



**ACTIVITY: ECLSS KLASS Console Loops**

**ECLSS KLASS Console Air Loop**

**Big Question:** *What are the acceptable values of the Air Loop components for KLASS?*

During the simulation countdown, you will be playing the role of the electrical engineer responsible for monitoring the ECLSS. During the launch countdown, please record the values identified on the display during the activity. At any time a value reaches a level that is out of range it will begin to flash red. **Issue a hold to the countdown.** You can correct the problem by inputting an accepted value into the display. Once the value returns to the accepted range, resume the countdown.

Time	A/C Temp	Cabin Temp	Cabin Temp Rate	Cabin BTU Rate	Fan Volts	Fan Amps	Fan Flow

### ECLSS KLASS Console Water and Freon Loops

**Big Question:** *What are the acceptable values of the Water and Freon Loops for KLASS?*

During the simulation countdown, you will be playing the role of the electrical engineer responsible for monitoring the ECLSS. During the launch countdown, please record the values identified on the display during the activity. At any time a value reaches a level that is out of range it will begin to flash red. **Issue a hold to the countdown.** You can correct the problem by inputting an accepted value into the display. Once the value returns to the accepted range, resume the countdown.

Time	Water Temp	Heat Exchanger Efficiencies (WL-water loop, FL-Freon loop)	Water Temp Rate	Water Exit Temp	Cold Plate Rate	Water BTU Rate	Freon Temp
		WL=      FL=					
		WL=      FL=					
		WL=      FL=					
		WL=      FL=					
		WL=      FL=					
		WL=      FL=					
		WL=      FL=					
		WL=      FL=					
		WL=      FL=					
		WL=      FL=					
		WL=      FL=					
		WL=      FL=					
		WL=      FL=					
		WL=      FL=					
		WL=      FL=					
		WL=      FL=					