

FY16 NSTX RUN LOG

NSTX-U FY 16 Run started on Dec. 18, 2015.

FY 2016 Operation Targets: TBD

Complete: 5.53 run weeks producing 557 plasmas

Date	Run Time (Daily hrs)	Accumulated FY Run Time (hrs)	Accumulated FY Run Weeks (40 hours / week)	Plasma Attempts	Plasma Achieved	Experimental Topics	Comments
12/18/15	4.83	4.83	0.12	13	11	XMP-101: Inductive Start-Up Scenarios	Delayed start for ISTP. Missed shots/down time for ECH
Week's End		4.83	0.12				
12/21/15	3.61	8.44	0.21			XMP-106: Magnetic Calibration	Delayed start for field coil/PSRTC/PCS Testing
				15	15	XMP-101: Inductive Start-Up Scenarios	
12/22/15	7.87	16.31	0.41	25	25	XMP-126: Ip and R Control	Additional test time for PF3U/L test shots.
						XMP-105: Vertical Position Control Checkout	
Week's End		16.31	0.41				
1/4/16	0	16.31	0.41	0	0		Vacuum Vessel Boronization
1/5/16	5.07	21.38	0.53	11	7	XMP-101: Inductive Start-Up Scenarios	Missed shots on FCPC/Controls. Down due to ECH/FCPC
						XMP-126: Ip and R Control	
1/6/16	6.78	28.16	0.70	19	9	XMP-101: Inductive Start-Up Scenarios	Missed shots on Controls/FCPC. Down for FCPC.
						XMP-105: Vertical Position Control Checkout	
						XMP-126: Ip and R Control	
1/7/16	8.27	36.43	0.91	26	25	XMP-127: Neutral beams into plasma	Down for Ip permissive
						XMP-107: Neutron Calibration Transfer	
						XMP-101: Inductive Start-Up Scenarios	
						XMP-105: Vertical Position Control Checkout	
						XMP-126: Ip and R Control	
1/8/16	8.24	44.67	1.12	26	23	XMP-127: Neutral Beams into Plasma	Mag test shots after 4PM
						XMP-105: Vertical Position Control Checkout	
						XMP-126: Ip and R Control	
						XMP-106: Magnetic Calibration	
Week's End		44.67	1.12				
1/11/16				0	0		TF Water Fitting Repair. Vacuum Vessel Boronization on 2nd shift
1/12/16	7.86	52.53	1.31	18	15	XMP-128: Increase the Elongation in L-Mode	Extra test time for gas injection system(GIS). Down due to Controls/Torus systems.
1/13/16	7.5	60.03	1.50	25	15	XMP-128: Increase the Elongation in L-Mode	Time spent on NB Conditioning. Missed shots on fizzles/FCPC
1/14/16	6.55	66.58	1.66	22	19	XMP-128: Increase the Elongation in L-Mode	Additional test time for FCPC/NB. Missed shots on fizzles/FCPC
						XMP-116: Initial H-mode Development	
1/15/16	3.19	69.77	1.74	8	6	XMP-116: Initial H-mode Development	Delayed start to GIS/FCPC. Down for FCPC. Missed shots on PCS
Week's End		69.77	1.74				
1/18/16	3.58	73.35	1.83	15	10	XMP-101: Inductive Start-Up Scenarios	Delayed start for GIS. Extra testing for Mag Diag. Down for PCS/FCPC. Missed shots on DCPS/FCPC
						XMP-106: Magnetic calibration	
						XMP-116: Initial H-mode Development	
1/19/16	7.27	80.62	2.02	25	23	XMP-116: Initial H-mode Development	Delayed start/Down for ECS. Missed shots on disrupts
1/20/16	0	80.62	2.02	0	0		Investigate PF1CU electrical insulation
1/21/16	4.04	84.66	2.12	12	11	XMP-116: Initial H-mode Development	Down for water/SPA's. Missed shot on fizzle
						XMP-121: Six SPA and RWM coil checkout	
						XP-1506: Low-beta locked mode studies	
1/22/16	8.43	93.09	2.33	29	27	XMP-116: Initial H-mode Development	Down/CA for NB. Missed shots on level 1 Faults
						XP-1506: Low-beta Low-density Locked Mode Studies	

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Week's End		93.09	2.33				
2/8/16	0	93.09	2.33	0	0		Investigate Outer Vacuum Vessel to Gnd leakage Path
2/9/16	3.28	96.37	2.41	9	7	XMP-137: Increase Ip and Kappa in L- and H-modes.	Extra Test time for Controls/FCPC. Missed shots on Aborts
						XMP-138: Vertical Control Checkout	
2/10/16	0.75	97.12	2.43	1	1	XMP-137: Increase Ip and Kappa in L- and H-modes.	Extra test time for NB. Down for GIS
						XMP-138: Vertical Control Checkout	
2/11/16	7.06	104.18	2.60	19	19	XMP-137: Increase Ip and Kappa in L- and H-modes.	Extra test time for Controls. Down for Controls
						XMP-138: Vertical Control Checkout	
						XMP-115: Isoflux Commissioning	
2/12/16	3.32	107.5	2.69	10	9	XMP-115: Isoflux Commissioning	Delayed/down start for MG. Missed shot on Abort (NB)
Week's End		107.5	2.69				
						XMP-137: Increase Ip and Kappa in L- and H-modes.	Delayed start for TVPS. Delayed/down for FCPC. Missed shot on Com
2/15/16	2.66	110.16	2.75	7	6		
						XP-1506: Low-beta Low-desntiy Locked Mode Studies	Delayed start/Down for FCPC/Con. Early End/CA for TOR. Missed shots on Aborts, Fizzles.
2/16/16	2.45	112.61	2.82	6	3		
2/17/16	0	112.61	2.82	0	0		Only testing/troubleshootingGIS, FCPC & Controls
2/18/16	3.98	116.59	2.91	7	5	XMP-115: Isoflux Commissioning	CA/Down for GIS/NB/Control. Missed shots on DCPS
						XP-1506: Low-beta Low-desntiy Locked Mode Studies	
2/19/16	9.13	125.72	3.14	25	23	XMP-115: Isoflux Commissioning	Missed shots on DCPS
Week's End		125.72	3.14				
2/22/16	1.8	127.52	3.19	5	4	XMP-115: Isoflux Commissioning	Delayed start for NB1A/GIS. Delayed/down for DCPS/Penning
2/23/16	4.63	132.15	3.30	15	15	XMP-115: Isoflux Commissioning	Delayed start for NB1A.
2/24/16	8.03	140.18	3.50	18	17	XMP-115: Isoflux Commissioning	Delayed start for NB1A.
2/25/16	6.58	146.76	3.67	21	20	XMP140: PF-5 Proportional EFC Test	GIS Work
2/26/16	7.68	154.44	3.86	22	18	XMP-137: Increase Ip and Kappa in L- and H-modes.	Down for Con/FCPC
Week's End		154.44	3.86				
2/29/16	6.47	160.91	4.02	23	16	XMP-121: Six SPA and RWM Coil Checkout	Down for water PLC/Controls.Missed shots on DCPS/Fizzle/Con
						XMP-137: Increase Ip and kappa in L- and H-modes.	
3/1/16	7.78	168.69	4.22	24	23	XMP140: PF-5 Proportional EFC Test	Delayerd start for water PLC. Missed shot on fizzle.
						XMP-137: Increase Ip and Kappa in L- and H-modes.	
3/2/16	6.88	175.57	4.39	17	17	XMP-137: Increase Ip and Kappa in L- and H-modes.	Delayed start for controls. Down for Water PLC/FCPC PLC
3/3/16	8.46	184.03	4.60	25	24	XMP-111: MPTS Commissioning	Prob. with Con glitches/NB reliability. Missed shot on abort.
						XP-1506:Low-Beta Error Field Correction	
3/4/16	8.19	192.22	4.81	26	24	XMP-115: Isoflux Commissioning	Down for Water PLC. Early NB trips. Miss shots on Aborts
						XMP-138: Vertical Control Checkout	
						XMP-137: Increase Ip and Kappa in L- and H-modes.	
Week's End		192.22	4.81				
3/21/16	0	192.22	4.81	0	0	XMP-143: Access Machine Conditions	Recovery plasmas from Vessel quick Ar Vent. No accrued Ops
3/22/16	9.55	201.77	5.04	21	21	XMP-120: X-Point and Strike-point Control	Break for Controls/Tech coverage
3/23/16	6.69	208.46	5.21	19	17	XMP-120: X-Point and Strike-point Control	Conclude early for NB Conditioning. Missed shots on fizzles
3/24/16	5.27	213.73	5.34	12	10	XP-1506: Low-beta Error Field Assessment	Down for ECS (Multiple) & Controls. Missed shots on Con/ECS
3/25/16	7.31	221.04	5.53	21	17	XMP-142: Reduced MHD H-mode Development	Delayed start for FCPC. CA for Tour. Missed shots on NB/Abort/Fizz
Week's End		221.04	5.53				
Totals		221.04	5.53	642	557		

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Run Hours	Run Weeks	Attempts	Plasmas
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