



 HELMHOLTZ
| GEMEINSCHAFT

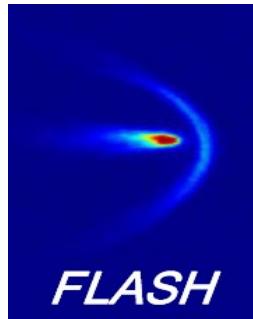
FLASH
Free-Electron Laser
in Hamburg

FLASH Maintenance Weeks

April/May 2008

Siegfried Schreiber, DESY

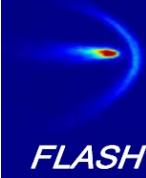
email:
siegfried.schreiber@desy.de



- Overview of maintenance work coordination:
K. Klose 92493



Overview



- Maintenance Weeks in 2008:
28-Apr-2008 7:00 h – 19-May-2008 7:00 h
(13 working days)
22-Dec-2008 7:00 h – 5-Jan-2009 7:00 h
(5 working days)
- Linacs (RF-Gun) needs to stay up with tunnel closed until 28-Apr-2008 13 h
- Main aim of May shutdown:
allow finishing Petra III work in the FLASH/Petra crossing area
- Many groups use this time for their maintenance and upgrades
- each maintenance work at FLASH requires a formal agreement and must be entries in the list:
<http://ttfinfo.desy.de/TTFelog> → access requests

FLASH Status: Measurements on the Beam Arrival Monitor
 last 8 hours: 1.0 nC; 75.61% ACC1: 118.0 MV/m; 95.49 % SASE: 0 μJ; 0 %
News: ttfbkr6 console machine upgrade | [Access requests - Tue March-18-2008](#) | [Machine improvement list](#)

02.08.2005 11:07

Close

Scheduled work / requests for Flash shutdown May 2008 (28.04.08 - 18.05.08)

Please, put your access request to the table below

What to do	Resp. person	Section	Vacuum work	When	Comments
installtion high resolution BPM UBC2	Schlarb, Remde	UBC2	yes	-	-
darkcurrent kicker ceramics gun	Obier, Wagner	GUN	yes	-	-
install new Diode	Magnets	-	no	-	requires test of radiation safety interlock
screen optical replica	Schlarb	SEED	yes	-	readjust screen angle
test Personeninterlock	D3	-	no	15/16.05.08	requires tunnel closed 2 days
waveguide adaption to optimize 1 GeV runs	Katalev	Tunnel	no	-	not yet sceduled
masteroscillator	Wedding	Inj. Racks	no	-	to be tested in parallel to old master osc.
Installation Cavity BPM and absorber	Vilcins	SEED	yes	-	
BPM	Remde, Schlarb	BC3	yes	-	BPM ready
work on roof hall 3	Warratz	Hall 3	no	-	Hall 3 cullies
install CSR spectrometer BC3	K. Ludwig, B.Schmidt	BC3	no	-	needs partial opening roof tunnel
modify screen 14ACC7	B.Schmidt	ACC7	yes	-	-
Drilling for sFlash	Khan, Budzinski, Leuschner	Flash tunnel to outside at 193m	no	-	D3 is involved, Kampfmittelräumdienst not necessary
EO	V.Arsov	140m	no	-	adjustments with Ti:Sa oscillator
Feedbackkicker h+v PSI	Obier	163m	yes	-	-
Test laser 2	Schreiber, Klose	Laser/GUN	no	-	
complete Laserbeamline	Polzin	Laser/GUN	no	-	
rf gun	Remde, Schreiber	GUN	yes	-	We may have to open the rf gun, not yet decided
Beam phase monitor (BPhM)	P.Morozov	ACC4 AN40 Rack	No	28.03.08-18.05.08	Prepare rack, install the BPhM and connect ACC4 probes to BPnM
work on FIR undulator beamline	gensch	FIR undulator beamline	-	-	
pull nitrogen stripping to building 49	Kienast, Ritz	Bogengang	no	The Rolltor has to be opened for 0.5 h	
switch off pumps in Pumphouse 1	Ullrich	Pumphouse 1	no	-	no water for all waveguides in old Hall 3, Magnets, Klystrons and others could get (lower) water from pumphouse 2, compressed air wont be affected
Install cable for cavity-BPM	Liebing	from SEED to Racks-Anbau	-	28.04.-15.05.08	Cable come from PSI

View Current

Logbook Search

Logbook Help

Op. schedules

Beam request

TTF safety

Links

Remote Access

Printer: ttflag

DOCS,
eLogBook



Gun section

V

- RF gun (Remde, Schreiber) – gun may have to be opened
 - requires cathode test on Mo morning 28-Apr until 13 h closed tunnel, running rf gun and solenoids

V

- Installation laser beamline (Polzin)
- Test laser 2 (Schreiber, Klose)

V

- install darkcurrent kicker ceramics GUN section (Obier, Wagner)

BC sections

V

- installation high resolution BPM UBC2 (Schlarb, Remde)

V

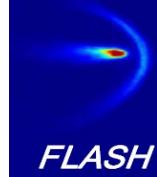
- BPM in dispersive section BC3 (Remde, Schlarb)

- install CSR spectrometer BC3 (K. Ludwig, B. Schmidt)

- may need partial opening of roof tunnel (to be decided)



Project List

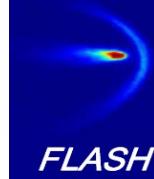


ACC4/5/6/7/seed/matching sections

- Beam phase monitor (BPhM) (P.Morozov)
ACC4 AN40 Rack, Prepare rack, install the BPhM and connect ACC4 probes to BPhM
- Install cable for cavity-BPM (Liebing) from SEED to Racks-Anbau
- Installation Cavity BPM (Vilcins, Lipka)
- Installation absorber before undulator (Vilcins, Fröhlich)
- readjust OTR screen optical replica (Angelova, Schlarb)
 - not yet decided (Angelova)
- modify screen 14ACC7 (B. Schmidt)
 - low priority
- EOVS (Arsov) adjustments with Ti:Sa oscillator
- Installation feedback kicker h+v PSI (Obier)
 - at 163 m, they replace the DESY kickers, in vacuum kicker, inner diameter not smaller than now



Project List



Magnets

- install new diode power supplies for some magnets (to combine interlock dipoles to one mother)

RF/LLRF

- waveguide adaption to optimize 1 GeV runs (Katalev)
 - not yet scheduled
- install new master oscillator (Wedding)
 - to be tested in parallel to old master oscillator

Photon beamline

- work on FIR undulator beamline (Gensch)
- other miscellaneous work (online spectrometer, GMD checks etc)



Other work

- Repair roof hall 3 (Warratz)
- Drilling side tunnel for sFLASH (Khan, Budzinski, Leuschner)
 - from FLASH tunnel to outside at 193 m, in beam height
 - Kampfmittelräumdienst not necessary
- Install nitrogen tubing to building 49 from Bogengang (Kienast, Ritz)
- switch off pumps in pump house 1 (Ullrich)
 - low water for all waveguides in hall 3, magnets, klystrons and others,
 - compressed air is not affected
- Annual test personnel interlock 15/16.05.08 requires tunnel closed or restricted access for 2 days
- Move controls server from hall 3 to building 30 (Rehlich)
 - no or limited doocs servers and services during a couple of hours for about 3 days
- BKR: FLASH consoles move to old HERA arc (Bacher, Vilcins)