

Texas A&M cyclotron radiation effects facility
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The activity of the Radiation Effects Facility (REF) increased over the previous reporting year. In this reporting period, the facility was used for 3,024 hours, which is a ~26% increase over the 2,399 hours used in the 2013-2014 reporting period and was the second highest usage year ever (3,042 in reporting year 2010-2011). Users of the facility (and hours used) over the past year were: Sandia National Laboratory (287), NASA GSFC (274.5), NASA JPL (208), Honeywell (181), International Rectifier (156), Intersil (152.5), SEAKR (152), Aeroflex (140.25), HIREX-France (136), NAVSEA (117), Microsemi (115.75), Lockheed Martin (96), BAE Systems (86), Ryoei-Japan (84), Defense Threat Reduction Agency (80), IMT-Italy (68.5), Johns Hopkins (62.5), Texas Instruments (56), Boeing Satellite Systems (48.5), Ball Aerospace (48), Northrop Grumman (47.5), L-3 Communications (44), ATMEL-France (30.5), GNSS-Norway (24), Scientic (24), Thales Alenia-France (24), VPT Inc (23.5), DSO-Singapore (22.5), Raytheon (22.5), Maxwell (16.5), InnoFlight (16.25), Cisco (16), General Dynamics (16), Harris (16), Signal Analysis (16), Save Inc (14), Peregrine (13.5), ICs LLC (12), Blue Line Engineering (12), IBM Corporation (12), ARIA (9.5), University of Saskatchewan-Canada (9.5), SwRI (9), University of Colorado/LASP (8), RES LLC (8), T2 Research (8). New users included Ryoei-Japan, IMT-Italy, GNSS-Norway, DSO-Singapore, InnoFlight, Signal Analysis, ICs LLC, Blue Line Engineering, ARIA, University of Saskatchewan-Canada, University of Colorado/LASP and RES LLC .

Table I compares the facility usage by commercial and government customers. The ratio from

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 (%)
2014-2015	3,024	1,975 (65%)	1,049 (35%)
2013-2014	2,399	1,517 (63%)	882 (37%)
2012-2013	2,626	1,856 (71%)	770 (29%)
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%)

this reporting year (65% to 35%) is similar to the trend seen in previous reporting periods and commercial hours still dominate (see Fig 1). Commercial hours increased by 30% and government hours increased by 19% over hours from 2013-2014. 15 MeV/u ions were the most utilized and especially 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. Almost 17% (340 hours) of the commercial hours were for foreign agencies from Canada, France, Italy, Japan, Norway and Singapore. It is expected that the facility will continue to be as active in future years.

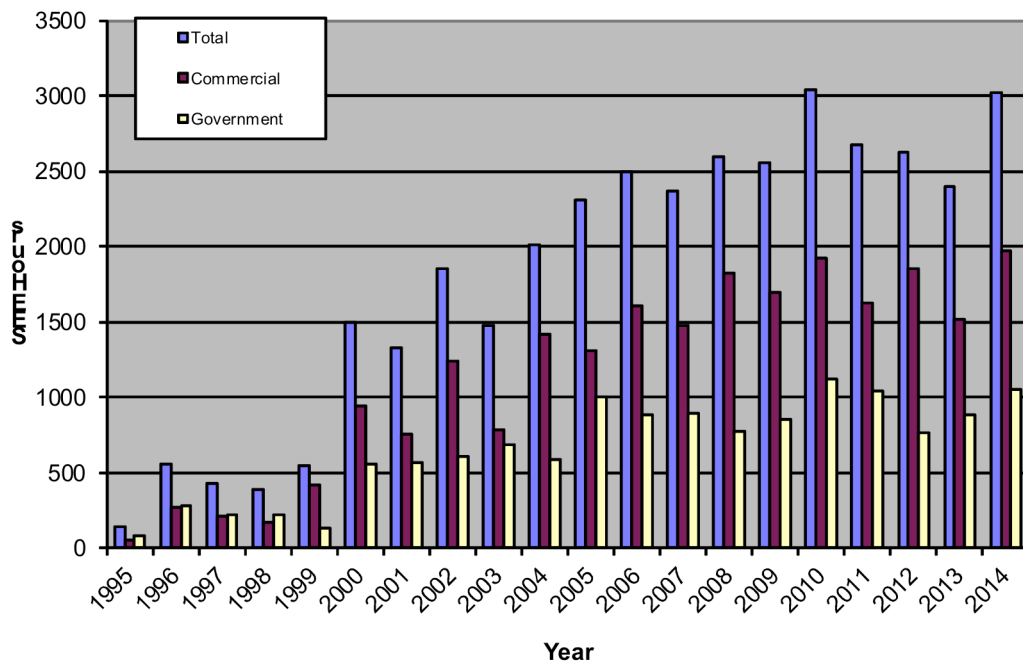


FIG. 1. Radiation Effects Facility usage by commercial and government customers for this and previous reporting years. The ratio from this reporting year (65% to 35%) is similar to the trends seen in previous reporting periods where commercial hours still dominate. About 17% (340 hours) of the commercial hours were from foreign agencies from Canada, France, Italy, Japan, Norway and Singapore.