

ENTRY NO. CU1 Date
 Cyclotron Model Cyclone 10/5
 Institution Austin Repatriation Medical Centre
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 In Charge: Dr. H. Tochon-Danguy Reported by: Dr. G. Egan

HISTORY

MILESTONE DATES:
 Installation Jan-Aug 1992 First Beam July 1992
 DESIGN/CONSTRUCTION BY: Ion Beam Applications
 COST: Accelerator A\$2.6 million Facility A\$7.6 million
 FUNDED BY: Institution, Federal & State Governments, donations.

STATUS

STAFF: Operators 2 Technicians 1
 BUDGET: Machine A\$0.25million Funded by State Govt.
 TIME DISTRIBUTION: (e.g. basic research, isotope production, maintenance, etc.)

(a) PET isotope production (clinical)	50%
(b) PET isotope production (research)	20%
(c) Radiochemistry research	15%
(d) Maintenance	15%
(e)	%

CHARACTERISTIC BEAMS

Accelerated Ions	E/A (MeV/u)	Current (part μ A)	
		Internal	External
(a) H^-	10 MeV		30 μ A
(b) D^-	5 MeV		20 μ A

1994 μ A-hours on target: 4000

FACILITIES

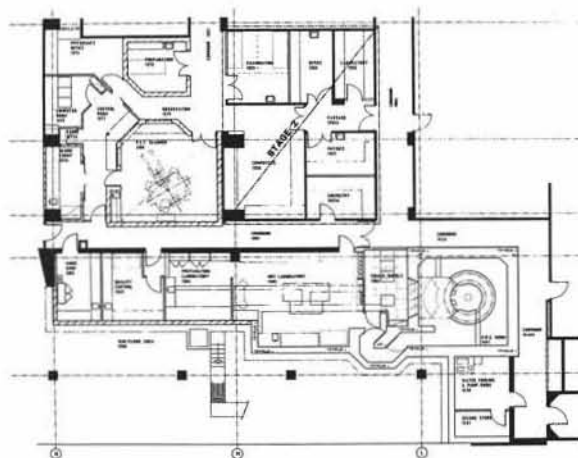
SHIELDED AREA: Fixed: 25 m^2 Moveable 7 m^2
 Target Stations: 4 No. Served At Same Time: 1
 OTHER FACILITIES: Radiochemistry laboratories, radiopharmacy laboratories, PET scanner (ECAT 951/31R), image processing laboratories.

REFERENCES/NOTES

- (a) G.F. Egan, H.J. Tochon-Danguy et al. "Production, administration and disposal of PET isotopes",
 (b) J. Radiation Protection in Australia 13 (1995).

PLAN VIEW OF FACILITY, COMMENTS

Dedicated PET isotope (^{18}F , ^{15}O , ^{13}N , ^{11}C) production.
 Floor plan of PET Centre including cyclotron and radiochemistry laboratories attached.



AUSTIN HOSPITAL P.E.T. CENTRE - FLOOR PLAN

ENTRY NO. CU2 Date 25 November 1995
 Cyclotron Model IBA CYCLONE 30
 Institution National Medical Cyclotron
 Address BMB-12, Camperdown, NSW-2050, AUSTRALIA
 Tel +612 565 7600 Telex
 Fax +612 565 7676 E-MAIL
 In Charge: C. Jamieson Reported by: D.W. Arnott/
 B Mukherjee

HISTORY

MILESTONE DATES:
 Installation 9.4.91 First Beam 9.7.91
 DESIGN/CONSTRUCTION BY: Ion Beam Applications
 COST: Accelerator AUD.4.3 M. Facility AUD.20.5 M.
 FUNDED BY: ANSTO/RPAH

STATUS

STAFF: Operators 4 Technicians 7
 BUDGET: Machine Funded by ANSTO
 TIME DISTRIBUTION: (e.g. basic research, isotope production, maintenance, etc.)

(a) Isotope Production PET	15%
(b) Isotope Production SPECT	70%
(c) Cyclotron Development	10%
(d) Maintenance	5%
(e)	%

CHARACTERISTIC BEAMS

Accelerated Ions	E/A (MeV/u)	Current (part μ A)	
		Internal	External
(a) H^-	15-30	15-860	15-860
(b)			

1994 μ A-hours on target: 55000 micro Amp.hr

FACILITIES

SHIELDED AREA: Fixed: 216 m^2 Moveable 7 m^2
 Target Stations: 8 No. Served At Same Time: 2
 OTHER FACILITIES: Trial Neutron Irradiation for Radiation Hardening
 Neutron Activation Analysis
 Neutron Dosimetry

REFERENCES/NOTES

- (a) B. Mukherjee and D.W. Arnott, Proc. 13th Cyclo Conf. pp.252 (1992).

PLAN VIEW OF FACILITY, COMMENTS

