







## PANTEX/DOE-NNSA CONSERVATION REACH

Considering that Pantex and collaborators are studying various aspects of the year-round ecology of several species of birds with the latest tracking and mapping technology, the Pantex Plant has given the U.S. DOE a conservation reach that spans the Western Hemisphere. Eastern Purple Martins (Progne subis subis) occur over much of North America east of the Rocky Mountains and spend the winter in the Amazon Basin of Brazil. Swainson's Hawks (Buteo swainsoni) occur in most of the western half of the U.S. and Canada and migrate to the Pampas of Argentina each winter. Both species frequent important stopover sites during their journey and some of these areas are in need of conservation actions.

## Pantex/DOE-NNSA Conservation Reach

Through the use of the latest Global Positioning System (GPS) and data-logger technology, studies on migratory birds by Pantex and collaborators have expanded the U.S. DOE's conservation reach throughout the Western Hemisphere.



U.S. DOE-NNSA Pantex Plant

Pantex Wildlife Biologist, Jim Ray Consolidated Nuclear Security, LLC. Photo courtesy of Susan K. Ray.





This Swainson's Hawk (Buteo swainsoni) is one of many being studied year-round with the use of GPS transmitters by the Pantex Plant and Texas Tech University (Lubbock). The primary focus of the study relates to risks of wind energy development to these birds of prey.

Photo courtesy of Consolidated Nuclear Security, LLC.



Pantex Wildlife Biologist Jim Ray and his summer intern, Madeleine Thornley, attaching a GPS datalogger to a Purple Martin at a private residence in the Texas Panhandle. Pantex not only uses its banding program as a public outreach opportunity, it also collaborates with the University of Manitoba and other partners in an international study on the year-round ecology of the declining Purple Martin.

Photo courtesy of Consolidated Nuclear Security, LLC.



The 2019 Presidential **Migratory Bird Federal** Stewardship Award featured a sketch of the Purple Martin, in honor of the Pantex Plant's extensive work with this declining species. This work involves research, collaboration, and outreach. Photo courtesy of

Consolidated Nuclear Security, LLC.



Award winners. Pictured (from left to right) are Chris Cantwell, DOE/NNSA Pantex Plant; Beverly Whitehead, DOE; Jerome Ford, U.S. Fish & Wildlife Service; James Ray, DOE/NNSA Pantex Plant; and Josh Silverman, DOE.