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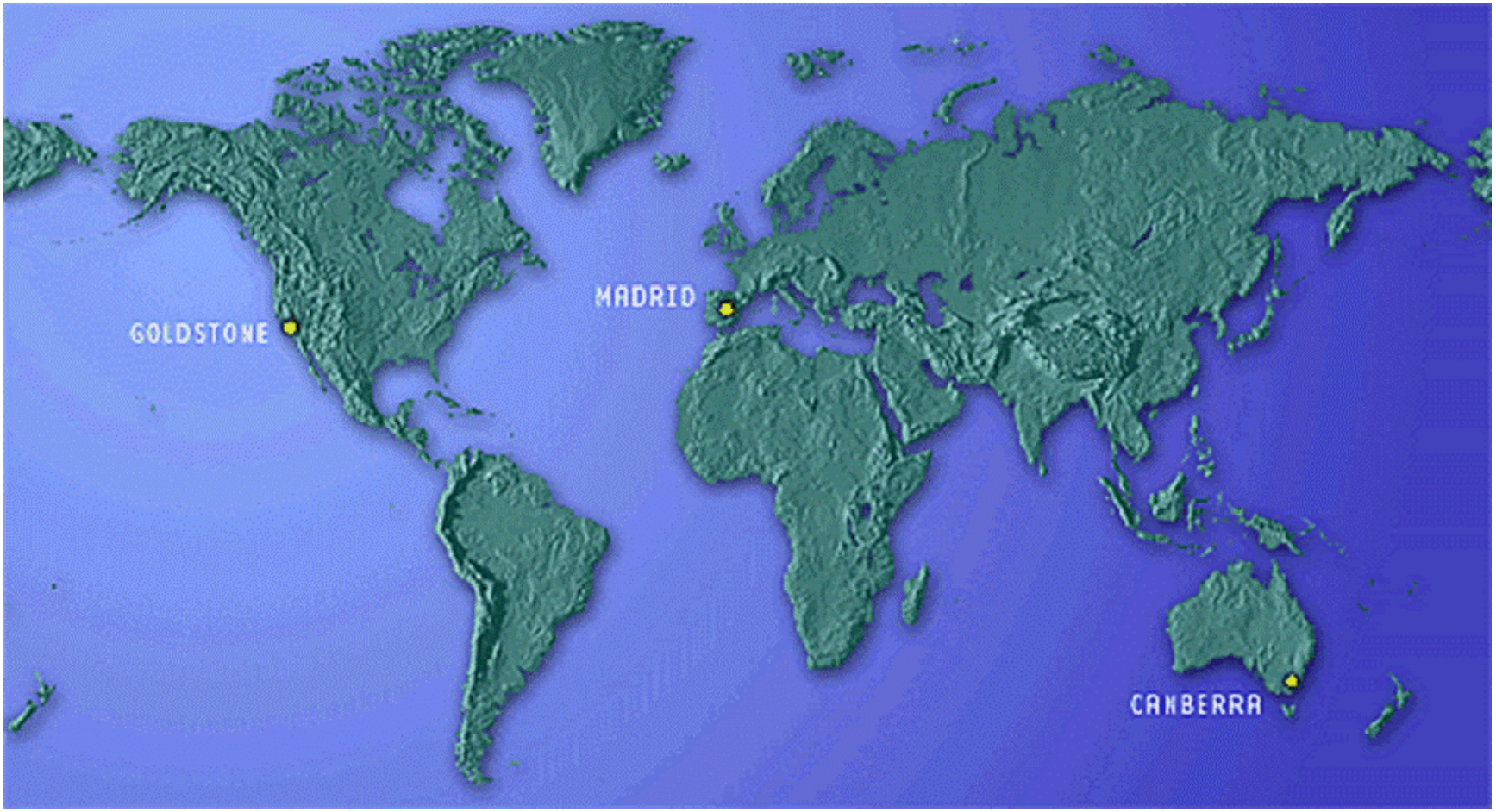
DSN Antenna Downtime
Status and Forecast



Resource Allocation Planning Service

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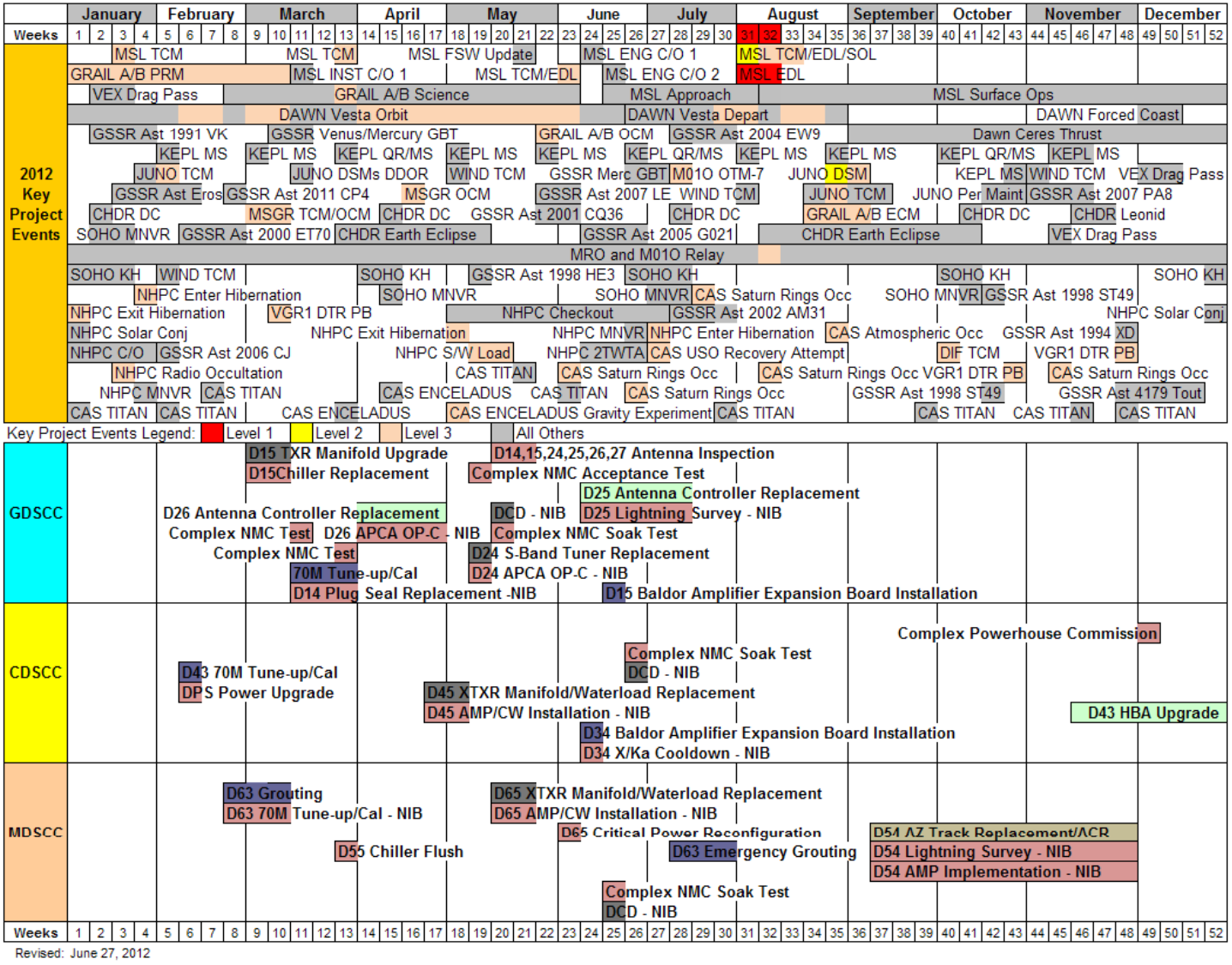
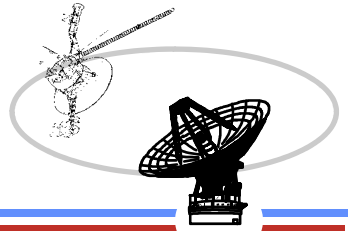
- 2012 -

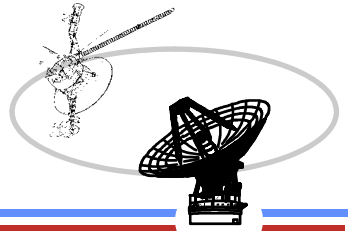


Revised: June 27, 2012



DSN Downtime 2012

2012							
Site	Details	Start	End	Duration (Days)	Weeks	Start DOY	End DOY
DSS 54	AMP Installation - NIB	09/10/2012 05:00	11/29/2012 00:00	80	37 - 48	254	334
DSS 54	AZ TRK/ACR Replacement	09/10/2012 05:00	11/29/2012 00:00	80	37 - 48	254	334
DSS 54	Lightning Survey - NIB	09/10/2012 05:00	11/29/2012 00:00	80	37 - 48	254	334
DSS 43	HBA Upgrade and Life Extension	11/12/2012 19:00	06/10/2013 07:00	210	46 - 24	317	161
SPC 40	Powerhouse Commission	12/04/2012 04:15	12/04/2012 07:15	0	49 - 49	339	339
SPC 40	Powerhouse Commission	12/04/2012 21:00	12/05/2012 00:00	0	49 - 49	339	340
SPC 40	Powerhouse Commission	12/05/2012 21:00	12/06/2012 00:00	0	49 - 49	340	341
SPC 40	Powerhouse Commission	12/06/2012 21:00	12/07/2012 00:00	0	49 - 49	341	342



Antenna Downtime Status and Forecast

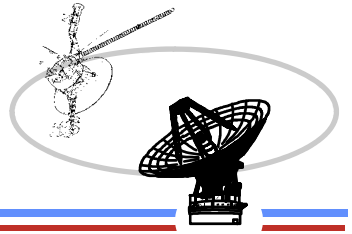
The following are downtimes for 2012

- BWG Antenna Controller Replacement
  - DSS-25 was scheduled for June 11 – July 15, 2012, weeks 24 – 28 - Completed
    - Lightning Survey was be NIB
  - DSS-54 ACR and AZ Track Replacement is scheduled for September 10 – November 28, 2012, weeks 37 – 48, requested 3 additional days for elevation balance
    - Lightning Survey will be NIB
    - ECR 11.0070 (Baldor amplifier expansion board installation) will be NIB

Note: DSS-63 emergency grouting was performed in weeks 29 – 30 - Completed

- SPC-40 requests 4 blocks of 3 hour complex wide downtime for Power House Commission
  - Week 49 is scheduled, Four days for 3 hours each

- DSS-43 HBA Upgrade and Life Extension downtime is scheduled
  - DSS-43 HBA Upgrade downtime is scheduled as one continuous downtime for week 46 of 2012 to week 23 of 2013
  - S-Band Maser Replacement will be NIB
  - Power ECO will be scheduled NIB



Antenna Downtime Status and Forecast

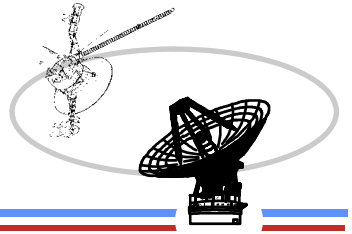
The following are downtimes for 2013 – 2014

- SPC-60 requests six 10 hour blocks of complex wide downtime for Power Cutover from January – June of 2013
  - Downtimes are scheduled for the following weeks
  - Weeks 04, 09,13, 17, 22 and 26 – prime shift hours are requested.

- BWG Antenna Controller Replacement for 2013
  - DSS-55 is scheduled for March 18 – April 4, weeks 08 – 14
  - ECR 11.0070 (Baldor amplifier expansion board installation) will be NIB

- SPC-10 requests four 10-hour blocks of complex wide downtime for G86 Power Cutover and one 12-hour block of downtime for Power Robustness in 2013
  - G86 Power cutover downtimes are scheduled for the following weeks
    - Weeks 14, 19, 24 and 31– night hours are acceptable.
  - Power Robustness is scheduled for the following week
    - Week 21– daylight hours only

- SPC-10 requests one 6 – 8 hour complex wide downtime for NMC Automated Link Build (ALB)
  - Scheduled for March 21, 2013, week 12

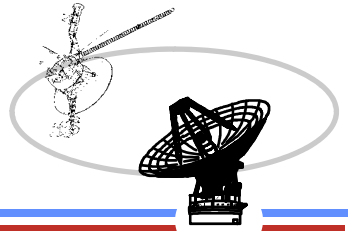


2013 – 2014 Downtimes (continued)

- SPC-40 request 8 blocks of 3 hour complex downtime for Power House Commission in 2013. The following weeks are scheduled
  - Five blocks, 3 hours in April, week 16
  - Three blocks, 3 hours in April/May, week 18

- AZ Track Replacement downtime is requested for DSS-24 and DSS-26
  - DSS-24 is scheduled for April 8, – June 17, 2013, weeks 15 – 24
  - DSS-26 is proposed for March 31 – June 8, 2014, weeks 14 – 23
    - Reconfiguration Prep is proposed for March 10 – June 30, weeks 11 - 26
    - 80 kW Facility Preparation will be scheduled NIB March 31 – May 18, weeks14 – 20

- SPC-40 request a total of 24 hour s of downtime on each antenna for inspection in 2013
  - Antennas include DSS- 34, 43 and 45
  - Week 19 inspection times are scheduled for 8 hours NIB to maintenance plus 8 hours swing shift – Except DSS-43 which will be done during HBA downtime
  - Week 20 inspection times are scheduled for 8 hours NIB to maintenance

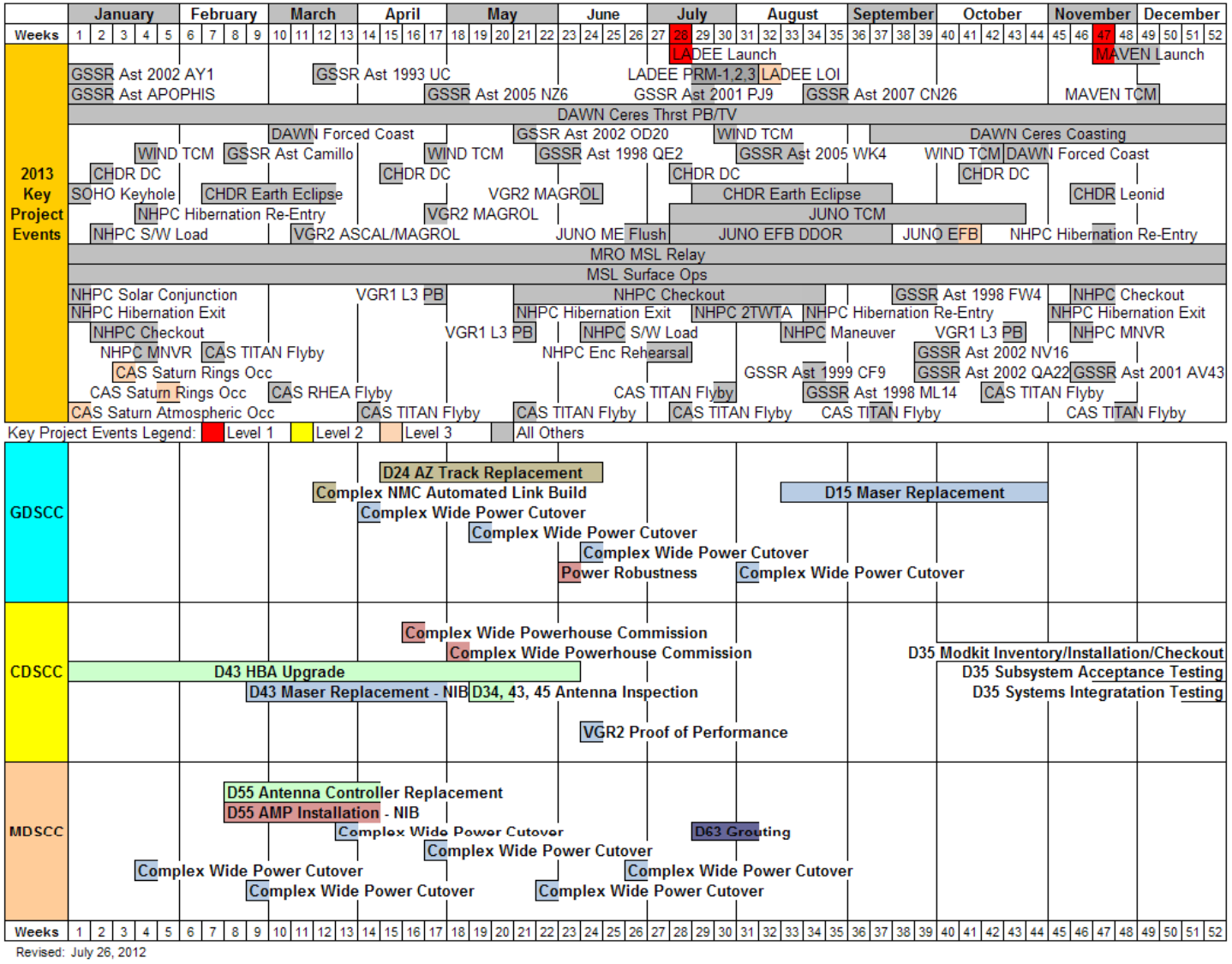


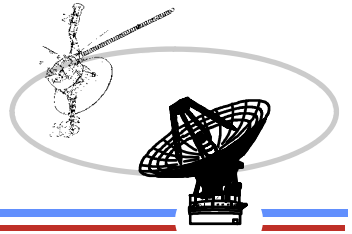
2013 – 2014 Downtimes (continued)

- DSS-63 downtime for Grouting 2013
  - Scheduled for July 15 – August 2, weeks 29 – 31
    - Note: Stand alone Grouting typically requires 15 days, however, 3 additional days have been requested
- DSS-15 Maser Replacement is requested for 2013
  - Seventy seven days are scheduled for August 12, – November 4, weeks 33– 44
- DCD 4.1 downtime requested for software installation for 2014
  - GDSCC and NOCC proposed for January 8, week 02
  - CDSCC is proposed for February 20, week 08
  - MDSCC is proposed for March 6, week 10
- DSS-63 HBA Upgrade and Life Extension downtime is proposed for 2014
  - Proposed for March 10 – October 5, weeks 11– 40
    - Maser replacement will be NIB
- SPC-60 request a total of 24 hour s of downtime on each antenna for inspection in 2014
  - Antennas include DSS-54, 55, 63 and 65
  - Week 30 inspection times are proposed for 8 hours NIB to maintenance plus 8 hours swing shift – Except DSS-63 which will be done during HBA downtime
  - Week 31 inspection times are proposed for 8 hours NIB to maintenance

Resource Allocation Planning Service

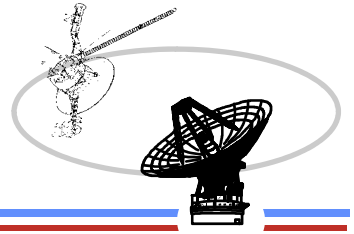
- 2013 -





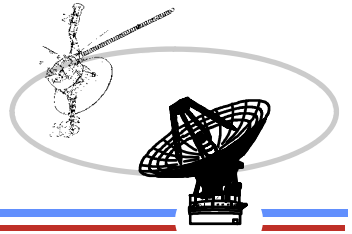
DSN Downtime 2013

2013							
Site	Details	Start	End	Duration (Days)	Weeks	Start DOY	End DOY
DSS 54	Complex Power Cutover	01/23/2013 05:00	01/23/2013 17:00	0	04 - 04	23	23
DSS 55	Complex Power Cutover	01/23/2013 05:00	01/23/2013 17:00	0	04 - 04	23	23
DSS 63	Complex Power Cutover	01/23/2013 05:00	01/23/2013 17:00	0	04 - 04	23	23
DSS 65	Complex Power Cutover	01/23/2013 05:00	01/23/2013 17:00	0	04 - 04	23	23
DSS 55	AMP Installation - NIB	02/18/2013 00:00	04/04/2013 00:00	45	08 - 14	49	94
DSS 55	Antenna Controller Replacement	02/18/2013 00:00	04/04/2013 00:00	45	08 - 14	49	94
DSS 43	Maser Replacement - NIB	02/25/2013 05:00	04/25/2013 17:00	60	09 - 17	56	115
DSS 54	Complex Power Cutover	02/27/2013 05:00	02/27/2013 17:00	0	09 - 09	58	58
DSS 55	Complex Power Cutover	02/27/2013 05:00	02/27/2013 17:00	0	09 - 09	58	58
DSS 63	Complex Power Cutover	02/27/2013 05:00	02/27/2013 17:00	0	09 - 09	58	58
DSS 65	Complex Power Cutover	02/27/2013 05:00	02/27/2013 17:00	0	09 - 09	58	58
SPC 10	NMC Automated Link Build	03/21/2013 00:00	03/21/2013 06:00	0	12 - 12	80	80
DSS 54	Complex Power Cutover	03/27/2013 05:00	03/27/2013 17:00	0	13 - 13	86	86
DSS 55	Complex Power Cutover	03/27/2013 05:00	03/27/2013 17:00	0	13 - 13	86	86
DSS 63	Complex Power Cutover	03/27/2013 05:00	03/27/2013 17:00	0	13 - 13	86	86
DSS 65	Complex Power Cutover	03/27/2013 05:00	03/27/2013 17:00	0	13 - 13	86	86
SPC 10	Complex Power Cutover	04/01/2013 15:00	04/02/2013 01:00	0	14 - 14	91	92
DSS 24	AZ Track Replacement	04/08/2013 00:00	06/17/2013 00:00	70	15 - 25	98	168
SPC 40	Powerhouse Commission	04/15/2013 21:00	04/16/2013 00:00	0	16 - 16	105	106
SPC 40	Powerhouse Commission	04/16/2013 21:00	04/17/2013 00:00	0	16 - 16	106	107
SPC 40	Powerhouse Commission	04/17/2013 21:00	04/18/2013 00:00	0	16 - 16	107	108
SPC 40	Powerhouse Commission	04/18/2013 21:00	04/19/2013 00:00	0	16 - 16	108	109
SPC 40	Powerhouse Commission	04/19/2013 21:00	04/20/2013 00:00	0	16 - 16	109	110



DSN Downtime 2013

2013							
Site	Details	Start	End	Duration (Days)	Weeks	Start DOY	End DOY
DSS 54	Complex Power Cutover	04/24/2013 05:00	04/24/2013 17:00	0	17 - 17	114	114
DSS 55	Complex Power Cutover	04/24/2013 05:00	04/24/2013 17:00	0	17 - 17	114	114
DSS 63	Complex Power Cutover	04/24/2013 05:00	04/24/2013 17:00	0	17 - 17	114	114
DSS 65	Complex Power Cutover	04/24/2013 05:00	04/24/2013 17:00	0	17 - 17	114	114
SPC 40	Powerhouse Commission	04/29/2013 21:00	04/30/2013 00:00	0	18 - 18	119	120
SPC 40	Powerhouse Commission	04/30/2013 21:00	05/01/2013 00:00	0	18 - 18	120	121
SPC 40	Powerhouse Commission	05/01/2013 21:00	05/02/2013 00:00	0	18 - 18	121	122
SPC 10	Complex Power Cutover	05/06/2013 15:00	05/07/2013 01:00	0	19 - 19	126	127
DSS 43	Antenna Inspection	05/06/2013 22:00	05/07/2013 14:00	1	19 - 19	126	127
DSS 34	Antenna Inspection	05/07/2013 22:00	05/08/2013 14:00	1	19 - 19	127	128
DSS 45	Antenna Inspection	05/08/2013 22:00	05/09/2013 14:00	1	19 - 19	128	129
DSS 34	Antenna Inspection	05/14/2013 22:00	05/15/2013 06:00	0	20 - 20	134	135
DSS 45	Antenna Inspection	05/15/2013 22:00	05/16/2013 06:00	0	20 - 20	135	136
SPC 10	Power Robustness	06/03/2013 15:00	06/03/2013 03:00	0	23 - 23	154	154
SPC 10	Power Robustness	06/04/2013 15:00	06/04/2013 03:00	0	23 - 23	155	155
DSS 54	Complex Power Cutover	05/29/2013 05:00	05/29/2013 17:00	0	22 - 22	149	149
DSS 55	Complex Power Cutover	05/29/2013 05:00	05/29/2013 17:00	0	22 - 22	149	149
DSS 63	Complex Power Cutover	05/29/2013 05:00	05/29/2013 17:00	0	22 - 22	149	149
DSS 65	Complex Power Cutover	05/29/2013 05:00	05/29/2013 17:00	0	22 - 22	149	149
SPC 10	Complex Power Cutover	06/10/2013 15:00	06/11/2013 01:00	0	24 - 24	161	162
DSS 54	Complex Power Cutover	06/27/2013 05:00	06/27/2013 17:00	0	26 - 26	178	178
DSS 55	Complex Power Cutover	06/27/2013 05:00	06/27/2013 17:00	0	26 - 26	178	178
DSS 63	Complex Power Cutover	06/27/2013 05:00	06/27/2013 17:00	0	26 - 26	178	178

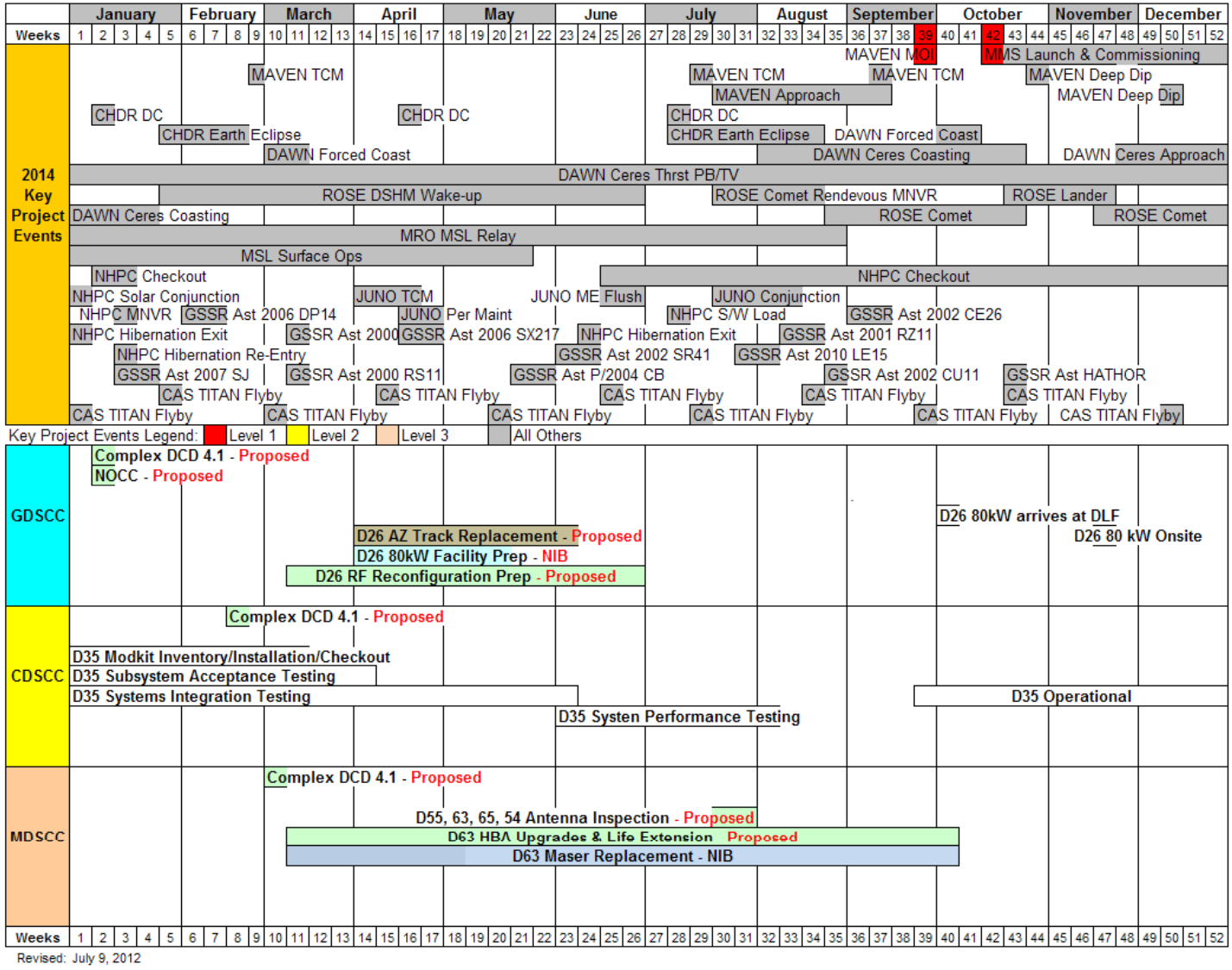


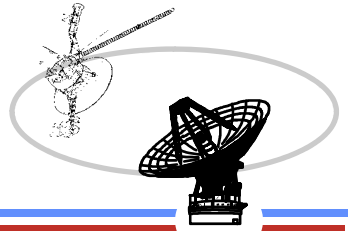
DSN Downtime 2013

2013							
Site	Details	Start	End	Duration (Days)	Weeks	Start DOY	End DOY
DSS 65	Complex Power Cutover	06/27/2013 05:00	06/27/2013 17:00	0	26 - 26	178	178
DSS 63	Grouting - Proposed	07/15/2013 00:00	08/02/2013 00:00	18	29 - 31	196	214
SPC 10	Complex Power Cutover	07/29/2013 15:00	07/30/2013 01:00	0	31 - 31	210	211
DSS 15	Maser Replacement	08/12/2013 14:00	11/04/2013 01:00	83	33 - 45	224	308

Resource Allocation Planning Service

- 2014 -





DSN Downtime 2014

2014							
Site	Details	Start	End	Duration (Days)	Weeks	Start DOY	End DOY
GCF 20	DCD 4.1 - Proposed	01/08/2014 23:10	01/09/2014 05:10	0	02 - 02	8	9
SPC 10	DCD 4.1 - Proposed	01/08/2014 23:10	01/09/2014 05:10	0	02 - 02	8	9
SPC 40	DCD 4.1 - Proposed	02/20/2014 12:00	02/20/2014 18:00	0	08 - 08	51	51
SPC 60	DCD 4.1 - Proposed	03/06/2014 07:00	03/06/2014 13:00	0	10 - 10	65	65
DSS 26	RF Reconfiguration Prep - Proposed	03/10/2014 00:00	06/29/2014 00:00	111	11 - 26	69	180
DSS 63	HBA Upgrades and Life Extension - Proposed	03/10/2014 00:00	10/05/2014 00:00	209	11 - 40	69	278
DSS 63	S-Band Maser Replacement - NIB	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
DSS 55	Antenna Inspection - Proposed	07/21/2014 07:00	07/21/2014 23:00	1	30 - 30	202	202
DSS 65	Antenna Inspection - Proposed	07/22/2014 07:00	07/22/2014 23:00	1	30 - 30	203	203
DSS 63	Antenna Inspection - Proposed	07/23/2014 07:00	07/23/2014 23:00	1	30 - 30	204	204
DSS 54	Antenna Inspection - Proposed	07/25/2014 07:00	07/25/2014 23:00	1	30 - 30	206	206
DSS 55	Antenna Inspection - Proposed	07/28/2014 07:00	07/28/2014 16:30	0	31 - 31	209	209
DSS 65	Antenna Inspection - Proposed	07/29/2014 07:00	07/29/2014 16:30	0	31 - 31	210	210
DSS 54	Antenna Inspection - Proposed	08/01/2014 07:00	08/01/2014 16:30	0	31 - 31	213	213

Resource Allocation Planning Service

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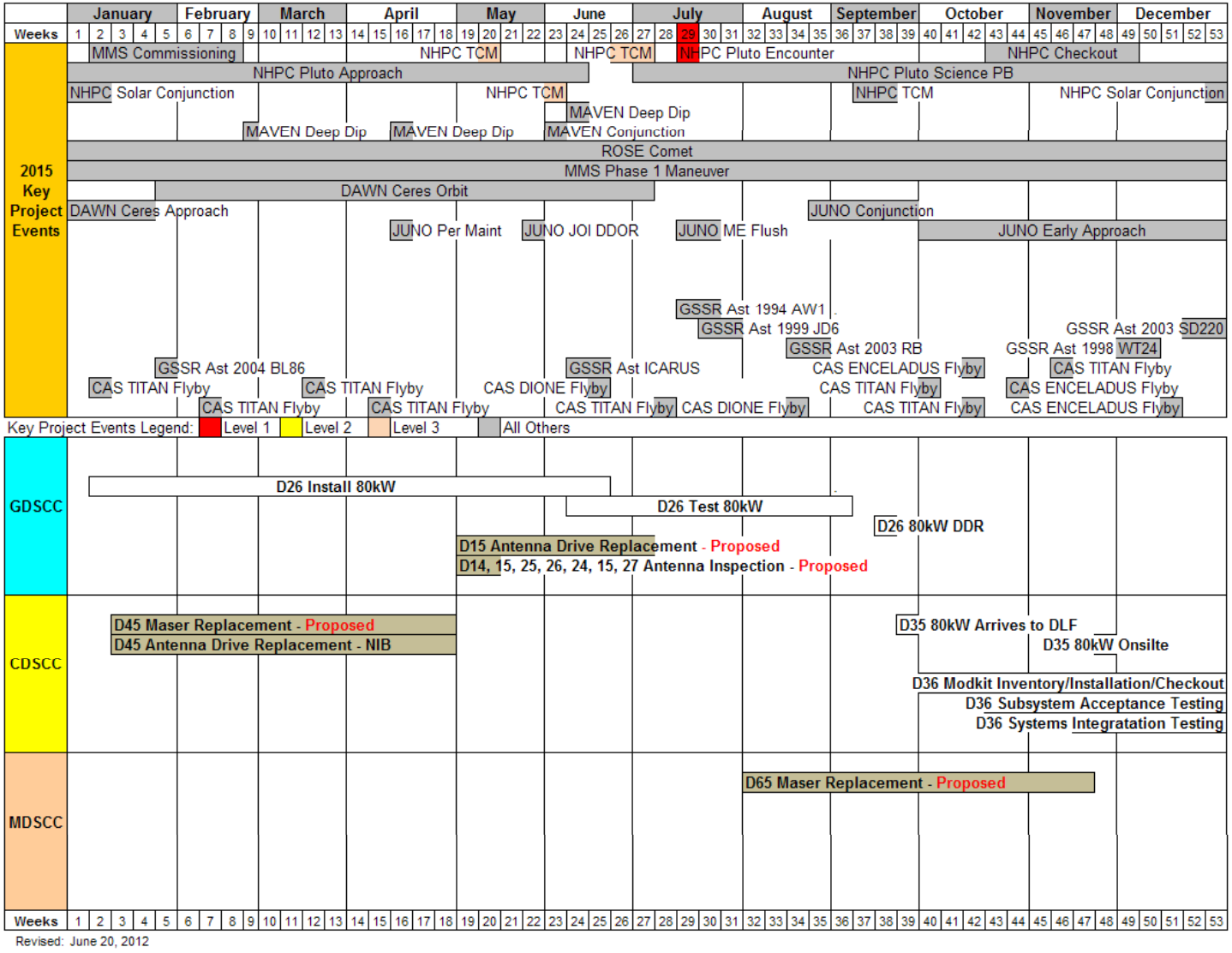
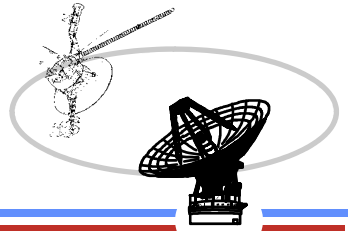
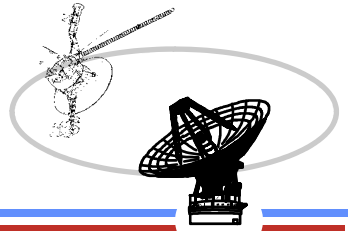
- 2015 -





DSN Downtime 2015

2015							
Site	Details	Start	End	Duration (Days)	Weeks	Start DOY	End DOY
DSS 45	Antenna Drive Replacement - NIB	01/12/2015 00:00	05/04/2015 00:00	112	03 - 19	12	124
DSS 45	Maser Replacement - Proposed	01/12/2015 00:00	05/04/2015 00:00	112	03 - 19	12	124
DSS 15	Antenna Drive Replacement - Proposed	05/04/2015 00:00	07/06/2015 00:00	63	19 - 28	124	187
DSS 14	Antenna Inspection - Proposed	05/04/2015 15:00	05/05/2015 06:00	1	19 - 19	124	125
DSS 26	Antenna Inspection - Proposed	05/05/2015 15:00	05/06/2015 06:00	1	19 - 19	125	126
DSS 25	Antenna Inspection - Proposed	05/06/2015 15:00	05/07/2015 06:00	1	19 - 19	126	127
DSS 15	Antenna Inspection - Proposed	05/07/2015 15:00	05/08/2015 06:00	1	19 - 19	127	128
DSS 27	Antenna Inspection - Proposed	05/08/2015 14:00	05/08/2015 23:00	0	19 - 19	128	128
DSS 14	Antenna Inspection - Proposed	05/11/2015 14:00	05/11/2015 23:00	0	20 - 20	131	131
DSS 26	Antenna Inspection - Proposed	05/12/2015 14:00	05/12/2015 23:00	0	20 - 20	132	132
DSS 24	Antenna Inspection - Proposed	05/13/2015 15:00	05/14/2015 06:00	1	20 - 20	133	134
DSS 15	Antenna Inspection - Proposed	05/14/2015 14:00	05/14/2015 23:00	0	20 - 20	134	134
DSS 27	Antenna Inspection - Proposed	05/15/2015 14:00	05/15/2015 23:00	0	20 - 20	135	135
DSS 65	Maser Replacement - Proposed	08/03/2015 00:00	11/23/2015 00:00	112	32 - 48	215	327



Antenna Downtime Status and Forecast

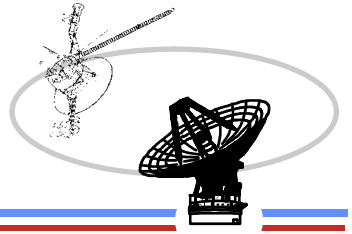
The following are downtimes for 2015 – 2018

- Maser Replacement has been requested for 2015
  - DSS-45 is proposed for weeks 03 – 18
    - Antenna Drive Replacement will be NIB
  - DSS-65 is proposed for weeks 32 – 47

- HEF Antenna Drive Replacement requested
  - DSS-15 Proposed for May 4 – July 6, 2015 weeks, 19 – 27
    - DSS-15 Antenna inspection proposed for weeks 19 and 20
  - DSS-65 Proposed for August 7 – October 2, 2017, weeks 32 – 39
    - DSS-65 Antenna inspection proposed for weeks 33 and 34

- SPC-10 request a 24 hour downtime on each antenna for inspection in 2015
  - Antennas include DSS-14, 15, 24, 25, 26 and 27
  - Week 19 inspection times are proposed for 8 hours NIB to maintenance plus 8 hours swing shift
  - Week 20 inspection times are proposed for 8 hours NIB to maintenance

- SPC- 40 request a 24 hour downtime on each antenna for inspection in 2016
  - Antennas include DSS-34, 43 and 45
  - Week 18 inspection times are proposed for 8 hours NIB to maintenance plus 8 hours swing shift
  - Week 19 inspection times are proposed for 8 hours NIB to maintenance



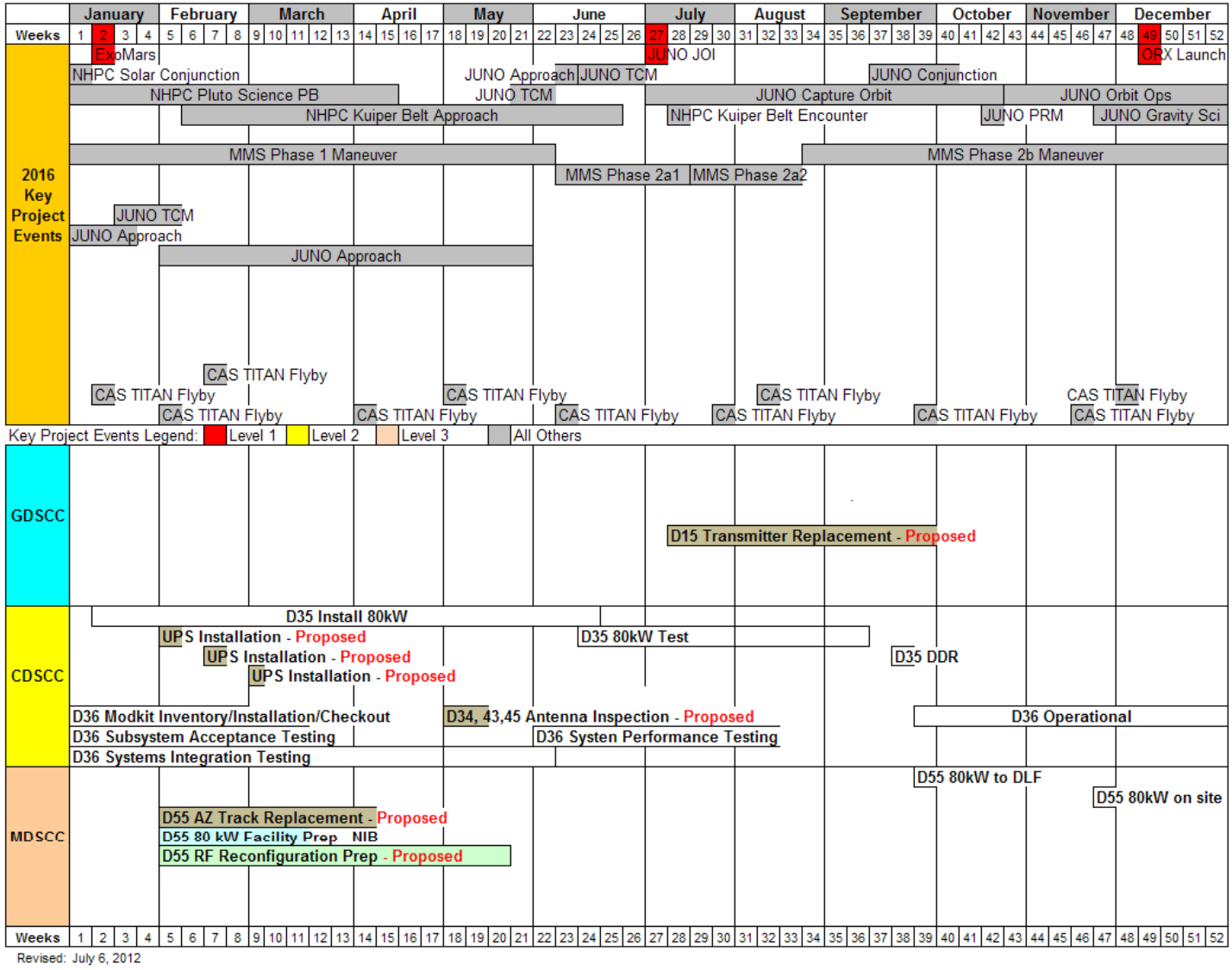
Antenna Downtime Status and Forecast

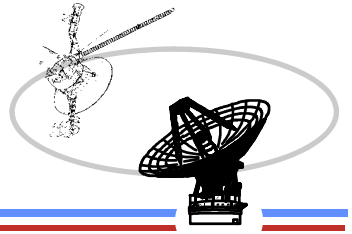
2015 – 2018 Downtimes cont.

- SPC-40 request three twelve-hour downtimes for UPS Installation in 2016
  - Proposed February and March, weeks 05, 07, 09
- HEF Transmitter Replacement requested
  - DSS-15 Proposed for July 11 – September 12, 2016 weeks, 28 – 39
  - DSS-45 Proposed for May 15 – August 7, 2017, weeks, 20 – 31
  - DSS-65 Proposed for July 16 – October 8, 2018, weeks 29 – 40
- AZ Track Replacement is requested for DSS-25 and DSS-55
  - 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
    - Reconfiguration Prep is proposed for February 1 – May 23, weeks 05 – 20
  - DSS-25 is proposed for January 29 – April 08, 2018, weeks 05 – 14
    - XX/Ka Installation will be NIB
- DSS-24 XX/Ka Installation requested for 2018
  - Proposed for April 30 – July 9, weeks 18 – 27

Resource Allocation Planning Service

- 2016 -



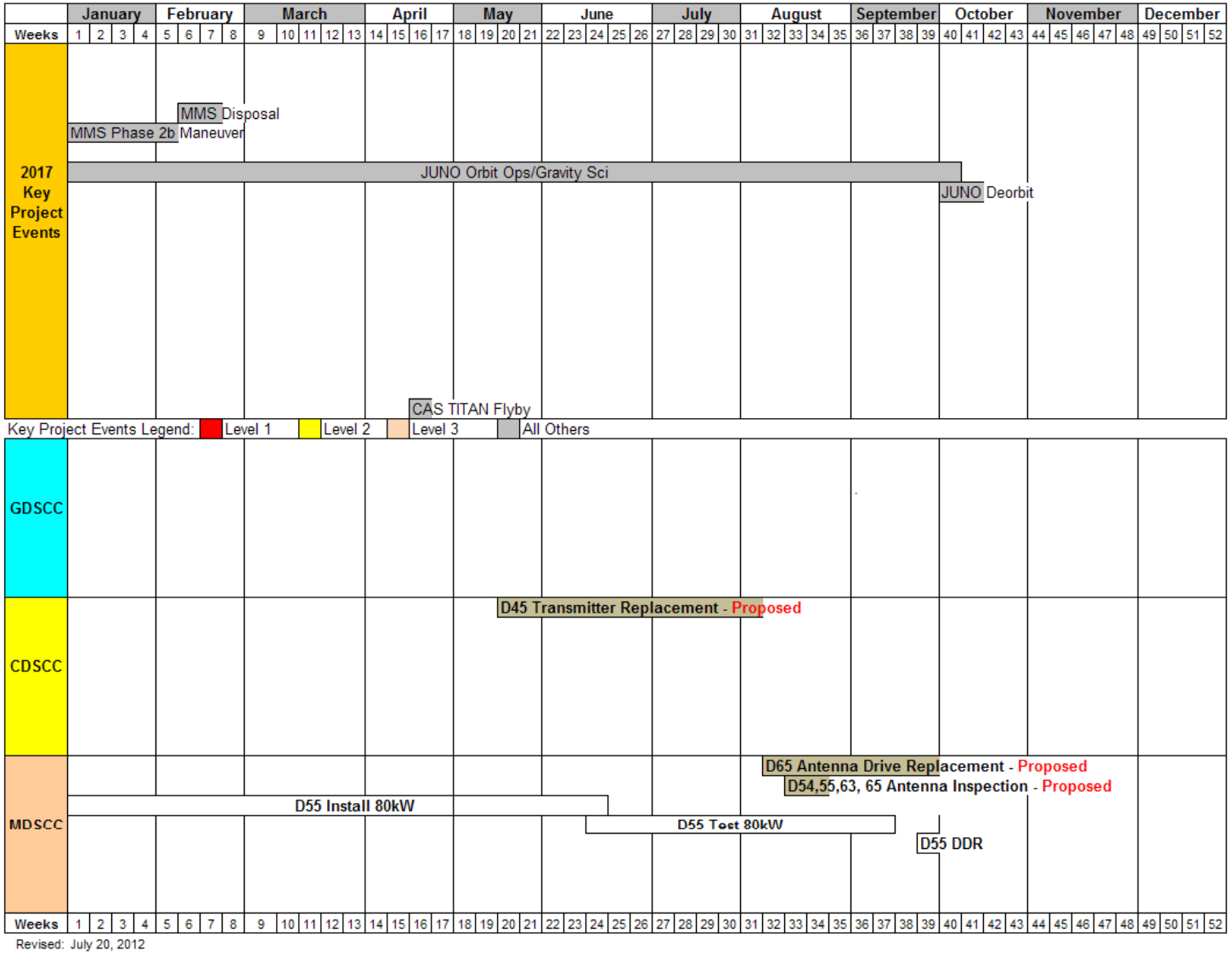


DSN Downtime 2016

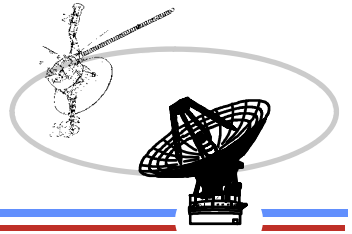
2016							
Site	Details	Start	End	Duration (Days)	Weeks	Start DOY	End DOY
DSS 55	80 kW Facility Prep - NIB	02/01/2016 00:00	03/20/2016 00:00	48	05 - 11	32	80
DSS 55	AZ Track Replacement - Proposed	02/01/2016 00:00	04/10/2016 00:00	69	05 - 14	32	101
DSS 55	RF Reconfiguration Prep - Proposed	02/01/2016 00:00	05/23/2016 00:00	112	05 - 21	32	144
SPC 40	UPS Installation - Proposed	02/03/2016 21:00	02/04/2016 09:00	0	05 - 05	34	35
SPC 40	UPS Installation - Proposed	02/17/2016 21:00	02/18/2016 09:00	0	07 - 07	48	49
SPC 40	UPS Installation - Proposed	03/02/2016 21:00	03/03/2016 09:00	0	09 - 09	62	63
DSS 43	Antenna Inspection - Proposed	05/02/2016 22:00	05/03/2016 14:00	1	18 - 18	123	124
DSS 34	Antenna Inspection - Proposed	05/03/2016 22:00	05/04/2016 14:00	1	18 - 18	124	125
DSS 45	Antenna Inspection - Proposed	05/04/2016 22:00	05/05/2016 14:00	1	18 - 18	125	126
DSS 43	Antenna Inspection - Proposed	05/09/2016 22:00	05/10/2016 06:00	0	19 - 19	130	131
DSS 34	Antenna Inspection - Proposed	05/10/2016 22:00	05/11/2016 06:00	0	19 - 19	131	132
DSS 15	Transmitter Replacement - Proposed	07/11/2016 00:00	10/03/2016 00:00	84	28 - 40	193	277

Resource Allocation Planning Service

- 2017 -



Revised: July 20, 2012



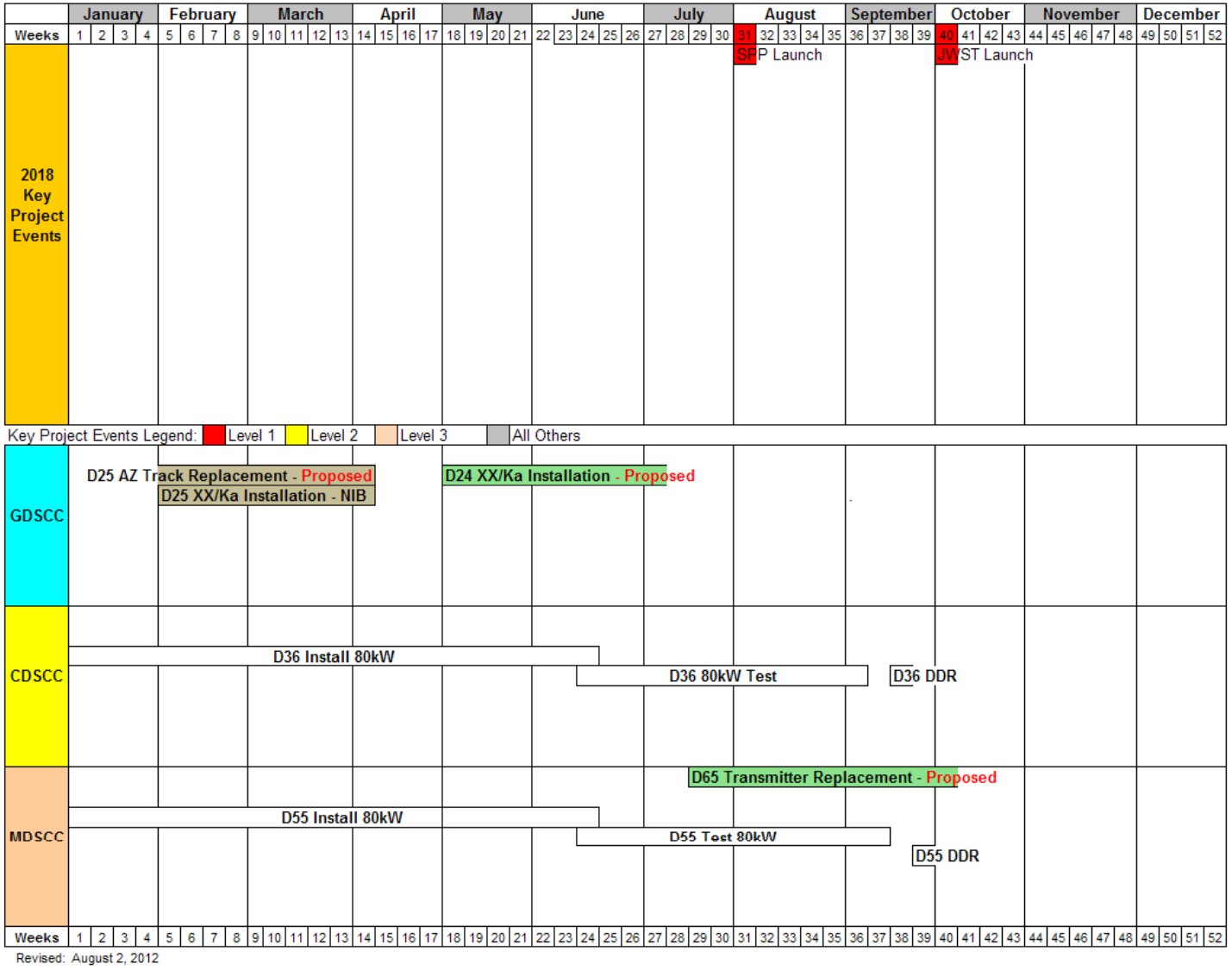
DSN Downtime 2017

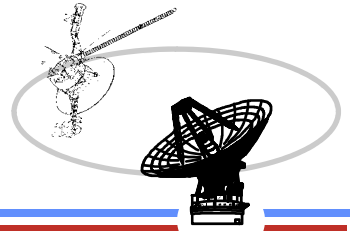
2017							
Site	Details	Start	End	Duration (Days)	Weeks	Start DOY	End DOY
DSS 45	Transmitter Replacement - Proposed	05/15/2017 00:00	08/07/2017 00:00	84	20 - 32	135	219
DSS 65	Antenna Drive Replacement - Proposed	08/07/2017 00:00	10/02/2017 00:00	56	32 - 40	219	275
DSS 55	Antenna Inspection - Proposed	08/14/2017 07:00	08/14/2017 23:00	1	33 - 33	226	226
DSS 65	Antenna Inspection - Proposed	08/15/2017 07:00	08/15/2017 23:00	1	33 - 33	227	227
DSS 63	Antenna Inspection - Proposed	08/16/2017 07:00	08/16/2017 23:00	1	33 - 33	228	228
DSS 54	Antenna Inspection - Proposed	08/18/2017 07:00	08/18/2017 23:00	1	33 - 33	230	230
DSS 55	Antenna Inspection - Proposed	08/21/2017 07:00	08/21/2017 16:30	0	34 - 34	233	233
DSS 63	Antenna Inspection - Proposed	08/23/2017 07:00	08/23/2017 16:30	0	34 - 34	235	235
DSS 54	Antenna Inspection - Proposed	08/25/2017 07:00	08/25/2017 16:30	0	34 - 34	237	237

Resource Allocation Planning Service

Jet Propulsion Laboratory
California Institute of Technology

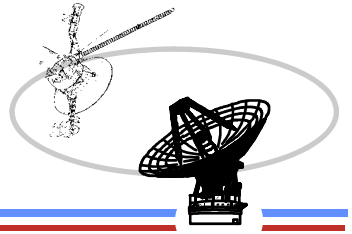
- 2018 -





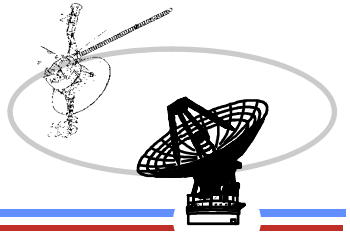
DSN Downtime 2018

2018							
Site	Details	Start	End	Duration (Days)	Weeks	Start DOY	End DOY
DSS 25	AZ Track Replacement - Proposed	01/29/2018 00:00	04/09/2018 00:00	70	05 - 15	29	99
DSS 25	XX/Ka Installation - NIB	01/29/2018 00:00	04/09/2018 00:00	70	05 - 15	29	99
DSS 24	XX/Ka Installation - Proposed	04/30/2018 00:00	07/09/2018 00:00	70	18 - 28	120	190
DSS 65	Transmitter Replacement - Proposed	07/16/2018 00:00	10/08/2018 00:00	84	29 - 41	197	281



Future assets new/upgrades

- DSS-35 Installation and Operational 2013 – 2014
  - Modkit Installation October 1, 2013 – March 14, 2014 weeks 40 – 11
  - Acceptance Testing November 22, 2013 – April 4, 2014, weeks 47 – 14
  - System Integration Testing December 17, 2013 – June 2, 2014 weeks 51 – 23
  - Operations Systems Performance Testing June 2, 2014 – August 15, 2014, weeks 23 – 33
  - 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



Antenna Downtime Status and Forecast

Complex	Station	Subnet	S-Band		X-Band		Ka-Band		Ka Phase 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	✔	✔	✔	✔	N/A	N/A	10/01/15
10	DSS-26	34B2	N/A	N/A	✔	✔	✔	N/A	N/A	N/A	N/A
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: 1/5/2012

✔ ✔ ✔ = Capability Recently Exists ✔ = Capability Exists * = To Be Commissioned