gdms.gsfc.nasa.gov/gdms/plsql/dmform.master_list

The form may then be printed out and filled out manually or filled out on screen and printed. Most (if not all) of the data required for recording supplier performance will need to be typed into RITS.

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c. Complete the form on-line using the Work Order Authorization System. Access this system at the following URL:

<http://gdms.gsfc.nasa.gov/gdms/pls/appmenu>

This system maintains a database of all WOA's entered in the system, and allows WOA searches and copying of existing work orders. Most (if not all) of the data required for recording supplier performance will need to be typed into RITS.

2.2 Receiving inspection instructions containing the following receiving inspection/test events, at a minimum, shall be identified on the WOA for each acquisition:

a. First default event: "Perform kind, count, and condition inspection." Those terms have the following meaning: kind – check for correct part number or configuration, count – check that the quantity delivered matches the quantity called for in the purchasing document, and condition – perform visual inspection to determine that the items have not been damaged.

b. Last default event: "Update RITS with results of Receiving Inspection." This event is accomplished by entering into the RITS database the following receiving inspection results and supplier information: quantity accepted, quantity rejected, actual delivery date, number of Nonconformance Reports (NCR's) issued, and the supplier name and location.

c. The WOA allows the acquisition initiator to insert additional receiving inspection and test events between the default events as appropriate for the acquisition. Additional events should be considered under the following circumstances:

- (1) No product verification by GSFC or its agents is planned at the subcontractor's premises (see GPG 5100.1)
- (2) The terms of the procurement do not require objective evidence of product conformance to be provided to GSFC
- (3) The subcontractor's or potential subcontractor's performance history warrants incoming product verification
- (4) Characteristics of incoming product are essential to mission success

Detailed instructions on how to complete a WOA are included with the [GSFC Form 4-30](#), Work Order Authorization (WOA), that is accessible through GDMS.

2.3 Incoming GSFC products shall be identified in accordance with GPG 5310.4 and incoming customer-supplied products shall be identified in accordance with GPG 5900.1. The WOA, which reflects this identification, shall travel with the product.

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2.4 Incoming products shall be processed in accordance with the receiving inspection instructions on the WOA. The completion of each event shall be annotated by the performing individual on the associated WOA. If the PDL requests that all or a portion of the items be released for production purposes prior to accomplishment of any receiving inspection or test identified in the receiving inspection instructions, the product shall be identified and controlled as nonconforming product in accordance with GPG 5340.2.

2.5 If Central Receiving will be performing receiving inspections and tests on the incoming product (e.g., “Perform kind, count, and condition inspection” or “Update RITS with results of Receiving Inspection”), they must have access to the applicable WOA otherwise processing of the product will be delayed until the WOA has been created by the acquisition initiator.

2.6 When indicated in the applicable receiving inspection instructions, receiving inspection personnel shall record actual measurements and test results on the WOA as part of the receiving inspection record.

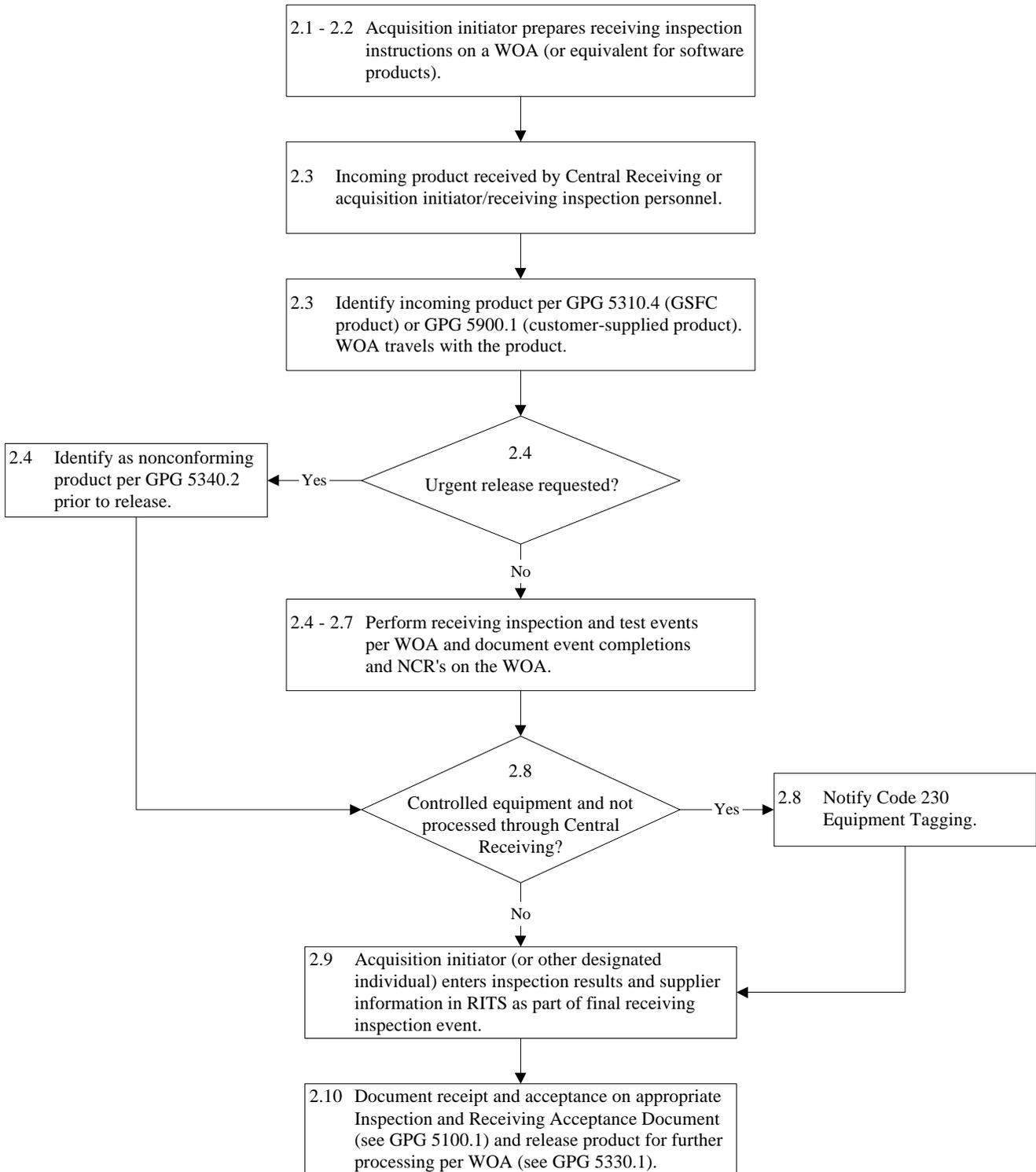
2.7 Nonconformances found during receiving inspection and test shall be documented in accordance with GPG 5340.2. The resulting NCR number shall be entered in the appropriate WOA block associated with the event where the NCR was found.

2.8 If incoming GSFC products are controlled equipment that will not be processed through the equipment accountability function in Central Receiving (e.g., the items are oversized and will not be offloaded), the organization owning the equipment shall contact the Code 230 equipment tagging operation so that the items can be properly identified and controlled in accordance with NPG 4200.1 (e.g., barcode-tagged and entered into the NASA Equipment Management System).

2.9 Per the final receiving inspection and test event, the acquisition initiator (or other designated individual) shall enter into RITS the receiving inspection results (quantity accepted, quantity rejected, actual delivery date, and the number of NCR’s issued) and the supplier name and location. The annotated WOA will then be maintained as a record by the organization.

2.10 Receipt and acceptance for conforming product (or product dispositioned in accordance with GPG 5340.2) shall also be documented by the appropriate Inspection and Receiving Acceptance Document (e.g., Small Purchases System or DD Form 250 - see GPG 5100.1) and the product shall be released to the PDL for continued processing in accordance with WOA instructions established per GPG 5330.1.

Receiving Inspection and Test Flowchart



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CHANGE HISTORY LOG

Revision	Effective Date	Description of Changes
Baseline	08/12/98	Initial Release
A	10/6/98	<ul style="list-style-type: none"> • Header and footer format changes. • P.8 – Identified maintenance responsibility for quality records. • 2.10 – Included requirement for further processing after receiving.
B	05/07/99	<ul style="list-style-type: none"> • General revision to incorporate RITS. • Incorporated format changes to comply with GPG 1410.1.
C	08/05/02	<ul style="list-style-type: none"> • Changed directive title. • General revision to replace references to RITS WOA with GSFC Form 4-30 to reflect the new process which does not make RITS mandatory for creating WOA's for receiving inspection and test activities. • Incorporated format changes to comply with GPG 1410.1 (P.6 – Safety, P.7 – Training, and P.9 – Metrics). • P.8 – Added the “Inspection and Receiving Acceptance Document” as a record and changed the retention period for the “RITS database supplier performance records.” • P.9 – Added “percent of products accepted” and “percent of products delivered on time” as metrics. • P.10 – Added definitions for “controlled equipment” and “receiving inspection.” • 1.1 – Stated that all products covered by the scope of the GSFC QMS are required to be processed through GSFC's Central Receiving operation. • 1.2 – Stated that inspection and test requirements for software products are determined in accordance with GPG 8700.5. • 1.3 – Stated that using RITS is not required for subsequent receipts of the product. • 2.1 – Included information on how to obtain a GSFC Form 4-30. • 2.5 – Stated that processing of incoming product will be delayed in Central Receiving if the WOA is not available and needs to be created. • 2.10 – Stated that receipt and acceptance for products shall also be documented with the appropriate Inspection and Receiving Acceptance Document in accordance with GPG 5100.1.