Astronomical League
Earth Orbiting Satellite Observing Program
Observation Report Form

Observers Name_____

Date of Observation_____

Satellite Name <u>and</u>
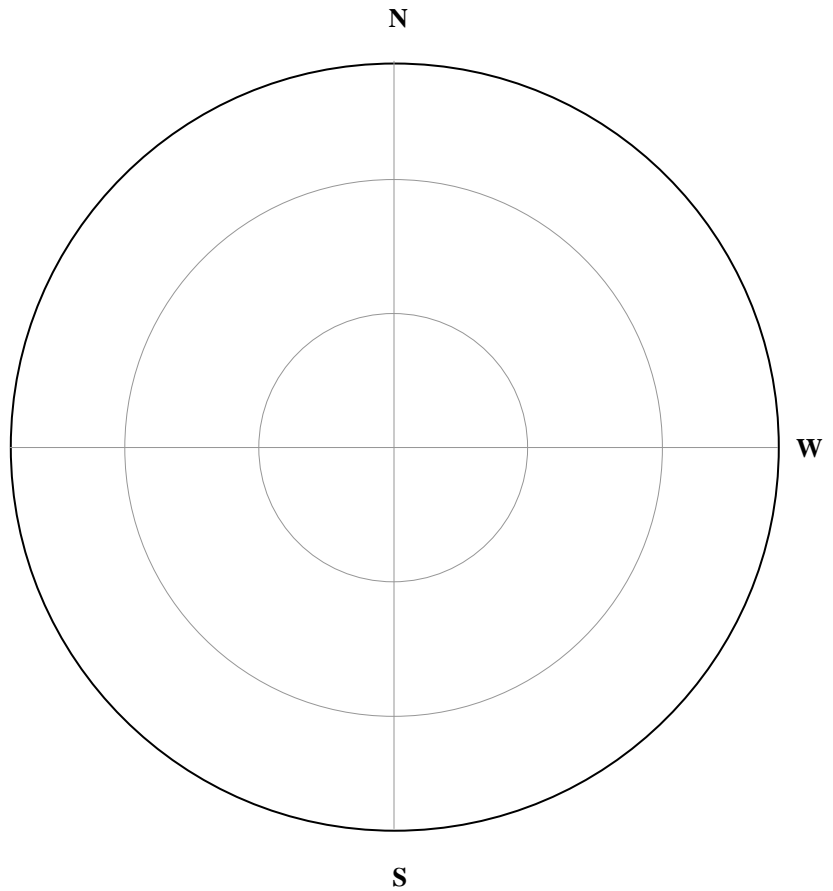Element Set Satellite ID_____

Date of Element Set Used_____

Location of Observer
     Latitude_____
     (use decimal degrees only)

     Longitude_____
     (use decimal degrees only, west is negative)

     Elevation_____
     (specify feet or meters)

Instrument Used (check one)
     _____Unaided Eye
     _____Binoculars
     _____Telescope – specify aperture_____

Comments_____
_____
_____

N   **E**   **W**   **S**

Draw or sketch the path of the satellite across the sky
relative to bright stars. The outer ring represents the horizon.

IMPORTANT - Place time "hacks" on at least two
locations on the satellite track, *including the time-zone
and daylight/standard time references*, for example
01:20:50 UTC, 19:30:40 EST, 23:10:59 PDT, etc.).   Observation Number (1-28) _____

Observation Objective (subject to change - check only one task per observation)

Active Payload (4)		Manned Spaceflight (3)			Multinational (5)	
1 _____						
2 _____		ISS	_____		Russia	_____
3 _____		Soyuz	_____		China	_____
4 _____		Dragon	_____		USA	_____
		Starliner	_____		India	_____
		Other	_____		France	_____
					Japan	_____
Rocket Bodies (4) 1 _____		Multipass (4)	1 a_____ b_____		Canada	_____
2 _____			2 a_____ b_____		Other	_____
3 _____						
4 _____					Constellations: (2)	_____
						_____
Formation (2) 1 a _____ b _____		Aged Elsets (4)	1 a_____ b_____			
2 a _____ b _____			2 a_____ b_____			

Observing Guidelines and Suggestions

General Rules (subject to change)
1) Provide one observation sheet for each observation task shown.
2) Be sure to state both the spacecraft name <u>and</u> id (Satellite Number or International Designation) on each observation sheet.
3) Sketch the path of the satellite's motion across the sky, being sure to include at least two time hacks and reference constellations, for example:

(Orion)

22:10:20 UTC

22:09:50 UTC
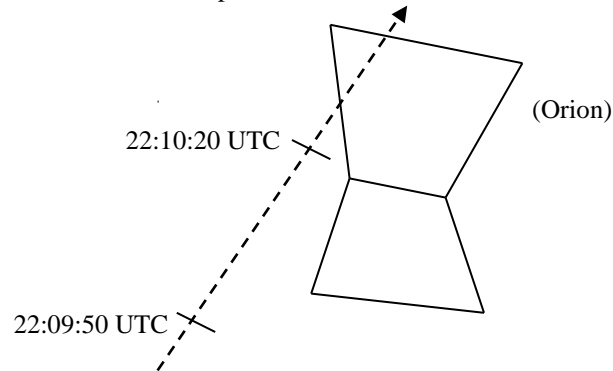
4) Record the time of observations as accurately as possible. Use WWV' the U.S. Naval Observatory web site or a GPS based watch to set your clock before observing.
5) Any single observation (pass) can only be used to satisfy one task, for example, observing the Soyuz flying in formation with the Space Station Alpha (ISS) can be used as a Soyuz observation and an ISS observation, OR as a formation pass, but not both.
6) If you have any questions contact the EOSOP Coordinator.
7) Verification of observations can be time consuming. After submitting *copies* of your observing logs, please allow 4 weeks to receive your EOSOP certificate. NOTE: Observing logs will NOT be returned - please submit copies only to:

> Brad Young
> EOSOP Coordinator
> 212 E. 16th St.
> Tulsa OK USA 74119
> (918) 629 9160
> allenb_young@yahoo.com

Active Payloads - Observe four *different* operational spacecraft. For example, HST, weather/imaging satellites, communications satellites, etc.
Rocket Bodies - Observe four *different* rocket bodies. These can often be seen as "flashers", and are usually denoted by "r/b" in the elset.
Multinational - Observe objects from five *different* countries. If the country is not listed, record the name of the country on the observation form.
Manned Spaceflight - Observe three *different* manned spacecraft, e.g. two Russian Soyuz and one space station, two SpaceX Manned Dragon and one Boeing Starliner, etc.
Multipass - Observe an object (2) on multiple passes on a single night (pass "a" and pass "b").
Aged Elsets - Observe an object twice, once with an elset less than 1 week old, and later (3 or more weeks after the first observation) using a prediction with the same, now older, elset (pass "a" and pass "b").
Formation - Observe 2 (or more) objects flying in formation, e.g. Soyuz and ISS prior to docking or after separation (object "a" and object "b"). Record multiple objects flying in formation on a single observation report form. Successfully completing a formation pass equals two 'observations'
Constellation – Observe 2 different satellites in the same constellation.