

CANREB Steering Committee Meeting: RFQ Update

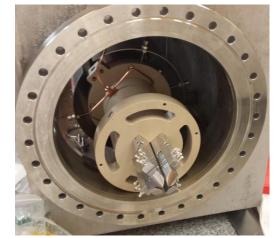
Brad Barquest

August 31, 2017



CANREB RFQ buncher update

- Dirty assembly complete; Clean(room) assembly in progress
 - Fall Co-op student to assist with installation, tests
 - 3 MHz circuit nearly done
- Integration and Test Plan reviewed
- Most purchased parts have arrived
 - Edge welded bellows outstanding
 - Power supplies part of RIB order; to be shipped soon
 - Isolation transformer procurement in progress
 - Turbos to be purchased with RIB line pumps











CANREB RFQ/PDT stands

- RFQ stand assembly ongoing
 - Rails haven't arrived yet
 - Service platform, HV enclosure under design
- PDT enclosure design largely complete
 - Aim to finalize design next month
 - HV switch has arrived









- September Finish up RFQ clean assembly
- Fall Install RFQ on stand*, cable electronics, carry out standalone tests
 - *likely after ALIS room construction clean assembly tent?
- Jan EBIS arrives!
 - Install PDT in-situ



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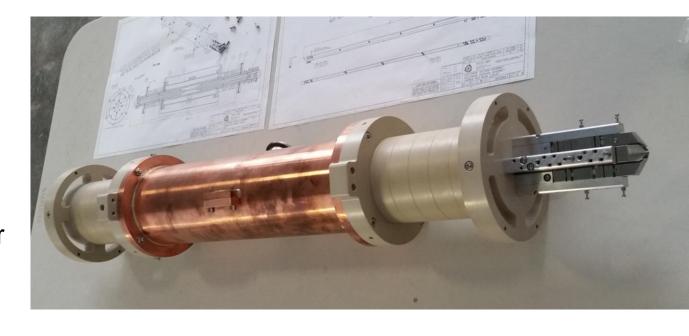
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Brad Barquest Research Associate

February 10, 2017

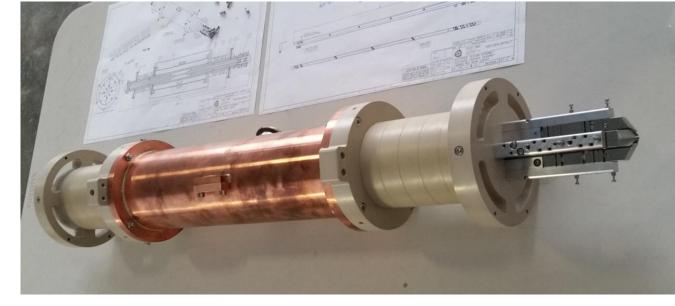
CANREB RFQ buncher update (manufacture)

- Parts for RFQ structure have arrived from the machine shop
 - Dirty assembly underway
 - Injection,
 ejection optics
 parts being
 manufactured
- Vacuum chamber and assembly drawings released by ECO



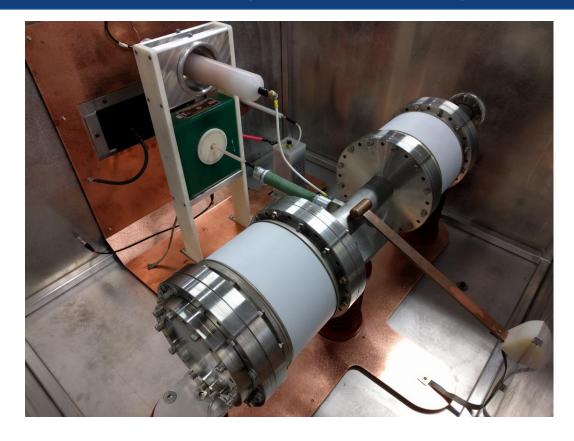
CANREB RFQ buncher update (procurement)

- RF amplifier has arrived
- Power supplies bundled with RIB transport PS request for quote
- Fasteners & vacuum hardware ordered by G. Hodgson
- Switch, logic unit procurement and controls documentation are in progress



CANREB pulsed drift tube update

- PDT prototype tests carried out
 - Desired voltages,
 rise time reached;
 PDT design
 concept validated
 - Summary of test results circulated for review





CANREB pulsed drift tube update

- Updates to PDT system
 - Switch with cooling capability has been ordered
 - Higher current HVPS has arrived
 - Enclosure redesign, new circuit layout will better protect the switch from discharge





- RF circuit prototype design review took place in December 2016
 - 3 MHz prototype demonstrated good performance; expected to satisfy project requirements
 - Design of circuit enclosure underway
 - 6 MHz circuit to follow



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