**IBEX Goat Herder 19 June - 25 June 18**

Orbit# 410 PERIGEE (19 – 20 June 18)

The perigee contacts were nominal for command/telemetry and the inertial maneuver successful.

We experienced an ACE Reset on 17 June 18 and recovered on 19 June during the SSR\_Dump contact. CAR# 980 was issued to re-enable the FDC responses.

RAZOR# 642 was issued for the ACE Reset.

We successfully loaded the sweep tables for the orbit 411 Hi Background Test, and it will run for one full Orbit. (Orbit# 411). The Hi normal sweep table will be reloaded on June 29 (end of Orbit# 411).

Orbit# 411 APOGEE (25 June 18)

The apogee contact was nominal for command/telemetry and the inertial maneuver successful.

***Date*** ***Jday*** ***Time***  ***Station*** ***Razor#*** ***USNPR#*** ***PASS/FAIL***

 **Tuesday, June 19, 2018** 170 2145 USHI02 Pass

***Controller*** ***CAR1*** ***CAR2*** ***CAR3*** ***Radius Earth*** ***S-Band Rate*** ***Station PWR***

 SWesley 980 979 12 desc 160ksps 155 watts

 ***EBNO Values*** ***EBNO Values 3*** ***AGC Strength***

 ***EBNO Values 2*** ***AGC Strength 2***

 ***VC 0*** ***VC 0 Seq Err*** ***VC 1*** ***VC 1 Seq Err***  ***VC 2*** ***VC 2 Seq Err***

 1910 2 1307 0 25082 0

 ***VC 2 Write Pointer Start*** 31579 ***VC 2 Write Pointer End*** 31638

 ***VC 2 Read Pointer Start*** 6500 ***VC 2 Read Pointer End*** 31582

 Orbit#411 SSR\_Dump/Tracking Contact

 @FMI\_SetDownlink(320k)

SSR\_Dump.scr (new)

CAR# 979 Upload Orbit# 412 ATS 1.IBEX\_2018\_180\_o0412a\_v001 (812-915)

 CAR# 980 ACE Reset Recovery 1.FDC\_Enable\_disable.scr(as whole,enable)

reset\_master\_timer.scr

@FTG\_DumpBAckorbit(from start,0,0,0,0)

 IBEX Orbit# 410 PERIGEE Target Vectors 19 June 18 @2145 UTC

 CSS Angle TLM

 CSS Sun-Pointing Angle 0

 CSS Angle TLM 0.389668

 CSS Sun-Pointing Angle 0.779336

 19 June18 @2145

 Pre-Burn

 Thruster 1

 Thruster 2

 Thruster 3

 Thruster 4

 Post-Burn

 Thruster 1 272 19 June18 @2145

 Thruster 2 272

 Thruster 3 304

 Thruster 4 304

 Number of Pulses

 Thruster 1 272

 Thruster 2 272

 Thruster 3 304

 Thruster 4 304

 Thruster Pairs

 Thruster 1 & 2 544

 Thruster 3 & 4 608

 MPS Generated PERIGEE Target Vectors

 MPS Cmd Vector X 0.066062000

 MPS Cmd Vector Y 0.919133000

 MPS Cmd Vector Z 0.388368000

***Date*** ***Jday*** ***Time***  ***Station*** ***Razor#*** ***USNPR#*** ***PASS/FAIL***

 **Wednesday, June 20, 2018** 171 1245 USAK Pass

***Controller*** ***CAR1*** ***CAR2*** ***CAR3*** ***Radius Earth*** ***S-Band Rate*** ***Station PWR***

 SWesley 978 15 asc 40ksps 195 watts

 ***EBNO Values*** ***EBNO Values 3*** ***AGC Strength***

 ***EBNO Values 2*** ***AGC Strength 2***

 ***VC 0*** ***VC 0 Seq Err*** ***VC 1*** ***VC 1 Seq Err***  ***VC 2*** ***VC 2 Seq Err***

 714 5 1424 29 0 0

 ***VC 2 Write Pointer Start*** 32384 ***VC 2 Write Pointer End*** 32474

 ***VC 2 Read Pointer Start*** 31582 ***VC 2 Read Pointer End*** 31582

 Orbit# 410 Tracking Contact

CAR# 978 IBEX\_Hi Background Test and Lo Magneto tail season

 @CEU\_MODE(HVENG)

 @CEU\_MODE(HVSTANDBY)

 sweep\_table\_upload\_160922.scr (Table\_hi\_023456\_Background)

 @CEU\_MODE(HVENG)

 @CEU\_MODE(HVSCI)

 @FTG\_Dumpbackorbit(from start,0,0,0,0)

 stx,off

***Date*** ***Jday*** ***Time***  ***Station*** ***Razor#*** ***USNPR#*** ***PASS/FAIL***

 **Monday, June 25, 2018** 176 1400 USHI02 Pass

***Controller*** ***CAR1*** ***CAR2*** ***CAR3*** ***Radius Earth*** ***S-Band Rate*** ***Station PWR***

 SWesley 45 desc 2ksps 238 watts

 ***EBNO Values*** ***EBNO Values 3*** ***AGC Strength***

 ***EBNO Values 2*** ***AGC Strength 2***

 ***VC 0*** ***VC 0 Seq Err*** ***VC 1*** ***VC 1 Seq Err***  ***VC 2*** ***VC 2 Seq Err***

 234 4 0 0 0 0

 ***VC 2 Write Pointer Start*** 45951 ***VC 2 Write Pointer End*** 46011

 ***VC 2 Read Pointer Start*** 31582 ***VC 2 Read Pointer End*** 31582

 Orbit# 411 Apogee Tracking Contact

@FMI\_SetDownlink(40k)

@FMI\_SetDownlink (2k)

 IBEX Orbit# 411 APOGEE Target Vectors 25 Jun 18 @1400 UTC

 J2000 Spin Axis

 ECI X -0.000231

 ECI Y 0.916815

 ECI Z 0.399313

 Precession Maneuver

 MPS Diff 0.864 deg

 \*MPS Diff should be < 1.5\*

 Right Ascension - RA 90.014 deg

 Declination - DEC 23.535 deg

 IBEX Spin Axis vs. Sun Vector

 IBEX Sun Angle -3.977 deg

 -0.05090410 ActNor.EstInrToBdy[0]

 -0.54566700 ActNor.EstInrToBdy[1]

 -0.83281900 ActNor.EstInrToBdy[2]

 0.07790320 ActNor.EstInrToBdy[3]

 1213971068.000 ActNor.EstTime

 MPS Generated APOGEE Target Vectors

 MPS Cmd Vector X -0.009425000

 MPS Cmd Vector Y 0.921504000

 MPS Cmd Vector Z 0.388256000

CSS Angle TLM 0.389668

CSS Sun-Pointing Angle 0.779336

 19 June18 @2145

CSS Angle TLM 0.919623

CSS Sun-Pointing Angle 1.839246

 25 June18 @1415

Pre-Burn

Thruster 1 272 19 June18 @2145

Thruster 2 272

Thruster 3 304

Thruster 4 304

Post-Burn

Thruster 1 544 25 June18 @1415

Thruster 2 544

Thruster 3 592

Thruster 4 592

Number of Pulses

Thruster 1 272

Thruster 2 272

Thruster 3 288

Thruster 4 288

Thruster Pairs

Thruster 1 & 2 544

Thruster 3 & 4 576