Hypothetical DLC concept created for GTA Online. Concept is titled *GTAOnline Spy Satellite DLC*.

Concept presented in this document is the Attack Drone Swarm Service provided by the Shadow Hacker Group through the spy satellite.

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Brief Disclaimer

The DLC concept that is featured in this software development document is fictional. Since it is intended for GTA Online, a game that is owned by Rockstar Games, it will feature some aspects or concepts of their game to help me illustrate the DLC concept.

Any imagery that is owned by Rockstar Games, is only used by me for educational purposes, to help explain a concept that I am proposing.

No type of illegal or unauthorized modification to GTA Online is being proposed in this document. I am only reusing certain aspects of their game in a hypothetical manner. I am also including other components for addition into GTA Online.

Any other images found in this document are used solely for educational purposes and are property of their respective owners. Using any images from public sources does not mean I am claiming ownership over the images.

I will also use the GTA Online logo to help me illustrate some of the concepts I am proposing.

Accessing this presentation through my LinkedIn page (or any other way) does not give you the permission to distribute it nor claim it as your own work.

No relation to Rockstar Games nor GTA Online. Thank you.

Sincerely,

Ed Orejel, MSCS

Vision Statement

Attack Drone Swarm

Shadow Hacker Group

In designing the *GTA Online Spy Satellite DLC*, a few potential optimizations were discovered. The optimizations in this document use the in-game cell phone that is provided to the players in conjunction with another component found in GTA Online – the drone.

The players in GTA Online will use the spy satellite to launch an attack drone swarm on a player, that is targeted through their in-game cell phone's latitude and longitude coordinates, respectively.

The Shadow Hacker Group will obtain these coordinates from the spy satellite, respectively.

The Attack Drone Swarm gameplay concept is very straightforward. It is a swarm of drones that are weaponized and used to target a player. The delivery of the attack drone swarm can be done in various ways.

The Attack Drone Swarm would attack the target player automatically, once the service is requested by a player.

The various delivery methods and the various weapons that could be used by the attack drone swarm to attack the player, will be discussed in this presentation, but in the slides that follow.

Attack Drone Swarm

Tactical Truck

Alternate Image of Tactical Truck

Shadow Hacker Group

The Attack Drone Swarm can currently be created in GTA Online without the addition of a spy satellite.

The addition of the spy satellite to help track players through their in-game cell phones, is a fun concept that allows everything in the game to be logically linked without implying it. That is, adding the spy satellite "ties" everything together in an explicit and logical (believable) way.

The Tactical Truck and the Attack Drone Swarm could be programmed by Rockstar Games to be able to home in on a targeted player, so that the Attack Drone Swarm knows to swarm the player after being launched or dispatched.

The entire GTA Online Spy Satellite DLC is built on the premise of explicitly connecting the telecommunications systems (cell phones, Internet, etc.), all of the computers whether they are in cars or in homes or any place else, all of the security cameras and all of the digital devices of any kind that could be weapons or turned into cameras. Thank you.
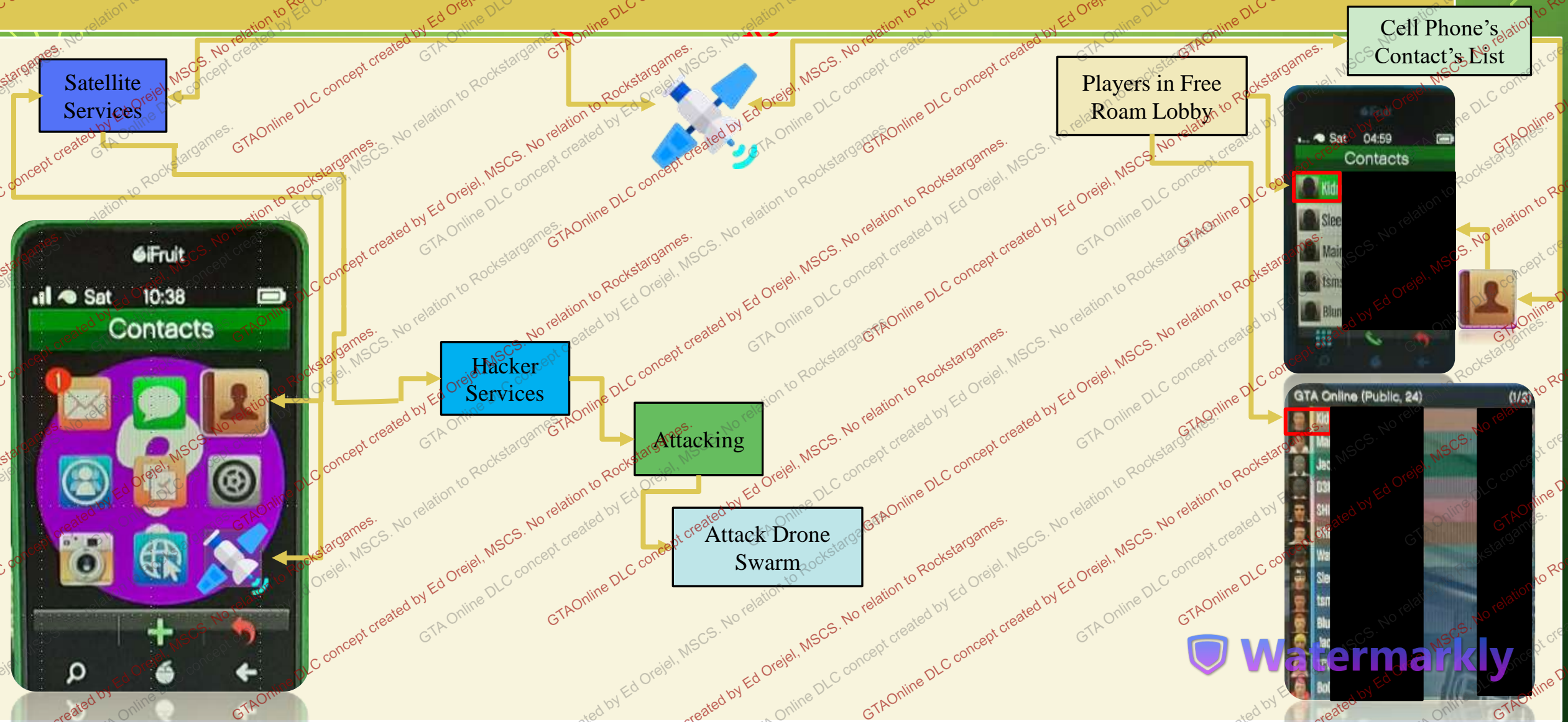
Sincerely,

Ed Orejel, MSCS

Satellite Services

Cell Phone's Contact's List

Players in Free Roam Lobby

Hacker Services

Attacking

Attack Drone Swarm

Contacts

GTA Online (Public, 24)

Attack Drone Swarm

Spy Plane Air Drop

Ballistic Armor

Shadow Hacker Group

Attack Drone Swarm: this function can be enabled using current in-game components. A key issue is how to deliver the Attack Drone Swarm to a targeted player, once the service has been requested by a player, through the spy satellite.

Delivery System 1 – Covert Spy Plane Air Drop System similar to Ballistic Armor Delivery System – the system used to deliver the Ballistic Armor to the player can be used to deliver the Attack Drone Swarm. The spawning of the drone swarm and its effects would have to be created.

A spawn algorithm for a <u>single large crate</u>, storing multiple attack drones inside could be the following:

1. A single large crate lands near target player via air drop from a covert spy plane.
2. Immediately after crate impact, crate breaks into pieces, colored smoke spawns in.
3. Broken crate spawns away.
4. Attack Drone Swarm spawns in while there is still smoke visible to the player. This is to create the idea that the Attack Drone Swarm was in the single large box that was just air-dropped.
5. Attack Drone Swarm attacks the target player after all drones have spawned in. Colored smoke spawns away.
6. The player would be attacked with weapons attached to the drones.

Attack Drone Swarm – Delivery Method 2 – Covert Spy Plane Air Drop – Multiple Smaller Crates Spawn Multiple Attack Drones

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Attack Drone Swarm

Spy Plane Air Drop

Ballistic Armor

Shadow Hacker Group

Attack Drone Swarm: this function can be enabled using current in-game components. A key issue is how to deliver the Attack Drone Swarm to a targeted player, once the service has been requested by a player through the spy satellite.

Delivery System 2 – Covert Spy Plane Air Drop System similar Ballistic Armor Delivery System – the system used to deliver the Ballistic Armor to the player can be used to deliver an attack drone swarm. The spawning of the drone swarm and its effects would have to be created.

A spawn algorithm for an air drop of <u>multiple smaller crates</u>, each storing one attack drone inside, could be the following:

1. Multiple small crates land near target player via air drop from covert secret spy plane.
2. Immediately after crates impact, crates breaks into pieces, colored smoke spawns in.
3. Broken crates spawn away.
4. Attack drones spawn in while there is still smoke visible to the player. This is to create the idea that the Attack Drone Swarm originated from the multiple smaller boxes that were air-dropped.
5. Attack Drone Swarm attacks the target player after all of them have spawned in. Colored smoke spawns away.
6. The player would be attacked with weapons attached to the drones.

Attack Drone Swarm

Spy Plane Air Drop

**Ballistic Armor**

Shadow Hacker Group

Delivery System 1 and Delivery System 2 Notifications: The player that requests the Attack Drone Swarm could receive a notification that the Attack Drone Swarm Service request has been dispatched.

A new notification could be received by the requesting player, once the Attack Drone Swarm has begun attacking the player.

Sample notifications for the Ballistic Amor is shown below in rectangle image titled Image #1:

Image #1

A crate 🛸 containing the Ballistic Armor and Minigun has been dispatched.

Sample notifications for the Attack Drone Swarm could be as shown below in rectangle image titled Image #2:

Image #2

A crate containing an Attack Drone Swarm has been dispatched. Attack incoming.

The notification will be adjusted depending on the type of crate that is air dropped from the covert spy plane. It could be a single large crate, or multiple smaller crates. The notification is not sent to the player, if the Tactical Truck Delivery System is used and the player is the one that can launch the drone swarm. Notifications could be sent for every other Attack Drone Swarm Delivery System.

Attack Drone Swarm – Delivery Method 3 – Tactical Truck Delivery Method 1 – Delivery System 3.1 – Many Missile-Projectile Canisters

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Attack Drone Swarm

Tactical Truck

Attack Drone Swarm

Shadow Hacker Group

Attack Drone Swarm: this function can be enabled using current in-game components. A key issue is how to deliver the Attack Drone Swarm to a targeted player, once the service has been requested by a player through the spy satellite.

Delivery System 3.1 – Tactical Truck:

A tactical truck can be used to launch an attack drone swarm. This can be done in a few ways. I will describe two.

The first spawn algorithm for an attack drone swarm launched from a tactical truck could be the following:

1. The tactical truck can be procured by the player and modified in the Mammoth Avenger or the Facility or another location. It is assumed that the player will weaponize the tactical truck by modifying it. Alternatively, the tactical truck could be modified in Los Santos Customs.
2. After the tactical truck has been weaponized by the player, the tactical truck will have the ability to home in on a player's cell phone coordinates because they have been linked to the spy satellite by the Shadow Hacker Group.
3. The player will have the option of firing multiple missile-projectile canisters that will contain a single attack drone inside of them. Upon impact near the targeted player, the attack drones will swarm to the player to attack with their weapons.
4. The missile-projectile canisters will need spawn and de-spawn algorithms similar to the crates that will get air dropped by the Covert Spy Plane.

Attack Drone Swarm – Delivery Method 3 – Tactical Truck Delivery Method 2 – Delivery System 3.2 – Single Large Missile-Like Projectile Canister

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Attack Drone Swarm

Tactical Truck

Single Large Projectile

Shadow Hacker Group

Attack Drone Swarm: this function can be enabled using current in-game components. A key issue is how to deliver the Attack Drone Swarm to a targeted player, once the service has been requested by a player through the spy satellite.

Delivery System 3.2 – Tactical Truck:

A tactical truck can be used to launch an attack drone swarm. Two ways of accomplishing this task will be described.

The second spawn algorithm for an attack drone swarm launched from a tactical truck could be the following:

1. The players purchase a tactical truck that launches attack drone swarms. The truck could also have front-facing machine guns.
2. The players upgrade the tactical truck at Los Santos Customs to unlock attack drones.
3. The attack drones are launched from a missile-like projectile that is fired at the player.
4. The missile-like projectile can home in on a player's in-game cell phone coordinates.
5. Upon firing the missile-like projectile at the player, the missile-like projectile travels to the player's location.
6. Upon impact, the missile-like projectile breaks and spawns away. The missile-like projectile does not damage the player.
7. The attack drone swarm spawns in as the missile-like projectile breaks and spawns away.
8. This algorithm gives the behavior that the attack drone swarm was fired from the tactical truck and delivered to the player using a missile-like projectile.
9. The drones swarm the targeted player and attack using weapons. The weapon types will be featured in upcoming slides.

Attack Drone Swarm

Tactical Truck

Alternative View of Tactical Truck

Shadow Hacker Group

Attack Drone Swarm: this function can be enabled using current in-game components. A key issue is how to deliver the Attack Drone Swarm to a targeted player, once the service has been requested by a player through the spy satellite.

Delivery System 3.3 – NPC-Driven Tactical Truck:

Alternatively, an NPC-driven tactical truck can be used to fire off the Attack Drone Swarm to a targeted player. In this way, the service functions similarly to some of the in-game services such as the Merry Weather Mercenaries.

The NPCs would fall under the purview of the Shadow Hacker Group. Thus, military NPCs would not be driving the tactical truck.

Attack Drone Swarm – Delivery Method 4 – Large Missile-Like Projectile Air Dropped from the Sky (Spy Plane Assumed, Not Visible)

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Attack Drone Swarm

Large Missile-Like Projectile

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Attack Drone Swarm: this function can be enabled using current in-game components. A key issue is how to deliver the Attack Drone Swarm to a targeted player, once the service has been requested by a player through the spy satellite.

Delivery System 4 – Air Drop by Cover Spy Plane that is not Visible to Players

Another method to deliver the Attack Drone Swarm to a targeted player could be via an air drop, but the covert spy plane will not be visible. The spy plane is assumed to have flown by and made the air drop containing the attack drones. Using this method, the attack drones can fall from the sky in crates, or in a parachute attached to a missile-like canister.

The Attack Drone Swarm would swarm the targeted player and attack them with weapons. Very similar to the other methods that involve the Attack Drone Swarm being air dropped.

Attack Drone Swarm

Invade and Persuade RC Tank

Shadow Hacker Group

The Attack Drone Swarm can be weaponized. The types of weapons that can be enabled on each drone, could be the following:

- Lasers
- Small Caliber Missiles
- Small Caliber Bullets
- Flame Thrower

The Invade and Persuade RC Tank has a laser weapon that is enabled on it, when players go to Los Santos Customs for the upgrade. Similarly, for the Attack Drone Swarm, the players would upgrade their drone swarm with a laser attachment at the appropriate modification location.

The Plasma Cannon (laser) weapon attachment on the Invade and Persuade RC Tank is shown on the image to the left. The Attack Drone Swarm would attack the targeted player with a similar, but less lethal Plasma Cannon to balance out the swarm of drones firing all of their lasers at the targeted player.

The balancing of all the weapons would have to be considered, so that the targeted player is not overpowered by a weaponized Attack Drone Swarm.

Attack Drone Swarm – Drone Weapon System to Attack the Targeted Player – Weapon 2 – The Small Missiles (Rocket Launcher)

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Attack Drone Swarm

Invade and Persuade RC Tank

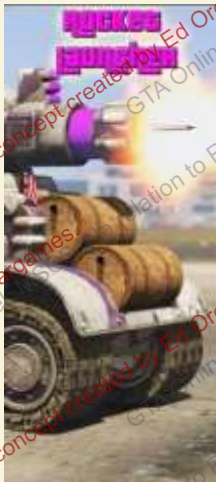**Shadow Hacker Group**

The Attack Drone Swarm can be weaponized. The types of weapons that can be enabled on each drone, could be the following:

- Lasers
- Small Caliber Missiles
- Small Caliber Bullets
- Flame Thrower

The Invade and Persuade RC Tank has a Small Missile (Rocket Launcher) weapon that is enabled on it, when players go to Los Santos Customs for the upgrade. Similarly, for the Attack Drone Swarm, the players would upgrade their drone swarm with a Small Missile (Rocket Launcher) attachment at the appropriate modification location.

The Small Missile (Rocket Launcher) weapon attachment on the Invade and Persuade RC Tank is shown on the image to the left.

Attack Drone Swarm

Invade and Persuade RC Tank

Shadow Hacker Group

The Attack Drone Swarm can be weaponized. The types of weapons that can be enabled on each drone, could be the following:

- Lasers
- Small Caliber Missiles
- Small Caliber Bullets
- Flame Thrower

The Invade and Persuade RC Tank has a Flame Thrower weapon that is enabled on it, when players go to Los Santos Customs for the upgrade. Similarly, for the Attack Drone Swarm, the players would upgrade their drone swarm with a Flame Thrower attachment at the appropriate modification location.

The Flame Thrower weapon attachment on the Invade and Persuade RC Tank is shown on the image to the left.

Attack Drone Swarm

Invade and Persuade RC Tank

Shadow Hacker Group

The Attack Drone Swarm can be weaponized. The types of weapons that can be enabled on each drone, could be the following:

- Lasers
- Small Caliber Missiles
- Small Caliber Bullets
- Flame Thrower

The Invade and Persuade RC Tank has a Small Caliber Machine Gun weapon that is enabled on it, when players go to Los Santos Customs for the upgrade. Similarly, for the Attack Drone Swarm, the players would upgrade their drone swarm with a Small Caliber Machine Gun attachment at the appropriate modification location.

The Small Caliber Machine Gun weapon attachment on the Invade and Persuade RC Tank is shown on the image to the left.