

Texas A&M cyclotron radiation effects facility
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The activity of the Radiation Effects Facility (REF) decreased compared to the previous reporting year. In this reporting period, the facility was used for 2,673 hours, which is a ~12% decrease over the 3,042 hours used in the 2010-2011 reporting period. However this year had the second highest usage ever. Nearly 250 hours were lost in December 2011 to unscheduled maintenance. Users of the facility (and hours used) over the past year were: SEAKR (381), NAVSEA (331.5), NASA GSFC (192), Lockheed Martin (181), Xilinx Corp (156.5), Sandia Nat Lab (120), NASA JPL (118.5), Boeing Satellite Systems (115.25), Aeroflex (114.25), JD Instruments (112), BAE Systems (81.25), Honeywell (72), International Rectifier (68), Maxwell Technologies (67), CEA - France (58), Intel Corp (56.25), Thales Alenia - France (56), Sun Tronics (51.5), Radiation Assured Dev (48), Stapor Research (38), Air Force (32), Johns Hopkins (24), MicroSemi (23.5), SEMICOA (22), TAMU Physics (18.25), University of Michigan (17.5), White Sands AFRL (16), Peregrine Semi (15.5), AMTEC (14.25), Texas Instruments (12), HIREX - France (11.5), EM Photonics (8), Montana State University (8), Northrop Grumman (8), Save Inc (8), University of Texas - El Paso (8) and Vanderbilt University (8). New users included CEA - France, MicroSemi, SEMICOA, University of Michigan, EM Photonics, Montana State University, Save Inc and University of Texas - El Paso.

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 (%)
2011-2012	2,673	1,630 (61%)	1,043 (39%)
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%)
1995-1996	141	58 (41%)	83 (59%)

Table I compares the facility usage by commercial and government customers. The ratio from this reporting year (61% to 39%) is similar to the trend seen in previous reporting periods, and commercial hours still dominate (see Fig 1). Commercial hours decreased by 15% and government hours decreased by 7% over hours from 2010-2011. 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.

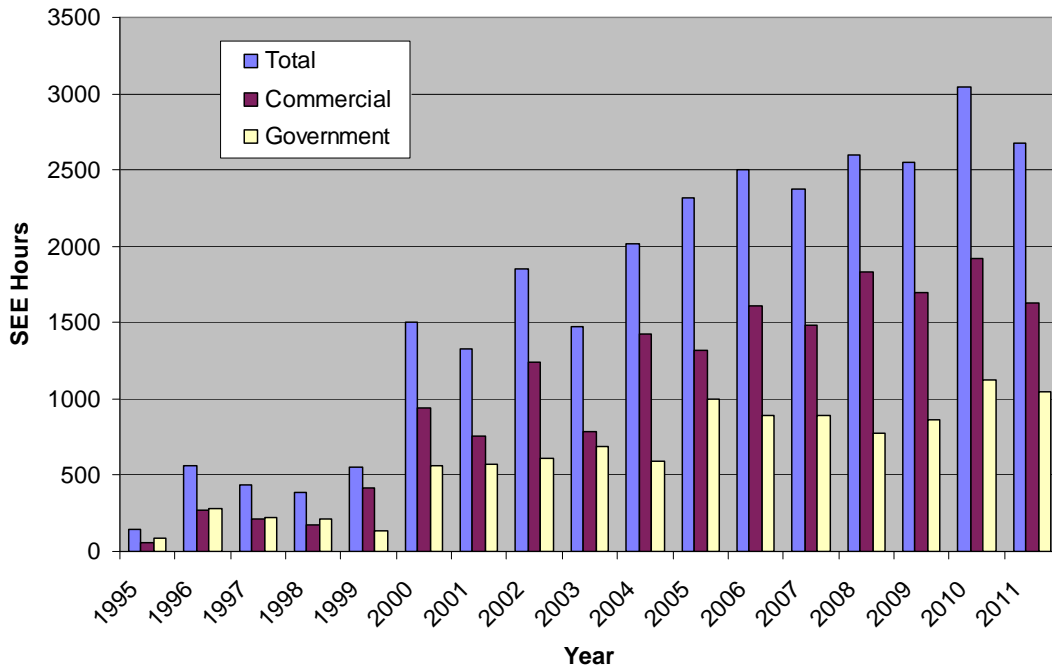


FIG. 1. Radiation Effects Facility usage by commercial and government customers for this and previous reporting years. Despite the decrease in total hours by 12%, the ratio from this reporting year (61% to 39%) is similar to the trend seen in previous reporting periods where commercial hours still dominate.