## How Atmospherics Make a Game About Survival

The game *Stationeers*, by RocketWerkz, is all about survival. One of the most core parts of the game, mentioned directly in the title, is the construction of a station. These stations are safe environments for the player where they can take off their space suit and breath in the internal atmosphere. This process: being able to create a breathable atmosphere amidst a toxic planet is one of if not the main challenge of the game. It has the communicative role of the different actions and tasks that can be preformed in a space, with those actions being presented to the player through obvious visual and audio cues. This process and its associated actions and game state presentations makes the player feel the weight of the games challenge, sensing and being affected by the danger outside, and only having a small haven within your stations walls creates the experience of struggling against the planet and eventually succeeding in gaining a small foothold.

First off, the actual process of creating a safe atmosphere. At it's core this process relies on collision logics. Like in reality, gas will expand from areas of low pressure to areas of high pressure, unless it collides with a solid object. This collision logic is easily understood since we experience it every day. Creating a sealed room and filling it with gas will obviously create a high pressure environment, something necessary to survive the 1% earth pressure atmosphere on Mars. The role of this system is also quite obvious: Being able to take off you helmet, grow food or light a torch all depend on your atmosphere, and most people within the games target demographic can intuit those roles quite well.

While intuition is great, there are several ways the game state presentation changes to show the player which roles the atmospheric process is allowing. Most noticeably is the in game audio. Sound is muffled relative to pressure, from almost mute in a vacuum to a "normal" level when around 1 atm. This means without even checking the gauges at the bottom of the screen, a player can tell when pressure has reached a satisfactory level. Temperature is also key to survival, and this is shown through either a frost forming on the players visor (seen from a first person perspective) for cold temperatures, or a heat distortion visual effect for high temperatures. These effects, like the audio muffling, show when the environment is in a state unsuitable for most tasks needed for survival. Once the player is in a game state void of these glaring audio and visual cues they can take off their helmet to eat, drink, and then plant food for later. Additionally, there is a particle effect which shows the flow of gas, which can alert a player to a breach in their atmosphere.

The communicative roles and presentation of *Stationeers* creates a player experience where you are constantly vigilant for these alarming cues. Hearing a sudden drop in audio immediately devastates any player as they realize the room they spend an hour pressurizing and bringing to temperature has just vented onto the freezing surface of Europa, leaving the plants that would have been their next meal to die within minutes. Seeing distorted waves while smelting alerts you that your furnace is on far too high (It's possibly about to explode). These experiences are what makes *Stationeers* so challenging and interesting. Mistakes are immediately telegraphed by the game state, giving a brief period to identify the source of the problem, solve the issue and repair the damage. Failure to do so has drastic consequences that are immediately

noticeable through this one process. These player experiences are what make you feel like you are truly fighting to survive, one wrong move can set you 10 steps backward. It's what makes *Stationeers* one of the few survival games where I truly felt like survival was a challenge in and of itself. You don't survive by fighting off bad guys or monsters; your only enemy is nature itself.