



National Aeronautics and Space Administration
Jet Propulsion Laboratory
California Institute of Technology

A Standardized Approach for Commodity Codes & Defect Codes

***Americas Aerospace Quality Group
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Phoenix, AZ***

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National Aeronautics and Space Administration
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Standardization of Commodity Codes



OVERVIEW

- ▶ **Challenge/Solution**
- ▶ **Benefits**
- ▶ **Developing a Cross-Reference Table**
- ▶ **What are CAGE Codes?**
- ▶ **Demonstration**
- ▶ **Other**





CHALLENGE

No standard method of identifying commodities among NASA Centers and Suppliers.

JPL	OTHER NASA CENTERS	SUPPLIERS
<ul style="list-style-type: none">• SIC• NAICS	<ul style="list-style-type: none">• FSC• OTHER	<ul style="list-style-type: none">• FSC• SIC• NAICS• OTHER



SOLUTION

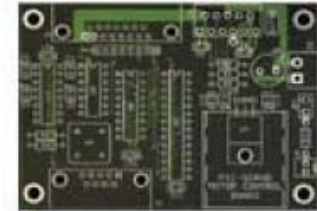
Develop a cross-reference that references several mature, established commodity systems and unify them to use one standardized code to be used across all of NASA.





WHY SEPARATE BY COMMODITY

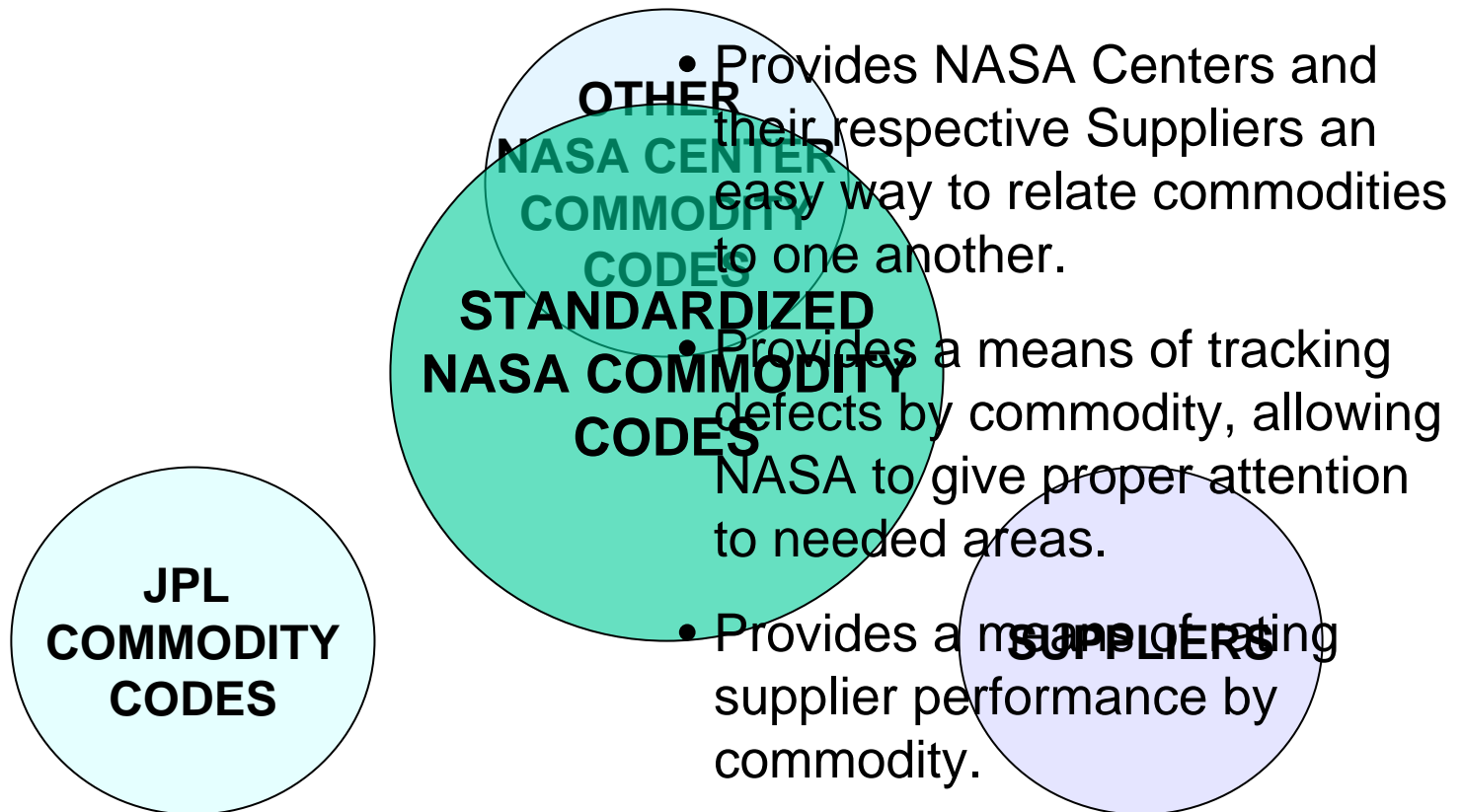
- Some suppliers make more than one type of product.
- A rating system that is based on all supplier products may be skewed.





BENEFITS

What are the benefits of unifying all the commodity codes?





DEVELOPING THE CROSS-REFERENCE TABLE

G291 Audio and Video Equipment Manufacturing												
A	D	E	F	G	H	I	J	K	L	M	N	
NASA COMMODITY CODE	SIC CODE	SIC DESCRIPTION	NAICS CODE	NAICS DESCRIPTION	FSC CODE	FSC DESCRIPTION	BOEING CODE	BOEING DESCRIPTION	ATK CODE	ATK DESCRIPTION	CAGE CODES OF NASA SUPPLIERS PROVIDING COMMODITIES	
1	M14-9	3641	Household Audio and Video Equipment	334310	Audio and Video Equipment Manufacturing	5820 7730	Radio and Television Communication Equipment Except Airborne Phonographs Radios	NONE	NONE	042	IT - Communications	0TR96, 34078, 53919, 6L254
290	M14-10	3671	Electronic Components, NEC (radio headphones)	334310	Audio and Video Equipment Manufacturing	5965	Headsets Handsets Microphones and Speakers	B, I	Electrical/Mechanical Equipment, Electrical Hardware	064	MRO-Electrical	14749, 33967, 0R8N4, 1GLF1, 88379, 65342, 1L1W6, 0H379, 16301, 28916, 3C2C4, 1Z496, 13993, 12050, 71034, 32997, 0V167, 69698, 3DJK4, 80045, 1MQS9, 66544, 0HHL6, 0D4L1, 1W0F9, 66087, 051712, 23280, 5Y549, 28983, 50721, 56219, 015M4, 6S055, 31461, 18853, 26
291	M14-11	3648	Electron Tubes	334411	Electron Tube Manufacturing	5960	Electron Tubes and Associated Hardware	B, I		NONE	NONE	1RU44, 73293, 52969, 015M4, 0JXJ4, 0T9D1, 03550
292	M14-12	3651	Printed Circuit Boards	334412	Bare Printed Circuit Board Manufacturing	3670	Specialized Semiconductor Microcircuit and Printed Circuit Board PCB Manufacturing Machinery			082	Printed Wiring Boards (PWB'S)	1W538, 65342, 51484, 3BH67, 3DR78, 30598, 63695, 65882, 051712, 50721, 56219, 79616, 1T1S2, 07284, 1KXU6, 68911, 57508, 9J721,
293	M14-13	3652	Semiconductors and Related Devices	334413	Semiconductor and Related Device Manufacturing	5961	Semiconductor Devices and Associated Hardware	B, I	Electrical/Mechanical Equipment, Electrical Hardware	064	MRO-Electrical	0J4Z0, 33967, 0JN02, 88379, 65342, 24355, 06665, 1FN41, 3C2C4, 60024, 52969, 57300, 3DJK4, 1DR13, 061F4, 0D4L1, 06698, 56219



COMMERCIAL AND GOVERNMENT ENTITY CODES

What are CAGE Codes?

- A CAGE Code is a five (5) character alpha-numeric code that identifies companies doing or wishing to do business with the Federal Government.

Who maintains CAGE Codes?

- The Defense Logistics Information Service (DLIS).

What is the purpose of CAGE Codes?

- Required by the Federal Acquisition Regulation Act (FAR) to be registered in the CCR which requires a CAGE Code.
- Identifies the supplier by location and by Strategic Business Unit.
- No cost to the supplier or NASA.



DEMONSTRATION

(SCREEN SHOTS)

LIVE DEMO:

<http://mttc.jpl.nasa.gov/pqa/commoditysearch.cfm>



DEMONSTRATION



PROCUREMENT QUALITY ASSURANCE



[QUALITY CLAUSES/PLANS](#)

[COMMODITY CODE SEARCH](#)

[DEFECT CODE SEARCH](#)

[P-CARDS](#)

NASA COMMODITY CODE SEARCH

Objectives:

- To relate commodities from one NASA center to another.
- Utilize a system for Supplier Performance Ratings (based upon commodity).

QUALITY CLAUSE AND PLAN OPERATIONS - JET PROPULSION LABORATORY - MAINTAINED BY JAKE L. HENG



DEMONSTRATION



PROCUREMENT QUALITY ASSURANCE



Your search for **able** returned record(s)
 Records Searched: mysearch.recordssearched

NASA COMMODITY CODE	NASA TITLE	NASA DESC	NAISC DESC	SIC DESC	FSC DESC
M12-13	Hand and Edge Tool Manufacturing	Noncurrent-Carrying Wiring Devices (fish wire, electrical wiring tool), Hand and Edge Tool Manufacturing, Wire Nonelectrical Wire and Cable Electrical, Purchased Parts (Tooling)	Hand and Edge Tool Manufacturing	Noncurrent-Carrying Wiring Devices (fish wire, electrical wiring tool)	Wire Nonelectrical Wire and Cable Electrical
M15-14	Fiber Optic Cable Manufacturing	Drawing and Insulating of Nonferrous Wire (fiber optic cable-insulating only), Fiber Optic Cable Manufacturing, Rolling Mills and Drawing Machines	Fiber Optic Cable Manufacturing	Drawing and Insulating of Nonferrous Wire (fiber optic cable-insulating only)	Rolling Mills and Drawing Machines
M15-16	Fiber Optic Cables	Fiber Optic Cables	NONE	NONE	Fiber Optic Cables
M15-17	Fiber Optic Cable Assemblies and Harnesses, Cables and Wiring Harnesses	Fiber Optic Cable Assemblies and Harnesses, Cables and Wiring Harnesses	NONE	NONE	Fiber Optic Cable Assemblies and Harnesses
M15-27	Current-Carrying Wiring Device Manufacturing	Current-Carrying Wiring Devices, Current-Carrying Wiring Device Manufacturing, Wire and Cable Electrical, Electrical/Mechanical Equipment, Electrical Hardware, MRO-Electrical	Current-Carrying Wiring Device Manufacturing	Current-Carrying Wiring Devices	Wire and Cable Electrical

BACK



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NASA COMMODITY CODE:M15-14

NASA COMMODITY CODE DESCRIPTION

Drawing and Insulating of Nonferrous Wire (fiber optic cable-insulating only), Fiber Optic Cable Manufacturing, Rolling Mills and Drawing Machines

SUPPLIER CAGE CODES

CAGE CODE	SUPPLIER NAME	OPTIONS
27813	California Fine Wire Co Inc.	<input type="button" value="VIEW"/>
24027	<u>Calmont Wire</u>	<input type="button" value="VIEW"/>
0TAN2	Dugan Data Communications Company	<input type="button" value="VIEW"/>
68027	Elrob Inc. DBA El-Com/Cabletek	<input type="button" value="VIEW"/>
55944	Falmat, Inc.	<input type="button" value="VIEW"/>
0HKZ1	High Performance Alloys, Inc.	<input type="button" value="VIEW"/>
0VXH8	JM Fiber Optics, Inc.	<input type="button" value="VIEW"/>
4V463	Mark Metals	<input type="button" value="VIEW"/>
1GVT4	MegaPhase LLC	<input type="button" value="VIEW"/>
3EVP1	Nanometer Technologies Inc.	<input type="button" value="VIEW"/>
		<input type="button" value="VIEW"/>
3GUE2	New World Technologies Inc.	<input type="button" value="VIEW"/>
12515	Nexans/US, Inc. DBA Berk-Tek Electronics Cable	<input type="button" value="VIEW"/>
0F848	OZ Optics LTD	<input type="button" value="VIEW"/>
53919	Pasternack Enterprises	<input type="button" value="VIEW"/>
4P070	Southern California Braiding Co., Inc.	<input type="button" value="VIEW"/>
57500	Storm Products Co DBA Advanced Technology Group	<input type="button" value="VIEW"/>



DEMONSTRATION

ASL - Update Supplier Information

Supplier Name:

Previous Name(s):

Database Status:

ASL Status:

Address:

City:

State:

Zip Code:

Phone Number:

Fax Number:

Point of Contact:

Title:

E-mail Address:

Web Site: [View Web Site](#)
example: www.vendorname.com

NAICS:

Commodity Description:

SIC Code:

CAGE Code:

Supplier Oracle ID:

Program/Project Name:



COMMODITY CODE SUMMARY

- **All NASA Centers and suppliers can keep their current codes/systems.**
- **The Commodity Code Cross-Reference Table can be integrated into all NASA Centers with minimum effort and cost.**
- **The Cross-Reference Table can be utilized for classifying suppliers' performance metrics among NASA.**
- **NASA Supplier Rating System and the integrated Cross-Reference tables will allow:**
 - **Effective Supplier Surveillance across the Agency**
 - **A means of managing and mitigating risks.**



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Defect Code Development



Agenda

- Background
- Objectives
- Duration and Frequency
- Development Status and Summary
- Examples



Background

- The CAIB report identified the lack of information rollup as a problem in the agency

- The Defect Code Work Group was chartered to develop a unified set of defect codes to be used across the Agency to:
 - Allow roll-up of nonconformance trends to NASA HQ
 - Better distribute resources to problematic areas

- The group solicited inputs from several sources to consider and conducted an assessment.



Background (cont.)

- Six Defect Code systems were evaluated by JPL.
- Based on the assessment outcome, a recommendation was made to modify and utilize the Department of the Army's (DOA's) Defect Code system.
- Participants from NASA Centers, Primes, and aerospace industry partners joined the Standardization of Defect Codes Workgroup.



Objectives

- Workgroup Objectives:
 - Develop a standardized system that tracks defects that can be shared and understood among the Aerospace community.
 - Augment process improvements for all participating organizations.



Duration and Frequency

- The workgroup holds meetings:
 - Bi-monthly via teleconference (commenced on January 10, 2006)
 - Every other Tuesday.



Development Status and Summary

- Eight general groups of codes, which consist of two top tier levels, have been finalized.
- Each month one general group will be reviewed to determine the need for additional tiers.
- Defect codes will be incorporated into the Problem Reporting and Corrective Action (PRACA) system requirements.



Examples

- The first two digits identify the general group the defect falls under:

General Group Codes	
Code	Explanation
10	Cleaning, Preservation, Painting, Plating, or Other Processing
11	Packaging
12	Packing and Loading
13	Marking and Labeling
14 & 15	Material Deficiencies
16	Functional Certification, Inspection, or Performance Test
17	Document Recording or Routing Deficiencies
18	Storage Deficiencies



Examples

- The third digit further defines the specific defect. The following codes are comprised of the general group codes and specific defect:

Cleaning, Preservation, Painting, Plating, or Other Processing	
10	
Code	Explanation
100	Appearance (paint runs, overspray, not up to standard)
101	Cleaning improper or inadequate
102	Preservation improper or inadequate
103	Wrapping improper or inadequate (i.e., carbon or fiberglass outer wrap of pressure vessel)
104	Protection afforded not compatible with type or storage or other environment
105	Inadequate coverage or improper thickness
106	Improper and inadequate preparation
107	Wrong type, method, and color
108	Drying improper or inadequate
109	Corrosion detected



Points of Contact

Standardization of Defect Codes Workgroup

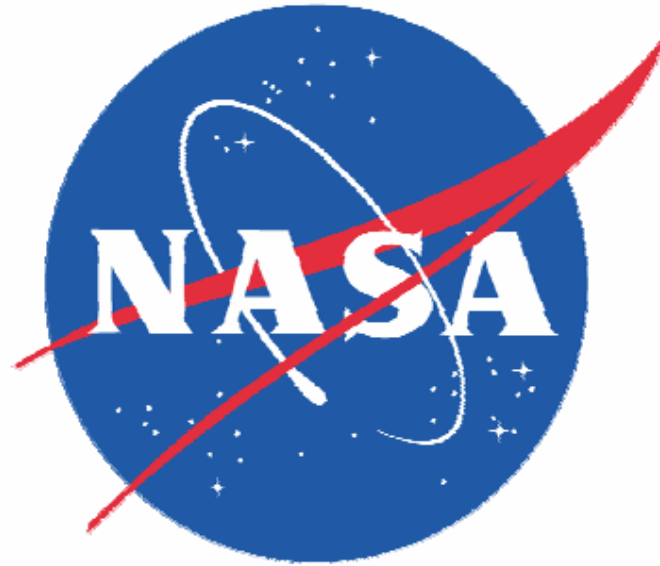
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Thank you and good day!

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