December 29, 1992 -
NSLS TECH NOTES

1. Ring Nomenclature, J. Godel

2. Heat Transfer in the Vacuum Chamber Wall, S. Krinsky

3. Beam Power in the Synchrotron Radiation, G.K. Green

4. R.F. Cavity Design for Synchrotron Light Source, K. Batchelor and J. Claus

5. Flat Wigglers with Iron Teeth, S. Krinsky

6. Prototype Control System, J. Sheehan

7. Heat Transfer at a Beam Port Corner, S. Krinsky

8. The General Problem of Coupling a Given UV Monochromator to a Given Storage Ring, M. Howells

9. Microprocessor Strategy, B. Culwick

10. 80/20-NSLS Monitor V 1.2.1, J. Goldstick

11. Analysis of the Effect of Sextupole and Octupole Terms on the Resonance, R. Gluckstern

12. 8080 Development System for NSLS, B. Culwick

13. User's Guide for the Program DIMAT, R. Servranckx

14. Closed Orbit Distortion Resulting from an Extended Kick, S. Krinsky

15. Computer Interface for NSLS Magnetic Measurements, B. Culwick

16. Kicker Locations for VUV Ring, L. Blumberg

17. Some Thought on the Application Control Program System, E. Bozoki

18. V125 Monitor Update, J. Goldstick

19. Helpful Hints in Updating, Compiling, Loading, and Executing Fortran Programs on the DG, E. Bozoki

20. AOS CLI Macro Primer, B. Culwick

21. Microcomputer Program for Control of Beam Position Pickup Electrode Monitors, S. Okumura

22. Programming Burr Brown Card MP8418 - A 16 or 32 Channel Analog Input and a 12 Bit Analog to Digital Converter, O. Singh

23. 8080/8085 Assembler, J. Sheehan

24. Introduction to NSLS Function Generator, O. Singh

25. The Timing System, J. Sheehan

26. Tektronix 8001 Down Line Loader, R. Claus and J. Smith

27. File Transfers Between Computer, J. Smith and K. Moore

28D. Eclispe Turn on Procedure, J. Smith and S. Ramamoorthy

29. Curvature of the NSLS Dipole Magnets, J. Galayda

30. Systematic Errors in the NSLS Storage Ring Dipole Lamination, J. Galayda

31. Two Algorithms to be Used in Magnet Ramping, E. Bozoki

32A. Program MICROTEST, J. Weisenbloom and J. Smith

33C. Program TYDEVICERF, J. Weisenbloom and J. Smith

34. Subroutine for ADM-3 Cursor Controls, J. Weisenbloom and J. Smith

35. Operator's Control Desk Terminal, B. Culwick

36C. Computer Mediated Knobs for Analog Set Point Control, B. Culwick

37A. Program Line Monitor A80, J. Smith and H. Langenbach

38. ERRPRO, J. Smith and J. Weisenbloom

38B. ERRPO, S. Ramamoorthy and J. Smith

39. Diagnostic Routines for Testing 80/20 System (with 116 Memory Board or Z80-Z10 Board for Data Communication), S. Ramamoorthy and J. Smith

40. Computer Control of Beam Position Pickup Electrode Detectors, S. Okumura

41. A Program for Individual Device Control, E. Bozoki

42. Using Light Source Communication Board (LSCOMM), O. Singh

43. Summary of VUV Vacuum System, J. Schuchman

44. Jumper Options for 80/20 mp Boards, J. Baer

45B. UCODE - User Code Subroutines, J. Weisenbloom and H. Langenbach

46. Implementation of 60 Cycle Interrupts in Microprocessors, H. Langenbach and J. Baer

47. Summary of X-Ray Vacuum System, Anticipated Pressures, and Pumping Speeds, J. Schuchman

48. Network/Micro Communication Testing, J. Smith

49. Function Generator Related Programs (Operator's Manual), E. Bozoki

50. Microprocessor Configuration, J. Smith and J. Sheehan

51A. Operator, J. Smith

51B. Operator, J. Smith, J. Weisenbloom and J. Dabrowski

52. A Program for Segmenting Ramping Functions, E. Bozoki

53. Ionization Pump Monitoring and Control Program Version 1.0, B. Culwick

54. Program CRDEVICERF, J. Weisenbloom and J. Smith

55. Useful Formulas for a Cos-wiggler. Application to the Six-Pole 6 Tesla Wiggler, A. Luccio.

56. Program PDPCVERT, J. Smith

57. Fortran and Microcode Interface for Long Messages, J. Smith and S. Ramamoorthy

58. NSLS Development Monitor, J. Smith and S. Ramamoorthy

59. NSLS Control Monitor - New Features and Subroutines, J. Smith and S. Ramamoorthy

60. Program COPY76TAPE, J. Smith

61. Scientific Subroutine Package, E. Bozoki and R. Wolf

62. Memory Test for NSLS Microprocessor Systems, S. Ramamoorthy and J. Smith

63. Converting SBC 116 Board to House 2716 Eprom Instead of 2708 Eprom, O. Singh and J. Baer

64A. Program CRBDEVICERF, J. Smith and J. Weisenbloom

65. Vacuum Chamber Metallization, A. Faltens

66. SCORE Control Program, E. Bozoki

67. The Status of the SCORE Program, E. Bozoki and R. Wolf

68. Computer Data Acquisition for NSLS Dipole Magnet Measurement, B. Culwick

69. Operating the Ionization Pump Control Program, B. Culwick

70. Vacuum Chamber Bakeout Computer Support, B. Culwick

71. Computer Interface to the Scanning Wire for Booster Injection Studies, B. Culwick

72. Program MAGMESCOPY, J. Smith

73. NSLS Computer Control Introduction, J. Smith

74. SCORE Control Program Update, R. Wolf

75. The NSLS Booster Scanning Wire, J. Bittner and M. Shea

76. Processing and Plotting LeCroy 2256 Data in the Data General Control Computers, J. Bittner and M. Shea

77. Data Acquisition Using the LeCroy 2246AS, M. Shea

78. A Proposed Booster Tune Measurement System, M. Shea

79A. Interface Between Multibus and the KS 3908 CAMAC Controller, M. Shea

80. Subroutine to Clear Lines on the Screen, S. Ramamoorthy and J. Smith

81A. Device Naming Convention in the Device Data Field, E. Bozoki

82. New Version of Individual Control Program, R. Wolf

83A. LREADCONL, LREAD, J. Smith

84. Flux Calculations, Polarization, and Optical Coating Considerations for the U4A Beam Line, P. Takacs

85. MP8418 Utility Program, O. Singh

86. GDSFLS.CLI, E. Bozoki

87. Microprocessor Devices, O. Singh

88. GRLECROY, LGETLECROY, J. Smith and J. Weisenbloom

89. Making an Integrating Micro Work from Scratch, O. Singh and W. Rambo

90. Optical Components for NSLS VUV Beam Lines, P. Takacs and M. Howells

91. Etendue Considerations in Plane Grating and Rowland Circle Grazing Incidence Monochromators, M. Howells

92. Genisco Display Subroutines, J. Smith

93. Comparison of Three Different Models of the Booster Dipole and Calculation of the Booster Ramping Fuctions, E. Bozoki

94. Multiple Touschek Lifetime for VUV Ring, C.Y. Yao

95. RCOMP Program, E. Bozoki and R. Wolf

96. Modified POISSON For Characteristic Impedance Calculation of a Transmission Line, C.Y. Yao

97. Microstatus and Memdisplay, S. Ramamoorthy and J. Smith

98. Program with Graphics to Draw Electrical Schematic Drawings, S. Haines, L. Chinn, and G. Williams

99. Present Status of the Function Generator Related Programs, E. Bozoki

100. A Program to Fill in Bills of Material, S. Haines, G. Williams, and L. Chinn

101B. Save/Restore System (Preliminary), H. Langenbach

102. Using the Computer Switching Micro, J. Flannigan

103. Restarting NEXEC, J. Flannigan

104. Effects of Mirror Figure Accuracy on Image Quality, P. Takacs

105. Vendor Lists for Procurement of VUV Optical Components, P. Takacs

106. How to Use the Application Control Programs, E. Bozoki

107. +100 to 1900 Volt Electron Spectrometer Ramp with 24 mV Prevision for Beam Line U14A, G. Williams, R. Klaffky, M. Kelly, and J. Skora

108. NSLS Microcomputer-Controlled Digitizer Instruction Manual, Y.G. Su

109. Save/Restore Editor Version 1.4, H. Langenbach

110. Switched PUE Electrode Monitor Program, H. Langenbach

111. Integrating Power Supply Program, H. Langenbach

112B. Cross Reference Listing of Integrating Micro Device Names, H. Langenbach

113. Operator Console Interface, B. Culwick

114. CRDEVICERF, J. Smith

115. Data General Eclipse to Micom File Transfers, H. Langenbach

116. Initial Diagnostic Display and Control Programs, H. Lagenbach

117. Interface Between Aerotech Drive and Tektronix 4053 Computer, L.H. Yu and B. Culwick

118. Emittance Calculation Programs, E. Bozoki

119. Incorporation of the Coupled Beam Size and Touschek Lifetime into the RING Program, E. Bozoki

120. PGM Scanning Guide, R. Thomson and R. Carr.
121. Changes to Device Names and Micro Assignments, H. Langenbach

122. Measurements and Arrangement of the Permanent Magnets for the Hybrid Wiggler, A. Luccio and L.H. Yu

123. Clock Rates and Vector Requirements for the NSLS Function Generators, B. Culwick

124. Eclipse Directories, J. Smith

125C. RAMPCNTRL, H. Langenbach

126. Ramp File Edit Program, B. Culwick and H. Langenbach

127. Recent Changes in Some of the Application Programs, H. Langenbach

128. Changes to Device Names and Micro Assignments, H. Lagenbach

129B. LIB-FORTRAN Subroutine Library, J. Smith

130. RDNETERROR-Prints the Error Messages Reported to ERRPRO, S. Ramamoorthy and J. Smith

131. SUM.ERROR - Summary of ERRPRO Errors, S. Ramamoorthy and J. Smith

132. SENDUVMSG, S. Ramamoorthy and J. Smith

133. Digital Signal Processor Interface and Operating Specifications, R. Olsen

134. Manipulating Ramps for Profit, B. Culwick

135. Recent Modifications to the Ramp Control Program (Ref. Tech. Note 125C), H. Langenbach

136. LMONMICROS - Monitors the Status of Micros on the Novas, J. Smith

137. TRIMSWEEP, H. Langenbach

138. UV Beam Monitor, S. Ramamoorthy and J. Smith

139. X-Ray Beam Monitor, S. Ramamoorthy and J. Smith

140. SENDXRAYMSG, S. Ramamoorthy and J. Smith

141. MSGDISPLAY, S. Ramamoorthy and J. Smith

142. One More Time About Ramping, E. Bozoki

143. NSLS High Energy UV Ring, Preliminary Parameters, S. Krinsky, C. Pellegrini, and A. van Steenbergen

144. MINDSCAN: Program to Send Messages to the LED Display in the VUV Ring, S. Ramamoorthy and J. Smith

145. Diagnostics Program for the Electron Spectrometer Ramp for Beam Line U14A, G. Williams, N. Lucas, and M. Spitzer

146. Trim Magnet Adjust Program, H. Langenbach

147. Development Monitor Version V135 and V135A, O. Singh

148. PRETUNE, J. Smith

149. Beta Function Measurement in VUV Ring, C. Pellegrini

150. Gas Lifetime in VUV Ring, C. Pellegrini

151. LINACSTS: Program to Control and Display the Status of Linac Booster Vacuum Valves, S. Ramamoorthy, J. Smith, and J. Flannigan

152. Upgrading of the RING-Related Application Programs, E. Bozoki

153. SHARMON Program, E. Bozoki

154. HARMGEN Program, E. Bozoki

155. NSLS Vacuum System Review Workshop, J. Schuchman

156. Program, M. McKeown, J. Smith and S. Ramamoorthy

157. Step Motor Monitor and Control Program, H. Langenbach

158. ERRPRO: Reporting of Errors, S. Ramamoorthy and J. Smith

159. Corrector Calibration Program, R. Horwitz and E. Bozoki

160. Operation of the U14 Cylindrical Mirror Analyzer, G. Williams

161. RESETMICRO, J. Bopp

162. Development Monitor - Update, J. Smith, S. Ramamoorthy, and J. Dabrowski
163. PLOTRHIST, J. Bopp

164. HOURLYXRAY, J. Bopp

165. HOURLYVUV, J. Bopp

166. MSAVEUV, MSAVEXR, M. McKeown

167A. Configuring SBS 80/24 Board for NSLS Use, O. Singh and W. Rambo

168. Rigidity Evaluation of a Circular Plate Reinforced with Radial Ribs, R. Hawrylak

169. Kikusui Power Supply Control via Microprocessor, O. Singh and W. Rambo

170B. Multibunch Micro, S. Ramamoorthy and J. Smith

171A. Format for the Device Type (50 octal. (Rev.1), J. Smith and S. Ramamoorthy

172. Thermal/Structural Analysis: Wiggler Vacuum Chamber, R. Alforque and S. Sharma

173. CALCOMP on the DG, J. Bopp

174. Plotting Graphs on the IBM PC, J. Bopp

175. JLIB - A Library of Input Routines, J. Smith and R. Horwitz

176. Calibrating the U14 Plane Grating Monochromator, N. Lucas

177. The Calibration of the Orbit Corrector Magnets in the VUV and X-Ray Rings, E. Bozoki

178. Loading Backups from Labeled Tapes, J. Flannigan

179. Restarting Operation Programs, J. Flannigan

180. Vacuum Technical Note - X-Ray Ring Vacuum Performance on July 27, 1984, A. Mathewson

181. VUV Ring Vacuum Performance on August 2, 1984, A. Mathewson

182. Vacum Technical Note - The Calibration of the Residual Gas Analyzer in X1BM1 Dipole Magnet, A. Mathewson

183. Ringdata Program, C. Sheehan and E. Bozoki

184. Inclusion of Undulator Type Elements in the RING Control Program, E. Bozoki

185. The Beam-Residual Gas Lifetime in the X-Ray Ring, A. Mathewson

186. Magnetic Measurements on the NSLS Superconducting Wiggler, A. Luccio

187. NSLS Console Terminal Program, J. Smith

188. Magnet and Model Calibration for the X-Ray Ring, E. Bozoki

189. Update on the IBM-PC Workstation at the NSLS, J. Murphy

190. Pumping Speed of Distributed Ion Pump, DIP, H. Halama

191. Magnet Meausrements on the NSLS Soft X-Ray Hybrid Undulator, A. Luccio

192. History Program, M. McKeown

193. MONHIST, M. McKeown

194. B X-Ray Quadrupole Power Supplies, O. Singh

195. Assorted Studies of the X-Ray RF System, B. Craft, J. Keane, and M. Puglisi

196. X-Ray Ring Performance Between July 20 and September 14, 1984, H. Halama

197. Hysteresis Study of Trim Magnets, L.H. Yu and J. Galayda

198. UV and X-Ray Software Ramps (preliminary), J. Smith

199. SPICE - Circuit Simulation and Analysis, J. Smith

200. X-Ray Front End Retrofit, W. Breck, P. Foster, W. Jordan, E. McKenna, and R. Scheuerer

201A. Radiation Monitoring (preliminary), J. Smith, B. Morris, and T. Dickinson

202. PBUS: Parallel Port Bus, J. Smith, S. Ramamoorthy, and D. Klein

203. NSLS Computer System Upgrade, J. Smith

204. NSLS Mux and Flag Control System, S. Ramamoorthy, J. Smith, and J. Flannigan

205. How to Get the Parameter-Values from the Header of Any Ramp Files, E. Bozoki

206. Undulator Effects Compensation on the VUV Ring, G. Vignola

207. UV Radiation Monitor, S. Ramamoorthy and J. Smith

208. Control Monitor Library Routines for Type 50 Devices, S. Ramamoorthy

209. GENLIB Library, E. Bozoki and C. Sheehan

210. Device Testing - Preliminary, J. Smith and S. Ramamoorthy

211. VUV Ring Lifetime on August 30, 1984, J. Galayda

212. Getting a Listing of Micros and Devices, J. Bopp, J. Smith, S. Ramamoorthy, and J. Flannigan

213. Effect of Fomlin Oil on Beam Lifetime, T.S. Chou

214. Ramp Control Program, M. McKeown

215. Daily Tasks to Ensure that All "History" Files will be Complete, M. McKeown

216. DGRAMP, J. Bopp and J. Smith

217. Extension of the Calibration of the X-Ray Ring Quadrupoles Up to 2.4 GeV, E. Bozoki

218. Calibration of the VUV Quadrupoles, E. Bozoki

219. Calibration of the X-Ray Ring and VUV Ring Sextupoles, E. Bozoki

220. X-Ray Ring Vacuum Performance After the 1984 Shut Down, H. Halama

221. Pretune Version 5 Summary, J. Smith and J. Bopp

222. Electron Trajectory From MK VII Gun to Linac, C. Kilbourne and L. Blumberg

223. CCTOP Facilities Documentation, J. Smith and C. Bensch
224. Pretune Version 5 Summary, J. Smith and J. Bopp

225. Bunch Selection, S. Ramamoorthy, J. Smith and A. Wong

226. Sub-Routine to Drive the Linger Controller for the U14A Monochromator Stepping Motor, N. Lucas

227. CCTOP Documentation, C. Bensch

228. Status of the X-Ray Ring Vacuum, H. Halama

229. Plotting of Data, A. Wong, J. Smith and S. Ramamoorthy

230. Practical Guidelines for Minimizing Time Spans when Opening X-Ray Monochromators to Atmospheric Pressure While Changing or Adjusting, G. van Derlaske

231. X-Ray Beam Line Status Electrical System, J. Klein

232. Controlling the U14A CAM Ramp Voltage, N. Lucas

233. Preliminary Measurements of Integrated Multipoles of the Superconducting Wiggler, A. Luccio

234. Magnetic Measurements and Analysis of Data for the Free Electron Laser Undulator, A. Luccio

235. A Program for Acquisition by Using DT 2805/5716 Board, M. Li

236. JLIB Facilities Documentation, C. Bensch

237. Removeable of Rhodium Coating from Silicone Carbide (REFEL) Mirrors, J. Colbert

238. SAVEMERGE, C. Bensch

239. SAVESYS, C. Bensch and R. O'Brien

240. Utility Programs LSTSQR and WIGGLER for NSLS Ethernet, L. Blumberg

241. Estimate of Long Radius Surface Curvature from Interferagon Fringe Basing Measurements, P. Takacs

242. Specifications for a Long Trace Surface Profiling Instrument, P. Takacs

243. Preliminary Measurements of Integrated Multipoles of the Superconducting Wiggler, A. Luccio

244. Multiple Channel Counting on the U14 TEK 4052 Data Acquisition System, A. Wirtz and G. Williams

245. Scale Factor for Relating the Surface Roughness Power Spectrum to Scattered Light Observation and Grazing Incidents, P. Takacs

246. Watch, R. O'Brien

247. Injection Orbit Deformation at LEGS D2 Septum in X-Ray Ring, R. Blumberg

248. Procedure for Magnet and Model Calibration, E. Bozoki

249. NEG Pump Study, T.S. Chou

250. U13 Beam Position Monitor, L. Yu, L. Ma, and R. Nawrocky

251. PBUS Interface for On/Off Control of Devices, S. Ramamoorthy, J. Smith, D. Klein, and W. Rambo

252. Configuration of VEM 1000 System for Communication to Other Computers/ Terminals, S. Ramamoorthy, J. Smith, B. Culwick, and J. Flannigan

253. Computer Control for Frequency Synthesizers, S. Ramamoorthy, J. Smith, D. Klein, W. Rambo, and C. Nielson

254. Design Studies of Sputter-Ion Pumps, Part I: Cell Size Dependency, T.S. Chou

255. Generation of Error Listings, S. Ramamoorthy

256. Software Reset of Micros, S. Ramamoorthy

257. Ramping System, J. Smith, et. al.

258. UV Ramp Devices, J. Smith

259. Prototype of Titanium Nitride Coating Facility, T.S. Chou

260. Design Study of Sputter Ion Pump, Part II: Magnetic Field Dependency.., T.S. Chou

261. Quantitative Analysis of the Gas Burst Produced by Viton Sealed..., P. Stefan

262. X-Ray Valve and Interlock Controls, J. Klein and C. Neilson

263. PUE Text/Compare, B. Culwick and P. Campbell

264. A Low Drift Analog Integrator for Magnetic Measurements, R. Nawrocky

265. Micro for Linac Control, B. Morris, S. Liu, and A. Wirtz

266. Automated Orbited Correction, E. Bozoki and A. Luccio

267. Evaluation of NSLS Beam Line Fast Valve Protection, C. Foerster and R. Larson

268. Update of X-Ray Ring Trim Calibration, E. Bozoki

269. Pretune Changes - Versions 8.0 through 8.6, J. Smith

270. 1984 Measurement of NSLS Distributed Diode Sputter Ion Pump Characteristics, C. Foerster

271. VME 1553 Communication System, S. Liu, J. Smith, and S. Ramamoorthy

272. MICRO - PC System for X-Ray Beam Position Monitor, P. Siddons and H. Kraner

273. A Proposal for a NSLS Injection System, C. Pellegrini

274. A High Speed X-Ray Beam Position Monitor, P. Siddons and H. Kraner

275. UHV Linear Actuators for NSLS Beam Lines, T. Oversluizen

276. VMEbus - Multibus Interface, S. Liu

277. Softramps - Hardware and Software, J. Smith and S. Ramamoorthy

278. Micro for Closed Orbit Feedback, S. Liu

279. 16-Bit Data Acquisition Micro, S. Liu and W. Rambo

280. General Purpose VME Module of NSLS, S. Liu, J. Smith, and S. Ramamoorthy

281. Comments on NSLS Phase III, J. LeDuff

282. Suggestions for Organizing a Successful Workshop, T. Rotondo and J. Murphy

283. All You Ever Wanted to Know About VI But Were Afraid to Ask, H. Langenbach

284. SHADOW, Used to Examine Energy Miscalibration of PGM, J. Colbert

285. Estimate of the Influence of Wakefield on the Emittance and Energy Spread in the MeV Linac, L.H. Yu and C. Pellegrini

286. ATF Beam Specifications,

287. Quick Look-up Tables and Graphs for Changes in the n and b in the X-Ray Ring, E. Bozoki

288. Design Calculations for a Transversely Biased Ferrite Coaxial Line Tuner for the VUV and X-Ray Ring Cavities, J. Wachtel

289. "Automation" of Corrector Calibration, E. Bozoki

290. Kicker Service Guide, T. Romano

291. Global Orbit Correction Using Measured Response Matrix, E. Bozoki

292. Availability of QSEX and ORBCOR on the VAX, E. Bozoki

293. Vertical Scraper on the X-Ray Ring, J. Murphy

294. Machine Parameters Which Can Be Chosen to be Fitted in QSEX, E. Bozoki

295. New Computer Names for X-Ray Trims, B. Craft and O. Singh

296. The Uses of Measured Response Matrix for Orbit Correction and the Build Program, E. Bozoki

297. Unique Vacuum Seals in the NSLS RF Cavity, M. Thomas

298. Algorithm for Choosing the Number of Correctors to be Used for Least Square Orbit Correction, E. Bozoki

299. Measurement of Bunch Lengthening Using the Fourth Harmonic Cavity in the VUV Ring, S. Buda, R. D'Alsace, A.M. Fauchet, J. Keane, G. Ramirez, M. Thomas, G. Vignola, and J. Wachtel

300. Using PLOT10, J. Smith and Y. Tang

301. GPLS VMEbus Interface, M. Minasi

302. Betration Function Measurement in the NSLS X-Ray Ring, J. Murphy

303.

304. VME PBUS, J. Tallent

305. Unconstrained Least Square Method for Minimizing Global Orbit, E. Bozoki

306. Data Requirements of a Model-Based Control System, E. Bozoki

307. Changes in Softramp, J. Smith and Y. Tang

308. X-Ray Trim Micro Program Overview, E. Scholer, J. Smith, and Y. Tang

309. Using Cursor and Window Package Under F77, Y. Tang

310. Several Comments F77, Y. Tang

311. Vax Local Libraries, J.D. Smith, Y.N. Tang and S. Ramamoorthy

312. Vax DDR User-Interface, J.D. Smith and Y.N. Tang

313. Vax DDR Inspection Proogram - lookddr - J.D. Smith and Y.N. Tang

314. X-Ray Trim System Overview, O. Singh (8/11)

315. Updating DDR and VAX, Y. Tang and J. Smith (10/88)

316. User Interface for the VME Version of the Monitor, Susila Ramamoorthy and J.D. Smith (12/6/88)

317. Sequencer, K. Algra (2/24/89)

318. VAX Ucode Library, Y.N. Tang and J.D. Smith (2/28/89)

319. Programs for Reading and Display Vacuum Pump History Data, Becky Yang (2/28/89)

320. PUE Detectors Signal Processing Board Calibration (Initial Calibration) F. Porfido (3/29/89)

321. Stockroom Security System, R. Best

322. Unified Error Reporting Conventions and Apollo DDR Library, Y.N. Tang and J. D. Smith (4/25/89)

323. Apollo Ucode Library, Y.N. Tang, J.D. Smith (4/28/89)

324. Water Cooled Safety Shutters, R. Alforque, A. Almasy, L. Berman

325. Ion Pumps at the NSLS, H. Halama and C. Foerster, 5/30/89

326. NSLS Controls Database Requirements, E. Bozoki, I. So, J. Smith (6/1/89) (6/2/89); 326A (4/1/90

327. Evaluation of 16 Bit Analog to Digital Converters for VME Bus, C. Saunders, O. Singh, W. Rambo (5/20/89)

328. Four and Five Phase Stepping Motor Wiring with Limit Switches, L. Berman (6/30/89)

329. Startup and Shutdown Procedures for the VME Systems, S. Ramamoorthy, J. Flannigan (7/18/89)

330. Test Procedure for Trim-PUE Data Acquisition System, S. Ramamoorthy, Y. Tang, J. Flannigan, J.D. Smith (7/20/89)

331. Trimpue & Vaxnet Data Acquisition System, S. Ramamoorthy, J. Flannigan, J. Smith, Y. Tang (7/26/89)

332. VME System Test, S. Ramamoorthy, J.D. Smith, J. Flannigan (7/20/89)

333.a On Program Trimpuetest, Y.N. Tang, etc. (7/24/89)

334. Test and Startup Procedures for Trimpue and Vaxnet micros, J. Flannigan, S. Ramamoorthy, J.D. Smith (7/21/89)

335. On Program Mictest - Microtest, Y.N. Tang, J.D. Smith (7/21/89)

336. On the VAX Operator Program - Y.N. Tang, J.D. Smith (7/24/89)

337. Strain Analysis ..... Sharma, Siddons, Lapeyre

338. 2 CPU X-Ray Trim Micro Overview (supersedes Tech note 308 and 308A (7/24/89)

339. X25 Undulator Operating Procedures, J. Dabrowski and J.D. Smith (8/3/89)

340. X21 Undulator Operating Procedures, J. Dabrowski and J.D. Smith (8/3/89)

341. Local Interlock Micro, J. Flannigan (9/5/89)

342. Programs for Collecting History Data on Vax and Their File Formats, Y.N. Tang (8/11/89)

343. PUE Detectors SW254 Switch Board (SLS 60.376-3-2) Test Procedure, F. Porfido (8/22/89)

344. X-Ray Main Power Supply Error Detection, J. Smith, W. Rasmussen, R. Olsen (8/21/89)

345. A Prototype System for the Automatic Generation of VME Micros, E. Scholer, J. Smith, S. Ramamoorthy, Y. Tang (8/23/89)

346. X-Ray Transfer Line (XLS) Micro, E. Scholer, J. Smith, O. Singh (8/25/89)

347. Active Interlock RF Interface Test Procedures, W. Broome, S. Buda, G. Ramirez (8/28/89)

348. Active Interlock RF Controls Interface, G. Ramirez, M. Thomas (8/28/89)

349. PUE Detectors RF Detector Board Test Procedure, F. Porfido (9/14/89)

350. Central Active Interlock, J. Dabrowski

351. UV Global .....

352. Testing Procedure for the Interum Insertion Device Active-Interlock Local Logic, J. Tallent, J. Rothman (9/14/89)

353. Computer Group Program Standards, Y. Tang, J. Smith, S. Ramamoorthy (9/10/89)

354. Programs for Collecting, Printing and Analyzing History Data on VAX, Y. Tang and J. Smith (9/14/89)

355. Calculation of the Orbit from PUE measurements Using Nonlinear Reconstruction, E. Bozoki, J. Bittner, J-Y. Huang (9/20/89)

356. Tang .....

357. X25 Active Interlock Baseline Measurement Using an Ion Chamber, G. Decker, L. Berman, R. Nawrocky (9/25/89)

358. Insertion Device Active Interlock Logamp/Filter Chassis-Inspection/Test Check Sheet, J. Rothman (9/25/89)

359. PUE Detectors - Overall Unit Test and Calibration Procedure, F. Porfido (9/89)

360. Calibration of Fast Valve Sensor Electronics, T. Monahan (10/3/89)

361. Application Manager, S. Sathe, J. Smith

362. X-Ray RF Cavity Test Mode Personnel Security System, W. Broome

363. Graphics Editor, S. Sathe, J. Smith

364. The VAX Database Program, Y. Tang, J. Smith, E. Scholer

365. Inspection Procedures, J. Rothman

366. Interactive User I/F Library, S. Sathe, J. Smith (1/26/90)

367. Program Nettest, Y. Tang, S. Ramamoorthy, J. Smith

368. Danal - Device Data Analysis Program, Y. Tang, J. Smith

369. Test Results on Real Time Ethernet Link, S. Ramamoorthy, J. Smith

370. X25 Receiver, Gain Measurement Using an Ion Chamber and a Dial Indicator G. Decker, L. Berman, R. Nawrocky, I. So

371. Getting Started with Apollo Workstations for Control Room Operators H.J. Langenbach, 11/30/89

372. GPLS Board Test, S. Ramamoorthy, J. Smith

373. Control System Upgrade, J. Smith, S. Ramamoorthy, Y. Tang

374. GPIB Interface for VME Systems, S. Ramamoorthy, J.D. Smith, 12/14/89

375. Interlock Pre-fill Test, I. So

376. VME Micro Interface, J. Smith

377. Plotting History Data on VAX, Y.N. Tang and J.D. Smith

378. Reading and Writing Devices in F77: A Set of High Level Routines, Y.N. Tang and J.D. Smith

379. UTOK Wiggler Operating Procedures, J. Dabrowski & J. Smith (3/36/90)

380. Vacuum Display for the X-Ray and VUV Ring, S. Sathe & J. Smith (2/5/90)

381. Bitmap Icons for Apollo Windows, S. Sathe (2/6/90)

382. NSLS Standard File System (Preliminary), Y. Tang, S. Sathe, J. Smith (2/90)

383. Insertion Device Active Interlock Central Chassis/Control Room Display Chassis Test Procedure, R. Nawrocky (3/90)

383
B. Insertion Device Active Interlock Central Chassis/Control Room Display Chassis Test Procedure, J. Tallent, R. Nawrocky, J. Rothman, F. Porfido (3/90)

384. Insertion Device Active Interlock Local Chassis Inspection/Test Check Sheet, J. Tallent, R. Nawrocky, J. Rothman (3/1/90)

384B. Insertion Device Active Interlock Local Chassis Inspection/Test Check Sheet, J. Tallent, R. Nawrocky, J. Rothman, F. Porfido (3/1/90)

385. Sixteen Channel Buffer Amplifier, R. Nawrocky (3/90)

386. Active Interlock Fault/Reset Report, I. So, R. Nawrocky, G. Decker (3/6/90)

387. NSLS Standard File System Library, Y. Tang & J. Smith (3/14/90)

388. TCP/IP and Ethernet Test, Y.N. Tang, J.D. Smith and S. Ramamoorthy (3/18/90)

389. High Power Insertion Device Active Interlock Parameters, G. Decker, P. Stefan (3/90)

390. Oxygen Deficiency System, M. Iarocci, D. Carlson (4/2/90)

391. Active Interlock Beam Position Monitor Calibration Program

392. Calibration of the Sixteen Channel Buffer Amplifier Chassis (SLS-61-52), Tallent (4/90)

393. Outgassing of Macor, T.S. Chou (4/3/90)

394. X14 Aux Interlock Chassis Alignment/Test Procedure, J. Rothman & R. Nawrocky (4/2/90)

395. Interactive User I/F Library With Motif Look and Feel, S.M. Sathe and J.B. Smith (4/12/90), also NSLS TN 395A

395B. same as above (July 26, 1990)

396. The Ucode Library for the New Control System (Preliminary), Smith, Tang, Ramamoorthy (5/90)

397. The Utility Library (Preliminary), Tang, Smith (5/90)

398. Apollo and Vax Netlibrary Functions and Error Handling for Interface to VME Server and Pretune Micro, S. Ramamoorthy, J.D. Smith (5/16/90)

399. Modifications on Preturne Network System, Ramamoorthy, Flannigan, Smith (5/90)

400. Netlog Information Program, Ramamoorthy, Smith (5/90)

401. Magnetic Field Sending Switch for the X5 Interlock System, S.L. Kramer, (5/14/90)

402. XLS Transport Line Status and Schedule, S. Kramer (5/90)

403. Dynamic Aperture Estimates for XLS, S. Kramer (5/90).

404. Specifications for the Eight-port Serial Controller, S. Ramamoorthy, J.D. Smith (6/8/90)

405. Hardware and Software Configuration for Eight Port System, S. Ramamoorthy, J. Flannigan, J.D. Smith (6/8/90)

406. Changes in Harmonic Correction Program on VAX, Tang, Yu, Smith (7/25/90)

407. Rcvread - The Program to Read and Average RF Receivers, Y.N. Tang, J.D. Smith, (8/10/90)

409. Changes in Harmonic Correction Program on VAX, Y.N. Tang, L.H. Yu and J.D. Smith (7/25/90)

410. Micro Definition Language and the Program Mdefparser, Sanders, Ramamoorthy, Smith (8/90)

411. SW254 Chip Test, F. Porfido (9/90)

412. Vacuum Display on Apollo Using Motif Interface, Sathe, Smith (10/90)

413. Apollo Setup for Invocation of the Operator Control Programs - S.M. Sathe, (10/90)

414. Changing and Updating DDR's on VAX and Apollo, Y.N. Tang and J.D. Smith, (10/90)

415. Overview of the NSLS Control Monitor, S. Ramamoorthy, J.D. Smith, (10/90)

416. LOADDATA: Program to Download Micro Database to Micros. Susila, Smith (11/90)

417. Formal Specifications of the Device Structures. Susila, Smith (10/90)

418. Device Data Formats in the Datapool, Susila, Smith (10/90)

419. Using Apollos for the NSLS Control Operations, S. Sathe (11/90)

420. Save, Restore and Compare on Apollo. Sathe, Smith (11/90)

421. Modifications on the Pretune Data Acquisition System. Ramamoorthy, Flannigan (1/91)

422.

423. The Menu Program Devtestmenu for the VAX Interpreter Devtest. Tang (1/91)

424. X-Ray Ramping Summary. Smith (2/91)

425. Programs Using the New Pretune Data Acquisition System and Operator Menus. Tang, Singh (1/91).

426. Use the Program Opmenu to Make your own menu on VAX. Tang (2/9/91).

427. The Global Feedback Control Program - gf. Tang, Singh (2/8/91).

428. The Orbit History Program Orbitlog and Its Monitor Orbitmonitor. Tang (2/13/91).

429. New Functions in the Apollo Ucode Library. Tang, Smith (2/12/91).

430. The Vacuum History Program Vaclog and Its monitors Vacmonitor. Tang (2/14/91).

431. The Apollo Local Feedback Monitoring Program. Tang, Smith (3/1/91).

432. Orbit History Display on Apollo. Sathe (3/5/91).

433. Comparison of St707, St122 and HS402 Neg. Strips, Guo, Halama (3/91).

434. X17 Ramping Software on the VAX, Tang, Smith (3/27/91).

435. Controlling Ozone in White Beam Hutches. Gmur, Berman, Iarocci (3/29/91).

436. SXLS Phase I Beam Profile Monitor, Nawrocky (4/15/91).

437. X-Ray Ramping on the Apollo. So (3/7/91).

438. VAX Pretune. Tang, Smith (4/91).

439. SXLS Ramping ... E. Bozoki (7/91).

440. Booster Ramping: Application and Micro..., Sathe, Ramamoorthy (7/91).

441. Booster ramping program on Apollo... Sathe, Bozoki (9/91).

442. ? S. Ramamoorthy.

443. Reading and writing data arrays to devices... Tang (11/91

444. Reading X-ray receivers through trimpue micro. Tang, Flannigan (11/91)

445. X-ray ramping programs on DG. Sathe, Smith (1/92).

446. Predicting the SXLS Pressure. H. Halama (2/92)

447. XLS Video Beam Profile, S. Kramer, R. Rose

448. ?, J. Rogers.

449. Harmonic correction programs for X-ray and VUV ring. Tang, Smith (3/92)

450. Orbit files. Tang, Smith (3/92)

451. Fast Orbit history data collection and conversion. Tang, Smith (3/92).
452. Preliminary study and design of a polarized wiggler. Friedman, Krinsky (4/92)
453. Building DDR for the upgraded control system. Tang, Smith (4/92).

454. Estimate of Photons per bunch for the FEL Angiography Ring. Blumberg (5/92).

455. X-ray Harmonic cavity (CERN-type) and higher order mode suppression. Biscardi, Broome (6/92).

456. Fitting of SXLS Magnet Measurement Data. L.N. Blumberg, J.B. Murphy, 12/20/91.

457. Reading and Writing data arrays of devices of type-50 on the VAX. Tang, Smith (9/92).

458. ?, O. Singh

459. Harmonic Orbit Correction in ORBCOR. E. Bozoki, 8/11/92.

460. Translator Program between MAD and RING Input. E. Bozoki, 8/11/92.

461. Translators Between MAD and RING Data Format, I. So, 8/12/92.

462. Robinson Stability for X-Ray Ring 500 mA, 2.5 GeV Operation, R. Biscardi, W. Broome, J.M. Wang, 8/92.

463. Ring Message Program for the UV and X-ray Screen, I. So, J. Smith, 9/92.

464. The DDR of Version II on our Upgraded Control System, Y. Tang, J. Smith, 9/92.

465. Trim Sweep Program for the UV and X-ray Rings, I. So, J. Smith, 9/92.

466. Bunch Selection Program for the UV and X-Ray Rings, I. So, J. Smith, 9/21/92.

467. ?, A. Warkentein.

468. UV Injection and Top-Off Mode on the Apollo, I. So, S. Kramer, J. Smith, 10/22/92.

469. Edit Ramp Program for the UV and X-Ray Rings, I. So, J. Smith - 10/29/92

470. Important System Files & Libraries (System Software Technote 0), Tang, J. Smith-12/92.

471. The DDR Library for the NSLS Upgraded Control System, Tang, Smith - 12/92.

472. A Brief Description of the Ucode Library n the Upgraded Control System (System Software Technote II) Tang, Smith - 12/92.

473. ?, I. So, 12/92.

474. ?, Y. Tang

475. ?, Y. Tang

476. ?, Y. Tang, HP Graphics Menu Program an Woper, Tang, Smith 1/8/93

477. Y. Tang, A Brief Description of the F77 Ucode Library, Tang, Smith 1/24/93

478. Beauman, R., High Pressure Copper Syster Serial/Parallel Pump Configuration 2/23/93

479. Broome, W., RF Training for High Current X-Ray Injection

480. Hanna, S. The Active Operation of the Harmonic ...

481. Hanna, S. and Broome, W., Analysis & Testing ...

482. Broome, W. And Biscardi, R. Higher Order Mode Sampling in X-Ray Ring Accelerating Cavity.

483. Desmond, E., DARPA Linac Transfer Line Controls, 2/94.

484. Desmond, E., DARPA Linac Control System. 3/2/94.

485. Desmond, E., DARPA Linac Acceptance Tests, 3/10/04.

486. Buda, S., VUV Dipole Power Supply Feedforward, 8/93.

487. Bordoley, M.

488. Bordoley, M.

489. Bordoley, M.

490. Bordoley, M.

491. Wang, J.M. and Broome, W., Power Considerations for XLS Coherent Light Source , 10/94.

492. Bozoki, E., On the NSLS Technical Database.

493. Batchelor, K., Shielding Upgrade for the VUV Storage Ring.

494. Keane, J., RF Power Req. For Highly ...
495. Bozoki, E., Access to the VUV and X-Ray Ring Modeling Database.
496. Tallent, J., R. Nawrocky, Active Interlock Aux Fault Combiner Chassis QA Inspection/Test Checklist. SLS-61.178.

497. Tallent, J., Nawrocky, R., Active Interlock DCCT/Hall Probe Signal Buffer Amplifier Chassis SLS-61.182 Q.A. Inspection/Test Checklist.

498. Foerster, C., Ultra High Vacuum System - 9/6/95.

499. Tallent, J., Active Interlock ...

500. Tallent, J.

501. Ramamoorthy, S., VX Works Version of NSLS Control Monitor.

502. Batchelor, K., Shielding Requirements for the VUV Storage Ring.

503. Buda, S., Superconducting Cavity RF Controller

504. Rothman, J. Radiation Monitor Integrator Test Procedure

505. Rothman, J. Radiation Monitor High Voltage Board Test Procedure.

506. Rothman, J. Radiation Monitor Voltage Board Test Procedure.

507. Rothman, J. Radiation Monitor Calibration Procedure.

508. Rothman, J. Radiation Monitor Final Assembly Test Procedure.

509. Rothman, J. NSLS Chipmunk Radiation Monitor Operating Manual.

510. W. Broome and J-M. Wang, Reactive Robinson Instability at SXLS.

511. E. Johnson, Improved Pop-in Monitor.

512. J. Safranek and L. Solomon, X-Ray Ring Steering and Skew Quad Trim Magnetic Measurements.

513. P. M. Stefan, IVUN Hot-Water Generator Bake-Out System: Description and Operation.

514. Peter M. Stefan, X-ray Ring Crotch Thermal Fatigue Test: First-Cut Electron Gun Design.

515. A. Borrelli, Testing the Global Harmonic Feedback Board, 10/21/98.

516. Jeffrey Rothman, NSLS Alarm System Remote Control Chassis Test Procedure, 12/08/98, REV. 1.0.

517. Dominic J. Ciardullo, Assessment of the Present Analog Processing Scheme For The NSLS Average Orbit Beam Position Monitors, 3/31/00.

518. Dominic J. Ciardullo, A Possible QAM Technique For Processing Average Beam Orbits At the NSLS, 6/19/00.

519. S.L. Kramer, VUV RF System Improvement Proposal, 3/16/01.

520. Jim Rose, Tuning an Calibration of the SLAC 2856MHz Phase and Amplitude detectors, 9/10/01.

521. S.L. Kramer, Proposal to Replace Booster-VUV Critical Device, 5/2/02.

522. Nicholas A. Lynch, Author, John Skarita Advisor, Mechanical Design Study of a Superconducting Undulator, 7/29/03.