

## Appendix B

### Hopewell G10-2-360 Irradiator System Parts w/o Source

MJWTS has a entire spare Hopewell irradiator setup but without the source. Our G10-2-360 source lost it's Special Form Certificate 10/31/2019 and MJW has made the decision to dispose of this source even though it remains a fully functional system even as a normal form source.

Figure 1 shows the present configuration of the G10-2-360. It has the same attenuator 0-X8000 upgrade as the G10-2-12 and computer control and electronics plus an additional shield wall behind the irradiator (currently with a Sonitrol security system box attached). MJWTS is asking \$18,495 for these irradiator system accessories. The buyer should make note that all that is needed to complete the system is the irradiator and the Cs-137 sources. MJWTS encourages a potential buyer to contact Hopewell Designs, Inc. for a quote to complete the system with a G10-2-360 irradiator or similar unit with a 2 Ci and 200 Ci Cs-137 sources and that would allow for calibration of high dose rate instruments.



**Figure 1. MJWTS Hopewell G10-2-360 Irradiator System**



**Figure 2. MJWTS Hopewell G10-2-360 Control Station**

The spare parts inventory is listed on page 3 as Table 1 and includes the two old Attenuator-X units. It also includes the additional square shadow shield located behind the irradiator (with the Sonitrol security box attached) and the added upgrades for the positioning system the attenuator system upgrade.

**Table 1. G10-2-360 Spare Parts List**

- **Electronic Controller**
- **Attenuator-X**
  - **10,000 attenuator set with a x10, x100, x1000 and x10,000**
  - **With pneumatic operations and below gamma beam installation**
  - **Thomas commercial grade air compressor AIR-PAC Model T-614HDN**
- **Attenuator 0-X8000 Upgrade**
  - **4 attenuator set with 16 shield configurations and computer control**
- **G-10 computer control upgrade**
  - **Replaced electronic controller with:**
    - **Computer controller**
    - **17" LCD monitor**
    - **Opto DIO card for I/O**
    - **GPIB-USB cable for electrometer interface**
    - **Automated irradiation software**
    - **Exposure rate data**
- **Model T20-2-M two axis manual system**
  - **Track movement is manual**
  - **Locking tabs hold platform at desired position**
  - **Hand crank for z-axis**
  - **Track – Wiremold Raceway Model AL3300B-10**
  - **Table**
- **Shield Wall**
  - **(60" tall x 50" wide x 1.75" lead thickness) Can be bolted to floor.**
- **Instrument Camera**
  - **JVC 1/3-inch color CCTV camera Model TK-X750U**
- **Area Monitor**
  - **Ludlum Digital Area Monitor Model 375/2**
- **Motor**
  - **MDrive Plus microstepping Drive with Apex Dynamics Gearbox Model PN 034**