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Highlights from the first year of operating the new ATLAS in-flight facility (RAISOR)[1] C. R. HOFFMAN, C. DICKERSON, Argonne National Laboratory, G. L. WILSON, Louisiana State University / Argonne National Laboratory, RAISOR TEAM — The ATLAS Accelerator facility at Argonne National Laboratory recently completed upgrades to its in-flight radioactive beam capabilities. The new in-flight facility, RAISOR, was designed specifically for the production of in-flight beams through transfer reactions at ideal energies for nuclear structure work, direct reaction studies, and nuclear astrophysics measurements ($\sim$5 - 15 MeV/u). RAISOR is comprised of an achromatic momentum chicane with bookend quadrupole doublets followed by rebunching and sweeper radio-frequency elements. In this way, both a momentum and velocity selection takes place in the identification of desired in-flight beams of interest. Since the RAISOR commissioning in the Fall of 2018, the facility has been used in six different experimental measurements delivering beams from Li up to P. Milestones include the first in-flight beams at new target stations, increases in the production yields and masses by factors of ten and two over the previous facility. Details on the characteristics of the in-flight beams produced and future facility directions will presented in addition to the physics highlights.

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