



**Call ALAVs System**

**Introduction Text**  
Log results of friend or foe into a database used to determine an evolving behavior called comfort level.

**Response: Friend**

**Response: Foe**

**Response: Friend Group**

**Response: Friend Individual**

**Response: Foe Group**

**Response: Foe Individual**

**Question 1: Friend Group**  
Sends breads crumbs behavior or sour milk behavior to group of ALAVs.

**Question 1: Friend Individual (wait 15 sec)**  
a. Adjusts height level.  
b. Logs height data for courtship behavior.

Invalid Response 1: Friend Individual (if cannot understand response after 10 sec)

Invalid Response 2: Friend Individual (if cannot understand response after second attempt)

**Question 1: Foe Group**  
Sends scatter behavior or hide behavior to group of ALAVs.

**Question 1: Foe Individual (wait 15 sec)**  
a. Logs data for guardian behavior.  
b. Adjusts height level.

Invalid Response 1: Foe Individual (if cannot understand response after 10 sec)

Invalid Response 2: Foe Individual (if cannot understand response after second attempt)

Invalid Response 1: Friend Group (if cannot understand response after 10 sec)

Invalid Response 2: Friend Group (if cannot understand response after second attempt)

**Question 2: Friend Individual**  
Logs age data for courtship behavior.

Invalid Response 3: Friend Individual (if cannot understand response after 10 sec)

Invalid Response 4: Friend Individual (if cannot understand response after second attempt)

Invalid Response 1: Foe Group (if cannot understand response after 10 sec)

Invalid Response 2: Foe Group (if cannot understand response after second attempt)

**Question 2: Foe Individual**  
Logs weight data for guardian behavior.

Invalid Response 3: Foe Individual (if cannot understand response after 10 sec)

Invalid Response 4: Foe Individual (if cannot understand response after second attempt)

**Exit 1: Friend Group**  
a. ALAVs perform feeding behavior together.  
b. Back to autonomous.

**Exit 2: Friend Group**  
a. ALAVs perform feeding behavior at diff times (don't get full).  
b. Back to autonomous.

**Exit 1: Friend Individual**  
a. Odd ball performs courtship dance.  
b. Back to autonomous.

Invalid Response 5: Friend Individual (if cannot understand response after 10 sec)

Invalid Response 6: Friend Individual (if cannot understand response after second attempt)

**Exit 1: Foe Group**  
a. ALAVs travel diff directions, flash red LEDs, call out.  
b. Back to autonomous.

**Exit 2: Foe Group**  
a. Propellers, LEDs, vibrators on for 2 sec. Then freeze (silence) for 20 sec.  
b. Back to autonomous.

**Question 3: Foe Individual**  
Logs dim witted data to guardian behavior.

Invalid Response 5: Foe Individual (if cannot understand response after 10 sec)

Invalid Response 6: Foe Individual (if cannot understand response after second attempt)

**Exit 1: Foe Individual**  
a. Odd ball performs guardian dance.  
b. Back to autonomous.

**Call Back (one hour later)**  
Calls back participant 1 hour later.

**Call Back (one hour later)**  
Calls back participant 1 hour later.

**Call Back (one hour later)**  
Calls back participant 1 hour later.

**Call Back (one hour later)**  
Calls back participant 1 hour later.