

SPACE OPERATIONS SYMPOSIUM (B6)
New Operations Concepts, Advanced Systems and Commercial Space Operations (2)

Author: Mr. Meidad Pariente
SPACEECIALIST, Effective Space Solutions, Israel, meidad@effective-space.com

Prof. Pini Gurfil
Asher Space Research Institute (ASRI), Israel, pgurfil@tx.technion.ac.il
Dr. Nevo Taaseh
Effective Space Solutions, Israel, nevo@effective-space.com

PERFORMING STATION KEEPING FOR COMSATS AS AN IN-ORBIT SERVICE

Abstract

Effective Space Solutions is a New-Space company, aiming to provide in-orbit services for communication satellites. One of the major services offered to customers is prolonging operational service life by performing station keeping maneuvers for EOL satellites.

The engineering challenge is to perform station keeping maneuvers (both North-South and East-West) to a 2000 kg satellite, with a 300 kg microsatellite without hindering or interfering with service

This paper will show an analysis of an operational mission of a combined North-South (NS) and East-West (EW) station keeping for at least twelve (12) months using the unique DeOrbiter design and docking arms mechanism. This unique design allow combined corrections and also an ability to compensate for joint Center of Gravity (jCoG) missalignments