



Solar Storm Deorbits Batch of Starlink Satellites

Michael Piper, Junior

Last Thursday, SpaceX launched a new batch of 49 Starlink satellites on one of their Falcon 9 rockets. While the launch was a success for the Falcon, an unexpected geomagnetic storm will cause the destruction of up to 40 of the satellites.

Starlink, owned by SpaceX, is a satellite constellation that provides internet coverage. While most other communication constellations fly in medium or geosynchronous earth orbits, Starlink inhabits the low earth orbit altitude of 550 kilometers. This low orbit enables lower distance-based latency for the customer, as well as quick decay from atmospheric drag to clear the orbit of debris.

After initially being deployed into a roughly 200 kilometer altitude parking

orbit, Starlink satellites typically slowly raise themselves to the 550 kilometer operational altitude over the course of a few weeks. Unfortunately for the most recent batch of satellites, a geomagnetic storm from a solar flare was underway as they reached their parking orbit. This storm caused the thermosphere – a layer of the upper atmosphere that encompasses most of low earth orbit – to expand, which in turn created significantly more drag on the Starlink satellites.

To minimize drag, SpaceX turned the bladelike satellites edge-on to the airflow, an attitude that precludes firing the ion thruster used for orbital maneuvering. SpaceX declared on Tuesday that most of the satellites are experiencing too much drag to avoid reentry.

Game of Thrones Book Review: It's All in the Details

Aislin Freedman, Sophomore

Winter is Coming. A classic line that most people have heard at some point in their lives. The line has so many meanings. In *Game of Thrones*, it's meant quite literally, as summer has lasted over six years, and it's getting colder in the seven kingdoms. At the same time, political conspiracies are unraveling, people are dying, and something in the far north, beyond a protective barrier wall and in a forest of secrets, is awakening.

Dragons are more than legend and myth; they are history. They have not been alive for years though, and the reign of the dragon kings has been usurped, leaving only two remaining heirs of the dynasty, outcasts and on a different continent. But does the blood of dragons still continue on with them? Or was their older brother the last true dragon.

Kings are challenged, alliances tested, and children forced to grow up to face harsh reality. The world of George R. R. Martin is complex, and seemingly slow paced, but every single detail ever mentioned will come back to haunt you later if you aren't paying attention.

Six direwolf pups are found, the exact number of children the Lord Stark has. The lord of the north, whose symbol on his banner is that of a direwolf, is lord of the largest and harshest territory in the whole continent. At a time when direwolves were thought extinct, is it a symbol?

A young girl struggles with a demanding and abusive, but ultimately powerless brother. She has to learn to find her own power, and learn who to trust, and what she really wants. The Lord Stark unravels a royal mystery that was pursued by his predecessor before the man died.

A dwarf, insulted and looked down upon even by his own family, gets wrapped up in the royal conspiracies of his sister the queen and his lord father.

A thousand stories. One story. Pay attention, keep a lookout, and expect nothing.

When you play the game of thrones, you win or you die. There is no middle ground.

So which will it be? Victory or death?

Poems: "Electricity" and "A Love Poem"

Madison Lofmark, Senior

Amira Warab

Electricity

A Love Poem

I watched a bug fly
into a green metal zapper
it's wings flapping
uneven yet determined
so desperate to reach the light
that it thought would be
it's salvation
a breath of love
blown by the hilt of a dagger
and I winced as it's
delicate wings
flashed in a pillar of smoke
while surrounding children
laughed sweet
with sugar-sticky hands
found myself asking
why a creature would
fly so close to the light
even as it set their wings ablaze
nature's undocumented Icarus.
then I saw you standing in the doorway
under the peeling stoop
with the glow of the nightlight
on sunken soft cheeks
and all at once knew.

Your love is something I compare
To the summer breeze in the heart of
Babylon
The jacket in the autumn air
Or the hand holding me tight till the
break of dawn
The fire in the winter despair
Lighting up the dark with every
spark and turn-on
The superfan in the concert
Cheering me on when the cast and
the crowd was gone
The oasis in the desert
My escape self - brought when the
drought had come upon
Your love is something I compare
To a love poem that goes on and on
and on.



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Music Review: Rapper Earl Sweatshirt

Sophia Bottari, Freshman

Rapper Earl Sweatshirt released his album *SICK!* on January 14, 2022. *SICK!* tells the story of the artist's past and present, experiencing the pandemic and struggling with addiction. Throughout these ten short tracks, Earl's emotionally painful past and present are recurring themes. Nostalgia of past friendships begins the album with the song "Old Friend." This track acknowledges his past relationships with his former friends in the group Odd Future.

Earl's nostalgia returns in "Fire in the Hole," which details a romantic relationship that he has removed himself from. Details about his past relationships take a sour turn when he relates one to sprinkling salt on a blood wound. Earl sounds like he is literally sick in the third track, "Sick!", which adds an extra layer of distress to the song.

The pain in Earl's voice in "Sick!" becomes more classy, though, in "Lye," where he casually raps over a unique trumpet instrumental.

SICK! references the pandemic as well as Earl's personal illnesses of addiction and depression. Earl seems to struggle to accept his success and impact on the music industry. His melancholic lyrics coordinate with the depressing tone throughout *SICK!*. However, the album lacks structure and instead goes on a cluttered rant. For the most part, *SICK!* reflects Earl's feelings of defeat, mentally and physically, but if you are interested in contemporary and experimental hip hop, this album deserves your attention.



Recent Updates at MHS:

1. Masks are now optional at the high school.
2. Mask Mandate back in place for 1 week after February Vacation (2/28 - 3/4).
3. Masks are still required on all school buses.

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