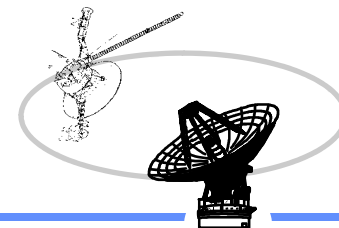


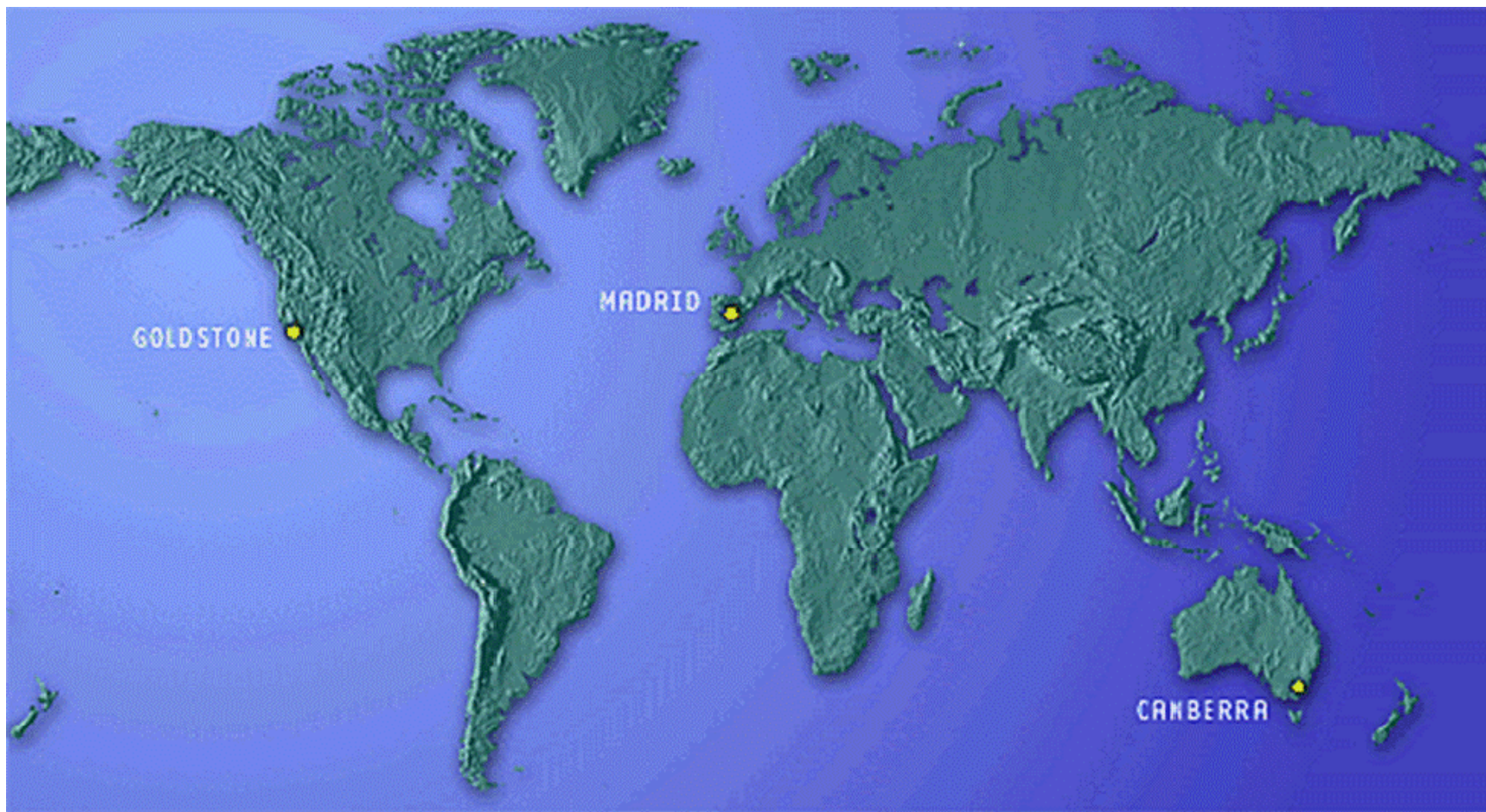


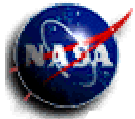
Interplanetary Network Directorate (IND)
Deep Space Network (DSN)
Resource Allocation Planning Service



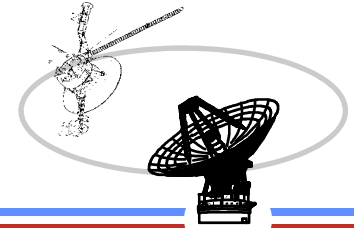
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DSN Antenna Downtime Status and Forecast





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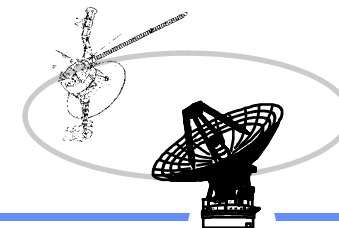
- 2011 -

	January		February		March		April		May		June		July		August		September		October		November		December																													
Weeks	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52
2011 Key Project Events	SDU Tempel Enc				MSGR MOI				THC LOI				July 1 ACP Begins				GRAIL Launch/TCM				DAWN Vesta Arrival				MSL Launch & TCM				GRAIL-A/B LOI																							
	SDU Approach				SDU Post Enc Imaging				DAWN Vesta Approach				Vesta Orbit Survey				HAMO				DAWN Vesta Orbit LAMO																															
	DAWN Forced Coast				CHDR Earth Eclipse				CHDR Dark Current				CHDR Dark Current				CHDR Earth Eclipse				CHDR Draconid Pass																															
	CHDR Dark Current				CHDR Dark Current				CHDR Lunar Eclipse				CHDR Lunar Eclipse				CHDR Earth Eclipse				CHDR Leonid																															
	KEPL Monthly Sci.				DAWN Inst CO				KEPL Monthly Sci.				KEPL Monthly Sci.				KEPL Monthly Sci.				KEPL Monthly Sci.																															
	KEPL Monthly Sci.				KEPL Qtrly. Roll				VEX Drag Pass				KEPL Qtrly. Roll				KEPL Qtrly. Roll				KEPL Qtrly. Roll																															
	SOHO Keyhole/MNVR				SOHO Keyhole/MNVR				SOHO Keyhole/MNVR				SOHO Keyhole/MNVR				SOHO Keyhole/MNVR				GSSR Ast 2005 YU55																															
	WIND TCM				MSGR TCM				WIND TCM				WIND TCM				VEX Drag Pass				WIND TCM																															
	MSGR TCM				MSGR TCM				MSGR TCM				MSGR TCM				MSGR TCM				MSGR TCM																															
	NHPC Maneuver				NHPC Checkout				NHPC Maneuver				NHPC Checkout				CAS ENCELADUS Flyby				CAS DIONE Flyby																															
ROSE Rendezvous Maneuver				CAS TITAN Flyby				CAS TITAN Flyby				ROSE DSHM Entry				CAS ENCELADUS Flyby				NHPC Maneuver				NHPC Solar Conj																												
CAS RHEA Flyby				CAS TITAN Flyby				CAS TITAN Flyby				CAS TITAN Flyby				CAS TITAN Flyby				CAS TITAN Flyby				GSSR Asteroid 2000 YA																												
GDSCC	D15 Pintle Bearing				D15 Gear Box Replace -NIB				D24 Antenna Controller Replacement				D25 Antenna Controller Replacement - Proposed				D27 Antenna Controller Replacement				D25 Antenna Controller Replacement - Proposed																															
	DPS Power Upgrade				DPS Power Upgrade				Cable Wrap Protection -NIB				250 Watt S-Band Install -NIB				Cable Wrap Protection -NIB																																			
	DPS Power Upgrade				NMC Install - NIB				DPS Power Upgrade				Cable Wrap Protection -NIB																																							
	DPS Power Upgrade				DPS Power Upgrade				DPS Maintenance - Proposed				DPS Maintenance - Proposed				DPS Maintenance - Proposed																																			
	DPS Power Upgrade				DPS Power Upgrade				DPS Maintenance - Proposed				DPS Maintenance - Proposed				DPS Maintenance - Proposed																																			
CDSCC	NMC Install				DPS Maintenance - Proposed				DPS Maintenance - Proposed				DPS Maintenance - Proposed				DPS Maintenance - Proposed																																			
	D34 Antenna Controller Replacement - Proposed				Sub Reflector Position Transducer Replacement -NIB				Cable Wrap Protection -NIB				DPS Maintenance - Proposed				DPS Maintenance - Proposed																																			
	DPS Maintenance - Proposed				DPS Maintenance - Proposed				DPS Maintenance - Proposed				DPS Maintenance - Proposed				DPS Maintenance - Proposed																																			
	DPS Maintenance - Proposed				DPS Maintenance - Proposed				DPS Maintenance - Proposed				DPS Maintenance - Proposed				DPS Maintenance - Proposed																																			
MDSCC	NMC Install				D55 Sub Reflector Position Transducer Replacement - Proposed				D54 Sub Reflector Position Transducer Replacement - Proposed				D55 Sub Reflector Position Transducer Replacement - Proposed				D54 Sub Reflector Position Transducer Replacement - Proposed																																			
	D63 DLM				D63 GROUING -NIB				D63 DLM				D63 GROUING -NIB				D63 DLM																																			
	D63 GROUING -NIB				D63 GROUING -NIB				D63 GROUING -NIB				D63 GROUING -NIB				D63 GROUING -NIB																																			

Revised: January 4, 2011



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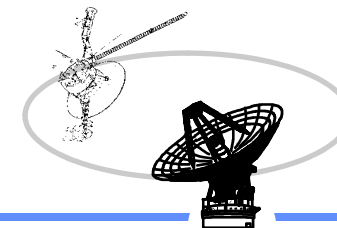


DSN Downtime 2011

2011							
Site	Details	Start	End	Duration (Days)	Weeks	Start DOY	End DOY
SPC 10	DPS Power Upgrade	01/04/2011 21:05	01/05/2011 12:05	1	01 - 01	4	5
DSS 15	Gear Box Replacement-NIB	01/10/2011 00:00	03/20/2011 00:00	69	02 - 11	10	79
DSS 15	Pintle Bearing	01/10/2011 00:00	03/20/2011 00:00	69	02 - 11	10	79
SPC 10	DPS Power Upgrade	01/17/2011 18:30	01/18/2011 06:30	0	03 - 03	17	18
SPC 10	DPS Power Upgrade	01/18/2011 19:00	01/19/2011 07:00	0	03 - 03	18	19
SPC 10	NMC Installation - NIB	01/20/2011 19:15	01/21/2011 01:15	0	03 - 03	20	21
SPC 10	DPS Power Upgrade	01/20/2011 19:15	01/21/2011 07:15	0	03 - 03	20	21
SPC 10	DSP Power Upgrade	01/21/2011 18:30	01/22/2011 06:30	0	03 - 03	21	22
SPC 10	DPS Power Upgrade	01/24/2011 19:30	01/25/2011 07:30	0	04 - 04	24	25
SPC 10	DPS Power Upgrade	01/25/2011 19:30	01/26/2011 07:30	0	04 - 04	25	26
SPC 10	DPS Power Upgrade	01/27/2011 19:50	01/28/2011 07:50	0	04 - 04	27	28
SPC 10	DPS Power Upgrade	01/28/2011 18:45	01/29/2011 06:45	0	04 - 04	28	29
SPC 10	DPS Power Upgrade	01/31/2011 19:45	02/01/2011 07:45	0	05 - 05	31	32
SPC 40	NMC Installation	03/03/2011 07:45	03/04/2011 13:45	1	09 - 09	62	63
SPC 60	NMC Installation	03/12/2011 21:15	03/13/2011 03:15	0	10 - 10	71	72
DSS 63	Depot Level Maintenance	04/04/2011 00:00	05/08/2011 00:00	34	14 - 18	94	128
DSS 63	Grouting - NIB	04/04/2011 00:00	05/08/2011 00:00	34	14 - 18	94	128
DSS 24	Cable Wrap Protection - NIB	04/11/2011 00:00	04/14/2011 00:00	3	15 - 15	101	104
DSS 24	Antenna Controller Replacement	04/11/2011 00:00	05/15/2011 00:00	34	15 - 19	101	135
DSS 54	Subreflector Position Transducer Replacement - Proposed	05/17/2011 00:00	05/20/2011 00:00	3	20 - 20	137	140



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 Resource Allocation Planning Service



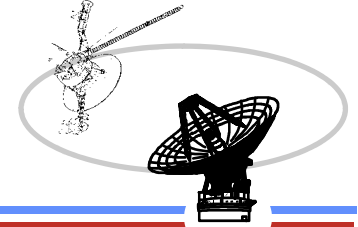
DSN Downtime 2011 (Continued)

2011							
Site	Details	Start	End	Duration (Days)	Weeks	Start DOY	End DOY
DSS 34	Cable Wrap Protection - NIB	05/23/2011 00:00	05/26/2011 00:00	3	21 - 21	143	146
DSS 34	Antenna Controller Replacement - Proposed	05/23/2011 00:00	06/19/2011 00:00	27	21 - 24	143	170
DSS 34	Subreflector Position Transducer Replacement - NIB	05/23/2011 00:00	06/19/2011 00:00	27	21 - 24	143	170
DSS 55	Subreflector Position Transducer Replacement - Proposed	06/07/2011 00:00	06/10/2011 00:00	3	23 - 23	158	161
SPC 40	DPS Maintenance - Proposed	06/23/2011 20:00	06/24/2011 08:00	0	25 - 25	174	175
DSS 27	Cable Wrap Protection - NIB	06/27/2011 00:00	06/30/2011 00:00	3	26 - 26	178	181
DSS 27	250 Watt S-Band Install - NIB	06/27/2011 00:00	07/24/2011 00:00	27	26 - 29	178	205
DSS 27	Antenna Controller Replacement	06/27/2011 00:00	07/24/2011 00:00	27	26 - 29	178	205
SPC 40	DPS Maintenance - Proposed	07/04/2011 20:00	07/05/2011 08:00	0	27 - 27	185	186
SPC 40	DPS Maintenance - Proposed	07/18/2011 20:00	07/19/2011 08:00	0	29 - 29	199	200
DSS 25	Cable Wrap Protection - NIB	10/03/2011 00:00	10/06/2011 00:00	3	40 - 40	276	279
DSS 25	Antenna Controller Replacement - Proposed	10/03/2011 00:00	11/06/2011 00:00	34	40 - 44	276	310
SPC 40	DPS Maintenance - Proposed	10/10/2011 20:00	10/11/2011 08:00	0	41 - 41	283	284
SPC 40	DPS Maintenance - Proposed	10/24/2011 20:00	10/25/2011 08:00	0	43 - 43	297	298
SPC 40	DPS Maintenance - Proposed	10/31/2011 20:00	11/01/2011 08:00	0	44 - 44	304	305
SPC 40	DPS Maintenance - Proposed	11/07/2011 20:00	11/08/2011 08:00	0	45 - 45	311	312



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Antenna Downtime Status and Forecast

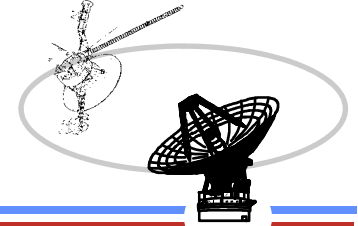
The following are downtimes for 2011

- ❑ DSS-15 downtime for Pintle Bearing is scheduled for January 10 – March 20, weeks 02 – 11
 - ❑ Elevation Gearbox Replacement is scheduled NIB
 - ❑ ZDD is scheduled for February 28
- ❑ Goldstone 12-hour Complex Wide DPS Power Upgrade Downtime is scheduled for Monday, Tuesday, Thursday and Friday, January 17, 18, 20, 21, week 03, January 24, 25, 27, 28, week 04 and January 31, week 05
 - ❑ Times are scheduled based on Stardust requirements prior to Tempel Encounter
 - ❑ This needs to be completed by the end of January per AQMD requirements.
 - ❑ An additional 15 hour downtime was scheduled for January 4, week 01
- ❑ NMC 6-hour Complex Wide Downtime is scheduled at all complexes
 - ❑ Goldstone is scheduled for January 20, 1915 – 0115 , NIB to DPS Power Upgrade in week 03
 - ❑ Canberra is scheduled for March 3 DOY 62, 0745 – 1345, week 09
 - ❑ Madrid is scheduled for March 12 DOY 71, 2115 – 0315, week 10
- ❑ Canberra 7 12-hour blocks of Complex Wide DSCC Power Substation (DPS) Maintenance Downtime is requested for April – September
 - ❑ This is proposed during day shift (2000 – 0800) in weeks 25, 27, 29, 41, 43, 44 and 45



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Antenna Downtime Status and Forecast

Downtimes for 2011 (continued)

- ❑ DSS-63 downtime for Depot Level Maintenance is scheduled
 - ❑ Downtime scheduled for April 4 – May 8, weeks 14 – 18
 - ❑ Grouting will be scheduled NIB

- ❑ BWG Antenna Controller Replacement is requested starting in April
 - ❑ DSS-24 is scheduled for April 11 – May 15, weeks 15 – 19
 - ❑ DSS-34 is proposed for May 23 – June 19, weeks 21 – 24
 - ❑ Sub Reflector Position Transducer Replacement will be scheduled NIB
 - ❑ DSS-27 is scheduled for June 27 – July 24, weeks 26 – 29
 - ❑ 250 Watt S-Band Install will be scheduled NIB

Note: The above downtimes must be in this order with a 1 week break between each

- ❑ DSS-25 is proposed for October 3 – November 6, weeks 40 – 44

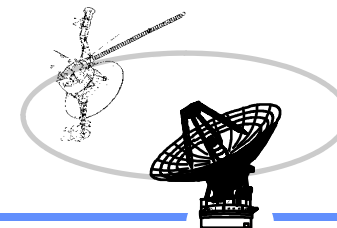
Note: Cable Wrap Protection for each BWG ACR requires 3 days and will be NIB to the first week of the downtime

- ❑ Sub Reflector Position Transducer Replacement is requested for May and August
 - ❑ DSS 54 is proposed for May 17, 18 and 19, DOY 137, 138 and 139, week 20
 - ❑ DSS 55 is proposed for June 7, 8 and 9, DOY 158, 159 and 160, week 23
 - ❑ This downtime can be scheduled as early as possible and can run back to back



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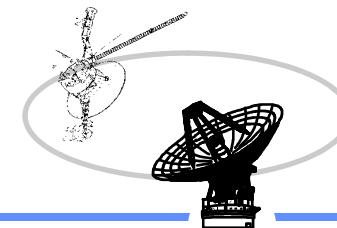
- 2012 -

	January				February				March				April				May				June				July				August				September				October				November				December							
Weeks	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52
2012 Key Project Events	MSL INST C/O 1				MSL TCM				MSL TCM				MSL TCM				MSL TCM				MSL TCM				MSL EDL																											
	DAWN Vesta Orbit								DAWN Vesta Orbit								DAWN Vesta Depart								DAWN Vesta Depart								DAWN Forced Coast																			
	MSL ENG C/O 1				MSL FS Checkout 2				MSL FSW Update				MSL FSW Update				MSL ENG C/O 2				MSL ENG C/O 2				KEPL Qtrly. Roll/Sci				KEPL Monthly Sci.				KEPL Monthly Sci.				KEPL Monthly Sci.															
	WIND TCM				KEPL Monthly Sci.				KEPL Qtrly. Roll				KEPL Monthly Sci.				KEPL Qtrly. Roll/Sci				KEPL Monthly Sci.				WIND TCM				KEPL Monthly Sci.				WIND TCM				GSSR Ast 2007 PA8															
	GSSR Ast Eros				JUNO DSMs DDOR				JUNO DSMs DDOR				JUNO DSMs DDOR				JUNO DSMs DDOR				JUNO DSMs/DDORs/TCMs				JUNO Per Maint																											
	JUNO Cruise								JUNO Cruise								JUNO Cruise								JUNO Cruise																											
	CHDR Dark Current				CHDR Dark Current				CHDR Dark Current				CHDR Dark Current				CHDR Dark Current				CHDR Dark Current				CHDR Dark Current																											
	VEX Drag Pass				GSSR Mars				CHDR Earth Eclipse				GSSR Ast 2005 G021				CHDR Earth Eclipse				CHDR Leonid																															
	MRO Relay								MRO Relay								MRO Relay								MRO Relay																											
	SOHO Keyhole/MNVR				SOHO Keyhole/MNVR				SOHO Keyhole/MNVR				SOHO Keyhole/MNVR				SOHO Keyhole/MNVR				VEX Drag Pass				SOHO Keyhole																											
	GRAIL A/B LOI/OPR/TSF				MSL TCM				MSL Approach				MSL Surface Ops																																							
	GSSR Ast 1991 VK				GRAIL A/B Science				VEX Drag Pass				MRO MSL Relay																																							
	NHPC Beacon				NHPC Checkout				NHPC Beacon				NHPC Beacon																																							
	NHPC Solar Conj				GSSR Ast 2000 ET70				GSSR Ast 2002 AM31				NHPC Checkout				NHPC Solar Conj																																			
	NHPC Chkout				MSL TCM				CAS ENCELADUS Flyby				CAS TITAN Flyby				CAS TITAN Flyby				GSSR Ast 4179 Tout																															
	CAS TITAN Flyby				CAS TITAN Flyby				CAS ENCELADUS Flyby				CAS TITAN Flyby				CAS TITAN Flyby				GSSR Ast 1998 ST49				CAS TITAN Flyby																											
	CAS TITAN Flyby				CAS ENCELADUS Flyby				CAS ENCELADUS Flyby				CAS ENCELADUS Flyby				CAS ENCELADUS Flyby				CAS ENCELADUS Flyby				CAS ENCELADUS Flyby																											
	GDSCC																									D25 Antenna Controller Replacement Back-Up Plan - Proposed				Cable Wrap Protection-NIB																						
				D26 Antenna Controller Replacement - Proposed				Cable Wrap Protection-NIB				D14 70M Tune-up/Calibration - Proposed																																								
CDSCC																									D43 GROUTING - Proposed				D43 70M Tune-up/Calibration - NIB																							
																									D63 GROUTING - Proposed				D63 70M Tune-up/Calibration - NIB																							
MDSCC																									D54 AZ Track Replacement - Proposed				D54 Antenna Controller Replacement - Proposed																							
																																					Cable Wrap Protection-NIB															

Revised: January 3, 2011



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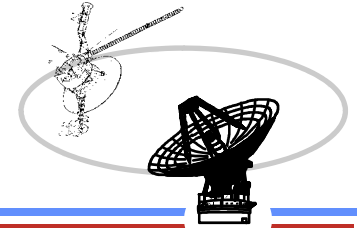
DSN Downtime 2012

2012							
Site	Details	Start	End	Duration (Days)	Weeks	Start DOY	End DOY
DSS 26	Cable Wrap Protection - NIB	03/12/2012 00:00	03/15/2012 00:00	3	43 - 43	72	75
DSS 26	Antenna Controller Replacement - Proposed	03/12/2012 00:00	04/08/2012 00:00	27	43 - 47	72	99
DSS 63	70m Tune-up/Calibration - NIB	05/07/2012 00:00	05/27/2012 00:00	20	19 - 21	128	148
DSS 63	Grouting - Proposed	05/07/2012 00:00	05/27/2012 00:00	20	19 - 21	128	148
DSS 14	70m Tune-up/Calibration - Proposed	05/28/2012 00:00	05/31/2012 00:00	3	22 - 22	149	152
DSS 25	Cable Wrap Protection - NIB	06/11/2012 00:00	06/14/2012 00:00	3	24 - 24	163	166
DSS 43	70m Tune-up/Calibration - NIB	06/11/2012 00:00	06/26/2012 00:00	15	24 - 26	163	178
DSS 43	Grouting - Proposed	06/11/2012 00:00	06/26/2012 00:00	15	24 - 26	163	178
DSS 25	Antenna Controller Replacement - Back-up Plan Proposed	06/11/2012 00:00	07/15/2012 00:00	34	24 - 28	163	197
DSS 54	AZ Track Replacement - Proposed	09/10/2012 00:00	10/21/2012 00:00	41	37 - 42	254	295
DSS 54	Cable Wrap Protection - NIB	10/22/2012 00:00	10/25/2012 00:00	3	43 - 43	296	299
DSS 54	Antenna Controller Replacement - Proposed	10/22/2012 00:00	11/25/2012 00:00	34	43 - 47	296	330



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Antenna Downtime Status and Forecast

The following are downtimes for 2012 – 2014

- ❑ BWG Antenna Controller Replacement for 2012 – 2013
 - ❑ DSS-26 is proposed for March 12 – April 8, weeks 11 – 14
 - ❑ DSS-25 is proposed for June 11 – July 15, weeks 24 – 28
 - ❑ This is a backup for 2011 based on GRAIL launch schedule
 - ❑ DSS-54 is proposed for October 22 – November 25, weeks 43 – 47
 - ❑ DSS-55 is proposed for January 14 – February 17, 2013, weeks 03 – 07

Note: Cable Wrap Protection for each BWG ACR requires 3 days and will be NIB to the first week of the downtime

- ❑ DSS-63 downtime for Grouting is requested once per year
 - ❑ 2012 is proposed for May 7 – 27 , weeks 19 – 21
 - ❑ Tune-up/Calibration will be scheduled NIB
 - ❑ 2013 is proposed for September 2 – 17, weeks 36 – 38
 - ❑ Stand alone Grouting requires 15 days

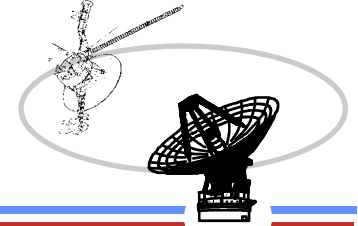
- ❑ DSS-14 downtime for Tune-up/Calibration is requested for May 28 – 31, 2012, week 22

- ❑ DSS-43 downtime for Grouting is requested for 2012
 - ❑ This is proposed for June 11 – June 25, weeks 24 – 26
 - ❑ Tune-up/Calibration will be scheduled NIB



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Antenna Downtime Status and Forecast

The following are downtimes for 2012 – 2014 (continued)

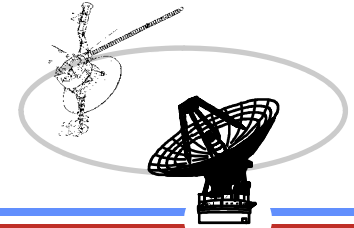
- ❑ AZ Track Replacement is requested for DSS-54, 24 and 26 beginning in the fall of 2012. The following sequence is proposed
 - ❑ DSS-54 is proposed for September 10 – October 21, 2012, weeks 37 – 42
 - ❑ DSS-24 is proposed for April 22 – June 30, 2013, weeks 17 – 26
 - ❑ DSS-26 is proposed for March 31 – June 8, 2014 weeks 14 – 23
 - ❑ 80 kW Facility Preparation will be scheduled NIB March 31 – May 18, weeks 14 – 20

- ❑ DSS-43 HBA Upgrade Downtime is proposed for 2013
 - ❑ Downtime committee is proposing January 7 – August 11, weeks 02 – 32
 - ❑ ZDD will be scheduled prior to return to service

- ❑ DSS-63 HBA Upgrade Downtime is proposed for 2014
 - ❑ Downtime committee is proposing March 10 – October 5, weeks 11– 40
 - ❑ ZDD will be scheduled prior to return to service



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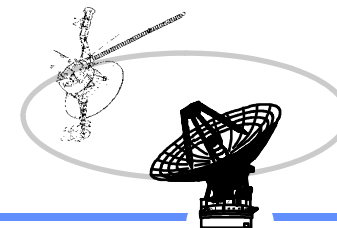
- 2013 -

	January					February				March				April				May				June				July				August				September				October				November				December						
Weeks	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52
2013 Key Project Events											LADEE Launch LIPF Launch				LADEE LOI																				MAVEN Launch MAVEN TCM MAVEN Cruise																	
											DAWN Ceres Thrst PB/TV										DAWN Ceres Coasting																															
	WIND TCM					DAWN Forced Coast					WIND TCM					WIND TCM					WIND TCM					WIND TCM					WIND TCM					WIND TCM																
	CHDR Dark Current					CHDR Earth Eclipse					CHDR Dark Current					CHDR Dark Current					CHDR Earth Eclipse					CHDR Earth Eclipse					CHDR Leonid																					
											JUNO Cruise										JUNO TCM										JUNO EFB																					
											MRO MSL Relay MSL Surface Ops																																									
	NHPC Solar Conjunction										NHPC Checkout										NHPC Beacon					NHPC Checkout																										
	NHPC Checkout																				NHPC Maneuver					NHPC Maneuver																										
	NHPC Maneuver																									NHPC Maneuver					NHPC Maneuver																					
						CAS TITAN Flyby					CAS RHEA Flyby					CAS TITAN Flyby					CAS TITAN Flyby					CAS TITAN Flyby					CAS TITAN Flyby					CAS TITAN Flyby																
GDSCC																					D24 AZ Track Replacement - Proposed																															
CDSCC											D43 HBA Upgrades & Life Extension - Proposed																				D35 Modkit Installation					D35 Acceptance Testing D35 Systems Integration Testing																
MDSCC	D55 Antenna Controller Replacement - Proposed					D55 Cable Wrap Protection - NIB																									D63 GROUTING - Proposed																					

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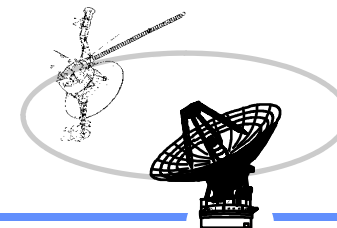
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California Institute of Technology

DSN Downtime 2013

2013							
Site	Details	Start	End	Duration (Days)	Weeks	Start DOY	End DOY
DSS 43	HBA Upgrades and Life Extension - Proposed	01/07/2013 00:00	08/11/2013 00:00	216	02 - 32	7	223
DSS 55	Cable Wrap Protection - NIB	01/14/2013 00:00	01/17/2013 00:00	3	03 - 03	14	17
DSS 55	Antenna Controller Replacement - Proposed	01/14/2013 00:00	02/17/2013 00:00	34	03 - 07	14	48
DSS 24	AZ Track Replacement - Proposed	04/22/2013 00:00	06/30/2013 00:00	69	17 - 26	112	181
DSS 63	Grouting - Proposed	09/02/2013 00:00	09/17/2013 00:00	15	36 - 38	245	260

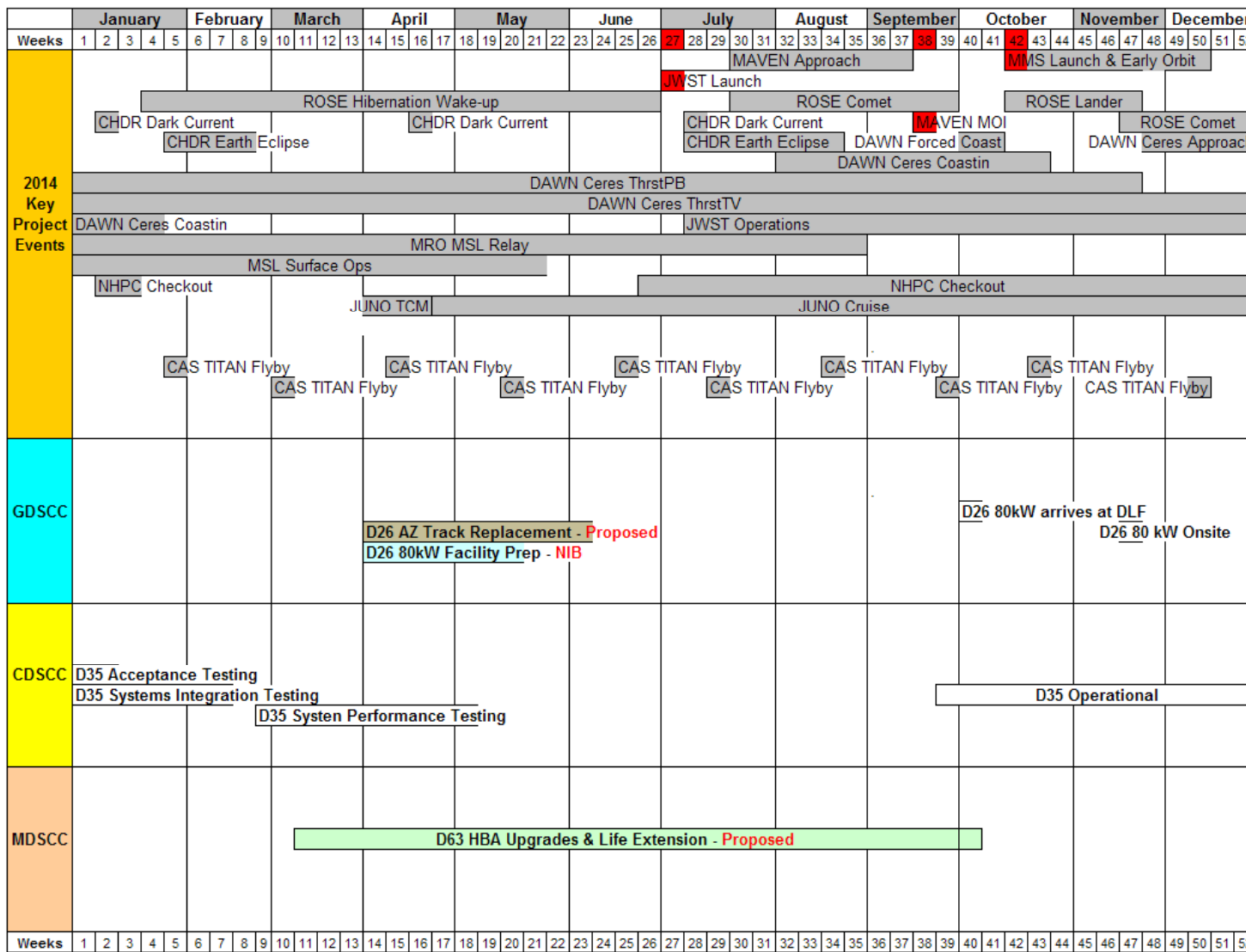


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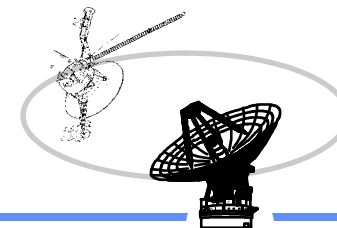
- 2014 -



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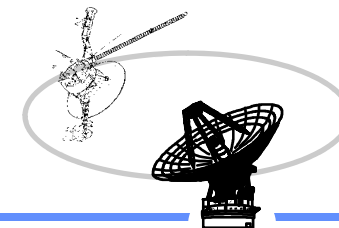
JPL Jet Propulsion Laboratory
California Institute of Technology

DSN Downtime 2014

2014							
Site	Details	Start	End	Duration (Days)	Weeks	Start DOY	End DOY
DSS 63	HBA Upgrades and Life Extension - Proposed	03/10/2014 00:00	10/05/2014 00:00	209	11 - 40	69	278
DSS 26	80 kW Facility Prep - NIB	03/31/2014 00:00	05/18/2014 00:00	48	14 - 20	90	138
DSS 26	AZ Track Replacement - Proposed	03/31/2014 00:00	06/08/2014 00:00	69	14 - 23	90	159



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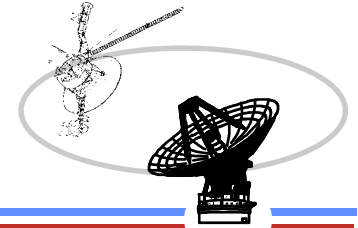
- 2015 -

	January					February				March				April				May				June				July				August				September				October				November				December							
Weeks	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53
2015 Key Project Events	NHPC Pluto Approach																							NHPC Pluto Encounter											NHPC Pluto Science PB																		
	MMS Prime Mission																																																				
	ROSE Comet																																																				
	DAWN Ceres Orbit																																																				
	JUNO Cruise																																																				
	JWST Operations																																																				
	CAS TITAN Flyby					CAS TITAN Flyby				CAS TITAN Flyby				CAS TITAN Flyby				CAS TITAN Flyby				CAS TITAN Flyby				CAS TITAN Flyby				CAS TITAN Flyby				CAS TITAN Flyby				CAS TITAN Flyby				CAS TITAN Flyby											
	CAS ENCELADUS Flyby											CAS ENCELADUS Flyby											CAS ENCELADUS Flyby											CAS ENCELADUS Flyby																			
	CAS ENCELADUS Flyby											CAS ENCELADUS Flyby											CAS ENCELADUS Flyby											CAS ENCELADUS Flyby																			
	CAS ENCELADUS Flyby											CAS ENCELADUS Flyby											CAS ENCELADUS Flyby											CAS ENCELADUS Flyby																			
GDSCC	D26 Install 80kW																							D26 Test 80kW											D26 80kW DDR																		
	D25 AZ Track Replacement - Proposed																																																				
CDSCC	D35 80kW Arrives to DLF																																							D35 80kW Onsite													
MDSCC																																																					
Weeks	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53

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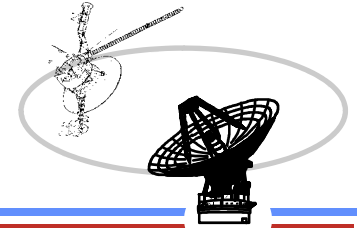
DSN Downtime 2015

2015							
Site	Details	Start	End	Duration (Days)	Weeks	Start DOY	End DOY
DSS 25	AZ Track Replacement - Proposed	03/31/2015 00:00	06/07/2015 00:00	68	14 - 23	90	158



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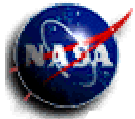
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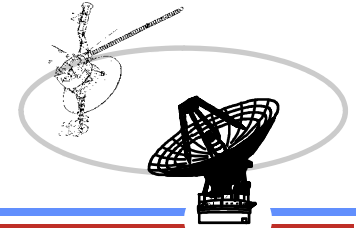
Antenna Downtime Status and Forecast

The following are downtimes for 2015 – 2016

- ❑ AZ Track Replacement is requested for DSS-25 and 55
 - ❑ DSS-25 is proposed for March 31 – June 7, 2015, weeks 14 – 23
 - ❑ DSS-55 is proposed for February 1 – April 10, 2016, weeks 05 – 14
 - ❑ 80 kW Facility Preparation is scheduled NIB for February 1 – March 20, weeks 05 – 11



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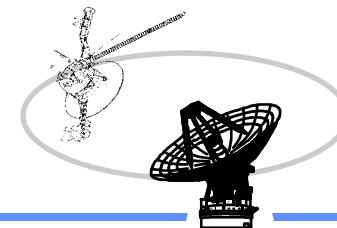
- 2016 -

	January				February				March				April				May			June				July			August				September				October			November			December											
Weeks	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52
2016 Key Project Events																																																				
GDSCC																																																				
CDSCC																																																				
MDSCC																																																				
D35 Install 80kW																																																				
D35 80kW Test																																																				
D35 DDR																																																				
D55 80kW to DLF																																																				
D55 80 kW Facility Prep - NIB																																																				
D55 AZ Track Replacement - Proposed																																																				
D55 80kW on site																																																				

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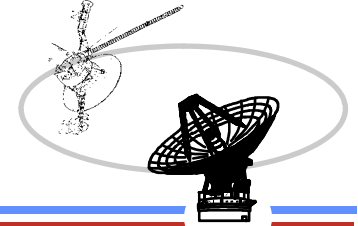
DSN Downtime 2016

2016							
Site	Details	Start	End	Duration (Days)	Weeks	Start DOY	End DOY
DSS 55	80 kW Facility Prep - NIB	02/01/2016 00:00	03/20/2016 00:00	48	05 - 11	32	80
DSS 55	AZ Track Replacement - Proposed	02/01/2016 00:00	04/10/2016 00:00	69	05 - 14	32	101



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Future assets new/upgrades

- ❑ DSS-35 Installation and Operational 2013 – 2014
 - ❑ Modkit Installation October 1 – November 19, 2013, weeks 40 - 47
 - ❑ Acceptance Testing October 23, 2013 – January 8, 2014, weeks 43 – 2
 - ❑ System Integration Testing November 20, 2013 – February 13, 2014, weeks 47 – 07
 - ❑ Operations Systems Performance Testing February 27 – May 1, 2014, weeks 09 – 18
 - ❑ Operational September 26, 2014

- ❑ DSS-26 80kW Installation 2014 – 2015
 - ❑ 80kW arrive at DLF October, 2014, week 40
 - ❑ 80kW arrive on-site November, 2014, week 47
 - ❑ 80kW install January – June, 2015, weeks 02 – 25
 - ❑ 80 kW test June – September, 2015, weeks 24 – 36
 - ❑ DDR September, 2015, week 38

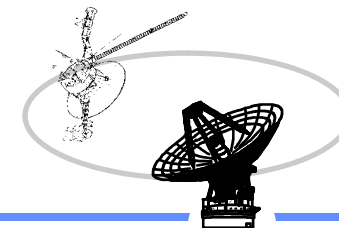
- ❑ DSS-35 80kW Installation 2016 – A placeholder has been set awaiting dates

- ❑ DSS-36 Installation and Operational 2016 – A placeholder has been set awaiting dates

- ❑ DSS-55 80kW Installation 2016 – 2017
 - ❑ 80kW Facility Prep – February 2016, weeks 05 – 10
 - ❑ 80kW at DLF September, 2016, week 39
 - ❑ 80kW on-site November, 2016, week 47
 - ❑ 80kW install January – June, 2017, weeks 01 – 24
 - ❑ 80kW test June – September, 2017, weeks 24 – 37
 - ❑ DDR September, 2017, week 39



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Antenna Downtime Status and Forecast

Complex	Station	Subnet	S-Band		X-Band		Ka-Band		Ka 2	X-Band ACQ AID	80kW
			Down	Up	Down	Up	Down	Up			
10	DSS-27	34HSB	✓	✓	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10	DSS-24	34B1	✓	✓	✓	✓	N/A	N/A	✓	✓	N/A
40	DSS-34	34B1	✓	✓	✓	✓	✓	N/A	✓	✓	N/A
60	DSS-54	34B1	✓	✓	✓	✓	✓	N/A	✓	✓	N/A
10	DSS-25	34B2	N/A	N/A	✓	✓	✓	12/12/10	N/A	N/A	N/A
10	DSS-26	34B2	N/A	N/A	✓	✓	✓	N/A	N/A	N/A	10/01/15
40	DSS-35*	34B2	N/A	N/A	11/01/14	11/01/14	11/01/14	N/A	N/A	N/A	11/01/16
40	DSS-36*	34B2	N/A	N/A	11/01/16	11/01/16	11/01/16	N/A	N/A	N/A	N/A
60	DSS-55	34B2	N/A	N/A	✓	✓	✓	N/A	N/A	N/A	10/01/17
10	DSS-15	34HEF	✓	N/A	✓	✓	N/A	N/A	N/A	N/A	N/A
40	DSS-45	34HEF	✓	✓	✓	✓	N/A	N/A	N/A	N/A	N/A
60	DSS-65	34HEF	✓	✓	✓	✓	N/A	N/A	N/A	N/A	N/A
10	DSS-14	70M	✓	✓	✓	✓	N/A	N/A	N/A	N/A	N/A
40	DSS-43	70M	✓	✓	✓	✓	N/A	N/A	N/A	N/A	N/A
60	DSS-63	70M	✓	✓	✓	✓	N/A	N/A	N/A	N/A	N/A

N/A = Capability Not Planned

xx/xx/xx = Capability Date Recently Changed

As of: 6/28/2010

✓ ✓ ✓ = Capability Recently Exists

✓ = Capability Exists

* = To Be Commissioned