Game Design Document: **Legendary Sky** (Working Title)

Yellow Highlights are items that are unrefined game elements that may be unnecessary and/or may be removed.

Summary:

Horizontal SHMUP game play which is a spiritual fusion of the UN Squadron and Aerofighters assault series. The game's main features are the Aces and the special abilities unique to each. These unique Aces, compounded with the ability to purchase and upgrade a variety of aircraft will add to a wide variety of play mechanics and player customization, rarely seen in the SHMUP genre.

Explanation of Game play Mechanics:

ACES

When the player begins a new game, he selects an Ace (a.k.a. a pilot), which will act as the player's avatar throughout the game. There will be at least 6 Aces, each from a different country that participated in WW II. *Current countries: USA, Britain, Russia, France, Germany, Italy, Japan*

Each Ace has a varying distribution of attributes and a unique Ace Skill. The attribute points are separated into 4 categories: ATK (Offense), DEF (Defense), SPD (Maneuverability), and SPC (Special).

- *ATK (Offense): The higher the aces ATK attribute, the more damage done with an attack.*
- *DEF (Defense): The higher the DEF attribute, the more damage the player can receive before their plane is destroyed.*
- *SPD (Maneuverability): The higher the SPD attribute, the quicker a plane can maneuver on screen.*
- *SPC (Special): The higher the SPC attribute, the quicker the ACE GAUGE will fill in combat. This attribute also increases the potency of the Ace Skill.*
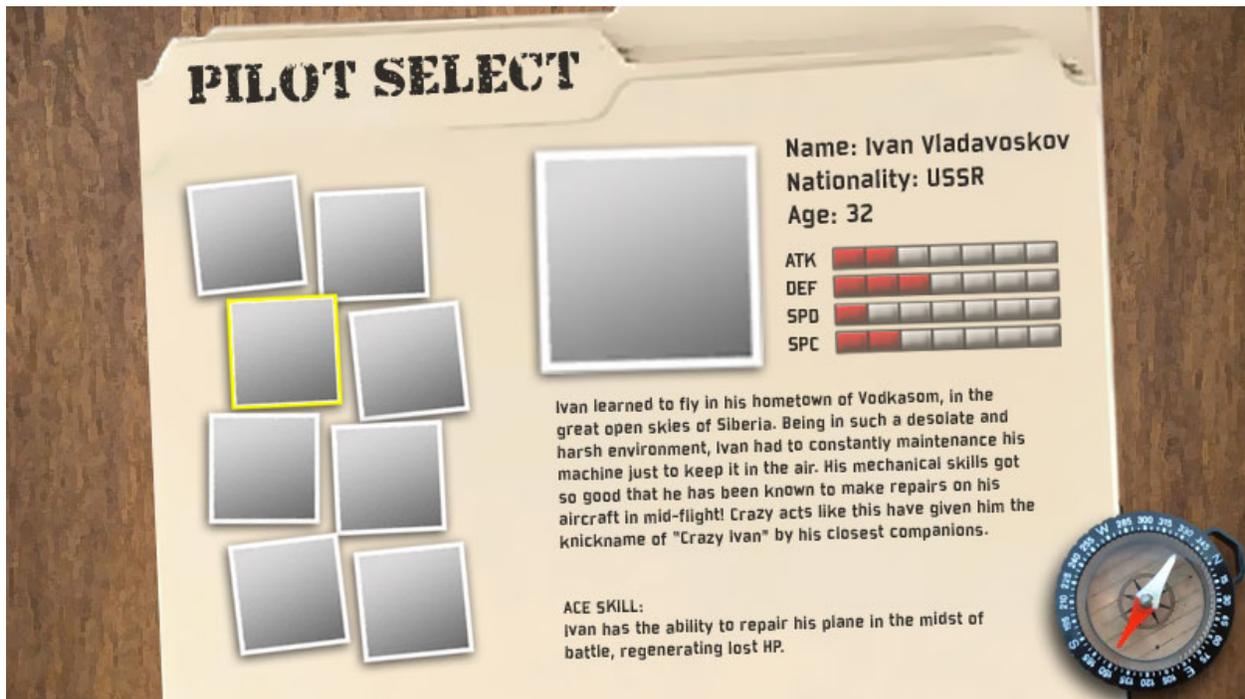

Illustration of Pilot Select Screen showing pilot bios and attributes distribution.

ACE SKILL

Each "Ace" will have a unique ACE SKILL (a.k.a. AS). These skills are as unique as the Aces themselves and will drain the ACE GAUGE (a.k.a. AG) when activated. The AS can be separated into three categories: Offense, Defense, and Support. Below are some examples of AS.

Offensive:
- *Attack power is temporarily boosted until AG is drained (approximately 15 seconds).*
- *Firing arc of main gun is temporarily increased to attack a wider area until the AG is drained (20seconds).*
- *Unmanned "drone planes" come in and assist the player until the AG is drained (15 seconds).*

Defensive:
- *Plane's HP can be restored in combat. The higher the AG when activated, the more HP that is restored.*
- *Boost the plane's maneuverability significantly until the AG is drained (15 seconds).*
- *Make the plane invincible until the AG is drained (5-10 seconds).*
- *Significantly boost the plane's DEF until the AG is drained (25 seconds).*

Support:
- All Attributes are boosted by +1 for the duration of the skill.
- Increase the amount of money earned per kill for the duration of the skill.

ACE GAUGE

The Ace Gauge (AG) is a meter used to control the use and potency of a pilot's Ace Skill. The AG is charged in combat when the player makes successful attacks on the enemy. The more damage delivered, the quicker the AG will charge. The SPC attribute also affects the speed with which the AG charges. The AG is segmented into three brackets. lvl 1, lvl 2, and MAX. An Ace Skill cannot be initiated if the AG is lower than lvl 1. Depending on the AS used, the AG may be consumed in different ways.
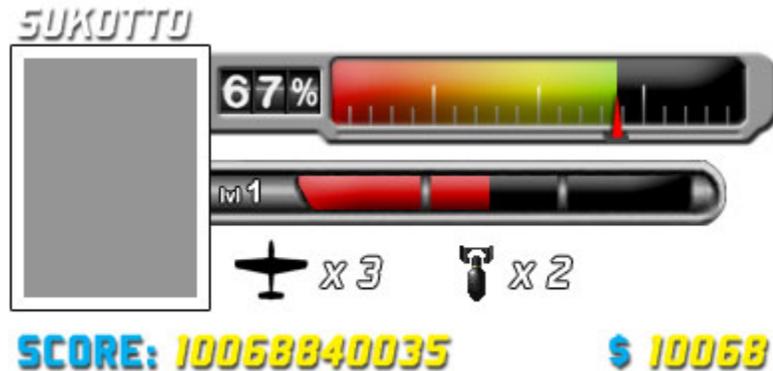

Illustration showing the pilot HUD for in-game play. Pilot's image, HP gauge, AG gauge, the player's XBox Live name, and the number of lives and bombs remaining, along with the current score and money earned are displayed here.

After the player selects their Ace and they're taken to the OPERATIONS MAP. Here the player can see the entire operations area masked by the "fogs of war". This means that the player can only see or engage levels within his current operational range. The player begins at their base in the NW corner of the map. From here they only have access to 1 level. After completion of this first mission, the player than gets an expanded view from the latest mission location completed. This will allow the player to initiate "mission hoping". Mission Hopping describes the ability of the player to choose which missions to engage in and which route they wish to take to the enemy HQ.

Mission A01: Eliminate Coastal Defenses

Alright, time to stretch those wings. Head out and crush the enemy's coastal defenses so our ground troops can establish a foothold. Expect heavy air resistance and some ground resistance once you reach the coastline.

Target: Southern Supply Depot

This is the enemy's southern supply depot. Taking this out will reduce their fighting strength and allow us to push deeper into their territory. Expect mostly ground-based resistance with some light air support.

Illustrations showing campaign map. Player starts off with Mission 1, but after that can "mission hop" and select their own path to the end stage.

After the player selects an "Ace", he will be taken to the Aircraft Selection screen. Here the player will be shown a list of aircraft available. Initially there is only 1 plane available, and this is dependent on which ACE was selected. For example, If the USA Ace is chosen, the starting aircraft is the P-51D Mustang. If the British Ace is selected, his starting aircraft is the Spitfire. As the player completes missions, they will earn money, which can then be used to purchase new aircraft or upgrade existing aircraft. Each aircraft will have a list of attributes, ATK, DEF, SPD, SPC. These attributes have identical affects to those of the Aces. The attributes of the aces will be added to the attributes of the plane to determine the overall attributes of the player in combat. Each plane has a unique gun type, firing arc, and rate of fire. This makes certain planes more useful on different missions.

Current List of Aircraft: P-40 Warhawk, P-51 Mustang, P-38 Lightning, F4-Corsair, Supermarine Spitfire, Hawker Hurricane, ME-109, Fw 190 Würger, Zero, Ki-43 Hayabusa, M.S. 406, Dewotine D.520,

PURCHASING AIRCRAFT / UPGRADES

The point system in this game goes hand-in-hand with currency to purchase new aircraft and upgrades. Each time a player destroys an enemy, they are rewarded with points. The more valuable the target, the higher the point value rewarded. The point to currency ratio may vary depending on difficulty, the Ace being used, or other factors. But generally it will be a 100 : 1 ratio of points per dollar earned. Other factors will increase or decrease the points/currency rewarded at the end of the level: Total damage received, number of Ace Skills used, number of Supports used, etc.
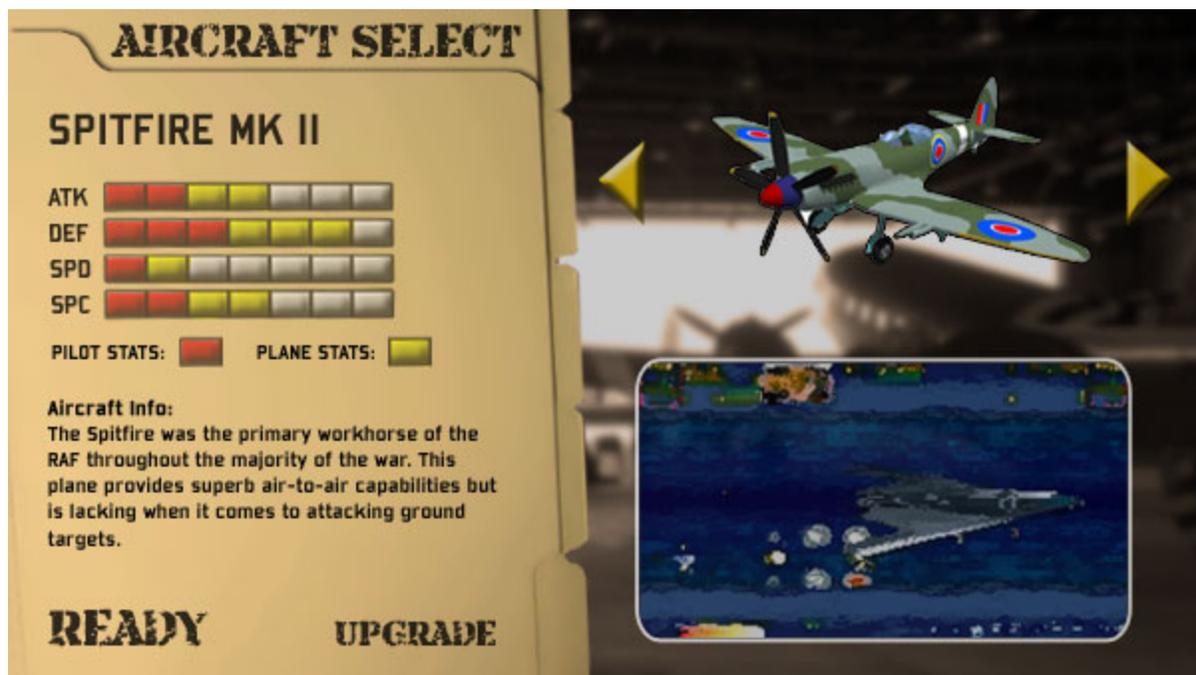

Illustration showing aircraft selection menu. The image in the bottom right is a demo of how the plane acts in-game. If the player selects a plane they do not own, a BUY option will be displayed in the bottom left of the screen instead of READY.