ABSTRACT

Satellite orbits are the paths that satellites follow while in space. Based on altitude, satellites in high earth orbit have a satellite position with an orbit that follows a point on the earth's surface called a geosynchronous orbit. Geosynchronous orbits have satellites that orbit the earth almost the same as the earth's rotation. There is a perturbation in the satellite orbit in the form of a disturbance phenomenon from external influences. Perturbation is the phenomenon of satellite orbits changing due to Earth's gravity, interference with the attraction of the moon, and solar radiation pressure. When perturbation occurs, it will cause the position of the satellite to shift from geosynchronous orbit. Satellites have been designated in the surveillance area of the control station. Therefore, it is necessary to make efforts to maintain the position of the satellite so that it remains in the surveillance area called station keeping. The control station will be responsible for keeping station keeping in order to keep the satellite at box keeping availability. The method is carried out using field observations. Observations made by observing the satellite box keeping area. With several parameters that must be considered in every satellite movement, the satellite will always be monitored from the satellite control earth station. The observed satellites especially for PT. Telkom Indonesia's satellite is in geostationary orbit. The satellites circulating in the geostationer orbit are Telkom MP-Sat, Telkom 3S and Telkom 2. Implementation of station keeping is carried out by maneuvering or burning thus to keep the satellite position in the availability box keeping. Preparation of the final report on field work is the responsibility of the author as a condition of having done field work at PT. Telkom Satelit Indonesia. In an effort to help improve report writing, it is necessary to have criticism and suggestions from readers. This is so that the report can be maximized further.

Keywords: Satellite, Station Keeping, Box Keeping