Appendix - List of elements and capabilities that contribute to IAWN efforts

United States Capabilities

Facility	Location	Observation	Contributions
Minor Planet Center	Cambridge,	Observation correlation	Database of observations and
(MPC)	Massachusetts	and orbit determination	orbits of asteroids and comets
NEO Coordination	Jet Propulsion	Precision computation	Precision close approach
Office	Laboratory (JPL),	of orbits of asteroids	prediction, impact probability
	Pasadena, California	and comets	and risk assessment
Catalina Sky Survey	Tucson, Arizona	Detection; astrometric	NEO discovery
		follow-up	
Pan-STARRS	Haleakalā (Maui),	Detection; astrometric	NEO discovery
	Hawaii	follow-up	
LINEAR	White Sands, New	Detection, astrometric	NEO discovery
	Mexico	follow-up	
NEOWISE	Sun-synchronous,	Detection; IR	Discovery, Size, albedo, thermal
	low-Earth orbit	characterization	inertia, rough composition
NASA IRTF	Mauna Kea, Hawaii	IR characterization,	IR spectroscopy, composition
		rapid response	
Magdalena Ridge	Socorro, New Mexico	Follow-up	Astrometry, Photometric
Observatory		characterization	lightcurves, spectroscopy
Univ of Hawaii, 2.2-	Mauna Kea, Hawaii	Astrometric follow-up	Visible albedo, precision
meter			astrometry
Mission Accessible	Lowell Observatory,	astrometry,	Catalog physical properties of
Near-Earth Object	Flagstaff, Arizona	photometry,	several 100s sub-km NEOs
Survey (MANOS)		spectroscopy	
Spacewatch	Tucson, Arizona	Detection, astrometric	Discovery, photometry,
(KPNO)		follow-up	astrometry
Goldstone Solar	Deep Space Network	Precision vector and	Precision orbit determination;
System Radar	DSS-14 Barstow,	radar imaging	shape models
	California		
Arecibo Planetary	Arecibo Observatory,	Precision vector and	Precision orbit determination;
Radar	Puerto Rico	radar imaging	shape models

NASA agrees to the terms as laid out in the IAWN Statement of Intent dated 9 March 2015. NASA offers NEO observation efforts utilizing the elements and capabilities from the United States as detailed in this appendix.

John M Grunsfeld

Associate Administrator for Science Mission Directorate