

Texas A&M cyclotron radiation effects facility

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The activity of the Radiation Effects Facility (REF) increased dramatically over the previous reporting year. In this reporting period, the facility was used for 3,042 hours, which is a ~19% increase over the 2,552 hours used in the 2009-2010 reporting period and surpasses the record of 2,600 hours from 2008-2009. Users of the facility (and hours used) over the past year were: NASA GSFC (367), NAVSEA (345.25), SEAKR (335), Xilinx Corp (284), Lockheed Martin (203.5), Intersil (165), Boeing Research & Technology (144), Aeroflex Corp (130.25), NASA JPL (106.5), Boeing Satellite Systems (89), BAE Systems (87.5), Stapor Research Corp (80), HIREX - France (73), Honeywell Corp (68), Ball Aerospace (67), International Rectifier (65), Silicon Turnkey (55.5), National Semiconductor (43.5), Northrop Grumman (39.25), Georgia Tech (32), Air Force (30.5), Microsemi Lawrence (30), General Dynamics (25), JD Instruments (24), VPT Inc (24), OptiComp Corp (21), University of Idaho (20), NASA JSC (16), SOREQ - Israel (16), Thales Alenia - France (16), Data Device Corp (12.5), Radiation Assured Devices (10), Silicon Space Technologies (9) and SunTronics (8). New users included Boeing Research & Technology, HIREX – France, OptiComp Corp and Thales Alenia - France.

Table I compares the facility usage by commercial and government customers. The ratio from this reporting year (63% to 37%) is similar to the trend seen in previous reporting periods and commercial hours still dominate (see Fig 1). Commercial hours increased by 14% and government hours

TABLE I. Radiation Effects Facility usage by commercial and government customers for this and previous reporting years.

Reporting Year	Total Hours	Commercial Hours (%)	Government Hours (%)
2010-2011	3,042	1,922(63%)	1,121(37%)
2009-2010	2,551	1,692 (66%)	859 (34%)
2008-2009	2,600	1,828 (70%)	772 (30%)
2007-2008	2,373	1,482 (62%)	891 (38%)
2006-2007	2,498	1,608 (64%)	890 (36%)
2005-2006	2,314	1,314 (57%)	1,000 (43%)
2004-2005	2,012	1,421 (71%)	591 (29%)
2003-2004	1,474	785 (53%)	689 (47%)
2002-2003	1,851	1,242 (67%)	609 (33%)
2001-2002	1,327	757 (57%)	570 (43%)
2000-2001	1,500	941 (63%)	559 (37%)
1999-2000	548	418 (76%)	131 (24%)
1998-1999	389	171 (44%)	218 (56%)
1997-1998	434	210 (48%)	224 (52%)
1996-1997	560	276 (49%)	284 (51%)

increased by 30% over hours from 2009-2010. 15 and 25 MeV/u Kr and Xe were most utilized as well as 15 MeV/u Au. No new beams were added to SEELine users list. Much of the testing conducted at the facility continues to be for defense systems by both government and commercial agencies. It is expected that the facility will continue to be as active in future years.

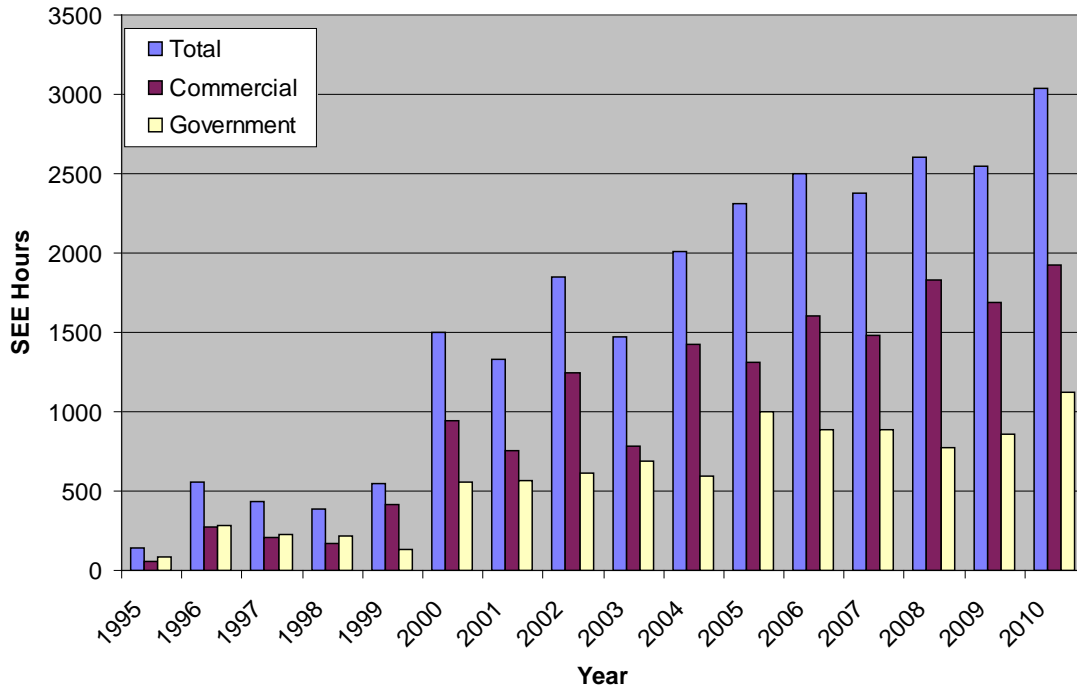


FIG. 1. Radiation Effects Facility usage by commercial and government customers for this and previous reporting years. Despite the increase in total hours by 19%, the ratio from this reporting year (63% to 37%) is similar to the trend seen in previous reporting periods where commercial hours still dominate.