

**Wallops Presentation
DSN Scheduling**



**Margaret Medina
Support Products Supervisor**

June 26, 2003

DSN Scheduling



SUPPORT PRODUCTS GROUP
Margaret Medina
 Supervisor

Pre Tracking Processes

Post Tracking Processes

DSN SCHEDULING
 Holger Schroeder - Lead
 Donna Dillard
 Rene Best
 Brandy Brown
 Eugenia Young-Anderson
 Carleen Ward

ISTP/MIDEX
 Scheduling Representatives
 Cindee Abramo
 Honi Alexander

SSF
 Peter Nguyen - Lead
 Ed Gardner

SOE
 Robert Brodtkin * - Lead
 Mel McBride backup
 Dwight Durkee backup

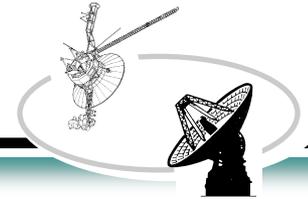
PREDICTS
 Lori Wallace* - Lead
 Mel Mc Bride *
 Mark Chen *
 Dwight Durkee *
 Daniel Jimenez *
 Irma Adams *

TPAP
 Pio Espejo -Lead
 Ed Gardner

RMDCT
 Laura Campanelli * - Lead
 Teresa Thomas *
 Tarek Baayoun *
 Lorena Carrillo *

* Subcontractor

DSN Scheduling



Process Flow Diagram

Long Range Planning

Mid-Range

Short Range

Realtime

New inputs Change Request
(submitted via E-mail)

New inputs Change Request
(submitted via E-mail)

Realtime Changes
(submitted via E-mail)

4 week schedules

RAPSO
DSN/Project
Requirements

RAPT
Conflict
Resolution
Meetings
Fridays

DSN Scheduling
Meeting
Mondays

Planning and
Forecast Weeks
8 Weeks

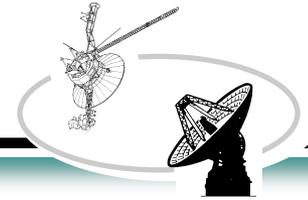
DSN Scheduling
Meeting
Mondays

7-Day
Schedule/Forecast

Realtime
Updates to
7-Day
Schedule

**Distributed to the Network
NIS and SPPA
Twice Daily**

DSN Scheduling

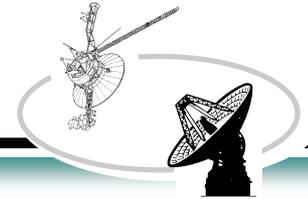


Purpose

Provide network scheduling capability to schedule hardware implementations, tests, and tracking using network operational resources based upon allocation guidelines provided by JPL DSMS (Deep Space Mission Services)

- Chair DSN Scheduling meetings as needed with Network users and provide scheduling representative to JPL's Resource Allocation Office meetings
- Generate, validate and distribute via the Network Support System (NSS) and the Network Information Service (NIS), the 7-Day Operations Schedule, Forecast and all Planning Weeks
- Advise resource requestors support information about scheduling constraints
- Maintain historical schedule data records and provide special reports and studies upon request from customers
- Prepare and implement contingency schedules for launch slips

DSN Scheduling



PRODUCTS GENERATED BY DSN SCHEDULING

➤ Forecast/Planning Schedules

Updated and distributed 2 times a day to the SPPA (Support Products Provider Assembly) and Network Operations Control Center/ Network Information Server NOCC/NIS web page

<http://dsn.jpl.nasa.gov>

➤ Real-Time Operations Schedule

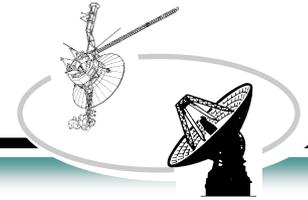
Updated and distributed (minimum 2 times a day) to the stations and the NOCC/NIS web page and at the SPPA (conflict free)

Distribute weekly to the NOCC/NIS web page - Wednesday afternoon

7-Day schedule (conflict free)

Forecast week (may still contain conflicts)

DSN Scheduling



REPORTS GENERATED BY DSN SCHEDULING

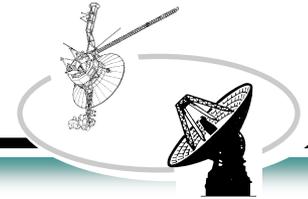
- Monthly Utilization Reports to DSMS
Historical report in reference to scheduled event versus actual utilization

- Monthly Project Report to DSMS
Historical report of time used by individual project by antenna

- Reports and Special Studies
Historical reports as required

- All reports can be viewed at the Support Products Group SPG, DSN Scheduling Web page
<http://csocjplonline.jpl.nasa.gov/spg/scheduling>

DSN Scheduling



Support Products Group

- Life
- Infrastructure
- Predicts
- RVDC
- NAV NSP Tracking Analysis
- Scheduling
- SOE
- Software Support Files
- TPAP
- CSOCJPLOnline Home
- Send Feedback

Galaxy NGC 4114

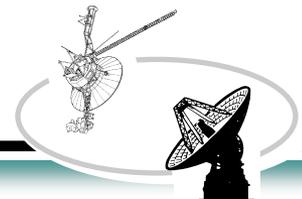
Visitor Number

1125

Since Mar 05, 2001

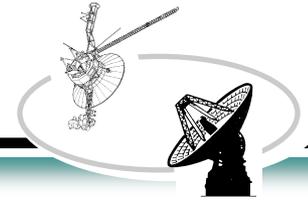


DSN Scheduling



<i>Personnel</i>	DSN SCHEDULING		
<i>Documents</i>	DSN Scheduling SOP: 842-50-318	DSN SCHEDULING-131	
<i>Forms</i>	Configuration Code Request (CSOC-JPL-FORM-003538)	CHANGE REQUEST FORM CSOC-JPL-FORM-000598	
	Configuration Code Request Form Instructions	CHANGE REQUEST FORM INSTRUCTIONS	
<i>Files</i>	CFGST.TXT CURRENTLY ACTIVE CONFIGURATION CODES	Schedulable Equip. (SPC/DSS EQUIP. ALLOCATION)	Work Category Codes
<i>Admin</i>	PRIME E-MAIL ADDRESS (DL-DSNSCHED@JPL.NASA.GOV)	<u>HOURS OF OPERATION</u> 7am - 4:15pm Pacific	MONDAY MORNING MEETING 10am Pacific 818.354.4634
	EMERGENCY E-MAIL ADDRESS (DSNSCHED@A.RMAIL.FLTOPS.JPL.NASA.GOV)	MISC. INFORMATION	
<i>Reports</i>	Requirements vs. Scheduled vs Actual		
	PIE CHARTS History by Work Category by Antenna Size	UTILIZATION Schedule vs History By Work Category + RadioMetric	
	ANTENNA USAGE By Subnetwork By Work Category	PROJECT ACTUAL HOURS + Test&Training	
HOME (<i>SPG Homepage</i>)	MONTHLY SCHEDULE VS. HISTORY By Work Category plus Project Nbr Of Events by Antenna	TRACK / TEST By Subnetwork By Project	

DSN Scheduling

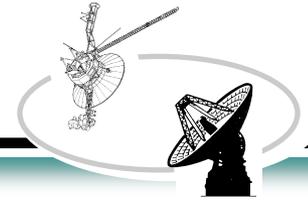


DSN Scheduling Activities

26/34/70 meter Scheduling Process

- Chair the Monday morning conflict resolution scheduling meeting
- Receive changes for the next operational week as well as the forecast week
- Process change requests to the NSS database
- Identify conflicts resulting from requested changes and advise accordingly
- Update database and post new schedule to the SPPA and NOCC/NIS web page twice a day

DSN Scheduling



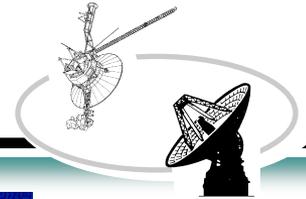
DSN Scheduling Activities (cont'd)

Real-Time Scheduling Activities

Process change requests to the 7-Day Schedule

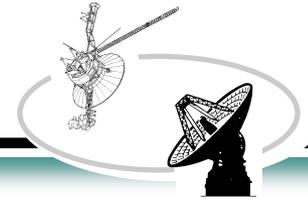
- Prepare and implement contingency schedules for launch slips
- Identify conflicts resulting from requested changes and advise accordingly
- Provide emergency support scheduling
- Generate and distribute revisions to the 7-Day Schedule
- Coordinate with OPS-Chief to send updated schedules to the Complexes

DSN Scheduling



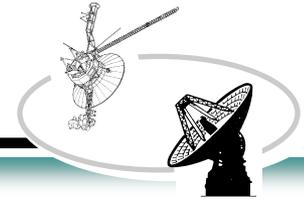
*Eugenia Young-Anderson Brandy Brown Margie Medina Renee Best
Carleen Ward Hoag Schroeder Donna Dillard*

DSN Scheduling

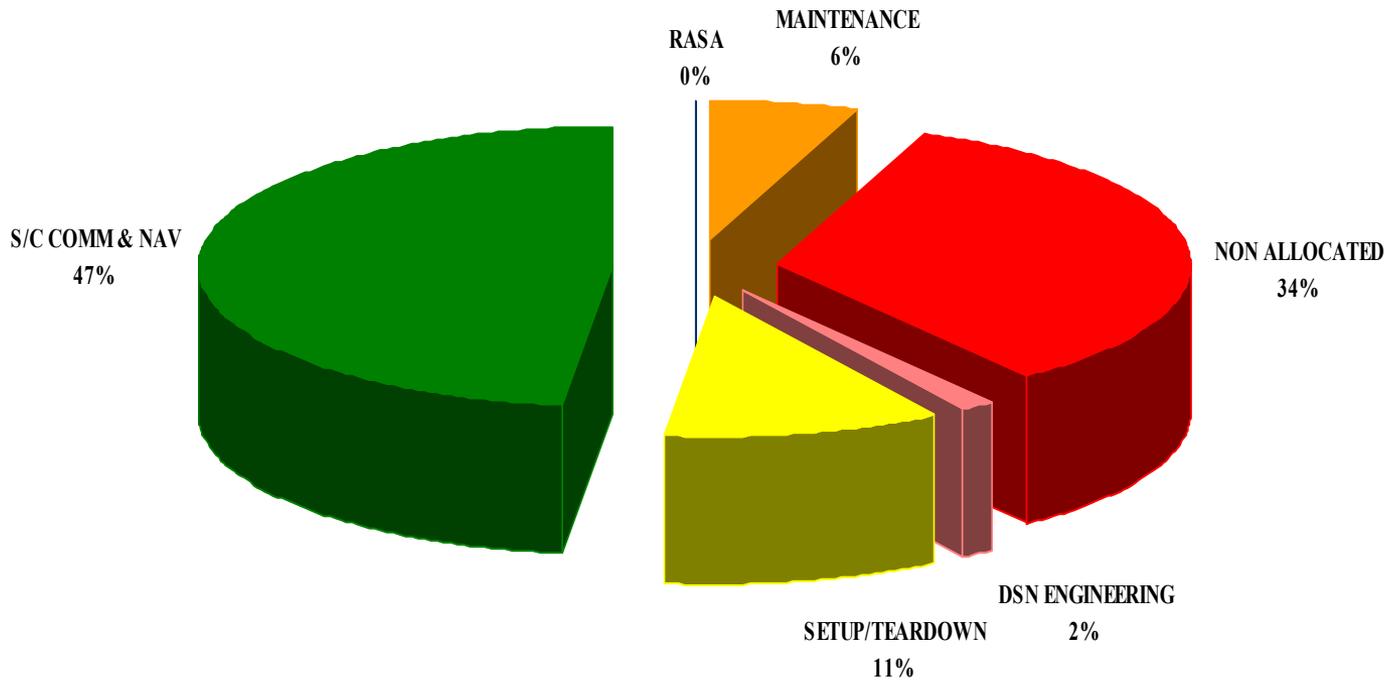


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DSN Scheduling

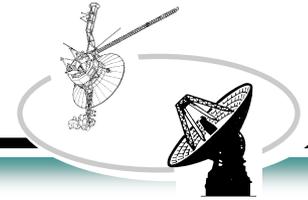


DSN Utilization for May 2003 26 Meter Subnetwork

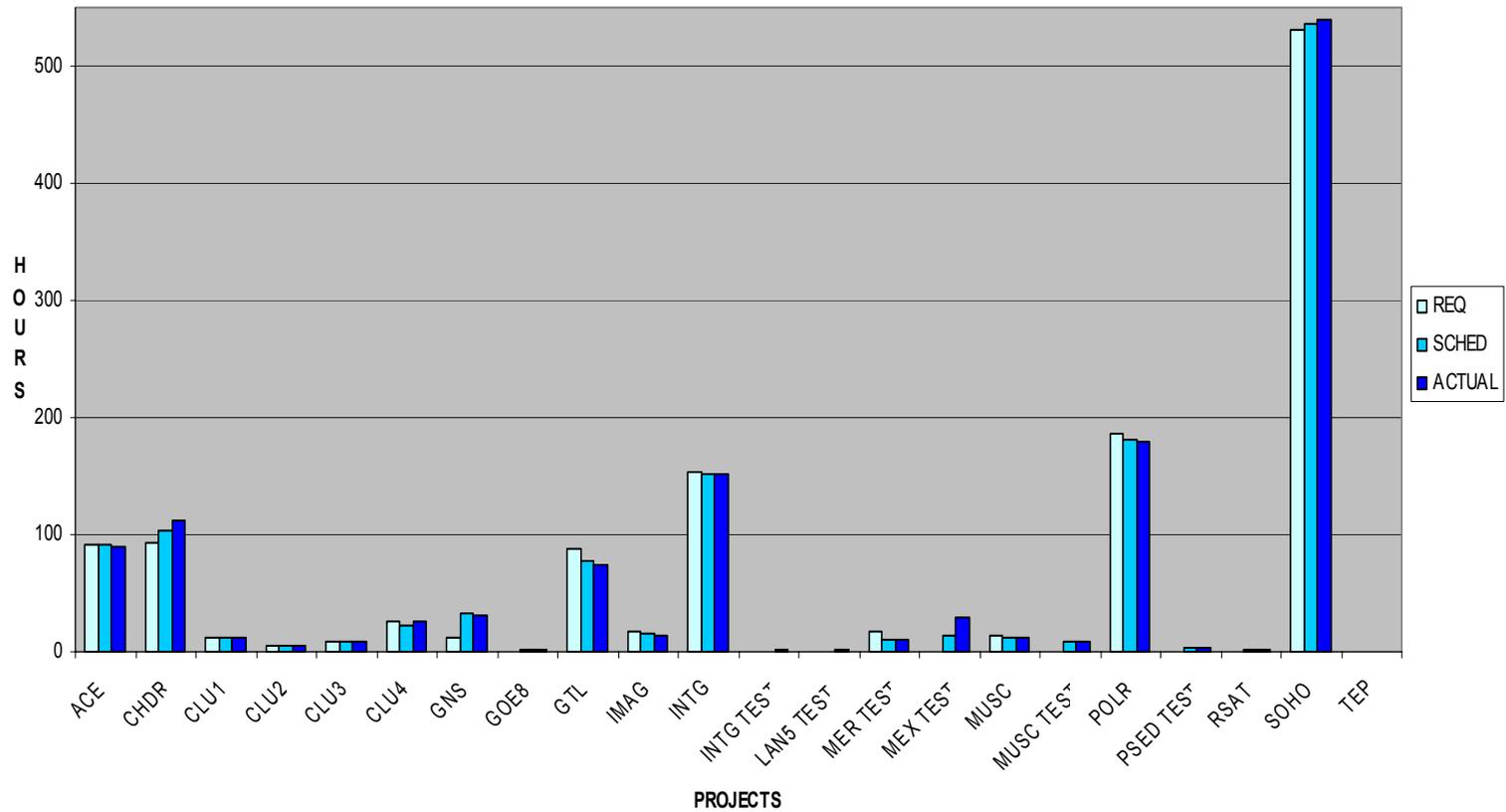


NASA Presentation

DSN Scheduling



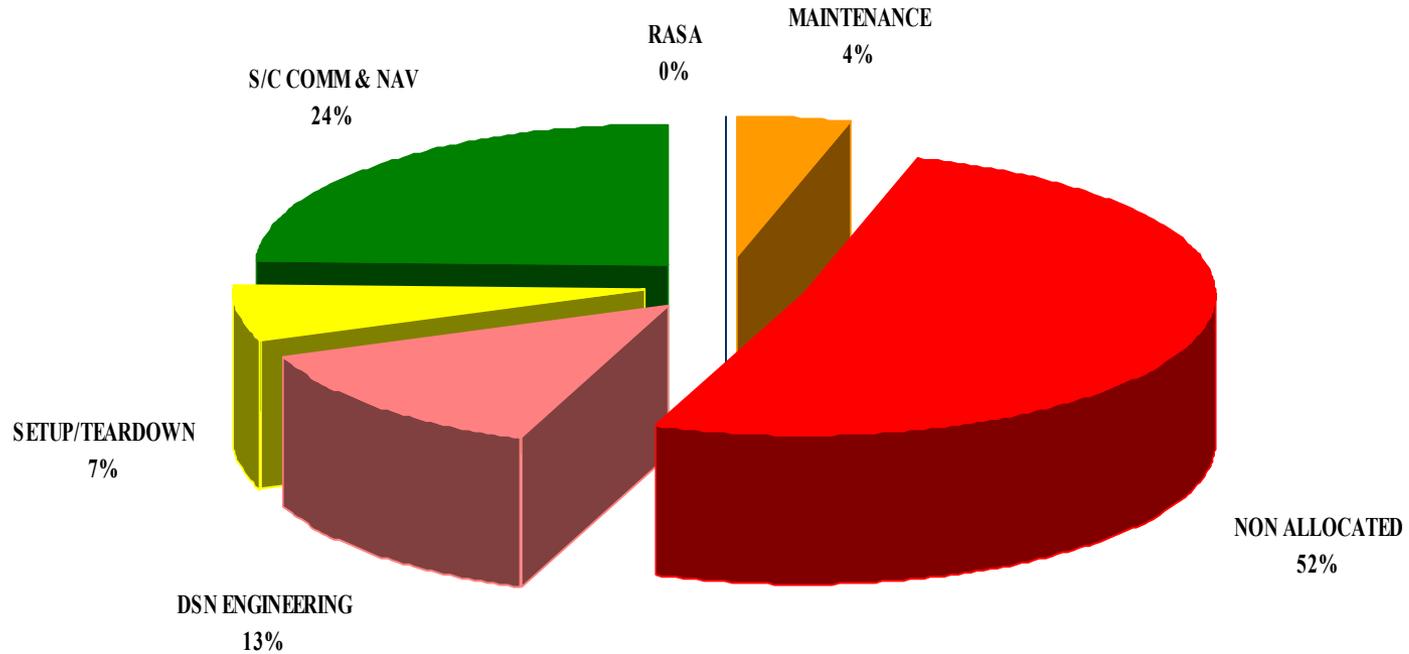
Requested vs Scheduled vs Actual
 26M (DSS-16, 46, 66)
 May 2003



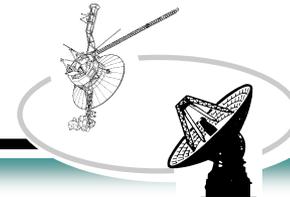
DSN Scheduling



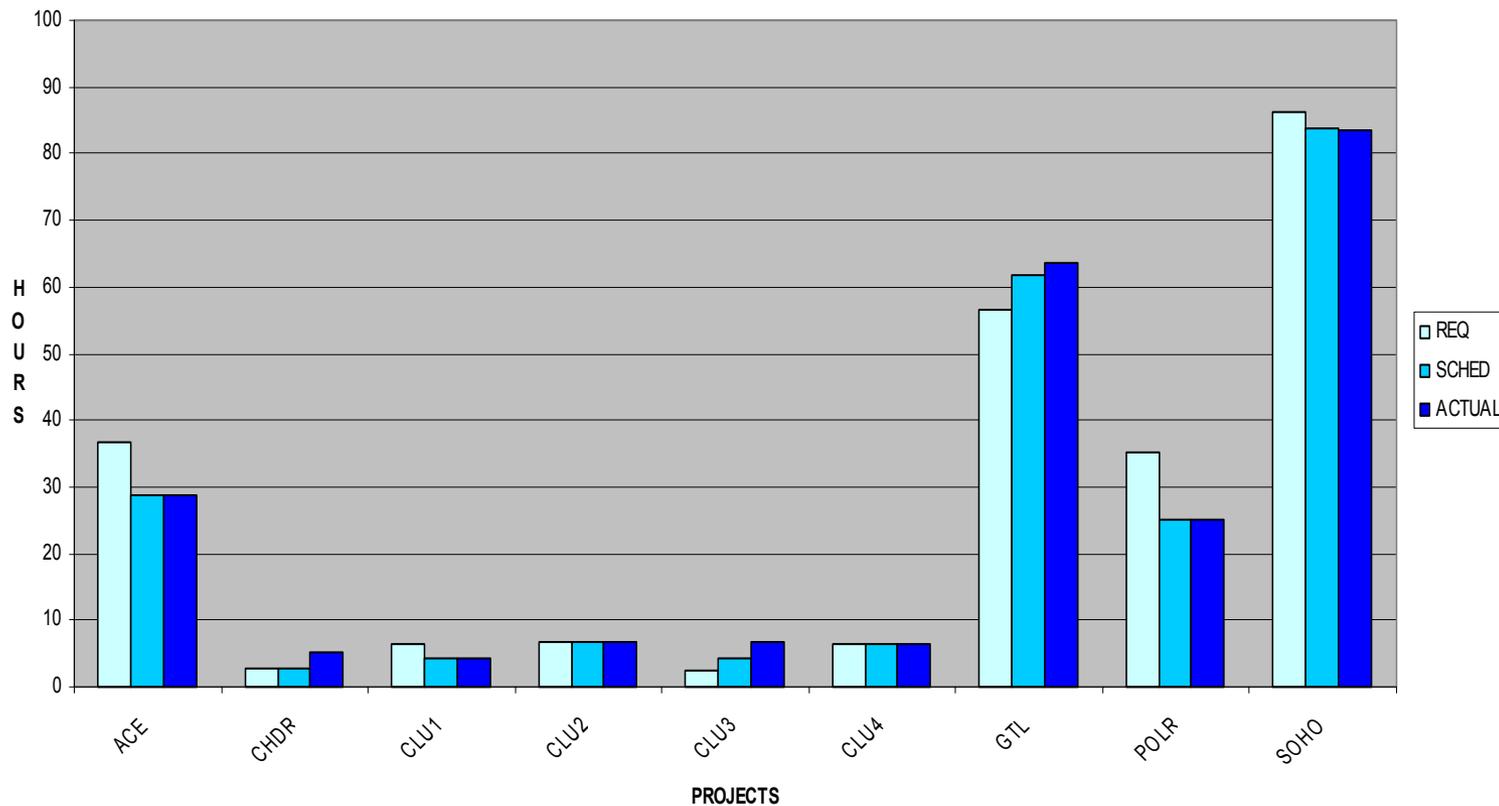
DSN Utilization for May 2003 HSBWG (DSS 27)



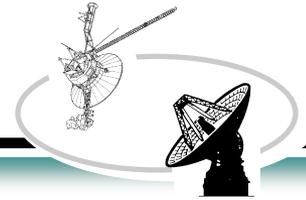
DSN Scheduling



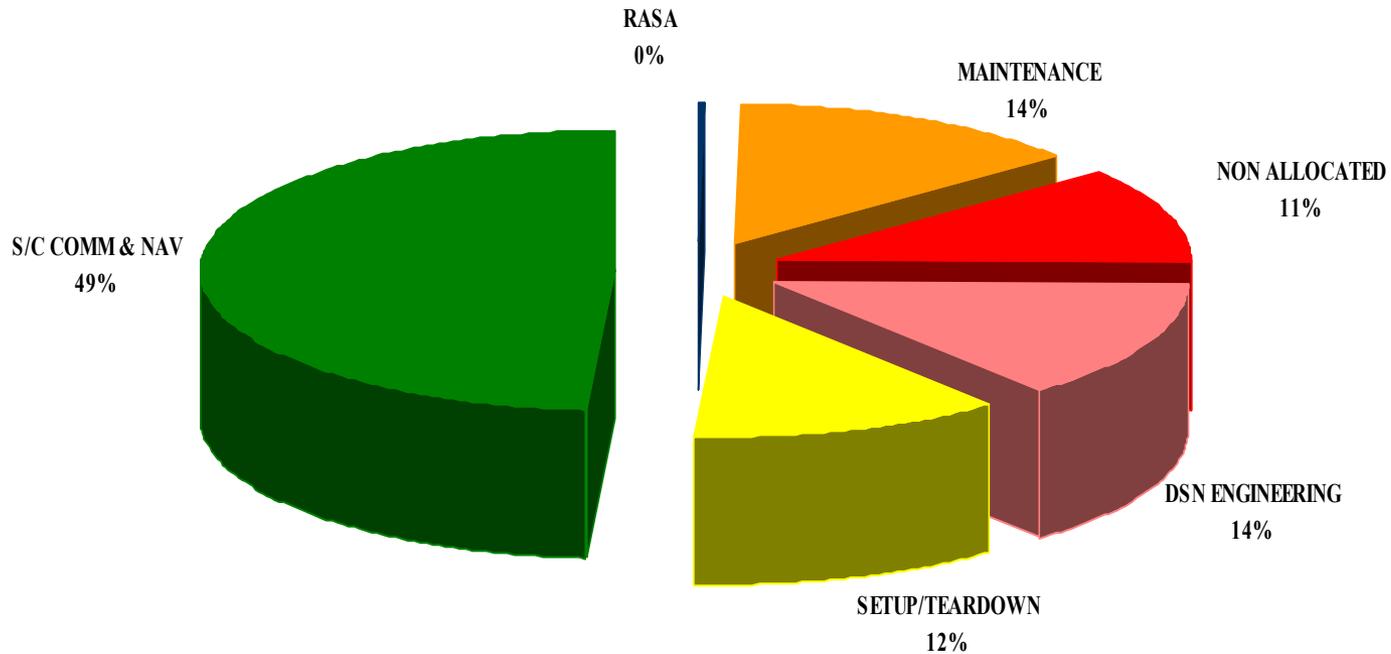
Requested vs Scheduled vs Actual
HSBW (DSS-27)
May 2003



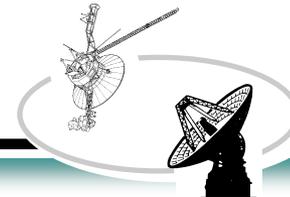
DSN Scheduling



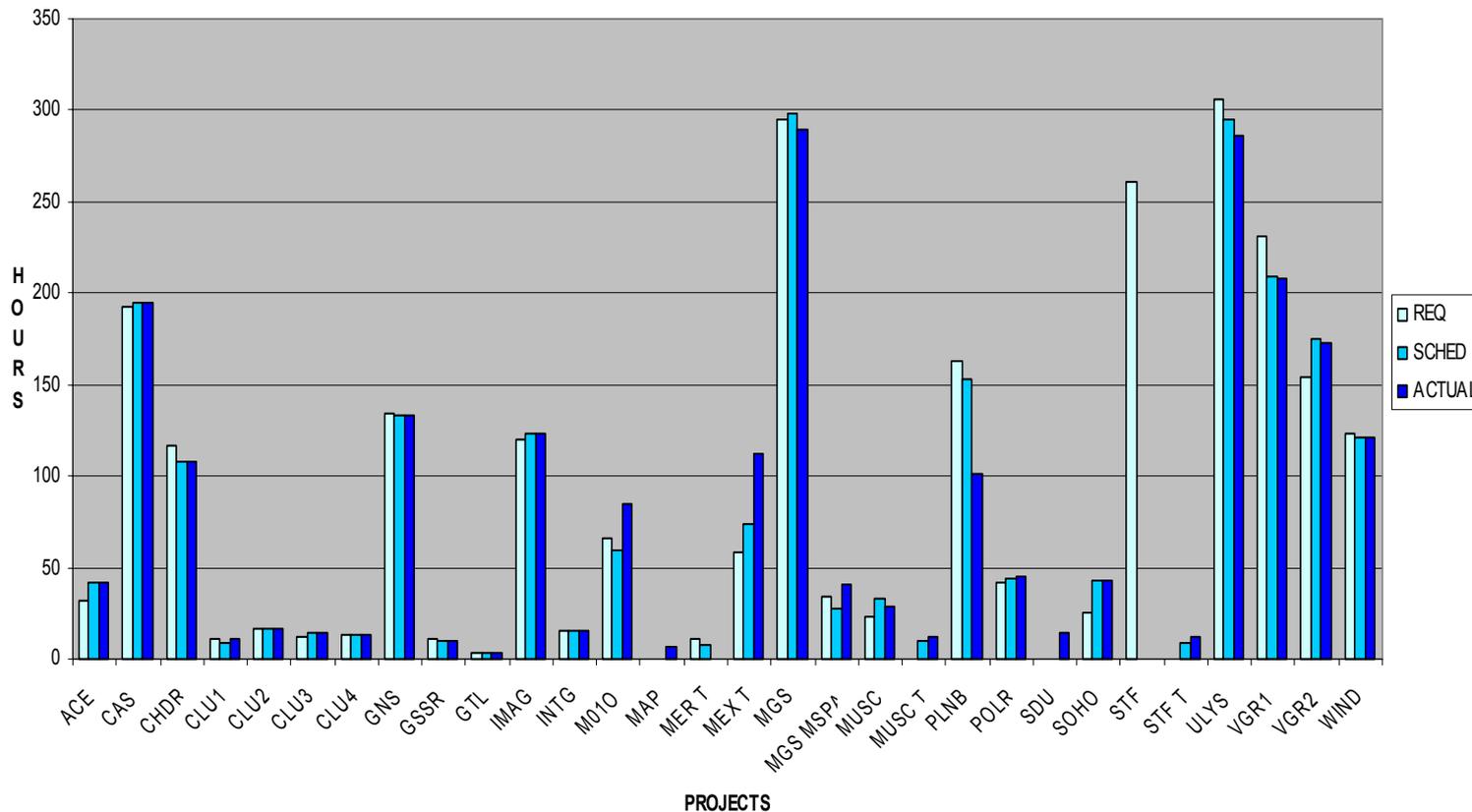
DSN Utilization for May 2003 34 Meter BWG Subnetwork



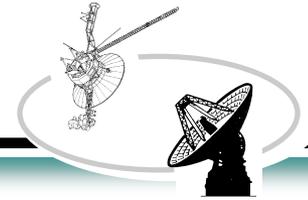
DSN Scheduling



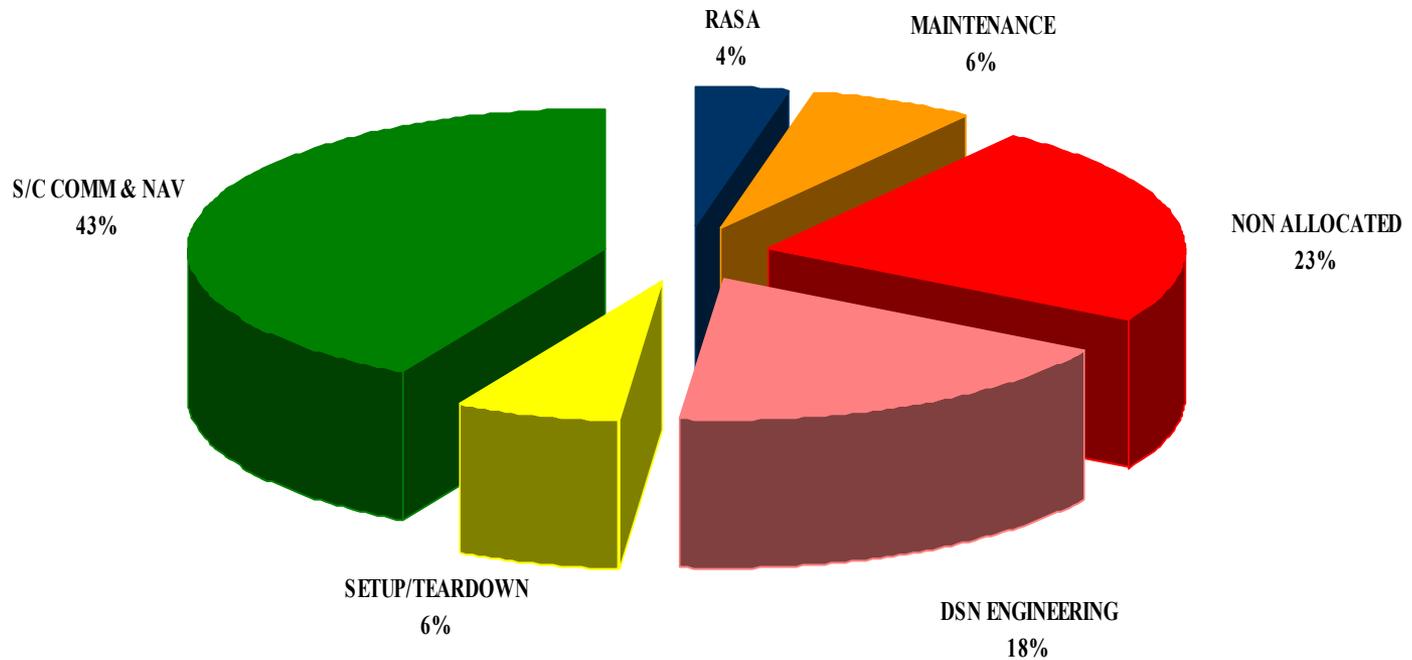
Requested vs Scheduled vs Actual
 34M BWG (DSS-24, 25, 26, 34, 54)
 May 2003



DSN Scheduling

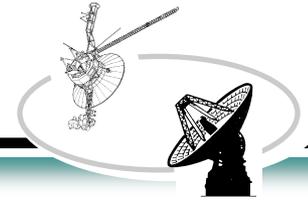


DSN Utilization for May 2003 34 Meter HEF Subnetwork

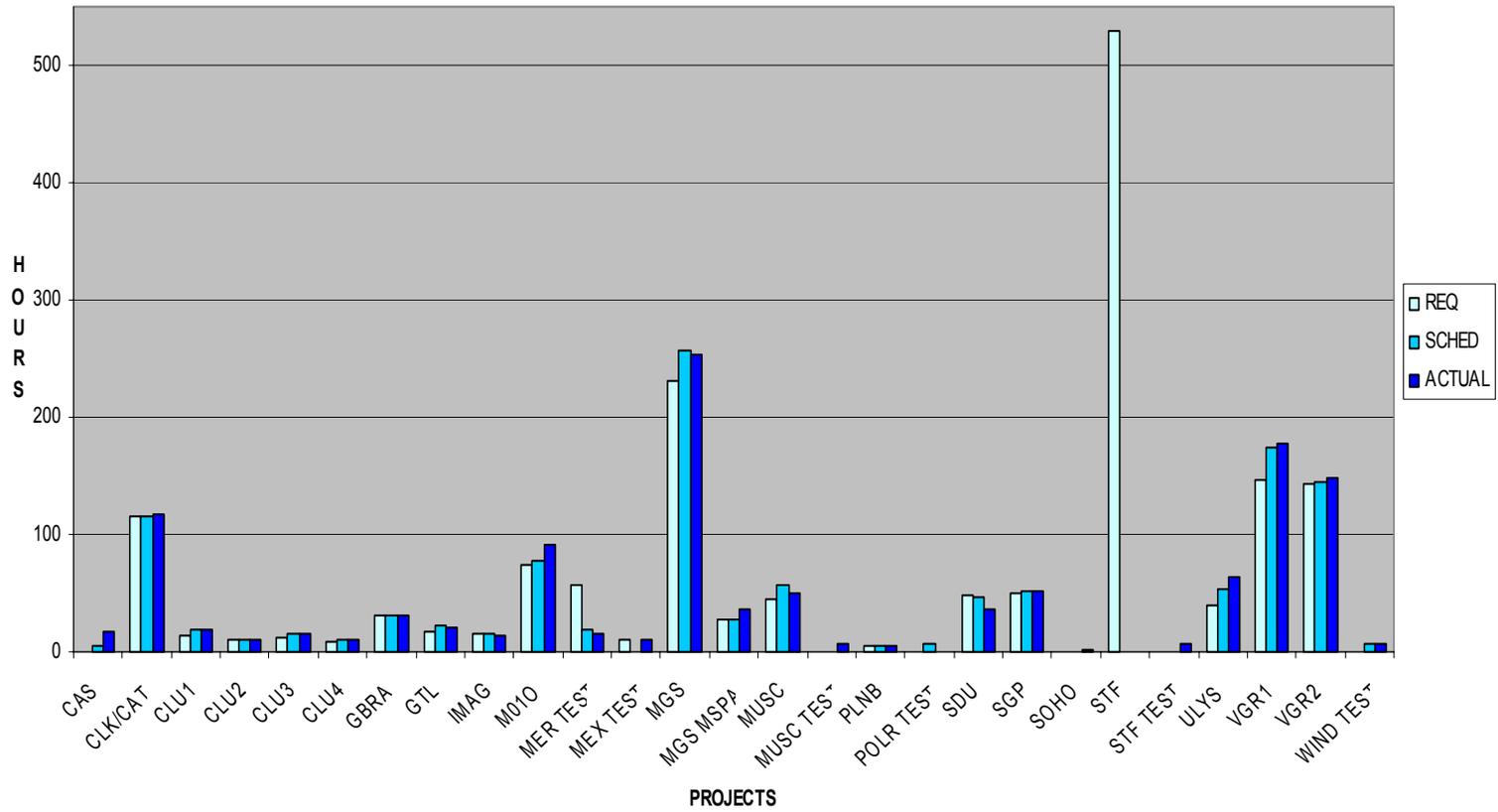


NASA Presentation

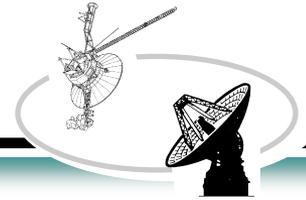
DSN Scheduling



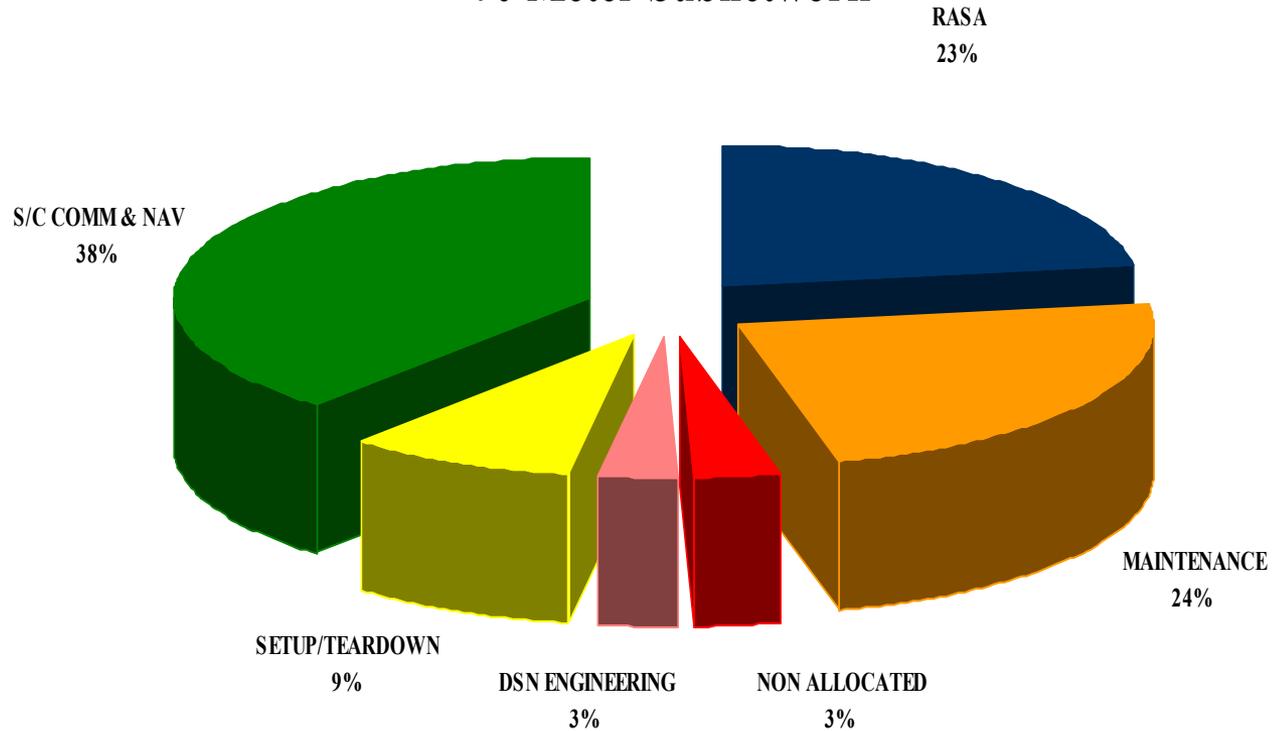
Requested vs Scheduled vs Actual
 34M HEF (DSS-15, 45, 65)
 May 2003



DSN Scheduling

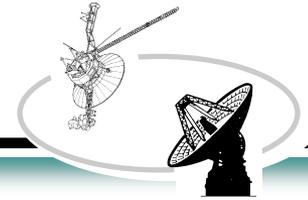


DSN Utilization for May 2003 70 Meter Subnetwork

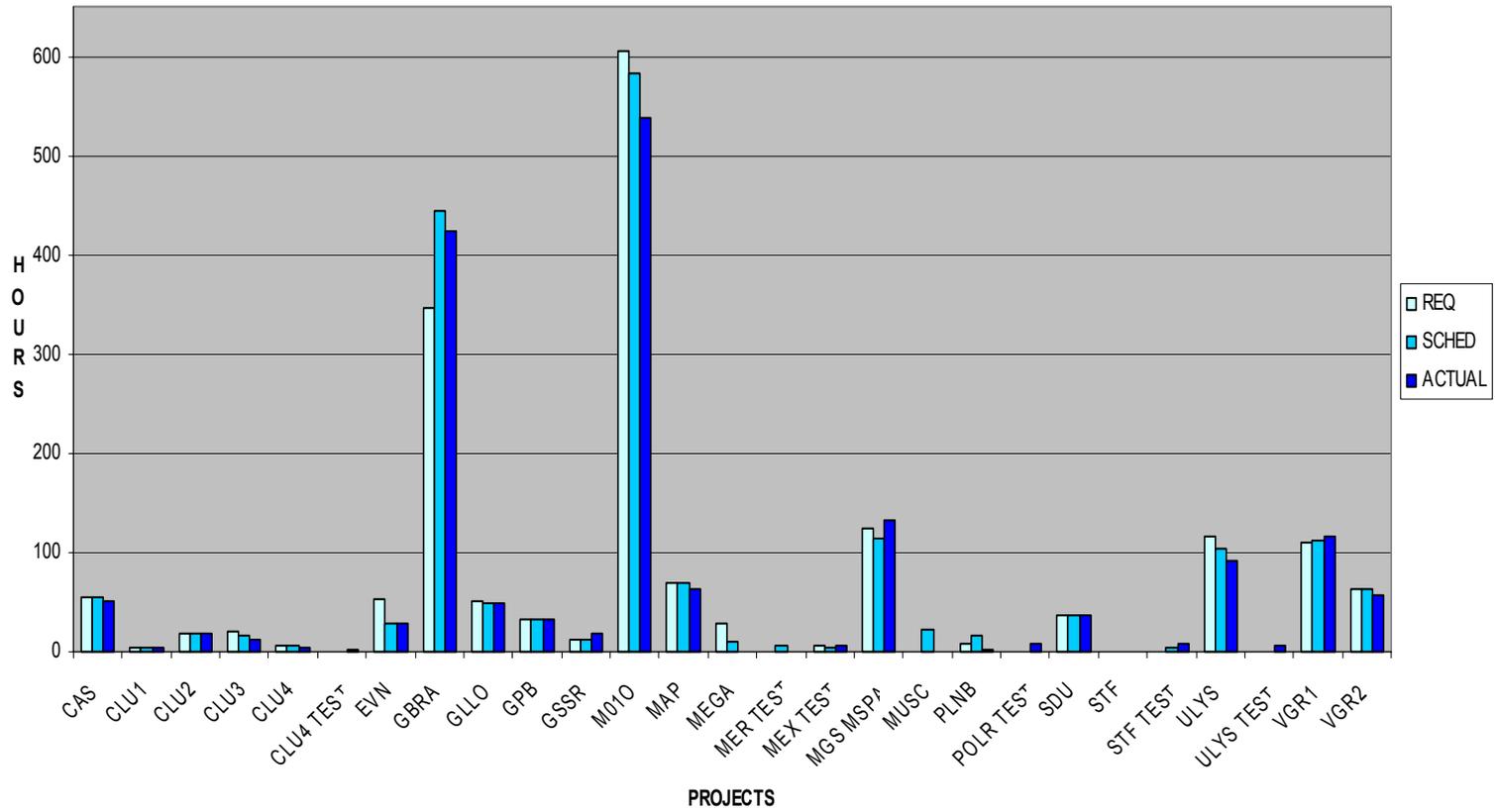


NASA Presentation

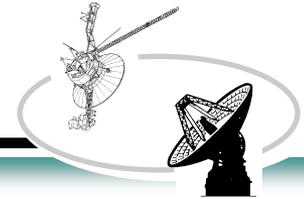
DSN Scheduling



Requested vs Scheduled vs Actual
 70M (DSS-14, 43, 63)
 May 2003



DSN Scheduling



DSN Utilization for May 2003 Entire Network

