

**Team OwOwO : Nelson Zhang, Avisek Pandit, Ting Chen**

**IntroCS Period 6**

**2020-04-19**

**Lab 1: On Wednesdays We Wear Pink**

## **Flight-Chan And X-Kun**

### **Flight-Chan Specifications :**

**CPU:** AMD Ryzen 9 3900X 3.8 GHz 12-Core Processor **\$434.00**

**CPU Cooler:** be quiet! Dark Rock Pro 4 50.5 CFM CPU Cooler **\$86.46**

**Motherboard:** MSI MPG X570 GAMING PLUS ATX AM4 Motherboard **\$169.99**

**Memory:** G.Skill Ripjaws V Series 32 GB (2 x 16 GB) DDR4-3200 Memory **\$139.99**

**Storage:**

- Samsung 860 Evo 500 GB 2.5" Solid State Drive \$89.99
- Seagate BarraCuda 4 TB 3.5" 5400RPM Internal Hard Drive **\$89.99**

**Video Card:** Asus GeForce RTX 2080 Ti 11 GB Dual OC Video Card **\$1179.99**

**Case:** NZXT H510 ATX Mid Tower Case **\$69.99**

**Power Supply:** Cooler Master MWE Gold 650 W 80+ Gold Certified Fully Modular ATX Power Supply **\$99.99**

**Operating System:** Microsoft Windows 10 Home OEM 64-bit **\$106.99**

**Monitor:** AOC C24G1 24.0" 1920x1080 144 Hz Monitor **\$279.00**

**Keyboard:** Corsair K55 + HARPOON RGB Wired Gaming Keyboard + Optical Mouse **\$59.99**

**Mouse:** Razer DeathAdder Elite Wired Optical Mouse **\$39.99**

**Headphones:** Kingston HyperX Cloud Stinger Headset **\$49.99**

**Speakers:** Logitech Z333 40 W 2.1 Channel Speakers **\$79.99**

**Price : \$ 2739.33**

**Price After Government Theft: \$ 2982.46**

<https://pcpartpicker.com/list/C646L2>

**But an XBox One is \$299.00...**

## **X - Kun Specifications:**

**CPU:** AMD Ryzen 7 2700X 3.7 GHz 8-Core Processor **\$285.98**

**Motherboard:** MSI MPG X570 GAMING PLUS ATX AM4 Motherboard **\$169.99**

**Memory:** Corsair Vengeance LPX 16 GB (2 x 8 GB) DDR4-3200 Memory **\$81.99**

**Storage:** Seagate Barracuda Compute 2 TB 3.5" 7200RPM Internal Hard Drive **\$50.99**

**Video Card:** MSI GeForce RTX 2070 8 GB Video Card **\$419.99**

**Case:** Fractal Design Focus G ATX Mid Tower Case **\$52.99**

**Power Supply:** Thermaltake Toughpower GX1 RGB 500 W 80+ Gold Certified ATX Power Supply **\$59.99**

**Operating System:** Microsoft Windows 10 Home OEM 64-bit **\$106.99**

**Monitor:** MSI Optix G241 23.8" 1920x1080 144 Hz Monitor **\$189.99**

**Keyboard+Mouse:** Corsair K55 + HARPOON RGB Wired Gaming Keyboard With Optical Mouse **\$59.99**

**Headphones:** Kingston HyperX Cloud Stinger Headset **\$49.99**

**Speakers:** Logitech Z213 7 W 2.1 Channel Speakers **\$28.99**

**Price: \$1577.84**

**Price After Government Theft: \$1717.87**

<https://pcpartpicker.com/list/GsWXWb>

<b>Parts</b>	<b>XBox One</b>	<b>XBox Series X</b>	<b>Recommended for MFS2020 (gfinityesports.com)</b>	<b>Flight-Chan</b>	<b>X-Kun</b>
<b>CPU</b>	AMD Jaguar 8th Gen  1.75 GHz 8-Core	  3.8 GHz 8-Core	AMD Ryzen 7 1700  3 GHz 8-Core	AMD Ryzen 9 3900X  3.8 GHz 12-Core	AMD Ryzen 7 2700X  3.7 GHz 8-Core
<b>RAM</b>	  8 GB DDR3-2133	  16 GB GDDR6	  12 GB	G.Skill Ripjaws V Series  32 GB DDR4-3200	Corsair Vengeance LPX  16 GB DDR4-3200
<b>Video Card</b>	AMD Xbox One GPU  853 Mhz 8 GB	Navi RDNA 2 GPU  1825Mhz	MSI Radeon RX 470 4 GB Gaming X Video Card  1254 Mhz 4 GB	Asus GeForce RTX 2080 Ti 11 GB Dual OC Video Card  1350 Mhz 11 GB	MSI GeForce RTX 2070 8 GB Video Card  1410 Mhz 8 GB
<b>Total Price:</b>	<b>\$299.00</b>	<b>N/A</b>	<b>N/A</b>	<b>\$ 2982.46</b>	<b>\$ 1717.87</b>

**CPU:** AMD Ryzen 7 2700X 3.7 GHz 8-Core Processor **\$285.98**



The CPU is responsible for calculating, directing, and processing the data in a computer. Since Microsoft Flight Simulator 2020 wants to let you fly anywhere in a recreation of the real world, it requires a good CPU to process all that data. The recommended CPU for running MFS2020 is a Ryzen R5 1600 ( according to game-debate ) or a Ryzen 7 1700 ( according to GfinityEsports ), the Ryzen 7 2700 beats both as a newer and stronger version in the Ryzen line so in case the estimates are wrong, Hikaru will still have a good amount of leftover CPU power to make MFS2020 run seamlessly.

**Power Supply:** Thermaltake Toughpower 500 W 80+ Gold Certified ATX Power Supply **\$64.98**



The Powersupply is chosen after all the other parts are picked out to ensure there's enough power for the rest of the PC. PCPartPicker estimates the wattage needed is 394, but getting a 400 watt power supply is cutting it a bit too close. While it's a little bit more expensive compared to a bronze rated power supply for the same wattage, it's actually cheaper in the long run because it saves money on Hikaru's electricity bill with more efficient transfer of energy.

**Monitor : MSI Optix G241 \$189.99**



The MSI Optix G241 is a great choice for this pc because of many reasons. Firstly, the display itself is 1920 by 1080p and has an IPS panel. IPS panels have great color accuracy and viewing angles, meaning looking at the monitor from the left or the right compared to the center will not change the colors. Secondly, there is a 1ms response time, and the refresh rate is 144 hertz. This means that the gameplay of Microsoft Flight Simulator will be smoother.

**Keyboard + Mouse : Corsair K55 + HARPOON \$59.99**



The Corsair K55 + HARPOON comes with a keyboard, and a mouse. The keyboard and mouse both have RGB lights, and are customizable to your liking. The keyboard and mouse also have 6 programmable macros. All in all, it's a good deal for the price.

**Speakers : Logitech Z213 7 W 2.1 Channel Speakers \$28.99**



According to multiple reviews, these speakers are great especially for their price. They come with 2 satellites, 1 subwoofer, 1 3.5mm input, and a headphone jack. The satellite speakers carry the mid-bass, and the subwoofer is the base only speaker. You can also plug in your headphones into the wired pod, or control the speakers from there.

**Headphones : Kingston HyperX Cloud Stinger Headset \$49.99**



Headphones, in case you don't want people to hear what you're hearing. There is also a mic built into the headset so you can communicate with friends if you'd like to.

**Video Card : MSI GeForce RTX 2070 8 GB Video Card \$426.98**



The video card is a very important part of the PC. It generates the images that we see on our monitors. For Microsoft Flight Simulator 2020, the recommended video card was a GTX 1070, or better. We decided that the RTX 2070 was a better choice, because it is 25% better according to UserBenchmark. This video card will definitely let Hikaru play Microsoft Flight Simulator 2020 seamlessly.

**Motherboard:** MSI MPG X570 GAMING PLUS ATX AM4 Motherboard **\$169.99**



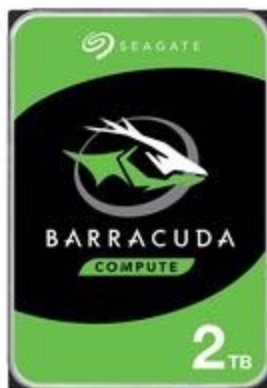
The motherboard is essential to link the various parts of the computer together. Our motherboard has 4 memory slots which allow for RAM insertion. Most of the reviews were positive and the people that bought it seemed pleased with the motherboard. Key factor was easy to install.

**Memory:** Corsair Vengeance LPX 16 GB (2 x 8 GB) DDR4-3200 Memory **\$81.99**



There are 2x8 GB sticks which is sufficient in allowing to run FS2020 smoothly without much lag. Plus, a heat spreader is included which distributes the heat and makes sure it doesn't heat up too much.

**Storage:** Seagate Barracuda Compute 2 TB 3.5" 7200RPM Internal Hard Drive **\$50.99**



The Xbox One X starts off with 1TB of storage. Thus, 2TB of storage will allow for our customer to save all the necessary files that are needed for running FS2020.

**Operating System:** Microsoft Windows 10 Home OEM 64-bit **\$106.99**





We chose an OS that was compatible with the rest of the pc parts. It has a maximum supported memory of 128 GB, which is nowhere close to that amount. In the reviews, the users seem frustrated that when an update happens, some settings change, but it can be easily changed back.